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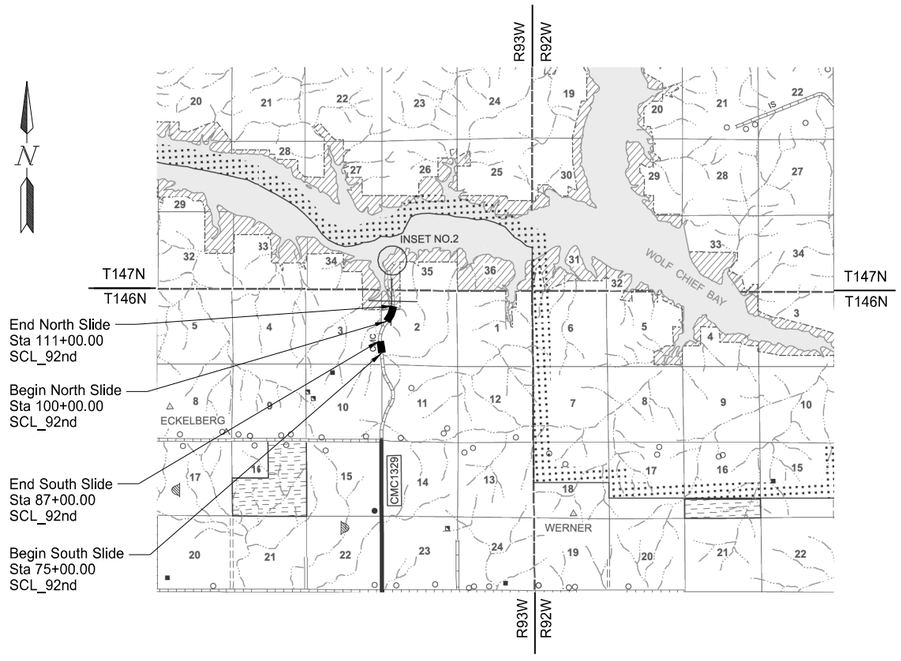
DESIGN DATA				
Traffic	Average Daily			
Current <100	Pass: <100	Trucks: <100	Total: <100	
Forecast <100	Pass: <100	Trucks: <100	Total: <100	
Clear Zone Distance: N/A		Design Speed: 45		
Minimum Sight Dist. for Stopping: 365		Bridges: N/A		
Sight Dist. for No Passing Zone: 900				
Pavement Design Life 5 (years)				
Design Accumulated One-way Flexible ESALs: N/A				

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NORTH DAKOTA
DEPARTMENT OF TRANSPORTATION

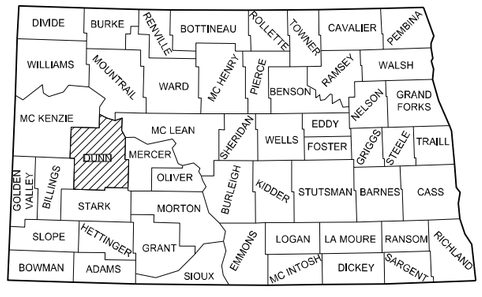
Federal Aid Project
CER-1329(066)
Dunn County
92nd Ave NW

Slide Repair



GOVERNING SPECIFICATIONS	Date Published and Adopted by the North Dakota Department of Transportation
Standard Specifications	7/1/2025
Supplemental Specifications	NONE

PROJECT NUMBER \ DESCRIPTION	NET MILES	GROSS MILES
South Slide	0.227	0.227
North Slide	0.208	0.208
TOTAL	0.435	0.435



STATE COUNTY MAP

DESIGNER
James P. Erickson, EI

DESIGNER
Amy J. Schaaf, PE

I hereby certify that the attached plans were prepared by me or under my direct supervision and that I am a duly registered Professional Engineer under the laws of the State of North Dakota

8/27/2026
APPROVED DATE

Moore Engineering, Inc.

moore engineering, inc.
a Vistal company

Moore Engineering, Inc.

REGISTERED PROFESSIONAL ENGINEER
AMY J. SCHAAF
PE-40939
DATE: 08/27/2026
NORTH DAKOTA

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
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PLAN SECTIONS

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1	1	Title Sheet
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77	1 - 3	Permanent Erosion Control
80	1 - 2	Layouts
81	1	Survey Coordinate and Curve Data
100	1 - 4	Work Zone Traffic Control
200	1 - 22	Cross Sections

LIST OF STANDARD DRAWINGS

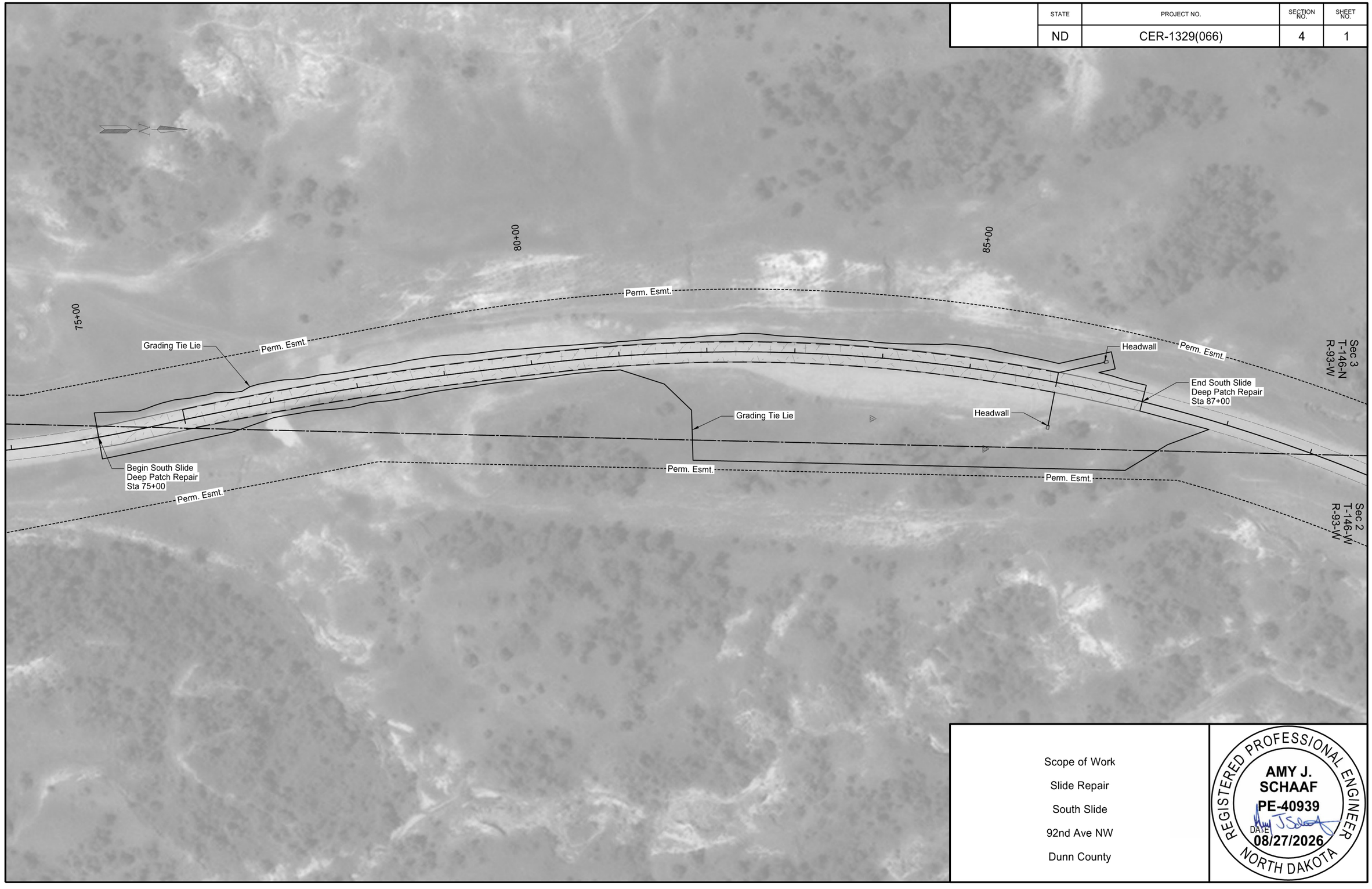
Number	Description
D-101-1, 2, 3, 4	NDDOT Abbreviations
D-101-20, 21	Line Styles
D-101-30, 31, 32, 33	Symbols
D-101-40	Cross Section Legend
D-255-2	Erosion And Siltation Control - Erosion Control Blanket Installation
D-261-1	Erosion Control - Fiber Roll Placement Details
D-704-7	Breakaway Systems For Construction Zone Signs - Perforated Tube
D-704-8	Breakaway Systems For Construction Zone Signs - U-Channel Post
D-704-9	Construction Sign Details - Terminal And Guide Signs
D-704-11, 11A	Construction Sign Details - Warning Signs
D-704-13	Barricade And Channelizing Device Details
D-704-14	Construction Sign Punching And Mounting Details
D-704-20	Terminal And Seal Coat Sign Layouts
D-714-18	Precast Concrete Headwall Details
D-752-1	Standard Barbed Wire Fence
D-754-21B	Reflectorized Delineators - Two-Lane Two-Way Highway
D-754-21C	Type A Reflectorized Delineator Spacing - Two-Lane Two-Way Highway

SPECIAL PROVISIONS

Number	Description
SSP 1	Temporary Erosion and Sediment Best Management Practices
SSP 3	Local Agency Contracts
SSP 6	Gravel Road Specifications

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Scope of Work

Slide Repair

South Slide

92nd Ave NW

Dunn County

REGISTERED PROFESSIONAL ENGINEER
AMY J. SCHAAF
PE-40939
DATE
08/27/2026
NORTH DAKOTA

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Scope of Work

Slide Repair

North Slide

92nd Ave NW

Dunn County

REGISTERED PROFESSIONAL ENGINEER
AMY
SCHAAF
PE-40939
DATE
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NOTES

109-P01 LOAD RESTRICTIONS: Any trucks removing material from or delivering material to the project site must not exceed the legal load limit. Trucks may be randomly selected by the Engineer to be weighed per section 109.01 J of the Standard Specifications. If any truck is over the limit, that load will not be paid for. Call Lori Tabor at the Dunn County Highway Department (701-764-5546) to verify the legal load limit at the time of bidding.

201-P01 REMOVAL OF TREES: Cut down trees that are 3 inches or larger in diameter measured at a point 4.5 feet above the ground after October 31st and before April 15th. Cut trees may be laid on the ground and removed at a later date.

Trees to be cut down during this time period are within the areas shown in section 40 of the plans. The Engineer will install brightly colored flagging prior to tree clearing to ensure contractor stays within clearing limits.

Sta 82+83 to Sta 86+49 Rt

Do not cut down documented Northern Long Eared Bat roosts or trees within 0.25 miles of roosts or documented foraging habitat during any time of year.

203-010 SHRINKAGE: 25 percent additional volume is included for shrinkage in earth.

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

203-P01 TOPSOIL: Strip and salvage all topsoil on areas to be disturbed to be reused on the project. Topsoil has been calculated based on a 4 IN depth. If Contractor and Engineer agree, item will be paid at plan quantity.

203-P02 COMMON EXCAVATION – SUBCUT: Do not stockpile material within project limits and dispose of waste material outside project limits due to landslide risk. Any waste site used must be cleared as per section 107.17 of the Standard Specifications. Volumes included in the plans are in situ. If Contractor and Engineer agree, item will be paid at plan quantity.

The existing subgrade under the deep patch repair areas is high plasticity clay. Contractor will stage construction so that at least one layer of Geosynthetic Material Type G and 9" of Aggregate Base Course CL 5 is in place prior to trafficking through deep patch excavation areas.

302-P01: AGGREGATE: Stockpile 50% of the Aggregate Base Course CL 5 and Underdrain Fill Granular Material at a site within 20 miles of the project prior to beginning removal operations. If a suitable site cannot, be obtained within 20 miles of the project, site approval will be at the discretion of the Engineer.

704-P01 TRAFFIC CONTROL DEVICES LIST: The traffic control devices list has been developed using the following standard drawing layouts for traffic control:

D-704-20: Layout G for terminal signing

Ten Delineator Drums and ten Tubular Markers have been included for use at the Engineer's Discretion.

704-P02 PORTABLE CHANGEABLE MESSAGE SIGN: Install one Portable Changeable Message Sign (PCMS) in advance of the project limits along 92nd Ave NW near 4th St NW. Place two weeks prior to beginning construction and operate for the duration of the project. The Engineer will field-verify the location for the PCMS installation. Relocate the PCMS as directed by the Engineer.

Provide an operator trained in the use of the PCMS. The Engineer will determine the message to be displayed. Program the message within one hour of the Engineer's request to change the message.

709-P01 GEOSYNTHETIC MATERIAL TYPE S2: Secure the geosynthetic using the manufacturer's recommended methods. Provide product data sheet detailing these methods to the Engineer prior to beginning placement of geosynthetic.

709-P02 GEOSYNTHETIC MATERIAL TYPE G: Furnish Geosynthetic Material Type G that meets the requirements of AASHTO M288, Class 4B Geogrid.

714-P01 UNDERDRAIN PIPE PVC NON-PERFORATED 6IN: Use SDR 35 pipe that meets ASTM D3034 for the underdrain outlets and ASTM D1784 for any gaskets.

714-P02 UNDERDRAIN FILL GRANULAR MATERIAL: Use Underdrain Aggregate per section 714.03 B of the Standard Specifications.

754-P01 REMOVE & RESET DELINEATORS: All delineators within the grading limits are to be removed prior to earthwork beginning and stockpiled onsite or at a contractor staging area. Reset delineators per standard drawing D-754-21C after earthwork operations are complete. There are approximately 24 delineators onsite needing removal. Only 16 of them will need to be reset. After resetting the necessary delineators, deliver any remaining delineators to the Dunn County Road Department, and neatly stack them at a location designated by Mike Karey, the road superintendent.

The address of the Road Department is 730 1st Ave SW, Halliday, ND 58636. Contact Mike Karey (701-260-0062) at least 24 hours prior to delivery for instructions on where to deliver them. Include all costs for removing, resetting, and delivering the extra delineators in the contract unit price bid for "Remove and Reset Delineators."

764-P01 REMOVE 3-CABLE GUARDRAIL AND POSTS: Deliver the removed 3-cable guardrail posts with attached hook bolts and line post plate washers to the Dunn County Road Department, and neatly stack them at a location designated by Mike Karey,

REGISTERED PROFESSIONAL ENGINEER
AMY SCHAAF
PE-40939
DATE 08/27/2026
NORTH DAKOTA

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NOTES

the road superintendent. The remaining cable and concrete anchors become the property of the contractor.

The address of the Road Department is 730 1st Ave SW, Halliday, ND 58636. Include all costs for delivery of the posts and hardware and for disposal of the remaining 3-cable guardrail materials in the contract unit price bid for "Remove 3-Cable Guardrail and Posts."

Contact Mike Karey (701-260-0062) at least 24 hours prior to delivery for instructions on where to deliver it.

980-P01 CATTLEGUARD RESET: This bid item includes removing and resetting the cattle guard at Sta 104+71, as well as the adjacent gate to the east. The current condition of the guard is partially installed due to sliding conditions. Install all pieces properly as part of this bid item.

REGISTERED PROFESSIONAL ENGINEER
AMY
SCHAAF
PE-40939
DATE
08/27/2026
NORTH DAKOTA

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Estimated Quantities

SPEC	CODE	ITEM DESCRIPTION	UNIT	Mainline: Funding A	TOTAL
103	0100	CONTRACT BOND	L SUM	1	1
201	0352	REMOVAL OF TREES & BRUSH	L SUM	1	1
202	0114	REMOVAL OF CONCRETE PAVEMENT	SY	27	27
202	0120	REMOVE AGGREGATE BASE & SURFACING	L SUM	1	1
202	0132	REMOVAL OF BITUMINOUS SURFACING	SY	3961	3961
203	0109	TOPSOIL	CY	1018	1018
203	0138	COMMON EXCAVATION-SUBCUT	CY	16181	16181
216	0100	WATER	M GAL	512	512
251	0200	SEEDING CLASS II	ACRE	2.489	2.489
251	2000	TEMPORARY COVER CROP	ACRE	2.497	2.497
253	0201	HYDRAULIC MULCH	ACRE	3.995	3.995
255	0101	ECB TYPE 1	SY	4799	4799
261	0112	FIBER ROLLS 12IN	LF	11192	11192
261	0113	REMOVE FIBER ROLLS 12IN	LF	5596	5596
302	0121	AGGREGATE BASE COURSE CL 5	CY	10920	10920
350	0501	GRAVEL SURFACING	CY	2300	2300
702	0100	MOBILIZATION	L SUM	1	1
704	1000	TRAFFIC CONTROL SIGNS	UNIT	182	182
704	1052	TYPE III BARRICADE	EA	6	6
704	1060	DELINEATOR DRUMS	EA	10	10
704	1067	TUBULAR MARKERS	EA	10	10
704	4011	PORTABLE CHANGEABLE MESSAGE SIGN	EA	1	1
709	0100	GEOSYNTHETIC MATERIAL TYPE G	SY	39900	39900
709	0162	GEOSYNTHETIC MATERIAL TYPE S2	SY	8466	8466
709	0501	GEOTEXTILE FABRIC-TYPE D1	SY	2161	2161
714	3151	HEADWALL-PRECAST CONCRETE 6IN	EA	4	4
714	3159	HEADWALL VEGETATION BARRIER	EA	4	4
714	6581	PIPE POLYETHYLENE CORR PERF 6IN DRAIN	LF	3892	3892
714	9700	UNDERDRAIN FILL GRANULAR MATERIAL	CY	114	114
714	9771	UNDERDRAIN PIPE PVC NON-PERFORATED 6IN	LF	200	200
752	0905	TEMPORARY FENCE	LF	308	308
752	0922	FENCE REMOVE & RESET	LF	523	523
754	0162	REMOVE & RESET DELINEATORS	EA	16	16
764	2020	REMOVE 3-CABLE GUARDRAIL & POSTS	LF	496	496
980	0170	CATTLE GUARD RESET	EA	1	1

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South Slide Repair Quantities

SPEC	CODE	Item Description	Unit	Transition 75+00 Area/Width	Transition to QTY/Sta	Transition 76+00 Sub-Total	Full Depth Slide Repair 76+00 Area/Width	Full Depth Slide Repair to QTY/Sta	Full Depth Slide Repair 86+00 Sub-Total	Transition 86+00 Area/Width	Transition to QTY/Sta	Transition 87+00 Sub-Total	SOUTH TOTALS	Unit
709	0162	Geosynthetic Material Type S2	SY	29 FT (Avg)	322	322	34 FT	378	3778	29 FT (Avg)	322	322	4422	SY
709	0100	Geosynthetic Material Type G Layer 1	SY	N/A			24 FT	267	2667	N/A			2667	SY
709	0100	Geosynthetic Material Type G Layer 2	SY	N/A			25 FT	278	2778	N/A			2778	SY
709	0100	Geosynthetic Material Type G Layer 3	SY	N/A			26 FT	289	2889	N/A			2889	SY
709	0100	Geosynthetic Material Type G Layer 4	SY	N/A			27 FT	300	3000	N/A			3000	SY
709	0100	Geosynthetic Material Type G Layer 5	SY	N/A			28 FT	311	3111	N/A			3111	SY
709	0100	Geosynthetic Material Type G Layer 6	SY	N/A			29 FT	322	3222	N/A			3222	SY
709	0100	Geosynthetic Material Type G Layer 7	SY	N/A			30 FT	333	3333	N/A			3333	SY
709	0100	Geosynthetic Material Type G Total	SY	N/A			N/A			N/A			21000	SY
302	0121	Aggregate Base Course CL 5 @ 1.875 Ton/CY	CY	70.21 SF (Avg)	260	260	140.41 SF	520	5200	70.21 SF (Avg)	260	260	5720	CY
350	0501	Gravel Surfacing @ 1.875 Ton/CY	CY	27 SF	100	100	27 SF	100	1000	27 SF	100	100	1200	CY

North Slide Repair Quantities

SPEC	CODE	Item Description	Unit	Transition 100+00 Area/Width	Transition to QTY/Sta	Transition 101+00 Sub-Total	Full Depth Slide Repair 101+00 Area/Width	Full Depth Slide Repair to QTY/Sta	Full Depth Slide Repair 110+00 Sub-Total	Transition 110+00 Area/Width	Transition to QTY/Sta	Transition 111+00 Sub-Total	NORTH TOTALS	Unit
709	0162	Geosynthetic Material Type S2	SY	29 FT (Avg)	322	322	34 FT	378	3400	29 FT (Avg)	322	322	4044	SY
709	0100	Geosynthetic Material Type G Layer 1	SY	N/A			24 FT	267	2400	N/A			2400	SY
709	0100	Geosynthetic Material Type G Layer 2	SY	N/A			25 FT	278	2500	N/A			2500	SY
709	0100	Geosynthetic Material Type G Layer 3	SY	N/A			26 FT	289	2600	N/A			2600	SY
709	0100	Geosynthetic Material Type G Layer 4	SY	N/A			27 FT	300	2700	N/A			2700	SY
709	0100	Geosynthetic Material Type G Layer 5	SY	N/A			28 FT	311	2800	N/A			2800	SY
709	0100	Geosynthetic Material Type G Layer 6	SY	N/A			29 FT	322	2900	N/A			2900	SY
709	0100	Geosynthetic Material Type G Layer 7	SY	N/A			30 FT	333	3000	N/A			3000	SY
709	0100	Geosynthetic Material Type G Total	SY	N/A			N/A			N/A			18900	SY
302	0121	Aggregate Base Course CL 5 @ 1.875 Ton/CY	CY	70.21 SF (Avg)	260	260	140.41 SF	520	4680	70.21 SF (Avg)	260	260	5200	CY
350	0501	Gravel Surfacing @ 1.875 Ton/CY	CY	27 SF	100	100	27 SF	100	900	27 SF	100	100	1100	CY

Water

25 MGal/Mile for Dust Palliative
15 Gal/SY for Blended Base
20 Gal/Ton for Aggregates
10 Gal/CY for Embankment

SPEC	CODE	BID ITEM	UNIT	QUANTITY
754	162	REMOVE & RESET DELINEATORS	EA	16

Note: There are 24 delineators to remove. When resetting, space per D-754-21C.

Basis of Estimate

Slide Repair

South & North Slides

92nd Ave NW

Dunn County

REGISTERED PROFESSIONAL ENGINEER
AMY J. SCHAAF
PE-40939
DATE 8/27/2026
NORTH DAKOTA

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Location	203-0138 COMMON EXCAVATION - SUBCUT***			Topsoil** (Pay Item)
	Excavation (A)	Embankment* (B)	Waste (A-B)	
	CY	CY	CY	CY
South Slide				
Sta 75+00 to 87+00	10707	701	10006	748
Underdrains & Outlets	133	22	111	4
Sub-Totals	10840	723	10117	752
North Slide				
Sta 100+00 to 111+00	5207	234	4973	262
Underdrains & Outlets	134	25	109	4
Sub-Totals	5341	259	5082	266
TOTALS	16181	982	15199	1018

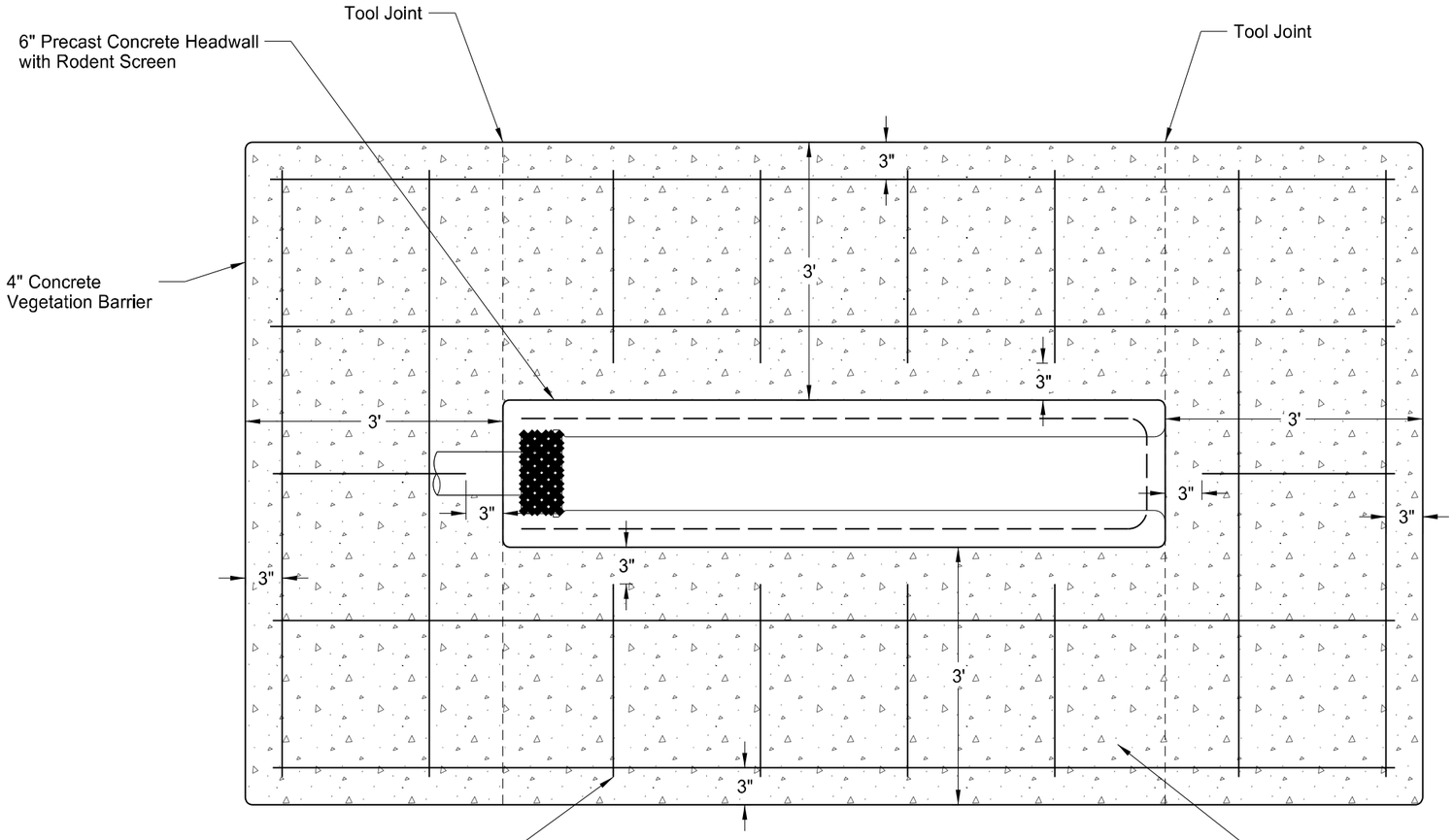
* Additional 25% volume included for shrinkage
** Assumed 4 inch depth for topsoil areas
***Excavation, Embankment, and Waste are all included in pay item 203-0138 COMMON EXCAVATION - SUBCUT.

Earthwork Table
Slide Repair
South & North Slide
92nd Ave NW
Dunn County

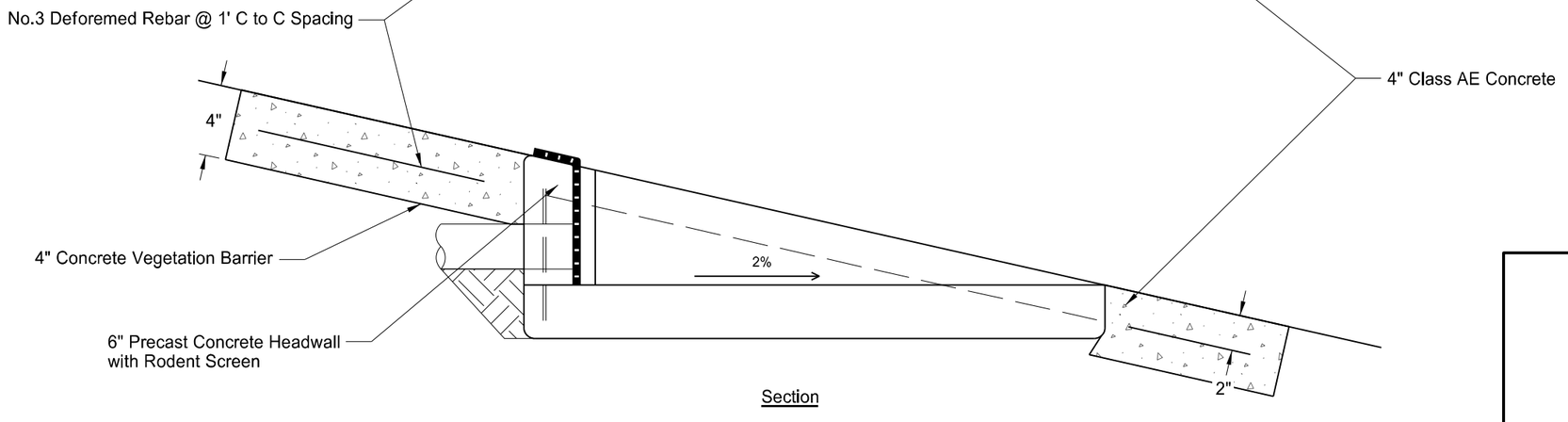
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Plan



Section

General Details

Silde Repair

Concrete Vegetation Barrier

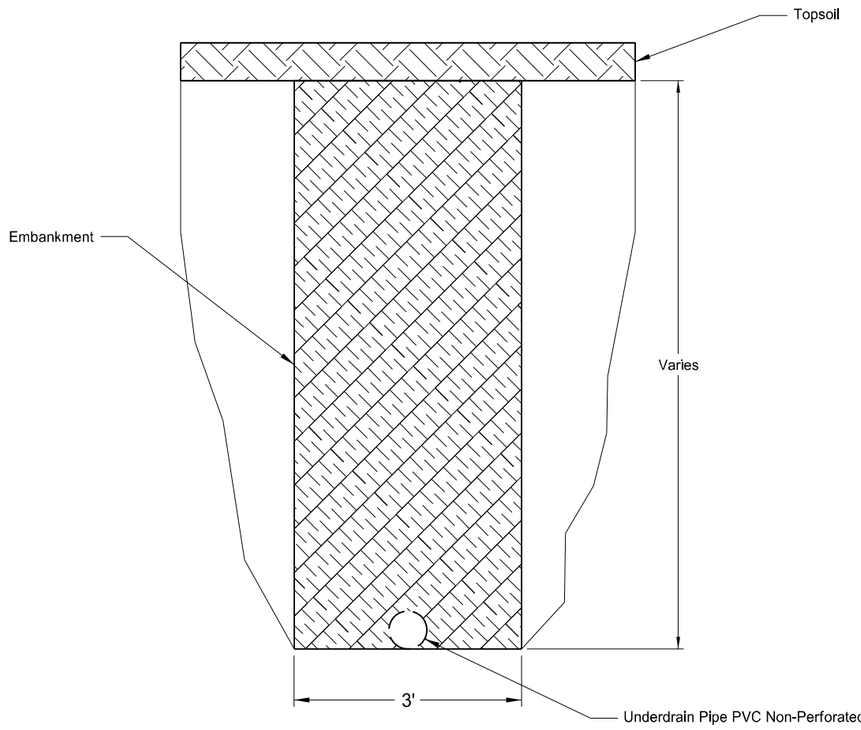
92nd Ave NW

Dunn County

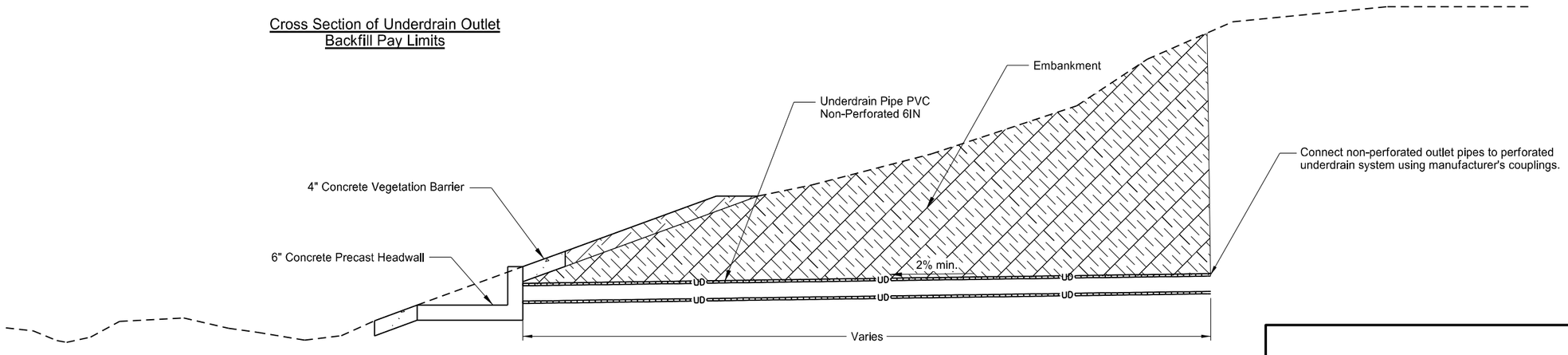
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Cross Section of Underdrain Outlet
Backfill Pay Limits



Underdrain Outlet Cross Section

General Details

Slide Repair

Underdrain Outlet Details

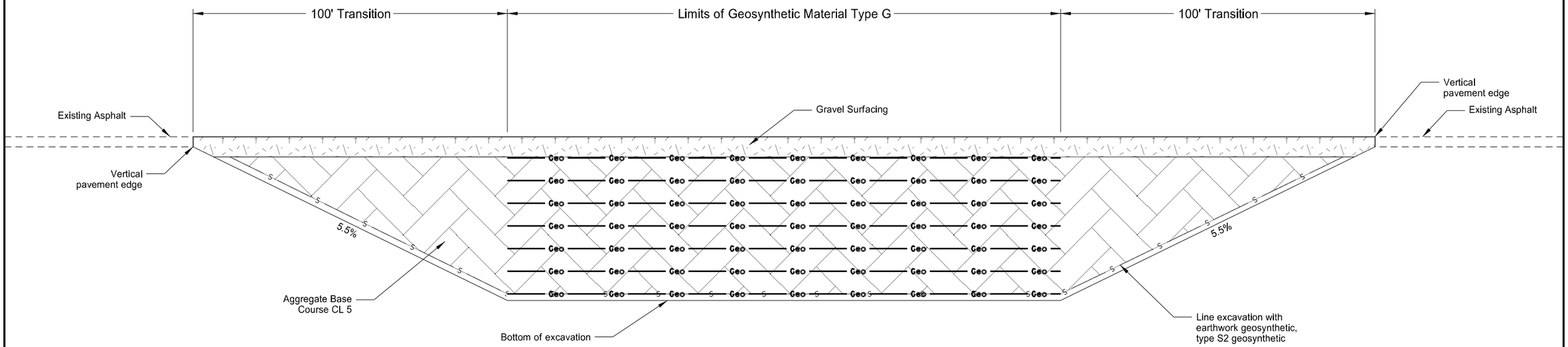
92nd Ave NW

Dunn County

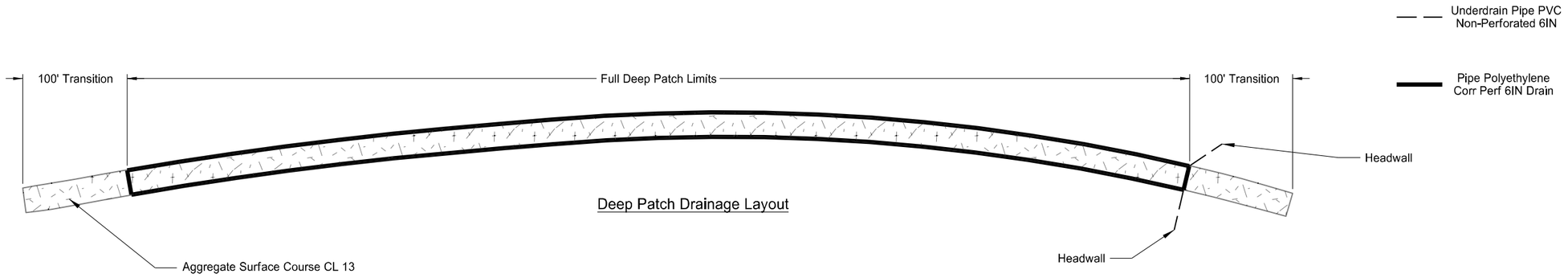
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Deep Patch Transition



Deep Patch Drainage Layout

General Details

Slide Repair

Transition and Drainage Details

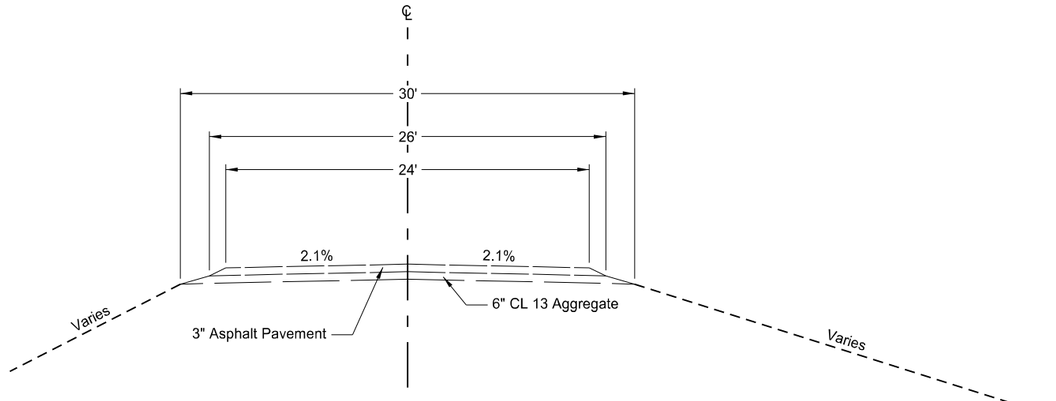
92nd Ave NW

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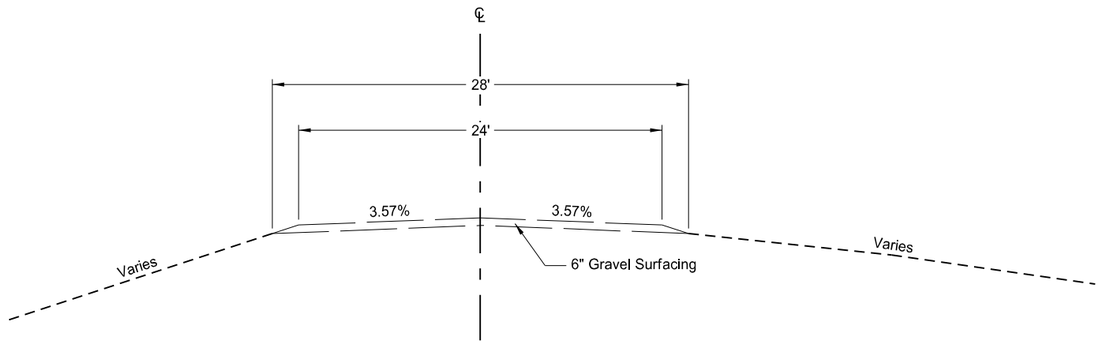
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South Slide
Sta 75+00.00 to Sta 87+00.00

North Slide
Sta 100+00.00 to Sta 101+95.77
Sta 109+00.55 to Sta 111+00.00



North Slide
Sta 101+95.77 to Sta 109+00.55

Existing Typical Sections

Slide Repair

South & North Slides

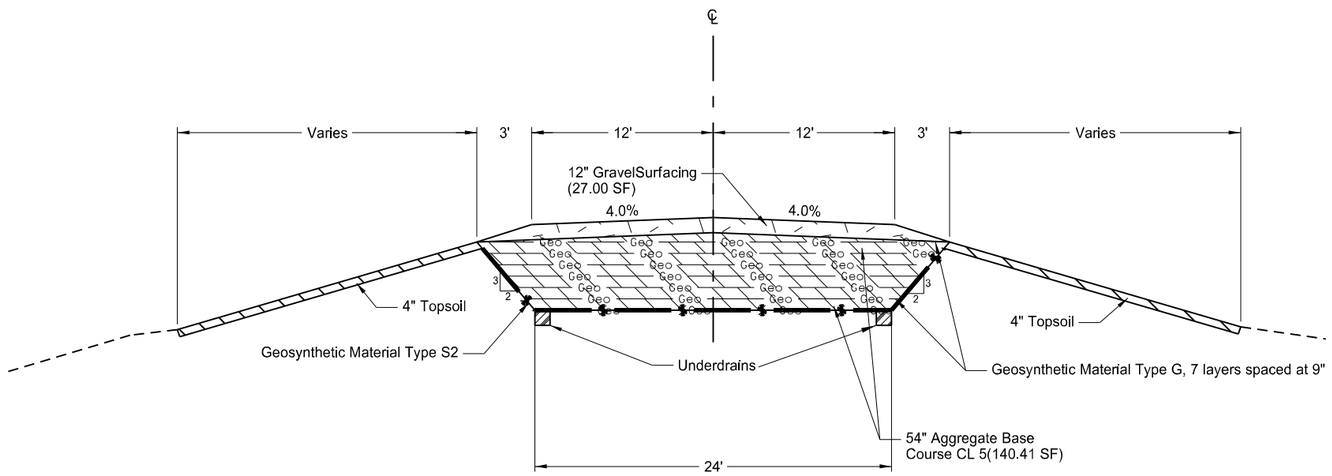
92nd Ave NW

Dunn County

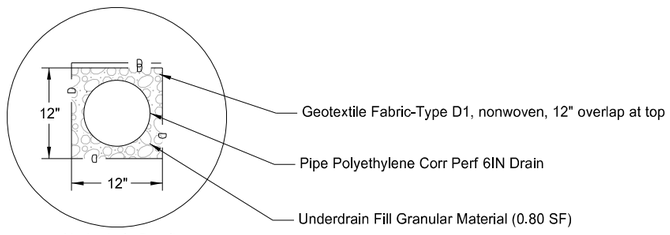
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North & South Slide
Sta 75+00 to 87+00
Sta 100+00 to 111+00



Underdrain Detail

Underdrain Notes:
1. Use "Underdrain Pipe PVC Non-Perforated 6IN" for underdrain outlets.
2. Backfill outlet pipes with common excavation material according to Section 203.04 G.3, "Compaction Control, Type B."
3. Install rodent guards as shown on headwall details in section 20.

Deep Patch Notes:
1. Use Geosynthetic Material Type G having roll width no less than 12 ft.
2. Overlap Geosynthetic Material Type G a minimum of 18 inches on the bottom layer, then overlap the remaining layers a minimum of 12 inches.
3. Alternate placement of biaxial geogrid parallel and perpendicular to centerline in subsequent layers.
4. First layer of geogrid to be placed directly on top of S2 wrap and be placed immediately ahead of aggregate base.

Proposed Typical Sections

Slide Repair

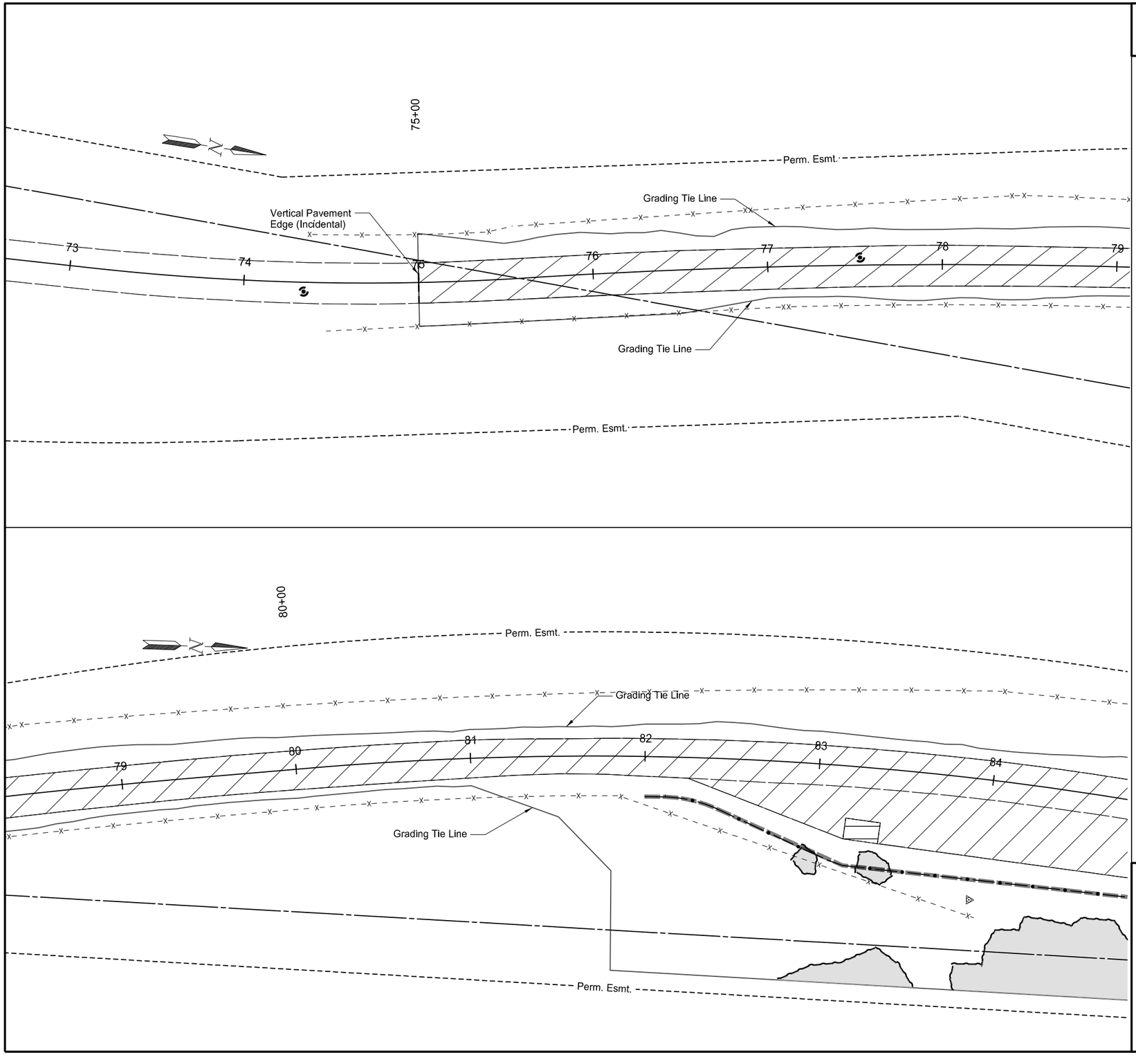
South & North Slides

92nd Ave NW

Dunn County

REGISTERED PROFESSIONAL ENGINEER
AMY J. SCHAAF
PE-40939
DATE 8/27/2026
NORTH DAKOTA

Docusign Envelope ID: 89BE7878-0912-8D61-8292-9E11C1689D69



	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	CER-1329(066)	40	1

SPEC	CODE	PAY ITEM	QTY	UNIT
201	0352	REMOVAL OF TREES & BRUSH		
		Sta 82+83 to Sta 84+50 RT	0.5	LSUM
202	0114	REMOVAL OF CONCRETE PAVEMENT		
		Sta 83+16 to Sta 83+37 RT	27	SY
202	0132	REMOVAL OF BITUMINOUS SURFACING		
		Sta 75+00 to Sta 84+50	2388	SY
764	2020	REMOVE 3-CABLE GUARDRAIL & POSTS		
		Sta 82+00 22.9' Rt to Sta 84+50 56.7' Rt	250	LF

LEGEND

- REMOVAL OF BITUMINOUS SURFACING
- REMOVE AGGREGATE BASE & SURFACING
- REMOVAL OF CONCRETE PAVEMENT
- REMOVAL OF TREES & BRUSH
- REMOVE 3-CABLE GUARDRAIL & POSTS

Removals

Slide Repair

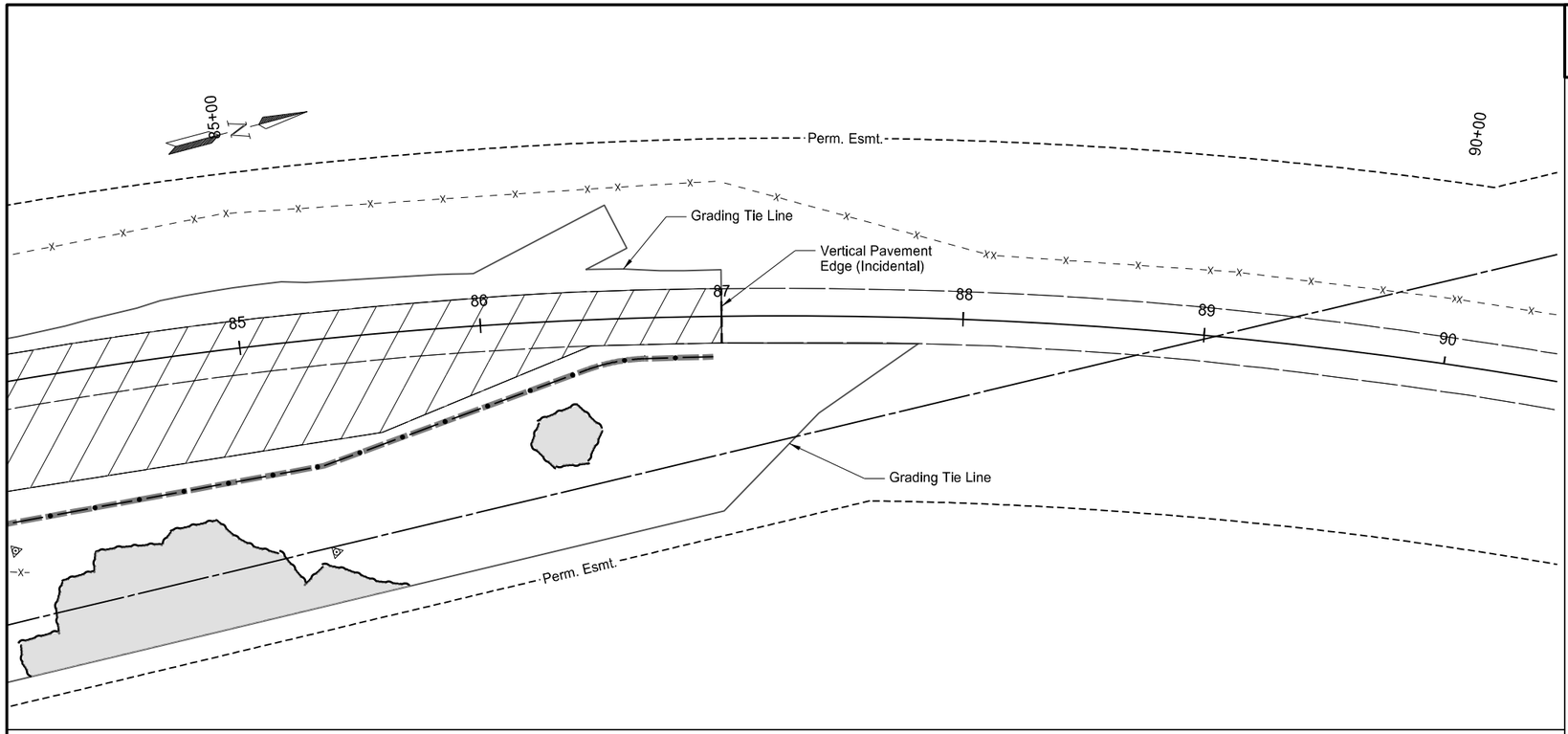
South Slide

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	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	CER-1329(066)	40	2

SPEC	CODE	PAY ITEM	QTY	UNIT
201	0352	REMOVAL OF TREES & BRUSH		
		Sta 84+50 to Sta 86+49 RT	0.5	LSUM
202	0132	REMOVAL OF BITUMINOUS SURFACING		
		Sta 84+50 to Sta 87+00	621	SY
764	2020	REMOVE 3-CABLE GUARDRAIL & POSTS		
		Sta 84+50 56.7' Rt to Sta 86+96 16.8' Rt	246	LF

LEGEND

- REMOVAL OF BITUMINOUS SURFACING
- REMOVE AGGREGATE BASE & SURFACING
- REMOVAL OF CONCRETE PAVEMENT
- REMOVAL OF TREES & BRUSH
- REMOVE 3-CABLE GUARDRAIL & POSTS

Removals

Slide Repair

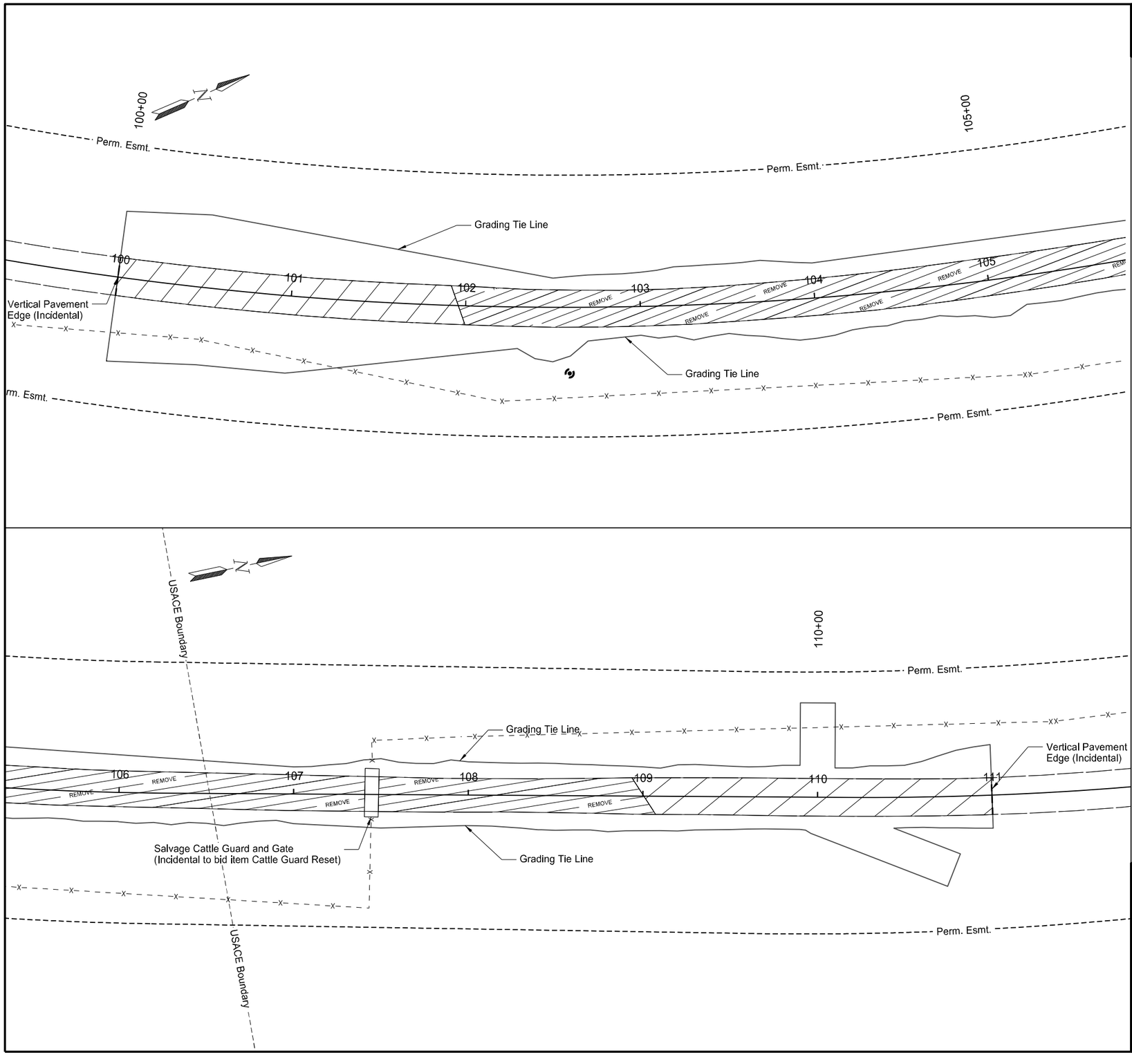
South Slide

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Dunn County

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AMY J. SCHAAF
PE-40939
DATE: 8/27/2026
NORTH DAKOTA

Docusign Envelope ID: 223B17E0-0526-8CA7-81CA-9F444A2E8544



STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	CER-1329(066)	40	3

SPEC	CODE	PAY ITEM	QTY	UNIT
202	0120	REMOVE AGGREGATE BASE & SURFACING		
		Sta 101+95 to Sta 109+00	1	LSUM
202	0132	REMOVAL OF BITUMINOUS SURFACING		
		Sta 100+00 to Sta 101+95	479	SY
		Sta 109+00 to Sta 111+00	473	

LEGEND

- REMOVAL OF BITUMINOUS SURFACING
- REMOVE AGGREGATE BASE & SURFACING
- REMOVAL OF CONCRETE PAVEMENT
- REMOVAL OF TREES & BRUSH
- REMOVE 3-CABLE GUARDRAIL & POSTS

Removals

Slide Repair

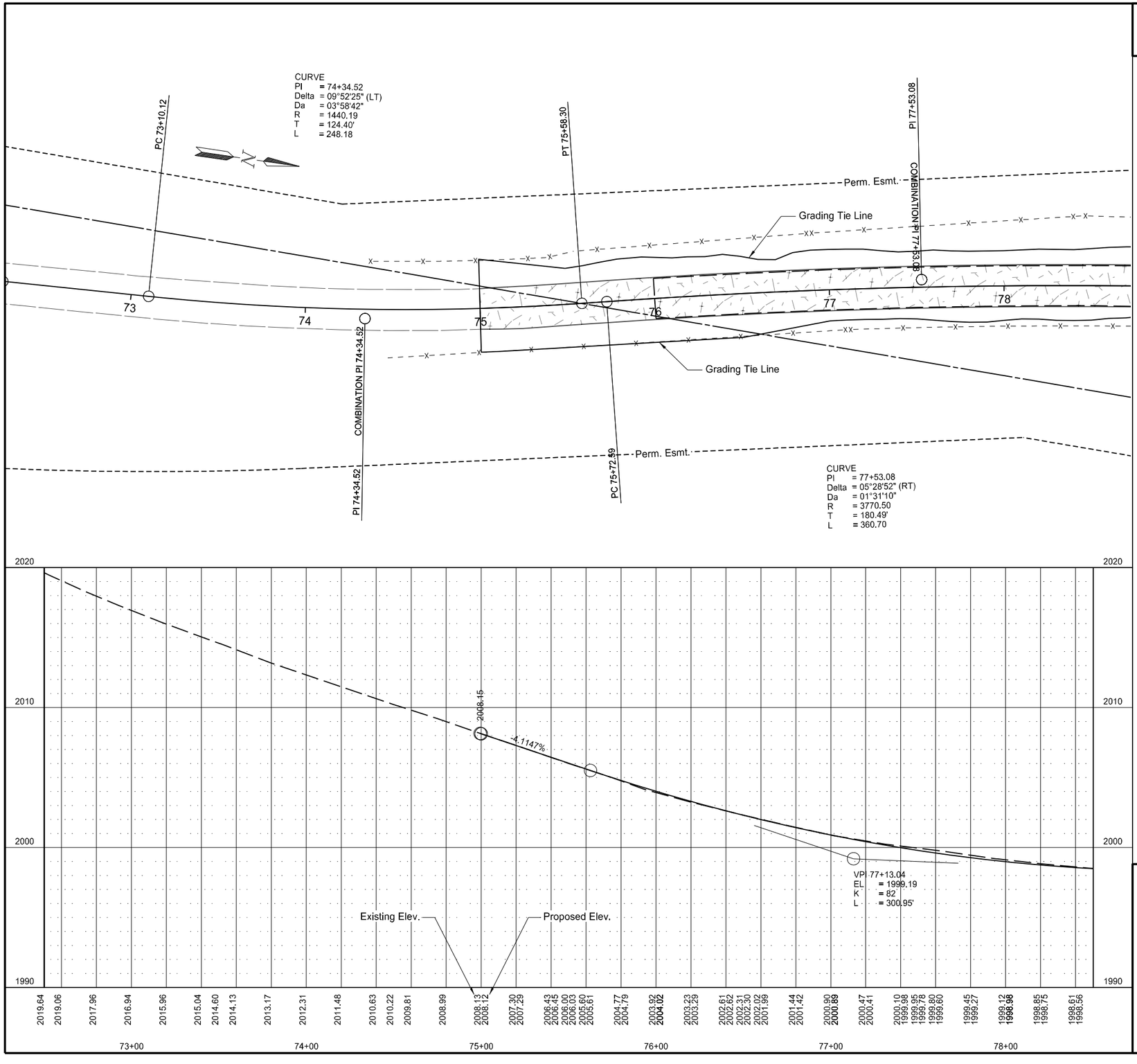
North Slide

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DATE 8/28/2026
NORTH DAKOTA

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	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	CER-1329(066)	60	1

SPEC	CODE	PAY ITEM	QTY	UNIT
709	0401	GEOTEXTILE FABRIC-TYPE D1		
		Sta 76+00	13	SY
		Sta 76+00 to Sta 78+50 Rt	138	SY
		Sta 76+00 to Sta 78+50 Lt	139	SY
714	6581	PIPE POLYETHYLENE CORR PERF 6IN DRAIN		
		Sta 76+00	23	LF
		Sta 76+00 to Sta 78+50 Rt	249	LF
		Sta 76+00 to Sta 78+50 Lt	251	LF
714	9700	UNDERDRAIN FILL GRANULAR MATERIAL		
		Sta 76+00	1	CY
		Sta 76+00 to Sta 78+50 Rt	7	CY
		Sta 76+00 to Sta 78+50 Lt	7	CY

LEGEND

GRAVEL SURFACING

PIPE POLYETHYLENE CORR PERF 6IN DRAIN

UNDERDRAIN PIPE PVC NON-PERFORATED 6IN

Plan and Profile

Slide Repair

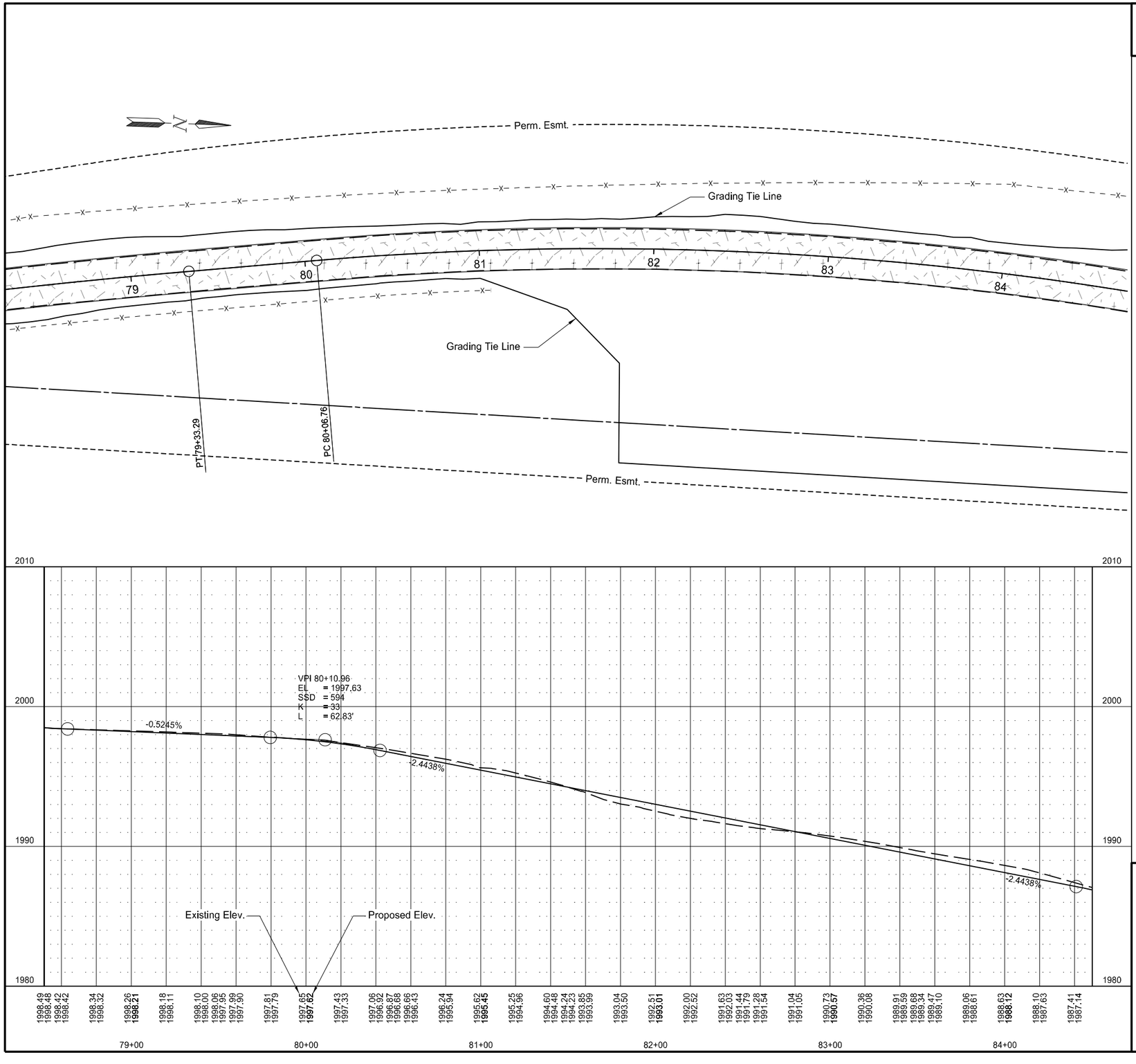
South Slide

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	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	CER-1329(066)	60	2

SPEC	CODE	PAY ITEM	QTY	UNIT
709	0401	GEOTEXTILE FABRIC-TYPE D1		
		Sta 78+50 to Sta 84+50 Rt	332	SY
		Sta 78+50 to Sta 84+50 Lt	335	SY
714	6581	PIPE POLYETHYLENE CORR PERF 6IN DRAIN		
		Sta 78+50 to Sta 84+50 Rt	597	LF
		Sta 78+50 to Sta 84+50 Lt	603	LF
714	9700	UNDERDRAIN FILL GRANULAR MATERIAL		
		Sta 78+50 to Sta 84+50 Rt	18	CY
		Sta 78+50 to Sta 84+50 Lt	18	CY

LEGEND

GRAVEL SURFACING

PIPE POLYETHYLENE CORR PERF 6IN DRAIN

UNDERDRAIN PIPE PVC NON-PERFORATED 6IN

Plan and Profile

Slide Repair

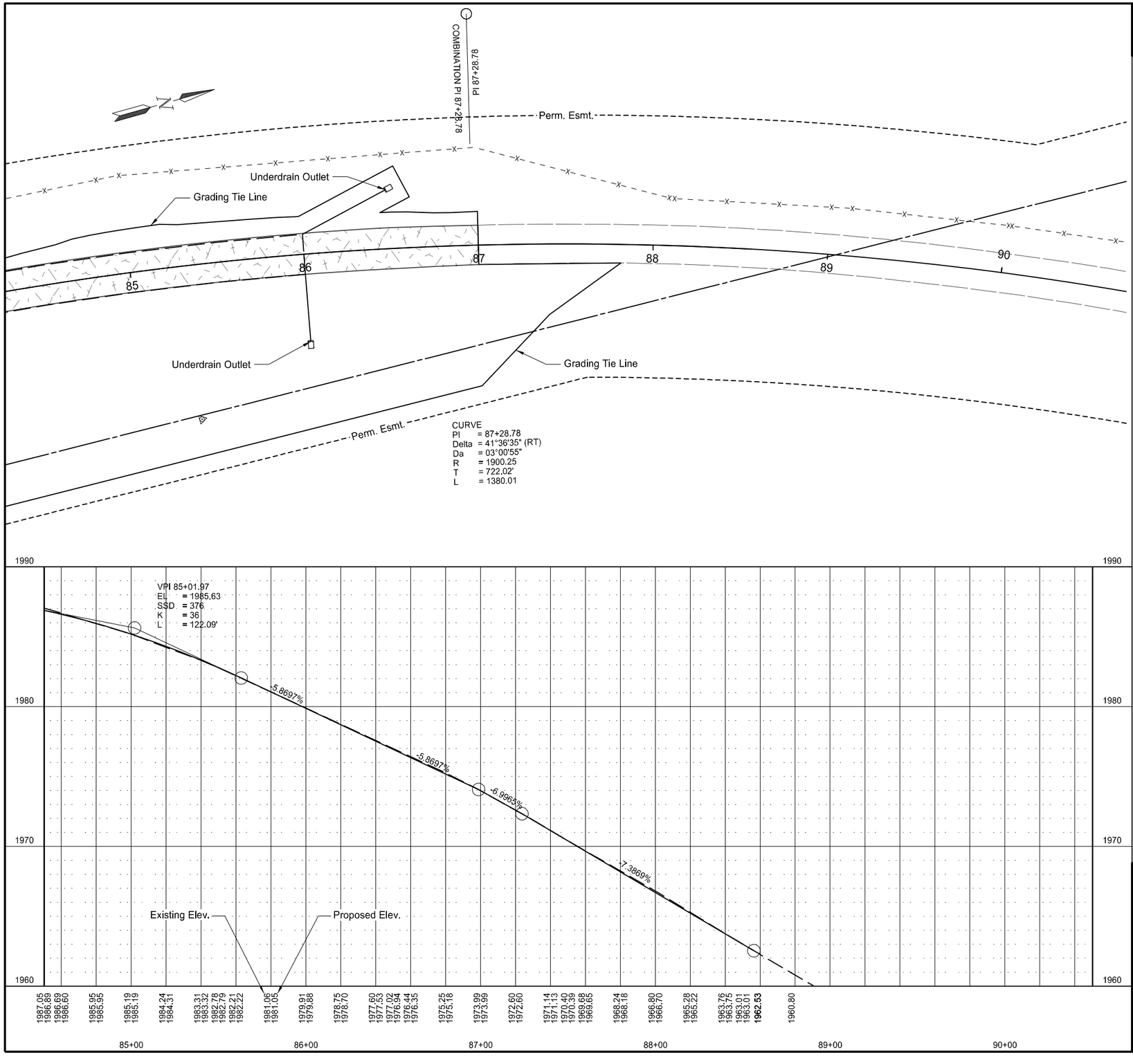
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	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	CER-1329(066)	60	3

SPEC	CODE	PAY ITEM	QTY	UNIT
709	0401	GEOTEXTILE FABRIC-TYPE D1		
		Sta 84+50 to Sta 86+00 Rt	83	SY
		Sta 84+50 to Sta 86+00 Lt	83	SY
		Sta 86+00	13	SY
714	3151	HEADWALL-PRECAST CONCRETE 6IN		
		86+00 50.1' Rt	1	EA
		86+49 33.8' Rt	1	EA
714	3159	HEADWALL VEGETATION BARRIER		
		86+00 50.1' Rt	1	EA
		86+49 33.8' Rt	1	EA
714	6581	PIPE POLYETHYLENE CORR PERF 6IN DRAIN		
		Sta 84+50 to Sta 86+00 Rt	150	LF
		Sta 84+50 to Sta 86+00 Lt	150	LF
		Sta 86+00	23	LF
714	9700	UNDERDRAIN FILL GRANULAR MATERIAL		
		Sta 84+50 to Sta 86+00 Rt	4	CY
		Sta 84+50 to Sta 86+00 Lt	4	CY
		Sta 86+00	1	CY
714	9771	UNDERDRAIN PIPE PVC NON-PERFORATED 6IN		
		Sta 86+00 11.5' Rt to Sta 86+00 50.1' Rt	39	LF
		Sta 86+00 11.5' Lt to Sta 86+49 33.8' Lt	54	LF

LEGEND

GRAVEL SURFACING

PIPE POLYETHYLENE CORR PERF 6IN DRAIN

UNDERDRAIN PIPE PVC NON-PERFORATED 6IN

Plan and Profile

Slide Repair

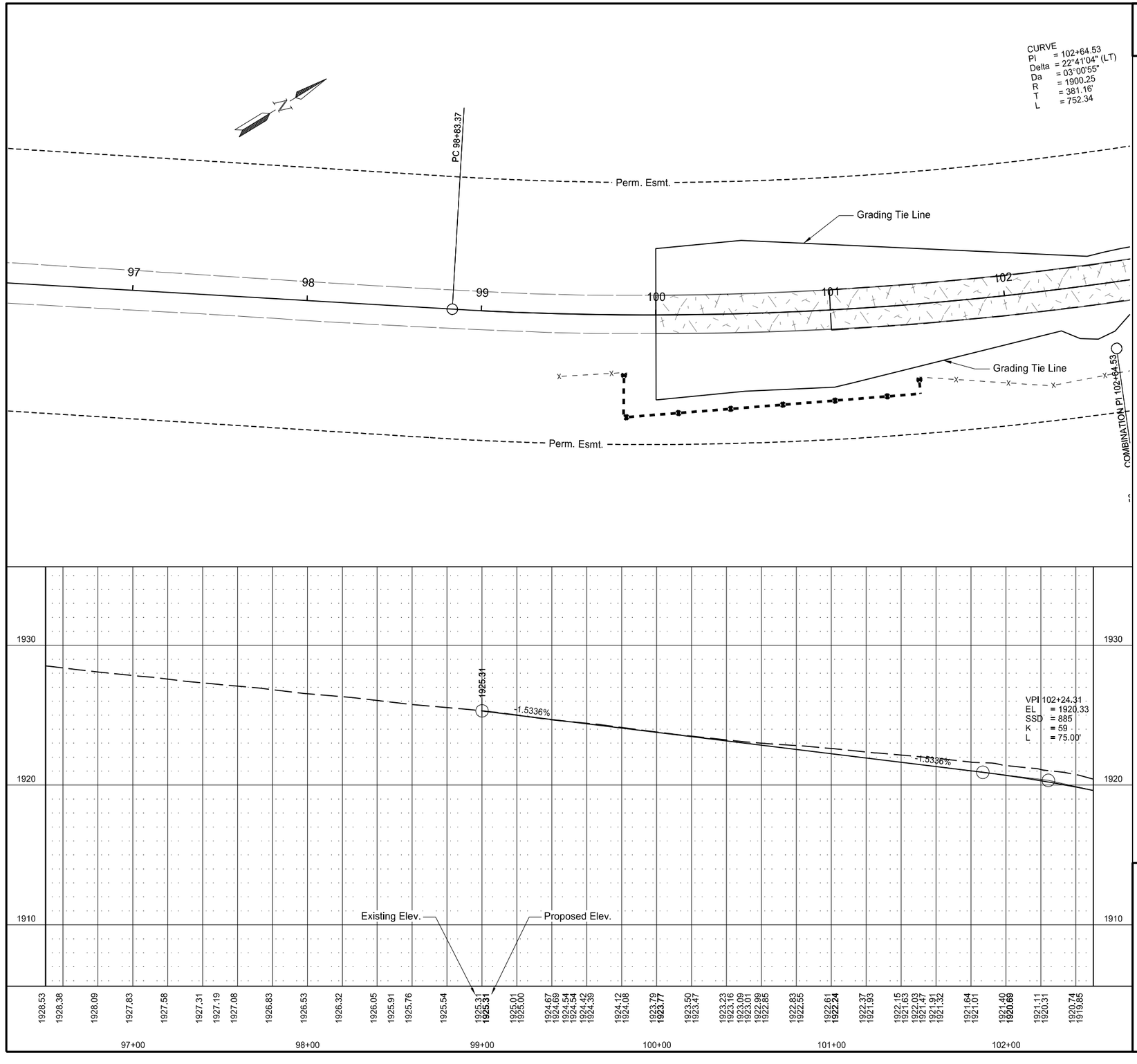
South Slide

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	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	CER-1329(066)	60	4

SPEC	CODE	PAY ITEM	QTY	UNIT
709	0401	GEOTEXTILE FABRIC-TYPE D1		
		Sta 101+00	13	SY
		Sta 101+00 to Sta 102+50 Rt	84	SY
		Sta 101+00 to Sta 102+50 Lt	83	SY
714	6581	PIPE POLYETHYLENE CORR PERF 6IN DRAIN		
		Sta 101+00	23	LF
		Sta 101+00 to Sta 102+50 Rt	151	LF
		Sta 101+00 to Sta 102+50 Lt	149	LF
714	9700	UNDERDRAIN FILL GRANULAR MATERIAL		
		Sta 101+00	1	CY
		Sta 101+00 to Sta 102+50 Rt	4	CY
		Sta 101+00 to Sta 102+50 Lt	4	CY

LEGEND

GRAVEL SURFACING

PIPE POLYETHYLENE CORR PERF 6IN DRAIN

UNDERDRAIN PIPE PVC NON-PERFORATED 6IN

Plan and Profile

Slide Repair

North Slide

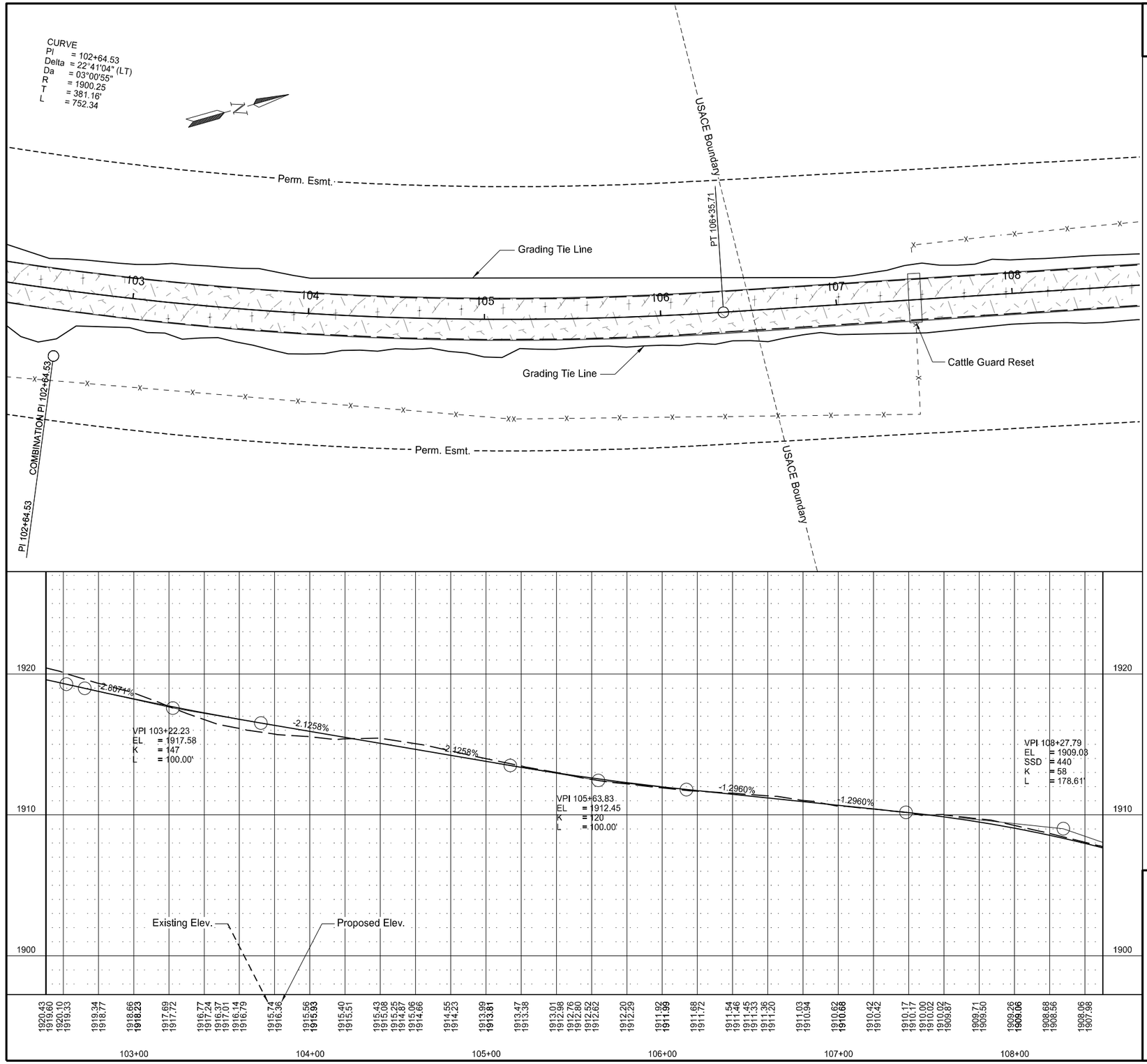
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STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	CER-1329(066)	60	5



SPEC	CODE	PAY ITEM	QTY	UNIT
709	0401	GEOTEXTILE FABRIC-TYPE D1		
		Sta 102+50 to Sta 108+50 Rt	334	SY
		Sta 102+50 to Sta 108+50 Lt	332	SY
714	6581	PIPE POLYETHYLENE CORR PERF 6IN DRAIN		
		Sta 102+50 to Sta 108+50 Rt	602	LF
		Sta 102+50 to Sta 108+50 Lt	598	LF
714	9700	UNDERDRAIN FILL GRANULAR MATERIAL		
		Sta 102+50 to Sta 108+50 Rt	18	CY
		Sta 102+50 to Sta 108+50 Lt	18	CY
980	0170	CATTLE GUARD RESET		
		Sta 107+45	1	EA

LEGEND

GRAVEL SURFACING

PIPE POLYETHYLENE CORR PERF 6IN DRAIN

UNDERDRAIN PIPE PVC NON-PERFORATED 6IN

Plan and Profile

Slide Repair

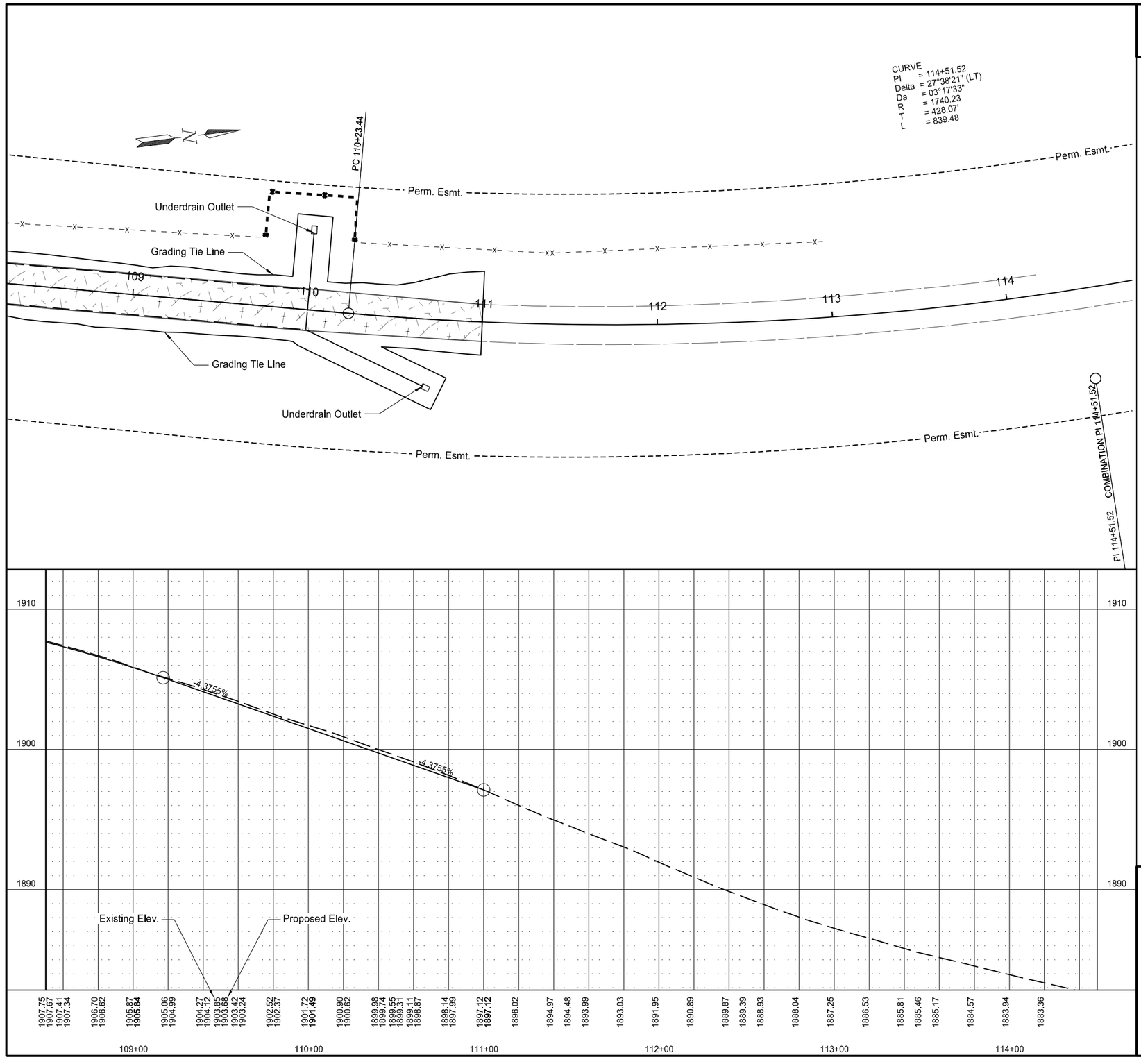
North Slide

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NORTH DAKOTA

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	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	CER-1329(066)	60	6

SPEC	CODE	PAY ITEM	QTY	UNIT
709	0401	GEOTEXTILE FABRIC-TYPE D1		
		Sta 108+50 to Sta 110+00 Rt	83	SY
		Sta 108+50 to Sta 110+00 Lt	83	SY
		Sta 110+00	13	SY
714	3151	HEADWALL-PRECAST CONCRETE 6IN		
		110+00 44.0' Lt	1	EA
		110+68 38.4' Rt	1	EA
714	3159	HEADWALL VEGETATION BARRIER		
		110+00 44.0' Lt	1	EA
		110+68 38.4' Rt	1	EA
714	6581	PIPE POLYETHYLENE CORR PERF 6IN DRAIN		
		Sta 108+50 to Sta 110+00 Rt	150	LF
		Sta 108+50 to Sta 110+00 Lt	150	LF
		Sta 110+00	23	LF
714	9700	UNDERDRAIN FILL GRANULAR MATERIAL		
		Sta 108+50 to Sta 110+00 Rt	4	CY
		Sta 108+50 to Sta 110+00 Lt	4	CY
		Sta 110+00	1	CY
714	9771	UNDERDRAIN PIPE PVC NON-PERFORATED 6IN		
		Sta 110+00 11.5' Lt to Sta 110+00 44.0' Lt	33	LF
		Sta 110+00 11.5' Rt to Sta 110+68 38.4' Rt	74	LF

LEGEND

GRAVEL SURFACING

PIPE POLYETHYLENE CORR PERF 6IN DRAIN

UNDERDRAIN PIPE PVC NON-PERFORATED 6IN

Plan and Profile

Slide Repair

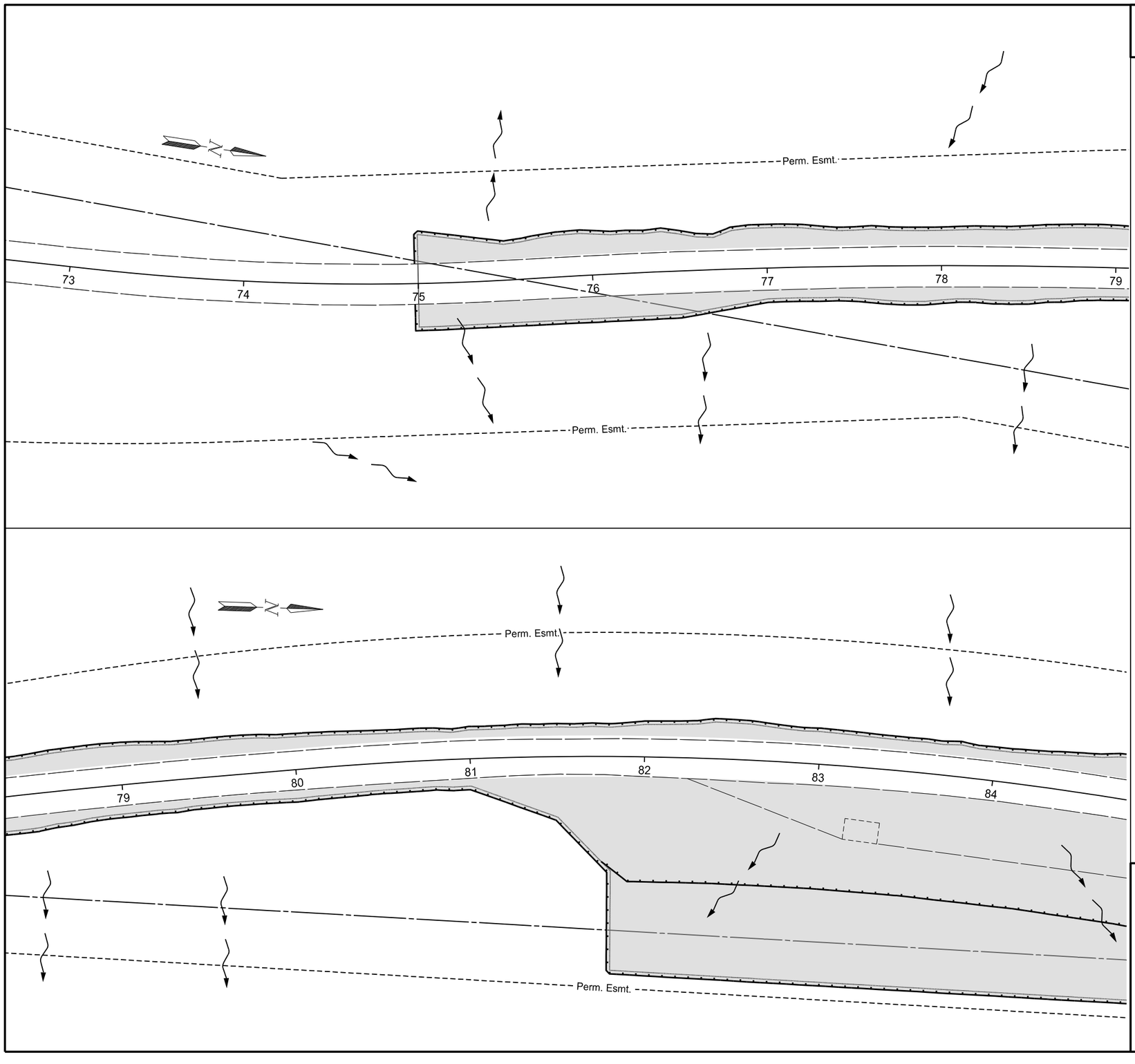
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	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	CER-1329(066)	76	1

SPEC	CODE	PAY ITEM	QTY	UNIT
251	2000	TEMPORARY COVER CROP		
		Sta 74+98 to Sta 84+50 Lt	0.218	ACRE
		Sta 74+98 to Sta 84+50 Rt	0.928	ACRE
253	0201	HYDRAULIC MULCH		
		Sta 74+98 to Sta 84+50 Lt	0.218	ACRE
		Sta 74+98 to Sta 84+50 Rt	0.928	ACRE
261	0112	FIBER ROLLS 12IN		
		Sta 74+98 to Sta 84+50 Lt	979	LF
		Sta 74+98 to Sta 84+50 Rt	1289	LF
261	0113	REMOVE FIBER ROLLS 12IN		
		Sta 74+98 to Sta 84+50 Lt	979	LF
		Sta 74+98 to Sta 84+50 Rt	1289	LF

LEGEND

HYDRAULIC MULCH, STRAW MULCH

FIBER ROLLS 12IN

FLOW DIRECTION

Temporary Erosion Control

Slide Repair

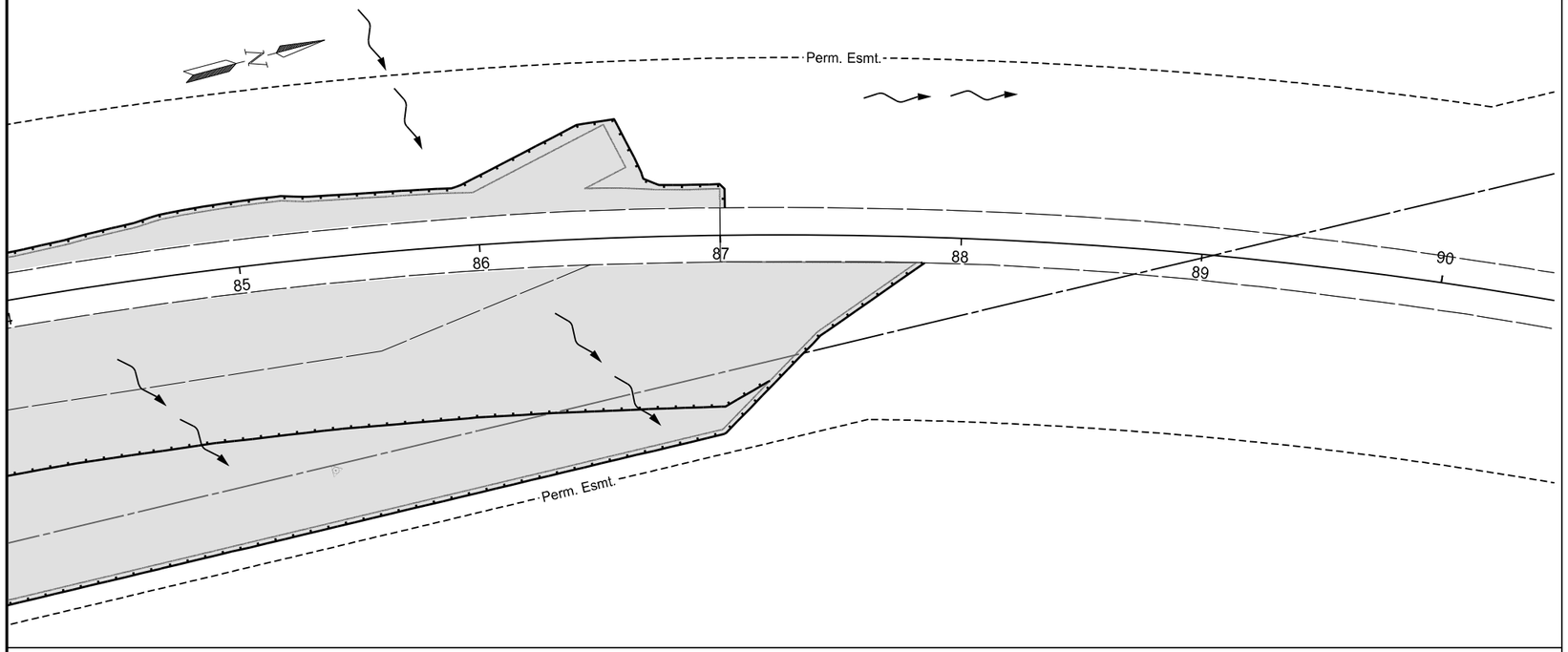
South Slide

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	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	CER-1329(066)	76	2

SPEC	CODE	PAY ITEM	QTY	UNIT
251	2000	TEMPORARY COVER CROP		
		Sta 84+50 to Sta 87+02 Lt	0.100	ACRE
		Sta 84+50 to Sta 87+02 Rt	0.511	ACRE
253	0201	HYDRAULIC MULCH		
		Sta 84+50 to Sta 87+02 Lt	0.100	ACRE
		Sta 84+50 to Sta 87+02 Rt	0.511	ACRE
261	0112	FIBER ROLLS 12IN		
		Sta 84+50 to Sta 87+02 Lt	287	LF
		Sta 84+50 to Sta 87+02 Rt	613	LF
261	0113	REMOVE FIBER ROLLS 12IN		
		Sta 84+50 to Sta 87+02 Lt	287	LF
		Sta 84+50 to Sta 87+02 Rt	613	LF

LEGEND

HYDRAULIC MULCH, STRAW MULCH

FIBER ROLLS 12IN

FLOW DIRECTION

Temporary Erosion Control

Slide Repair

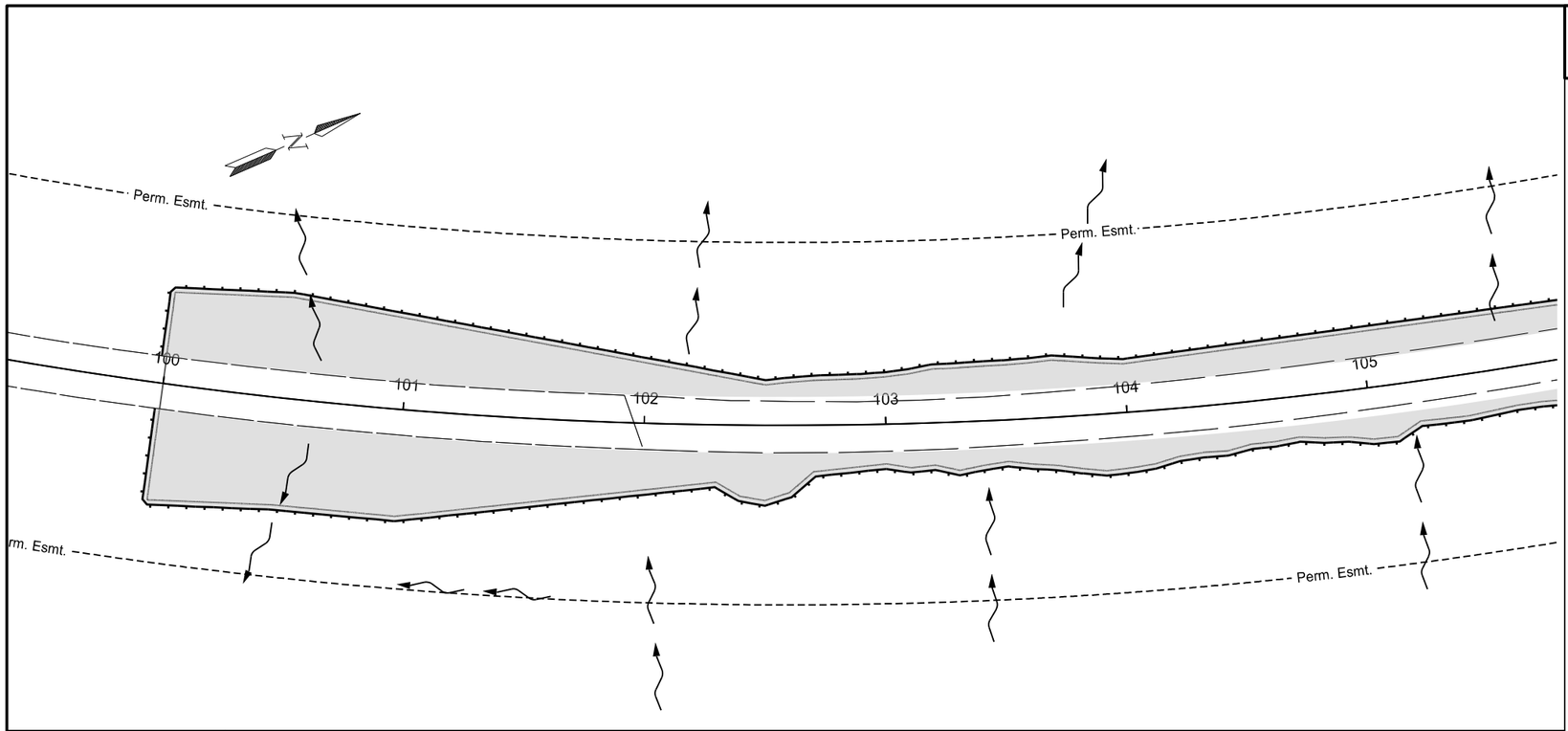
South Slide

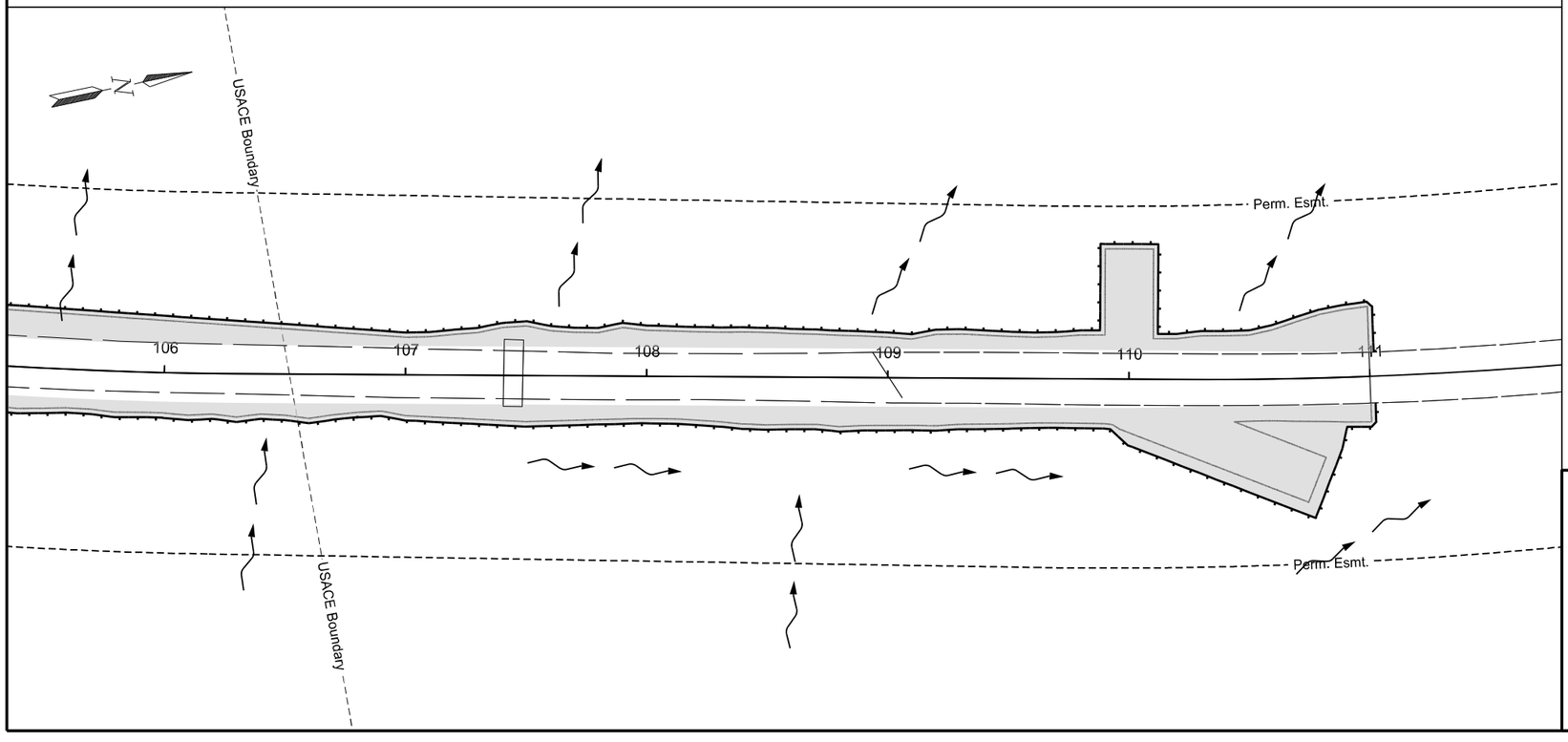
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	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	CER-1329(066)	76	3

SPEC	CODE	PAY ITEM	QTY	UNIT
251	2000	TEMPORARY COVER CROP		
		Sta 74+98 to Sta 84+50 Lt	0.218	ACRE
		Sta 74+98 to Sta 84+50 Rt	0.928	ACRE
253	0201	HYDRAULIC MULCH		
		Sta 74+98 to Sta 84+50 Lt	0.218	ACRE
		Sta 74+98 to Sta 84+50 Rt	0.928	ACRE
261	0112	FIBER ROLLS 12IN		
		Sta 74+98 to Sta 84+50 Lt	979	LF
		Sta 74+98 to Sta 84+50 Rt	1289	LF
261	0113	REMOVE FIBER ROLLS 12IN		
		Sta 74+98 to Sta 84+50 Lt	979	LF
		Sta 74+98 to Sta 84+50 Rt	1289	LF

LEGEND

- HYDRAULIC MULCH, STRAW MULCH
- FIBER ROLLS 12IN
- FLOW DIRECTION

Temporary Erosion Control

Slide Repair

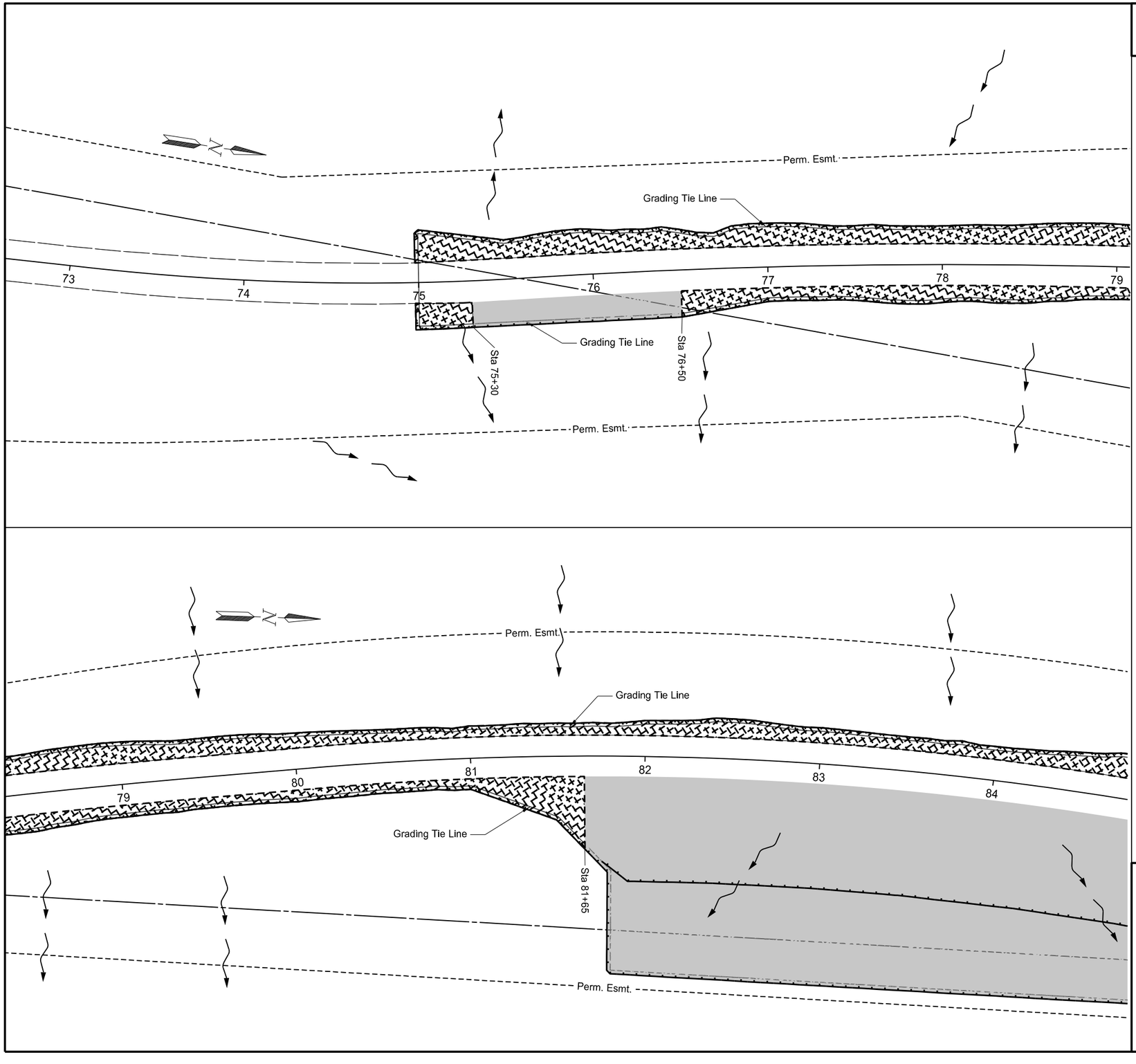
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	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	CER-1329(066)	77	1

SPEC	CODE	PAY ITEM	QTY	UNIT
251	0200	SEEDING CLASS II		
		Sta 74+98 to Sta 84+50 Lt	0.218	ACRE
		Sta 74+98 to Sta 84+50 Rt	0.928	ACRE
253	0201	HYDRAULIC MULCH		
		Sta 74+98 to Sta 84+50 Rt	0.807	ACRE
255	0101	ECB TYPE 1		
		Sta 74+98 to Sta 84+50 Lt	1057	SY
		Sta 74+98 to Sta 75+30 Rt	53	SY
		Sta 76+50 to Sta 81+65 Rt	534	SY
261	0112	FIBER ROLLS 12IN		
		Sta 74+98 to Sta 84+50 Lt	979	LF
		Sta 74+98 to Sta 84+50 Rt	1289	LF

LEGEND

- 4" TOPSOIL, SEEDING CLASS II, HYDRAULIC MULCH
- 4" TOPSOIL, SEEDING CLASS II, ECB TYPE 1
- FIBER ROLLS 12IN
- FLOW DIRECTION

Permanent Erosion Control

Slide Repair

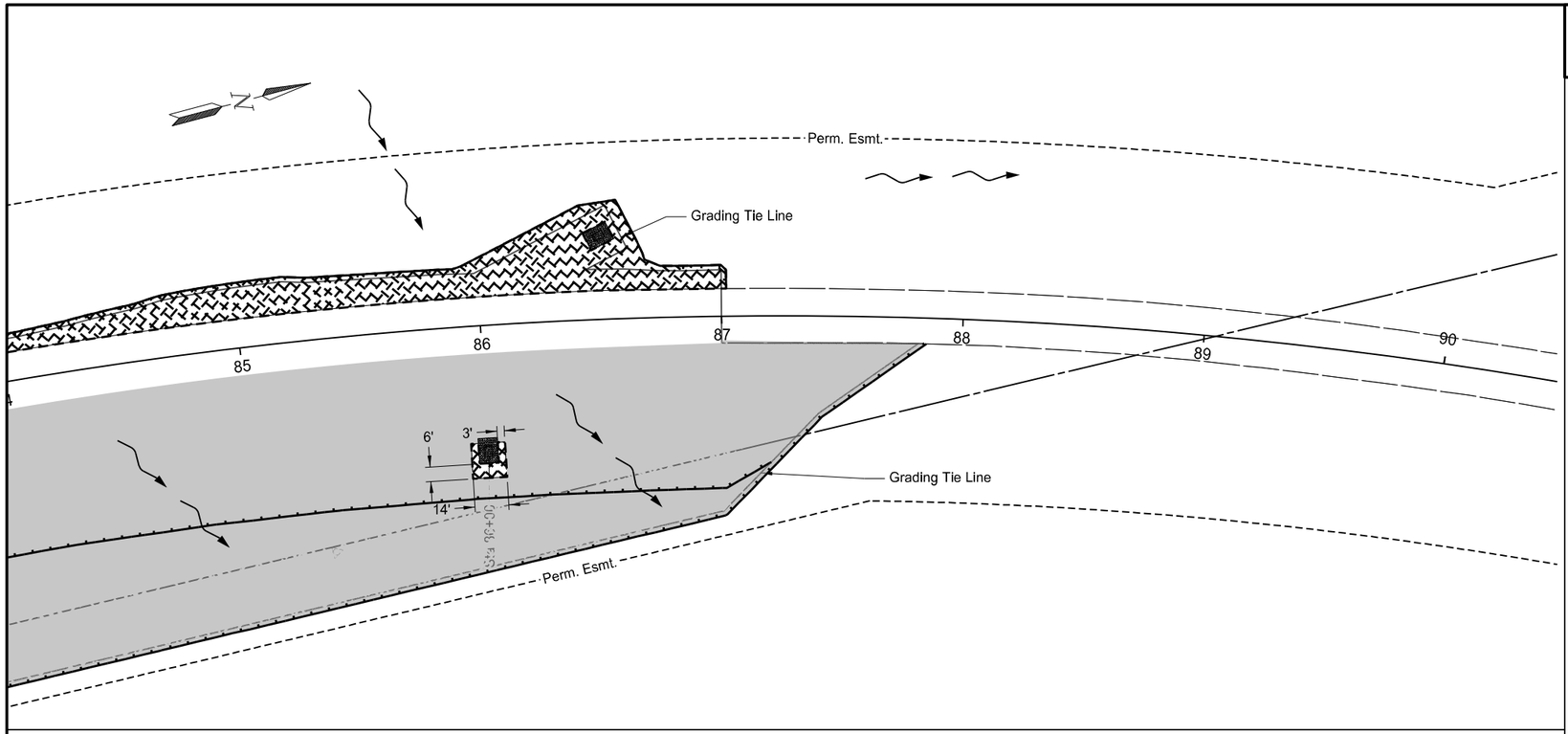
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	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	CER-1329(066)	77	2

SPEC	CODE	PAY ITEM	QTY	UNIT
251	0200	SEEDING CLASS II		
		Sta 84+50 to Sta 87+02 Lt	0.098	ACRE
		Sta 84+50 to Sta 87+02 Rt	0.509	ACRE
253	0201	HYDRAULIC MULCH		
		Sta 84+50 to Sta 87+02 Rt	0.506	ACRE
255	0101	ECB TYPE 1		
		Sta 84+50 to Sta 87+02 Lt	473	SY
		Sta 85+93 to Sta 86+07 Rt	15	SY
261	0112	FIBER ROLLS 12IN		
		Sta 84+50 to Sta 87+02 Lt	287	LF
		Sta 84+50 to Sta 87+02 Rt	613	LF

LEGEND

- 4" TOPSOIL, SEEDING CLASS II, HYDRAULIC MULCH
- 4" TOPSOIL, SEEDING CLASS II, ECB TYPE 1
- FIBER ROLLS 12IN
- FLOW DIRECTION

Permanent Erosion Control

Slide Repair

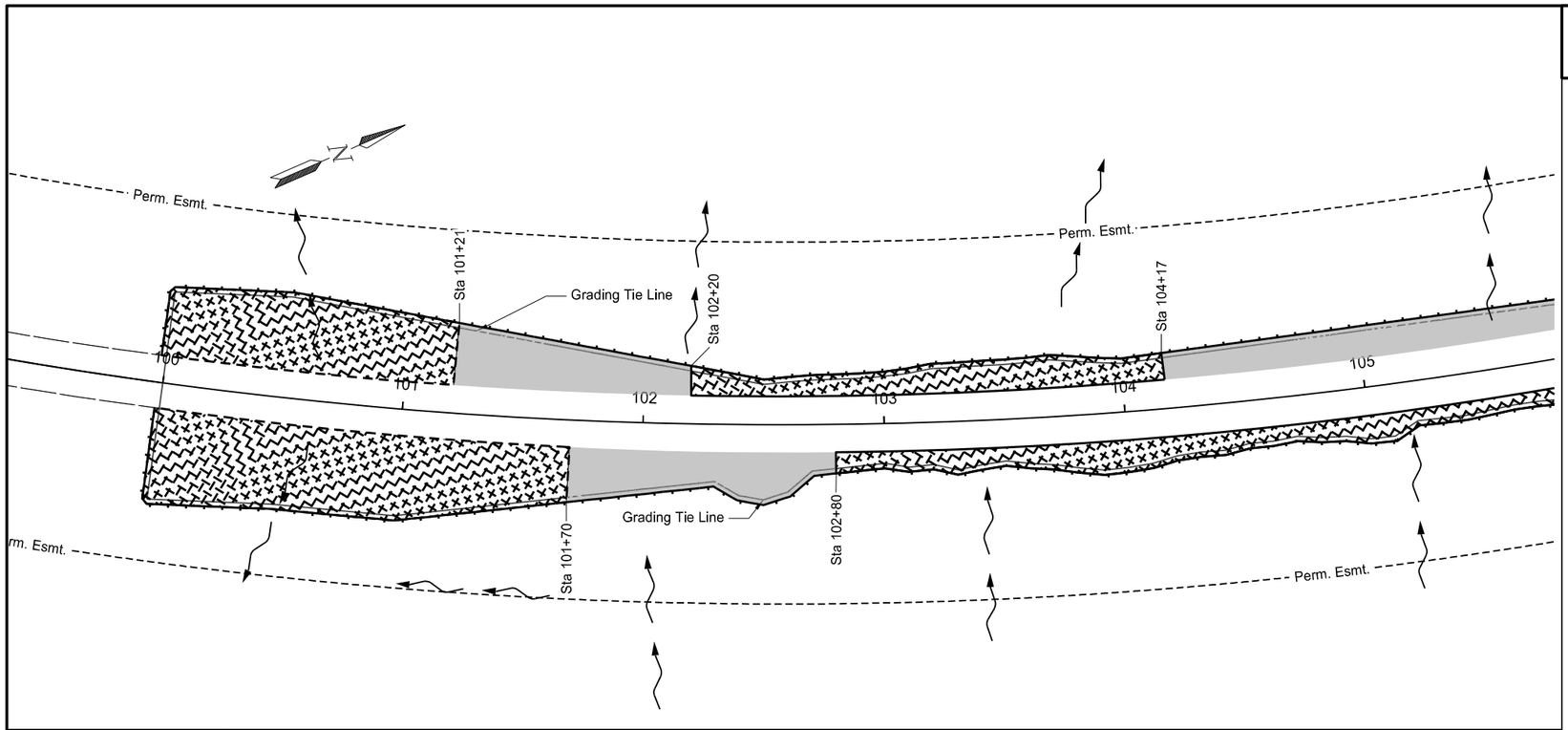
South Slide

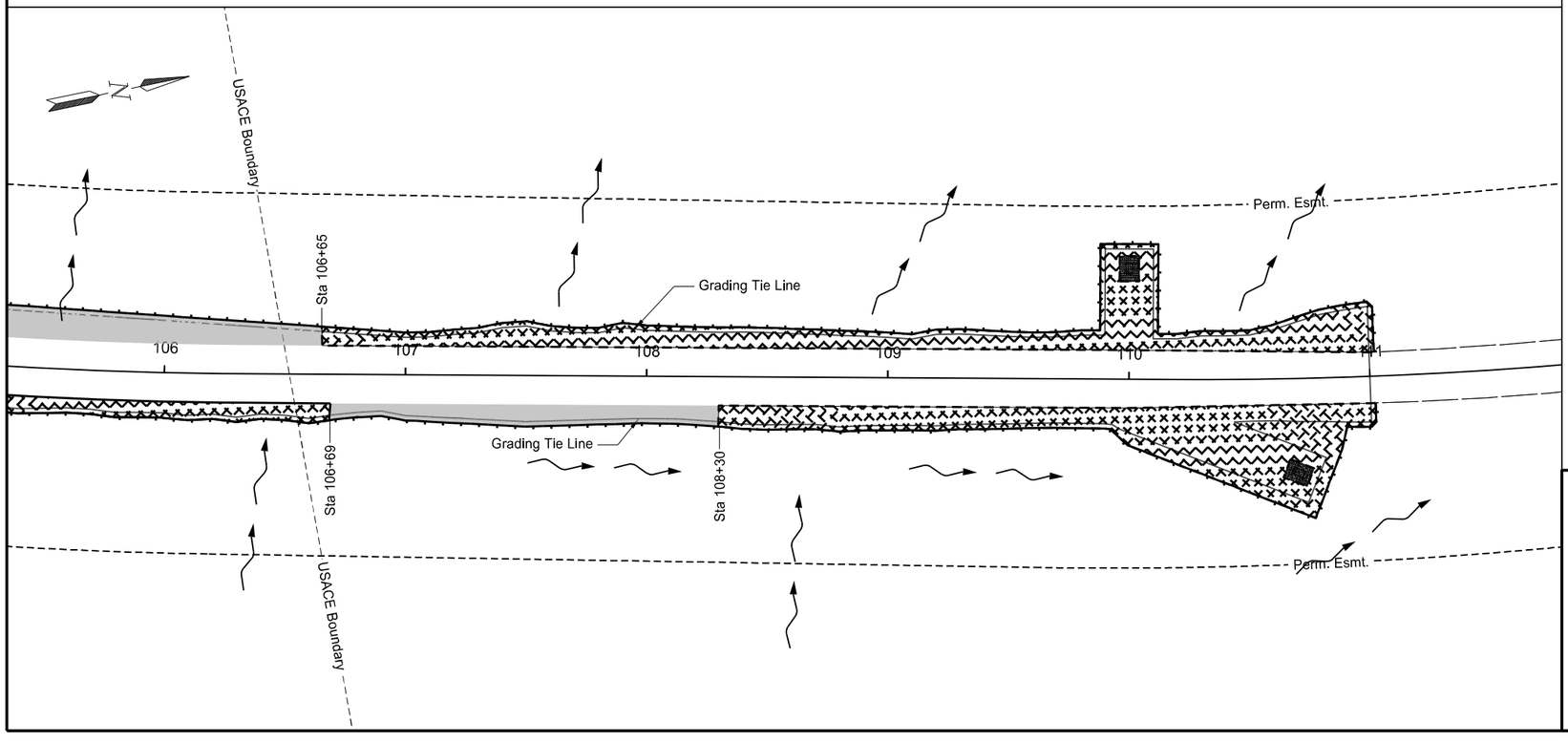
92nd Ave NW

Dunn County

REGISTERED PROFESSIONAL ENGINEER
AMY J. SCHAAF
PE-40939
DATE 8/27/2026
NORTH DAKOTA

Docusign Envelope ID: 89BE7878-0912-8D61-8292-9E11C1689D69





	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	CER-1329(066)	77	3

SPEC	CODE	PAY ITEM	QTY	UNIT
251	0200	SEEDING CLASS II		
		Sta 99+98 to Sta 111+02 Lt	0.349	ACRE
		Sta 99+98 to Sta 111+02 Rt	0.387	ACRE
253	0201	HYDRAULIC MULCH		
		Sta 99+98 to Sta 111+02 Lt	0.112	ACRE
		Sta 99+98 to Sta 111+02 Rt	0.073	ACRE
255	0101	ECB TYPE 1		
		Sta 99+98 to Sta 101+21 Lt	402	SY
		Sta 99+98 to Sta 101+70 Rt	648	SY
		Sta 102+20 to Sta 104+17 Lt	235	SY
		Sta 102+80 to Sta 106+69 Rt	373	SY
		Sta 106+65 to Sta 111+02 Lt	512	SY
		Sta 108+30 to Sta 111+02 Rt	497	SY
261	0112	FIBER ROLLS 12IN		
		Sta 99+98 to Sta 111+02 Lt	1219	LF
		Sta 99+98 to Sta 111+02 Rt	1209	LF

LEGEND

- 4" TOPSOIL, SEEDING CLASS II, HYDRAULIC MULCH
- 4" TOPSOIL, SEEDING CLASS II, ECB TYPE 1
- FIBER ROLLS 12IN
- FLOW DIRECTION

Permanent Erosion Control

Slide Repair

North Slide

92nd Ave NW

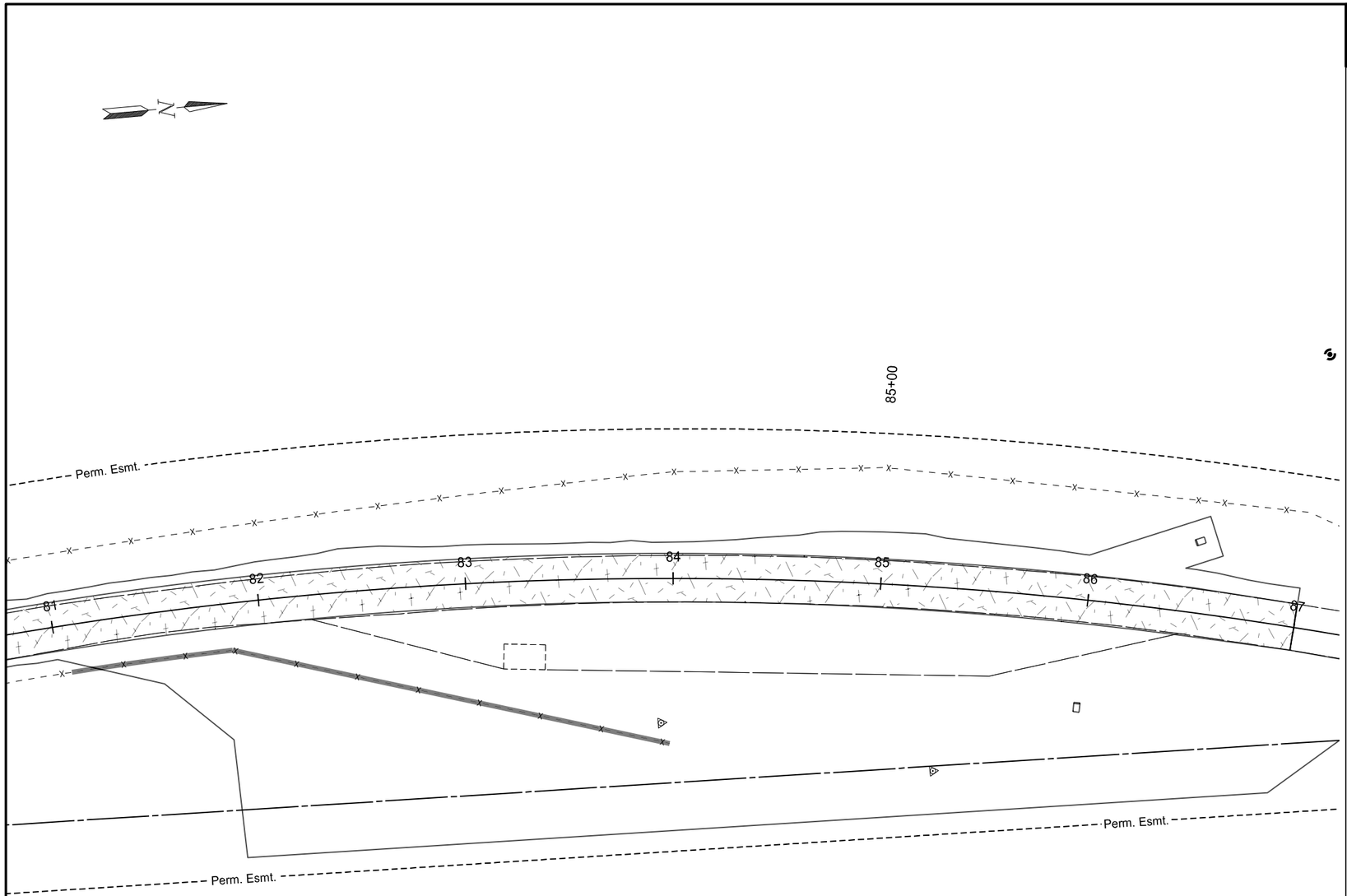
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AMY J. SCHAAF
PE-40939
DATE 8/27/2026
NORTH DAKOTA

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STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	CER-1329(066)	80	1

SPEC	CODE	PAY ITEM	QTY	UNIT
752	922	FENCE REMOVE & RESET		
		Sta 81+06 22.8' Rt to Sta 81+85 22.7' Rt	78	LF
		Sta 81+87 26.5' Rt to Sta 83+98 79.5' Rt	212	LF



LEGEND

- TEMPORARY FENCE
- EXISTING FENCE
- FENCE REMOVE AND RESET

Fencing Layout

Slide Repair

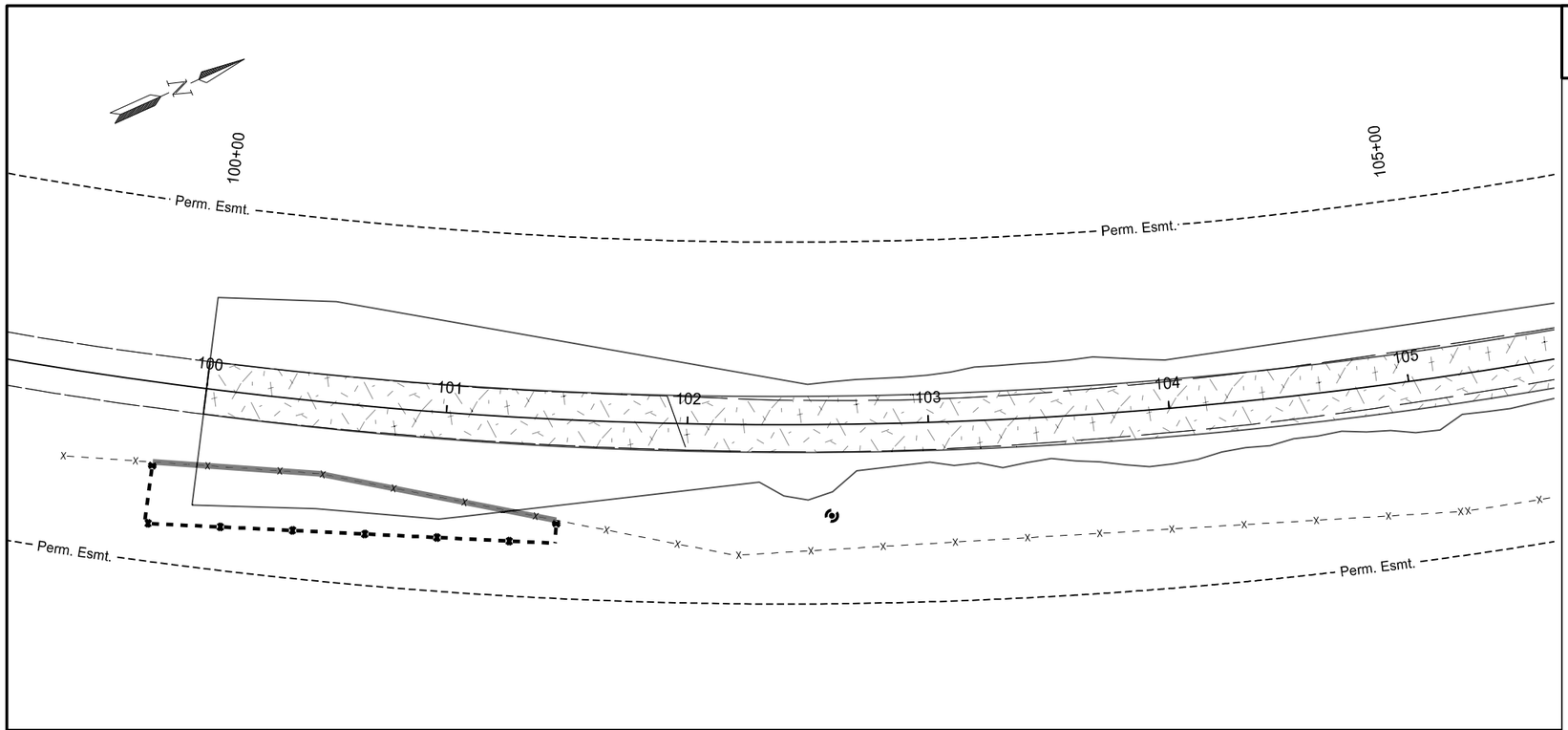
South Slide

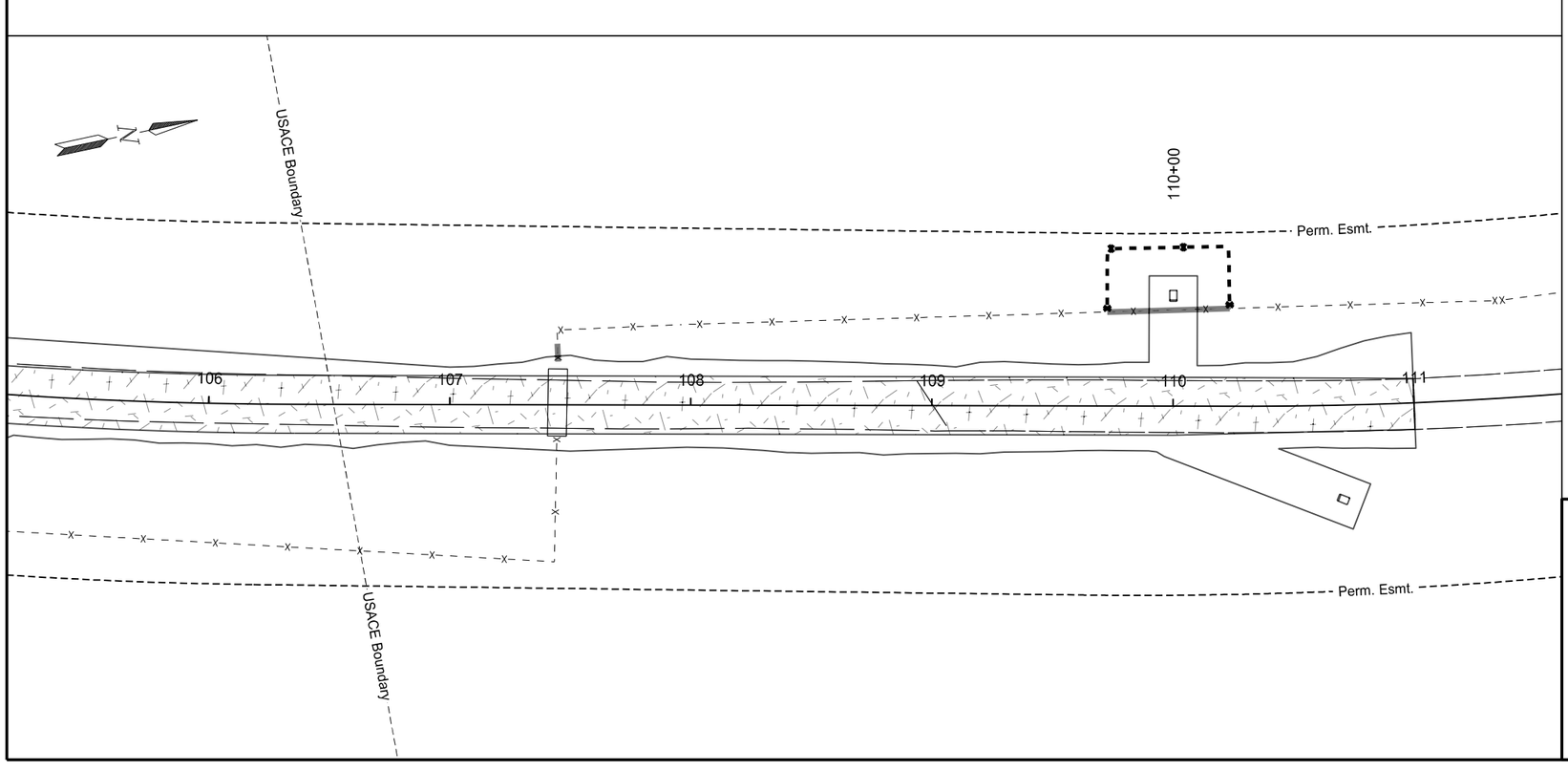
92nd Ave NW

Dunn County

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AMY J. SCHAAF
PE-40939
DATE 8/27/2026
NORTH DAKOTA

Docusign Envelope ID: 89BE7878-0912-8D61-8292-9E11C1689D69





	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	CER-1329(066)	80	2

SPEC	CODE	PAY ITEM	QTY	UNIT
752	905	TEMPORARY FENCE		
		Sta 99+82 33.1' Rt to Sta 101+48 41.8' Rt	206	LF
		Sta 109+73 39.0' Lt to Sta 110+23 40.6' Lt	102	LF
752	922	FENCE REMOVE & RESET		
		Sta 99+82 33.1' Rt to Sta 101+48 41.8' Rt	169	LF
		Sta 107+45 17.9' Lt to Sta 107+44 31.0' Lt	13	LF
		Sta 109+73 39.0' Lt to Sta 110+23 40.6' Lt	51	LF

LEGEND

- TEMPORARY FENCE
- EXISTING FENCE
- FENCE REMOVE AND RESET

Fencing Layout

Slide Repair

North Slide

92nd Ave NW

Dunn County

REGISTERED PROFESSIONAL ENGINEER
AMY J. SCHAAF
PE-40939
DATE 8/27/2026
NORTH DAKOTA

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PRELIMINARY SURVEY COORDINATE AND CURVE DATA - Little Missouri Bay Road, Slide Repair

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	CER-1329(066)	81	1

HORIZONTAL ALIGNMENT

PNT	STATION	NORTHING	EASTING
92nd Ave NW (SCL_92nd)			
Begin/PC	67+20.05	670679.68	1473538.16
PI	68+39.38	670798.97	1473535.29
PT	69+58.49	670917.31	1473519.92
PC	70+29.42	670987.65	1473510.78
PI C2	71+27.90	671085.31	1473498.10
PT	72+26.26	671183.70	1473493.93
PC	73+10.12	671267.49	1473490.37
PI C3	74+34.52	671391.78	1473485.09
PT	75+58.30	671513.32	1473458.58
PC	75+72.59	671527.28	1473455.53
PI C4	77+53.08	671703.62	1473417.07
PT	79+33.29	671882.82	1473395.62
PC	80+06.76	671955.78	1473386.89
PI C5	87+28.78	672672.68	1473301.11
PT	93+86.77	673265.67	1473713.03
PC	98+83.37	673673.52	1473996.34
PI C6	102+64.53	673986.57	1474213.80
PT	106+35.71	674359.26	1474293.71
PC	110+23.44	674738.38	1474374.99
PI C7	114+51.52	675156.94	1474464.73
PT	118+62.92	675569.37	1474350.06
End	122+10.72	675904.46	1474256.90

CURVE DATA

ARC DEFINITION

C1		C2	
PI STA	= 68+39.38	PI STA	= 71+27.90
Delta	= 6° 01' 03" LT	Delta	= 4° 58' 03" RT
Da	= 2° 31' 25"	Da	= 2° 31' 25"
R	= 2270.30'	R	= 2270.30'
T	= 119.33'	T	= 98.48'
L	= 238.44'	L	= 196.83'
C3		C4	
PI STA	= 74+34.52	PI STA	= 77+53.08
Delta	= 9° 52' 25" LT	Delta	= 5° 28' 52" RT
Da	= 3° 58' 42"	Da	= 1° 31' 10"
R	= 1440.19'	R	= 3770.50'
T	= 124.40'	T	= 180.49'
L	= 248.18'	L	= 360.70'
C5		C6	
PI STA	= 87+28.78	PI STA	= 102+64.53
Delta	= 41° 36' 35" RT	Delta	= 22° 41' 04" LT
Da	= 3° 00' 55"	Da	= 3° 00' 55"
R	= 1900.25'	R	= 1900.25'
T	= 722.02'	T	= 381.16'
L	= 1380.01'	L	= 752.34'
C7			
PI STA	= 114+51.52		
Delta	= 27° 38' 21" LT		
Da	= 3° 17' 33"		
R	= 1740.23'		
T	= 428.07'		
L	= 839.48'		

US PUBLIC LAND SURVEY DATA

CORNER	IRN	NORTHING	EASTING
T-146-N R-93-W			
N 1/16 Cor 2	9-A.5	674497.14	1473531.12
NE Sec Cor 10	9-C	670545.40	1473435.18
W 1/16 Cor 2	9.5-A	675755.44	1474867.56
SE Sec Cor 10	9-E	665281.44	1473302.21
T-147-N R-93-W			
W 1/16 Cor 35	9.5-N	675751.90	1474963.04

SURVEY CONTROL POINTS

PNT	NORTHING	EASTING	ELEV	STATION	OFFSET	ALIGNMENT	MONUMENT
SECONDARY CONTROL							
CP 35011	666059.33	1473492.04	2391.89	Off of Alignment			Alum cap stamped FHWA
CP 10	672336.40	1473449.57	1985.81	83+93.99	69.57' Rt	SCL_92nd	5/8"x18" Rebar with plastic Cap Stamped Moore Control
CP 11	675721.07	1474350.34	1882.00	120+09.01	40.90' Rt	SCL_92nd	5/8"x18" Rebar with plastic Cap Stamped Moore Control
CP 35006	677527.92	1474030.40	1867.81	Off of Alignment			Alum cap stamped FHWA
CP 35007	677680.08	1473908.29	1853.43	Off of Alignment			Alum cap stamped FHWA

All coordinates and measurements on this document derived from the International Foot definition.

INITIALIZING BENCH MARK NDGPS Stations (OPUS)

☒ NAVD-88 ☐ _____

☐ GEOID12B ☐ _____ ☒ GEOID18

Date Survey Completed 10/1/23

☐ Assumed Coordinates

☒ All coordinates on this sheet are Dunn County ground coordinates. They are derived from the NAD83(2011) reference frame; North Dakota South Zone Combination Factor (cf) = 0.9998690

REGISTERED PROFESSIONAL ENGINEER AND LAND SURVEYOR
THOMAS D. WEIGEL
PE-28797
LS-10871
DATE 08/27/2026
NORTH DAKOTA

NOTES: Sheet 1 of 1

Docusign Envelope ID: 89BE7878-0912-8D61-8292-9E11C1689D69

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	CER-1329(066)	100	1

SIGN NUMBER	SIGN SIZE	DESCRIPTION	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 $150 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		15	
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)		30	
R2-1-48	48"x60"	SPEED LIMIT __		39	
R2-1aP-24	24"x18"	MINIMUM FEE $150 (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	
R10-6-24	24"x36"	STOP HERE ON RED		16	
R11-2-48	**48"x30"**	**ROAD CLOSED (Mounted on barricade)**	**2**	**12**	**24**
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**	**1**	**35**	**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**	**1**	**35**	**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		35	
W20-8-18	18"x18"	STOP - SLOW PADDLE Back to Back		5	
W20-52P-54	54"x12"	NEXT __ MILES (Mounted on warning sign post)		12	
W21-1-48	48"x48"	WORKERS		35	
W21-2-48	48"x48"	FRESH OIL		35	
W21-3-48	48"x48"	ROAD MACHINERY AHEAD or __ FT or _ MILE		35	
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	

SIGN NUMBER	SIGN SIZE	DESCRIPTION	AMOUNT REQUIRED	UNITS PER AMOUNT	UNITS SUB TOTAL
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

CONSIGN 1	**42"x18"**	**LITTLE MO CAMPGROUND/BOAT RAMP ACCESS CLOSED AFTER LABOR DA**	**4**	**22**	**88**

SPEC & CODE

704-1000	**TRAFFIC CONTROL SIGNS**	**TOTAL UNITS**	**182**

SPEC & CODE	DESCRIPTION	UNIT	QUANTITY
704-0100	FLAGGING	MHR	
704-1048	PORTABLE RUMBLE STRIPS	EACH	
704-1050	TYPE I BARRICADES	EACH	
704-1052	**TYPE III BARRICADES**	**EACH**	**6**
704-1060	**DELINEATOR DRUMS**	**EACH**	**10**
704-1065	TRAFFIC CONES	EACH	
704-1067	**TUBULAR MARKERS**	**EACH**	**10**
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	
704-4011	**PORTABLE CHANGEABLE MESSAGE SIGN**	**EA**	**1**
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/

REGISTERED PROFESSIONAL ENGINEER
AMY SCHAAF
PE-40939
DATE: 08/27/2026
NORTH DAKOTA

Traffic Control Devices List

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	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	CER-1329(066)	100	2



Legend

Work Zone

Sign

Barricade Type III

Construction Signing

Slide Repair

South & North Slides

92nd Ave NW

Dunn County

REGISTERED PROFESSIONAL ENGINEER
AMY J. SCHAAF
PE-40939
DATE: 8/27/2026
NORTH DAKOTA

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STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	CER-1329(066)	100	3







Legend

Sign

Barricade Type III

Construction Signing

Slide Repair

South & North Signs

92nd Ave NW

Dunn County

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AMY J. SCHAAF
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NORTH DAKOTA

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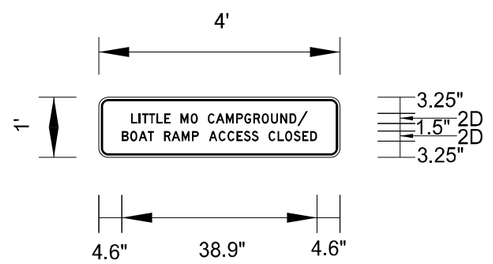
Docusign Envelope ID: 89BE7878-0912-8D61-8292-9E11C1689D69

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	CER-1329(066)	100	4

SIGN NUMBER	CONSIGN1
WIDTH X HEIGHT	4'-0" x 1'-0"
BORDER WIDTH	0-1/2" (inset 0-3/8")
CORNER RADIUS	1-1/2"
MOUNTING	Ground
BACKGROUND	**TYPE:** IV Reflective
	COLOR: Orange
LEGEND/BORDER	**TYPE:** IV Reflective
	COLOR: Black

SYMBOL	X	Y	WID	HT	ANGLE

AREA: 4 Sq.Ft.



Dimensions are in inches

Letter locations are panel edge to lower left corner

ND_Const_12_Small.sxf

| | | | | |