DESIGN DATA			
Traffic	Average Daily		
Current 2017	Pass: 665	Trucks: 1,020	Total: 1,685
Forecast 2037	Pass: 995	Trucks: 1,460	Total: 2,415

Clear Zone Distance: 42 LF (4:1)	Design Speed: 65 mph
Minimum Sight Dist. for Stopping: 645 ft	Bridges: N/A
Sight Dist. for No Passing Zone: 1100 ft	
Pavement Design Life 20 (years)	
Design Accumulated One-way Flexible Pavement ESALs: 2,934,242	

JOB # 24
NORTH DAKOTA
DEPARTMENT OF TRANSPORTATION

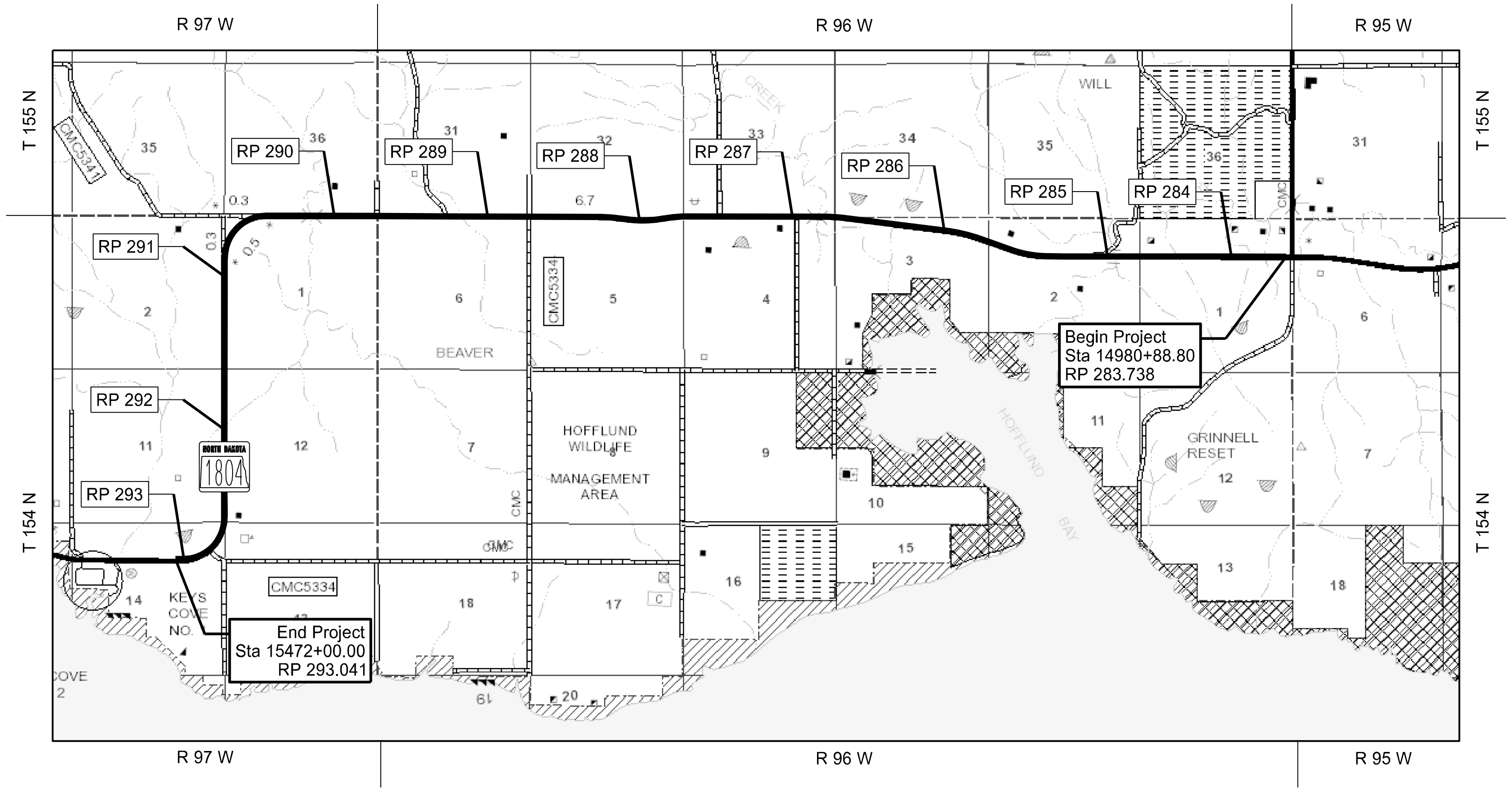
SOIB-7-804(061)283

Williams County
ND Highway 1804
Jct Tioga Rd South and West Approx 9.3 Mi to Red Mike Area
Widening, HMA, Passing Lanes, Pipe Extension,
& Intersection Improvements

STATE	PROJECT NO.	PCN	SECTION NO.	SHEET NO.
ND	SOIB-7-804(061)283	21786	1	1

GOVERNING SPECIFICATIONS:
2014 Standard Specifications adopted by the North Dakota Department of Transportation and the Supplemental Specifications effective on the date the project is advertised.

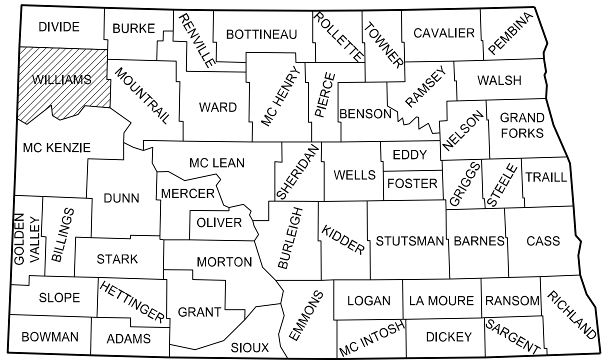
PROJECT NUMBER \ DESCRIPTION	NET MILES	GROSS MILES
SOIB-7-804(061)283	9.301	9.301



Legal Description
T 154 N, R 96 W - Sec 1, 2, 3, 4, 5, 6
T 154 N, R 97 W - Sec 1, 2, 11, 12, 13, 14
T 155 N, R 96 W - Sec 31, 32, 33, 34, 35, 36
T 155 N, R 97 W - Sec 35, 36

ND Hwy 1804 Reference Points

284	14994+72
285	15047+46
286	15100+29
287	15153+06
288	15205+91
289	15258+64
290	15311+52
291	15364+25
292	15417+08
293	15469+82


STATE COUNTY MAP

DESIGNERS
Jessica R. Karls, PE
Taylor D. Olson, PE
Brady L. Haussler, PE
Sean Kelly
Matthew Jennings

DISTRICT REVIEW
Joel M. Wilt /s/
DISTRICT NAME

APPROVED DATE 08/27/18
Robert Fode /s/
OFFICE OF PROJECT DEVELOPMENT
ND DEPARTMENT OF TRANSPORTATION

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 ND.

APPROVED DATE 08/15/18
Jessica R. Karls /s/
KADRMAS LEE & JACKSON

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

SPECIAL PROVISIONS

Number	Description
SP 003(14)	Temporary Erosion and Sediment Best Management Practices
SP 5223(14)	Permits and Environmental Considerations
SP 726(14)	Flexible Pavement Surface Tolerance

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LIST OF STANDARD DRAWINGS

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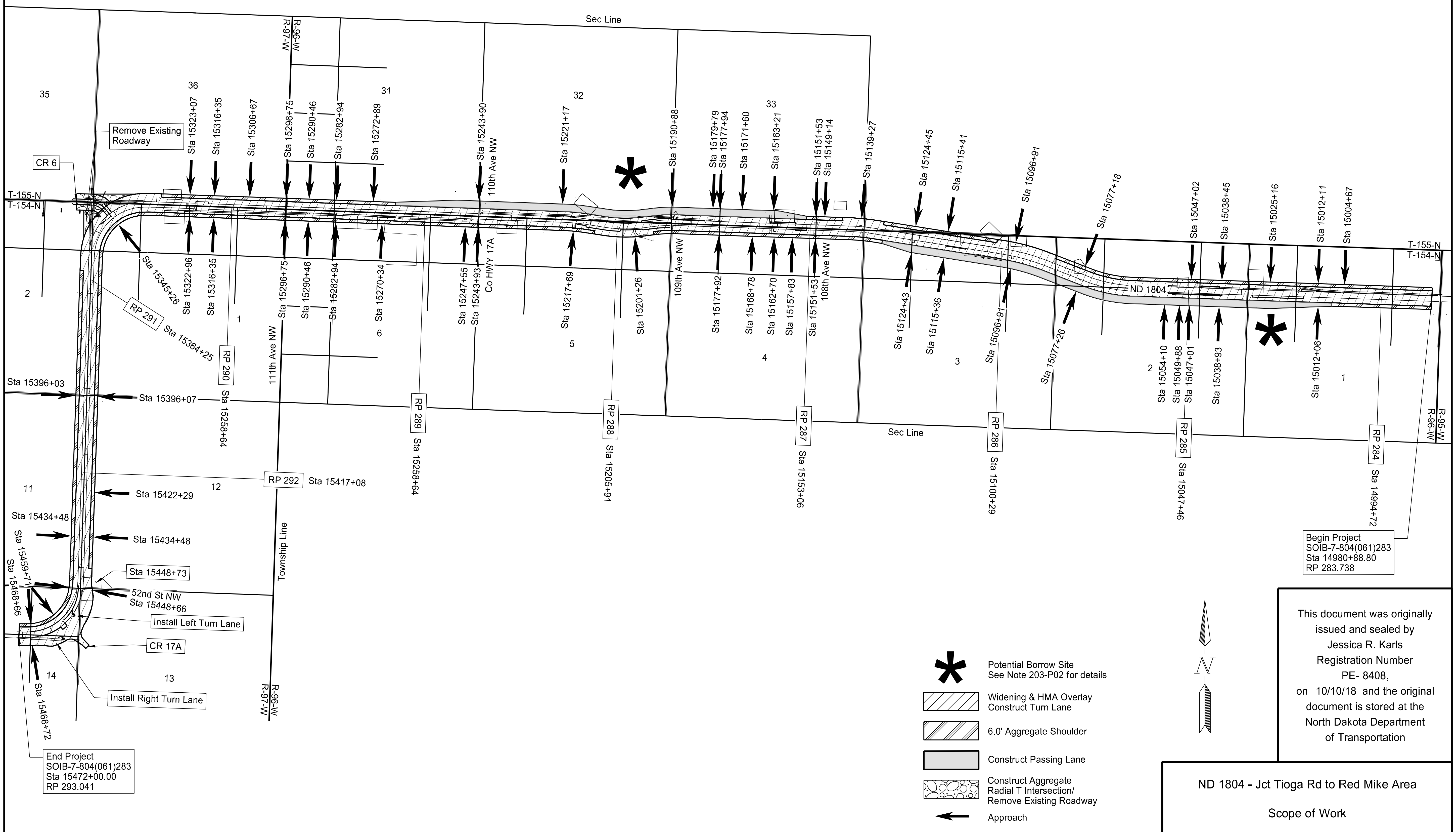

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ND 1804 - Jct Tioga Rd to Red Mike Area

Scope of Work

NOTES

GENERAL NOTES

105-200 UTILITY COORDINATION: A utility coordination meeting is required.

105-P01 UTILITIES: The vertical and horizontal utility locations shown in the plans are approximate. Plan locations should not be interpreted as exact for bidding or construction purposes.

105-P02 UTILITIES: Notify all utility owners of the project schedule as specified in Section 105.03, “Cooperation with Utility Owners”.

Coordinate and perform construction activities in a manner that accommodates the utility coordination requirements included in the Utility Coordination Table.

Protect utilities not listed in the Utility Coordination Table in their existing locations.

105-P03 UTILITIES: Utility facilities identified in the table below are to remain. Adjust operations adjacent to these utility facilities to protect them as described in the table (see comments column). Repair the damaged utilities at the Contractor’s expense. All grading work associated to the utility conflicts is the Contractor’s expense.

In addition to the table below, more utilities in conflict with the proposed work are identified in the Utility Conflict Summary Sheets. (Utility Conflict Summary sheets do include utilities listed in the Table below, as well.)

Station	Offset	Approx Qty		Approx Max Cut/Fill	Comments	Utility Company	Type of Facility
15006+02 to 15016+56	63.1' Rt - 66.4' Rt	1054	Cut	0.8' - 6.5'	Contractor to proctect in place.	Northwest Communication Cooperation	Fiber Optic Line
15008+08	69.9' Rt	1	Cut	1.5'	Contractor to leave existing ground undisturbed within 6' of the pole and build a new slope at a 2:1 ratio to tie into proposed ground.	Mountrail-Williams Electric Coop.	Power Pole
15011+07	69.9' Rt	1	Cut	3.1'	See Note 105-P05	Mountrail-Williams Electric Coop.	Power Pole
15011+76	73.2' Rt	1	Cut	2.8'	Contractor to leave existing ground undisturbed within 6' of the pedestal and build a new slope at a 2:1 ratio to tie into proposed ground.	Northwest Communication Cooperation	Fiber Optic Pedestal
15038+22 to 15041+00	68.3' Rt - 65.4' Rt	274	Cut	0.6' - 3.9'	Contractor to proctect in place.	Northwest Communication Cooperation	Fiber Optic Line
15038+60 to 15038+70	48.7' Lt - 83.7' Lt	39	Cut	0.6'	Contractor to proctect in place.	Northwest Communication Cooperation	Fiber Optic Line
15038+72 to 15038+86	20.0' Rt - 69.7' Rt	53	Cut	0.6'	Contractor to proctect in place.	Northwest Communication Cooperation	Fiber Optic Line
15040+82	72.8' Rt	1	Cut	1.8'	Contractor to leave existing ground undisturbed within 6' of the pole and build a new slope at a 2:1 ratio to tie into proposed ground.	Mountrail-Williams Electric Coop.	Power Pole
15043+00 to 15044+45	65.5' Rt	144	Cut	0.6' - 6.0'	Contractor to proctect in place.	Northwest Communication Cooperation	Fiber Optic Line
15043+21	72.2' Rt	1	Cut	4.5'	See Note 105-P05	Mountrail-Williams Electric Coop.	Power Pole
15041+50 to 15044+23	90.4' Rt - 99.5' Rt	272	Cut	2.4'	Contractor to proctect in place.	Tesoro High Plains Pipeline	Fuel Line
15045+06	78.9' Lt - 28.0' Lt	51	Cut	2.2'	Contractor to proctect in place.	Nesson Gath	Fuel Line
15045+45 to 15045+47	28.0' Lt - 68.0' Lt	40	Cut	2.4'	Contractor to proctect in place.	Tesoro High Plains Pipeline	Fuel Line
15046+07	28.0' Lt - 55.5' Lt	27	Cut	2.6'	Contractor to proctect in place.	Nesson Gath	Fuel Line
15048+97 to 15052+45	68.4' Rt - 72.6' Rt	347	Cut	0.0' - 3.9'	Contractor to proctect in place.	Northwest Communication Cooperation	Fiber Optic Line
15049+68	73.4' Rt	1	Cut	1.2'	Contractor to leave existing ground undisturbed within 6' of the locker vault and build a new slope at a 2:1 ratio to tie into proposed ground.	Mountrail-Williams Electric Coop.	Box Locker Vault Electric
15049+71	72.5' Rt	1	Cut	1.2'	Contractor to leave existing ground undisturbed within 6' of the pole and build a new slope at a 2:1 ratio to tie into proposed ground.	Mountrail-Williams Electric Coop.	Power Pole
15051+53	72.3' Rt	1	Cut	1.9'	Contractor to leave existing ground undisturbed within 6' of the pedestal and build a new slope at a 2:1 ratio to tie into proposed ground.	Northwest Communication Cooperation	Fiber Optic Pedestal
15112+22	76.3' Lt	1	Cut	2.7'	Contractor to leave existing ground undisturbed within 6' of the pole and build a new slope at a 2:1 ratio to tie into proposed ground.	Mountrail-Williams Electric Coop.	Power Pole
15124+12	71.4' Lt	1	Cut	1.6'	Contractor to leave existing ground undisturbed within 6' of the pedestal and build a new slope at a 2:1 ratio to tie into proposed ground.	Mountrail-Williams Electric Coop.	Box Locker Vault Electric
15124+18	70.7' Lt	1	Cut	1.6'	Contractor to leave existing ground undisturbed within 6' of the pole and build a new slope at a 2:1 ratio to tie into proposed ground.	Mountrail-Williams Electric Coop.	Power Pole
15154+60 to 15160+00	64.7' Rt - 46.5' Rt	540	Cut	1.6' - 6.1'	Contractor to proctect in place.	Northwest Communication Cooperation	Fiber Optic Line
15158+09	75.6' Rt	1	Cut	2.4'	See Note 105-P04	Mountrail-Williams Electric Coop.	Power Pole
15187+44	72.0' Rt	1	Fill	1.9'	See Note 105-P04	Mountrail-Williams Electric Coop.	Power Pole
15192+65	82.7' Rt	1	Fill	1.3'	Contractor to leave existing ground undisturbed within 6' of the pole and build a new slope at a 2:1 ratio to tie into proposed ground.	Mountrail-Williams Electric Coop.	Power Pole

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NOTES

Station	Offset	Approx Qty		Approx Max Cut/Fill	Comments	Utility Company	Type of Facility
15207+52 to 15208+48	56.9' Rt - 58.1' Rt	95	Cut	0.0' - 1.5'	Contractor to proctect in place.	Northwest Communication Cooperation	Fiber Optic Line
15217+97 to 15221+00	49.0' Rt - 70.0' Rt	306	Cut	0.7' - 2.9'	Contractor to proctect in place.	Northwest Communication Cooperation	Fiber Optic Line
15453+19 to 15458+00	53.5' Rt - 46.3' Rt	466	Cut	1.1' - 2.9'	Contractor to proctect in place.	Williams Rural Water Association	Water Line
15460+51 to 15461+49	77.0' Lt - 54.6' Lt	111	Cut	1.4'	Contractor to proctect in place.	Northwest Communication Cooperation	Fiber Optic Line
15463+00 to 15467+33	54.5' Rt - 56.5' Rt	418	Cut	0.7' - 2.1'	Contractor to proctect in place.	Williams Rural Water Association	Water Line
15466+40	50.8' Rt	1	Cut	0.8'	Contractor to leave existing ground undisturbed within 6' of the pole and build a new slope at a 2:1 ratio to tie into proposed ground.	Mountrail-Williams Electric Coop.	Power Pole
1006+03	48.0' Lt - 57.4' Rt	107		n/a	Contractor to proctect in place.	Northwest Communication Cooperation	Fiber Optic Line
1007+06	33' Lt - 58.3' Rt	92		n/a	Contractor to proctect in place.	Williams Rural Water Association	Water Line

105-P04 UTILITIES: Place embankment up to the following utility poles in fill sections. Prior to fill being placed coordinate wrapping of these poles with Mountrail Williams Electric Coop (MWEC). Provide MWEC 14 calendar days of notice before the work is to be done. The following poles require wrapping:
15187+44 RT
15192+62 RT

105-P05 UTILITIES: Proposed cuts around the utility poles at station 15011+07 Rt, and 15043+21 Rt are approved by Mountrail Williams Electric Coop (MWEC) without relocation of the utility poles. Provide MWEC a minimum of 14 calendar days of notice for cuts greater than two feet. Construction phasing may include grading an adjacent area to finished grade, installing a guy pole, removing existing guy anchors, grading the existing guy anchor area to finished grade, and installing permanent guy anchors at finished grade.

Complete all earthwork grading resulting from the completion of utility relocations before the final completion. Include the cost for this grading work in the contract unit price for “COMMON EXCAVATION – TYPE A”.

107-P01 MAINTAINING TRAFFIC –DROP-OFFS: If, at the end of the work-day, drop-offs greater than 2 inches and less than 18 inches or slopes steeper than 4:1 exist between the edge of a traffic lane and the outside edge of the proposed roadway, perform one of the following actions:

- Construct a traversable wedge in the area of the drop-off or steep slope; or
- Close the lane adjacent to the drop-off or steep slope and provide 24-hour flagging or pilot car operations.

When constructing a wedge, construct a wedge composed of aggregate or earthen materials with a 4:1 or flatter slope along the entire length of the area. Compact materials using Type C compaction, as specified in 203.04 E.4, "Compaction Control Type C."

Install stackable vertical panels that meet the requirements of Section 704.03 H, "Stackable Vertical Panels," along the edge of the driving lane closest to the wedge.

The Engineer will measure stackable vertical panels as specified in Section 704.05, "Method of Measurement" and will pay for panels as specified in Section 704.06, "Basis of Payment."

The Engineer will not measure material used to construct the wedge. Include the cost of materials, equipment, labor, and incidentals required for this operation in the price bid for *aggregate or earthwork pay items*.

If a 4:1 or flatter wedge is not installed, provide 24 hour flagging or pilot car operations and associated traffic control at no additional cost to the Department.

The requirements of Section 704.04 O, "Traffic Control for Uneven Pavement" apply to drop-offs created by milling or the placement of hot mix asphalt.

108-100 WEEKLY PLANNING & REPORTING MEETING: A weekly planning and reporting meeting is required.

201-300 CLEARING & GRUBBING: This work consists of clearing, grubbing, removing, and disposal of vegetation and debris within the limits of construction throughout the project. Include all costs for removal and disposal in the price bid for “Clearing & Grubbing”.

202-P01 FENCE REMOVAL: Notify landowners in writing, with a copy to the Engineer, a minimum of 30 days in advance of fence removal. Just prior to removing fence, coordinate verbally with the adjacent landowners. Additional information, including the property owners’ contact information, will be available from the Engineer.

202-P02 REMOVAL OF PIPE: Remove the drainage system through the temporary bypass concurrent with removal of the temporary bypass. Include all costs for removing the drainage system in the unit price bid for “Removal of Pipe All Types & Sizes.”

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NOTES

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

203-380 AVERAGE HAUL: The average haul shown on the plans does not include the dead haul from the borrow areas to the point of entry into the mass.

203-P01 ROADWAY OBLITERATION: The Engineer will measure and pay for removal the roadway surface material, seeding, mulching, and erosion control items as specified in the appropriate section of the Standard Specifications.

203-P02 BORROW SITE: Two potential borrow site locations are shown in Section 4 of the plans. Environmental clearance has not been obtained for the potential borrow sites. Obtain proper clearance before using the sites.
Contact information for the landowner is listed below:

Woodrow J. Sveen
121 North Jackson
Plentywood, MT 59254
(701)-570-1371

302-P01 TRAFFIC SERVICE AGGREGATE: Provide Traffic Service Aggregate that meets the requirements for Class 5 as specified in Section 816.02, "Miscellaneous Aggregates."

704-100 TRAFFIC CONTROL SUPERVISOR: Provide a Traffic Control Supervisor.

704-500 PORTABLE RUMBLE STRIPS (PRS): Use PRS made of rubber or engineered polymers.

Install PRS that meet the following criteria:

- Have no adhesives or fasteners required for placement;
- Have a manufacturer's speed rating that meets or exceeds the posted speed limit;
- Each strip in the array must weigh a minimum of 100 pounds.

Use individual PRS constructed in one of the following manners:

- A single piece;
- Inter locking segments; or
- Two pieces hinged at the midpoint.

An installed array of PRS consists of a minimum of 3 individual strips.

Move rumble strips with the flagging operation. Do not place rumble strips on horizontal curves.

The Engineer will count and measure each array as one unit. Include the cost of providing, installing, maintaining, and relocating PRS in the unit price bid for "Portable Rumble Strips."

704-P01 TRAFFIC CONTROL FOR GRADING & BASE WORK: Grade the embankment within the work area. Delineate the work zone with stackable vertical panels spaced 2 times the posted speed limit. Maintain two lanes of traffic at all times. Provide traffic control consisting of a temporary road closure, flagging, and a pilot car during paving operations.

Maintain access to all intersections and private drives.

704-P02 WORK ZONE TRAFFIC CONTROL (PASSING LANES): Place one Type III Barricade at the beginning of the passing lane and one Type III Barricade every ½ mile of the passing lane. Place delineator drums at every entrance and intersection to keep the newly constructed lane closed. Place stackable vertical panels at the edge of the through lane at 130’ spacing until all signing is in place and all work within clear zone is done, including topsoil, seeding, and mulching. Open the newly constructed passing lanes when all passing lane signing, and markings are in place.

704-P03 TRAFFIC CONTROL FOR BITUMINOUS PAVEMENT: Provide traffic control consisting of a temporary road closure, flagging, and a pilot car.

Traffic control device quantities are based on a 6-mile limitation and the list below. Provide additional devices at no additional cost to the Department.

1. Standard D-704-15, layout A;
2. Standard D-704-20, layout G – signing will be required at junctions: 108th Ave NW, 109th Ave, 110th Ave, Co Hwy 17A, 54th St NW, and 52nd St NW;
3. Standard D-704-22, layouts K and L; and
4. Standard D-704-26, layouts EE and GG.

Place flaggers and traffic control devices as shown on Standard D-704-15, layout A at the following intersections when the lane closure spans across them:

1. 108th Avenue NW
2. 109th Avenue NW
3. 110th Avenue NW
4. County Hwy 17A
5. Co Rd 6
6. 52nd Street NW

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NOTES

706-P01 FIELD OFFICE: Provide a field office which meets the following requirements:

1. Minimum total area of 440 square feet.
2. Indoor bathroom facilities and supplies with weekly cleaning services.
3. Hookups for heat, electricity, sewer, and potable water.
4. Minimum cabinet space of 32 cubic feet.
5. Minimum counter space of 40 square feet.
6. Air conditioner with a minimum of 20,000 BTUs.
7. Lighting with a minimum of 110 foot-candles.
8. DSL broadband internet and a router that broadcasts Wi-Fi and will allow for hard wiring of a computer.
9. Photocopy/Printer with scanning capabilities capable of 11x17 photocopies and toner to last the duration of the project. Other features to include digital copying and scanning. Copier/printer machine with operating software compatible with that used by the NDDOT.

Supply a photocopier with enough toner to last the length of the project and with the following capabilities:

a. Printing;
b. Scanning; and
c. Producing 11 x 17 photocopies and prints.

Place the field office on the project, or as close to the project as possible. The Contractor is responsible for the pay for the following:

- Rental fees;
- Heating;
- Electrical;
- Sewer; and
- Potable water.

Make the field office available for occupancy one week before the start of the project. The Engineer will approve the location and the condition of the office. Do not remove the field office until the Engineer releases the field office.

The Engineer is responsible for the following items:

- Furnishing office equipment;
- Supplying paper;
- and Supplying and paying for internet service.

All requirements of the Field Office are subject to approval by the Engineer. Include the costs for the field office in the bid item "Field Office."

Schedule for Payments:

- 25% when set up on site.
- 50% when 30% of the work is complete.
- 75% when 60% of the work is complete.
- 100% when project is complete.

714-P01 PIPE EXTENSIONS: Remove the silted-in material from the pipes before extending them. Include the cost of removing the silt in the price bid for “Pipe Cleanout”.

752-P01 TEMPORARY FENCE: Verify the need for temporary fence with the landowner. Place temporary fencing around temporary construction easements where existing fence is removed until permanent fencing is in place.

754-P01 STOP SIGNS - REFLECTIVE STRIPS: Install 2” wide white reflective strips on the all sides of the sign support, except the side that faces the same direction as the sign.

Use reflective material that meets the requirements of Section 894.02 C, "Type IV Retroreflective Sheeting."

Install the strips on STOP signs at the following locations:

- 15459+50 – LT
- 1000+43 – RT

Include the cost of furnishing and installing retroreflective strips in the contract unit price for "Steel Galvanized Posts – Telescoping Perforated Tube."

762-050 PAVEMENT MARKING: If the Engineer and Contractor agree, plan quantity will be used as the measurement for payment for pavement marking items.

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ENVIRONMENTAL NOTES

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

EN-1 AQUATIC NUISANCE SPECIES (ANS): Equipment that was last used outside of North Dakota or within a Class I infested waterbody (identified on the North Dakota Game and Fish Department (NDGFD) website) requires an inspection by NDGFD. Notify the NDGFD at least 10 business days prior to pumps, watercraft, or any equipment entering a public water to allow the NDGFD sufficient time to inspect any and all such equipment for ANS. Contact the NDGFD ANS Coordinator, Jessica Howell by e-mail jmhowell@nd.gov for equipment inspections. Supply one of the following to the engineer as proof of compliance prior to work taking place in the water: (1) the NDGFD inspection report, (2) documented NDGFD correspondence (email or signed letter). If an inspection is not required, no follow up documentation is required.

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

EN-3 Threatened and Endangered Species: The contractor will notify the Project engineer immediately in the event any threatened or endangered species is identified within one-mile of the proposed project. The Project engineer will cease all construction activities, establish at least a 0.5 mile avoidance area, and immediately coordinate with the USFWS, FHWA, and NDDOT Environmental and Transportation Services. The contractor will not resume work within the avoidance area until the Project Engineer has confirmed with the agencies that work may proceed (either species have left the area or approved minimization measures have been implemented).

Above ground utility conflicts are not foreseen with this project but if any impacts are required, contact the NDDOT Utility Engineer to coordinate with the utility company. Bird diverters will be installed by the utility company on overhead utility lines that are shifted due to the proposed action.

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ND	SOIB-7-804(061)283	8	1

Estimated Quantities

SPEC	CODE	ITEM DESCRIPTION	UNIT	Mainline: Funding A				TOTAL
103	100	CONTRACT BOND	L SUM	1				1
103	200	ESCROW OF BID DOCUMENTATION	L SUM	1				1
201	330	CLEARING & GRUBBING	L SUM	1				1
202	169	REMOVAL OF END SECTION-ALL TYPES & SIZES	EA	2				2
202	174	REMOVAL OF PIPE ALL TYPES AND SIZES	LF	389				389
202	312	REMOVE EXISTING FENCE	LF	8235				8235
203	101	COMMON EXCAVATION-TYPE A	CY	27949				27949
203	109	TOPSOIL	CY	70287				70287
203	122	TOPSOIL-DEPT OPTION BORROW AREA	CY	15230				15230
203	140	BORROW-EXCAVATION	CY	162594				162594
216	100	WATER	M GAL	6433				6433
251	200	SEEDING CLASS II	ACRE	72.56				72.56
251	2000	TEMPORARY COVER CROP	ACRE	72.55				72.55
253	101	STRAW MULCH	ACRE	145.11				145.11
255	103	ECB TYPE 3	SY	10730				10730
256	100	RIPRAP GRADE I	CY	15				15
260	200	SILT FENCE SUPPORTED	LF	3930				3930
260	201	REMOVE SILT FENCE SUPPORTED	LF	3930				3930
261	112	FIBER ROLLS 12IN	LF	40369				40369
261	113	REMOVE FIBER ROLLS 12IN	LF	18002				18002
261	120	FIBER ROLLS 20IN	LF	13244				13244
261	121	REMOVE FIBER ROLLS 20IN	LF	6646				6646
262	100	FLOTATION SILT CURTAIN	LF	289				289
262	101	REMOVE FLOTATION SILT CURTAIN	LF	289				289
302	50	TRAFFIC SERVICE AGGREGATE	TON	200				200
302	115	AGGREGATE BASE COURSE CL 4	TON	9940				9940
302	120	AGGREGATE BASE COURSE CL 5	TON	103794				103794
302	357	AGGREGATE SURFACE COURSE CL 13	CY	1117				1117
401	50	TACK COAT	GAL	7472				7472
401	60	PRIME COAT	GAL	6183				6183
401	160	BLOTTER MATERIAL CL 44	TON	185				185
411	105	MILLING PAVEMENT SURFACE	SY	651				651
430	45	SUPERPAVE FAA 45	TON	58361				58361
430	1000	CORED SAMPLE	EA	363				363
430	5806	PG 58H-28 ASPHALT CEMENT	TON	3502				3502
702	100	MOBILIZATION	L SUM	1				1
704	100	FLAGGING	MHR	2200				2200
704	1000	TRAFFIC CONTROL SIGNS	UNIT	3607				3607
704	1048	PORTABLE RUMBLE STRIPS	EA	2				2
704	1052	TYPE III BARRICADE	EA	14				14
704	1060	DELINEATOR DRUMS	EA	194				194
704	1067	TUBULAR MARKERS	EA	353				353
704	1080	STACKABLE VERTICAL PANELS	EA	354				354
704	1185	PILOT CAR	HR	1100				1100
706	400	FIELD OFFICE	EA	1				1
706	500	AGGREGATE LABORATORY	EA	1				1
706	550	BITUMINOUS LABORATORY	EA	1				1

Estimated Quantities

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SOIB-7-804(061)283	8	2

SPEC	CODE	ITEM DESCRIPTION	UNIT	Mainline: Funding A	TOTAL
706	600	CONTRACTOR'S LABORATORY	EA	1	1
709	151	GEOSYNTHETIC MATERIAL TYPE R1	SY	6159	6159
709	155	GEOSYNTHETIC MATERIAL TYPE RR	SY	35	35
714	310	PIPE CONC REINF 18IN CL III	LF	34	34
714	615	PIPE CONC REINF 24IN CL III	LF	252	252
714	820	PIPE CONC REINF 30IN CL III	LF	74	74
714	905	PIPE CONC REINF 36IN CL III	LF	198	198
714	1005	PIPE CONC REINF 42IN CL III	LF	36	36
714	1105	PIPE CONC REINF 48IN CL III	LF	40	40
714	1510	PIPE CONC REINF 72IN CL III	LF	12	12
714	3010	END SECT-CONC REINF 18IN	EA	2	2
714	3035	END SECT-CONC REINF 36IN	EA	4	4
714	3480	15FT STR PLATE PIPE .218IN	LF	72	72
714	4099	PIPE CONDUIT 18IN-APPROACH	LF	78	78
714	4106	PIPE CONDUIT 24IN-APPROACH	LF	450	450
714	4116	PIPE CONDUIT 36IN-APPROACH	LF	64	64
714	5015	PIPE CORR STEEL .064IN 18IN	LF	238	238
714	5035	PIPE CORR STEEL .064IN 24IN	LF	148	148
714	5210	PIPE CORR STEEL .079IN 30IN	LF	12	12
714	5215	PIPE CORR STEEL .079IN 36IN	LF	40	40
714	5810	END SECT CORR STEEL .064IN 18IN	EA	18	18
714	5820	END SECT CORR STEEL .064IN 24IN	EA	10	10
714	5825	END SECT CORR STEEL .079IN 30IN	EA	2	2
714	5830	END SECT CORR STEEL .079IN 36IN	EA	4	4
714	9200	CATTLE PASS CONC INTERMED SECTION	LF	52	52
714	9611	REMOVE & RELAY CONC CATTLE PASS END SECTION	EA	3	3
714	9660	REMOVE & RELAY END SECTION-ALL TYPE & SIZES	EA	57	57
720	110	RIGHT OF WAY MARKERS	EA	83	83
720	125	ALIGNMENT MONUMENTS	EA	43	43
720	130	IRON PIN R/W MONUMENTS	EA	83	83
720	135	IRON PIN REFERENCE MONUMENTS	EA	65	65
752	200	FENCE BARBED WIRE 4 STRAND	LF	9222	9222
752	905	TEMPORARY FENCE	LF	9217	9217
752	993	FENCE TERMINAL	EA	19	19
752	2995	CORNER ASSEMBLY-WOOD POST	EA	43	43
752	4100	DOUBLE BRACE ASSEMBLY BARBED WIRE	EA	1	1
754	110	FLAT SHEET FOR SIGNS-TYPE XI REFL SHEETING	SF	621	621
754	112	FLAT SHEET FOR SIGNS-TYPE IV REFL SHEETING	SF	126	126
754	195	DIAMOND GRADE DELINEATORS-TYPE A	EA	14	14
754	206	STEEL GALV POSTS-TELESCOPING PERFORATED TUBE	LF	1359	1359
754	563	REFERENCE MARKER-TYPE C	EA	10	10
754	592	RESET SIGN PANEL	EA	13	13
754	803	OBJECT MARKERS - TYPE III	EA	14	14
754	805	OBJECT MARKERS - CULVERTS	EA	68	68
760	5	RUMBLE STRIPS - ASPHALT SHOULDER	MILE	18.6	18.6
760	7	RUMBLE STRIPS - ASPHALT CENTERLINE	MILE	9.3	9.3
760	10	RUMBLE STRIPS - INTERSECTION	SET	1	1

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Estimated Quantities

SPEC	CODE	ITEM DESCRIPTION	UNIT	Mainline: Funding A				TOTAL
762	112	EPOXY PVMT MK MESSAGE	SF	260				260
762	113	EPOXY PVMT MK 4IN LINE	LF	153063				153063
762	115	EPOXY PVMT MK 8IN LINE	LF	1451				1451
762	117	EPOXY PVMT MK 24IN LINE	LF	12				12
762	430	SHORT TERM 4IN LINE-TYPE NR	LF	308842				308842
766	100	MAILBOX-ALL TYPES	EA	5				5
980	170	CATTLE GUARD RESET	EA	1				1
990	400	PIPE CLEANOUT	EA	32				32

754 0805 OBJECT MARKERS - CULVERTS			
Station	Offset		Quantity (EA)
	Lt	Rt	
WIDENING & HMA OVERLAY			
15001+65	1	1	2
15015+08	1	1	2
15051+98	1	1	2
15077+83	1	1	2
15124+87	2	2	4
15127+00	2	2	4
15130+90	1	1	2
15160+84	1	1	2
15165+24	1	1	2
15173+15	1	1	2
15177+89	2	2	4
15181+55	1	1	2
15220+82	1	1	2
15243+12	2	2	4
15261+36	2	2	4
15271+24	1	1	2
15274+19	1	1	2
15278+94	1	1	2
15282+56	1	1	2
15290+10	1	1	2
15297+92	1	1	2
15302+91	1	1	2
15308+73	1	1	2
15313+61	1	1	2
15328+71	1	1	2
15335+49	1	1	2
15339+23	1	1	2
15353+11	1	1	2
15438+27	1	1	2
		TOTAL =	68

754 0563 REFERENCE MARKER-TYPE C		
Reference Point	Station	Quantity (EA)
WIDENING & HMA OVERLAY		
RP 284	14994+72	1
RP 285	15047+46	1
RP 286	15100+29	1
RP 287	15153+06	1
RP 288	15205+91	1
RP 289	15258+64	1
RP 290	15311+52	1
RP 291	15364+25	1
RP 292	15417+08	1
RP 293	15469+82	1
	TOTAL =	10

Mailboxes			
Station	Type	Number	Work
15024+88 - Rt	Single	1	Replace
15157+58 - Rt	Single	1	Replace
15316+43 - Rt	Single	1	Replace
15322+87 - Rt	Single	1	Replace
15448+81 - Lt	Single	1	Replace
Total		5	

430 1000 CORED SAMPLE									
Begin Station	End Station	Specification Section	A	B	C	D	Quantity	Quantity	Unit
			Distance (Ft) /2000	Lanes	Lifts	Sublots (A x B x C)	(D x 2)	(1 per mile)	
WIDENING & HMA OVERLAY									
14980+88.80	15016+00.00	430.04 I.2.b(1), "General"	2	2	3	12	24	n/a	EA
15016+00.00	15125+00.00		5	3		45	90		
15125+00.00	15162+00.00		2	2		12	24		
15162+00.00	15259+00.00		5	3		45	90		
15259+00.00	15445+00.00		9	2		54	108		
15445+00.00	15472+00.00		1	3		9	18		
14980+88.80	15472+00.00	430.04 I.2.b(2), "Pavement Thickness Determination Cores"	-	-	-	-	-	9	EA
					SUBTOTAL =		354	9	EA
					GRAND TOTAL =		363		EA

760 0005 RUMBLE STRIPS - ASPHALT SHOULDER			
Begin Station	End Station	Basis	Quantity (MILE)
WIDENING & HMA OVERLAY			
14980+88.80 Lt	15472+00.00 Lt	5,280 LF/Mile	9.30
14980+88.80 Rt	15472+00.00 Rt		9.30
		TOTAL =	18.60

760 0007 RUMBLE STRIPS - ASPHALT CENTERLINE			
Begin Station	End Station	Basis	Quantity (MILE)
WIDENING & HMA OVERLAY			
14980+88.80	15472+00.00	5,280 LF/Mile	9.30
		TOTAL =	9.30

760 0010 RUMBLE STRIPS - INTERSECTION	
Location	Set
Co Rd 17A	1
TOTAL=	1

Water
25 M Gal/Mile for Dust Palliative
20 Gal/Ton for Aggregate
10 Gal/CY for Embankment

Removal of Pavement
Aggregate Base @ 1.875 Ton/CY
Bituminous @ 2 Ton/CY

Pavement
Aggregate Base Course Cl 5 @ 1.875 Ton/CY
Tack Coat @ 0.05 Gal/SY
PG 58H-28 Asphalt Cement @ 6.0%
Superpave FAA 45 @ 2 Ton/CY
Prime @ 0.25 Gal/SY
Blotter Material Cl 44 @ 15 Lb/SY

762 0113 EPOXY PVMT MK 4IN LINE							
Begin Station	End Station	Description	Length (LF)	Center Line Striping (4IN Yellow)		Center Line Striping (4IN White)	Edge Line (4IN White)
				Barrier Line (LF)	Center Skips (LF)	Center Skips (LF)	Edge Line (4IN White)
14980+89	14987+20	EB No Passing	631	631	150	See Section 120 Sheet 2 for Locations	1,262
14987+20	15006+00	Center Skip	1880	-	470		3,760
15006+00	15008+20	WB No Passing	220	220	50		440
15008+20	15014+00	Dbl Yellow No Passing	580	1,160	-		1,160
15014+00	15093+00	EB No Passing	7900	7,900	1,970		15,800
15093+00	15110+00	Dbl Yellow No Passing	1700	3,400	-		3,400
15110+00	15137+80	EB No Passing	2780	2,780	690		5,560
15137+80	15149+20	Center Skip	1140	-	280		2,280
15149+20	15161+00	WB No Passing	1180	1,180	290		2,360
15161+00	15168+00	Dbl Yellow No Passing	700	1,400	-		1,400
15168+00	15198+00	WB No Passing	3000	3,000	750		6,000
15198+00	15217+00	Dbl Yellow No Passing	1900	3,800	-		3,800
15217+00	15266+80	WB No Passing	4980	4,980	1,240		9,960
15266+80	15445+00	Center Skip	17820	-	4,450		35,640
15445+00	15447+26	Dbl Yellow No Passing	226	452	-		452
15471+56	15472+00	Dbl Yellow No Passing	44	88	-		88
Sub Total (LF)				30,991	10,340	4,700	93,362
Grand Total (LF)				139,393			

*Intersection from Station 15447+26 to Station 15471+56, see Section 120 Sheet 1 for Quantities

762 0430 SHORT TERM 4IN LINE - TYPE NR	
Yellow (LF)	White (LF)
99,662	209,180
Total (LF) =	308,842

*The short term pavement marking quantities do not include quantities for arrows or hatch striping. It is assumed that the 8" white channel line will be temporarily striped as 4" white line.

*Quantity is based on 2 applications.

*See Section 100 Sheet 1 for the pay item.

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North Dakota Department
of Transportation

ND 1804 - Jct Tioga Rd to Red Mike Area

Basis of Estimate

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SOIB-7-804(061)283	10	2

	302 0115 AGGREGATE BASE COURSE CL 4			302 0120 AGGREGATE BASE COURSE CL 5			430 0045 SUPERPAVE FAA 45		
Location	Area (SF)	- (TON)	Cumulative (TON)	Area (SF)	- (TON)	Cumulative (TON)	Area (SF)	- (TON)	Cumulative (TON)
14980+88.80	4.50	-	-	14.32	-	-	11.93	-	-
14981+00.00	4.50	3	3	14.32	11	11	11.93	10	10
14982+00.00	4.50	31	34	14.32	99	110	10.99	85	95
14983+00.00	4.50	31	65	14.32	99	209	10.87	81	176
14984+00.00	4.50	31	96	14.32	99	308	10.44	79	255
14985+00.00	4.50	31	127	14.32	99	407	11.11	80	335
14986+00.00	4.50	31	158	14.32	99	506	11.74	85	420
14987+00.00	4.50	31	189	14.32	99	605	10.34	82	502
14988+00.00	4.50	31	220	14.32	99	704	8.86	71	573
14989+00.00	4.50	31	251	14.32	99	803	9.80	69	642
14990+00.00	4.50	31	282	14.32	99	902	10.20	74	716
14991+00.00	4.50	31	313	14.32	99	1,001	11.16	79	795
14992+00.00	4.50	31	344	14.32	99	1,100	11.61	84	879
14993+00.00	4.50	31	375	14.32	99	1,199	12.39	89	968
14994+00.00	4.50	31	406	14.32	99	1,298	7.03	72	1,040
14995+00.00	4.50	31	437	14.32	99	1,397	9.30	60	1,100
14996+00.00	4.50	31	468	14.32	99	1,496	9.95	71	1,171
14997+00.00	4.50	31	499	14.32	99	1,595	11.41	79	1,250
14998+00.00	4.50	31	530	14.32	99	1,694	10.23	80	1,330
14999+00.00	4.50	31	561	14.32	99	1,793	11.36	80	1,410
15000+00.00	4.50	31	592	14.32	99	1,892	6.57	66	1,476
15001+00.00	4.50	31	623	14.32	99	1,991	10.90	65	1,541
15002+00.00	4.50	31	654	14.32	99	2,090	11.72	84	1,625
15003+00.00	4.50	31	685	14.32	99	2,189	12.25	89	1,714
15004+00.00	4.50	31	716	14.32	99	2,288	12.39	91	1,805
15005+00.00	4.50	31	747	14.32	99	2,387	11.14	87	1,892
15006+00.00	4.50	31	778	14.32	99	2,486	11.40	84	1,976
15007+00.00	4.50	31	809	14.32	99	2,585	9.82	79	2,055
15008+00.00	4.50	31	840	14.32	99	2,684	11.09	77	2,132
15009+00.00	2.25	23	863	23.60	132	2,816	14.13	93	2,225
15010+00.00	2.25	16	879	23.60	164	2,980	14.05	104	2,329
15011+00.00	2.25	16	895	24.06	165	3,145	14.40	105	2,434
15012+00.00	2.25	16	911	26.37	175	3,320	14.04	105	2,539
15013+00.00	2.25	16	927	28.67	191	3,511	15.54	110	2,649
15014+00.00	2.25	16	943	30.98	207	3,718	16.07	117	2,766
15015+00.00	2.25	16	959	33.29	223	3,941	16.84	122	2,888
15016+00.00	2.25	16	975	35.60	239	4,180	18.73	132	3,020
15017+00.00	2.25	16	991	35.60	247	4,427	17.93	136	3,156
15018+00.00	2.25	16	1,007	35.60	247	4,674	17.91	133	3,289
15019+00.00	2.25	16	1,023	35.60	247	4,921	17.60	132	3,421
15020+00.00	2.25	16	1,039	35.60	247	5,168	17.71	131	3,552
15021+00.00	2.25	16	1,055	35.60	247	5,415	18.59	134	3,686
15022+00.00	2.25	16	1,071	35.60	247	5,662	17.76	135	3,821
15023+00.00	2.25	16	1,087	35.60	247	5,909	18.56	135	3,956
15024+00.00	2.25	16	1,103	35.60	247	6,156	18.67	138	4,094
15025+00.00	2.25	16	1,119	35.60	247	6,403	17.73	135	4,229
15026+00.00	2.25	16	1,135	35.60	247	6,650	17.78	132	4,361
15027+00.00	2.25	16	1,151	35.60	247	6,897	17.13	129	4,490
15028+00.00	2.25	16	1,167	35.60	247	7,144	17.44	128	4,618
15029+00.00	2.25	16	1,183	35.60	247	7,391	19.20	136	4,754
15030+00.00	2.25	16	1,199	35.60	247	7,638	18.50	140	4,894
15031+00.00	2.25	16	1,215	35.60	247	7,885	17.28	133	5,027
15032+00.00	2.25	16	1,231	35.60	247	8,132	18.66	133	5,160
15033+00.00	2.25	16	1,247	35.60	247	8,379	17.60	134	5,294
15034+00.00	2.25	16	1,263	35.60	247	8,626	16.72	127	5,421
15035+00.00	2.25	16	1,279	35.60	247	8,873	17.27	126	5,547
15036+00.00	2.25	16	1,295	35.60	247	9,120	18.51	133	5,680
15037+00.00	2.25	16	1,311	35.60	247	9,367	19.38	140	5,820
15038+00.00	1.13	12	1,323	32.97	238	9,605	17.87	138	5,958
15039+00.00	2.25	12	1,335	35.60	238	9,843	17.76	132	6,090
15040+00.00	2.25	16	1,351	35.60	247	10,090	18.31	134	6,224
15041+00.00	2.25	16	1,367	35.60	247	10,337	18.43	136	6,360
15042+00.00	2.25	16	1,383	35.60	247	10,584	17.09	132	6,492
15043+00.00	2.25	16	1,399	35.60	247	10,831	18.72	133	6,625
15044+00.00	2.25	16	1,415	35.60	247	11,078	18.79	139	6,764
15045+00.00	2.25	16	1,431	35.60	247	11,325	18.06	136	6,900
15046+00.00	2.25	16	1,447	35.60	247	11,572	17.97	133	7,033
15047+00.00	1.13	12	1,459	32.97	238	11,810	17.16	130	7,163
15048+00.00	2.25	12	1,471	35.60	238	12,048	17.98	130	7,293
15049+00.00	2.25	16	1,487	35.60	247	12,295	18.43	135	7,428
15050+00.00	2.25	16	1,503	35.60	247	12,542	18.12	135	7,563
15051+00.00	2.25	16	1,519	35.60	247	12,789	18.83	137	7,700
15052+00.00	2.25	16	1,535	35.60	247	13,036	18.23	137	7,837
15053+00.00	2.25	16	1,551	35.60	247	13,283	16.71	129	7,966
15054+00.00	2.25	16	1,567	35.60	247	13,530	17.24	126	8,092
15055+00.00	2.25	16	1,583	35.60	247	13,777	18.74	133	8,225
15056+00.00	2.25	16	1,599	35.60	247	14,024	17.76	135	8,360
15057+00.00	2.25	16	1,615	35.60	247	14,271	17.85	132	8,492
15058+00.00	2.25	16	1,631	35.60	247	14,518	18.15	133	8,625
15059+00.00	2.25	16	1,647	35.60	247	14,765	17.81	133	8,758
15060+00.00	2.25	16	1,663	35.60	247	15,012	19.07	137	8,895
15061+00.00	2.25	16	1,679	35.60	247	15,259	18.90	141	9,036
15062+00.00	2.25	16	1,695	35.04	245	15,504	20.75	147	9,183
15063+00.00	2.25	16	1,711	34.08	240	15,744	22.57	160	9,343
15064+00.00	2.25	16	1,727	33.93	236	15,980	21.88	165	9,508
15065+00.00	2.25	16	1,743	33.93	236	16,216	21.64	161	9,669
15066+00.00	2.25	16	1,759	33.93	236	16,452	21.69	160	9,829
15067+00.00	2.25	16	1,775	33.93	236	16,688	20.41	156	9,985
15068+00.00	2.25	16	1,791	33.93	236	16,924	21.08	154	10,139
15069+00.00	2.25	16	1,807	33.93	236	17,160	20.12	153	10,292
15070+00.00	2.25	16	1,823	33.93	236	17,396	19.17	146	10,438
15071+00.00	2.25	16	1,839	33.93	236	17,632	19.60	144	10,582
15072+00.00	2.25	16	1,855	33.93	236	17,868	19.61	145	10,727
15073+00.00	2.25	16	1,871	33.94	236	18,104	21.12	151	10,878
15074+00.00	2.25	16	1,887	33.94	236	18,340	21.29	157	11,035
15075+00.00	2.25	16	1,903	33.94	236	18,576	20.30	154	11,189
15076+00.00	2.25	16	1,919	34.65	238	18,814	19.48	147	11,336
15077+00.00	1.13	12	1,931	32.97	235	19,049	13.54	122	11,458
15078+00.00	2.25	12	1,943	35.60	238	19,287	12.64	97	11,555
15079+00.00	2.25	16	1,959	35.60	247	19,534	16.01	106	11,661
15080+00.00	2.25	16	1,975	35.60	247	19,781	16.31	120	11,781
15081+00.00	2.25	16	1,991	35.60	247	20,028	16.94	123	11,904
15082+00.00	2.25	16	2,007	35.60	247	20,275	18.18	130	12,034
15083+00.00	2.25	16	2,023	35.60	247	20,522	16.37	128	12,162
15084+00.00	2.25	16	2,039	35.60	247	20,769	12.32	106	12,268
15085+00.00	2.25	16	2,055	35.60	247	21,016	18.93	116	12,384
15086+00.00	-	8	2,063	34.63	244	21,260	20.18	145	12,529
15087+00.00	-	-	2,063	34.53	240	21,500	21.58	155	12,684
15088+00.00	-	-	2,063	34.67	240	21,740	20.83	157	12,841
15089+00.00	-	-	2,063	34.75	241	21,981	21.12	155	12,996
15090+00.00	-	-	2,063	34.75	241	22,222	21.02	156	13,152
15091+00.00	-	-	2,063	34.75	241	22,463	22.02	159	13,311
15092+00.00	-	-	2,063	34.75	241	22,704	22.22	164	13,475
15093+00.00	-	-	2,063	34.75	241	22,945	22.66	166	13,641
15094+00.00	-	-	2,063	34.75	241	23,186	22.16	166	13,807
15095+00.00	-	-	2,063	34.75	241	23,427	23.38	169	13,976
15096+00.00	-	-	2,063	34.75	241	23,668	24.50	177	14,153
15097+00.00	-	-	2,063	34.75	241	23,909	23.26	177	14,330
15098+00.00	-	-	2,063	34.75	241	24,150	23.20	172	14,502
15099+00.00	-	-	2,063	34.75	241	24,391	24.37	176	14,678
15100+00.00	-	-	2,063	34.49	240	24,631	23.16	176	14,854
15101+00.00	-	-	2,063	34.59	240	24,871	21.64	166	15,020
15102+00.00	2.25	8	2,071	35.60	244	25,115	18.03	147	15,167
15103+00.00	2.25	16	2,087	35.60	247	25,362	13.63	117	15,284
15104+00.00	2.25	16	2,103	35.60	247	25,609	12.64	97	15,381
15105+00.00	2.25	16	2,119	35.60	247	25,856	13.89	98	15,479
15106+00.00	2.25	16	2,135	35.60	247	26,103	14.26	104	15,583
15107+00.00	2.25	16	2,151	35.60	247	26,350	13.57	103	15,686
15108+00.00	2.25	16	2,167	35.60	247	26,597	14.02	102	15,788
15109+00.00	2.25	16	2,183	35.60	247	26,844	14.43	105	15,893
15110+00.00	2.25	16	2,199	35.60	247	27,091	13.51	103	15,996
15111+00.00	2.25	16	2,215	35.60	247	27,338	17.26	114	16,110
15112+00.00	2.25	16	2,231	35.60	247	27,585	16.30	124	16,234
15113+00.00	2.25	16	2,247	35.60	247	27,832	13.24	109	16,343
15114+00.00	2.25	16	2,263	35.60	247	28,079	17.17	113	16,456
15115+00.00	1.13	12	2,275	32.97	238	28,317	19.36	135	16,591
15116+00.00	2.25	12	2,287	35.60	238	28,555	19.43	144	16,735
15117+00.00	2.25	16	2,303	35.60	247	28,802	18.55	141	16,876
15118+00.00	2.25	16	2,319	35.60	247	29,049	14.16	121	16,997
15119+00.00	2.25	16	2,335	35.60	247	29,296	12.69	99	17,096
15120+00.00	2.25	16	2,351	35.60	247	29,543	19.72	120	17,216
15121+00.00	2.25	16	2,367	35.60	247	29,790	13.08	121	17,337
15122+00.00	2.25	16	2,383	35.60	247	30,037	14.14	101	17,438
15123+00.00	2.25	16	2,399	35.60	247	30,284	15.87	111	17,549
15124+00.00	1.13	12	2,411	32.97	238	30,522	13.34	108	17,657
15125+00.00	2.25	12	2,423	35.60	238	30,760	13.33	99	17,756
15126+00.00	2.25	16	2,439	33.29	239	30,999	17.17	113	17,869
15127+00.00	2.25	16	2,455	30.98	223	31,222	15.57	121	17,990
15128+00.00	2.25	16	2,471	28.67	207	31,429	15.94	117	18,107
15129+00.00	2.25	16	2,487	26.37	191	31,620	15.11	115	18,222
15130+00.00	2.25	16	2,503	24.06	175	31,795	12.34	102	18,324
15131+00.00	2.25	16	2,519	23.60	165	31,960	13.01	94	18,418
15132+00.00	2.25	16	2,535	23.60	164	32,124	13.44	98	18,516
15133+00.00	4.50	23	2,558	14.32	132	32,256	11.58	93	18,609
15134+00.00	2.25	23	2,581	13.41	96	32,352	13.65	93	18,702
15135+00.00	2.25	16	2,597	13.25	93	32,445	16.09	110	18,812
15136+00.00	2.25	16	2,613	13.14	92	32,537	16.32	120	18,932
15137+00.00	2.25	16	2,629	13.14	91	32,628	16.86	123	19,055
15138+00.00	2.25	16	2,645	13.14	91	32,719	16.84	125	19,180
15139+00.00	2.25	16	2,661	13.14	91	32,810	17.81	128	19,308
15140+00.00	2.25	16	2,677	13.14	91	32,901	17.46	131	19,439
15141+00.00	2.25	16	2,693	13.14	91	32,992	17.09	128	19,567
15142+00.00	2.25	16	2,709	13.14	91	33,083	11.01	104	19,671
15143+00.00	2.25	16	2,725	13.32	92	33,175	9.36	75	19,746
15144+00.00	2.25	16	2,741	13.41	93	33,268	7.69	63	19,809
15145+00.00	4.50	23	2,764	14.32	96	33,364	10.14	66	19,875
15146+00.00	4.50	31	2,795	14.32	99	33,463	5.87	59	19,934
15147+00.00	4.50	31	2,826	17.04	109	33,572	10.58	61	19,995
15148+00.00	4.50	31	2,857	17.04	118	33,690	10.92	80	20,075
15149+00.00	3.38	27	2,884	13.92	108	33,798	11.16	82	20,157
15150+00.00	4.50	27	2,911	17.04	108	33,906	11.60	84	20,241
15151+00.00	3.38	27	2,938	13.37	106	34,012	10.51	82	20,323
15152+00.00	3.38	23	2,961	13.92	95	34,107	11.26	81	20,404

Notes:
Superpave FAA 45, Aggregate Base Course Cl 4, and Aggregate Base Course Cl 5 quantities calculated using average end areas from cross sections.

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ND 1804 - Jct Tioga Rd to Red Mike Area

Basis of Estimate

Widening & HMA Overlay
Paving Tables

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SOIB-7-804(061)283	10	3

	302 0115 AGGREGATE BASE COURSE CL 4			302 0120 AGGREGATE BASE COURSE CL 5			430 0045 SUPERPAVE FAA 45		
	Area	-	Cumulative	Area	-	Cumulative	Area	-	Cumulative
Location	(SF)	(TON)	(TON)	(SF)	(TON)	(TON)	(SF)	(TON)	(TON)
15153+00.00	4.50	27	2,988	17.04	108	34,215	11.39	84	20,488
15154+00.00	4.50	31	3,019	17.04	118	34,333	9.52	77	20,565
15155+00.00	2.25	23	3,042	27.21	154	34,487	13.81	86	20,651
15156+00.00	2.25	16	3,058	27.21	189	34,676	14.17	104	20,755
15157+00.00	2.25	16	3,074	27.67	191	34,867	13.90	104	20,859
15158+00.00	1.13	12	3,086	26.86	189	35,056	13.82	103	20,962
15159+00.00	2.25	12	3,098	32.28	205	35,261	16.00	110	21,072
15160+00.00	2.25	16	3,114	34.59	232	35,493	16.20	119	21,191
15161+00.00	2.25	16	3,130	36.90	248	35,741	17.73	126	21,317
15162+00.00	2.25	16	3,146	39.21	264	36,005	19.74	139	21,456
15163+00.00	1.13	12	3,158	36.09	261	36,266	18.10	140	21,596
15164+00.00	2.25	12	3,170	39.21	261	36,527	19.19	138	21,734
15165+00.00	2.25	16	3,186	39.21	272	36,799	19.06	142	21,876
15166+00.00	2.25	16	3,202	39.21	272	37,071	19.59	143	22,019
15167+00.00	2.25	16	3,218	39.21	272	37,343	18.99	143	22,162
15168+00.00	2.25	16	3,234	39.21	272	37,615	18.33	138	22,300
15169+00.00	1.13	12	3,246	36.09	261	37,876	19.00	138	22,438
15170+00.00	2.25	12	3,258	39.21	261	38,137	19.46	142	22,580
15171+00.00	2.25	16	3,274	39.21	272	38,409	18.35	140	22,720
15172+00.00	2.25	16	3,290	39.21	272	38,681	18.78	138	22,858
15173+00.00	2.25	16	3,306	39.21	272	38,953	18.03	136	22,994
15174+00.00	2.25	16	3,322	39.21	272	39,225	18.19	134	23,128
15175+00.00	2.25	16	3,338	39.21	272	39,497	18.12	134	23,262
15176+00.00	2.25	16	3,354	39.21	272	39,769	19.11	138	23,400
15177+00.00	2.25	16	3,370	39.21	272	40,041	18.37	139	23,539
15178+00.00	1.13	12	3,382	36.09	261	40,302	18.57	137	23,676
15179+00.00	2.25	12	3,394	39.21	261	40,563	19.16	140	23,816
15180+00.00	2.25	16	3,410	39.21	272	40,835	18.78	141	23,957
15181+00.00	2.25	16	3,426	39.21	272	41,107	18.59	138	24,095
15182+00.00	2.25	16	3,442	39.21	272	41,379	18.81	139	24,234
15183+00.00	2.25	16	3,458	39.21	272	41,651	17.87	136	24,370
15184+00.00	2.25	16	3,474	39.21	272	41,923	18.26	134	24,504
15185+00.00	2.25	16	3,490	39.21	272	42,195	19.95	142	24,646
15186+00.00	2.25	16	3,506	39.21	272	42,467	18.60	143	24,789
15187+00.00	2.25	16	3,522	39.21	272	42,739	17.85	135	24,924
15188+00.00	2.25	16	3,538	39.21	272	43,011	19.46	138	25,062
15189+00.00	2.25	16	3,554	38.54	270	43,281	20.67	149	25,211
15190+00.00	2.25	16	3,570	37.56	264	43,545	22.29	159	25,370
15191+00.00	2.25	16	3,586	37.53	261	43,806	22.50	166	25,536
15192+00.00	2.25	16	3,602	37.53	261	44,067	20.61	160	25,696
15193+00.00	2.25	16	3,618	37.53	261	44,328	21.31	155	25,851
15194+00.00	2.25	16	3,634	37.53	261	44,589	20.68	156	26,007
15195+00.00	2.25	16	3,650	37.53	261	44,850	21.46	156	26,163
15196+00.00	2.25	16	3,666	38.39	264	45,114	21.67	160	26,323
15197+00.00	-	8	3,674	39.69	271	45,385	19.92	154	26,477
15198+00.00	-	-	3,674	39.64	275	45,660	20.15	148	26,625
15199+00.00	-	-	3,674	39.44	275	45,935	22.16	157	26,782
15200+00.00	-	-	3,674	39.81	275	46,210	23.25	168	26,950
15201+00.00	-	-	3,674	39.81	276	46,486	23.45	173	27,123
15202+00.00	-	-	3,674	39.81	276	46,762	22.68	171	27,294
15203+00.00	-	-	3,674	41.36	282	47,044	23.05	169	27,463
15204+00.00	-	-	3,674	41.36	287	47,331	23.00	171	27,634
15205+00.00	-	-	3,674	41.36	287	47,618	23.80	173	27,807
15206+00.00	-	-	3,674	41.36	287	47,905	24.44	179	27,986
15207+00.00	-	-	3,674	41.36	287	48,192	24.02	180	28,166
15208+00.00	-	-	3,674	39.81	282	48,474	23.30	175	28,341
15209+00.00	-	-	3,674	39.81	276	48,750	24.33	176	28,517
15210+00.00	-	-	3,674	39.54	276	49,026	22.37	173	28,690
15211+00.00	-	-	3,674	39.69	275	49,301	19.21	154	28,844
15212+00.00	2.25	8	3,682	39.21	274	49,575	18.23	139	28,983
15213+00.00	2.25	16	3,698	39.21	272	49,847	19.02	138	29,121
15214+00.00	2.25	16	3,714	38.33	269	50,116	20.75	147	29,268
15215+00.00	2.25	16	3,730	37.83	264	50,380	20.79	154	29,422
15216+00.00	2.25	16	3,746	37.83	263	50,643	21.04	155	29,577
15217+00.00	2.25	16	3,762	37.83	263	50,906	18.10	145	29,722
15218+00.00	1.13	12	3,774	34.71	252	51,158	20.00	141	29,863
15219+00.00	2.25	12	3,786	37.83	252	51,410	18.39	142	30,005
15220+00.00	2.25	16	3,802	37.83	263	51,673	18.95	138	30,143
15221+00.00	2.25	16	3,818	38.17	264	51,937	19.73	143	30,286
15222+00.00	2.25	16	3,834	39.19	269	52,206	18.37	141	30,427
15223+00.00	2.25	16	3,850	39.21	272	52,478	17.81	134	30,561
15224+00.00	2.25	16	3,866	39.21	272	52,750	17.40	130	30,691
15225+00.00	2.25	16	3,882	39.21	272	53,022	17.28	128	30,819
15226+00.00	2.25	16	3,898	39.21	272	53,294	17.13	127	30,946
15227+00.00	2.25	16	3,914	39.21	272	53,566	17.56	128	31,074
15228+00.00	2.25	16	3,930	39.21	272	53,838	17.88	131	31,205
15229+00.00	2.25	16	3,946	39.21	272	54,110	18.22	134	31,339
15230+00.00	2.25	16	3,962	39.21	272	54,382	17.02	131	31,470
15231+00.00	2.25	16	3,978	39.21	272	54,654	18.74	132	31,602
15232+00.00	2.25	16	3,994	39.21	272	54,926	18.50	138	31,740
15233+00.00	2.25	16	4,010	39.21	272	55,198	17.53	133	31,873
15234+00.00	2.25	16	4,026	39.21	272	55,470	17.52	130	32,003
15235+00.00	2.25	16	4,042	39.21	272	55,742	17.08	128	32,131
15236+00.00	2.25	16	4,058	39.21	272	56,014	17.48	128	32,259
15237+00.00	2.25	16	4,074	39.21	272	56,286	18.13	132	32,391
15238+00.00	2.25	16	4,090	39.21	272	56,558	17.68	133	32,524
15239+00.00	2.25	16	4,106	39.21	272	56,830	16.66	127	32,651
15240+00.00	2.25	16	4,122	39.21	272	57,102	17.48	126	32,777
15241+00.00	2.25	16	4,138	39.21	272	57,374	17.52	130	32,907
15242+00.00	2.25	16	4,154	39.21	272	57,646	17.35	129	33,036
15243+00.00	2.25	16	4,170	39.21	272	57,918	17.00	127	33,163
15244+00.00	1.13	12	4,182	36.08	261	58,179	17.02	126	33,289
15245+00.00	2.25	12	4,194	39.21	261	58,440	19.05	134	33,423
15246+00.00	2.25	16	4,210	39.21	272	58,712	19.72	144	33,567
15247+00.00	2.25	16	4,226	39.21	272	58,984	18.71	142	33,709
15248+00.00	1.13	12	4,238	36.09	261	59,245	19.47	141	33,850
15249+00.00	2.25	12	4,250	39.21	261	59,506	19.23	143	33,993
15250+00.00	2.25	16	4,266	39.21	272	59,778	19.82	145	34,138
15251+00.00	2.25	16	4,282	39.21	272	60,050	18.92	143	34,281
15252+00.00	2.25	16	4,298	39.21	272	60,322	18.20	137	34,418
15253+00.00	2.25	16	4,314	39.21	272	60,594	19.27	139	34,557
15254+00.00	2.25	16	4,330	39.21	272	60,866	18.33	139	34,696
15255+00.00	2.25	16	4,346	39.21	272	61,138	19.40	140	34,836
15256+00.00	2.25	16	4,362	39.21	272	61,410	19.04	142	34,978
15257+00.00	2.25	16	4,378	39.21	272	61,682	18.53	139	35,117
15258+00.00	2.25	16	4,394	39.21	272	61,954	18.91	139	35,256
15259+00.00	2.25	16	4,410	39.21	272	62,226	18.91	140	35,396
15260+00.00	2.25	16	4,426	36.90	264	62,490	17.84	136	35,532
15261+00.00	2.25	16	4,442	34.59	248	62,738	17.89	132	35,664
15262+00.00	2.25	16	4,458	32.28	232	62,970	15.97	125	35,789
15263+00.00	2.25	16	4,474	29.98	216	63,186	14.68	114	35,903
15264+00.00	2.25	16	4,490	27.67	200	63,386	14.51	108	36,011
15265+00.00	2.25	16	4,506	27.21	191	63,577	15.76	112	36,123
15266+00.00	2.25	16	4,522	27.21	189	63,766	14.85	113	36,236
15267+00.00	4.50	23	4,545	17.04	154	63,920	11.74	98	36,334
15268+00.00	4.50	31	4,576	17.04	118	64,038	11.99	88	36,422
15269+00.00	4.50	31	4,607	17.04	118	64,156	11.39	87	36,509
15270+00.00	3.38	27	4,634	13.92	108	64,264	10.79	82	36,591
15271+00.00	4.50	27	4,661	17.04	108	64,372	11.29	82	36,673
15272+00.00	4.50	31	4,692	17.04	118	64,490	13.38	91	36,764
15273+00.00	3.38	27	4,719	13.92	108	64,598	10.21	87	36,851
15274+00.00	4.50	27	4,746	17.04	108	64,706	10.76	78	36,929
15275+00.00	4.50	31	4,777	17.04	118	64,824	10.07	77	37,006
15276+00.00	4.50	31	4,808	17.04	118	64,942	11.53	80	37,086
15277+00.00	4.50	31	4,839	17.04	118	65,060	11.78	86	37,172
15278+00.00	4.50	31	4,870	17.04	118	65,178	10.92	84	37,256
15279+00.00	4.50	31	4,901	17.04	118	65,296	11.70	84	37,340
15280+00.00	4.50	31	4,932	17.04	118	65,414	12.75	91	37,431
15281+00.00	4.50	31	4,963	17.04	118	65,532	11.38	89	37,520
15282+00.00	4.50	31	4,994	17.04	118	65,650	11.58	85	37,605
15283+00.00	2.26	23	5,017	10.80	97	65,747	10.83	83	37,688
15284+00.00	4.50	23	5,040	17.04	97	65,844	11.59	83	37,771
15285+00.00	4.50	31	5,071	17.04	118	65,962	11.24	85	37,856
15286+00.00	4.50	31	5,102	17.04	118	66,080	11.06	83	37,939
15287+00.00	4.50	31	5,133	17.04	118	66,198	11.38	83	38,022
15288+00.00	4.50	31	5,164	17.04	118	66,316	10.37	81	38,103
15289+00.00	4.50	31	5,195	17.04	118	66,434	11.40	81	38,184
15290+00.00	2.26	23	5,218	10.80	97	66,531	9.96	79	38,263
15291+00.00	4.50	23	5,241	17.04	97	66,628	12.28	82	38,345
15292+00.00	4.50	31	5,272	17.04	118	66,746	9.82	82	38,427
15293+00.00	4.50	31	5,303	17.04	118	66,864	11.43	79	38,506
15294+00.00	4.50	31	5,334	17.04	118	66,982	10.34	81	38,587
15295+00.00	4.50	31	5,365	17.04	118	67,100	9.39	73	38,660
15296+00.00	4.50	31	5,396	17.04	118	67,218	11.61	78	38,738
15297+00.00	2.26	23	5,419	10.80	97	67,315	10.33	81	38,819
15298+00.00	4.50	23	5,442	17.04	97	67,412	10.13	76	38,895
15299+00.00	4.50	31	5,473	17.04	118	67,530	10.73	77	38,972
15300+00.00	4.50	31	5,504	17.04	118	67,648	10.30	78	39,050
15301+00.00	4.50	31	5,535	17.04	118	67,766	11.22	80	39,130
15302+00.00	4.50	31	5,566	17.04	118	67,884	10.30	80	39,210
15303+00.00	4.50	31	5,597	17.04	118	68,002	11.02	79	39,289
15304+00.00	4.50	31	5,628	17.04	118	68,120	11.17	82	39,371
15305+00.00	4.50	31	5,659	17.04	118	68,238	11.10	82	39,453
15306+00.00	4.50	31	5,690	17.04	118	68,356	10.95	82	39,535
15307+00.00	3.38	27	5,717	13.92	108	68,464	11.11	82	39,617
15308+00.00	4.50	27	5,744	17.04	108	68,572	12.08	86	39,703
15309+00.00	4.50	31	5,775	17.04	118	68,690	11.08	86	39,789
15310+00.00	4.50	31	5,806	17.04	118	68,808	11.09	82	39,871
15311+00.00	4.50	31	5,837	17.04	118	68,926	8.92	74	39,945
15312+00.00	4.50	31	5,868	17.04	118	69,044	9.48	68	40,013
15313+00.00	4.50	31	5,899	17.04	118	69,162	10.76	75	40,088
15314+00.00	4.50	31	5,930	17.04	118	69,280	9.21	74	40,162
15315+00.00	4.50	31	5,961	17.04	118	69,398	11.77	78	40,240
15316+00.00	2.26	23	5,984	10.80	97	69,495	11.15	85	40,325
15317+00.00	4.50	23	6,007	17.04	97	69,592	11.55	84	40,409
15318+00.00	4.50	31	6,038	17.04	118	69,710	7.32	70	40,479
15319+00.00	4.50	31	6,069	17.04	118	69,828	11.55	70	40,549
15320+00.00	4.50	31	6,100	17.04	118	69,946	9.52	78	40,627
15321+00.00	4.50	31	6,131	17.04	118	70,064	10.35	74	40,701
15322+00.00	4.50	31	6,162	17.04	118	70,182	11.45	81	40,782
15323+00.00	2.26	23	6,185	10.80	97	70,279	11.06	83	40,865
15324+00.00	4.50	23	6,208	17.04	97	70,376	5.21	60	40,925
15325+00.00	4.50	31	6,239	17.04	118	70,494	1.56	25	40,950

Notes:
Superpave FAA 45, Aggregate Base Course Cl 4, and Aggregate Base Course Cl 5 quantities calculated using average end areas from cross sections.

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Taylor D. Olson
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ND 1804 - Jct Tioga Rd to Red Mike Area

Basis of Estimate

Widening & HMA Overlay
Paving Tables

	302 0115 AGGREGATE BASE COURSE CL 4			302 0120 AGGREGATE BASE COURSE CL 5			430 0045 SUPERPAVE FAA 45		
Location	Area (SF)	- (TON)	Cumulative (TON)	Area (SF)	- (TON)	Cumulative (TON)	Area (SF)	- (TON)	Cumulative (TON)
15326+00.00	4.50	31	6,270	17.04	118	70,612	9.41	41	40,991
15327+00.00	4.50	31	6,301	17.04	118	70,730	10.53	74	41,065
15328+00.00	4.50	31	6,332	17.04	118	70,848	10.49	78	41,143
15329+00.00	4.50	31	6,363	17.04	118	70,966	11.19	80	41,223
15330+00.00	4.50	31	6,394	17.04	118	71,084	5.84	63	41,286
15331+00.00	2.25	23	6,417	17.52	120	71,204	11.38	64	41,350
15332+00.00	2.25	16	6,433	17.52	122	71,326	12.06	87	41,437
15333+00.00	2.25	16	6,449	17.52	122	71,448	12.28	90	41,527
15334+00.00	2.25	16	6,465	17.52	122	71,570	14.03	97	41,624
15335+00.00	2.25	16	6,481	17.52	122	71,692	13.72	103	41,727
15336+00.00	2.25	16	6,497	17.52	122	71,814	15.18	107	41,834
15337+00.00	2.25	16	6,513	17.22	121	71,935	15.89	115	41,949
15338+00.00	2.25	16	6,529	17.12	119	72,054	13.98	111	42,060
15339+00.00	2.25	16	6,545	17.12	119	72,173	15.27	108	42,168
15340+00.00	2.25	16	6,561	17.12	119	72,292	14.18	109	42,277
15341+00.00	2.25	16	6,577	17.12	119	72,411	14.23	105	42,382
15342+00.00	2.25	16	6,593	17.12	119	72,530	14.06	105	42,487
15343+00.00	2.25	16	6,609	17.12	119	72,649	13.79	103	42,590
15344+00.00	2.25	16	6,625	17.12	119	72,768	14.25	104	42,694
15345+00.00	2.25	16	6,641	17.12	119	72,887	13.64	103	42,797
15346+00.00	2.25	16	6,657	17.12	119	73,006	14.30	103	42,900
15347+00.00	2.25	16	6,673	17.12	119	73,125	13.06	101	43,001
15348+00.00	2.25	16	6,689	17.12	119	73,244	13.60	99	43,100
15349+00.00	2.25	16	6,705	17.12	119	73,363	14.90	106	43,206
15350+00.00	2.25	16	6,721	17.12	119	73,482	14.92	110	43,316
15351+00.00	2.25	16	6,737	17.12	119	73,601	14.29	108	43,424
15352+00.00	2.25	16	6,753	17.12	119	73,720	12.34	99	43,523
15353+00.00	2.25	16	6,769	17.12	119	73,839	13.38	95	43,618
15354+00.00	2.25	16	6,785	17.12	119	73,958	14.10	102	43,720
15355+00.00	2.25	16	6,801	17.12	119	74,077	15.28	109	43,829
15356+00.00	2.25	16	6,817	17.42	120	74,197	15.08	112	43,941
15357+00.00	2.25	16	6,833	17.52	121	74,318	15.76	114	44,055
15358+00.00	2.25	16	6,849	17.52	122	74,440	15.51	116	44,171
15359+00.00	2.25	16	6,865	17.52	122	74,562	15.04	113	44,284
15360+00.00	2.25	16	6,881	17.52	122	74,684	14.39	109	44,393
15361+00.00	2.25	16	6,897	17.52	122	74,806	12.96	101	44,494
15362+00.00	4.50	23	6,920	17.04	120	74,926	10.63	87	44,581
15363+00.00	4.50	31	6,951	17.04	118	75,044	10.27	77	44,658
15364+00.00	4.50	31	6,982	17.04	118	75,162	10.26	76	44,734
15365+00.00	4.50	31	7,013	17.04	118	75,280	8.95	71	44,805
15366+00.00	4.50	31	7,044	17.04	118	75,398	9.74	69	44,874
15367+00.00	4.50	31	7,075	17.04	118	75,516	9.77	72	44,946
15368+00.00	4.50	31	7,106	17.04	118	75,634	11.60	79	45,025
15369+00.00	4.50	31	7,137	17.04	118	75,752	9.58	78	45,103
15370+00.00	4.50	31	7,168	17.04	118	75,870	9.52	71	45,174
15371+00.00	4.50	31	7,199	17.04	118	75,988	11.83	79	45,253
15372+00.00	4.50	31	7,230	17.04	118	76,106	10.23	82	45,335
15373+00.00	4.50	31	7,261	17.04	118	76,224	10.07	75	45,410
15374+00.00	4.50	31	7,292	17.04	118	76,342	9.82	74	45,484
15375+00.00	4.50	31	7,323	17.04	118	76,460	9.77	73	45,557
15376+00.00	4.50	31	7,354	17.04	118	76,578	8.83	69	45,626
15377+00.00	4.50	31	7,385	17.04	118	76,696	9.83	69	45,695
15378+00.00	4.50	31	7,416	17.04	118	76,814	9.99	73	45,768
15379+00.00	4.50	31	7,447	17.04	118	76,932	11.33	79	45,847
15380+00.00	4.50	31	7,478	17.04	118	77,050	11.97	86	45,933
15381+00.00	4.50	31	7,509	17.04	118	77,168	11.45	87	46,020
15382+00.00	4.50	31	7,540	17.04	118	77,286	10.78	82	46,102
15383+00.00	4.50	31	7,571	17.04	118	77,404	11.05	81	46,183
15384+00.00	4.50	31	7,602	17.04	118	77,522	9.68	77	46,260
15385+00.00	4.50	31	7,633	17.04	118	77,640	10.10	73	46,333
15386+00.00	4.50	31	7,664	17.04	118	77,758	10.68	77	46,410
15387+00.00	4.50	31	7,695	17.04	118	77,876	12.73	87	46,497
15388+00.00	4.50	31	7,726	17.04	118	77,994	9.77	83	46,580
15389+00.00	4.50	31	7,757	17.04	118	78,112	11.32	78	46,658
15390+00.00	4.50	31	7,788	17.04	118	78,230	9.84	78	46,736
15391+00.00	4.50	31	7,819	17.04	118	78,348	10.60	76	46,812
15392+00.00	4.50	31	7,850	17.04	118	78,466	10.37	78	46,890
15393+00.00	4.50	31	7,881	17.04	118	78,584	10.98	79	46,969
15394+00.00	4.50	31	7,912	17.04	118	78,702	10.44	79	47,048
15395+00.00	4.50	31	7,943	17.04	118	78,820	10.19	76	47,124
15396+00.00	2.26	23	7,966	10.80	97	78,917	11.31	80	47,204
15397+00.00	4.50	23	7,989	17.04	97	79,014	12.29	87	47,291
15398+00.00	4.50	31	8,020	17.04	118	79,132	10.43	84	47,375
15399+00.00	4.50	31	8,051	17.04	118	79,250	11.07	80	47,455
15400+00.00	4.50	31	8,082	17.04	118	79,368	10.65	80	47,535
15401+00.00	4.50	31	8,113	17.04	118	79,486	10.65	79	47,614
15402+00.00	4.50	31	8,144	17.04	118	79,604	10.78	79	47,693
15403+00.00	4.50	31	8,175	17.04	118	79,722	8.43	71	47,764
15404+00.00	4.50	31	8,206	17.04	118	79,840	11.58	74	47,838
15405+00.00	4.50	31	8,237	17.04	118	79,958	10.29	81	47,919
15406+00.00	4.50	31	8,268	17.04	118	80,076	5.29	58	47,977
15407+00.00	4.50	31	8,299	17.04	118	80,194	10.00	57	48,034
15408+00.00	4.50	31	8,330	17.04	118	80,312	6.03	59	48,093
15409+00.00	4.50	31	8,361	17.04	118	80,430	10.70	62	48,155
15410+00.00	4.50	31	8,392	17.04	118	80,548	12.13	85	48,240
15411+00.00	4.50	31	8,423	17.04	118	80,666	11.74	88	48,328
15412+00.00	4.50	31	8,454	17.04	118	80,784	10.44	82	48,410
15413+00.00	4.50	31	8,485	17.04	118	80,902	11.50	81	48,491
15414+00.00	4.50	31	8,516	17.04	118	81,020	11.43	85	48,576
15415+00.00	4.50	31	8,547	17.04	118	81,138	10.65	82	48,658
15416+00.00	4.50	31	8,578	17.04	118	81,256	6.17	62	48,720
15417+00.00	4.50	31	8,609	17.04	118	81,374	11.71	66	48,786
15418+00.00	4.50	31	8,640	17.04	118	81,492	12.26	89	48,875
15419+00.00	4.50	31	8,671	17.04	118	81,610	11.90	89	48,964
15420+00.00	4.50	31	8,702	17.04	118	81,728	11.78	88	49,052
15421+00.00	4.50	31	8,733	17.04	118	81,846	10.46	82	49,134
15422+00.00	3.38	27	8,760	13.92	108	81,954	4.99	57	49,191
15423+00.00	4.50	27	8,787	17.04	108	82,062	10.43	57	49,248
15424+00.00	4.50	31	8,818	17.04	118	82,180	12.64	85	49,333
15425+00.00	4.50	31	8,849	17.04	118	82,298	11.25	88	49,421
15426+00.00	4.50	31	8,880	17.04	118	82,416	10.71	81	49,502
15427+00.00	4.50	31	8,911	17.04	118	82,534	10.46	78	49,580
15428+00.00	4.50	31	8,942	17.04	118	82,652	10.29	77	49,657
15429+00.00	4.50	31	8,973	17.04	118	82,770	9.85	75	49,732
15430+00.00	4.50	31	9,004	17.04	118	82,888	11.53	79	49,811
15431+00.00	4.50	31	9,035	17.04	118	83,006	9.60	78	49,889
15432+00.00	4.50	31	9,066	17.04	118	83,124	11.18	77	49,966
15433+00.00	4.50	31	9,097	17.04	118	83,242	10.04	79	50,045
15434+00.00	2.26	23	9,120	10.80	97	83,339	9.90	74	50,119
15435+00.00	2.26	16	9,136	10.80	75	83,414	11.75	80	50,199
15436+00.00	4.50	23	9,159	17.04	97	83,511	11.44	86	50,285
15437+00.00	4.50	31	9,190	17.04	118	83,629	6.43	66	50,351
15438+00.00	4.50	31	9,221	17.04	118	83,747	11.55	67	50,418
15439+00.00	4.50	31	9,252	17.04	118	83,865	10.37	81	50,499
15440+00.00	4.50	31	9,283	17.04	118	83,983	11.42	81	50,580
15441+00.00	4.50	31	9,314	17.04	118	84,101	10.97	83	50,663
15442+00.00	4.50	31	9,345	17.04	118	84,219	10.13	78	50,741
15443+00.00	4.50	31	9,376	17.04	118	84,337	11.07	79	50,820
15444+00.00	2.50	24	9,400	48.62	228	84,565	19.71	114	50,934
15445+00.00	2.50	17	9,417	48.62	338	84,903	19.99	147	51,081
15446+00.00	2.50	17	9,434	48.62	338	85,241	21.26	153	51,234
15447+00.00	2.50	17	9,451	48.62	338	85,579	20.78	156	51,390
15448+00.00	2.50	17	9,468	48.62	338	85,917	20.50	153	51,543
15449+00.00	2.50	17	9,485	48.62	338	86,255	19.93	150	51,693
15450+00.00	3.00	19	9,504	50.40	344	86,599	21.45	153	51,846
15451+00.00	3.00	21	9,525	52.71	358	86,957	21.56	159	52,005
15452+00.00	3.00	21	9,546	54.56	372	87,329	22.64	164	52,169
15453+00.00	3.00	21	9,567	56.08	384	87,713	22.31	167	52,336
15454+00.00	3.00	21	9,588	56.08	389	88,102	22.85	167	52,503
15455+00.00	3.00	21	9,609	56.08	389	88,491	23.22	171	52,674
15456+00.00	3.00	21	9,630	56.08	389	88,880	23.41	173	52,847
15457+00.00	3.00	21	9,651	56.08	389	89,269	24.45	177	53,024
15458+00.00	3.00	21	9,672	56.08	389	89,658	23.38	177	53,201
15459+00.00	3.00	21	9,693	69.30	435	90,093	28.04	190	53,391
15460+00.00	3.00	21	9,714	65.08	467	90,560	27.68	206	53,597
15461+00.00	3.00	21	9,735	68.08	462	91,022	26.58	201	53,798
15462+00.00	3.00	21	9,756	68.08	473	91,495	27.26	199	53,997
15463+00.00	3.00	21	9,777	68.08	473	91,968	26.65	200	54,197
15464+00.00	3.00	21	9,798	68.08	473	92,441	27.72	201	54,398
15465+00.00	3.00	21	9,819	68.08	473	92,914	26.89	202	54,600
15466+00.00	3.00	21	9,840	66.46	467	93,381	26.86	199	54,799
15467+00.00	3.00	21	9,861	63.28	450	93,831	26.26	197	54,996
15468+00.00	2.87	20	9,881	61.48	433	94,264	24.74	189	55,185
15469+00.00	2.00	17	9,898	59.12	419	94,683	25.03	184	55,369
15470+00.00	2.00	14	9,912	59.12	411	95,094	24.54	184	55,553
15471+00.00	2.00	14	9,926	59.12	411	95,505	23.92	179	55,732
15472+00.00	2.00	14	9,940	59.12	411	95,916	23.92	177	55,909
Grand Total		9,940			95,916			55,909	

Notes:
Superpave FAA 45, Aggregate Base Course Cl 4, and Aggregate Base Course Cl 5 quantities calculated using average end areas from cross sections.

This document was originally issued and sealed by Taylor D. Olson Registration Number PE-10405 on 08/15/18 and the original document is stored at the North Dakota Department of Transportation

ND 1804 - Jct Tioga Rd to Red Mike Area

Basis of Estimate

Widening & HMA Overlay
Paving Tables

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SOIB-7-804(061)283	10	5

TACK, PRIME, AND BLOTTER PER STATION RANGE (MAINLINE)

Note: Station ranges listed to develop quantities correspond to proposed typical section stationing show in Section 30.					14980+88.80 - 15008+20.00	15008+20.00 - 15085+57.70	15085+57.70 - 15101+85.90	15101+85.90 - 15132+80.00	15132+80.00 - 15133+22.00	15133+22.00 - 15144+37.30	15144+37.30 - 15147+00.00	15147+00.00 - 15154+20.00	15154+20.00 - 15196+22.80	15196+22.80 - 15211+78.00	15211+78.00 - 15266+80.00	15266+80.00 - 15330+75.20	15330+75.20 - 15345+00.00	15345+00.00 - 15355+00.00	15355+00.00 - 15361+79.40	15361+79.40 - 15443+26.00	15443+26.00 - 15459+76.38	15459+76.38 - 15472+00.00	
SPEC	CODE	DESCRIPTION	UNIT	RATE	2731.20 LF	7737.70 LF	1628.20 LF	3094.10 LF	42.00 LF	1115.30 LF	262.70 LF	720.00 LF	4202.80 LF	1555.20 LF	5502.00 LF	6395.20 LF	1424.80 LF	1000.00 LF	679.40 LF	8146.60 LF	1650.38 LF	1223.62 LF	Total
401	0050	TACK COAT (1st Lift)	GAL	0.05 Gal/SY	147	633	133	253	2	60	14	35	332	123	435	308	91	64	43	392	151	130	
401	0050	TACK COAT (SE Correction)	GAL	0.05 Gal/SY	0	0	0	0	0	44	0	0	0	0	0	0	34	48	16	0	0	0	
401	0050	TACK COAT (2nd Lift)	GAL	0.05 Gal/SY	149	623	149	249	2	73	14	39	338	142	443	349	93	65	44	444	151	126	6982
401	0060	PRIME COAT	GAL	0.25 Gal/SY	58	1205	344	482	1	119	6	35	771	372	1010	312	152	106	72	398	373	367	6183
401	0160	BLOTTER MATERIAL CL 44	TON	15 Lb/SY	2	36	10	14	0	4	0	1	23	11	30	9	5	3	2	12	11	11	185

APPROACH PAVING SUMMARY

LOCATION		302 0120 AGGREGATE BASE COURSE CL 5	401 0050 TACK COAT	430 0045 SUPERPAVE FAA 45
		(TON)	(GAL)	(TON)
WIDENING & HMA OVERLAY				
Private Drive - Paved				
Sta 15004+67 Rt		105	9	46
Sta 15025+16 Rt		122	13	66
Sta 15038+93 Lt		110	12	61
Sta 15077+26 Lt		106	13	66
Sta 15096+91 Rt		110	12	61
Sta 15115+41 Rt		106	13	66
Sta 15124+43 Lt		164	12	61
Sta 15157+83 Lt		108	13	66
Sta 15163+21 Rt		110	12	61
Sta 15171+60 Rt		149	13	64
Sta 15177+92 Rt		98		
Sta 15190+88 Rt		328	12	61
Sta 15221+17 Rt		120	13	66
Sta 15243+90 Rt		124	14	70
Sta 15270+34 Lt		106	13	66
Sta 15316+35 Rt		106	15	74
Sta 15322+96 Lt		108	13	66
Sta 15323+07 Rt		106	15	74
Sta 15448+73 Lt		136	14	68
SUBTOTAL =		2,422	233	1,164
Low Volume Public Road - Gravel				
Sta 15151+53 Lt		235	18	90
SUBTOTAL =		235	18	90
Low Volume Public Road - Paved				
Sta 15047+02 Rt		133	16	80
Sta 15177+94 Rt		143	13	66
Sta 15243+93 Lt		157	18	89
Sta 15272+89 Rt		106	13	66
Sta 15345+26 Rt		106	-	
Sta 15459+71 Lt		106	-	
SUBTOTAL =		751	60	301

APPROACH PAVING SUMMARY

LOCATION		302 0120 AGGREGATE BASE COURSE CL 5	401 0050 TACK COAT	430 0045 SUPERPAVE FAA 45
		(TON)	(GAL)	(TON)
WIDENING & HMA OVERLAY				
Field Drive				
Sta 15012+06 Lt		107	5	25
Sta 15012+11 Rt		123	5	25
Sta 15038+45 Rt		102	5	25
Sta 15047+01 Lt		110	5	25
Sta 15049+88 Lt		130	9	46
Sta 15054+10 Lt		110	5	25
Sta 15077+18 Rt		125	5	25
Sta 15096+91 Lt		110	5	25
Sta 15115+36 Lt		167	5	25
Sta 15124+45 Rt		98	5	25
Sta 15139+27 Rt		120	5	25
Sta 15149+14 Rt		106	5	25
Sta 15151+53 Rt		192	5	25
Sta 15162+70 Lt		144	5	25
Sta 15168+78 Lt		103	5	25
Sta 15179+79 Rt		247	5	25
Sta 15201+26 Lt		110	5	25
Sta 15217+69 Lt		260	5	25
Sta 15247+55 Lt		144	5	25
Sta 15282+94 Lt		116	5	25
Sta 15282+94 Rt		98	5	25
Sta 15290+46 Lt		114	5	25
Sta 15290+46 Rt		98	5	25
Sta 15296+75 Rt		108	5	25
Sta 15296+75 Lt		98	5	25
Sta 15306+67 Rt		98	5	25
Sta 15316+35 Lt		105	5	25
Sta 15396+03 Rt		98	5	25
Sta 15396+07 Lt		104	5	25
Sta 15422+32 Lt		98	5	25
Sta 15434+48 Lt		143	5	25
Sta 15434+48 Rt		118	5	25
Sta 15448+66 Rt		154	5	25
Sta 15468+66 Rt		98	5	26
Sta 15468+72 Lt		214	5	25
SUBTOTAL =		4,470	179	897
GRAND TOTAL =		7,878	490	2,452

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ND 1804 - Jct Tioga Rd to Red Mike Area

Basis of Estimate

RIGHT OF WAY MARKERS & IRON PIN MONUMENTS

Station	Offset	Northing	Easting	Description	Point No.	720 0110 RIGHT OF WAY MARKERS	720 0130 IRON PIN R/W MONUMENTS	720 0135 IRON PIN REFERENCE MONUMENTS
ND 1804 (SCL1804)								
14979+27.35	-75.00	444950.03	1369359.14	SEC CROSSING	90001			X
14979+27.94	75.00	445099.96	1369363.71	SEC CROSSING	90002			X
15004+85.59	-75.00	445037.84	1366802.41	QTR CROSSING	90003			X
15004+85.88	75.00	445187.77	1366807.27	QTR CROSSING	90005			X
15006+00.00	75.00	445191.69	1366693.21	PPSD R/W	90006	X	X	
15006+00.00	90.00	445206.68	1366693.73	PPSD R/W	90007	X	X	
15012+50.00	120.00	445258.97	1366045.15	PPSD R/W	90008	X	X	
15012+50.00	90.00	445228.99	1366044.12	PPSD R/W	90009	X	X	
15016+00.00	-125.00	445026.13	1365686.94	PPSD R/W	90013	X	X	
15016+00.00	-75.00	445076.10	1365688.65	PPSD R/W	90012	X	X	
15016+50.00	120.00	445272.70	1365645.38	PPSD R/W	90010	X	X	
15016+50.00	75.00	445227.73	1365643.84	PPSD R/W	90011	X	X	
15030+00.00	-125.00	445074.18	1364287.76	PPSD R/W	90014	X	X	
15030+00.00	-75.00	445124.15	1364289.48	PPSD R/W	90015	X	X	
15030+44.65	-75.00	445125.69	1364244.86	SEC CROSSING	90016			X
15030+44.65	75.00	445275.60	1364250.01	SEC CROSSING	90017			X
15031+94.64	-75.00	445130.84	1364094.95	SEC CROSSING	90018			X
15031+94.65	75.00	445280.75	1364100.10	SEC CROSSING	90019			X
15038+29.99	-110.00	445117.66	1363458.78	PPSD R/W	90023	X	X	
15038+29.99	-75.00	445152.64	1363459.99	PPSD R/W	90024	X	X	
15039+00.00	75.00	445304.96	1363395.16	PPSD R/W	90021	X	X	
15039+00.00	125.00	445354.93	1363396.88	PPSD R/W	90022	X	X	
15044+00.00	75.00	445322.12	1362895.45	PPSD R/W	90026	X	X	
15044+00.00	125.00	445372.09	1352897.17	PPSD R/W	90025	X	X	
15049+00.00	75.00	445339.28	1362395.75	PPSD R/W	90028	X	X	
15049+00.00	105.00	445369.26	1362396.78	PPSD R/W	90027	X	X	
15052+99.99	-110.00	445168.12	1361989.65	PPSD R/W	90029	X	X	
15052+99.99	-75.00	445203.10	1361990.85	PPSD R/W	90030	X	X	
15053+00.00	75.00	445353.01	1361995.99	PPSD R/W	90032	X	X	
15057+58.50	-75.00	445218.84	1361532.61	QTR CROSSING	90033			X
15057+58.83	75.00	445368.76	1361537.42	QTR CROSSING	90035			X
15053+00.00	105.00	445383.00	1361997.02	PPSD R/W	90031	X	X	
15083+19.51	-75.00	445771.23	1359030.45	SEC CROSSING	90039			X
15085+11.41	-75.00	445840.52	1358851.50	SEC CROSSING	90040			X
15084+39.20	75.00	445954.33	1358973.00	SEC CROSSING	90041			X
15086+31.10	75.00	446023.62	1358794.04	SEC CROSSING	90043			X
15099+79.73	75.00	446391.55	1357483.13	PT REF	90047			X
15110+00.00	-75.00	446403.13	1356451.96	PPSD R/W	90048	X	X	
15110+00.03	-95.00	446383.38	1356448.83	PPSD R/W	90049	X	X	
15111+56.82	-95.00	446407.93	1356293.94	QTR CROSSING	90050			X
15111+78.02	75.00	446579.15	1356299.62	QTR CROSSING	90052			X
15115+00.00	-95.00	446461.66	1355954.99	PPSD R/W	90053	X	X	
15115+00.00	-75.00	446481.41	1355958.12	PPSD R/W	90054	X	X	
15135+28.17	75.00	446947.08	1353978.45	PC REF	90056			X
15137+53.47	-75.00	446829.42	1353734.72	SEC CROSSING	90057			X
15138+85.63	-75.00	446843.26	1353605.04	SEC CROSSING	90058			X
15137+55.94	75.00	446978.67	1353749.88	SEC CROSSING	90060			X
15139+25.96	75.00	446996.31	1353578.55	SEC CROSSING	90061			X

720 0125 ALIGNMENT MONUMENTS

Station	Offset	Northing	Easting	Description	Point No.	720 0125 ALIGNMENT MONUMENTS
ND 1804 (SCL1804)						
14978+52.64	0.00	445022.42	1369436.38	SEC CORNER	90000	X
15004+85.73	0.00	445112.81	1366804.84	QTR CORNER	90004	X
15031+19.65	0.00	445203.22	1364172.48	SEC CORNER	90020	X
15057+58.66	0.00	445293.80	1361535.02	QTR CORNER	90034	X
15062+80.62	0.00	445311.72	1361013.37	PC	90036	X
15069+20.58	-54.24	445333.89	1360367.73	PI	90037	X
15075+60.54	0.00	445567.14	1359765.30	PT	90038	X
15084+75.30	0.00	445897.43	1358912.25	SEC CORNER	90042	X
15087+63.88	0.00	446001.62	1358643.13	PC	90044	X
15093+71.81	32.40	446221.95	1358074.08	PI	90045	X
15099+79.73	0.00	446317.48	1357471.39	PT	90046	X
15111+68.68	0.00	446503.62	1356297.10	QTR CORNER	90051	X
15135+28.17	0.00	446873.01	1353966.70	PC	90055	X
15138+30.43	7.98	446920.37	1353667.89	SEC CROSSING	90059	X
15138+79.64	10.80	446928.10	1353619.13	PI	90062	X
15142+31.11	0.00	446940.25	1353267.43	PT	90064	X
15164+65.70	0.00	447017.36	1351034.17	QTR CROSSING	90075	X
15189+69.60	0.00	447103.77	1348531.76	PC	90079	X
15191+01.18	0.00	447106.05	1348400.21	SEC CROSSING	90085	X
15192+57.85	10.90	447113.74	1348243.14	PI	90089	X
15195+46.10	0.00	447080.20	1347956.29	PT	90093	X
15199+10.74	0.00	447037.85	1347594.12	PC	90097	X
15204+22.82	-34.58	446978.01	1347082.43	PI	90101	X
15209+34.91	0.00	447055.87	1346573.18	PT	90106	X
15214+29.60	0.00	447130.63	1346084.17	PC	90109	X
15217+51.24	9.04	447179.30	1345765.88	QTR CORNER	90115	X
15217+59.04	9.48	447180.48	1345758.15	PI	90116	X
15220+88.47	0.00	447192.58	1345428.58	PT	90117	X
15243+86.29	0.00	447276.93	1343132.31	SEC CORNER	90123	X
15270+30.45	0.00	447374.44	1340489.94	QTR CORNER	90127	X
15296+67.84	0.00	447471.46	1337854.34	SEC CORNER	90131	X
15323+05.74	0.00	447566.38	1335218.15	QTR CORNER	90135	X
15332+50.22	0.00	447600.37	1334274.29	TS	90186	X
15360+04.38	0.00	445968.84	1332525.39	ST	90188	X
15369+50.40	0.00	445023.34	1332493.79	QTR CORNER	90138	X
15395+89.84	0.00	442385.37	1332405.61	SEC CORNER	90141	X
15422+29.21	0.00	439747.48	1332317.34	QTR CORNER	90146	X
15445+01.03	0.00	437476.93	1332241.36	TS	90189	X
15448+67.82	-11.52	437109.59	1332229.06	SEC CORNER	90149	X
15472+64.68	0.00	435847.49	1330482.94	ST	90191	X
					TOTAL =	39

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ND 1804 - Jct Tioga Rd to Red Mike Area

Monuments & Right of Way Markers

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SOIB-7-804(061)283	10	7

RIGHT OF WAY MARKERS & IRON PIN MONUMENTS

Station	Offset	Northing	Easting	Description	Point No.	720 0110 RIGHT OF WAY MARKERS	720 0130 IRON PIN R/W MONUMENTS	720 0135 IRON PIN REFERENCE MONUMENTS
ND 1804 (SCL1804)								
15142+31.11	-75.00	446865.29	1353264.84	PT REF	90063			X
15142+31.11	75.00	447015.20	1353270.01	PT REF	90065			X
15154+00.00	-90.00	446890.64	1352096.13	PPSD R/W	90066	X	X	
15154+00.00	-75.00	446905.63	1352096.65	PPSD R/W	90067	X	X	
15157+00.00	-90.00	446900.99	1351796.31	PPSD R/W	90068	X	X	
15157+00.00	-75.00	446915.98	1351796.83	PPSD R/W	90069	X	X	
15157+00.00	75.00	447065.89	1351802.00	PPSD R/W	90070	X	X	
15157+00.00	110.00	447100.87	1351803.21	PPSD R/W	90071	X	X	
15164+00.00	75.00	447090.05	1351102.42	PPSD R/W	90072	X	X	
15164+00.00	110.00	447125.03	1351103.63	PPSD R/W	90073	X	X	
15164+65.59	-75.00	446942.40	1351031.69	QTR CROSSING	90074			X
15164+65.76	75.00	447092.32	1351036.70	QTR CROSSING	90076			X
15182+00.00	75.00	447152.17	1349303.49	PPSD R/W	90077	X	X	
15182+00.00	90.00	447167.16	1349304.01	PPSD R/W	90078	X	X	
15189+69.61	90.00	447193.72	1348534.86	SEC CROSSING	90080			X
15190+00.00	-130.00	446974.75	1348497.92	PPSD R/W	90081	X	X	
15190+00.00	-75.00	447029.73	1348499.38	PPSD R/W	90082	X	X	
15190+65.97	90.00	447195.88	1348436.25	PPSD R/W	90084	X	X	
15190+71.46	-130.00	446975.93	1348428.91	PPSD R/W	90083	X	X	
15191+29.29	120.00	447225.94	1348371.23	PPSD R/W	90087	X	X	
15191+39.82	-130.00	446975.86	1348362.87	PPSD R/W	90086	X	X	
15192+23.06	-130.00	446974.18	1348282.49	SEC CROSSING	90088			X
15192+27.42	120.00	447223.91	1348270.03	SEC CROSSING	90090			X
15195+46.10	-130.00	446951.08	1347971.39	PT REF	90092			X
15195+46.09	120.00	447199.38	1347942.36	PT REF	90094			X
15199+10.00	-130.00	446908.81	1347609.96	PPSD R/W	90099	X	X	
15199+10.00	-105.00	446933.64	1347607.05	PPSD R/W	90098	X	X	
15199+10.75	75.00	447112.34	1347585.40	PPSD R/W	90096	X	X	
15199+10.75	120.00	447157.03	1347580.17	PPSD R/W	90095	X	X	
15201+92.86	75.00	447090.38	1347309.76	PPSD R/W	90100	X	X	
15205+00.00	-145.00	446869.83	1347000.41	PPSD R/W	90102	X	X	
15205+00.00	-105.00	446909.81	1347001.92	PPSD R/W	90103	X	X	
15207+98.79	75.00	447112.20	1346716.75	PPSD R/W	90104	X	X	
15209+34.89	-145.00	446912.53	1346551.28	PPSD R/W	90105	X	X	
15214+29.60	-145.00	446987.30	1346062.25	PPSD R/W	90107	X	X	
15214+29.60	-105.00	447026.84	1346068.30	PPSD R/W	90108	X	X	
15217+00.00	-105.00	447060.75	1345805.05	PPSD R/W	90110	X	X	
15217+00.00	-75.00	447090.59	1345808.18	PPSD R/W	90111	X	X	
15217+55.35	75.00	447245.35	1345768.03	PPSD R/W	90114	X	X	
15217+56.89	100.00	447270.39	1345768.84	PPSD R/W	90113	X	X	X
15220+88.47	100.00	447292.52	1345432.25	PT REF	90118			X
15225+00.00	75.00	447282.64	1345020.08	PPSD R/W	90120	X	X	
15225+00.00	100.00	447307.62	1345021.00	PPSD R/W	90119	X	X	
15243+10.37	-75.00	447199.20	1343205.43	SEC CORNER	90121			X
15243+12.21	75.00	447349.16	1343209.09	SEC CORNER	90122			X
15244+60.37	-75.00	447204.72	1343055.52	SEC CORNER	90124			X
15244+62.23	75.00	447354.68	1343059.18	SEC CORNER	90125			X
15270+30.45	-75.00	447299.49	1340487.18	QTR CROSSING	90126			X

RIGHT OF WAY MARKERS & IRON PIN MONUMENTS

Station	Offset	Northing	Easting	Description	Point No.	720 0110 RIGHT OF WAY MARKERS	720 0130 IRON PIN R/W MONUMENTS	720 0135 IRON PIN REFERENCE MONUMENTS
ND 1804 (SCL1804)								
15270+30.45	75.00	447449.39	1340492.71	QTR CROSSING	90128			X
15295+92.29	-75.00	447393.73	1337927.08	SEC CROSSING	90129			X
15295+93.33	75.00	447543.66	1337931.56	SEC CROSSING	90130			X
15297+42.35	-75.00	447399.19	1337777.18	SEC CROSSING	90132			X
15297+43.28	75.00	447549.12	1337781.65	SEC CROSSING	90133			X
15323+05.54	-75.00	447491.42	1335215.66	QTR CROSSING	90134			X
15323+05.95	75.00	447641.34	1335220.64	QTR CROSSING	90136			X
15332+50.22	-75.00	447525.42	1334271.59	TS REF	90185			X
15332+49.52	75.00	447675.30	1334277.68	TS REF	90187			X
15369+50.40	-75.00	445020.84	1332568.74	QTR CORNER	90137			X
15369+50.40	75.00	445025.85	1332418.83	QTR CORNER	90139			X
15395+15.23	-75.00	442457.44	1332483.06	SEC CORNER	90140			X
15396+65.29	-75.00	442307.46	1332478.04	SEC CORNER	90142			X
15395+14.39	75.00	442463.29	1332333.17	SEC CORNER	90143			X
15396+64.42	75.00	442313.35	1332328.16	SEC CORNER	90144			X
15422+29.21	-75.00	439744.97	1332392.30	QTR CORNER	90145			X
15422+28.96	75.00	439750.24	1332242.39	QTR CORNER	90147			X
15447+95.67	-75.00	437175.72	1332300.23	SEC CORNER	90148			X
15449+18.01	-75.00	437049.80	1332284.70	SEC CORNER	90150			X
15447+92.08	75.00	437193.27	1332151.22	SEC CORNER	90151			X
15449+80.86	75.00	437013.94	1332126.12	SEC CORNER	90152			X
15452+99.90	75.00	436726.15	1332035.45	PPSD R/W	90154	X	X	
15452+99.88	84.76	436730.11	1332026.53	PPSD R/W	90153	X	X	
15459+01.57	-75.00	436156.31	1331804.10	PPSD R/W	90155	X	X	
15459+01.57	-170.00	436085.79	1331867.75	PPSD R/W	90156	X	X	
15460+44.44	-170.00	435984.79	1331743.98	PPSD R/W	90157	X	X	
15460+44.44	-85.00	436053.24	1331693.59	PPSD R/W	90158	X	X	
15465+99.42	-75.00	435813.62	1331162.77	PPSD R/W	90160	X	X	
15465+99.42	-85.00	435803.92	1331165.22	PPSD R/W	90159	X	X	
15468+99.25	75.00	435918.16	1330844.42	PPSD R/W	90162	X	X	
15468+99.25	84.47	435927.61	1330843.94	PPSD R/W	90161	X	X	
15472+64.68	-75.00	435772.55	1330479.74	ST REF	90190			X
15472+64.68	75.00	435922.42	1330486.14	ST REF	90192			X
					TOTAL =	69	69	61

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ND 1804 - Jct Tioga Rd to Red Mike Area

Monuments & Right of Way Markers

RIGHT OF WAY MARKERS & IRON PIN MONUMENTS

Station	Offset	Northing	Easting	Description	Point No.	720 0110 RIGHT OF WAY MARKERS	720 0130 IRON PIN R/W MONUMENTS	720 0135 IRON PIN REFERENCE MONUMENTS
54th St (PR54ST)								
1000+73.13	74.99	447386.99	1333082.44	PPSD R/W	90163	X	X	
1000+73.13	-75.01	447292.49	1332965.96	PPSD R/W	90164	X	X	
1002+51.31	75.00	447525.37	1332970.19	PPSD R/W	90165	X	X	
1002+51.31	-75.00	447430.87	1332853.70	PPSD R/W	90167	X	X	
1003+66.43	75.00	447617.71	1332875.74	PPSD R/W	90168	X	X	
1004+85.58	75.00	447687.97	1332758.49	PPSD R/W	90170	X	X	
1005+38.94	-75.00	447567.34	1332654.92	SEC CORNER	90171			X
1005+84.52	75.00	447723.90	1332650.72	SEC CORNER	90172			X
1005+90.96	-75.00	447578.79	1332612.22	PPSD R/W	90173	X	X	
1006+14.18	75.00	447730.45	1332617.25	PPSD R/W	90174	X	X	
1006+69.07	-74.94	447587.57	1332546.48	PPSD R/W	90176	X	X	
1006+71.76	75.04	447737.48	1332551.45	PPSD R/W	90177	X	X	
1007+14.24	75.00	447739.08	1332508.13	SEC CORNER	90179			X
1007+10.83	-75.00	447589.06	1332506.02	SEC CORNER	90180			X
1012+00.12	-75.00	447607.06	1332017.06	PPSD R/W	90178	X	X	
1012+00.12	-33.00	447649.03	1332018.60	PPSD R/W	90179	X	X	
1012+00.12	33.00	447714.99	1332021.03	PPSD R/W	90180	X	X	
1012+00.12	75.00	447756.96	1332022.58	PPSD R/W	90181	X	X	
					TOTAL =	14	14	4

720 0125 ALIGNMENT MONUMENTS

Station	Offset	Northing	Easting	Description	Point No.	720 0125 ALIGNMENT MONUMENTS
54th St (PR54ST)						
1002+51.32	0.00	447478.12	1332911.95	PC	90166	X
1004+64.38	49.14	447654.42	1332768.97	PI	90169	X
1006+37.49	0.00	447659.71	1332581.96	SEC CORNER	90175	X
1006+77.53	0.00	447662.78	1332542.05	PT	90178	X
					TOTAL =	4

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ND 1804 - Jct Tioga Rd to Red Mike Area

Monuments & Right of Way Markers

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SOIB-7-804(061)283	11	1

LOCATION	EARTHWORK SUMMARY			TOPSOIL SUMMARY
	203 0101 COMMON EXCAVATION-TYPE A	EMBANKMENT	203 0140 BORROW EXCAVATION	203 109 TOPSOIL
	A	B	C=B-A	
	(CY)	(CY)	(CY)	(CY)
ND 1804 - Jct Tioga to Mike Rd				
Sta 14980+88.70 Lt Lane to Sta 15470+00.02	13,572	104,400	90,828	34,073
Sta 14980+88.70 Rt Lane to Sta 15470+00.02	6,768	79,730	72,962	31,629
Mainline Subtotal	20,340	184,130	163,790	65,702
Co Rd 6 - Radial T				
Sta 1000+50.00 to Sta 1011+00.14	2,878	3,292	414	1,862
Existing Co Rd 6 - Obliteration 1				
Sta 12+00.00 to Sta 22+00.00	4,021	1,646	-2,375	1,878
Existing Co Rd 6 - Obliteration 2				
Sta 50+00.00 to Sta 61+07.75	710	1,475	765	845
Total	27,949	190,543	162,594	70,287

Notes:

1. Additional 25% volume included for shrinkage.

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Taylor D. Olson
Registration Number
PE-10405,
on 08/15/18 and the original
document is stored at the
North Dakota Department
of Transportation

ND 1804 - Jct Tioga Rd to Red Mike Area

Earthwork Summary

Mainline & Radial T

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SOIB-7-804(061)283	11	2

Widening & HMA Overlay - Project Left
Table 1 of 13 (SCL 1804)

STATION	END AREA (SF)		ADJUSTED VOLUME (CY)		ADDED VOLUME (CY)	
	EXC	FILL	EXC	FILL	FILL	MASS
14980+88.70	0.00	0.00	0.000	0.000	0.000	0.000
14981+00.00	5.81	21.34	1.217	5.583	0.000	-4.366
14982+00.00	0.62	32.12	11.921	123.751	0.000	-116.196
14983+00.00	0.09	29.96	1.315	143.697	0.000	-258.578
14984+00.00	0.18	25.62	0.498	128.665	0.000	-386.745
14985+00.00	0.00	38.20	0.336	147.740	0.000	-534.149
14986+00.00	0.00	29.88	0.002	157.604	0.000	-691.751
14987+00.00	0.13	25.02	0.249	127.096	0.000	-818.598
14988+00.00	4.14	27.87	7.907	122.436	0.000	-933.127
14989+00.00	8.62	23.79	23.619	119.575	0.000	-1029.083
14990+00.00	4.84	34.61	24.927	135.182	0.000	-1139.338
14991+00.00	1.67	29.33	12.068	148.023	0.000	-1275.293
14992+00.00	10.01	20.89	21.640	116.247	0.000	-1369.900
14993+00.00	0.44	22.97	19.363	101.517	0.000	-1452.054
14994+00.00	1.32	12.12	3.264	81.219	0.000	-1530.009
14995+00.00	1.65	17.78	5.502	69.200	0.000	-1593.707
14996+00.00	2.29	19.04	7.306	85.218	0.000	-1671.619
14997+00.00	1.21	28.00	6.487	108.874	0.000	-1774.006
14998+00.00	1.65	20.50	5.303	112.254	0.000	-1880.957
14999+00.00	4.80	24.01	11.942	103.027	0.000	-1972.042
15000+00.00	4.78	20.94	17.742	104.056	0.000	-2058.356
15001+00.00	25.71	18.33	56.465	90.911	0.000	-2092.802
15001+64.73	14.37	31.91	0.000	0.000	0.000	-2092.802
15002+00.00	10.56	19.43	67.163	87.416	0.000	-2113.055
15003+00.00	6.55	19.61	31.696	90.378	0.000	-2171.737
15004+00.00	2.89	26.31	17.490	106.301	0.000	-2260.548
15004+60.51	14.15	21.29	19.090	66.667	0.000	-2308.125
15004+72.51	17.58	19.94	7.050	11.451	0.000	-2312.526
15005+00.00	19.45	17.10	18.848	23.571	0.000	-2317.249
15006+00.00	1.48	25.35	38.756	98.265	0.000	-2376.758
15007+00.00	2.45	20.29	7.282	105.636	0.000	-2475.112
15008+00.00	1.79	27.19	7.851	109.908	0.000	-2577.169
15009+00.00	6.90	26.33	16.090	123.904	0.000	-2684.983
15010+00.00	6.79	30.97	25.356	132.651	0.000	-2792.278
15011+00.00	9.29	30.98	29.780	143.408	0.000	-2905.906
15011+98.95	180.93	0.03	348.540	71.021	0.000	-2628.387
15012+00.00	181.20	0.00	0.000	0.000	0.879	-2629.266
15012+22.95	92.35	0.01	0.000	0.000	19.121	-2648.387
15013+00.00	7.43	38.76	142.379	69.158	0.000	-2575.166
15014+00.00	8.19	102.82	28.923	327.729	0.000	-2873.972
15015+00.00	7.78	112.23	29.573	497.787	0.000	-3342.186
15015+08.16	7.96	121.81	0.000	0.000	0.000	-3342.186
15016+00.00	7.61	45.21	28.490	364.440	0.000	-3678.136
15017+00.00	83.67	55.73	169.034	233.651	0.000	-3742.753
15018+00.00	130.49	51.20	396.593	247.504	0.000	-3593.664
15019+00.00	40.10	41.42	315.910	214.379	0.000	-3492.133
15020+00.00	31.57	45.23	132.720	200.564	0.000	-3559.977
15021+00.00	28.36	50.71	110.983	222.088	0.000	-3671.082
15022+00.00	50.29	44.54	145.657	220.498	0.000	-3745.923
15023+00.00	27.13	36.92	143.365	188.570	0.000	-3791.128
15024+00.00	77.81	47.83	194.322	196.178	0.000	-3792.984
15025+00.00	109.95	50.03	347.701	226.513	0.000	-3671.796
15025+04.09	110.12	47.41	16.663	9.222	0.000	-3664.355
15025+28.09	92.84	42.81	90.206	50.118	0.000	-3624.267
15026+00.00	92.22	45.66	246.452	147.255	0.000	-3525.070
15027+00.00	62.94	37.22	287.348	191.842	0.000	-3429.564
15028+00.00	84.06	47.25	272.222	195.525	0.000	-3352.867
15029+00.00	10.80	53.60	175.654	233.448	0.000	-3410.661
15030+00.00	8.10	39.30	34.991	215.058	0.000	-3590.728
15031+00.00	9.35	40.76	32.321	185.319	0.000	-3743.726
15032+00.00	8.17	38.79	32.450	184.123	0.000	-3895.399
15033+00.00	7.32	38.27	28.683	178.359	0.000	-4045.075
15034+00.00	8.10	33.00	28.549	164.965	0.000	-4181.491
15035+00.00	8.18	34.99	30.137	157.377	0.000	-4308.731
15036+00.00	7.13	44.49	28.349	183.971	0.000	-4464.353
15037+00.00	7.72	40.18	27.509	195.994	0.000	-4632.838
15038+00.00	12.52	47.94	37.491	203.995	0.000	-4799.342
15038+32.72	26.73	51.24	23.786	75.122	0.000	-4850.678
15038+56.72	46.32	10.51	32.468	34.301	0.000	-4852.511
15038+80.91	195.41	0.05	108.280	5.913	0.000	-4750.144
15039+00.00	241.00	0.00	0.000	0.000	32.617	-4782.761
15039+06.08	242.33	0.08	0.000	0.000	10.383	-4793.144
15040+00.00	6.28	146.39	432.407	318.453	0.000	-4679.190
15041+00.00	6.43	203.81	23.536	810.651	0.000	-5466.305

Widening & HMA Overlay - Project Left
Table 2 of 13 (SCL 1804)

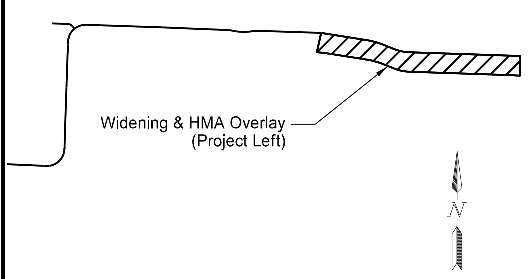
STATION	END AREA (SF)		ADJUSTED VOLUME (CY)		ADDED VOLUME (CY)	
	EXC	FILL	EXC	FILL	FILL	MASS
15041+80.57	5.85	259.42	0.000	0.000	0.000	-5466.305
15042+00.00	6.88	351.61	24.645	1285.695	0.000	-6727.355
15043+00.00	11.51	151.38	34.051	1164.340	0.000	-7857.644
15044+00.00	81.38	79.28	172.011	533.933	0.000	-8219.566
15045+00.00	50.16	53.70	243.579	307.822	0.000	-8283.809
15046+00.00	36.31	48.11	160.118	235.672	0.000	-8359.363
15046+85.46	183.73	0.11	348.229	95.377	0.000	-8106.511
15047+00.00	212.65	0.00	0.000	0.000	8.274	-8114.785
15047+17.09	171.52	0.00	0.000	0.000	9.726	-8124.511
15048+00.00	26.45	36.23	303.967	69.530	0.000	-7890.074
15049+00.00	26.57	45.23	98.187	188.569	0.000	-7980.456
15049+76.01	104.38	0.01	184.304	79.602	0.000	-7875.754
15050+00.00	69.00	8.68	0.000	0.000	118.025	-7993.779
15050+01.21	63.85	10.33	0.000	0.000	5.975	-7999.754
15051+00.00	16.21	86.15	146.461	220.613	0.000	-8073.906
15052+00.00	6.63	178.48	42.294	612.577	0.000	-8644.189
15053+00.00	7.36	72.34	25.903	580.604	0.000	-9198.890
15053+98.10	112.38	0.04	217.521	164.345	0.000	-9145.714
15054+00.00	121.28	0.00	0.000	0.000	6.657	-9152.371
15054+22.10	131.67	0.00	0.000	0.000	77.343	-9229.714
15055+00.00	5.09	43.12	197.292	77.761	0.000	-9110.183
15056+00.00	6.98	37.94	22.360	187.634	0.000	-9275.457
15057+00.00	7.20	34.21	26.268	167.016	0.000	-9416.205
15058+00.00	6.57	38.80	25.503	169.017	0.000	-9559.719
15059+00.00	6.27	44.94	23.774	193.839	0.000	-9729.784
15060+00.00	6.46	45.45	23.572	209.233	0.000	-9915.445
15060+34.48	6.59	42.14	8.334	69.912	0.000	-9977.023
15060+50.00	6.47	40.28	3.755	29.612	0.000	-10002.880
15061+00.00	7.38	39.14	12.828	91.927	0.000	-10081.979
15061+39.97	7.30	40.01	10.866	73.238	0.000	-10144.351
15061+50.00	7.15	39.95	2.683	18.566	0.000	-10160.234
15062+00.00	5.93	49.95	12.103	104.057	0.000	-10252.188
15062+45.46	4.97	59.11	9.173	114.765	0.000	-10357.780
15062+50.00	4.95	59.98	0.834	12.515	0.000	-10369.461
15062+80.62	4.12	67.10	5.142	90.076	0.000	-10454.395
15063+00.00	2.57	76.42	2.401	64.385	0.000	-10516.379
15063+50.00	2.84	85.22	5.010	187.085	0.000	-10698.454
15063+50.95	2.91	85.23	0.101	3.748	0.000	-10702.101
15064+00.00	3.10	84.34	5.458	192.527	0.000	-10889.170
15064+50.00	3.93	82.58	6.509	193.196	0.000	-11075.857
15065+00.00	3.58	86.61	6.952	195.827	0.000	-11264.732
15065+50.00	4.21	85.58	7.215	199.292	0.000	-11456.809
15066+00.00	3.97	87.03	7.571	199.776	0.000	-11649.014
15066+50.00	4.55	80.85	7.881	194.301	0.000	-11835.434
15067+00.00	4.52	71.30	8.392	176.102	0.000	-12003.144
15067+50.00	4.98	70.89	8.792	164.574	0.000	-12158.926
15068+00.00	5.04	72.19	9.271	165.597	0.000	-12315.252
15068+50.00	4.46	71.42	8.789	166.208	0.000	-12472.671
15069+00.00	4.41	77.74	8.207	172.639	0.000	-12637.103
15069+50.00	4.89	67.79	8.611	168.440	0.000	-12796.932
15070+00.00	5.98	62.78	10.066	151.115	0.000	-12937.981
15070+50.00	5.49	67.50	10.618	150.782	0.000	-13078.145
15071+00.00	4.61	68.44	9.355	157.342	0.000	-13226.132
15071+50.00	5.04	63.09	8.936	152.234	0.000	-13369.430
15072+00.00	5.42	65.09	9.680	148.356	0.000	-13508.106
15072+50.00	5.87	62.78	10.445	148.000	0.000	-13645.661
15073+00.00	5.42	73.44	10.452	157.665	0.000	-13792.874
15073+50.00	4.96	73.36	9.609	169.912	0.000	-13953.177
15074+00.00	3.63	75.13	7.952	171.864	0.000	-14117.089
15074+50.00	3.75	76.56	6.840	175.568	0.000	-14285.817
15074+90.21	2.83	78.82	4.907	144.624	0.000	-14425.534
15075+00.00	2.52	80.29	0.970	36.057	0.000	-14460.621
15075+50.00	3.86	75.82	5.901	180.682	0.000	-14635.402
15075+60.54	4.56	71.65	1.642	35.980	0.000	-14669.740
15075+95.70	5.62	56.81	6.628	104.555	0.000	-14767.667
15076+00.00	5.54	55.50	0.889	11.179	0.000	-14777.957
15076+50.00	5.93	39.96	10.624	110.486	0.000	-14877.819
15077+00.00	6.08	27.25	11.120	63.427	0.000	-14930.126
15077+01.19	6.38	13.57	0.275	0.783	0.000	-14930.634
15077+05.88	11.31	7.47	0.000	0.000	0.000	-14930.634
15077+29.88	29.43	0.08	0.000	0.000	58.000	-14988.634
15077+50.00	9.95	7.77	0.000	0.000	0.000	-14988.634
15077+82.98	4.83	54.42	0.000	0.000	0.000	-14988.634
15078+00.00	5.90	34.64	14.677	49.087	0.000	-15023.044

Widening & HMA Overlay - Project Left
Table 3 of 13 (SCL 1804)

STATION	END AREA (SF)		ADJUSTED VOLUME (CY)		ADDED VOLUME (CY)	
	EXC	FILL	EXC	FILL	FILL	MASS
15078+06.68	6.16	33.83	1.491	10.589	0.000	-15032.142
15079+00.00	6.98	33.10	22.704	144.579	0.000	-15154.017
15080+00.00	7.91	34.66	27.566	156.852	0.000	-15283.303
15081+00.00	5.99	48.36	25.732	192.175	0.000	-15449.746
15082+00.00	4.81	53.79	19.992	236.441	0.000	-15666.195
15083+00.00	5.32	59.50	18.755	262.238	0.000	-15909.678
15084+00.00	5.23	59.28	19.530	274.962	0.000	-16165.110
15085+00.00	4.14	58.88	17.347	273.537	0.000	-16421.300
15085+57.92	4.54	54.59	9.309	152.139	0.000	-16564.130
15086+00.00	4.30	55.20	6.887	106.946	0.000	-16664.189
15086+50.00	4.00	54.20	7.685	126.623	0.000	-16783.127
15086+63.41	4.24	53.67	2.046	33.484	0.000	-16814.565
15087+00.00	3.75	55.00	5.410	92.045	0.000	-16901.200
15087+50.00	3.88	57.34	7.058	130.029	0.000	-17024.171
15087+63.88	4.14	57.50	2.060	36.899	0.000	-17059.010
15087+68.90	4.35	57.46	0.000	0.000	0.000	-17059.010
15088+00.00	5.45	58.30	5.643	83.334	0.000	-17136.701
15088+14.11	5.81	56.41	2.941	37.467	0.000	-17171.227
15088+50.00	5.65	57.60	7.614	94.720	0.000	-17258.333
15089+00.00	5.71	47.63	10.522	121.794	0.000	-17369.605
15089+50.00	5.57	47.31	10.451	109.890	0.000	-17469.044
15090+00.00	4.20	63.26	9.049	127.982	0.000	-17587.977
15090+50.00	3.33	74.54	6.972	159.496	0.000	-17740.501
15091+00.00	3.61	86.47	6.427	186.361	0.000	-17920.435
15091+50.00	3.99	97.47	7.037	212.902	0.000	-18126.300
15092+00.00	3.55	111.51	6.978	241.873	0.000	-18361.195
15092+50.00	3.56	111.48	6.578	258.089	0.000	-18612.706
15093+00.00	3.45	113.59	6.485	260.506	0.000	-18866.727
15093+50.00	3.33	99.23	6.274	246.327	0.000	-19106.780
15094+00.00	2.90	91.65	5.766	220.933	0.000	-19321.947
15094+50.00	3.02	98.60	5.476	220.201	0.000	-19536.672
15095+00.00	2.26	83.49	4.889	210.756	0.000	-19742.539
15095+50.00	3.86	67.01	5.666	174.196	0.000	-19911.069
15096+00.00	2.90	71.16	6.255	159.925	0.000	-20064.739
15096+50.00	22.20	0.35	23.238	82.765	0.000	-20124.266
15096+78.80	24.39	0.13	24.850	0.315	0.000	-20099.731
15097+00.00	23.40	0.00	0.000	0.000	72.315	-20172.046
15097+02.55	22.75	0.08	0.000	0.000	8.685	-20180.731
15097+50.00	3.48	56.08	23.055	61.689	0.000	-20219.365
15098+00.00	26.91	0.00	28.145	64.911	0.000	-20256.131
15098+50.00	3.52	47.13	28.179	54.554	0.000	-20282.506
15099+00.00	3.23	53.67	6.253	116.667	0.000	-20392.920
15099+29.50	4.30	49.57	4.117	70.498	0.000	-20459.301
15099+50.00	3.76	51.00	3.060	47.725	0.000	-20503.966
15099+74.71	3.31	55.69	3.234	61.027	0.000	-20561.759
15099+79.73	3.63	55.20	0.000	0.000	0.000	-20561.759
15100+00.00	3.98	50.94	2.856	49.802	0.000	-20608.705
15100+50.00	3.90	53.94	7.301	121.387	0.000	-20722.791
15100+80.20	4.38	53.96	4.630	75.426	0.000	-20793.587
15101+00.00	4.63	53.98	3.303	49.473	0.000	-20839.757
15101+50.00	5.19	48.77	9.089	118.922	0.000	-20949.590
15101+85.69	4.68	51.30	6.522	82.669	0.000	-21025.737
15102+00.00	4.33	53.10	2.387	34.583	0.000	-21057.933
15103+00.00	4.12	60.03	15.635	261.881	0.000	-21304.179
15104+00.00	5.02	58.07	16.925	273.377	0.000	-21560.631
15105+00.00	3.92	64.02	16.557	282.607	0.000	-21826.681
15106+00.00	4.23	62.60	15.097	293.098	0.000	-22104.682
15107+00.00	4.22	58.07	15.648	279.328	0.000	-22368.362
15108+00.00	3.87	58.50	14.979	269.843	0.000	-22623.226
15109+00.00	4.04	55.57	14.656	264.049	0.000	-22872.619
15110+00.00	10.32	53.91	26.593	253.411	0.000	-23099.437
15111+00.00	56.97	56.20	124.609	254.884	0.000	-23229.712
15112+00.00	76.22	50.57	246.642	247.160	0.000	-23230.230
15113+00.00	52.66	53.81	238.658	241.623	0.000	-23233.195
15114+00.00	29.34	52.59	151.846	246.306	0.000	-23327.655
15115+00.00	11.61	58.01	75.837	256.032	0.000	-23507.850
15115+24.27	81.13	0.43	41.685	32.832	0.000	-23498.997
15115+53.33	83.04	3.94	0.000	0.000	160.000	-23658.997
15116+00.00	29.26	60.37	97.068	69.478	0.000	-23631.407
15117+00.00	27.56	64.48	105.223	289.000	0.000	-23815.184
15118+00.00	7.64	66.90	65.185	304.101	0.000	-24054.100
15119+00.00	8.54	70.85	29.955	318.856	0.000	-24343.001
15120+00.00	11.29	59.13	36.711	300.873	0.000	-24607.163
15121+00.00	16.04	49.86	50.609	252.286	0.000	-24808.840

Widening & HMA Overlay - Project Left
Table 4 of 13 (SCL 1804)

STATION	END AREA (SF)		ADJUSTED VOLUME (CY)		ADDED VOLUME (CY)	
	EXC	FILL	EXC	FILL	FILL	MASS
15122+00.00	19.49	57.26	65.797	247.954	0.000	-24990.997
15123+00.00	12.26	48.68	58.802	245.221	0.000	-25177.416
15124+00.00	38.92	59.14	94.786	249.591	0.000	-25332.221
15124+31.18	84.62	0.33	71.341	42.932	0.000	-25303.812
15124+55.18	99.92	0.00	0.000	0.000	201.000	-25504.812
15125+00.00	6.26	66.68	88.129	69.177	0.000	-25485.860
15126+00.00	3.34	107.12	17.792	402.315	0.000	-25870.383
15126+85.34	3.95	98.79	0.000	0.000	0.000	-25870.383
15127+00.00	4.05	94.44	13.689	466.567	0.000	-26323.261
15127+15.22	4.08	89.64	0.000	0.000	0.000	-26323.261
15128+00.00	3.94	77.74	14.797	398.558	0.000	-26707.022
15129+00.00	3.75	73.53	14.241	350.150	0.000	-27042.931
15130+00.00	4.12	77.11	14.567	348.698	0.000	-27377.062
15130+89.94	3.31	89.67	0.000	0.000	0.000	-27377.062
15131+00.00	3.31	79.05	13.764	361.497	0.000	-27724.795
15132+00.00	3.32	82.49	12.289	373.955	0.000	-28086.461
15133+00.00	0.04	81.81	6.235	380.337	0.000	-28460.563
15133+22.21	0.11	78.77	0.065	82.557	0.000	-28543.055
15133+50.00	0.00	77.42	0.059	100.473	0.000	-28643.469
15134+00.00	0.00	88.63	0.000	192.193	0.000	-28835.662
15134+27.70	0.05	82.42	0.025	109.684	0.000	-28945.321
15134+50.00	0.00	75.82	0.020	81.684	0.000	-29026.985
15135+00.00	0.00	64.07	0.003	161.905	0.000	-29188.887
15135+28.17	0.00	56.60	0.002	78.685	0.000	-29267.570
15135+33.19	0.01	55.19	0.001	12.990	0.000	-29280.559
15135+50.00	0.00	52.37	0.002	41.854	0.000	-29322.411
15135+78.40	0.00	53.84	0.001	69.827	0.000	-29392.237
15136+00.00	0.04	56.36	0.015	55.100	0.000	-29447.322
15136+50.00	0.00	60.97	0.034	135.793	0.000	-29583.081
15137+00.00	0.00	65.26	0.000	146.092	0.000	-29729.173



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ND 1804 - Jct Tioga Rd to Red Mike Area

Average End Area Tables

Widening & HMA Overlay
Project Left

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SOIB-7-804(061)283	11	3

Widening & HMA Overlay - Project Left

Table 5 of 13 (SCL 1804)

STATION	END AREA (SF)		ADJUSTED VOLUME (CY)		ADDED VOLUME (CY)	
	EXC	FILL	EXC	FILL	FILL	MASS
15137+50.00	0.00	76.62	0.000	164.214	0.000	-29893.387
15138+00.00	0.00	70.19	0.000	169.926	0.000	-30063.313
15138+50.00	0.00	73.72	0.000	166.561	0.000	-30229.874
15139+00.00	0.00	82.43	0.000	180.726	0.000	-30410.600
15139+15.60	0.09	78.75	0.026	58.208	0.000	-30468.782
15139+39.35	0.00	77.32	0.000	0.000	0.000	-30468.782
15139+50.00	0.00	74.80	0.000	37.489	0.000	-30506.271
15140+00.00	0.00	59.43	0.000	155.366	0.000	-30661.637
15140+50.00	0.00	57.43	0.000	135.258	0.000	-30796.895
15141+00.00	0.06	54.46	0.052	129.507	0.000	-30926.350
15141+50.00	1.79	29.93	1.710	97.675	0.000	-31022.315
15141+80.88	2.37	6.51	2.377	26.046	0.000	-31045.984
15142+00.00	2.37	2.61	1.676	4.035	0.000	-31048.343
15142+26.09	2.43	2.17	2.316	2.885	0.000	-31048.912
15142+31.11	2.36	2.19	0.445	0.506	0.000	-31048.973
15142+50.00	1.85	3.00	1.474	2.266	0.000	-31049.765
15143+00.00	2.05	2.24	3.609	6.062	0.000	-31052.218
15143+31.58	2.26	0.75	2.518	2.189	0.000	-31051.889
15143+50.00	1.82	1.01	1.393	0.754	0.000	-31051.250
15144+00.00	25.64	0.00	25.429	1.173	0.000	-31026.994
15144+24.84	23.45	0.00	22.584	0.001	0.000	-31004.411
15144+37.07	21.51	0.00	0.000	0.000	0.000	-31004.411
15145+00.00	1.82	1.68	27.196	2.441	0.000	-30979.656
15146+00.00	2.84	0.00	8.628	3.878	0.000	-30974.906
15147+00.00	1.00	9.09	7.111	21.036	0.000	-30988.831
15148+00.00	0.19	20.73	2.214	69.032	0.000	-31055.649
15149+00.00	0.00	27.03	0.356	110.560	0.000	-31165.853
15149+02.04	0.03	27.11	0.001	2.555	0.000	-31168.407
15149+26.04	0.18	22.06	0.000	0.000	0.000	-31168.407
15150+00.00	0.05	28.95	0.320	87.341	0.000	-31255.428
15151+00.00	1.54	1.21	2.944	69.834	0.000	-31322.318
15151+40.00	6.80	0.04	6.178	1.162	0.000	-31317.302
15151+64.77	5.94	0.00	0.000	0.000	746.000	-32063.302
15152+00.00	0.35	42.12	4.102	34.351	0.000	-32093.551
15153+00.00	0.00	54.86	0.651	224.502	0.000	-32317.402
15154+00.00	0.42	27.16	0.786	189.872	0.000	-32506.488
15155+00.00	18.35	39.04	34.773	153.252	0.000	-32624.967
15156+00.00	40.91	28.89	109.739	157.240	0.000	-32672.468
15157+00.00	6.56	24.62	87.892	123.865	0.000	-32708.441
15157+71.61	120.55	0.00	168.552	40.819	0.000	-32580.708
15157+95.42	74.93	0.04	0.000	0.000	32.000	-32612.708
15158+00.00	53.81	0.00	0.000	0.000	0.000	-32612.708
15159+00.00	0.05	27.09	99.734	62.713	0.000	-32575.687
15160+00.00	4.26	36.09	7.979	146.250	0.000	-32713.958
15160+84.17	4.80	36.87	0.000	0.000	0.000	-32713.958
15161+00.00	0.82	17.07	9.411	123.060	0.000	-32827.607
15162+00.00	0.17	34.54	1.827	119.483	0.000	-32945.263
15162+58.16	6.38	0.01	7.054	46.520	0.000	-32984.729
15162+82.16	5.24	0.06	0.000	0.000	0.000	-32984.729
15163+00.00	0.04	15.47	0.000	0.000	249.044	-33233.773
15163+09.17	0.59	25.54	0.000	0.000	127.956	-33361.729
15163+33.17	0.17	42.25	0.000	0.000	0.000	-33361.729
15164+00.00	0.09	52.89	0.316	147.199	0.000	-33508.612
15165+00.00	0.06	50.96	0.263	240.402	0.000	-33748.751
15165+23.63	0.10	86.10	0.000	0.000	0.000	-33748.751
15166+00.00	0.00	49.36	0.111	232.214	0.000	-33980.854
15167+00.00	0.00	45.52	0.007	219.623	0.000	-34200.470
15168+00.00	0.30	25.49	0.564	164.368	0.000	-34364.274
15168+65.72	6.06	0.25	7.752	39.160	0.000	-34395.682
15168+89.72	3.35	0.11	0.000	0.000	80.000	-34475.682
15169+00.00	0.15	6.97	0.666	1.684	0.000	-34476.700
15170+00.00	0.09	22.11	0.459	67.319	0.000	-34543.560
15171+00.00	0.08	23.13	0.320	104.716	0.000	-34647.956
15171+39.79	0.22	22.91	0.222	42.403	0.000	-34690.137
15171+79.79	0.48	17.24	0.525	37.175	0.000	-34726.787
15172+00.00	0.37	16.24	0.321	15.665	0.000	-34742.131
15173+00.00	0.01	19.91	0.709	83.683	0.000	-34825.105
15173+14.95	0.01	39.94	0.000	0.000	0.000	-34825.105
15174+00.00	0.19	19.31	0.368	90.772	0.000	-34915.509
15175+00.00	0.02	23.93	0.375	100.077	0.000	-35015.211
15176+00.00	0.00	33.36	0.028	132.618	0.000	-35147.801
15177+00.00	0.05	28.08	0.086	142.238	0.000	-35289.953
15177+80.40	4.86	0.18	7.311	52.607	0.000	-35335.249
15177+86.55	3.43	96.29	0.000	0.000	0.000	-35335.249

Widening & HMA Overlay - Project Left

Table 6 of 13 (SCL 1804)

STATION	END AREA (SF)		ADJUSTED VOLUME (CY)		ADDED VOLUME (CY)	
	EXC	FILL	EXC	FILL	FILL	MASS
15178+00.00	7.69	0.00	4.558	0.083	37.546	-35368.320
15178+08.40	6.03	0.02	2.134	0.003	23.454	-35389.643
15179+00.00	0.00	31.58	10.222	67.002	0.000	-35446.423
15179+67.29	0.31	45.14	0.389	119.501	0.000	-35565.535
15179+91.29	0.01	45.81	0.142	50.527	0.000	-35615.920
15180+00.00	0.00	46.86	0.001	18.689	0.000	-35634.608
15181+00.00	0.01	46.82	0.013	216.835	0.000	-35851.430
15181+54.75	0.12	100.95	0.000	0.000	0.000	-35851.430
15182+00.00	0.00	35.25	0.013	189.981	0.000	-36041.398
15183+00.00	0.02	24.12	0.043	137.441	0.000	-36178.796
15184+00.00	0.03	23.52	0.096	110.270	0.000	-36288.970
15185+00.00	0.00	25.78	0.054	114.112	0.000	-36403.028
15186+00.00	0.00	25.09	0.000	117.749	0.000	-36520.777
15187+00.00	0.00	21.10	0.000	106.923	0.000	-36627.700
15187+23.46	0.05	21.64	0.023	23.213	0.000	-36650.890
15187+50.00	0.00	22.87	0.026	27.344	0.000	-36678.208
15188+00.00	0.00	25.65	0.000	56.155	0.000	-36734.363
15188+28.95	0.02	25.34	0.008	34.172	0.000	-36768.527
15188+50.00	0.00	21.10	0.007	22.631	0.000	-36791.151
15189+00.00	0.00	21.64	0.002	49.474	0.000	-36840.623
15189+34.44	0.01	25.05	0.006	37.230	0.000	-36877.847
15189+50.00	0.00	24.63	0.003	17.895	0.000	-36895.739
15189+69.60	0.06	24.05	0.022	22.086	0.000	-36917.803
15190+00.00	0.03	21.32	0.052	31.930	0.000	-36949.681
15190+39.93	1.55	26.27	1.170	43.990	0.000	-36992.501
15190+50.00	2.42	25.43	0.741	12.051	0.000	-37003.811
15190+76.21	1.78	28.66	2.041	32.820	0.000	-37034.590
15190+99.78	0.09	35.52	0.816	35.017	0.000	-37068.791
15191+00.00	0.08	35.60	0.001	0.355	0.000	-37069.145
15191+50.00	0.00	39.94	0.070	87.425	0.000	-37156.500
15192+00.00	0.00	35.60	0.000	87.426	0.000	-37243.926
15192+50.00	0.00	106.46	0.000	164.421	0.000	-37408.347
15193+00.00	0.00	93.83	0.000	231.824	0.000	-37640.171
15193+50.00	0.00	126.29	0.000	254.777	0.000	-37894.948
15194+00.00	0.00	76.09	0.000	234.241	0.000	-38129.189
15194+50.00	0.00	46.13	0.000	141.462	0.000	-38270.651
15194+75.77	0.01	43.27	0.003	53.329	0.000	-38323.977
15195+00.00	4.29	37.98	1.927	45.572	0.000	-38367.622
15195+46.10	56.09	45.36	51.541	88.938	0.000	-38405.019
15195+50.00	63.02	45.86	8.602	8.235	0.000	-38404.652
15195+81.26	73.39	43.40	78.968	64.590	0.000	-38390.274
15196+00.00	76.76	47.68	52.110	39.513	0.000	-38377.677
15196+50.00	59.43	46.39	126.106	108.884	0.000	-38360.455
15196+64.60	18.67	46.03	21.115	31.235	0.000	-38370.575
15196+86.75	0.12	46.72	7.704	47.554	0.000	-38410.425
15197+00.00	0.00	47.99	0.028	29.047	0.000	-38439.444
15197+50.00	0.05	52.34	0.046	116.117	0.000	-38555.515
15197+70.09	0.18	48.48	0.086	46.887	0.000	-38602.316
15197+92.24	0.40	47.87	0.238	49.400	0.000	-38651.478
15198+00.00	0.22	48.11	0.089	17.241	0.000	-38668.630
15198+50.00	1.27	45.39	1.378	108.226	0.000	-38775.478
15198+75.58	1.86	46.51	1.484	54.416	0.000	-38828.410
15199+00.00	0.27	50.85	0.963	55.030	0.000	-38882.477
15199+10.74	1.34	50.72	0.321	25.249	0.000	-38907.405
15199+50.00	5.99	53.08	5.332	94.324	0.000	-38996.397
15199+81.07	1.70	52.54	4.426	75.957	0.000	-39067.928
15200+00.00	0.00	96.28	0.596	65.209	0.000	-39132.541
15200+50.00	0.23	36.88	0.217	154.120	0.000	-39286.444
15201+00.00	16.22	4.76	15.239	48.198	0.000	-39319.403
15201+14.48	81.49	0.50	26.209	1.765	0.000	-39294.959
15201+38.74	31.65	7.30	0.000	0.000	28.000	-39322.959
15201+50.00	7.78	36.83	8.221	11.501	0.000	-39326.239
15202+00.00	34.60	43.43	39.241	92.894	0.000	-39379.892
15202+50.00	17.18	40.61	47.952	97.267	0.000	-39429.207
15203+00.00	183.85	34.78	186.147	87.250	0.000	-39330.310
15203+50.00	148.42	38.97	307.659	85.357	0.000	-39108.008
15204+00.00	47.70	37.01	181.589	87.939	0.000	-39014.358
15204+50.00	0.07	44.73	44.230	94.603	0.000	-39064.731
15205+00.00	0.12	36.58	0.178	94.109	0.000	-39158.662
15205+50.00	0.33	35.06	0.413	82.919	0.000	-39241.168
15206+00.00	0.24	35.07	0.524	81.173	0.000	-39321.817
15206+50.00	0.11	52.17	0.321	100.975	0.000	-39422.471
15207+00.00	0.04	188.60	0.136	278.673	0.000	-39701.008
15207+50.00	0.02	350.24	0.055	623.668	0.000	-40324.621

Widening & HMA Overlay - Project Left

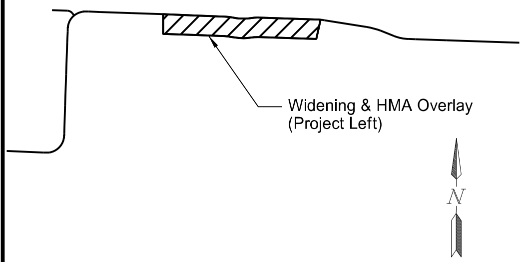
Table 7 of 13 (SCL 1804)

STATION	END AREA (SF)		ADJUSTED VOLUME (CY)		ADDED VOLUME (CY)	
	EXC	FILL	EXC	FILL	FILL	MASS
15208+00.00	0.00	445.83	0.017	921.385	0.000	-41245.989
15208+50.00	0.11	492.52	0.100	1086.056	0.000	-42331.945
15208+64.58	0.09	505.55	0.055	336.847	0.000	-42668.737
15209+00.00	0.00	548.10	0.062	863.895	0.000	-43532.570
15209+34.91	0.00	517.30	0.000	860.952	0.000	-44393.522
15209+50.00	0.00	484.42	0.000	349.904	0.000	-44743.426
15209+70.07	0.15	489.68	0.055	452.550	0.000	-45195.921
15210+00.00	0.00	458.45	0.082	656.888	0.000	-45852.727
15210+50.00	0.00	419.31	0.000	1015.920	0.000	-46868.647
15210+75.56	0.00	414.61	0.001	493.402	0.000	-47362.048
15211+00.00	0.07	436.07	0.034	481.266	0.000	-47843.280
15211+50.00	0.02	474.82	0.084	1054.267	0.000	-48897.463
15211+81.05	0.07	527.20	0.054	720.197	0.000	-49617.606
15212+00.00	0.00	431.29	0.026	420.448	0.000	-50038.028
15212+23.64	0.00	410.33	0.000	460.556	0.000	-50498.584
15212+50.00	0.00	392.90	0.000	490.124	0.000	-50988.708
15213+00.00	0.00	340.40	0.000	848.733	0.000	-51837.441
15213+29.13	0.05	309.29	0.027	438.089	0.000	-52275.503
15213+50.00	0.00	288.91	0.020	288.990	0.000	-52564.473
15214+00.00	0.00	245.12	0.000	618.087	0.000	-53182.560
15214+29.60	0.04	228.41	0.019	324.456	0.000	-53506.997
15214+34.62	0.01	227.37	0.004	52.964	0.000	-53559.957
15214+50.00	0.00	228.81	0.004	162.410	0.000	-53722.363
15214+79.83	0.06	226.31	0.032	314.263	0.000	-54036.594
15215+00.00	0.00	233.01	0.022	214.453	0.000	-54251.025
15215+50.00	0.00	165.65	0.000	461.403	0.000	-54712.428
15216+00.00	0.00	96.28	0.000	303.151	0.000	-55015.579
15216+50.00	0.00	76.16	0.000	199.582	0.000	-55215.161
15217+00.00	0.00	60.06	0.000	157.667	0.000	-55372.828
15217+50.00	4.75	0.02	4.400	69.541	0.000	-55437.969
15217+56.49	5.13	0.08	1.188	0.015	0.000	-55436.796
15217+80.74	8.12	0.23	0.000	0.000	880.000	-56316.796
15218+00.00	0.00	24.33	2.895	10.948	0.000	-56324.849
15218+50.00	0.00	30.46	0.000	63.411	0.000	-56388.260
15219+00.00	0.00	22.74	0.000	61.575	0.000	-56449.835
15219+50.00	0.00	28.04	0.000	58.779	0.000	-56508.614
15220+00.00	0.03	36.22	0.027	74.378	0.000	-56582.965
15220+38.46	0.45	35.10	0.343	63.498	0.000	-56646.120
15220+50.00	0.17	29.95	0.132	17.378	0.000	-56663.366
15220+82.38	0.15	47.61	0.000	0.000	0.000	-56663.366
15220+83.46	0.24	44.52	0.253	57.678	0.000	-56720.791
15220+88.48	0.45	34.23	0.064	9.150	0.000	-56729.877
15221+00.00	0.00	26.39	0.095	16.166	0.000	-56745.948
15221+03.30	0.01	25.66	0.000	3.973	0.000	-56749.921
15221+31.27	0.27	18.02	0.145	28.286	0.000	-56778.062
15221+50.00	0.02	10.76	0.101	12.479	0.000	-56790.440
15221+88.95	0.00	8.18	0.017	17.082	0.000	-56807.505
15222+00.00	0.00	6.53	0.001	3.762	0.000	-56811.266
15222+50.00	0.16	5.12	0.144	13.479	0.000	-56824.601
15222+94.44	0.32	4.78	0.393	10.187	0.000	-56834.395
15223+00.00	0.30	4.62	0.064	1.210	0.000	-56835.541
15224+00.00	1.81	1.15	3.909	13.345	0.000	-56844.977
15225+00.00	2.72	0.16	8.396	3.026	0.000	-56839.607
15226+00.00	0.83	2.13	6.579	5.285	0.000	-56838.313
15227+00.00	0.50	3.74	2.460	13.586	0.000	-56849.439
15228+00.00	0.21	6.29	1.309	23.235	0.000	-56871.365
15229+00.00	0.68	5.37	1.653	26.990	0.000	-56896.702
15230+00.00	1.55	3.02	4.139	19.413	0.000	-56911.976
15231+00.00	0.77	5.58	4.304	19.900	0.000	-56927.572
15232+00.00	0.70	4.18	2.737	22.575	0.000	-56947.410
15233+00.00	0.18	8.54	1.632	29.431	0.000	-56975.209
15234+00.00	0.00	7.05	0.332	36.093	0.000	-57010.970
15235+00.00	1.82	9.86	3.371	39.158	0.000	-57046.757
15236+00.00	1.52	8.00	6.185	41.339	0.000	-57081.911
15237+00.00	0.29	12.80	3.345	48.136	0.000	-57126.702
15238+00.00	0.36	10.32	1.197	53.507	0.000	-57179.012
15239+00.00	1.24	5.74	2.967	37.160	0.000	-57213.205
15240+00.00	1.26	5.15	4.639	25.202	0.000	-57233.768
15241+00.00	0.45	6.60	3.173	27.197	0.000	-57257.792
15242+00.00	0.39	11.18	1.553	41.160	0.000	-57297.399
15242+96.75	1.72	37.33	0.000	0.000	0.000	-57297.399
15243+00.00	2.07	30.41	4.555	96.276	0.000	-57389.120
15243+31.83	3.21	26.16	0.000	0.000	0.000	-57389.120
15243+74.78	7.86	0.00	0.000	0.000	0.000	-57389.120

Widening & HMA Overlay - Project Left

Table 8 of 13 (SCL 1804)

STATION	END AREA (SF)		ADJUSTED VOLUME (CY)		ADDED VOLUME (CY)	
	EXC	FILL	EXC	FILL	FILL	MASS
15244+00.00	8.36	0.00	0.000	0.000	69.750	-57458.870
15244+04.79	8.19	0.03	0.000	0.000	13.250	-57472.120
15245+00.00	0.01	17.03	14.454	37.601	0.000	-57495.267
15246+00.00	0.01	18.13	0.048	81.377	0.000	-57576.596
15247+00.00	0.17	22.49	0.331	94.018	0.000	-57670.283
15247+41.74	4.62	0.58	3.701	22.289	0.000	-57688.871
15247+65.74	5.33	0.02	0.000	0.000	236.000	-57924.871
15248+00.00	0.00	15.07	3.383	11.972	0.000	-57933.460
15249+00.00	0.00	22.91	0.000	87.918	0.000	-58021.378
15250+00.00	0.00	28.08	0.000	118.033	0.000	-58139.411
15251+00.00	0.00	23.32	0.000	118.975	0.000	-58258.386
15252+00.00	0.00	30.52	0.000	124.613	0.000	-58382.999
15253+00.00	0.00	24.04	0.000	126.297	0.000	-58509.296
15254+00.00	0.00	36.77	0.000	140.768	0.000	-58650.064
15255+00.00	0.00	49.42	0.000	199.517	0.000	-58849.581
15256+00.00	0.00	43.65	0.000	215.439	0.000	-59065.020
15257+00.00	0.00	35.85	0.000	184.013	0.000	-59249.033
15258+00.00	0.00	36.08	0.001	166.489	0.000	-59415.521
15259+00.00	0.00	36.51	0.001	168.015	0.000	-59583.535
15260+00.00	0.00	36.55	0.000	169.105	0.000	-59752.640
15261+00.00	0.00	34.98	0.000	165.573	0.000	-59918.213
15261+16.90	0.00	82.58	0.000	0.000	0.000	-59918.213
15261+54.31	0.00	78.41	0.000	0.000	0.000	-59918.213
15262+00.00	0.00	27.62	0.000	144.919	0.000	-60063.132
15263+00.00	0.23	22.35	0.419	115.684	0.000	-60178.397
15264+00.00	0.06	20.24	0.534	98.590	0.000	-60276.453
15265+00.00	0.48	23.01	0.995	100.104	0.000	-60375.562
15266+00.00	1.07	17.43	2.864	93.591	0.000	-60466.289
15267+00.00	2.09	16.41	5.860	78.323	0.000	-60538.752
15268+00.00	1.47	24.05	6.592	93.650	0.000	-60625.810



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ND 1804 - Jct Tioga Rd to Red Mike Area

Average End Area Tables

Widening & HMA Overlay
Project Left

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SOIB-7-804(061)283	11	4

Widening & HMA Overlay - Project Left
Table 9 of 13 (SCL 1804)

STATION	END AREA (SF)		ADJUSTED VOLUME (CY)		ADDED VOLUME (CY)	
	EXC	FILL	EXC	FILL	FILL	MASS
15269+00.00	1.77	22.68	5.990	108.169	0.000	-60727.989
15270+00.00	3.30	0.05	9.376	52.611	0.000	-60771.224
15270+21.93	6.07	0.02	3.801	0.033	0.000	-60767.456
15270+45.93	6.79	0.01	0.000	0.000	32.000	-60799.456
15271+00.00	0.00	33.37	6.798	41.768	0.000	-60834.426
15271+23.72	0.05	70.89	0.000	0.000	0.000	-60834.426
15272+00.00	0.00	30.00	0.000	146.690	0.000	-60981.116
15272+76.84	0.15	25.85	0.216	99.349	0.000	-61080.249
15273+00.00	0.01	25.03	0.068	27.275	0.000	-61107.456
15273+00.77	0.01	25.18	0.000	0.894	0.000	-61108.350
15274+00.00	8.12	0.00	14.925	57.848	0.000	-61151.273
15274+19.36	0.01	60.74	0.000	0.000	0.000	-61151.273
15275+00.00	0.00	34.07	15.029	78.860	0.000	-61215.104
15276+00.00	0.01	31.63	0.021	152.085	0.000	-61367.168
15277+00.00	0.02	34.91	0.050	154.031	0.000	-61521.149
15278+00.00	0.00	31.12	0.036	152.853	0.000	-61673.966
15278+94.52	0.00	48.48	0.000	0.000	0.000	-61673.966
15279+00.00	0.00	33.18	0.007	148.860	0.000	-61822.819
15280+00.00	0.00	30.10	0.000	146.493	0.000	-61969.312
15281+00.00	0.00	32.25	0.000	144.328	0.000	-62113.640
15282+00.00	0.00	29.95	0.000	143.967	0.000	-62257.607
15282+56.12	0.05	72.47	0.000	0.000	0.000	-62257.607
15282+81.74	5.01	0.05	0.000	0.000	0.000	-62257.607
15283+00.00	6.66	0.01	0.000	0.000	73.042	-62330.649
15283+05.74	4.19	0.03	0.000	0.000	22.958	-62353.607
15284+00.00	0.00	31.17	7.317	68.079	0.000	-62414.369
15285+00.00	0.00	24.92	0.000	129.849	0.000	-62544.218
15286+00.00	0.00	31.60	0.000	130.846	0.000	-62675.064
15287+00.00	0.00	30.90	0.000	144.685	0.000	-62819.749
15288+00.00	0.00	29.24	0.000	139.210	0.000	-62958.959
15289+00.00	0.00	27.52	0.000	131.377	0.000	-63090.336
15290+00.00	0.03	14.17	0.054	96.497	0.000	-63186.779
15290+10.55	0.02	32.15	0.000	0.000	0.000	-63186.779
15290+34.29	6.88	0.00	0.000	0.000	0.000	-63186.779
15290+58.29	5.07	0.01	0.000	0.000	85.000	-63271.779
15291+00.00	0.00	39.70	3.920	38.341	0.000	-63306.200
15292+00.00	0.01	26.10	0.010	152.319	0.000	-63458.509
15293+00.00	0.00	32.47	0.010	135.587	0.000	-63594.086
15294+00.00	0.00	28.63	0.000	141.444	0.000	-63735.530
15295+00.00	0.00	28.33	0.000	131.849	0.000	-63867.379
15296+00.00	0.00	31.99	0.000	139.614	0.000	-64006.993
15296+63.44	6.91	0.11	8.116	47.128	0.000	-64046.005
15296+87.39	6.53	0.08	0.000	0.000	40.000	-64086.005
15297+00.00	2.42	3.39	2.089	1.012	0.000	-64084.928
15297+92.15	0.11	48.44	0.000	0.000	0.000	-64084.928
15298+00.00	0.00	33.46	4.485	85.300	0.000	-64165.743
15299+00.00	0.00	32.49	0.000	152.653	0.000	-64318.396
15300+00.00	0.00	33.33	0.000	152.341	0.000	-64470.737
15301+00.00	0.01	29.09	0.016	144.476	0.000	-64615.197
15302+00.00	0.01	31.64	0.029	140.572	0.000	-64755.740
15302+90.54	0.01	64.78	0.000	0.000	0.000	-64755.740
15303+00.00	0.00	44.43	0.014	176.089	0.000	-64931.815
15304+00.00	0.00	35.81	0.000	185.751	0.000	-65117.566
15305+00.00	0.00	26.26	0.000	143.680	0.000	-65261.246
15306+00.00	0.00	31.07	0.000	132.694	0.000	-65393.940
15306+54.72	0.00	33.33	0.000	81.556	0.000	-65475.496
15306+78.72	0.11	31.38	0.047	35.950	0.000	-65511.399
15307+00.00	0.00	33.02	0.042	31.732	0.000	-65543.089
15308+00.00	0.00	33.16	0.000	153.202	0.000	-65696.291
15308+72.70	0.07	44.05	0.000	0.000	0.000	-65696.291
15309+00.00	0.00	31.51	0.000	149.700	0.000	-65845.991
15310+00.00	0.00	37.47	0.000	159.662	0.000	-66005.653
15311+00.00	0.32	28.20	0.592	152.007	0.000	-66157.068
15312+00.00	0.03	24.12	0.641	121.119	0.000	-66277.546
15313+00.00	0.14	27.30	0.308	119.040	0.000	-66396.278
15313+61.44	0.12	38.90	0.000	0.000	0.000	-66396.278
15314+00.00	0.14	27.10	0.524	125.942	0.000	-66521.696
15315+00.00	1.15	23.50	2.388	117.134	0.000	-66636.442
15316+00.00	3.63	0.45	8.839	55.439	0.000	-66683.042
15316+22.84	6.31	0.02	4.202	0.251	0.000	-66679.091
15316+46.84	7.26	0.00	0.000	0.000	95.000	-66774.091
15317+00.00	2.27	19.33	9.382	23.786	0.000	-66788.495
15318+00.00	6.04	10.79	15.392	69.725	0.000	-66842.828
15319+00.00	9.99	0.00	29.678	24.977	0.000	-66838.127

Widening & HMA Overlay - Project Left
Table 10 of 13 (SCL 1804)

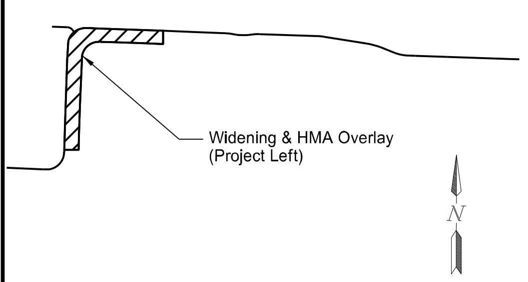
STATION	END AREA (SF)		ADJUSTED VOLUME (CY)		ADDED VOLUME (CY)	
	EXC	FILL	EXC	FILL	FILL	MASS
15319+40.16	96.58	1.11	79.250	1.029	0.000	-66759.906
15320+00.00	12.63	0.00	121.024	1.534	0.000	-66640.416
15321+00.00	5.78	0.00	34.099	0.007	0.000	-66606.324
15322+00.00	1.06	23.92	12.675	55.380	0.000	-66649.029
15322+83.95	9.06	0.00	15.728	46.487	0.000	-66679.788
15323+00.00	8.19	0.00	0.000	0.000	20.453	-66700.241
15323+19.26	7.18	0.39	0.000	0.000	24.547	-66724.788
15324+00.00	0.28	18.55	11.164	35.398	0.000	-66749.022
15325+00.00	0.22	21.34	0.930	92.334	0.000	-66840.426
15326+00.00	0.19	20.91	0.752	97.805	0.000	-66937.479
15327+00.00	0.00	25.68	0.348	107.859	0.000	-67044.990
15328+00.00	0.00	24.79	0.000	116.820	0.000	-67161.810
15328+71.38	0.15	46.94	0.000	0.000	0.000	-67161.810
15329+00.00	0.00	26.27	0.000	118.188	0.000	-67279.998
15329+09.08	0.31	26.02	0.053	10.992	0.000	-67290.937
15329+50.00	0.00	28.09	0.238	51.255	0.000	-67341.954
15330+00.00	0.01	25.79	0.013	62.361	0.000	-67404.302
15330+50.00	0.08	25.75	0.089	59.656	0.000	-67463.869
15330+84.08	0.01	27.04	0.058	41.645	0.000	-67505.456
15331+00.00	0.00	27.56	0.004	20.119	0.000	-67525.571
15331+50.00	0.00	28.90	0.002	65.339	0.000	-67590.908
15332+00.00	0.00	28.64	0.000	66.589	0.000	-67657.497
15332+50.00	0.00	36.52	0.000	75.412	0.000	-67732.909
15333+00.00	0.00	34.49	0.000	82.192	0.000	-67815.101
15333+50.00	0.16	38.59	0.147	84.590	0.000	-67899.544
15334+00.00	0.00	53.76	0.147	106.888	0.000	-68006.285
15334+50.00	0.00	57.23	0.000	128.458	0.000	-68134.743
15334+59.08	0.38	55.05	0.063	23.599	0.000	-68158.279
15335+00.00	0.00	40.31	0.285	90.329	0.000	-68248.323
15335+04.38	0.17	38.22	0.013	7.963	0.000	-68256.273
15335+48.96	0.03	91.21	0.000	0.000	0.000	-68256.273
15335+50.00	0.00	89.44	0.140	134.812	0.000	-68390.945
15336+00.00	0.00	37.79	0.000	147.250	0.000	-68538.195
15336+29.38	0.09	46.10	0.051	57.053	0.000	-68595.197
15336+50.00	0.00	42.93	0.036	42.498	0.000	-68637.659
15337+00.00	0.00	32.01	0.000	86.741	0.000	-68724.400
15337+50.00	0.00	21.41	0.000	61.830	0.000	-68786.230
15337+50.22	0.00	21.34	0.000	0.218	0.000	-68786.448
15338+00.00	0.40	16.47	0.373	43.564	0.000	-68829.639
15338+50.00	0.01	17.60	0.380	39.430	0.000	-68868.689
15339+00.00	0.05	19.91	0.056	43.411	0.000	-68912.044
15339+23.19	0.08	30.44	0.000	0.000	0.000	-68912.044
15339+50.00	0.00	20.38	0.050	46.637	0.000	-68958.631
15340+00.00	0.01	16.02	0.013	42.134	0.000	-69000.752
15340+04.38	0.36	15.50	0.030	3.196	0.000	-69003.918
15340+50.00	0.50	17.56	0.725	34.916	0.000	-69038.109
15341+00.00	0.00	26.67	0.463	51.193	0.000	-69088.839
15341+50.00	0.00	30.78	0.000	66.492	0.000	-69155.331
15341+79.38	0.01	27.07	0.004	39.339	0.000	-69194.666
15342+00.00	0.00	25.92	0.003	25.291	0.000	-69219.954
15343+00.00	0.00	27.04	0.000	122.598	0.000	-69342.552
15344+00.00	0.00	24.55	0.000	119.412	0.000	-69461.964
15344+60.72	0.03	29.70	0.034	76.240	0.000	-69538.170
15345+00.00	0.04	30.63	0.049	54.856	0.000	-69592.977
15345+14.45	0.31	29.26	0.092	20.028	0.000	-69612.913
15345+41.73	0.39	28.61	0.000	0.000	0.000	-69612.913
15346+00.00	0.20	29.77	0.635	78.746	0.000	-69691.024
15346+55.66	0.12	28.34	0.333	74.875	0.000	-69765.566
15347+00.00	0.68	21.81	0.658	51.477	0.000	-69816.385
15348+00.00	0.36	22.61	1.915	102.841	0.000	-69917.311
15349+00.00	0.00	26.48	0.658	113.646	0.000	-70030.299
15350+00.00	0.09	25.68	0.166	120.757	0.000	-70150.890
15351+00.00	0.28	19.06	0.692	103.578	0.000	-70253.776
15352+00.00	0.61	17.90	1.658	85.555	0.000	-70337.673
15353+00.00	0.92	11.04	2.838	66.997	0.000	-70401.832
15354+00.00	0.01	21.15	1.726	74.522	0.000	-70474.628
15355+00.00	0.00	24.86	0.019	106.509	0.000	-70581.118
15356+00.00	0.00	33.09	0.000	134.139	0.000	-70715.257
15357+00.00	0.00	32.91	0.000	152.757	0.000	-70868.014
15358+00.00	0.00	36.92	0.000	161.626	0.000	-71029.640
15359+00.00	0.00	39.28	0.000	176.376	0.000	-71206.016
15360+00.00	0.00	27.82	0.000	155.323	0.000	-71361.339
15361+00.00	0.09	19.69	0.165	109.989	0.000	-71471.163
15362+00.00	0.00	22.74	0.165	98.229	0.000	-71569.227

Widening & HMA Overlay - Project Left
Table 11 of 13 (SCL 1804)

STATION	END AREA (SF)		ADJUSTED VOLUME (CY)		ADDED VOLUME (CY)	
	EXC	FILL	EXC	FILL	FILL	MASS
15363+00.00	0.00	22.62	0.000	105.014	0.000	-71674.241
15364+00.00	0.00	28.92	0.000	119.320	0.000	-71793.561
15365+00.00	0.00	31.55	0.007	139.976	0.000	-71933.530
15366+00.00	0.00	26.10	0.007	133.450	0.000	-72066.973
15367+00.00	0.00	27.89	0.000	124.987	0.000	-72191.960
15368+00.00	0.00	31.72	0.000	137.983	0.000	-72329.943
15369+00.00	0.00	26.50	0.000	134.757	0.000	-72464.700
15370+00.00	0.01	28.34	0.016	126.933	0.000	-72591.617
15371+00.00	0.00	25.87	0.016	125.479	0.000	-72717.080
15372+00.00	0.01	23.05	0.011	113.240	0.000	-72830.309
15373+00.00	0.04	29.31	0.080	121.208	0.000	-72951.437
15374+00.00	0.05	32.16	0.159	142.294	0.000	-73093.572
15375+00.00	0.00	33.30	0.090	151.533	0.000	-73245.015
15376+00.00	0.22	24.35	0.414	133.456	0.000	-73378.057
15377+00.00	0.03	25.70	0.466	115.858	0.000	-73493.449
15378+00.00	0.00	24.93	0.056	117.189	0.000	-73610.582
15379+00.00	0.00	26.06	0.003	118.030	0.000	-73728.609
15380+00.00	0.00	27.67	0.000	124.395	0.000	-73853.004
15381+00.00	0.00	33.73	0.000	142.151	0.000	-73995.155
15382+00.00	0.00	35.67	0.000	160.651	0.000	-74155.806
15383+00.00	0.00	32.11	0.000	156.893	0.000	-74312.699
15384+00.00	0.00	33.24	0.000	151.279	0.000	-74463.978
15385+00.00	0.00	27.69	0.000	141.038	0.000	-74605.016
15386+00.00	0.00	30.69	0.000	135.128	0.000	-74740.144
15387+00.00	0.00	31.93	0.000	144.941	0.000	-74885.085
15388+00.00	0.00	37.13	0.000	159.858	0.000	-75044.943
15389+00.00	0.00	28.89	0.000	152.831	0.000	-75197.774
15390+00.00	0.00	12.34	0.000	95.430	0.000	-75293.204
15391+00.00	0.00	25.26	0.000	87.017	0.000	-75380.221
15392+00.00	0.00	24.51	0.003	115.200	0.000	-75495.418
15393+00.00	0.00	28.39	0.003	122.454	0.000	-75617.869
15394+00.00	0.00	27.65	0.000	129.733	0.000	-75747.602
15395+00.00	0.00	32.00	0.009	138.083	0.000	-75885.676
15395+91.16	8.19	0.11	13.828	67.758	0.000	-75939.606
15396+00.00	7.87	0.00	0.000	0.000	20.027	-75959.633
15396+18.96	7.45	0.00	0.000	0.000	42.973	-76002.606
15397+00.00	0.00	36.98	11.183	69.375	0.000	-76060.798
15398+00.00	0.00	24.57	0.000	142.482	0.000	-76203.280
15399+00.00	0.00	26.35	0.000	117.863	0.000	-76321.143
15400+00.00	0.00	27.96	0.000	125.708	0.000	-76446.851
15401+00.00	0.00	31.73	0.000	138.166	0.000	-76585.017
15402+00.00	0.07	30.77	0.134	144.685	0.000	-76729.568
15403+00.00	0.04	29.04	0.212	138.467	0.000	-76867.823
15404+00.00	0.00	36.55	0.078	151.845	0.000	-77019.590
15405+00.00	0.00	36.62	0.000	169.375	0.000	-77188.965
15406+00.00	0.00	37.32	0.000	171.153	0.000	-77360.118
15407+00.00	0.00	34.33	0.001	165.869	0.000	-77525.986
15408+00.00	0.00	31.56	0.001	152.538	0.000	-77678.523
15409+00.00	0.00	26.90	0.000	135.332	0.000	-77813.855
15410+00.00	0.00	28.17	0.000	127.471	0.000	-77941.326
15411+00.00	0.00	36.41	0.000	149.485	0.000	-78090.811
15412+00.00	0.00	35.43	0.000	166.310	0.000	-78257.121
15413+00.00	0.00	33.20	0.000	158.886	0.000	-78416.007
15414+00.00	0.00	26.74	0.000	138.760	0.000	-78554.767
15415+00.00	0.00	28.82	0.000	128.604	0.000	-78683.371
15416+00.00	0.00	29.28	0.000	134.474	0.000	-78817.845
15417+00.00	0.00	27.82	0.000	132.171	0.000	-78950.016
15418+00.00	0.00	31.58	0.000	137.514	0.000	-79087.530
15419+00.00	0.00	33.01	0.000	149.522	0.000	-79237.052
15420+00.00	0.00	34.20	0.000	155.568	0.000	-79392.620
15421+00.00	0.00	33.31	0.000	156.258	0.000	-79548.878
15422+00.00	7.81	0.00	14.458	77.101	0.000	-79611.521
15422+19.91	7.81	0.07	5.756	0.034	0.000	-79605.799
15422+43.91	7.69	0.00	0.000	0.000	30.000	-79635.799
15423+00.00	0.00	29.77	7.986	38.650	0.000	-79666.463
15424+00.00	0.00	30.69	0.000	139.954	0.000	-79806.417
15425+00.00	0.00	33.30	0.000	148.145	0.000	-79954.562
15426+00.00	0.00	31.40	0.000	149.777	0.000	-80104.339
15427+00.00	0.00	31.36	0.000	145.266	0.000	-80249.605
15428+00.00	0.00	33.18	0.000	149.395	0.000	-80399.000
15429+00.00	0.00	34.91	0.000	157.616	0.000	-80556.616
15430+00.00	0.00	34.09	0.000	159.725	0.000	-80716.341
15431+00.00	0.00	33.79	0.000	157.146	0.000	-80873.487
15432+00.00	0.00	32.66	0.000	153.822	0.000	-81027.309

Widening & HMA Overlay - Project Left
Table 12 of 13 (SCL 1804)

STATION	END AREA (SF)		ADJUSTED VOLUME (CY)		ADDED VOLUME (CY)	
	EXC	FILL	EXC	FILL	FILL	MASS
15433+00.00	0.00	29.37	0.000	143.573	0.000	-81170.882
15434+00.00	0.00	23.46	0.000	122.278	0.000	-81293.160
15434+36.37	0.14	26.80	0.096	42.308	0.000	-81335.372
15434+60.37	0.09	28.27	0.000	0.000	453.000	-81788.372
15435+00.00	0.00	26.69	0.069	50.415	0.000	-81838.718
15436+00.00	0.00	36.00	0.000	145.108	0.000	-81983.826
15437+00.00	0.00	37.56	0.000	170.270	0.000	-82154.096
15438+00.00	0.00	49.65	0.000	201.881	0.000	-82355.977
15438+16.41	0.00	68.16	0.000	0.000	0.000	-82355.977
15438+38.13	0.10	69.66	0.000	0.000	0.000	-82355.977
15439+00.00	0.00	34.97	0.000	195.890	0.000	-82551.867
15440+00.00	0.00	32.53	0.000	156.246	0.000	-82708.113
15441+00.00	0.11	33.15	0.207	152.028	0.000	-82859.934
15442+00.00	0.00	36.90	0.207	162.147	0.000	-83021.874
15443+00.00	0.04	34.74	0.081	165.827	0.000	-83187.620
15443+26.03	6.79	42.15	3.293	46.326	0.000	-83230.653
15443+50.00	6.11	39.56	5.725	45.338	0.000	-83270.266
15444+00.00	5.22	40.34	10.490	92.484	0.000	-83352.260
15444+50.00	5.34	38.76	9.779	91.556	0.000	-83434.037
15445+00.00	5.49	41.43	10.026	92.812	0.000	-83516.823
15445+01.03	5.45	41.58	0.209	1.979	0.000	-83518.593
15445+50.00	4.91	43.31	9.392	96.226	0.000	-83605.427
15446+00.00	5.00	43.49	9.173	100.460	0.000	-83696.714
15446+50.00	4.66	39.11	8.946	95.605	0.000	-83783.373
15447+00.00	5.61	31.00	9.514	81.151	0.000	-83855.010
15447+50.00	5.34	29.08	10.140	69.536	0.000	-83914.406
15448+00.00	5.93	27.80	10.432	65.834	0.000	-83969.808
15448+50.00	26.93	0.00	30.420	32.181	0.000	-83971.569
15448+54.35	29.45	0.03	4.538	0.003	0.000	-83967.034
15448+76.03	33.32	0.00	0.000	0.000	99.000	-84066.034



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ND 1804 - Jct Tioga Rd to Red Mike Area

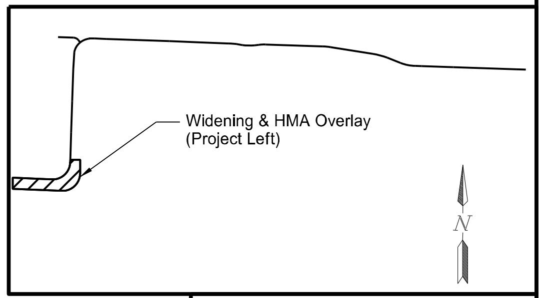
Average End Area Tables

Widening & HMA Overlay
Project Left

Widening & HMA Overlay - Project Left

Table 13 of 13 (SCL 1804)

STATION	END AREA (SF)		ADJUSTED VOLUME (CY)		ADDED VOLUME (CY)	
	EXC	FILL	EXC	FILL	FILL	MASS
15448+84.06	31.74	0.00	0.000	0.000	0.000	-84066.034
15449+00.00	17.45	3.35	14.518	1.238	0.000	-84052.754
15449+50.00	9.50	32.17	24.951	41.122	0.000	-84068.925
15450+00.00	9.40	18.46	17.496	58.602	0.000	-84110.031
15450+01.03	9.36	18.14	0.358	0.873	0.000	-84110.546
15450+50.00	9.54	16.25	17.137	38.988	0.000	-84132.397
15451+00.00	9.72	16.14	17.832	37.491	0.000	-84152.056
15451+50.00	7.95	27.10	16.360	50.049	0.000	-84185.745
15452+00.00	6.99	31.75	13.827	68.117	0.000	-84240.035
15452+50.00	5.41	46.44	11.478	90.497	0.000	-84319.054
15453+00.00	5.09	51.30	9.724	113.119	0.000	-84422.449
15453+50.00	4.36	56.18	8.750	124.397	0.000	-84538.096
15454+00.00	4.20	62.03	7.920	136.813	0.000	-84666.989
15454+50.00	4.00	66.53	7.591	148.786	0.000	-84808.184
15455+00.00	4.70	66.45	8.061	153.905	0.000	-84954.028
15455+50.00	4.35	69.48	8.380	157.327	0.000	-85102.975
15456+00.00	5.52	69.55	9.138	160.914	0.000	-85254.751
15456+50.00	5.75	63.55	10.439	154.053	0.000	-85398.365
15457+00.00	5.14	64.94	10.084	148.721	0.000	-85537.002
15457+50.00	5.14	59.74	9.521	144.305	0.000	-85671.786
15458+00.00	6.62	65.39	10.892	144.827	0.000	-85805.721
15458+50.00	5.95	67.13	11.635	153.379	0.000	-85947.465
15459+00.00	5.72	86.99	10.806	178.382	0.000	-86115.041
15459+50.00	10.55	0.38	15.064	101.123	0.000	-86201.100
15459+57.16	13.00	0.00	3.133	0.062	0.000	-86198.029
15459+85.36	14.00	2.00	14.236	1.554	0.000	-86185.347
15460+00.00	17.00	8.00	8.535	3.364	0.000	-86180.176
15460+50.00	16.00	110.00	30.534	136.171	0.000	-86285.813
15461+00.00	17.00	120.00	29.958	266.894	0.000	-86522.749
15461+50.00	15.00	117.00	29.617	275.390	0.000	-86768.522
15462+00.00	19.00	109.00	31.748	261.554	0.000	-86998.328
15462+50.00	24.00	118.00	39.884	262.105	0.000	-87220.549
15463+00.00	16.00	123.00	37.171	278.566	0.000	-87461.944
15463+50.00	13.00	132.00	27.191	294.883	0.000	-87729.636
15464+00.00	7.00	135.00	18.413	309.549	0.000	-88020.772
15464+50.00	5.00	133.00	10.774	310.253	0.000	-88320.251
15465+00.00	6.00	121.00	10.000	293.974	0.000	-88604.225
15465+50.00	8.00	120.00	12.466	279.470	0.000	-88871.229
15466+00.00	5.00	104.00	12.159	258.861	0.000	-89117.931
15466+50.00	4.00	95.00	9.070	229.383	0.000	-89338.244
15467+00.00	6.00	90.00	9.719	213.160	0.000	-89541.685
15467+50.00	10.00	70.00	14.463	184.705	0.000	-89711.927
15467+64.68	11.00	64.00	5.548	45.589	0.000	-89751.968
15468+00.00	13.00	50.00	15.787	92.956	0.000	-89829.137
15468+50.00	23.00	8.00	33.660	66.394	0.000	-89861.871
15468+53.54	24.00	5.00	3.101	1.086	0.000	-89859.856
15468+84.84	29.00	3.00	30.716	5.844	0.000	-89834.984
15468+89.68	27.00	5.00	5.030	0.873	0.000	-89830.827
15469+00.00	23.00	28.00	9.541	8.030	0.000	-89829.316
15469+50.00	14.00	68.00	34.370	111.988	0.000	-89906.934
15470+00.00	11.00	82.00	23.629	173.431	0.000	-90056.736
15470+50.00	8.00	105.00	17.582	215.586	0.000	-90254.740
15471+00.00	7.00	100.00	13.911	236.761	0.000	-90477.590
15471+50.00	6.00	110.00	11.731	242.815	0.000	-90708.674
15472+00.00	0.00	0.00	5.189	127.298	0.000	-90830.783
15472+00.02	0.00	0.00	0.000	0.000	0.000	-90830.783



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ND 1804 - Jct Tioga Rd to Red Mike Area

Average End Area Tables

Widening & HMA Overlay
Project Left

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SOIB-7-804(061)283	11	6

Widening & HMA Overlay - Project Right
Table 1 of 13 (SCL 1804)

STATION	END AREA (SF)		ADJUSTED VOLUME (CY)		ADDED VOLUME (CY)	
	EXC	FILL	EXC	FILL	FILL	MASS
14980+88.70	0.00	0.00	0.000	0.000	0.000	0.000
14981+00.00	0.80	41.11	0.168	10.754	0.000	-10.586
14982+00.00	0.51	49.09	2.439	208.792	0.000	-216.939
14983+00.00	0.00	62.63	0.951	258.594	0.000	-474.582
14984+00.00	0.03	64.93	0.061	295.272	0.000	-769.793
14985+00.00	0.01	46.98	0.077	259.044	0.000	-1028.760
14986+00.00	0.99	35.68	1.846	191.325	0.000	-1218.239
14987+00.00	1.59	41.78	4.774	179.306	0.000	-1392.771
14988+00.00	1.25	39.67	5.258	188.558	0.000	-1576.071
14989+00.00	0.08	47.12	2.457	200.903	0.000	-1774.517
14990+00.00	0.00	49.40	0.149	223.425	0.000	-1997.793
14991+00.00	0.00	39.95	0.006	206.844	0.000	-2204.631
14992+00.00	0.00	42.51	0.000	190.887	0.000	-2395.518
14993+00.00	0.00	41.43	0.000	194.304	0.000	-2589.822
14994+00.00	0.00	45.93	0.000	202.215	0.000	-2792.037
14995+00.00	0.00	46.32	0.000	213.538	0.000	-3005.575
14996+00.00	0.00	45.49	0.000	212.532	0.000	-3218.107
14997+00.00	0.00	46.93	0.000	213.932	0.000	-3432.039
14998+00.00	0.00	46.74	0.000	216.822	0.000	-3648.861
14999+00.00	0.81	44.40	1.492	210.968	0.000	-3858.337
15000+00.00	0.12	53.82	1.721	227.343	0.000	-4083.959
15001+00.00	9.25	55.24	17.368	252.437	0.000	-4319.028
15001+64.73	15.51	62.91	0.000	0.000	0.000	-4319.028
15002+00.00	7.14	51.24	30.360	246.463	0.000	-4535.131
15003+00.00	15.78	42.76	42.441	217.587	0.000	-4710.277
15004+00.00	0.00	49.38	29.220	213.287	0.000	-4894.344
15004+60.51	100.90	0.23	113.066	69.490	0.000	-4850.768
15004+72.51	95.69	0.27	0.000	0.000	183.000	-5033.768
15005+00.00	0.64	35.13	49.039	22.526	0.000	-5007.255
15006+00.00	0.60	44.97	2.290	185.398	0.000	-5190.363
15007+00.00	5.66	50.31	11.592	220.548	0.000	-5399.319
15008+00.00	22.04	57.31	51.292	249.116	0.000	-5597.143
15009+00.00	41.41	51.37	117.497	251.570	0.000	-5731.216
15010+00.00	34.95	60.38	141.401	258.687	0.000	-5848.502
15011+00.00	36.96	66.31	133.159	293.274	0.000	-6008.617
15011+98.95	193.90	0.08	423.004	152.055	0.000	-5737.668
15012+00.00	194.57	0.07	0.000	0.000	0.000	-5737.668
15012+22.95	135.41	0.97	0.000	0.000	127.000	-5864.668
15013+00.00	26.37	66.49	230.849	120.323	0.000	-5754.142
15014+00.00	5.17	61.59	58.402	296.478	0.000	-5992.218
15015+00.00	158.28	88.68	302.687	347.851	0.000	-6037.382
15015+08.16	146.85	125.94	0.000	0.000	0.000	-6037.382
15016+00.00	0.00	92.95	293.113	420.428	0.000	-6164.697
15017+00.00	0.00	35.01	0.000	296.187	0.000	-6460.884
15018+00.00	0.00	39.20	0.000	171.775	0.000	-6632.659
15019+00.00	0.00	39.75	0.000	182.765	0.000	-6815.424
15020+00.00	0.00	43.25	0.000	192.146	0.000	-7007.570
15021+00.00	0.00	44.28	0.000	202.631	0.000	-7210.201
15022+00.00	0.00	42.73	0.000	201.412	0.000	-7411.613
15023+00.00	0.00	33.53	0.000	176.514	0.000	-7588.127
15024+00.00	0.00	25.32	0.000	136.220	0.000	-7724.347
15025+00.00	4.24	0.05	7.860	58.731	0.000	-7775.218
15025+04.09	4.61	0.15	0.670	0.019	0.000	-7774.567
15025+28.09	4.68	0.11	0.000	0.000	62.000	-7836.567
15026+00.00	2.05	39.28	8.962	65.563	0.000	-7893.168
15027+00.00	0.00	40.16	3.789	183.883	0.000	-8073.262
15028+00.00	0.00	27.98	0.000	157.745	0.000	-8231.007
15029+00.00	0.00	29.89	0.000	133.964	0.000	-8364.971
15030+00.00	0.00	29.91	0.000	138.421	0.000	-8503.392
15031+00.00	0.00	26.78	0.000	131.238	0.000	-8634.630
15032+00.00	0.00	28.29	0.000	127.477	0.000	-8762.107
15033+00.00	0.00	31.04	0.000	137.321	0.000	-8899.428
15034+00.00	0.00	20.33	0.000	118.916	0.000	-9018.344
15035+00.00	0.00	29.47	0.000	115.291	0.000	-9133.635
15036+00.00	0.00	36.67	0.000	153.103	0.000	-9286.738
15037+00.00	0.00	45.03	0.000	189.120	0.000	-9475.858
15038+00.00	0.00	33.31	0.000	181.338	0.000	-9657.196
15038+32.72	104.99	2.07	63.616	26.795	0.000	-9620.375
15038+56.72	124.07	0.32	0.000	0.000	73.000	-9693.375
15038+80.91	1.87	22.89	56.410	12.999	0.000	-9649.964
15039+00.00	2.92	44.69	1.691	29.866	0.000	-9678.139
15039+06.08	3.33	47.52	0.704	12.972	0.000	-9690.407
15040+00.00	23.82	54.22	47.221	221.179	0.000	-9864.365
15041+00.00	237.87	87.29	484.595	327.563	0.000	-9707.333

Widening & HMA Overlay - Project Right
Table 2 of 13 (SCL 1804)

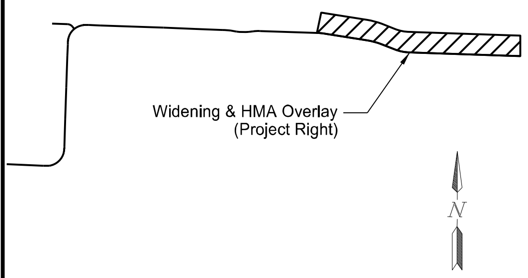
STATION	END AREA (SF)		ADJUSTED VOLUME (CY)		ADDED VOLUME (CY)	
	EXC	FILL	EXC	FILL	FILL	MASS
15041+80.57	184.66	231.54	0.000	0.000	0.000	-9707.333
15042+00.00	245.61	240.15	895.319	757.972	0.000	-9569.986
15043+00.00	116.06	112.89	669.750	817.237	0.000	-9717.473
15044+00.00	3.79	45.38	221.936	366.370	0.000	-9861.907
15045+00.00	4.76	31.29	15.824	177.478	0.000	-10023.561
15046+00.00	0.03	29.46	8.861	140.628	0.000	-10155.328
15046+85.46	132.96	0.03	210.458	58.343	0.000	-10003.213
15047+00.00	137.05	0.05	0.000	0.000	0.000	-10003.213
15047+17.09	135.66	0.22	0.000	0.000	55.000	-10058.213
15048+00.00	0.50	26.73	209.066	51.721	0.000	-9900.868
15049+00.00	2.48	28.10	5.517	126.911	0.000	-10022.262
15049+76.01	39.03	23.41	58.415	90.628	0.000	-10054.475
15050+00.00	50.04	26.86	0.000	0.000	0.000	-10054.475
15050+01.21	50.58	26.97	0.000	0.000	0.000	-10054.475
15051+00.00	104.78	28.04	284.212	125.779	0.000	-9896.042
15052+00.00	48.91	55.65	284.604	193.724	0.000	-9805.162
15053+00.00	0.00	29.04	90.571	196.047	0.000	-9910.638
15053+98.10	9.68	26.80	17.589	126.813	0.000	-10019.862
15054+00.00	8.72	26.85	0.648	2.362	0.000	-10021.576
15054+22.10	4.30	27.72	5.330	27.916	0.000	-10044.162
15055+00.00	0.00	25.71	6.210	96.360	0.000	-10134.312
15056+00.00	0.00	20.51	0.000	107.004	0.000	-10241.316
15057+00.00	0.00	13.60	0.000	78.963	0.000	-10320.279
15058+00.00	0.11	16.43	0.207	69.515	0.000	-10389.587
15059+00.00	0.27	16.96	0.712	77.303	0.000	-10466.178
15060+00.00	0.00	21.95	0.505	90.068	0.000	-10555.741
15060+34.48	0.12	20.52	0.077	33.899	0.000	-10589.563
15060+50.00	0.00	20.51	0.035	14.744	0.000	-10604.272
15061+00.00	0.00	20.78	0.000	47.797	0.000	-10652.069
15061+39.97	0.06	25.57	0.046	42.886	0.000	-10694.909
15061+50.00	0.00	26.77	0.012	12.152	0.000	-10707.049
15062+00.00	0.00	27.79	0.000	63.143	0.000	-10770.192
15062+45.46	0.00	30.93	0.001	61.791	0.000	-10831.982
15062+50.00	0.00	30.84	0.000	6.492	0.000	-10838.474
15062+80.62	0.07	29.90	0.038	43.058	0.000	-10881.494
15063+00.00	0.00	35.82	0.024	29.483	0.000	-10910.953
15063+50.00	0.00	41.32	0.000	89.277	0.000	-11000.230
15063+50.95	0.00	41.37	0.000	1.818	0.000	-11002.048
15064+00.00	0.00	37.43	0.000	89.473	0.000	-11091.521
15064+50.00	0.00	39.64	0.000	89.201	0.000	-11180.722
15065+00.00	0.00	42.93	0.000	95.560	0.000	-11276.282
15065+50.00	0.00	40.71	0.000	96.806	0.000	-11373.088
15066+00.00	0.00	44.12	0.000	98.193	0.000	-11471.281
15066+50.00	0.00	38.45	0.000	95.572	0.000	-11566.853
15067+00.00	0.00	31.68	0.000	81.165	0.000	-11648.018
15067+50.00	0.00	35.09	0.000	77.280	0.000	-11725.298
15068+00.00	0.00	38.49	0.000	85.161	0.000	-11810.459
15068+50.00	0.00	39.46	0.000	90.211	0.000	-11900.670
15069+00.00	0.00	39.46	0.000	91.338	0.000	-11992.008
15069+50.00	0.00	34.25	0.000	85.308	0.000	-12077.316
15070+00.00	0.00	34.96	0.000	80.102	0.000	-12157.418
15070+50.00	0.00	32.14	0.000	77.667	0.000	-12235.085
15071+00.00	0.00	33.48	0.000	75.948	0.000	-12311.033
15071+50.00	0.00	25.94	0.000	68.769	0.000	-12379.802
15072+00.00	0.00	24.64	0.000	58.546	0.000	-12438.348
15072+50.00	0.00	26.46	0.000	59.149	0.000	-12497.497
15073+00.00	0.00	30.96	0.000	66.454	0.000	-12563.951
15073+50.00	0.00	24.66	0.000	64.366	0.000	-12628.317
15074+00.00	0.00	25.05	0.000	57.528	0.000	-12685.845
15074+50.00	0.00	24.31	0.000	57.127	0.000	-12742.972
15074+90.21	0.08	22.24	0.062	43.327	0.000	-12786.237
15075+00.00	0.00	22.35	0.015	10.105	0.000	-12796.327
15075+50.00	0.00	29.85	0.000	60.420	0.000	-12856.747
15075+60.54	0.03	31.66	0.005	15.007	0.000	-12871.749
15075+95.70	0.33	33.66	0.230	53.165	0.000	-12924.684
15076+00.00	0.00	34.44	0.026	6.779	0.000	-12931.437
15076+50.00	0.00	30.06	0.000	74.653	0.000	-13006.090
15077+00.00	5.96	0.00	5.519	34.786	0.000	-13035.357
15077+01.19	6.01	0.03	0.264	0.001	0.000	-13035.094
15077+05.88	6.33	0.15	0.000	0.000	0.981	-13036.075
15077+29.88	8.05	0.00	0.000	0.000	5.019	-13041.094
15077+50.00	4.58	0.14	0.000	0.000	0.000	-13041.094
15077+82.98	0.00	34.24	0.000	0.000	0.000	-13041.094
15078+00.00	0.03	17.40	4.271	20.305	0.000	-13057.128

Widening & HMA Overlay - Project Right
Table 3 of 13 (SCL 1804)

STATION	END AREA (SF)		ADJUSTED VOLUME (CY)		ADDED VOLUME (CY)	
	EXC	FILL	EXC	FILL	FILL	MASS
15078+06.68	0.17	17.76	0.025	5.437	0.000	-13062.540
15079+00.00	0.09	12.82	0.462	66.063	0.000	-13128.141
15080+00.00	0.02	15.89	0.212	66.466	0.000	-13194.395
15081+00.00	0.00	22.49	0.039	88.856	0.000	-13283.212
15082+00.00	0.01	25.06	0.024	110.077	0.000	-13393.265
15083+00.00	0.13	24.07	0.269	113.726	0.000	-13506.722
15084+00.00	0.09	26.23	0.405	116.446	0.000	-13622.763
15085+00.00	0.02	25.23	0.194	119.127	0.000	-13741.696
15085+57.92	0.24	27.68	0.280	70.932	0.000	-13812.348
15086+00.00	0.00	31.43	0.189	57.569	0.000	-13869.728
15086+50.00	0.00	36.29	0.000	78.376	0.000	-13948.104
15086+63.41	0.00	36.85	0.000	22.705	0.000	-13970.809
15087+00.00	0.00	39.17	0.000	64.390	0.000	-14035.199
15087+50.00	0.00	42.95	0.000	95.047	0.000	-14130.246
15087+63.88	0.00	43.13	0.000	27.657	0.000	-14157.903
15087+68.90	0.00	42.85	0.000	0.000	0.000	-14157.903
15088+00.00	0.00	45.96	0.000	63.940	0.000	-14221.843
15088+14.11	0.00	46.89	0.000	30.327	0.000	-14252.170
15088+50.00	0.00	46.93	0.000	77.946	0.000	-14330.116
15089+00.00	0.00	45.46	0.000	106.937	0.000	-14437.053
15089+50.00	0.00	42.42	0.000	101.709	0.000	-14538.762
15090+00.00	0.05	38.79	0.043	93.993	0.000	-14632.712
15090+50.00	0.00	38.70	0.043	89.686	0.000	-14722.355
15091+00.00	0.00	35.04	0.000	85.343	0.000	-14807.698
15091+50.00	0.00	27.83	0.000	72.772	0.000	-14880.470
15092+00.00	0.00	32.17	0.000	69.449	0.000	-14949.919
15092+50.00	0.00	31.72	0.000	73.947	0.000	-15023.866
15093+00.00	0.04	36.17	0.036	78.581	0.000	-15102.411
15093+50.00	0.00	36.70	0.036	84.345	0.000	-15186.720
15094+00.00	0.04	34.21	0.041	82.078	0.000	-15268.757
15094+50.00	0.02	37.12	0.056	82.562	0.000	-15351.263
15095+00.00	0.00	47.41	0.015	97.833	0.000	-15449.081
15095+50.00	0.00	51.89	0.000	114.925	0.000	-15564.006
15096+00.00	0.00	53.14	0.000	121.560	0.000	-15685.566
15096+50.00	0.00	16.36	0.000	80.446	0.000	-15766.012
15096+78.80	1.99	1.17	1.059	11.691	0.000	-15776.644
15097+00.00	2.09	0.89	0.000	0.000	51.781	-15828.425
15097+02.55	2.47	1.48	0.000	0.000	6.219	-15834.644
15097+50.00	0.00	45.97	2.166	52.117	0.000	-15884.595
15098+00.00	0.00	42.58	0.000	102.484	0.000	-15987.079
15098+50.00	0.00	46.56	0.000	103.170	0.000	-16090.249
15099+00.00	0.00	54.94	0.000	117.480	0.000	-16207.729
15099+29.50	0.00	57.86	0.000	77.031	0.000	-16284.760
15099+50.00	0.00	58.52	0.000	55.227	0.000	-16339.987
15099+74.71	0.00	57.28	0.000	66.237	0.000	-16406.224
15099+79.73	0.07	56.66	0.000	0.000	0.000	-16406.224
15100+00.00	0.00	53.76	0.028	51.810	0.000	-16458.006
15100+50.00	0.00	55.93	0.000	126.962	0.000	-16584.968
15100+80.20	0.00	53.27	0.000	76.342	0.000	-16661.310
15101+00.00	0.00	53.92	0.000	49.130	0.000	-16710.440
15101+50.00	0.00	31.31	0.000	98.642	0.000	-16809.082
15101+85.69	0.07	29.40	0.043	50.151	0.000	-16859.190
15102+00.00	0.27	25.05	0.090	18.035	0.000	-16877.135
15103+00.00	0.59	28.69	1.592	124.396	0.000	-16999.939
15104+00.00	0.75	24.62	2.483	123.407	0.000	-17120.863
15105+00.00	0.47	22.61	2.274	109.332	0.000	-17227.921
15106+00.00	0.50	29.66	1.797	120.990	0.000	-17347.114
15107+00.00	0.43	27.33	1.709	131.910	0.000	-17477.315
15108+00.00	0.51	27.27	1.737	126.397	0.000	-17601.975
15109+00.00	0.16	31.37	1.239	135.757	0.000	-17736.493
15110+00.00	0.60	31.18	1.402	144.791	0.000	-17879.882
15111+00.00	0.13	40.00	1.352	164.757	0.000	-18043.287
15112+00.00	0.58	33.57	1.307	170.297	0.000	-18212.277
15113+00.00	0.20	46.90	1.438	186.281	0.000	-18397.120
15114+00.00	0.35	34.26	1.014	187.875	0.000	-18583.981
15115+00.00	5.16	0.00	10.205	79.308	0.000	-18653.084
15115+24.27	8.48	0.01	6.130	0.008	0.000	-18646.962
15115+53.33	6.92	0.00	0.000	0.000	5.000	-18651.962
15116+00.00	1.35	25.44	7.151	27.485	0.000	-18672.296
15117+00.00	0.29	33.29	3.044	135.944	0.000	-18805.196
15118+00.00	0.45	27.33	1.371	140.333	0.000	-18944.158
15119+00.00	0.73	38.35	2.180	152.054	0.000	-19094.032
15120+00.00	0.11	37.40	1.548	175.348	0.000	-19267.832
15121+00.00	0.31	27.99	0.776	151.352	0.000	-19418.408

Widening & HMA Overlay - Project Right
Table 4 of 13 (SCL 1804)

STATION	END AREA (SF)		ADJUSTED VOLUME (CY)		ADDED VOLUME (CY)	
	EXC	FILL	EXC	FILL	FILL	MASS
15122+00.00	0.22	26.65	0.983	126.484	0.000	-19543.909
15123+00.00	0.09	34.67	0.567	141.945	0.000	-19685.287
15124+00.00	0.32	15.83	0.760	116.894	0.000	-19801.421
15124+31.18	90.25	0.51	52.302	11.793	0.000	-19760.912
15124+55.18	224.42	0.00	0.000	0.000	14.000	-19774.912
15125+00.00	0.89	2.14	187.000	2.219	0.000	-19590.131
15126+00.00	0.14	27.40	1.908	68.366	0.000	-19656.589
15126+85.34	0.09	62.56	0.000	0.000	0.000	-19656.589
15127+00.00	0.07	69.53	0.390	224.362	0.000	-19880.561
15127+15.22	0.09	82.26	0.000	0.000	0.000	-19880.561
15128+00.00	0.01	45.09	0.148	265.332	0.000	-20145.745
15129+00.00	0.00	43.46	0.010	204.984	0.000	-20350.719
15130+00.00	0.15	41.64	0.278	196.997	0.000	-20547.438
15130+89.94	0.22	49.09	0.000	0.000	0.000	-20547.438
15131+00.00	0.02	47.38	0.324	206.082	0.000	-20753.196
15132+00.00	0.00	47.54	0.046	219.740	0.000	-20972.890
15133+00.00	0.00	40.41	0.000	203.609	0.000	-21176.499
15133+22.21	0.07	21.80	0.027	31.984	0.000	-21208.456
15133+50.00	0.11	32.44	0.090	34.889	0.000	-21243.255
15134+00.00	0.11	31.21	0.207	73.668	0.000	-21316.716
15134+27.70	0.11	33.77	0.117	41.666	0.000	-21358.265
15134+50.00	0.00	39.37	0.048	37.756	0.000	-21395.973
15135+00.00	0.00	49.75	0.003	103.154	0.000	-21499.124
15135+28.17	0.01	49.33	0.003	64.608	0.000	-21563.729
15135+33.19	0.02	48.61	0.002	11.380	0.000	-21575.107
15135+50.00	0.00	48.64	0.005	37.842	0.000	-21612.944
15135+78.40	0.08	51.66	0.040	65.943	0.000	-21678.847
15136+00.00	0.00	52.58	0.030	52.121	0.000	-21730.938
15136+50.00	0.00	56.50	0.000	126.254	0.000	-21857.192
15137+00.00	0.00	52.86	0.000	126.575	0.000	-21983.767



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ND 1804 - Jct Tioga Rd to Red Mike Area

Average End Area Tables

Widening & HMA Overlay
Project Right

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SOIB-7-804(061)283	11	7

Widening & HMA Overlay - Project Right
Table 5 of 13 (SCL 1804)

STATION	END AREA (SF)		ADJUSTED VOLUME (CY)		ADDED VOLUME (CY)	
	EXC	FILL	EXC	FILL	FILL	MASS
15137+50.00	0.00	63.29	0.000	134.429	0.000	-22118.196
15138+00.00	0.00	64.34	0.000	147.716	0.000	-22265.912
15138+50.00	0.00	64.97	0.000	149.662	0.000	-22415.574
15139+00.00	0.00	32.37	0.000	112.665	0.000	-22528.239
15139+15.60	4.83	4.37	1.395	13.270	0.000	-22540.114
15139+23.24	0.00	0.00	0.000	0.000	0.000	-22540.114
15139+39.35	1.31	1.65	2.702	3.312	180.000	-22720.724
15139+50.00	0.82	1.96	0.421	0.889	0.000	-22721.192
15140+00.00	0.00	48.12	0.759	57.961	0.000	-22778.394
15140+50.00	0.00	56.56	0.000	121.155	0.000	-22899.549
15141+00.00	0.00	50.25	0.000	123.618	0.000	-23023.167
15141+50.00	0.00	43.59	0.000	108.607	0.000	-23131.774
15141+80.88	0.01	35.27	0.007	56.365	0.000	-23188.132
15142+00.00	0.00	32.58	0.005	30.026	0.000	-23218.153
15142+26.09	0.00	24.06	0.000	34.202	0.000	-23252.355
15142+31.11	0.05	22.15	0.004	5.370	0.000	-23257.721
15142+50.00	0.00	17.27	0.016	17.240	0.000	-23274.945
15143+00.00	0.00	7.87	0.000	29.098	0.000	-23304.043
15143+31.58	0.03	3.80	0.020	8.527	0.000	-23312.550
15143+50.00	0.13	1.18	0.055	2.121	0.000	-23314.616
15144+00.00	0.29	0.48	0.389	1.915	0.000	-23316.142
15144+24.84	21.12	0.28	9.852	0.436	0.000	-23306.726
15144+37.07	22.76	0.20	0.000	0.000	0.000	-23306.726
15145+00.00	0.30	1.67	26.864	2.717	0.000	-23282.579
15146+00.00	0.60	2.28	1.654	9.152	0.000	-23290.077
15147+00.00	0.39	13.57	1.823	36.692	0.000	-23324.946
15148+00.00	0.00	18.13	0.724	73.365	0.000	-23397.587
15149+00.00	117.49	0.03	217.575	42.036	0.000	-23222.048
15149+02.04	129.47	0.06	9.322	0.004	0.000	-23212.730
15149+26.04	128.22	0.06	0.000	0.000	12.000	-23224.730
15150+00.00	0.14	37.82	175.805	64.841	0.000	-23113.766
15151+00.00	0.00	54.09	0.251	212.748	0.000	-23326.263
15151+40.00	0.02	39.84	0.018	86.967	0.000	-23413.212
15151+64.77	0.02	47.72	0.000	0.000	899.000	-24312.212
15152+00.00	0.00	76.68	0.015	101.437	0.000	-24413.634
15153+00.00	0.00	107.53	0.000	426.413	0.000	-24840.047
15154+00.00	0.00	40.55	0.000	342.789	0.000	-25182.836
15155+00.00	28.47	42.51	52.716	192.274	0.000	-25322.394
15156+00.00	90.19	29.18	219.734	165.958	0.000	-25268.618
15157+00.00	90.19	31.43	334.038	140.298	0.000	-25074.878
15157+71.61	231.69	0.00	426.841	52.091	0.000	-24700.128
15157+95.42	135.76	0.02	0.000	0.000	6.000	-24706.128
15158+00.00	105.62	3.36	20.476	0.359	0.000	-24686.011
15159+00.00	95.91	54.68	373.207	134.362	0.000	-24447.166
15160+00.00	451.17	56.87	1013.110	258.229	0.000	-23692.285
15160+84.17	12.84	49.87	0.000	0.000	0.000	-23692.285
15161+00.00	9.26	34.66	852.645	211.877	0.000	-23051.517
15162+00.00	4.53	45.31	25.546	185.120	0.000	-23211.091
15162+58.16	4.04	34.58	9.232	107.556	0.000	-23309.415
15162+82.16	6.16	20.48	0.000	0.000	0.000	-23309.415
15163+00.00	16.17	0.00	0.000	0.000	0.000	-23309.415
15163+09.17	23.86	0.00	0.000	0.000	0.000	-23309.415
15163+33.17	26.36	0.19	0.000	0.000	29.000	-23338.415
15164+00.00	5.38	45.69	39.290	70.977	0.000	-23370.102
15165+00.00	5.40	46.19	19.965	212.684	0.000	-23562.821
15165+23.63	5.75	57.73	0.000	0.000	0.000	-23562.821
15166+00.00	5.09	53.67	19.425	231.167	0.000	-23774.563
15167+00.00	5.05	59.88	18.774	262.857	0.000	-24018.646
15168+00.00	5.42	63.74	19.377	286.160	0.000	-24285.429
15168+65.72	10.48	55.90	19.345	182.022	0.000	-24448.106
15168+89.72	10.15	50.50	9.168	59.113	0.000	-24498.051
15169+00.00	6.77	50.15	3.219	23.942	0.000	-24518.774
15170+00.00	5.23	47.00	22.223	224.900	0.000	-24721.451
15171+00.00	7.22	16.32	23.070	146.589	0.000	-24844.970
15171+39.79	29.98	0.30	27.412	15.312	0.000	-24832.870
15171+79.79	31.93	0.16	0.000	0.000	30.000	-24862.870
15172+00.00	23.95	0.04	20.914	0.096	0.000	-24842.052
15173+00.00	6.23	44.20	55.888	102.421	0.000	-24888.585
15173+14.95	5.92	52.08	0.000	0.000	0.000	-24888.585
15174+00.00	5.46	50.31	21.651	218.769	0.000	-25085.703
15175+00.00	4.96	52.70	19.294	238.436	0.000	-25304.845
15176+00.00	6.07	52.98	20.417	244.628	0.000	-25529.056
15177+00.00	5.37	58.63	21.179	258.360	0.000	-25766.237
15177+80.40	26.36	0.07	47.247	109.248	0.000	-25828.238

Widening & HMA Overlay - Project Right
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STATION	END AREA (SF)		ADJUSTED VOLUME (CY)		ADDED VOLUME (CY)	
	EXC	FILL	EXC	FILL	FILL	MASS
15177+86.55	22.07	95.67	0.000	0.000	0.000	-25828.238
15178+00.00	25.28	0.00	18.747	0.032	98.006	-25907.529
15178+08.40	20.13	0.00	7.064	0.000	41.994	-25942.459
15179+00.00	3.36	63.51	39.842	134.668	0.000	-26037.285
15179+67.29	23.83	0.17	33.875	99.185	0.000	-26102.595
15179+91.29	9.45	30.77	0.000	0.000	458.000	-26560.595
15180+00.00	4.99	73.00	2.330	20.928	0.000	-26579.193
15181+00.00	4.34	119.10	17.274	444.673	0.000	-27006.592
15181+54.75	3.32	199.94	0.000	0.000	0.000	-27006.592
15182+00.00	3.18	127.84	13.915	571.628	0.000	-27564.305
15183+00.00	4.48	119.60	14.184	572.773	0.000	-28122.894
15184+00.00	4.60	140.63	16.822	602.382	0.000	-28708.454
15185+00.00	4.17	139.47	16.248	648.391	0.000	-29340.597
15186+00.00	3.09	193.08	13.459	769.793	0.000	-30096.931
15187+00.00	4.28	209.23	13.648	931.270	0.000	-31014.553
15187+23.46	5.16	195.09	4.101	219.570	0.000	-31230.022
15187+50.00	5.45	168.57	5.217	223.415	0.000	-31448.220
15188+00.00	6.09	148.91	10.682	367.448	0.000	-31804.986
15188+28.95	6.32	149.59	6.649	200.034	0.000	-31998.371
15188+50.00	6.19	147.29	4.876	144.659	0.000	-32138.154
15189+00.00	4.39	175.37	9.795	373.446	0.000	-32501.805
15189+34.44	3.74	192.67	5.184	293.409	0.000	-32790.030
15189+50.00	3.65	193.02	2.131	138.921	0.000	-32926.820
15189+69.60	3.57	184.76	2.621	171.403	0.000	-33095.602
15190+00.00	2.72	179.60	3.536	256.404	0.000	-33348.470
15190+39.93	4.77	158.45	5.538	312.460	0.000	-33655.392
15190+50.00	6.63	116.85	2.126	64.173	0.000	-33717.439
15190+76.21	13.71	1.30	9.871	71.699	0.000	-33779.267
15190+99.78	10.69	3.44	0.000	0.000	277.000	-34056.267
15191+00.00	10.59	3.52	0.085	0.035	0.000	-34056.217
15191+50.00	3.78	130.96	13.309	155.647	0.000	-34198.555
15192+00.00	4.42	181.63	7.592	361.787	0.000	-34552.750
15192+50.00	6.13	197.18	9.769	438.441	0.000	-34981.422
15193+00.00	5.53	188.72	10.801	446.643	0.000	-35417.264
15193+50.00	7.22	204.76	11.807	455.406	0.000	-35860.863
15194+00.00	6.39	225.01	12.600	497.417	0.000	-36345.680
15194+50.00	6.21	259.16	11.661	560.382	0.000	-36894.401
15194+75.77	5.38	293.36	5.528	329.594	0.000	-37218.467
15195+00.00	4.35	336.44	4.363	353.246	0.000	-37567.350
15195+46.10	4.13	345.90	7.234	728.148	0.000	-38288.264
15195+50.00	4.31	343.93	0.609	62.276	0.000	-38349.931
15195+81.26	5.21	321.41	5.510	481.444	0.000	-38825.865
15196+00.00	3.66	304.86	3.078	271.670	0.000	-39094.457
15196+50.00	5.10	181.13	8.106	562.479	0.000	-39648.830
15196+64.60	5.08	157.97	2.751	114.602	0.000	-39760.681
15196+86.75	5.56	133.14	4.364	149.259	0.000	-39905.576
15197+00.00	5.19	119.60	2.637	77.518	0.000	-39980.457
15197+50.00	5.86	71.19	10.232	220.828	0.000	-40191.053
15197+70.09	5.15	66.86	4.098	64.200	0.000	-40251.155
15197+92.24	5.27	65.07	4.277	67.644	0.000	-40314.522
15198+00.00	5.27	65.27	1.515	23.413	0.000	-40336.420
15198+50.00	4.93	81.42	9.450	169.779	0.000	-40496.749
15198+75.58	3.84	82.77	4.159	97.222	0.000	-40589.812
15199+00.00	3.88	81.47	3.495	92.843	0.000	-40679.160
15199+10.74	4.02	83.73	1.573	41.071	0.000	-40718.658
15199+50.00	5.05	79.35	6.595	148.207	0.000	-40860.270
15199+81.07	5.31	79.30	5.961	114.104	0.000	-40968.413
15200+00.00	5.27	78.72	3.711	69.244	0.000	-41033.946
15200+50.00	4.19	69.28	8.760	171.293	0.000	-41196.479
15201+00.00	3.69	70.04	7.292	161.241	0.000	-41350.428
15201+14.48	3.05	73.73	1.806	48.201	0.000	-41396.823
15201+38.74	2.92	78.01	0.000	0.000	0.000	-41396.823
15201+50.00	3.07	77.61	1.250	40.558	0.000	-41436.131
15202+00.00	3.21	73.73	5.812	175.165	0.000	-41605.484
15202+50.00	2.47	88.57	5.252	187.848	0.000	-41788.080
15203+00.00	6.41	75.67	8.215	190.095	0.000	-41969.960
15203+50.00	3.18	63.70	8.879	161.306	0.000	-42122.387
15204+00.00	2.80	66.77	5.539	151.005	0.000	-42267.853
15204+50.00	2.80	80.99	5.183	171.018	0.000	-42433.688
15205+00.00	2.37	73.16	4.787	178.419	0.000	-42607.320
15205+50.00	2.63	62.71	4.630	157.260	0.000	-42759.950
15206+00.00	2.29	67.19	4.553	150.342	0.000	-42905.739
15206+50.00	2.80	63.33	4.707	151.057	0.000	-43052.089
15207+00.00	3.31	60.76	5.650	143.620	0.000	-43190.059

Widening & HMA Overlay - Project Right
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STATION	END AREA (SF)		ADJUSTED VOLUME (CY)		ADDED VOLUME (CY)	
	EXC	FILL	EXC	FILL	FILL	MASS
15207+50.00	5.76	60.17	8.400	139.964	0.000	-43321.623
15208+00.00	23.39	51.88	26.992	129.689	0.000	-43424.320
15208+50.00	5.37	45.75	26.629	113.001	0.000	-43510.692
15208+64.58	5.76	43.27	3.005	30.044	0.000	-43537.731
15209+00.00	5.55	39.35	7.418	67.739	0.000	-43598.052
15209+34.91	4.00	45.69	6.174	68.722	0.000	-43660.600
15209+50.00	4.78	40.10	2.454	29.970	0.000	-43688.116
15209+70.07	5.68	40.14	3.890	37.281	0.000	-43721.507
15210+00.00	5.33	37.28	6.103	53.641	0.000	-43769.045
15210+50.00	5.20	34.24	9.746	82.783	0.000	-43842.082
15210+75.56	5.99	33.77	5.294	40.240	0.000	-43877.028
15211+00.00	6.70	32.05	5.742	37.238	0.000	-43908.524
15211+50.00	6.42	35.99	12.143	78.750	0.000	-43975.131
15211+81.05	6.55	37.18	7.456	52.592	0.000	-44020.267
15212+00.00	6.82	35.10	4.690	31.708	0.000	-44047.285
15212+23.64	7.85	33.27	6.420	37.412	0.000	-44078.277
15212+50.00	6.48	32.79	6.994	40.306	0.000	-44111.589
15213+00.00	5.44	39.01	11.040	83.098	0.000	-44183.647
15213+29.13	4.78	40.44	5.514	53.571	0.000	-44231.704
15213+50.00	4.05	49.36	3.412	43.380	0.000	-44271.672
15214+00.00	3.04	71.82	6.566	140.246	0.000	-44405.352
15214+29.60	2.63	93.94	3.107	113.572	0.000	-44515.817
15214+34.62	2.19	97.46	0.448	22.241	0.000	-44537.610
15214+50.00	2.47	101.72	1.328	70.914	0.000	-44607.196
15214+79.83	3.57	98.02	3.334	137.919	0.000	-44741.781
15215+00.00	2.94	95.58	2.429	90.388	0.000	-44829.740
15215+50.00	3.23	92.37	5.707	217.528	0.000	-45041.561
15216+00.00	3.06	75.64	5.820	194.450	0.000	-45230.191
15216+50.00	3.13	75.44	5.733	174.853	0.000	-45399.311
15217+00.00	3.85	55.29	6.462	151.302	0.000	-45544.151
15217+50.00	22.96	39.83	24.825	110.096	0.000	-45629.422
15217+56.49	23.81	40.66	5.621	12.091	0.000	-45635.892
15217+80.74	36.15	52.09	0.000	0.000	0.000	-45635.892
15218+00.00	27.52	56.56	22.703	48.431	0.000	-45661.620
15218+50.00	25.59	36.94	49.175	108.211	0.000	-45720.656
15219+00.00	8.85	67.83	31.889	121.262	0.000	-45810.029
15219+50.00	20.90	51.96	27.551	138.656	0.000	-45921.134
15220+00.00	57.97	47.31	73.032	114.902	0.000	-45963.004
15220+38.46	77.39	72.74	0.000	10.467	0.000	-45973.471
15220+50.00	78.09	80.08	33.228	40.823	0.000	-45981.066
15220+82.38	20.76	93.91	0.000	0.000	0.000	-45981.066
15220+83.46	17.65	91.34	0.000	0.000	0.000	-45981.066
15220+88.48	5.61	58.62	0.000	0.000	0.000	-45981.066
15221+00.00	16.66	0.00	0.000	0.000	0.000	-45981.066
15221+03.30	22.50	0.14	0.000	0.000	0.000	-45981.066
15221+31.27	37.71	0.00	0.000	0.000	1.000	-45982.066
15221+50.00	39.76	0.00	0.000	0.000	0.000	-45982.066
15221+88.95	11.61	1.54	0.000	0.000	0.000	-45982.066
15222+00.00	11.84	0.44	4.800	0.507	0.000	-45977.773
15222+11.92	0.00	0.00	0.000	0.000	0.000	-45977.773
15222+50.00	9.54	1.08	19.801	1.761	0.000	-45959.733
15222+94.44	8.28	4.85	14.667	6.096	0.000	-45951.162
15223+00.00	8.07	5.51	1.684	1.333	0.000	-45950.811
15224+00.00	6.94	9.47	27.809	34.684	0.000	-45957.686
15224+48.52	0.00	0.00	0.000	0.000	0.000	-45957.686
15225+00.00	5.37	14.43	22.809	55.342	0.000	-45990.219
15226+00.00	7.98	5.63	24.724	46.442	0.000	-46011.937
15227+00.00	6.33	18.62	26.489	56.138	0.000	-46041.586
15228+00.00	5.52	22.33	21.934	94.789	0.000	-46114.441
15229+00.00	5.80	15.97	20.952	88.652	0.000	-46182.141
15230+00.00	6.66	15.63	23.059	73.142	0.000	-46232.224
15231+00.00	6.25	11.36	23.907	62.478	0.000	-46270.795
15232+00.00	6.57	15.78	23.743	62.844	0.000	-46309.896
15233+00.00	5.40	13.30	22.169	67.324	0.000	-46355.051
15234+00.00	9.75	10.56	28.056	55.229	0.000	-46382.224
15235+00.00	8.08	9.13	33.017	45.580	0.000	-46394.787
15236+00.00	8.76	5.65	31.192	34.219	0.000	-46397.814
15237+00.00	9.96	6.91	34.669	29.071	0.000	-46392.216
15238+00.00	8.51	3.99	34.203	25.226	0.000	-46383.239
15239+00.00	9.43	8.44	33.213	28.763	0.000	-46378.789
15240+00.00	6.73	9.69	29.927	41.950	0.000	-46390.812
15241+00.00	6.19	14.53	23.924	56.054	0.000	-46422.942
15242+00.00	8.28	6.41	26.794	48.469	0.000	-46444.617
15242+96.75	6.05	44.88	0.000	0.000	0.000	-46444.617

Widening & HMA Overlay - Project Right
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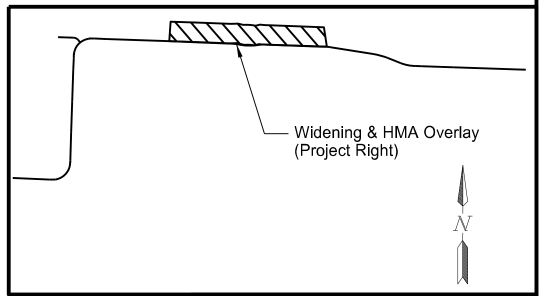
STATION	END AREA (SF)		ADJUSTED VOLUME (CY)		ADDED VOLUME (CY)	
	EXC	FILL	EXC	FILL	FILL	MASS
15243+00.00	6.20	38.49	26.818	103.948	0.000	-46521.747
15243+31.83	8.75	35.26	0.000	0.000	0.000	-46521.747
15243+74.78	40.81	0.01	0.000	0.000	2.000	-46523.747
15244+00.00	42.17	0.00	0.000	0.000	0.000	-46523.747
15244+04.79	39.76	0.25	0.000	0.000	0.000	-46523.747
15245+00.00	4.77	30.81	78.510	68.443	0.000	-46513.680
15246+00.00	3.61	48.75	15.530	184.172	0.000	-46682.322
15247+00.00	6.94	37.86	19.548	200.504	0.000	-46863.278
15247+41.74	7.01	36.27	10.780	71.617	0.000	-46924.115
15247+65.74	7.62	37.76	6.500	41.127	0.000	-46958.742
15248+00.00	7.18	33.44	9.394	56.474	0.000	-47005.822
15249+00.00	6.30	33.81	24.968	155.674	0.000	-47136.528
15250+00.00	4.85	41.24	20.646	173.726	0.000	-47289.608
15251+00.00	5.96	35.11	20.026	176.717	0.000	-47446.299
15252+00.00	5.25	38.60	20.765	170.619	0.000	-47596.153
15253+00.00	4.47	38.08	17.991	177.501	0.000	-47755.663
15254+00.00	4.12	43.95	15.910	189.882	0.000	-47929.635
15255+00.00	3.71	41.11	14.506	196.897	0.000	-48112.026
15256+00.00	3.83	40.26	13.952	188.359	0.000	-48286.433
15257+00.00	5.54	25.49	17.344	152.198	0.000	-48421.287
15258+00.00	4.10	36.88	17.857	144.372	0.000	-48547.802
15259+00.00	4.48	41.98	15.889	182.558	0.000	-48714.471
15260+00.00	3.70	42.86	15.141	196.393	0.000	-48895.723
15261+00.00	4.54	45.65	15.256	204.887	0.000	-49085.354
15261+16.90	4.10	79.74	0.000	0.000	0.000	-49085.354
15261+54.31	4.28	77.20	0.000	0.000	0.000	-49085.354
15262+00.00	5.47	40.48	18.531	199.394	0.000	-49266.217
15263+00.00	5.92	30.44	21.080	164.178	0.000	-49409.315
15264+00.00	5.10	23.61	20.403	125.113	0.000	-49514.025
15265+00.00	5.43	25.54	19.509	113.765	0.000	-49608.281



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ND 1804 - Jct Tioga Rd to Red Mike Area

Average End Area Tables

Widening & HMA Overlay
Project Right

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SOIB-7-804(061)283	11	8

Widening & HMA Overlay - Project Right
Table 9 of 13 (SCL 1804)

STATION	END AREA (SF)		ADJUSTED VOLUME (CY)		ADDED VOLUME (CY)	
	EXC	FILL	EXC	FILL	FILL	MASS
15266+00.00	5.24	21.25	19.762	108.297	0.000	-49696.816
15267+00.00	0.00	23.70	9.701	104.041	0.000	-49791.156
15268+00.00	0.01	23.28	0.023	108.752	0.000	-49899.885
15269+00.00	0.05	23.97	0.108	109.380	0.000	-50009.157
15270+00.00	0.40	23.31	0.824	109.447	0.000	-50117.780
15270+21.93	0.12	24.05	0.211	24.038	0.000	-50141.607
15270+45.93	0.25	21.45	0.163	25.285	0.000	-50166.729
15271+00.00	0.38	20.65	0.624	52.691	0.000	-50218.796
15271+23.72	0.08	43.55	0.000	0.000	0.000	-50218.796
15272+00.00	0.00	30.92	0.700	119.368	0.000	-50337.464
15272+76.84	8.86	0.00	12.607	54.999	0.000	-50379.856
15273+00.00	8.42	0.00	0.000	0.000	0.968	-50380.824
15273+00.77	8.31	0.02	0.000	0.000	0.032	-50380.856
15274+00.00	0.00	34.10	15.270	78.354	0.000	-50443.940
15274+19.36	0.00	57.00	0.000	0.000	0.000	-50443.940
15275+00.00	0.00	32.38	0.002	153.880	0.000	-50597.818
15276+00.00	0.00	31.12	0.002	146.989	0.000	-50744.805
15277+00.00	0.00	31.64	0.000	145.274	0.000	-50890.079
15278+00.00	0.00	31.57	0.000	146.329	0.000	-51036.408
15278+94.52	0.07	45.65	0.000	0.000	0.000	-51036.408
15279+00.00	0.05	27.62	0.088	137.016	0.000	-51173.336
15280+00.00	0.00	35.45	0.088	145.997	0.000	-51319.245
15281+00.00	0.00	26.44	0.000	143.271	0.000	-51462.516
15282+00.00	0.00	37.28	0.000	147.497	0.000	-51610.013
15282+56.12	0.00	16.01	0.000	0.000	0.000	-51610.013
15282+81.74	8.11	0.01	0.000	0.000	0.000	-51610.013
15283+00.00	7.76	0.00	0.000	0.000	34.238	-51644.251
15283+05.74	5.00	0.18	0.000	0.000	10.762	-51655.013
15284+00.00	0.00	26.99	8.735	59.281	0.000	-51705.559
15285+00.00	0.00	26.07	0.000	122.824	0.000	-51828.383
15286+00.00	0.02	28.78	0.042	126.969	0.000	-51955.310
15287+00.00	0.04	23.64	0.108	121.348	0.000	-52076.550
15288+00.00	0.04	26.48	0.138	116.007	0.000	-52192.419
15289+00.00	0.00	32.62	0.072	136.786	0.000	-52329.133
15290+00.00	0.00	23.06	0.002	128.889	0.000	-52458.020
15290+10.55	0.12	45.62	0.000	0.000	0.000	-52458.020
15290+34.29	5.17	0.19	0.000	0.000	0.000	-52458.020
15290+58.29	4.92	0.03	0.000	0.000	48.000	-52506.020
15291+00.00	0.00	30.85	3.797	29.822	0.000	-52532.045
15292+00.00	0.04	24.57	0.070	128.295	0.000	-52660.270
15293+00.00	0.00	32.03	0.070	131.006	0.000	-52791.206
15294+00.00	0.00	23.45	0.005	128.411	0.000	-52919.612
15295+00.00	0.04	26.86	0.073	116.448	0.000	-53035.987
15296+00.00	0.00	34.17	0.069	141.273	0.000	-53177.191
15296+63.44	10.04	0.00	11.799	50.182	0.000	-53215.574
15296+87.39	6.87	0.00	0.000	0.000	6.000	-53221.574
15297+00.00	1.50	0.13	1.954	0.040	0.000	-53219.660
15297+92.15	0.00	28.49	0.000	0.000	0.000	-53219.660
15298+00.00	0.01	14.64	2.802	34.209	0.000	-53251.067
15299+00.00	0.24	16.79	0.472	72.765	0.000	-53323.360
15300+00.00	0.05	23.06	0.543	92.249	0.000	-53415.066
15301+00.00	0.05	27.79	0.187	117.720	0.000	-53532.599
15302+00.00	0.01	27.17	0.115	127.230	0.000	-53659.714
15302+90.54	0.02	33.23	0.000	0.000	0.000	-53659.714
15303+00.00	0.00	30.51	0.021	133.529	0.000	-53793.222
15304+00.00	0.00	28.51	0.000	136.635	0.000	-53929.857
15305+00.00	0.02	27.22	0.036	129.006	0.000	-54058.827
15306+00.00	0.04	31.56	0.114	136.060	0.000	-54194.773
15306+54.72	6.97	0.03	7.106	40.008	0.000	-54227.675
15306+78.72	3.24	0.07	0.000	0.000	55.000	-54282.675
15307+00.00	0.00	26.48	1.276	13.082	0.000	-54294.481
15308+00.00	0.00	40.18	0.000	154.313	0.000	-54448.794
15308+72.70	0.01	46.80	0.000	0.000	0.000	-54448.794
15309+00.00	0.01	30.93	0.020	164.614	0.000	-54613.388
15310+00.00	0.07	25.79	0.148	131.309	0.000	-54744.549
15311+00.00	0.28	22.83	0.641	112.545	0.000	-54856.453
15312+00.00	0.24	24.97	0.963	110.642	0.000	-54966.132
15313+00.00	0.11	28.93	0.662	124.766	0.000	-55090.236
15313+61.44	0.25	32.42	0.000	0.000	0.000	-55090.236
15314+00.00	0.35	23.98	0.859	122.475	0.000	-55211.852
15315+00.00	0.00	31.30	0.647	127.959	0.000	-55339.164
15316+00.00	0.12	3.06	0.226	79.538	0.000	-55418.476
15316+22.84	8.91	0.00	3.822	1.621	0.000	-55416.275
15316+46.84	9.21	0.01	0.000	0.000	12.000	-55428.275

Widening & HMA Overlay - Project Right
Table 10 of 13 (SCL 1804)

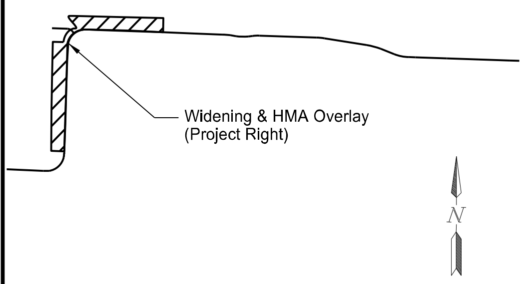
STATION	END AREA (SF)		ADJUSTED VOLUME (CY)		ADDED VOLUME (CY)	
	EXC	FILL	EXC	FILL	FILL	MASS
15317+00.00	0.21	17.13	9.274	21.095	0.000	-55440.096
15318+00.00	6.64	0.07	12.673	39.830	0.000	-55467.253
15319+00.00	9.92	0.06	30.662	0.316	0.000	-55436.907
15319+40.16	103.71	1.50	84.506	1.450	0.000	-55353.851
15320+00.00	11.03	0.06	127.163	2.156	0.000	-55228.844
15321+00.00	6.40	0.03	32.286	0.208	0.000	-55196.766
15322+00.00	2.69	16.19	16.838	37.539	0.000	-55217.467
15322+83.95	6.81	0.00	14.767	31.454	0.000	-55234.154
15323+00.00	8.08	0.00	0.000	0.000	0.000	-55234.154
15323+19.26	6.69	0.28	0.000	0.000	51.000	-55285.154
15324+00.00	0.98	18.28	11.476	34.675	0.000	-55308.353
15325+00.00	0.06	20.84	1.930	90.542	0.000	-55396.965
15326+00.00	0.00	24.51	0.108	104.984	0.000	-55501.841
15327+00.00	0.00	26.86	0.000	118.927	0.000	-55620.768
15328+00.00	0.00	27.47	0.000	125.780	0.000	-55746.548
15328+71.38	0.00	32.38	0.000	0.000	0.000	-55746.548
15329+00.00	0.00	31.59	0.000	136.721	0.000	-55883.269
15329+09.08	0.09	31.27	0.015	13.213	0.000	-55896.467
15329+50.00	0.00	26.84	0.067	55.049	0.000	-55951.449
15330+00.00	0.16	24.72	0.147	59.682	0.000	-56010.984
15330+50.00	0.07	20.63	0.216	52.489	0.000	-56063.257
15330+84.08	0.50	22.41	0.363	33.956	0.000	-56096.850
15331+00.00	0.73	23.29	0.362	16.845	0.000	-56113.333
15331+50.00	0.80	19.65	1.413	49.703	0.000	-56161.623
15332+00.00	0.64	18.62	1.331	44.289	0.000	-56204.581
15332+50.00	0.08	19.63	0.660	44.264	0.000	-56248.185
15333+00.00	0.27	20.01	0.323	45.876	0.000	-56293.738
15333+50.00	0.05	22.51	0.302	49.214	0.000	-56342.650
15334+00.00	0.01	27.55	0.054	57.945	0.000	-56400.541
15334+50.00	0.05	9.36	0.053	42.721	0.000	-56443.209
15334+59.08	0.70	6.53	0.126	3.339	0.000	-56446.422
15335+00.00	0.05	14.53	0.565	19.950	0.000	-56465.807
15335+04.38	0.18	13.11	0.019	2.803	0.000	-56468.591
15335+48.96	0.85	53.57	0.000	0.000	0.000	-56468.591
15335+50.00	0.75	51.58	0.791	68.318	0.000	-56536.118
15336+00.00	2.08	7.70	2.625	68.618	0.000	-56602.111
15336+29.38	2.60	8.45	2.545	10.982	0.000	-56610.548
15336+50.00	4.03	5.81	2.532	6.805	0.000	-56614.821
15337+00.00	6.27	0.26	9.538	7.025	0.000	-56612.308
15337+50.00	6.12	0.34	11.468	0.687	765.000	-57366.527
15337+50.22	6.12	0.34	0.050	0.003	0.000	-57366.480
15338+00.00	6.54	0.25	11.671	0.676	0.000	-57355.485
15338+50.00	0.50	16.12	6.527	18.951	0.000	-57367.909
15339+00.00	0.73	27.02	1.141	49.934	0.000	-57416.702
15339+23.19	1.45	33.95	0.000	0.000	0.000	-57416.702
15339+50.00	1.09	23.23	1.681	58.154	0.000	-57473.175
15340+00.00	0.42	19.85	1.399	49.850	0.000	-57521.626
15340+04.38	0.50	20.23	0.075	4.063	0.000	-57525.614
15340+50.00	0.45	26.34	0.807	49.174	0.000	-57573.981
15341+00.00	0.91	30.00	1.263	65.203	0.000	-57637.921
15341+50.00	0.36	35.23	1.175	75.495	0.000	-57712.241
15341+79.38	0.30	34.07	0.358	47.130	0.000	-57759.013
15342+00.00	0.46	32.76	0.291	31.899	0.000	-57790.621
15343+00.00	0.67	34.00	2.096	154.547	0.000	-57943.072
15344+00.00	0.18	46.82	1.571	187.080	0.000	-58128.581
15344+60.72	0.66	37.17	0.939	118.047	0.000	-58245.689
15345+00.00	0.48	36.46	0.000	0.000	83.420	-58329.109
15345+14.45	0.54	35.88	0.000	0.000	30.678	-58359.787
15345+41.73	0.33	37.33	0.000	0.000	57.934	-58417.721
15346+00.00	0.22	34.53	0.000	0.000	123.757	-58541.478
15346+55.66	0.42	42.29	0.000	0.000	118.212	-58659.690
15347+00.00	0.58	36.77	0.825	81.145	0.000	-58740.010
15348+00.00	0.22	41.06	1.480	180.163	0.000	-58918.693
15349+00.00	0.27	48.76	0.898	207.924	0.000	-59125.719
15350+00.00	0.16	43.04	0.794	212.506	0.000	-59337.431
15351+00.00	0.52	36.16	1.256	183.319	0.000	-59519.494
15352+00.00	0.71	22.02	2.273	134.658	0.000	-59651.879
15353+00.00	1.23	24.32	3.595	107.267	0.000	-59755.551
15354+00.00	0.00	13.40	2.276	87.314	0.000	-59840.589
15355+00.00	7.21	0.41	13.348	31.954	-2375.000	-57484.195
15356+00.00	10.36	0.00	32.535	0.943	0.000	-57452.603
15357+00.00	2.84	9.94	24.455	23.010	0.000	-57451.158
15358+00.00	1.72	12.98	8.450	53.065	0.000	-57495.773
15359+00.00	0.25	26.92	3.648	92.365	0.000	-57584.490

Widening & HMA Overlay - Project Right
Table 11 of 13 (SCL 1804)

STATION	END AREA (SF)		ADJUSTED VOLUME (CY)		ADDED VOLUME (CY)	
	EXC	FILL	EXC	FILL	FILL	MASS
15360+00.00	0.02	26.13	0.510	122.800	0.000	-57706.780
15361+00.00	0.36	17.57	0.710	101.152	0.000	-57807.222
15362+00.00	0.26	22.09	1.153	91.786	0.000	-57897.855
15363+00.00	0.03	27.55	0.551	114.905	0.000	-58012.209
15364+00.00	0.00	22.49	0.063	115.843	0.000	-58127.989
15365+00.00	0.00	22.41	0.004	103.948	0.000	-58231.933
15366+00.00	0.00	23.72	0.004	106.786	0.000	-58338.715
15367+00.00	0.09	25.03	0.165	112.849	0.000	-58451.399
15368+00.00	0.00	32.86	0.165	134.022	0.000	-58585.256
15369+00.00	0.00	29.32	0.000	143.942	0.000	-58729.198
15370+00.00	0.00	25.86	0.000	127.732	0.000	-58856.930
15371+00.00	0.00	33.43	0.000	137.248	0.000	-58994.178
15372+00.00	0.00	29.52	0.000	145.723	0.000	-59139.901
15373+00.00	0.00	31.76	0.000	141.857	0.000	-59281.758
15374+00.00	0.00	33.50	0.000	151.071	0.000	-59432.829
15375+00.00	0.00	29.37	0.000	145.533	0.000	-59578.362
15376+00.00	0.00	24.85	0.000	125.507	0.000	-59703.869
15377+00.00	0.00	28.25	0.000	122.925	0.000	-59826.794
15378+00.00	0.00	26.34	0.001	126.370	0.000	-59953.163
15379+00.00	0.00	31.99	0.001	135.030	0.000	-60088.192
15380+00.00	0.00	31.48	0.000	146.938	0.000	-60235.130
15381+00.00	0.00	26.92	0.000	135.195	0.000	-60370.325
15382+00.00	0.00	28.63	0.000	128.578	0.000	-60498.903
15383+00.00	0.00	33.69	0.000	144.244	0.000	-60643.147
15384+00.00	0.00	33.35	0.000	155.188	0.000	-60798.335
15385+00.00	0.00	32.83	0.000	153.197	0.000	-60951.532
15386+00.00	0.00	37.50	0.000	162.798	0.000	-61114.330
15387+00.00	0.00	36.46	0.000	171.200	0.000	-61285.530
15388+00.00	0.00	34.55	0.000	164.362	0.000	-61449.892
15389+00.00	0.00	36.03	0.000	163.376	0.000	-61613.268
15390+00.00	0.00	31.08	0.000	155.362	0.000	-61768.630
15391+00.00	0.01	33.77	0.019	150.124	0.000	-61918.735
15392+00.00	0.00	32.27	0.020	152.879	0.000	-62071.594
15393+00.00	0.00	34.48	0.001	154.521	0.000	-62226.114
15394+00.00	0.00	34.04	0.000	158.606	0.000	-62384.720
15395+00.00	0.00	29.23	0.000	146.445	0.000	-62531.165
15395+91.16	6.71	0.19	11.326	62.067	0.000	-62581.906
15396+00.00	6.59	0.02	0.000	0.000	12.715	-62594.621
15396+18.96	5.88	0.03	0.000	0.000	27.285	-62621.906
15397+00.00	0.00	27.98	8.827	52.537	0.000	-62665.616
15398+00.00	0.01	25.41	0.023	123.577	0.000	-62789.170
15399+00.00	0.00	23.67	0.025	113.602	0.000	-62902.747
15400+00.00	0.00	20.87	0.011	103.098	0.000	-63005.834
15401+00.00	0.02	22.16	0.054	99.599	0.000	-63105.379
15402+00.00	0.00	23.08	0.046	104.712	0.000	-63210.045
15403+00.00	0.01	29.38	0.018	121.420	0.000	-63331.447
15404+00.00	0.00	34.10	0.018	146.942	0.000	-63478.371
15405+00.00	0.16	31.18	0.288	151.109	0.000	-63629.192
15406+00.00	0.25	23.39	0.751	126.320	0.000	-63754.761
15407+00.00	0.15	22.33	0.745	105.854	0.000	-63859.870
15408+00.00	0.17	22.38	0.590	103.513	0.000	-63962.793
15409+00.00	0.07	25.38	0.434	110.564	0.000	-64072.923
15410+00.00	0.00	28.79	0.126	125.403	0.000	-64198.200
15411+00.00	0.00	25.86	0.009	126.509	0.000	-64324.700
15412+00.00	0.17	26.84	0.331	121.996	0.000	-64446.365
15413+00.00	0.01	32.06	0.346	136.344	0.000	-64582.363
15414+00.00	0.02	29.41	0.062	142.288	0.000	-64724.589
15415+00.00	0.02	24.76	0.066	125.390	0.000	-64849.913
15416+00.00	0.31	21.64	0.599	107.407	0.000	-64956.721
15417+00.00	0.00	28.71	0.572	116.560	0.000	-65072.709
15418+00.00	0.00	24.84	0.001	123.962	0.000	-65196.670
15419+00.00	0.00	30.29	0.000	127.616	0.000	-65324.286
15420+00.00	0.00	27.23	0.000	133.157	0.000	-65457.443
15421+00.00	0.27	20.89	0.509	111.400	0.000	-65568.334
15422+00.00	0.21	21.95	0.889	99.168	0.000	-65666.613
15422+19.91	0.24	22.54	0.163	20.501	0.000	-65686.951
15422+43.91	0.27	24.12	0.000	0.000	0.000	-65686.951
15423+00.00	0.11	28.77	0.396	68.673	0.000	-65755.228
15424+00.00	0.00	31.21	0.209	138.834	0.000	-65893.853
15425+00.00	0.01	31.87	0.014	146.030	0.000	-66039.869
15426+00.00	0.01	33.24	0.030	150.732	0.000	-66190.571
15427+00.00	0.06	34.64	0.135	157.129	0.000	-66347.565
15428+00.00	0.01	35.32	0.131	161.946	0.000	-66509.380
15429+00.00	0.01	36.96	0.023	167.318	0.000	-66676.675

Widening & HMA Overlay - Project Right
Table 12 of 13 (SCL 1804)

STATION	END AREA (SF)		ADJUSTED VOLUME (CY)		ADDED VOLUME (CY)	
	EXC	FILL	EXC	FILL	FILL	MASS
15430+00.00	0.00	37.66	0.011	172.720	0.000	-66849.384
15431+00.00	0.00	35.67	0.000	169.731	0.000	-67019.115
15432+00.00	0.00	35.49	0.000	164.707	0.000	-67183.822
15433+00.00	0.00	29.04	0.000	149.369	0.000	-67333.191
15434+00.00	0.00	6.92	0.000	83.253	0.000	-67416.444
15434+36.37	5.23	0.00	3.524	5.830	0.000	-67418.750
15434+60.37	5.65	0.01	0.000	0.000	59.000	-67477.750
15435+00.00	0.00	11.27	4.148	10.347	0.000	-67483.949
15436+00.00	0.16	33.67	0.290	104.021	0.000	-67587.680
15437+00.00	0.06	37.42	0.408	164.550	0.000	-67751.822
15438+00.00	0.00	35.50	0.118	168.788	0.000	-67920.492
15438+16.41	0.00	52.53	0.000	0.000	0.000	-67920.492
15438+38.13	0.03	54.03	0.000	0.000	0.000	-67920.492
15439+00.00	0.00	39.98	0.000	174.730	0.000	-68095.222
15440+00.00	0.00	34.73	0.000	172.943	0.000	-68268.165
15441+00.00	0.00	33.94	0.000	158.949	0.000	-68427.114
15442+00.00	0.00	32.92	0.000	154.773	0.000	-68581.887
15443+00.00	0.00	33.04	0.000	152.698	0.000	-68734.585
15443+26.03	4.39	30.42	2.116	38.241	0.000	-68770.710
15443+50.00	4.35	27.43	3.880	32.098	0.000	-68798.928
15444+00.00	5.35	26.72	8.987	62.670	0.000	-68852.611
15444+50.00	5.16	26.03	9.734	61.059	0.000	-68903.936
15445+00.00	4.18	31.26	8.645	66.313	0.000	-68961.604
15445+01.03	4.13	31.46	0.158	1.495	0.000	-68962.941
15445+50.00	3.34	37.98	6.775	78.707	0.000	-69034.873
15446+00.00	3.57	42.79	6.396	93.480	0.000	-69121.957
15446+50.00	4.01	41.09	7.014	97.077	0.000	-69212.020
15447+00.00	3.83	44.17	7.255	98.679	0.000	-69303.444
15447+50.00	3.42	49.34	6.706	108.229	0.000	-69404.967
15448+00.00	2.79	44.10	5.745	108.139	0.000	-69507.361



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ND 1804 - Jct Tioga Rd to Red Mike Area

Average End Area Tables

Widening & HMA Overlay
Project Right

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SOIB-7-804(061)283	11	9

Widening & HMA Overlay - Project Right
Table 13 of 13 (SCL 1804)

STATION	END AREA (SF)		ADJUSTED VOLUME (CY)		ADDED VOLUME (CY)	
	EXC	FILL	EXC	FILL	FILL	MASS
15448+50.00	4.62	18.08	6.862	71.957	0.000	-69572.456
15448+54.35	6.72	11.58	0.913	2.984	0.000	-69574.527
15448+76.03	9.91	0.09	0.000	0.000	205.775	-69780.302
15448+84.06	8.55	3.83	0.000	0.000	76.225	-69856.527
15449+00.00	3.69	26.85	3.615	11.318	0.000	-69864.230
15449+50.00	1.36	32.33	4.679	68.497	0.000	-69928.048
15450+00.00	1.02	31.01	2.202	73.310	0.000	-69999.156
15450+01.03	1.04	30.93	0.039	1.477	0.000	-70000.594
15450+50.00	1.38	32.54	2.197	71.947	0.000	-70070.344
15451+00.00	1.03	35.14	2.235	78.330	0.000	-70146.439
15451+50.00	1.76	26.94	2.583	71.847	0.000	-70215.703
15452+00.00	2.84	24.07	4.253	59.034	0.000	-70270.484
15452+50.00	3.42	25.20	5.792	57.019	0.000	-70321.711
15453+00.00	4.87	16.02	7.672	47.703	0.000	-70361.742
15453+50.00	6.18	18.93	10.227	40.456	0.000	-70391.971
15454+00.00	20.65	16.25	24.837	40.725	0.000	-70407.859
15454+50.00	33.32	14.70	49.968	35.822	0.000	-70393.713
15455+00.00	26.13	16.05	55.044	35.583	0.000	-70374.252
15455+50.00	27.65	15.03	49.793	35.972	0.000	-70360.431
15456+00.00	38.45	11.83	61.198	31.088	0.000	-70330.321
15456+50.00	56.26	17.28	87.694	33.683	0.000	-70276.310
15457+00.00	53.71	29.14	101.827	53.718	0.000	-70228.201
15457+50.00	45.48	28.81	91.838	67.062	0.000	-70203.425
15458+00.00	36.42	33.03	75.826	71.566	0.000	-70199.165
15458+50.00	25.47	34.27	57.303	77.891	0.000	-70219.753
15459+00.00	21.03	31.75	43.059	76.412	0.000	-70253.106
15459+50.00	25.30	30.52	42.898	72.074	0.000	-70282.282
15459+57.16	26.00	30.00	6.799	10.063	0.000	-70285.546
15459+85.36	23.00	27.00	25.680	37.603	0.000	-70297.469
15460+00.00	22.00	26.00	12.184	18.141	0.000	-70303.426
15460+50.00	19.00	30.00	37.677	65.044	0.000	-70330.793
15461+00.00	15.00	39.00	31.695	80.145	0.000	-70379.243
15461+50.00	14.00	42.00	26.707	93.690	0.000	-70446.226
15462+00.00	8.00	43.00	19.898	97.893	0.000	-70524.221
15462+50.00	7.00	48.00	14.090	105.069	0.000	-70615.200
15463+00.00	9.00	49.00	14.646	112.130	0.000	-70712.684
15463+50.00	12.00	54.00	19.458	119.629	0.000	-70812.855
15464+00.00	15.00	54.00	25.733	125.010	0.000	-70912.132
15464+50.00	18.00	53.00	30.823	123.788	0.000	-71005.097
15465+00.00	20.00	46.00	35.069	115.370	0.000	-71085.398
15465+50.00	22.00	43.00	39.045	103.064	0.000	-71149.417
15466+00.00	28.00	38.00	46.903	93.789	0.000	-71196.303
15466+50.00	32.00	29.00	56.154	78.056	0.000	-71218.205
15467+00.00	25.00	35.00	53.320	74.439	0.000	-71239.324
15467+50.00	3.00	40.00	26.256	87.514	0.000	-71300.582
15467+64.68	2.00	41.00	1.474	27.528	0.000	-71326.636
15468+00.00	1.00	44.00	2.375	69.389	0.000	-71393.650
15468+50.00	8.00	2.00	8.417	53.703	0.000	-71438.936
15468+53.54	11.00	0.00	1.221	0.178	0.000	-71437.893
15468+84.84	2.00	6.00	7.396	4.418	0.000	-71434.915
15468+89.68	1.00	14.00	0.231	2.206	0.000	-71436.890
15469+00.00	0.00	45.00	0.169	13.916	0.000	-71450.637
15469+50.00	1.00	48.00	0.939	107.464	0.000	-71557.162
15470+00.00	1.00	45.00	1.601	107.481	0.000	-71663.042
15470+50.00	1.00	47.00	1.702	106.529	0.000	-71767.869
15471+00.00	3.00	33.00	3.933	93.041	0.000	-71856.977
15471+50.00	4.00	27.00	6.947	68.849	0.000	-71918.879
15472+00.00	0.00	0.00	3.763	30.701	0.000	-71945.817
15472+00.02	0.00	0.00	0.000	0.000	0.000	-71945.817

Widening & HMA Overlay - Proposed Radial T
(PR54)

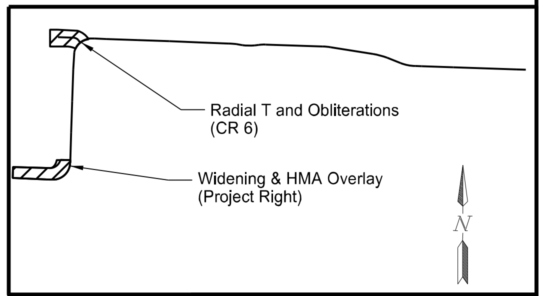
STATION	END AREA (SF)		ADJUSTED VOLUME (CY)		
	EXC	FILL	EXC	FILL	MASS
1000+50.00	0.00	0.00	0.000	0.000	0.000
1000+99.87	45.00	129.00	41.590	149.104	-107.514
1001+52.01	50.00	110.00	91.574	288.096	-304.036
1002+04.15	53.00	92.00	99.275	243.439	-448.200
1002+51.32	58.00	97.00	97.285	206.465	-557.380
1003+00.98	48.00	103.00	98.190	229.860	-689.050
1003+50.00	51.00	98.00	90.294	228.480	-827.236
1004+00.00	46.00	86.00	89.974	213.521	-950.783
1004+50.00	83.00	82.00	119.115	194.071	-1025.739
1005+00.00	120.00	76.00	187.299	182.169	-1020.609
1005+50.00	74.00	36.00	179.431	128.940	-970.118
1006+00.00	99.00	3.00	159.918	45.097	-855.297
1006+27.87	133.00	7.00	119.719	7.047	-742.625
1006+50.00	181.00	9.00	128.954	8.437	-622.108
1006+77.53	90.00	22.00	138.355	19.794	-503.547
1007+00.00	78.00	53.00	70.081	39.045	-472.511
1007+24.70	68.00	70.00	66.802	70.415	-476.124
1007+50.00	61.00	76.00	60.275	85.511	-501.360
1007+76.84	55.00	86.00	57.690	100.615	-544.285
1008+00.00	58.00	87.00	48.655	92.537	-588.167
1008+29.98	63.00	83.00	67.203	117.471	-638.435
1008+50.00	63.00	80.00	46.471	75.241	-667.205
1009+00.00	62.00	73.00	115.434	177.097	-728.868
1009+50.00	86.00	59.00	137.415	153.294	-744.747
1010+00.00	102.00	38.00	174.023	111.790	-682.514
1010+50.00	107.00	27.00	192.828	74.808	-564.494
1011+00.00	109.00	16.00	199.937	49.639	-414.196

Widening & HMA Overlay - Obliteration 1
(Sta 12+00.00 to 22+00.00)

STATION	END AREA (SF)		ADJUSTED VOLUME (CY)		
	EXC	FILL	EXC	FILL	MASS
12+00.00	73.00	28.00	0.000	0.000	0.000
12+50.00	75.00	29.00	137.134	66.668	70.466
13+00.00	114.00	26.00	175.218	63.804	181.880
13+50.00	109.00	50.00	206.254	87.460	300.674
14+00.00	99.00	58.00	191.984	125.061	367.597
14+50.00	141.00	21.00	221.637	91.686	497.548
15+00.00	106.00	34.00	227.861	63.387	662.022
15+50.00	111.00	35.00	200.141	79.440	782.723
16+00.00	111.00	34.00	205.475	79.992	908.206
16+50.00	109.00	33.00	204.212	78.371	1034.047
17+00.00	105.00	35.00	198.153	78.930	1153.270
17+50.00	113.00	31.00	201.803	76.093	1278.980
18+00.00	123.00	29.00	218.353	69.242	1428.091
18+50.00	129.00	28.00	233.060	66.266	1594.885
19+00.00	129.00	27.00	238.941	64.197	1769.629
19+50.00	119.00	32.00	229.722	68.676	1930.675
20+00.00	111.00	39.00	212.634	82.182	2061.127
20+50.00	109.00	40.00	202.866	90.592	2173.401
21+00.00	99.00	45.00	191.986	98.324	2267.063
21+50.00	86.00	50.00	171.297	110.414	2327.946
22+00.00	78.00	40.00	152.100	104.746	2375.300

Widening & HMA Overlay - Obliteration 2
(Sta 50+00.00 to 61+07.75)

STATION	END AREA (SF)		ADJUSTED VOLUME (CY)		
	EXC	FILL	EXC	FILL	MASS
50+00.00	0.00	0.00	0.000	0.000	0.000
50+50.00	0.00	0.00	0.000	0.000	0.000
51+00.00	0.00	5.00	0.000	6.223	-6.223
51+50.00	6.00	4.00	5.931	11.302	-11.594
52+00.00	18.00	7.00	22.544	13.522	-2.572
52+50.00	20.00	39.00	35.324	53.194	-20.442
53+00.00	21.00	48.00	38.130	100.053	-82.365
53+50.00	23.00	47.00	41.107	109.729	-150.987
54+00.00	27.00	43.00	47.032	104.652	-208.607
54+50.00	28.00	46.00	50.817	103.882	-261.672
55+00.00	25.00	51.00	48.482	112.842	-326.032
55+50.00	25.00	41.00	46.312	106.667	-386.387
56+00.00	25.00	45.00	46.475	99.560	-439.472
56+50.00	26.00	41.00	47.232	98.981	-491.221
57+00.00	23.00	42.00	45.696	95.851	-541.376
57+50.00	18.00	49.00	38.646	106.091	-608.821
58+00.00	17.00	48.00	32.518	112.576	-688.879
58+50.00	19.00	46.00	33.062	108.111	-763.928
59+00.00	20.00	25.00	35.618	81.344	-809.654
59+50.00	42.00	9.00	56.523	39.325	-792.456
60+00.00	0.00	0.00	38.458	10.659	-764.657
60+50.00	0.00	0.00	0.000	0.000	-764.657
61+00.00	0.00	0.00	0.000	0.000	-764.657
61+07.75	0.00	0.00	0.000	0.000	-764.657



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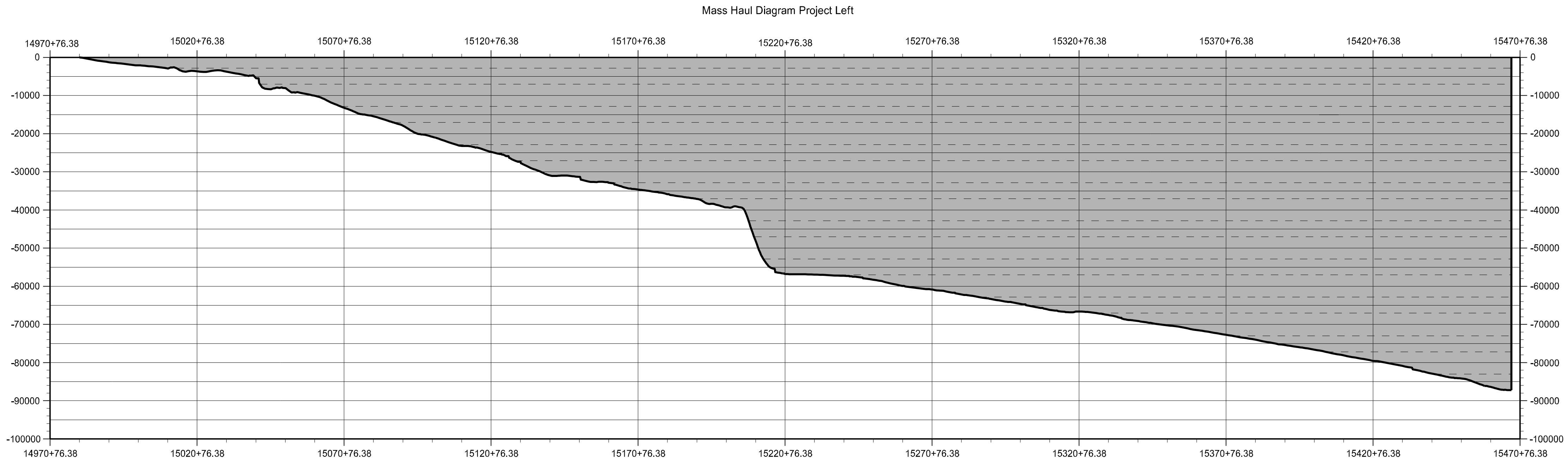
ND 1804 - Jct Tioga Rd to Red Mike Area

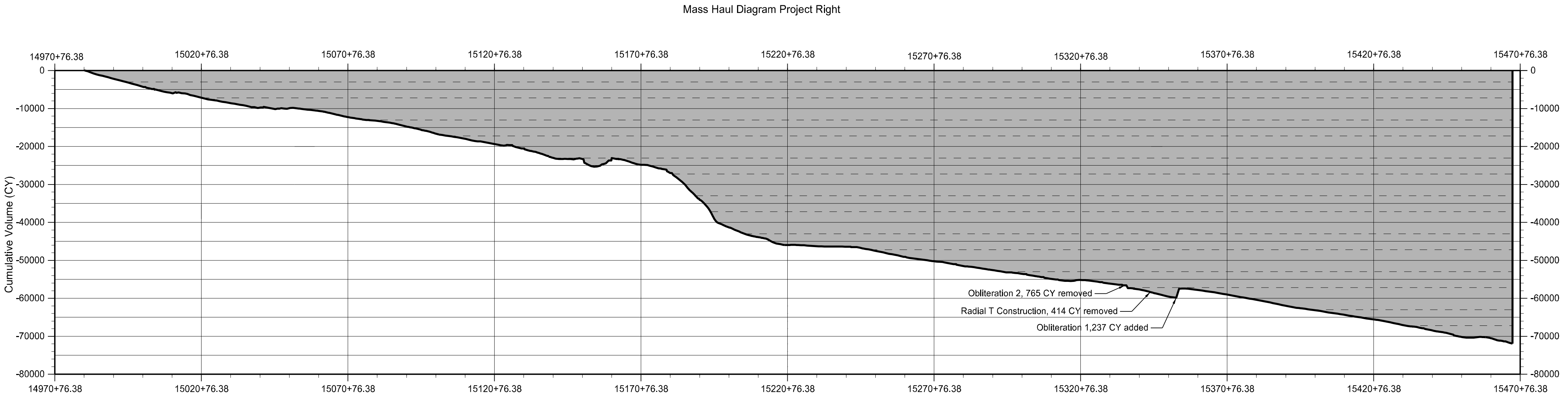
Average End Area Tables

Widening, HMA Overlay, & Radial T Construction Project Right & Radial T


Mass Haul Diagram Project Left

ND 1804 - Project Left

EMBANKMENT = 104,400.20
EXCAVATION = 13,572.49
BORROW = 90,827.71
AVERAGE HAUL= 26.22 STA


Mass Haul Diagram Project Right

ND 1804 - Project Right

EMBANKMENT = 86,143.28
EXCAVATION = 14,377.46
BORROW = 71,765.82
AVERAGE HAUL= 36.82 STA

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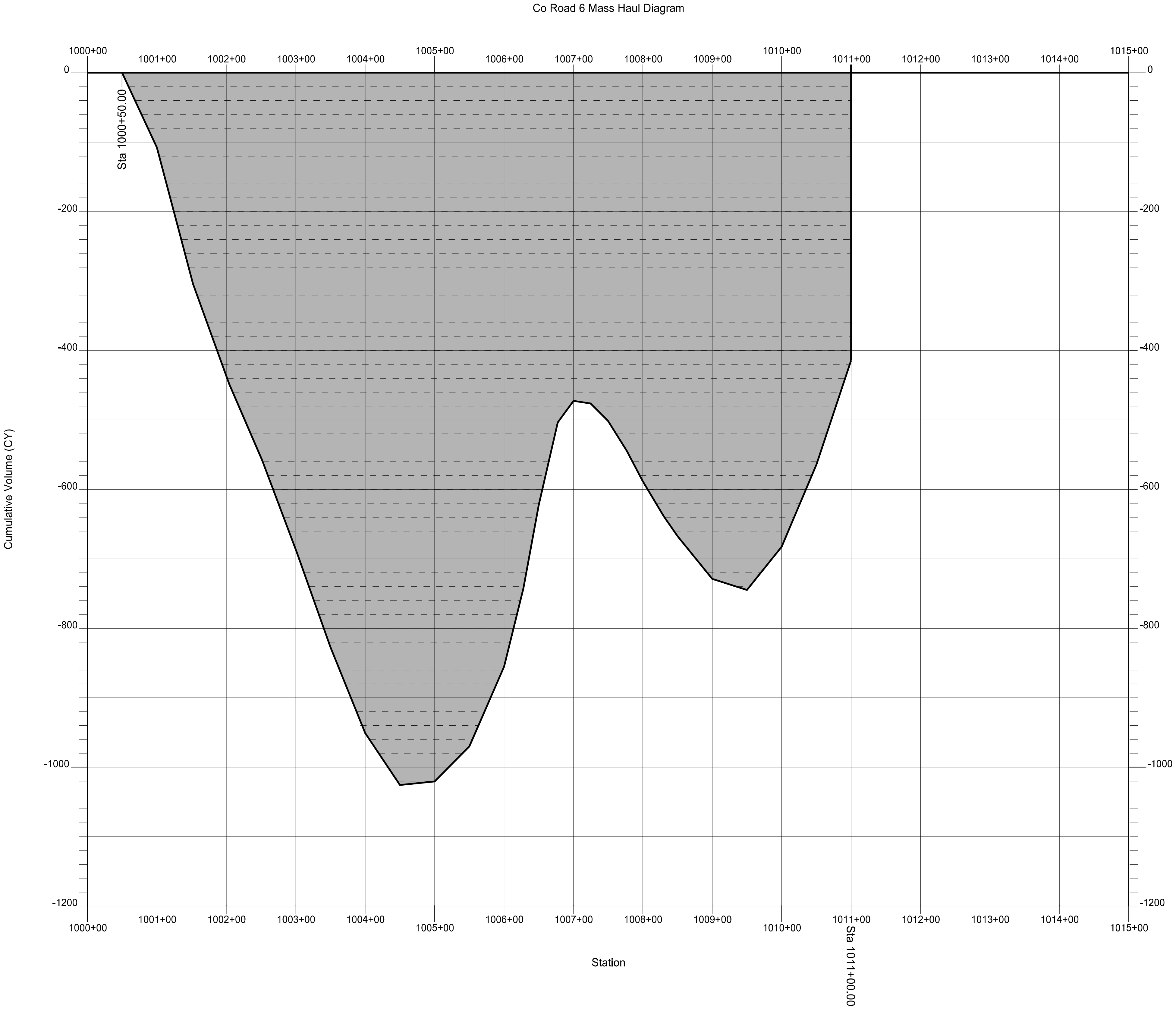
ND 1804 - Jct Tioga Rd to Red Mike Area

Mass Haul Diagrams

Mainline Project Left & Project Right

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SOIB-7-804(061)283	11	11



CR 6 - Radial T

EMBANKMENT =	3,292.00
EXCAVATION =	2,878.00
AVERAGE HAUL=	0.76 STA

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ND 1804 - Jct Tioga Rd to Red Mike Area

Mass Haul Diagrams

Co Road 6

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SOIB-7-804(061)283	20	1

Curve SCL1804_11

PI Station 15069+26.63 N 445,333.8907 E 1,360,367.7379
Delta = 19° 11' 53.83" (RT)
Degree = 1° 29' 59.84"
Tangent = 646.0171
Length = 1,279.9231
Radius = 3,819.8300
External = 54.2427
Long Chord = 1,273.9439
M = 53.4832
PC Station 15062+80.62 N 445,311.7160 E 1,361,013.3744
PT Station 15075+60.54 N 445,567.1423 E 1,359,765.2996
C.C. N 449,129.2951 E 1,361,144.4909
Back = N 88° 01' 58.52" W
Ahead = N 68° 50' 04.69" W
Chord Bearing = N 78° 26' 01.61" W

Station		Left Slope
15060+34.48	PC - 246.14'	-2.1
15061+39.97	PC - 140.65'	0.0
15062+45.46	PC - 35.16'	2.1
15062+80.62	PC	
15063+50.95	PC + 70.33'	4.2
15074+90.21	PT - 70.33'	4.2
15075+60.54	PT	
15075+95.70	PT + 35.16'	2.1
15077+01.19	PT + 140.65'	0.0
15078+06.68	PT + 246.14'	-2.1

Station		Right Slope
15060+34.48	PC - 246.14'	-2.1
15061+39.97	PC - 140.65'	-2.1
15062+45.46	PC - 35.16'	-2.1
15062+80.62	PC	
15063+50.95	PC + 70.33'	-4.2
15074+90.21	PT - 70.33'	-4.2
15075+60.54	PT	
15075+95.70	PT + 35.16'	-2.1
15077+01.19	PT + 140.65'	-2.1
15078+06.68	PT + 246.14'	-2.1

Curve SCL1804_14

PI Station 15093+74.10 N 446,221.9469 E 1,358,074.0808
Delta = 12° 09' 29.99" (LT)
Degree = 0° 59' 59.95"
Tangent = 610.2158
Length = 1,215.8485
Radius = 5,729.6500
External = 32.4028
Long Chord = 1,213.5685
M = 32.2206
PC Station 15087+63.88 N 446,001.6218 E 1,358,643.1328
PT Station 15099+79.73 N 446,317.4796 E 1,357,471.3895
C.C. N 440,658.4812 E 1,356,574.3803
Back = N 68° 50' 04.69" W
Ahead = N 80° 59' 34.68" W
Chord Bearing = N 74° 54' 49.69" W

Station		Left Slope
15085+57.92	PC - 205.96'	-2.1
15086+63.41	PC - 100.47'	-2.1
15087+63.88	PC	
15087+68.90	PC + 5.02'	-2.1
15088+14.11	PC + 50.23'	-3.0
15099+29.50	PT - 50.23'	-3.0
15099+74.71	PT - 5.02'	-2.1
15099+79.73	PT	
15100+80.20	PT + 100.47'	-2.1
15101+85.69	PT + 205.96'	-2.1

Station		Right Slope
15085+57.92	PC - 205.96'	-2.1
15086+63.41	PC - 100.47'	0.0
15087+63.88	PC	
15087+68.90	PC + 5.02'	2.1
15088+14.11	PC + 50.23'	3.0
15099+29.50	PT - 50.23'	3.0
15099+74.71	PT - 5.02'	2.1
15099+79.73	PT	
15100+80.20	PT + 100.47'	0.0
15101+85.69	PT + 205.96'	-2.1

Curve SCL1804_17

PI Station 15138+80.08 N 446,928.1023 E 1,353,619.1301
Delta = 7° 01' 45.71" (LT)
Degree = 0° 59' 59.95"
Tangent = 351.9141
Length = 702.9452
Radius = 5,729.6500
External = 10.7971
Long Chord = 702.5045
M = 10.7768
PC Station 15135+28.17 N 446,873.0081 E 1,353,966.7049
PT Station 15142+31.11 N 446,940.2468 E 1,353,267.4256
C.C. N 441,214.0096 E 1,353,069.6956
Back = N 80° 59' 34.68" W
Ahead = N 88° 01' 20.39" W
Chord Bearing = N 84° 30' 27.54" W

Station		Left Slope
15133+22.21	PC - 205.96'	-2.1
15134+27.70	PC - 100.47'	-2.1
15135+28.17	PC	
15135+33.19	PC + 5.02'	-2.1
15135+78.40	PC + 50.23'	-3.0
15141+80.88	PT - 50.23'	-3.0
15142+26.09	PT - 5.02'	-2.1
15142+31.11	PT	
15143+31.58	PT + 100.47'	-2.1
15144+37.07	PT + 205.96'	-2.1

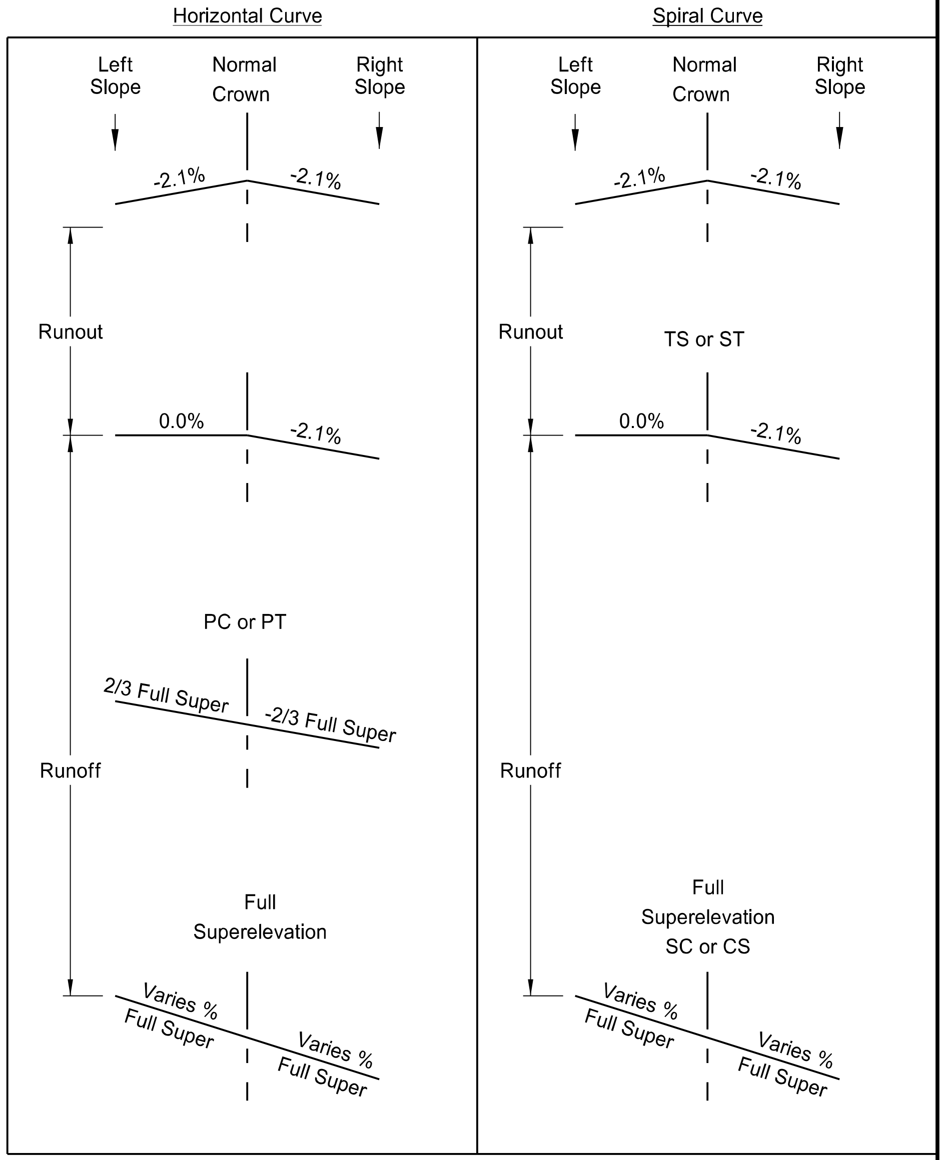
Station		Right Slope
15133+22.21	PC - 205.96'	-2.1
15134+27.70	PC - 100.47'	0.0
15135+28.17	PC	
15135+33.19	PC + 5.02'	2.1
15135+78.40	PC + 50.23'	3.0
15141+80.88	PT - 50.23'	3.0
15142+26.09	PT - 5.02'	2.1
15142+31.11	PT	
15143+31.58	PT + 100.47'	-2.1
15144+37.07	PT + 205.96'	-2.1

Curve SCL1804_20

PI Station 15192+58.40 N 447,113.7382 E 1,348,243.1364
Delta = 8° 38' 50.14" (LT)
Degree = 1° 29' 59.84"
Tangent = 288.7988
Length = 576.5008
Radius = 3,819.8300
External = 10.9018
Long Chord = 575.9538
M = 10.8708
PC Station 15189+69.60 N 447,103.7717 E 1,348,531.7632
PT Station 15195+46.10 N 447,080.1960 E 1,347,956.2921
C.C. N 443,286.2170 E 1,348,399.9410
Back = N 88° 01' 20.39" W
Ahead = S 83° 19' 49.47" W
Chord Bearing = S 87° 39' 14.54" W

Station		Left Slope
15187+23.46	PC - 246.14'	-2.1
15188+28.95	PC - 140.65'	-2.1
15189+34.44	PC - 35.16'	-2.1
15189+69.60	PC	
15190+39.93	PC + 70.33'	-4.2
15194+75.77	PT - 70.33'	-4.2
15195+46.10	PT	
15195+81.26	PT + 35.16'	-2.1
15196+86.75	PT + 140.65'	-2.1
15197+92.24	PT + 246.14'	-2.1

Station		Right Slope
15187+23.46	PC - 246.14'	-2.1
15188+28.95	PC - 140.65'	0.0
15189+34.44	PC - 35.16'	2.1
15189+69.60	PC	
15190+39.93	PC + 70.33'	4.2
15194+75.77	PT - 70.33'	4.2
15195+46.10	PT	
15195+81.26	PT + 35.16'	2.1
15196+86.75	PT + 140.65'	0.0
15197+92.24	PT + 246.14'	-2.1



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ND 1804 - Jct Tioga Rd to Red Mike Area

Superelevation Detail

Note: Calculations based on AASHTO method five. A design speed of 65 mph and maximum superelevation of 6% were used.

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SOIB-7-804(061)283	20	2

Curve SCL1804_23

PI Station 15204+25.91 N 446,978.0116 E 1,347,082.4349
Delta = 15° 21' 43.43" (RT)
Degree = 1° 29' 59.84"
Tangent = 515.1736
Length = 1,024.1674
Radius = 3,819.8300
External = 34.5837
Long Chord = 1,021.1025
M = 34.2734
PC Station 15199+10.74 N 447,037.8457 E 1,347,594.1220
PT Station 15209+34.91 N 447,055.8702 E 1,346,573.1787
C.C. N 450,831.8247 E 1,347,150.4731
Back = S 83° 19' 49.47" W
Ahead = N 81° 18' 27.10" W
Chord Bearing = N 88° 59' 18.82" W

Station		Left Slope
15196+64.60	PC - 246.14'	-2.1
15197+70.09	PC - 140.65'	0.0
15198+75.58	PC - 35.16'	2.1
15199+10.74	PC	
15199+81.07	PC + 70.33'	4.2
15208+64.58	PT - 70.33'	4.2
15209+34.91	PT	
15209+70.07	PT + 35.16'	2.1
15210+75.56	PT + 140.65'	0.0
15211+81.05	PT + 246.14'	-2.1

Station		Right Slope
15196+64.60	PC - 246.14'	-2.1
15197+70.09	PC - 140.65'	-2.1
15198+75.58	PC - 35.16'	-2.1
15199+10.74	PC	
15199+81.07	PC + 70.33'	-4.2
15208+64.58	PT - 70.33'	-4.2
15209+34.91	PT	
15209+70.07	PT + 35.16'	-2.1
15210+75.56	PT + 140.65'	-2.1
15211+81.05	PT + 246.14'	-2.1

Curve SCL1804_26

PI Station 15217+59.40 N 447,180.4770 E 1,345,758.1536
Delta = 6° 35' 19.42" (LT)
Degree = 0° 59' 59.95"
Tangent = 329.8041
Length = 658.8811
Radius = 5,729.6500
External = 9.4841
Long Chord = 658.5182
M = 9.4684
PC Station 15214+29.60 N 447,130.6334 E 1,346,084.1695
PT Station 15220+88.48 N 447,192.5837 E 1,345,428.5718
C.C. N 441,466.7955 E 1,345,218.2422
Back = N 81° 18' 27.10" W
Ahead = N 87° 53' 46.53" W
Chord Bearing = N 84° 36' 06.82" W

Station		Left Slope
15212+23.64	PC - 205.96'	-2.1
15213+29.13	PC - 100.47'	-2.1
15214+29.60	PC	
15214+34.62	PC + 5.02'	-2.1
15214+79.83	PC + 50.23'	-3.0
15220+38.46	PT - 50.23'	-3.0
15220+83.46	PT - 5.02'	-2.1
15220+88.48	PT	
15221+88.95	PT + 100.47'	-2.1
15222+94.44	PT + 205.96'	-2.1

Station		Right Slope
15212+23.64	PC - 205.96'	-2.1
15213+29.13	PC - 100.47'	0.0
15214+29.60	PC	
15214+34.62	PC + 5.02'	2.1
15214+79.83	PC + 50.23'	3.0
15220+38.46	PT - 50.23'	3.0
15220+83.46	PT - 5.02'	2.1
15220+88.48	PT	
15221+88.95	PT + 100.47'	0.0
15222+94.44	PT + 205.96'	-2.1

Spiral SCL1804_37 / Curve SCL1804_38 / Spiral SCL1804_39

Simple Curve
TS Station 15332+50.22
SC Station 15337+50.22
PI Station 15347+56.23
Delta = 70° 09' 07.01" (LT)
Degree = 03° 59' 57.03"
Tangent = 1,006.0141
Length = 1,754.1605
Radius = 1,432.6900
External = 317.9285
Back = S 82° 03' 51.65" W
Ahead = S 11° 54' 44.64" W
Chord Bearing = S 46° 59' 18.14" W
CS Station 15355+04.38
ST Station 15356+71.53
Existing Superelevation =
Proposed Superelevation = 6.0%

Total Combination
PI Station 15349+43.64
Delta = 90° 08' 52.15" (LT)
Length = 500.0000 (Spiral)
External = 317.9285
Back = S 82° 03' 51.65" W
Ahead = S 11° 54' 44.64" W
Chord Bearing = S 46° 59' 18.14" W

	Station		Left Slope
	15330+75.22	SC - 675.00'	-2.1
TS	15332+50.22	SC - 500.00'	-2.1
	15336+25.22	SC - 125.00'	-2.1
	15337+50.22	SC	-6.0
	15355+04.38	CS	-6.0
	15356+29.38	CS + 125.00'	-2.1
ST	15360+04.38	CS + 500.00'	-2.1
	15361+79.38	CS + 675.00'	-2.1

	Station		Right Slope
	15330+75.22	SC - 675.00'	-2.1
TS	15332+50.22	SC - 500.00'	0.0
	15336+25.22	SC - 125.00'	2.1
	15337+50.22	SC	6.0
	15355+04.38	CS	6.0
	15356+29.38	CS + 125.00'	2.1
ST	15360+04.38	CS + 500.00'	0.0
	15361+79.38	CS + 675.00'	-2.1

Spiral SCL1804_48 / Curve SCL1804_49 / Spiral SCL1804_50

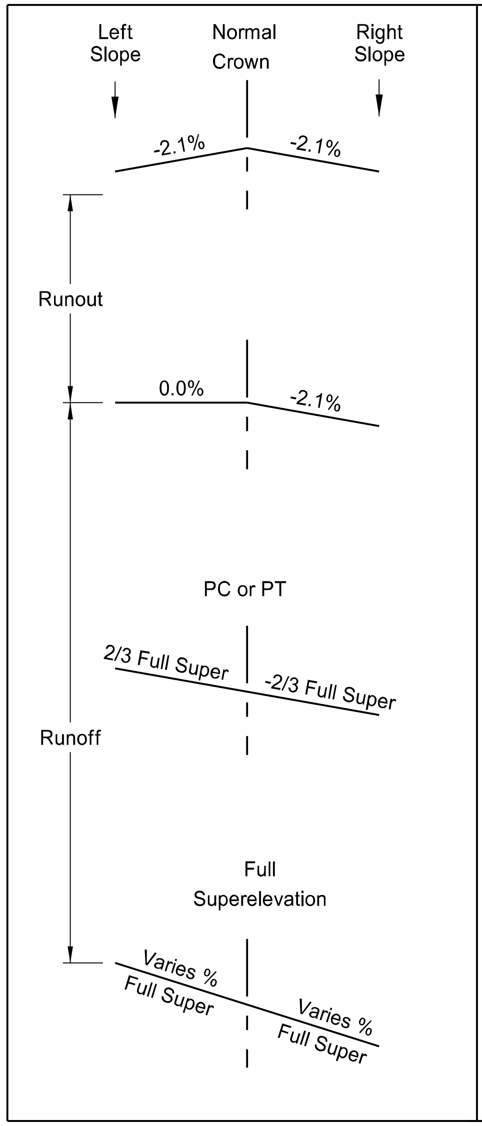
Simple Curve
TS Station 15445+01.03
SC Station 15450+01.03
PI Station 15460+14.15
Delta = 70° 31' 52.71" (LT)
Degree = 03° 59' 57.03"
Tangent = 1,013.1122
Length = 1,763.6466
Radius = 1,432.6900
External = 322.0171
Back = S 11° 54' 52.18" W
Ahead = S 82° 26' 44.89" W
Chord Bearing = S 47° 10' 48.53" W
CS Station 15467+64.68
ST Station 15472+64.68
Existing Superelevation =
Proposed Superelevation = 6.0%

Total Combination
PI Station 15462+04.04
Delta = 90° 31' 37.85" (RT)
Length = 500.0000 (Spiral)
External = 322.0171
Back = S 11° 54' 52.18" W
Ahead = S 82° 26' 44.89" W
Chord Bearing = S 47° 10' 48.53" W

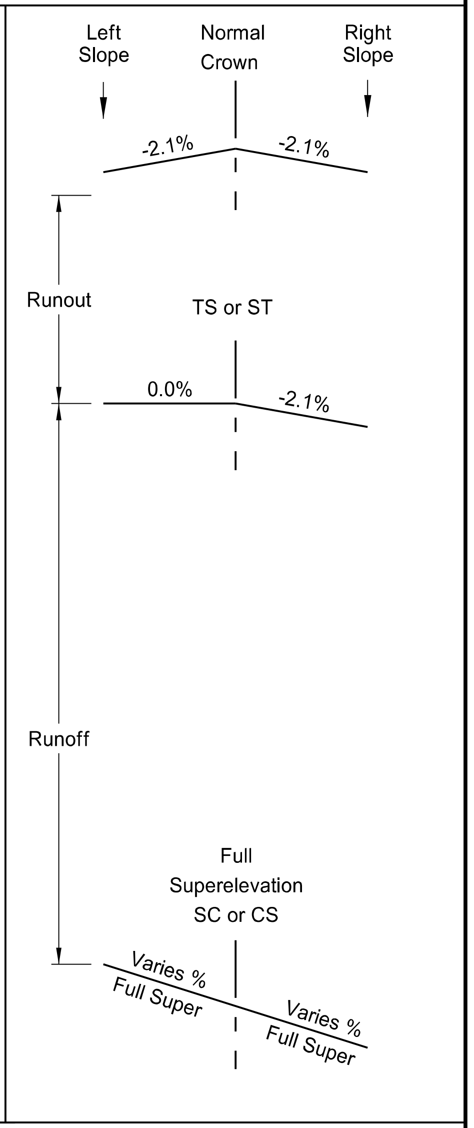
	Station		Left Slope
	15443+26.03	SC - 675.00'	-2.1
TS	15445+01.03	SC - 500.00'	0.0
	15448+76.03	SC - 125.00'	2.1
	15450+01.03	SC	6.0
	15467+64.68	CS	6.0
	15468+89.68	CS + 125.00'	2.1
ST	15472+64.68	CS + 500.00'	0.0
	15474+39.68	CS + 675.00'	-2.1

	Station		Right Slope
	15443+26.03	SC - 675.00'	-2.1
TS	15445+01.03	SC - 500.00'	-2.1
	15448+76.03	SC - 125.00'	-2.1
	15450+01.03	SC	-6.0
	15467+64.68	CS	-6.0
	15468+89.68	CS + 125.00'	-2.1
ST	15472+64.68	CS + 500.00'	-2.1
	15474+39.68	CS + 675.00'	-2.1

Horizontal Curve



Spiral Curve



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ND 1804 - Jct Tioga Rd to Red Mike Area

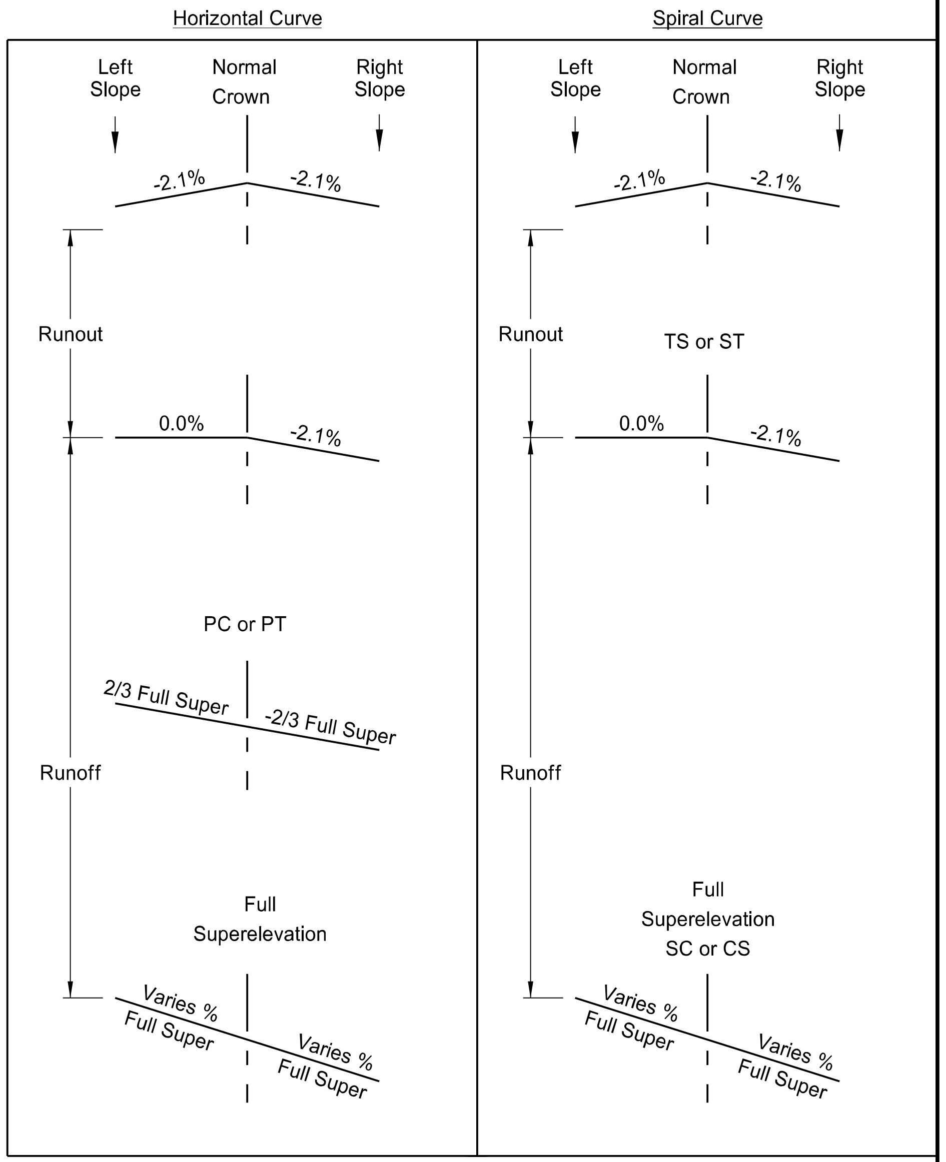
Superelevation Detail

Curve PR54ST_3

PI Station 1004+78.34 N 447,654.4249 E 1,332,768.9215
Delta = 48° 50' 25.27" (LT)
Degree = 11° 27' 32.96"
Tangent = 227.0224
Length = 426.2125
Radius = 500.0000
External = 49.1258
Long Chord = 413.4251
M = 44.7309
PC Station 1002+51.32 N 447,478.1216 E 1,332,911.9471
PT Station 1006+77.53 N 447,662.7798 E 1,332,542.0529
C.C. N 447,163.1185 E 1,332,523.6521
Back = N 39° 03' 02.12" W
Ahead = N 87° 53' 27.39" W
Chord Bearing = N 63° 28' 14.75" W
Existing Superelevation = NC
Proposed Superelevation = 2.4%

Station		Left Slope
1000+99.87	PC - 151.45'	-2.1
1001+52.01	PC - 99.31'	0.0
1002+04.15	PC - 47.17'	2.1
1002+51.32	PC	
1003+00.98	PC + 49.66'	6.0
1006+27.87	PT - 49.66'	6.0
1006+77.53	PT	
1007+24.70	PT + 47.17'	2.1
1007+76.84	PT + 99.31'	0.0
1008+28.98	PT + 151.45'	-2.1

Station		Right Slope
1000+99.87	PC - 151.45'	-2.1
1001+52.01	PC - 99.31'	-2.1
1002+04.15	PC - 47.17'	-2.1
1002+51.32	PC	
1003+00.98	PC + 49.66'	-6.0
1006+27.87	PT - 49.66'	-6.0
1006+77.53	PT	
1007+24.70	PT + 47.17'	-2.1
1007+76.84	PT + 99.31'	-2.1
1008+28.98	PT + 151.45'	-2.1



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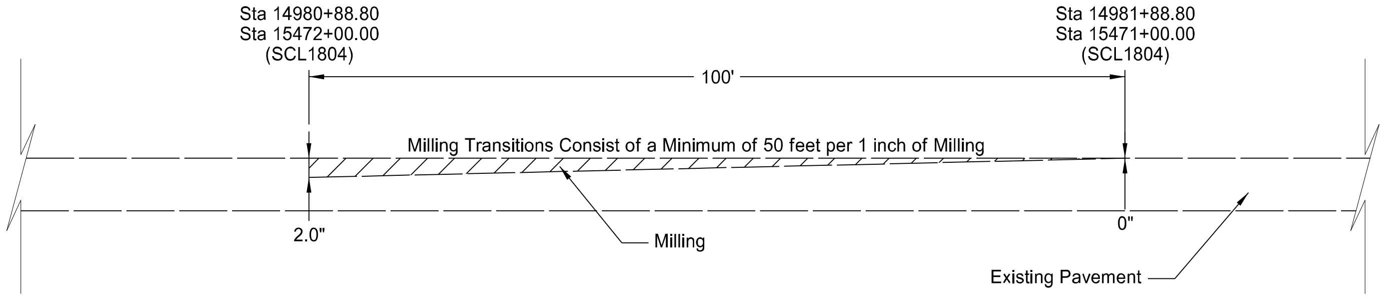
ND 1804 - Jct Tioga Rd to Red Mike Area

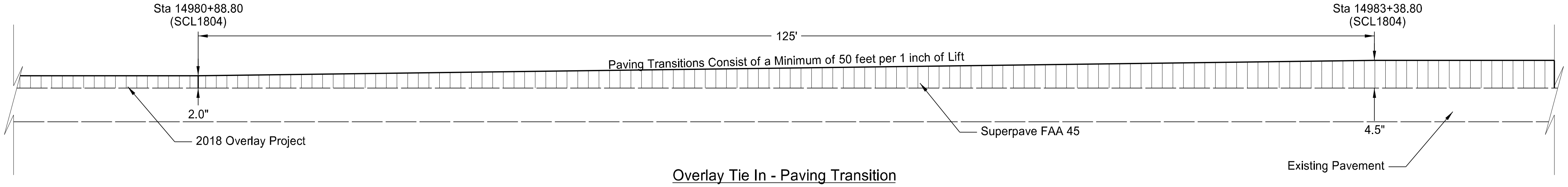
Superelevation Detail

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SOIB-7-804(061)283	20	4

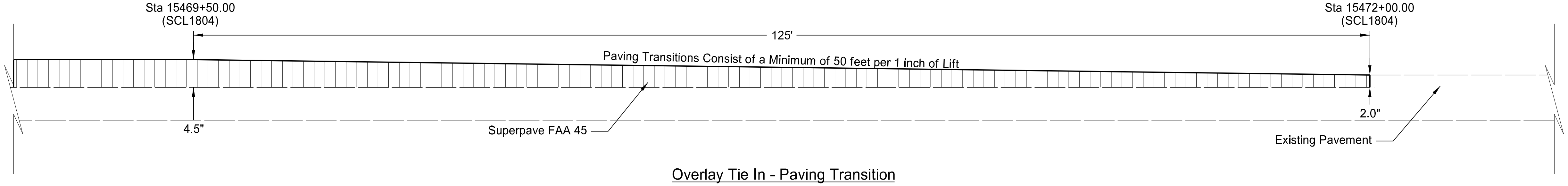
SPEC	CODE	BID ITEM	QTY	UNIT
411	0105	MILLING PAVEMENT SURFACE		
		Sta 14980+88.80 to Sta 14981+88.80	340	SY
		Sta 15741+00.00 to Sta 15472+00.00	311	SY



Overlay Tie In - Milling Transition



Overlay Tie In - Paving Transition



Overlay Tie In - Paving Transition

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ND 1804 - Jct Tioga Rd to Red Mike Area

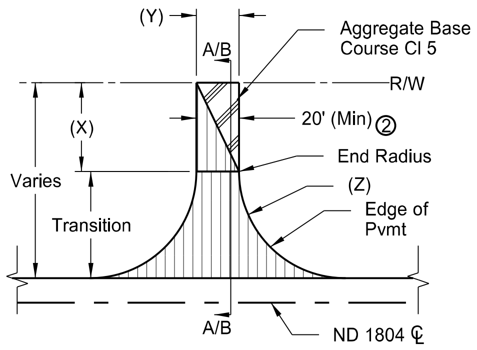
Project Tie-In Transitions

Note: Drawing not to scale

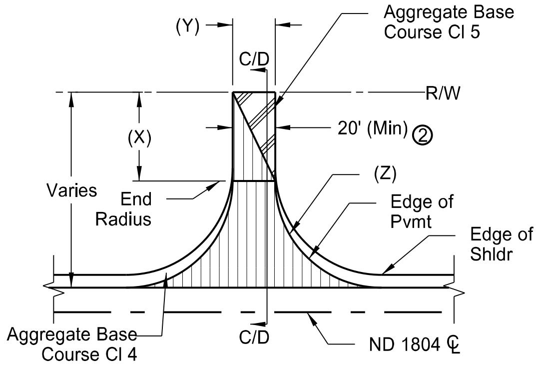
STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SOIB-7-804(061)283	20	5

APPROACH DETAILS

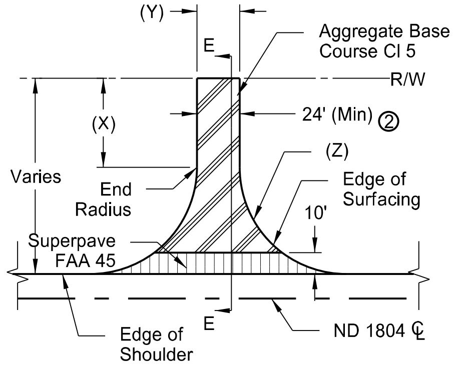
Station	Offset	Approach Type	Tie-Out Length (X) (LF)	Roadway Width (Y) (LF)	Radius (Z) (LF)	Full Depth Superpave FAA 45 (IN)	Full Depth Aggregate Base Course Cl 5 (IN)	Description
WIDENING & HMA OVERLAY								
15004+67	Rt	2	64.4	12	40	6.0	10.5	Private Drive - Paved
15012+06	Lt	3	1.6	24	40	6.0	18.0	Field Drive
15012+11	Rt	4	23.0	24	40	6.0	10.5	Field Drive
15025+16	Rt	2	21.5	24	40	6.0	10.5	Private Drive - Paved
15038+45	Rt	4	3.6	24	40	6.0	10.5	Field Drive
15038+93	Lt	1	2.0	24	40	6.0	18.0	Private Drive - Paved
15047+01	Lt	1	2.0	24	40	6.0	18.0	Field Drive
15047+02	Rt	4	13.6	32	40	6.0	10.5	LVPR - Paved
15049+88	Lt	1	26.3	24	40	6.0	18.0	Field Drive
15054+10	Lt	3	3.2	24	40	6.0	18.0	Field Drive
15077+18	Rt	3	9.6	24	40	6.0	18.0	Field Drive
15077+26	Lt	2	2.0	24	40	6.0	10.5	Private Drive - Paved
15096+91	Lt	3	22.4	24	40	6.0	18.0	Field Drive
15096+91	Rt	1	2.0	24	40	6.0	10.5	Private Drive - Paved
15115+36	Lt	3	27.2	24	40	6.0	18.0	Field Drive
15115+41	Rt	2	2.0	24	40	6.0	10.5	Private Drive - Paved
15124+43	Lt	1	66.8	24	40	6.0	18.0	Private Drive - Paved
15124+45	Rt	4	0.0	24	40	6.0	10.5	Field Drive
15139+27	Rt	1	41.0	18	40	6.0	10.5	Field Drive
15149+14	Rt	2	2.0	24	40	6.0	12.5	Field Drive
15151+53	Lt	2	116.6	24	50	6.0	12.5	LVPR - Gravel
15151+53	Rt	2	73.3	24	48	6.0	12.5	Field Drive
15157+83	Lt	1	0.0	24	40	6.0	12.5	Private Drive - Paved
15162+70	Lt	4	41.4	24	40	6.0	12.5	Field Drive
15163+21	Rt	1	2.0	24	40	6.0	18.0	Private Drive - Paved
15168+78	Lt	4	4.7	24	40	6.0	12.5	Field Drive
15171+60	Rt	1	2.0	40	40	6.0	18.0	Private Drive - Paved
15177+92	Lt	4	0.0	24	40	6.0	12.5	Private Drive - Paved
15177+94	Rt	1	26.5	28	40	6.0	18.0	LVPR - Paved
15179+79	Rt	3	61.2	24	40	6.0	18.0	Field Drive
15190+88	Rt	1	263.6	24	40	6.0	18.0	Private Drive - Paved
15201+26	Lt	1	2.0	24	40	6.0	12.5	Field Drive
15217+69	Lt	4	146.3	24	40	6.0	12.5	Field Drive
15221+17	Rt	1	2.0	28	40	6.0	18.0	Private Drive - Paved
15243+90	Rt	1	2.0	30	40	6.0	18.0	Private Drive - Paved
15243+93	Lt	2	23.0	24	50	6.0	12.5	LVPR - Paved
15247+55	Lt	4	41.3	24	40	6.0	12.5	Field Drive
15270+34	Lt	2	2.0	24	40	6.0	12.5	Private Drive - Paved
15272+89	Rt	2	2.0	24	40	6.0	12.5	LVPR - Paved
15282+94	Lt	4	16.5	24	40	6.0	12.5	Field Drive
15282+94	Rt	4	0.0	24	40	6.0	12.5	Field Drive
15290+46	Lt	4	14.3	24	40	6.0	12.5	Field Drive
15290+46	Rt	4	0.0	24	40	6.0	12.5	Field Drive
15296+75	Lt	2	4.6	24	40	6.0	12.5	Field Drive
15296+75	Rt	4	0.0	24	40	6.0	12.5	Field Drive
15306+67	Rt	4	0.0	24	40	6.0	12.5	Field Drive
15316+35	Lt	4	6.6	24	40	6.0	12.5	Field Drive
15316+35	Rt	2	2.0	24	40	6.0	12.5	Private Drive - Paved
15322+96	Lt	2	4.4	24	40	6.0	12.5	Private Drive - Paved
15323+07	Rt	2	2.0	24	40	6.0	12.5	Private Drive - Paved
15345+26	Lt	4	12.9	28	40	6.0	12.5	Recovery Approach
15345+26	Rt	1	980.0	28	55-350	6.0	12.5	LVPR - Paved
15396+03	Rt	4	0.0	24	40	6.0	12.5	Field Drive
15396+07	Lt	4	5.6	24	40	6.0	12.5	Field Drive
15422+29	Lt	4	0.0	24	40	6.0	12.5	Field Drive
15434+48	Lt	4	23.1	24	46	6.0	12.5	Field Drive
15434+48	Rt	4	0.0	24	46	6.0	12.5	Field Drive
15448+66	Lt	1	33.8	24	40	6.0	18.0	Private Drive - Paved
15448+73	Rt	4	50.4	24	40	6.0	18.0	Field Drive
15459+71	Lt	1	-	32	55-350	6.0	18.0	LVPR - Paved
15459+73	Rt	4	0.0	32	40	6.0	18.0	Recovery Approach
15468+66	Rt	4	0.0	24	40	6.0	18.0	Field Drive
15468+72	Lt	3	46.9	24	40	6.0	18.0	Field Drive



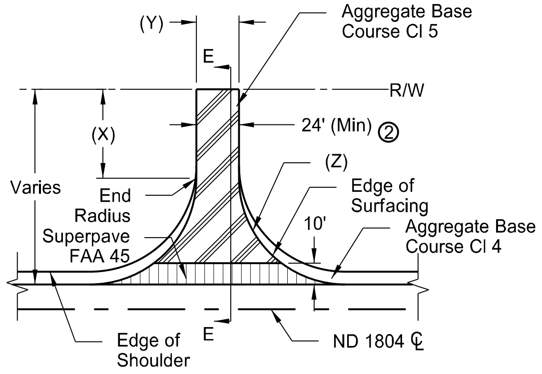
(1) Paved/Gravel Approach



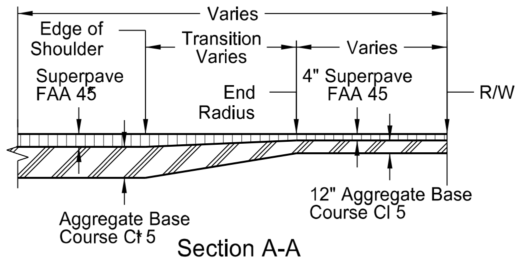
(2) Paved/Gravel Approach w/ Shoulder Aggregate



(3) Field Drive Approach



(4) Field Drive Approach w/ Shoulder Aggregate



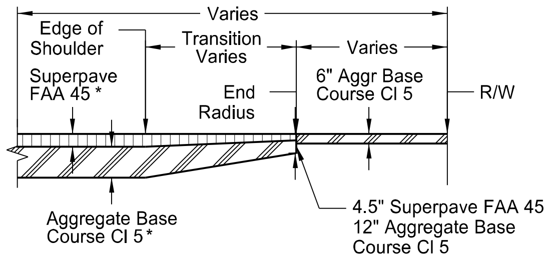
Section A-A
(Not to Scale)

Notes:

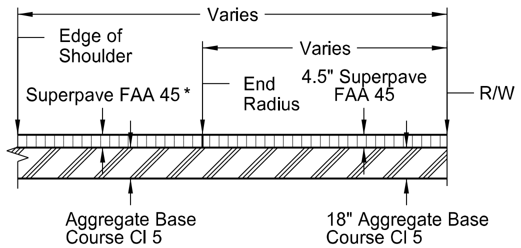
① Refer to Standard Drawing D-203-8, and to Section 200 Cross Sections for grading details.

② Minimum approach width, match existing width

③ Approach slough rate will be 4:1



Section B-B
(Not to Scale)



Section C-C
(Not to Scale)

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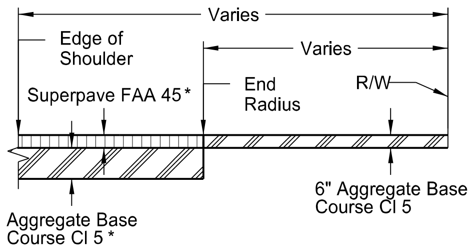
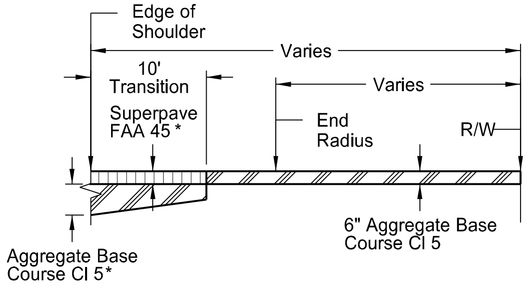


Section D-D
(Not to Scale)

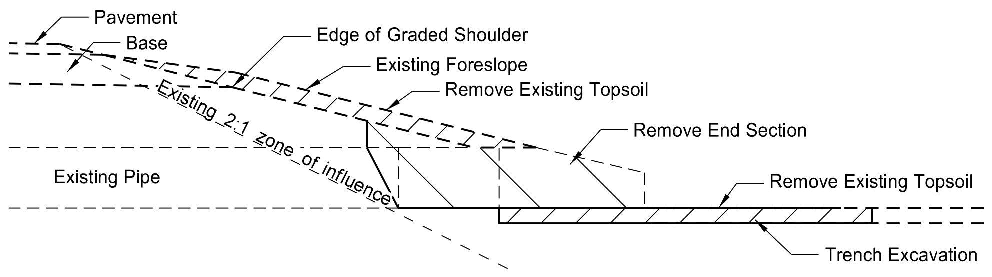


Section E-E
(Not to Scale)

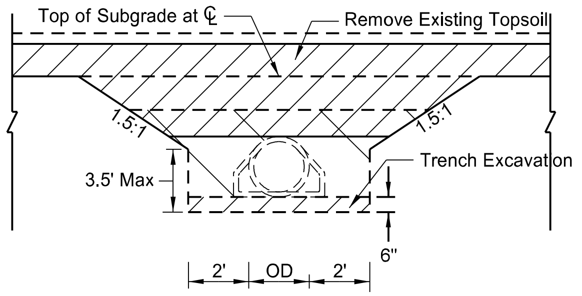
ND 1804 - Jct Tioga Rd to Red Mike Area

Approach Detail

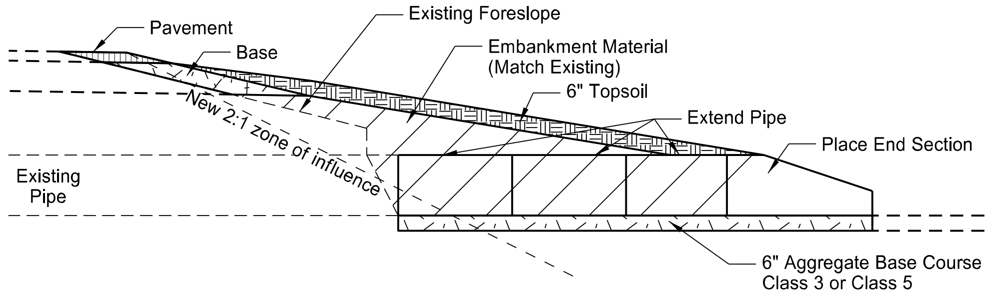
STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SOIB-7-804(061)283	20	6



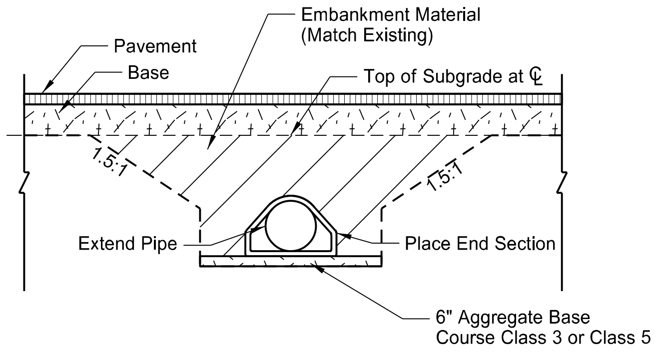
Removal Section
Cross Section View



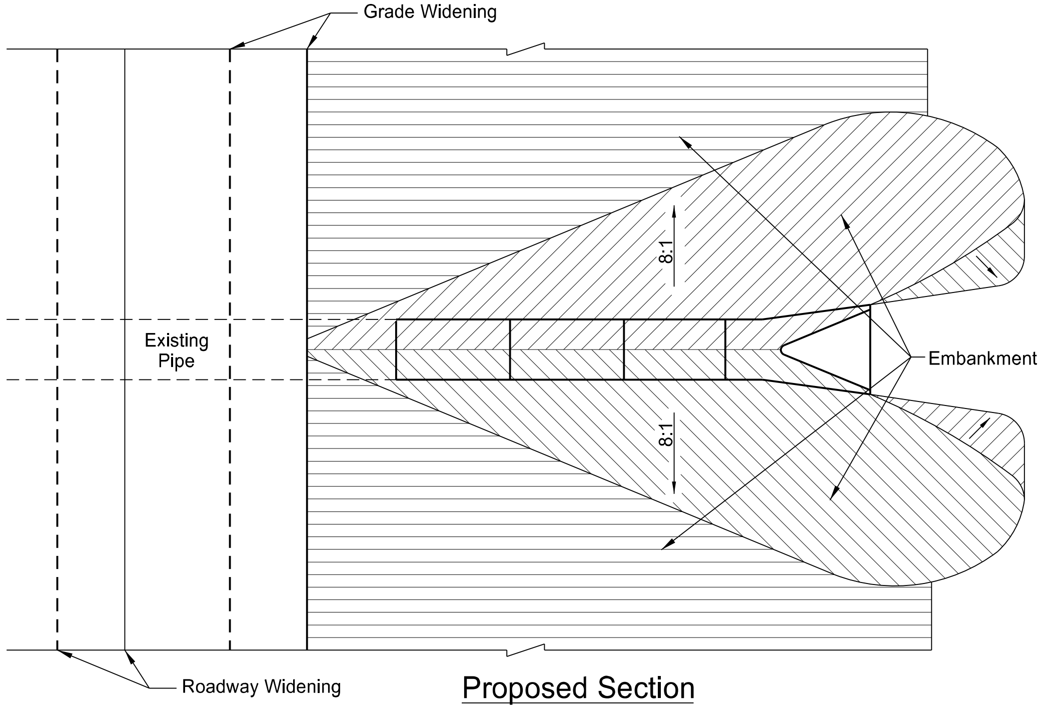
Removal Detail
Side View



Proposed Section
Cross Section View



Backfill Detail
Side View (Topsoil not shown)



Proposed Section
Plan View

Pay Items
1) Pipe*
2) Remove & Relay Pipe - All Types & Sizes (when required)
3) Remove & Reset End Section or new End Section
4) Borrow Excavation (Compaction Control Type A) or
Common Excavation-Type A
5) Topsoil
6) Seeding
7) Mulching

*Included in Pipe Pay Item
1) Pipe
2) Trench excavation
3) Aggregate Base Course Class 3 or Class 5

NOTES:
1. Embankment may be either Borrow Excavation (Compaction Control - Type A) or Common Excavation - Type A.
2. Aggregate may be either Class 3 or Class 5 Aggregate Base Course.

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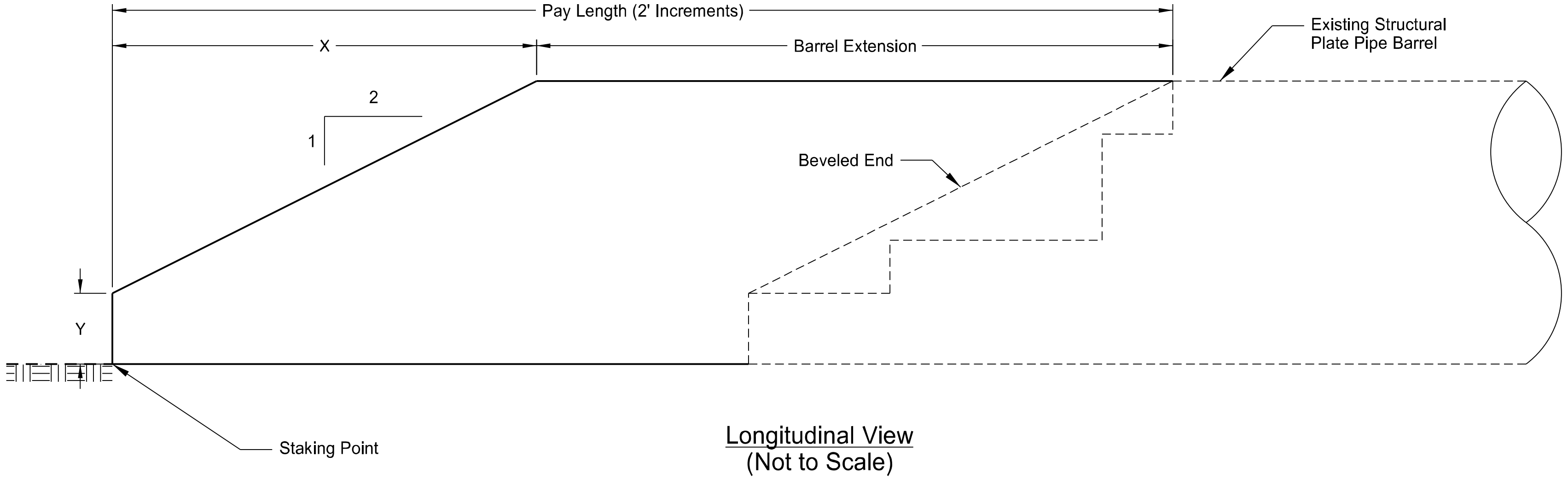
ND 1804 - Jct Tioga Rd to Red Mike Area

Mainline ℄ Pipe Extension Detail

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SOIB-7-804(061)283	20	7

RP	Station	Type of Pipe	Existing Length	Pipe Diameter "D"	Pipe Diameter "D"	Pay Length LF		Dim "X"	Dim "Y"
						LT	Rt		
284.893	15041+81	5% ELLIPTICAL SPP	108'	15'-0"	0.218"	16'	12'	22'-0"	48"



Longitudinal View
(Not to Scale)

Notes:

Do not place backfill until all plates in a ring are complete and all bolts in the structure are tightened to the manufacturer's specifications.

Tighten all bolts in the assembly to the pipe manufacturer's torque specifications.

Match the existing pipe section, gauge thickness and corrugations for the structural plate pipe extension. Remove beveled ends on the existing pipe, install the new pipe sections and re-install or replace the beveled ends as shown.

Include costs for equipment, labor, material, excavation, bedding and backfill in the price bid for the structural plate pipe pay items. Field verify pipe dimensions shown prior to fabrication.

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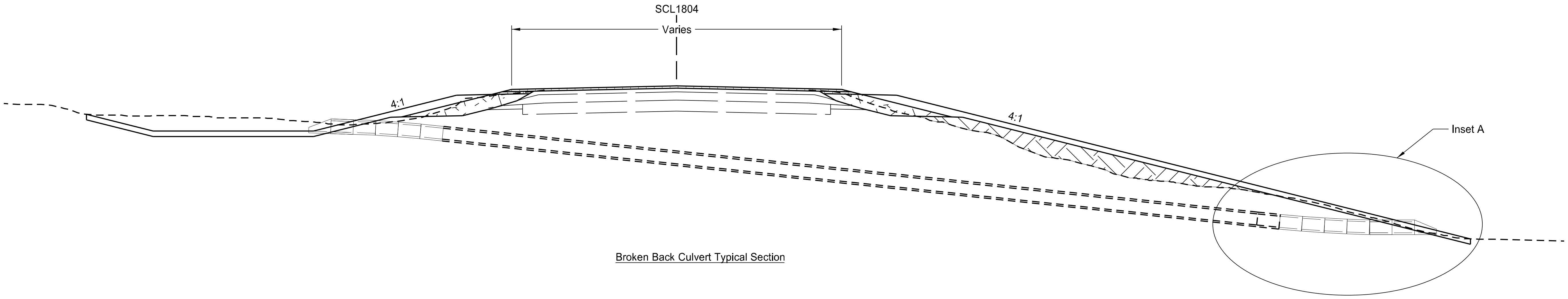
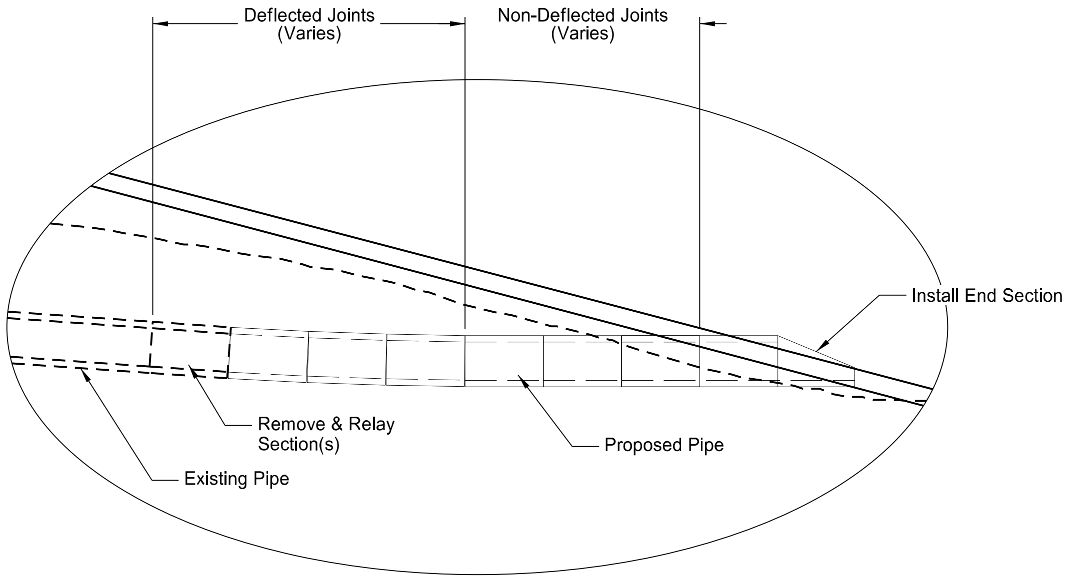
ND 1804 - Jct Tioga Rd to Red Mike Area

Structural Plate Pipe Extension



Broken Back Culvert Typical Section

Broken Back Culvert Details					
Station	Offset	Pipe Diameter (Inch)	Number of Deflected Proposed Joints	Deflection Angle at Each Proposed Joint	Overall Deflection Angle
WIDENING & HMA OVERLAY					
15126+85	Lt	36	2	1°00'00"	2°00'00"
15127+16	Rt	18	2	1°00'00"	2°00'00"
15220+83	Rt	24	3	1°00'00"	3°00'00"



Inset A

Notes:

1. Remove existing end sections (See Section 60)
2. Replace or relay end section (See Section 60)
3. Install pipe sections using a Maximum of 1° of Deflection per joint to obtain the required invert elevation
4. Proposed number of joints to deflect is based on a combination of 6' and 8' pipe segment lengths
5. Drawing not to scale
6. Install mortar and filter fabric on all deflected joints

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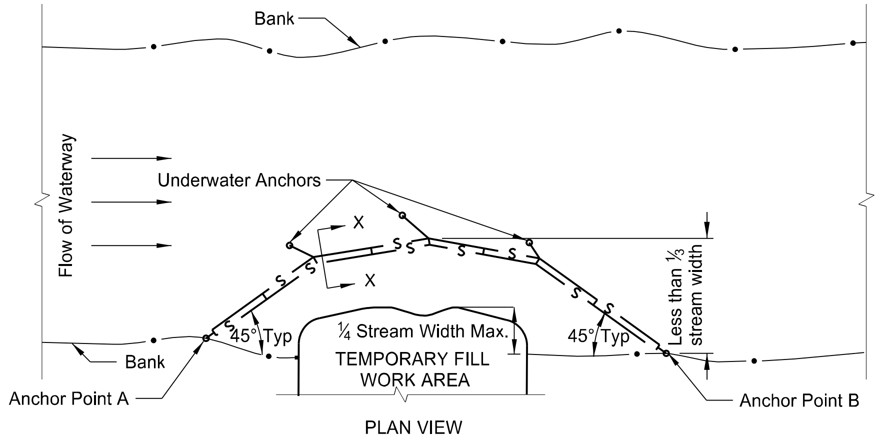
ND 1804 - Jct Tioga Rd to Red Mike Area

Broken Back Culvert Detail

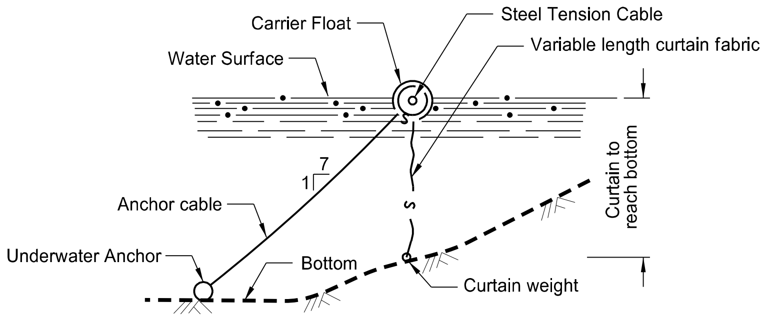
STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SOIB-7-804(061)283	20	9



PLAN VIEW

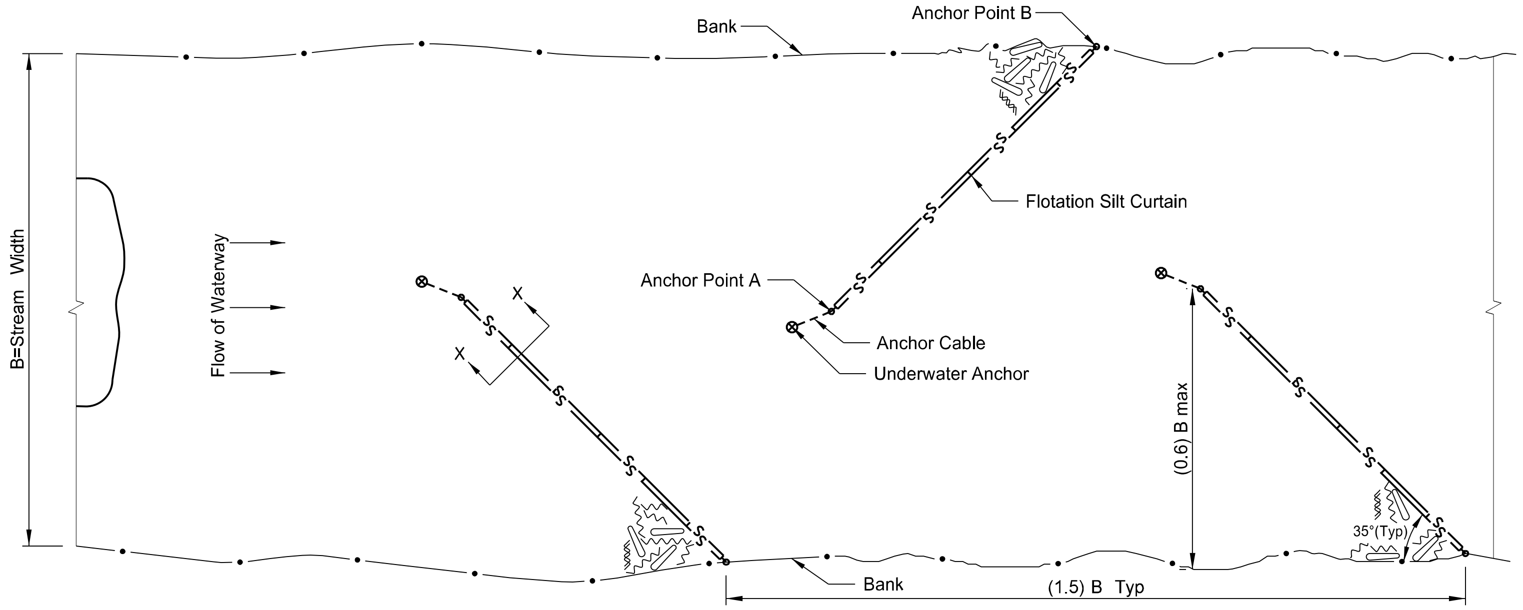
FLOTATION SILT CURTAIN - TYPE WORK AREA

DESIGN GUIDELINES:
When temporary work encroaches less than ¼ of the width of stream.



SECTION X-X
FLOTATION SILT CURTAINS

Note:
Maximum water velocity for moving water = 5 ft/sec



PLAN VIEW

FLOTATION SILT CURTAIN - TYPE HERRING BONE PATTERN

DESIGN GUIDELINES:
When temporary work encroaches more than ⅓ width of the stream
Or where stream width doesn't allow use of Type Moving Water

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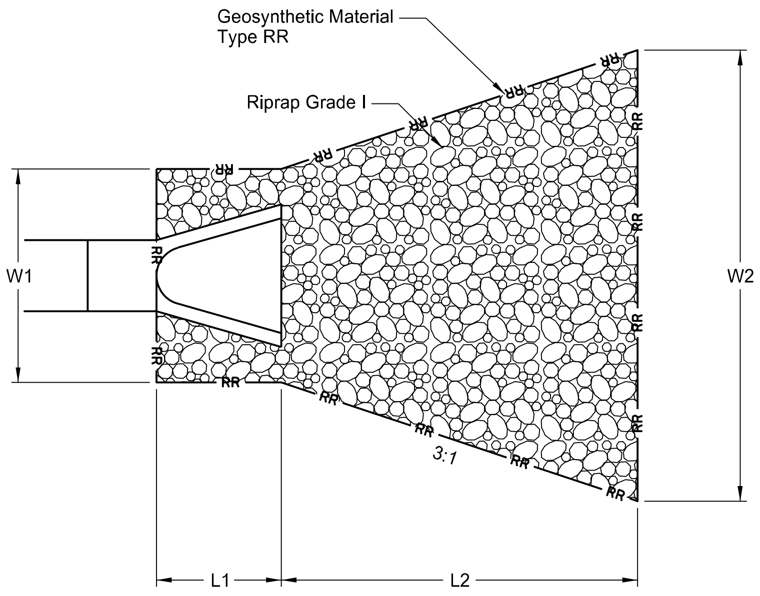
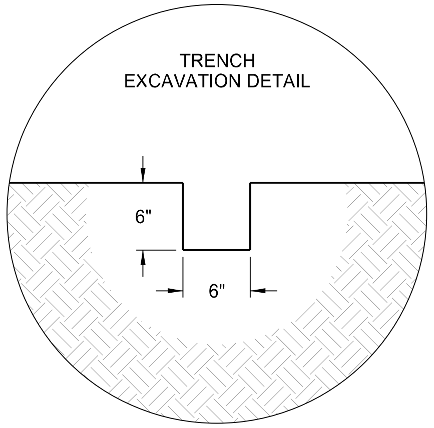
ND 1804 - Jct Tioga Rd to Red Mike Area

Flotation Silt Curtain Detail

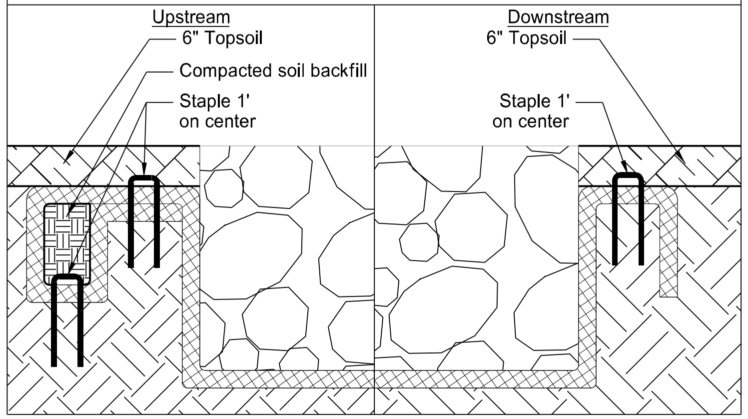


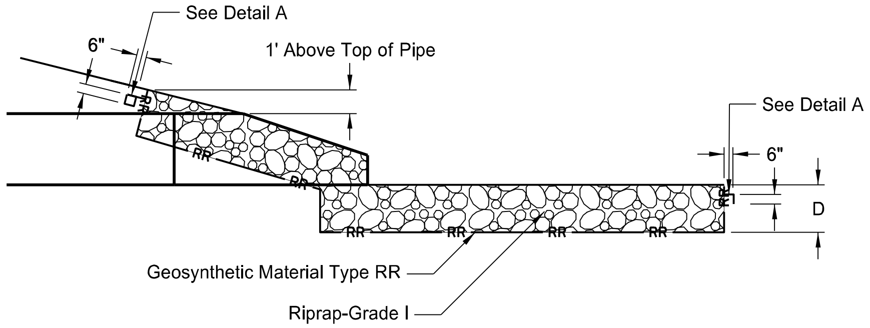
Riprap and Geosynthetic Material - Type RR Placement

Station	Offset	Type	Culvert Diameter (In)	L1 (Ft)	L2 (Ft)	W1 (Ft)	W2 (Ft)	D (In)	Riprap Grade	Riprap (CY)	Geosynthetic Material Type RR (SY)
15012+09	Lt	APP	36	9.3	12.0	9.0	17.0	20.0	I	15	35
					256 100 Riprap Grade I				Total	15	-
					709 0155 Geosynthetic Material Type RR					-	35



DETAIL A
ANCHOR TRENCH & GEOSYNTHETIC MATERIAL TYPE RR INSTALLATION





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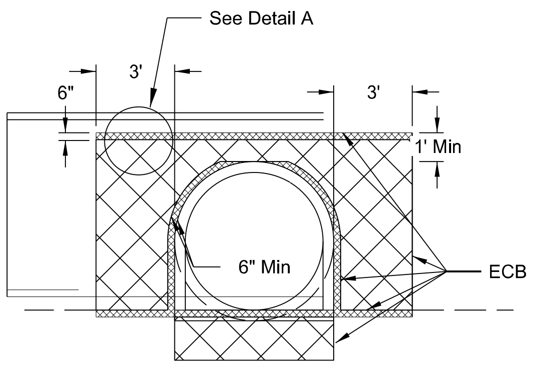
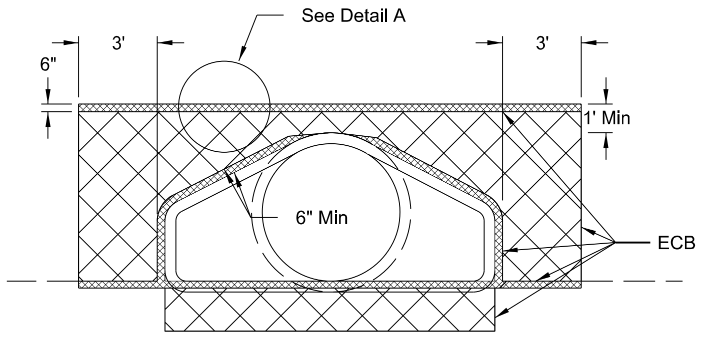
ND 1804 - Jct Tioga Rd to Red Mike Area

Riprap Detail

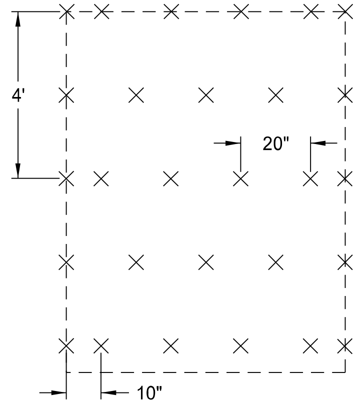
STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SOIB-7-804(061)283	20	11



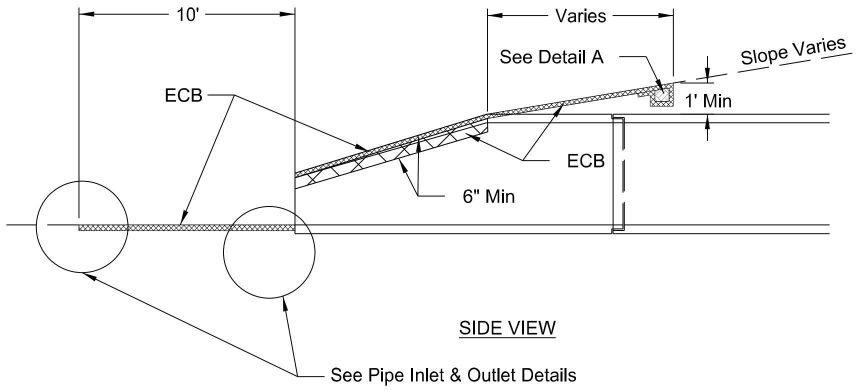
FRONT VIEW
Traversable End Section



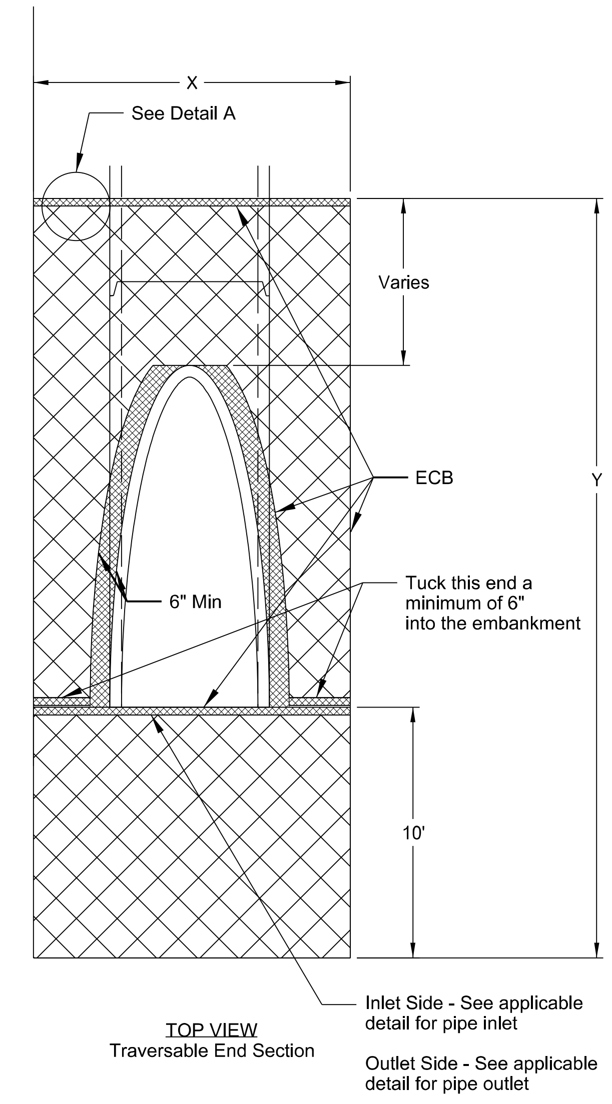
FRONT VIEW
Flared End Section



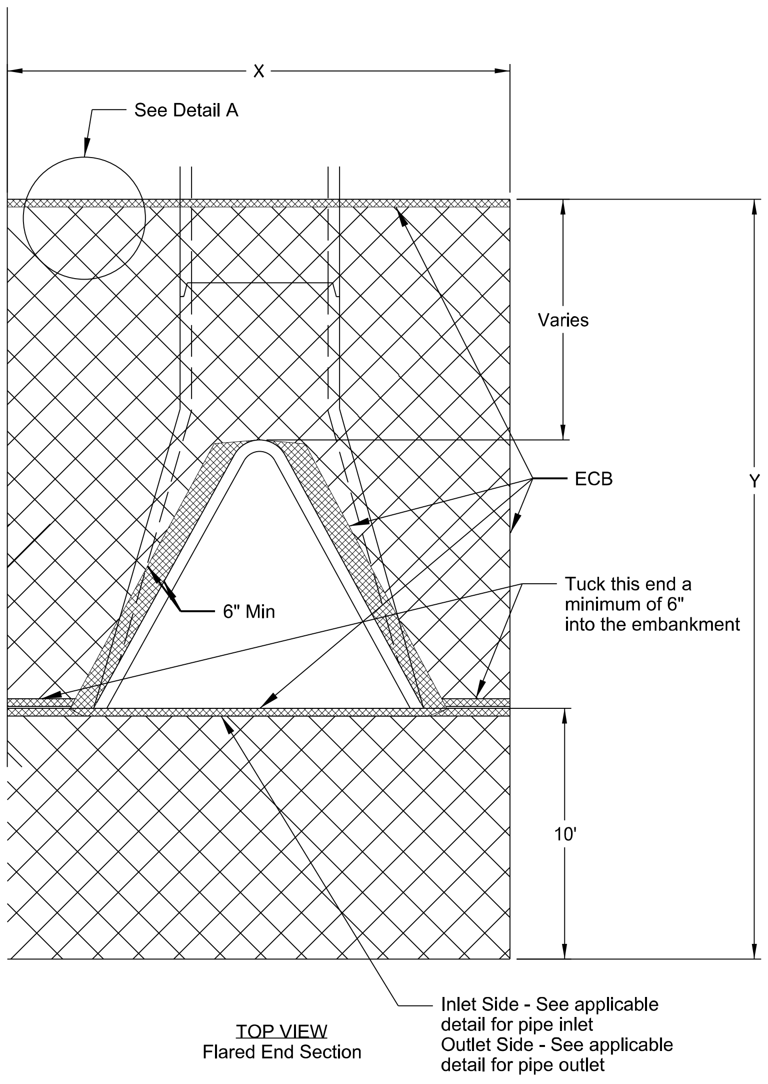
STAPLE PATTERN



SIDE VIEW

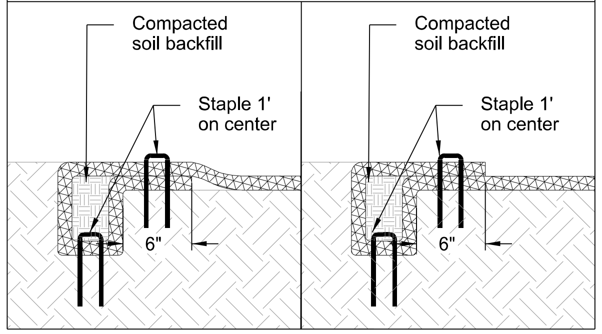


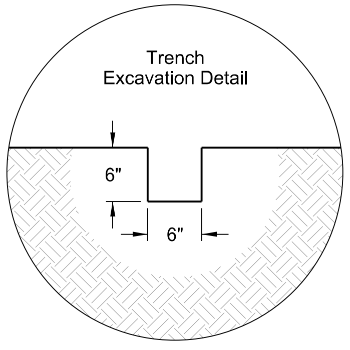
TOP VIEW
Traversable End Section

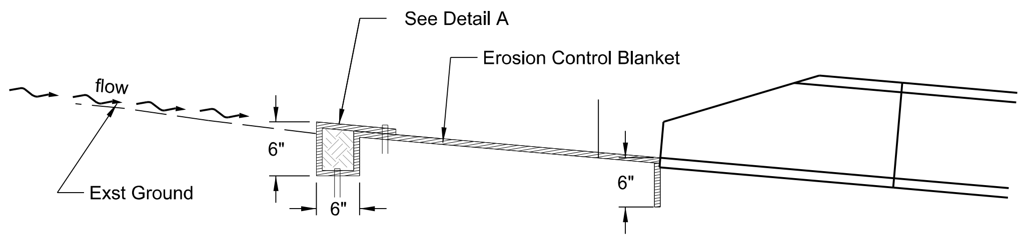


TOP VIEW
Flared End Section

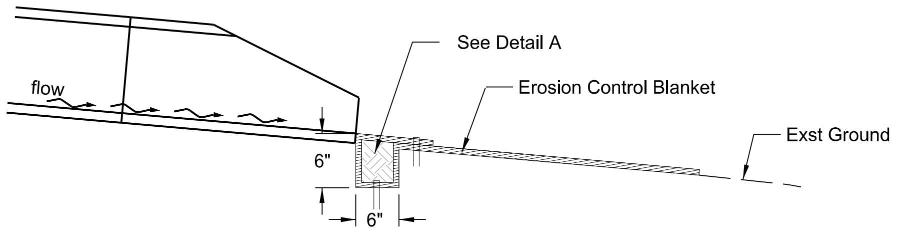
DETAIL A
ANCHOR TRENCH & BLANKET INSTALLATION







PIPE INLETS



PIPE OUTLETS

NOTE: Tuck the ECB a minimum of 6" into the embankment (against the flared end section) around the opening of the flared end section.

Notes:
1. Quantities for approach culverts based on 8:1 inslopes.
2. Quantities for mainline based on 4:1 inslopes.

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ND 1804 - Jct Tioga Rd to Red Mike Area

Erosion Control at Culvert Flared End Sections

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SOIB-7-804(061)283	20	12

SPEC	CODE	BID ITEM	QTY	UNIT
255	0103	ECB TYPE 3 ND 1804 - Jct Tioga Rd to Red Mike Area	3,294	SY

255 0103 ECB TYPE 3

Location of Surface Area		Pipe Dia	Description	No.	X	Y	Unit QTY	Total QTY
Station	Offset	(In)			(Ft)	(Ft)	(SY)	(SY)
15001+65	Lt & Rt	30	Mainline	2	11.6	18.5	22	44
15012+09	Lt	36	Approach	2	12.7	19.2	24	48
15012+14	Rt	24	Approach	2	10.5	21.6	24	48
15015+08	Lt & Rt	30	Mainline	2	11.6	18.5	22	44
15038+47	Rt	24	Approach	2	10.5	21.6	24	48
15038+95	Lt	24	Approach	2	10.5	21.6	24	48
15041+81	Lt & Rt	180	Mainline	2	45	34	137	274
15046+99	Lt	24	Approach	2	10.5	21.6	24	48
15051+98	Lt & Rt	72	Mainline	2	16.2	20.5	31	62
15054+12	Lt	36	Approach	2	12.7	23.3	30	60
15077+16	Rt	24	Approach	2	10.5	21.6	24	48
15077+29	Lt	30	Approach	2	11.6	22.5	27	54
15077+83	Lt & Rt	30	Mainline	2	11.6	18.5	22	44
15096+82	Rt	24	Approach	2	10.5	21.6	24	48
15115+39	Lt	18	Approach	2	9.5	20.7	22	44
15115+43	Rt	24	Approach	2	10.5	21.6	24	48
15124+45	Lt	24	Approach	2	10.5	21.6	24	48
15124+50	Rt	18	Approach	2	9.5	20.7	22	44
15124+87	Lt & Rt	60	Mainline	2	15	19	28	56
15127+00	Lt & Rt	36	Mainline	2	12.7	19.2	24	48
	Lt & Rt	18	Mainline	2	9.5	16.7	19	38
15130+90	Lt & Rt	36	Mainline	2	12.7	19.2	24	48
15139+28	Rt	18	Approach	2	9.5	20.7	22	44
15149+13	Rt	18	Approach	2	9.5	20.7	22	44
15157+67	Rt	18	Approach	2	9.5	20.7	22	44
15160+84	Lt & Rt	60	Mainline	2	15	19	28	56
15165+24	Lt & Rt	24	Mainline	2	10.5	27.6	20	40
15171+60	Rt	24	Approach	2	10.5	21.6	24	48
15173+15	Lt & Rt	24	Mainline	2	10.5	27.6	20	40
15177+89	Lt & Rt	42	Mainline	2	13.3	19.2	25	50
15177+91	Lt	24	Approach	2	10.5	21.6	24	48
15181+55	Lt & Rt	60	Mainline	2	15	19	28	56
15220+82	Lt & Rt	24	Mainline	2	10.5	27.6	20	40

255 0103 ECB TYPE 3

Location of Surface Area		Pipe Dia	Description	No.	X	Y	Unit QTY	Total QTY
Station	Offset	(IN)			(Ft)	(Ft)	(SY)	(SY)
15243+12	Lt & Rt	24	Mainline	2	10.5	27.6	20	40
	Lt & Rt	24	Mainline	2	10.5	27.6	20	40
15261+36	Lt & Rt	48	Mainline	2	13.8	20	27	54
	Lt & Rt	48	Mainline	2	13.8	20	27	54
15270+33	Lt	36	Approach	2	12.7	23.3	30	60
15271+24	Lt & Rt	36	Mainline	2	12.7	19.2	24	48
15272+87	Rt	18	Approach	2	9.5	20.7	22	44
15272+87	Rt	36	Approach	2	12.7	23.3	30	60
15274+19	Lt & Rt	36	Mainline	2	12.7	19.2	24	48
15278+94	Lt & Rt	36	Mainline	2	12.7	19.2	24	48
15282+56	Lt & Rt	36	Mainline	2	12.7	19.2	24	48
15290+10	Lt & Rt	36	Mainline	2	12.7	19.2	24	48
15290+47	Rt	24	Approach	2	10.5	21.6	24	48
15297+92	Lt & Rt	24	Mainline	2	10.5	27.6	20	40
15302+91	Lt & Rt	24	Mainline	2	10.5	27.6	20	40
15308+73	Lt & Rt	24	Mainline	2	10.5	27.6	20	40
15313+61	Lt & Rt	24	Mainline	2	10.5	27.6	20	40
15328+71	Lt & Rt	24	Mainline	2	10.5	27.6	20	40
15335+49	Lt & Rt	60	Mainline	2	15	19	28	56
15339+23	Lt & Rt	24	Mainline	2	10.5	27.6	20	40
15345+28	Lt	18	Approach	2	9.5	20.7	22	44
15353+11	Lt & Rt	36	Mainline	2	12.7	19.2	24	48
15396+01	Lt	18	Approach	2	9.5	20.7	22	44
15396+02	Rt	24	Approach	2	10.5	21.6	24	48
15422+32	Lt	24	Approach	2	10.5	21.6	24	48
15434+51	Rt	24	Approach	2	10.5	21.6	24	48
15438+27	Lt & Rt	36	Mainline	2	12.7	19.2	24	48
	Lt & Rt	36	Mainline	2	12.7	19.2	24	48
15459+91	Rt	18	Approach	2	9.5	20.7	22	44
15448+68	Rt	36	Approach	2	12.7	19.2	24	48
15468+72	Lt	18	Approach	2	9.5	20.7	22	44
15468+72	Rt	18	Approach	2	9.5	20.7	22	44
						Grand Total		3,294

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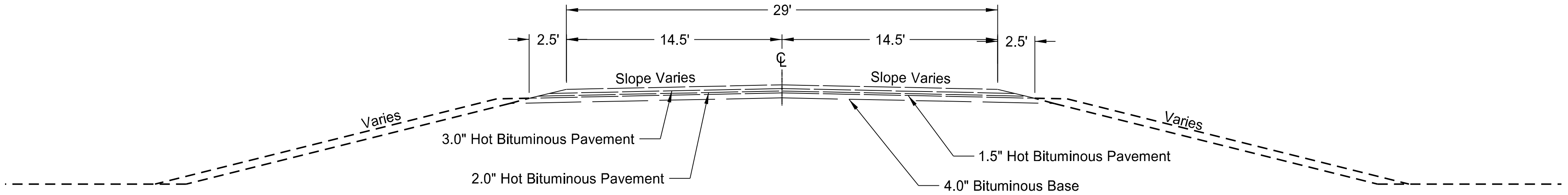
Notes:
1. Quantities for approach culverts based on 8:1 inslopes
2. Quantities for mainline based on 4:1 inslopes

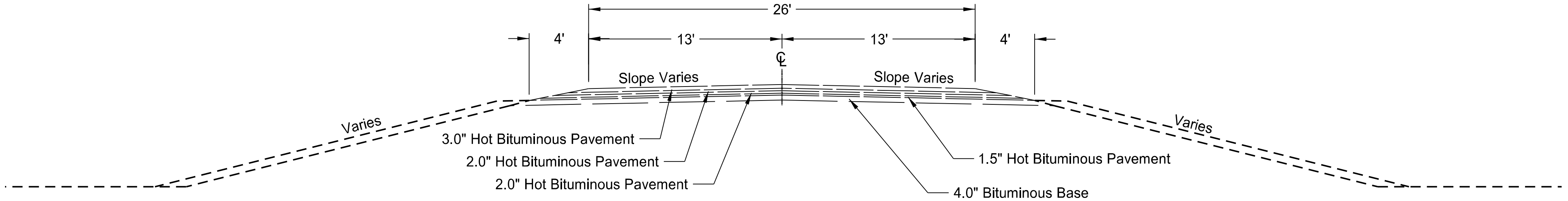
ND 1804 - Jct Tioga Rd to Red Mike Area

Erosion Control at Culvert Flared End Sections

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SOIB-7-804(061)283	30	1



Existing Typical Section
Sta 14980+88.80 to Sta 15147+00.00



Existing Typical Section
Sta 15147+00.00 to Sta 15472+00.00

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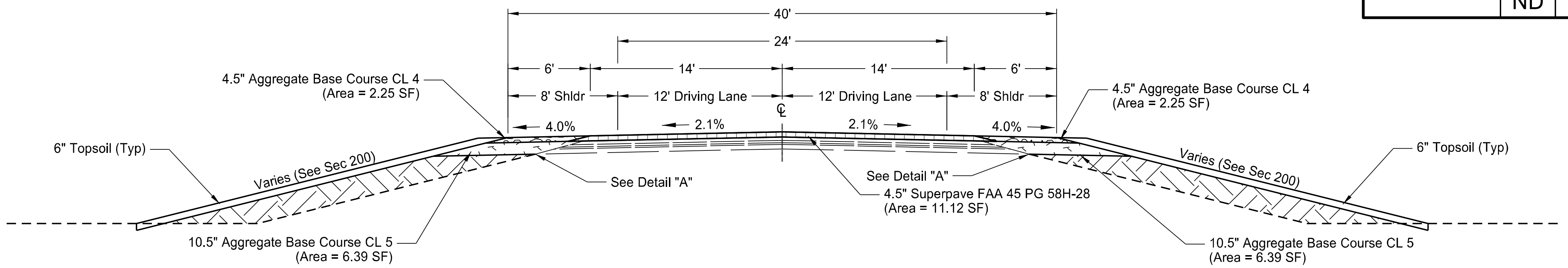
ND 1804 - Jct Tioga Rd to Red Mike Area

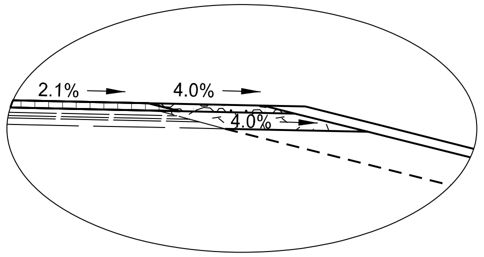
Existing Typical Sections

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SOIB-7-804(061)283	30	2

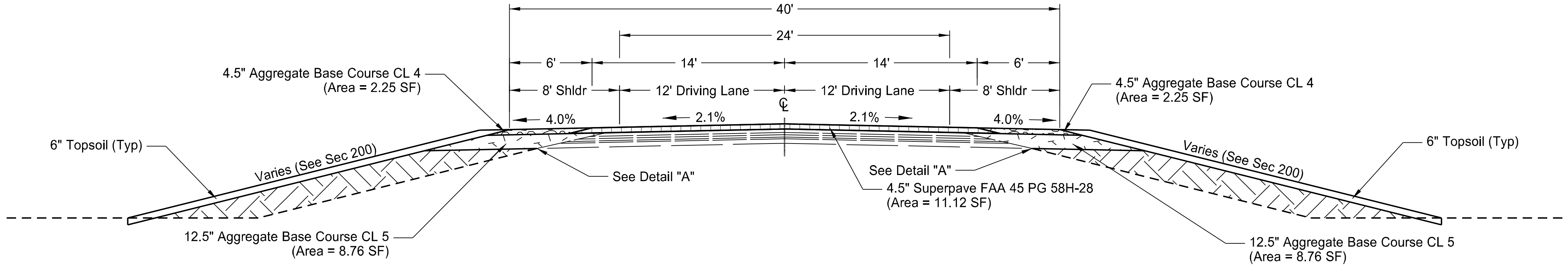
Notes:
1. Typical section shown at full width and full superelevation. Refer to Section 20 and 82 for superelevation and lane taper detail.
2. Construct all pavement and aggregate sloughs at 4H:1V.



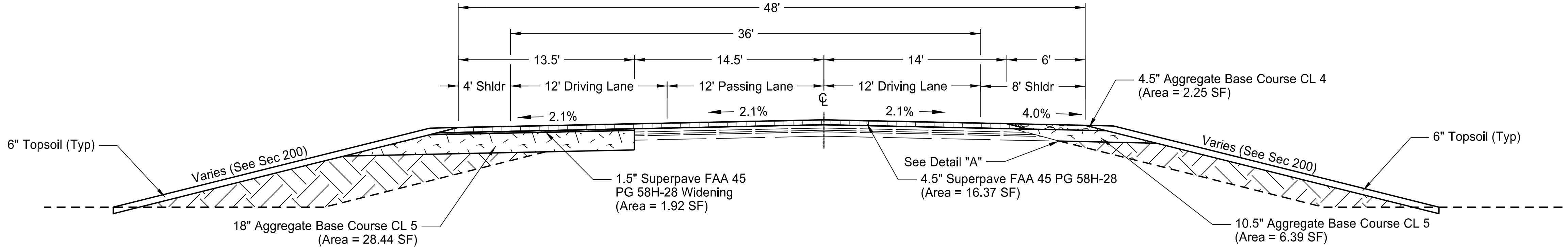
Proposed Typical Section (Double Aggregate Shoulder)
Sta 14980+88.80 to Sta 15008+20.00
Sta 15132+80.00 to Sta 15133+22.00
Sta 15144+37.30 to Sta 15147+00.00



Detail "A"



Proposed Typical Section (Double Aggregate Shoulder)
Sta 15147+00.00 to Sta 15154+20.00
Sta 15266+80.00 to Sta 15330+75.20
Sta 15361+79.40 to Sta 15443+26.00



Proposed Typical Section (Left Passing Lane)
Sta 15008+20.00 to Sta 15085+57.70
Sta 15101+85.90 to Sta 15132+80.00

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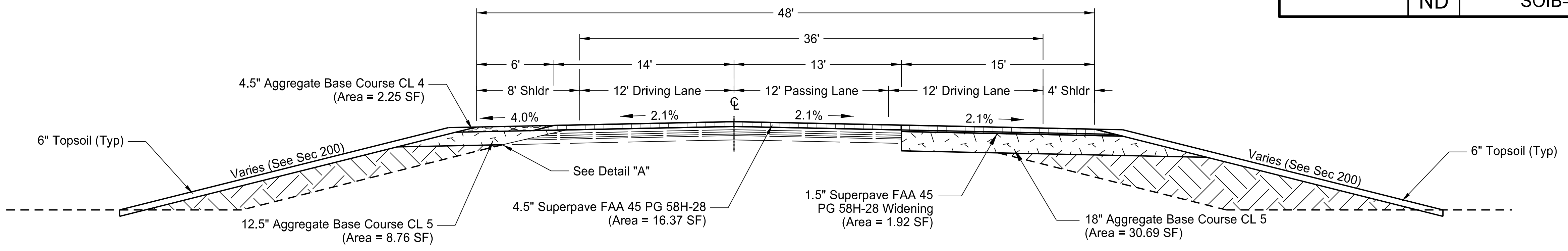
ND 1804 - Jct Tioga Rd to Red Mike Area

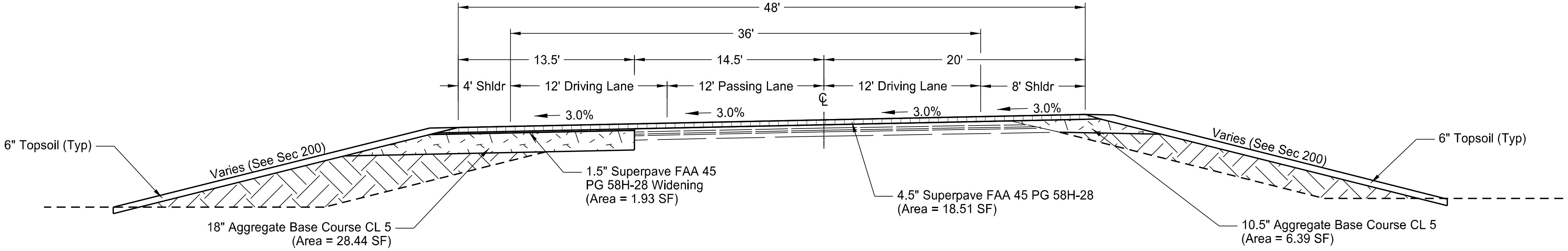
Proposed Typical Sections

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SOIB-7-804(061)283	30	3

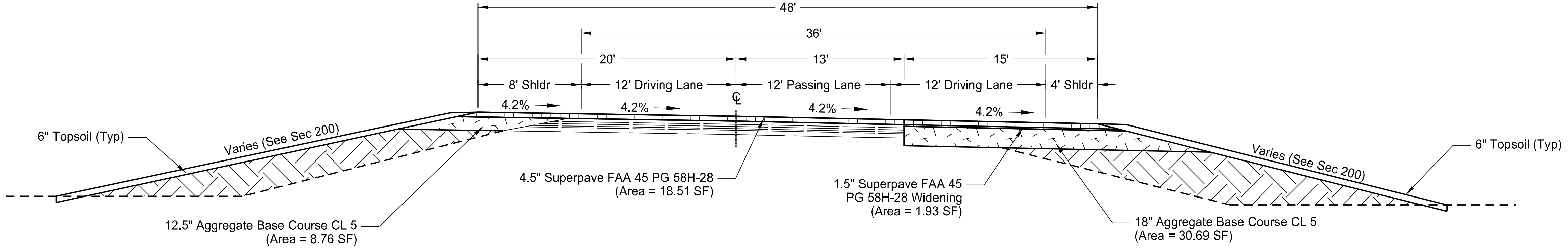
Notes:
1. Typical section shown at full width and full superelevation. Refer to Section 20 and 82 for superelevation and lane taper detail.
2. Construct all pavement and aggregate sloughs at 4H:1V.



Proposed Typical Section (Right Passing Lane)
Sta 15154+20.00 to Sta 15196+22.80
Sta 15211+78.00 to Sta 15266+80.00



Proposed Typical Section (Left Passing Lane with Aspahlt Shoulder)
Sta 15085+57.70 to Sta 15101+85.90



Proposed Typical Section (Right Passing Lane with Asphalt Shoulder)
Sta 15196+22.80 to Sta 15211+78.00

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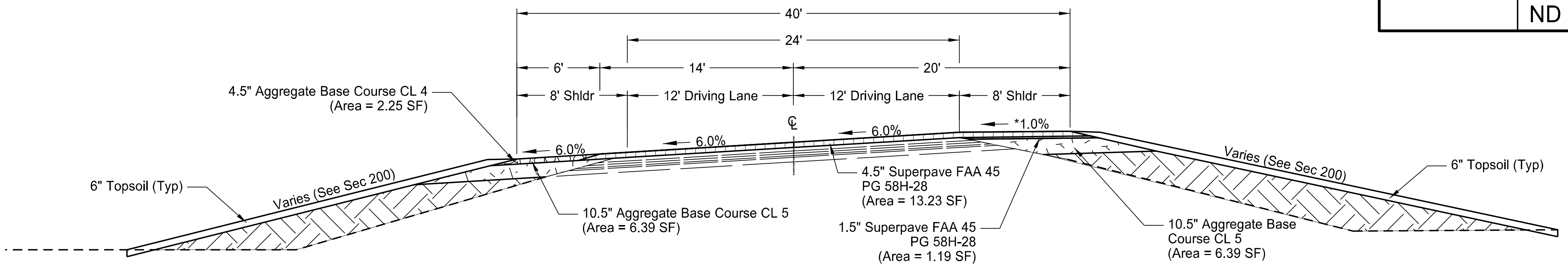
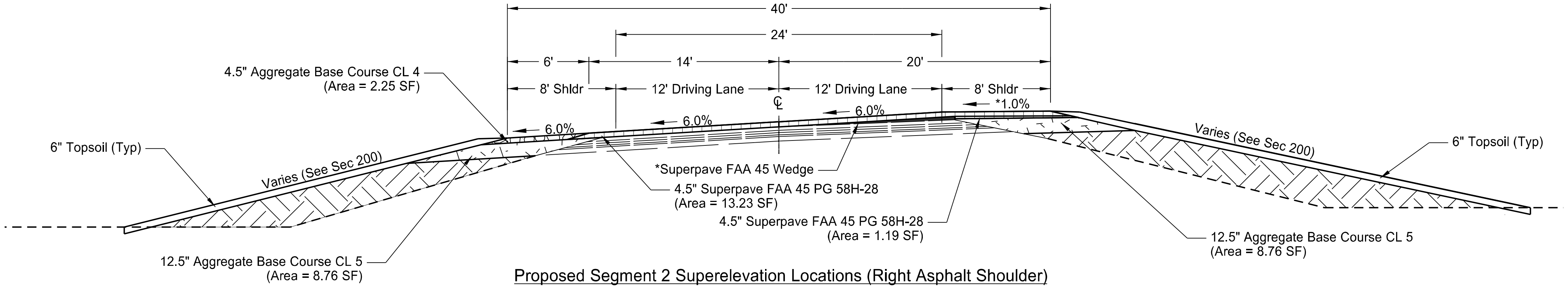
ND 1804 - Jct Tioga Rd to Red Mike Area

Proposed Typical Sections

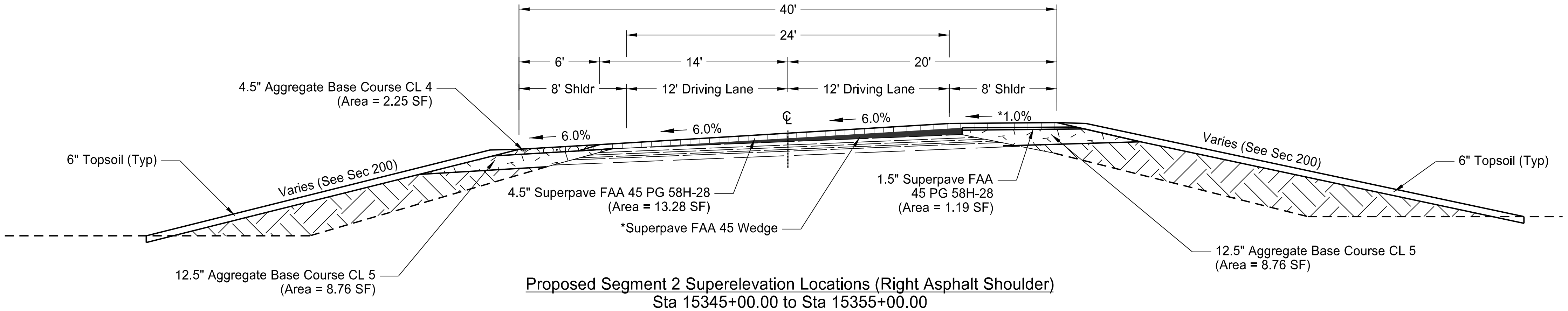
Notes:
1. Typical section shown at full width and full superelevation. Refer to Section 20 and 82 for superelevation and lane taper detail.
2. Construct all pavement and aggregate sloughs at 4H:1V.



Proposed Segment 1 Superelevation Locations (Right Asphalt Shoulder)
Sta 15133+22.00 to Sta 15144+37.30



Proposed Segment 2 Superelevation Locations (Right Asphalt Shoulder)
Sta 15330+75.20 to Sta 15345+00.00
Sta 15355+00.00 to Sta 15361+79.40



Proposed Segment 2 Superelevation Locations (Right Asphalt Shoulder)
Sta 15345+00.00 to Sta 15355+00.00

Superpave FAA 45 Wedge*

Begin Station (approximate)	End Station (approximate)	Rt / Lt	Existing Superelevation (%)	Proposed Superelevation (%)	Average Wedge Size (thickness X width)	Superpave FAA 45 Wedge Area (SF)	Approximate HMA (TONS)
15330+75.20	15361+79.40	Rt	4.1	6.0	(0.0" CL - 3.0" Rt) X 13'	1.64	256
15345+00.00	15355+00.00	Rt & Lt	4.1	6.0	(0.0" Lt - 6.0" Rt) X 26'	6.48	480

*Max rollover of 5% from Sta 15336+25.22 to Sta 15356+29.38 and Sta 15448+76.03 to Sta 15468+89.68

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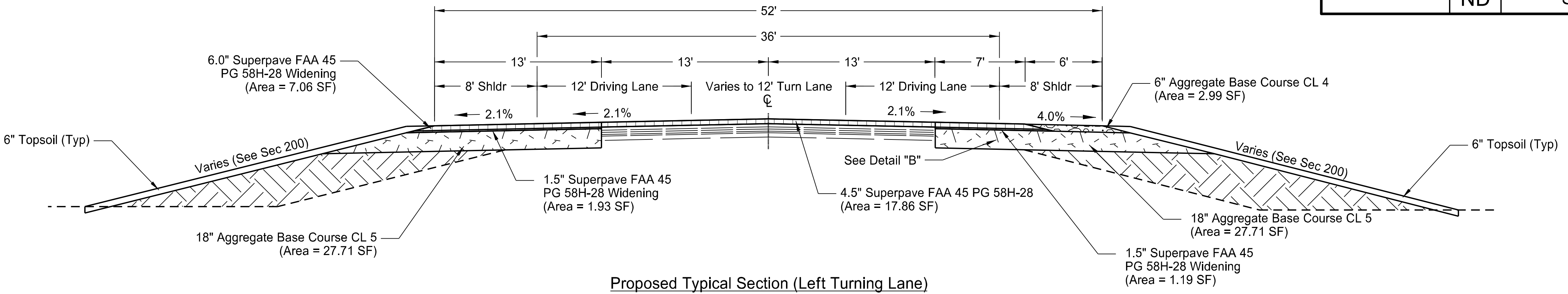
ND 1804 - Jct Tioga Rd to Red Mike Area

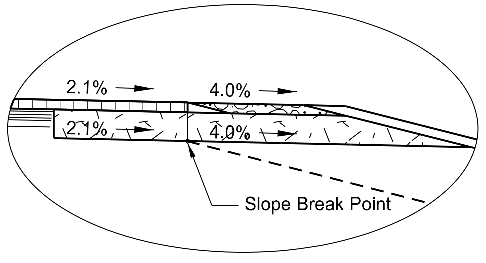
Proposed Typical Sections

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SOIB-7-804(061)283	30	5

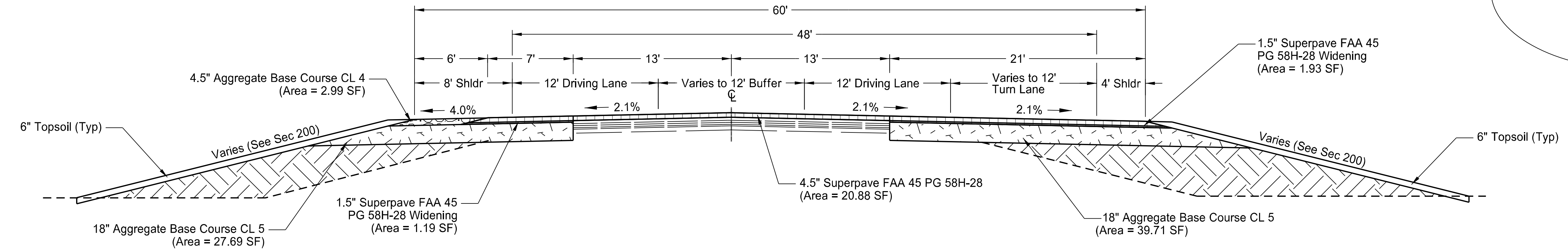


Proposed Typical Section (Left Turning Lane)
Sta 15447+26.00 to Sta 15459+76.38

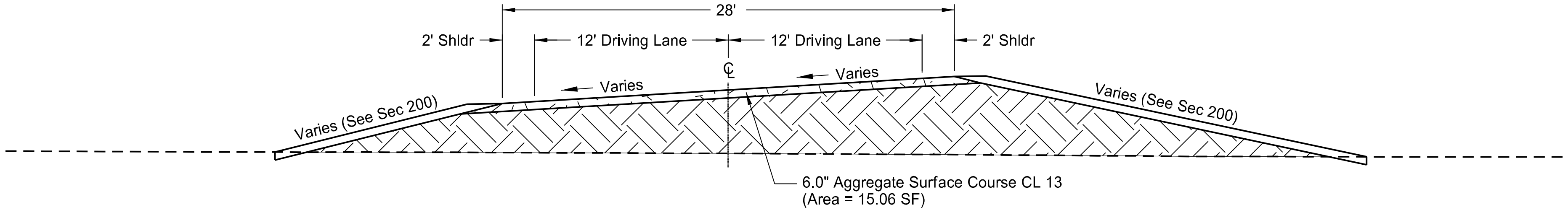
Notes:
1. Typical section shown at full width and full superelevation. Refer to Section 20 and 82 for superelevation and lane taper detail.
2. Construct all pavement and aggregate sloughs at 4H:1V.



Detail "B"



Proposed Typical Section (Right Turning Lane)
Sta 15459+76.38 to Sta 15472+00.00



Proposed Typical Section (54th St)
Sta 1000+55.00 to Sta 1011+00.00

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ND 1804 - Jct Tioga Rd to Red Mike Area

Proposed Typical Sections

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SOIB-7-804(061)283	51	1

Begin Station / Location	Begin Offset	End Station / Location	End Offset	Pipe Installation (Pay Item)			Allowable Material	Required Diameter	Steel Pipe Coatings	Steel Pipe Corrugations or Spiral Ribs	Steel Pipe Minimum Thickness	R1 Fabric (Pay Item)	End Sections		Applicable Backfill
													Begin	End	
				In	Bid Item	LF (Lt-Rt)		In	Type		In	SY length	EA	EA	
ND 1804 - Mainline Pipe List															
15001+66	36.7' Lt	15001+64	39.8' Rt	30	Pipe Conc. Reinf. CL III (Extension)	8-14	Reinforced Concrete Pipe - Class III (barrel length = 6 LF) Reinforced Concrete Pipe - Class III (barrel length = 12 LF)	30	-	-	-	-	Remove & Relay	Remove & Relay	Section 20 Sheet 6
15015+08	68.4' Lt	15015+08	71.6' Rt	30	Pipe Conc. Reinf. CL III (Extension)	10-18	Reinforced Concrete Pipe - Class III (barrel length = 8 LF) Reinforced Concrete Pipe - Class III (barrel length = 16 LF)	30	-	-	-	-	Remove & Relay	Remove & Relay	Section 20 Sheet 6
15041+81	71.3' Lt	15041+80	64.6' Rt	180	15FT STR PLATE PIPE	38-34	Structural Plate Pipe	180	Z, A, P	-	0.218	-	Section 20	Section 20	Section 20 Sheet 6
15051+97	48.9' Lt	15051+98	36.9' Rt	72	Pipe Conc. Reinf. CL III (Extension)	12-0	Reinforced Concrete Pipe - Class III (barrel length = 10 LF)	72	-	-	-	30	Remove & Relay	-	Section 20 Sheet 6
15077+83	41.1' Lt	15077+83	32.9' Rt	30	Pipe Conc. Reinf. CL III (Extension)	16-8	Reinforced Concrete Pipe - Class III (barrel length = 14 LF) Reinforced Concrete Pipe - Class III (barrel length = 6 LF)	30	-	-	-	24	Remove & Relay	Remove & Relay	Section 20 Sheet 6
15124+87	31.5' Lt	15124+91	41.4' Lt	4' x 6'	Cattle Pass Conc. Intermed. Section	12-0	Reinforced Concrete Cattle Pass (barrel length = 12 LF) (45° Bend)	4' x 6'	-	-	-	-	-	-	Section 20 Sheet 6
15124+91	41.4' Lt	15124+95	45.6' Lt	4' x 6'	Cattle Pass Conc. Intermed. Section	6-0	Reinforced Concrete Cattle Pass (barrel length = 6 LF)	4' x 6'	-	-	-	-	-	Remove & Relay	Section 20 Sheet 6
15126+85	64.6' Lt	15126+85	45.1' Rt	36	Pipe Conc. Reinf. CL III (Extension)	14-10	Reinforced Concrete Pipe - Class III (barrel length = 12 LF) Reinforced Concrete Pipe - Class III (barrel length = 8 LF)	36	-	-	-	-	Remove & Relay	Remove & Relay	Section 20 Sheet 6
15127+13	65.9' Lt	15127+17	57.3' Rt	18	Pipe Conc. Reinf. CL III (Extension)	14-20	Reinforced Concrete Pipe - Class III (barrel length = 12 LF) Reinforced Concrete Pipe - Class III (barrel length = 18 LF)	18	-	-	-	-	FES*	FES*	Section 20 Sheet 6
15130+90	52.2' Lt	15130+90	45.5' Rt	36	Pipe Conc. Reinf. CL III (Extension)	10-6	Reinforced Concrete Pipe - Class III (barrel length = 8 LF) Reinforced Concrete Pipe - Class III (barrel length = 4 LF)	36	-	-	-	-	FES*	FES*	Section 20 Sheet 6
15165+24	49.6' Lt	15165+23	47.3' Rt	24	Pipe Conc. Reinf. CL III (Extension)	14-12	Reinforced Concrete Pipe - Class III (barrel length = 12 LF) Reinforced Concrete Pipe - Class III (barrel length = 10 LF)	24	-	-	-	16	Remove & Relay	Remove & Relay	Section 20 Sheet 6
15173+15	37.3' Lt	15173+15	43.9' Rt	24	Pipe Conc. Reinf. CL III (Extension)	10-16	Reinforced Concrete Pipe - Class III (barrel length = 8 LF) Reinforced Concrete Pipe - Class III (barrel length = 14 LF)	24	-	-	-	22	Remove & Relay	Remove & Relay	Section 20 Sheet 6
15177+49	38.5' Lt	15178+32	45.8' Rt	42	Pipe Conc. Reinf. CL III (Extension)	16-20	Reinforced Concrete Pipe - Class III (barrel length = 14 LF) Reinforced Concrete Pipe - Class III (barrel length = 18 LF)	42	-	-	-	31	Remove & Relay	Remove & Relay	Section 20 Sheet 6
15181+55	41.9' Lt	15181+55	54.9' Rt	4' x 6'	Cattle Pass Conc. Intermed. Section	8-20	Precast Concrete Cattle Pass (barrel length = 8 LF) Precast Concrete Cattle Pass (barrel length = 20 LF)	4' x 6'	-	-	-	-	Remove & Relay	Remove & Relay	Section 20 Sheet 6
15220+82	38.4' Lt	15220+83	48.2' Rt	24	Pipe Conc. Reinf. CL III (Extension)	10-20	Reinforced Concrete Pipe - Class III (barrel length = 8 LF) Reinforced Concrete Pipe - Class III (barrel length = 18 LF)	24	-	-	-	31	Remove & Relay	Remove & Relay	Section 20 Sheet 6
15242+97	38.0' Lt	15242+96	43.6' Rt	24	Pipe Conc. Reinf. CL III (Extension)	10-16	Reinforced Concrete Pipe - Class III (barrel length = 8 LF) Reinforced Concrete Pipe - Class III (barrel length = 14 LF)	24	-	-	-	23	Remove & Relay	Remove & Relay	Section 20 Sheet 6
15243+32	38.7' Lt	15243+32	41.4' Rt	24	Pipe Conc. Reinf. CL III (Extension)	10-14	Reinforced Concrete Pipe - Class III (barrel length = 8 LF) Reinforced Concrete Pipe - Class III (barrel length = 12 LF)	24	-	-	-	23	Remove & Relay	Remove & Relay	Section 20 Sheet 6
15261+17	31.4' Lt	15261+17	34.3' Rt	48	Pipe Conc. Reinf. CL III (Extension)	8-12	Reinforced Concrete Pipe - Class III (barrel length = 6 LF) Reinforced Concrete Pipe - Class III (barrel length = 10 LF)	48	-	-	-	21	Remove & Relay	Remove & Relay	Section 20 Sheet 6
15261+53	30.3' Lt	15261+56	35.1' Rt	48	Pipe Conc. Reinf. CL III (Extension)	8-12	Reinforced Concrete Pipe - Class III (barrel length = 6 LF) Reinforced Concrete Pipe - Class III (barrel length = 10 LF)	48	-	-	-	20	Remove & Relay	Remove & Relay	Section 20 Sheet 6
15271+24	33.0' Lt	15271+24	31.6' Rt	36	Pipe Conc. Reinf. CL III (Extension)	10-8	Reinforced Concrete Pipe - Class III (barrel length = 8 LF) Reinforced Concrete Pipe - Class III (barrel length = 6 LF)	36	-	-	-	-	Remove & Relay	Remove & Relay	Section 20 Sheet 6
15274+20	32.3' Lt	15274+19	33.9' Rt	36	Pipe Conc. Reinf. CL III (Extension)	10-10	Reinforced Concrete Pipe - Class III (barrel length = 8 LF) Reinforced Concrete Pipe - Class III (barrel length = 8 LF)	36	-	-	-	-	Remove & Relay	Remove & Relay	Section 20 Sheet 6
15278+95	32.8' Lt	15278+94	31.2' Rt	36	Pipe Conc. Reinf. CL III (Extension)	10-8	Reinforced Concrete Pipe - Class III (barrel length = 8 LF) Reinforced Concrete Pipe - Class III (barrel length = 6 LF)	36	-	-	-	-	Remove & Relay	Remove & Relay	Section 20 Sheet 6
15282+56	32.8' Lt	15282+56	33.0' Rt	36	Pipe Conc. Reinf. CL III (Extension)	8-12	Reinforced Concrete Pipe - Class III (barrel length = 6 LF) Reinforced Concrete Pipe - Class III (barrel length = 10 LF)	36	-	-	-	-	Remove & Relay	Remove & Relay	Section 20 Sheet 6

Coatings: Z = Zinc
A = Aluminum
P = Polymeric (over Zinc or Aluminum)

Corrugations: 2 = 2-2/3"x1/2"
3 = 3"x1"
5 = 5"x1"

Spiral Ribs: 3/4 = 3/4"x3/4"@7-1/2"
1= 3/4"x1"@11-1/2"

(*) End sections are measured and paid for separately for pipe extensions.
FES = Flared End Section
TES = Traversable End Section

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ND 1804 - Jct Tioga Rd to Red Mike Area

Allowable Pipe List

Mainline Pipes

Begin Station / Location	Begin Offset	End Station / Location	End Offset	Pipe Installation (Pay Item)			Allowable Material	Required Diameter	Steel Pipe Coatings	Steel Pipe Corrugations or Spiral Ribs	Steel Pipe Minimum Thickness	R1 Fabric (Pay Item)	End Sections		Applicable Backfill
													Begin	End	
				In	Bid Item	LF (Lt-Rt)		In	Type		In	SY	EA	EA	
ND 1804 - Mainline Pipe List															
15290+10	33.7' Lt	15290+11	32.5' Rt	36	Pipe Conc. Reinf. CL III (Extension)	8-12	Reinforced Concrete Pipe - Class III (barrel length = 6 LF) Reinforced Concrete Pipe - Class III (barrel length = 10 LF)	36	-	-	-	-	Remove & Relay	Remove & Relay	Section 20 Sheet 6
15297+93	40.1' Lt	15297+91	37.1' Rt	24	Pipe Conc. Reinf. CL III (Extension)	14-8	Reinforced Concrete Pipe - Class III (barrel length = 12 LF) Reinforced Concrete Pipe - Class III (barrel length = 6 LF)	24	-	-	-	-	Remove & Relay	Remove & Relay	Section 20 Sheet 6
15302+91	40.4' Lt	15302+90	37.1' Rt	24	Pipe Conc. Reinf. CL III (Extension)	14-8	Reinforced Concrete Pipe - Class III (barrel length = 12 LF) Reinforced Concrete Pipe - Class III (barrel length = 6 LF)	24	-	-	-	-	Remove & Relay	Remove & Relay	Section 20 Sheet 6
15308+72	39.2' Lt	15308+73	38.1' Rt	24	Pipe Conc. Reinf. CL III (Extension)	12-10	Reinforced Concrete Pipe - Class III (barrel length = 10 LF) Reinforced Concrete Pipe - Class III (barrel length = 8 LF)	24	-	-	-	-	Remove & Relay	Remove & Relay	Section 20 Sheet 6
15313+61	37.2' Lt	15313+62	36.5' Rt	24	Pipe Conc. Reinf. CL III (Extension)	10-8	Reinforced Concrete Pipe - Class III (barrel length = 8 LF) Reinforced Concrete Pipe - Class III (barrel length = 6 LF)	24	-	-	-	-	Remove & Relay	Remove & Relay	Section 20 Sheet 6
15328+71	37.2' Lt	15328+71	36.3' Rt	24	Pipe Conc. Reinf. CL III (Extension)	10-8	Reinforced Concrete Pipe - Class III (barrel length = 8 LF) Reinforced Concrete Pipe - Class III (barrel length = 6 LF)	24	-	-	-	-	Remove & Relay	Remove & Relay	Section 20 Sheet 6
15335+49	32.0' Lt	15335+49	38.0' Lt	6' x 4'	6x4' Precast Cattle Pass	6-0	Precast Concrete Cattle Pass (barrel length = 6 LF)	4' x 6'	-	-	-	-	Remove & Relay	-	Section 20 Sheet 6
15339+23	36.1' Lt	15339+23	37.2' Rt	24	Pipe Conc. Reinf. CL III (Extension)	10-8	Reinforced Concrete Pipe - Class III (barrel length = 8 LF) Reinforced Concrete Pipe - Class III (barrel length = 6 LF)	24	-	-	-	-	Remove & Relay	Remove & Relay	Section 20 Sheet 6
15353+10	31.4' Lt	15353+13	32.6' Rt	36	Pipe Conc. Reinf. CL III (Extension)	4-6	Reinforced Concrete Pipe - Class III (barrel length = 2 LF) Reinforced Concrete Pipe - Class III (barrel length = 4 LF)	36	-	-	-	-	Remove & Relay	Remove & Relay	Section 20 Sheet 6
15438+16	34.5' Lt	15438+17	33.9' Rt	36	Pipe Conc. Reinf. CL III (Extension)	12-10	Reinforced Concrete Pipe - Class III (barrel length = 10 LF) Reinforced Concrete Pipe - Class III (barrel length = 8 LF)	36	-	-	-	-	Remove & Relay	Remove & Relay	Section 20 Sheet 6
15438+38	33.9' Lt	15438+38	34.4' Rt	36	Pipe Conc. Reinf. CL III (Extension)	12-10	Reinforced Concrete Pipe - Class III (barrel length = 10 LF) Reinforced Concrete Pipe - Class III (barrel length = 8 LF)	36	-	-	-	-	Remove & Relay	Remove & Relay	Section 20 Sheet 6

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P = Polymeric (over Zinc or Aluminum)

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3 = 3"x1"
5 = 5"x1"

Spiral Ribs: 3/4 = 3/4"x3/4"@7-1/2"
1 = 3/4"x1"@11-1/2"

(*) End sections are measured and paid for separately for pipe extensions.
FES = Flared End Section
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ND 1804 - Jct Tioga Rd to Red Mike Area

Allowable Pipe List

Mainline Pipes

Begin Station / Location	Begin Offset	End Station / Location	End Offset	Pipe Installation (Pay Item)			Allowable Material	Required Diameter	Steel Pipe Coatings	Steel Pipe Corrugations or Spiral Ribs	Steel Pipe Minimum Thickness	R1 Fabric (Pay Item)	End Sections		Applicable Backfill
													Begin	End	
				In	Bid Item	LF(Ahd-Bk)		In	Type		In	SY	EA	EA	
ND 1804 - Approach Pipes															
15011+47	49.3' Rt	15012+81	46.9' Rt	24	Pipe Conduit - Approach	134	Reinforced Concrete Pipe - Class III (barrell length = 130 LF)	24				-	FES	FES	Specification 714.04 A
							Corrugated Steel Pipe		Z, A, P	2	0.064				
							Spiral Rib Steel Pipe		Z, A, P	3/4, 1	0.064				
							High-Density Polyethylene								
							Polypropylene Pipe (AASHTO M330, Type S)								
15011+77	53.5' Lt	15012+41	54.4' Lt	36	Pipe Conduit - Approach	64	Reinforced Concrete Pipe - Class III (barrell length = 60 LF)	36				-	FES	FES	Specification 714.04 A
							Corrugated Steel Pipe	42	Z, A, P	2	0.064				
							Spiral Rib Steel Pipe		Z, A, P	3/4, 1	0.064				
							High-Density Polyethylene	36							
							Polypropylene Pipe (AASHTO M330, Type S)								
15038+13	53.9' Rt	15038+82	51.5' Rt	24	Pipe Conduit - Approach	70	Reinforced Concrete Pipe - Class III (barrell length = 66 LF)	24				-	FES	FES	Specification 714.04 A
							Corrugated Steel Pipe		Z, A, P	2	0.064				
							Spiral Rib Steel Pipe		Z, A, P	3/4, 1	0.064				
							High-Density Polyethylene								
							Polypropylene Pipe (AASHTO M330, Type S)								
15038+52	55.3' Lt	15039+62	53.8' Lt	24	Pipe Corr. Steel (Extension)	32-8	Corrugated Steel Pipe	24	Z, A, P	2	0.064	-	FES*	FES*	Specification 714.04 A
15046+55	52.9' Lt	15047+43	51.7' Lt	24	Pipe Corr. Steel (Extension)	14-14	Corrugated Steel Pipe	24	Z, A, P	2	0.064	-	Remove & Relay	Remove & Relay	Specification 714.04 A
15053+56	57.7' Lt	15054+38	54.7' Lt	36	Pipe Corr. Steel (Extension)	4-34	Corrugated Steel Pipe	36	Z, A, P	2	0.079	-	FES*	FES*	Specification 714.04 A
15077+01	57.3' Lt	15077+53	55.9' Lt	30	Pipe Corr. Steel (Extension)	2-8	Corrugated Steel Pipe	30	Z, A, P	2	0.079	-	FES*	FES*	Specification 714.04 A
15077+40	67.9' Rt	15077+46	68.0' Rt	24	Pipe Corr. Steel (Extension)	6-0	Corrugated Steel Pipe	24	Z, A, P	2	0.064	-	FES*	FES*	Specification 714.04 A
15096+41	49.9' Rt	15097+26	50.2' Rt	24	Pipe Corr. Steel (Extension)	8-6	Corrugated Steel Pipe	24	Z, A, P	2	0.064	-	FES*	FES*	Specification 714.04 A
15114+93	59.0' Rt	15116+22	58.5' Rt	24	Pipe Corr. Steel (Extension)	40-12	Corrugated Steel Pipe	24	Z, A, P	2	0.064	-	FES*	FES*	Specification 714.04 A
15114+95	54.5' Lt	15115+96	54.4' Lt	18	Pipe Corr. Steel (Extension)	30-16	Corrugated Steel Pipe	18	Z, A, P	2	0.064	-	FES*	FES*	Specification 714.04 A
15123+97	58.1' Lt	15124+93	66.0' Lt	24	Pipe Conduit - Approach	96	Reinforced Concrete Pipe - Class III (barrell length = 92 LF)	24				-	FES*	FES*	Specification 714.04 A
							Corrugated Steel Pipe		Z, A, P	2	0.064				
							Spiral Rib Steel Pipe		Z, A, P	3/4, 1	0.064				
							High-Density Polyethylene								
							Polypropylene Pipe (AASHTO M330, Type S)								
15124+79	68.0' Rt	15124+81	68.1' Rt	18	Pipe Corr. Steel (Extension)	2-0	Corrugated Steel Pipe	18	Z, A, P	2	0.064	-	FES*	FES*	Specification 714.04 A
15139+04	69.0' Rt	15139+12	70.1' Rt	18	Pipe Corr. Steel (Extension)	0-8	Corrugated Steel Pipe	18	Z, A, P	2	0.064	-	FES*	FES*	Specification 714.04 A
15148+68	47.0' Rt	15149+57	48.8' Rt	18	Pipe Corr. Steel (Extension)	18-20	Corrugated Steel Pipe	18	Z, A, P	2	0.064	-	FES*	FES*	Specification 714.04 A

Coatings: Z = Zinc
A = Aluminum
P = Polymeric (over Zinc or Aluminum)

Corrugations: 2 = 2-2/3"x1/2"
3 = 3"x1"
5 = 5"x1"

Spiral Ribs: 3/4 = 3/4"x3/4"@7-1/2"
1 = 3/4"x1"@11-1/2"

(*) End sections are measured and paid for separately for pipe extensions.
FES = Flared End Section
TES = Traversable End Section

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ND 1804 - Jct Tioga Rd to Red Mike Area

Allowable Pipe List

Approach Pipes

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SOIB-7-804(061)283	51	4

Begin Station / Location	Begin Offset	End Station / Location	End Offset	Pipe Installation (Pay Item)			Allowable Material	Required Diameter	Steel Pipe Coatings	Steel Pipe Corrugations or Spiral Ribs	Steel Pipe Minimum Thickness	R1 Fabric (Pay Item)	End Sections		Applicable Backfill
													Begin	End	
				In	Bid Item	LF(Ahd-Bk)		In	Type		In	SY	EA	EA	
ND 1804 - Approach Pipes															
15157+29	41.4' Rt	15158+04	43.0' Rt	24	Pipe Conduit - Approach	76	Reinforced Concrete Pipe - Class III (barrell length = 72 LF)	24				-	FES	FES	Specification 714.04 A
							Corrugated Steel Pipe		Z, A, P	2	0.064				
							Spiral Rib Steel Pipe		Z, A, P	3/4, 1	0.064				
							High-Density Polyethylene								
							Polypropylene Pipe (AASHTO M330, Type S)								
15270+57	49.5' Lt	15270+59	49.5' Lt	36	Pipe Corr. Steel (Extension)	2-0	Corrugated Steel Pipe	36	Z, A, P	2	0.079	-	FES*	FES*	Specification 714.04 A
15272+46	56.7' Rt	15273+20	54.7' Rt	18	Pipe Corr. Steel (Extension)	2-10	Corrugated Steel Pipe	18	Z, A, P	2	0.064	-	FES*	FES*	Specification 714.04 A
15273+18	49.2' Rt	15273+26	49.2' Rt	36	Pipe Conc. Reinf. CL III (Extension)	8-0	Reinforced Concrete Pipe - Class III (barrel length = 6 LF)	36				-	FES*	FES*	Specification 714.04 A
15290+18	51.9' Rt	15290+22	51.9' Rt	24	Pipe Corr. Steel (Extension)	0-4	Corrugated Steel Pipe	24	Z, A, P	2	0.064	-	FES*	FES*	Specification 714.04 A
15345+09	54.8' Lt	15345+46	52.8' Lt	18	Pipe Conduit - Approach	36	Reinforced Concrete Pipe - Class III (barrell length = 30 LF)	18				-	FES	FES	Specification 714.04 A
							Corrugated Steel Pipe		Z, A, P	2	0.064				
							Spiral Rib Steel Pipe		Z, A, P	3/4, 1	0.064				
							High-Density Polyethylene								
							Polypropylene Pipe (AASHTO M330, Type S)								
15395+60	43.3' Lt	15396+58	42.2' Lt	18	Pipe Corr. Steel (Extension)	30-14	Corrugated Steel Pipe	18	Z, A, P	2	0.064	-	FES*	FES*	Specification 714.04 A
15395+64	49.2' Rt	15396+38	49.8' Rt	24	Pipe Conduit - Approach	74	Reinforced Concrete Pipe - Class III (barrell length = 70 LF)	24				-	FES	FES	Specification 714.04 A
							Corrugated Steel Pipe		Z, A, P	2	0.064				
							Spiral Rib Steel Pipe		Z, A, P	3/4, 1	0.064				
							High-Density Polyethylene								
							Polypropylene Pipe (AASHTO M330, Type S)								
15422+56	57.3' Lt	15422+60	57.4' Lt	24	Pipe Corr. Steel (Extension)	4-0	Corrugated Steel Pipe	24	Z, A, P	2	0.064	-	Remove & Relay	-	Specification 714.04 A
15448+12	53.9' Lt	15449+07	52.9' Lt	18	Pipe Corr. Steel (Extension)	10-28	Corrugated Steel Pipe	18	Z, A, P	2	0.064	-	FES*	FES*	Specification 714.04 A
15459+69	62.3' Rt	15460+14	62.4' Rt	18	Pipe Conduit - Approach	42	Reinforced Concrete Pipe - Class III (barrell length = 36 LF)	18				-	FES	FES	Specification 714.04 A
							Corrugated Steel Pipe		Z, A, P	2	0.064				
							Spiral Rib Steel Pipe		Z, A, P	3/4, 1	0.064				
							High-Density Polyethylene								
							Polypropylene Pipe (AASHTO M330, Type S)								
15468+35	52.8' Rt	15469+00	61.2' Rt	18	Pipe Corr. Steel (Extension)	14-8	Corrugated Steel Pipe	18	Z, A, P	2	0.064	-	FES*	FES*	Specification 714.04 A
15468+36	79.8' Lt	15469+08	71.9' Lt	18	Pipe Corr. Steel (Extension)	14-14	Corrugated Steel Pipe	18	Z, A, P	2	0.064	-	FES*	FES*	Specification 714.04 A

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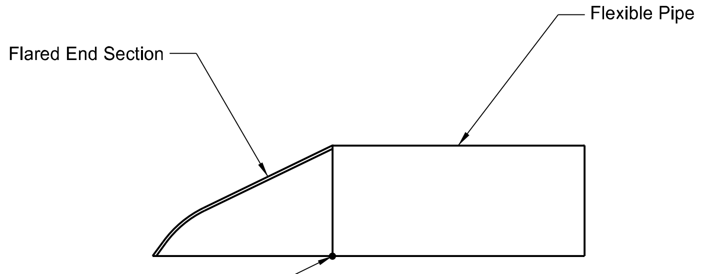
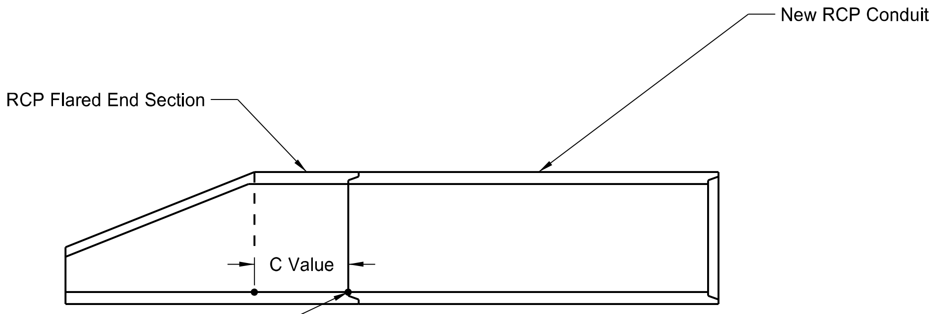
5 = 5"x1"

Spiral Ribs: 3/4 = 3/4"x3/4"@7-1/2"
1 = 3/4"x1"@11-1/2"

(*) End sections are measured and paid for separately for pipe extensions.
FES = Flared End Section
TES = Traversable End Section



Culvert Staking Detail
Extension/New Pipe
(Flexible Pipe)



Culvert Staking Detail
Extension/New Pipe
(Rigid Pipe)

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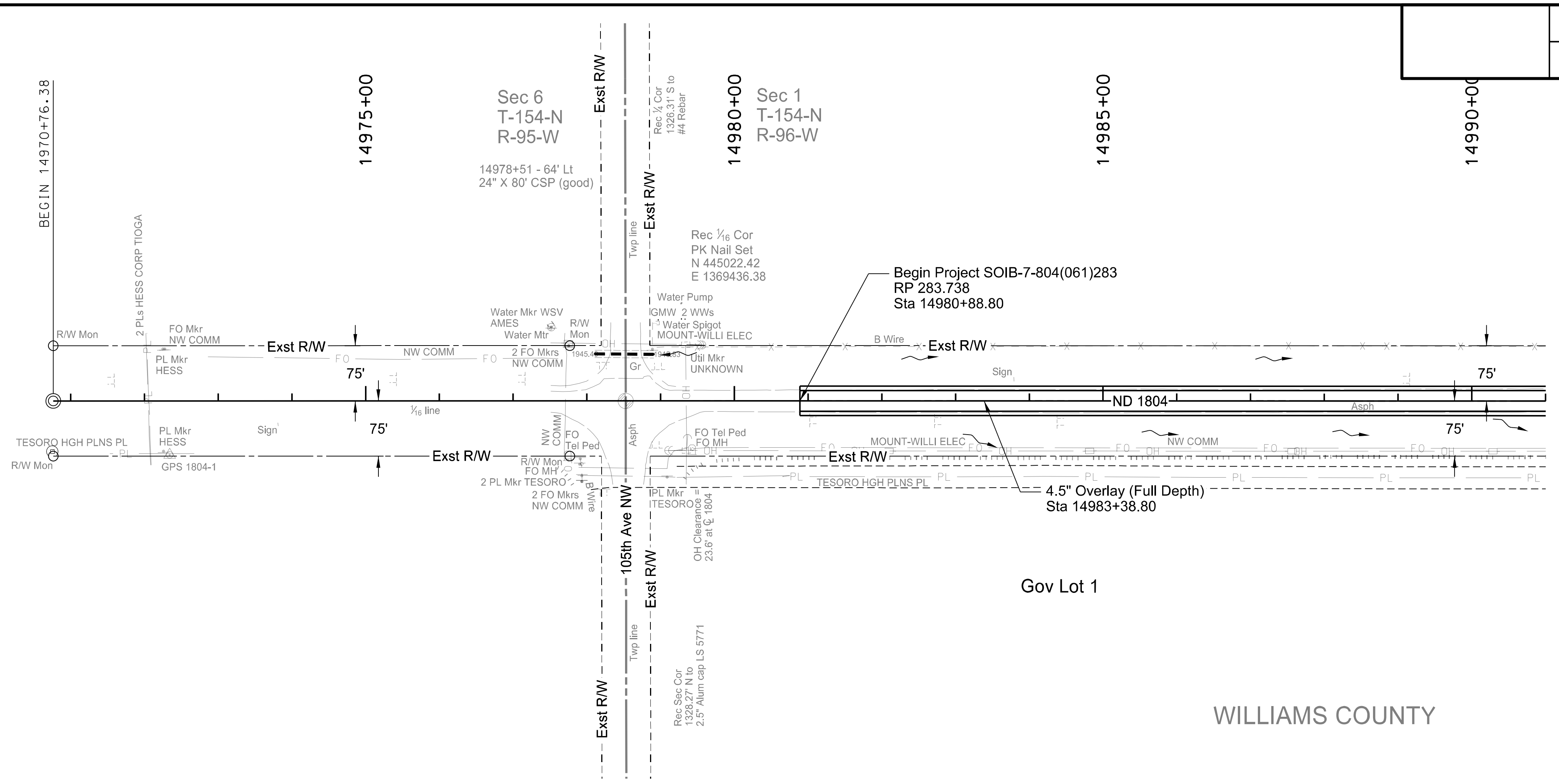
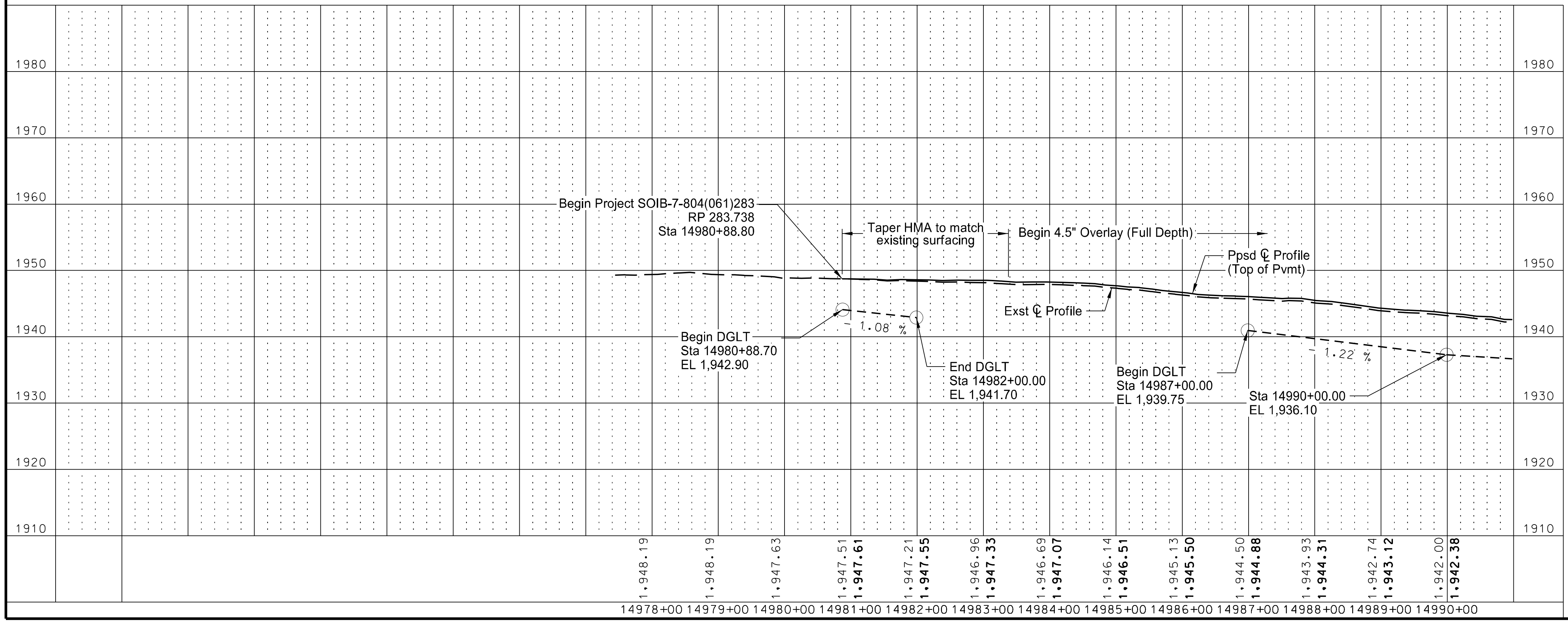
ND 1804 - Jct Tioga Rd to Red Mike Area

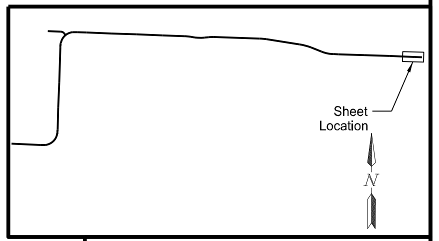
Allowable Pipe List

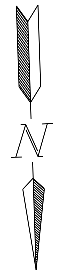
Approach Pipes

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SOIB-7-804(061)283	60	1









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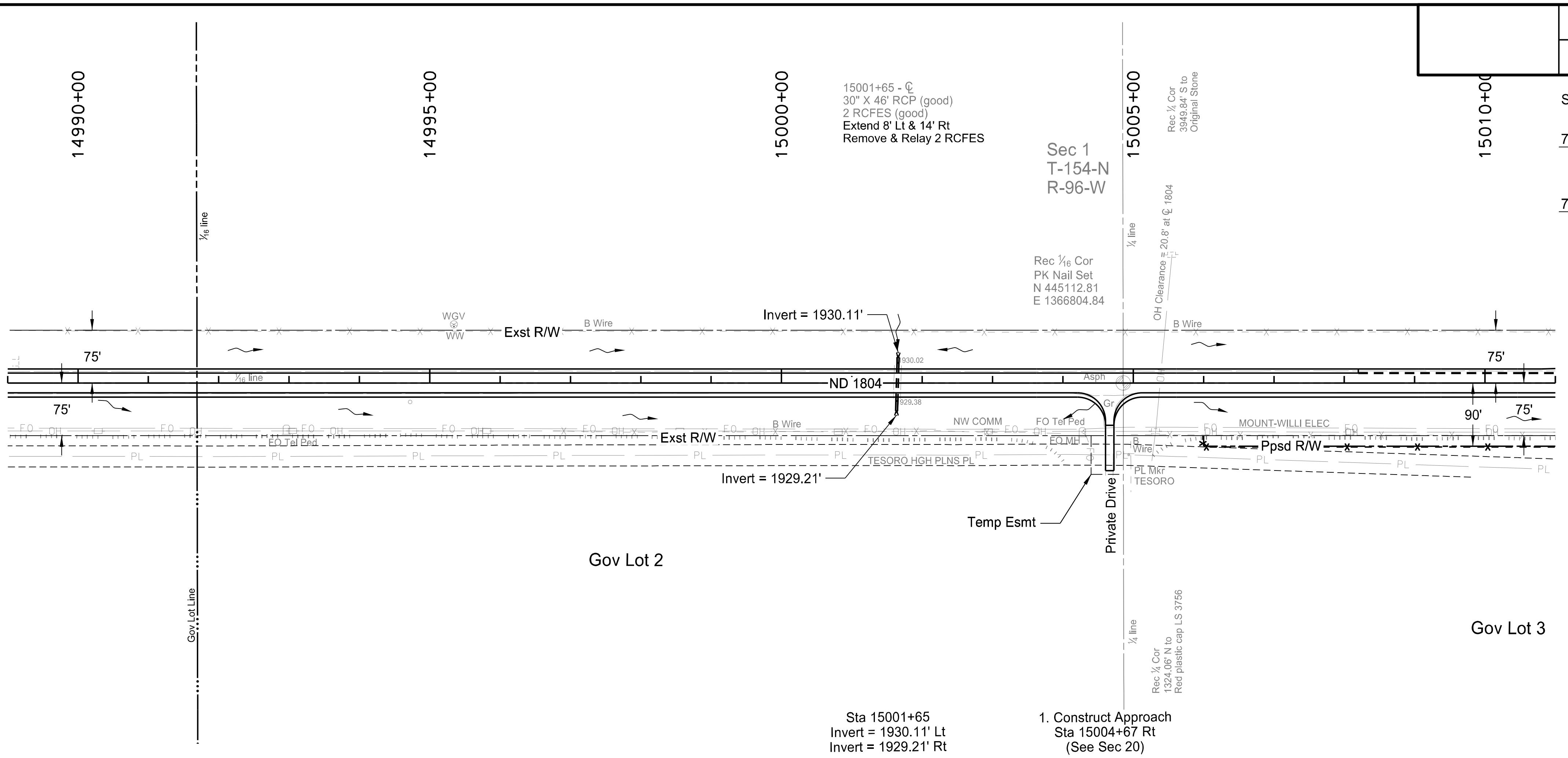
ND 1804 - Jct Tioga Rd to Red Mike Area

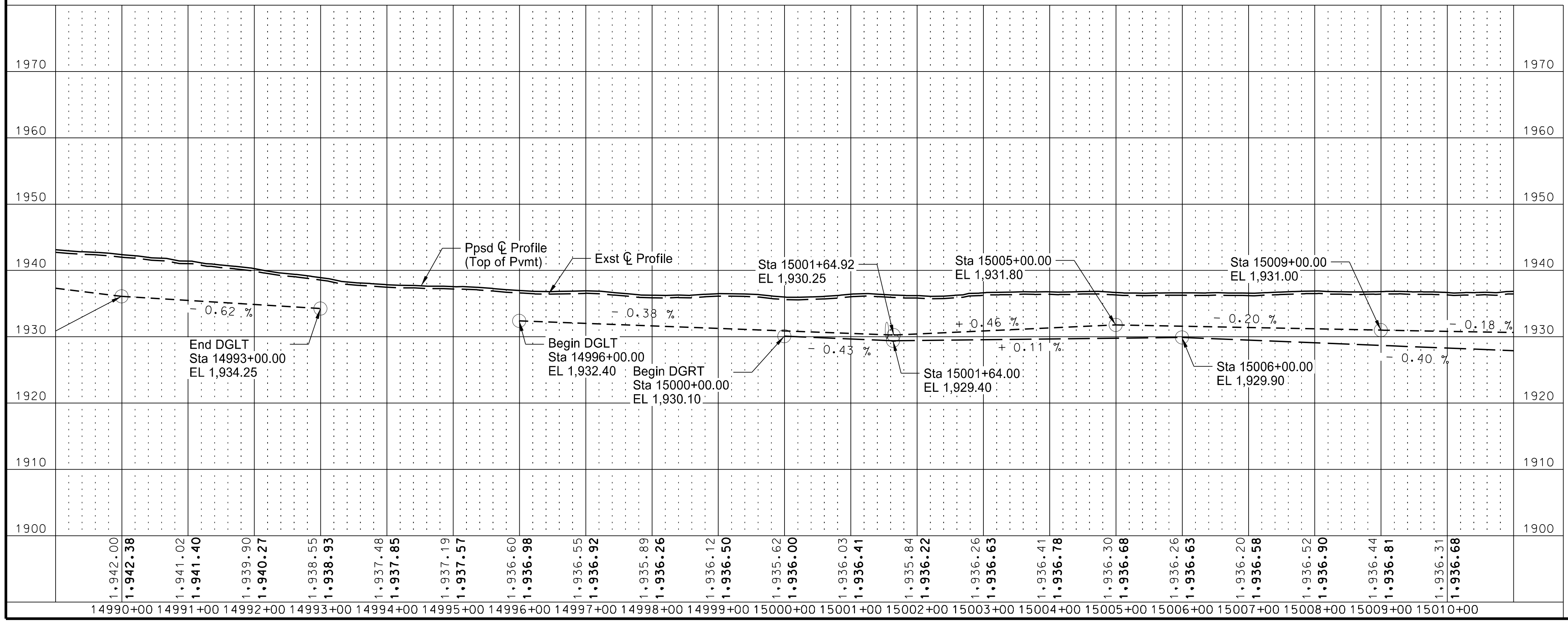
Plan & Profile

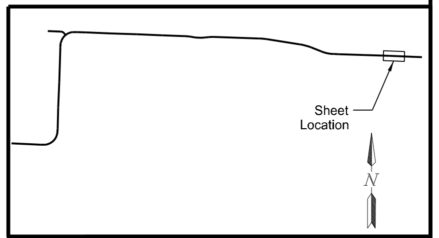
Sta 14970+76 to Sta 14990+00
(SCL1804)

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SOIB-7-804(061)283	60	2

SPEC	CODE	BID ITEM	QTY	UNIT
714	0820	PIPE CONC REINF 30IN CL III		
		Sta 15001+64, 25.8' Rt - 39.8' Rt	14	LF
		Sta 15001+66, 28.7 'Lt - 36.7' Lt	8	LF
714	9660	REMOVE & RELAY END SECTION-ALL TYPE & SIZES		
		Sta 15001+64 Rt & 15001+66 Lt	2	EA







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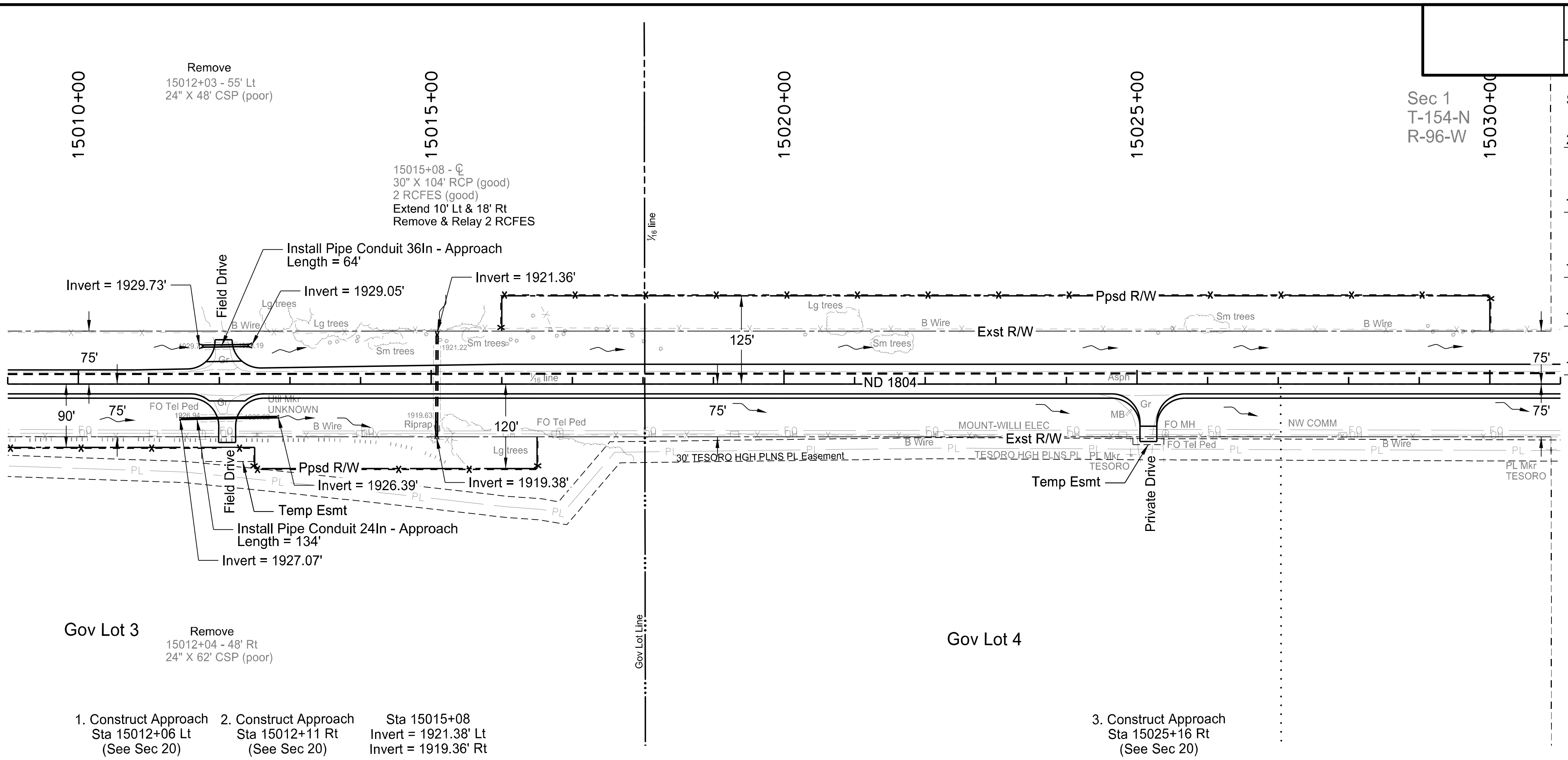
ND 1804 - Jct Tioga Rd to Red Mike Area

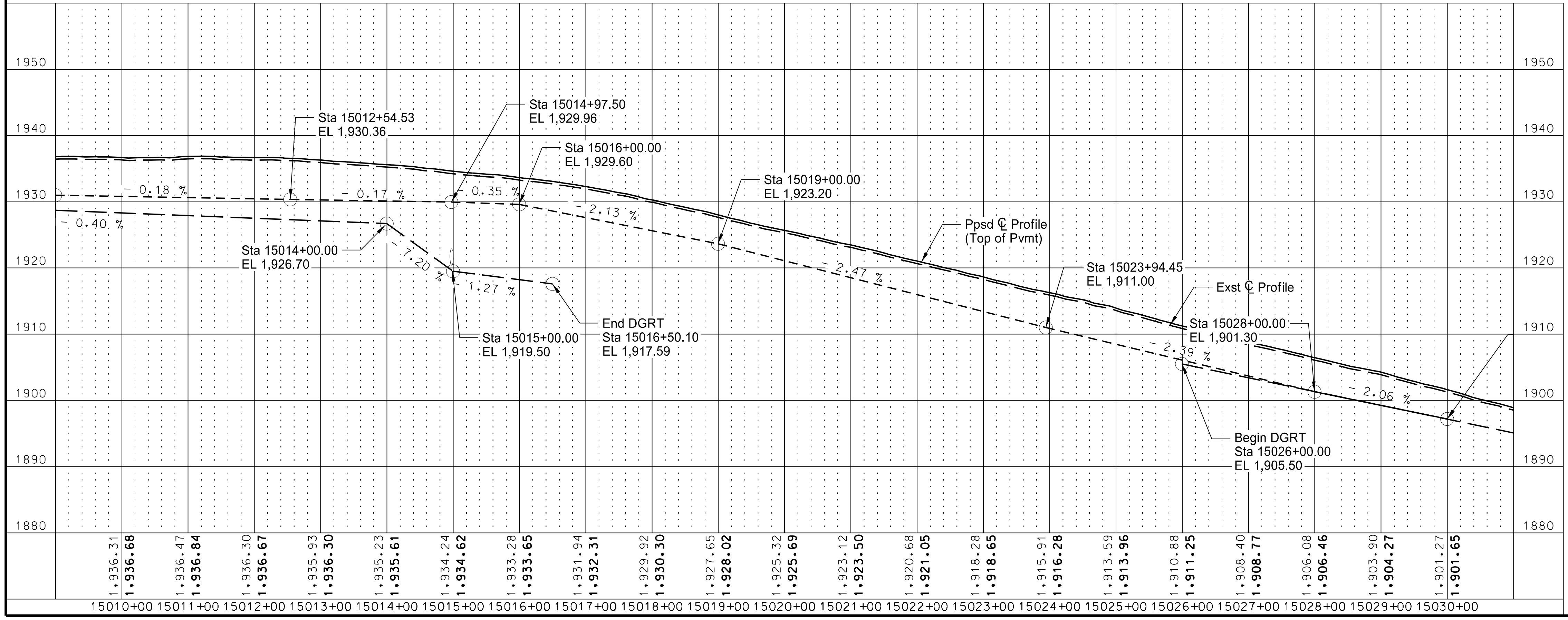
Plan & Profile

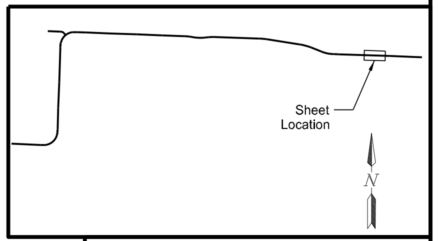
Sta 14990+00 to Sta 15010+00
(SCL1804)

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SOIB-7-804(061)283	60	3

SPEC	CODE	BID ITEM	QTY	UNIT
202	0174	REMOVAL OF PIPE ALL TYPES AND SIZES		
		Sta 15012+06, 48.7' Rt	62	LF
		Sta 15012+06, 53.5' Lt	48	LF
714	0820	PIPE CONC REINF 30IN CL III		
		Sta 15015+08, 58.4' Lt - 68.4' Lt	10	LF
		Sta 15015+08, 53.6' Rt - 71.6' Rt	18	LF
714	4106	PIPE CONDUIT 24IN-APPROACH		
		Sta 15011+47, 49.3' Rt to Sta 15012+81, 46.9' Rt	134	LF
714	4116	PIPE CONDUIT 36IN-APPROACH		
		Sta 15011+77, 53.5' Lt to Sta 15012+41, 54.4' Lt	64	LF
714	9660	REMOVE & RELAY END SECTION-ALL TYPE & SIZES		
		Sta 15015+08 Lt & Rt	2	EA







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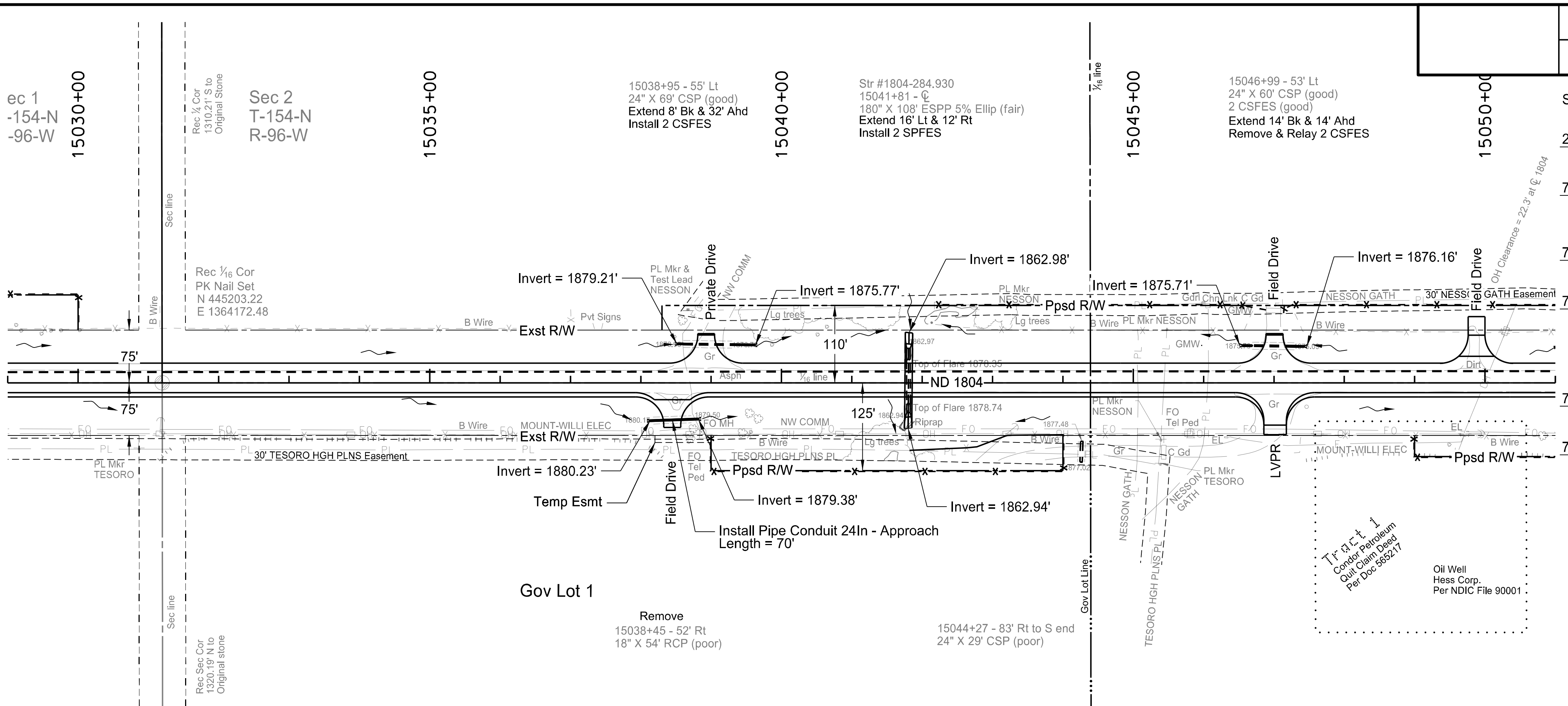
ND 1804 - Jct Tioga Rd to Red Mike Area

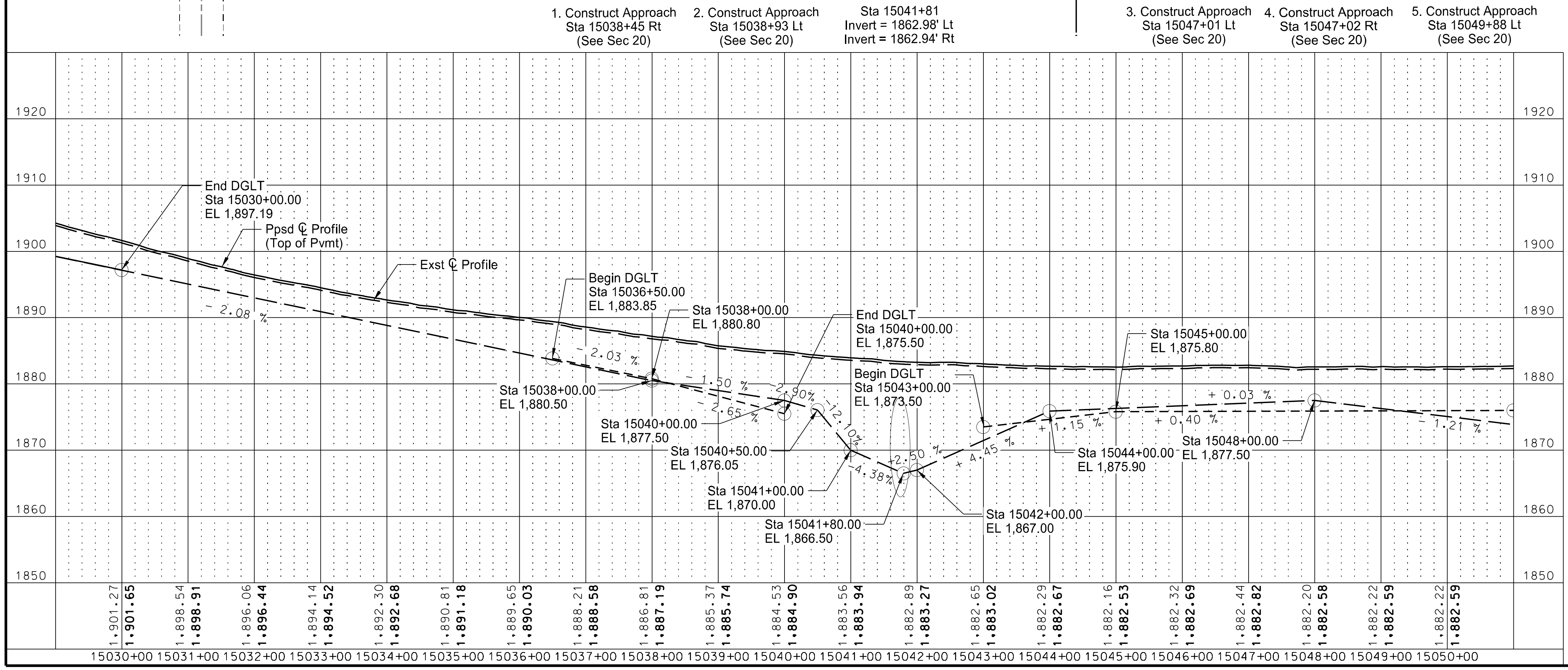
Plan & Profile

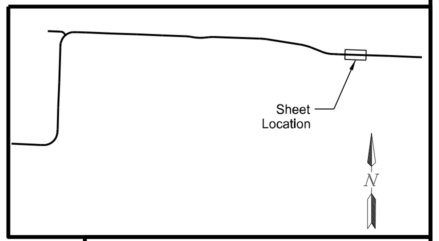
Sta 15010+00 to Sta 15030+00
(SCL1804)

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SOIB-7-804(061)283	60	4

SPEC	CODE	BID ITEM	QTY	UNIT
202	0174	REMOVAL OF PIPE ALL TYPES AND SIZES		
		Sta 15038+60, 53.0' Rt	54	LF
714	3480	15FT STR PLATE PIPE .218IN		
		Sta 15041+80, 33.0' Lt to Sta 15041+80, 71.3' Lt	38	LF
		Sta 15041+81, 30.0' Rt to Sta 15041+81, 64.6' Rt	34	LF
714	4106	PIPE CONDUIT 24IN-APPROACH		
		Sta 15038+13, 53.9' Rt to Sta 15038+82, 51.5' Rt	70	LF
714	5035	PIPE CORR STEEL .064IN 24IN		
		Sta 15038+52, 55.3' Lt to Sta 15038+60, 55.3' Lt	8	LF
		Sta 15039+30, 54.4' Lt to Sta 15039+62, 53.8' Lt	32	LF
		Sta 15046+55, 52.9' Lt to Sta 15046+69, 52.8' Lt	14	LF
		Sta 15047+29, 51.9' Lt to Sta 15047+43, 51.7' Lt	14	LF
714	5820	END SECT CORR STEEL .064IN 24IN		
		Sta 15038+52 Lt & Sta 15039+62 Lt	2	EA
714	9660	REMOVE & RELAY END SECTION-ALL TYPE & SIZES		
		Sta 15046+55 Lt & Sta 15047+43 Lt	2	EA







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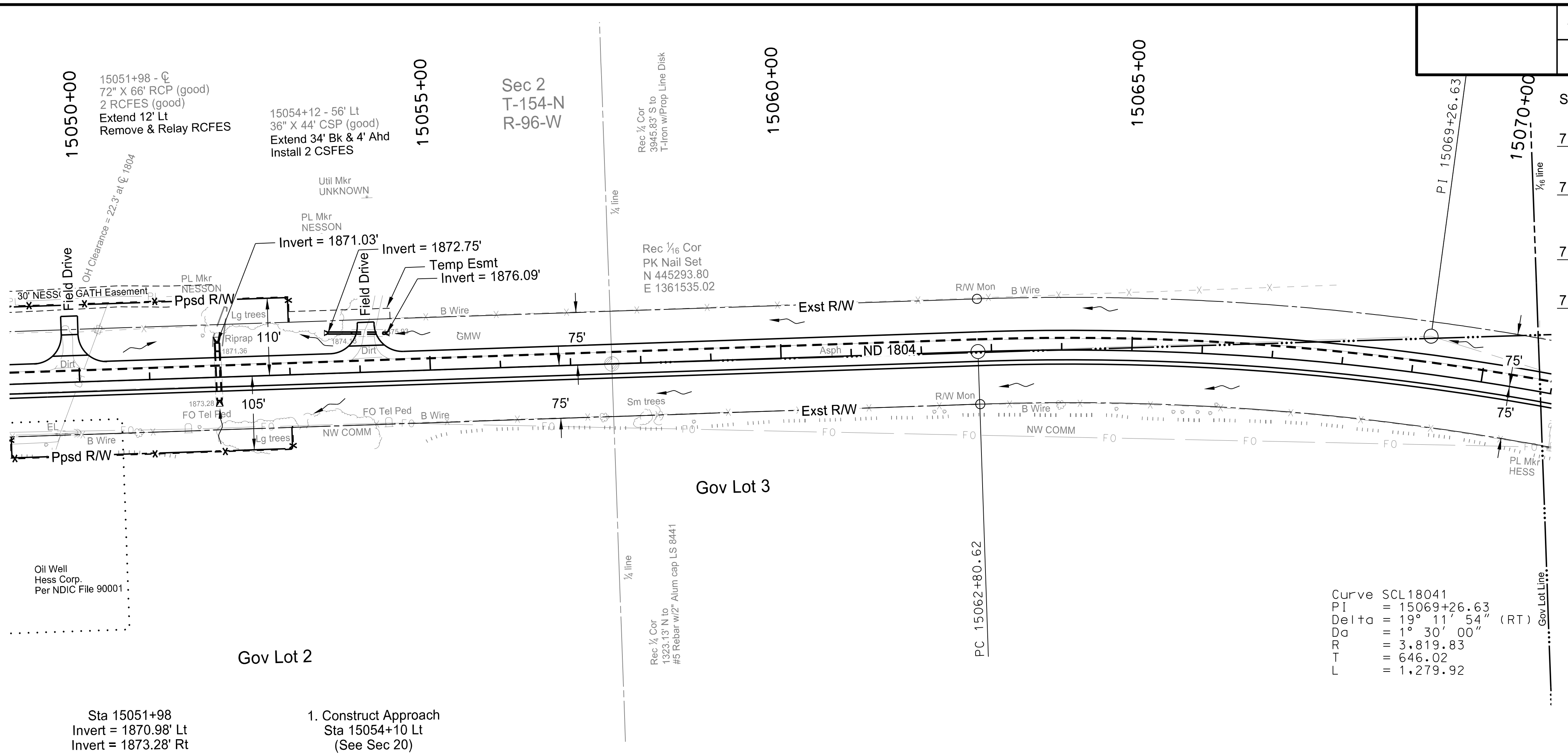
ND 1804 - Jct Tioga Rd to Red Mike Area

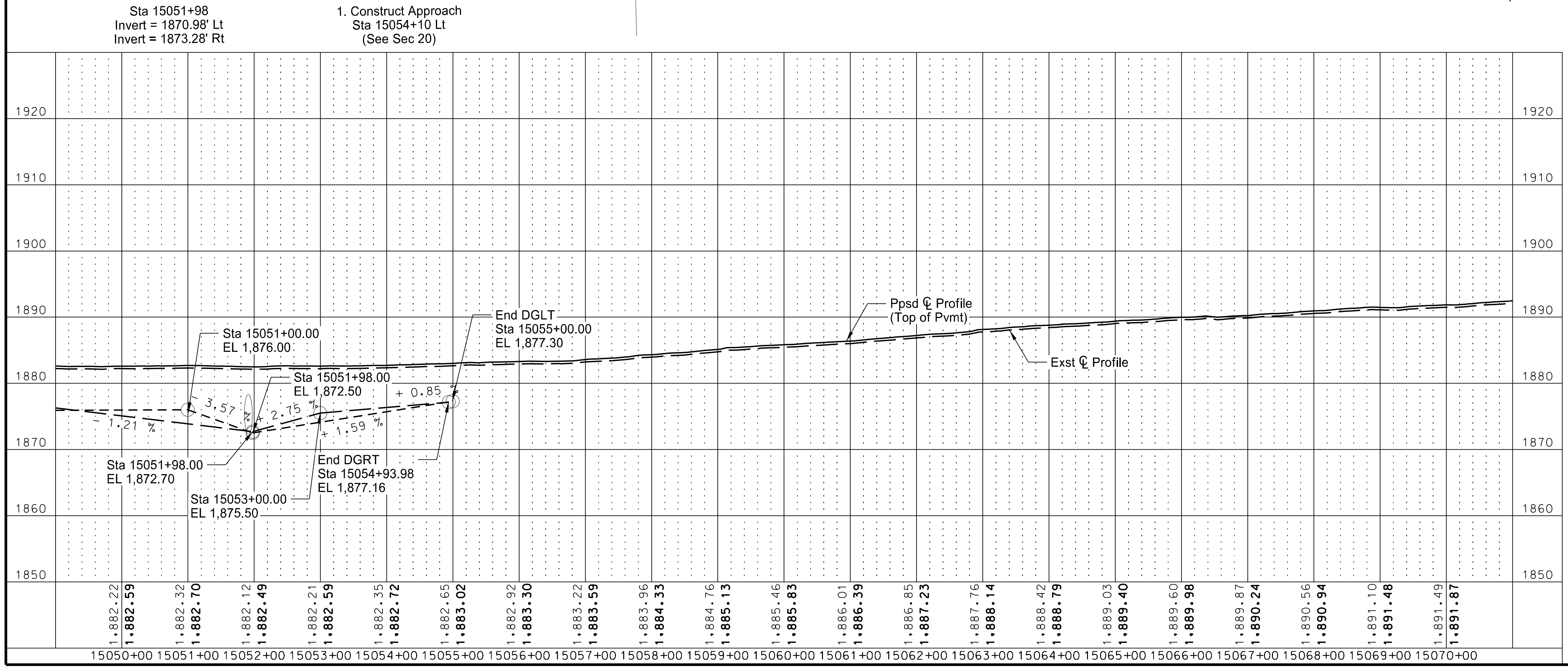
Plan & Profile

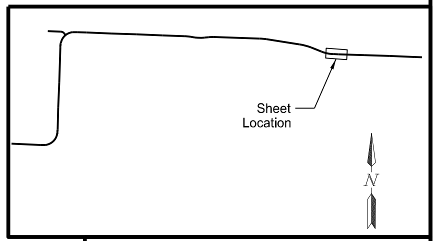
Sta 15030+00 to Sta 15050+00
(SCL1804)

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SOIB-7-804(061)283	60	5

SPEC	CODE	BID ITEM	QTY	UNIT
714	1510	PIPE CONC REINF 72IN CL III		
		Sta 15051+98, 37.1' Lt - 48.9' Lt	12	LF
714	5215	PIPE CORR STEEL .079IN 36IN		
		Sta 15053+56, 57.7' Lt to Sta 15053+90, 54.7' Lt	34	LF
		Sta 15054+34, 54.8' Lt to Sta 15054+38, 54.7' Lt	4	LF
714	5830	END SECT CORR STEEL .079IN 36IN		
		Sta 15053+56 Lt & Sta 15054+38 Lt	2	EA
714	9660	REMOVE & RELAY END SECTION-ALL TYPE & SIZES		
		Sta 15051+98 Lt	1	EA







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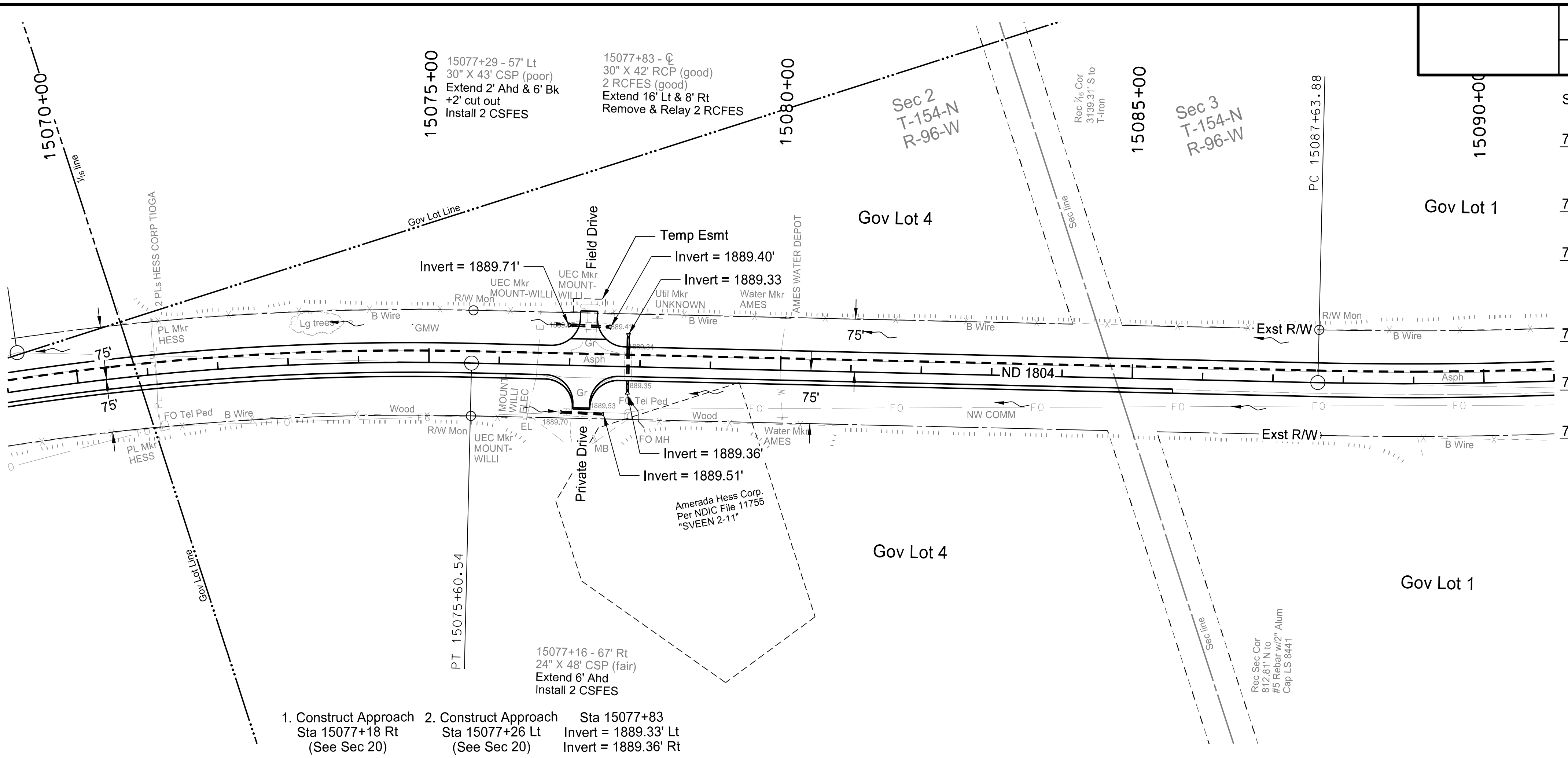
ND 1804 - Jct Tioga Rd to Red Mike Area

Plan & Profile

Sta 15050+00 to Sta 15070+00
(SCL1804)

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SOIB-7-804(061)283	60	6

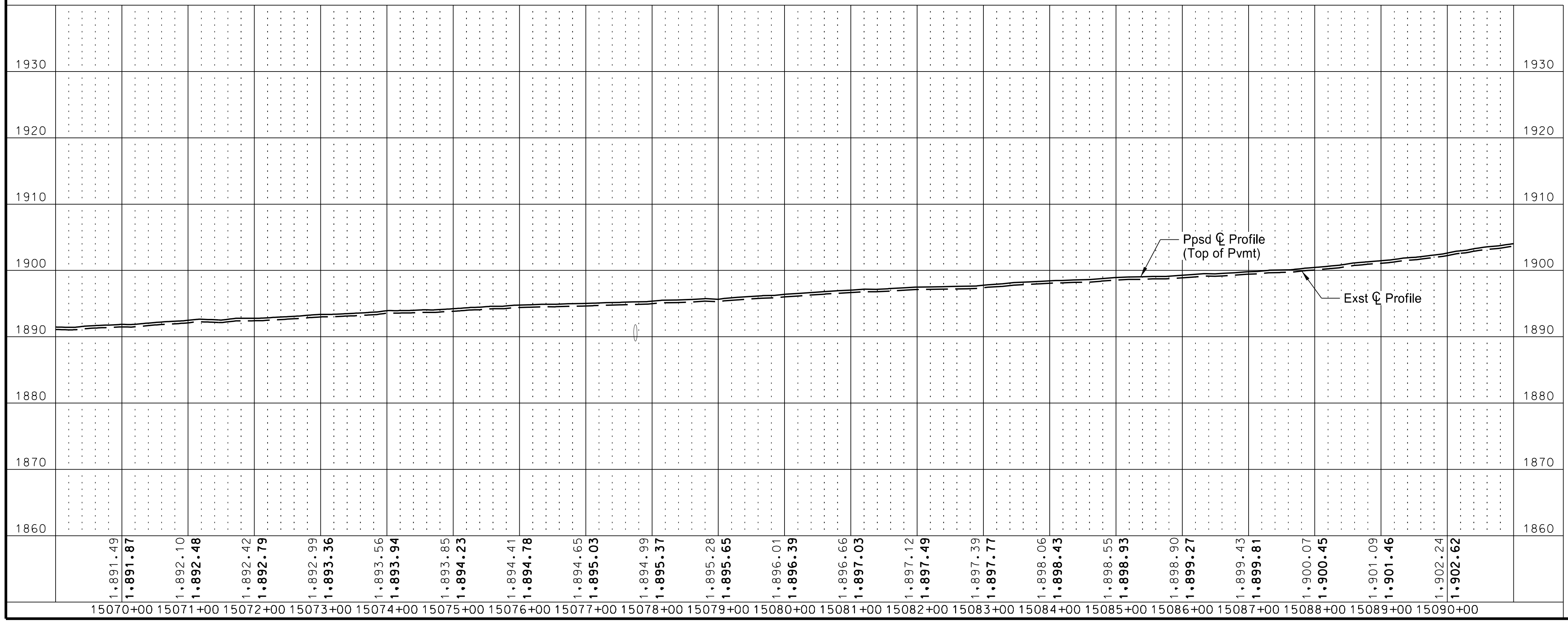


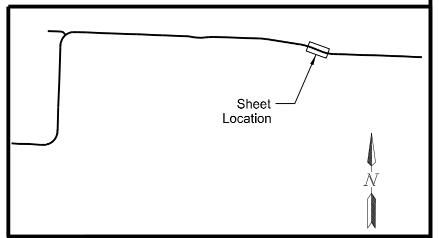
1. Construct Approach
Sta 15077+18 Rt
(See Sec 20)

2. Construct Approach
Sta 15077+26 Lt
(See Sec 20)

Sta 15077+83
Invert = 1889.33' Lt
Invert = 1889.36' Rt

SPEC	CODE	BID ITEM	QTY	UNIT
714	0820	PIPE CONC REINF 30IN CL III		
		Sta 15077+83, 25.1' Lt - 41.1' Lt	16	LF
		Sta 15077+83, 24.9' Rt - 32.9' Rt	8	LF
714	5035	PIPE CORR STEEL .064IN 24IN		
		Sta 15077+40, 67.9' Rt to Sta 15077+46, 68.0' Rt	6	LF
714	5210	PIPE CORR STEEL .079IN 30IN		
		Sta 15077+01, 57.3' Lt to Sta 15077+07, 55.9' Lt	8	LF
		Sta 15077+51, 55.9' Lt to Sta 15077+53, 55.9' Lt	2	LF
		Sta 15077+07, 57.3' Lt Cut Out	2	LF
714	5820	END SECT CORR STEEL .064IN 24IN		
		Sta 15076+91 Rt & Sta 15077+46 Rt	2	EA
714	5825	END SECT CORR STEEL .079IN 30IN		
		Sta 15077+01 Lt & Sta 15077+53 Lt	2	EA
714	9660	REMOVE & RELAY END SECTION-ALL TYPE & SIZES		
		Sta 15077+83 Lt & Rt	2	EA





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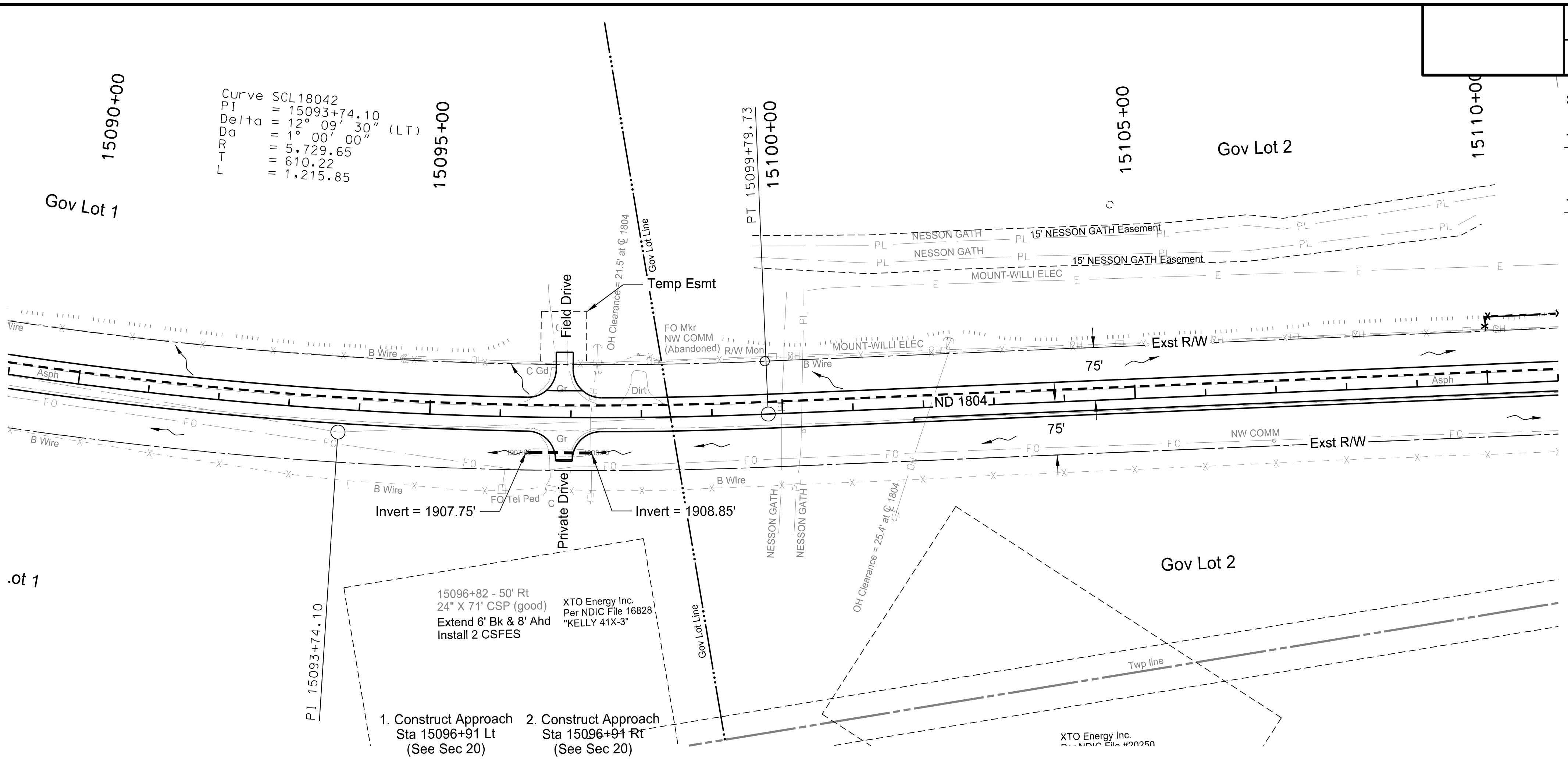
ND 1804 - Jct Tioga Rd to Red Mike Area

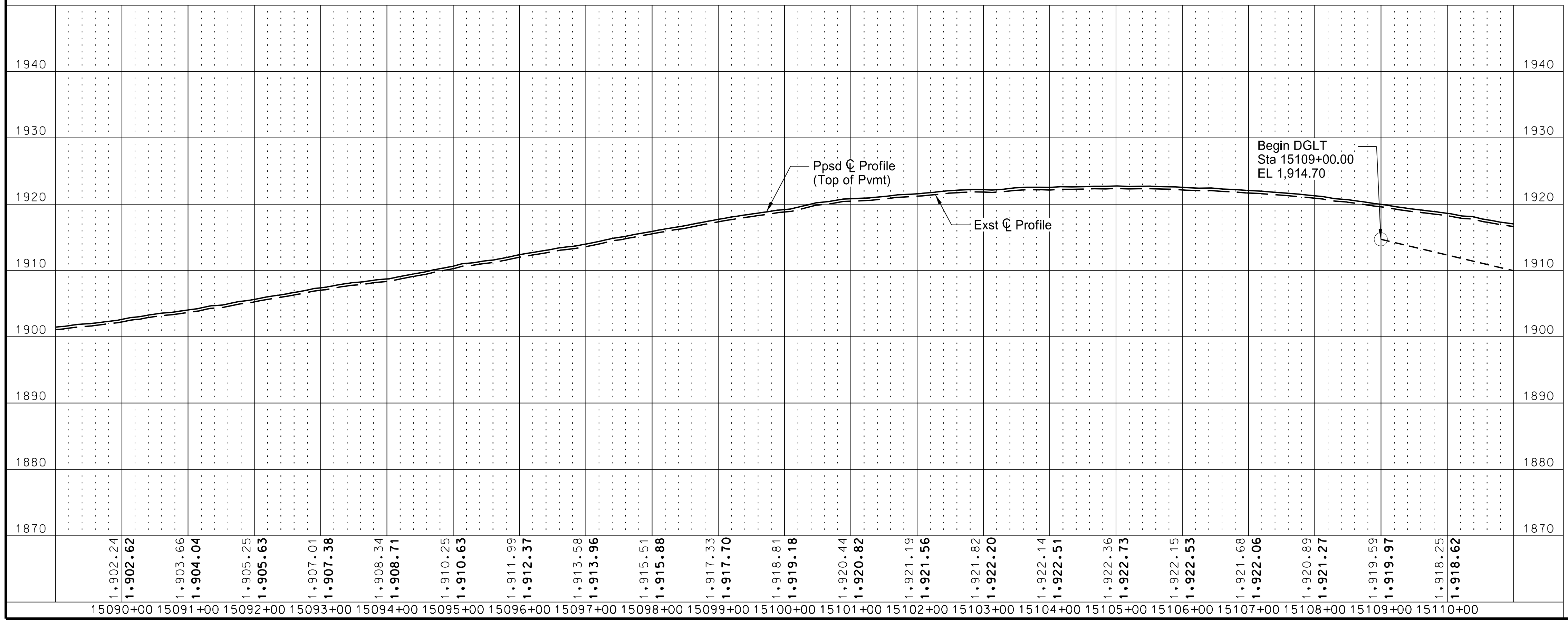
Plan & Profile

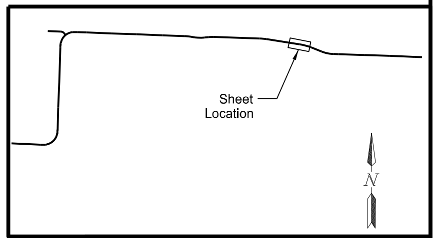
Sta 15070+00 to Sta 15090+00
(SCL1804)

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SOIB-7-804(061)283	60	7

SPEC	CODE	BID ITEM	QTY	UNIT
714	5035	PIPE CORR STEEL .064IN 24IN		
		Sta 15096+41, 49.9' Rt to Sta 15096+47, 49.9' Rt	6	LF
		Sta 15097+18, 50.2' Rt to Sta 15097+26, 50.2' Rt	8	LF
714	5820	END SECT CORR STEEL .064IN 24IN		
		Sta 15096+41 Rt & Sta 15097+26 Rt	2	EA







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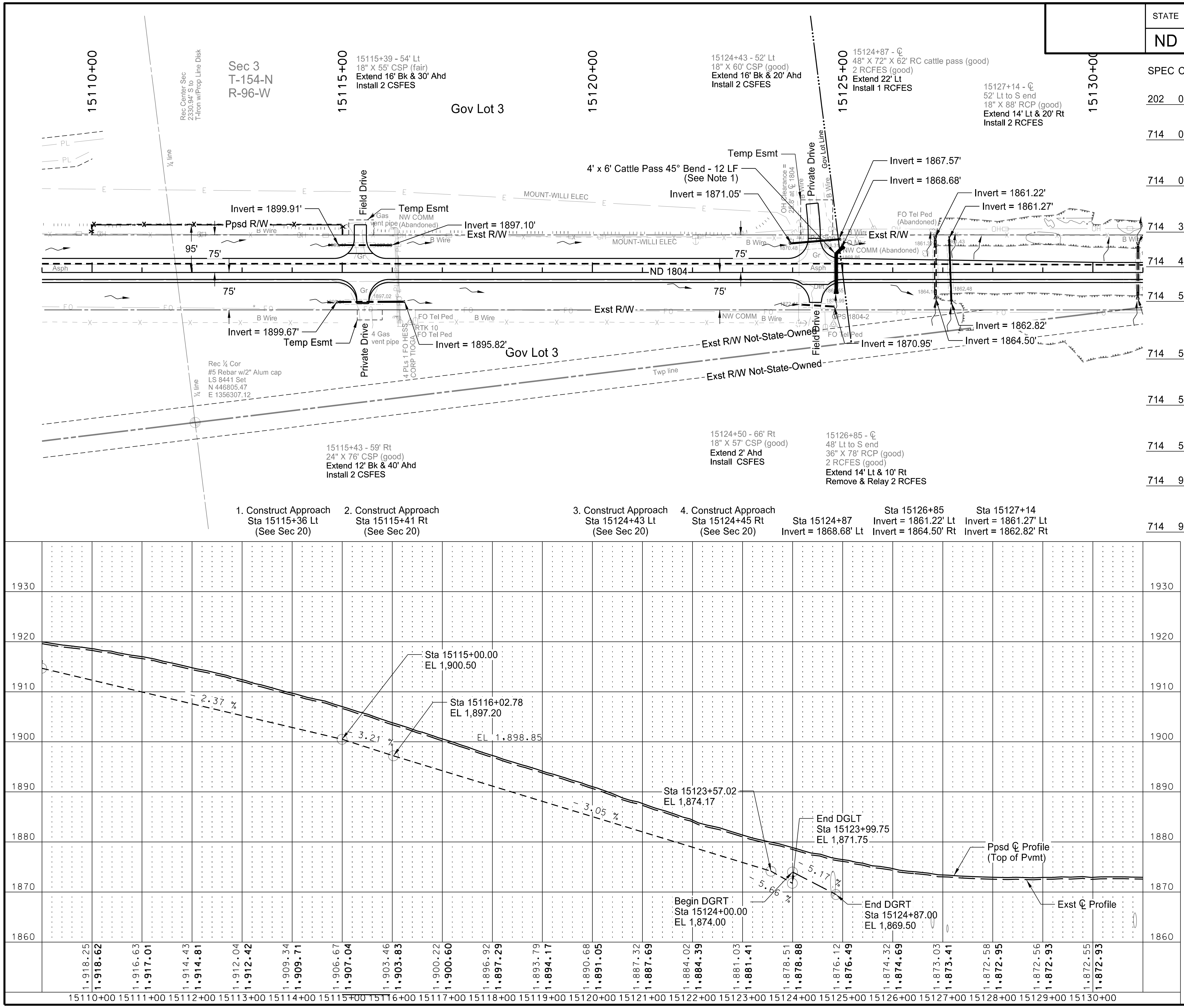
ND 1804 - Jct Tioga Rd to Red Mike Area

Plan & Profile

Sta 15090+00 to Sta 15110+00
(SCL1804)

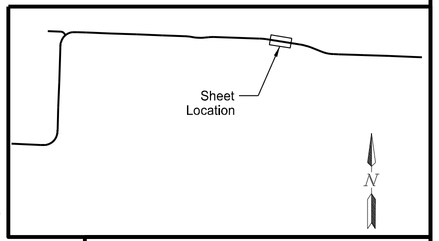
STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SOIB-7-804(061)283	60	8



SPEC	CODE	BID ITEM	QTY	UNIT
202	0174	REMOVAL OF PIPE ALL TYPES AND SIZES		
		Sta 15124+13, 49.4' Lt to Sta 15124+73, 54.5' Lt	60	LF
714	0310	PIPE CONC REINF 18IN CL III		
		Sta 15127+13, 51.9' Lt - 65.9' Lt	14	LF
		Sta 15127+17, 37.3' Rt - 57.3' Rt	20	LF
714	0905	PIPE CONC REINF 36IN CL III		
		Sta 15126+85, 50.6' Lt - 64.6' Lt	14	LF
		Sta 15126+85, 35.0' Rt - 45.1' Rt	10	LF
714	3010	END SECT-CONC REINF 18IN		
		Sta 15127+13 Lt & Sta 15127+17 Rt	2	EA
714	4106	PIPE CONDUIT 24IN-APPROACH		
		Sta 15123+97, 58.1' Lt to Sta 15124+93, 66.0' Lt	96	LF
714	5015	PIPE CORR STEEL .064IN 18IN		
		Sta 15114+95, 54.5' Lt to Sta 15115+11, 54.5' Lt	16	LF
		Sta 15115+66, 54.4' Lt to Sta 15115+96, 54.4' Lt	30	LF
		Sta 15124+79, 68.0' Rt to Sta 15124+81, 68.1' Rt	2	LF
714	5035	PIPE CORR STEEL .064IN 24IN		
		Sta 15114+93, 59.0' Rt to Sta 15115+05, 58.9' Rt	12	LF
		Sta 15115+82, 58.7' Rt to Sta 15116+22, 58.5' Rt	40	LF
714	5810	END SECT CORR STEEL .064IN 18IN		
		Sta 15114+95 Lt & Sta 15115+96 Lt	2	EA
		Sta 15124+21 Rt & Sta 15124+81 Rt	2	EA
714	5820	END SECT CORR STEEL .064IN 24IN		
		Sta 15114+93 Rt & Sta 15116+22 Rt	2	EA
714	9200	CATTLE PASS CONC INTERMED SECTION		
		Sta 15124+87, 31.5' Lt to Sta 15124+91, 41.4' Lt	12	LF
		Sta 15124+91, 41.4' Lt to Sta 15124+95, 45.6' Lt	6	LF
714	9660	REMOVE & RELAY END SECTION-ALL TYPE & SIZES		
		Sta 15124+95 Lt	1	EA
		Sta 15126+85 Lt & Rt	2	EA

Notes:

1. The 4' x 6' Cattle Pass 45° Bend is assumed to be 12 LF measured at the center of the bend. Include all costs associated with the bend in the price bid for "CATTLE PASS CONC INTERMED SECTION".



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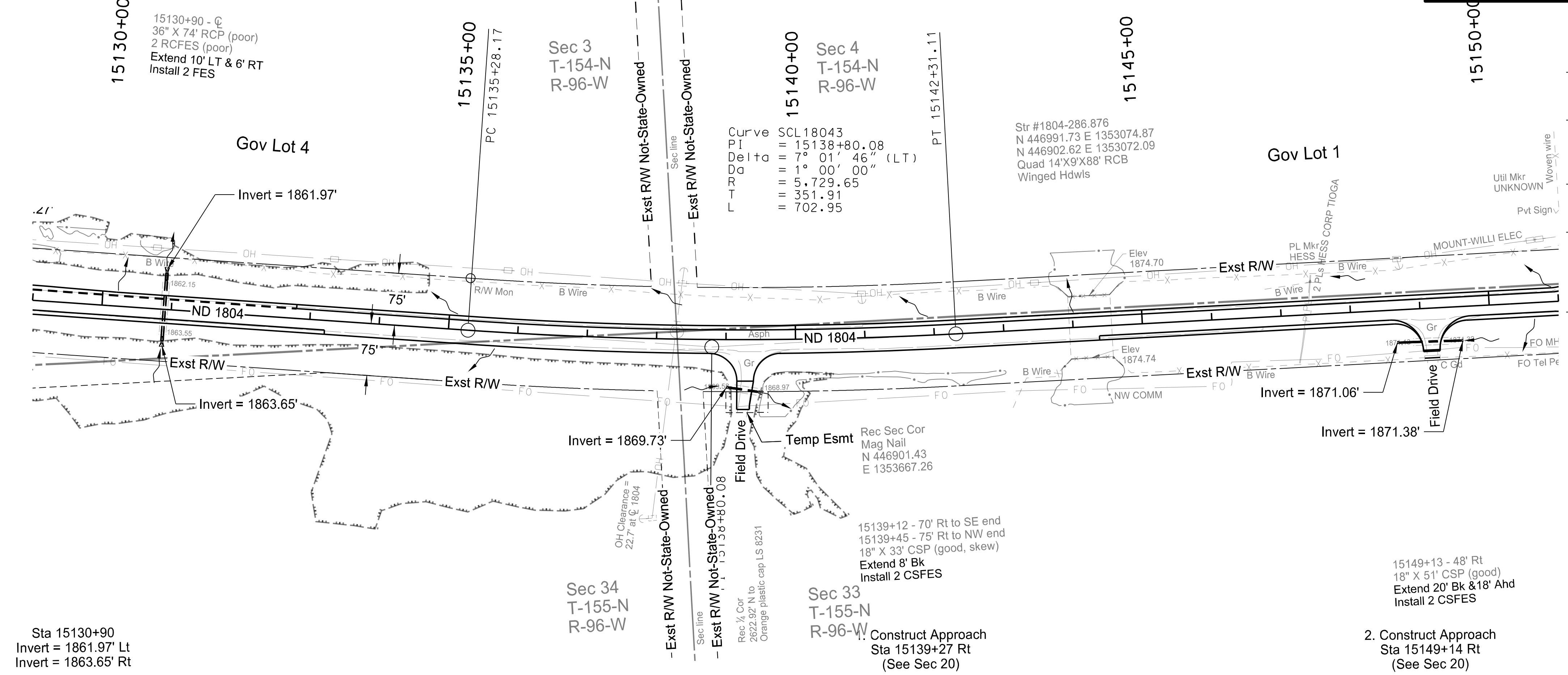
ND 1804 - Jct Tioga Rd to Red Mike Area

Plan & Profile

Sta 15110+00 to Sta 15130+00
(SCL1804)

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SOIB-7-804(061)283	60	9

SPEC	CODE	BID ITEM	QTY	UNIT
202	0169	REMOVAL OF END SECTION-ALL TYPES & SIZES		
		Sta 15130+90 Lt & Rt	2	EA
714	0905	PIPE CONC REINF 36IN CL III		
		Sta 15130+90, 42.2' Lt - 52.2' Lt	10	LF
		Sta 15130+90, 39.5' Rt - 45.5' Rt	6	LF
714	3035	END SECT-CONC REINF 36IN		
		Sta 15130+90 Lt & Rt	2	EA
714	5015	PIPE CORR STEEL .064IN 18IN		
		Sta 15139+04, 69.0' Rt to Sta 15139+12, 70.1' Rt	8	LF
		Sta 15148+68, 47.0' Rt to Sta 15148+88, 47.4' Rt	20	LF
		Sta 15149+39, 48.4' Rt to Sta 15149+57, 48.8' Rt	18	LF
714	5810	END SECT CORR STEEL .064IN 18IN		
		Sta 15139+04 Rt & Sta 15139+55 Rt	2	EA
		Sta 15148+68 Rt & Sta 15149+57 Rt	2	EA



15130+90 - ℄
36" X 74' RCP (poor)
2 RCFES (poor)
Extend 10' LT & 6' RT
Install 2 FES

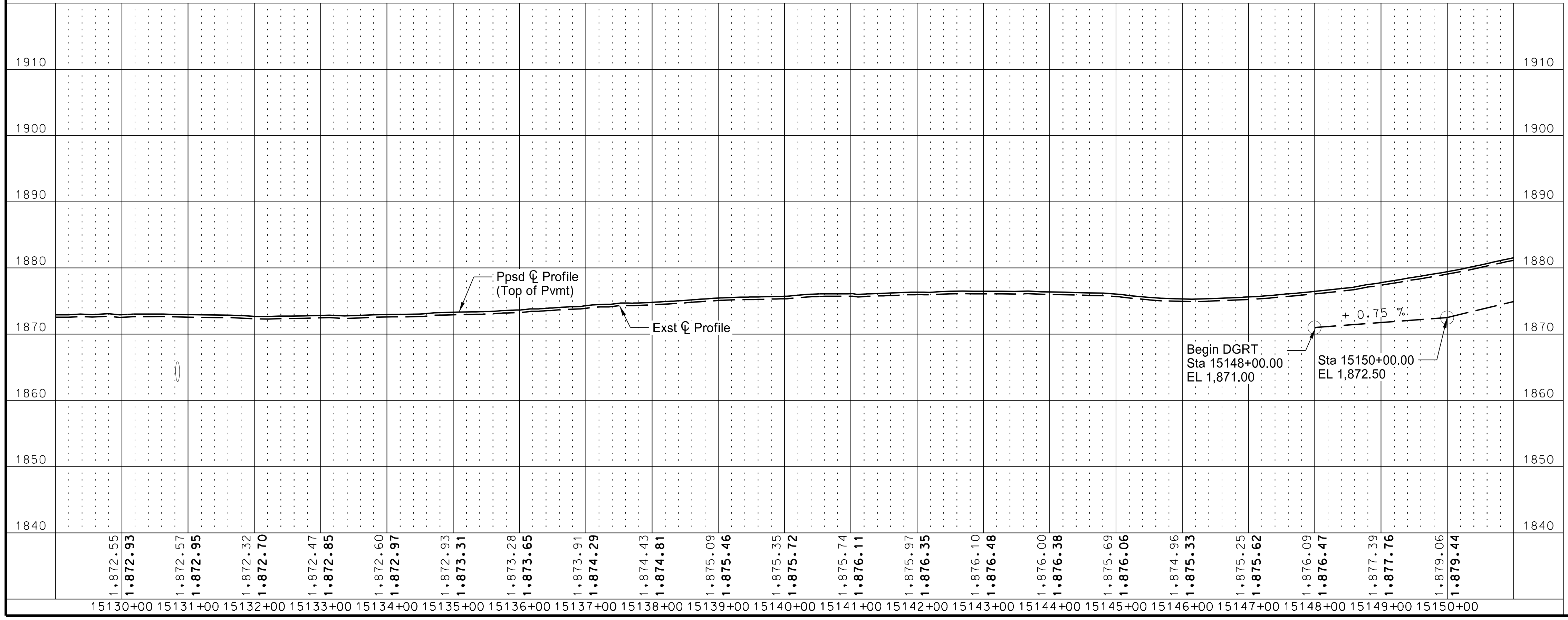
15139+12 - 70' Rt to SE end
15139+45 - 75' Rt to NW end
18" X 33' CSP (good, skew)
Extend 8' Bk
Install 2 CSFES

15149+13 - 48' Rt
18" X 51' CSP (good)
Extend 20' Bk &18' Ahd
Install 2 CSFES

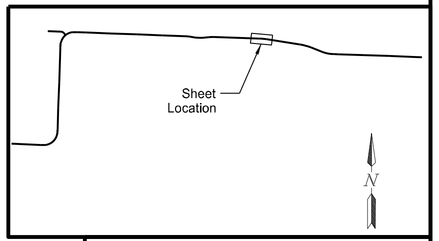
Sta 15130+90
Invert = 1861.97' Lt
Invert = 1863.65' Rt

1. Construct Approach
Sta 15139+27 Rt
(See Sec 20)

2. Construct Approach
Sta 15149+14 Rt
(See Sec 20)



15130+00	1,872.55	**1,872.93**
15131+00	1,872.57	**1,872.95**
15132+00	1,872.32	**1,872.70**
15133+00	1,872.47	**1,872.85**
15134+00	1,872.60	**1,872.97**
15135+00	1,872.93	**1,873.31**
15136+00	1,873.28	**1,873.65**
15137+00	1,873.91	**1,874.29**
15138+00	1,874.43	**1,874.81**
15139+00	1,875.09	**1,875.46**
15140+00	1,875.35	**1,875.72**
15141+00	1,875.74	**1,876.11**
15142+00	1,875.97	**1,876.35**
15143+00	1,876.10	**1,876.48**
15144+00	1,876.00	**1,876.38**
15145+00	1,875.69	**1,876.06**
15146+00	1,874.96	**1,875.33**
15147+00	1,875.25	**1,875.62**
15148+00	1,876.09	**1,876.47**
15149+00	1,877.39	**1,877.76**
15150+00	1,879.06	**1,879.44**



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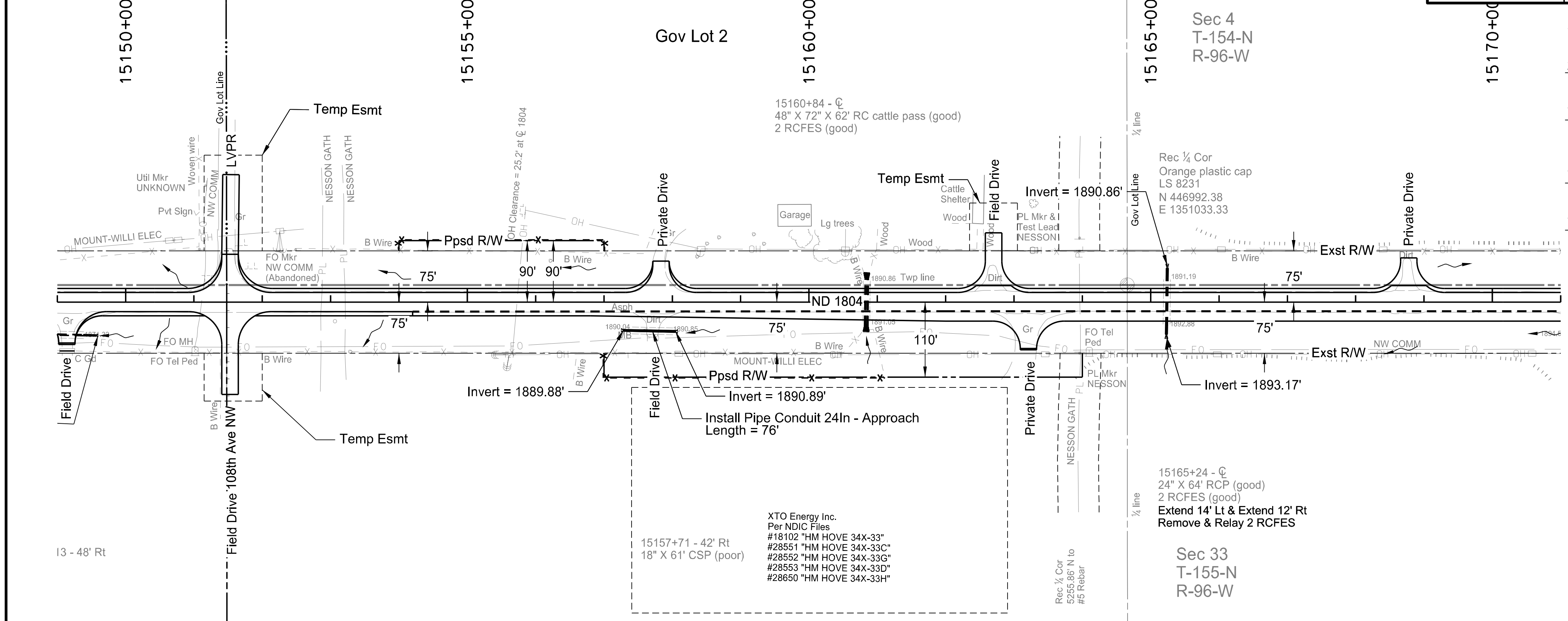
ND 1804 - Jct Tioga Rd to Red Mike Area

Plan & Profile

Sta 15130+00 to Sta 15150+00
(SCL1804)

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SOIB-7-804(061)283	60	10

SPEC	CODE	BID ITEM	QTY	UNIT
202	0174	REMOVAL OF PIPE ALL TYPES AND SIZES		
		Sta 15157+41, 41.6' Rt to Sta 15158+01, 42.9' Rt	61	LF
714	0615	PIPE CONC REINF 24IN CL III		
		Sta 15165+24, 35.6' Lt -49.6' Lt	14	LF
		Sta 15165+24, 35.3' Rt -47.3' Rt	12	LF
714	4106	PIPE CONDUIT 24IN-APPROACH		
		Sta 15157+29, 41.4' Rt to Sta 15158+04, 43.0' Rt	76	LF
714	9660	REMOVE & RELAY END SECTION-ALL TYPE & SIZES		
		Sta 15165+24 Lt & Rt	2	EA



1. Construct Approach
Sta 15151+53 Lt
(See Sec 20)

2. Construct Approach
Sta 15151+53 Rt
(See Sec 20)

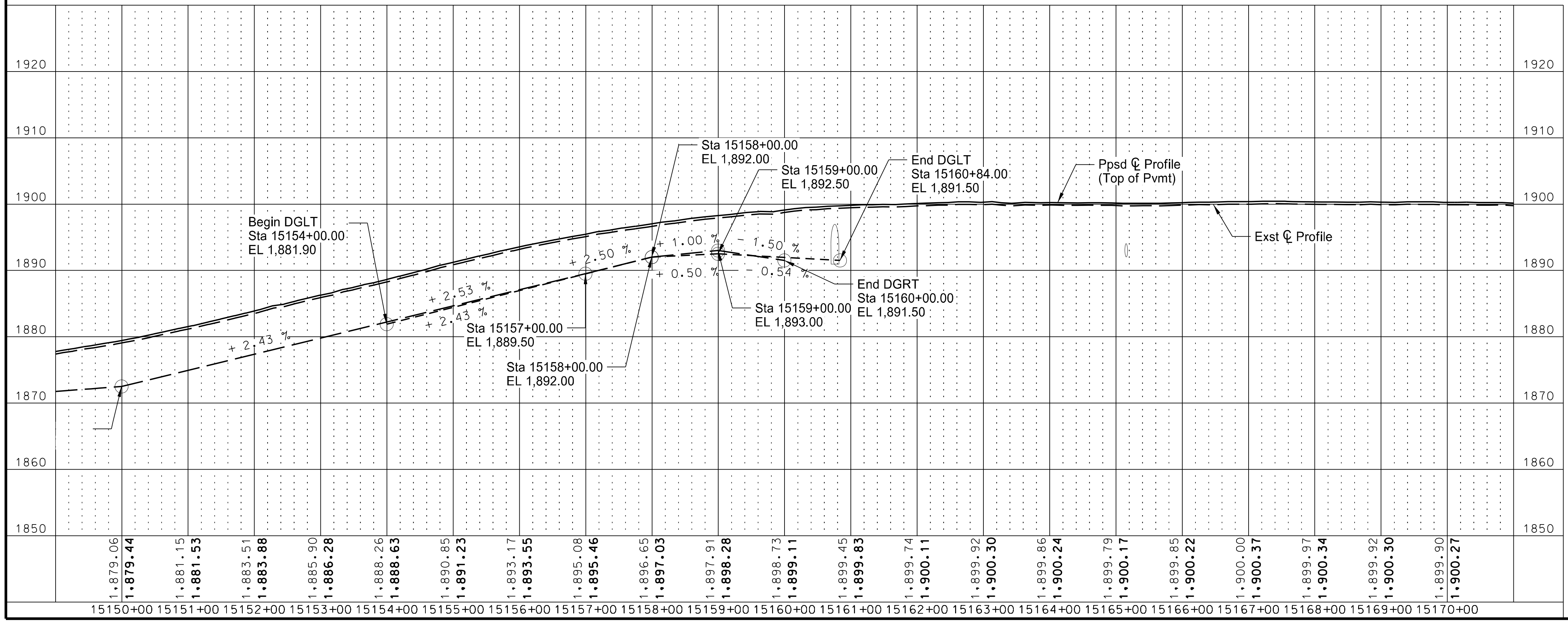
3. Construct Approach
Sta 15157+83 Lt
(See Sec 20)

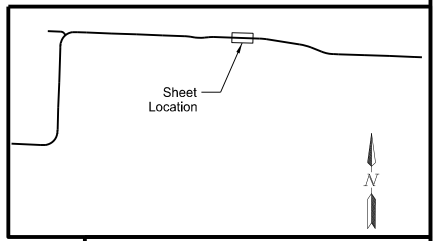
4. Construct Approach
Sta 15162+70 Lt
(See Sec 20)

5. Construct Approach
Sta 15163+21 Rt
(See Sec 20)

Sta 15165+24
Invert = 1890.86' Lt
Invert = 1893.17' Rt

6. Construct Approach
Sta 15168+78 Lt
(See Sec 20)





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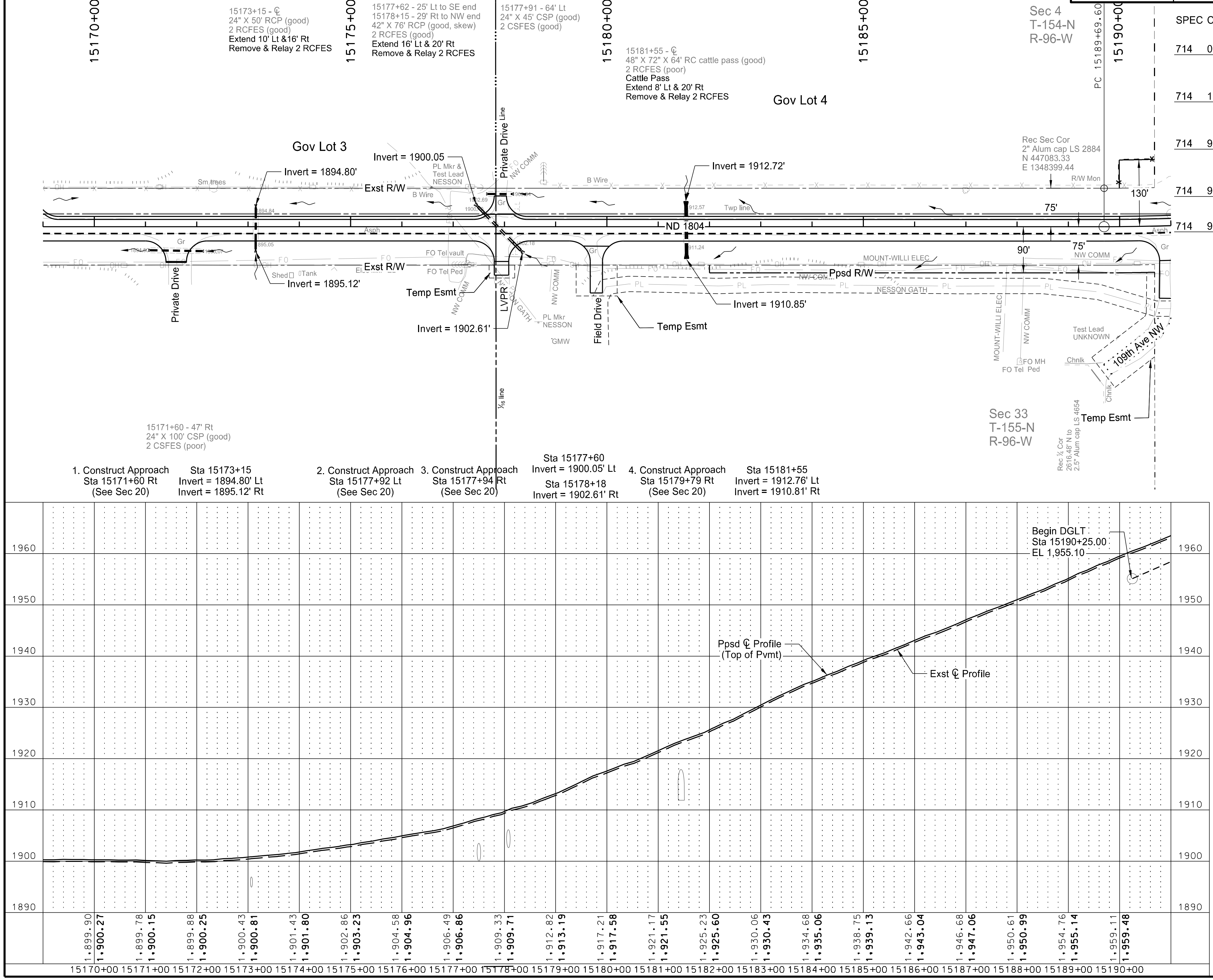
ND 1804 - Jct Tioga Rd to Red Mike Area

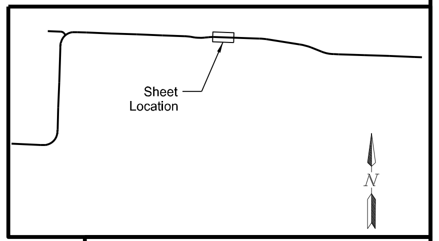
Plan & Profile

Sta 15150+00 to Sta 15170+00
(SCL1804)

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SOIB-7-804(061)283	60	11

SPEC	CODE	BID ITEM	QTY	UNIT
714	0615	PIPE CONC REINF 24IN CL III		
		Sta 15173+15, 27.3' Lt - 37.3' Lt	10	LF
		Sta 15173+15, 27.9' Rt - 43.9' Rt	16	LF
714	1005	PIPE CONC REINF 42IN CL III		
		Sta 15177+49, 38.5' Lt to Sta 15177+60, 27.2' Lt	16	LF
		Sta 15178+18, 31.5' Rt to Sta 15178+32, 45.8' Rt	20	LF
714	9200	CATTLE PASS CONC INTERMED SECTION		
		Sta 15181+55, 33.7' Lt - 41.9' Lt	8	LF
		Sta 15181+55, 35.0' Rt - 54.9' Rt	20	LF
714	9611	REMOVE & RELAY CONC CATTLE PASS END SECTION		
		Sta 15181+55 Lt & Rt	2	EA
714	9660	REMOVE & RELAY END SECTION-ALL TYPE & SIZES		
		Sta 15173+15 Lt & Rt	2	EA
		Sta 15177+49 Lt & Sta 15178+32 Rt	2	EA





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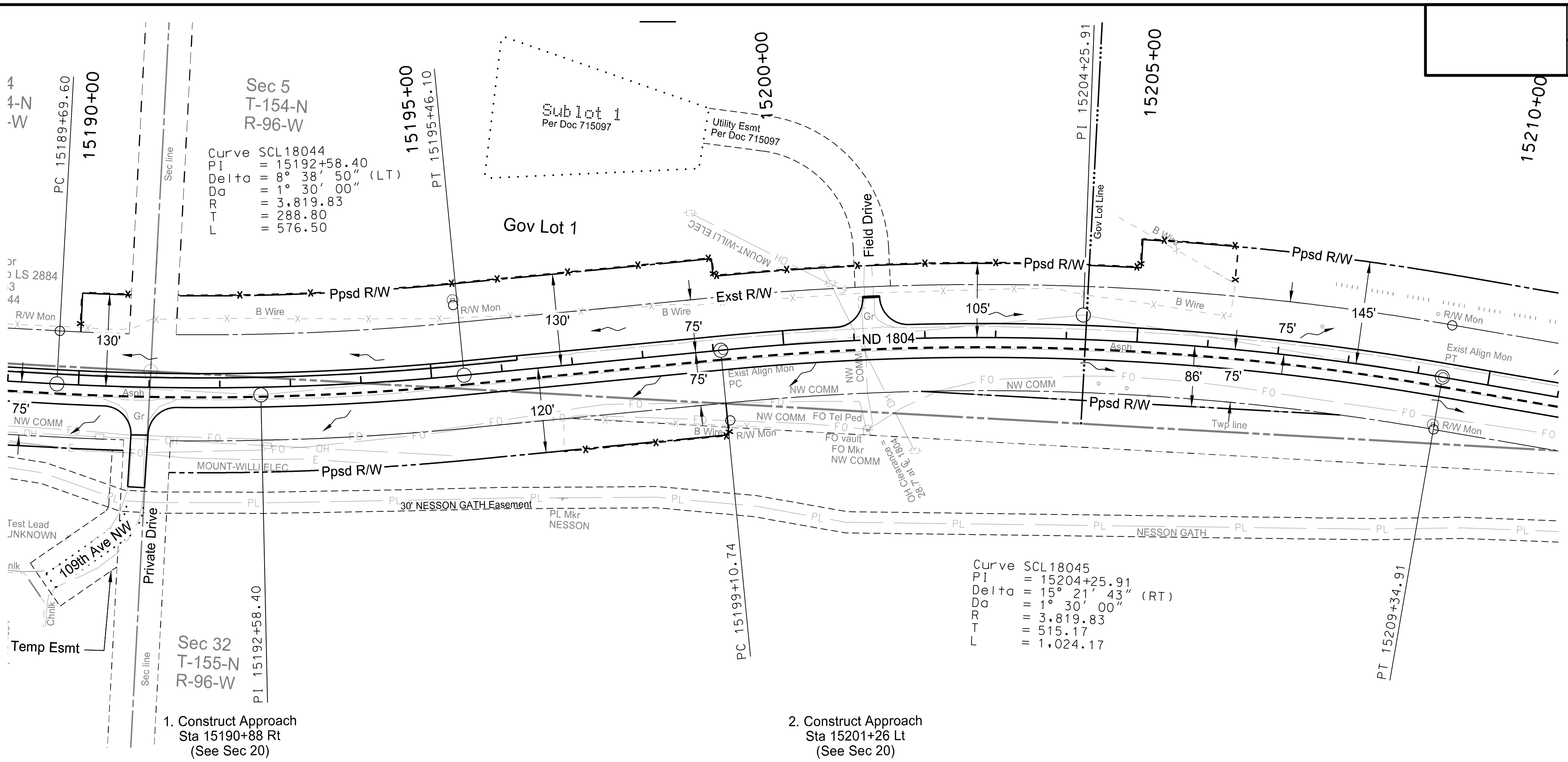
ND 1804 - Jct Tioga Rd to Red Mike Area

Plan & Profile

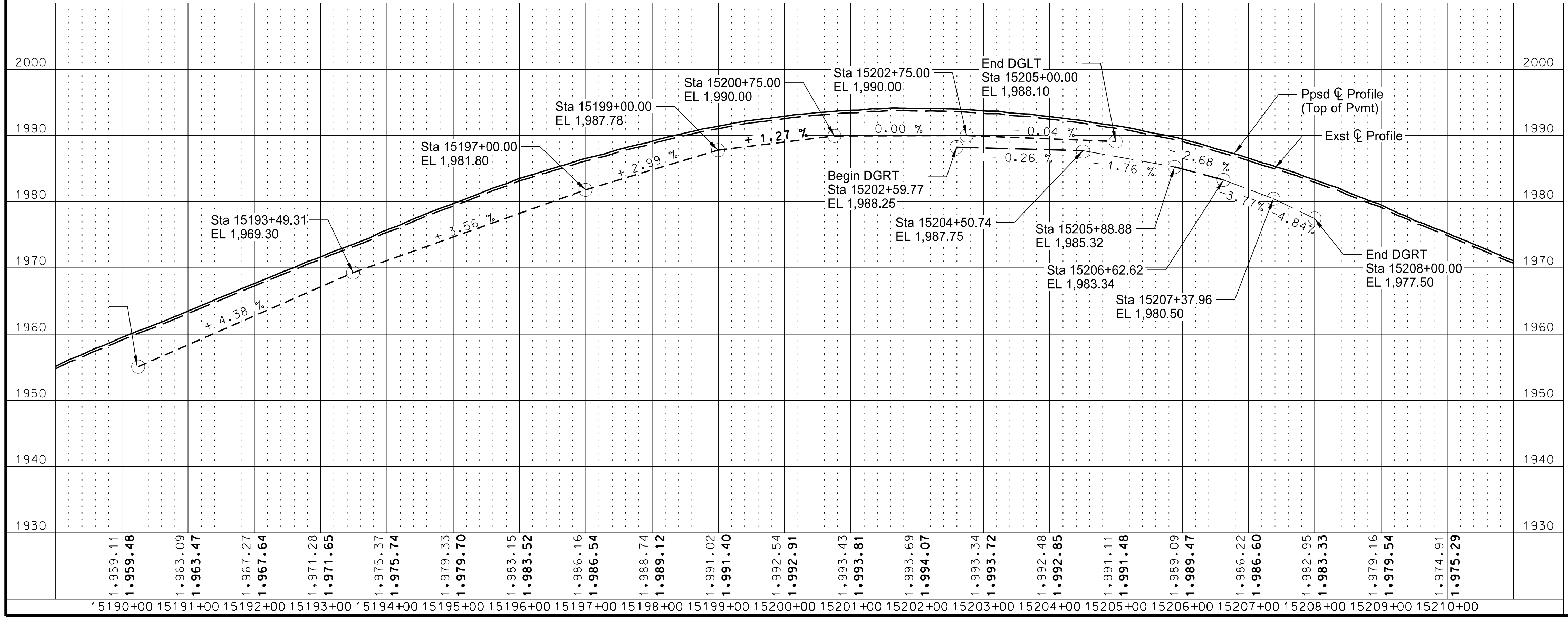
Sta 15170+00 to Sta 15190+00
(SCL1804)

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SOIB-7-804(061)283	60	12

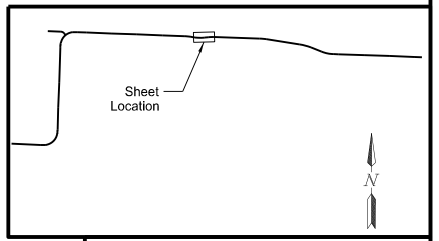


1. Construct Approach
Sta 15190+88 Rt
(See Sec 20)

2. Construct Approach
Sta 15201+26 Lt
(See Sec 20)



15190+00	1,959.11	1,959.48
15191+00	1,963.09	1,963.47
15192+00	1,967.27	1,967.64
15193+00	1,971.28	1,971.65
15194+00	1,975.37	1,975.74
15195+00	1,979.33	1,979.70
15196+00	1,983.15	1,983.52
15197+00	1,986.16	1,986.54
15198+00	1,988.74	1,989.12
15199+00	1,991.02	1,991.40
15200+00	1,992.54	1,992.91
15201+00	1,993.43	1,993.81
15202+00	1,993.69	1,994.07
15203+00	1,993.34	1,993.72
15204+00	1,992.48	1,992.85
15205+00	1,991.11	1,991.48
15206+00	1,989.09	1,989.47
15207+00	1,986.22	1,986.60
15208+00	1,982.95	1,983.33
15209+00	1,979.16	1,979.54
15210+00	1,974.91	1,975.29



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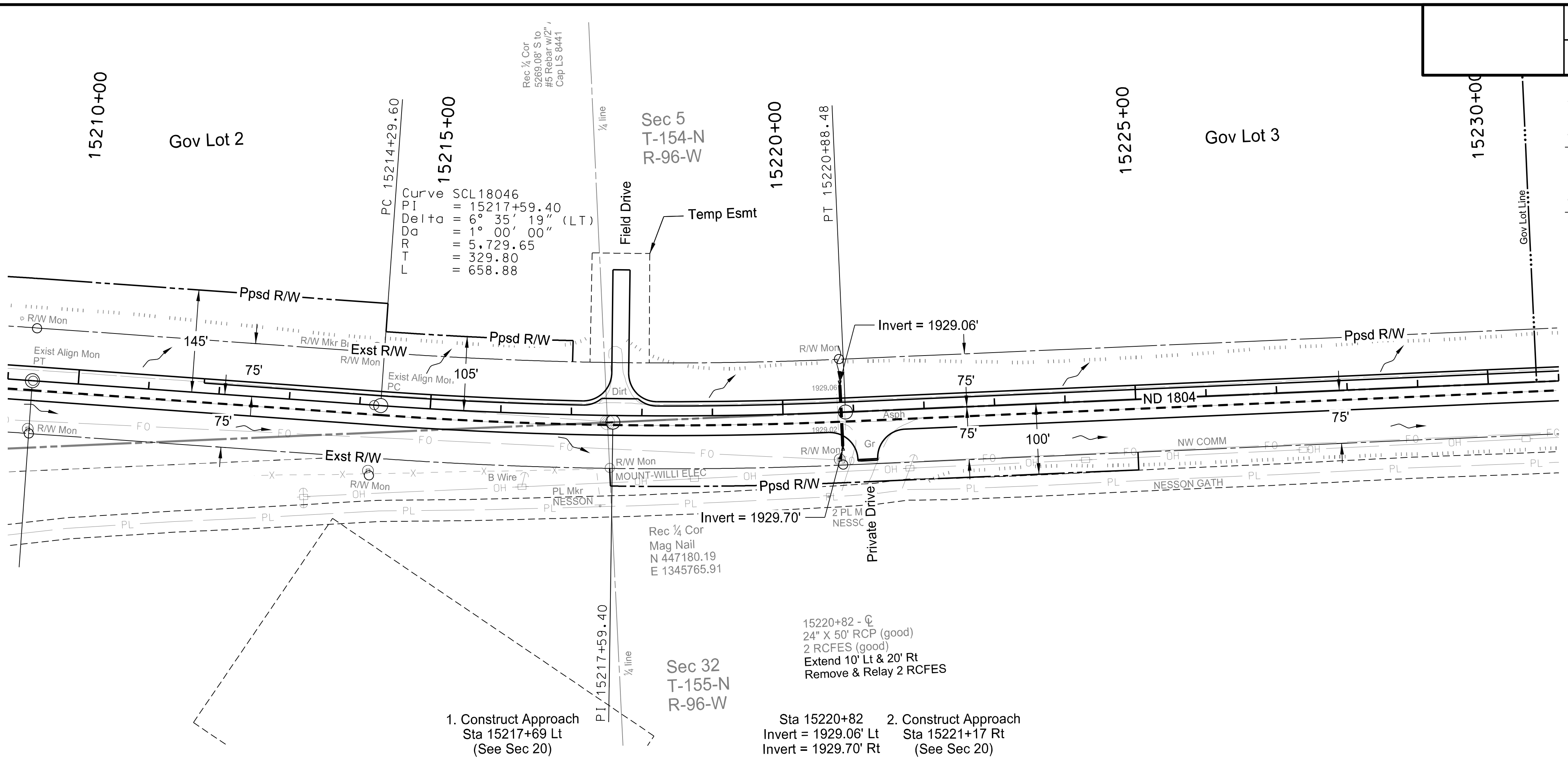
ND 1804 - Jct Tioga Rd to Red Mike Area

Plan & Profile

Sta 15190+00 to Sta 15210+00
(SCL1804)

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SOIB-7-804(061)283	60	13

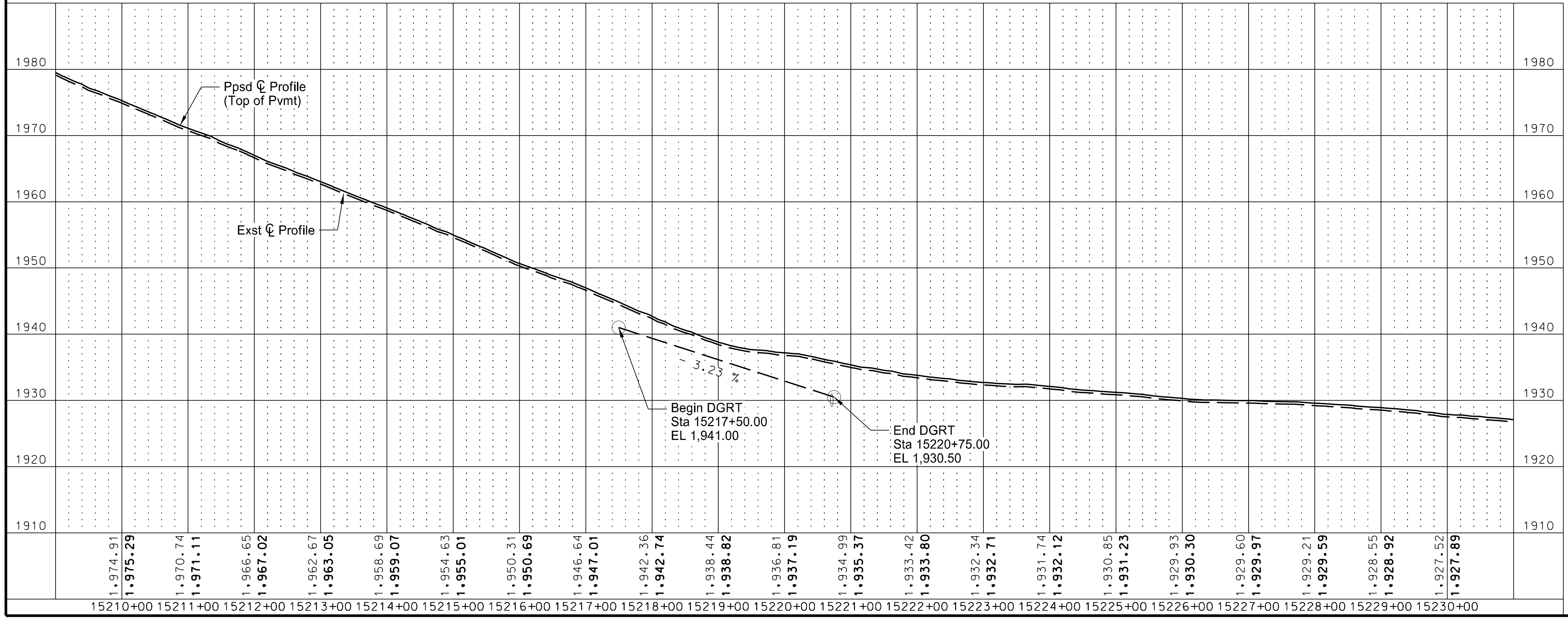
SPEC	CODE	BID ITEM	QTY	UNIT
714	0615	PIPE CONC REINF 24IN CL III		
		Sta 15220+82, 28.4' Lt - 38.4' Lt	10	LF
		Sta 15220+83, 28.1' Rt - 48.2' Rt	20	LF
714	9660	REMOVE & RELAY END SECTION-ALL TYPE & SIZES		
		Sta 15220+82 Lt & Sta 15220+83 Rt	2	EA



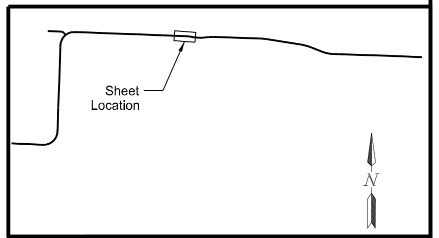
1. Construct Approach
Sta 15217+69 Lt
(See Sec 20)

Sta 15220+82
Invert = 1929.06' Lt
Invert = 1929.70' Rt

2. Construct Approach
Sta 15221+17 Rt
(See Sec 20)



15210+00	1,974.91	1,975.29
15211+00	1,970.74	1,971.11
15212+00	1,966.65	1,967.02
15213+00	1,962.67	1,963.05
15214+00	1,958.69	1,959.07
15215+00	1,954.63	1,955.01
15216+00	1,950.31	1,950.69
15217+00	1,946.64	1,947.01
15218+00	1,942.36	1,942.74
15219+00	1,938.44	1,938.82
15220+00	1,936.81	1,937.19
15221+00	1,934.99	1,935.37
15222+00	1,933.42	1,933.80
15223+00	1,932.34	1,932.71
15224+00	1,931.74	1,932.12
15225+00	1,930.85	1,931.23
15226+00	1,929.93	1,930.30
15227+00	1,929.60	1,929.97
15228+00	1,929.21	1,929.59
15229+00	1,928.55	1,928.92
15230+00	1,927.52	1,927.89



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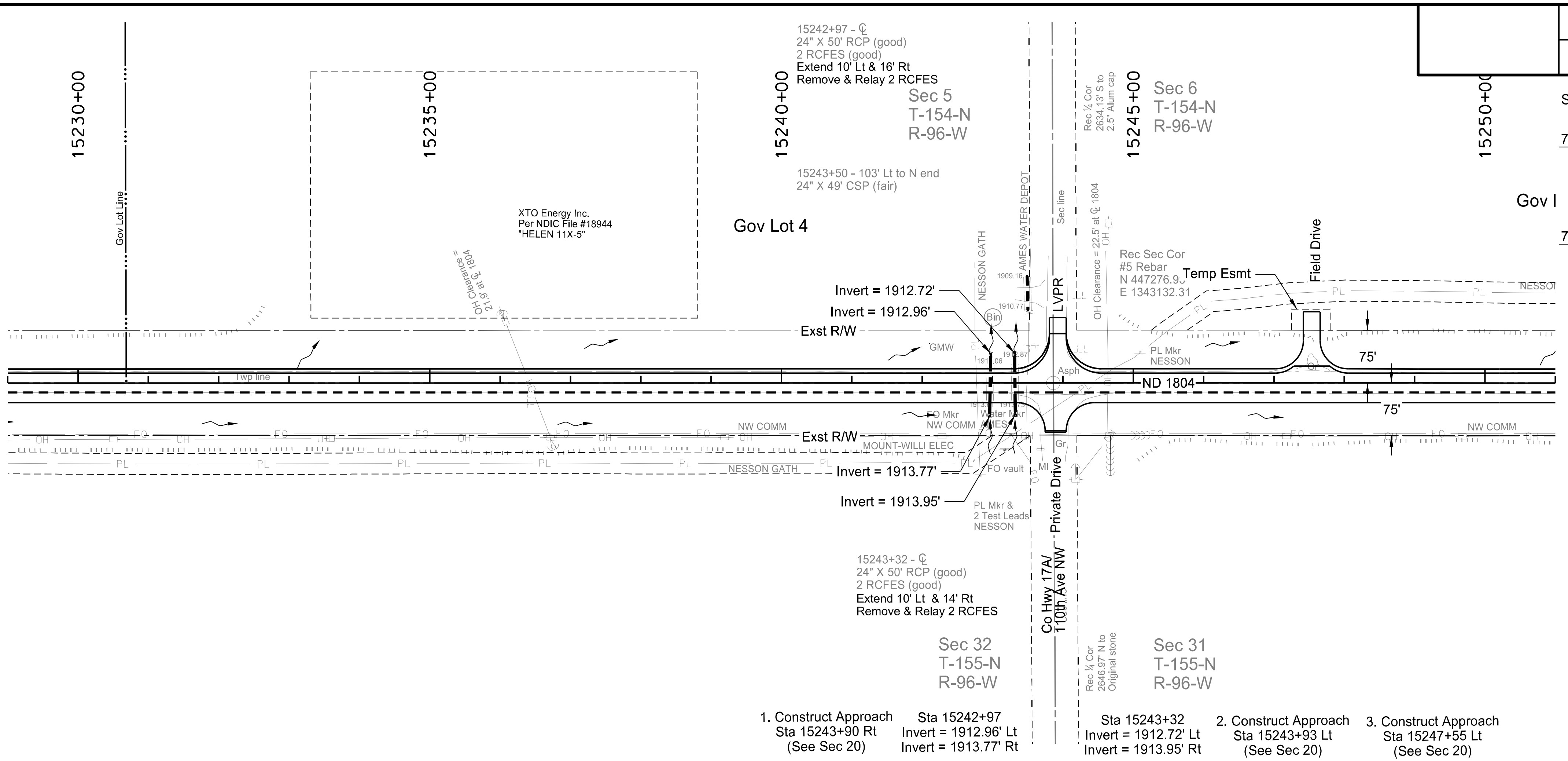
ND 1804 - Jct Tioga Rd to Red Mike Area

Plan & Profile

Sta 15210+00 to Sta 15230+00
(SCL1804)

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SOIB-7-804(061)283	60	14

SPEC	CODE	BID ITEM	QTY	UNIT
714	0615	PIPE CONC REINF 24IN CL III		
		Sta 15242+97, 28.0' Lt - 38.0' Lt	10	LF
		Sta 15242+96, 27.6' Rt - 43.6' Rt	16	LF
		Sta 15243+32, 28.7' Lt - 38.7' Lt	10	LF
		Sta 15243+32, 27.4' Rt - 41.4' Rt	14	LF
714	9660	REMOVE & RELAY END SECTION-ALL TYPE & SIZES		
		Sta 15242+97 Lt & Sta 15242+96 Rt	2	EA
		Sta 15243+32 Lt & Rt	2	EA



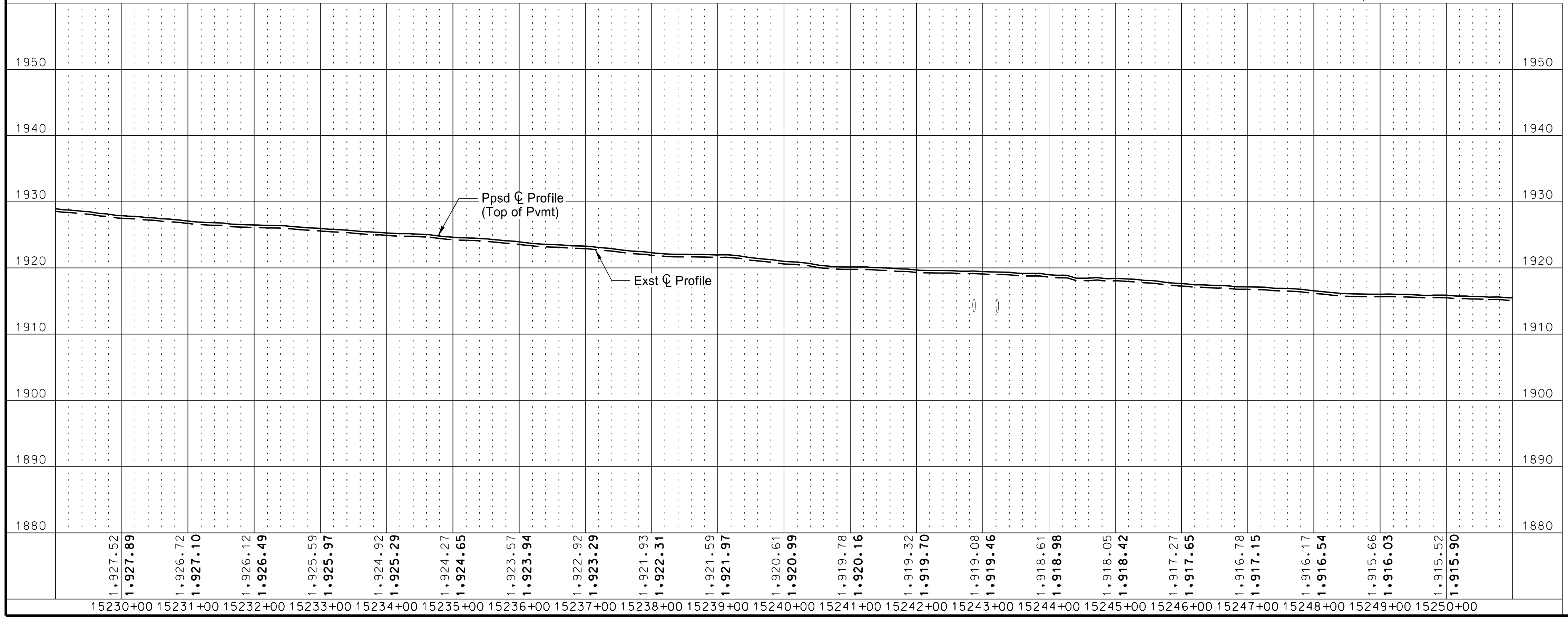
1. Construct Approach
Sta 15243+90 Rt
(See Sec 20)

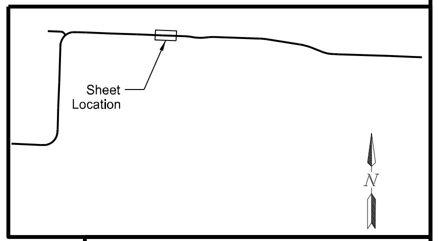
Sta 15242+97
Invert = 1912.96' Lt
Invert = 1913.77' Rt

Sta 15243+32
Invert = 1912.72' Lt
Invert = 1913.95' Rt

2. Construct Approach
Sta 15243+93 Lt
(See Sec 20)

3. Construct Approach
Sta 15247+55 Lt
(See Sec 20)





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ND 1804 - Jct Tioga Rd to Red Mike Area

Plan & Profile

Sta 15230+00 to Sta 15250+00
(SCL1804)

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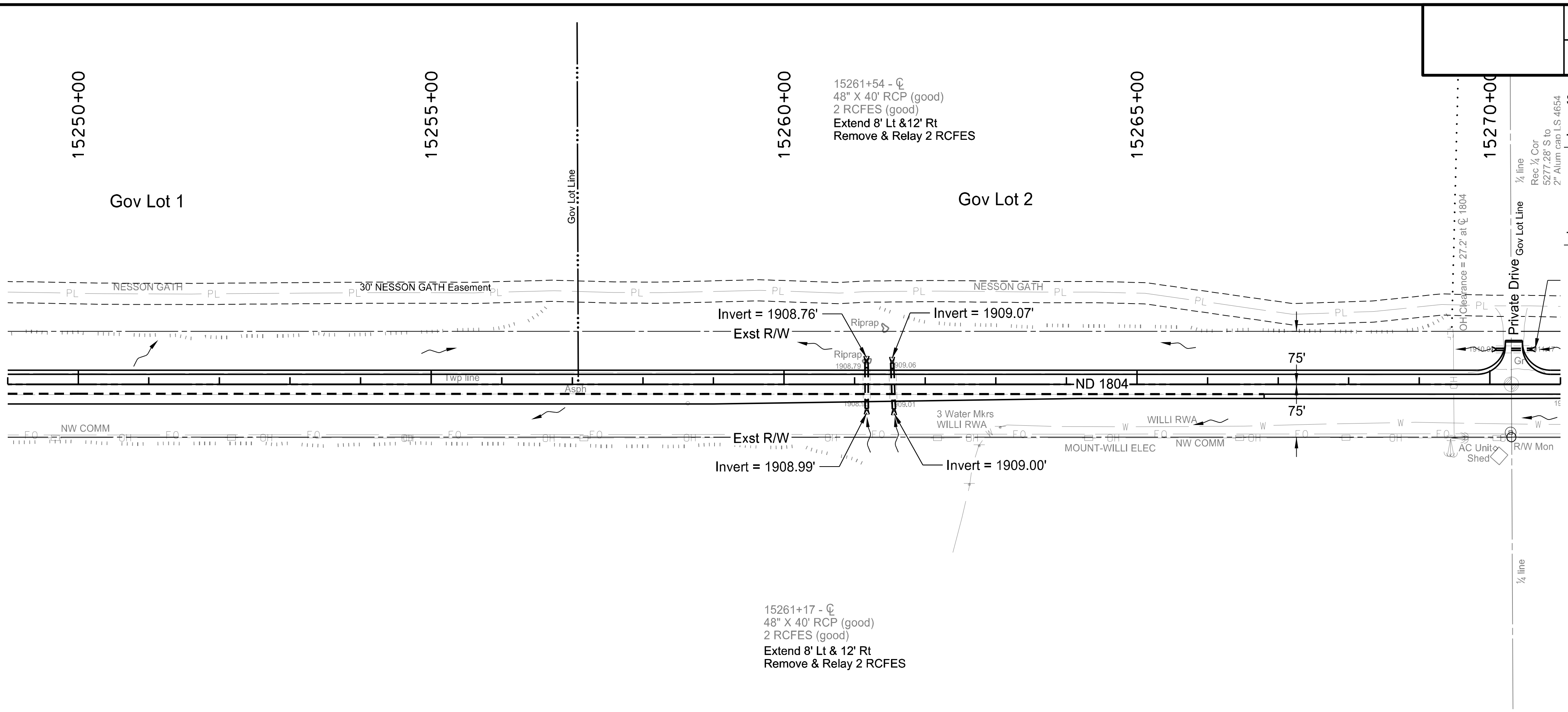
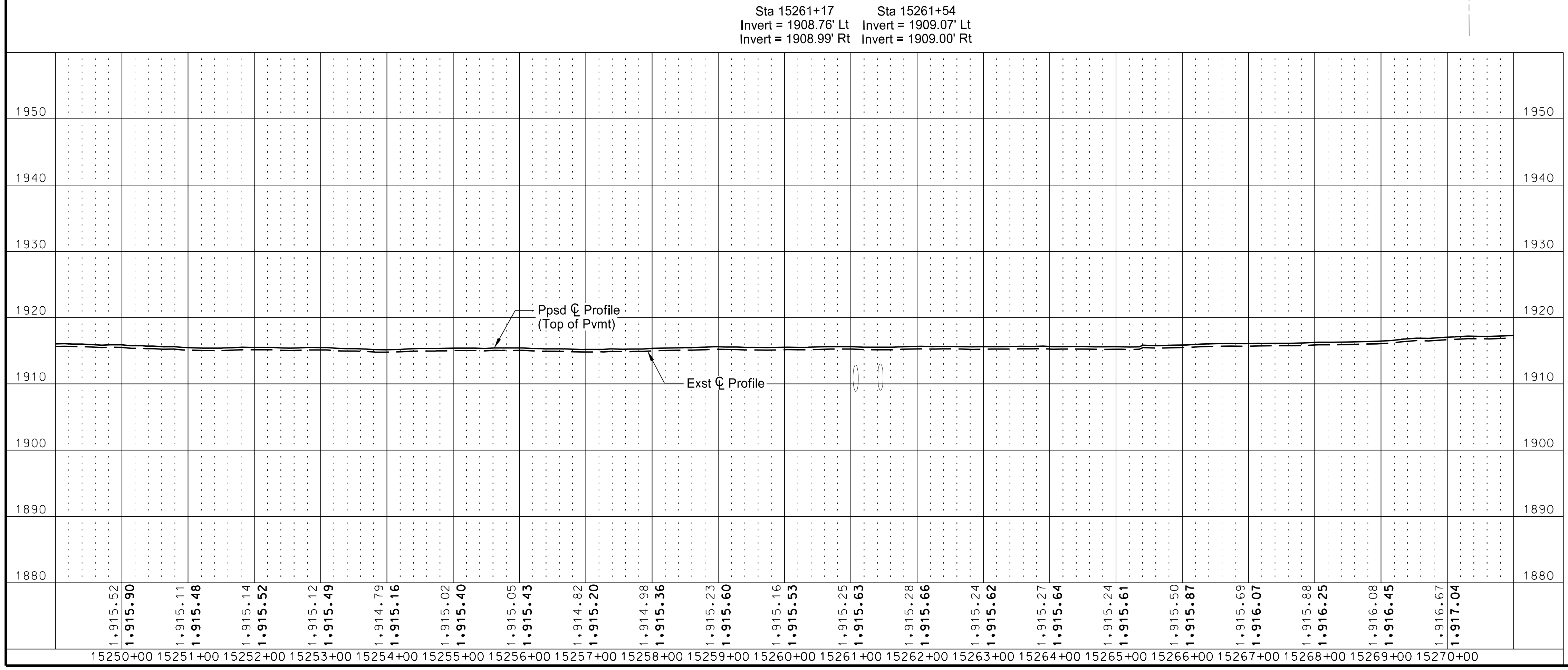
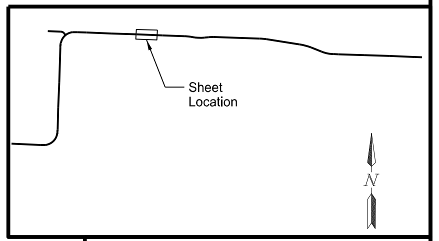
STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SOIB-7-804(061)283	60	15

SPEC	CODE	BID ITEM	QTY	UNIT
714	1105	PIPE CONC REINF 48IN CL III		
		Sta 15261+17, 23.6' Lt - 31.4' Lt	8	LF
		Sta 15261+17, 22.4' Rt - 34.3' Rt	12	LF
		Sta 15261+53, 22.5' Lt - 30.3' Lt	8	LF
		Sta 15261+55, 23.2' Rt to Sta 15261+56, 35.1' Rt	12	LF
714	9660	REMOVE & RELAY END SECTION-ALL TYPE & SIZES		
		Sta 15261+17 Lt & Rt	2	EA
		Sta 15261+53 Lt & Sta 15261+56 Rt	2	EA







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ND 1804 - Jct Tioga Rd to Red Mike Area

Plan & Profile

Sta 15250+00 to Sta 15270+00
(SCL1804)

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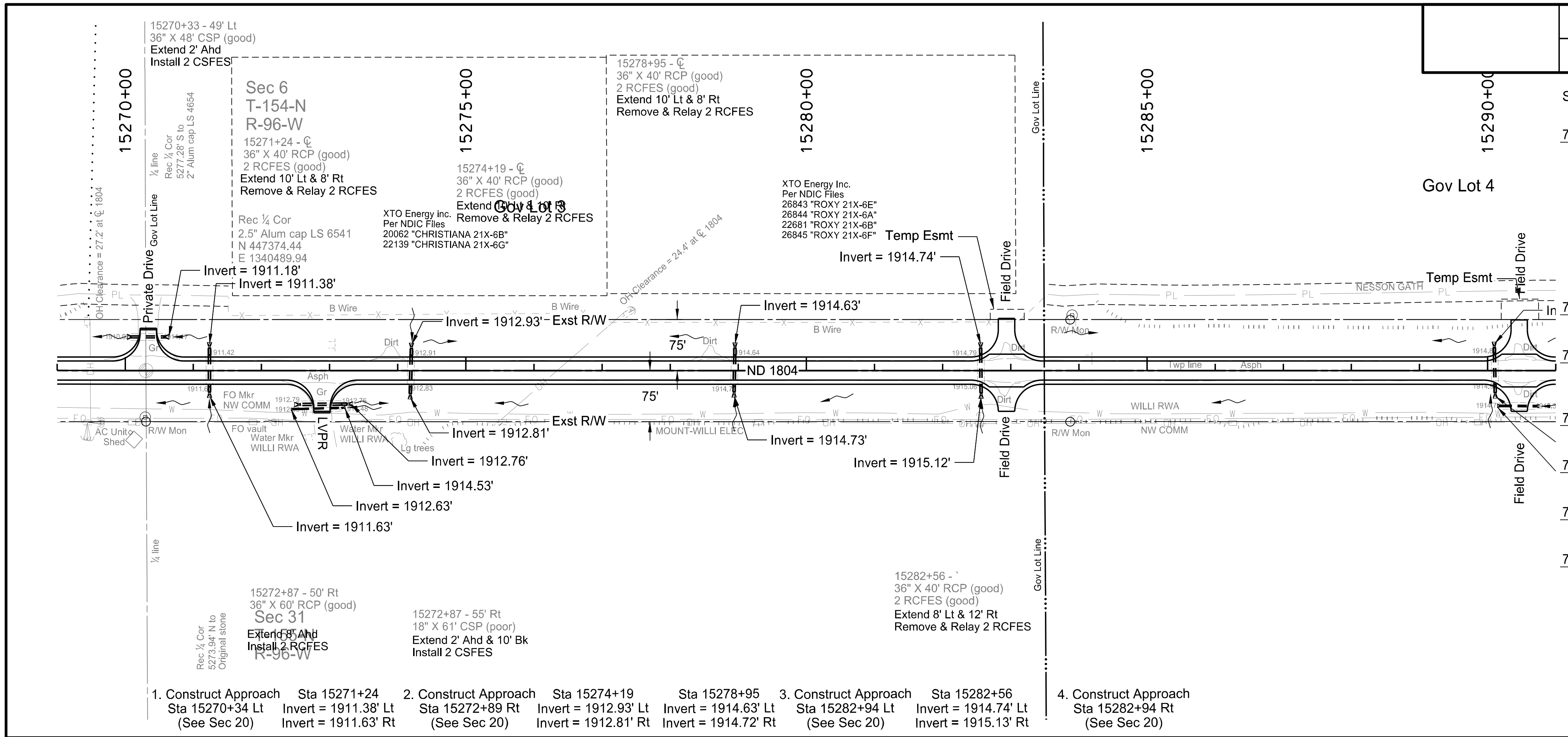
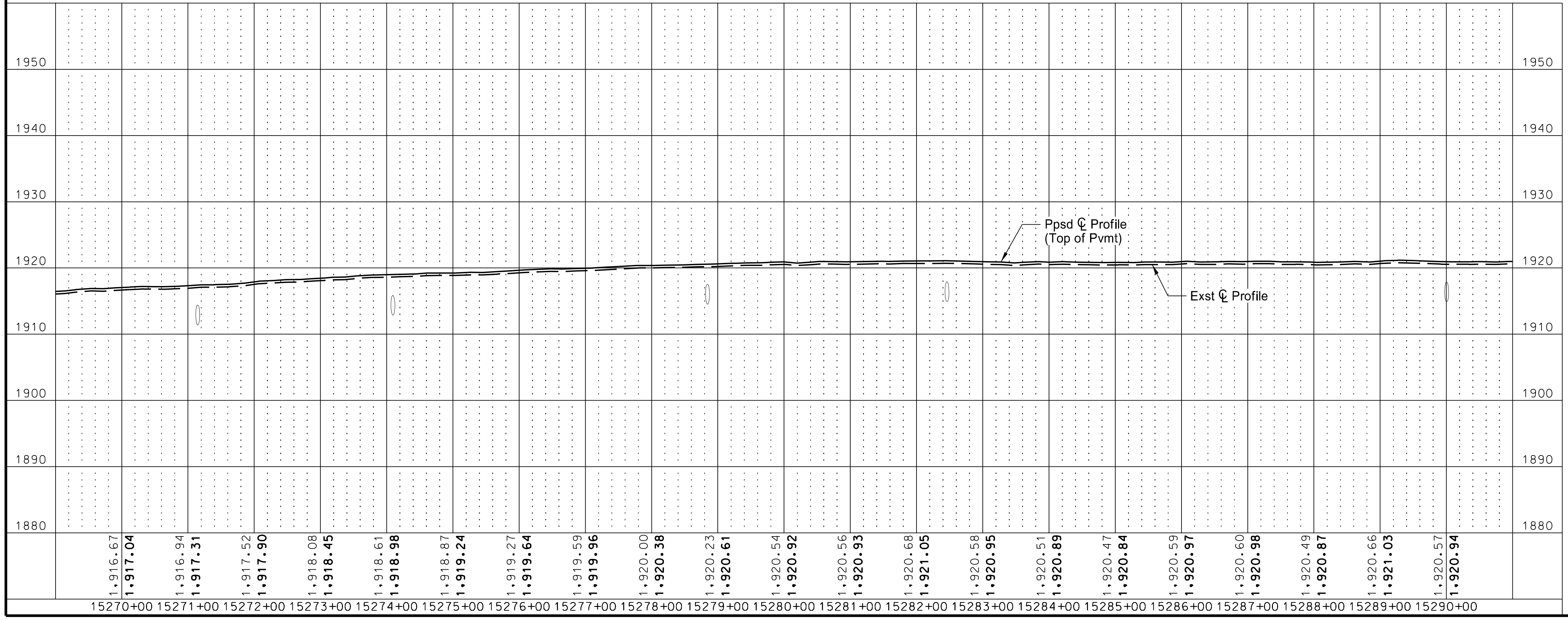
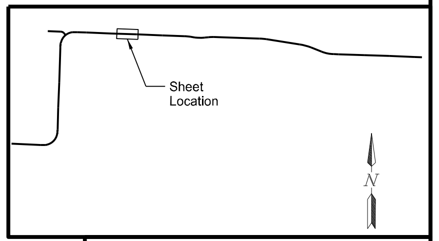
STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SOIB-7-804(061)283	60	16

SPEC	CODE	BID ITEM	QTY	UNIT
714	0905	PIPE CONC REINF 36IN CL III		
		Sta 15271+24, 23.1' Lt - 33.0' Lt	10	LF
		Sta 15271+24, 23.7' Rt - 31.6' Rt	8	LF
		Sta 15273+18, 49.2' Rt to Sta 15273+26, 49.2' Rt	8	LF
		Sta 15274+19, 24.0' Rt - 33.9' Rt	10	LF
		Sta 15274+20, 22.5' Lt - 32.3' Lt	10	LF
		Sta 15278+94, 23.4' Rt - 31.2' Rt	8	LF
		Sta 15278+95, 23.0' Lt - 32.8' Lt	10	LF
		Sta 15282+56, 25.0' Lt - 32.8' Lt	8	LF
		Sta 15282+56, 21.1' Rt - 33.0' Rt	12	LF
714	3035	END SECT-CONC REINF 36IN		
		Sta 15272+57 Rt & Sta 15273+26 Rt	2	EA
714	5015	PIPE CORR STEEL .064IN 18IN		
		Sta 15272+46, 56.7' Rt to Sta 15272+56, 56.4' Rt	10	LF
		Sta 15273+18, 54.7' Rt to Sta 15273+20, 54.7' Rt	2	LF
714	5215	PIPE CORR STEEL .079IN 36IN		
		Sta 15270+57, 49.5' Lt to Sta 15270+59, 49.5' Lt	2	LF
714	5810	END SECT CORR STEEL .064IN 18IN		
		Sta 15272+46 Rt & Sta 15273+20 Rt	2	EA
714	5830	END SECT CORR STEEL .079IN 36IN		
		Sta 15270+08 Lt & Sta 15270+59 Lt	2	EA
714	9660	REMOVE & RELAY END SECTION-ALL TYPE & SIZES		
		Sta 15271+24 Lt & Rt	2	EA
		Sta 15274+19 Rt & Sta 15274+20 Lt	2	EA
		Sta 15278+94 Rt & Sta 15278+95 Lt	2	EA
		Sta 15282+56 Lt & Rt	2	EA







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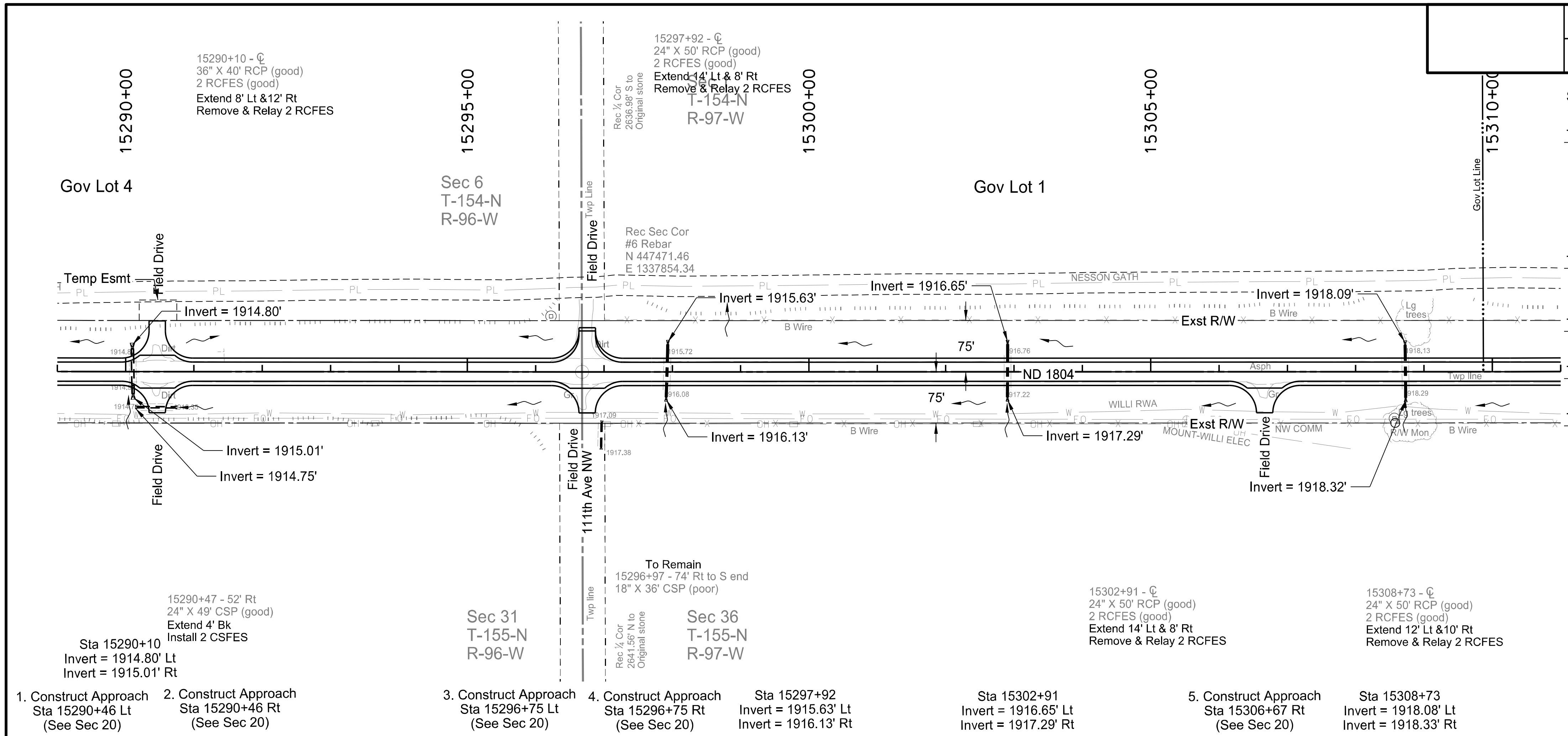
ND 1804 - Jct Tioga Rd to Red Mike Area

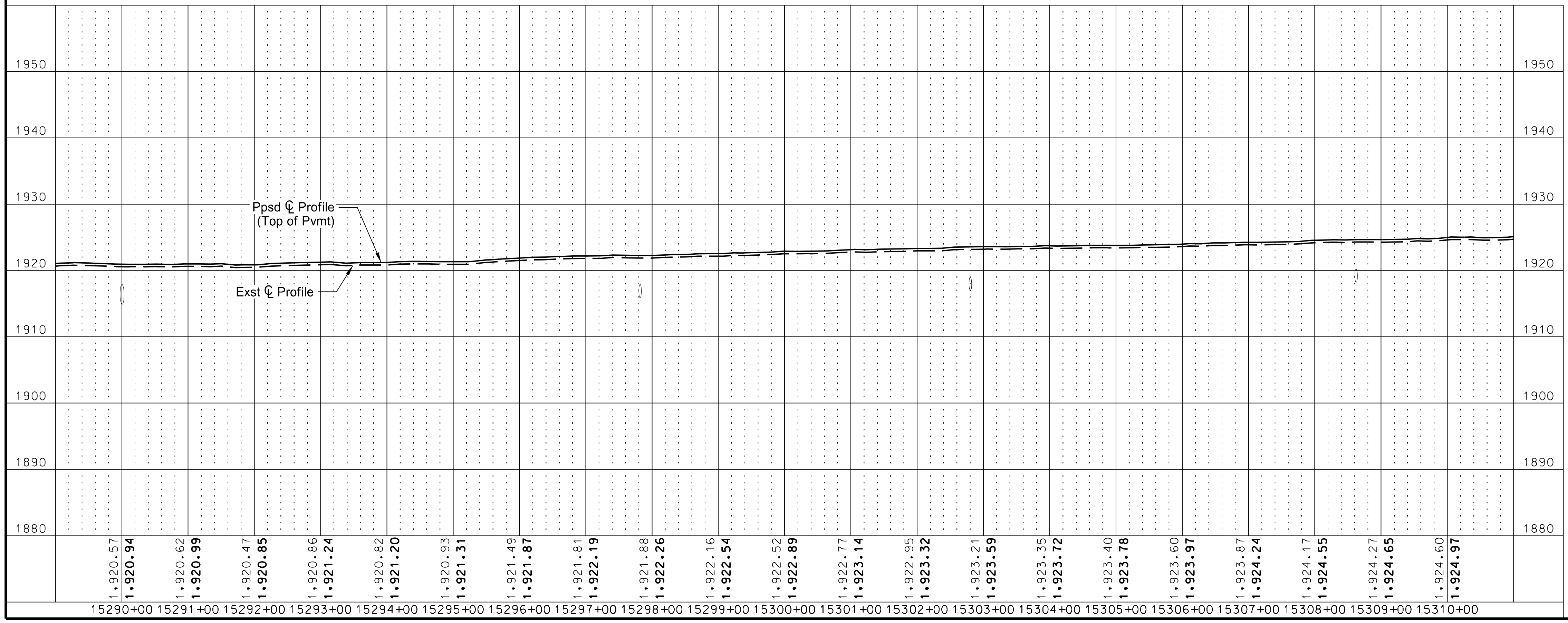
Plan & Profile

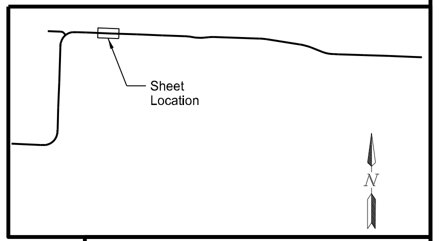
Sta 15270+00 to Sta 15290+00
(SCL1804)

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SOIB-7-804(061)283	60	17

SPEC	CODE	BID ITEM	QTY	UNIT
714	0615	PIPE CONC REINF 24IN CL III		
		Sta 15297+91, 29.1' Rt -37.1' Rt	8	LF
		Sta 15297+93, 25.9' Lt - 40.1' Lt	14	LF
		Sta 15302+90, 29.1' Rt - 37.1' Rt	8	LF
		Sta 15302+91, 26.4' Lt - 40.4' Lt	14	LF
		Sta 15308+72, 27.2' Lt - 39.2' Lt	12	LF
		Sta 15308+73, 28.1' Rt - 38.1' Rt	10	LF
714	0905	PIPE CONC REINF 36IN CL III		
		Sta 15290+10, 25.9' Lt - 33.7' Lt	8	LF
		Sta 15290+11, 20.6' Rt - 32.5' Rt	12	LF
714	5035	PIPE CORR STEEL .064IN 24IN		
		Sta 15290+18, 51.9' Rt to Sta 15290+22, 51.9' Rt	4	LF
714	5820	END SECT CORR STEEL .064IN 24IN		
		Sta 15290+18 Rt & Sta 15290+72 Rt	2	EA
714	9660	REMOVE & RELAY END SECTION-ALL TYPE & SIZES		
		Sta 15290+10 Lt & Sta 15290+11 Rt	2	EA
		Sta 15297+91 Rt & Sta 15297+93 Rt	2	EA
		Sta 15302+90 Rt & Sta 15302+91 Lt	2	EA
		Sta 15308+72 Lt & Sta 15308+73 Rt	2	EA







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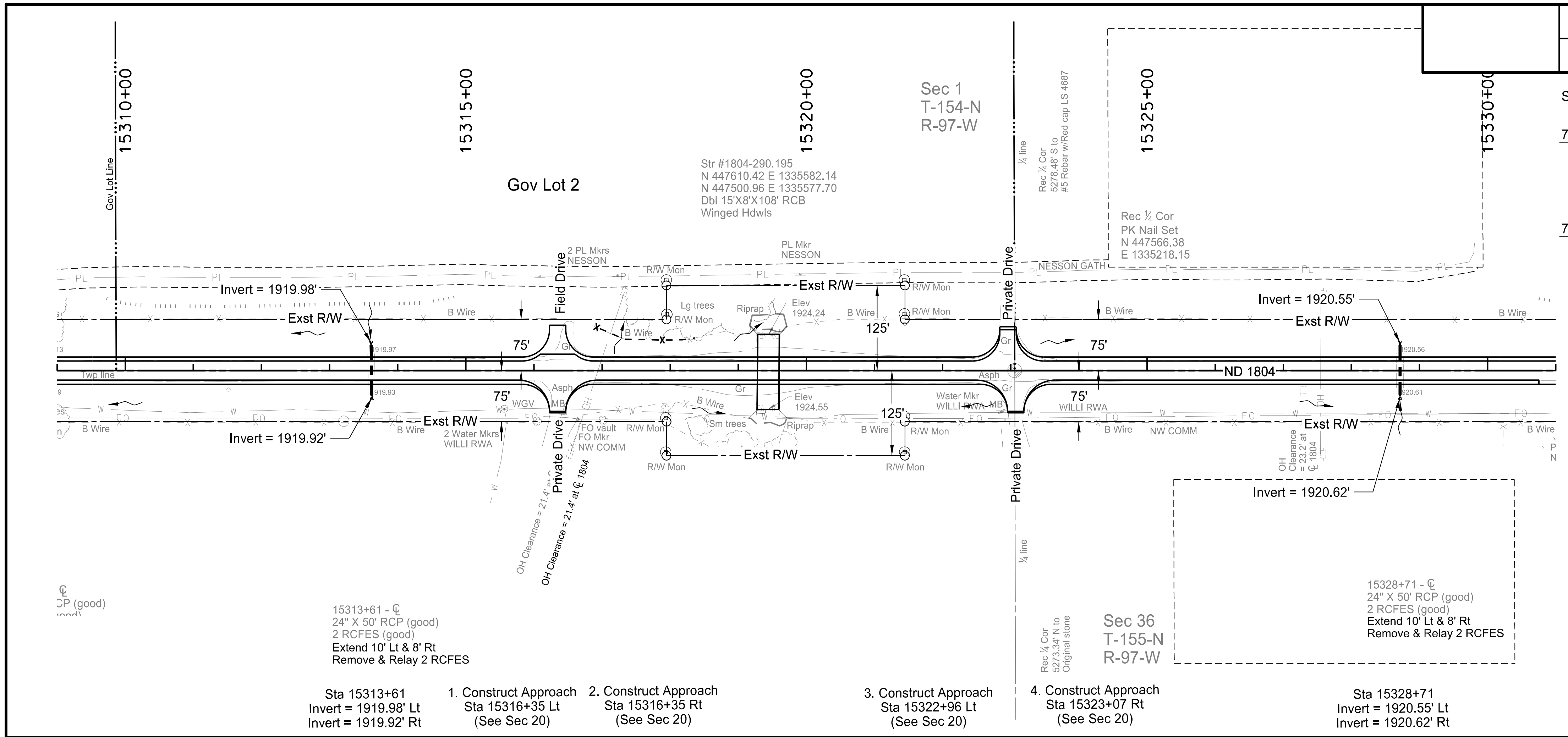
ND 1804 - Jct Tioga Rd to Red Mike Area

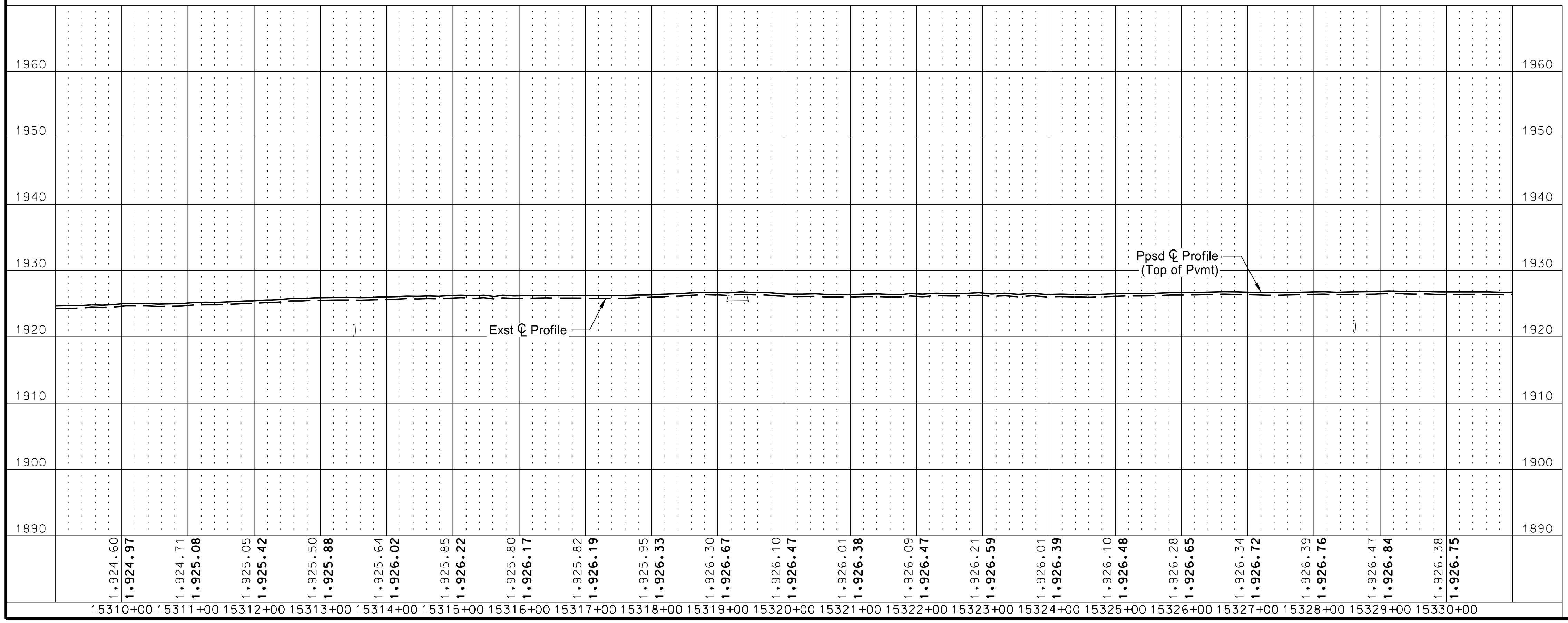
Plan & Profile

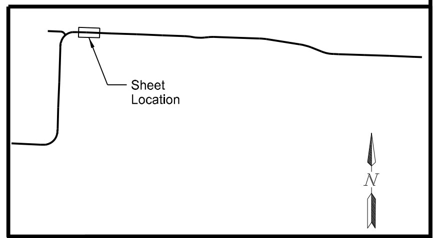
Sta 15290+00 to Sta 15310+00
(SCL1804)

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SOIB-7-804(061)283	60	18

SPEC	CODE	BID ITEM	QTY	UNIT
714	0615	PIPE CONC REINF 24IN CL III		
		Sta 15313+61, 27.2' Lt - 37.2' Lt	10	LF
		Sta 15313+62, 28.5' Rt - 36.5' Rt	8	LF
		Sta 15328+71, 27.2' Lt - 37.2' Lt	10	LF
		Sta 15328+71, 28.3' Rt - 36.3' Rt	8	LF
714	9660	REMOVE & RELAY END SECTION-ALL TYPE & SIZES		
		Sta 15313+61 Lt & Sta 15313+62 Rt	2	EA
		Sta 15328+71 Lt & Rt	2	EA







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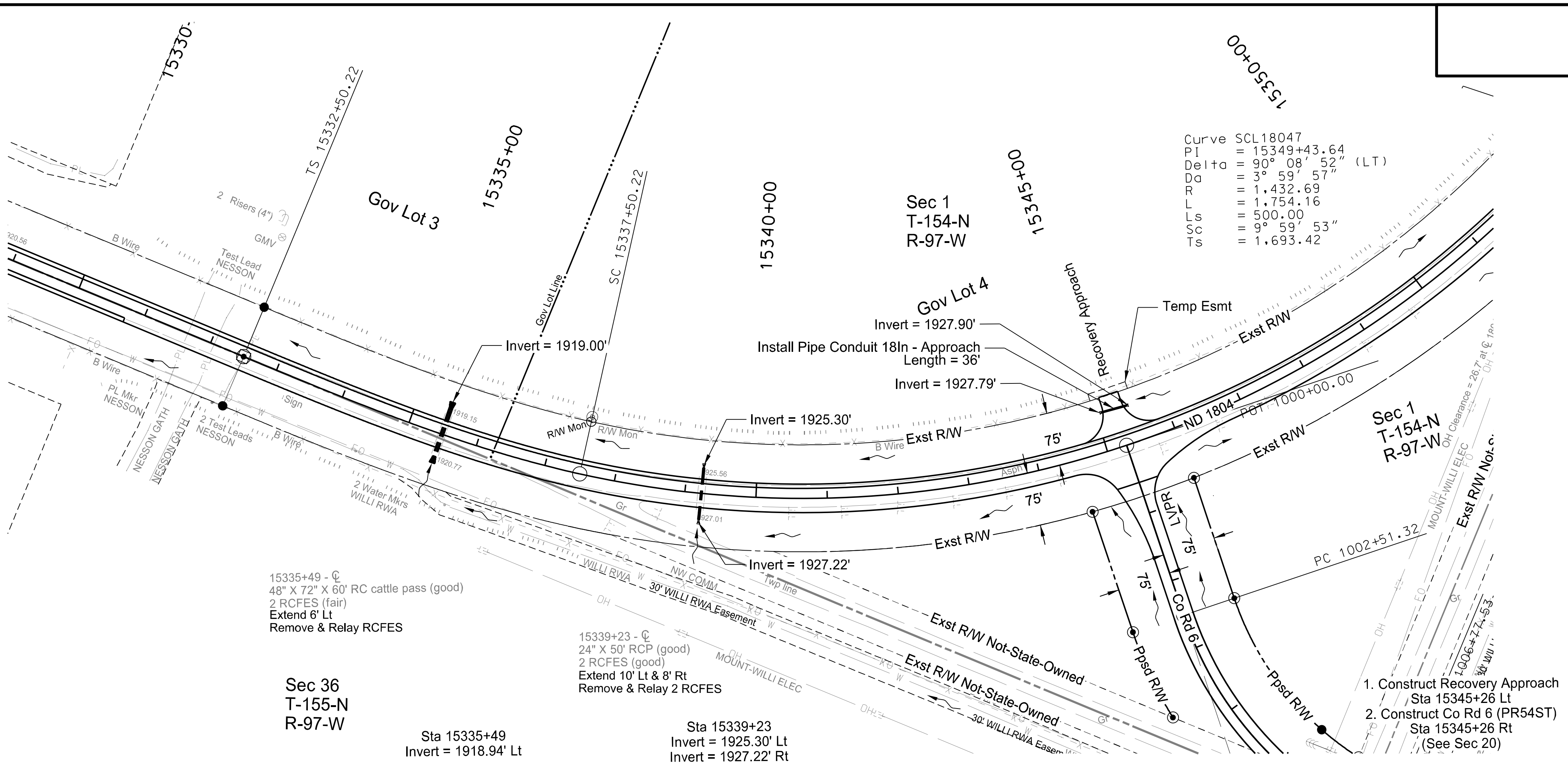
ND 1804 - Jct Tioga Rd to Red Mike Area

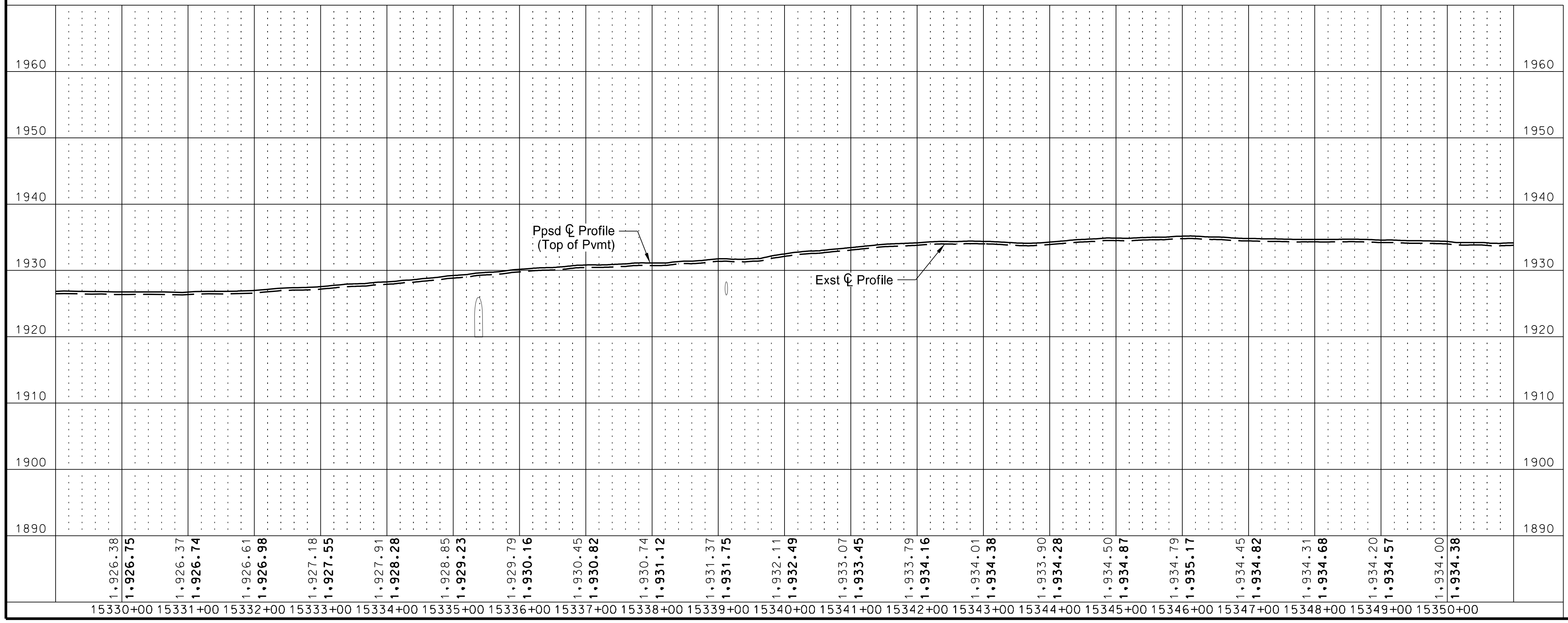
Plan & Profile

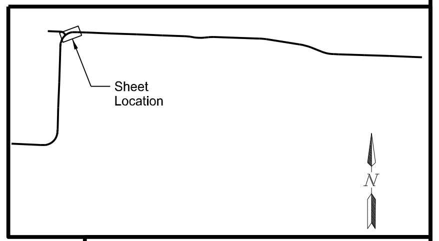
Sta 15310+00 to Sta 15330+00
(SCL1804)

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SOIB-7-804(061)283	60	19

SPEC	CODE	BID ITEM	QTY	UNIT
714	0615	PIPE CONC REINF 24IN CL III		
		Sta 15339+23, 26.1' Lt - 36.1' Lt	10	LF
		Sta 15339+23, 29.2' Rt - 37.2' Rt	8	LF
714	4099	PIPE CONDUIT 18IN-APPROACH		
		Sta 15345+09, 54.8' Lt to Sta 15345+46, 52.8' Lt	36	LF
714	9200	CATTLE PASS CONC INTERMED SECTION		
		Sta 15335+49, 32.0' Lt - 38.0' Lt	6	LF
714	9611	REMOVE & RELAY CONC CATTLE PASS END SECTION		
		Sta 15335+49 Lt	1	EA
714	9660	REMOVE & RELAY END SECTION-ALL TYPE & SIZES		
		Sta 15339+23 Lt & Rt	2	EA







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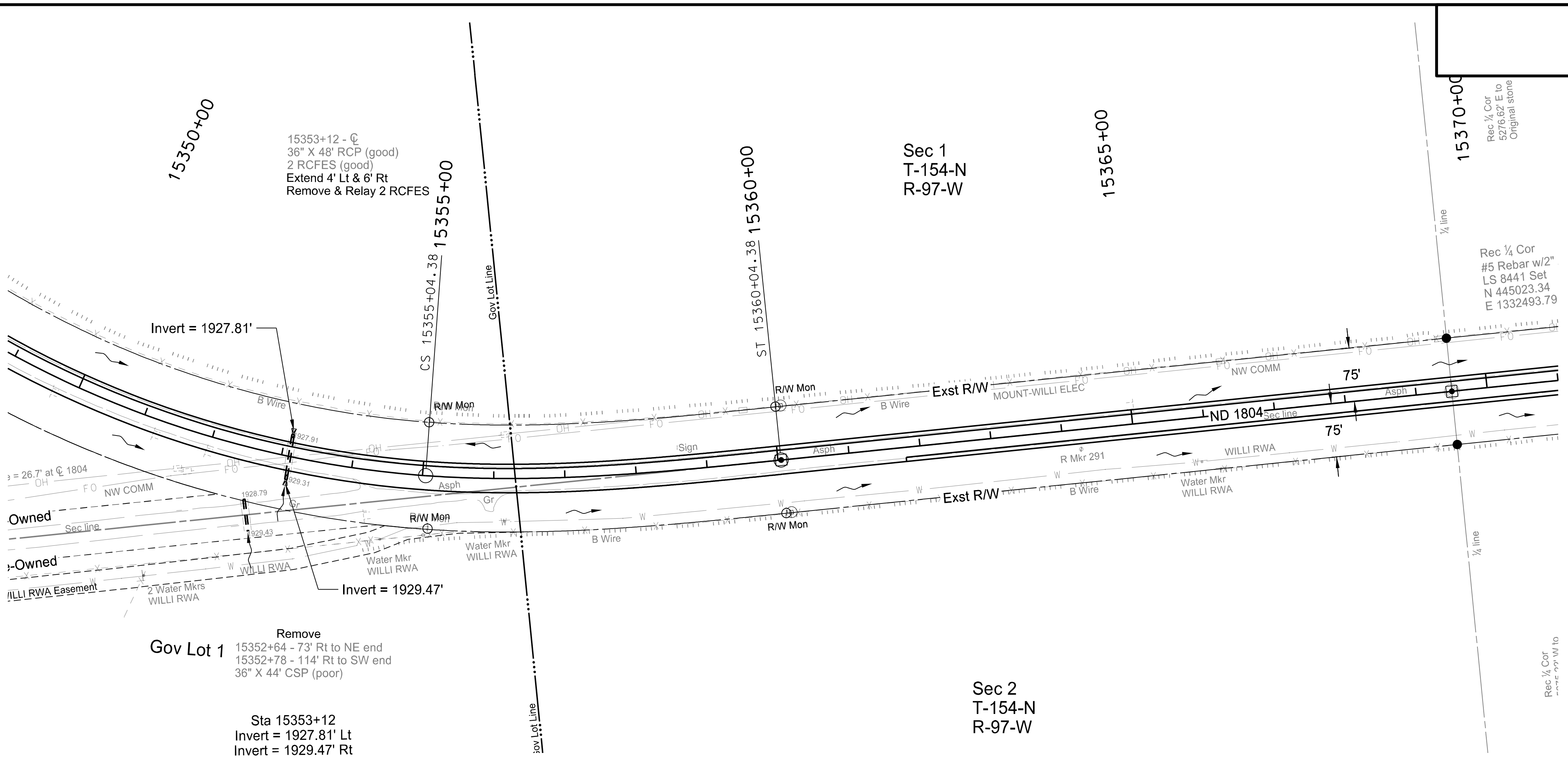
ND 1804 - Jct Tioga Rd to Red Mike Area

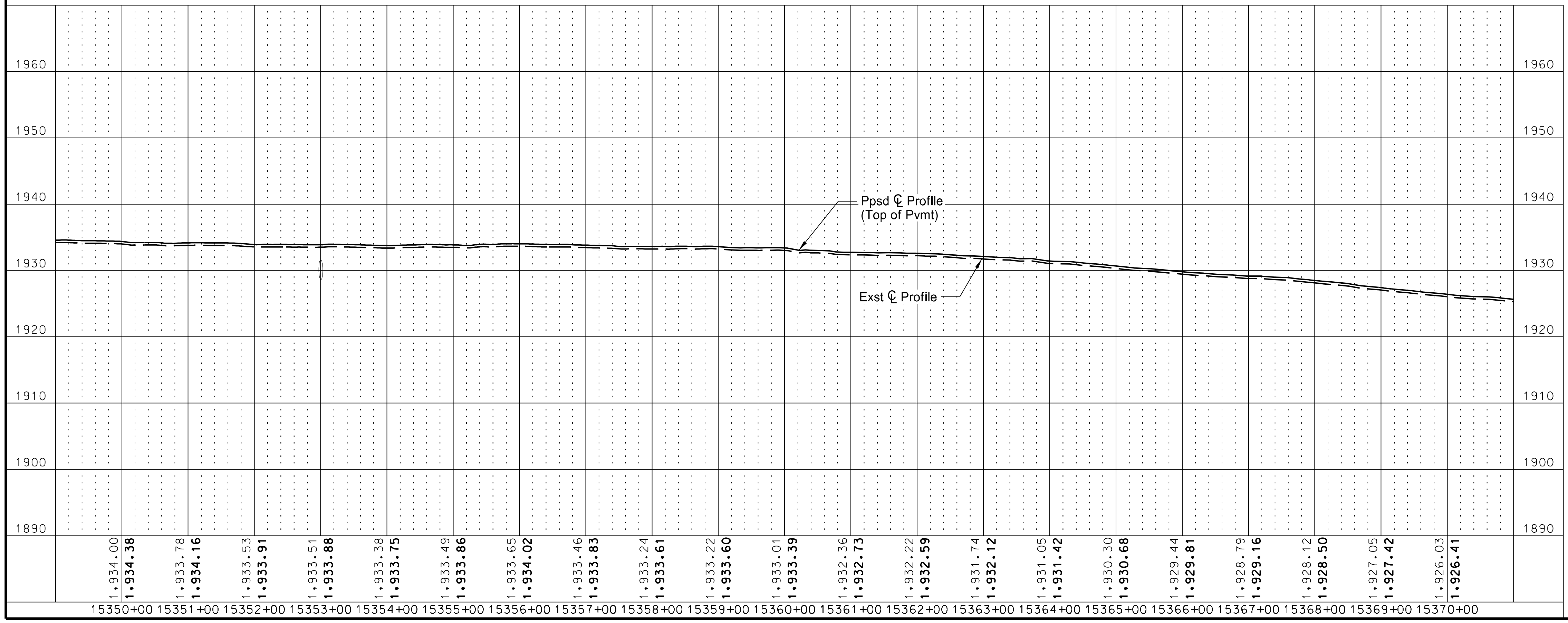
Plan & Profile

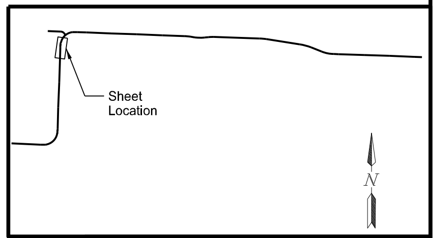
Sta 15330+00 to Sta 15350+00
(SCL1804)

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SOIB-7-804(061)283	60	20

SPEC	CODE	BID ITEM	QTY	UNIT
202	0174	REMOVAL OF PIPE ALL TYPES AND SIZES		
		Sta 15352+64, 73.0' Rt	44	LF
714	0905	PIPE CONC REINF 36IN CL III		
		Sta 15353+10, 27.5' Lt - 31.4' Lt	4	LF
		Sta 15353+13, 26.8' Rt - 32.6' Rt	6	LF
714	9660	REMOVE & RELAY END SECTION-ALL TYPE & SIZES		
		Sta 15353+10 Lt & Sta 15353+13 Rt	2	EA







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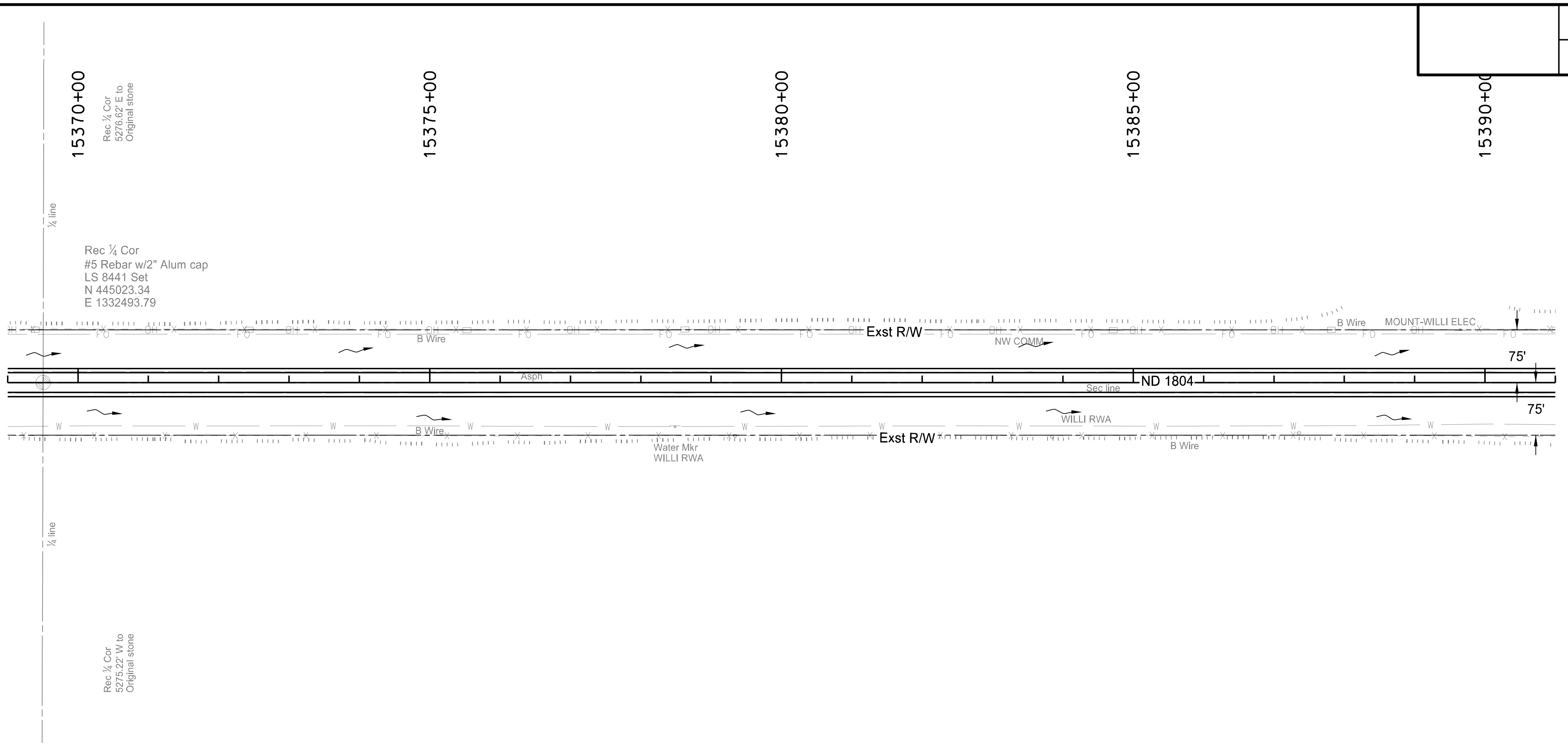
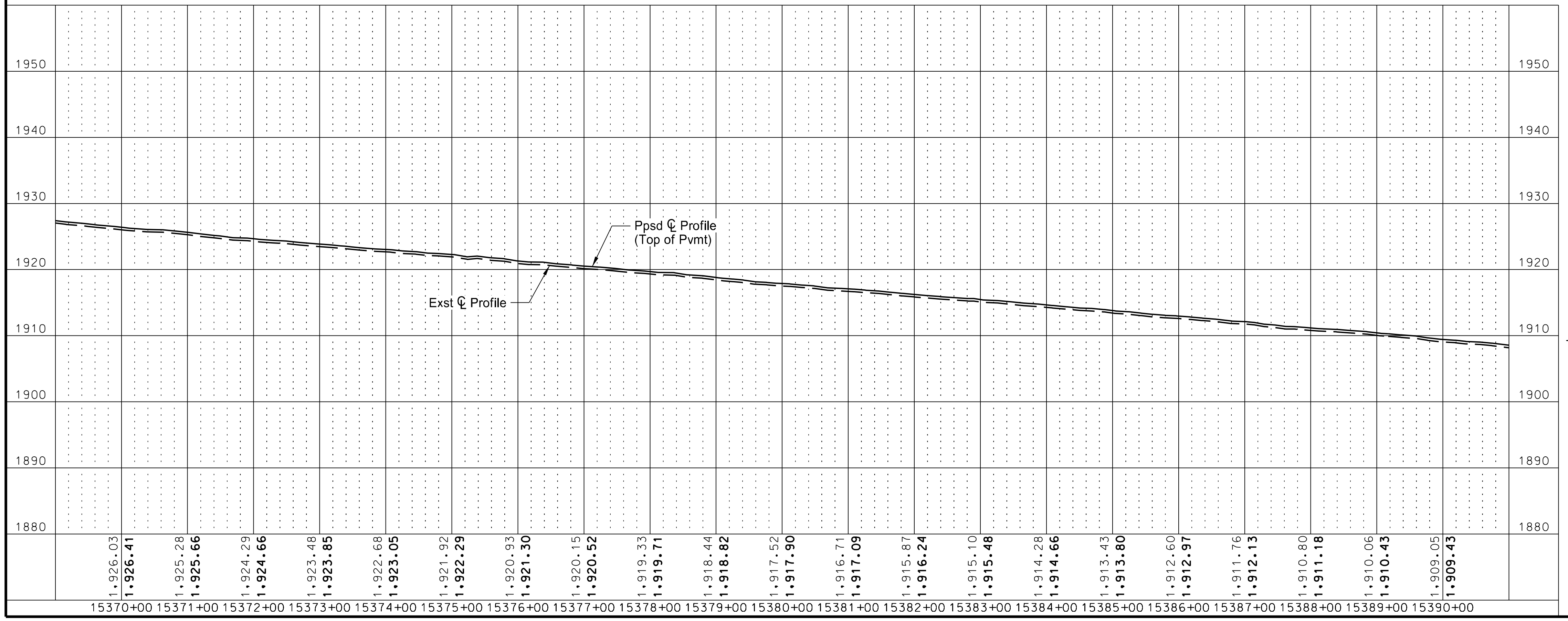
ND 1804 - Jct Tioga Rd to Red Mike Area

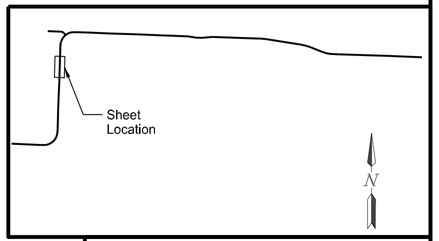
Plan & Profile

Sta 15350+00 to Sta 15370+00
(SCL1804)

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SOIB-7-804(061)283	60	21







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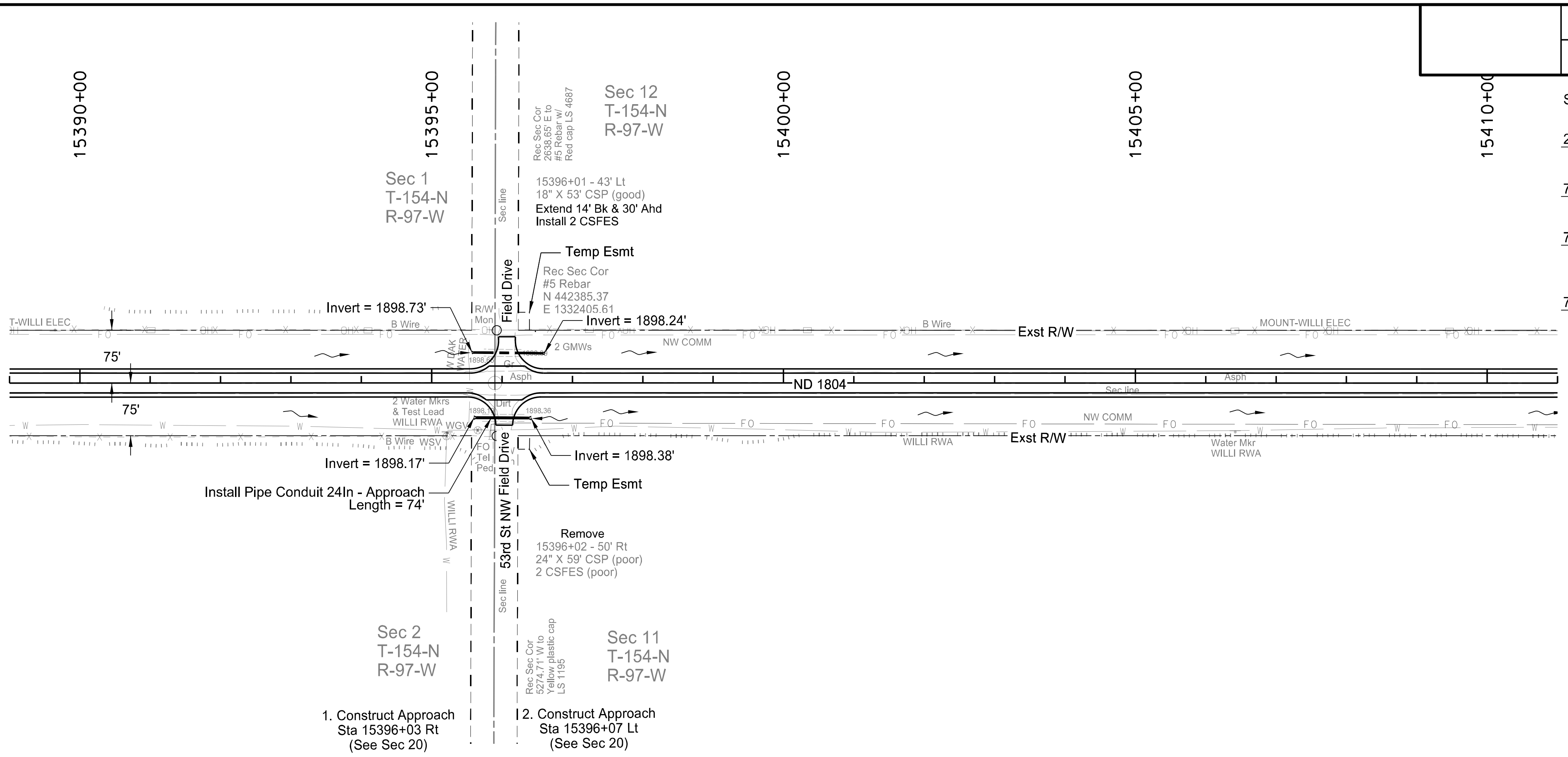
ND 1804 - Jct Tioga Rd to Red Mike Area

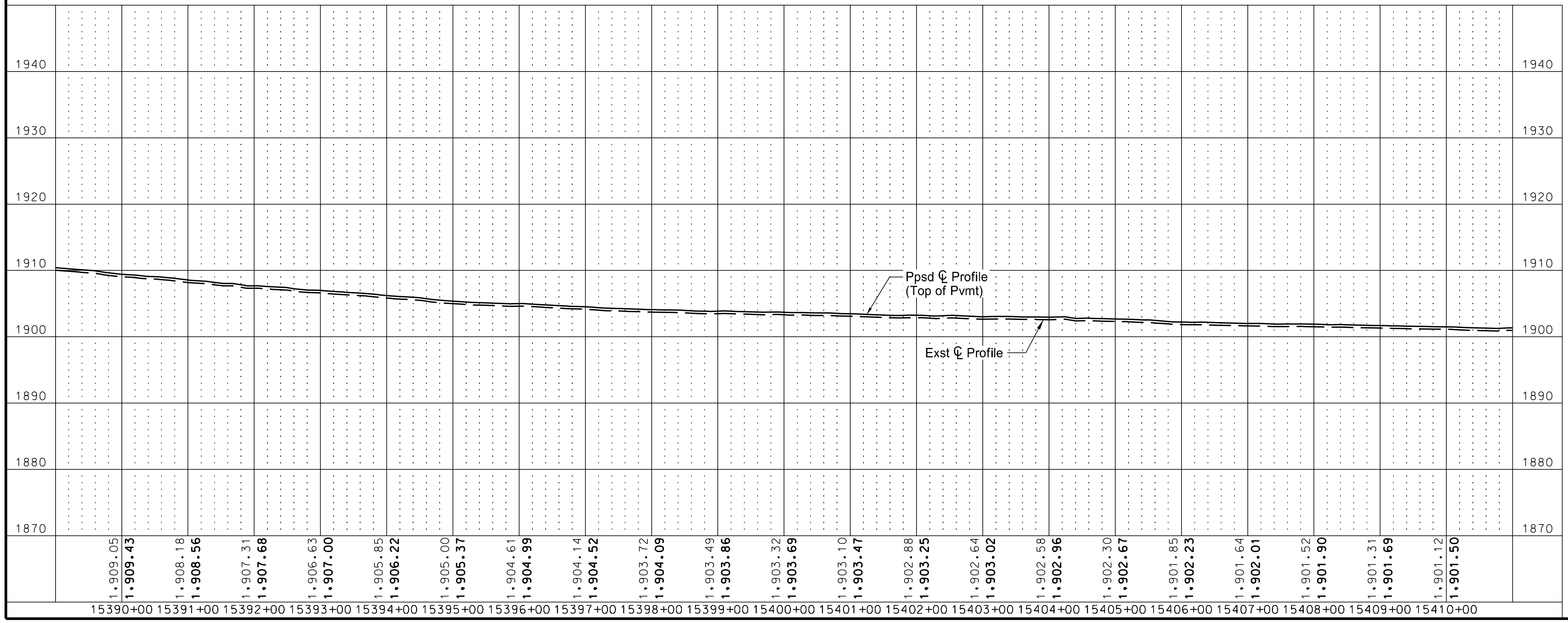
Plan & Profile

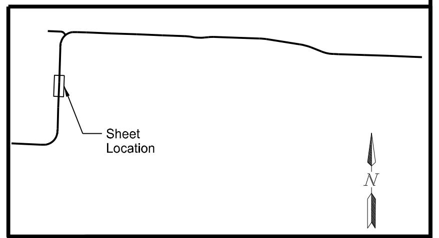
Sta 15370+00 to Sta 15390+00
(SCL1804)

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SOIB-7-804(061)283	60	22

SPEC	CODE	BID ITEM	QTY	UNIT
202	0174	REMOVAL OF PIPE ALL TYPES AND SIZES		
		Sta 15395+72, 49.3' Rt to Sta 15396+32, 49.7' Rt	60	LF
714	4106	PIPE CONDUIT 24IN-APPROACH		
		Sta 15395+64, 49.2' Rt to Sta 15396+38, 49.8' Rt	74	LF
714	5015	PIPE CORR STEEL .064IN 18IN		
		Sta 15395+60, 43.3' Lt to Sta 15395+74, 43.1' Lt	14	LF
		Sta 15396+28, 42.5' Lt to Sta 15396+58, 42.2' Lt	30	LF
714	5810	END SECT CORR STEEL .064IN 18IN		
		Sta 15395+60 Lt & 15396+58 Lt	2	EA







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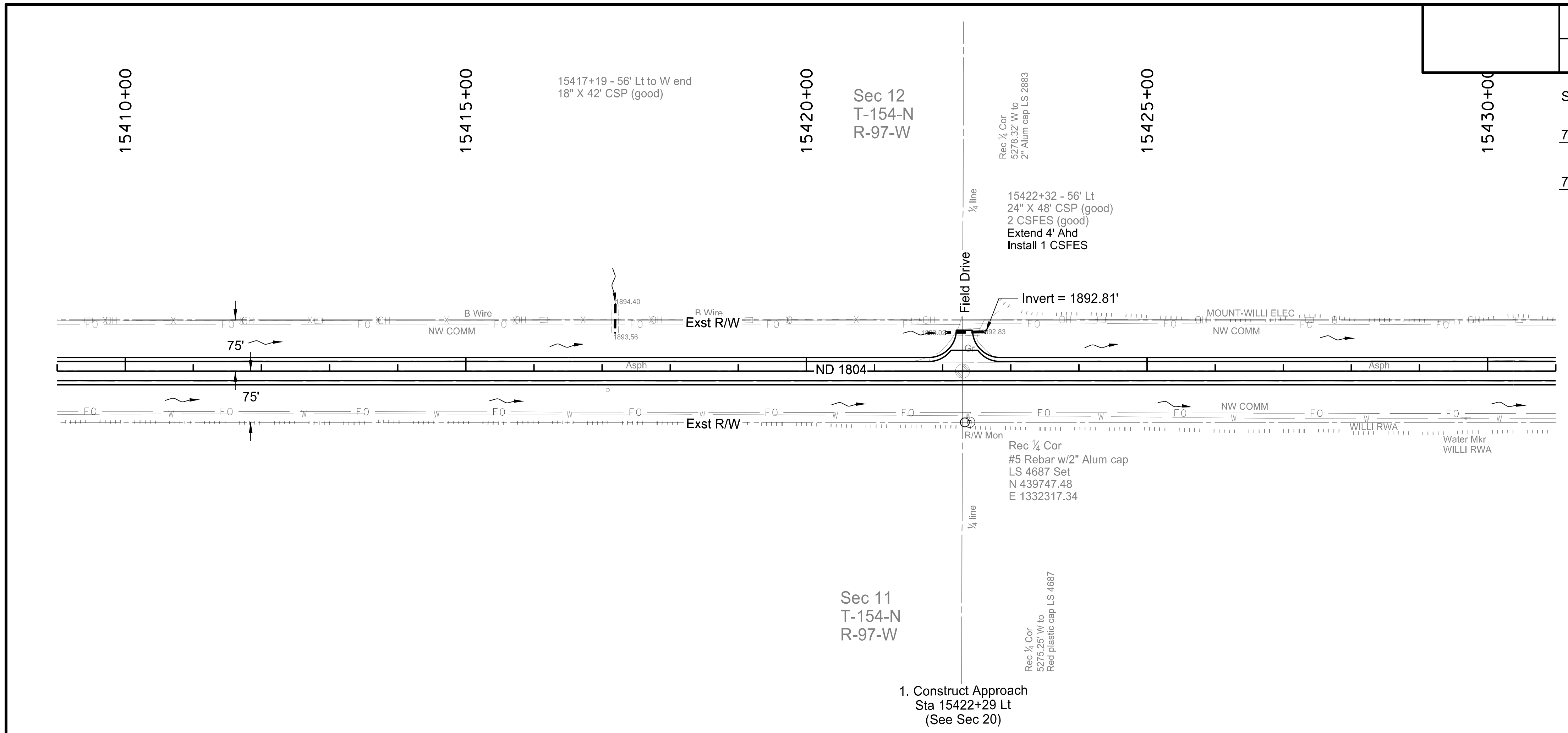
ND 1804 - Jct Tioga Rd to Red Mike Area

Plan & Profile

Sta 15390+00 to Sta 15410+00
(SCL1804)

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SOIB-7-804(061)283	60	23

SPEC	CODE	BID ITEM	QTY	UNIT
714	5035	PIPE CORR STEEL .064IN 24IN Sta 15422+56, 57.3' Lt to Sta 15422+60, 57.4' Lt	4	LF
714	9660	REMOVE & RELAY END SECTION-ALL TYPE & SIZES Sta 15422+60 Lt	1	EA

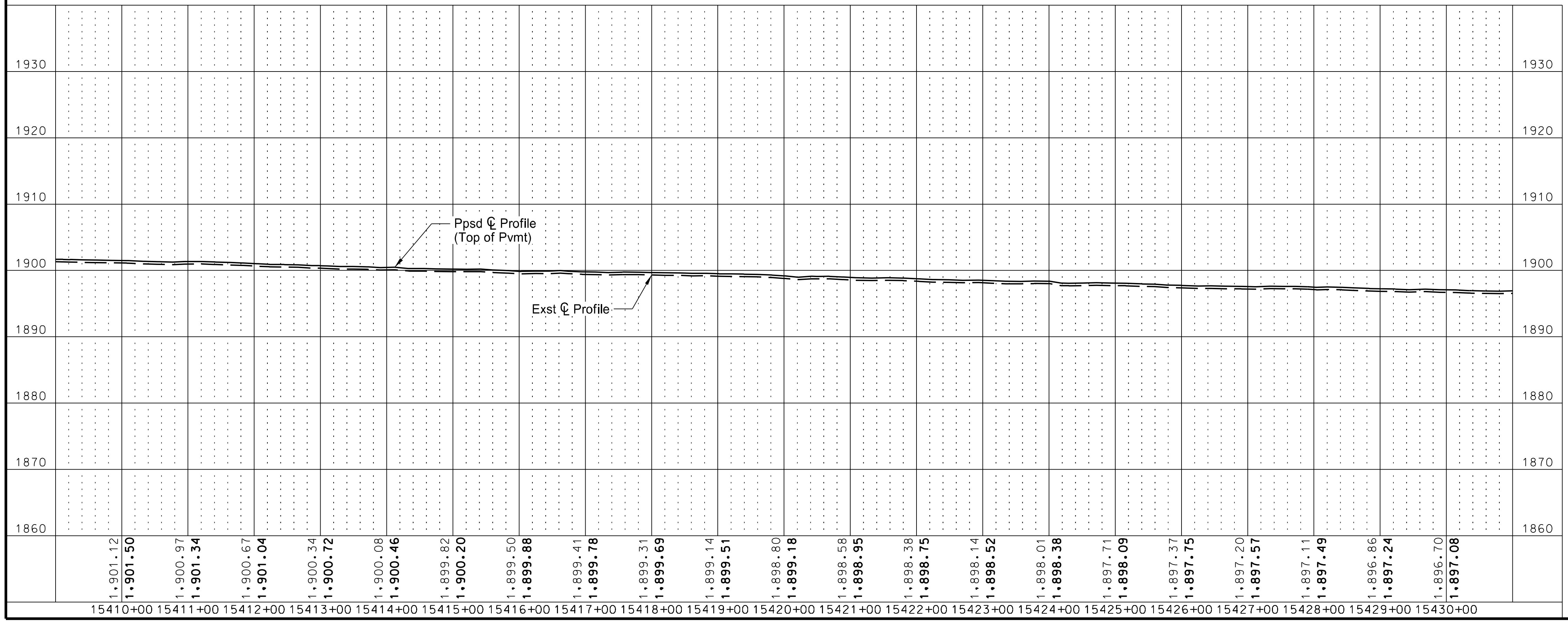


15417+19 - 56' Lt to W end
18" X 42' CSP (good)

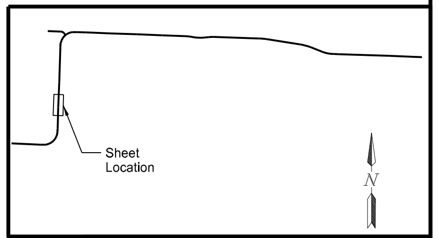
15422+32 - 56' Lt
24" X 48' CSP (good)
2 CSFES (good)
Extend 4' Ahd
Install 1 CSFES

Rec ¼ Cor
#5 Rebar w/2" Alum cap
LS 4687 Set
N 439747.48
E 1332317.34

1. Construct Approach
Sta 15422+29 Lt
(See Sec 20)



15410+00	1,901.12	1,901.50
15411+00	1,900.97	1,901.34
15412+00	1,900.67	1,901.04
15413+00	1,900.34	1,900.72
15414+00	1,900.08	1,900.46
15415+00	1,899.82	1,900.20
15416+00	1,899.50	1,899.88
15417+00	1,899.41	1,899.78
15418+00	1,899.31	1,899.69
15419+00	1,899.14	1,899.51
15420+00	1,898.80	1,899.18
15421+00	1,898.58	1,898.95
15422+00	1,898.38	1,898.75
15423+00	1,898.14	1,898.52
15424+00	1,898.01	1,898.38
15425+00	1,897.71	1,898.09
15426+00	1,897.37	1,897.75
15427+00	1,897.20	1,897.57
15428+00	1,897.11	1,897.49
15429+00	1,896.86	1,897.24
15430+00	1,896.70	1,897.08



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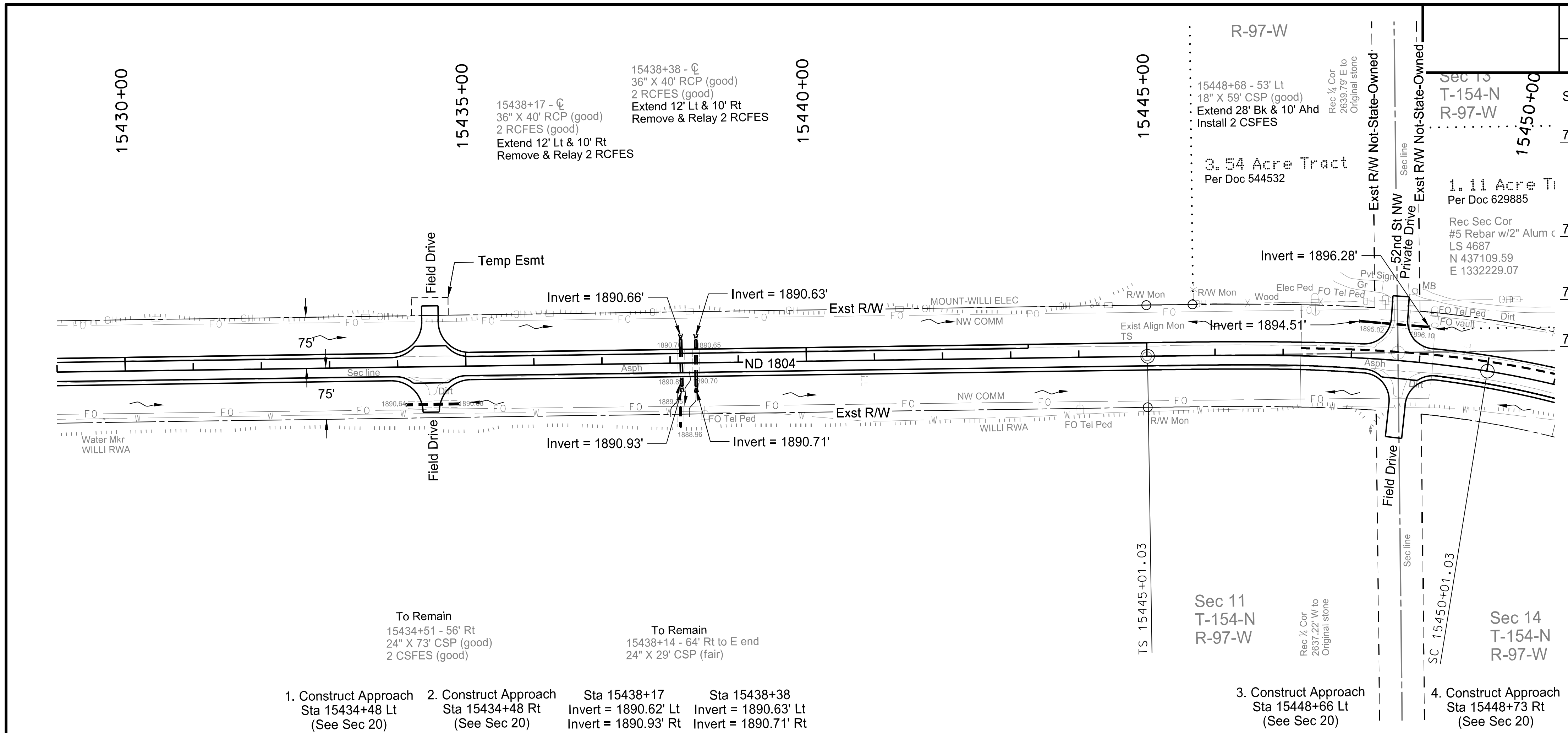
ND 1804 - Jct Tioga Rd to Red Mike Area

Plan & Profile

Sta 15410+00 to Sta 15430+00
(SCL1804)

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SOIB-7-804(061)283	60	24

SPEC	CODE	BID ITEM	QTY	UNIT
714	0905	PIPE CONC REINF 36IN CL III		
		Sta 15438+16, 22.6' Lt - 34.5' Lt	12	LF
		Sta 15438+17, 24.0' Rt - 33.9' Rt	10	LF
		Sta 15438+38, 30.0' Lt - 33.9' Lt	12	LF
		Sta 15438+38, 24.5' Rt - 34.4' Rt	10	LF
714	5015	PIPE CORR STEEL .064IN 18IN		
		Sta 15448+12, 53.9' Lt to Sta 15448+40, 53.2' Lt	28	LF
		Sta 15448+97, 52.8' Lt to Sta 15449+07, 52.9' Lt	10	LF
714	5810	END SECT CORR STEEL .064IN 18IN		
		Sta 15448+12 Lt & Sta 15449+07 Lt	2	EA
714	9660	REMOVE & RELAY END SECTION-ALL TYPE & SIZES		
		Sta 15438+16 Lt & 15438+17 Rt	2	EA
		Sta 15438+38 Lt & Rt	2	EA

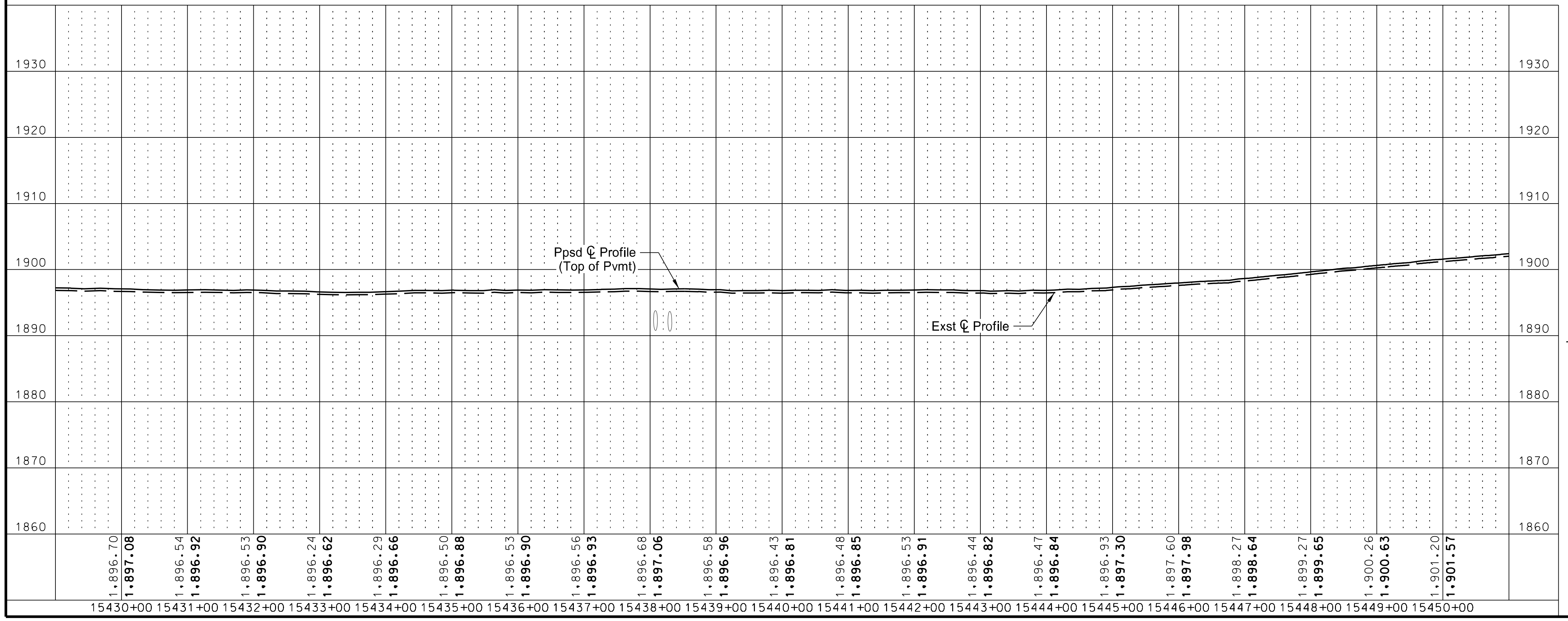


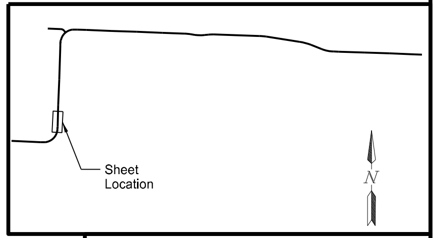
1. Construct Approach Sta 15434+48 Lt (See Sec 20)
2. Construct Approach Sta 15434+48 Rt (See Sec 20)

Sta 15438+17
Invert = 1890.62' Lt
Invert = 1890.93' Rt

Sta 15438+38
Invert = 1890.63' Lt
Invert = 1890.71' Rt

3. Construct Approach Sta 15448+66 Lt (See Sec 20)
4. Construct Approach Sta 15448+73 Rt (See Sec 20)





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ND 1804 - Jct Tioga Rd to Red Mike Area

Plan & Profile

Sta 15430+00 to Sta 15450+00
(SCL1804)

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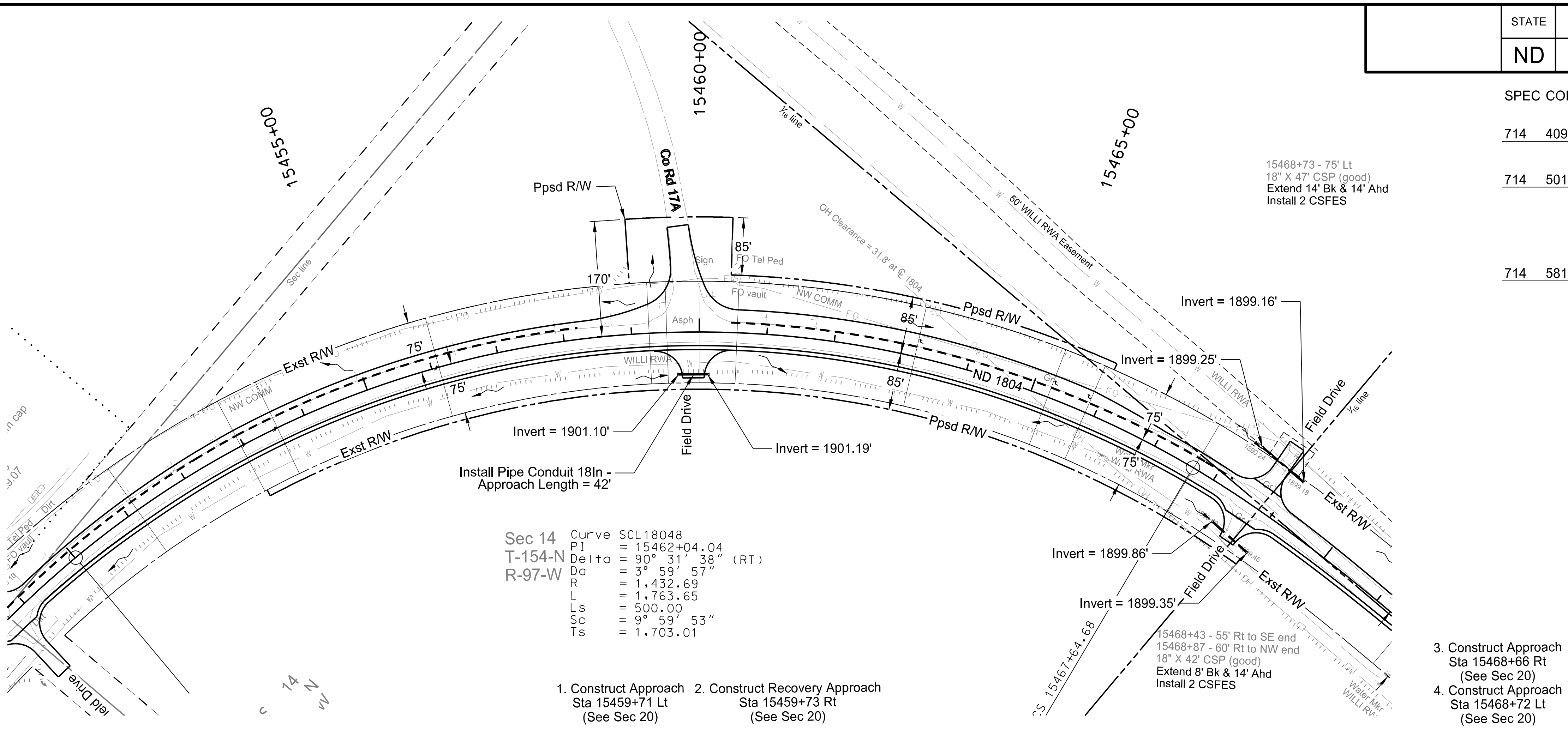
STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SOIB-7-804(061)283	60	25

SPEC	CODE	BID ITEM	QTY	UNIT
714	4099	PIPE CONDUIT 18IN-APPROACH		
		Sta 15459+69, 62.3' Rt to Sta 15460+14, 62.4' Rt	42	LF
714	5015	PIPE CORR STEEL .064IN 18IN		
		Sta 15468+35, 52.8' Rt to Sta 15468+43, 53.9' Rt	8	LF
		Sta 15468+86, 59.6' Rt to Sta 15469+00, 61.2' Rt	14	LF
		Sta 15468+36, 79.8' Lt to Sta 15468+50, 78.0' Lt	14	LF
		Sta 15468+94, 73.1' Lt to Sta 15469+08, 71.9' Lt	14	LF
714	5810	END SECT CORR STEEL .064IN 18IN		
		Sta 15468+35 Rt & Sta 15469+00 Rt	2	EA
		Sta 15468+36 Lt & Sta 15469+08 Lt	2	EA



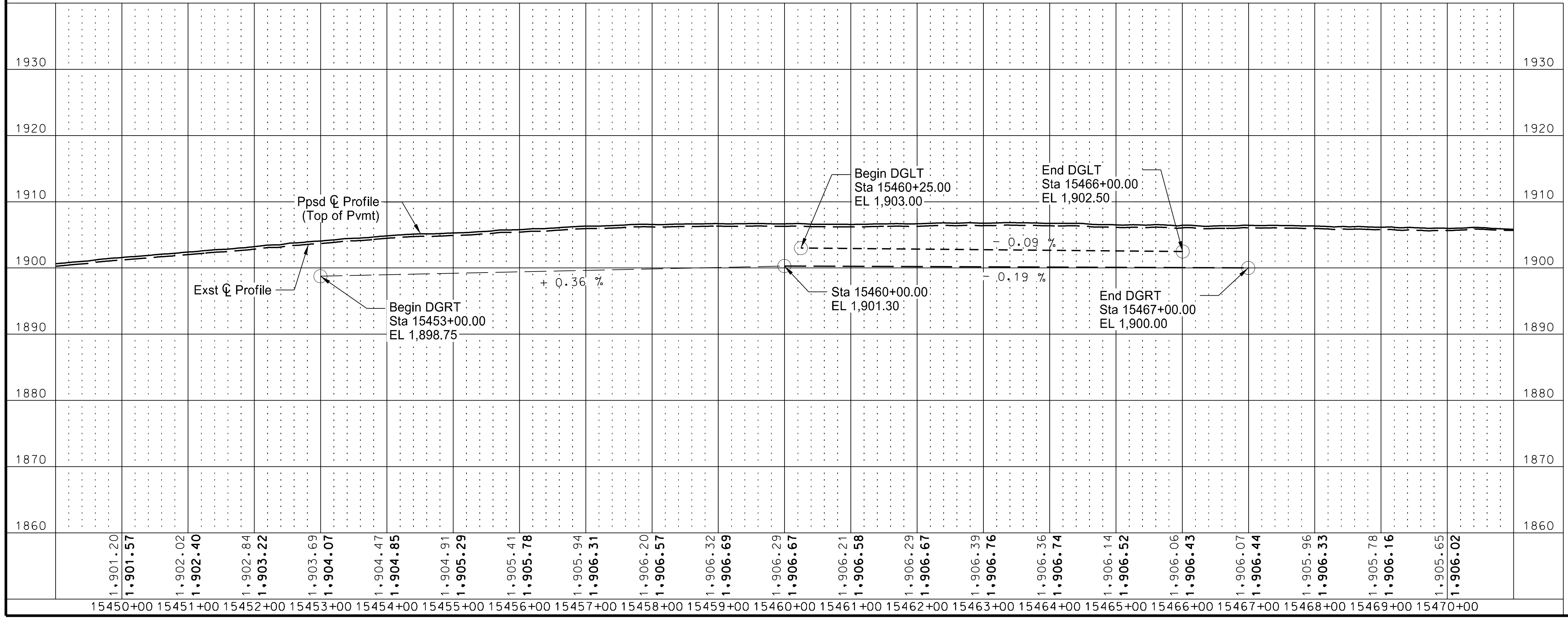
Curve SCL18048
PI = 15462+04.04
Delta = 90° 31′ 38″ (RT)
Da = 3° 59′ 57″
R = 1,432.69
L = 1,763.65
Ls = 500.00
Sc = 9° 59′ 53″
Ts = 1,703.01

1. Construct Approach
Sta 15459+71 Lt
(See Sec 20)

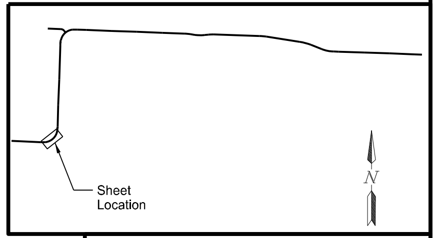
2. Construct Recovery Approach
Sta 15459+73 Rt
(See Sec 20)

3. Construct Approach
Sta 15468+66 Rt
(See Sec 20)

4. Construct Approach
Sta 15468+72 Lt
(See Sec 20)



15450+00	1,901.20	1,901.57
15451+00	1,902.02	1,902.40
15452+00	1,902.84	1,903.22
15453+00	1,903.69	1,904.07
15454+00	1,904.47	1,904.85
15455+00	1,904.91	1,905.29
15456+00	1,905.41	1,905.78
15457+00	1,905.94	1,906.31
15458+00	1,906.20	1,906.57
15459+00	1,906.32	1,906.69
15460+00	1,906.29	1,906.67
15461+00	1,906.21	1,906.58
15462+00	1,906.29	1,906.67
15463+00	1,906.39	1,906.76
15464+00	1,906.36	1,906.74
15465+00	1,906.14	1,906.52
15466+00	1,906.06	1,906.43
15467+00	1,906.07	1,906.44
15468+00	1,905.96	1,906.33
15469+00	1,905.78	1,906.16
15470+00	1,905.65	1,906.02



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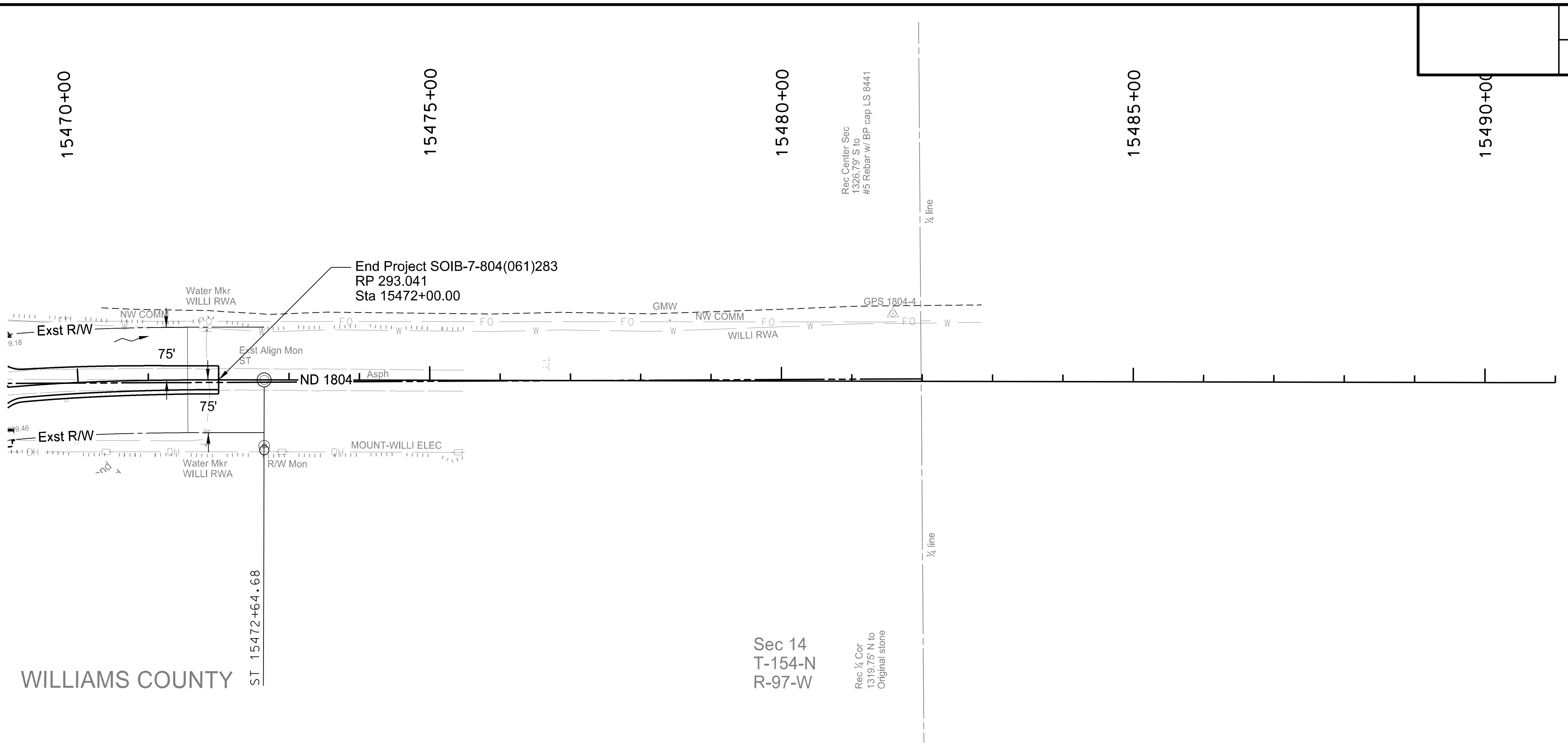
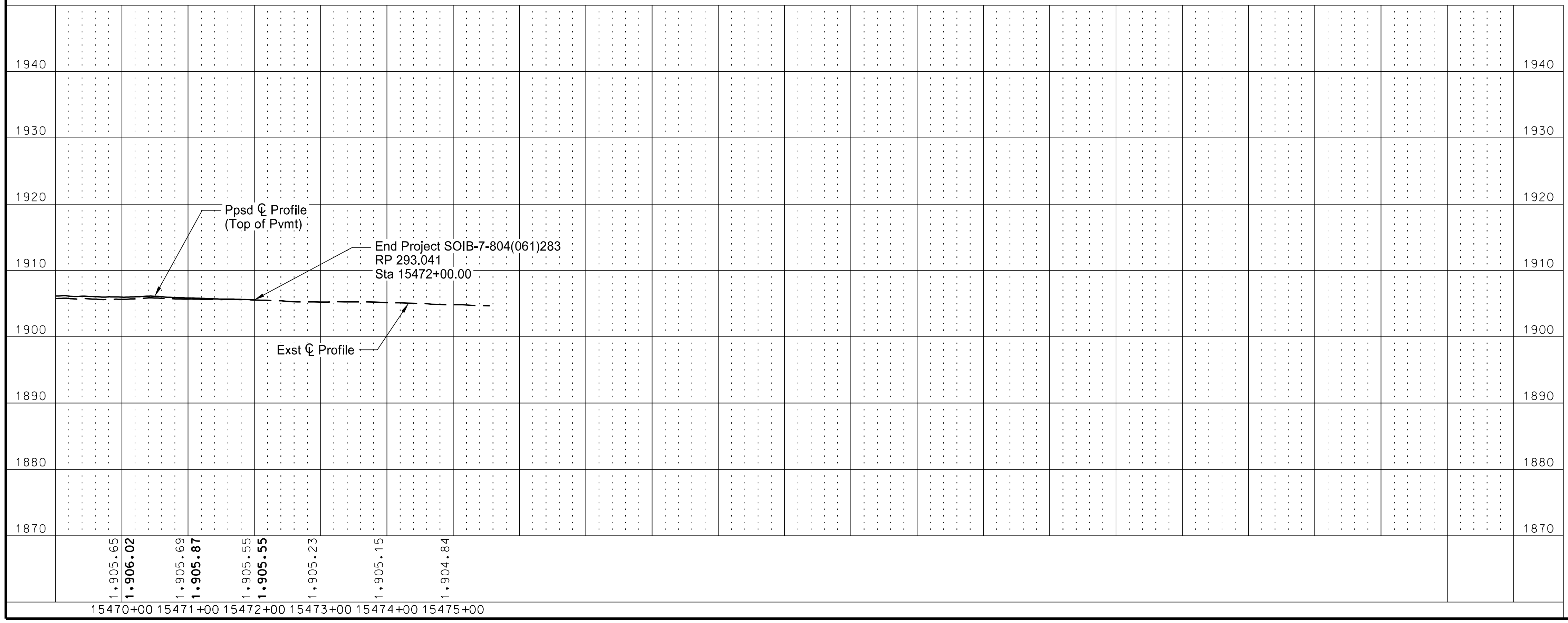
ND 1804 - Jct Tioga Rd to Red Mike Area

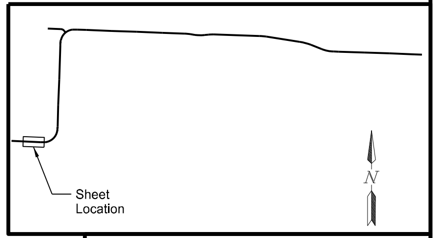
Plan & Profile

Sta 15450+00 to Sta 15470+00
(SCL1804)

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SOIB-7-804(061)283	60	26







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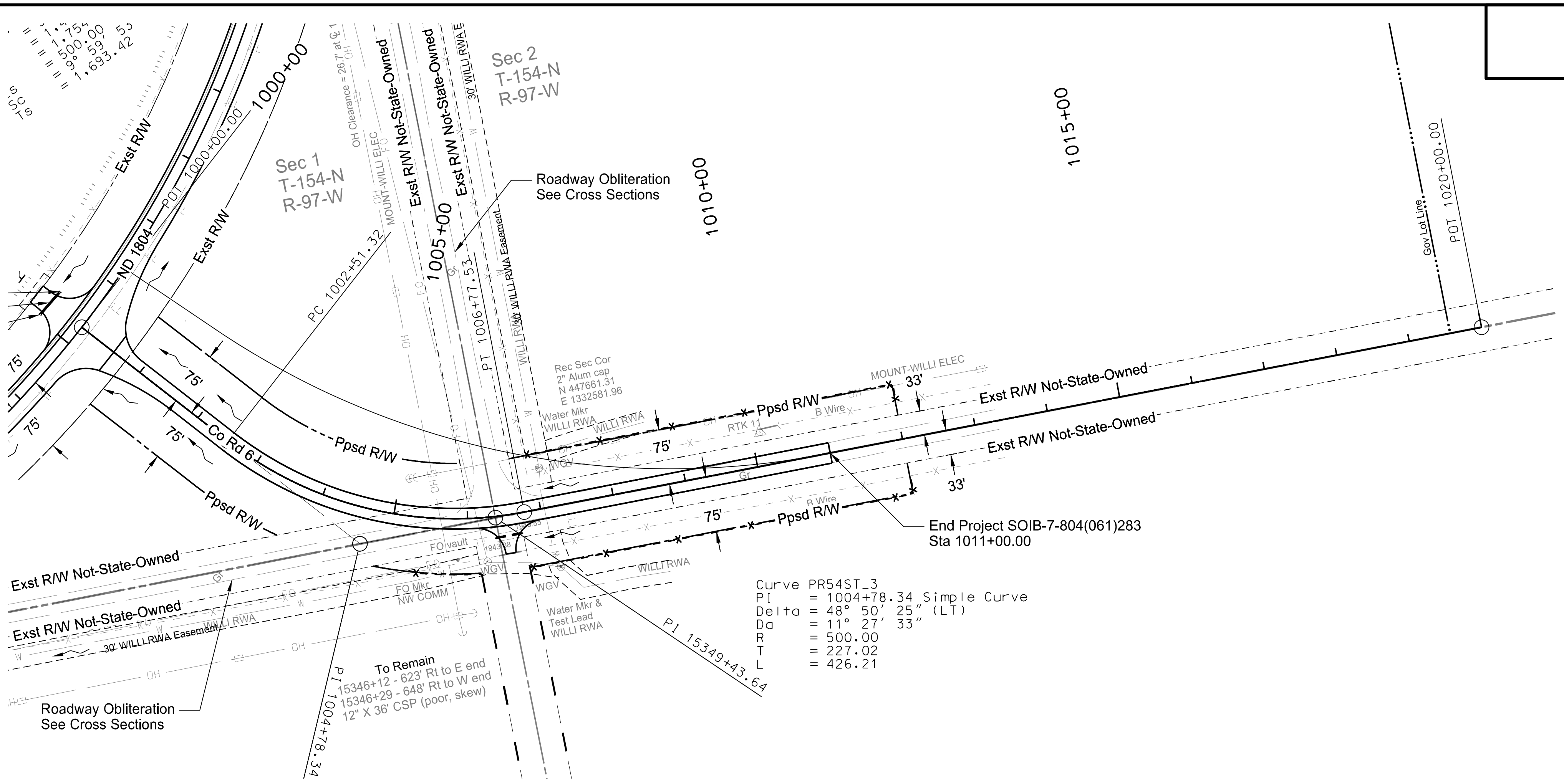
ND 1804 - Jct Tioga Rd to Red Mike Area

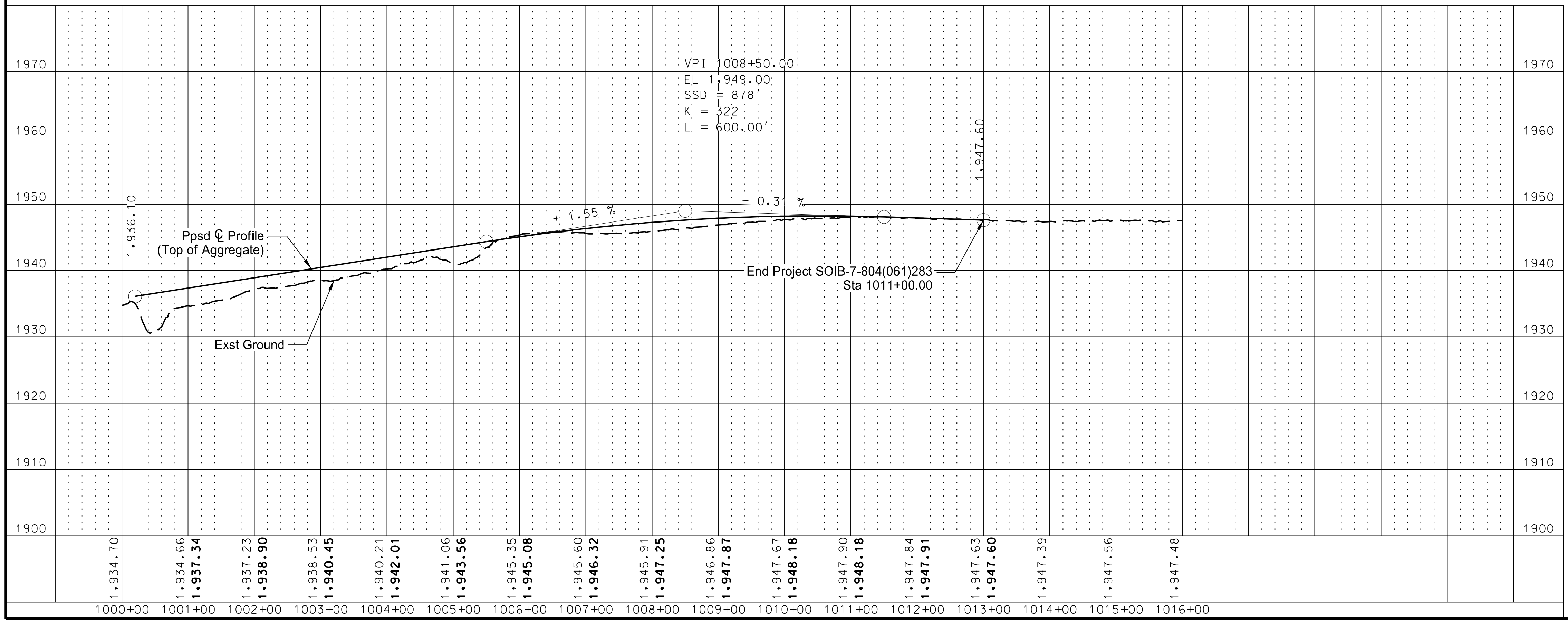
Plan & Profile

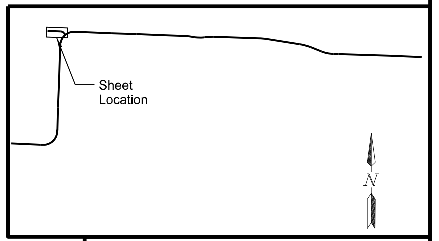
Sta 15470+00 to Sta 15490+00
(SCL1804)

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SOIB-7-804(061)283	60	27

SPEC	CODE	BID ITEM	QTY	UNIT
302	0160	AGGREGATE BASE COURSE CL 13 Sta 1055+00.0 to Sta 1011+00.0 (6IN)	1,117	TON







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ND 1804 - Jct Tioga Rd to Red Mike Area

Plan & Profile

Sta1000+00 to Sta 1020+00
(PR54ST)