



North Dakota Department of Transportation

Thomas K. Sorel
Director

Doug Burgum
Governor

October 31, 2018

ADDENDUM 3 – JOB 24

TO: All prospective bidders on Project SOIB-7-804(061)283, Job No. 24 scheduled for the November 9, 2018 bid opening.

The following plans and request for proposal revision shall be made:

Plan Revisions:

See attached summary from Jessica Karls, P.E. dated October 22, 2018 for an explanation.

Request for Proposal Revisions:

Remove and replace pages 5 thru 11 of 13 of the Proposal pages located at the beginning of the Request for Proposal with pages revised 10/30/2018.

The following changes were made to the Bid Items:

Spec	Code	Description	Unit	Previous Quantity	Revised Quantity
202	0169	REMOVAL OF END SECTION-ALL TYPES & SIZES	EA	2	50
202	0174	REMOVAL OF PIPE ALL TYPES AND SIZES	LF	389	483
203	0140	BORROW-EXCAVATION	CY	162,594	156,777
251	0200	SEEDING CLASS II	ACRE	72.56	72.22
251	2000	TEMPORARY COVER CROP	ACRE	72.55	72.06
253	0101	STRAW MULCH	ACRE	145.11	144.28
261	0112	FIBER ROLLS 12IN	LF	40,369	40,221
261	0113	REMOVE FIBER ROLLS 12IN	LF	18,002	17,928
714	1005	PIPE CONC REINF 42IN CL III	LF	36	52
714	1105	PIPE CONC REINF 48IN CL III	LF	40	96
714	1510	PIPE CONC REINF 72IN CL III	LF	12	26
714	3020	END SECT-CONC REINF 24IN	EA	0	18
714	3030	END SECT-CONC REINF 30IN	EA	0	4
714	3035	END SECT-CONC REINF 36IN	EA	4	20
714	4116	PIPE CONDUIT 36IN-APPROACH	LF	64	194
714	5035	PIPE CORR STEEL 0.064IN 24IN	LF	148	154
714	5215	PIPE CORR STEEL 0.079IN 36IN	LF	40	38
714	5820	END SECT CORR STEEL 0.064IN 24IN	EA	10	14
714	9200	CATTLE PASS CONC INTERMED SECTION	LF	52	112
714	9611	REMOVE & RELAY CATTLE PASS END SECTION	EA	3	8
714	9660	REMOVE & RELAY END SECTION-ALL TYPE & SIZES	EA	57	13
720	0110	RIGHT OF WAY MARKERS	EA	83	80
720	0130	IRON PIN R/W MONUMENTS	EA	83	80
752	0200	FENCE BARBED WIRE 4 STRAND	LF	9,222	9,099
752	0905	TEMPORARY FENCE	LF	9,217	9,097

This addendum is to be incorporated into the bidder's proposal for this project. AASHTOWare Project Bids files should be updated by downloading the addendum file from the Bid Express on-line bidding exchange at <http://www.bidx.com/> and load it into the AASHTOWare Project Bids program.

A handwritten signature in blue ink, appearing to read "Phillip Murdoff". The signature is stylized and cursive.

PHILLIP MURDOFF, P.E. – CONSTRUCTION SERVICES ENGINEER
80: jwj
Enclosure

PLAN ADDENDUM SUMMARY AND APPROVAL

Project Information							
Project: SOIB-7-804(061)283				PCN: 21786			
Location: Jct Tioga Rd to Mike Area							
Date: 10/22/2018		Lead Designer: KLJ					
Bid Opening Date: 11/09/2018		JOB#: 24	Addendum#: 1				
Distribute to: -Grp-DOT Bids Addenda (dotbids@nd.gov)							
Section	Sheet	Description of Change					
6	1-4	Added note 100-P01 Formatted sheets as notes changed pages Removed Note 202-P02					
8	1	The following bid items have been updated:					
		Spec	Code	Description	Unit	Previous Quantity	Addendum Quantity
		202	0169	REMOVAL OF END SECTION-ALL TYPES & SIZES	EA	2	50
		202	0174	REMOVAL OF PIPE ALL TYPES AND SIZES	LF	389	483
		203	0140	BORROW-EXCAVATION	CY	162,594	156,777
		251	0200	SEEDING CLASS II	ACRE	72.56	72.22
		251	2000	TEMPORARY COVER CROP	ACRE	72.55	72.06
		253	0101	STRAW MULCH	ACRE	145.11	144.28
		261	0112	FIBER ROLLS 12IN	LF	40,369	40,221
		261	0113	REMOVE FIBER ROLLS 12IN	LF	18,002	17,928
		714	1005	PIPE CONC REINF 42IN CL III	LF	36	52
		714	1105	PIPE CONC REINF 48IN CL III	LF	40	96
		714	1510	PIPE CONC REINF 72IN CL III	LF	12	26
		714	3020	END SECT-CONC REINF 24IN	EA	0	18
		714	3030	END SECT-CONC REINF 30IN	EA	0	4
		714	3035	END SECT-CONC REINF 36IN	EA	4	20
		714	4116	PIPE CONDUIT 36IN-APPROACH	LF	64	194
		714	5035	PIPE CORR STEEL 0.064IN 24IN	LF	148	154
		714	5215	PIPE CORR STEEL 0.079IN 36IN	LF	40	38
		714	5820	END SECT CORR STEEL 0.064IN 24IN	EA	10	14
		714	9200	CATTLE PASS CONC INTERMED SECTION	LF	52	112
		714	9611	REMOVE & RELAY CATTLE PASS END SECTION	EA	3	8
		714	9660	REMOVE & RELAY END SECTION-ALL TYPE & SIZES	EA	57	13
		720	0110	RIGHT OF WAY MARKERS	EA	83	80
720	0130	IRON PIN R/W MONUMENTS	EA	83	80		
752	0200	FENCE BARBED WIRE 4 STRAND	LF	9,222	9,099		
752	0905	TEMPORARY FENCE	LF	9,217	9,097		

8	1	752	0993	FENCE TERMINAL	EA	19	18
		752	2995	CORNER ASSEMBLY-WOOD POST	EA	43	41
10	6-7	Updated ROW markers & Iron pin R/W Monuments					
11	1,3,4-5 & 10	Updated quantities for Embankment and Borrow Excavation(Sheet 1) Updated end areas, adjusted volume quantities, Updated mass ordinate(Sheet 3) Mass ordinate updated(Sheet 4-5) Updated Mass Haul Diagram(Sheet 10)					
51	1-4	Updated End Section types, lengths of pipe conduits, lengths of extensions					
60	2,4-20,24-25	Updated End Sections of pipes (Sheet 2,4-20,24-25) Permanent ROW changed to Temporary ROW (Sheet 4-5,11-13,25) Updated length of pipe (Sheet 4-5,10-11,15) Update offset of approach pipe (Sheet 5,16) Update length of Cattle Pass (Sheet 8,19) Revised approach pipes (Sheet 11)					
76	2-3,6-7 & 13	Permanent ROW changed to Temporary ROW(Sheet 2-3,13) Updated Straw Mulch and Temporary Cover Crop quantities(Sheet 6-7)					
77	2-3,6-7 & 13	Permanent ROW changed to Temporary ROW(Sheet 2-3,13) Updated Straw Mulch and Seeding Class II quantities(Sheet 6-7)					
80	6, 9, 10, 13	Updated fencing quantities due to ROW changes					
82	2, 6, 13	Updated ROW markers & Iron pin R/W Monuments due to ROW changes					
200	20,24,75,83,85,91-120,137,169-170	Updated Pipe Lengths (Sheet 20,24,75,83,85,137,169-170) Slope outside of the clear zone has been changed to a 3:1, ROW updated. (Sheet 91-120)					

APPROVAL

Should the revisions described above be processed as a plan addendum?

Yes No

____ Roger Weigel /s/_____
Roger Weigel, P.E. - Design Engineer

____10/30/18_____
Date



October 22, 2018

ADDENDUM 1 JOB 24

TO: All prospective bidders and suppliers on Project SOIB-7-804(061)283 scheduled for the November 9, 2018 bid opening.

Revisions for SOIB-7-804(061)283:

Remove & replace plan sheets:

- | | |
|--|--------------------|
| • Section 6 Sheets 1-4 | Revised 10/22/2018 |
| • Section 8 Sheets 1-3 | Revised 10/22/2018 |
| • Section 10 Sheets 6-7 | Revised 10/22/2018 |
| • Section 11 Sheets 1, 3-5 & 10 | Revised 10/22/2018 |
| • Section 51 Sheets 1-4 | Revised 10/22/2018 |
| • Section 60 Sheets 2, 4-6 | Revised 10/22/2018 |
| • Section 60 Sheets 8-20 | Revised 10/22/2018 |
| • Section 60 Sheets 24-25 | Revised 10/22/2018 |
| • Section 76 Sheets 2-3 | Revised 10/22/2018 |
| • Section 76 Sheets 6-7 & 13 | Revised 10/22/2018 |
| • Section 77 Sheets 2-3 | Revised 10/22/2018 |
| • Section 77 Sheets 6-7 & 13 | Revised 10/22/2018 |
| • Section 80 Sheets 6, 9, 10 & 13 | Revised 10/22/2018 |
| • Section 82 Sheets 2, 6 & 13 | Revised 10/22/2018 |
| • Section 200 Sheets 20, 24, 75, 83 & 85 | Revised 10/22/2018 |
| • Section 200 Sheets 91-120 | Revised 10/22/2018 |
| • Section 200 Sheets 137, 169-170 | Revised 10/22/2018 |

with the enclosed revised sheets.

Electronic files will be made available through the NDDOT's Plans and Proposals Page.

SECTION 6

SHEETS 1-4:

- Added note 100-P01
- Formatted sheets as notes changed pages
- Removed note 202-P03

SECTION 8

SHEETS 1-3:

- The following bid items have been updated:

Spec	Code	Description	Unit	Previous Quantity	Addendum 1 Quantity
202	0169	REMOVAL OF END SECTION-ALL TYPES & SIZES	EA	2	50
202	0174	REMOVAL OF PIPE ALL TYPES AND SIZES	LF	389	483
203	0140	BORROW-EXCAVATION	CY	162,594	156,777
251	0200	SEEDING CLASS II	ACRE	72.56	72.22
251	2000	TEMPORARY COVER CROP	ACRE	72.55	72.06
261	0112	FIBER ROLLS 12IN	LF	40,369	40,221
261	0113	REMOVE FIBER ROLLS 12 IN	LF	18,002	17,928
253	0101	STRAW MULCH	ACRE	145.11	144.28
714	1005	PIPE CONC REINF 42IN CL III	LF	36	52
714	1105	PIPE CONC REINF 48IN CL III	LF	40	96
714	1510	PIPE CONC REINF 72IN CL III	LF	12	26
714	3020	END SECT-CONC REINF 24IN	EA	0	18
714	3030	END SECT-CONC REINF 30IN	EA	0	4
714	3035	END SECT-CONC REINF 36IN	EA	4	20
714	4116	PIPE CONDUIT 36IN-APPROACH	LF	64	194
714	5035	PIPE CORR STEEL 0.064IN 24IN	LF	148	154
714	5215	PIPE CORR STEEL 0.079IN 36IN	LF	40	38
714	5820	END SECT CORR STEEL 0.064IN 24IN	EA	10	14
714	9200	CATTLE PASS CONC INTERMED SECTION	LF	52	112
714	9611	REMOVE & RELAY CATTLE PASS END SECTION	EA	3	8
714	9660	REMOVE & RELAY END SECTION-ALL TYPE & SIZES	EA	57	13
720	0110	RIGHT OF WAY MARKERS	EA	83	80
720	0130	IRON PIN R/W MONUMENTS	EA	83	80
752	0200	FENCE BARBED WIRE 4 STRAND	LF	9,222	9,099
752	0905	TEMPORARY FENCE	LF	9,217	9,097
752	0993	FENCE TERMINAL	EA	19	18
752	2995	CORNER ASSEMBLY-WOOD POST	EA	43	41

SECTION 10

SHEETS 6-7:

- Updated ROW markers & Iron pin R/W Monuments

SECTION 11

SHEETS 1,3,4-5 & 10

- Updated quantities for Embankment and Borrow Excavation (Sheet 1)
- Updated end areas, adjusted volume quantities, updated mass ordinate (Sheet 3)
- Mass ordinate updated (Sheet 4-5)
- Updated Mass Haul Diagram (Sheet 10)

SECTION 51

SHEETS 1-4:

- Updated end section types, lengths of pipe conduits, lengths of extensions

SECTION 60

SHEETS 2, 4-11, 8-20, 24-25

- Updated end sections of pipes (Sheet 2, 4-20, 24-25)
- Permanent ROW changed to temporary ROW (Sheet 4-5, 11-13, 25)
- Updated length of pipe (Sheet 4-5, 10-11, 15)
- Update offset of approach pipe (Sheet 5, 16)
- Update length of cattle pass (Sheet 8, 19)
- Revised approach pipes (Sheet 11)

SECTION 76

SHEETS 2-3, 6-7 & 13

- Permanent ROW changed to temporary ROW (Sheet 2-3, 13)
- Updated Straw Mulch and Temporary Cover Crop quantities (Sheet 6-7)

SECTION 77

SHEETS 2-3, 6-7 & 13

- Permanent ROW changed to temporary ROW (Sheet 2-3, 13)
- Updated Straw Mulch and Seeding Class II quantities (Sheet 6-7)

SECTION 80

SHEETS 6, 9, 10 & 13

- Updated fencing quantities due to ROW changes (Sheet 6, 9, 10, 13)

SECTION 82

SHEETS 2, 6 & 13

- Updated due to ROW changes (Sheet 2, 13)
- Updated ROW markers & Iron pin R/W Monuments due to ROW changes (Sheet 6)

SECTION 200

SHEETS 20, 24, 75, 83 & 85

- Updated pipe lengths (Sheet 20, 24, 75, 83, 85, 137, 169-170)
- Slope outside of the clear zone has been changed to a 3:1, ROW updated. (Sheet 91-120)



This addendum is to be incorporated into bidder's proposal for this project.

Sincerely,
KLJ

A handwritten signature in blue ink, appearing to read 'Jessica Pfand'.

Project Engineer

Enclosure(s): Revised Plan Sheets)
-Project #: SOIB-7-804(061)283
c: Justin Schlosser, NDDOT Design Division



BID ITEMS

Project: SOIB-7-804(061)283 (PCN-21786)

Bidder must type or neatly print unit prices in numerals, make extensions for each item, and total. Do not carry unit prices further than three (3) decimal places.

Item No.	Spec No.	Code No.	Description	Unit	Approx. Quantity	Unit Price		Amount	
						\$\$\$\$	000	\$\$\$\$	00
001	103	0100	CONTRACT BOND	L SUM	1.				
002	103	0200	ESCROW OF BID DOCUMENTATION	L SUM	1.				
003	201	0330	CLEARING & GRUBBING	L SUM	1.				
004	202	0169	REMOVAL OF END SECTION-ALL TYPES & SIZES	EA	50.				
005	202	0174	REMOVAL OF PIPE ALL TYPES AND SIZES	LF	483.				
006	202	0312	REMOVE EXISTING FENCE	LF	8,235.				
007	203	0101	COMMON EXCAVATION-TYPE A	CY	27,949.				
008	203	0109	TOPSOIL	CY	70,287.				
009	203	0122	TOPSOIL-DEPT OPTION BORROW AREA	CY	15,230.				
010	203	0140	BORROW-EXCAVATION	CY	156,777.				
011	216	0100	WATER	M GAL	6,433.				
012	251	0200	SEEDING CLASS II	ACRE	72.220				
013	251	2000	TEMPORARY COVER CROP	ACRE	72.060				
014	253	0101	STRAW MULCH	ACRE	144.280				
015	255	0103	ECB TYPE 3	SY	10,730.				
016	256	0100	RIPRAP GRADE I	CY	15.				

BID ITEMS

Project: SOIB-7-804(061)283 (PCN-21786)

Bidder must type or neatly print unit prices in numerals, make extensions for each item, and total. Do not carry unit prices further than three (3) decimal places.

Item No.	Spec No.	Code No.	Description	Unit	Approx. Quantity	Unit Price		Amount	
						\$\$\$\$	000	\$\$\$\$	00
017	260	0200	SILT FENCE SUPPORTED	LF	3,930.				
018	260	0201	REMOVE SILT FENCE SUPPORTED	LF	3,930.				
019	261	0112	FIBER ROLLS 12IN	LF	40,221.				
020	261	0113	REMOVE FIBER ROLLS 12IN	LF	17,928.				
021	261	0120	FIBER ROLLS 20IN	LF	13,244.				
022	261	0121	REMOVE FIBER ROLLS 20IN	LF	6,646.				
023	262	0100	FLOTATION SILT CURTAIN	LF	289.				
024	262	0101	REMOVE FLOTATION SILT CURTAIN	LF	289.				
025	302	0050	TRAFFIC SERVICE AGGREGATE	TON	200.				
026	302	0115	AGGREGATE BASE COURSE CL 4	TON	9,940.				
027	302	0120	AGGREGATE BASE COURSE CL 5	TON	103,794.				
028	302	0357	AGGREGATE SURFACE COURSE CL 13	CY	1,117.				
029	401	0050	TACK COAT	GAL	7,472.				
030	401	0060	PRIME COAT	GAL	6,183.				
031	401	0160	BLOTTER MATERIAL CL 44	TON	185.				
032	411	0105	MILLING PAVEMENT SURFACE	SY	651.				

BID ITEMS

Project: SOIB-7-804(061)283 (PCN-21786)

Bidder must type or neatly print unit prices in numerals, make extensions for each item, and total. Do not carry unit prices further than three (3) decimal places.

Item No.	Spec No.	Code No.	Description	Unit	Approx. Quantity	Unit Price		Amount	
						\$\$\$\$	000	\$\$\$\$	00
033	430	0045	SUPERPAVE FAA 45	TON	58,361.				
034	430	1000	CORED SAMPLE	EA	363.				
035	430	5806	PG 58H-28 ASPHALT CEMENT	TON	3,502.				
036	702	0100	MOBILIZATION	L SUM	1.				
037	704	0100	FLAGGING	MHR	2,200.				
038	704	1000	TRAFFIC CONTROL SIGNS	UNIT	3,607.				
039	704	1048	PORTABLE RUMBLE STRIPS	EA	2.				
040	704	1052	TYPE III BARRICADE	EA	14.				
041	704	1060	DELINEATOR DRUMS	EA	194.				
042	704	1067	TUBULAR MARKERS	EA	353.				
043	704	1080	STACKABLE VERTICAL PANELS	EA	354.				
044	704	1185	PILOT CAR	HR	1,100.				
045	706	0400	FIELD OFFICE	EA	1.				
046	706	0500	AGGREGATE LABORATORY	EA	1.				
047	706	0550	BITUMINOUS LABORATORY	EA	1.				
048	706	0600	CONTRACTOR'S LABORATORY	EA	1.				

BID ITEMS

Project: SOIB-7-804(061)283 (PCN-21786)

Bidder must type or neatly print unit prices in numerals, make extensions for each item, and total. Do not carry unit prices further than three (3) decimal places.

Item No.	Spec No.	Code No.	Description	Unit	Approx. Quantity	Unit Price		Amount	
						\$\$\$\$	000	\$\$\$\$	00
049	709	0151	GEOSYNTHETIC MATERIAL TYPE R1	SY	6,159.				
050	709	0155	GEOSYNTHETIC MATERIAL TYPE RR	SY	35.				
051	714	0310	PIPE CONC REINF 18IN CL III	LF	34.				
052	714	0615	PIPE CONC REINF 24IN CL III	LF	252.				
053	714	0820	PIPE CONC REINF 30IN CL III	LF	74.				
054	714	0905	PIPE CONC REINF 36IN CL III	LF	198.				
055	714	1005	PIPE CONC REINF 42IN CL III	LF	52.				
056	714	1105	PIPE CONC REINF 48IN CL III	LF	96.				
057	714	1510	PIPE CONC REINF 72IN CL III	LF	26.				
058	714	3010	END SECT-CONC REINF 18IN	EA	2.				
059	714	3020	END SECT-CONC REINF 24IN	EA	18.				
060	714	3030	END SECT-CONC REINF 30IN	EA	4.				
061	714	3035	END SECT-CONC REINF 36IN	EA	20.				
062	714	3480	15FT STR PLATE PIPE .218IN	LF	72.				
063	714	4099	PIPE CONDUIT 18IN-APPROACH	LF	78.				
064	714	4106	PIPE CONDUIT 24IN-APPROACH	LF	450.				

BID ITEMS

Project: SOIB-7-804(061)283 (PCN-21786)

Bidder must type or neatly print unit prices in numerals, make extensions for each item, and total. Do not carry unit prices further than three (3) decimal places.

Item No.	Spec No.	Code No.	Description	Unit	Approx. Quantity	Unit Price		Amount	
						\$\$\$\$	000	\$\$\$\$	00
065	714	4116	PIPE CONDUIT 36IN-APPROACH	LF	194.				
066	714	5015	PIPE CORR STEEL .064IN 18IN	LF	238.				
067	714	5035	PIPE CORR STEEL .064IN 24IN	LF	154.				
068	714	5210	PIPE CORR STEEL .079IN 30IN	LF	12.				
069	714	5215	PIPE CORR STEEL .079IN 36IN	LF	38.				
070	714	5810	END SECT CORR STEEL .064IN 18IN	EA	18.				
071	714	5820	END SECT CORR STEEL .064IN 24IN	EA	14.				
072	714	5825	END SECT CORR STEEL .079IN 30IN	EA	2.				
073	714	5830	END SECT CORR STEEL .079IN 36IN	EA	4.				
074	714	9200	CATTLE PASS CONC INTERMED SECTION	LF	112.				
075	714	9611	REMOVE & RELAY CONC CATTLE PASS END SECTION	EA	8.				
076	714	9660	REMOVE & RELAY END SECTION-ALL TYPE & SIZES	EA	13.				
077	720	0110	RIGHT OF WAY MARKERS	EA	80.				
078	720	0125	ALIGNMENT MONUMENTS	EA	43.				
079	720	0130	IRON PIN R/W MONUMENTS	EA	80.				
080	720	0135	IRON PIN REFERENCE MONUMENTS	EA	65.				

BID ITEMS

Project: SOIB-7-804(061)283 (PCN-21786)

Bidder must type or neatly print unit prices in numerals, make extensions for each item, and total. Do not carry unit prices further than three (3) decimal places.

Item No.	Spec No.	Code No.	Description	Unit	Approx. Quantity	Unit Price		Amount	
						\$\$\$\$	000	\$\$\$\$	00
081	752	0200	FENCE BARBED WIRE 4 STRAND	LF	9,099.				
082	752	0905	TEMPORARY FENCE	LF	9,097.				
083	752	0993	FENCE TERMINAL	EA	18.				
084	752	2995	CORNER ASSEMBLY-WOOD POST	EA	41.				
085	752	4100	DOUBLE BRACE ASSEMBLY BARBED WIRE	EA	1.				
086	754	0110	FLAT SHEET FOR SIGNS-TYPE XI REFL SHEETING	SF	621.				
087	754	0112	FLAT SHEET FOR SIGNS-TYPE IV REFL SHEETING	SF	126.				
088	754	0195	DIAMOND GRADE DELINEATORS-TYPE A	EA	14.				
089	754	0206	STEEL GALV POSTS-TELESCOPING PERFORATED TUBE	LF	1,359.				
090	754	0563	REFERENCE MARKER-TYPE C	EA	10.				
091	754	0592	RESET SIGN PANEL	EA	13.				
092	754	0803	OBJECT MARKERS - TYPE III	EA	14.				
093	754	0805	OBJECT MARKERS - CULVERTS	EA	68.				
094	760	0005	RUMBLE STRIPS - ASPHALT SHOULDER	MILE	18.600				
095	760	0007	RUMBLE STRIPS - ASPHALT CENTERLINE	MILE	9.300				
096	760	0010	RUMBLE STRIPS - INTERSECTION	SET	1.				

NOTES

Revised 10/22/18

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SOIB-7-804(061)283	6	1

GENERAL NOTES

- 100-P01 LIMITED ACCESS: There are areas within this project that will not be available for the Contractor to access until a later date.
- ND 1804 from Sta.15191+38 to Sta.15217+00 LT. Anticipated access April 1, 2019.
 - ND 1804 from Sta. 15201+92 to Sta. 15207+99 RT. Anticipated access April 1, 2019.
 - ND 1804 from Sta. 15217+25 to Sta. 15218+10 LT. Anticipated access April 1, 2019.
 - ND 1804 from Sta. 15344+98 to Sta. 15345+56 LT. Anticipated access April 1, 2019.
 - ND 1804 from Sta. 15396+23 to Sta. 15396+39 LT. Anticipated access April 1, 2019.
 - Co Rd 6 / 54th St from Sta. 1001+00 to Sta. 1012+00 LT&RT. Anticipated access April 1, 2019.

The Engineer will notify the Contractor if areas become available prior to the dates listed.

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 protect 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 protect 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 protect 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 protect 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 protect 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 protect in place.	Tesoro High Plains Pipeline	Fuel Line
15045+06	78.9' Lt - 28.0' Lt	51	Cut	2.2'	Contractor to protect in place.	Nesson Gath	Fuel Line
15045+45 to 15045+47	28.0' Lt - 68.0' Lt	40	Cut	2.4'	Contractor to protect in place.	Tesoro High Plains Pipeline	Fuel Line
15046+07	28.0' Lt - 55.5' Lt	27	Cut	2.6'	Contractor to protect in place.	Nesson Gath	Fuel Line

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Station	Offset	Approx Qty		Approx Max Cut/Fill	Comments	Utility Company	Type of Facility
15048+97 to 15052+45	68.4' Rt - 72.6' Rt	347	Cut	0.0' - 3.9'	Contractor to protect 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 protect 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
15207+52 to 15208+48	56.9' Rt - 58.1' Rt	95	Cut	0.0' - 1.5'	Contractor to protect 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 protect 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 protect 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 protect 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 protect 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 protect in place.	Northwest Communication Cooperation	Fiber Optic Line
1007+06	33' Lt - 58.3' Rt	92		n/a	Contractor to protect 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

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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.

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;

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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

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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Estimated Quantities

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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	50	50
202	174	REMOVAL OF PIPE ALL TYPES AND SIZES	LF	483	483
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	156777	156777
216	100	WATER	M GAL	6433	6433
251	200	SEEDING CLASS II	ACRE	72.22	72.22
251	2000	TEMPORARY COVER CROP	ACRE	72.06	72.06
253	101	STRAW MULCH	ACRE	144.28	144.28
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	40221	40221
261	113	REMOVE FIBER ROLLS 12IN	LF	17928	17928
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

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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	52	52
714	1105	PIPE CONC REINF 48IN CL III	LF	96	96
714	1510	PIPE CONC REINF 72IN CL III	LF	26	26
714	3010	END SECT-CONC REINF 18IN	EA	2	2
714	3020	END SECT-CONC REINF 24IN	EA	18	18
714	3030	END SECT-CONC REINF 30IN	EA	4	4
714	3035	END SECT-CONC REINF 36IN	EA	20	20
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	194	194
714	5015	PIPE CORR STEEL .064IN 18IN	LF	238	238
714	5035	PIPE CORR STEEL .064IN 24IN	LF	154	154
714	5210	PIPE CORR STEEL .079IN 30IN	LF	12	12
714	5215	PIPE CORR STEEL .079IN 36IN	LF	38	38
714	5810	END SECT CORR STEEL .064IN 18IN	EA	18	18
714	5820	END SECT CORR STEEL .064IN 24IN	EA	14	14
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	112	112
714	9611	REMOVE & RELAY CONC CATTLE PASS END SECTION	EA	8	8
714	9660	REMOVE & RELAY END SECTION-ALL TYPE & SIZES	EA	13	13
720	110	RIGHT OF WAY MARKERS	EA	80	80
720	125	ALIGNMENT MONUMENTS	EA	43	43
720	130	IRON PIN R/W MONUMENTS	EA	80	80
720	135	IRON PIN REFERENCE MONUMENTS	EA	65	65
752	200	FENCE BARBED WIRE 4 STRAND	LF	9099	9099
752	905	TEMPORARY FENCE	LF	9097	9097
752	993	FENCE TERMINAL	EA	18	18
752	2995	CORNER ASSEMBLY-WOOD POST	EA	41	41
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

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SPEC	CODE	ITEM DESCRIPTION	UNIT	Mainline: Funding A	TOTAL
760	7	RUMBLE STRIPS - ASPHALT CENTERLINE	MILE	9.3	9.3
760	10	RUMBLE STRIPS - INTERSECTION	SET	1	1
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

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	
15050+58.68	75.00	445344.74	1362237.29	PPSD R/W	90028	X	X	
15050+58.68	105.00	445374.71	1362238.20	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	105.00	445383.00	1361997.02	PPSD R/W	90031	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
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

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+65.97	90.00	447195.88	1348436.25	PPSD R/W	90084	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
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

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)								
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 =						66	66	61

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ND 1804 - Jct Tioga Rd to Red Mike Area
Monuments & Right of Way Markers

LOCATION	EARTHWORK SUMMARY			TOPSOIL SUMMARY
	203 0101 COMMON EXCAVATION- TYPE A	EMBANKMENT	203 0140 BORROW EXCAVATION	203 109 TOPSOIL
	A (CY)	B (CY)	C=B-A (CY)	(CY)
ND 1804 - Jct Tioga to Mike Rd				
Sta 14980+88.70 Lt Lane to Sta 15470+00.02	13,714	96,967	83,253	34,073
Sta 14980+88.70 Rt Lane to Sta 15470+00.02	14,805	89,525	74,720	31,629
Mainline Subtotal	28,519	186,492	157,973	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	36,128	192,905	156,777	70,287

Notes:

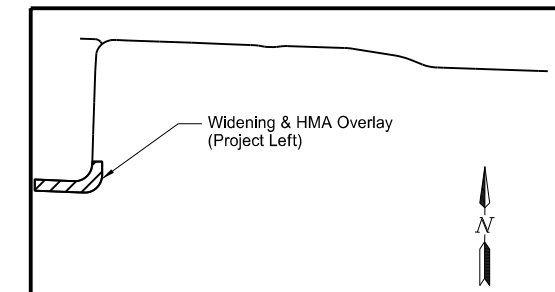
1. Additional 25% volume included for shrinkage.

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ND 1804 - Jct Tioga Rd to Red Mike Area
Earthwork Summary
Mainline & Radial T

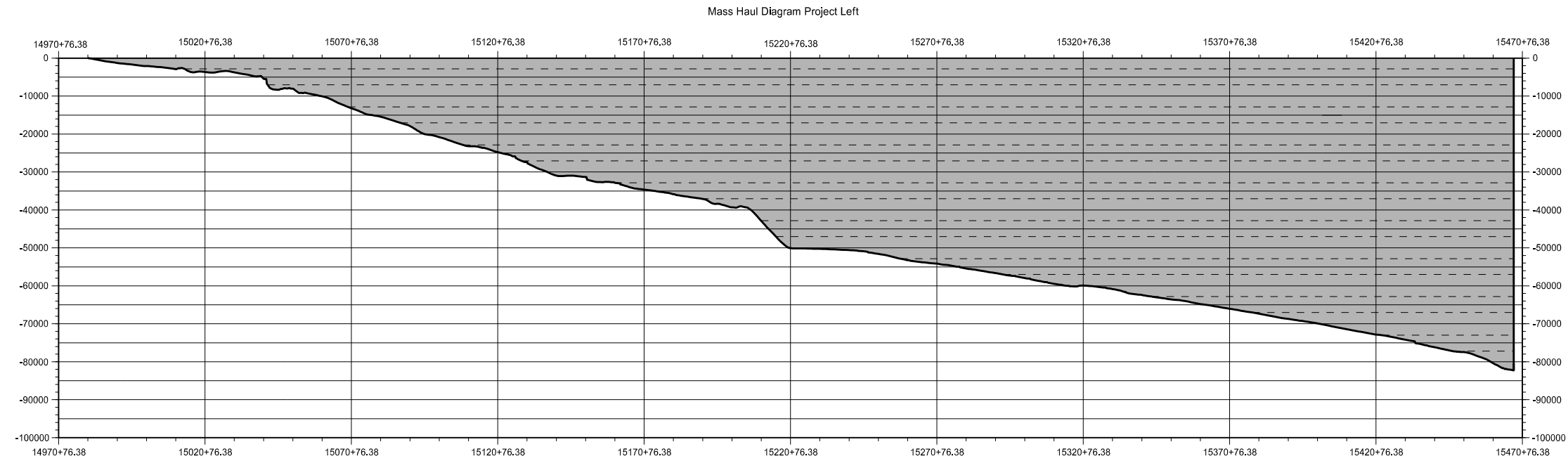
Widening & HMA Overlay - Project Left
Table 13 of 13 (SCL 1804)

STATION	END AREA (SF)		ADJUSTED VOLUME (CY)		ADDED VOLUME (CY)	MASS
	EXC	FILL	EXC	FILL	FILL	
15449+00.00	22.56	0.44	16.532	0.164	0.000	-78357.190
15449+50.00	12.89	22.17	32.823	26.176	0.000	-78350.543
15450+00.00	13.19	9.71	24.155	36.896	0.000	-78363.284
15450+01.03	13.16	9.43	0.503	0.456	0.000	-78363.237
15450+50.00	13.26	9.23	23.959	21.153	0.000	-78360.431
15451+00.00	13.49	10.67	24.775	23.033	0.000	-78358.689
15451+50.00	11.17	20.85	22.834	36.480	0.000	-78372.335
15452+00.00	10.14	25.43	19.729	53.554	0.000	-78406.160
15452+50.00	8.35	39.03	17.119	74.601	0.000	-78463.642
15453+00.00	7.93	43.71	15.073	95.766	0.000	-78544.335
15453+50.00	6.94	48.56	13.775	106.791	0.000	-78637.351
15454+00.00	6.68	53.97	12.616	118.662	0.000	-78743.397
15454+50.00	6.50	58.08	12.205	129.683	0.000	-78860.875
15455+00.00	7.29	58.17	12.766	134.542	0.000	-78982.651
15455+50.00	6.84	61.17	13.079	138.115	0.000	-79107.687
15456+00.00	8.21	61.17	13.934	141.589	0.000	-79235.342
15456+50.00	8.46	55.48	15.438	135.002	0.000	-79354.906
15457+00.00	7.38	56.84	14.672	129.989	0.000	-79470.223
15457+50.00	7.63	51.91	13.901	125.858	0.000	-79582.180
15458+00.00	9.21	57.67	15.590	126.821	0.000	-79693.411
15458+50.00	8.50	57.09	16.393	132.824	0.000	-79809.842
15459+00.00	8.31	46.49	15.559	119.883	0.000	-79914.166
15459+50.00	15.58	0.15	22.120	53.983	0.000	-79946.029
15459+57.16	18.53	0.01	4.520	0.027	0.000	-79941.536
15459+85.36	22.86	0.00	0.000	0.000	215.000	-80156.536
15460+00.00	16.78	0.00	10.749	0.000	0.000	-80145.787
15460+50.00	10.91	82.07	25.643	94.985	0.000	-80215.129
15461+00.00	11.46	94.20	20.714	204.013	0.000	-80398.428
15461+50.00	10.44	91.00	20.274	214.353	0.000	-80592.507
15462+00.00	13.88	82.15	22.515	200.410	0.000	-80770.402
15462+50.00	18.36	91.18	29.848	200.622	0.000	-80941.176
15463+00.00	12.34	95.76	28.420	216.368	0.000	-81129.124
15463+50.00	10.15	104.48	20.824	231.762	0.000	-81340.062
15464+00.00	6.27	107.88	15.205	245.787	0.000	-81570.644
15464+50.00	5.64	104.74	11.029	246.082	0.000	-81805.697
15465+00.00	5.90	93.92	10.690	229.927	0.000	-82024.934
15465+50.00	7.51	92.99	12.416	216.329	0.000	-82228.847
15466+00.00	5.52	76.18	12.058	195.801	0.000	-82412.590
15466+50.00	5.16	57.57	9.888	154.806	0.000	-82557.508
15467+00.00	8.04	36.68	12.223	109.093	0.000	-82654.378
15467+50.00	12.44	15.67	18.962	60.596	0.000	-82696.012
15467+64.68	14.47	11.77	7.315	9.324	0.000	-82698.021
15468+00.00	18.23	2.46	21.386	11.637	0.000	-82688.272
15468+50.00	31.70	0.00	46.233	2.851	0.000	-82644.890
15468+53.54	32.23	0.28	4.190	0.023	0.000	-82640.723
15468+84.84	34.46	0.01	0.000	0.000	421.000	-83061.723
15469+00.00	29.23	0.00	12.179	0.000	0.000	-83049.544
15469+50.00	17.42	15.17	43.192	17.555	0.000	-83023.907
15470+00.00	12.71	22.63	27.898	43.746	0.000	-83039.755
15470+50.00	8.98	36.21	20.078	68.103	0.000	-83087.780
15471+00.00	7.96	31.69	15.686	78.592	0.000	-83150.686
15471+50.00	6.34	36.64	13.245	79.094	0.000	-83216.535
15472+00.00	0.00	0.00	5.870	42.413	0.000	-83253.078



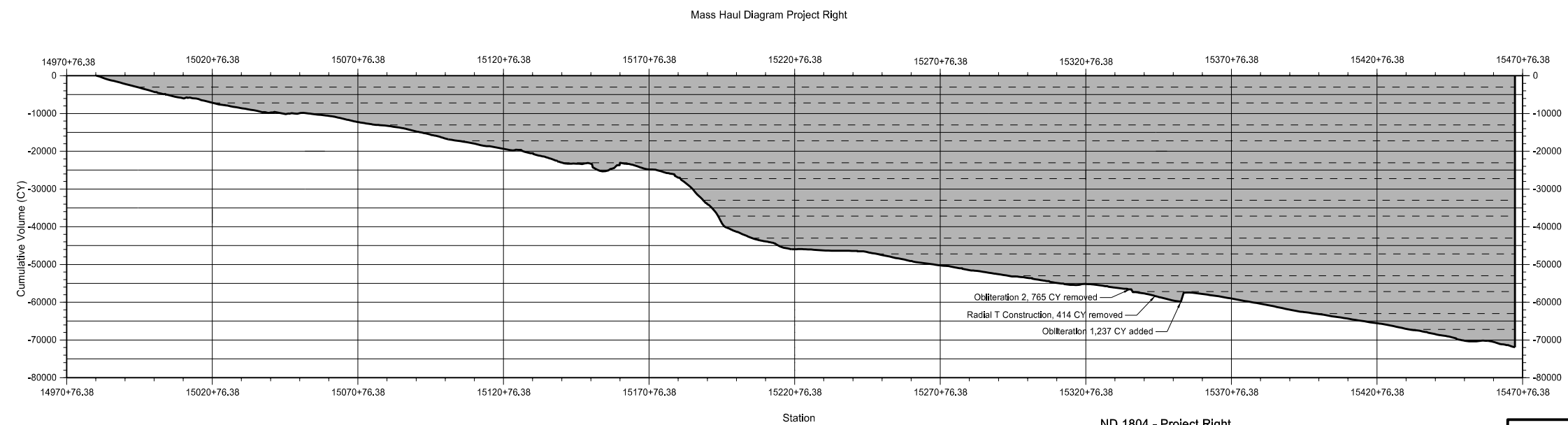
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ND 1804 - Jct Tioga Rd to Red Mike Area
Average End Area Tables
Widening & HMA Overlay
Project Left



ND 1804 - Project Left

EMBANKMENT =	102,744.00
EXCAVATION =	13,714.00
BORROW =	89,030.00
AVERAGE HAUL =	24.2 STA



ND 1804 - Project Right

EMBANKMENT =	95,938.00
EXCAVATION =	22,414.00
BORROW =	73,524.00
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

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
				In	Bid Item	LF (Lt-Rt)							Begin	End	
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	-	-	-	-	TES*	TES*	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	80.5' Lt	15041+80	75.0' Rt	180	15FT STR PLATE PIPE	36-36	Structural Plate Pipe	180	Z, A, P	-	0.218	-	Section 20	Section 20	Section 20 Sheet 6
15051+97	58.9' Lt	15051+98	41.9' Rt	72	Pipe Conc. Reinf. CL III (Extension)	18-8	Reinforced Concrete Pipe - Class III (barrel length = 16 LF) Reinforced Concrete Pipe - Class III (barrel length = 6 LF)	72	-	-	-	30	Remove & Relay	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	TES*	TES*	Section 20 Sheet 6
15124+87	31.5' Lt	15124+91	41.4' Lt	4' x 6'	Cattle Pass Conc. Intermed. Section	20-0	Reinforced Concrete Cattle Pass (barrel length = 20 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	6-10	Reinforced Concrete Cattle Pass (barrel length = 6 LF) Reinforced Concrete Cattle Pass (barrel length = 10 LF)	4' x 6'	-	-	-	-	Remove & Relay	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	-	-	-	-	TES*	TES*	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	-	-	-	-	TES*	TES*	Section 20 Sheet 6
15160+84	43.3' Lt	15160+84	55.5' Rt	4' x 6'	Cattle Pass Conc. Intermed. Section	10-22	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
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	TES*	TES*	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	TES*	TES*	Section 20 Sheet 6
15177+49	61.5' Lt	15178+32	71.8' Rt	42	Pipe Conc. Reinf. CL III (Extension)	24-28	Reinforced Concrete Pipe - Class III (barrel length = 22 LF) Reinforced Concrete Pipe - Class III (barrel length = 26 LF)	42	-	-	-	31	Remove & Relay	Remove & Relay	Section 20 Sheet 6
15181+55	44.9' Lt	15181+55	58.9' Rt	4' x 6'	Cattle Pass Conc. Intermed. Section	10-26	Precast Concrete Cattle Pass (barrel length = 8 LF) Precast Concrete Cattle Pass (barrel length = 24 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	TES*	TES*	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	TES*	TES*	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	TES*	TES*	Section 20 Sheet 6
15261+17	43.4' Lt	15261+17	50.3' Rt	48	Pipe Conc. Reinf. CL III (Extension)	20-28	Reinforced Concrete Pipe - Class III (barrel length = 18 LF) Reinforced Concrete Pipe - Class III (barrel length = 26 LF)	48	-	-	-	21	Remove & Relay	Remove & Relay	Section 20 Sheet 6
15261+53	42.3' Lt	15261+56	51.1' Rt	48	Pipe Conc. Reinf. CL III (Extension)	20-28	Reinforced Concrete Pipe - Class III (barrel length = 18 LF) Reinforced Concrete Pipe - Class III (barrel length = 26 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	-	-	-	-	TES*	TES*	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	-	-	-	-	TES*	TES*	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	-	-	-	-	TES*	TES*	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	-	-	-	-	TES*	TES*	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
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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
				In	Bld Item	LF (Lt-Rt)							Begin	End	
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	-	-	-	-	TES*	TES*	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	-	-	-	-	TES*	TES*	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	-	-	-	-	TES*	TES*	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	-	-	-	-	TES*	TES*	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	-	-	-	-	TES*	TES*	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	-	-	-	-	TES*	TES*	Section 20 Sheet 6
15335+49	40.0' Lt	15335+49	46.0' Rt	4' x 6'	Cattle Pass Conc. Intermed. Section	8-8	Precast Concrete Cattle Pass (barrel length = 6 LF) Precast Concrete Cattle Pass (barrel length = 6 LF)	4' x 6'	-	-	-	-	Remove & Relay	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	-	-	-	-	TES*	TES*	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	-	-	-	-	TES*	TES*	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	-	-	-	-	TES*	TES*	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	-	-	-	-	TES*	TES*	Section 20 Sheet 6

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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"

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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	
				In	Bid Item							LF(Ahd-Bk)	In		Type
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	Z, A, P	2	0.064	-	TES	TES	Specification 714.04 A
							Corrugated Steel Pipe								
							Spiral Rib Steel Pipe								
							High-Density Polyethylene								
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				-	TES	TES	Specification 714.04 A
							Corrugated Steel Pipe								
							Spiral Rib Steel Pipe								
							High-Density Polyethylene								
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	Z, A, P	2	0.064	-	TES	TES	Specification 714.04 A
							Corrugated Steel Pipe								
							Spiral Rib Steel Pipe								
							High-Density Polyethylene								
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	-	TES*	TES*	Specification 714.04 A
							Corrugated Steel Pipe								
							Corrugated Steel Pipe								
							Corrugated Steel Pipe								
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	-	TES*	TES*	Specification 714.04 A
							Corrugated Steel Pipe								
							Corrugated Steel Pipe								
							Corrugated Steel Pipe								
15053+56	67.7' Lt	15054+38	64.7' Lt	36	Pipe Conduit - Approach	80	Reinforced Concrete Pipe - Class III (barrell length = 76 LF)	36	Z, A, P	2	0.064	-	FES*	FES*	Specification 714.04 A
							Corrugated Steel Pipe								
							Spiral Rib Steel Pipe								
							High-Density Polyethylene								
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	-	TES*	TES*	Specification 714.04 A
							Corrugated Steel Pipe								
							Corrugated Steel Pipe								
							Corrugated Steel Pipe								
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
							Corrugated Steel Pipe								
							Corrugated Steel Pipe								
							Corrugated Steel Pipe								
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	-	TES*	TES*	Specification 714.04 A
							Corrugated Steel Pipe								
							Corrugated Steel Pipe								
							Corrugated Steel Pipe								
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	-	TES*	TES*	Specification 714.04 A
							Corrugated Steel Pipe								
							Corrugated Steel Pipe								
							Corrugated Steel Pipe								
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	-	TES*	TES*	Specification 714.04 A
							Corrugated Steel Pipe								
							Corrugated Steel Pipe								
							Corrugated Steel Pipe								
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	Z, A, P	2	0.064	-	TES*	TES*	Specification 714.04 A
							Corrugated Steel Pipe								
							Spiral Rib Steel Pipe								
							High-Density Polyethylene								
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
							Corrugated Steel Pipe								
							Corrugated Steel Pipe								
							Corrugated Steel Pipe								
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
							Corrugated Steel Pipe								
							Corrugated Steel Pipe								
							Corrugated Steel Pipe								
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	-	TES*	TES*	Specification 714.04 A
							Corrugated Steel Pipe								
							Corrugated Steel Pipe								
							Corrugated Steel Pipe								

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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"

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ND 1804 - Jct Tioga Rd to Red Mike Area
Allowable Pipe List
Approach Pipes

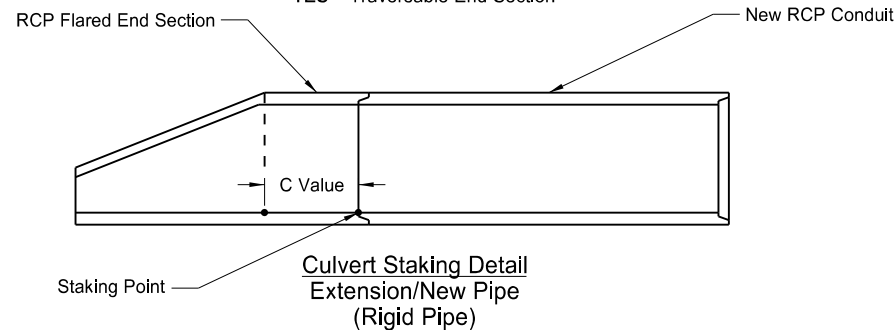
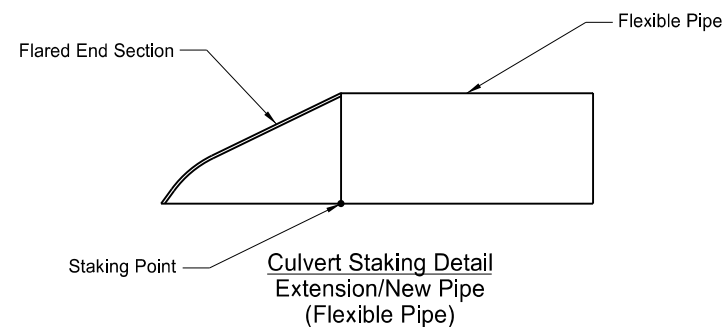
Begin Station / Location	Begin Offset	End Station / Location	End Offset	Pipe Installation (Pay Item)		Allowable Material	Required Diameter	Steel Pipe Coatings	Steel Pipe Corrugations or Spiral Ribs	Steel Pipe Minimum Thickness	R1 Fabric (Pay Item)	End Sections		Applicable Backfill	
				In	LF(Ahd-Bk)							Begin	End		
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	Z, A, P	2	0.064	-	TES	TES	Specification 714.04 A
							Corrugated Steel Pipe								
							Spiral Rib Steel Pipe								
							High-Density Polyethylene								
15171+10	46.0' Rt	15172+10	47.7' Rt	24	Pipe Corr. Steel (Extension)	0-0	Corrugated Steel Pipe	24	Z, A, P	2	0.064	-	TES*	TES*	Specification 714.04 A
							Corrugated Steel Pipe								
							Corrugated Steel Pipe								
							Corrugated Steel Pipe								
15177+68	63.7' Lt	15178+14	63.7' Lt	24	Pipe Corr. Steel (Extension)	0-0	Corrugated Steel Pipe	24	Z, A, P	2	0.064	-	TES*	TES*	Specification 714.04 A
							Corrugated Steel Pipe								
							Corrugated Steel Pipe								
							Corrugated Steel Pipe								
15270+09	69.5' Lt	15270+59	69.5' Lt	36	Pipe Conduit - Approach	50	Reinforced Concrete Pipe - Class III (barrell length = 46 LF)	36	Z, A, P	2	0.064	-	FES*	FES*	Specification 714.04 A
							Corrugated Steel Pipe								
							Spiral Rib Steel Pipe								
							High-Density Polyethylene								
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	-	TES*	TES*	Specification 714.04 A
							Corrugated Steel Pipe								
							Corrugated Steel Pipe								
							Corrugated Steel Pipe								
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				-	TES*	TES*	Specification 714.04 A
							Reinforced Concrete Pipe - Class III (barrel length = 6 LF)								
							Reinforced Concrete Pipe - Class III (barrel length = 6 LF)								
							Reinforced Concrete Pipe - Class III (barrel length = 6 LF)								
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	-	TES*	TES*	Specification 714.04 A
							Corrugated Steel Pipe								
							Corrugated Steel Pipe								
							Corrugated Steel Pipe								
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	Z, A, P	2	0.064	-	TES	TES	Specification 714.04 A
							Corrugated Steel Pipe								
							Spiral Rib Steel Pipe								
							High-Density Polyethylene								
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	-	TES*	TES*	Specification 714.04 A
							Corrugated Steel Pipe								
							Corrugated Steel Pipe								
							Corrugated Steel Pipe								
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	Z, A, P	2	0.064	-	TES	TES	Specification 714.04 A
							Corrugated Steel Pipe								
							Spiral Rib Steel Pipe								
							High-Density Polyethylene								
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
							Corrugated Steel Pipe								
							Corrugated Steel Pipe								
							Corrugated Steel Pipe								
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
							Corrugated Steel Pipe								
							Corrugated Steel Pipe								
							Corrugated Steel Pipe								
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	Z, A, P	2	0.064	-	FES	FES	Specification 714.04 A
							Corrugated Steel Pipe								
							Spiral Rib Steel Pipe								
							High-Density Polyethylene								
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
							Corrugated Steel Pipe								
							Corrugated Steel Pipe								
							Corrugated Steel Pipe								
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
							Corrugated Steel Pipe								
							Corrugated Steel Pipe								
							Corrugated Steel Pipe								

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"

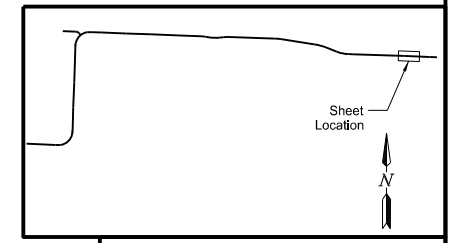
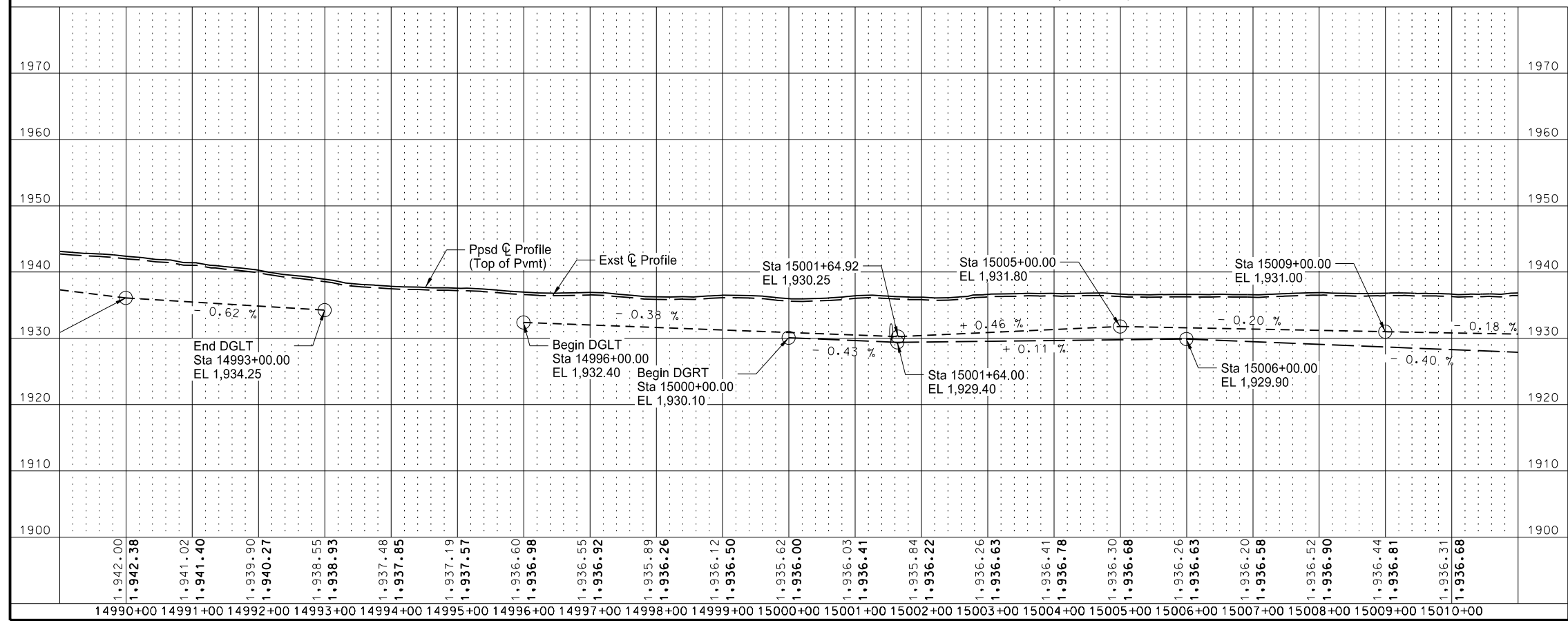
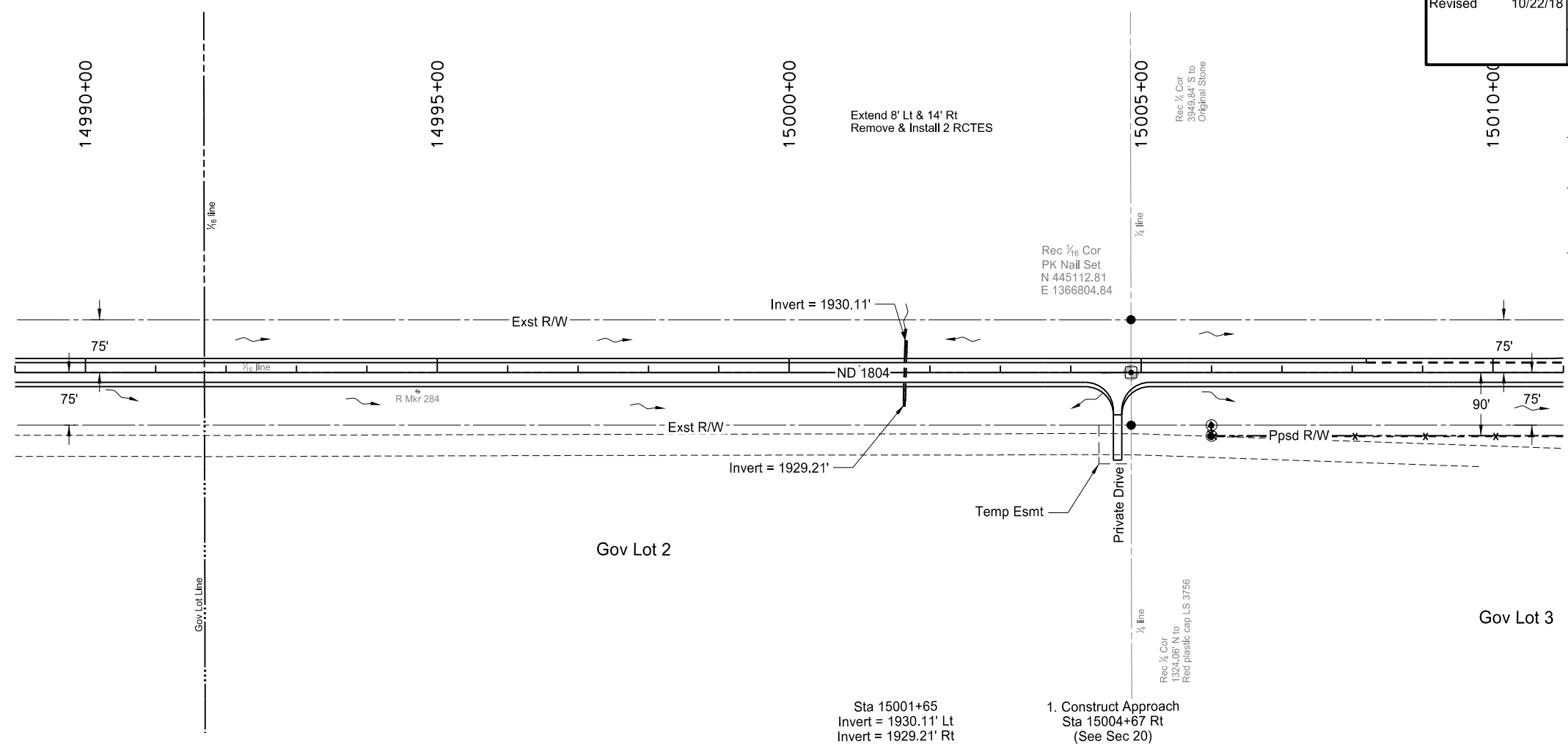
(* End sections are measured and paid for separately for pipe extensions.
 FES = Flared End Section
 TES = Traversable End Section



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ND 1804 - Jct Tioga Rd to Red Mike Area
 Allowable Pipe List
 Approach Pipes

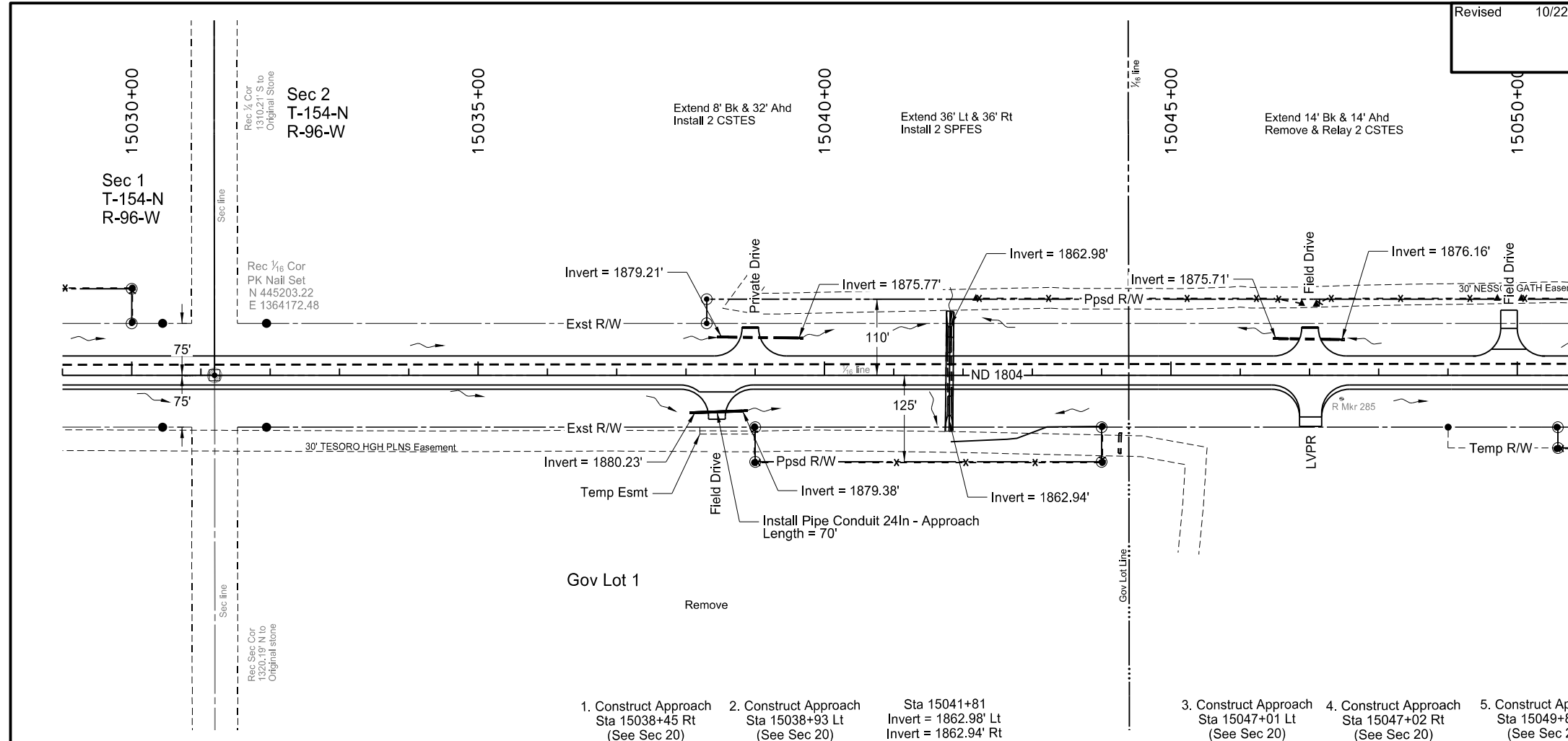
SPEC CODE	BID ITEM	QTY	UNIT
202 0169	REMOVAL OF END SECTION-ALL TYPES & SIZES Sta 15001+64 Rt & 15001+66 Lt	2	EA
714 0820	PIPE CONC REINF 30IN CL III Sta 15001+64, 25.8' Rt - 39.8' Rt Sta 15001+66, 28.7' Lt - 36.7' Lt	14	LF
714 3030	END SECT-CONC REINF 30IN Sta 15001+64 Rt & 15001+66 Lt	2	EA



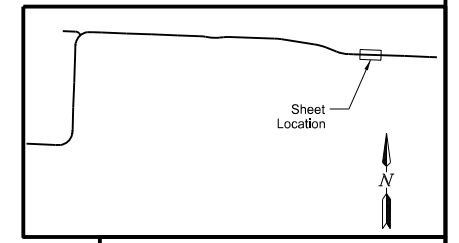
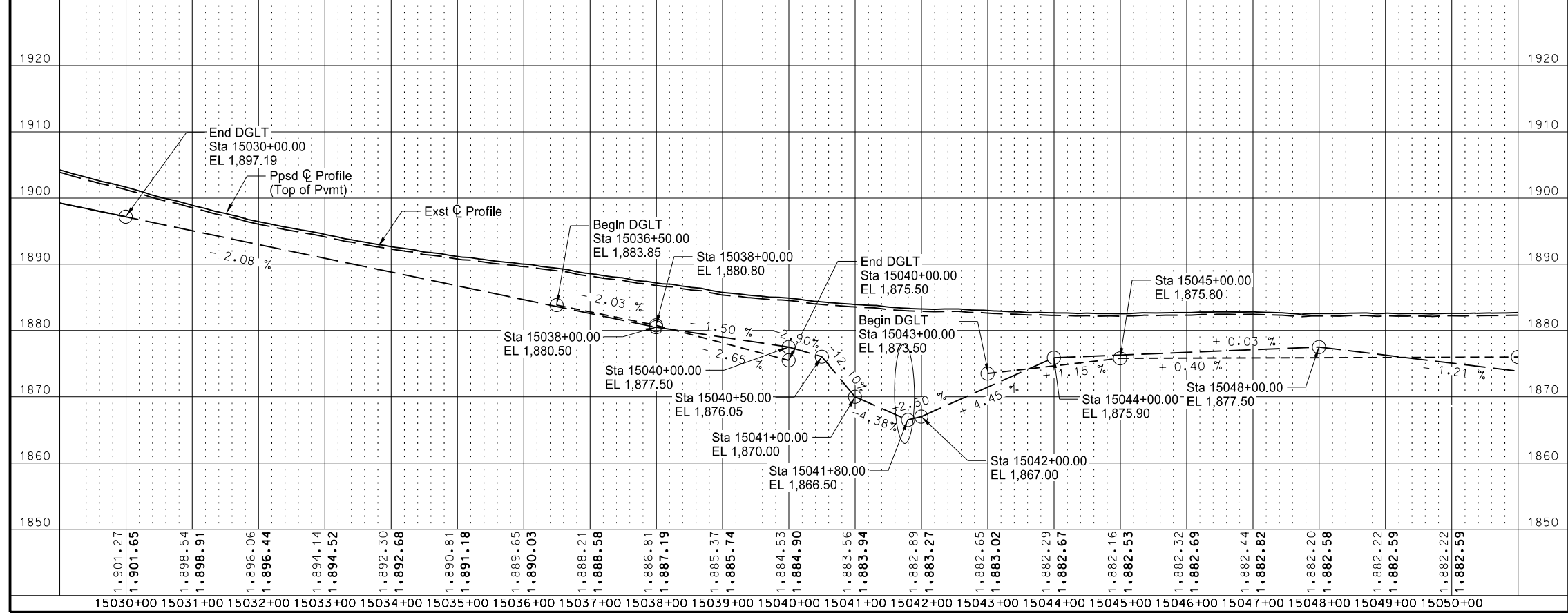
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ND 1804 - Jct Tioga Rd to Mike Area
Plan & Profile
Sta 14990+00 to Sta 15010+00
(SCL1804)

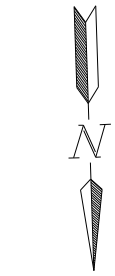
SPEC CODE	BID ITEM	QTY	UNIT
202 0169	REMOVAL OF END SECTION-ALL TYPES & SIZES Sta 15046+55 Lt & Sta 15047+43 Lt	2	EA
202 0174	REMOVAL OF PIPE ALL TYPES AND SIZES Sta 15038+60, 53.0' Rt	54	LF
714 3480	15FT STR PLATE PIPE .218IN Sta 15041+80, 33.0' Lt to Sta 15041+80, 71.3' Lt Sta 15041+81, 30.0' Rt to Sta 15041+81, 64.6' Rt	36	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 Sta 15039+30, 54.4' Lt to Sta 15039+62, 53.8' Lt Sta 15046+55, 52.9' Lt to Sta 15046+69, 52.8' Lt Sta 15047+29, 51.9' Lt to Sta 15047+43, 51.7' Lt	8	LF
714 5820	END SECT CORR STEEL .064IN 24IN Sta 15038+52 Lt & Sta 15039+62 Lt Sta 15046+55 Lt & Sta 15047+43 Lt	2	EA



- Construct Approach Sta 15038+45 Rt (See Sec 20)
 - Construct Approach Sta 15038+93 Lt (See Sec 20)
 - Construct Approach Sta 15047+01 Lt (See Sec 20)
 - Construct Approach Sta 15047+02 Rt (See Sec 20)
 - Construct Approach Sta 15049+88 Lt (See Sec 20)
- Sta 15041+81
Invert = 1862.98' Lt
Invert = 1862.94' Rt

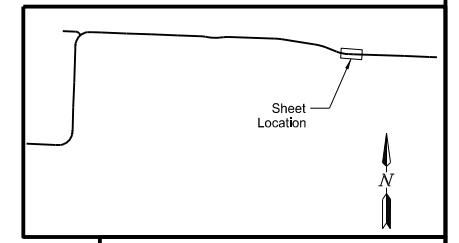
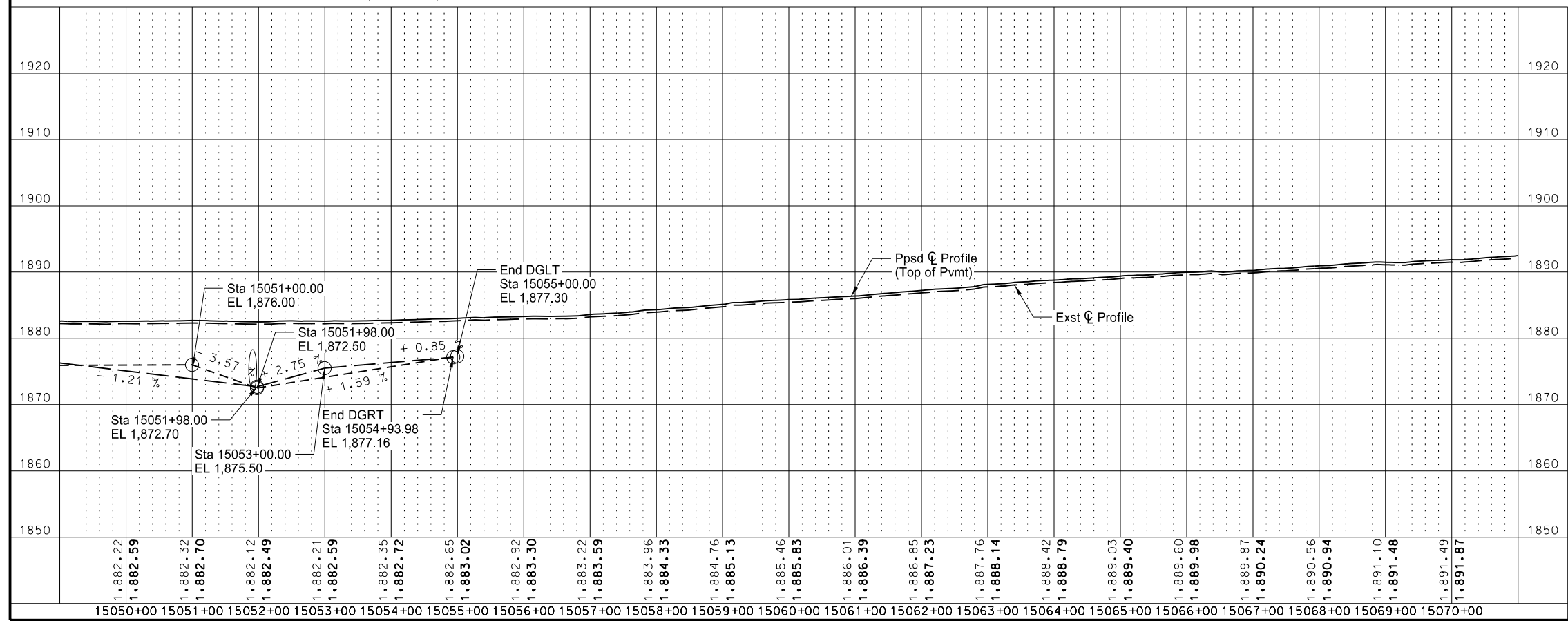
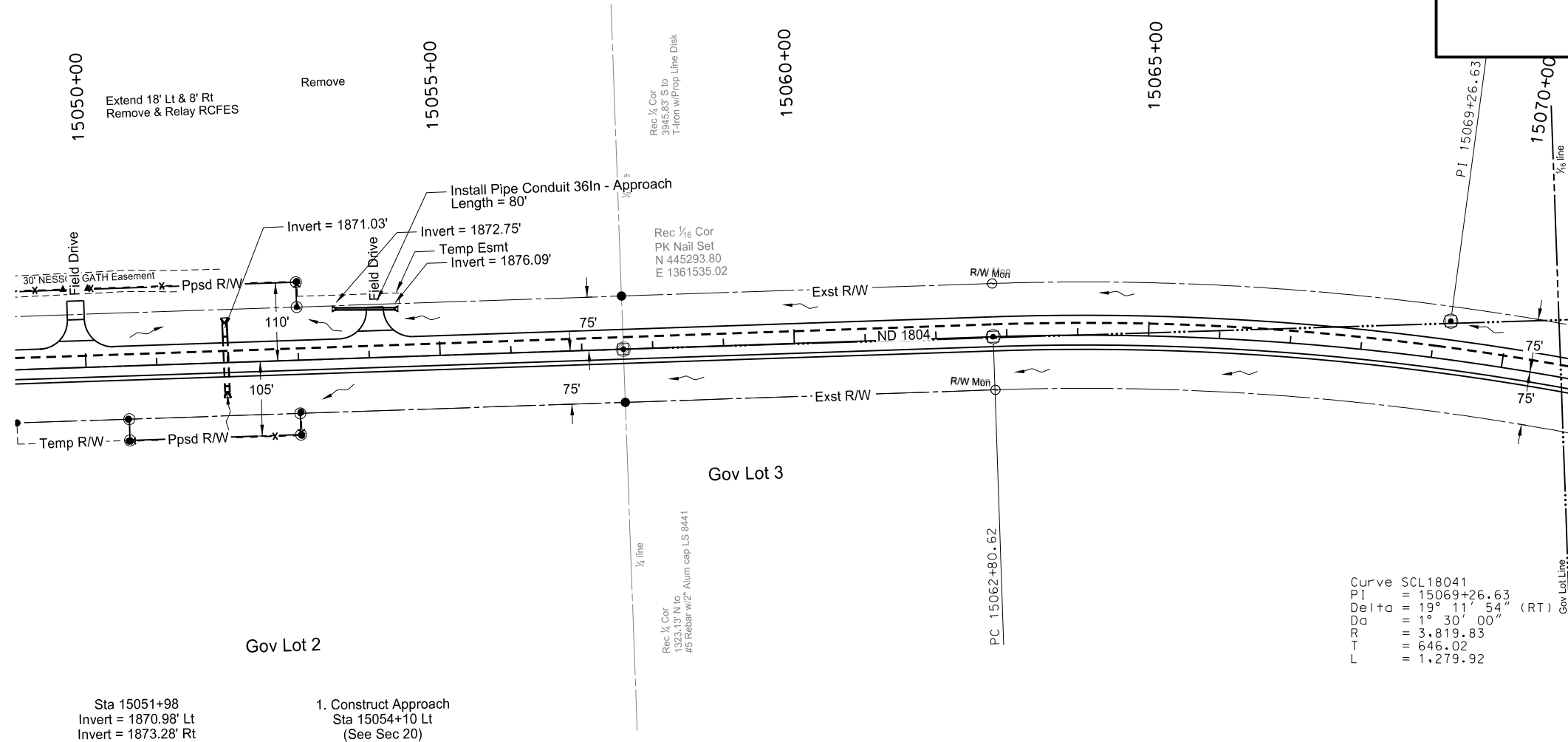


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ND 1804 - Jct Tioga Rd to Mike Area
Plan & Profile
Sta 15030+00 to Sta 15050+00 (SCL1804)

SPEC CODE	BID ITEM	QTY	UNIT
202 0174	REMOVAL OF PIPE ALL TYPES AND SIZES Sta 15053+90, 56.5' Lt - Sta 15054+34, 54.8' Lt	45	LF
714 1510	PIPE CONC REINF 72IN CL III Sta 15051+98, 37.1' Lt - 48.9' Lt Sta 15051+98, 28.9' Rt - 36.9' Rt	18 8	LF LF
714 4116	PIPE CONDUIT 36IN-APPROACH Sta 15053+56, 67.7' Lt to Sta 15053+90, 64.7' Lt	80	LF
714 9660	REMOVE & RELAY END SECTION-ALL TYPE & SIZES Sta 15051+98 Lt, Rt	2	EA

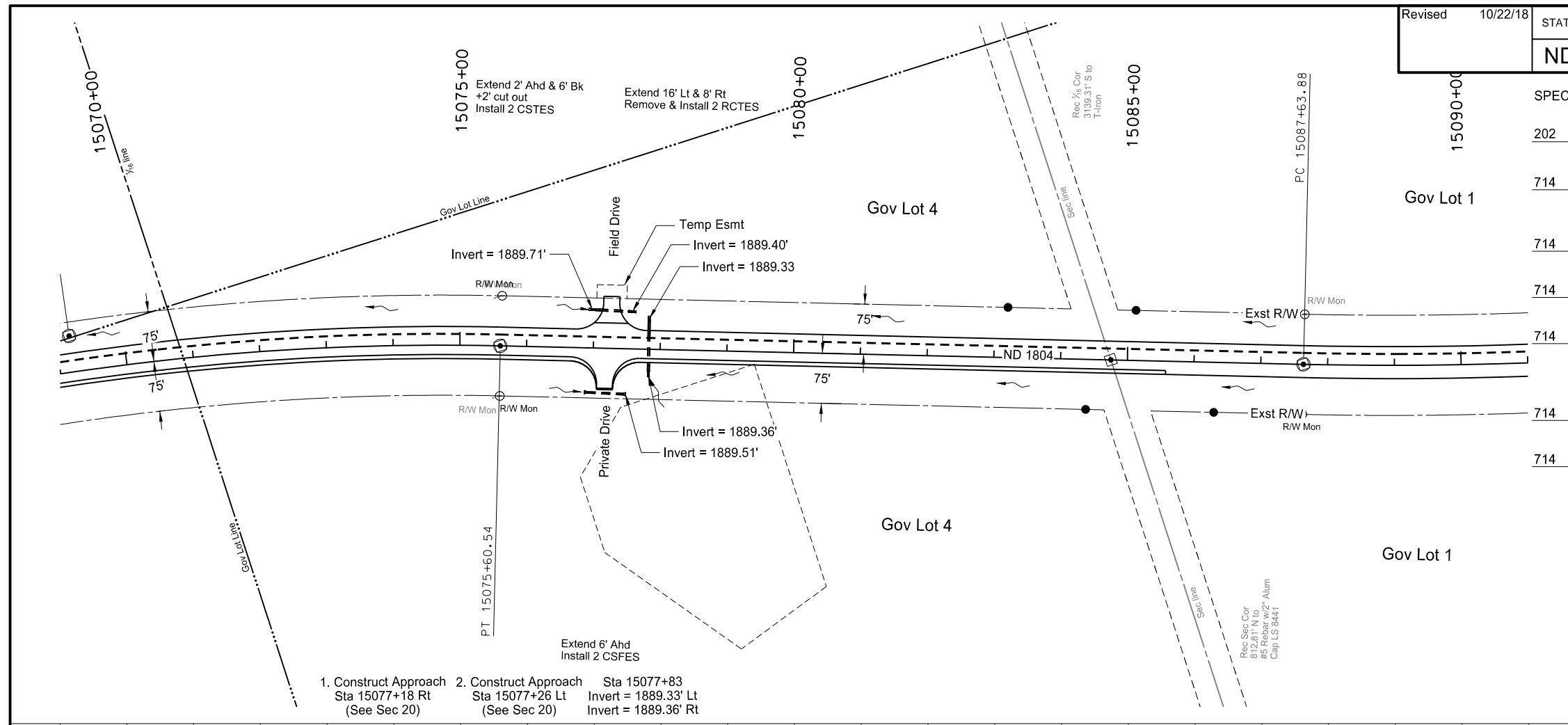


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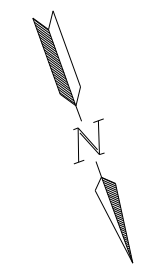
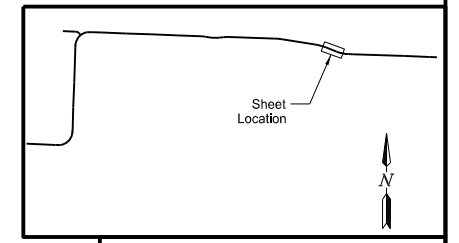
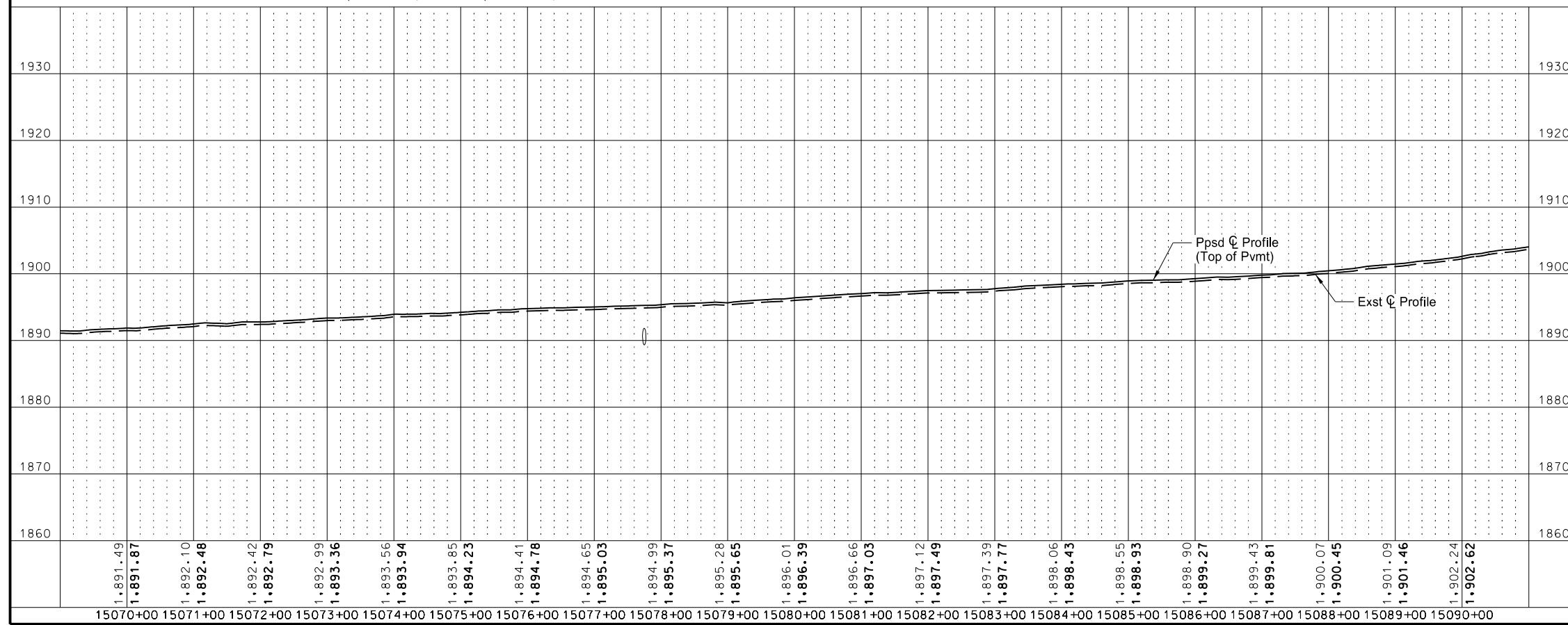
ND 1804 - Jct Tioga Rd to Mike Area
 Plan & Profile
 Sta 15050+00 to Sta 15070+00 (SCL1804)

Revised	10/22/18	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
		ND	SOIB-7-804(061)283	60	6

QTY	UNIT	SPEC CODE	BID ITEM
202	0169	REMOVAL OF END SECTION-ALL TYPES & SIZES	Sta 15077+83 Lt & Rt
2	EA		
714	0820	PIPE CONC REINF 30IN CL III	Sta 15077+83, 25.1' Lt - 41.1' Lt
16	LF		
8	LF		Sta 15077+83, 24.9' Rt - 32.9' Rt
714	3030	END SECT-CONC REINF 30IN	Sta 15077+83 Lt & Rt
2	EA		
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		
2	LF		Sta 15077+51, 55.9' Lt to Sta 15077+53, 55.9' Lt
2	LF		Sta 15077+07, 57.3' Lt Cut Out
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		



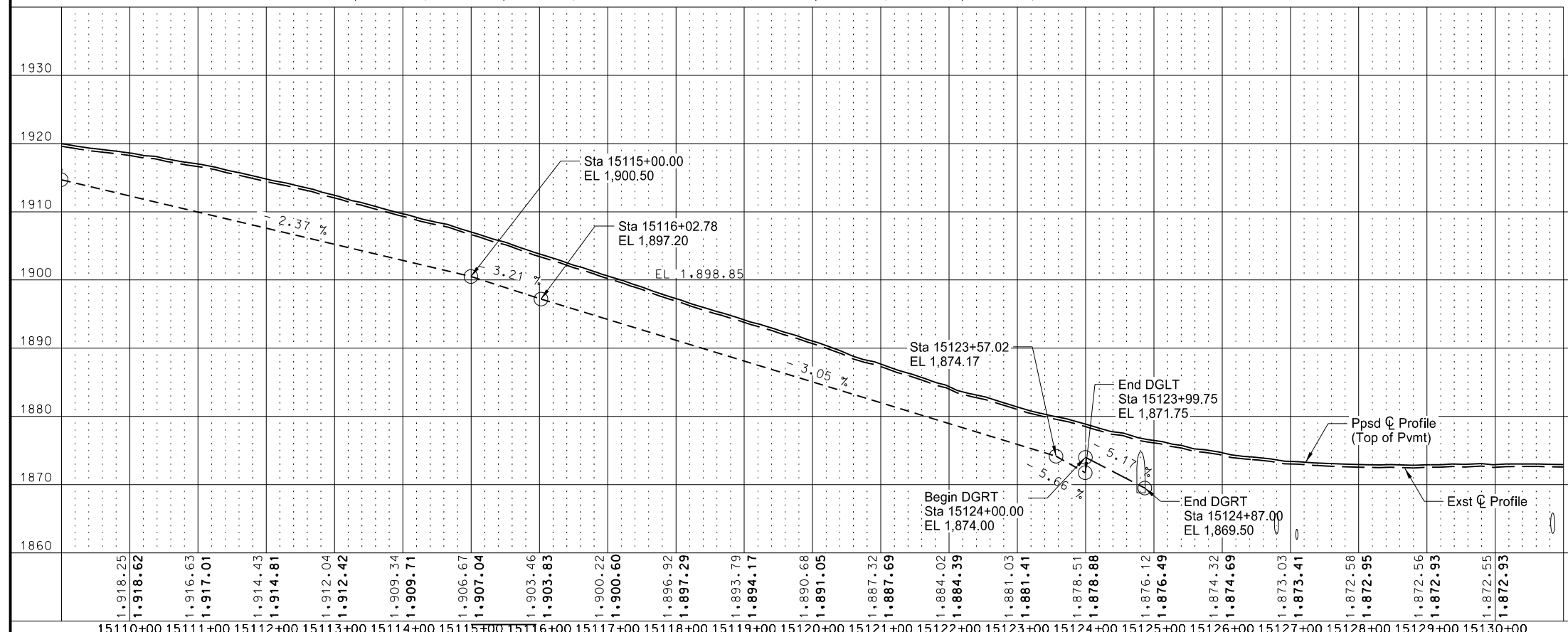
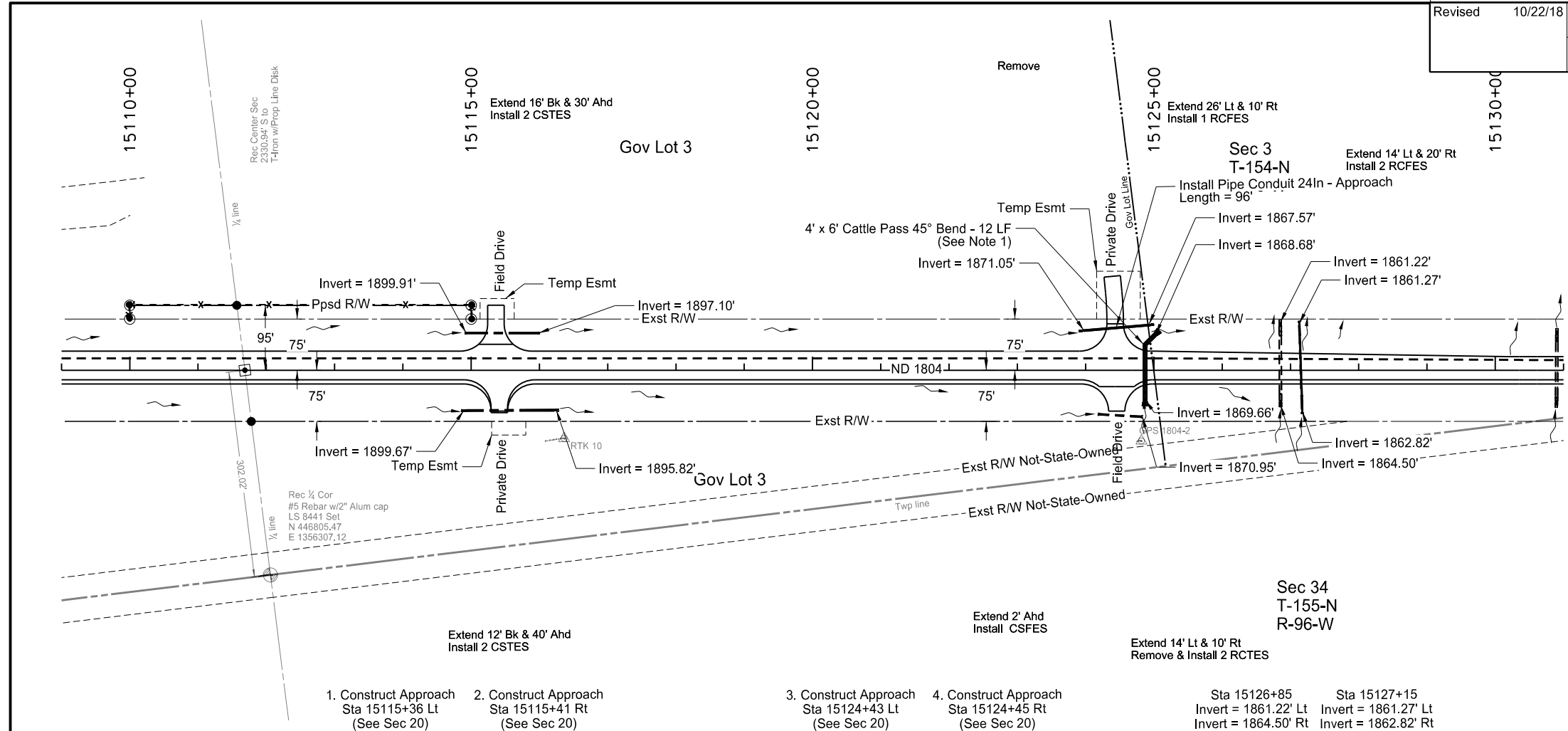
- 1. Construct Approach Sta 15077+18 Rt (See Sec 20)
- 2. Construct Approach Sta 15077+26 Lt (See Sec 20)
- Sta 15077+83 Invert = 1889.33' Lt
- Invert = 1889.36' Rt



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ND 1804 - Jct Tioga Rd to Mike Area
Plan & Profile
Sta 15070+00 to Sta 15090+00 (SCL1804)

	SPEC CODE	BID ITEM	QTY	UNIT
202	0169	REMOVAL OF END SECTION-ALL TYPES & SIZES Sta 15126+85 Lt & Rt	2	EA
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 Sta 15127+17, 37.3' Rt - 57.3' Rt	14	LF
714	0905	PIPE CONC REINF 36IN CL III Sta 15126+85, 50.6' Lt - 64.6' Lt Sta 15126+85, 35.0' Rt - 45.1' Rt	14	LF
714	3010	END SECT-CONC REINF 18IN Sta 15127+13 Lt & Sta 15127+17 Rt	2	EA
714	3035	END SECT-CONC REINF 36IN Sta 15126+85 Lt & 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 Sta 15115+66, 54.4' Lt to Sta 15115+96, 54.4' Lt Sta 15124+79, 68.0' Rt to Sta 15124+81, 68.1' Rt	16	LF
714	5015	PIPE CORR STEEL .064IN 18IN Sta 15115+66, 54.4' Lt to Sta 15115+96, 54.4' Lt Sta 15124+79, 68.0' Rt to Sta 15124+81, 68.1' Rt	30	LF
714	5015	PIPE CORR STEEL .064IN 18IN 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 Sta 15115+82, 58.7' Rt to Sta 15116+22, 58.5' Rt	12	LF
714	5035	PIPE CORR STEEL .064IN 24IN 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 Sta 15124+21 Rt & Sta 15124+81 Rt	2	EA
714	5810	END SECT CORR STEEL .064IN 18IN Sta 15114+95 Lt & Sta 15115+96 Lt 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 Sta 15124+91, 41.4' Lt to Sta 15124+95, 45.6' Lt Sta 15124+87, 32.7' Rt to Sta 15124+87, 42.7' Rt	12	LF
714	9200	CATTLE PASS CONC INTERMED SECTION Sta 15124+87, 31.5' Lt to Sta 15124+91, 41.4' Lt Sta 15124+91, 41.4' Lt to Sta 15124+95, 45.6' Lt Sta 15124+87, 32.7' Rt to Sta 15124+87, 42.7' Rt	6	LF
714	9200	CATTLE PASS CONC INTERMED SECTION Sta 15124+87, 32.7' Rt to Sta 15124+87, 42.7' Rt	10	LF
714	9611	REMOVE & RELAY CONC CATTLE PASS END SECTION Sta 15124+87, Lt & Rt	2	EA



Sheet Location

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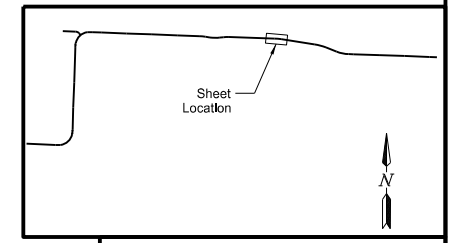
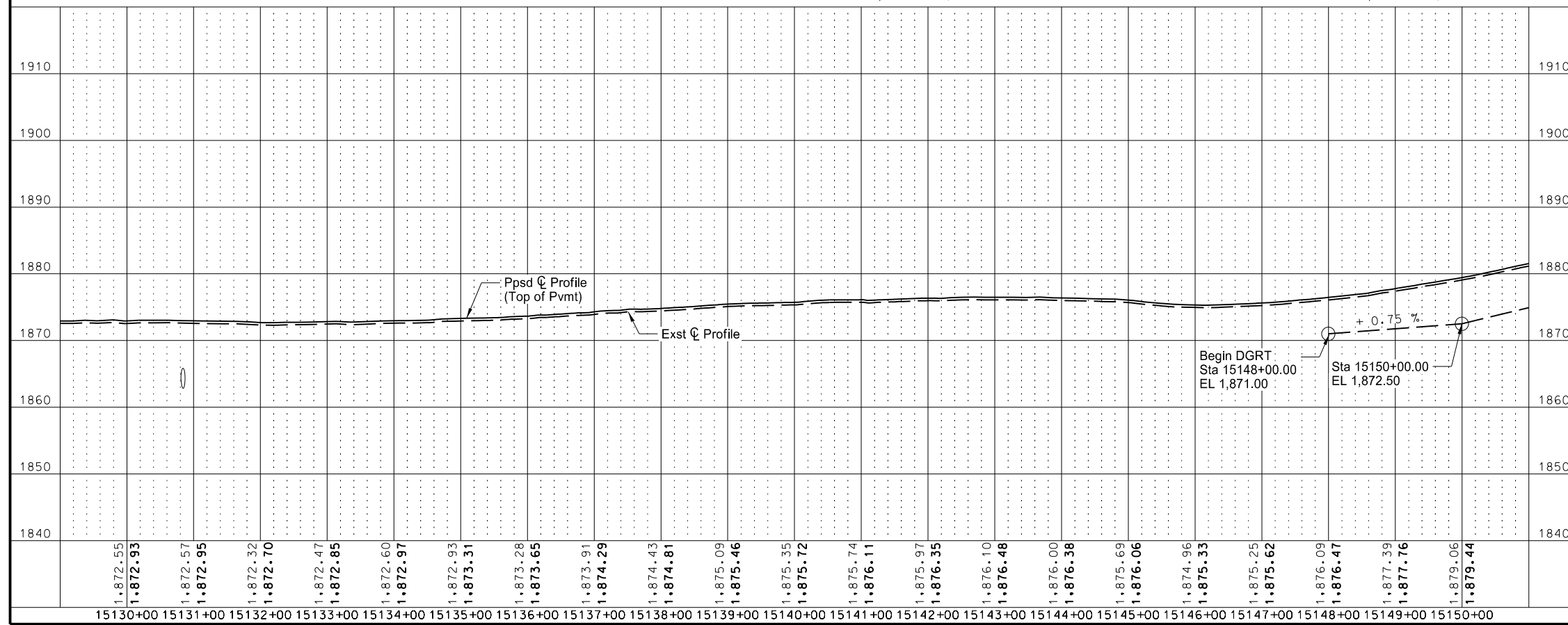
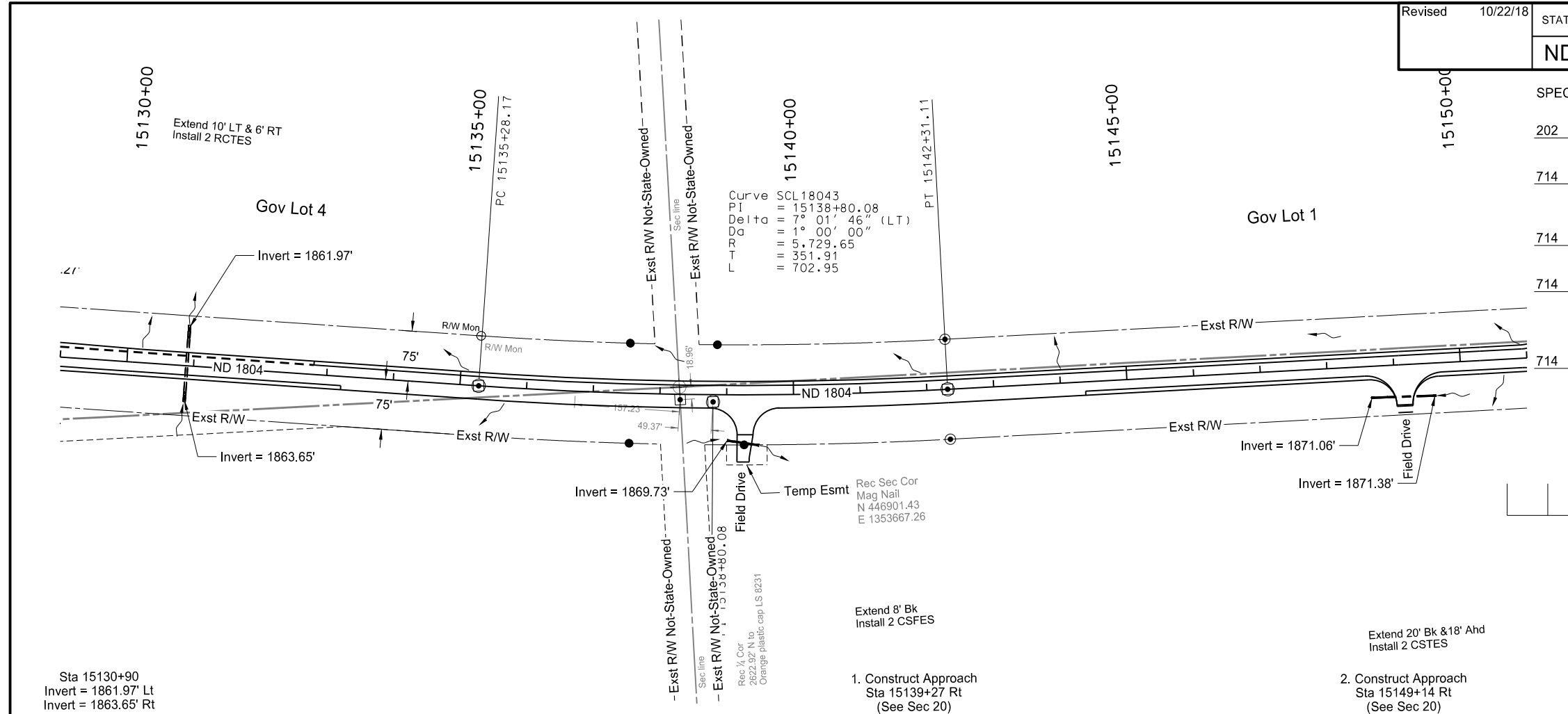
ND 1804 - Jct Tioga Rd to Mike Area

Plan & Profile

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

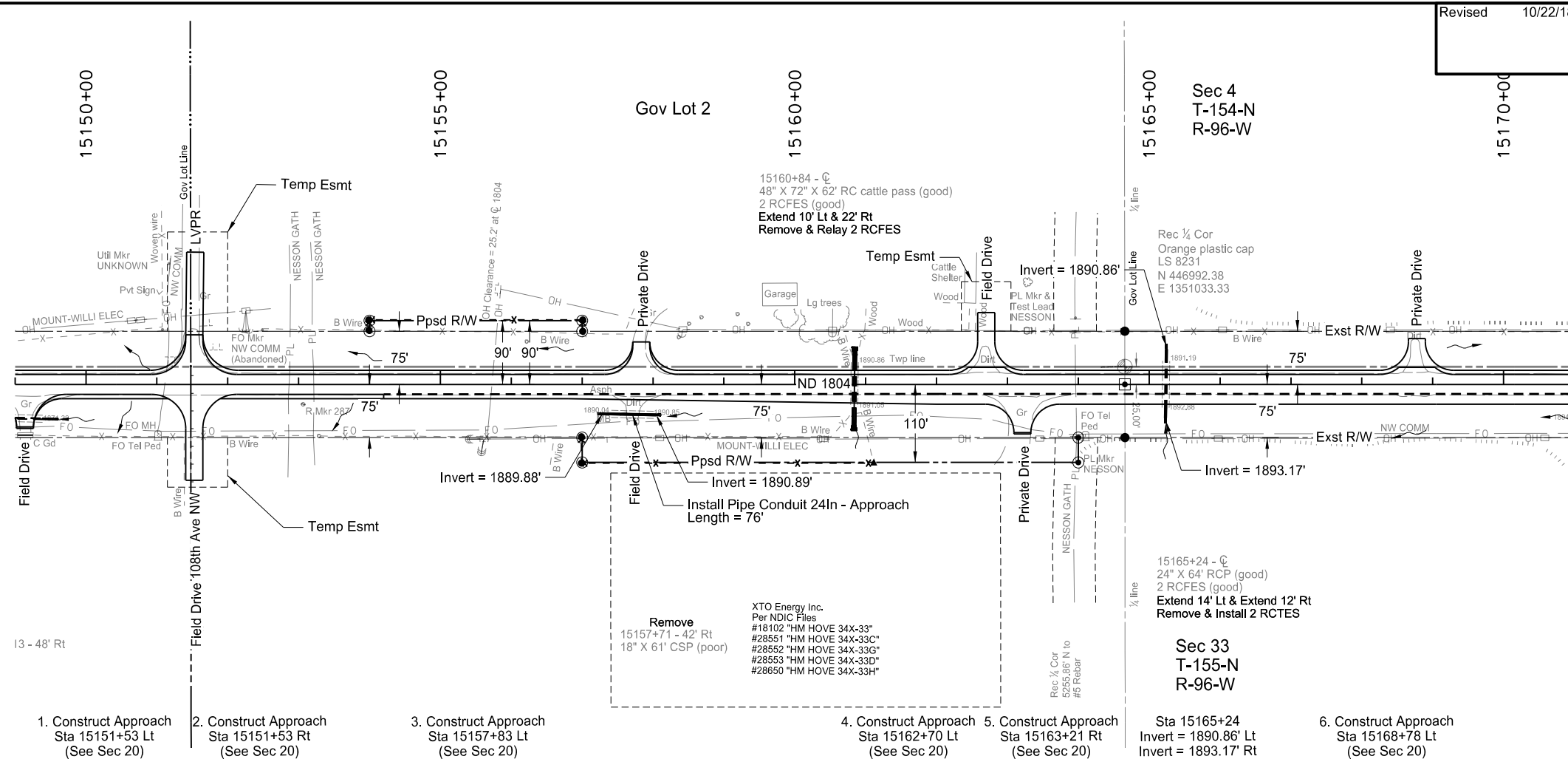
Revised	10/22/18	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
		ND	SOIB-7-804(061)283	60	9

	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 Sta 15130+90, 39.5' Rt - 45.5' Rt	10	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 Sta 15148+68, 47.0' Rt to Sta 15148+88, 47.4' Rt Sta 15149+39, 48.4' Rt to Sta 15149+57, 48.8' Rt	8	LF
			20	LF
			18	LF
	714	5810 END SECT CORR STEEL .064IN 18IN Sta 15139+04 Rt & Sta 15139+55 Rt Sta 15148+68 Rt & Sta 15149+57 Rt	2	EA
			2	EA

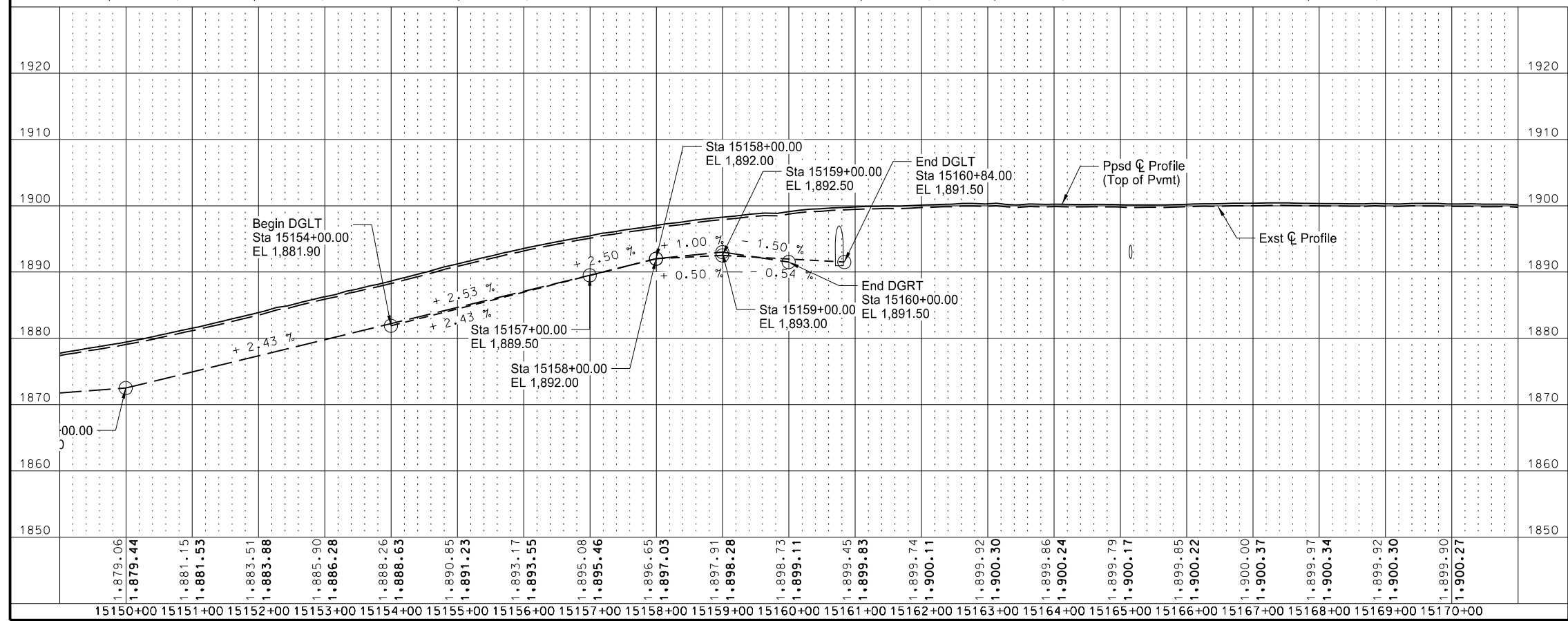


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ND 1804 - Jct Tioga Rd to Mike Area
Plan & Profile
Sta 15130+00 to Sta 15150+00 (SCL1804)



QTY	UNIT	ITEM
202 0169	2 EA	REMOVAL OF END SECTION-ALL TYPES & SIZES Sta 15165+24 Lt & Rt
202 0174	61 LF	REMOVAL OF PIPE ALL TYPES AND SIZES Sta 15157+41, 41.6' Rt to Sta 15158+01, 42.9' Rt
714 0615	14 LF	PIPE CONC REINF 24IN CL III Sta 15165+24, 35.6' Lt - 49.6' Rt
	12 LF	Sta 15165+24, 35.3' Rt - 47.3' Rt
714 3020	2 EA	END SECT-CONC REINF 24IN Sta 15165+24 Lt & Rt
714 4106	76 LF	PIPE CONDUIT 24IN-APPROACH Sta 15157+29, 41.4' Rt to Sta 15158+04, 43.0' Rt
714 9200	10 LF	CATTLE PASS CONC INTERMED SECTION Sta 15160+84, 33.3' Lt - 43.3' Lt
	22 LF	Sta 15160+84, 33.5' Rt - 55.5' Rt
714 9611	2 EA	REMOVE & RELAY CONC CATTLE PASS END SECTION Sta 15160+84 Lt & Rt

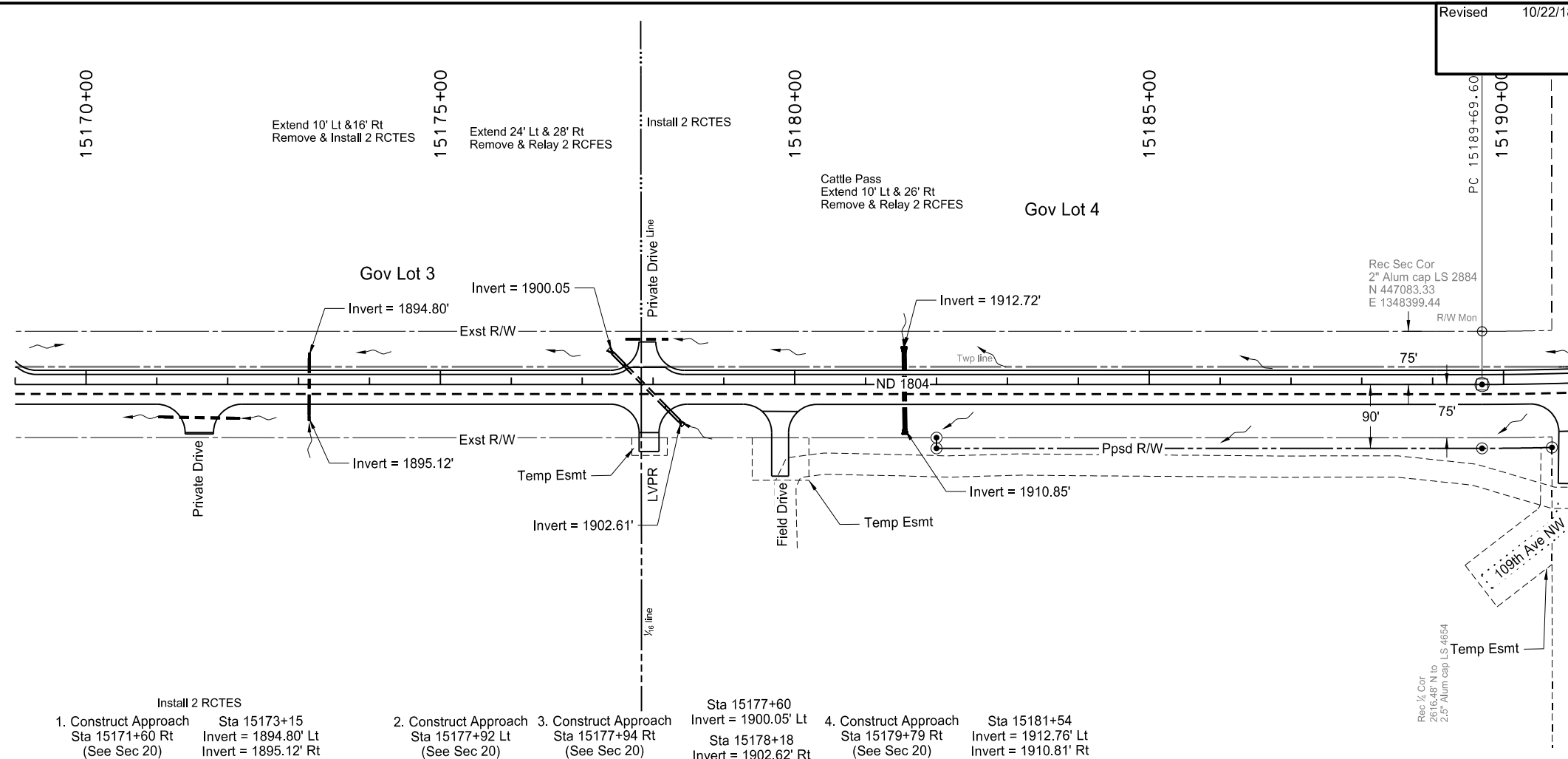


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ND 1804 - Jct Tioga Rd to Mike Area

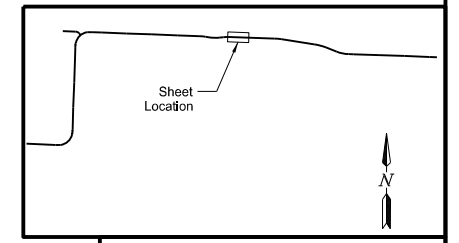
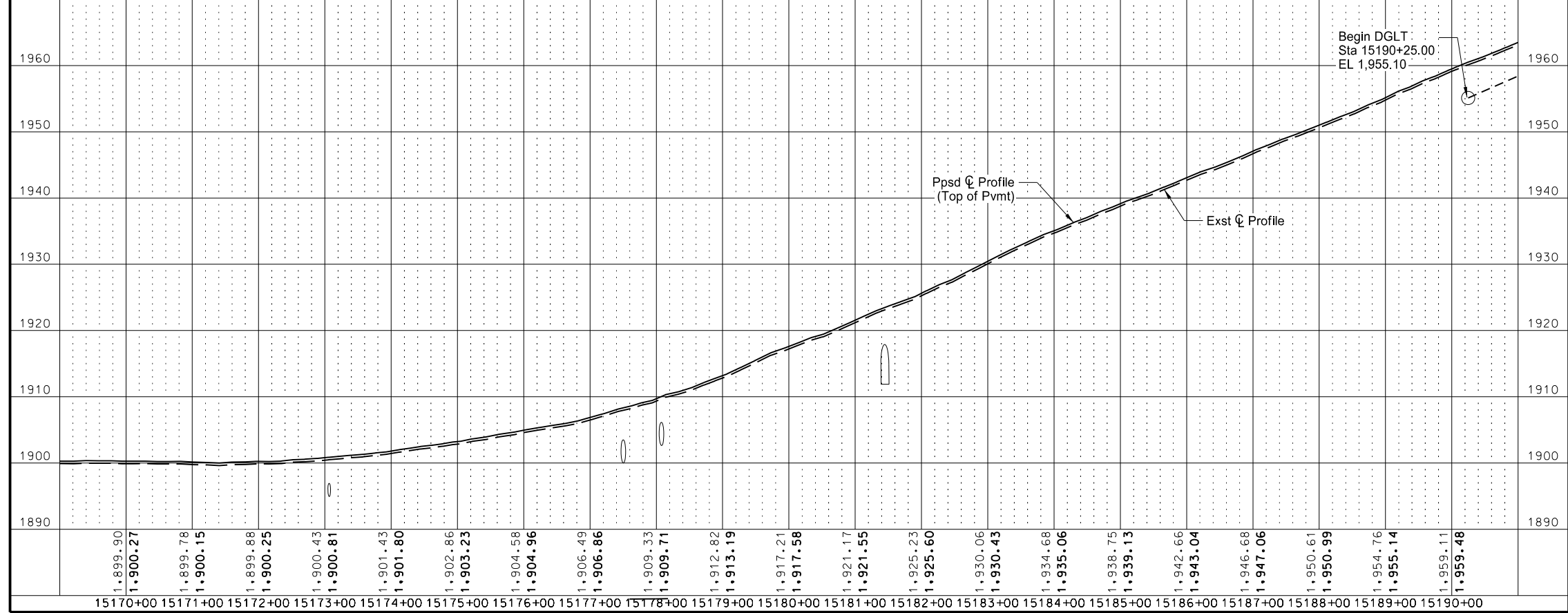
Plan & Profile

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



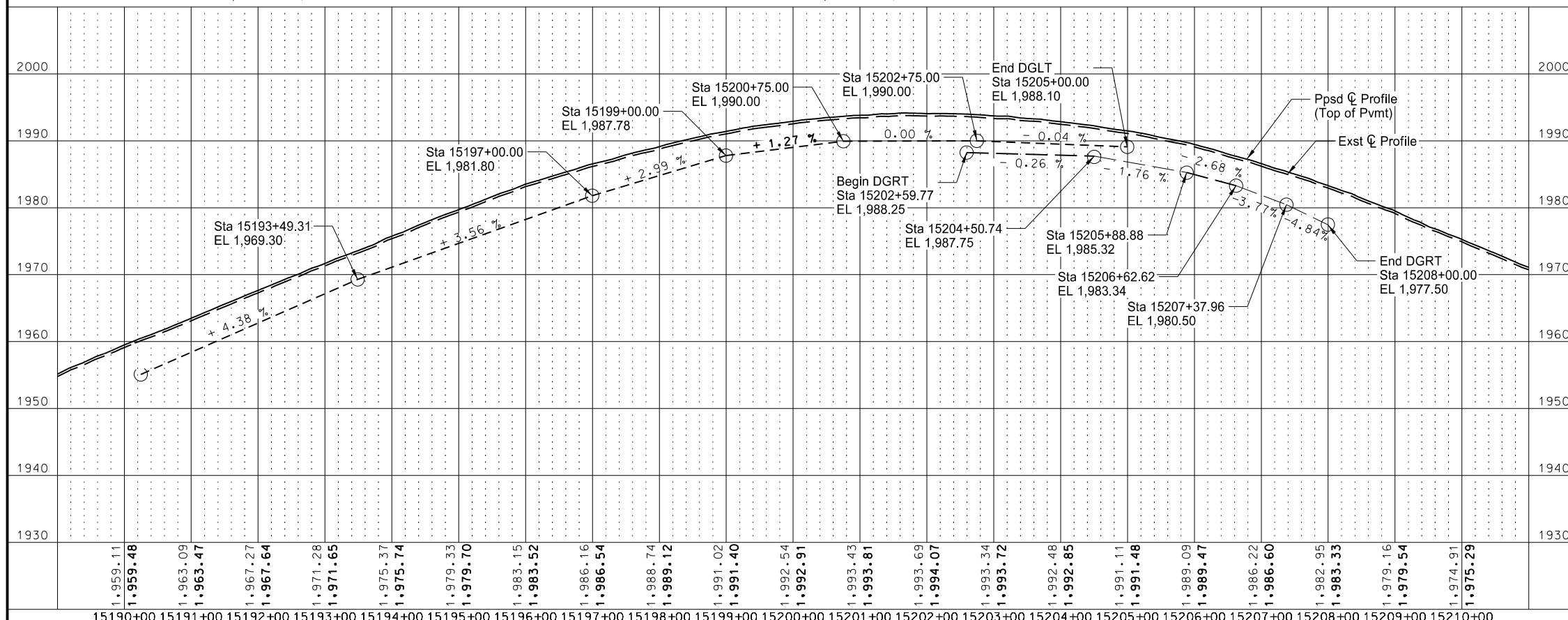
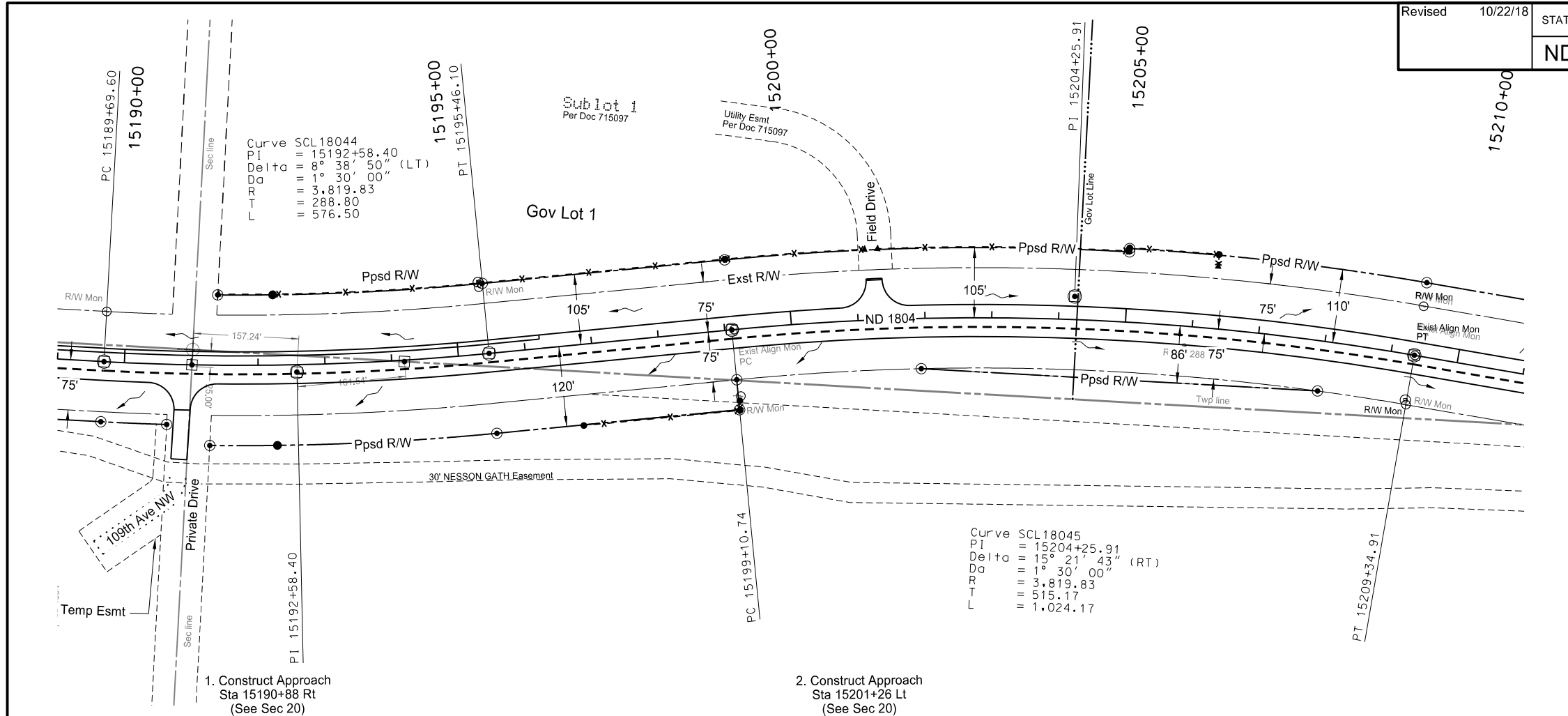
ITEM	QTY	UNIT
202 0169 REMOVAL OF END SECTION-ALL TYPES & SIZES Sta 15171+70 Rt & Sta 15172+10 Rt Sta 15173+15 Lt & Rt	2 EA 2 EA	
714 0615 PIPE CONC REINF 24IN CL III Sta 15173+15, 27.3' Lt - 37.3' Lt Sta 15173+15, 27.9' Rt - 43.9' Rt	10 LF 16 LF	
714 1005 PIPE CONC REINF 42IN CL III Sta 15177+49, 38.5' Lt to Sta 15177+60, 27.2' Lt Sta 15178+18, 31.5' Rt to Sta 15178+32, 71.8' Rt	24 LF 28 LF	
714 5820 END SECT CORR STEEL .064IN 24IN Sta 15171+70 Rt & Sta 15172+10 Rt Sta 15173+15 Lt & Rt Sta 15177+68 Lt & Sta 15178+14 Lt	2 EA 2 EA 2 EA	
714 9200 CATTLE PASS CONC INTERMED SECTION Sta 15181+55, 33.7' Lt - 44.9' Lt Sta 15181+55, 35.0' Rt - 58.9' Rt	10 LF 26 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 15177+49 Lt & Sta 15178+32 Rt	2 EA	

- Install 2 RCTES
1. Construct Approach Sta 15171+60 Rt (See Sec 20) Sta 15173+15 Invert = 1894.80' Lt Invert = 1895.12' Rt
 2. Construct Approach Sta 15177+92 Lt (See Sec 20)
 3. Construct Approach Sta 15177+94 Rt (See Sec 20)
 4. Construct Approach Sta 15179+79 Rt (See Sec 20)
- Sta 15177+60 Invert = 1900.05' Lt
Sta 15178+18 Invert = 1902.62' Rt
- Sta 15181+54 Invert = 1912.76' Lt
Sta 15181+54 Invert = 1910.81' Rt



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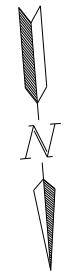
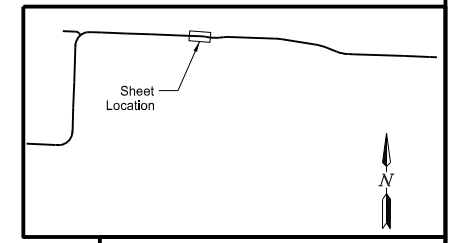
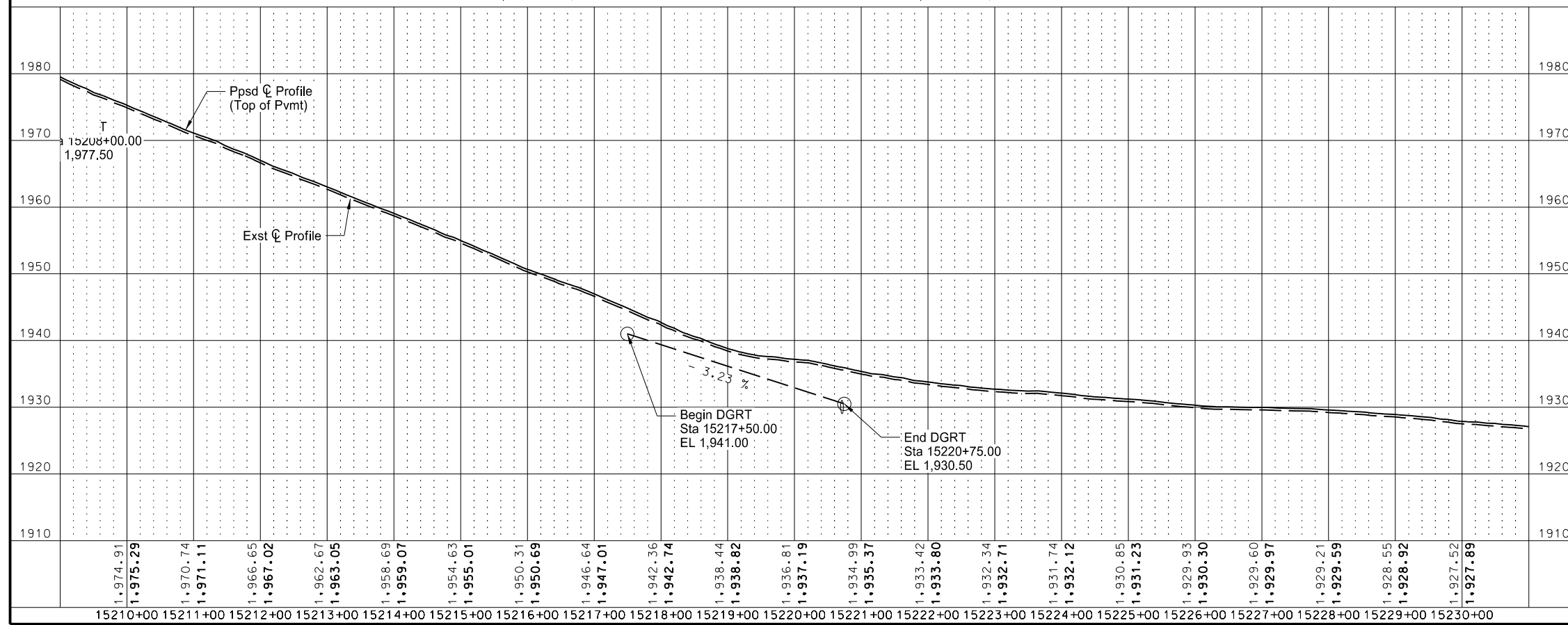
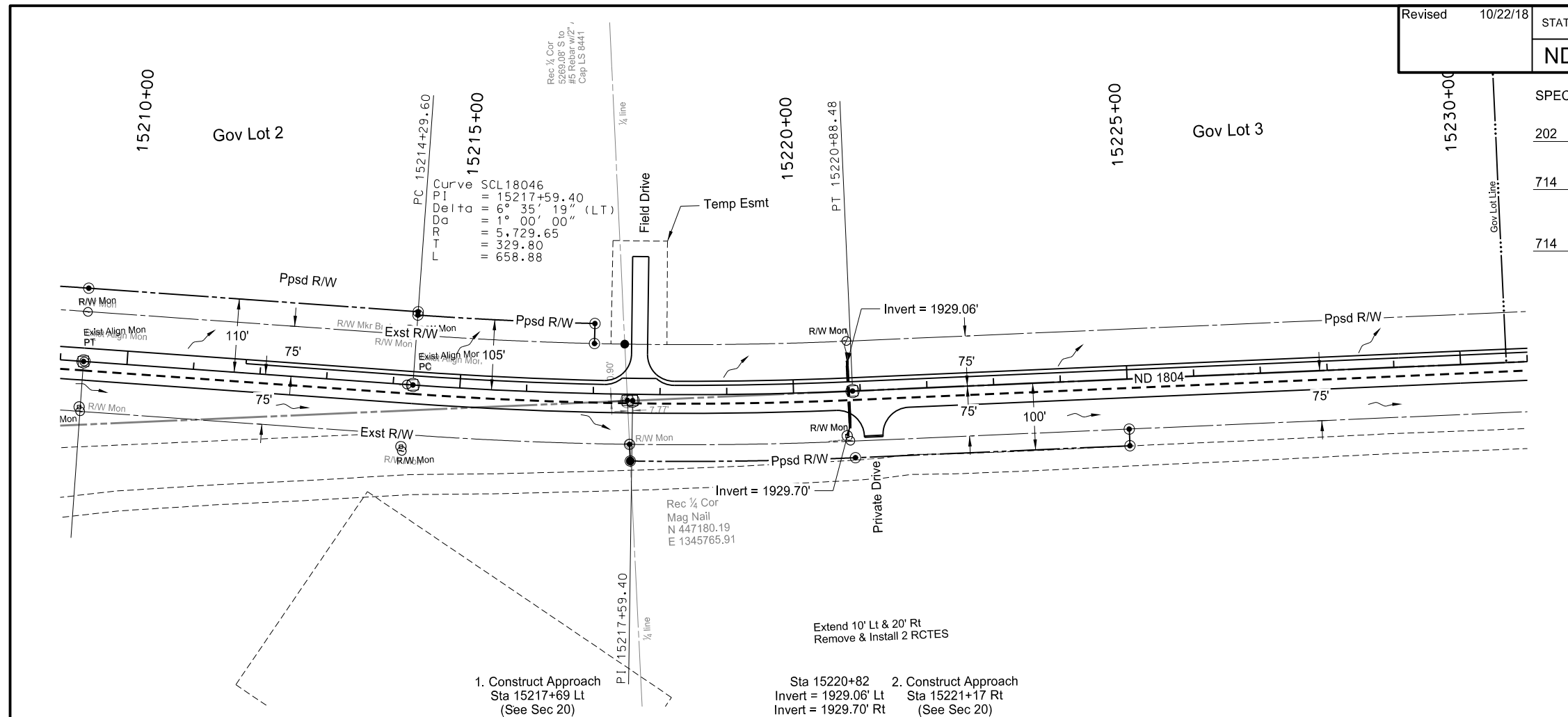
ND 1804 - Jct Tioga Rd to Mike Area
Plan & Profile
Sta 15170+00 to Sta 15190+00 (SCL1804)



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ND 1804 - Jct Tioga Rd to Mike Area
 Plan & Profile
 Sta 15190+00 to Sta 15210+00
 (SCL1804)

SPEC CODE	BID ITEM	QTY	UNIT
202 0169	REMOVAL OF END SECTION-ALL TYPES & SIZES Sta 15220+82 Lt & Sta 15220+83 Rt	2	EA
714 0615	PIPE CONC REINF 24IN CL III Sta 15220+82, 28.4' Lt - 38.4' Lt Sta 15220+83, 28.1' Rt - 48.2' Rt	10	LF
714 3020	END SECT-CONC REINF 24IN Sta 15220+82 Lt & Sta 15220+83 Rt	2	EA

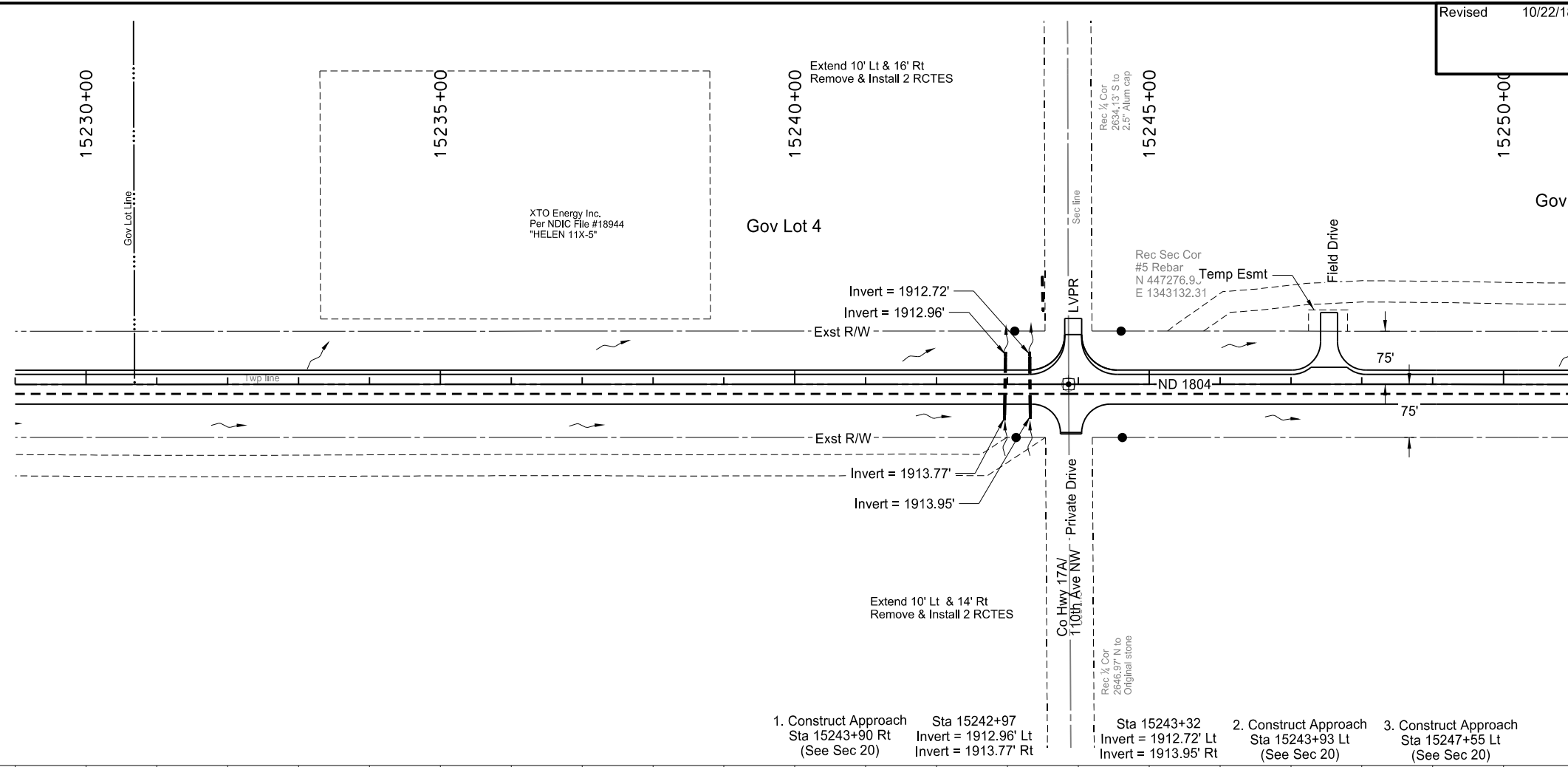


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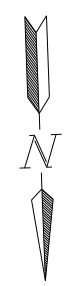
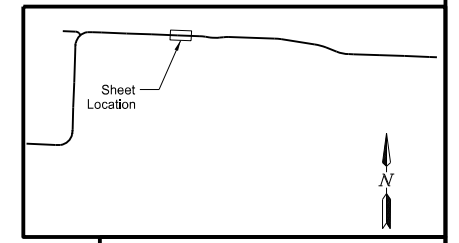
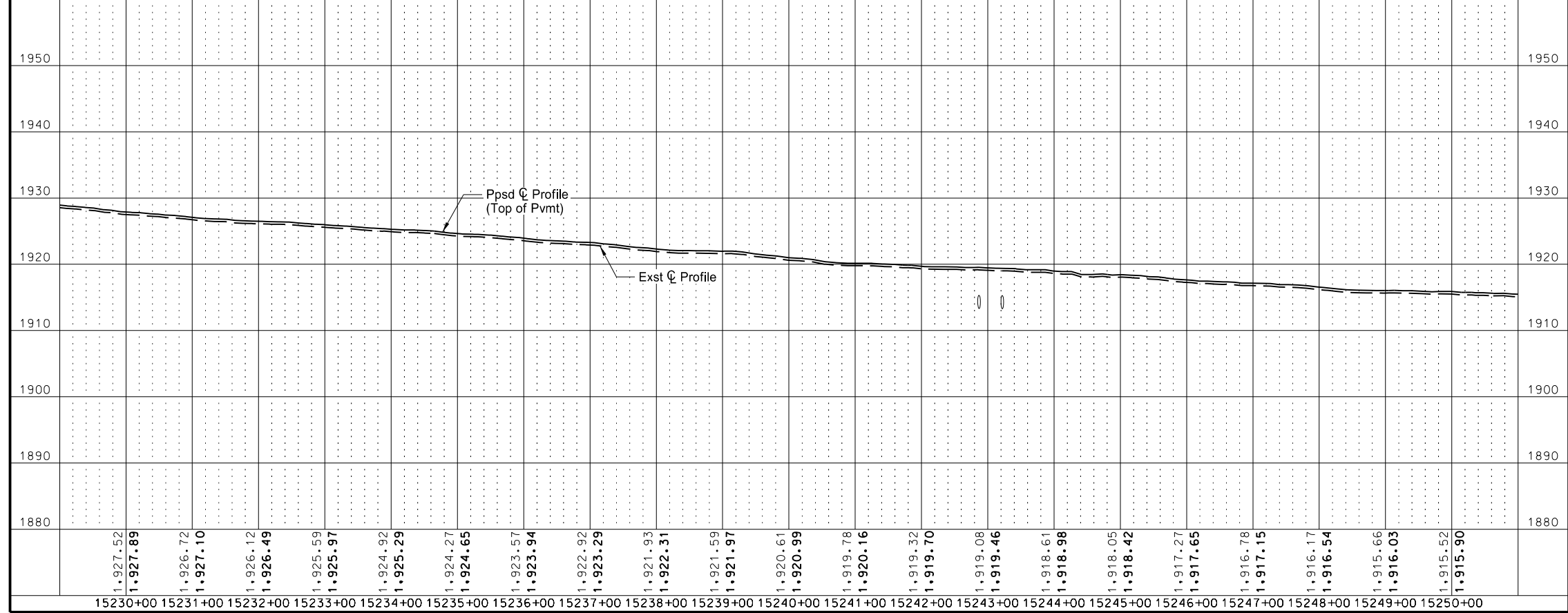
ND 1804 - Jct Tioga Rd to Mike Area
Plan & Profile
Sta 15210+00 to Sta 15230+00
(SCL1804)

Revised	10/22/18	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
		ND	SOIB-7-804(061)283	60	14

Spec Code	Bid Item	Qty	Unit
202 0169	REMOVAL OF END SECTION-ALL TYPES & SIZES Sta 15242+97 Lt & Sta 15242+96 Rt Sta 15243+32 Lt & Rt	2	EA
714 0615	PIPE CONC REINF 24IN CL III Sta 15242+97, 28.0' Lt - 38.0' Lt Sta 15242+96, 27.6' Rt - 43.6' Rt Sta 15243+32, 28.7' Lt - 38.7' Lt Sta 15243+32, 27.4' Rt - 41.4' Rt	10	LF
714 3020	END SECT-CONC REINF 24IN Sta 15242+97 Lt & Sta 15242+96 Rt Sta 15243+32 Lt & Rt	2	EA

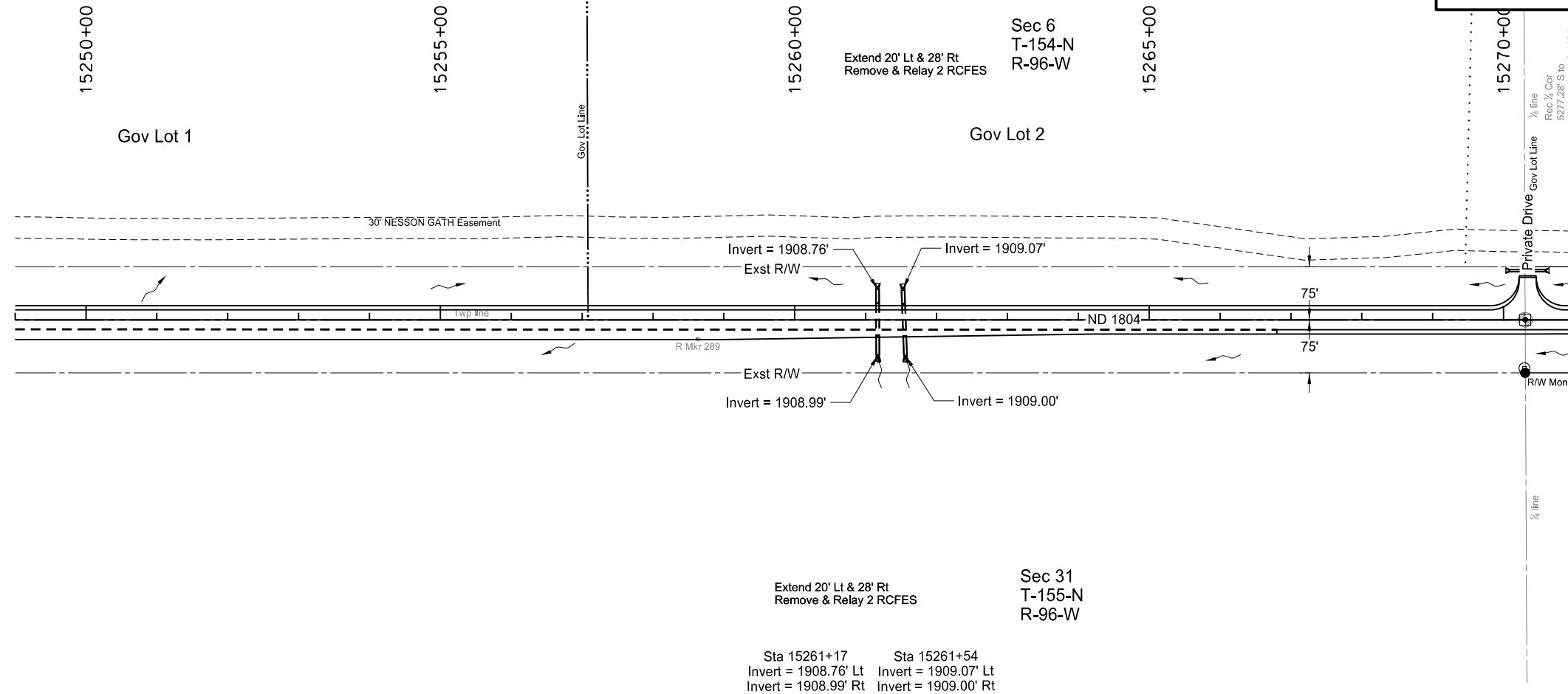


1. Construct Approach Sta 15242+97 Lt Invert = 1912.96' Lt
Sta 15243+90 Rt Invert = 1913.77' Rt (See Sec 20)
2. Construct Approach Sta 15243+32 Lt Invert = 1912.72' Lt
Sta 15247+55 Lt Invert = 1913.95' Rt (See Sec 20)
3. Construct Approach Sta 15242+96 Rt Invert = 1912.72' Rt
Sta 15247+55 Lt Invert = 1913.95' Rt (See Sec 20)

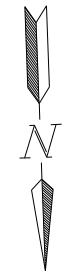
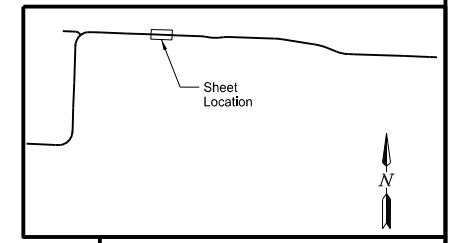
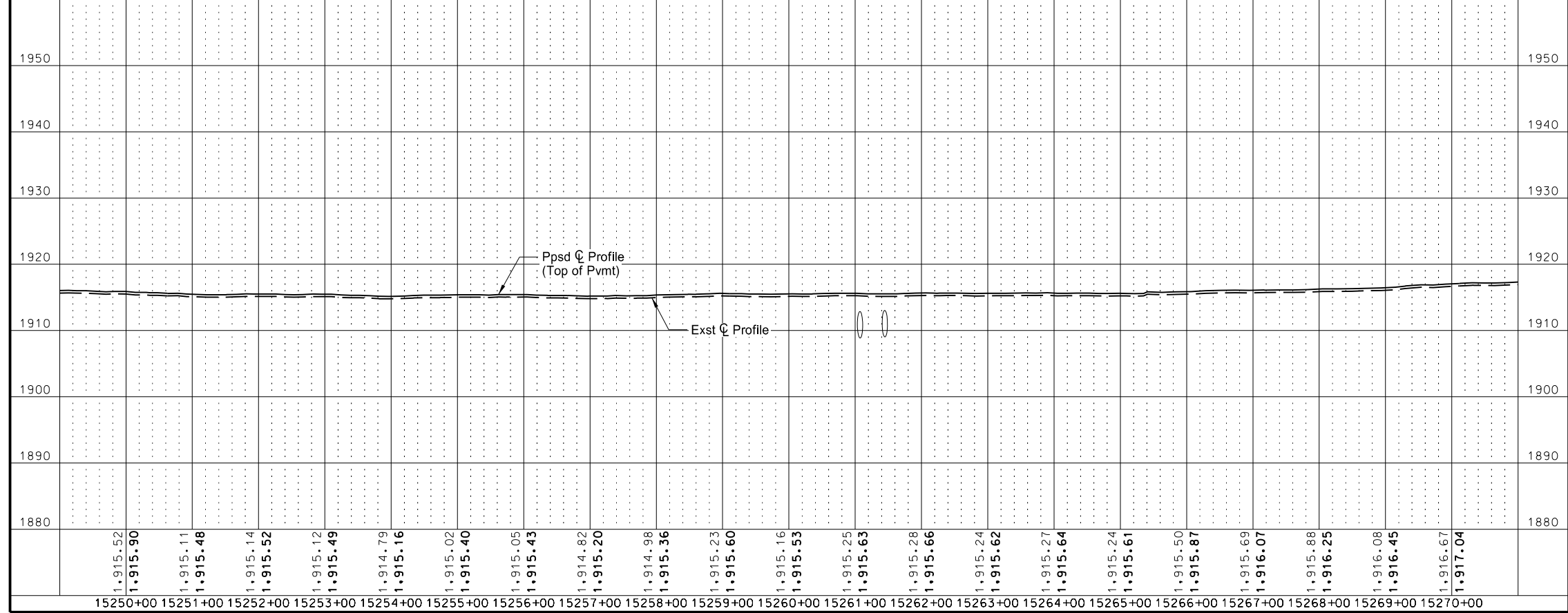


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ND 1804 - Jct Tioga Rd to Mike Area
Plan & Profile
Sta 15230+00 to Sta 15250+00 (SCL1804)

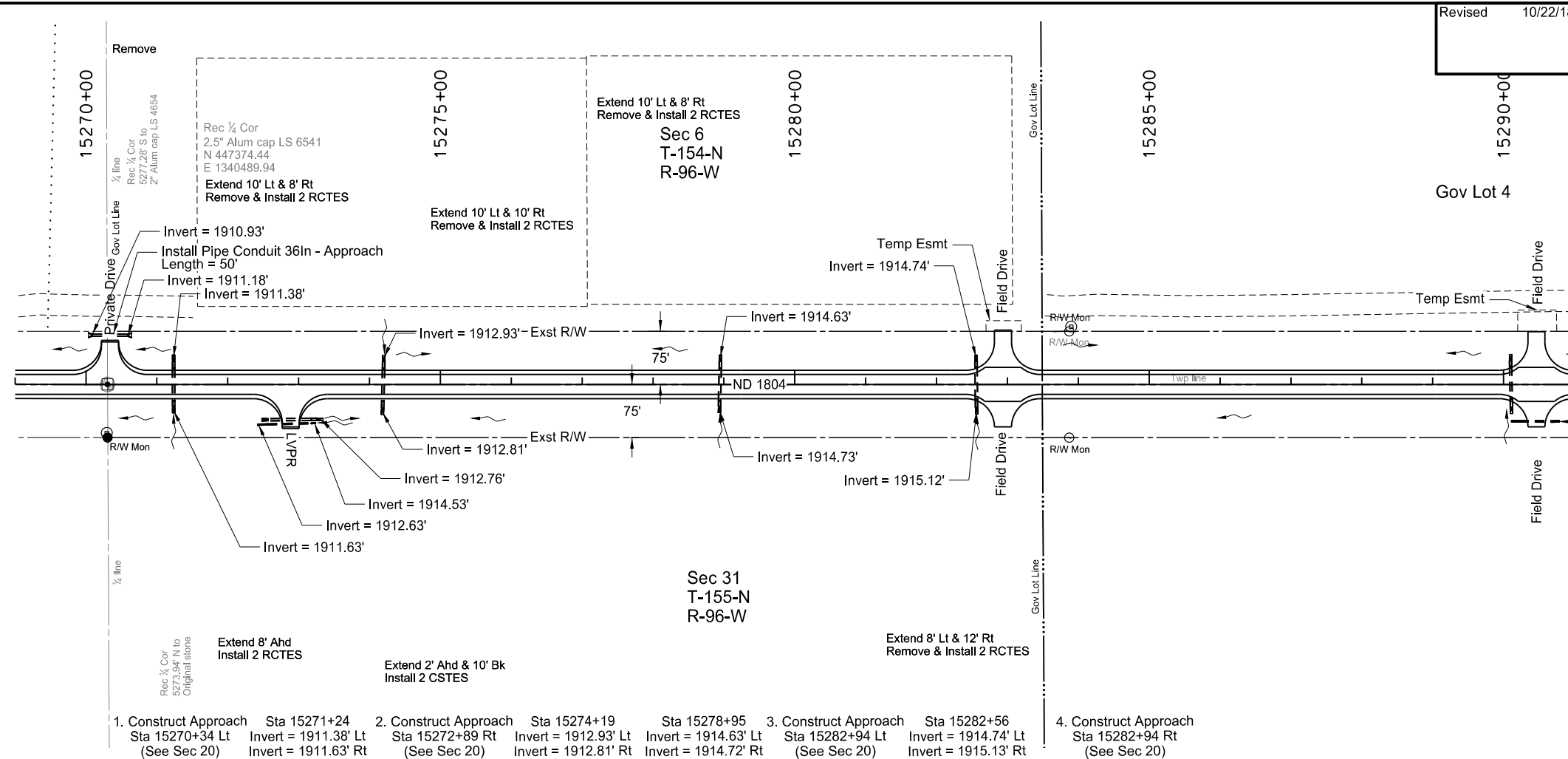


SPEC CODE	BID ITEM	QTY	UNIT
714 1105	PIPE CONC REINF 48IN CL III		
	Sta 15261+17, 23.6' Lt - 43.4' Lt	20	LF
	Sta 15261+17, 22.4' Rt - 50.3' Rt	28	LF
	Sta 15261+53, 22.5' Lt - 42.3' Lt	20	LF
	Sta 15261+55, 23.2' Rt to Sta 15261+56, 51.1' Rt	28	LF
714 9660	REMOVE & RELAY END SECTION-ALL TYPE & SIZES		
	Sta 15261+17 Lt & Rt	2	EA
	Sta 15261+53 Lt & Sta 15261+56 Rt	2	EA



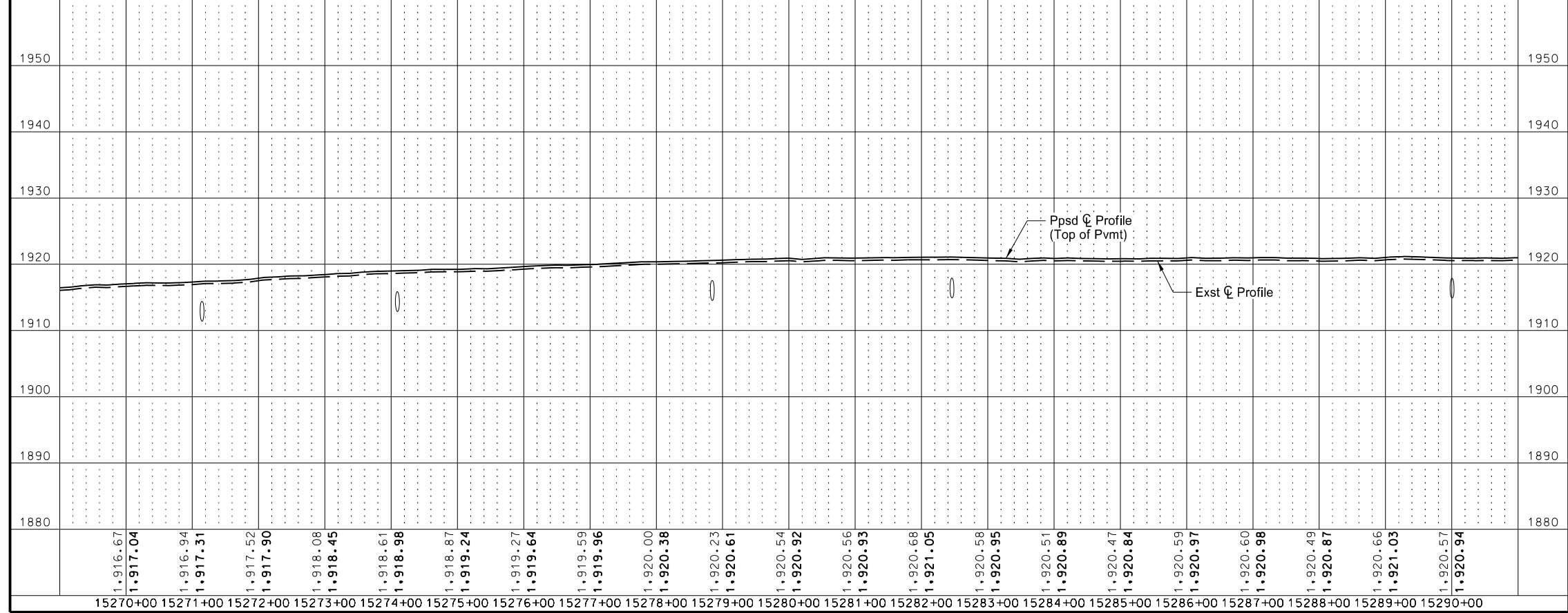
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ND 1804 - Jct Tioga Rd to Mike Area
Plan & Profile
Sta 15250+00 to Sta 15270+00 (SCL1804)



SPEC CODE	BID ITEM	QTY	UNIT
202 0169	REMOVAL OF END SECTION-ALL TYPES & 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
202 0174	REMOVAL OF PIPE ALL TYPES AND SIZES	49	LF
	Sta 15270+08, 49.4' Lt - Sta 15270+57, 49.5' Lt		
714 0905	PIPE CONC REINF 36IN CL III	10	LF
	Sta 15271+24, 23.1' Lt - 33.0' Lt	8	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	10	LF
	Sta 15274+19, 24.0' Rt - 33.9' Rt	10	LF
	Sta 15274+20, 22.5' Lt - 32.3' Lt	8	LF
	Sta 15278+94, 23.4' Rt - 31.2' Rt	10	LF
	Sta 15278+95, 23.0' Lt - 32.8' Lt	8	LF
	Sta 15282+56, 25.0' Lt - 32.8' Lt	12	LF
	Sta 15282+56, 21.1' Rt - 33.0' Rt		
714 3035	END SECT-CONC REINF 36IN	2	EA
	Sta 15271+24 Lt & Rt	2	EA
	Sta 15272+57 Rt & Sta 15273+26 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
714 4116	PIPE CONDUIT 36IN-APPROACH	50	LF
	Sta 15270+09, 69.5' Lt - Sta 15270+59, 69.5' Lt		
714 5015	PIPE CORR STEEL .064IN 18IN	10	LF
	Sta 15272+46, 56.7' Rt to Sta 15272+56, 56.4' Rt	2	LF
	Sta 15273+18, 54.7' Rt to Sta 15273+20, 54.7' Rt		
714 5810	END SECT CORR STEEL .064IN 18IN	2	EA
	Sta 15272+46 Rt & Sta 15273+20 Rt		
714 5830	END SECT CORR STEEL .079IN 36IN	2	EA
	Sta 15270+08 Lt & Sta 15270+59 Lt		

- Construct Approach Sta 15271+24 Lt Invert = 1911.38' Lt
Sta 15270+34 Lt Invert = 1911.63' Rt (See Sec 20)
- Construct Approach Sta 15274+19 Lt Invert = 1912.93' Lt
Sta 15272+89 Rt Invert = 1912.81' Rt (See Sec 20)
- Construct Approach Sta 15278+95 Lt Invert = 1914.63' Lt
Sta 15279+00 Rt Invert = 1914.72' Rt
Sta 15282+94 Lt Invert = 1914.74' Lt
Sta 15282+94 Rt Invert = 1915.13' Rt (See Sec 20)
- Construct Approach Sta 15282+56 Lt Invert = 1914.74' Lt
Sta 15282+94 Rt Invert = 1915.13' Rt (See Sec 20)



Sheet Location

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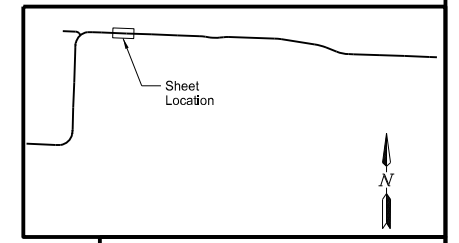
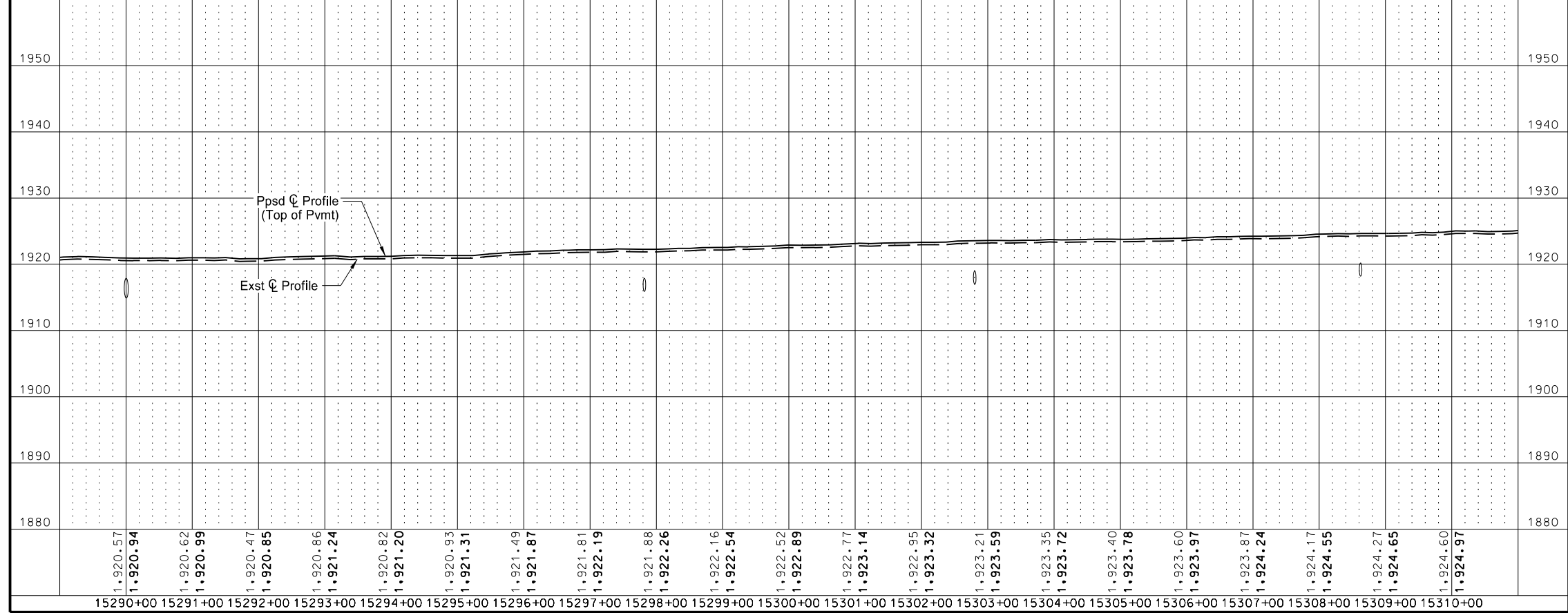
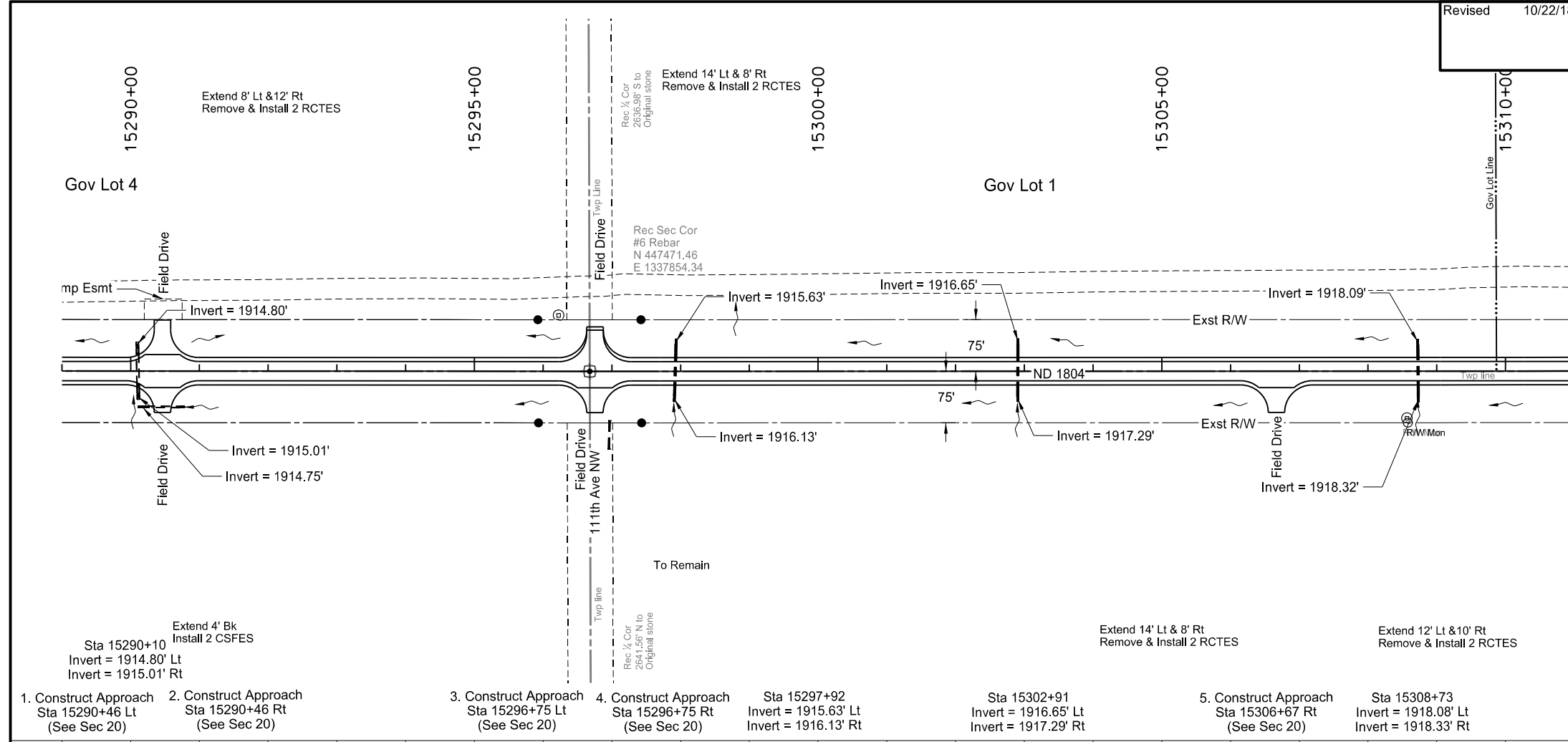
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ND 1804 - Jct Tioga Rd to Mike Area

Plan & Profile

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

ITEM	QTY	UNIT
202 0169 REMOVAL OF END SECTION-ALL TYPES & 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
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 3020 END SECT-CONC REINF 24IN		
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
714 3035 END SECT-CONC REINF 36IN		
Sta 15290+10 Lt & Sta 15290+11 Rt	2	EA
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

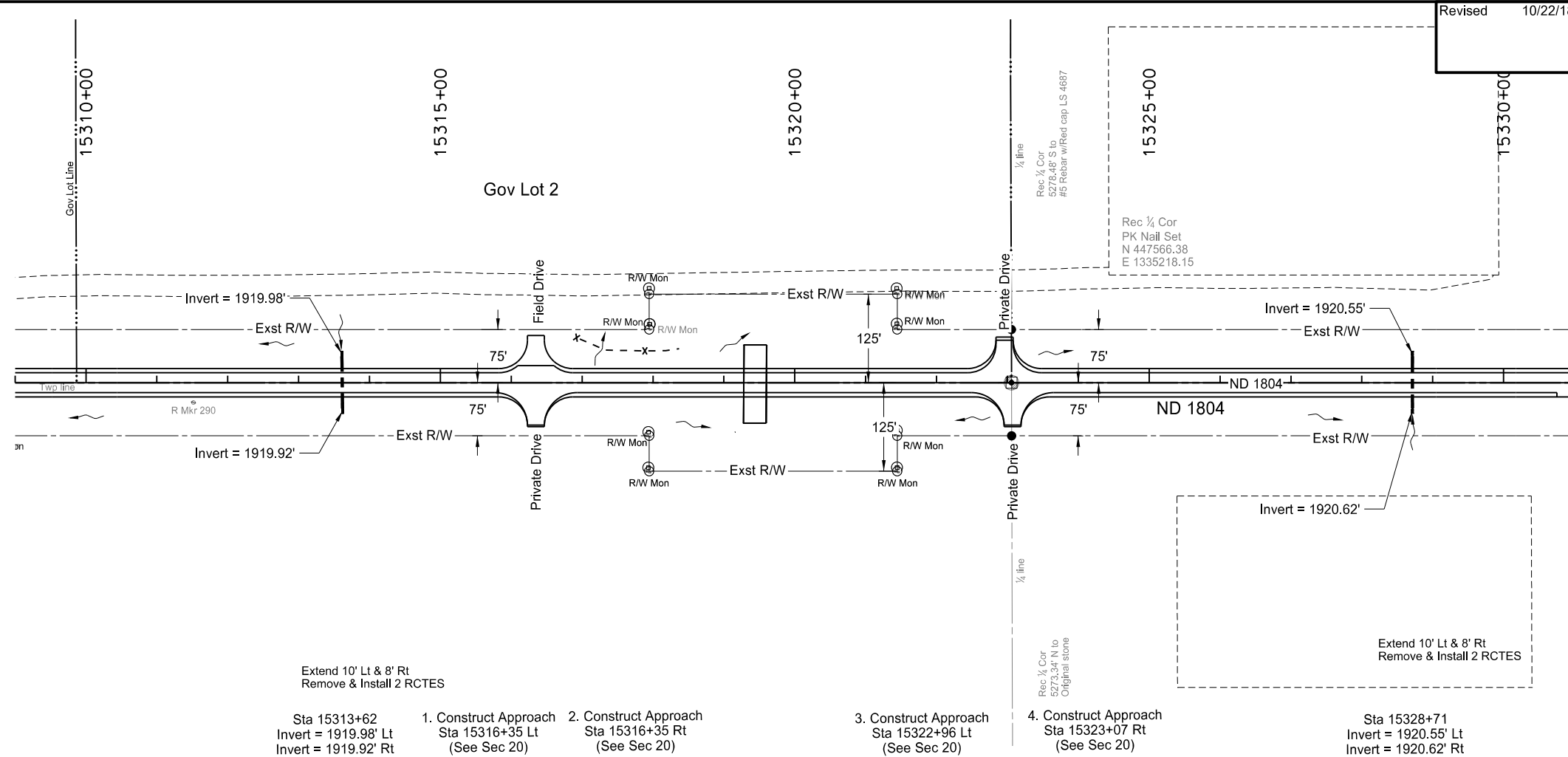


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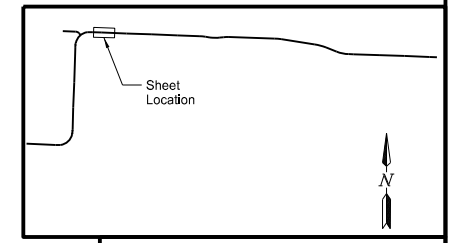
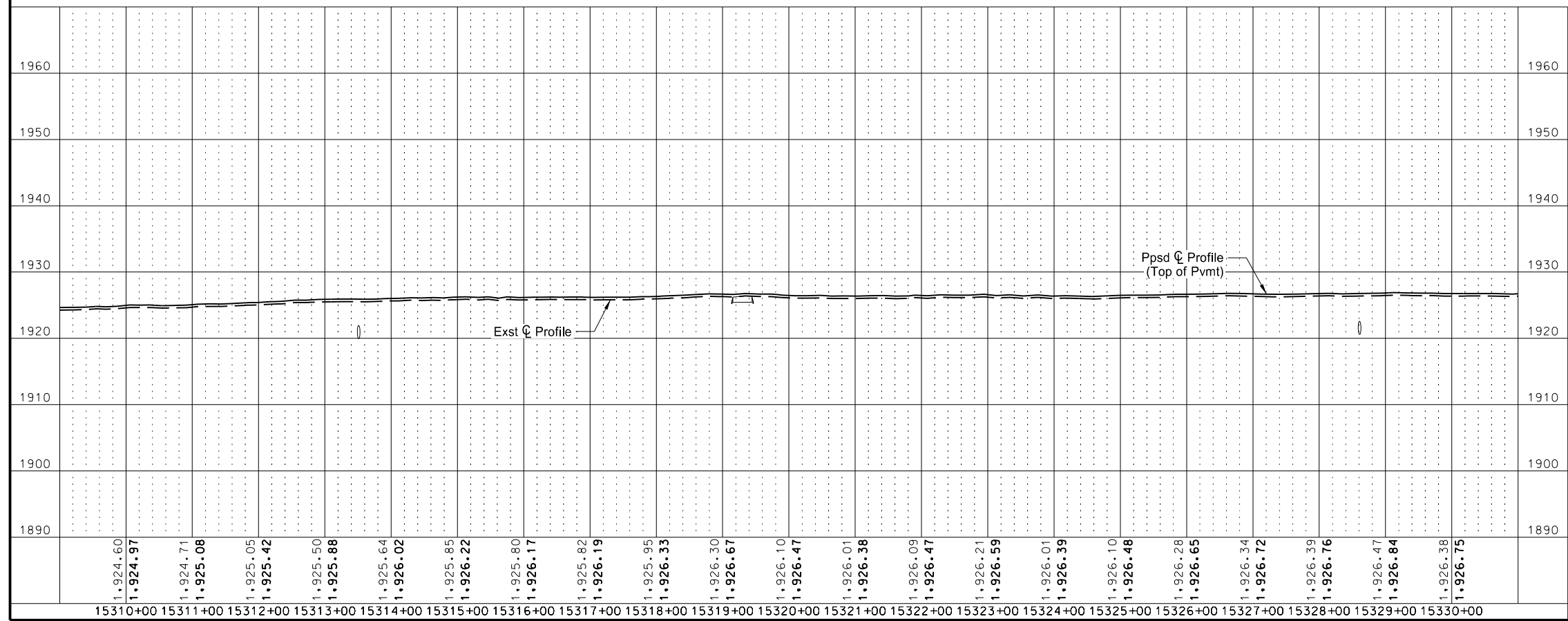
ND 1804 - Jct Tioga Rd to Mike Area
Plan & Profile
Sta 15290+00 to Sta 15310+00 (SCL1804)

Revised	10/22/18	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
		ND	SOIB-7-804(061)283	60	18

SPEC CODE	BID ITEM	QTY	UNIT
202	0169 REMOVAL OF END SECTION-ALL TYPES & SIZES Sta 15313+61 Lt & Sta 15313+62 Rt Sta 15328+71 Lt & Rt	2	EA
714	0615 PIPE CONC REINF 24IN CL III Sta 15313+61, 27.2' Lt - 37.2' Lt Sta 15313+62, 28.5' Rt - 36.5' Rt Sta 15328+71, 27.2' Lt - 37.2' Lt Sta 15328+71, 28.3' Rt - 36.3' Rt	10	LF
		8	LF
		10	LF
		8	LF
714	3020 END SECT-CONC REINF 24IN Sta 15313+61 Lt & Sta 15313+62 Rt Sta 15328+71 Lt & Rt	2	EA
		2	EA



- 1. Construct Approach Sta 15316+35 Lt (See Sec 20)
 - 2. Construct Approach Sta 15316+35 Rt (See Sec 20)
 - 3. Construct Approach Sta 15322+96 Lt (See Sec 20)
 - 4. Construct Approach Sta 15323+07 Rt (See Sec 20)
- Sta 15313+62
Invert = 1919.98' Lt
Invert = 1919.92' Rt
- Sta 15328+71
Invert = 1920.55' Lt
Invert = 1920.62' Rt

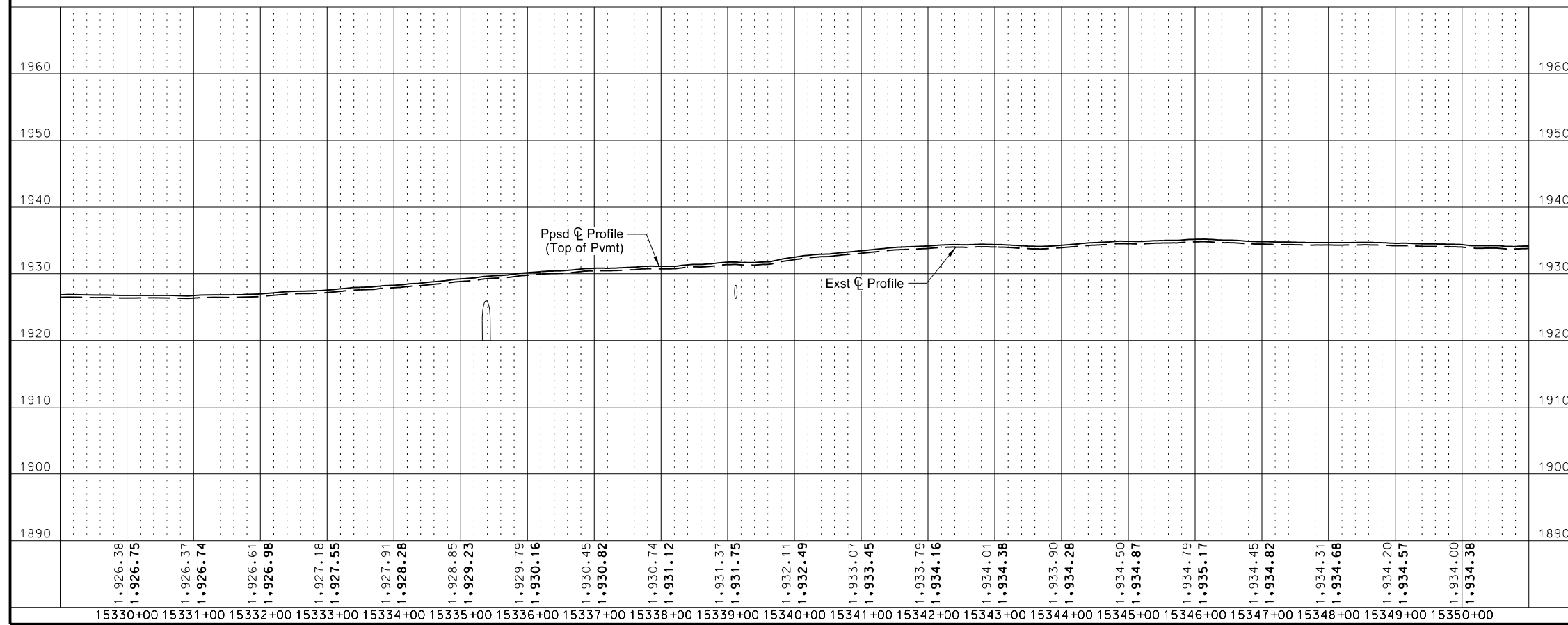
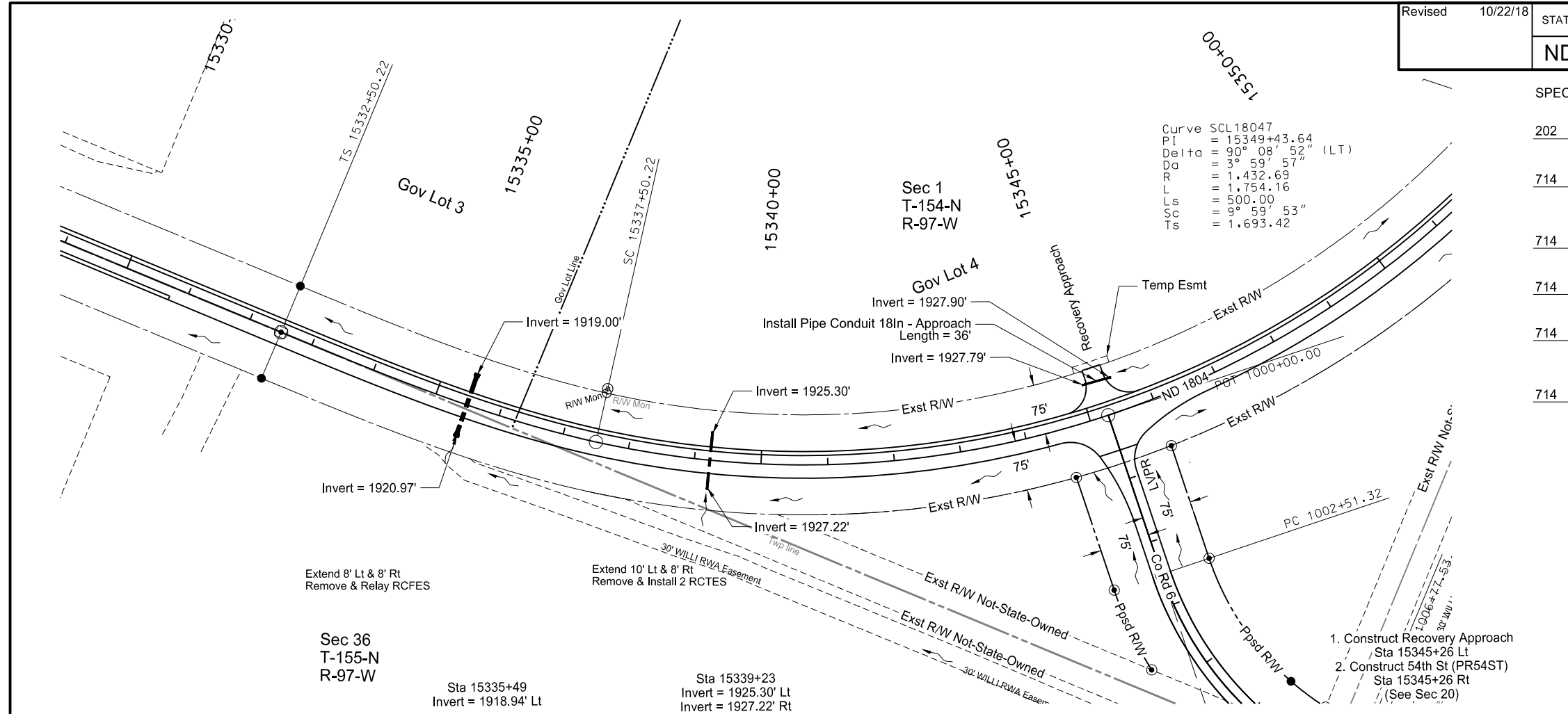


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ND 1804 - Jct Tioga Rd to Mike Area
Plan & Profile
Sta 15310+00 to Sta 15330+00 (SCL1804)

Revised	10/22/18	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
		ND	SOIB-7-804(061)283	60	19

SPEC CODE	BID ITEM	QTY	UNIT
202 0169	REMOVAL OF END SECTION-ALL TYPES & SIZES Sta 15339+23 Lt & Rt	2	EA
714 0615	PIPE CONC REINF 24IN CL III Sta 15339+23, 26.1' Lt - 36.1' Lt Sta 15339+23, 29.2' Rt - 37.2' Rt	10	LF
714 3020	END SECT-CONC REINF 24IN Sta 15339+23 Lt & Rt	2	EA
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 - 40.0' Lt Sta 15335+49, 38.0' Rt - 46.0' Rt	8	LF
714 9611	REMOVE & RELAY CONC CATTLE PASS END SECTION Sta 15335+49 Lt & Rt	2	EA



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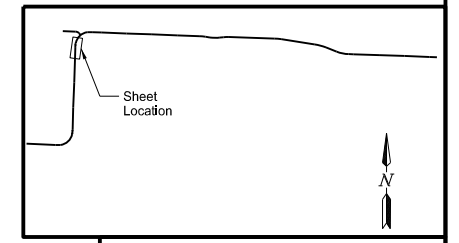
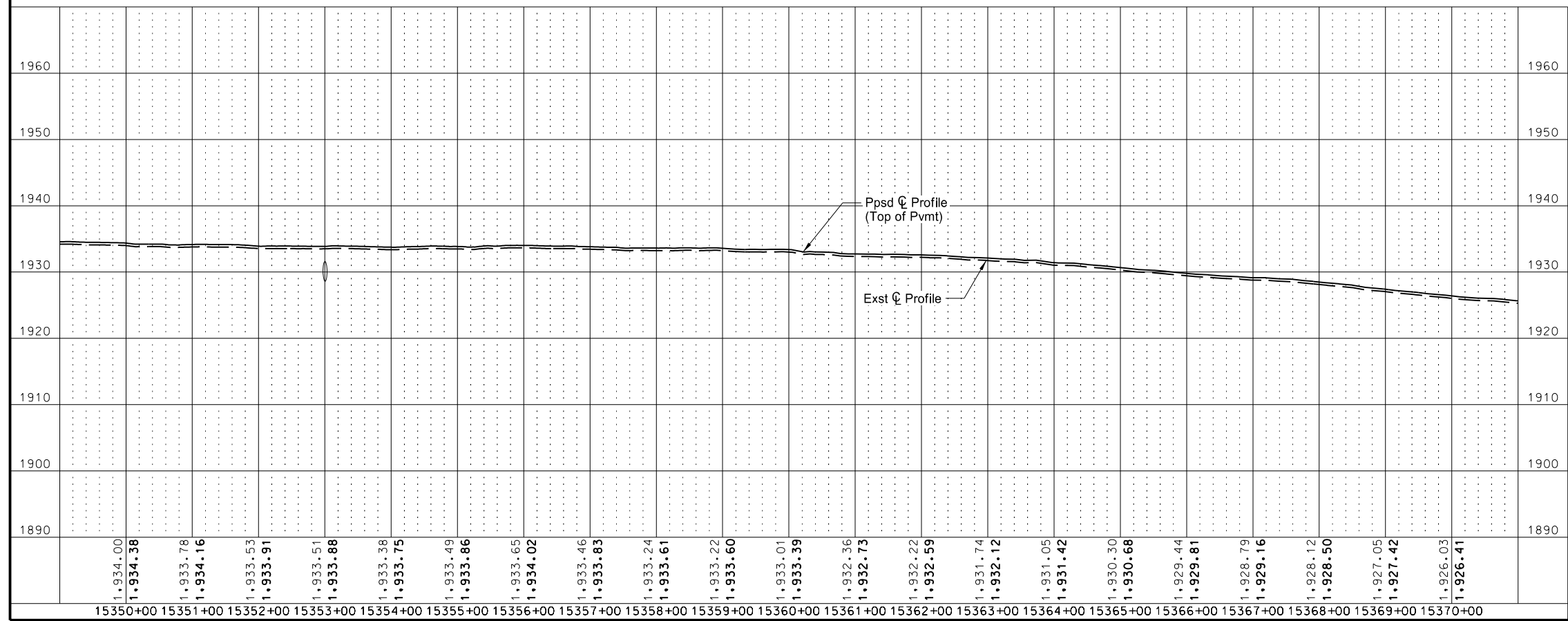
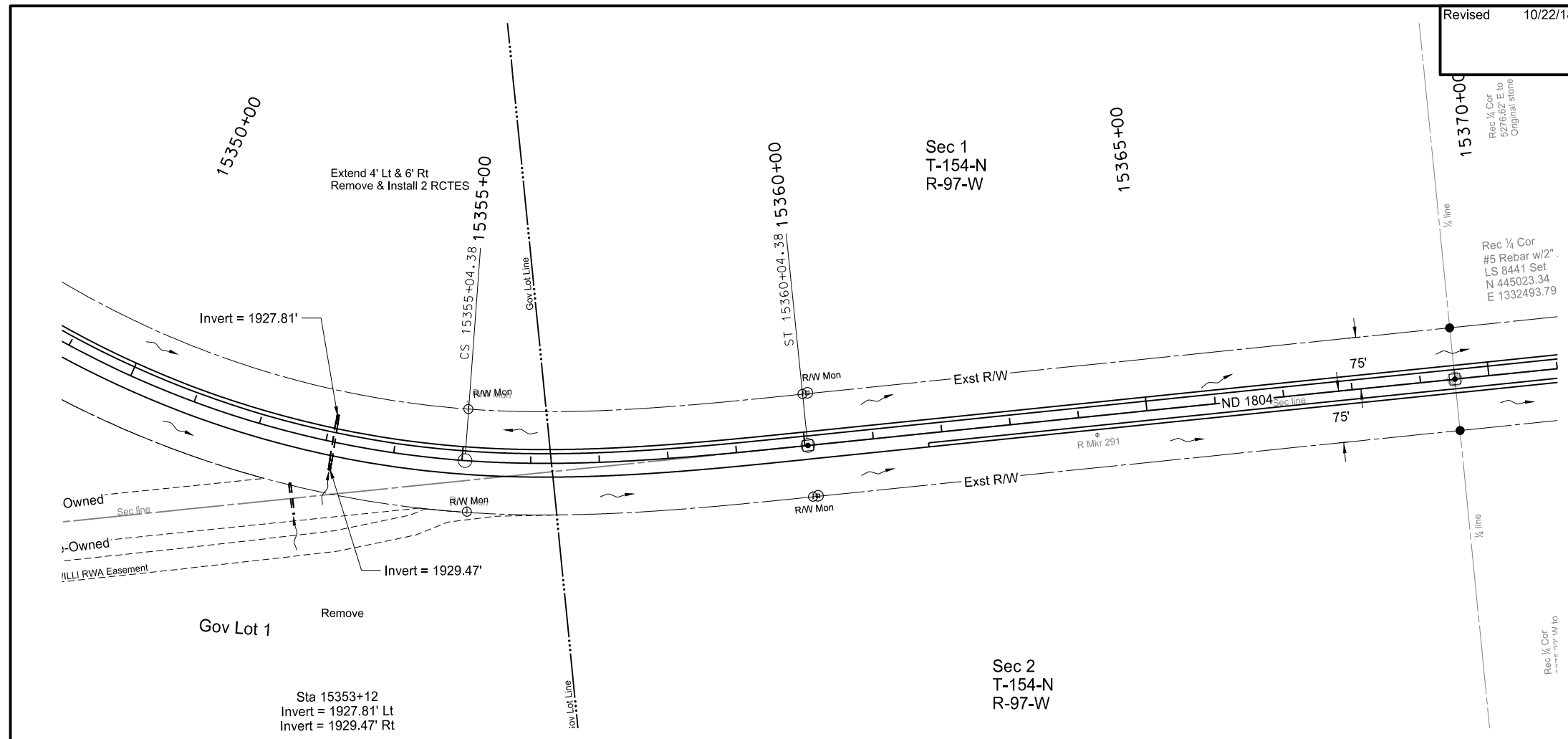
ND 1804 - Jct Tioga Rd to Mike Area

Plan & Profile

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

Revised	10/22/18	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
		ND	SOIB-7-804(061)283	60	20

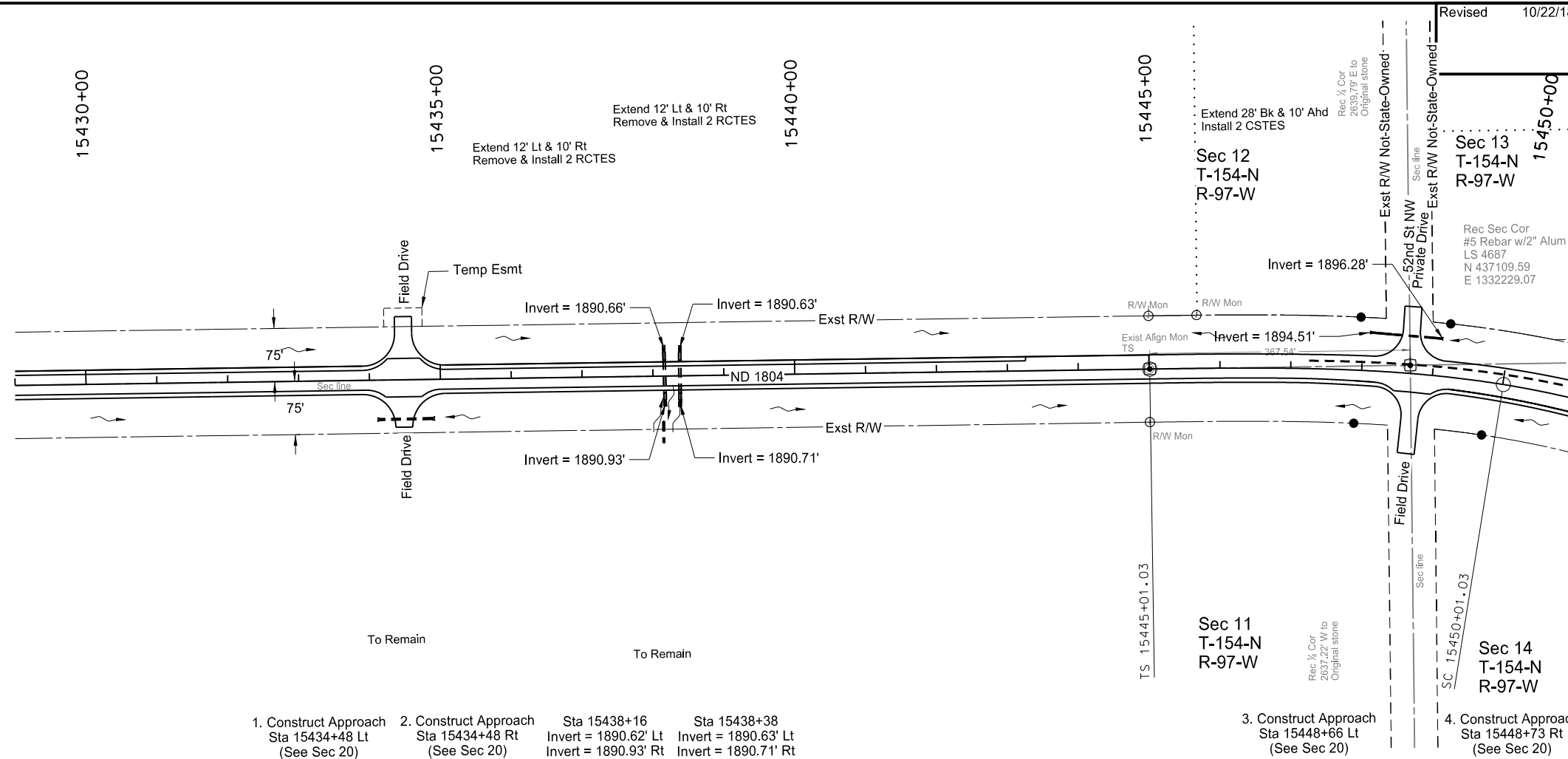
SPEC CODE	BID ITEM	QTY	UNIT
202 0169	REMOVAL OF END SECTION-ALL TYPES & SIZED Sta 15353+10 Lt & Sta 15353+13 Rt	2	EA
202 0174	REMOVAL OF PIPE ALL TYPES AND SIZES Sta 15352+64, 73.0' Rt	44	LF
714 0905	PIPE CONC REINF 36IN CL III Sta 15353+10, 27.5' Lt - 31.4' Lt Sta 15353+13, 26.8' Rt - 32.6' Rt	4 6	LF LF
714 3035	END SECT-CONC REINF 36IN Sta 15353+10 Lt & Sta 15353+13 Rt	2	EA



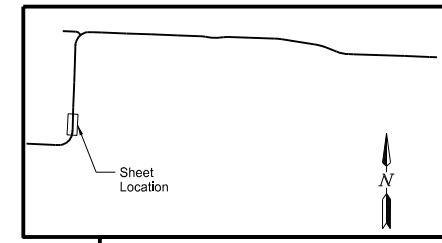
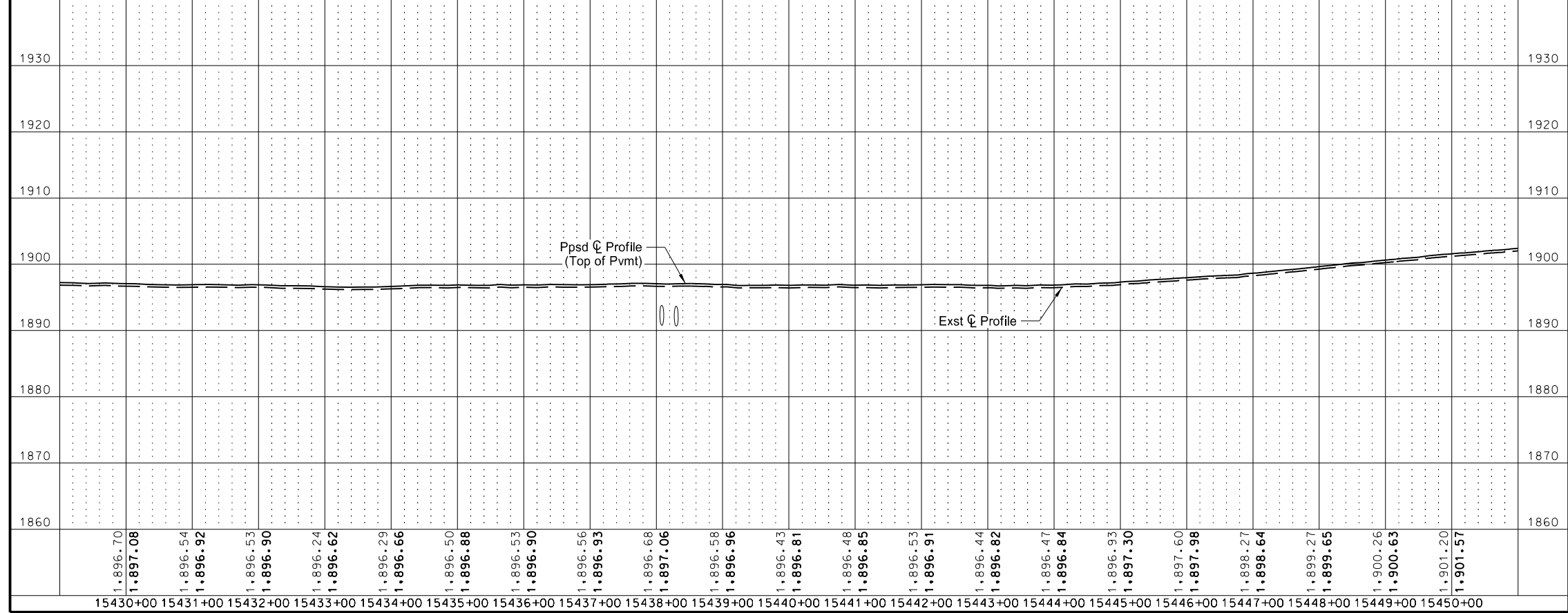
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ND 1804 - Jct Tioga Rd to Mike Area
Plan & Profile
Sta 15350+00 to Sta 15370+00
(SCL1804)

QTY	UNIT	SPEC CODE	BID ITEM
202	0169	REMOVAL OF END SECTION-ALL TYPES & SIZES	
			Sta 15438+16 Lt & 15438+17 Rt
			Sta 15438+38 Lt & Rt
714	0905	PIPE CONC REINF 36IN CL III	
			Sta 15438+16, 22.6' Lt - 34.5' Lt
			Sta 15438+17, 24.0' Rt - 33.9' Rt
			Sta 15438+38, 30.0' Lt - 33.9' Lt
			Sta 15438+38, 24.5' Rt - 34.4' Rt
714	3035	END SECT-CONC REINF 36IN	
			Sta 15438+16 Lt & 15438+17 Rt
			Sta 15438+38 Lt & Rt
714	5015	PIPE CORR STEEL .064IN 18IN	
			Sta 15448+12, 53.9' Lt to Sta 15448+40, 53.2' Lt
			Sta 15448+97, 52.8' Lt to Sta 15449+07, 52.9' Lt
714	5810	END SECT CORR STEEL .064IN 18IN	
			Sta 15448+12 Lt & Sta 15449+07 Lt



- 1. Construct Approach Sta 15434+48 Lt (See Sec 20)
- 2. Construct Approach Sta 15434+48 Rt (See Sec 20)
- Sta 15438+16 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)

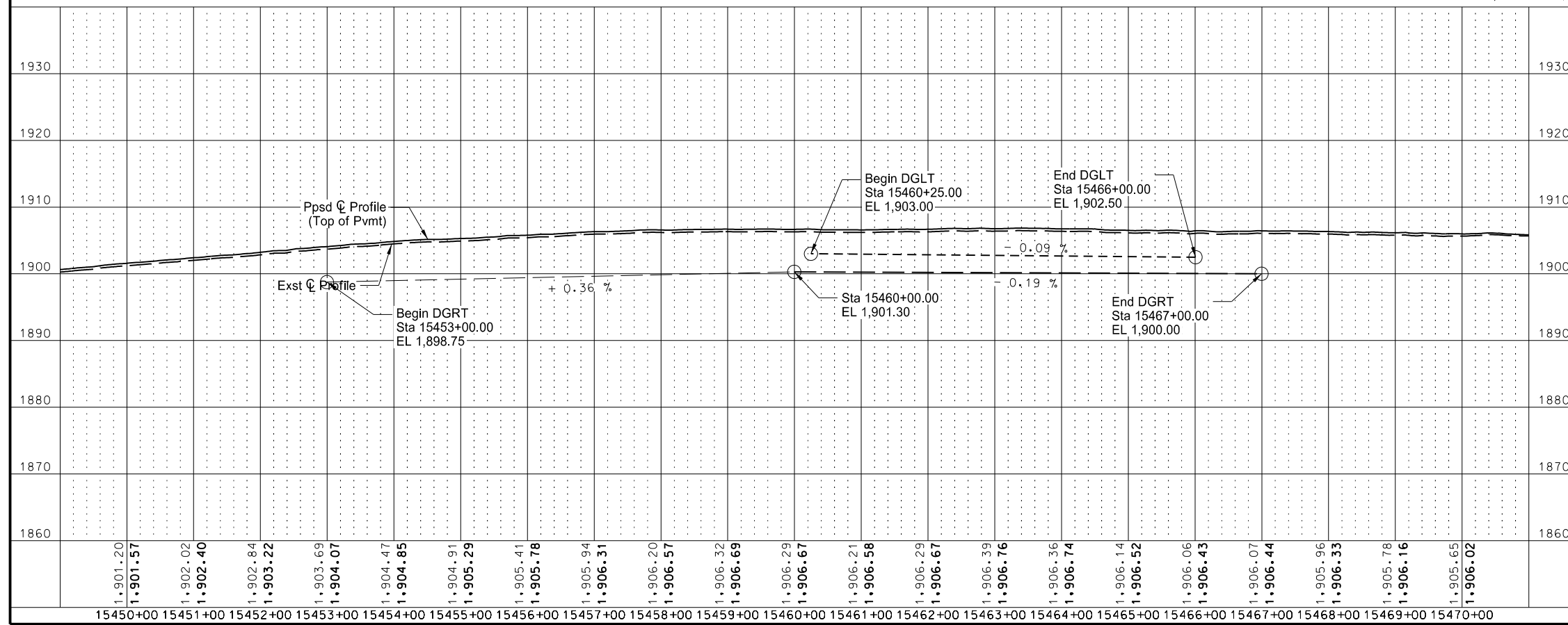
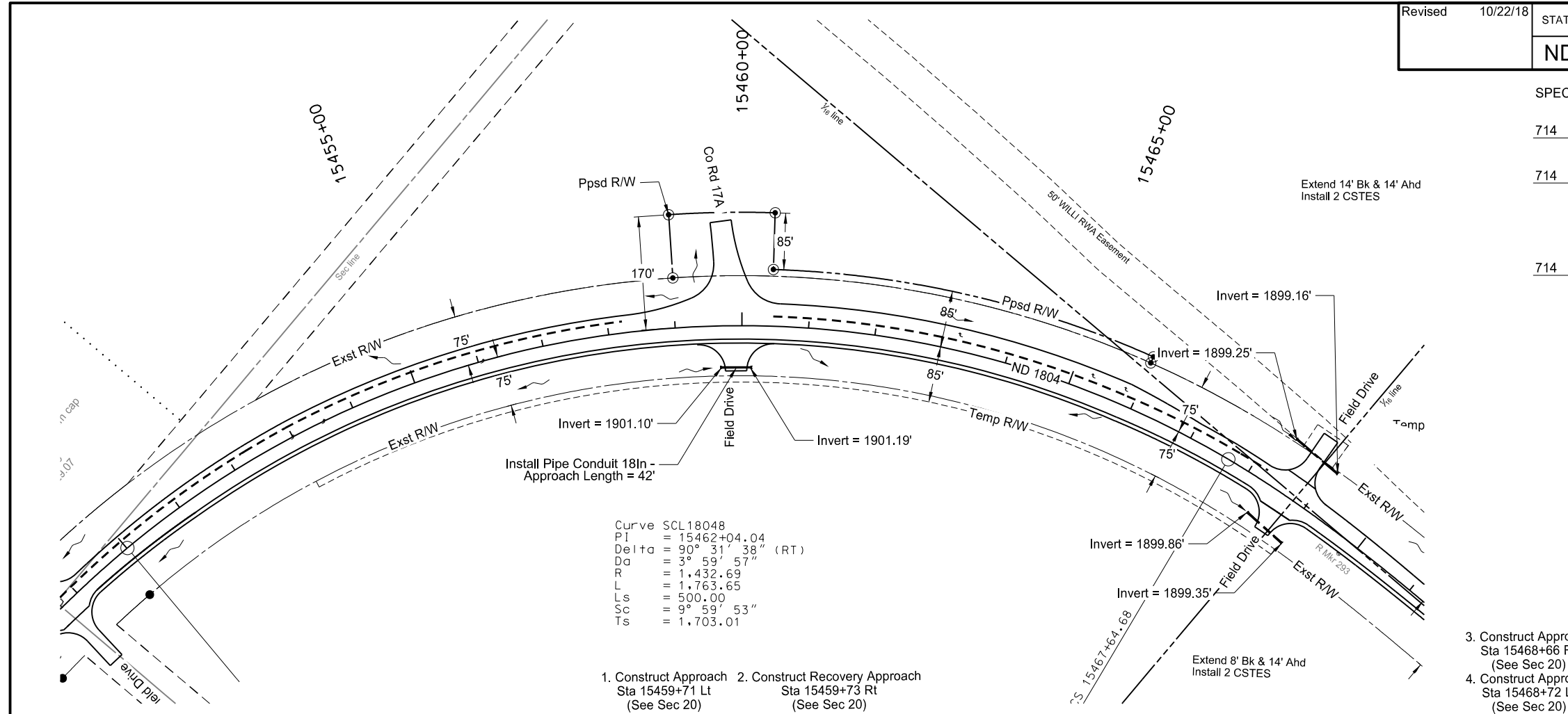


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ND 1804 - Jct Tioga Rd to Mike Area
Plan & Profile
Sta 15430+00 to Sta 15450+00 (SCL1804)

Revised	10/22/18	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 Sta 15468+86, 59.6' Rt to Sta 15469+00, 61.2' Rt Sta 15468+36, 79.8' Lt to Sta 15468+50, 78.0' Lt Sta 15468+94, 73.1' Lt to Sta 15469+08, 71.9' Lt	8 14 14 14	LF
714 5810	END SECT CORR STEEL .064IN 18IN Sta 15468+35 Rt & Sta 15469+00 Rt Sta 15468+36 Lt & Sta 15469+08 Lt	2 2	EA

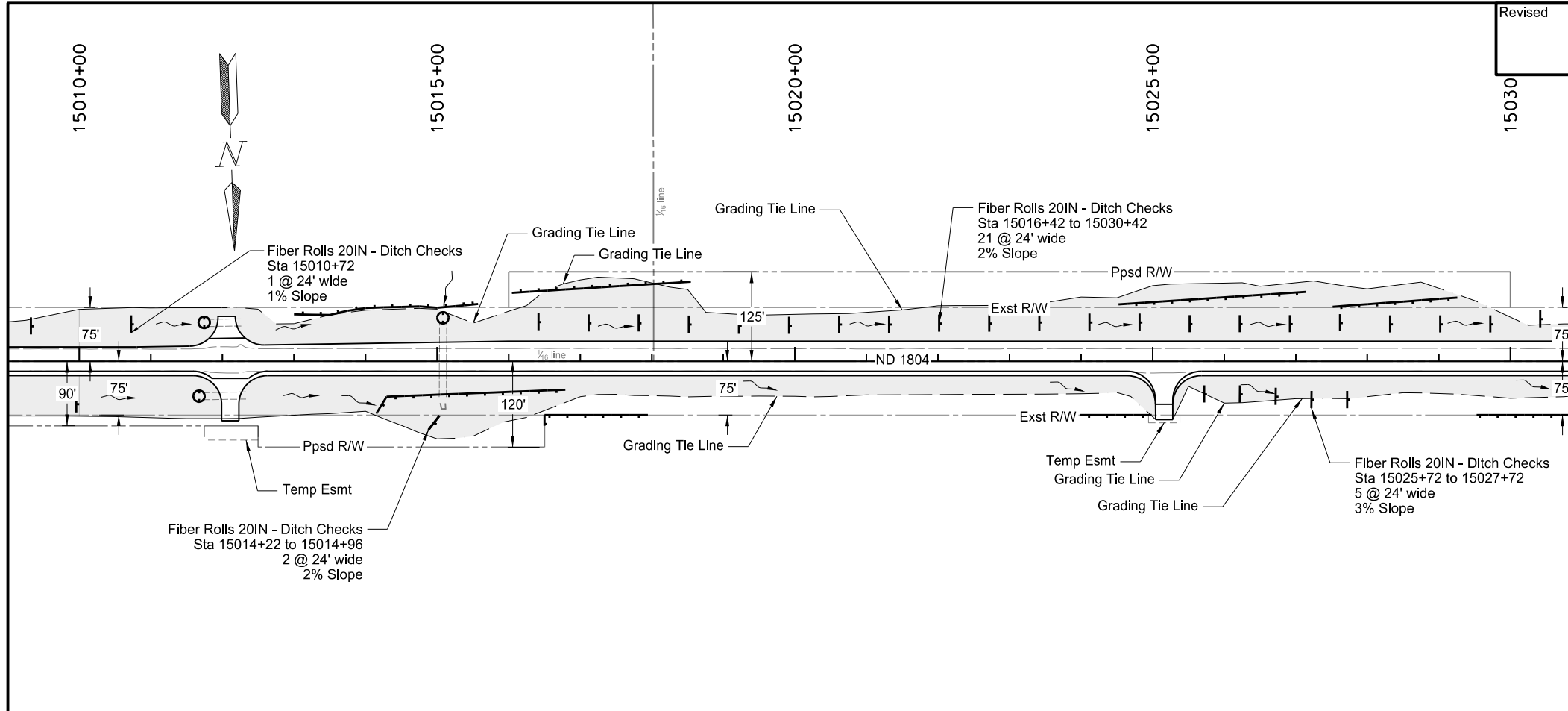


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ND 1804 - Jct Tioga Rd to Mike Area

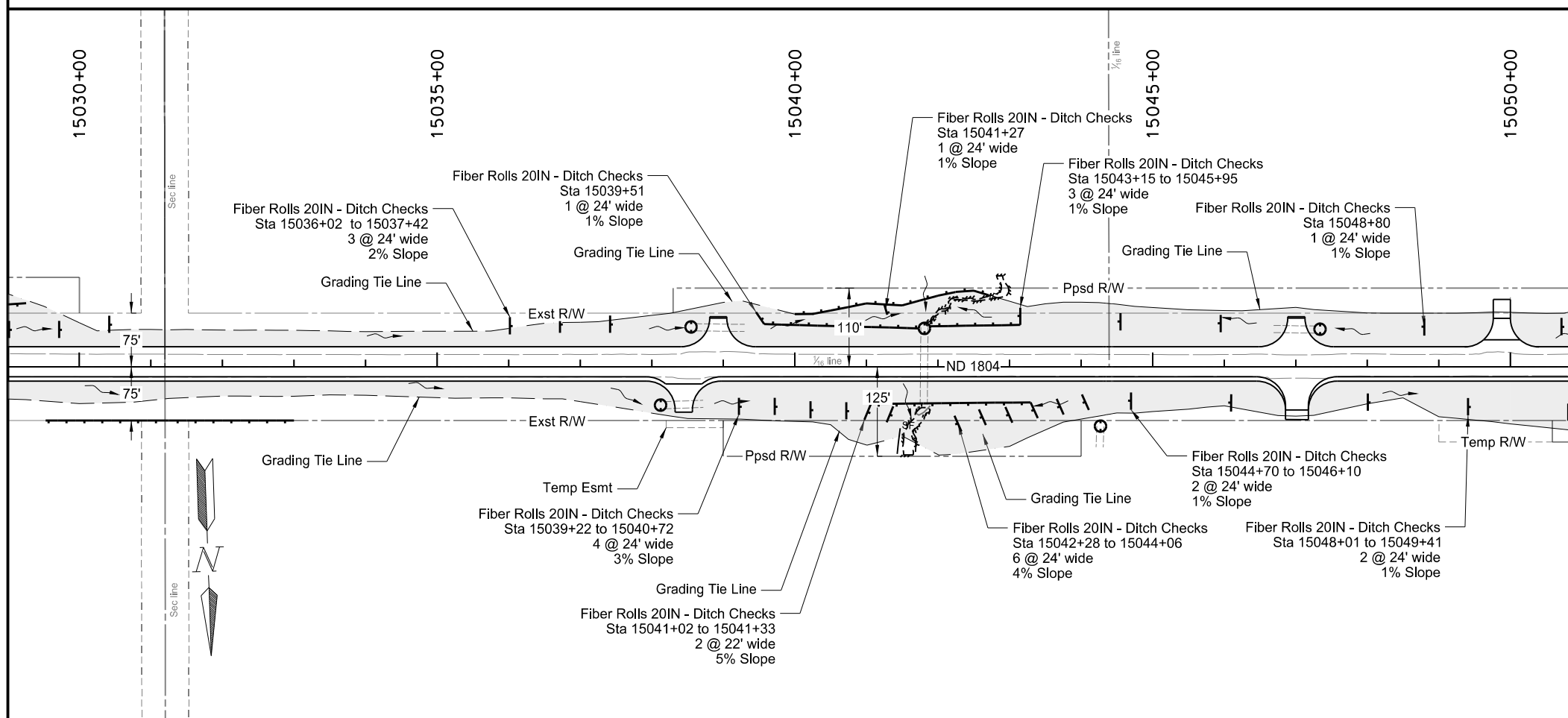
Plan & Profile

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



SPEC CODE	BID ITEM	QTY	UNIT
251 2000	TEMPORARY COVER CROP Sta 15010+00 to 15050+00	8.19	ACRE
253 0101	STRAW MULCH Sta 15010+00 to 15050+00	8.19	ACRE
260 0200	SILT FENCE SUPPORTED Sta 15010+00 to 15050+00	113	LF
260 0201	REMOVE SILT FENCE SUPPORTED Sta 15010+00 to 15050+00	113	LF
261 0112	FIBER ROLLS 12IN Sta 15010+00 to 15050+00	2,800	LF
261 0113	REMOVE FIBER ROLLS 12IN Sta 15010+00 to 15050+00	2,800	LF
261 0120	FIBER ROLLS 20IN Sta 15010+00 to 15050+00	1,268	LF
261 0121	REMOVE FIBER ROLLS 20IN Sta 15010+00 to 15050+00	1,268	LF

For ditch grades encountered in the field not listed, use the following spacing:
 Spacing = { Diameter of Roll (ft) - Entrenchment (ft) } / Slope (ft/ft)

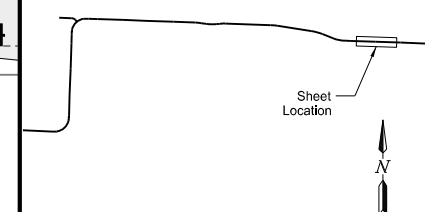


DITCH CHECK SPACING		
Ditch Grade	12" Spacing (ft)	20" Spacing (ft)
1%	85	140
2%	45	70
3%	30	50
4%	20	35
5%	15	30

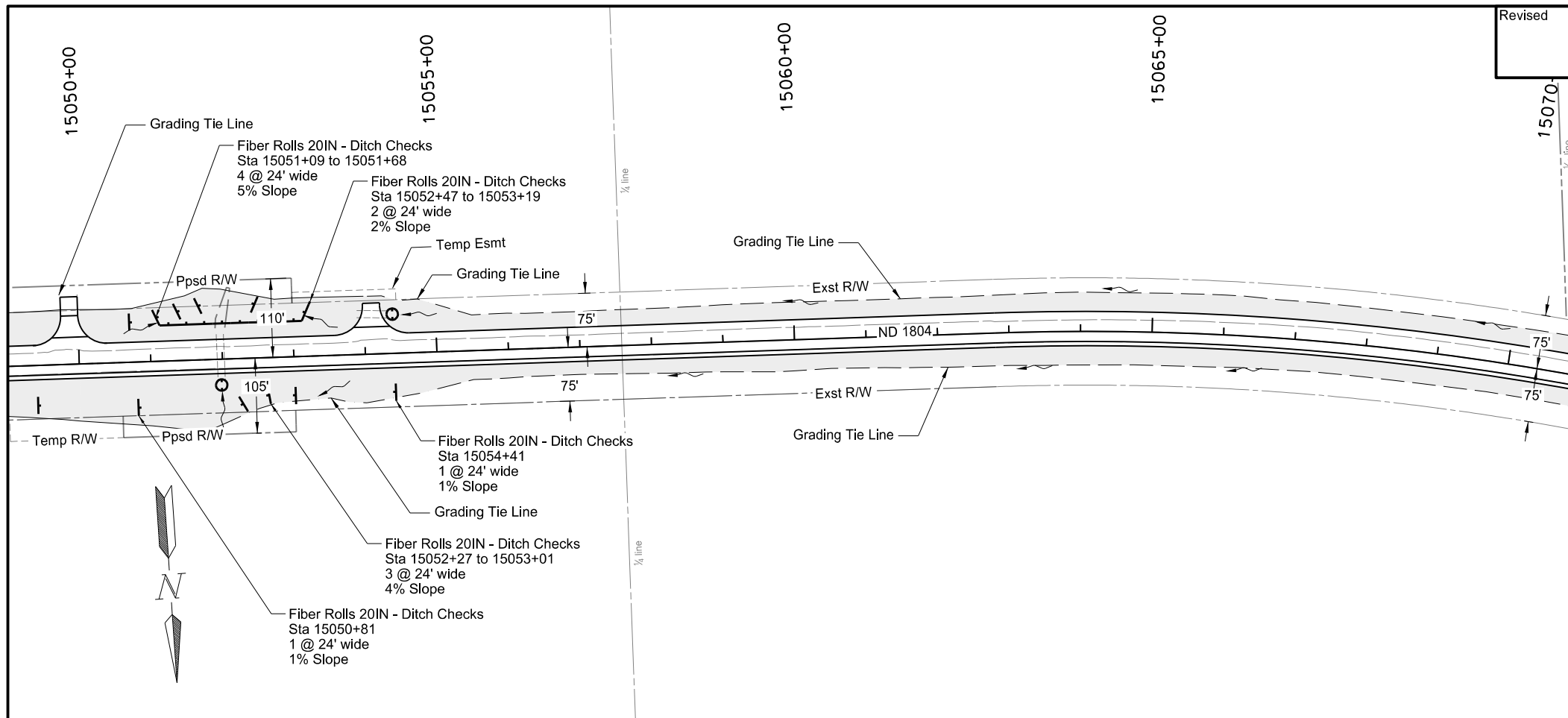
SLOPE & PERIMETER PROTECTION		
Slope	12" Spacing (ft)	20" Spacing (ft)
3:1	45	60
4:1 or Flatter	60	80

LEGEND	
	Grading Tie Line - Cut
	Grading Tie Line - Fill
	Grading Tie Line - Transition
	Temporary Cover Crop & Straw Mulch
	Fiber Rolls (12IN or 20IN)
	Silt Fence Supported
	Flotation Silt Curtain

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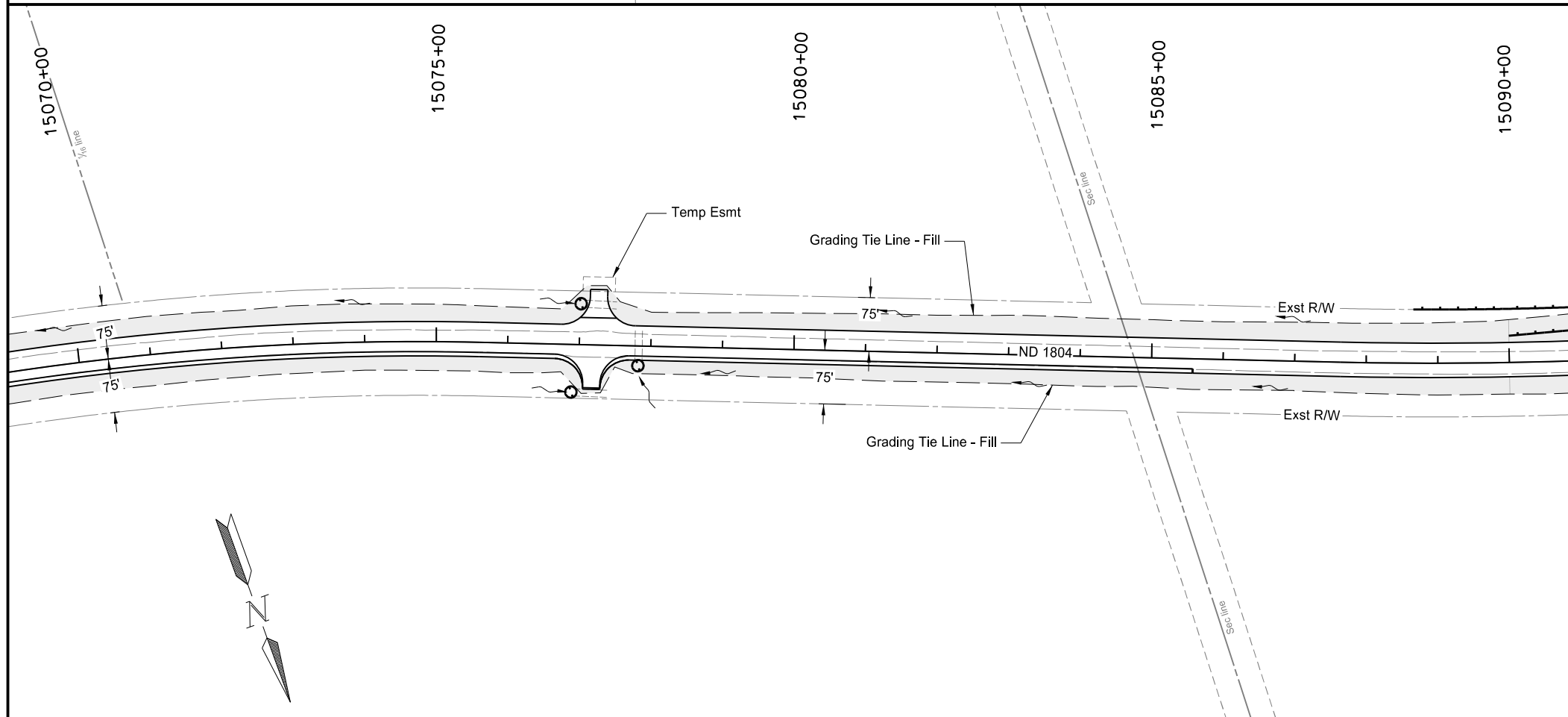


ND 1804 - Jct Tioga Rd to Red Mike Area
 Temporary Sediment & Erosion Control
 Sta 15010+00 to Sta 15050+00
 (SCL1804)



SPEC CODE	BID ITEM	QTY	UNIT
251 2000	TEMPORARY COVER CROP Sta 15050+00 to 15090+00	4.97	ACRE
253 0101	STRAW MULCH Sta 15050+00 to 15090+00	4.97	ACRE
261 0112	FIBER ROLLS 12IN Sta 15050+00 to 15090+00	407	LF
261 0113	REMOVE FIBER ROLLS 12IN Sta 15050+00 to 15090+00	407	LF
261 0120	FIBER ROLLS 20IN Sta 15050+00 to 15090+00	264	LF
261 0121	REMOVE FIBER ROLLS 20IN Sta 15050+00 to 15090+00	264	LF

For ditch grades encountered in the field not listed, use the following spacing:
 Spacing = { Diameter of Roll (ft) - Entrenchment (ft) } / Slope (ft/ft)

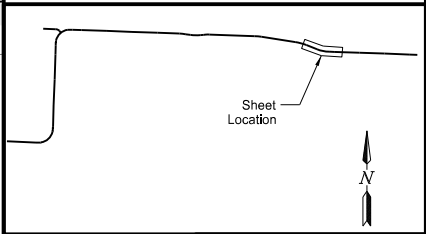


DITCH CHECK SPACING		
Ditch Grade	12" Spacing (ft)	20" Spacing (ft)
1%	85	140
2%	45	70
3%	30	50
4%	20	35
5%	15	30

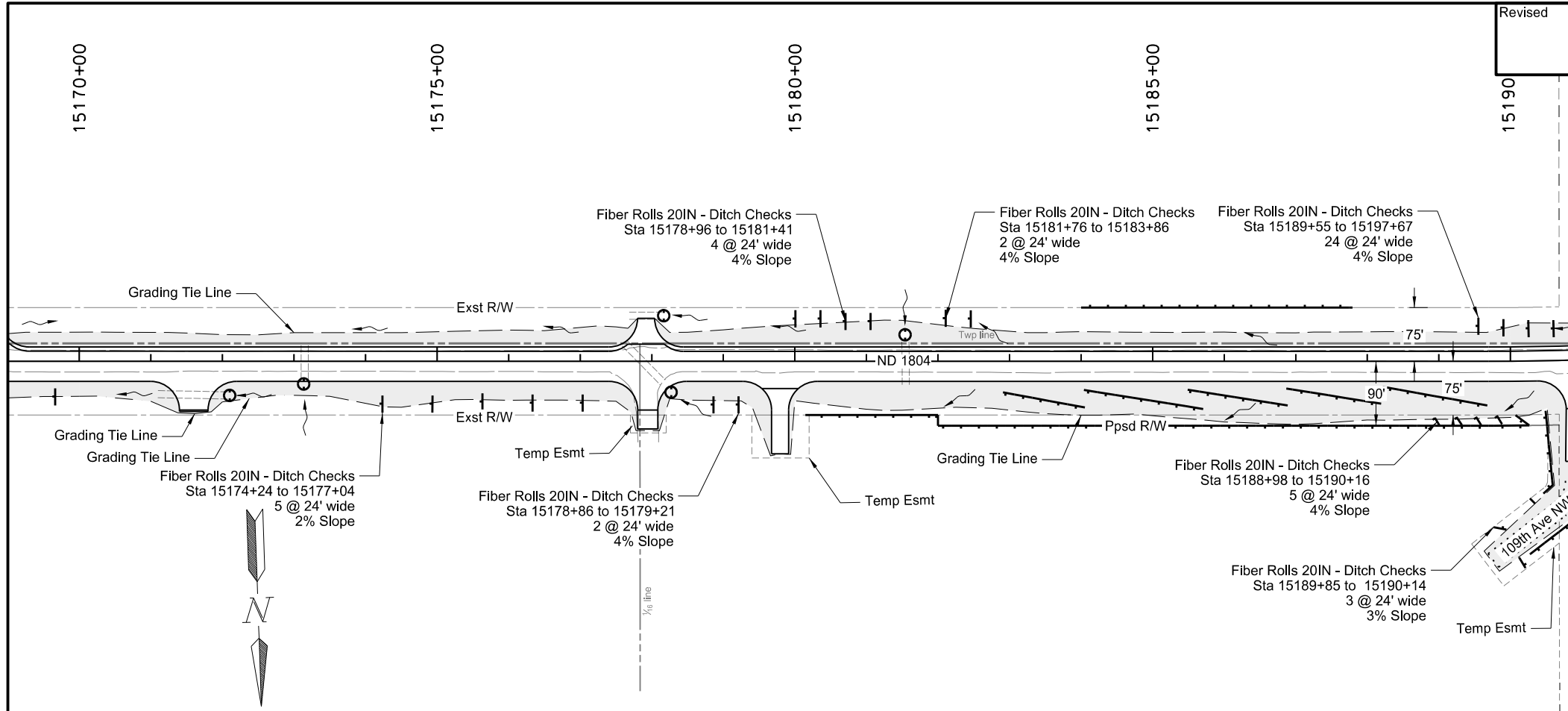
SLOPE & PERIMETER PROTECTION		
Slope	12" Spacing (ft)	20" Spacing (ft)
3:1	45	60
4:1 or Flatter	60	80

LEGEND	
	Grading Tie Line - Cut
	Grading Tie Line - Fill
	Grading Tie Line - Transition
	Temporary Cover Crop & Straw Mulch
	Fiber Rolls (12IN or 20IN)
	Silt Fence Supported
	Flotation Silt Curtain

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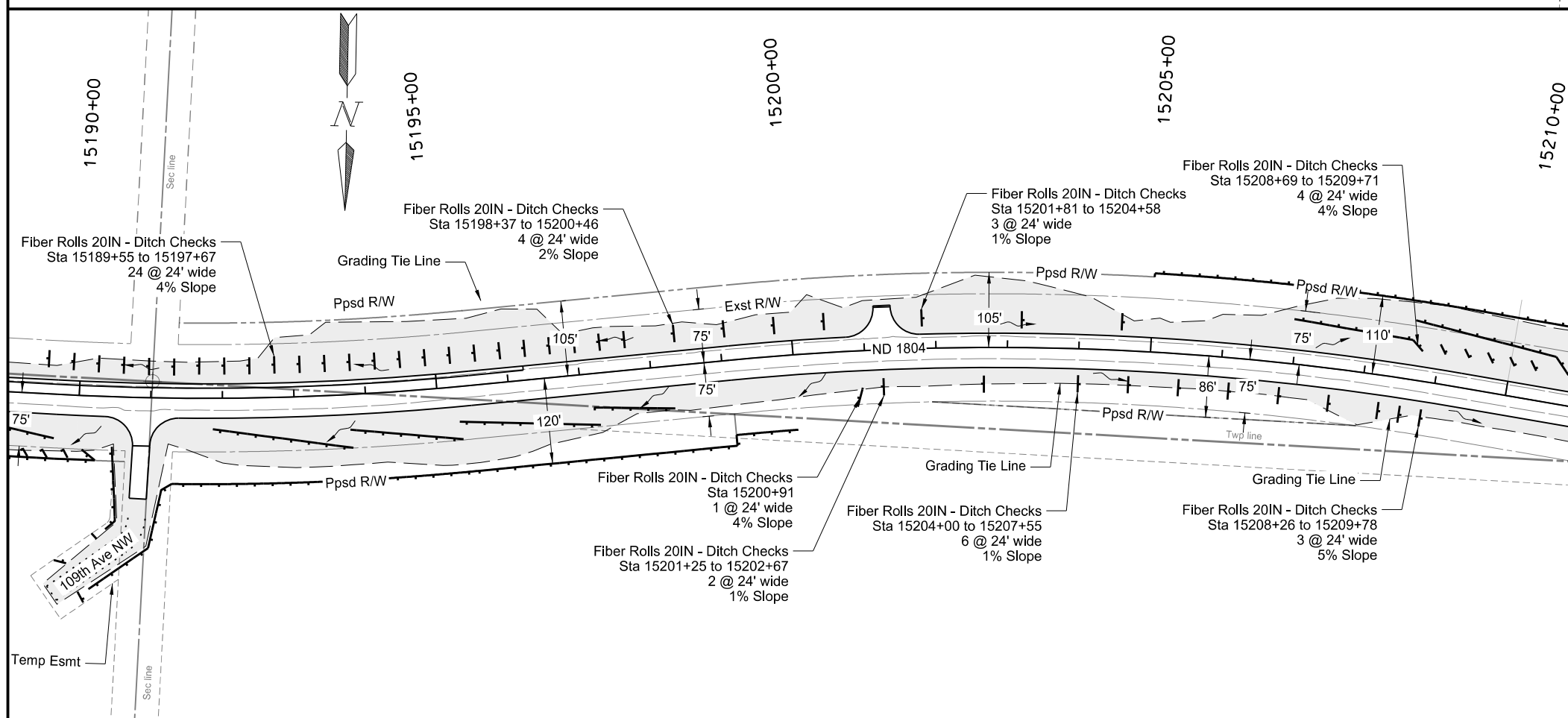


ND 1804 - Jct Tioga Rd to Red Mike Area
 Temporary Sediment & Erosion Control
 Sta 15050+00 to Sta 15090+00
 (SCL1804)



SPEC CODE	BID ITEM	QTY	UNIT
251 2000	TEMPORARY COVER CROP Sta 15170+00 to 15210+00	7.32	ACRE
253 0101	STRAW MULCH Sta 15170+00 to 15210+00	7.32	ACRE
261 0112	FIBER ROLLS 12IN Sta 15170+00 to 15210+00	4,903	LF
261 0113	REMOVE FIBER ROLLS 12IN Sta 15170+00 to 15210+00	4,903	LF
261 0120	FIBER ROLLS 20IN Sta 15170+00 to 15210+00	1,538	LF
261 0121	REMOVE FIBER ROLLS 20IN Sta 15170+00 to 15210+00	1,538	LF

For ditch grades encountered in the field not listed, use the following spacing:
 Spacing = { Diameter of Roll (ft) } / Slope (ft/ft)

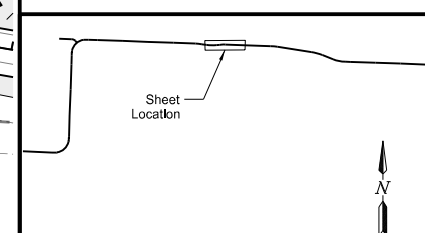


DITCH CHECK SPACING		
Ditch Grade	12" Spacing (ft)	20" Spacing (ft)
1%	85	140
2%	45	70
3%	30	50
4%	20	35
5%	15	30

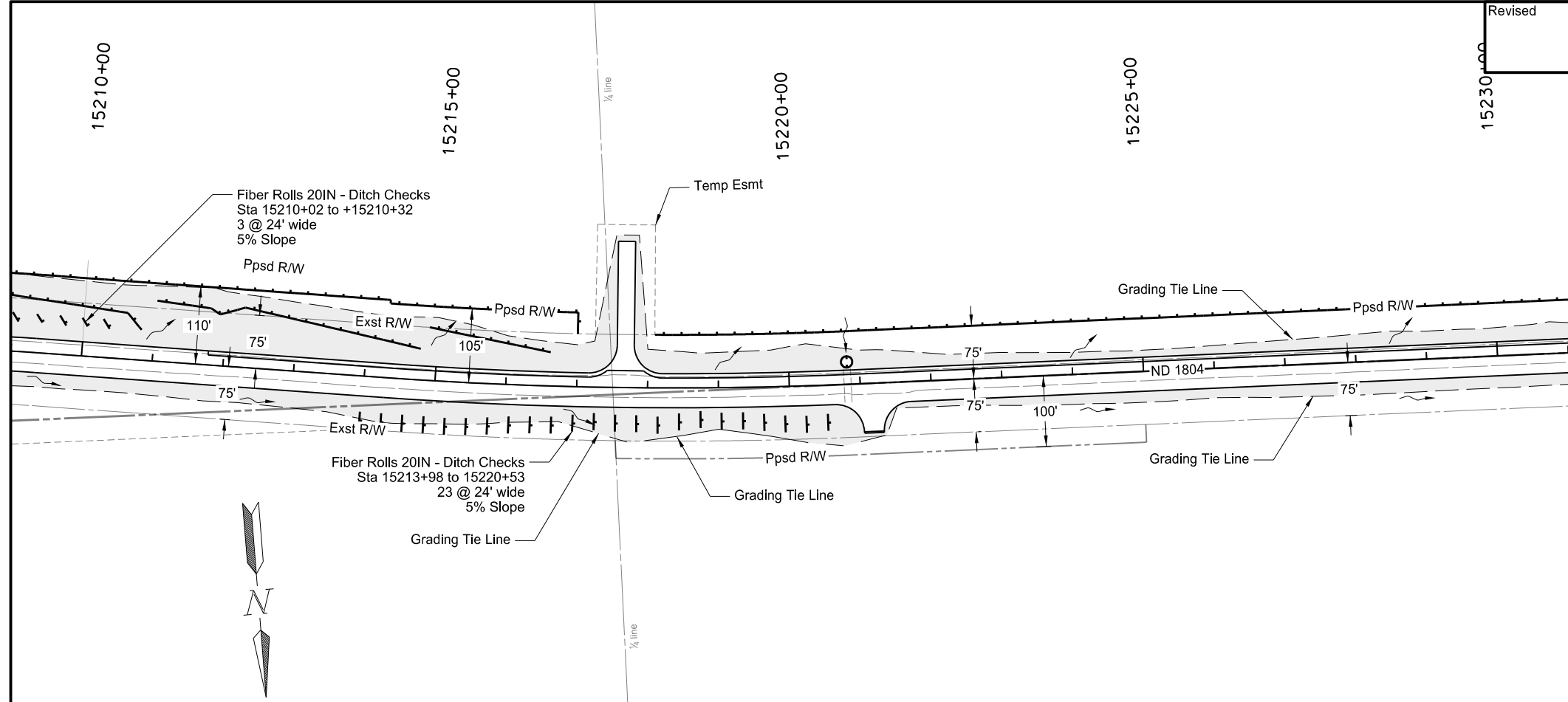
SLOPE & PERIMETER PROTECTION		
Slope	12" Spacing (ft)	20" Spacing (ft)
3:1	45	60
4:1 or Flatter	60	80

LEGEND	
	Grading Tie Line - Cut
	Grading Tie Line - Fill
	Grading Tie Line - Transition
	Temporary Cover Crop & Straw Mulch
	Fiber Rolls (12IN or 20IN)
	SF Silt Fence Supported
	S Flotation Silt Curtain

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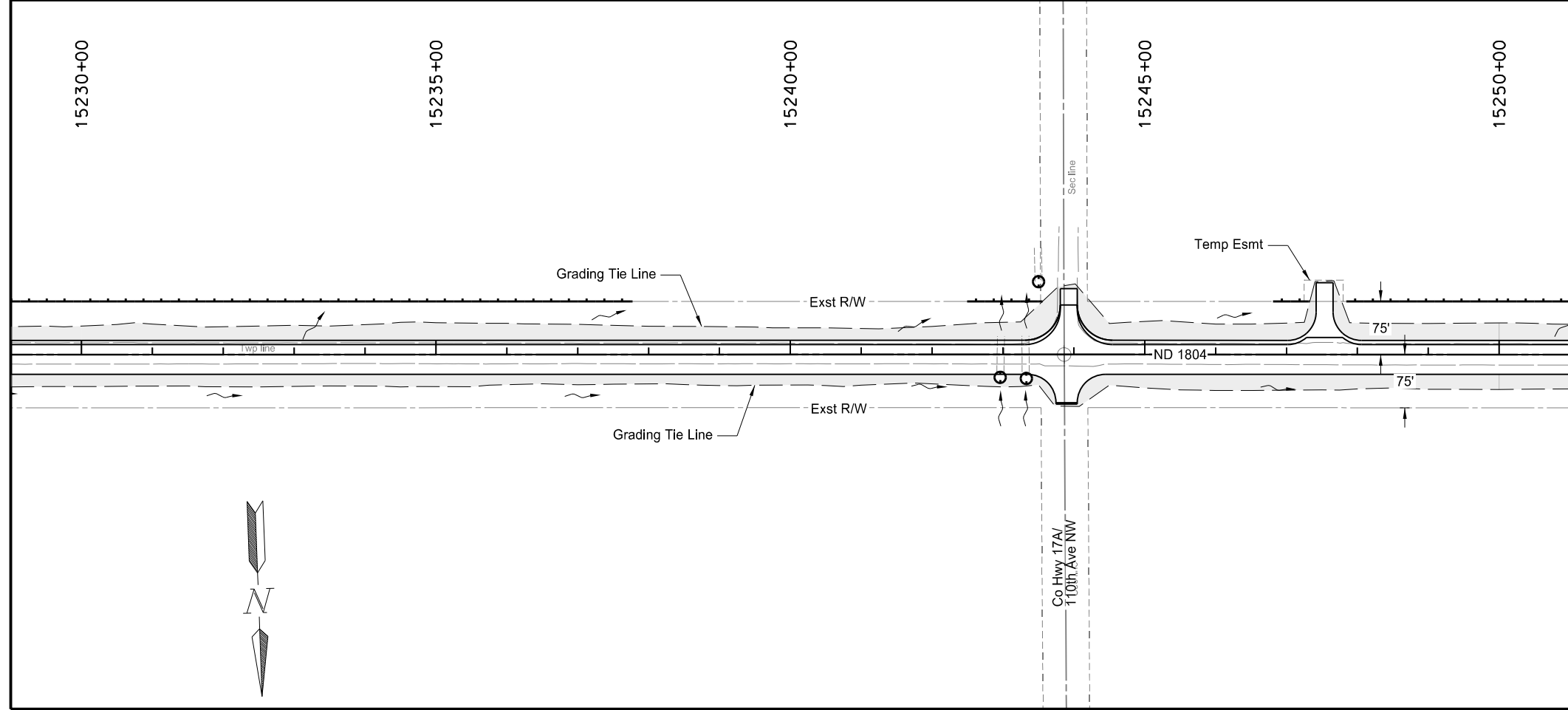


ND 1804 - Jct Tioga Rd to Red Mike Area
 Temporary Sediment & Erosion Control
 Sta 15170+00 to Sta 15210+00
 (SCL1804)



SPEC CODE	BID ITEM	QTY	UNIT
251 2000	TEMPORARY COVER CROP Sta 15210+00 to 15250+00	4.80	ACRE
253 0101	STRAW MULCH Sta 15210+00 to 15250+00	4.80	ACRE
261 0112	FIBER ROLLS 12IN Sta 15210+00 to 15250+00	3,782	LF
261 0113	REMOVE FIBER ROLLS 12IN Sta 15210+00 to 15250+00	3,782	LF
261 0120	FIBER ROLLS 20IN Sta 15210+00 to 15250+00	624	LF
261 0121	REMOVE FIBER ROLLS 20IN Sta 15210+00 to 15250+00	624	LF

For ditch grades encountered in the field not listed, use the following spacing:
 Spacing = { Diameter of Roll (ft) - Entrenchment (ft) } / Slope (ft/ft)

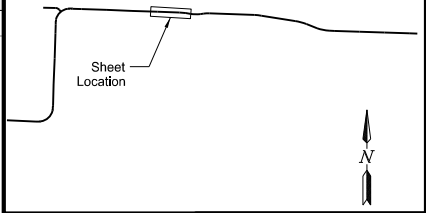


DITCH CHECK SPACING		
Ditch Grade	12" Spacing (ft)	20" Spacing (ft)
1%	85	140
2%	45	70
3%	30	50
4%	20	35
5%	15	30

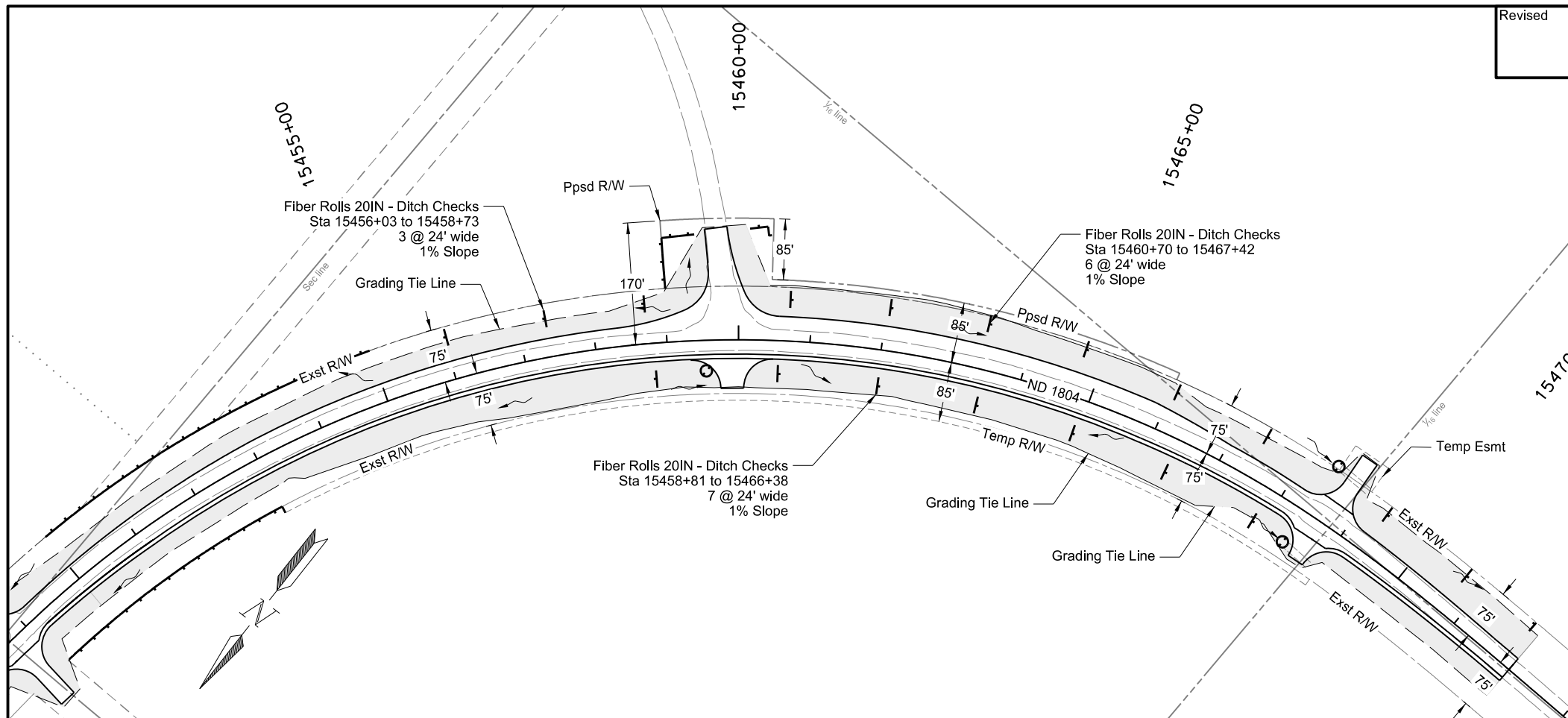
SLOPE & PERIMETER PROTECTION		
Slope	12" Spacing (ft)	20" Spacing (ft)
3:1	45	60
4:1 or Flatter	60	80

LEGEND	
	Grading Tie Line - Cut
	Grading Tie Line - Fill
	Grading Tie Line - Transition
	Temporary Cover Crop & Straw Mulch
	Fiber Rolls (12IN or 20IN)
	Silt Fence Supported
	Flotation Silt Curtain

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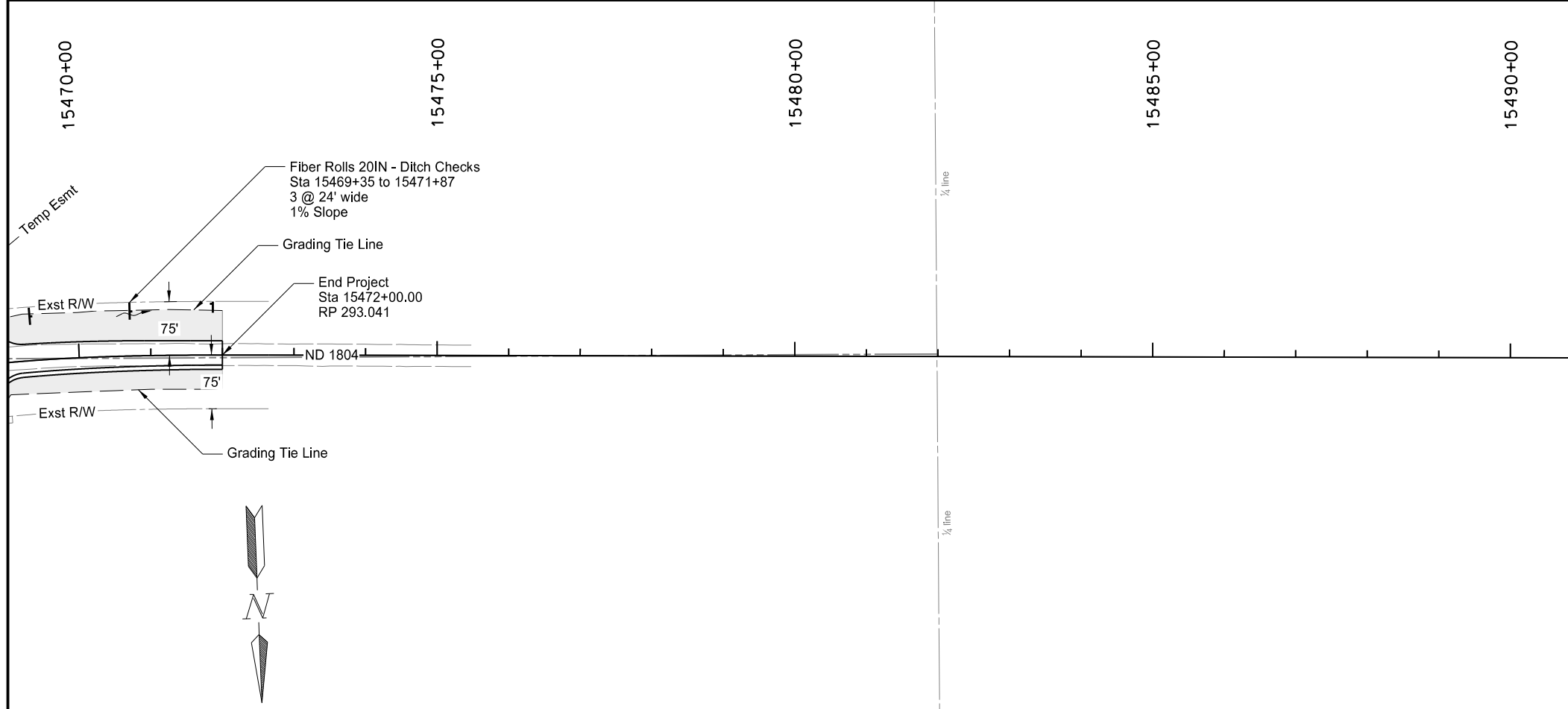


ND 1804 - Jct Tioga Rd to Red Mike Area
 Temporary Sediment & Erosion Control
 Sta 15210+00 to Sta 15250+00
 (SCL1804)



SPEC CODE	BID ITEM	QTY	UNIT
251 2000	TEMPORARY COVER CROP Sta 15450+00 to 15490+00	3.44	ACRE
253 0101	STRAW MULCH Sta 15450+00 to 15490+00	3.44	ACRE
261 0112	FIBER ROLLS 12IN Sta 15450+00 to 15490+00	1,018	LF
261 0113	REMOVE FIBER ROLLS 12IN Sta 15450+00 to 15490+00	1,018	LF
261 0120	FIBER ROLLS 20IN Sta 15450+00 to 15490+00	456	LF
261 0121	REMOVE FIBER ROLLS 20IN Sta 15450+00 to 15490+00	456	LF

For ditch grades encountered in the field not listed, use the following spacing:
 Spacing = { Diameter of Roll (ft) - Entrenchment (ft) } / Slope (ft/ft)

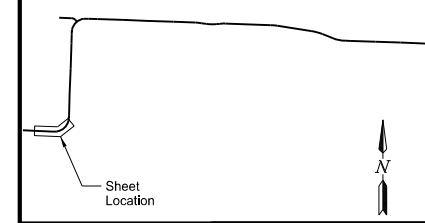


DITCH CHECK SPACING		
Ditch Grade	12" Spacing (ft)	20" Spacing (ft)
1%	85	140
2%	45	70
3%	30	50
4%	20	35
5%	15	30

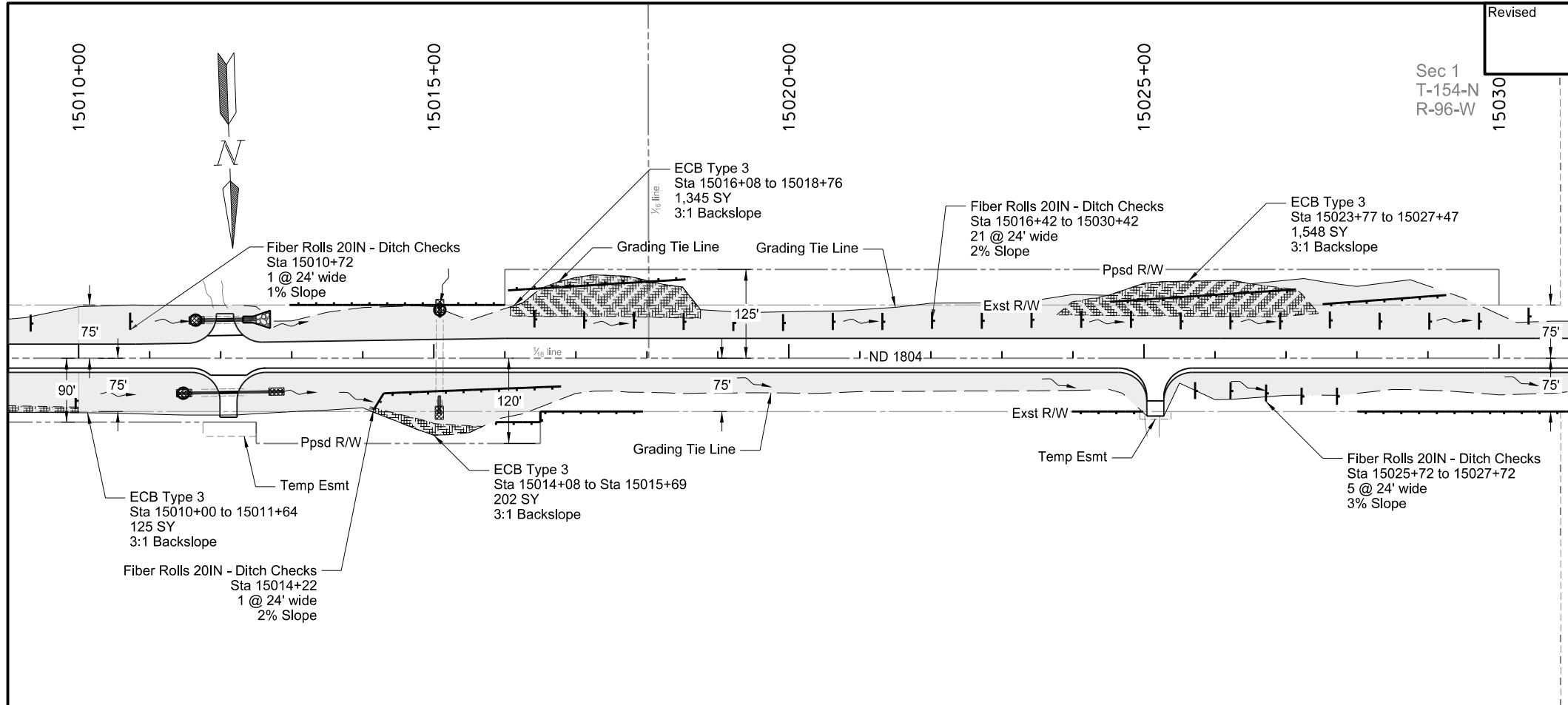
SLOPE & PERIMETER PROTECTION		
Slope	12" Spacing (ft)	20" Spacing (ft)
3:1	45	60
4:1 or Flatter	60	80

LEGEND	
	Grading Tie Line - Cut
	Grading Tie Line - Fill
	Grading Tie Line - Transition
	Temporary Cover Crop & Straw Mulch
	Fiber Rolls (12IN or 20IN)
	SF Silt Fence Supported
	S Flotation Silt Curtain

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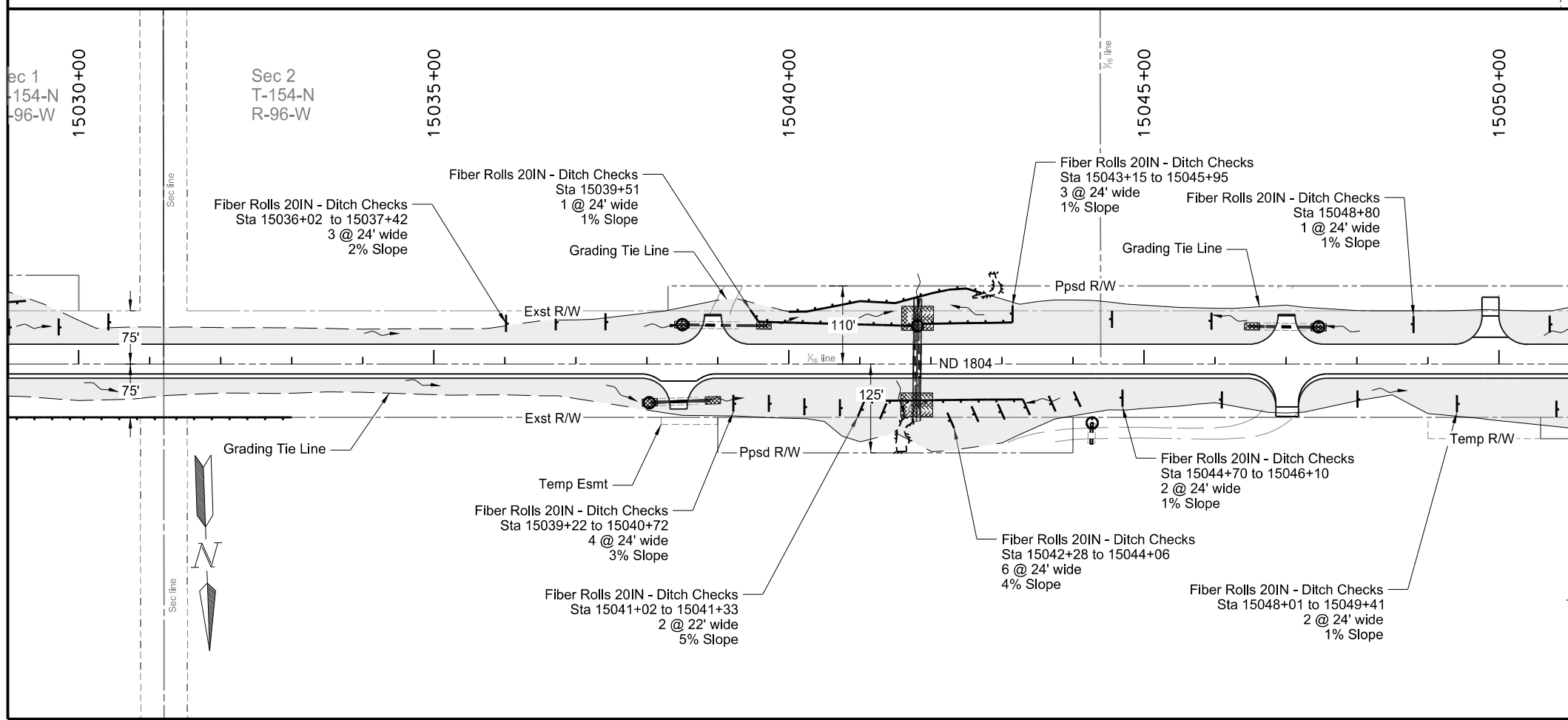


ND 1804 - Jct Tioga Rd to Red Mike Area
 Temporary Sediment & Erosion Control
 Sta 15450+00 to Sta 15490+00
 (SCL1804)



SPEC CODE	BID ITEM	QTY	UNIT
251 0200	SEEDING CLASS II Sta 15010+00 to 15050+00	8.19	ACRE
253 0101	STRAW MULCH Sta 15010+00 to 15050+00	8.19	ACRE
255 0103	ECB TYPE 3		
	Sta 15010+00 to 15011+64	125	SY
	Sta 15014+08 to 15015+69	202	SY
	Sta 15016+08 to 15018+76	1,345	SY
	Sta 15023+77 to 15027+47	1,548	SY
261 0112	FIBER ROLLS 12IN Sta 15010+00 to 15050+00	3,208	LF
261 0120	FIBER ROLLS 20IN Sta 15010+00 to 15050+00	1,268	LF

For ditch grades encountered in the field not listed, use the following spacing:
 Spacing = { Diameter of Roll (ft) - Entrenchment (ft) } / Slope (ft/ft)



DITCH CHECK SPACING		
Ditch Grade	12" Spacing (ft)	20" Spacing (ft)
1%	85	140
2%	45	70
3%	30	50
4%	20	35
5%	15	30

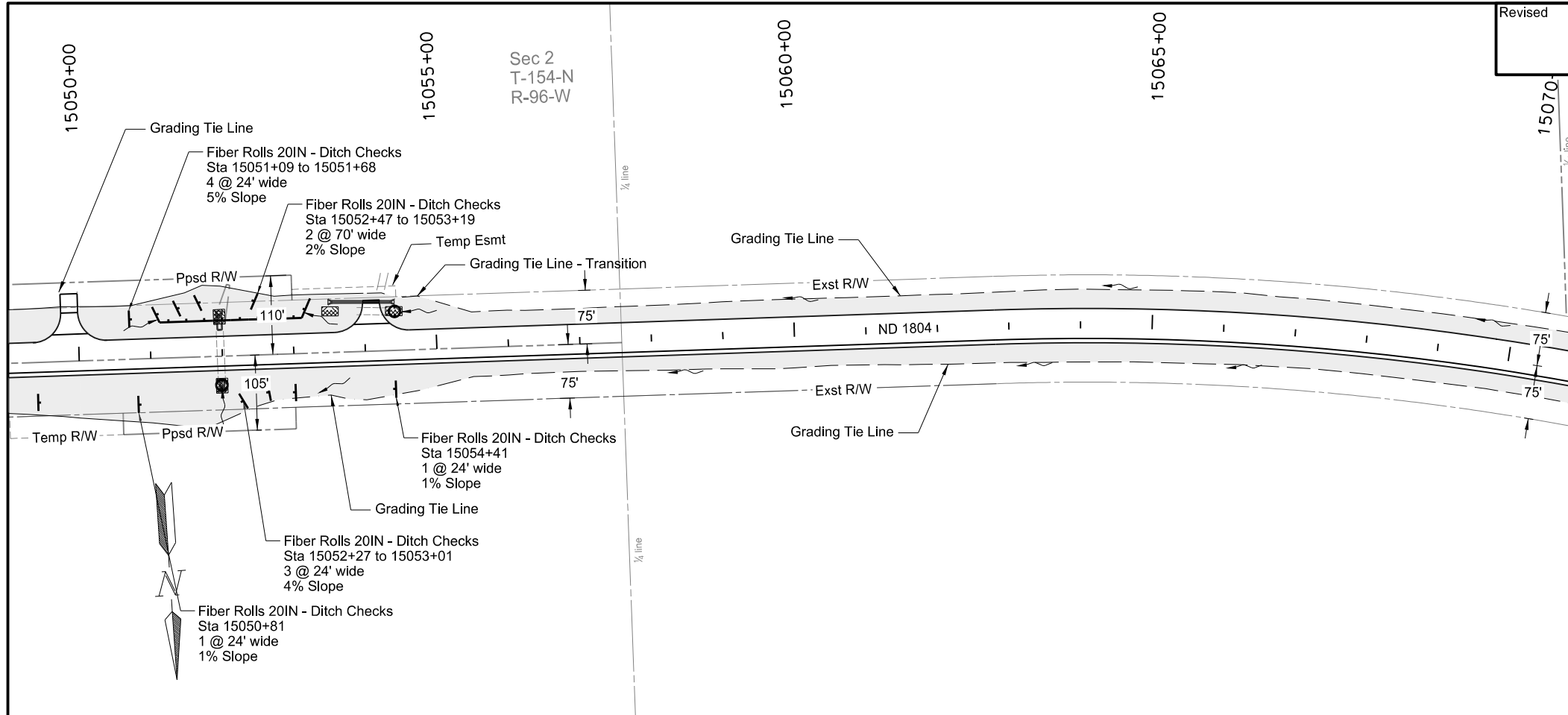
SLOPE & PERIMETER PROTECTION		
Slope	12" Spacing (ft)	20" Spacing (ft)
3:1	45	60
4:1 or Flatter	60	80

LEGEND

- Grading Tie Line - Cut
- Grading Tie Line - Fill
- Grading Tie Line - Transition
- Seeding Class II & Straw Mulch
- Erosion Control Blanket
- Riprap
- Fiber Rolls (12IN or 20IN)

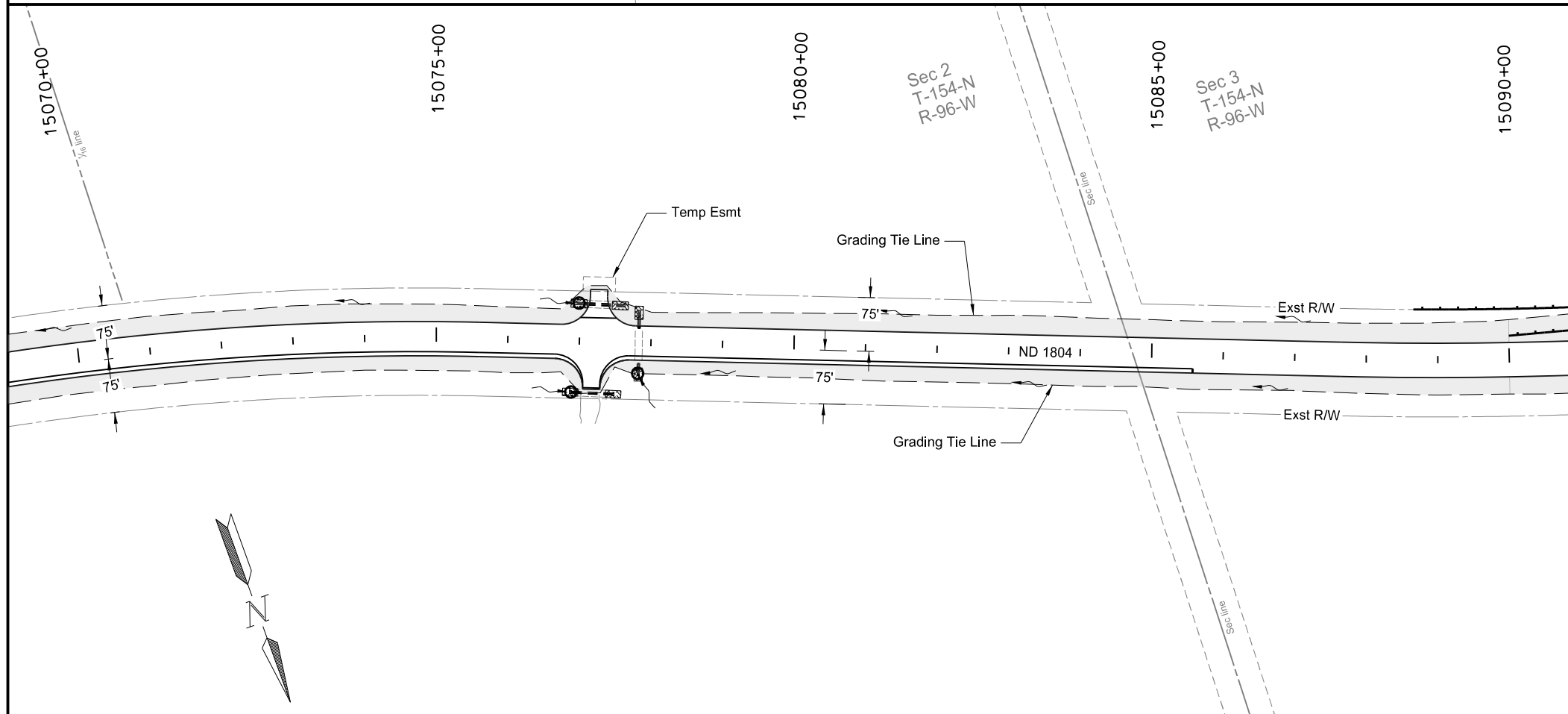
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ND 1804 - Jct Tioga Rd to Red Mike Area
 Permanent Sediment & Erosion Control
 Sta 15010+00 to Sta 15050+00
 (SCL1804)



SPEC CODE	BID ITEM	QTY	UNIT
251 0200	SEEDING CLASS II Sta 15050+00 to 15090+00	4.97	ACRE
253 0101	STRAW MULCH Sta 15050+00 to 15090+00	4.97	ACRE
261 0112	FIBER ROLLS 12IN Sta 15050+00 to 15090+00	407	LF
261 0120	FIBER ROLLS 20IN Sta 15050+00 to 15090+00	264	LF

For ditch grades encountered in the field not listed, use the following spacing:
 Spacing = { Diameter of Roll (ft) - Entrenchment (ft) } / Slope (ft/ft)

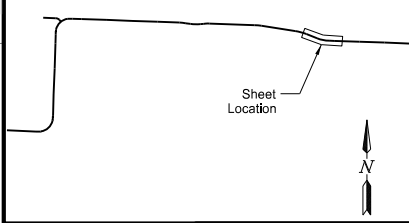


DITCH CHECK SPACING		
Ditch Grade	12" Spacing (ft)	20" Spacing (ft)
1%	85	140
2%	45	70
3%	30	50
4%	20	35
5%	15	30

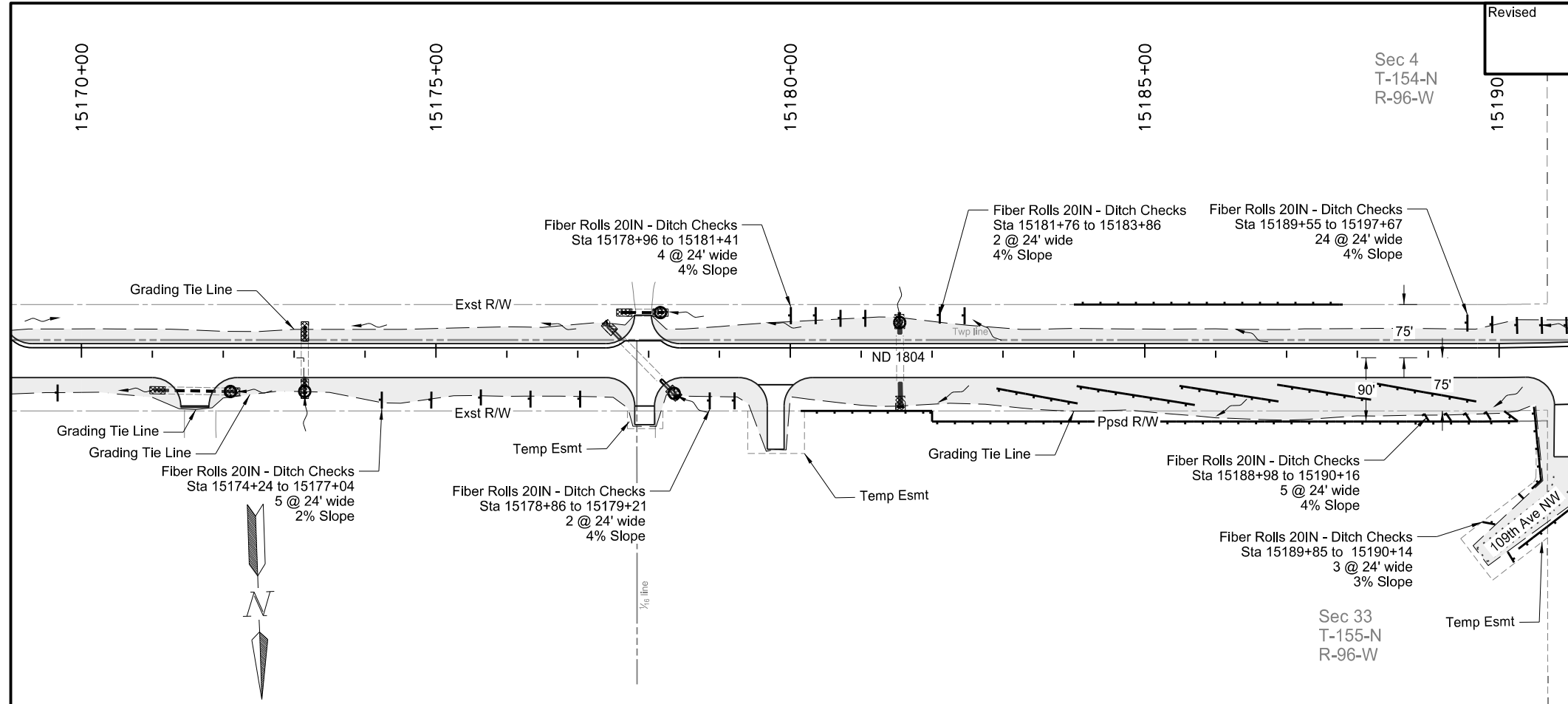
SLOPE & PERIMETER PROTECTION		
Slope	12" Spacing (ft)	20" Spacing (ft)
3:1	45	60
4:1 or Flatter	60	80

LEGEND	
	Grading Tie Line - Cut
	Grading Tie Line - Fill
	Grading Tie Line - Transition
	Seeding Class II & Straw Mulch
	Erosion Control Blanket
	Riprap
	Fiber Rolls (12IN or 20IN)

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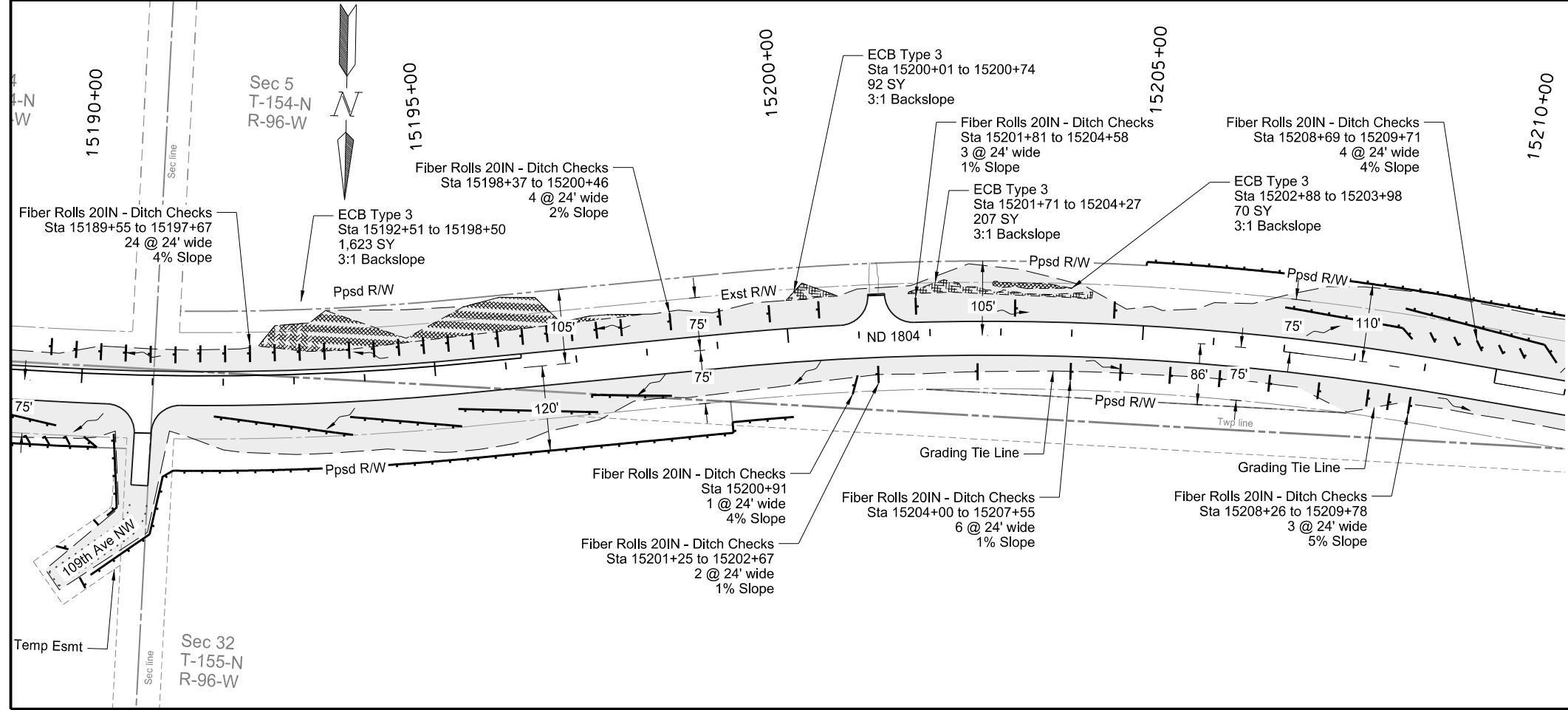


ND 1804 - Jct Tioga Rd to Red Mike Area
 Permanent Sediment & Erosion Control
 Sta 15050+00 to Sta 15090+00
 (SCL1804)



SPEC CODE	BID ITEM	QTY	UNIT
251 0200	SEEDING CLASS II Sta 15170+00 to 15210+00	7.33	ACRE
253 0101	STRAW MULCH Sta 15170+00 to 15210+00	7.33	ACRE
255 0103	ECB TYPE 3 Sta 15192+51 to 15198+01 Sta 15200+01 to 15200+74 Sta 15201+71 to 15204+27 Sta 15202+88 to 15203+98	1,623 92 207 70	SY
261 0112	FIBER ROLLS 12IN Sta 15170+00 to 15210+00	4,903	LF
261 0120	FIBER ROLLS 20IN Sta 15170+00 to 15210+00	1,538	LF

For ditch grades encountered in the field not listed, use the following spacing:
 Spacing = { Diameter of Roll (ft) - Entrenchment (ft) } / Slope (ft/ft)



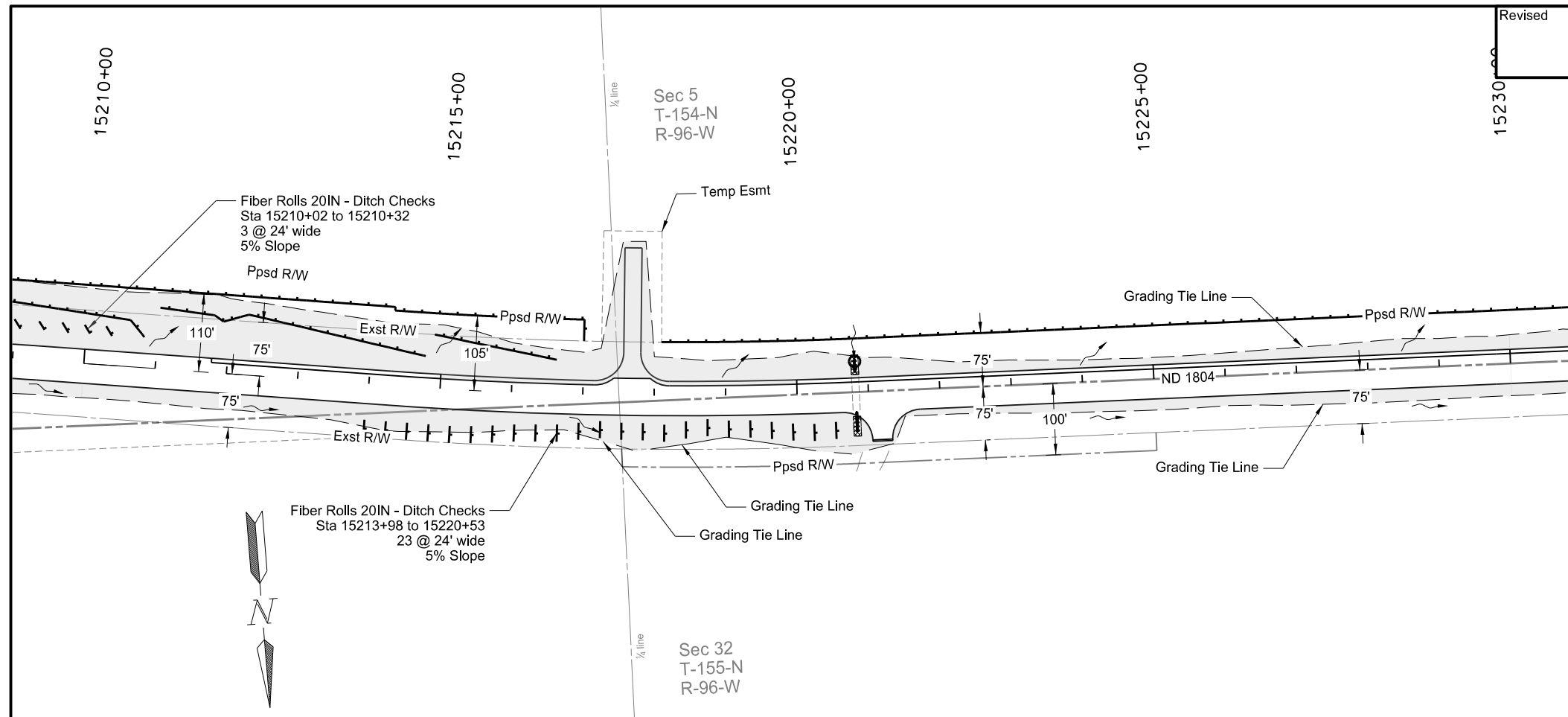
DITCH CHECK SPACING		
Ditch Grade	12" Spacing (ft)	20" Spacing (ft)
1%	85	140
2%	45	70
3%	30	50
4%	20	35
5%	15	30

SLOPE & PERIMETER PROTECTION		
Slope	12" Spacing (ft)	20" Spacing (ft)
3:1	45	60
4:1 or Flatter	60	80

LEGEND	
	Grading Tie Line - Cut
	Grading Tie Line - Fill
	Grading Tie Line - Transition
	Seeding Class II & Straw Mulch
	Erosion Control Blanket
	Riprap
	Fiber Rolls (12IN or 20IN)

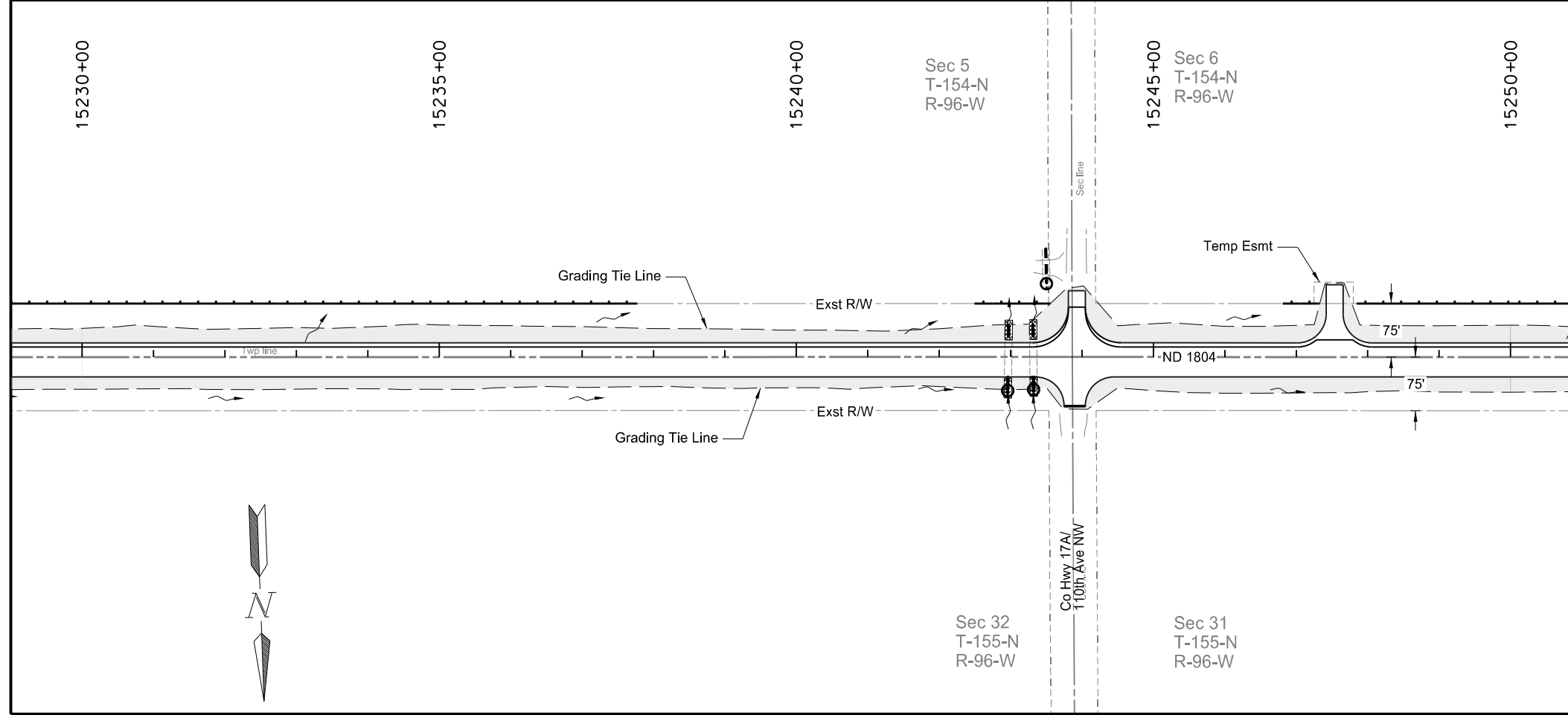
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ND 1804 - Jct Tioga Rd to Red Mike Area
 Permanent Sediment & Erosion Control
 Sta 15170+00 to Sta 15210+00
 (SCL1804)



SPEC CODE	BID ITEM	QTY	UNIT
251 0200	SEEDING CLASS II Sta 15210+00 to 15250+00	4.95	ACRE
253 0101	STRAW MULCH Sta 15210+00 to 15250+00	4.95	ACRE
261 0112	FIBER ROLLS 12IN Sta 15210+00 to 15250+00	3,782	LF
261 0120	FIBER ROLLS 20IN Sta 15210+00 to 15250+00	624	LF

For ditch grades encountered in the field not listed, use the following spacing:
 Spacing = { Diameter of Roll (ft) - Entrenchment (ft) } / Slope (ft/ft)

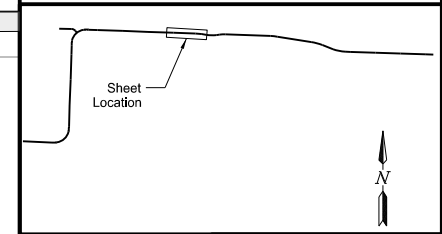


DITCH CHECK SPACING		
Ditch Grade	12" Spacing (ft)	20" Spacing (ft)
1%	85	140
2%	45	70
3%	30	50
4%	20	35
5%	15	30

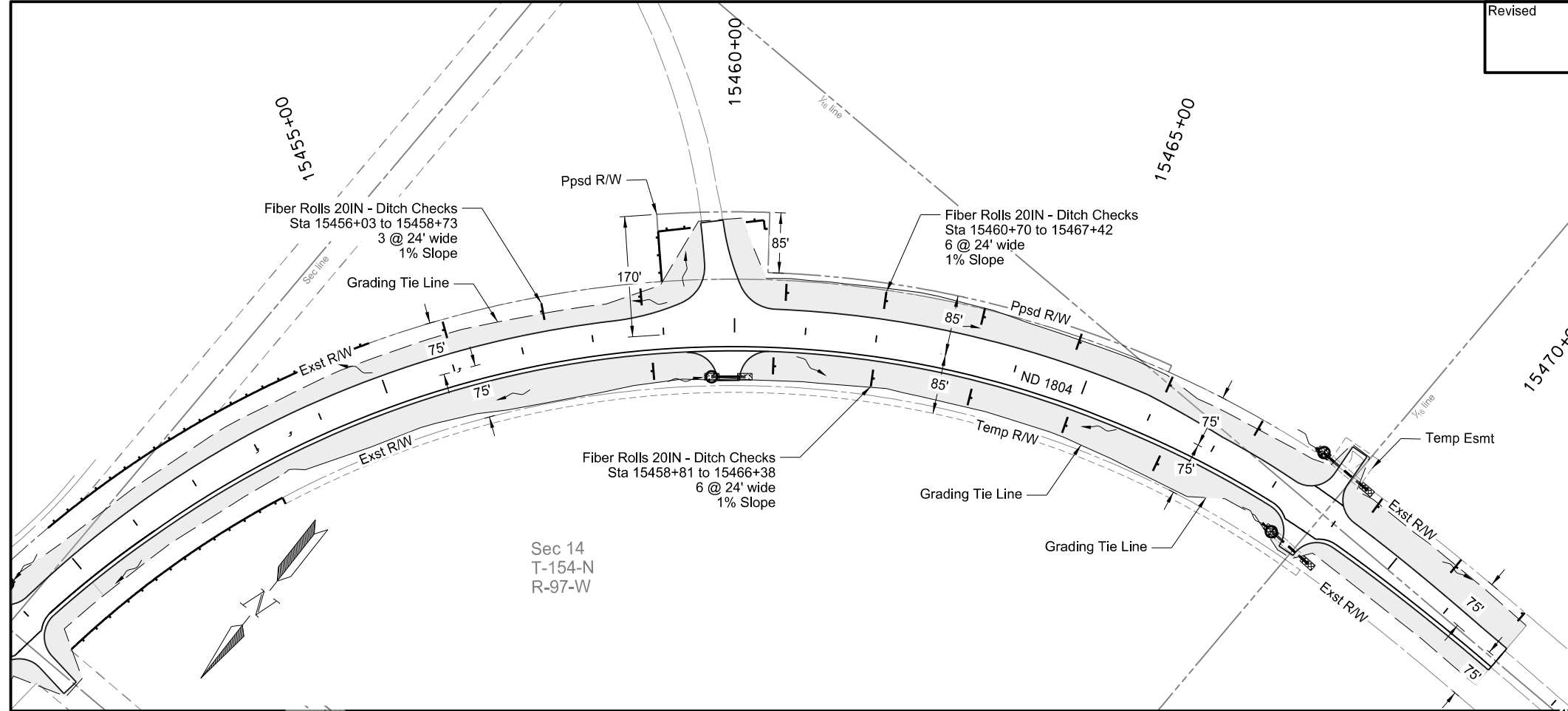
SLOPE & PERIMETER PROTECTION		
Slope	12" Spacing (ft)	20" Spacing (ft)
3:1	45	60
4:1 or Flatter	60	80

LEGEND	
	Grading Tie Line - Cut
	Grading Tie Line - Fill
	Grading Tie Line - Transition
	Seeding Class II & Straw Mulch
	Erosion Control Blanket
	Riprap
	Fiber Rolls (12IN or 20IN)

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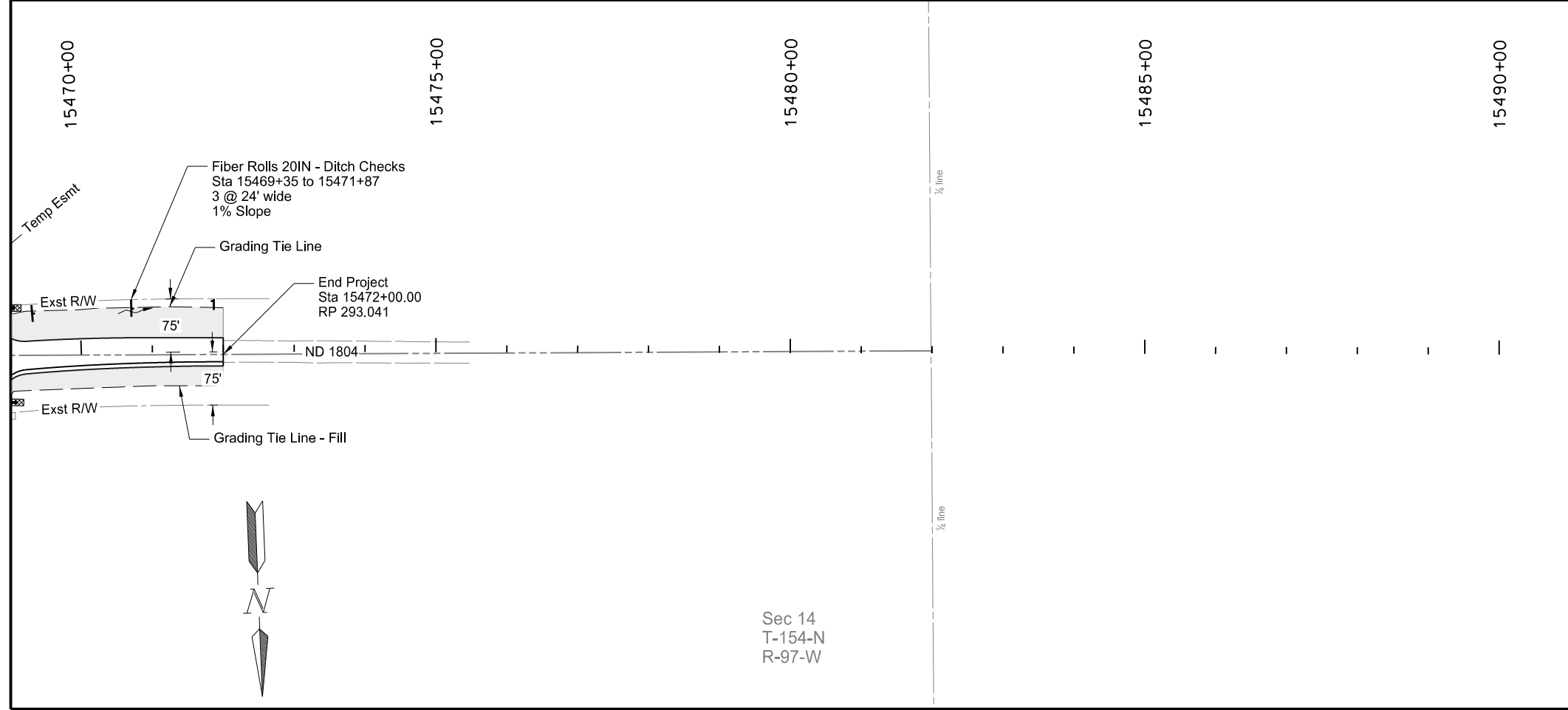


ND 1804 - Jct Tioga Rd to Red Mike Area
 Permanent Sediment & Erosion Control
 Sta 15210+00 to Sta 15250+00
 (SCL1804)



SPEC CODE	BID ITEM	QTY	UNIT
251 0200	SEEDING CLASS II Sta 15450+00 to 15490+00	3.44	ACRE
253 0101	STRAW MULCH Sta 15450+00 to 15490+00	3.44	ACRE
261 0112	FIBER ROLLS 12IN Sta 15450+00 to 15490+00	1,018	LF
261 0120	FIBER ROLLS 20IN Sta 15450+00 to 15490+00	456	LF

For ditch grades encountered in the field not listed, use the following spacing:
 Spacing = { Diameter of Roll (ft) - Entrenchment (ft) } / Slope (ft/ft)

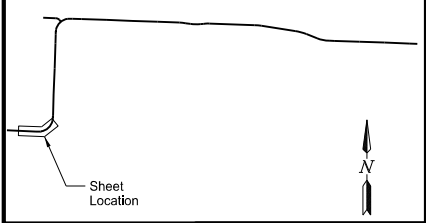


DITCH CHECK SPACING		
Ditch Grade	12" Spacing (ft)	20" Spacing (ft)
1%	85	140
2%	45	70
3%	30	50
4%	20	35
5%	15	30

SLOPE & PERIMETER PROTECTION		
Slope	12" Spacing (ft)	20" Spacing (ft)
3:1	45	60
4:1 or Flatter	60	80

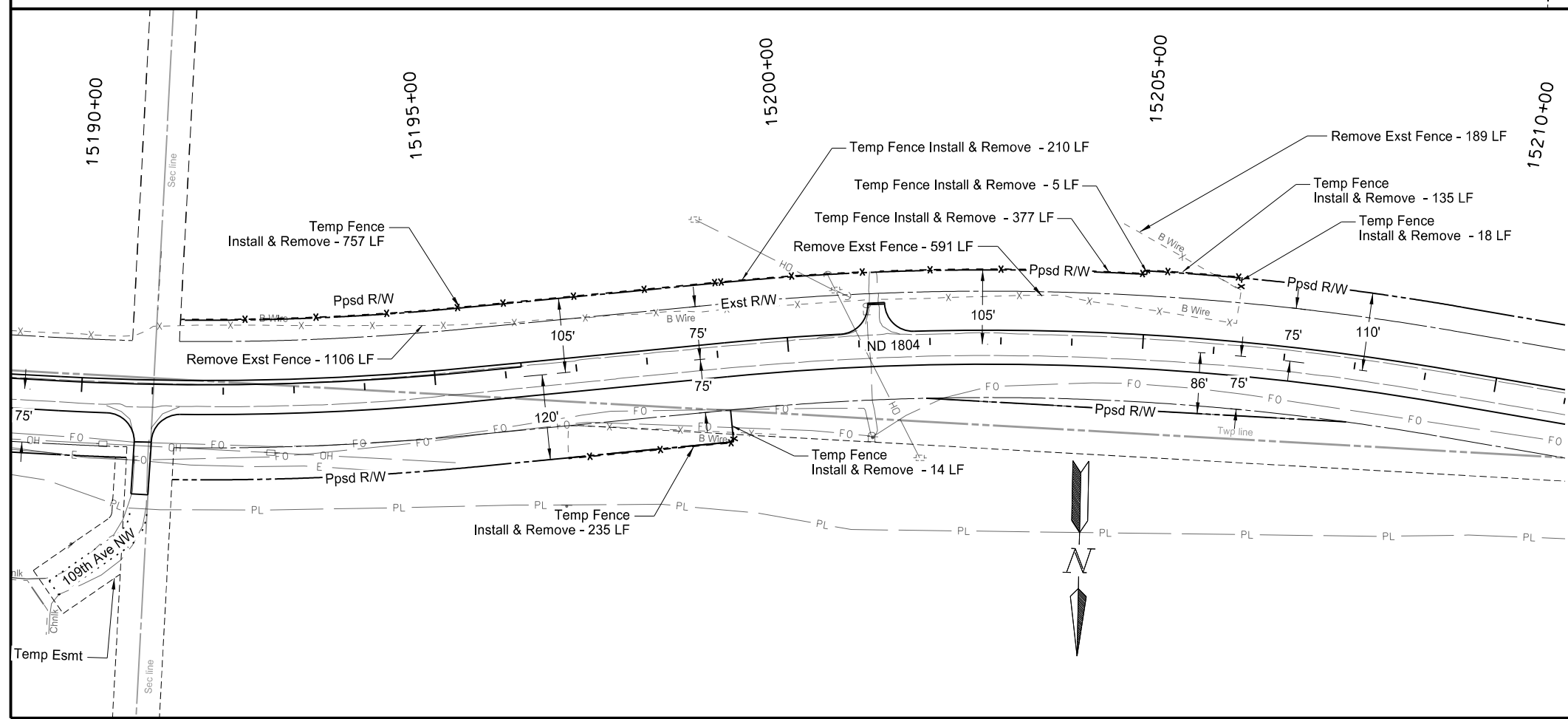
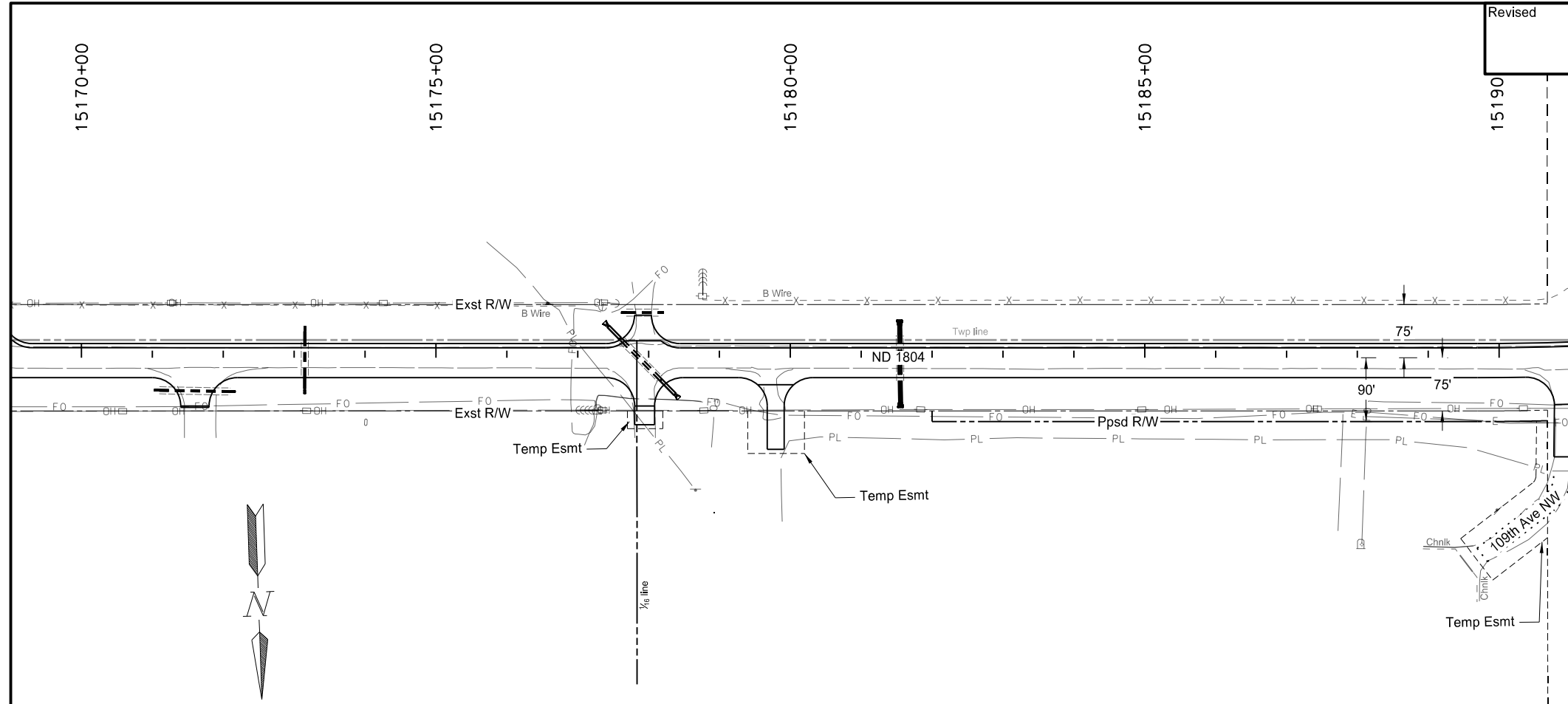
LEGEND	
	Grading Tie Line - Cut
	Grading Tie Line - Fill
	Grading Tie Line - Transition
	Seeding Class II & Straw Mulch
	Erosion Control Blanket
	Riprap
	Fiber Rolls (12IN or 20IN)

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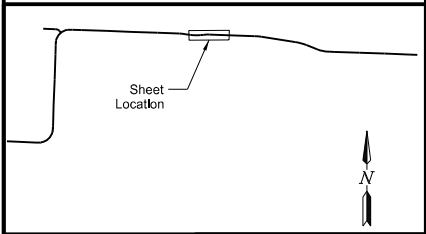


ND 1804 - Jct Tioga Rd to Red Mike Area
 Permanent Sediment & Erosion Control
 Sta 15450+00 to Sta 15490+00
 (SCL1804)

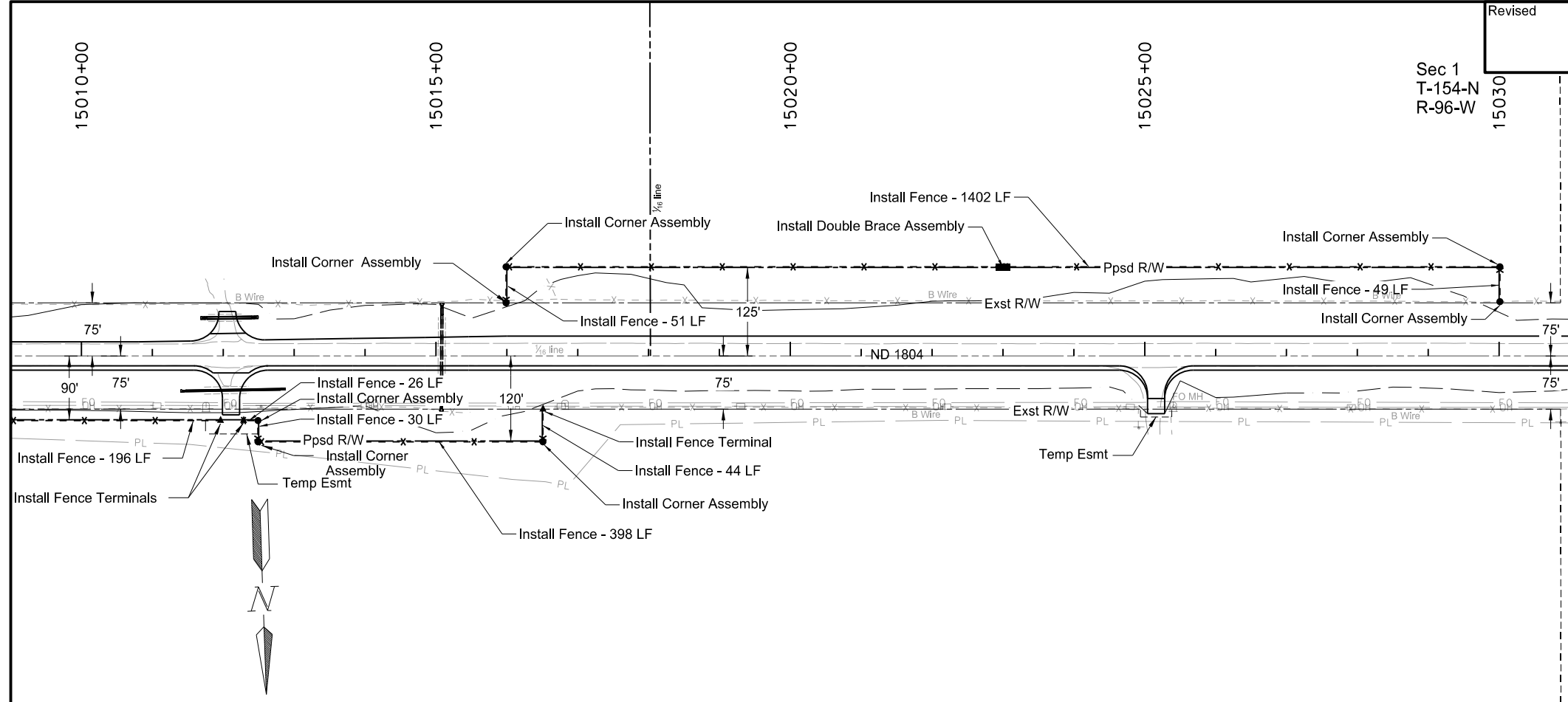
SPEC CODE	BID ITEM	QTY	UNIT
202	0312 REMOVE EXISTING FENCE		
	Sta 15190+01 - 82' Lt to 15201+11 - 66' Lt	1,106	LF
	Sta 15201+33 - 66' Lt to 15205+98 - 108' Lt	591	LF
	Sta 15206+31 - 93' Lt to 15204+66 - 175' Lt	189	LF
752	0905 TEMPORARY FENCE		
	Sta 15191+40 - 129' Lt to 15199+09 - 129' Lt	757	LF
	Sta 15196+78 - 119' Rt to 15199+10 - 119' Lt	235	LF
	Sta 15199+10 - 119' Rt to 15199+10 - 107 Rt	14	LF
	Sta 15199+09 - 104' Lt to 15201+14 - 104' Lt	210	LF
	Sta 15201+33 - 104' Lt to 15205+01 - 104' Lt	377	LF
	Sta 15205+01 - 104' Lt to 15205+01 - 111' Lt	5	LF
	Sta 15205+01 - 111' Lt to 15206+31 - 111' Lt	135	LF
	Sta 15206+31 - 111' Lt to 15206+31 - 93' Lt	18	LF



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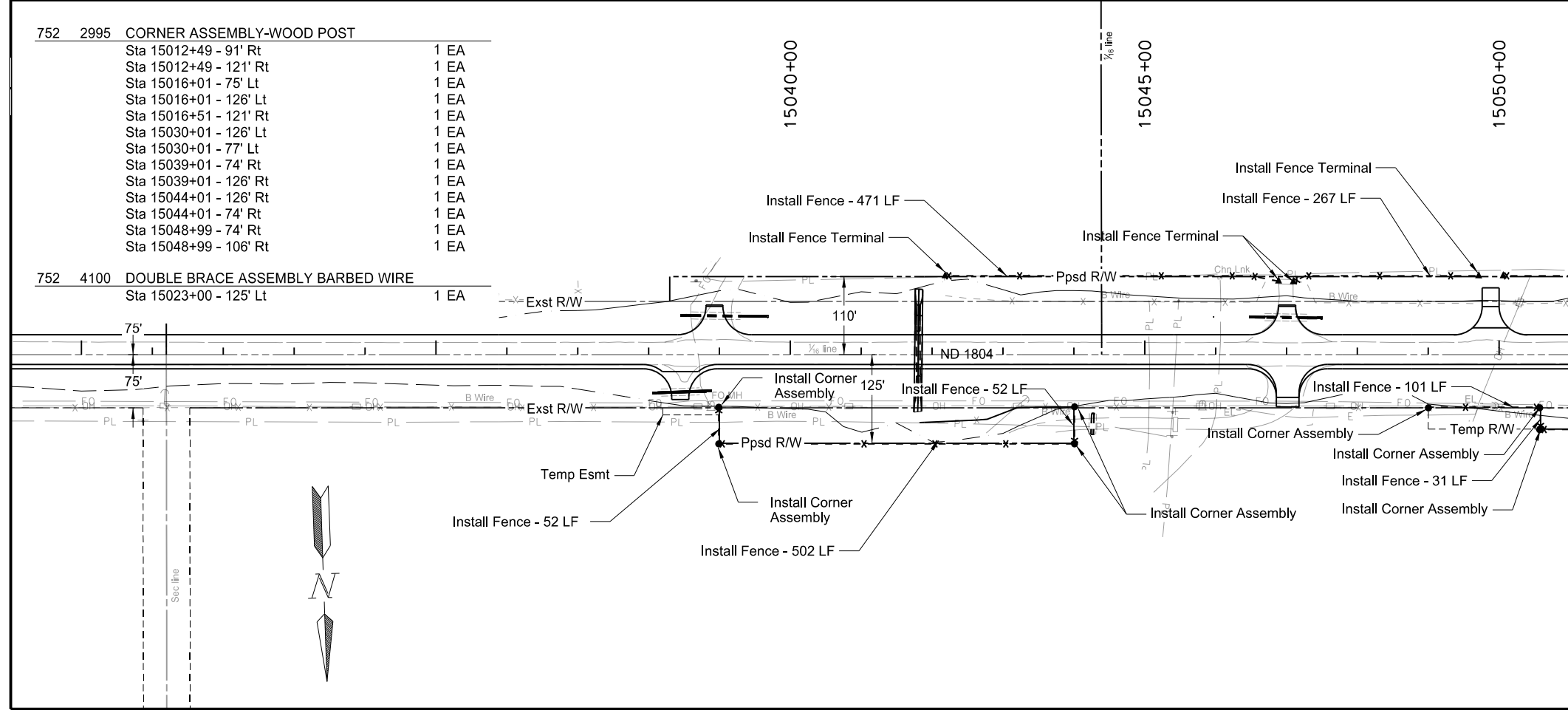
ND 1804 - Jct Tioga Rd to Red Mike Area
 Temporary Fencing Layouts
 Sta 15170+00 to Sta 15210+00
 (SCL1804)



SPEC CODE	BID ITEM	QTY	UNIT
752 0200	FENCE BARBED WIRE 4 STRAND		
	Sta 15010+00 - 89' Rt to 15011+96 - 91' Rt	196	LF
	Sta 15012+29 - 91' Rt to 15012+49 - 91' Rt	26	LF
	Sta 15012+49 - 91' Rt to 15012+49 - 119' Rt	30	LF
	Sta 15012+51 - 129' Rt to 15016+51 - 119' Rt	398	LF
	Sta 15016+49 - 119' Rt to 15016+49 - 75' Rt	44	LF
	Sta 15015+99 - 75' Lt to 15015+99 - 126' Lt	51	LF
	Sta 15015+99 - 126' Lt to 15030+01 - 126' Lt	1,402	LF
	Sta 15030+01 - 126' Lt to 15030+01 - 77' Lt	49	LF
	Sta 15038+99 - 74' Rt to 15038+99 - 126' Rt	52	LF
	Sta 15038+99 - 126' Rt to 15044+01 - 126' Rt	502	LF
	Sta 15044+01 - 126' Rt to 15044+01 - 74' Rt	52	LF
	Sta 15042+19 - 111' Lt to 15046+89 - 104' Lt	471	LF
	Sta 15047+10 - 103' Lt to 15049+71 - 111' Lt	267	LF
	Sta 15048+99 - 75' Rt to 15050+00 - 75' Rt	101	LF
	Sta 15050+59 - 75' Rt to 15050+59 - 106' Rt	31	LF
752 0993	FENCE TERMINAL		
	Sta 15011+96 - 91' Rt	1	EA
	Sta 15012+29 - 91' Rt	1	EA
	Sta 15016+49 - 75' Rt	1	EA
	Sta 15042+19 - 111' Lt	1	EA
	Sta 15046+89 - 104' Lt	1	EA
	Sta 15047+10 - 103' Lt	1	EA
	Sta 15049+71 - 111' Lt	1	EA

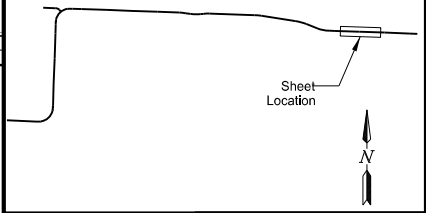
752 2995	CORNER ASSEMBLY-WOOD POST		
	Sta 15012+49 - 91' Rt	1	EA
	Sta 15012+49 - 121' Rt	1	EA
	Sta 15016+01 - 75' Lt	1	EA
	Sta 15016+01 - 126' Lt	1	EA
	Sta 15016+51 - 121' Rt	1	EA
	Sta 15030+01 - 126' Lt	1	EA
	Sta 15030+01 - 77' Lt	1	EA
	Sta 15039+01 - 74' Rt	1	EA
	Sta 15039+01 - 126' Rt	1	EA
	Sta 15044+01 - 126' Rt	1	EA
	Sta 15044+01 - 74' Rt	1	EA
	Sta 15048+99 - 74' Rt	1	EA
	Sta 15048+99 - 106' Rt	1	EA

752 4100	DOUBLE BRACE ASSEMBLY BARBED WIRE		
	Sta 15023+00 - 125' Lt	1	EA

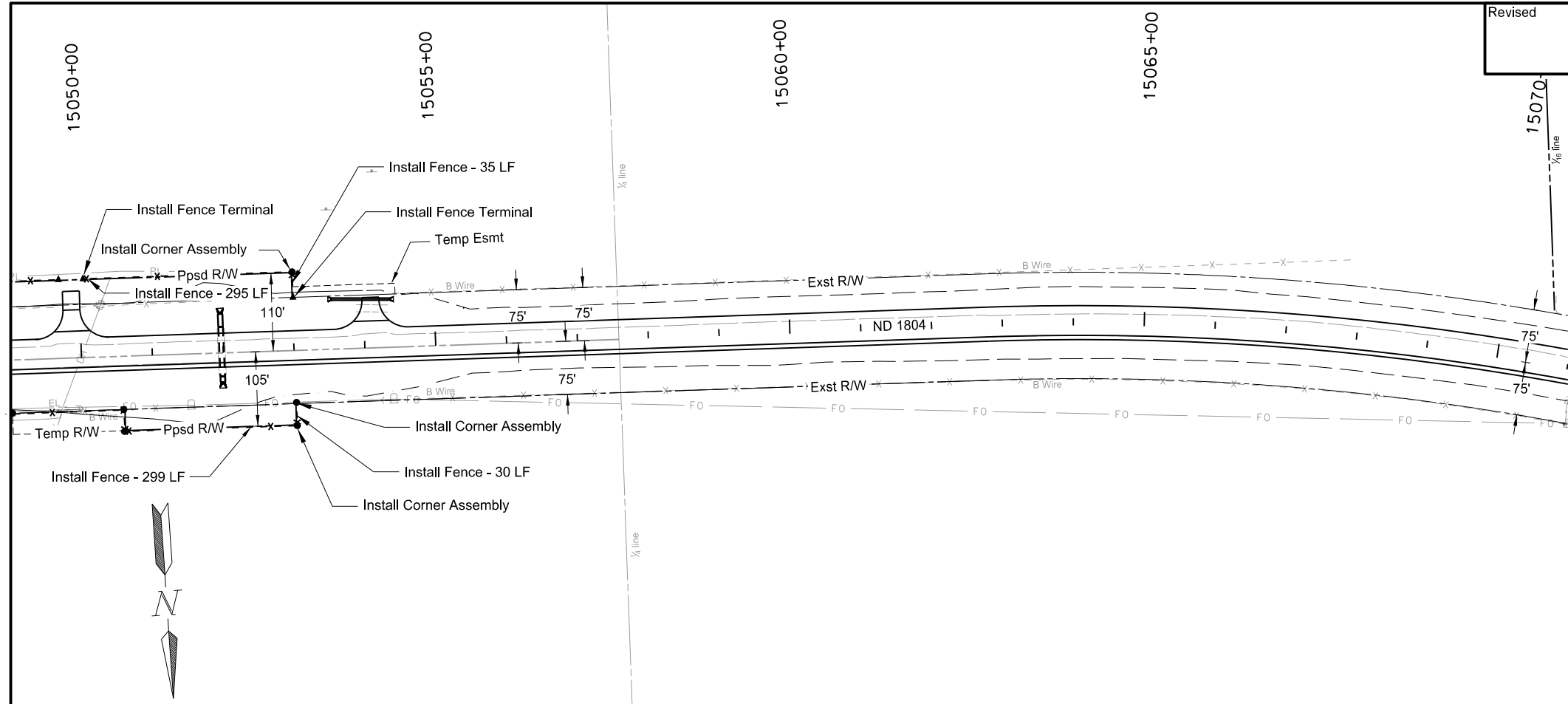


LEGEND	
- - x - -	Fence Barbed Wire
•	Corner Assembly Wood Post Barbed Wire
■	Double Brace Assembly Barbed Wire
▲	Fence Terminal

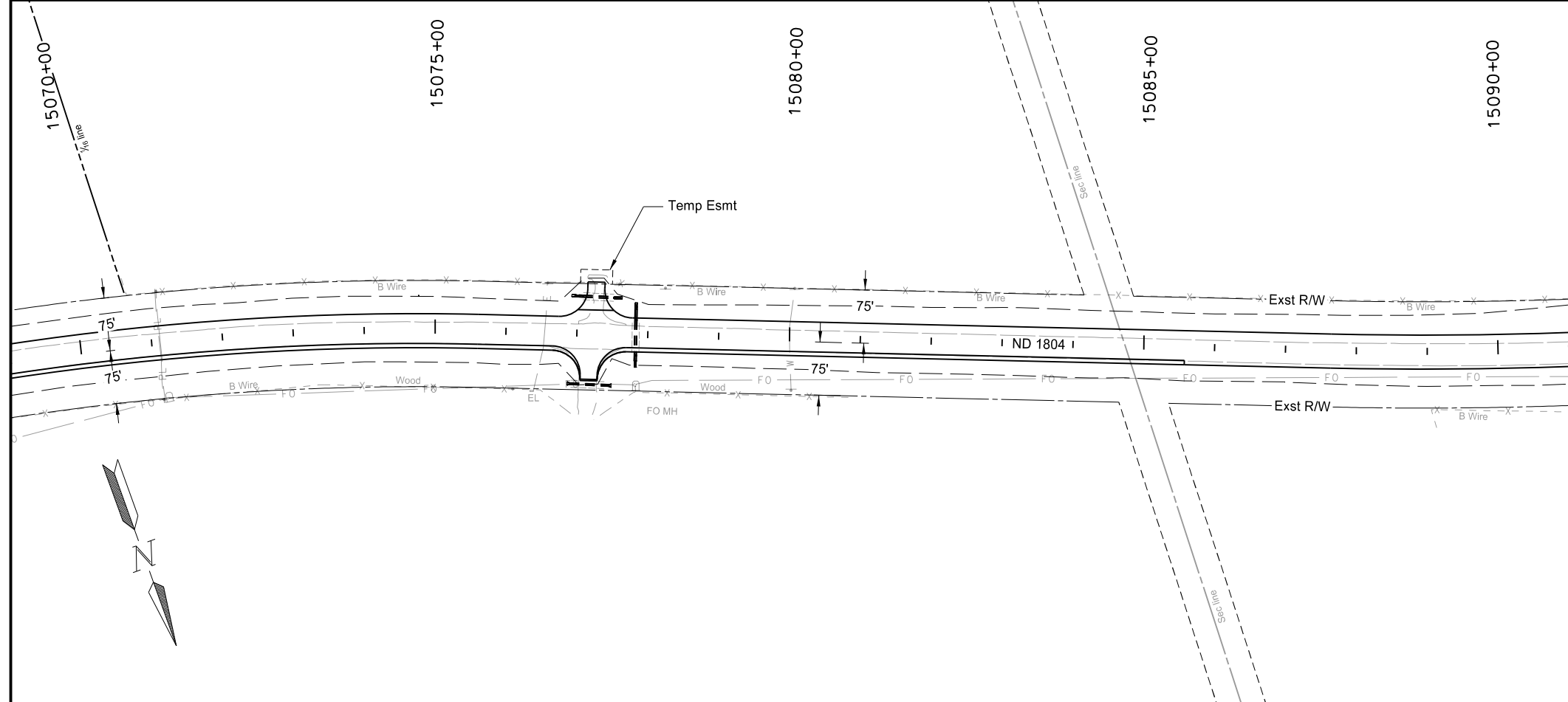
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ND 1804 - Jct Tioga Rd to Red Mike Area
Permanent Fencing Layouts
Sta 15010+00 to Sta 15050+00
(SCL1804)

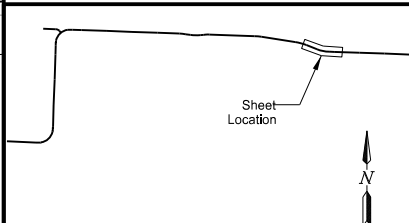


SPEC CODE	BID ITEM	QTY	UNIT
752 0200	FENCE BARBED WIRE 4 STRAND		
	Sta 15050+06 - 111' Lt to 15053+01 - 111' Lt	295	LF
	Sta 15053+01 - 111' Lt to 15053+01 - 75' Lt	35	LF
	Sta 15050+00 - 104' Rt to 15053+00 - 104' Rt	299	LF
	Sta 15053+01 - 73' Rt to 15053+01 - 104' Rt	30	LF
752 0993	FENCE TERMINAL		
	Sta 15050+06 - 111' Lt	1	EA
	Sta 15053+01 - 75' Lt	1	EA
752 2995	CORNER ASSEMBLY-WOOD POST		
	Sta 15053+01 - 111' Lt	1	EA
	Sta 15053+01 - 106' Rt	1	EA
	Sta 15053+01 - 73' Rt	1	EA

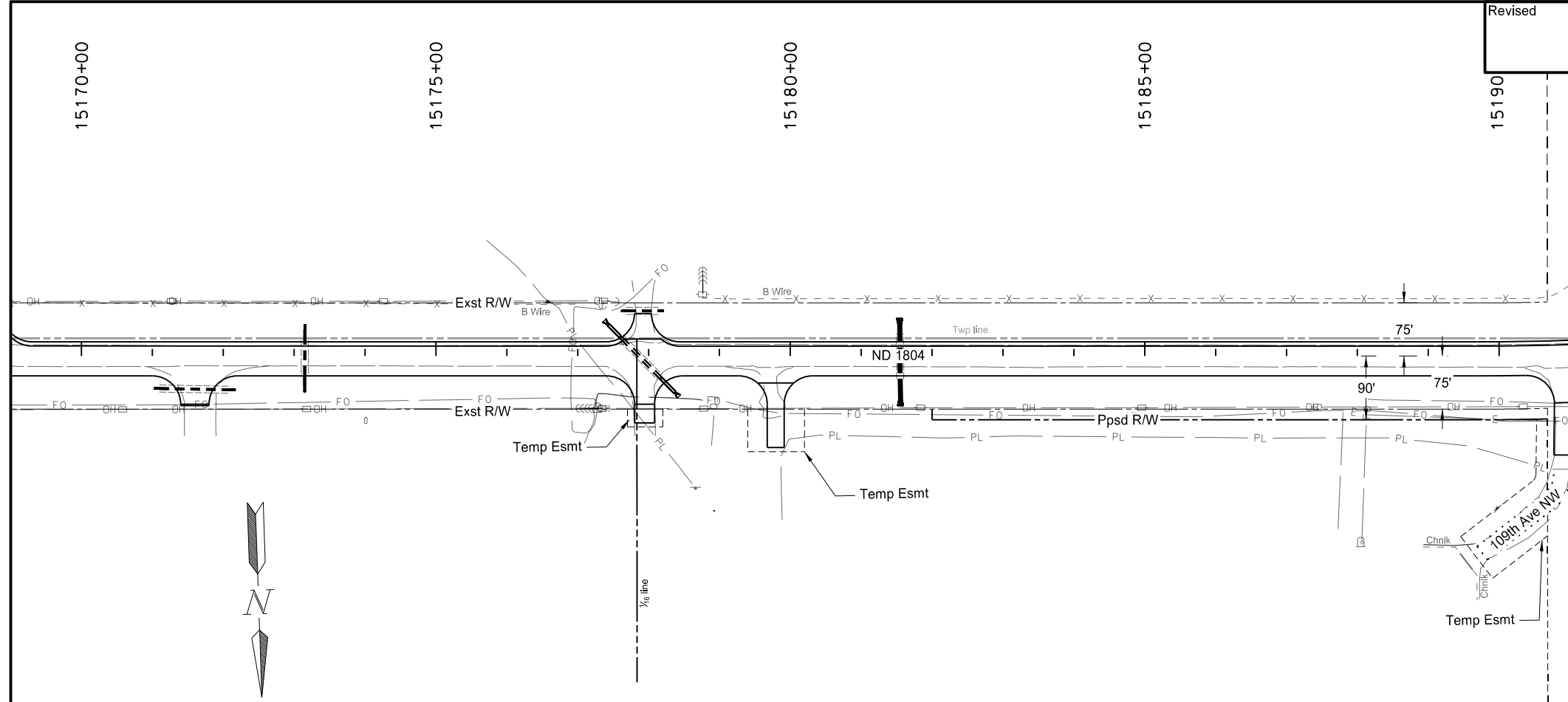


LEGEND	
- - x - -	Fence Barbed Wire
•	Corner Assembly Wood Post Barbed Wire
■	Double Brace Assembly Barbed Wire
▲	Fence Terminal

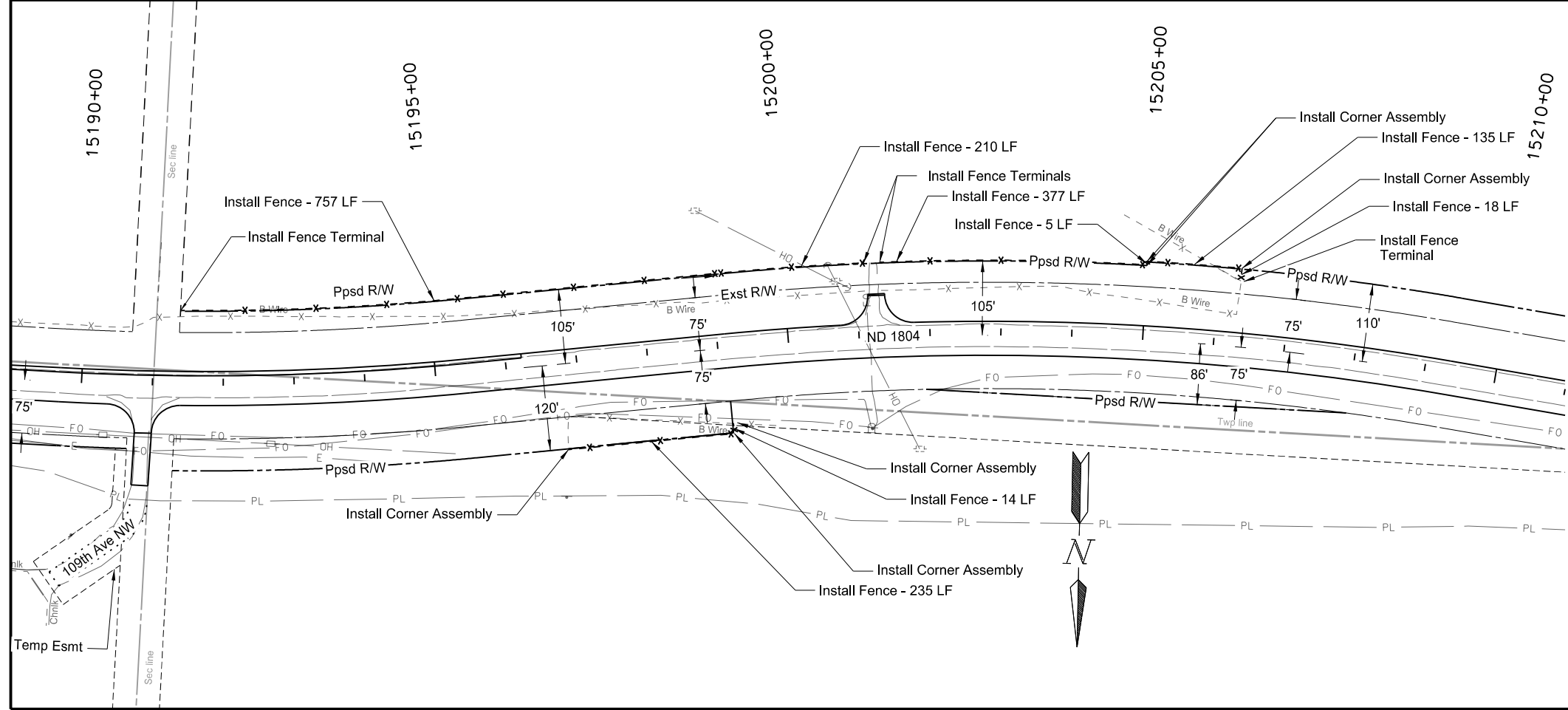
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ND 1804 - Jct Tioga Rd to Red Mike Area
Permanent Fencing Layouts
Sta 15050+00 to Sta 15090+00
(SCL1804)

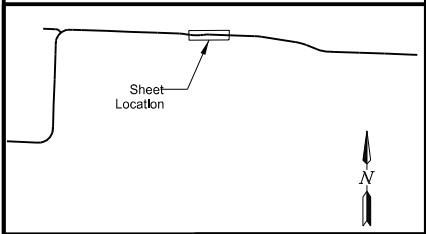


SPEC CODE	BID ITEM	QTY	UNIT
752 0200	FENCE BARBED WIRE 4 STRAND		
	Sta 15191+40 - 130' Lt to 15199+09 - 129' Lt	757	LF
	Sta 15196+77 - 119' Rt to 15199+12 - 121' Rt	235	LF
	Sta 15199+12 - 121' Rt to 15199+12 - 107' Rt	14	LF
	Sta 15199+11 - 106' Lt to 15201+14 - 106' Lt	210	LF
	Sta 15201+33 - 106' Lt to 15205+00 - 106' Lt	377	LF
	Sta 15205+00 - 106' Lt to 15205+00 - 111' Lt	5	LF
	Sta 15205+00 - 111' Lt to 15206+31 - 111' Lt	135	LF
	Sta 15206+31 - 111' Lt to 15206+31 - 93' Lt	18	LF
752 0993	FENCE TERMINAL		
	Sta 15191+40 - 130' Lt	1	EA
	Sta 15201+14 - 106' Lt	1	EA
	Sta 15201+33 - 106' Lt	1	EA
	Sta 15206+31 - 93' Lt	1	EA
752 2995	CORNER ASSEMBLY-WOOD POST		
	Sta 15196+77 - 121' Rt	1	EA
	Sta 15199+12 - 121' Rt	1	EA
	Sta 15199+12 - 107' Rt	1	EA
	Sta 15205+00 - 106' Lt	1	EA
	Sta 15205+00 - 111' Lt	1	EA
	Sta 15206+31 - 111' Lt	1	EA

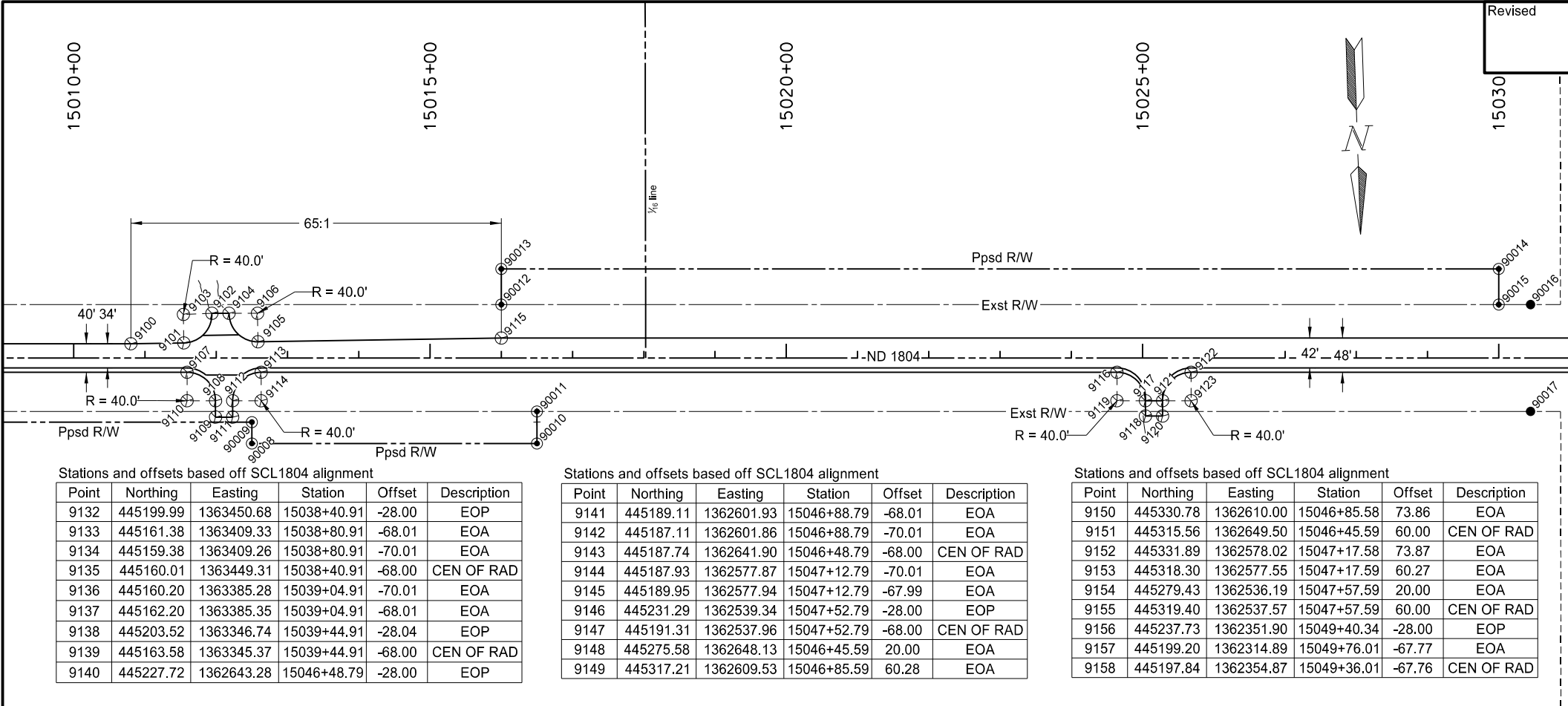


LEGEND	
- x -	Fence Barbed Wire
•	Corner Assembly Wood Post Barbed Wire
■	Double Brace Assembly Barbed Wire
▲	Fence Terminal

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 Brady L. Haussler
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ND 1804 - Jct Tioga Rd to Red Mike Area
 Permanent Fencing Layouts
 Sta 15170+00 to Sta 15210+00
 (SCL1804)



Stations and offsets based off SCL1804 alignment

Point	Northing	Easting	Station	Offset	Description
9100	445113.22	1366210.18	15010+80.06	-20.00	EOP
9101	445114.63	1366135.78	15011+54.47	-21.14	EOP
9102	445074.41	1366094.99	15011+93.85	-62.74	EOA
9103	445074.63	1366135.02	15011+53.85	-61.14	CEN OF RAD
9104	445075.23	1366071.00	15012+17.85	-62.74	EOA
9105	445116.60	1366031.78	15012+58.47	-22.74	EOP
9106	445076.61	1366031.03	15012+57.85	-62.74	CEN OF RAD
9107	445155.90	1366132.71	15011+58.95	20.00	EOA
9108	445197.26	1366094.11	15011+98.95	60.01	EOA
9109	445220.27	1366094.90	15011+98.95	83.04	EOA
9110	445195.88	1366134.08	15011+58.95	60.00	CEN OF RAD
9111	445221.10	1366070.92	15012+22.95	83.04	EOA
9112	445198.07	1366070.12	15012+22.95	59.99	EOA
9113	445159.47	1366028.77	15012+62.95	20.00	EOA
9114	445199.45	1366030.14	15012+62.95	60.00	CEN OF RAD
9115	445123.07	1365690.27	15016+00.00	-28.00	EOP
9116	445200.70	1364828.34	15024+64.09	20.00	EOA
9117	445242.04	1364789.74	15025+04.09	59.99	EOA
9118	445263.55	1364790.47	15025+04.09	81.51	EOA
9119	445240.68	1364829.71	15024+64.09	60.00	CEN OF RAD
9120	445264.37	1364766.49	15025+28.09	81.51	EOA
9121	445242.86	1364765.75	15025+28.09	59.99	EOA
9122	445204.27	1364724.40	15025+68.09	20.00	EOA
9123	445244.25	1364725.77	15025+68.09	60.00	CEN OF RAD
9124	445246.31	1363500.49	15037+92.72	20.00	EOA
9125	445287.65	1363461.89	15038+32.72	59.99	EOA
9126	445291.23	1363462.01	15038+32.72	63.58	EOA
9127	445286.28	1363501.86	15037+92.72	60.00	CEN OF RAD
9128	445292.05	1363438.02	15038+56.72	63.57	EOA
9129	445288.49	1363437.90	15038+56.72	60.01	EOA
9130	445249.88	1363396.55	15038+96.72	20.00	EOA
9131	445289.85	1363397.93	15038+96.72	60.00	CEN OF RAD

Stations and offsets based off SCL1804 alignment

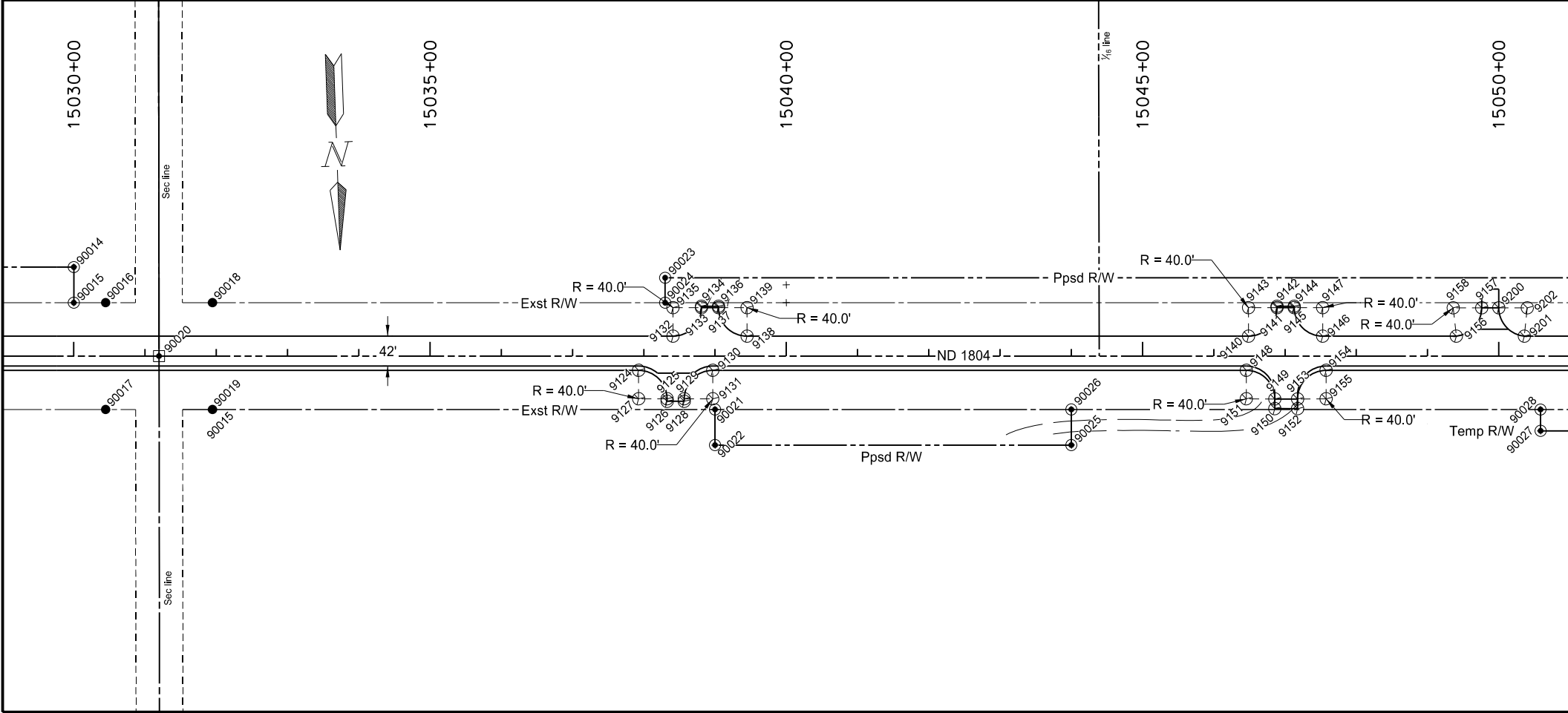
Point	Northing	Easting	Station	Offset	Description
9132	445199.99	1363450.68	15038+40.91	-28.00	EOP
9133	445161.38	1363409.33	15038+80.91	-68.01	EOA
9134	445159.38	1363409.26	15038+80.91	-70.01	EOA
9135	445160.01	1363449.31	15038+40.91	-68.00	CEN OF RAD
9136	445160.20	1363385.28	15039+04.91	-70.01	EOA
9137	445162.20	1363385.35	15039+04.91	-68.01	EOA
9138	445203.52	1363346.74	15039+44.91	-28.04	EOP
9139	445163.58	1363345.37	15039+44.91	-68.00	CEN OF RAD
9140	445227.72	1362643.28	15046+48.79	-28.00	EOP

Stations and offsets based off SCL1804 alignment

Point	Northing	Easting	Station	Offset	Description
9141	445189.11	1362601.93	15046+88.79	-68.01	EOA
9142	445187.11	1362601.86	15046+88.79	-70.01	EOA
9143	445187.74	1362641.90	15046+48.79	-68.00	CEN OF RAD
9144	445187.93	1362577.87	15047+12.79	-70.01	EOA
9145	445189.95	1362577.94	15047+12.79	-67.99	EOA
9146	445231.29	1362539.34	15047+52.79	-28.00	EOP
9147	445191.31	1362537.96	15047+52.79	-68.00	CEN OF RAD
9148	445275.58	1362648.13	15046+45.59	20.00	EOA
9149	445317.21	1362609.53	15046+85.59	60.28	EOA

Stations and offsets based off SCL1804 alignment

Point	Northing	Easting	Station	Offset	Description
9150	445330.78	1362610.00	15046+85.58	73.86	EOA
9151	445315.56	1362649.50	15046+45.59	60.00	CEN OF RAD
9152	445331.89	1362578.02	15047+17.58	73.87	EOA
9153	445318.30	1362577.55	15047+17.59	60.27	EOA
9154	445279.43	1362536.19	15047+57.59	20.00	EOA
9155	445319.40	1362537.57	15047+57.59	60.00	CEN OF RAD
9156	445237.73	1362351.90	15049+40.34	-28.00	EOP
9157	445199.20	1362314.89	15049+76.01	-67.77	EOA
9158	445197.84	1362354.87	15049+36.01	-67.76	CEN OF RAD

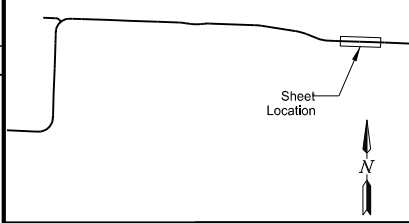


Note: For points 90,008 through 90,027, refer to section 10 sheet 6.

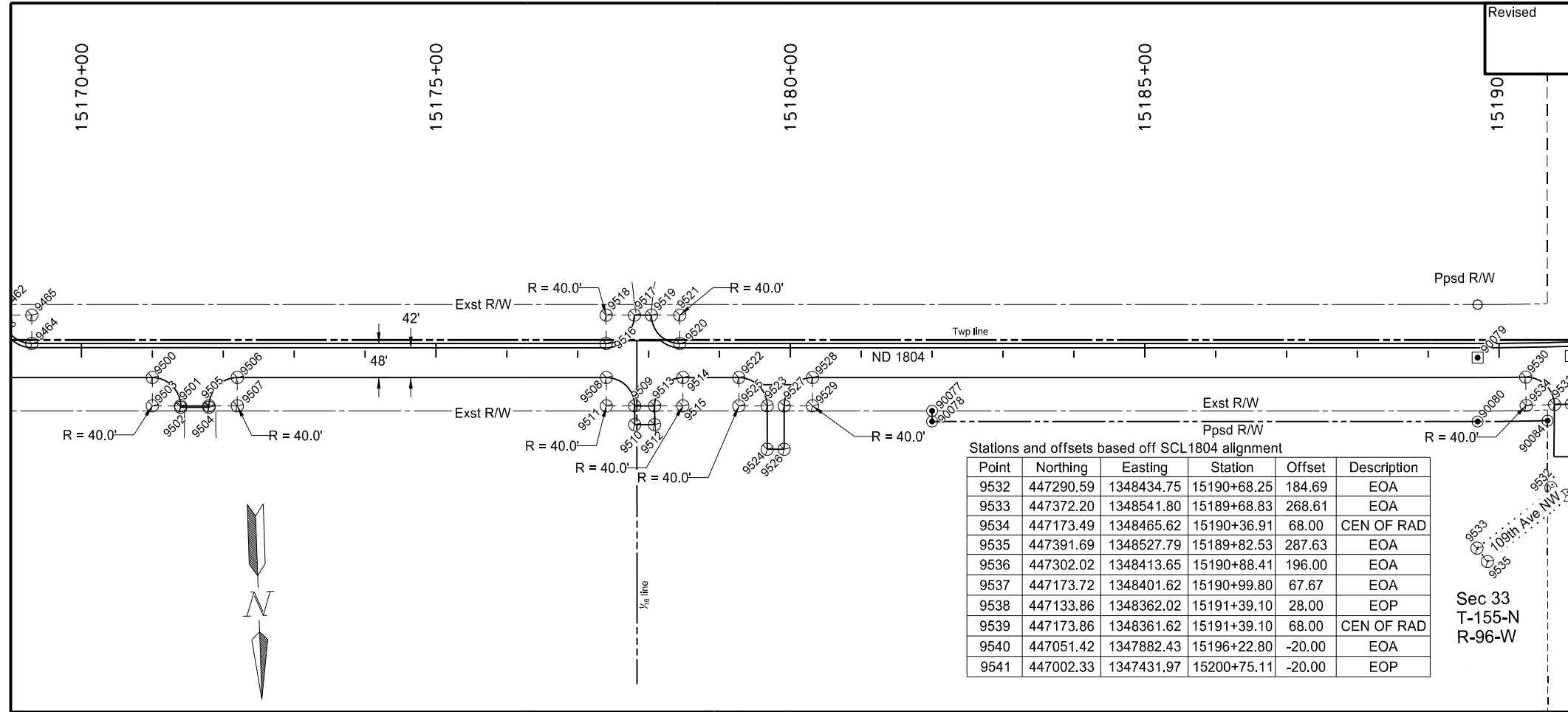
LEGEND

- R/W Marker (Witness Post)
- Alignment Monument
- Iron Pin R/W Monument
- Iron Pin Reference Monument
- Survey Data Point

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ND 1804 - Jct Tioga Rd to Red Mike Area
 Survey Data Layouts
 Sta 15010+00 to Sta 15050+00
 (SCL1804)

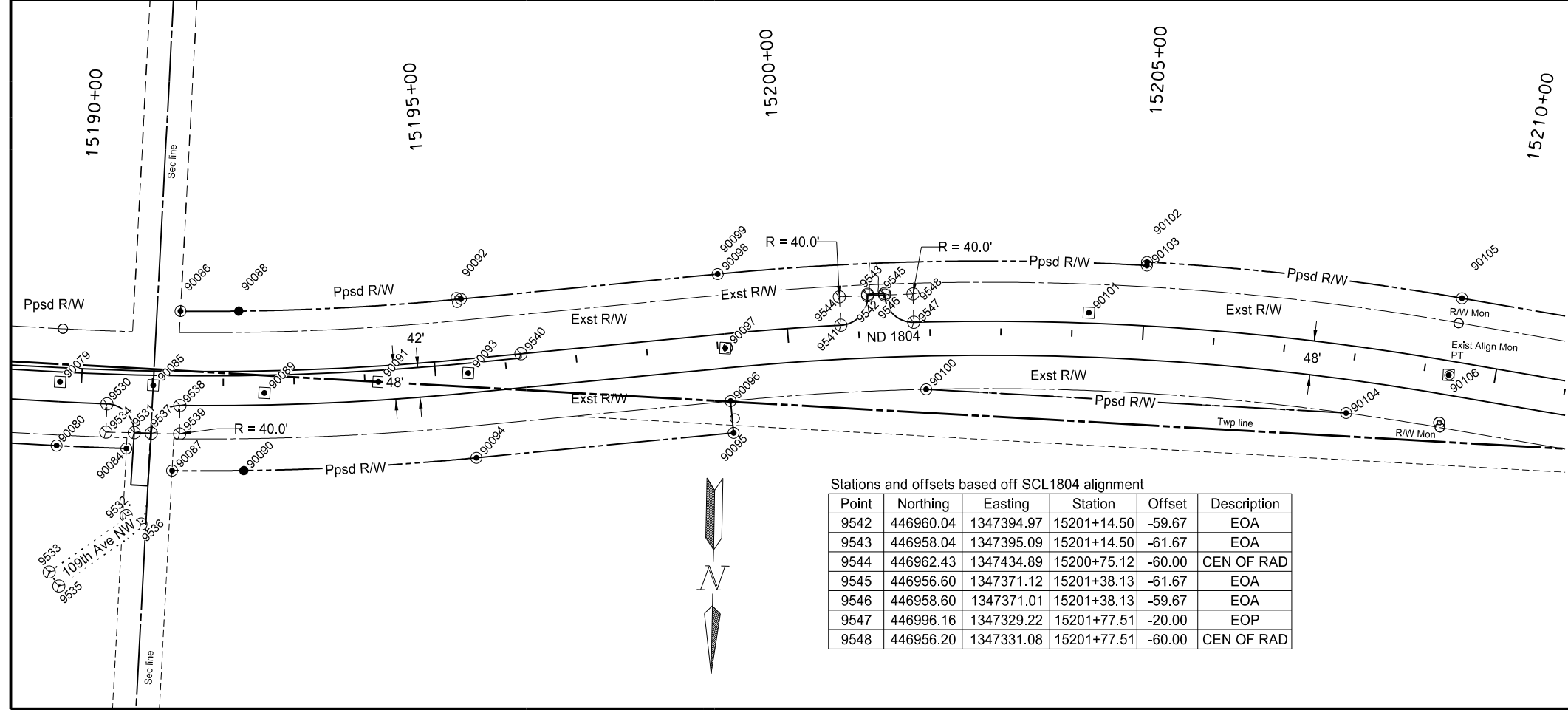


Stations and offsets based off SCL1804 alignment

Point	Northing	Easting	Station	Offset	Description
9532	447290.59	1348434.75	15190+68.25	184.69	EOA
9533	447372.20	1348541.80	15189+68.83	268.61	EOA
9534	447173.49	1348465.62	15190+36.91	68.00	CEN OF RAD
9535	447391.69	1348527.79	15189+82.53	287.63	EOA
9536	447302.02	1348413.65	15190+88.41	196.00	EOA
9537	447173.72	1348401.62	15190+99.80	67.67	EOA
9538	447133.86	1348362.02	15191+39.10	28.00	EOP
9539	447173.86	1348361.62	15191+39.10	68.00	CEN OF RAD
9540	447051.42	1347882.43	15196+22.80	-20.00	EOA
9541	447002.33	1347431.97	15200+75.11	-20.00	EOP

Stations and offsets based off SCL1804 alignment

Point	Northing	Easting	Station	Offset	Description
9500	447067.23	1350401.43	15170+99.79	28.00	EOP
9501	447108.58	1350362.83	15171+39.79	68.00	EOA
9502	447110.58	1350362.90	15171+39.79	70.00	EOA
9503	447107.20	1350402.81	15170+99.79	68.00	CEN OF RAD
9504	447111.96	1350322.93	15171+79.79	70.00	EOA
9505	447109.97	1350322.87	15171+79.78	68.00	EOA
9506	447071.37	1350281.50	15172+19.79	28.00	EOP
9507	447111.35	1350282.88	15172+19.79	68.00	CEN OF RAD
9508	447089.34	1349761.20	15177+40.40	28.00	EOP
9509	447130.69	1349722.60	15177+80.40	68.00	EOA
9510	447157.16	1349723.52	15177+80.40	94.48	EOA
9511	447129.31	1349762.58	15177+40.40	68.00	CEN OF RAD
9512	447158.12	1349695.53	15178+08.40	94.48	EOA
9513	447131.66	1349694.62	15178+08.40	68.00	EOA
9514	447093.06	1349653.26	15178+48.40	28.00	EOP
9515	447133.04	1349654.64	15178+48.40	68.00	CEN OF RAD
9516	447041.35	1349759.90	15177+40.04	-20.00	EOA
9517	447002.76	1349718.54	15177+80.04	-60.00	EOA
9518	447001.38	1349758.52	15177+40.04	-60.00	CEN OF RAD
9519	447003.58	1349694.56	15178+04.04	-60.00	EOA
9520	447044.94	1349655.96	15178+44.04	-20.00	EOA
9521	447004.96	1349654.58	15178+44.04	-60.00	CEN OF RAD
9522	447095.78	1349574.42	15179+27.29	28.00	EOP
9523	447137.14	1349535.83	15179+67.29	68.00	EOA
9524	447198.34	1349537.94	15179+67.29	129.24	EOA
9525	447135.76	1349575.80	15179+27.29	68.00	CEN OF RAD
9526	447199.17	1349513.95	15179+91.29	129.24	EOA
9527	447137.97	1349511.84	15179+91.29	68.00	EOA
9528	447099.37	1349470.48	15180+31.29	28.00	EOP
9529	447139.35	1349471.86	15180+31.29	68.00	CEN OF RAD
9530	447133.50	1348464.95	15190+36.91	28.00	EOP
9531	447173.63	1348425.63	15190+76.20	67.67	EOA



Stations and offsets based off SCL1804 alignment

Point	Northing	Easting	Station	Offset	Description
9542	446960.04	1347394.97	15201+14.50	-59.67	EOA
9543	446958.04	1347395.09	15201+14.50	-61.67	EOA
9544	446962.43	1347434.89	15200+75.12	-60.00	CEN OF RAD
9545	446956.60	1347371.12	15201+38.13	-61.67	EOA
9546	446958.60	1347371.01	15201+38.13	-59.67	EOA
9547	446996.16	1347329.22	15201+77.51	-20.00	EOP
9548	446956.20	1347331.08	15201+77.51	-60.00	CEN OF RAD

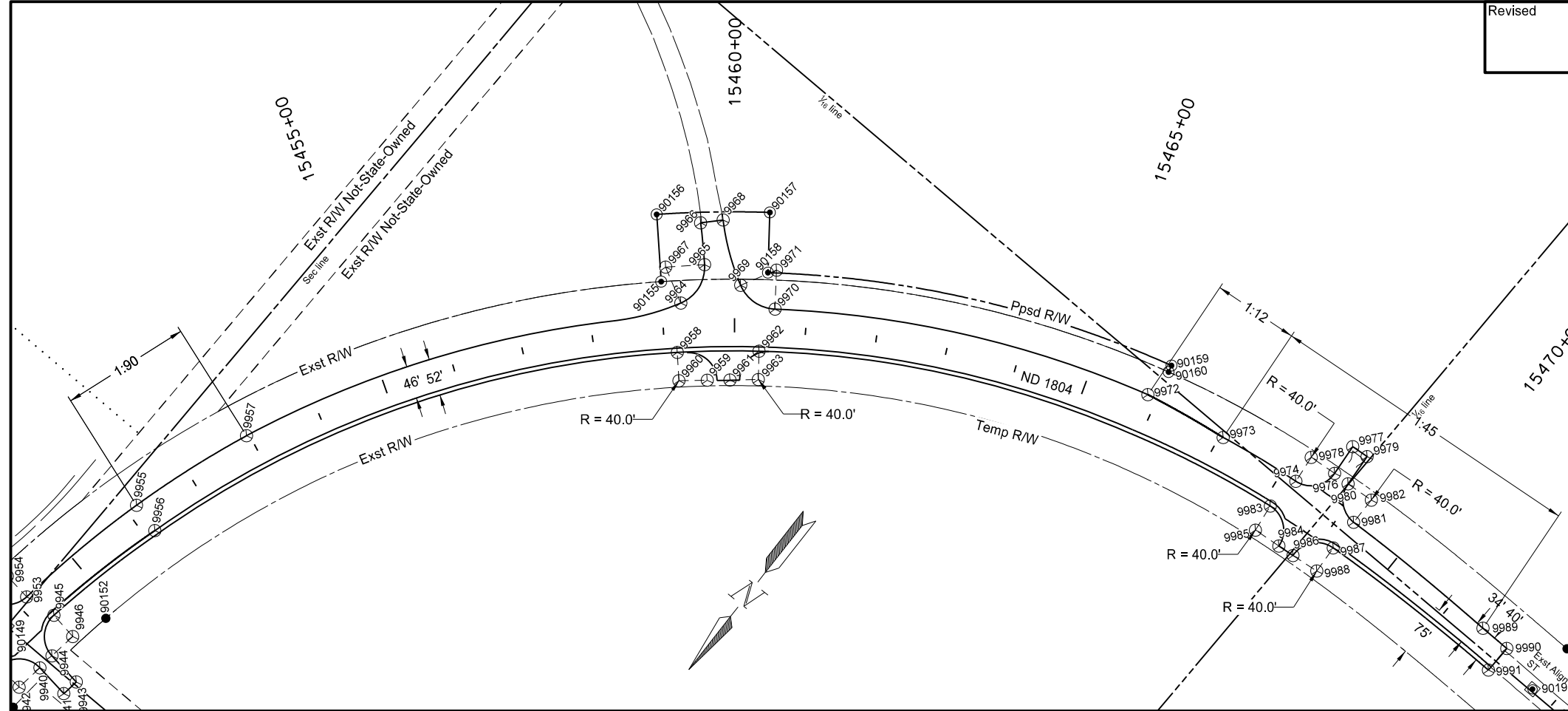
Note: For points 90,076 through 90,104, refer to section 10 sheets 6 and 7.

LEGEND

- R/W Marker (Witness Post)
- Alignment Monument
- Iron Pin R/W Monument
- Iron Pin Reference Monument
- Survey Data Point

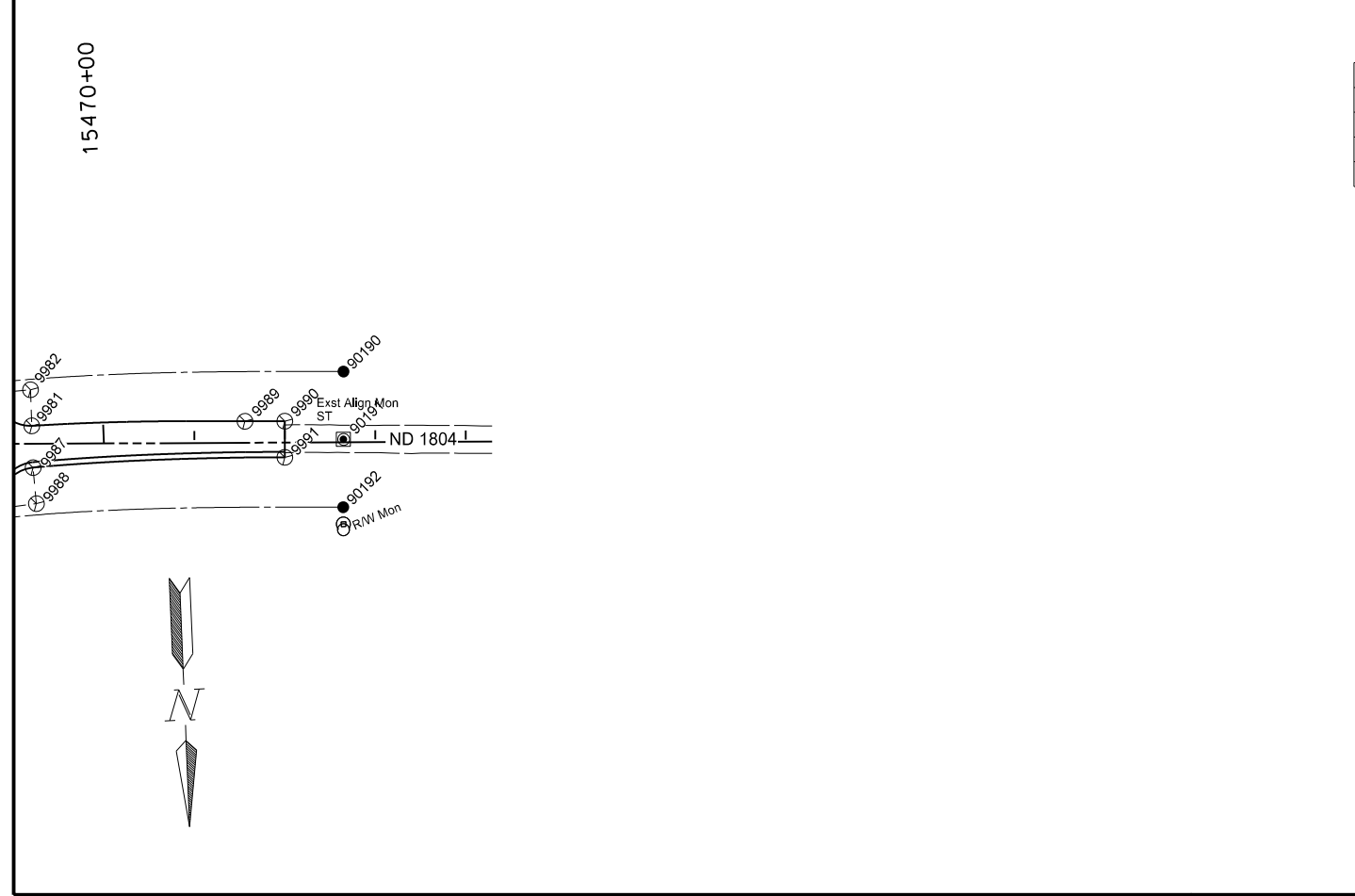
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ND 1804 - Jct Tioga Rd to Red Mike Area
 Survey Data Layouts
 Sta 15170+00 to Sta 15210+00 (SCL1804)



Stations and offsets based off SCL1804 alignment

Point	Northing	Easting	Station	Offset	Description
9955	436861.88	1332190.70	15451+15.54	-24.10	EOP
9956	436873.97	1332148.29	15451+16.00	20.00	EOA
9957	436688.91	1332129.42	15452+96.00	-26.00	EOP
9958	436220.64	1331724.49	15459+17.85	26.00	EOA
9959	436225.35	1331667.03	15459+59.79	66.97	EOA
9960	436250.63	1331698.03	15459+17.85	66.00	CEN OF RAD
9961	436205.31	1331642.08	15459+93.36	67.14	EOA
9962	436147.98	1331635.00	15460+35.30	26.00	EOA
9963	436180.04	1331611.08	15460+35.30	66.00	CEN OF RAD
9964	436162.90	1331763.63	15459+26.44	-43.21	EOP
9965	436099.66	1331770.81	15459+60.32	-96.03	EOP
9966	436056.76	1331811.69	15459+56.68	-155.16	EOP
9967	436136.34	1331811.81	15459+08.74	-95.01	CEN OF RAD
9968	436033.97	1331789.23	15459+85.36	-158.57	EOP
9969	436091.04	1331712.78	15460+08.25	-66.42	EOP
9970	436087.44	1331653.94	15460+55.82	-34.00	EOP
9971	436042.90	1331686.22	15460+55.80	-89.01	CEN OF RAD
9972	435856.80	1331166.04	15465+86.00	-34.00	EOP
9973	435838.61	1331045.21	15467+05.46	-26.00	EOP
9974	435823.66	1330926.40	15468+23.20	-25.12	EOP
9976	435781.04	1330890.33	15468+61.62	-64.65	EOA
9977	435735.73	1330893.52	15468+61.65	-110.08	EOA
9978	435783.85	1330930.23	15468+23.10	-65.12	CEN OF RAD
9979	435734.15	1330868.98	15468+84.84	-110.07	EOA
9980	435780.96	1330866.29	15468+84.81	-63.19	EOA
9981	435818.66	1330826.62	15469+21.79	-23.60	EOP
9982	435778.66	1330826.36	15469+23.58	-63.56	CEN OF RAD
9983	435873.32	1330933.15	15468+11.68	23.65	EOA
9984	435910.18	1330888.75	15468+53.79	64.26	EOA
9985	435913.06	1330928.65	15468+12.19	63.65	CEN OF RAD
9986	435908.44	1330864.81	15468+78.68	64.16	EOA
9987	435864.87	1330826.93	15469+19.64	22.56	EOA



Stations and offsets based off SCL1804 alignment

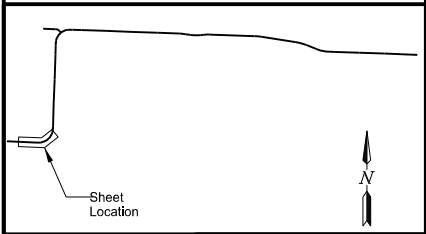
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9988	435904.82	1330824.97	15469+19.99	62.56	CEN OF RAD
9989	435823.16	1330590.85	15471+56.00	-20.00	EOP
9990	435824.81	1330546.77	15472+00.00	-20.00	EOP
9991	435864.77	1330548.36	15472+00.00	20.00	EOP

Note: For points 90,151 through 90,157, refer to section 10 sheet 7.

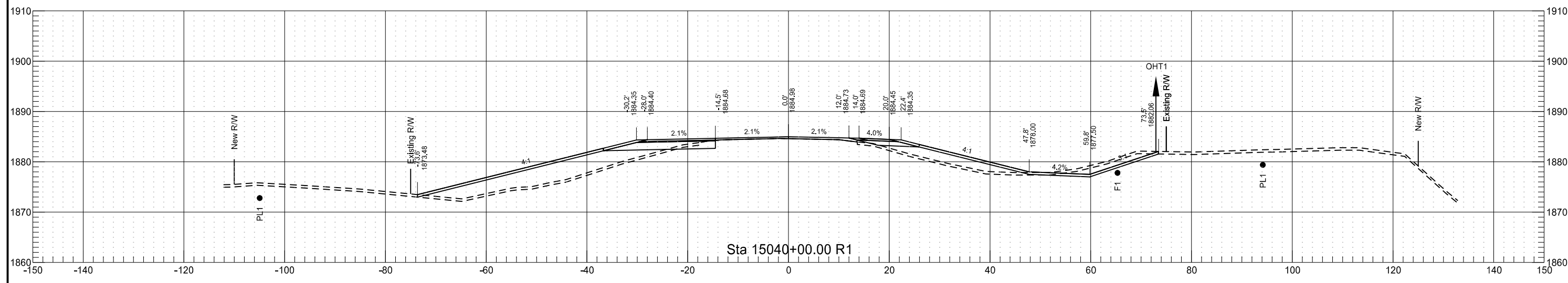
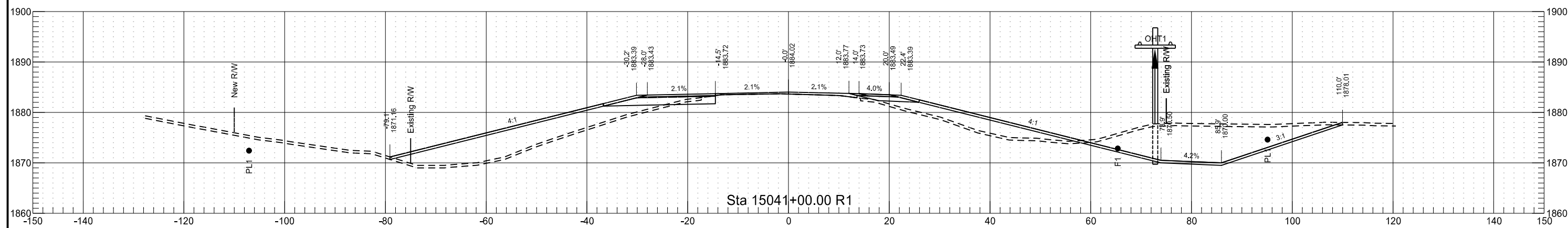
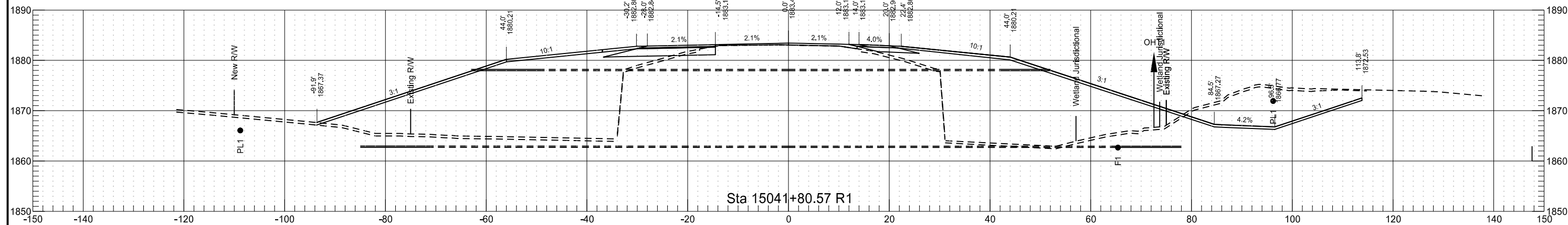
LEGEND

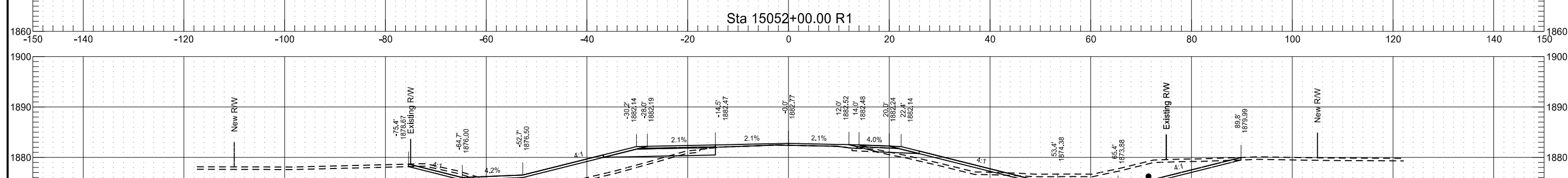
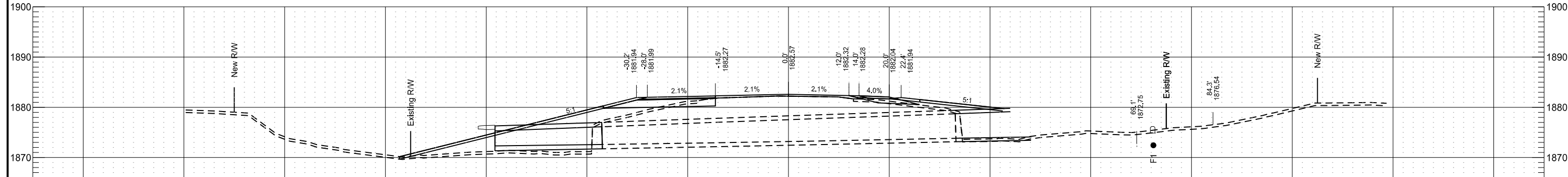
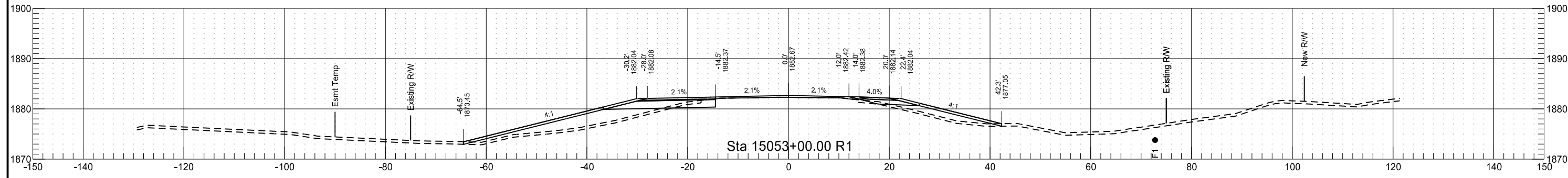
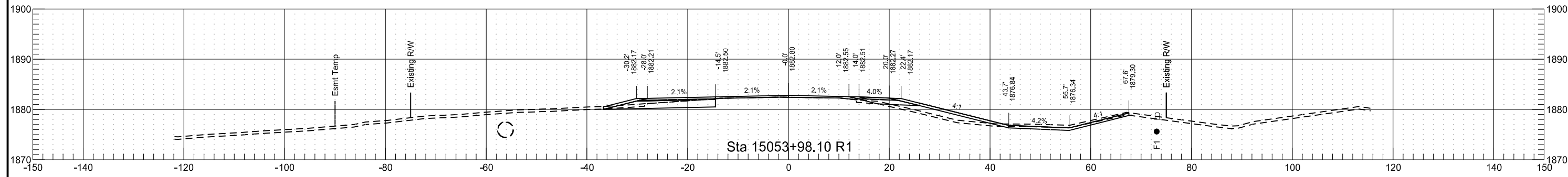
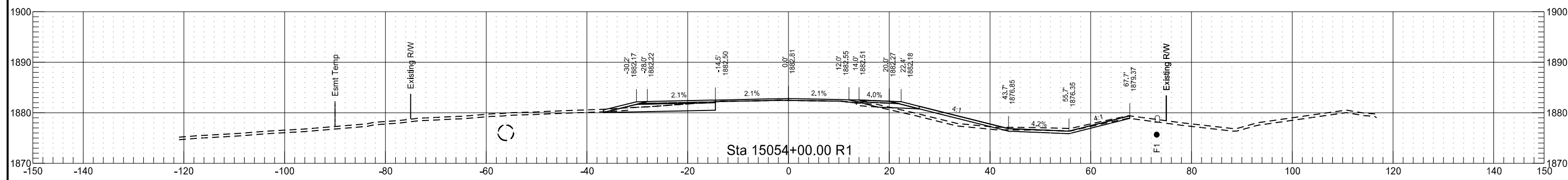
- R/W Marker (Witness Post)
- Alignment Monument
- Iron Pin R/W Monument
- Iron Pin Reference Monument
- Survey Data Point

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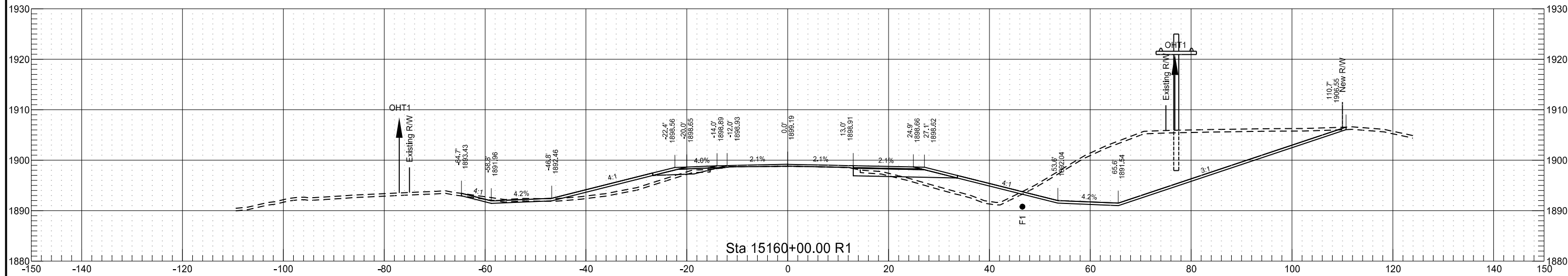
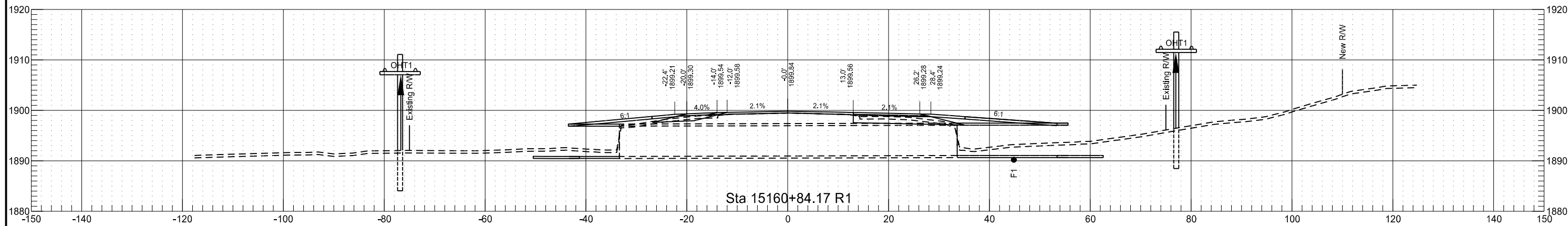
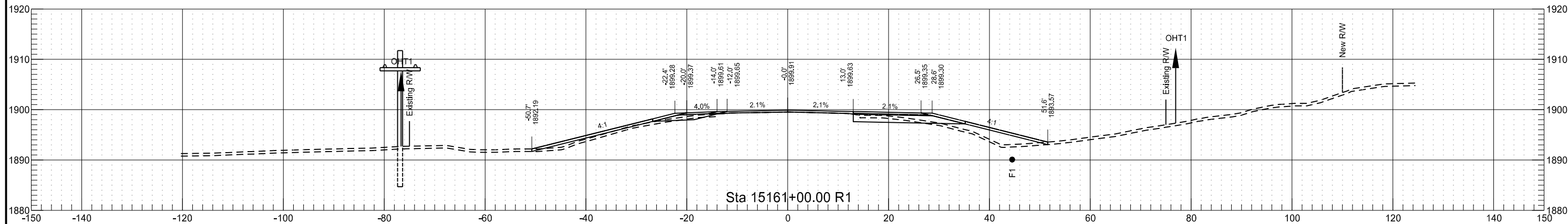


ND 1804 - Jct Tioga Rd to Red Mike Area
 Survey Data Layouts
 Sta 15450+00 to Sta 15490+00
 (SCL1804)





Revised	10/22/18	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
		ND	SOIB-7-804(061)283	200	75



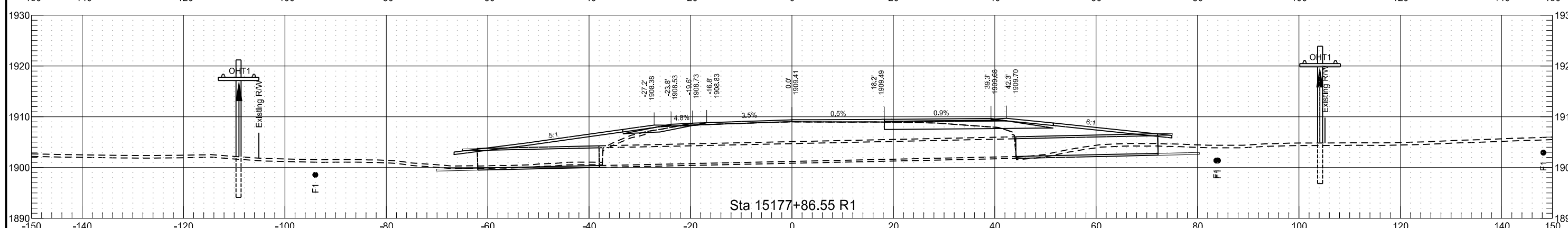
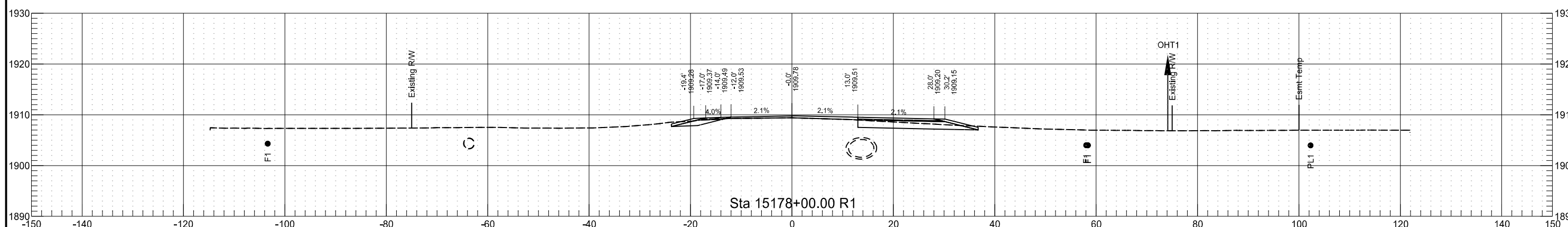
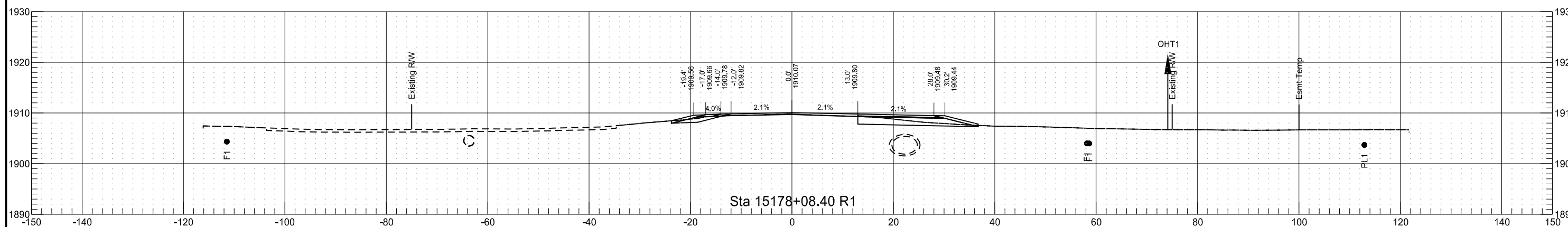
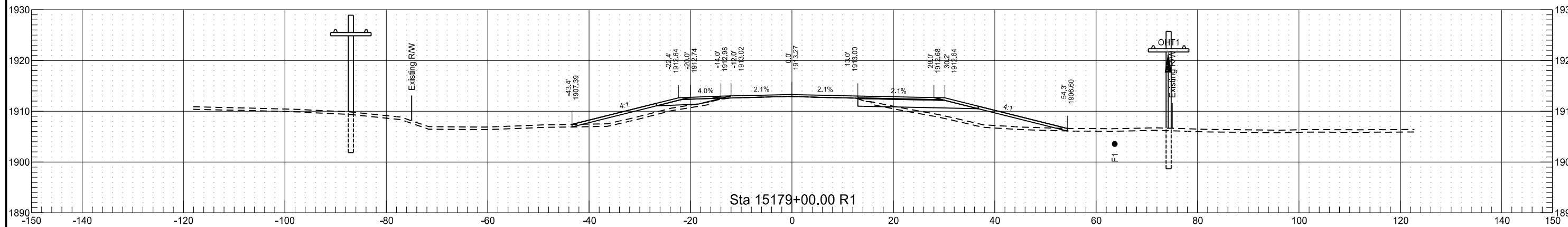
Revised 10/22/18

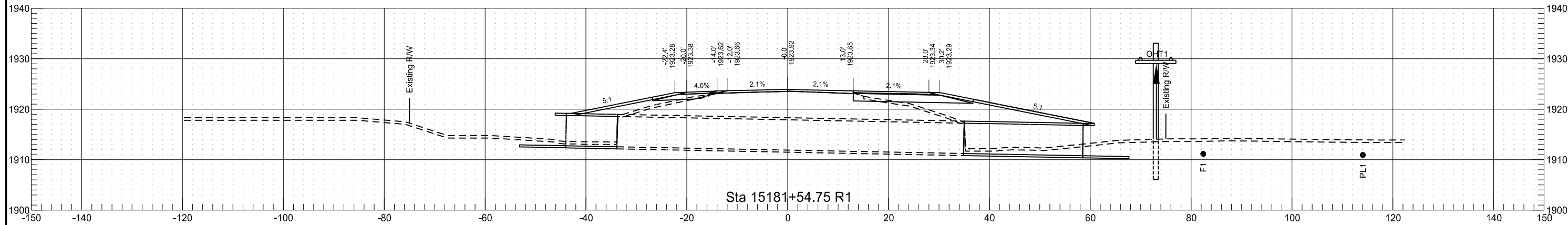
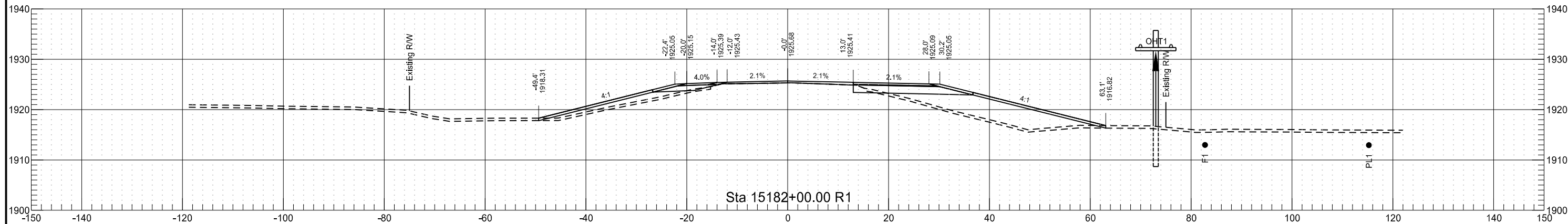
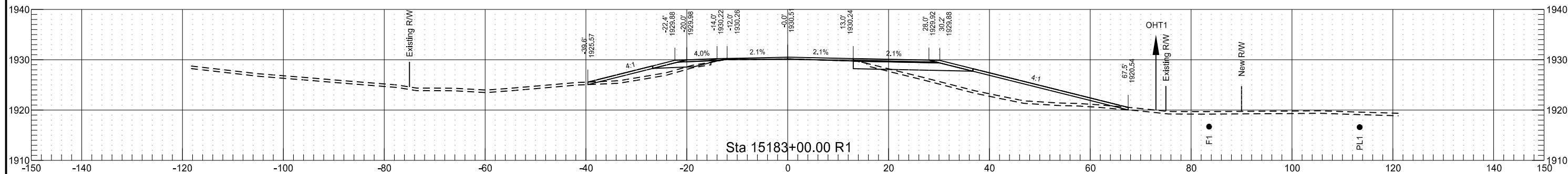
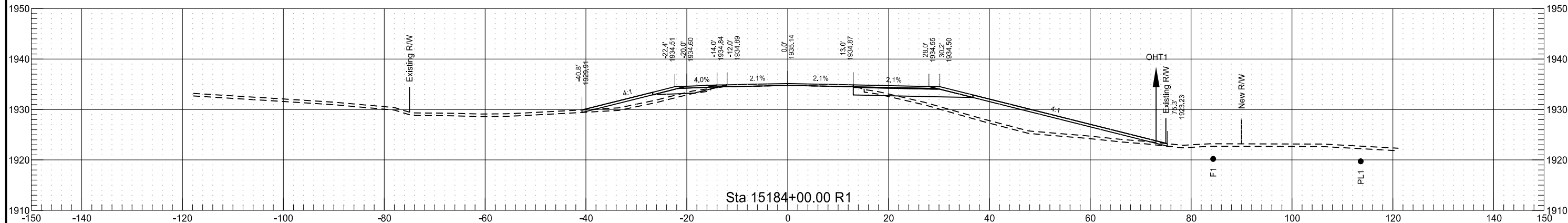
STATE
ND

PROJECT NO.
SOIB-7-804(061)283

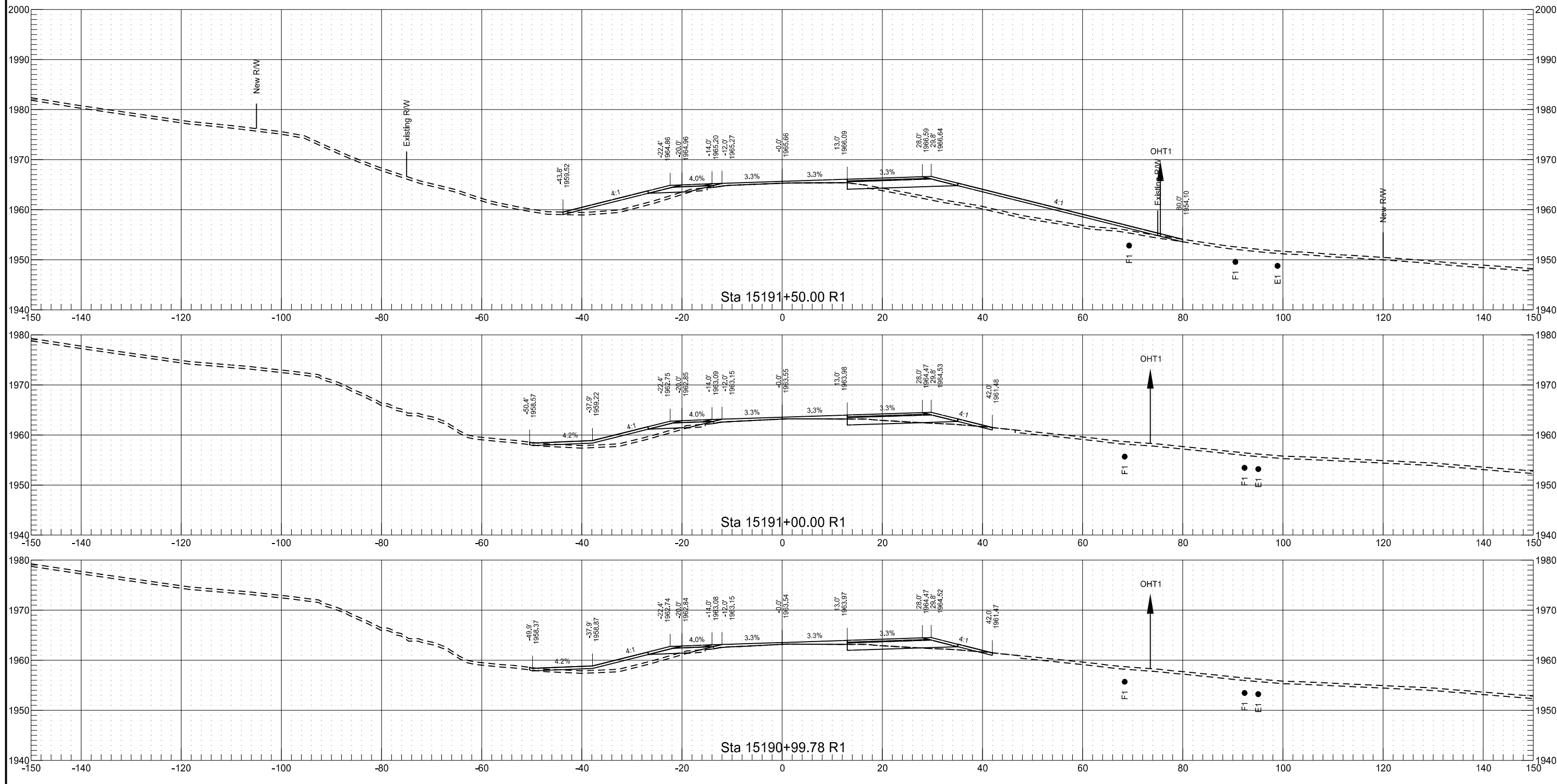
SECTION NO.
200

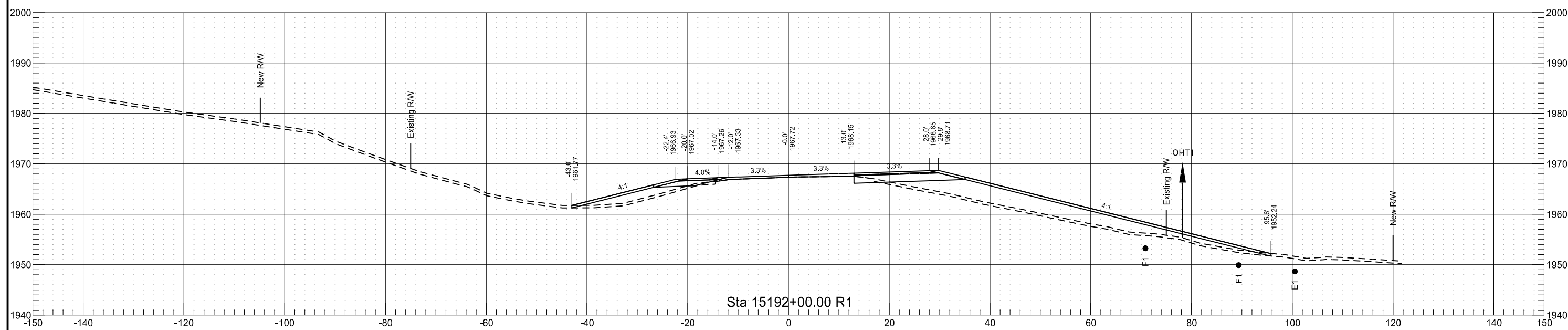
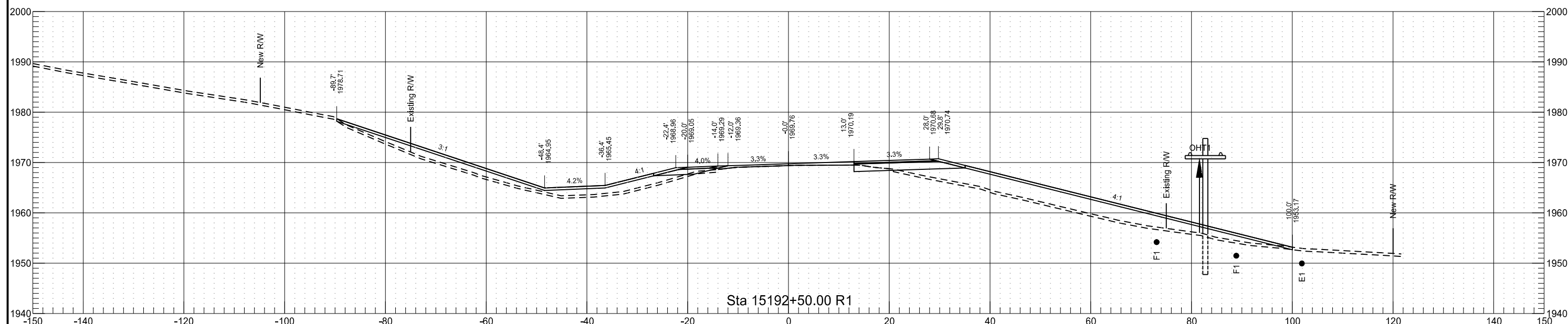
SHEET NO.
83

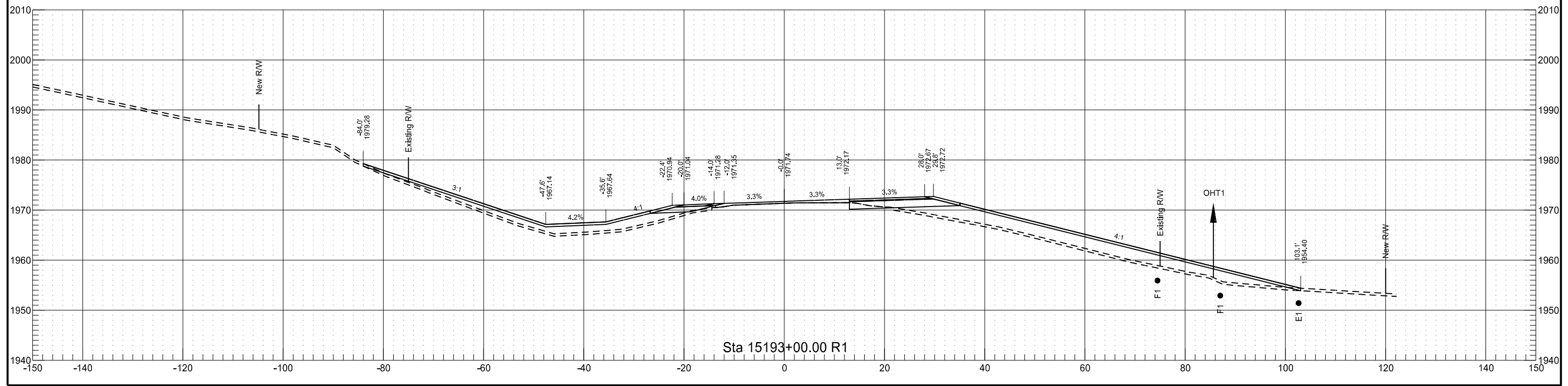
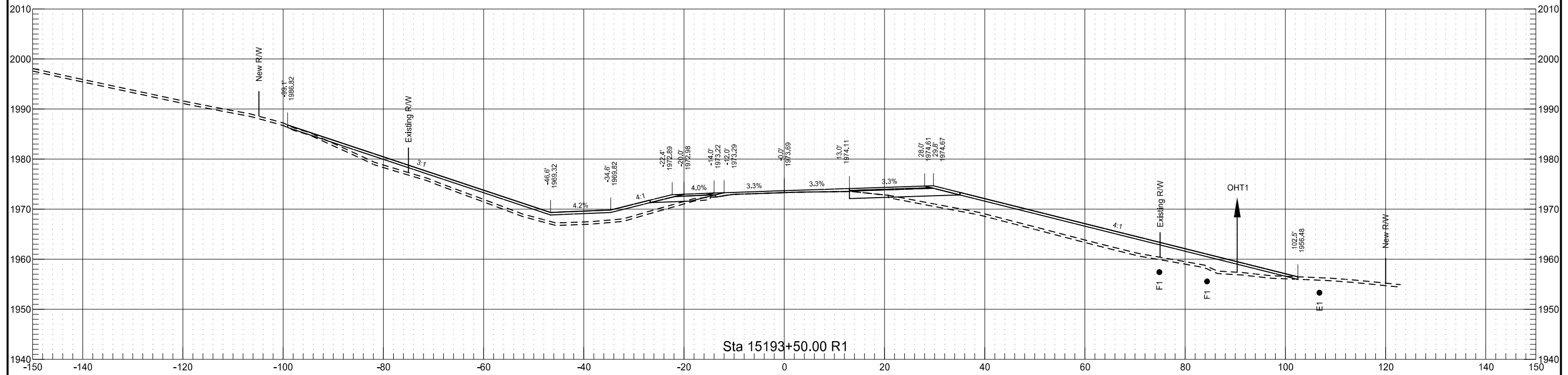


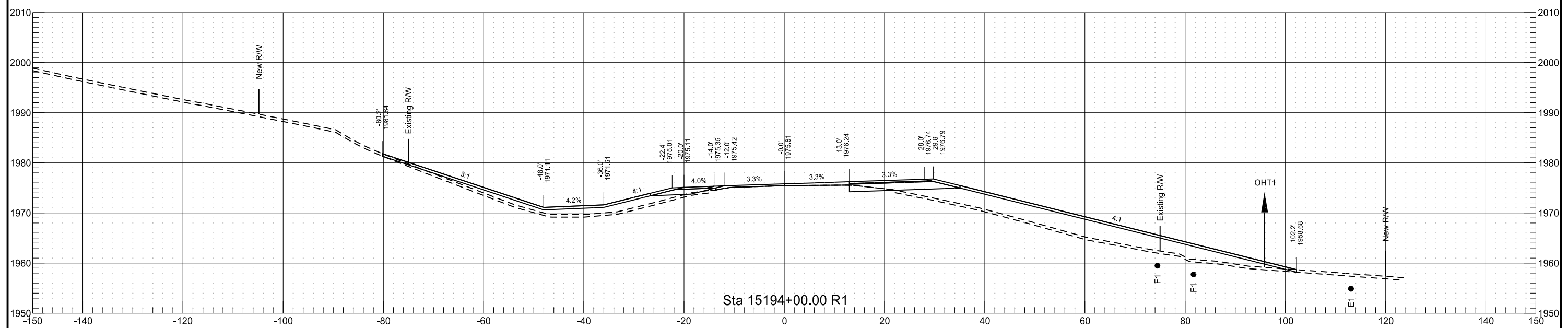
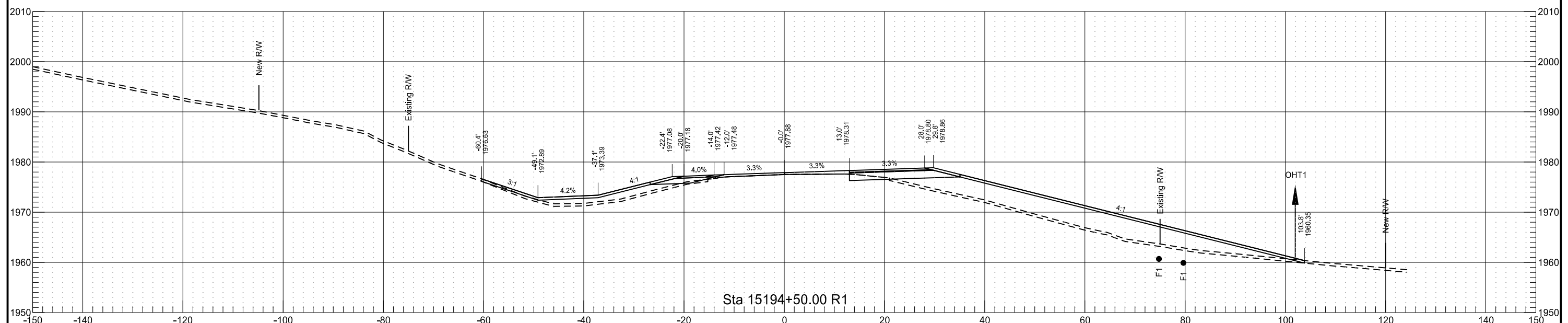


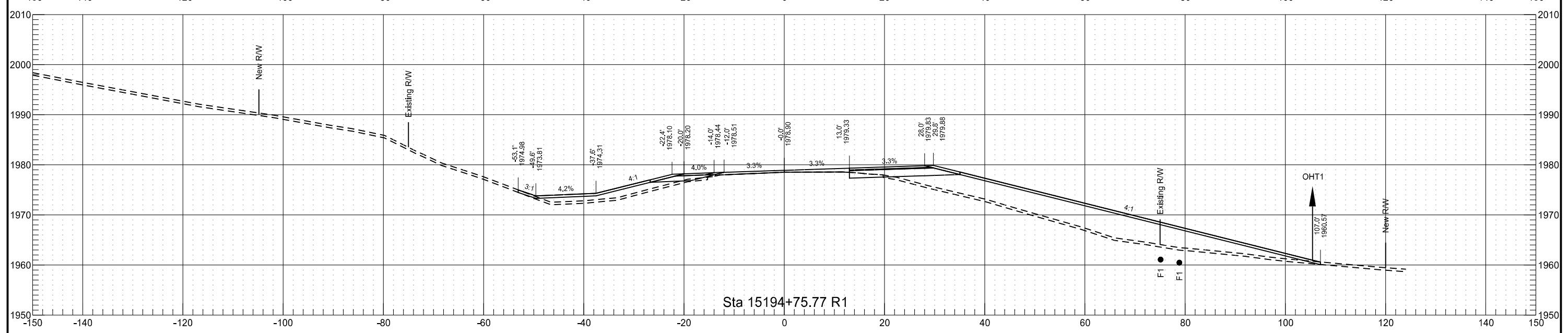
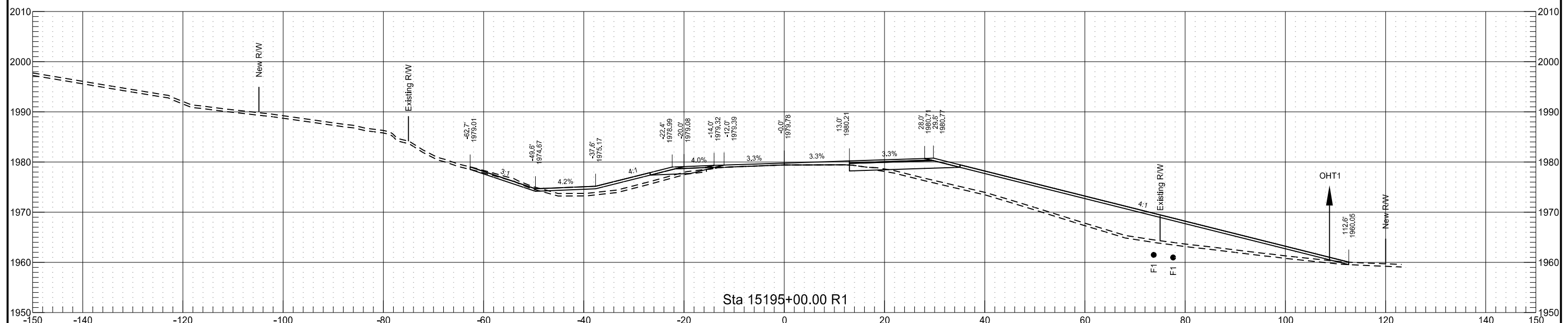
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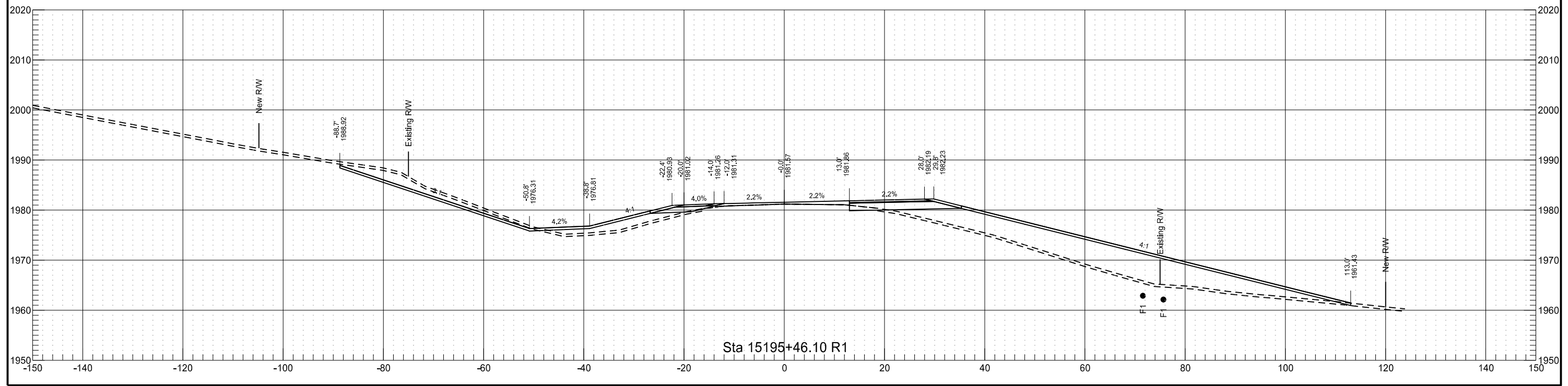
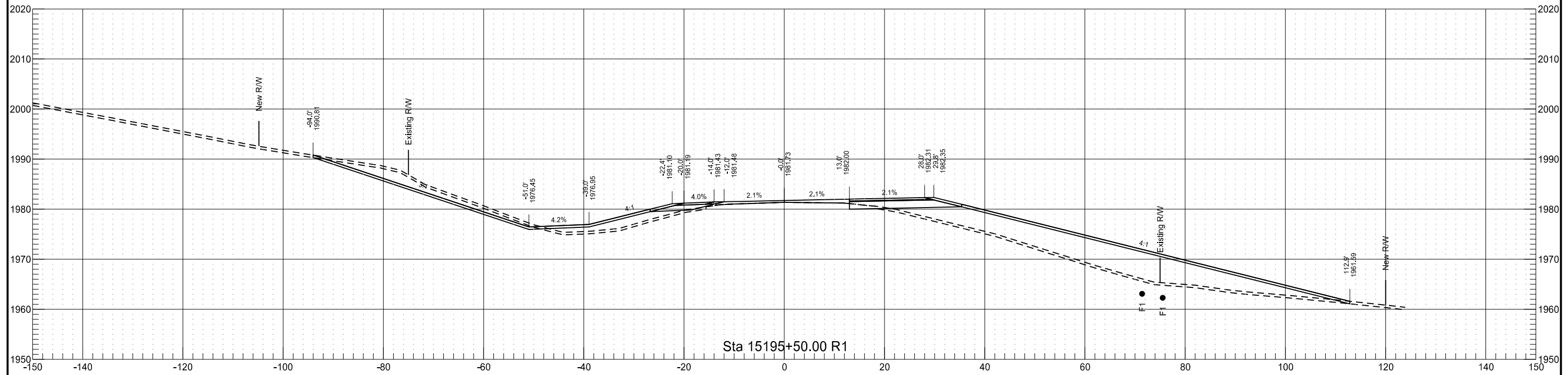


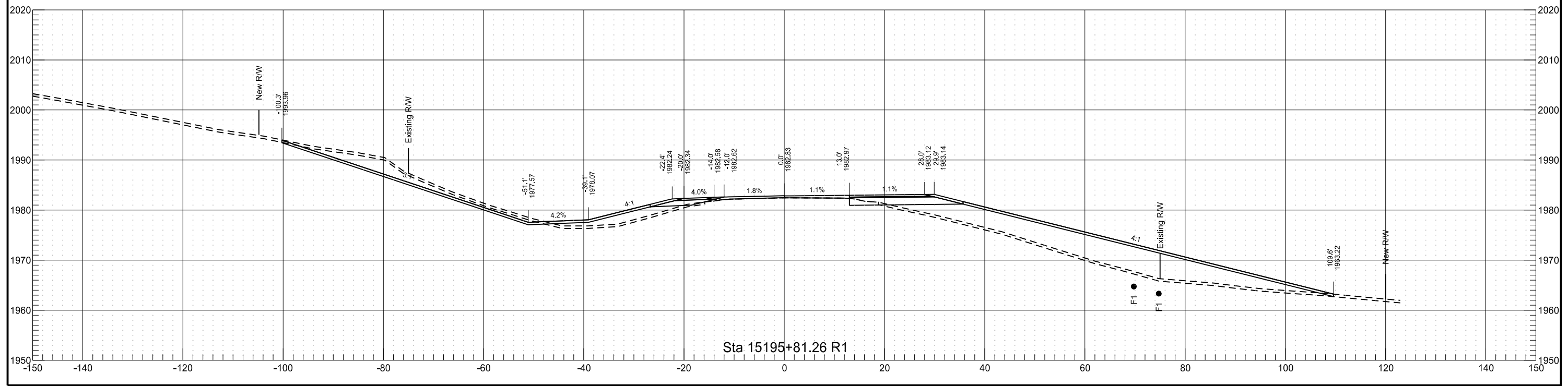
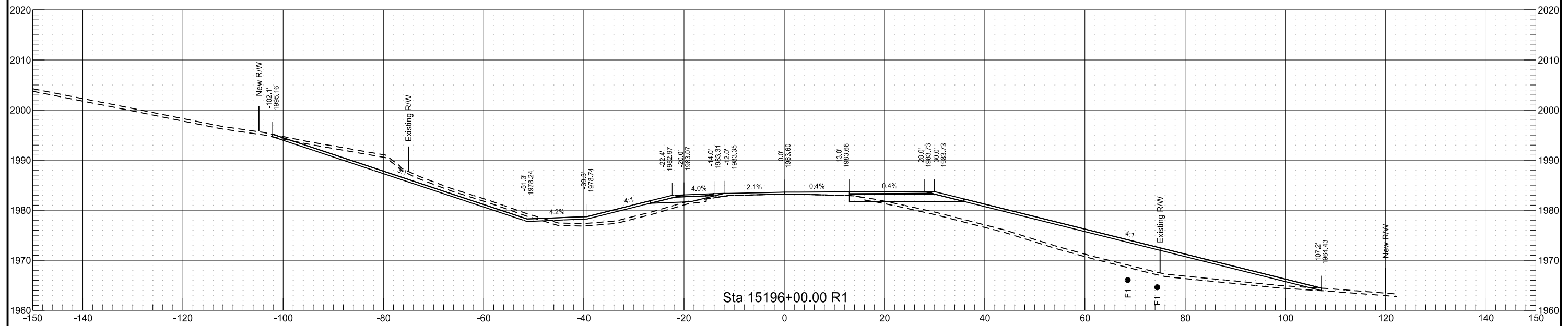


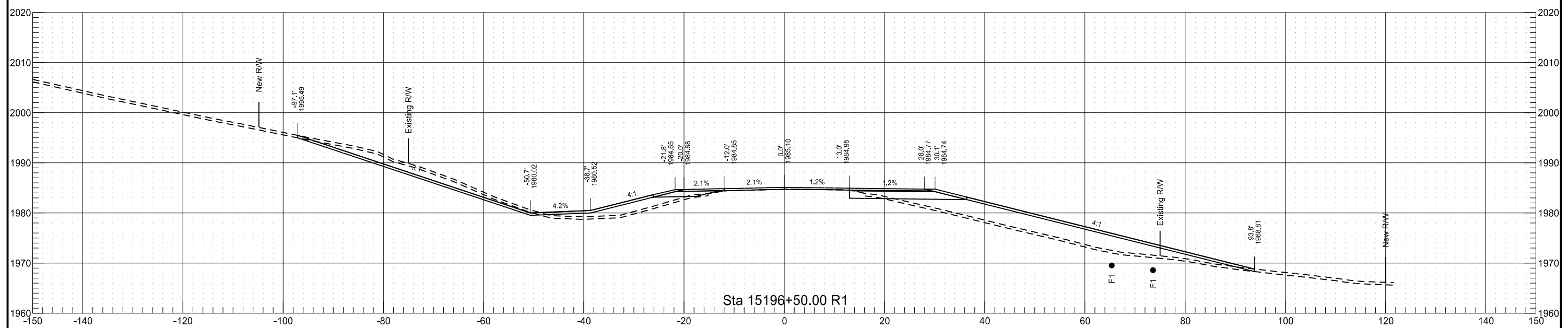
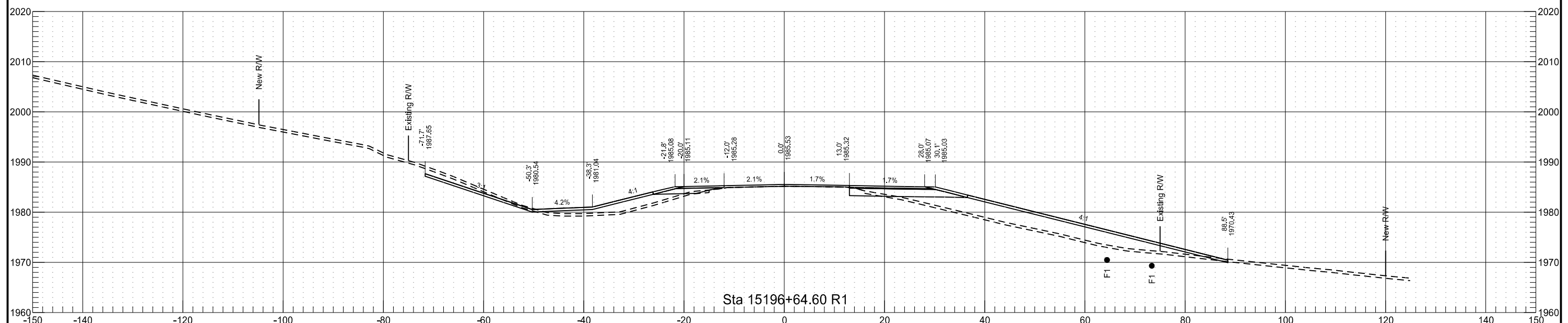


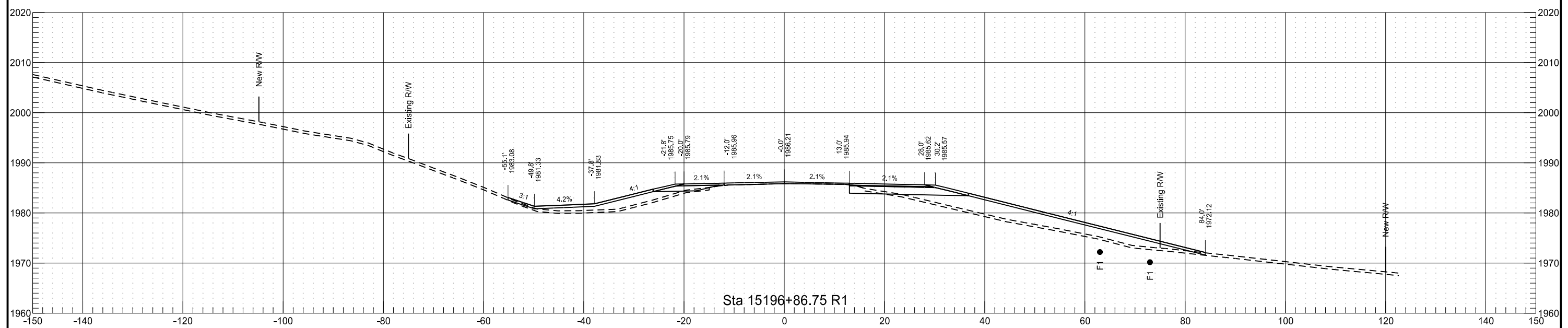
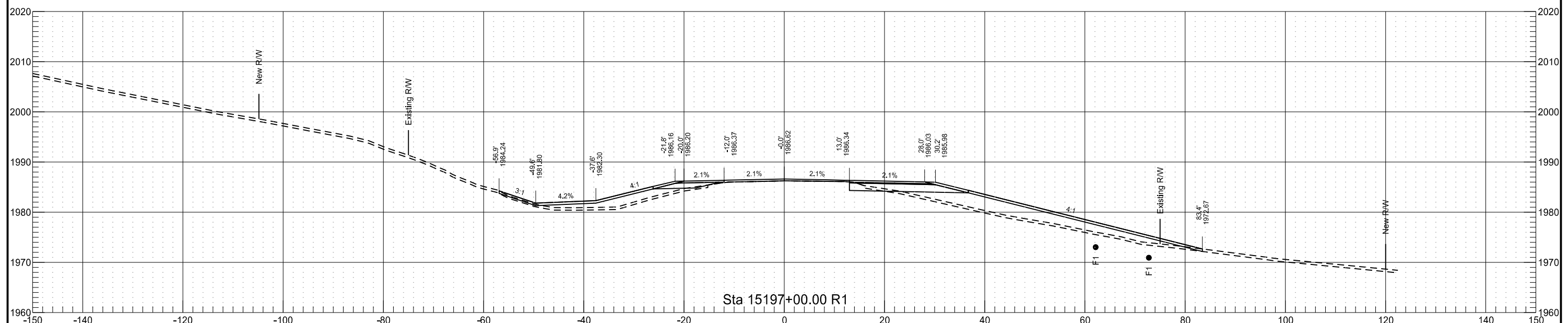


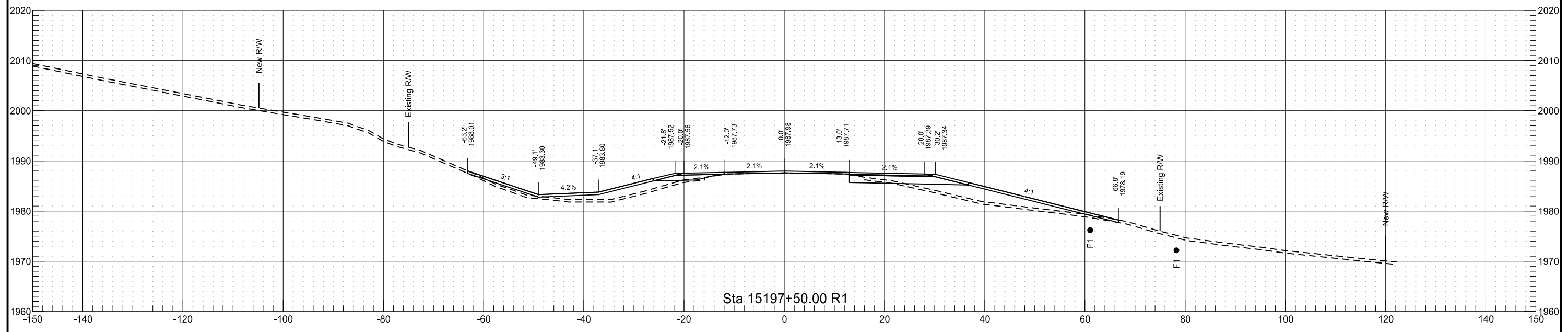
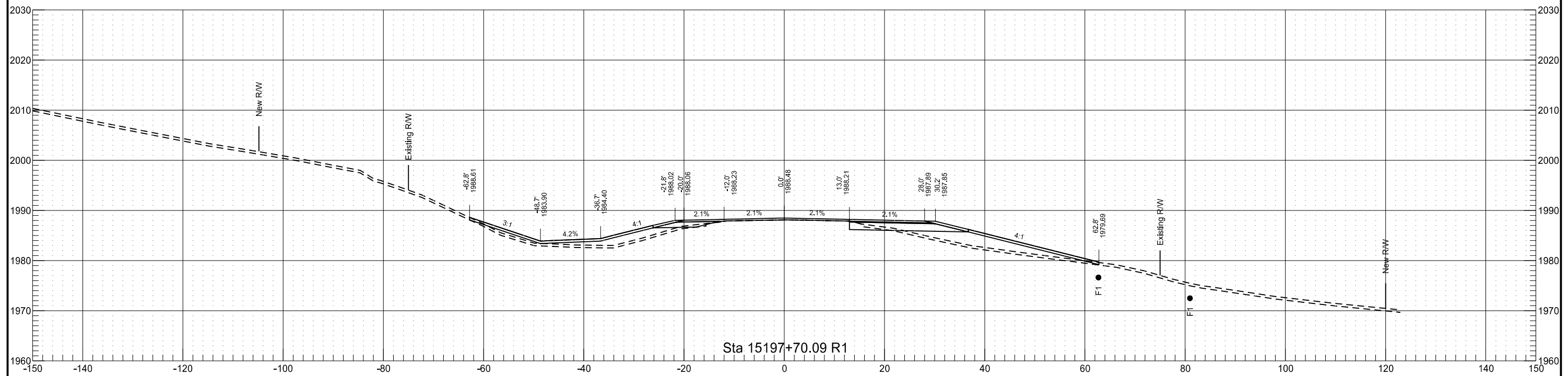


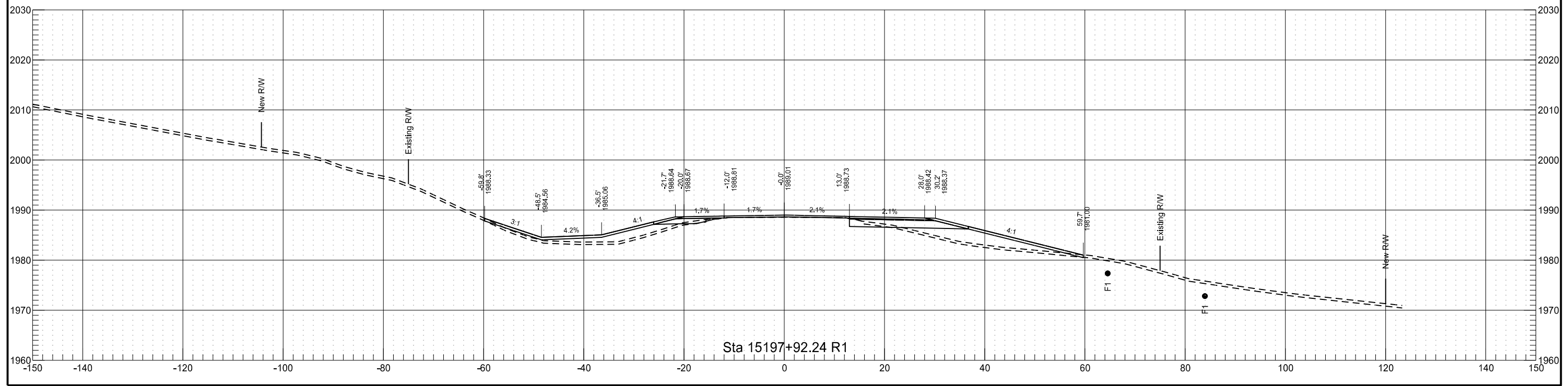
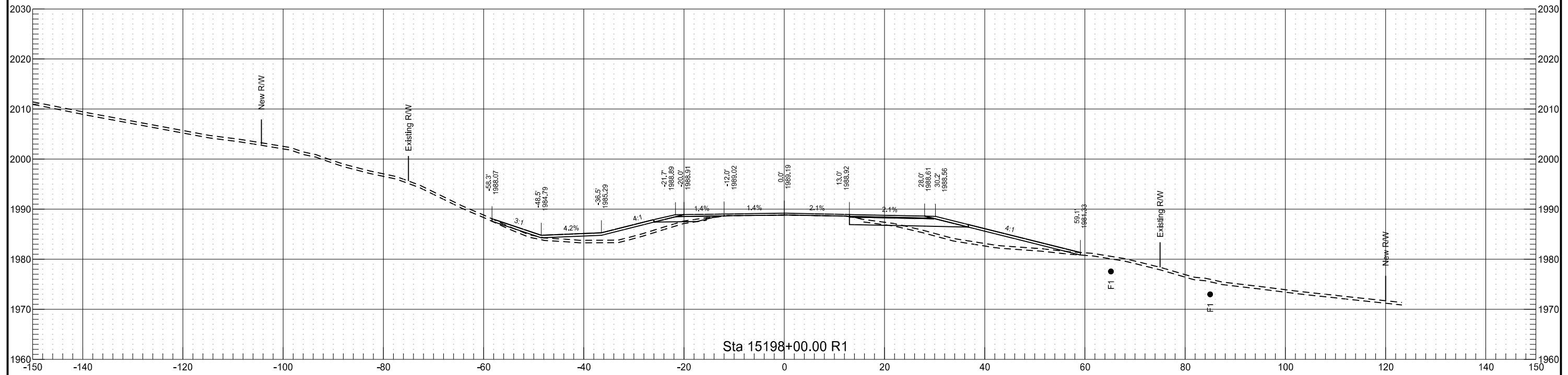


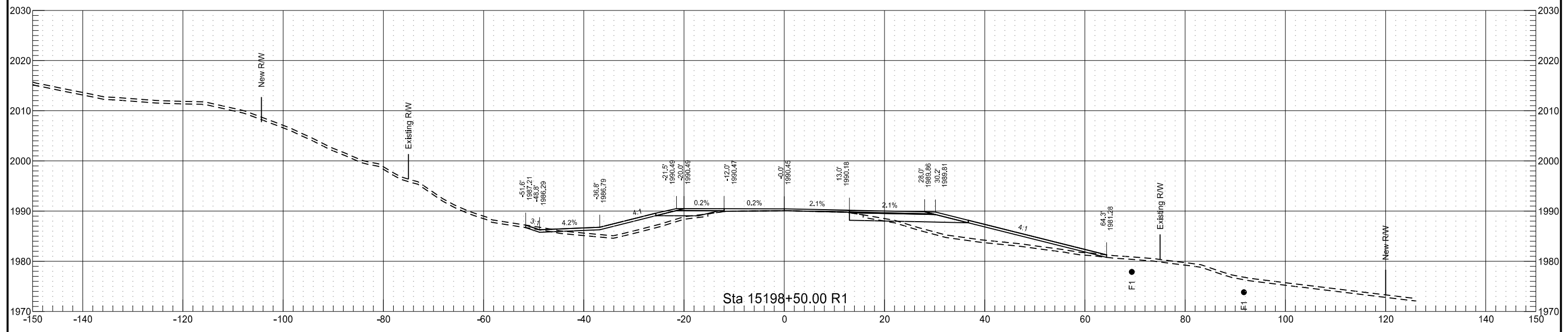
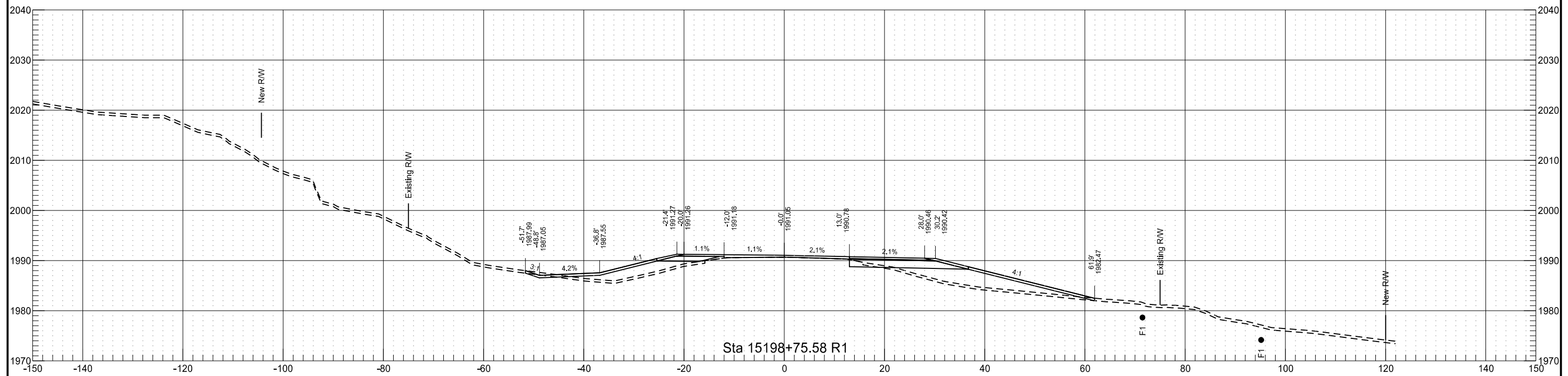




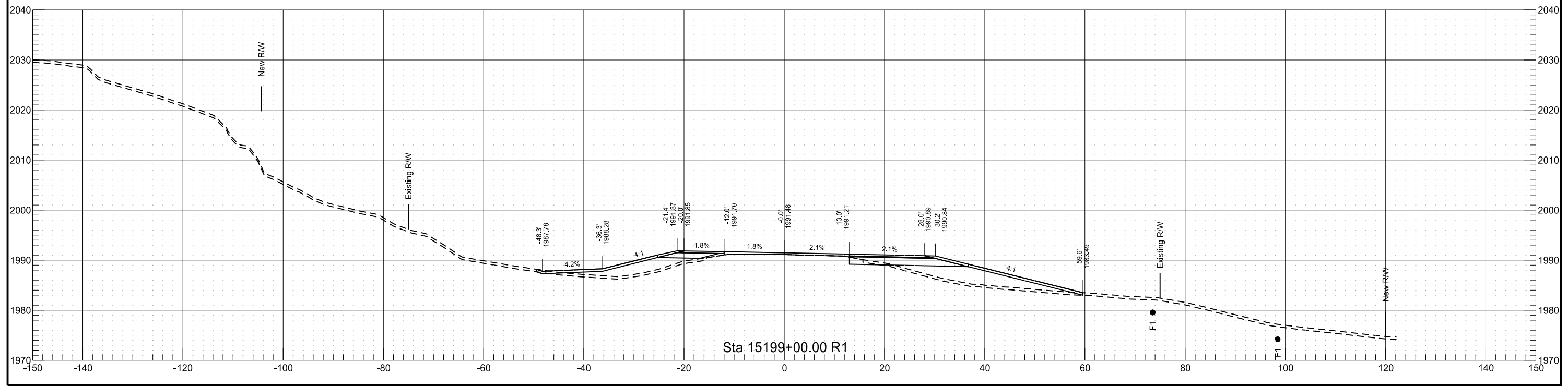
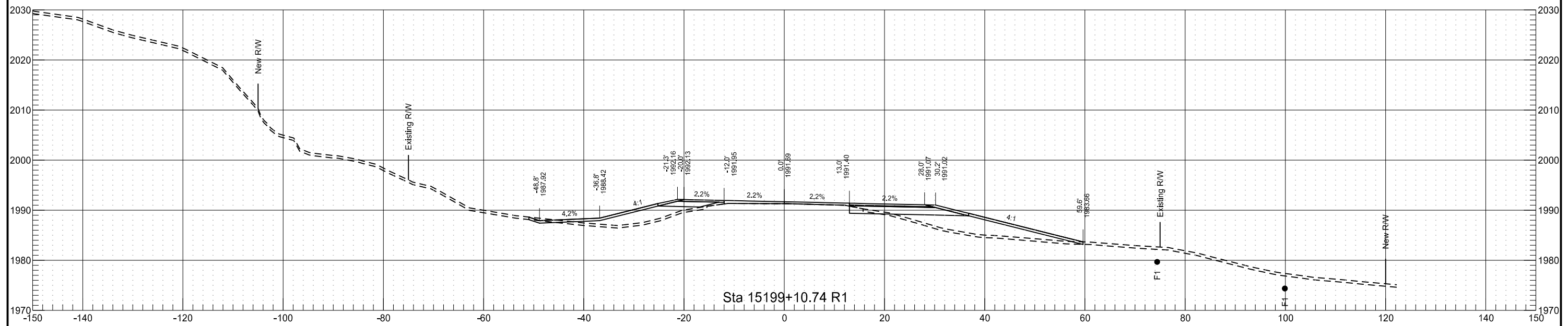


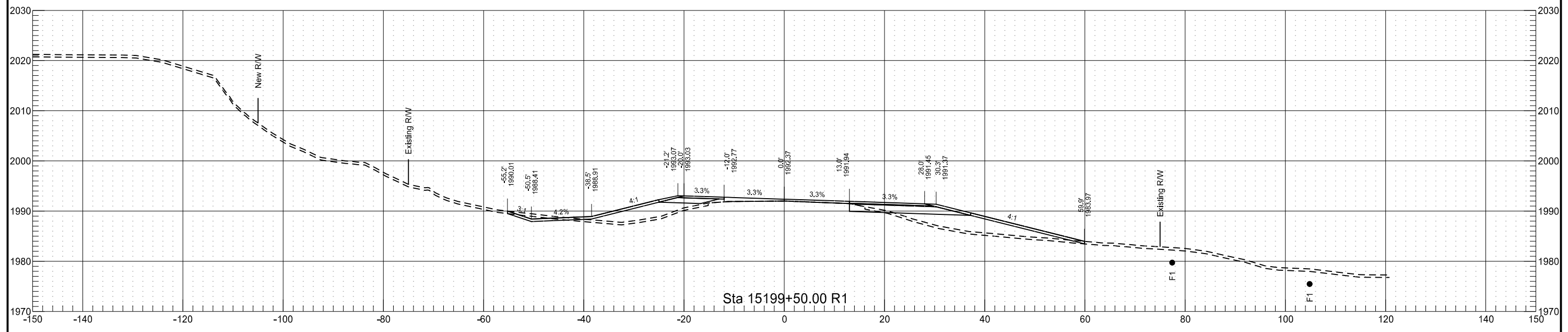
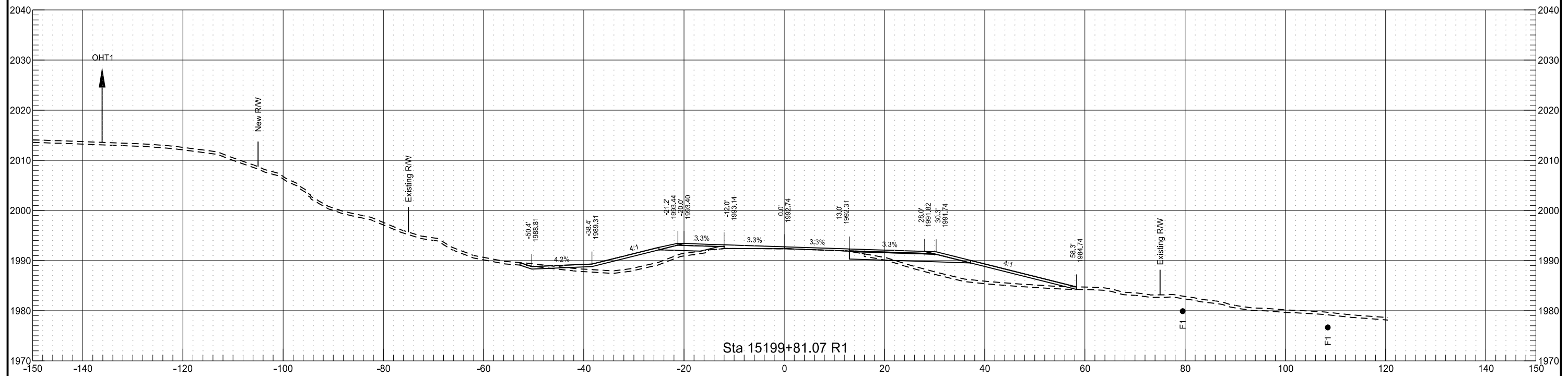




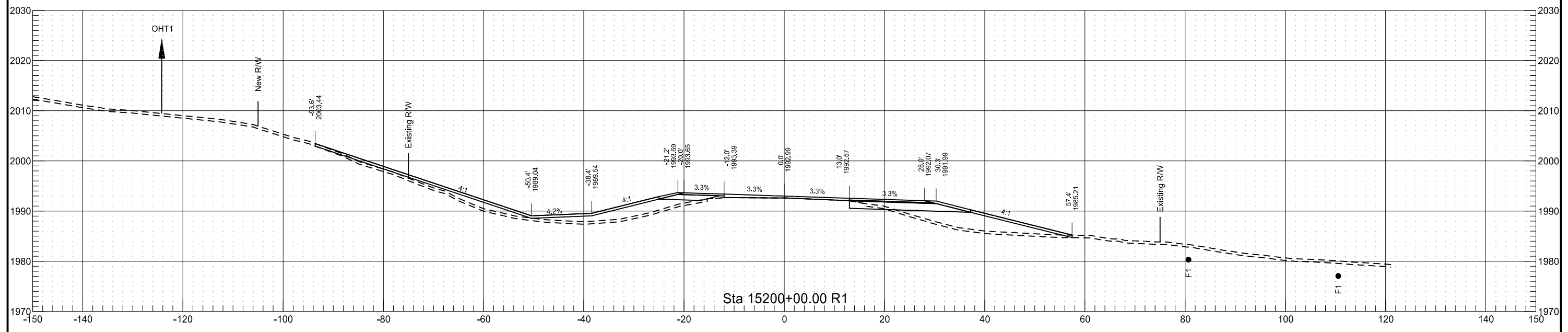
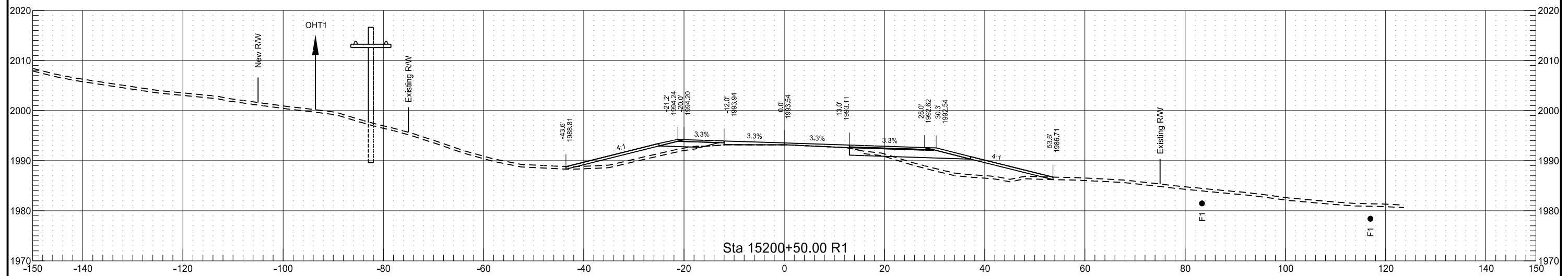
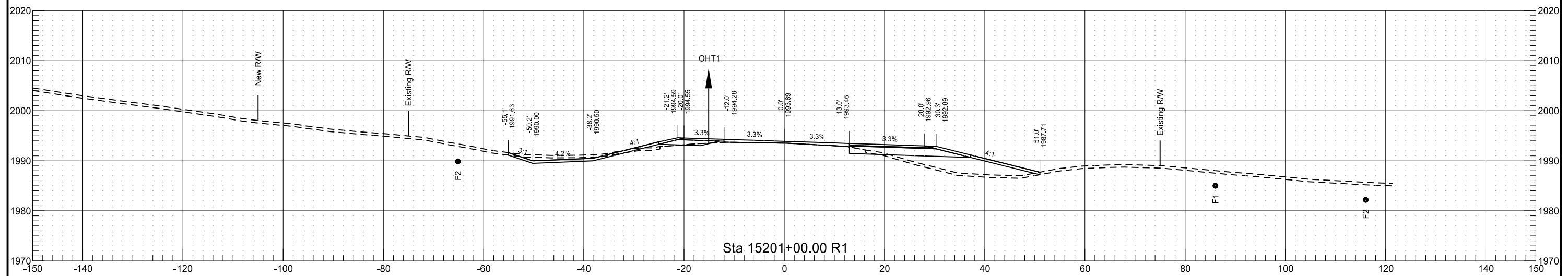


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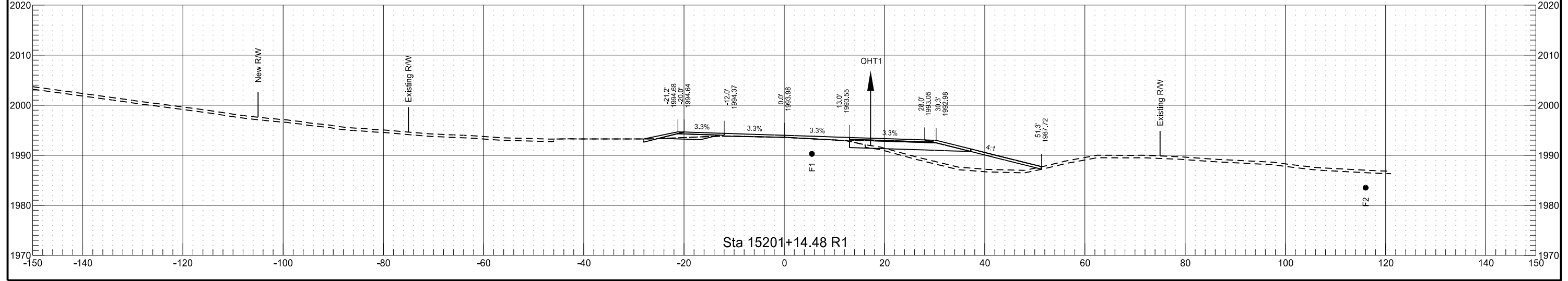
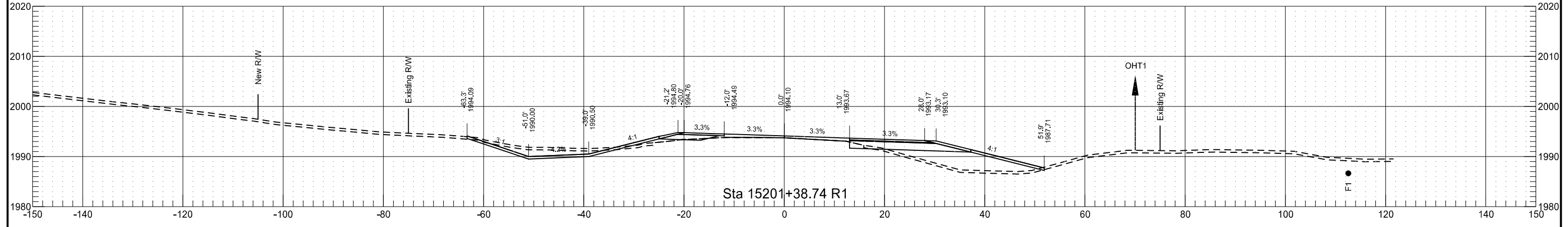
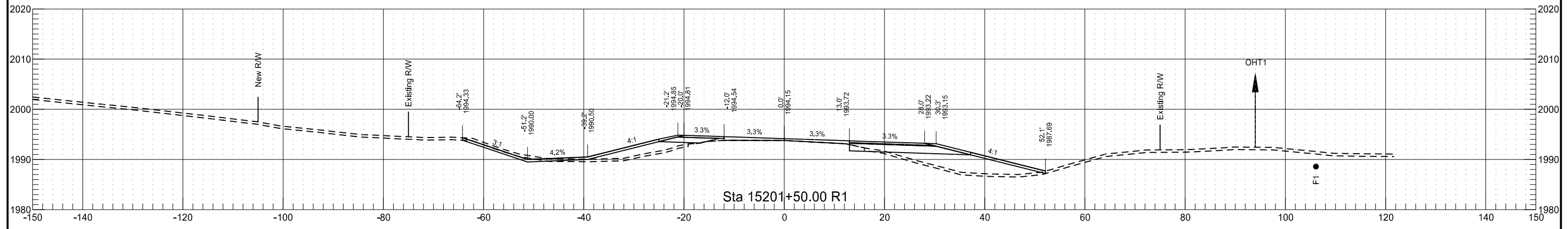


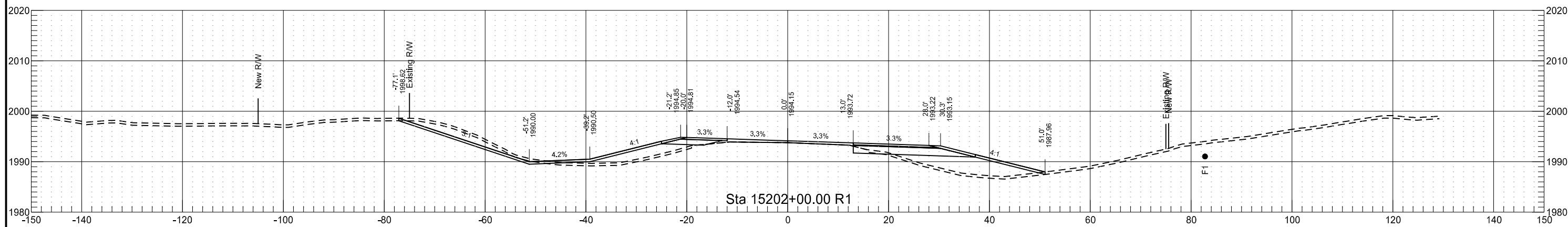
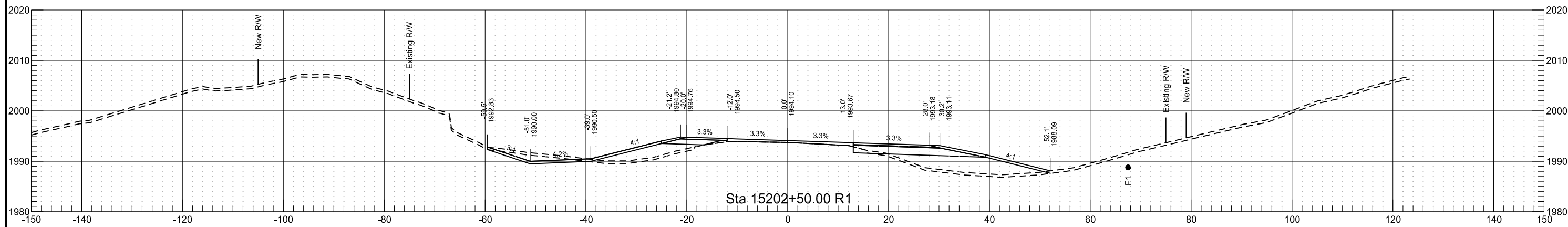
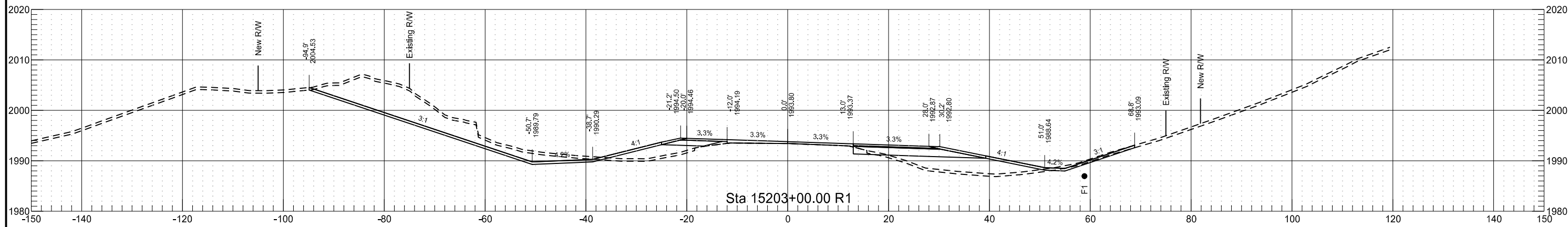
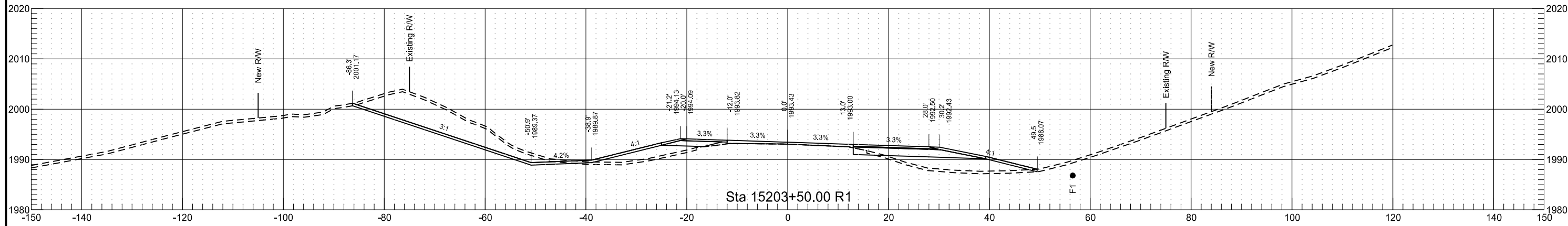


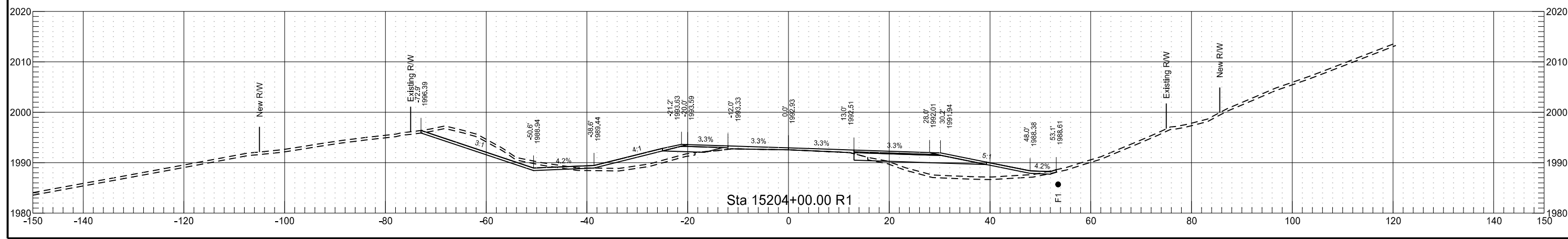
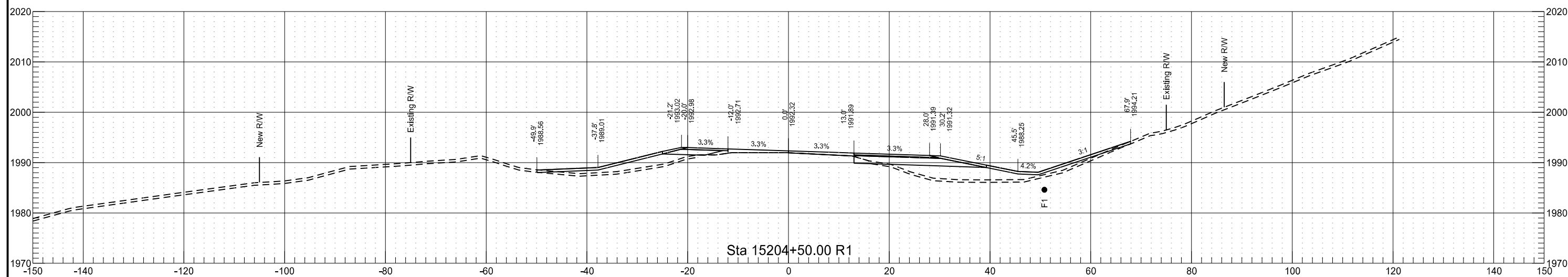
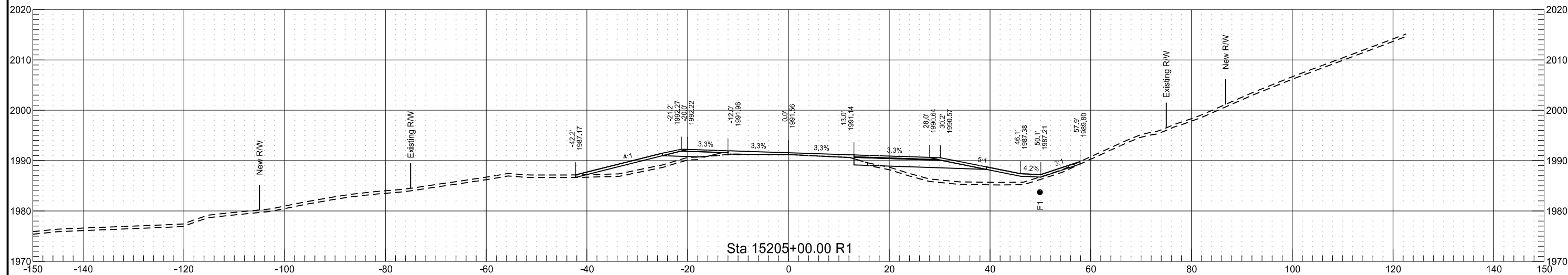
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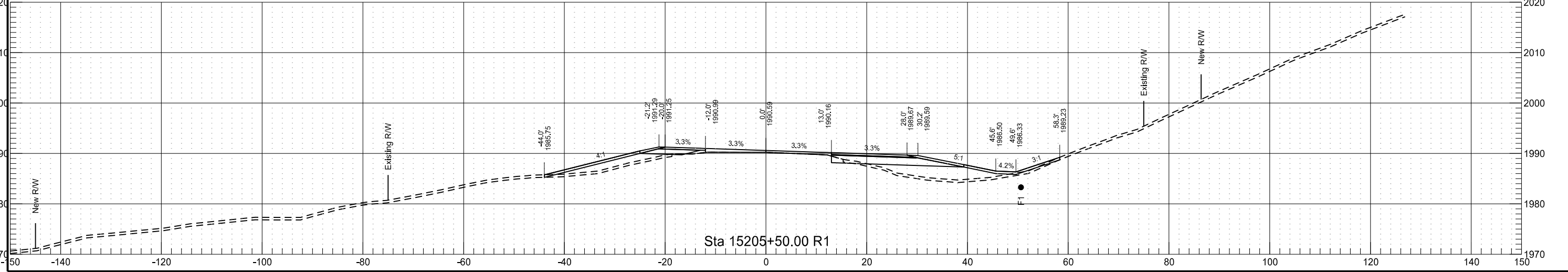
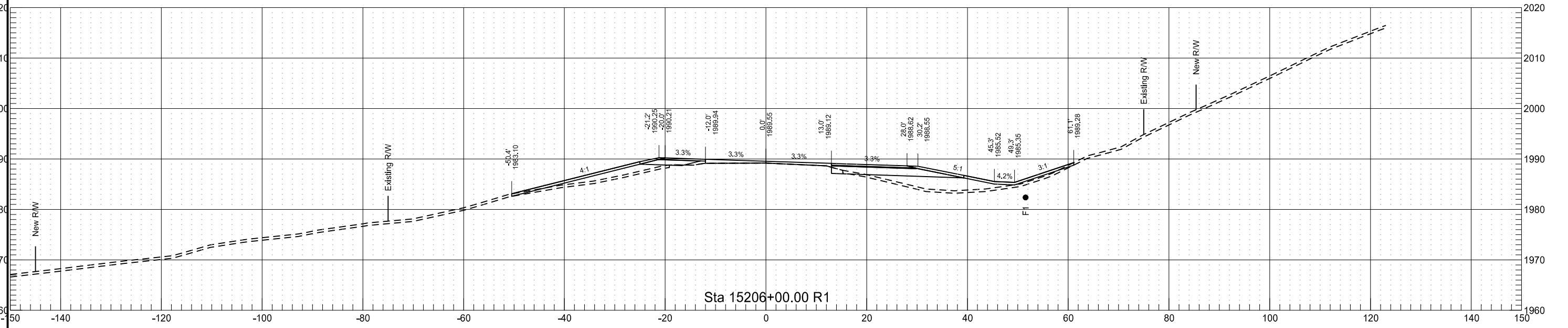
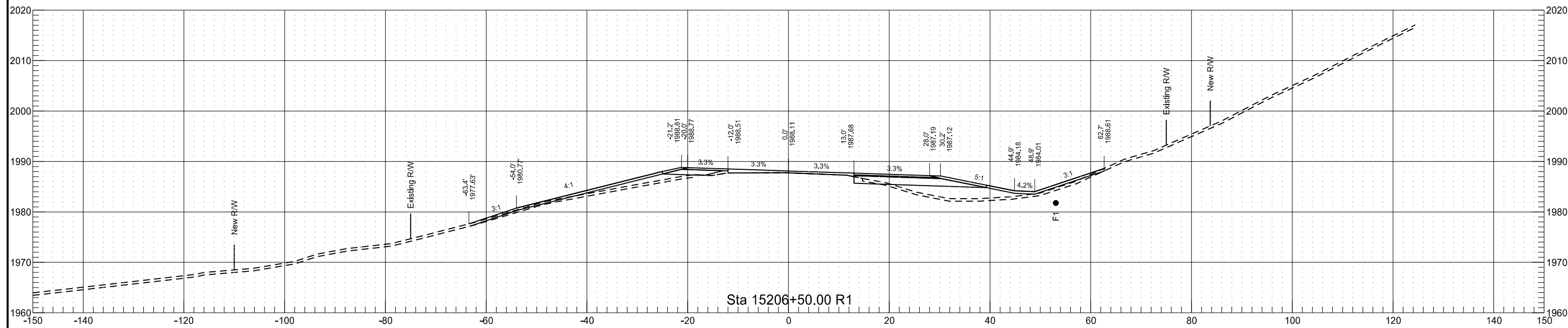


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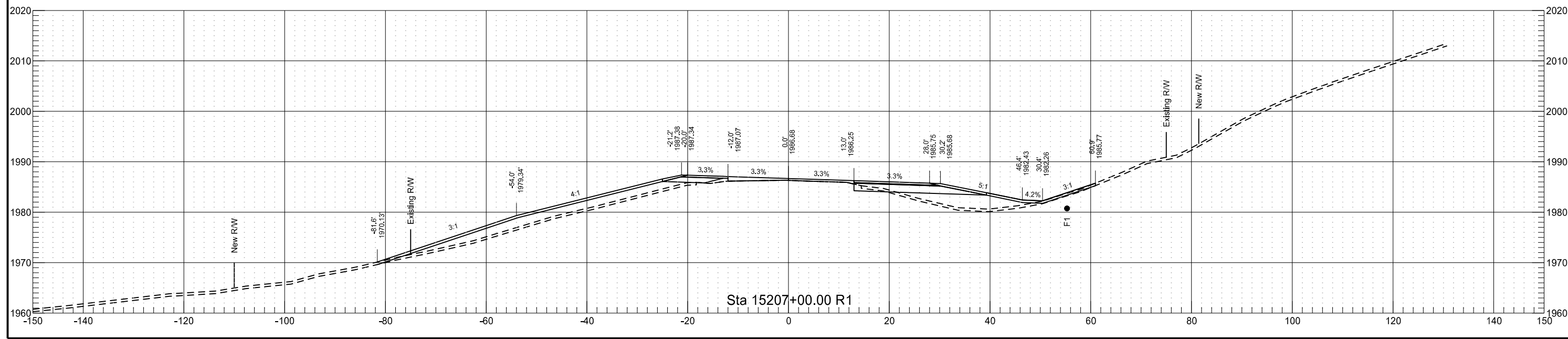
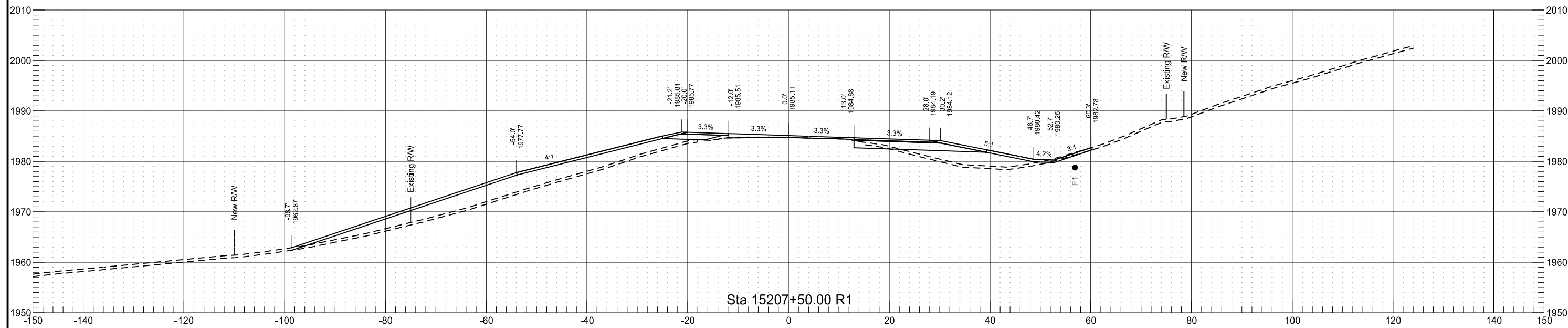
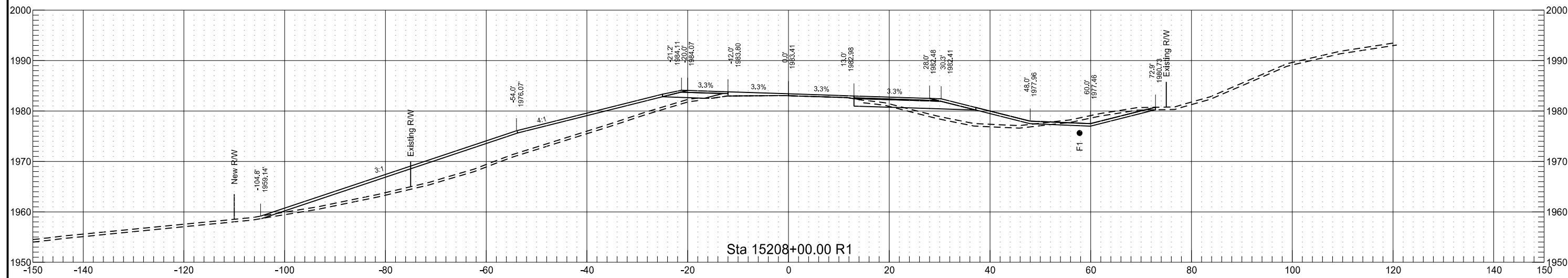




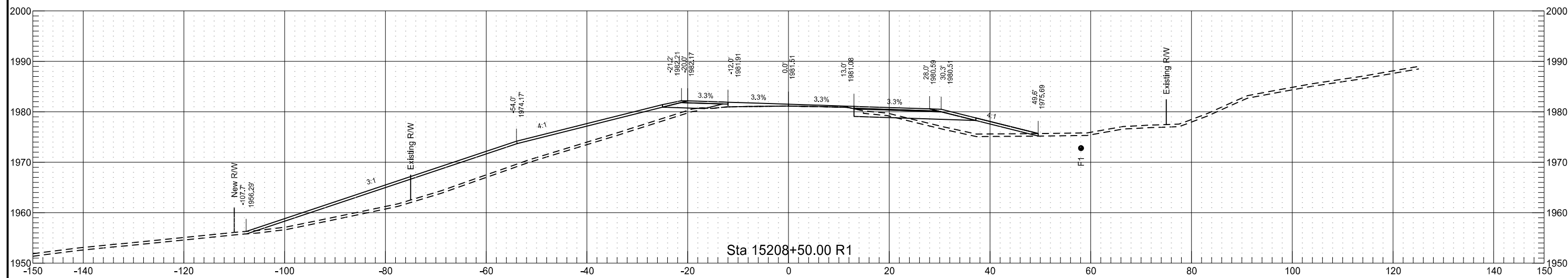
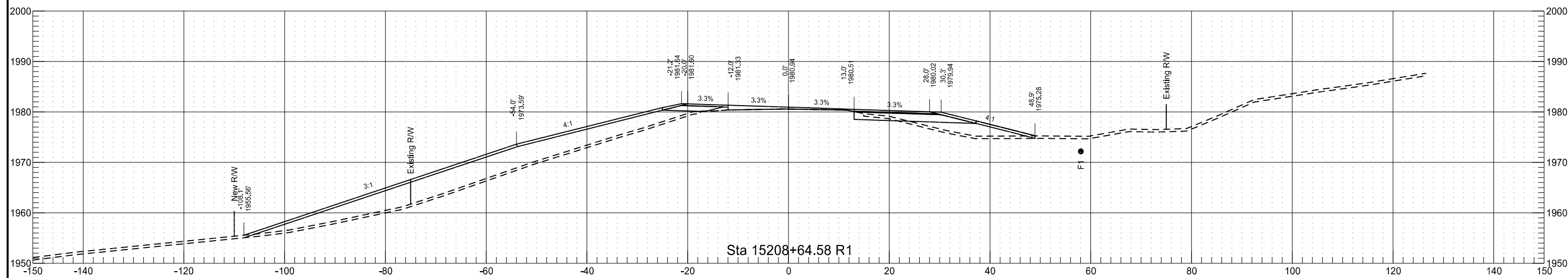
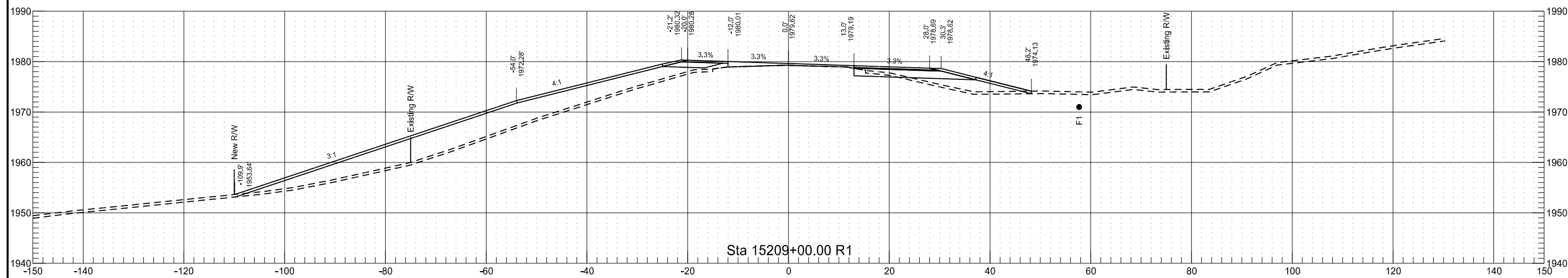




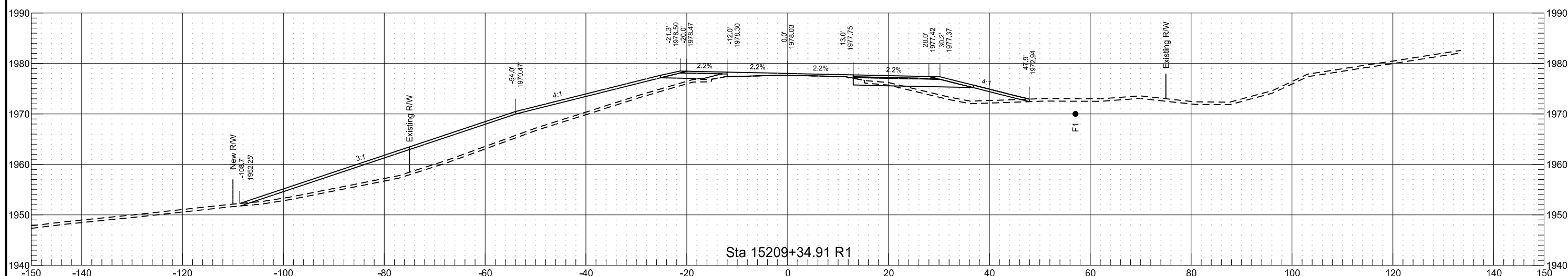
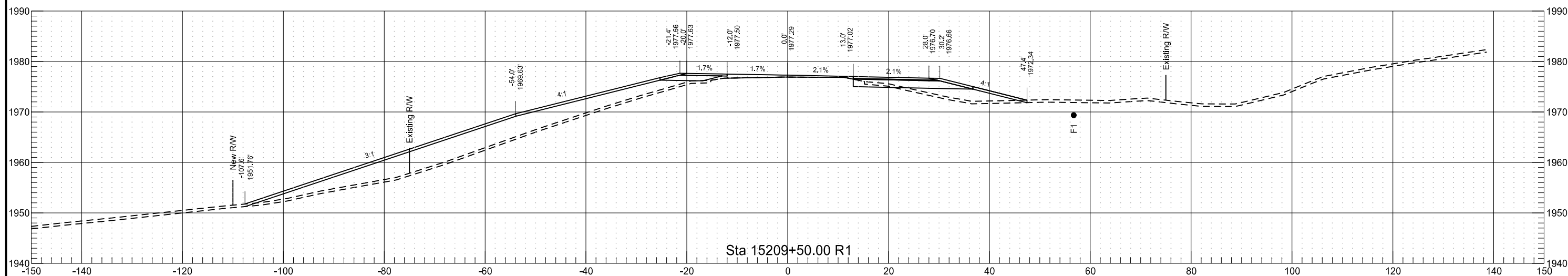
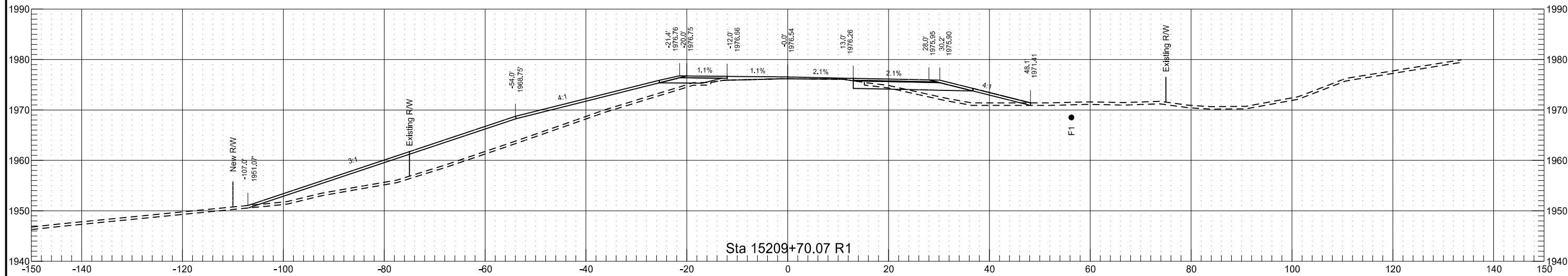
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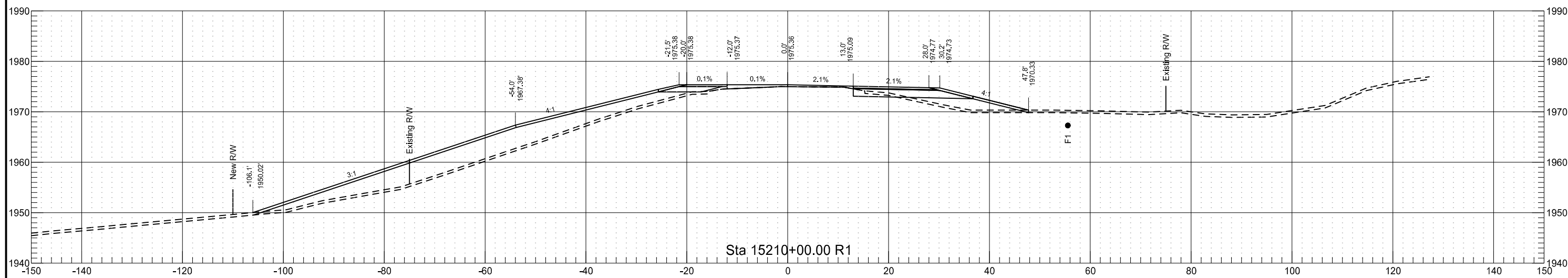
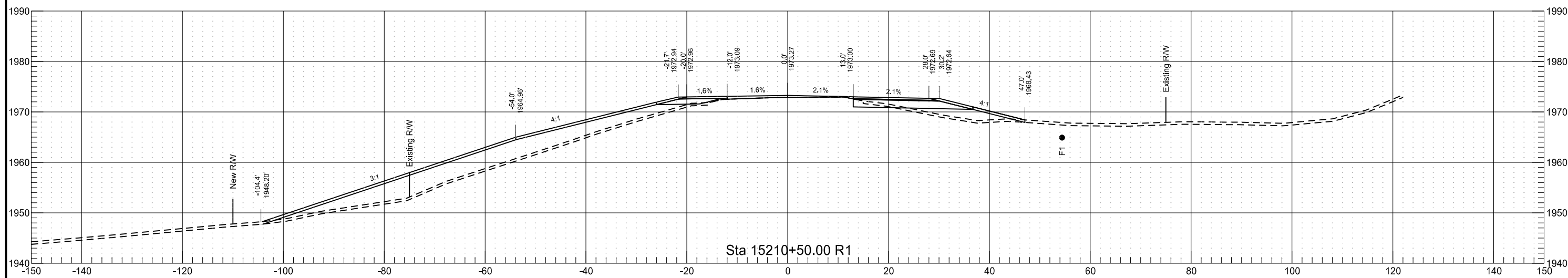
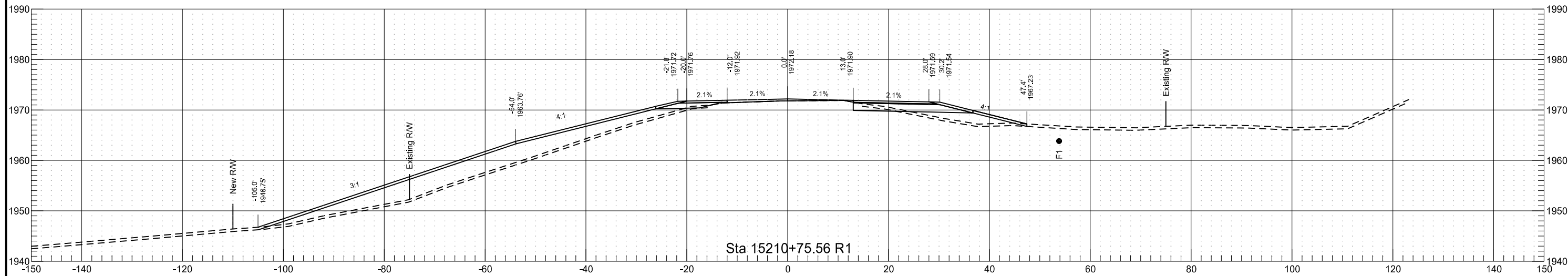


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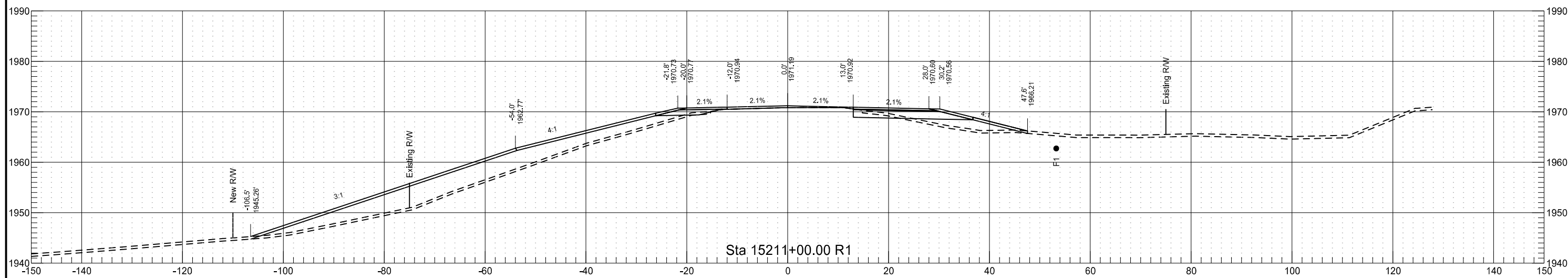
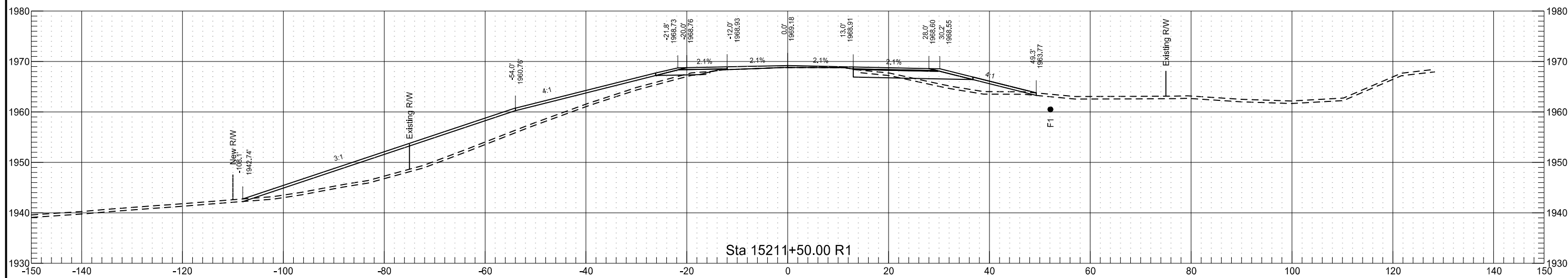
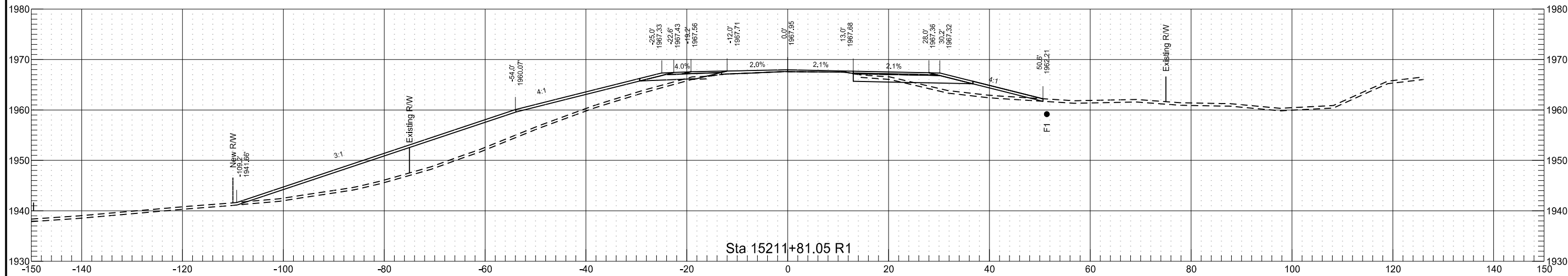


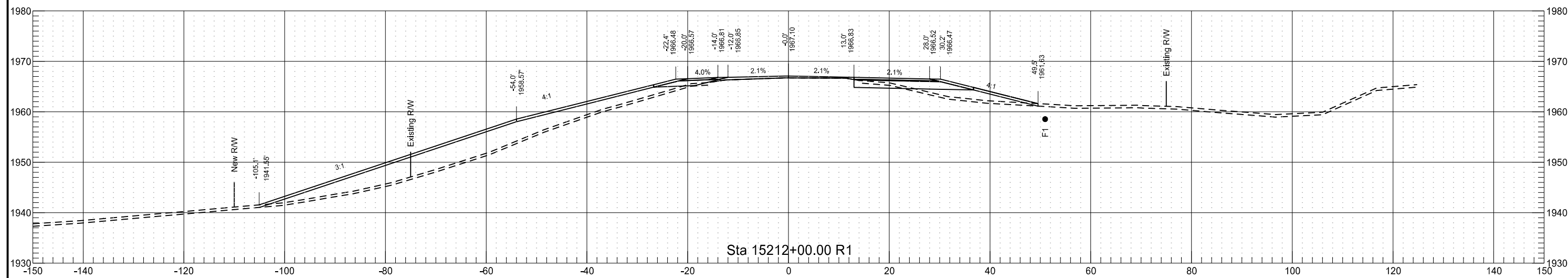
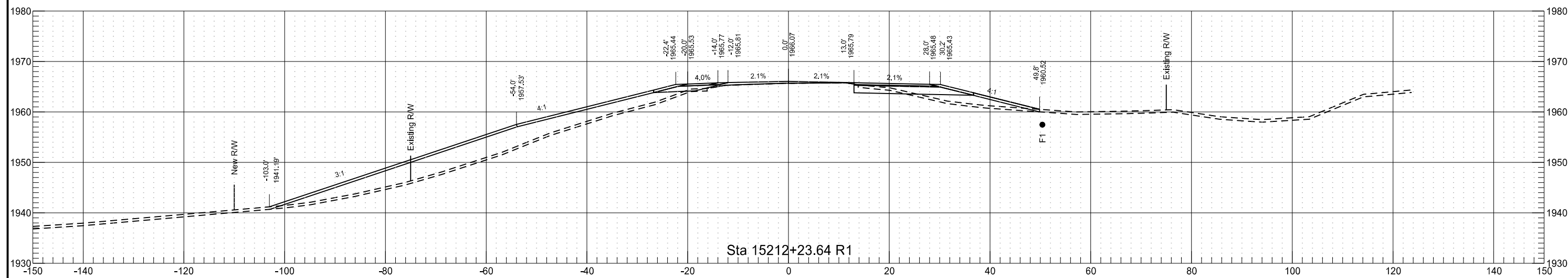
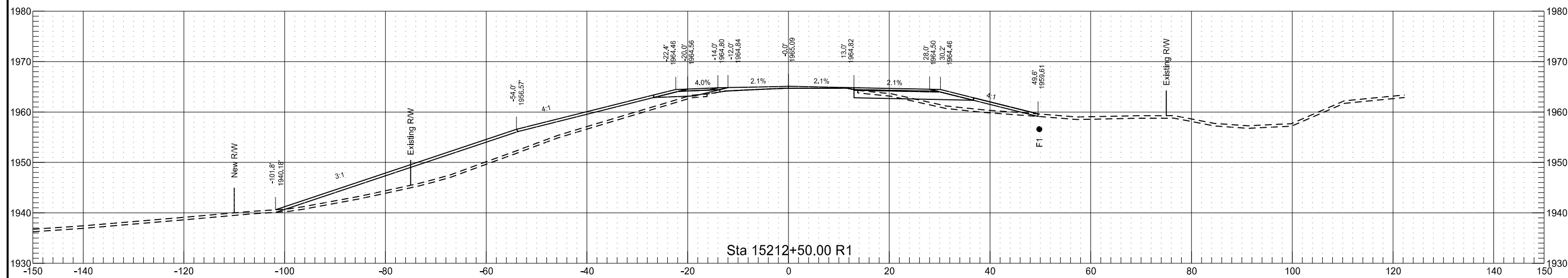
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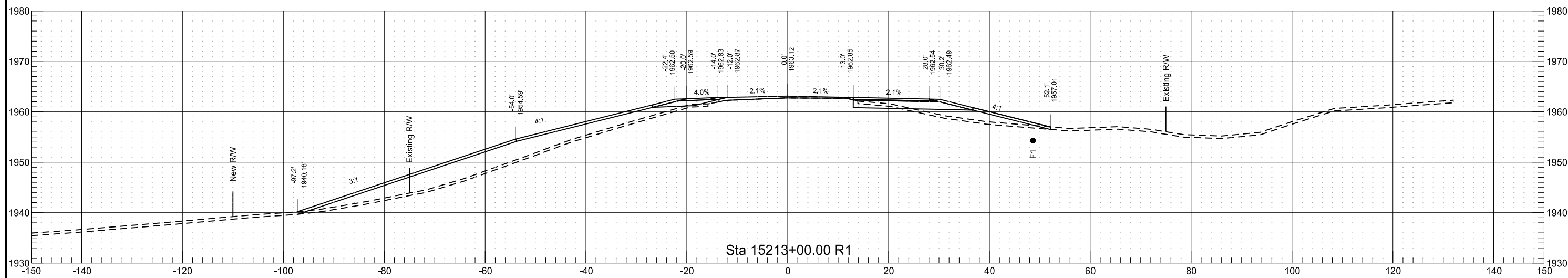
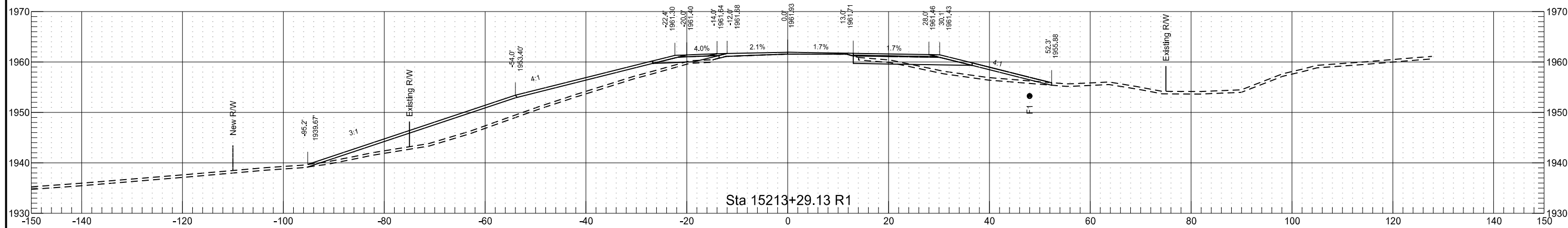
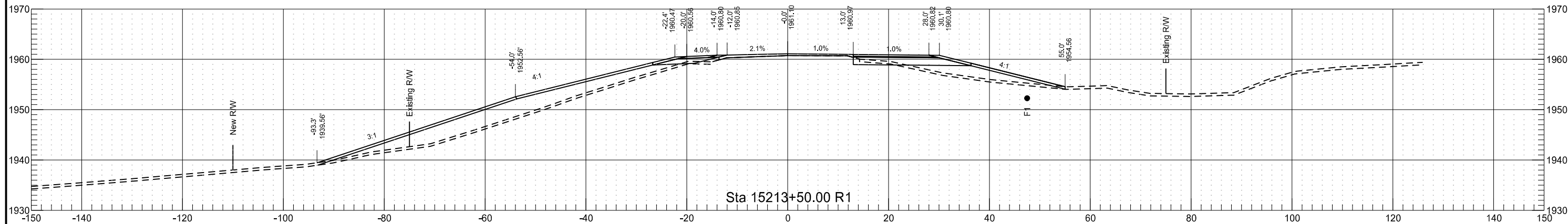


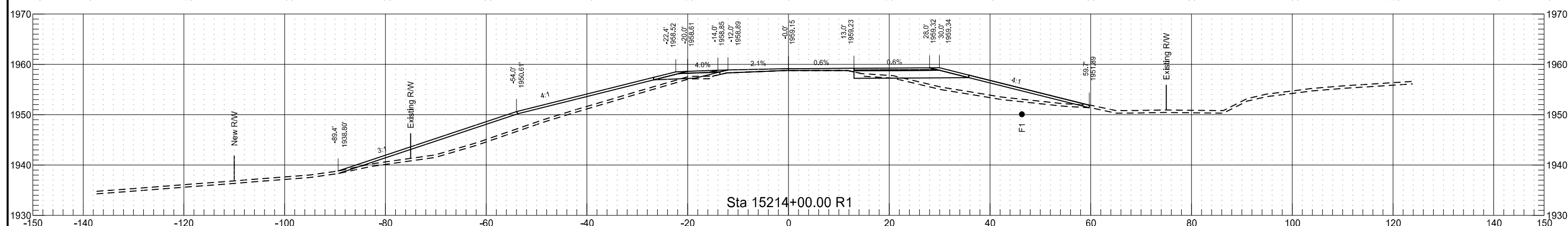
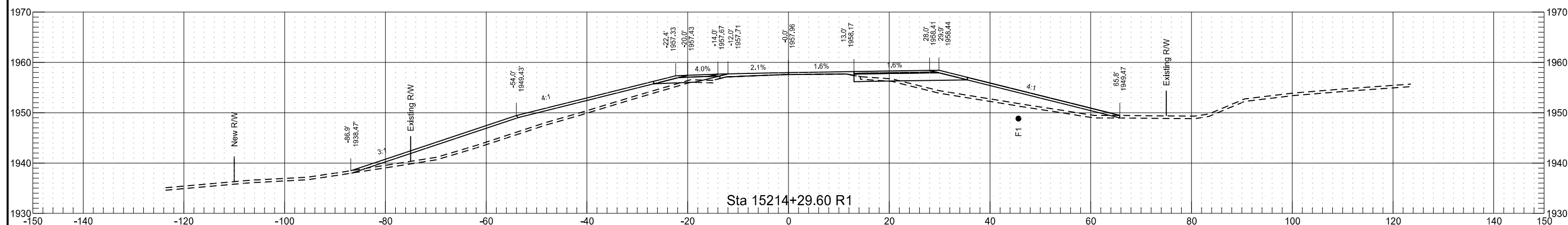
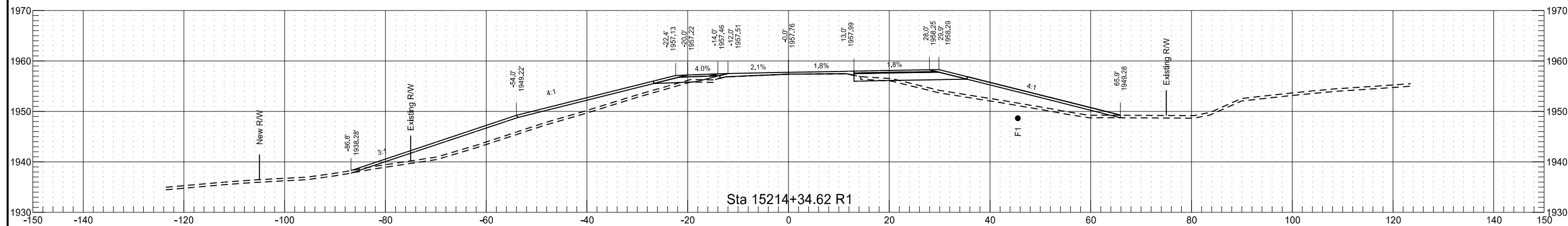


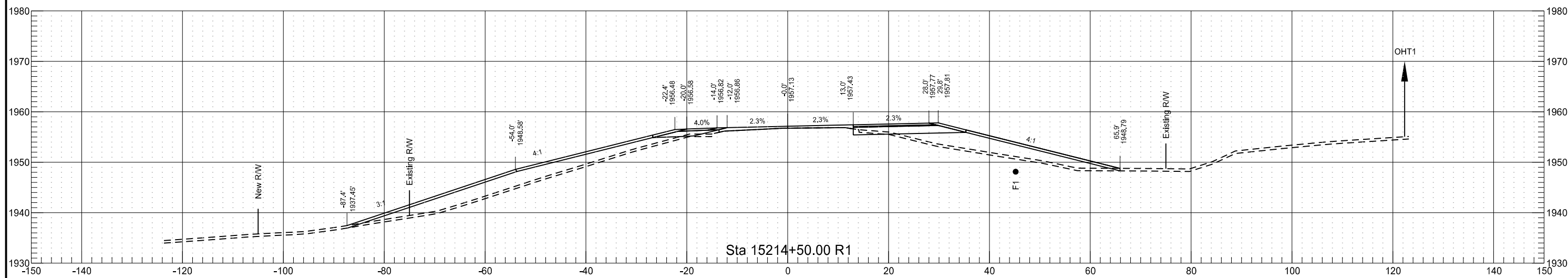
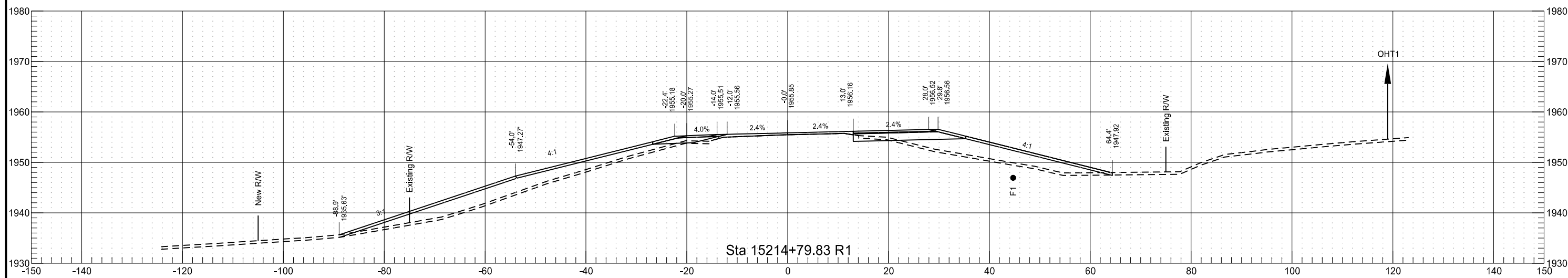
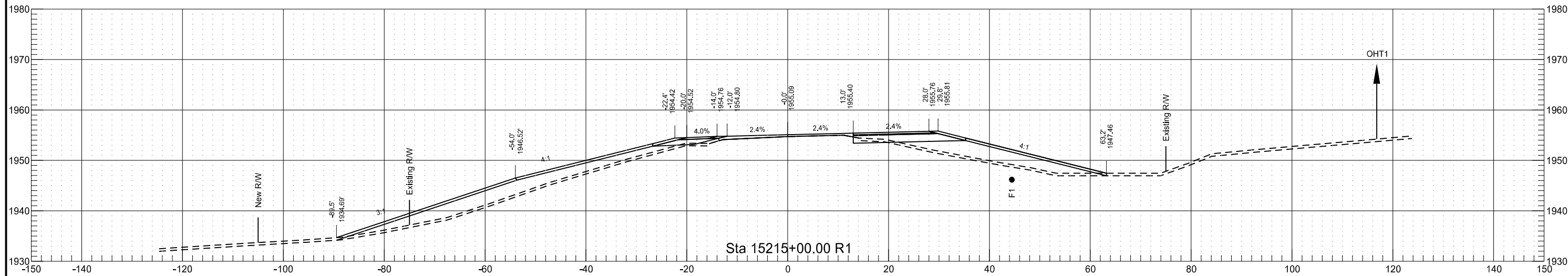
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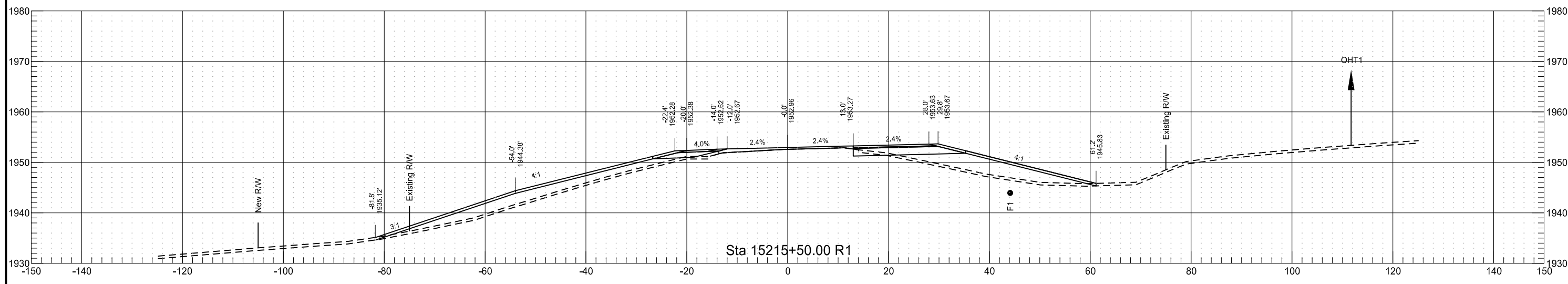
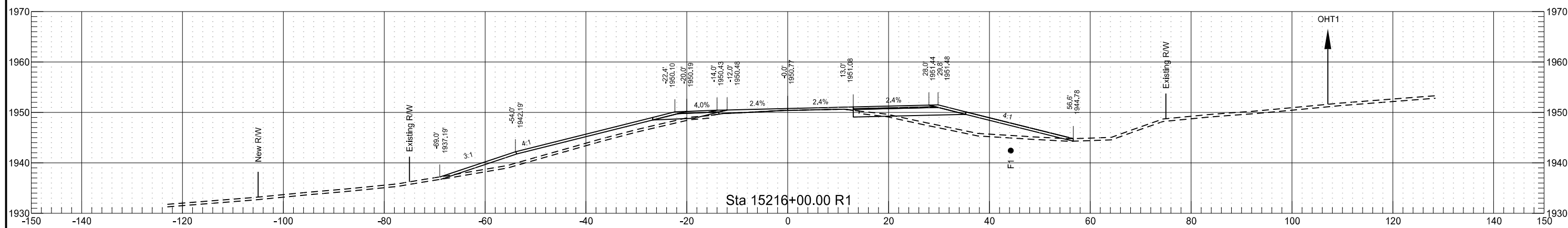
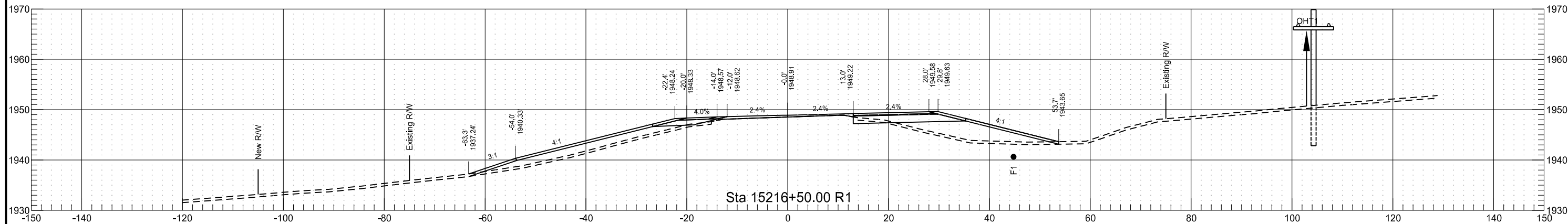




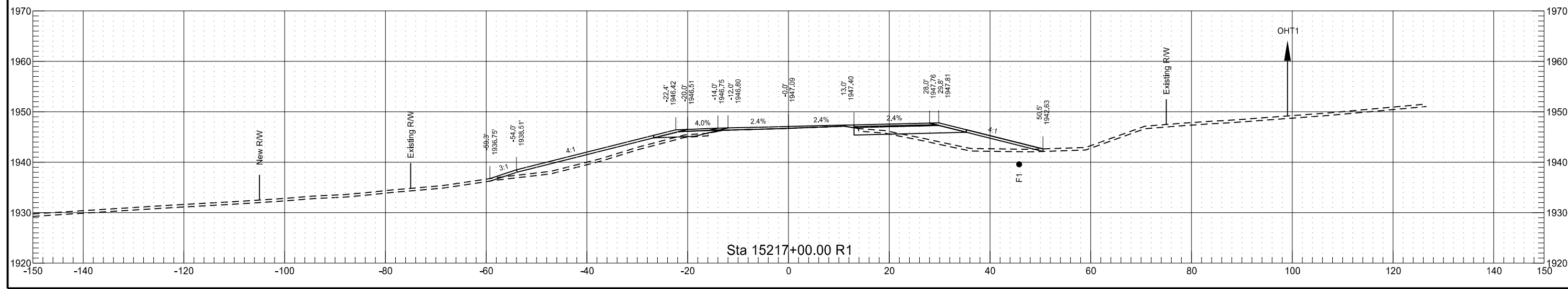




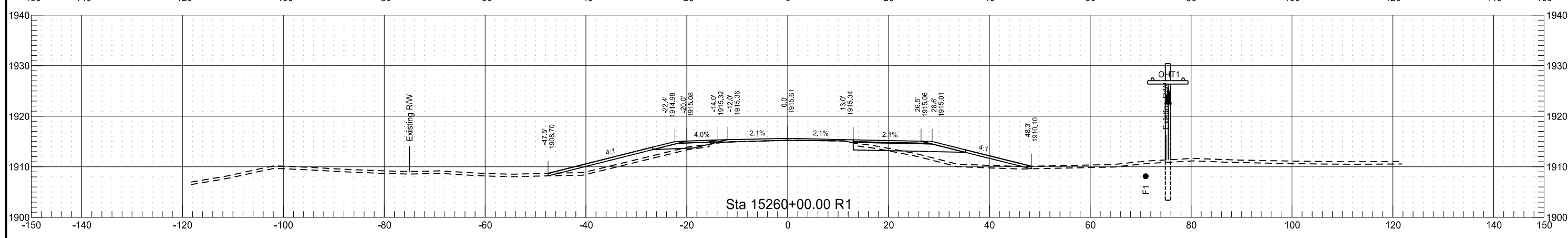
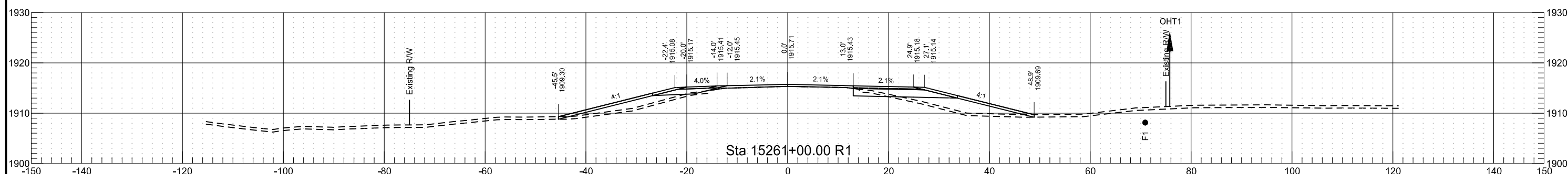
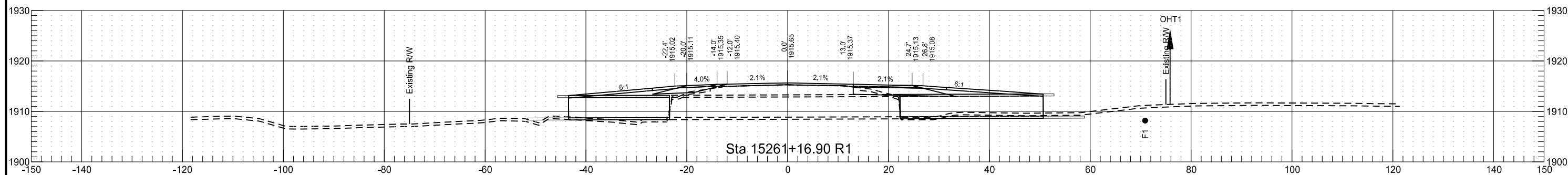
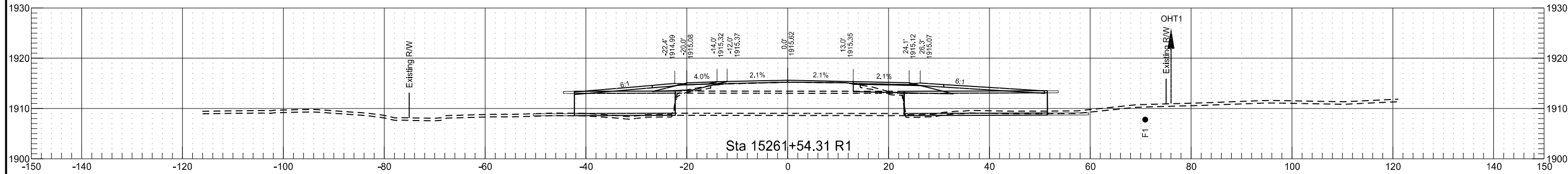
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