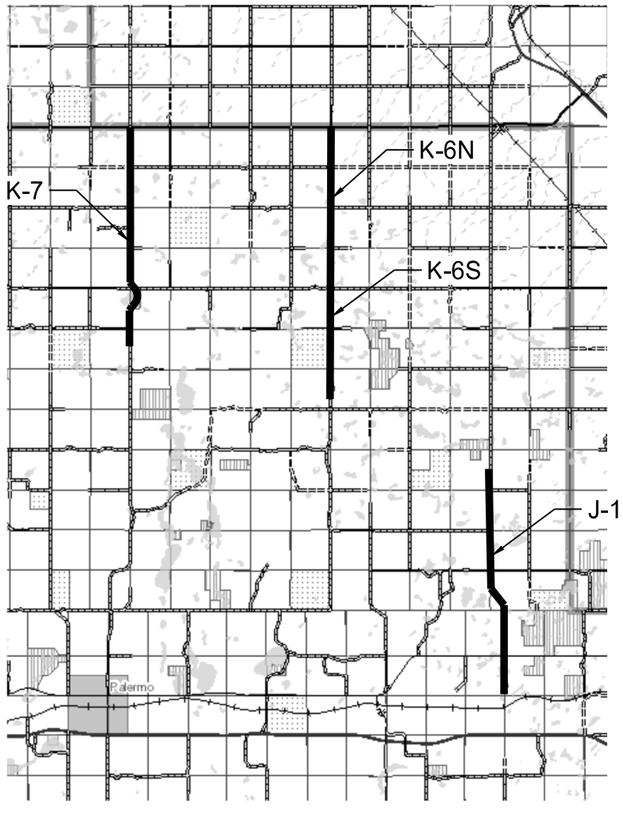
DESIGN DATA				
Traffic N/A	Average Daily			
Current N/A	Pass: N/A	Trucks: N/A	Total: N/A	
Preventive Maintenance: Inslope Repair				

	STATE	PROJECT NO.	PCN	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	21835	1	1

JOB # 5
NORTH DAKOTA
DEPARTMENT OF TRANSPORTATION

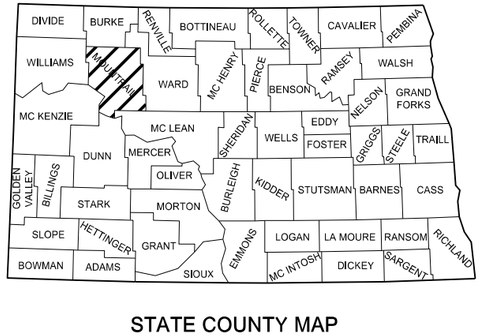
ROM-0300(135)

Mountrail County
Minot Minuteman Complex Inslope Repair



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

PROJECT NUMBER \ DESCRIPTION	NET MILES	GROSS MILES
ROM-0300(135)	3.8258	3.8258



STATE COUNTY MAP

DESIGNERS

Clifford R. Menting, PE

Bradley J. Schaff, EIT

I hereby certify that the attached plans were prepared by me or under my direct supervision and that I am a duly registered professional engineer under the laws of the state of ND.

APPROVED DATE Date Signed by PE

Clifford Menting
NDDOT DIV-DIST OR CONSULTANT FIRM

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9/7/2017 4:58:52 PM cschatz N:\20732\ROM-0300(135)\Design\Design Common\001_Upfront\001TS.dgn

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	ROM-0300(135)	2	1

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PLAN SECTIONS

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6	1 - 2	Notes
6	3 - 9	Environmental Notes
8	1	Quantities
10	1 - 2	Basis of Estimate
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30	1 - 29	Typical Sections
50	1	Hydraulic Data
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75	1 - 16	Wetland Impacts
76	1 - 29	Temporary Erosion Control
77	1 - 30	Permanent Erosion Control
81	1	Survey Coordinate and Curve Data
100	1 - 3	Work Zone Traffic Control
110	1 - 3	Signing
200	1 - 133	Cross Sections

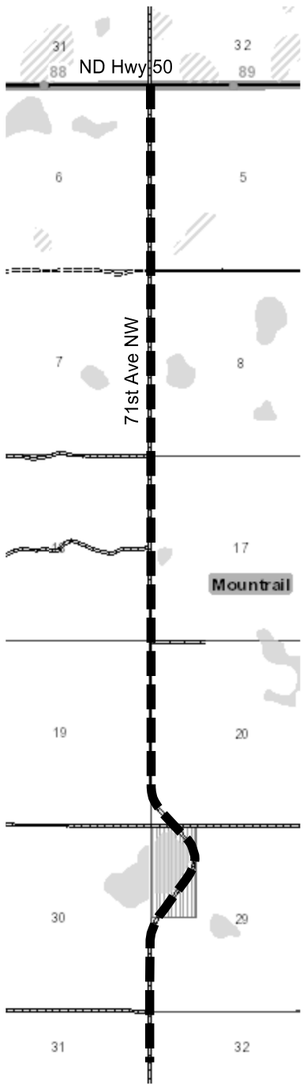
LIST OF STANDARD DRAWINGS

Number	Description
D-101-1, 2, 3	NDDOT Abbreviations
D-101-10	NDDOT Utility Company and Organization Abbreviations
D-101-20, 21	Line Styles
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D-203-7	Recovery Approaches At T-Intersections
D-203-8	Standard Rural Approaches
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D-261-1	Erosion Control - Fiber Roll Placement Details
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D-704-7, 8	Breakaway Systems For Construction Zone Signs - Perforated Tube
D-704-9, 11	Construction Sign Details - Terminal And Guide Signs
D-704-12	Shoulder Closure Tapers
D-704-13	Barricade And Channelizing Device Details
D-704-14	Construction Sign Punching And Mounting Details
D-704-15	Road Closure Layouts
D-704-20	Terminal And Seal Coat Sign Layouts
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D-704-30	Windrow Marking
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D-714-25, 26	Transverse Mainline Pipe Installation Detail for Pipes More Than 4 Feet Below Top of the Proposed Subgrade
D-752-1	Standard Barbed Wire Fence
D-754-7	Pipe Support And Sign Mounting Details
D-754-18	Barricade And Advance Signs For Forward Roadway Termination
D-754-24	Mounting Details Perforated Tube
D-754-82, 83	Object Markers

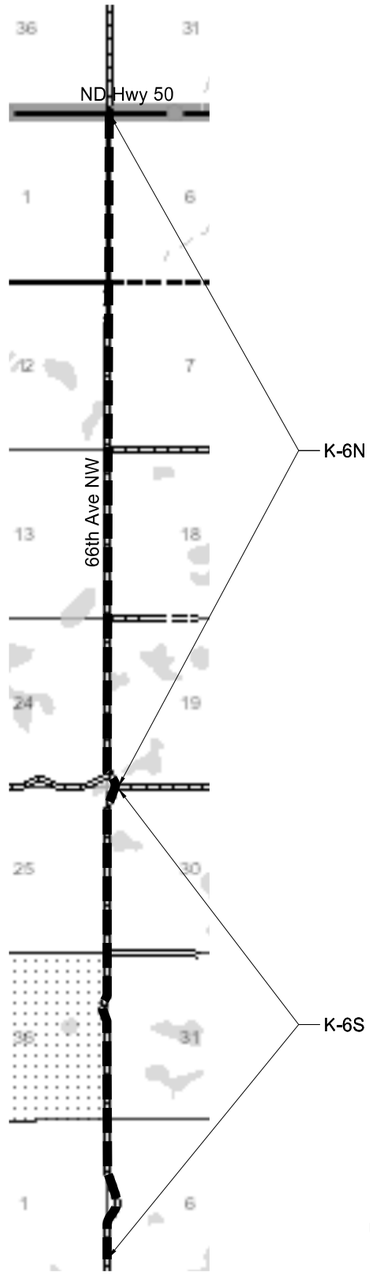
SPECIAL PROVISIONS

Number	Description
SP 003(14)	Temporary Erosion and Sediment Best Management Practices
SP 5181(14)	Permits and Environmental Considerations
SP 568(14)	Concrete Erosion Control Blanket

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	4	1

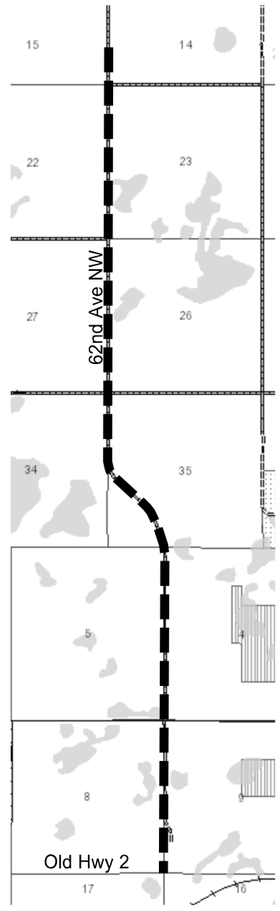


K-7



K-6N

K-6S



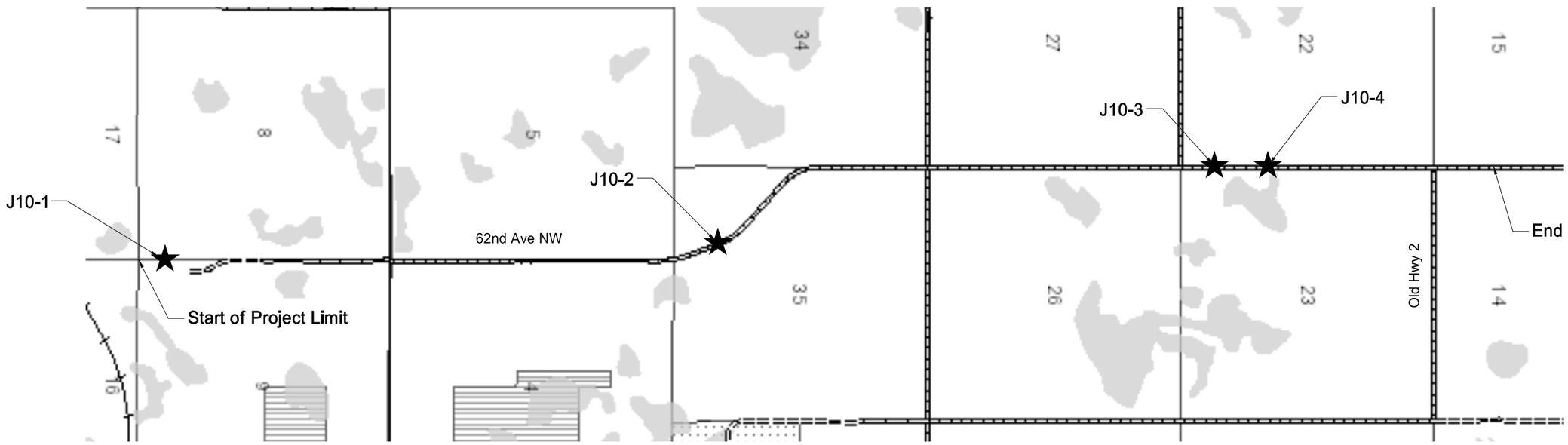
J-10

Project Limits

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Scope of work

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	4	2



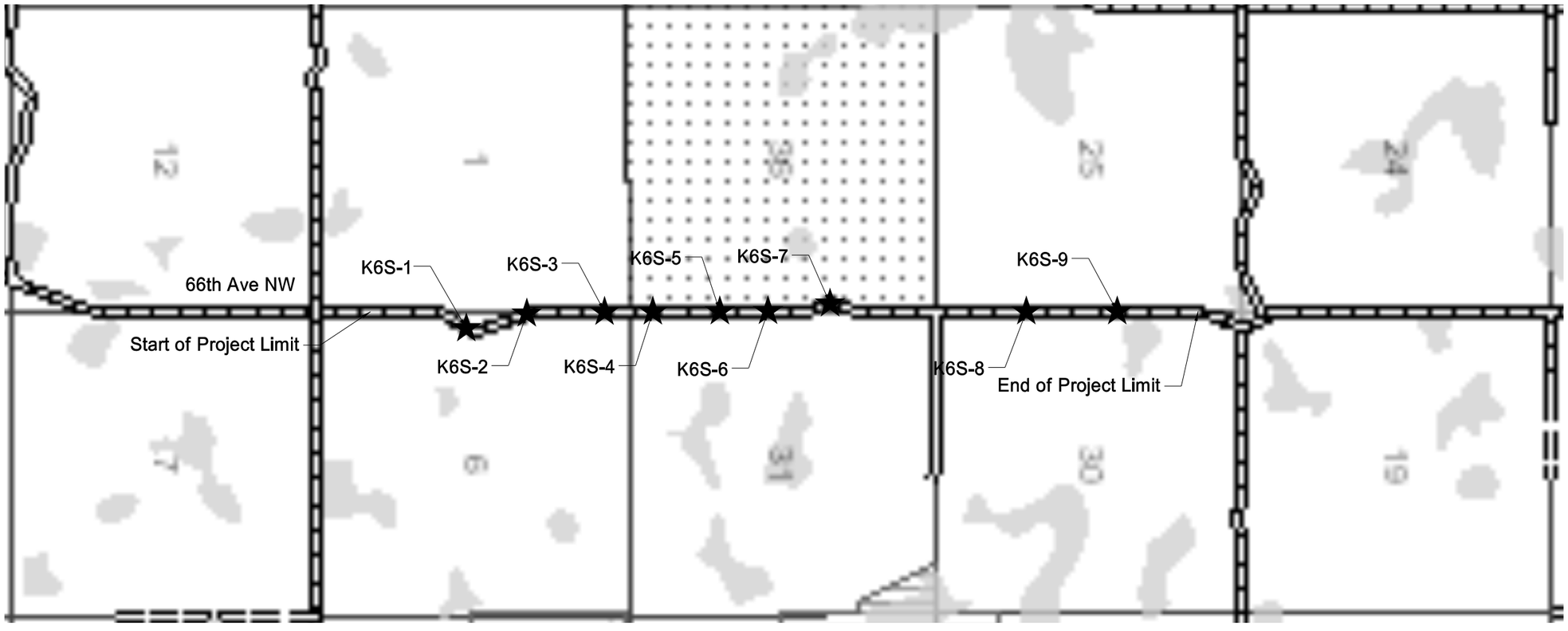
J-10
Mountrail County

★ Construction Site

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Scope of work

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	4	3



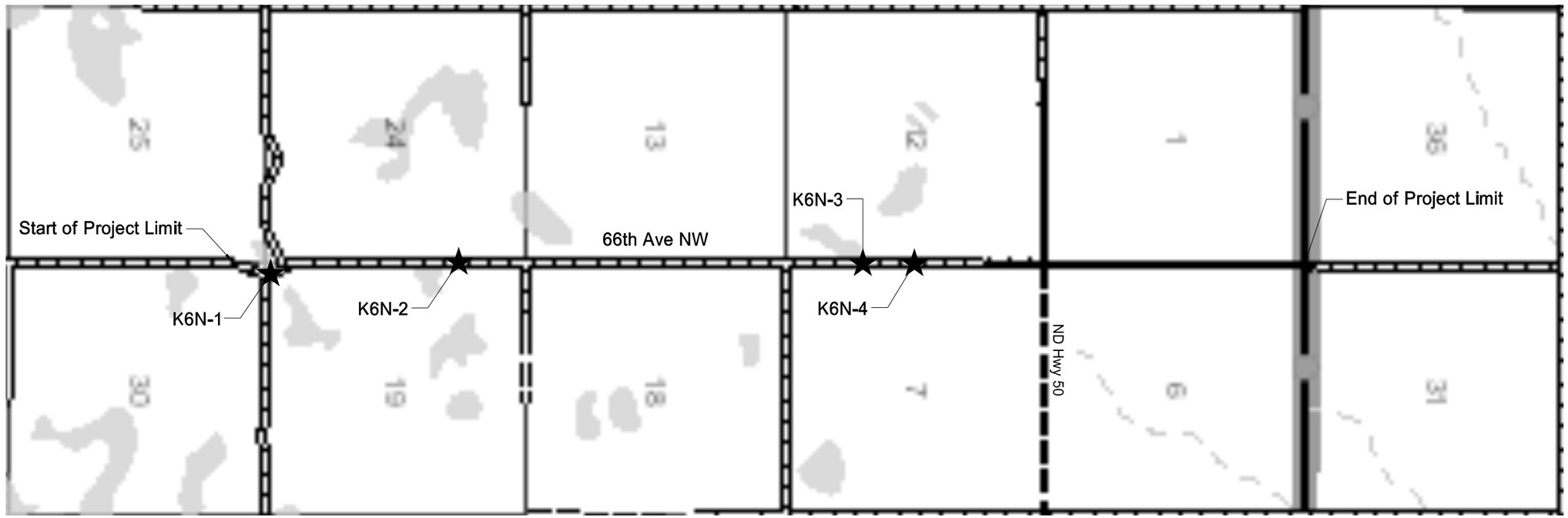
K-6S
Mountrail County

★ Construction Site

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Scope of work

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	4	4



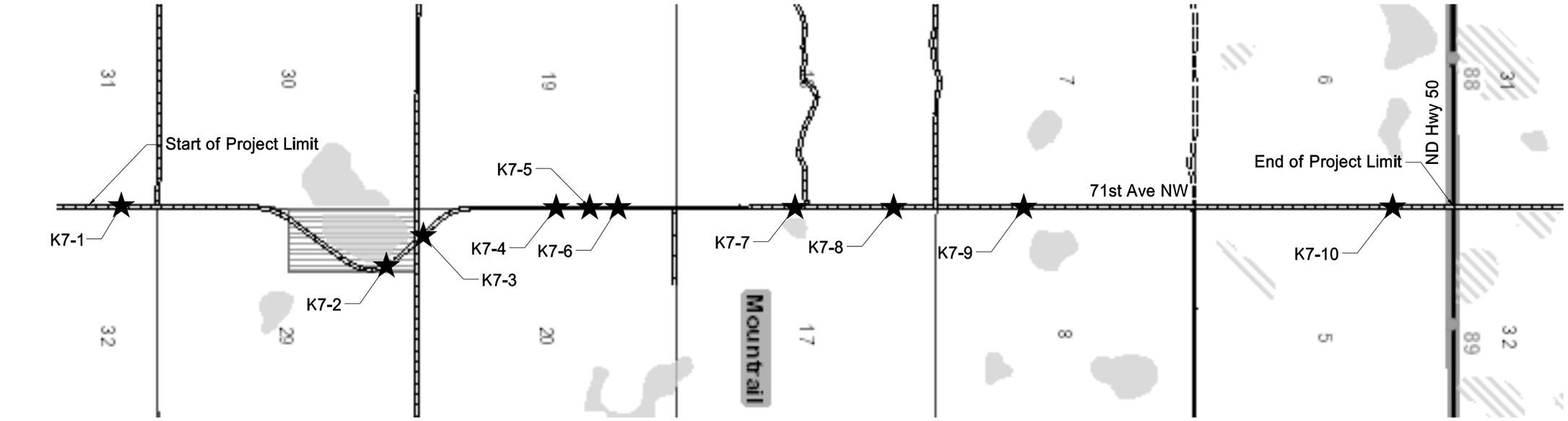
K-6N
Mountrail County

★ Construction Site

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Scope of work

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	4	5



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Mountrail County

★ Construction Site

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Scope of work

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	ROM-0300(135)	6	1

NOTES

100-P02 FENCE REMOVAL: The Contractor will remove existing fences unless otherwise noted in the plans.

The Contractor shall install temporary fence along the proposed right-of-way. A quantity of 1529 linear feet has been provided to accommodate operations. The temporary fence shall meet the requirements of Standard Drawing D-752-1. The temporary fence shall be installed with connections made to the existing fence prior to removal of fencing within the right-of-way. All costs associated with this working, including the installation, removal and disposal of the temporary fence shall be included in the price bid for "Temporary Fence".

104-P01 WATER LEVEL: The Contractor should be aware that the water levels on the projects are expected to change. NDDOT reserves the right to change grades and any other aspect of the work that are affected by the changing water level. The contractor's unit bid prices for all bid items will be considered full compensation for that item regardless of the water elevation at the time of construction.

It is the responsibility of the contractor to become informed in regards to the anticipated water level at the time of construction. The submission of a proposal will be considered conclusive evidence that the bidder is satisfied with the conditions to be encountered in performing the work and as to the requirements of the proposed work.

104-P02 WETLAND MITIGATION CREDITS: Prior to beginning any work on the project the contractor shall purchase exactly 2,82 acre of wetland mitigation credits from Ducks Unlimited to satisfy the Environmental Commitments shown in Section 75 of the plans. No work shall begin on the project until a Credit Sales Letter from Ducks Unlimited is submitted to and accepted by The Army Corps Engineers.

The wetland mitigation credits shall be purchased from the Missouri North Watershed mitigation site and the Souris River Watershed mitigation site. The details are:

Souris River	0.86 Credits @ $68,000/credit =	$58,480
Missouri North	1.96 Credits @ $50,000/credit =	$98,000
Total	2.82 Credits	**$156,480**

The contact information to purchase the wetland mitigation credits from Ducks Unlimited is provided below:

Trenton Hieb
Biologist in Ecosystem Services – Mitigation
Ducks Unlimited (Great Plains Region)
2525 River Road
Bismarck. ND 58503
Phone: 701-355-3573
Email: thieb@ducks.org

107-P01 ENVIRONMENTAL COMMITMENT: Contact the US Fish and Wildlife Service to confirm sources of water intended for use are not part of the USFWS refuge system, including wetland easements.

Jon Beyer, Wetland District Manager, Audubon Wildlife Refuge
32 75 11th St NW, Coleharbor, ND 58531
Office Phone: 701.442.5474

202-P01 REMOVAL OF RIP RAP – LOOSE ROCK: Remove all material being used as rip rap. This includes Type II Rip Rap, large rock and broken up concrete.

All this material will become the property of the contractor.

If the contractor wishes to reuse the riprap, the riprap must meet Grade listed in plans.

203-P01 TOPSOIL AND IMPORTED TOPSOIL: Strip and stockpile the existing topsoil. Replace topsoil on new embankments that are not permanently protected with riprap, concrete blanket, or TRM. Supplement the existing topsoil with imported topsoil so the final topsoil depth is a 4 inches in depth. Payment for the existing topsoil will be made at the plan quantity for "Topsoil". Payment for imported topsoil will be measured and paid for as "Imported Topsoil".

203-P02 SHRINKAGE: 25 percent additional volume of borrow material is included for shrinkage in earth embankment above the water. 50 percent additional volume of material is included for shrinkage/loss in temporary berm construction.

203-P03 KEYWAY/BERM: Construct a temporary keyway/berm in areas where the foreslope extends into the water at locations shown in the plans. Remove the entire keyway berm. Remove the keyway/berm in its entirety at the pipe locations after the new pipe has been installed. Do not push the temporary embankment into the water.

The removed embankment may be incorporated within other areas of the project or it may be disposed of outside the highway right of way in accordance with Section 107.17 of the Standard Specifications. If the contractor elects to dispose of the removed keyway/berm embankment at the borrow site, the contractor shall notify the engineer to cross-section the borrow site prior to placing the waste embankment at the borrow site. If the contractor elects to incorporate the removed keyway/berm embankment within other areas on the project, the contractor will not be paid for this material a second time.

203-P04 SUBCUT: 500 LF of subcut excavation has been included to be used at the discretion of the Engineer.

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STATE	PROJECT NO.	SECTION NO.	SHEET NO.
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NOTES

256-P01 RIPRAP-GRADE II: Place riprap immediately after embankment completion to minimize erosion potential.

262-P01 FLOTATION SILT CURTAIN: Place the flotation silt curtain prior to placing any fill in the water. Do not remove the flotation silt curtain until permanent erosion control has been installed on the new fill slope.

704-P01 TRAFFIC CONTROL: Maintain one lane open to traffic at all times. Open the roadway to 2 way traffic at the end of each work day. Provide traffic control consisting of the following layouts:

1. Standard D-704-15, Layout Type A; 8 work sites, 16 flaggers
2. Standard D-704-20, Layout G; 8 project termini
3. Standard D-704-22, Layouts K; 2 truck entering layouts
4. Standard D-704-30; 2 windrow sites totaling 2 miles

708-P01 CONCRETE EROSION CONTROL BLANKET: Below is a list of suppliers that can supply the "CONCRETE EROSION CONTROL BLANKET". Other suppliers will also be considered as approved equals.

Product: CC 45
Forterra Pipe & Precast
925 Basin Avenue
Bismarck, ND 58504
(701) 223-7178

Product: ArmorFlex
Contech Engineered Solutions
P.O. Box 5322
Minnetonka, MN 55343 (800) 338-1122
(701) 202-0895

Product: UltraFlex M Series
Submar, Inc.
1711 Dunn St.
Houma, LA 70361
(800) 978-2627

714-P02 PIPE INSTALLATION: The Contractor will need to install the pipe, backfill the trench up to grade, and return traffic to normal by end of day's work. If the Contractor is unable to complete the centerline pipe replacement work in one working day, the area shall be made traversable for two lanes of traffic or flagged 24 hours per day. The Contractor must notify the Military 48 hours in advance of all pipe installation.

714-P03 EXISTING CENTERLINE PIPE: There is the possibility of existing centerline located within the work area. All centerline pipe will be removed and paid for as REMOVAL OF PIPE ALL TYPES AND SIZES.

714-P04 NEW PIPE INSTALLATION: Under Project No. ROM-0300(132) a new 24" Pipe Conduit was installed at site K6N - Site 3. The station location is unknown and the elevation is approximately 2290. This culvert is to remain in-place. The contractor will install the permanent inslope repair around the newly installed Pipe Conduit.

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STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	ROM-0300(135)	6	3

ENVIRONMENTAL SHEETS

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

EN-1: Unavoidable impacts to wetlands will be mitigated onsite, adjacent to the project, or at a NDDOT approved mitigation site or bank. The bank will be provided by ducks unlimited in the drainage basin for which the wetland impacts will occur.

EN-2 Temporary Wetland Impacts: Temporary impact areas within wetlands and or other waters are incorporated into the plans for this project. Remove all temporary fill placed and sedimentation in wetlands.

EN-3: Erosion control devices will be used as needed during construction. Care is to be taken during construction activity near any water of the state to minimize adverse effects on a water body

EN-4: Fugitive dust emissions created during construction will be minimized.

EN-5: Based on the scope of the project, the US Army Corps of Engineers has determined the project needs a Clean Water Act Section 404 permit.

EN-6: NDPDES (North Dakota Pollutants Discharge Elimination System) permit to be obtained by the Contractor prior to construction.

EN-7: All spills must be immediately reported to this Department and appropriate remedial actions performed.

EN-8: Per the Fish and Wildlife permit, the contractor has 30 days to complete the work at each site.

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Wetland Impact Table

Wetland Number	Location	Wetland Type	Wetland Feature	USACE Jurisdictional Wetlands[1]	Wetland Impacts Acre(s)		USFWS Easement Impacts Acre(s)		Wetland Mitigation				
									Mitigation Required			Ducks Unlimited Bank	
					Temp.	Perm.	Temp.	Perm.	EO 11990	USACE	USFWS	Location	Acre(s)
#4a	Sec. 6, T158N, R89W	Basin	Natural	Yes	0.12	0.00	0.00	0.00	Yes	No	No	Missouri River Northern Service Area	0.00
#4b	Sec. 5, T158N, R89W	Basin	Natural	Yes	0.54	0.07	0.00	0.00	Yes	No	No	Missouri River Northern Service Area	0.07
#5	Sec. 8, T158N, R89W	Basin	Natural	Yes	0.00	0.00	0.00	0.00	Yes	No	No	Missouri River Northern Service Area	0.00
#6	Sec. 7, T158N, R89W	Basin	Natural	Yes	0.03	0.03	0.00	0.00	Yes	No	No	Missouri River Northern Service Area	0.03
#7a	Sec. 7, T158N, R89W	Basin	Natural	Yes	0.04	0.05	0.00	0.00	Yes	No	No	Missouri River Northern Service Area	0.05
#7b	Sec. 8, T158N, R89W	Basin	Natural	Yes	0.16	0.04	0.00	0.00	Yes	No	No	Missouri River Northern Service Area	0.04
#8a	Sec. 7, T158N, R89W	Basin	Natural	Yes	0.13	0.00	0.00	0.00	Yes	No	No	Missouri River Northern Service Area	0.00
#8b	Sec. 8, T158N, R89W	Basin	Natural	Yes	0.08	0.04	0.00	0.00	Yes	No	No	Missouri River Northern Service Area	0.04
#9a	Sec. 8, T158N, R89W	Basin	Natural	Yes	0.03	0.04	0.00	0.00	Yes	No	No	Missouri River Northern Service Area	0.04
#9b	Sec. 7, T158N, R89W	Basin	Natural	Yes	0.08	0.05	0.00	0.00	Yes	No	No	Missouri River Northern Service Area	0.05
#10	Sec. 7, T158N, R89W	Basin	Natural	Yes	0.00	0.00	0.00	0.00	Yes	No	No	Missouri River Northern Service Area	0.00
#11a	Sec. 17, T158N, R89W	Basin	Natural	Yes	0.58	0.06	0.00	0.00	Yes	No	No	Missouri River Northern Service Area	0.06

Wetland Impact Table

Wetland Number	Location	Wetland Type	Wetland Feature	USACE Jurisdictional Wetlands[1]	Wetland Impacts Acre(s)		USFWS Easement Impacts Acre(s)		Wetland Mitigation				
									Mitigation Required			Ducks Unlimited Bank	
					Temp.	Perm.	Temp.	Perm.	EO 11990	USACE	USFWS	Location	Acre(s)
#11b	Sec. 18, T188N, R89W	Basin	Natural	Yes	0.25	0.00	0.00	0.00	Yes	No	No	Missouri River Northern Service Area	0.00
#12a	Sec. 18, T158N, R89W	Basin	Natural	Yes	0.00	0.00	0.00	0.00	Yes	No	No	Missouri River Northern Service Area	0.00
#12b	Sec. 17, T158N, R89W	Basin	Natural	Yes	0.14	0.00	0.00	0.00	Yes	No	No	Missouri River Northern Service Area	0.00
#12c	Sec. 18, T158N, R89W	Basin	Natural	Yes	0.00	0.00	0.00	0.00	Yes	No	No	Missouri River Northern Service Area	0.00
#13a	Sec. 19, T158N, R89W	Basin	Natural	Yes	0.22	0.00	0.00	0.00	Yes	No	No	Missouri River Northern Service Area	0.00
#13b	Sec. 20, T158N, R89W	Basin	Natural	Yes	0.40	0.06	0.00	0.00	Yes	No	No	Missouri River Northern Service Area	0.06
#14a	Sec. 19, T158N, R89W	Basin	Natural	Yes	0.10	0.00	0.00	0.00	Yes	No	No	Missouri River Northern Service Area	0.00
#14b	Sec. 20, T158N, R89W	Basin	Natural	Yes	0.14	0.00	0.00	0.00	Yes	No	No	Missouri River Northern Service Area	0.00
#15a	Sec. 19, T158N, R89W	Basin	Natural	Yes	0.48	0.15	0.00	0.00	Yes	No	No	Missouri River Northern Service Area	0.15
#15b	Sec. 20, T158N, R89W	Basin	Natural	Yes	0.29	0.12	0.00	0.00	Yes	No	No	Missouri River Northern Service Area	0.12
#16a	Sec. 20, T158N, R89W	Basin	Natural	Yes	0.46	0.07	0.00	0.00	Yes	No	No	Missouri River Northern Service Area	0.07
#16b	Sec. 20, T158N, R89W	Basin	Natural	Yes	0.38	0.13	0.00	0.00	Yes	No	No	Missouri River Northern Service Area	0.13

Wetland Impact Table

Wetland Number	Location	Wetland Type	Wetland Feature	USACE Jurisdictional Wetlands[1]	Wetland Impacts Acre(s)		USFWS Easement Impacts Acre(s)		Wetland Mitigation				
									Mitigation Required			Ducks Unlimited Bank	
					Temp.	Perm.	Temp.	Perm.	EO 11990	USACE	USFWS	Location	Acre(s)
#16c	Sec. 29, T158N, R89W	Fringe	Natural	Yes	0.57	0.12	0.00	0.00	Yes	No	No	Missouri River Northern Service Area	0.12
#16d	Sec. 29, T158N, R89W	Basin	Natural	Yes	0.02	0.03	0.00	0.00	Yes	No	No	Missouri River Northern Service Area	0.03
#16e	Sec. 29, T158N, R89W	Basin	Natural	Yes	0.20	0.09	0.00	0.00	Yes	No	No	Missouri River Northern Service Area	0.09
#17a	Sec. 31, T158N, R89W	Basin	Natural	Yes	0.48	0.16	0.00	0.00	Yes	No	No	Missouri River Northern Service Area	0.16
#17b	Sec. 32, T158N, R89W	Fringe	Natural	Yes	0.36	0.14	0.00	0.00	Yes	No	No	Missouri River Northern Service Area	0.14
#18a	Sec. 12, T158N, R89W	Basin	Natural	Yes	0.30	0.03	0.00	0.00	Yes	No	No	SE4 of Section 23, T156, R72	0.03
#18b	Sec. 7, T158N, R89W	Basin	Natural	Yes	0.27	0.07	0.00	0.00	Yes	No	No	SE4 of Section 23, T156, R72	0.07
#19a	Sec. 12, T158N, R89W	Basin	Natural	Yes	0.04	0.00	0.00	0.00	Yes	No	No	SE4 of Section 23, T156, R72	0.00
#19b	Sec. 7, T158N, R89W	Basin	Natural	Yes	0.54	0.20	0.00	0.00	Yes	No	No	SE4 of Section 23, T156, R72	0.20
#19c	Sec. 12, T158N, R89W	Basin	Natural	Yes	0.73	0.06	0.00	0.00	Yes	No	No	SE4 of Section 23, T156, R72	0.06
#20a	Sec. 24, T158N, R89W	Basin	Natural	Yes	0.60	0.06	0.00	0.00	Yes	No	No	Missouri River Northern Service Area	0.06
#20b	Sec. 19, T158N, R88W	Basin	Natural	Yes	0.64	0.14	0.00	0.00	Yes	No	No	Missouri River Northern Service Area	0.14

Wetland Impact Table

Wetland Number	Location	Wetland Type	Wetland Feature	USACE Jurisdictional Wetlands[1]	Wetland Impacts Acre(s)		USFWS Easement Impacts Acre(s)		Wetland Mitigation				
									Mitigation Required			Ducks Unlimited Bank	
					Temp.	Perm.	Temp.	Perm.	EO 11990	USACE	USFWS	Location	Acre(s)
#21	Sec. 19, T158N, R88W	Basin	Natural	Yes	0.19	0.02	0.00	0.00	Yes	No	No	Missouri River Northern Service Area	0.02
#22a	Sec. 25, T158N, R89W	Basin	Natural	Yes	0.00	0.00	0.00	0.00	Yes	No	No	Missouri River Northern Service Area	0.00
#22b	Sec. 30, T158N, R88W	Basin	Natural	Yes	0.18	0.02	0.00	0.00	Yes	No	No	Missouri River Northern Service Area	0.02
#23a	Sec. 25, T158N, R89W	Basin	Natural	Yes	0.36	0.00	0.00	0.00	Yes	No	No	Missouri River Northern Service Area	0.00
#23b	Sec. 30, T158N, R88W	Basin	Natural	Yes	0.29	0.00	0.00	0.00	Yes	No	No	Missouri River Northern Service Area	0.00
#24	Sec. 36, T158N, R89W	Basin	Natural	Yes	0.29	0.00	0.00	0.00	Yes	No	No	Missouri River Northern Service Area	0.00
#25a	Sec. 36, T158N, R89W	Basin	Natural	Yes	0.62	0.03	0.00	0.00	Yes	No	No	Missouri River Northern Service Area	0.03
#25b	Sec. 31, T158N, R88W	Basin	Natural	Yes	0.48	0.16	0.00	0.00	Yes	No	No	Missouri River Northern Service Area	0.16
#26a	Sec. 36, T158N, R89W	Basin	Natural	Yes	0.18	0.05	0.00	0.00	Yes	No	No	Missouri River Northern Service Area	0.05
#26b	Sec. 31, T158N, R88W	Basin	Natural	Yes	0.18	0.03	0.00	0.00	Yes	No	No	Missouri River Northern Service Area	0.03
#27a	Sec. 36, T158N, R89W	Basin	Natural	Yes	0.15	0.00	0.00	0.00	Yes	No	No	Missouri River Northern Service Area	0.00
#27b	Sec. 31, T158N, R88W	Basin	Natural	Yes	0.11	0.04	0.00	0.00	Yes	No	No	Missouri River Northern Service Area	0.04

Wetland Impact Table

Wetland Number	Location	Wetland Type	Wetland Feature	USACE Jurisdictional Wetlands[1]	Wetland Impacts Acre(s)		USFWS Easement Impacts Acre(s)		Wetland Mitigation				
									Mitigation Required			Ducks Unlimited Bank	
					Temp.	Perm.	Temp.	Perm.	EO 11990	USACE	USFWS	Location	Acre(s)
#28a	Sec. 1, T157N, R89W	Basin	Natural	Yes	0.04	0.00	0.00	0.00	Yes	No	No	Missouri River Northern Service Area	0.00
#28b	Sec. 6, T157N, R88W	Basin	Natural	Yes	0.00	0.00	0.00	0.00	Yes	No	No	Missouri River Northern Service Area	0.00
#29a	Sec. 6, T157N, R88W	Basin	Natural	Yes	0.00	0.00	0.56	0.09	Yes	No	Yes	Missouri River Northern Service Area	0.00
#29b	Sec. 6, T157N, R88W	Basin	Artificial	Yes	0.00	0.00	0.00	0.00	Yes	No	No	Missouri River Northern Service Area	0.00
#29c	Sec. 6, T157N, R88W	Basin	Natural	Yes	0.00	0.00	0.13	0.00	Yes	No	No	Missouri River Northern Service Area	0.00
#30a	Sec. 22, T157N, R88W	Basin	Natural	Yes	0.44	0.06	0.00	0.00	Yes	No	No	Missouri River Northern Service Area	0.06
#30b	Sec. 23, T157N, R88W	Basin	Natural	Yes	0.44	0.00	0.00	0.00	Yes	No	No	Missouri River Northern Service Area	0.00
#31a	Sec. 22, T157N, R88W	Basin	Natural	Yes	0.28	0.00	0.00	0.00	Yes	No	No	Missouri River Northern Service Area	0.00
#31b	Sec. 23, T157N, R88W	Basin	Natural	Yes	0.28	0.06	0.00	0.00	Yes	No	No	Missouri River Northern Service Area	0.06
#32a	Sec. 35, T157N, R88W	Basin	Natural	Yes	0.69	0.00	0.00	0.00	Yes	No	No	Missouri River Northern Service Area	0.00
#32b	Sec. 35, T157N, R88W	Basin	Natural	Yes	0.05	0.00	0.00	0.00	Yes	No	No	Missouri River Northern Service Area	0.00
#32c	Sec. 35, T157N, R88W	Basin	Natural	Yes	0.09	0.00	0.00	0.00	Yes	No	No	Missouri River Northern Service Area	0.00

Wetland Impact Table

Wetland Number	Location	Wetland Type	Wetland Feature	USACE Jurisdictional Wetlands[1]	Wetland Impacts Acre(s)		USFWS Easement Impacts Acre(s)		Wetland Mitigation				
									Mitigation Required			Ducks Unlimited Bank	
					Temp.	Perm.	Temp.	Perm.	EO 11990	USACE	USFWS	Location	Acre(s)
#33a	Sec. 5, T156N, R88W	Basin	Natural	Yes	0.42	0.08	0.00	0.00	Yes	No	Yes	Missouri River Northern Service Area	0.08
#33b	Sec. 4, T156N, R88W	Basin	Natural	Yes	0.00	0.00	0.00	0.00	Yes	No	No	Missouri River Northern Service Area	0.00
				Totals	**18.36**	**2.82**	**0.69**	**0.09**					**2.82**

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	ROM-0300(135)	8	1

Spec	Code	Description	Units	Quantity
103	100	CONTRACT BOND	L SUM	1
201	370	REMOVAL OF TREES 10IN	EA	4
202	174	REMOVAL OF PIPE ALL TYPES AND SIZES	LF	596
202	312	REMOVE EXISTING FENCE	LF	3,476
202	400	REMOVAL OF RIPRAP - LOOSE ROCK	CY	2,182
203	109	TOPSOIL	CY	2,786
203	119	TOPSOIL-IMPORTED	CY	2,391
203	138	COMMON EXCAVATION-SUBCUT	CY	492
203	140	BORROW-EXCAVATION	CY	147,558
216	100	WATER	M GAL	157
251	200	SEEDING CLASS II	ACRE	3.099
251	2000	TEMPORARY COVER CROP	ACRE	3.099
253	101	STRAW MULCH	ACRE	6.197
255	202	TRM TYPE 2	SY	5,936
256	200	RIPRAP GRADE II	CY	3,729
260	100	SILT FENCE UNSUPPORTED	LF	1,284
260	101	REMOVE SILT FENCE UNSUPPORTED	LF	1,284
261	112	FIBER ROLLS 12IN	LF	7,819
261	113	REMOVE FIBER ROLLS 12IN	LF	7,819
262	100	FLOTATION SILT CURTAIN	LF	18,610
262	101	REMOVE FLOTATION SILT CURTAIN	LF	18,610
302	356	AGGREGATE SURFACE COURSE CL 13	TON	1,069
702	100	MOBILIZATION	L SUM	1
704	100	FLAGGING	MHR	4,896
704	1000	TRAFFIC CONTROL SIGNS	UNIT	5,644
704	1052	TYPE III BARRICADE	EA	10
704	1080	STACKABLE VERTICAL PANELS	EA	25
708	5810	CONCRETE EROSION CONTROL BLANKET	SY	14,580
709	151	GEOSYNTHETIC MATERIAL TYPE R1	SY	6,053
709	155	GEOSYNTHETIC MATERIAL TYPE RR	SY	26,690
714	3020	END SECT-CONC REINF 24IN	EA	2
714	4100	PIPE CONDUIT 18IN	LF	719
714	4105	PIPE CONDUIT 24IN	LF	377
714	4110	PIPE CONDUIT 30IN	LF	62
752	905	TEMPORARY FENCE	LF	3,476
754	110	FLAT SHEET FOR SIGNS-TYPE XI REFL SHEETING	SF	47
754	206	STEEL GALV POSTS-TELESCOPING PERFORATED TUBE	LF	103
754	805	OBJECT MARKERS - CULVERTS	EA	52
900	2001	Wetland Mitigation Site 1	ACRE	0.86
900	2002	Wetland Mitigation Site 2	ACRE	1.96

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Quantities

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	10	1

Unit Weights

Aggregate Base Course CL 5 @ 1.875 Tons/CY

Water			
Description	**Basis**	**Units**	**Mgal**
10 Mgal/Mile for Dust Palliative	6	Miles	60.0
20 Gal/Ton for Aggregates	1069	Tons	21.4
10 Gal/CY for Embankment	7,561	CY	75.7
Project Total			**157.1**

Spec	Code	Material	Unit	Temporary	Permanent	Total
251	0200	Seeding Class II	Acre		3.099	**3.099**
251	2000	Temporary Cover Crop	Acre	3.099		**3.099**
253	0101	Straw Mulch	Acre	3.099	3.099	**6.197**

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Basis of Estimate

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	ROM-0300(135)	10	2

Earthwork Summary								
Site	Common Excavation	Embankment (CY)	Adjusted Embankment at 25% Shrinkage (CY)	Berm	Adjusted Berm at 50% Shrinkage (CY)	Borrow (CY)	Topsoil (CY)	Topsoil Imported (CY)
	A	B	C = B × (1.25)	D	E = D × (1.5)	F = C + E - A	G	H
J10-1	0	193	241	1432	2,148	2,389	47	102
J10-2	0	463	579	3,416	5,124	5,703	179	222
J10-3	0	287	359	2,919	4,379	4,737	98	85
J10-4	0	238	298	6,353	9,530	9,827	118	121
J10 Subtotal	**0**	**1,181**	**1,476**	**14,120**	**21,180**	**22,656**	**443**	**531**
K6S-1	0	57	71	1,770	2,655	2,726	40	30
K6S-2	0	28	35	1,776	2,664	2,699	33	12
K6S-3	0	14	18	0	0	18	10	35
K6S-4	0	134	14	901	1,352	1,365	54	54
K6S-5	0	135	169	1,566	2,349	2,518	58	24
K6S-6	0	357	446	9,823	14,735	15,181	227	108
K6S-7	0	87	109	1,072	1,608	1,717	67	103
K6S-8	0	197	246	2,396	3,594	3,840	86	206
K6S-9	0	56	70	752	1,128	1,198	49	12
K6S Subtotal	**0**	**1,065**	**1,178**	**20,056**	**30,084**	**31,262**	**623**	**584**
K6N-1	0	80	100	1,029	1,544	1,644	50	23
K6N-2	0	394	493	15,112	22,668	23,161	323	27
K6N-3	0	592	740	6,932	10,398	11,138	270	144
K6N-4	0	72	90	3,231	4,847	4,937	58	32
K6N Subtotal	**0**	**1,138**	**1,423**	**26,304**	**39,456**	**40,879**	**702**	**226**
K7-1	0	914	1,143	4,643	6,965	8,107	273	174
K7-2	0	312	390	3,412	5,118	5,508	102	121
K7-3	0	520	650	8,450	12,675	13,325	207	164
K7-4	0	598	748	5,435	8,153	8,900	191	103
K7-5	0	86	108	0	0	108	38	89
K7-6	0	48	60	3,632	5,448	5,508	37	63
K7-7	0	80	100	0	0	100	32	45
K7-8	0	37	46	2,643	3,965	4,011	37	76
K7-9	0	129	161	981	1,472	1,633	62	154
K7-10	0	64	80	3,655	5,483	5,563	38	63
K7 Subtotal	**0**	**2,788**	**3,485**	**32,851**	**49,277**	**52,762**	**1,018**	**1,050**
Project Total	**0**	**6,172**	**7,561**	**93,331**	**139,997**	**147,558**	**2,786**	**2,391**

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Earthwork Summary

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	11	1

Station	Material	End Area (SF)	Vol. (CY)	Accum. Vol. (CY)	Adj. Vol. (CY*)	Adj. Accum. Vol. (CY)
J10-1						
6+25.00	Fill	20.9	0	0	0	0
6+50.00	Fill	30.6	24	24	30	-30
6+75.00	Fill	37.1	31	55	39	-69
7+00.00	Fill	35.7	34	89	43	-111
7+25.00	Fill	21.1	26	115	33	-144
7+50.00	Fill	18.9	18	133	23	-166
7+75.00	Fill	21.6	19	152	24	-190
8+00.00	Fill	29.6	24	176	30	-220
8+25.00	Fill	8.1	17	193	21	-241
J10-2						
66+25.00	Fill	3.4	0	0	0	0
66+50.00	Fill	13.2	8	8	10	-10
66+75.00	Fill	13.4	12	20	15	-25
67+00.00	Fill	16.5	14	34	18	-43
67+25.00	Fill	16.0	15	49	19	-61
67+50.00	Fill	18.2	16	65	20	-81
67+75.00	Fill	13.7	15	80	19	-100
68+00.00	Fill	11.1	11	91	14	-114
68+25.00	Fill	13.8	12	103	15	-129
68+50.00	Fill	18.3	15	118	19	-148
68+75.00	Fill	22.4	19	137	24	-171
69+00.00	Fill	17.4	18	155	23	-194
69+25.00	Fill	15.9	15	170	19	-213
69+50.00	Fill	14.2	14	184	18	-230
69+75.00	Fill	8.8	11	195	14	-244
70+00.00	Fill	6.9	7	202	9	-253
70+25.00	Fill	6.6	6	208	8	-260
70+50.00	Fill	4.6	5	213	6	-266
70+75.00	Fill	4.1	4	217	5	-271
71+00.00	Fill	8.4	6	223	8	-279
71+25.00	Fill	12.3	10	233	13	-291
71+50.00	Fill	15.3	13	246	16	-308
71+75.00	Fill	17.8	15	261	19	-326
72+00.00	Fill	23.4	19	280	24	-350
72+25.00	Fill	30.9	25	305	31	-381
72+50.00	Fill	46.5	36	341	45	-426
72+75.00	Fill	54.6	47	388	59	-485
73+00.00	Fill	37.1	42	430	53	-538
73+25.00	Fill	16.7	25	455	31	-569
73+50.00	Fill	1.3	8	463	10	-579

*An additional volume of 25% has been included to allow for shrinkage in permanent embankment.

Station	Material	End Area (SF)	Vol. (CY)	Accum. Vol. (CY)	Adj. Vol. (CY*)	Adj. Accum. Vol. (CY)
J10-3						
179+25.00	Fill	3.3	0	0	0	0
179+50.00	Fill	12.1	7	7	9	-9
179+75.00	Fill	27.7	18	25	23	-31
180+00.00	Fill	30.5	27	52	34	-65
180+25.00	Fill	28.0	27	79	34	-99
180+50.00	Fill	28.2	26	105	33	-131
180+75.00	Fill	25.1	25	130	31	-163
181+00.00	Fill	14.6	18	148	23	-185
181+25.00	Fill	10.6	12	160	15	-200
181+50.00	Fill	19.0	14	174	18	-218
181+75.00	Fill	30.1	23	197	29	-246
182+00.00	Fill	35.0	30	227	38	-284
182+25.00	Fill	22.0	26	253	33	-316
182+50.00	Fill	16.1	18	271	23	-339
182+75.00	Fill	7.2	11	282	14	-353
183+00.00	Fill	4.1	5	287	6	-359
J10-4						
187+75.00	Fill	4.3	0	0	0	0
188+00.00	Fill	8.8	6	6	8	-8
188+25.00	Fill	13.1	10	16	13	-20
188+50.00	Fill	13.0	12	28	15	-35
188+75.00	Fill	11.2	11	39	14	-49
189+00.00	Fill	11.0	10	49	13	-61
189+25.00	Fill	9.2	9	58	11	-73
189+50.00	Fill	12.8	10	68	13	-85
189+75.00	Fill	6.9	9	77	11	-96
190+00.00	Fill	4.7	5	82	6	-103
190+25.00	Fill	2.7	3	85	4	-106
190+50.00	Fill	9.8	6	91	8	-114
190+75.00	Fill	12.3	10	101	13	-126
191+00.00	Fill	11.2	11	112	14	-140
191+25.00	Fill	16.5	13	125	16	-156
191+50.00	Fill	28.2	21	146	26	-183
191+75.00	Fill	31.5	28	174	35	-218
192+00.00	Fill	31.7	29	203	36	-254
192+25.00	Fill	20.2	24	227	30	-284
192+50.00	Fill	3.1	11	238	14	-298

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Earthwork Data Table

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	ROM-0300(135)	11	2

Station	Material	End Area (SF)	Vol. (CY)	Accum. Vol. (CY)	Adj. Vol. (CY*)	Adj. Accum. Vol. (CY)
K6S-1						
6+00.00	Fill	1.7	0	0	0	0
6+25.00	Fill	5.0	3	3	4	-4
6+50.00	Fill	2.8	4	7	5	-9
6+75.00	Fill	2.4	2	9	3	-11
7+00.00	Fill	6.8	4	13	5	-16
7+25.00	Fill	5.1	6	19	8	-24
7+50.00	Fill	7.8	6	25	8	-31
7+75.00	Fill	7.5	7	32	9	-40
8+00.00	Fill	14.2	10	42	13	-53
8+25.00	Fill	18.6	15	57	19	-71
K6S-2						
14+75.00	Fill	7.0	0	0	0	0
15+00.00	Fill	5.0	6	6	8	-8
15+25.00	Fill	1.8	3	9	4	-11
15+50.00	Fill	1.7	2	11	3	-14
15+75.00	Fill	1.4	1	12	1	-15
16+00.00	Fill	1.8	1	13	1	-16
16+25.00	Fill	2.3	2	15	3	-19
16+50.00	Fill	3.0	2	17	3	-21
16+75.00	Fill	4.0	3	20	4	-25
17+00.00	Fill	2.9	3	23	4	-29
17+25.00	Fill	1.3	2	25	3	-31
17+50.00	Fill	1.6	1	26	1	-33
17+75.00	Fill	2.5	2	28	3	-35
K6S-3						
29+25.00	Fill	3.9	0	0	0	0
29+50.00	Fill	4.0	4	4	5	-5
29+75.00	Fill	7.1	5	9	6	-11
30+00.00	Fill	3.7	5	14	6	-18
K6S-4						
35+50.00	Fill	5.6	0	0	0	0
35+75.00	Fill	6.0	5	5	6	-6
36+00.00	Fill	8.3	7	12	9	-15
36+25.00	Fill	21.0	14	26	18	-33
36+50.00	Fill	19.9	19	45	24	-56
36+75.00	Fill	21.6	19	64	24	-80
37+00.00	Fill	21.5	20	84	25	-105
37+25.00	Fill	20.9	20	104	25	-130
37+50.00	Fill	21.1	19	123	24	-154
37+75.00	Fill	2.8	11	134	14	-168

*An additional volume of 25% has been included to allow for shrinkage in permanent embankment.

Station	Material	End Area (SF)	Vol. (CY)	Accum. Vol. (CY)	Adj. Vol. (CY*)	Adj. Accum. Vol. (CY)
K6S-5						
47+75.00	Fill	34.7	0	0	0	0
48+00.00	Fill	26.4	28	28	35	-35
48+25.00	Fill	27.6	25	53	31	-66
48+50.00	Fill	21.0	23	76	29	-95
48+75.00	Fill	14.6	17	93	21	-116
49+00.00	Fill	11.3	12	105	15	-131
49+25.00	Fill	11.3	10	115	13	-144
49+50.00	Fill	12.4	11	126	14	-158
49+75.00	Fill	6.9	9	135	11	-169
K6S-6						
54+00.00	Fill	4.71	0	0	0	0
54+25.00	Fill	13.71	9	9	11	-11
54+50.00	Fill	13.22	12	21	15	-26
54+75.00	Fill	13.89	13	34	16	-43
55+00.00	Fill	17.96	15	49	19	-61
55+25.00	Fill	21.58	18	67	23	-84
55+50.00	Fill	18.37	18	85	23	-106
55+75.00	Fill	11.01	14	99	18	-124
56+00.00	Fill	4	7	106	9	-133
56+25.00	Fill	1.58	3	109	4	-136
56+50.00	Fill	0	1	110	1	-138
56+75.00	Fill	0	0	110	0	-138
57+00.00	Fill	0	0	110	0	-138
57+25.00	Fill	0	0	110	0	-138
57+50.00	Fill	2.46	5	115	6	-144
57+75.00	Fill	2.33	2	117	3	-146
58+00.00	Fill	8.77	5	122	6	-153
58+25.00	Fill	11.81	10	132	13	-165
58+50.00	Fill	10.08	10	142	13	-178
58+75.00	Fill	10.87	10	152	13	-190
59+00.00	Fill	10.04	10	162	13	-203
59+25.00	Fill	7.83	8	170	10	-213
59+50.00	Fill	7.48	7	177	9	-221
59+75.00	Fill	5.47	6	183	8	-229
60+00.00	Fill	5.42	5	188	6	-235
60+25.00	Fill	7.61	6	194	8	-243
60+50.00	Fill	22.74	14	208	18	-260
60+75.00	Fill	30.69	25	233	31	-291
61+00.00	Fill	28.63	27	260	34	-325
61+25.00	Fill	27.76	26	286	33	-358
61+50.00	Fill	25.55	25	311	31	-389
61+75.00	Fill	21.07	22	333	28	-416
62+00.00	Fill	13.7	16	349	20	-436
62+25.00	Fill	3.24	8	357	10	-446

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Earthwork Data Table

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	11	3

Station	Material	End Area (SF)	Vol. (CY)	Accum. Vol. (CY)	Adj. Vol. (CY*)	Adj. Accum. Vol. (CY)
K6S-7						
67+50.00	Fill	3.4	0	0	0	0
67+75.00	Fill	3.5	3	3	4	-4
68+00.00	Fill	3.1	3	6	4	-8
68+25.00	Fill	4.2	3	9	4	-11
68+50.00	Fill	4.1	4	13	5	-16
68+75.00	Fill	3.8	4	17	5	-21
69+00.00	Fill	5.1	4	21	5	-26
69+25.00	Fill	3.8	4	25	5	-31
69+50.00	Fill	4.4	4	29	5	-36
69+75.00	Fill	2.8	3	32	4	-40
70+00.00	Fill	5.0	4	36	5	-45
70+25.00	Fill	2.9	4	40	5	-50
70+50.00	Fill	6.2	4	44	5	-55
70+75.00	Fill	5.9	6	50	8	-63
71+00.00	Fill	7.8	6	56	8	-70
71+25.00	Fill	3.4	5	61	6	-76
71+50.00	Fill	1.3	2	63	3	-79
71+75.00	Fill	7.3	4	67	5	-84
72+00.00	Fill	6.2	6	73	8	-91
72+25.00	Fill	4.7	5	78	6	-98
72+50.00	Fill	4.5	4	82	5	-103
72+75.00	Fill	5.9	5	87	6	-109

Station	Material	End Area (SF)	Vol. (CY)	Accum. Vol. (CY)	Adj. Vol. (CY*)	Adj. Accum. Vol. (CY)
K6S-8						
103+25.00	Fill	1.8	0	0	0	0
103+50.00	Fill	11.4	6	6	8	-8
103+75.00	Fill	26.1	17	23	21	-29
104+00.00	Fill	29.6	26	49	33	-61
104+25.00	Fill	23.9	25	74	31	-93
104+50.00	Fill	18.9	20	94	25	-118
104+75.00	Fill	18.2	17	111	21	-139
105+00.00	Fill	22.7	19	130	24	-163
105+25.00	Fill	23.1	21	151	26	-189
105+50.00	Fill	17.4	19	170	24	-213
105+75.00	Fill	9.7	13	183	16	-229
106+00.00	Fill	8.6	8	191	10	-239
106+25.00	Fill	4.0	6	197	8	-246

*An additional volume of 25% has been included to allow for shrinkage in permanent embankment.

Station	Material	End Area (SF)	Vol. (CY)	Accum. Vol. (CY)	Adj. Vol. (CY*)	Adj. Accum. Vol. (CY)
K6S-9						
121+00.00	Fill	1.4	0	0	0	0
121+25.00	Fill	4.6	3	3	4	-4
121+50.00	Fill	3.5	4	7	5	-9
121+75.00	Fill	3.9	3	10	4	-13
122+00.00	Fill	1.6	3	13	4	-16
122+25.00	Fill	3.9	3	16	4	-20
122+50.00	Fill	3.9	4	20	5	-25
122+75.00	Fill	6.2	5	25	6	-31
123+00.00	Fill	7.8	7	32	9	-40
123+25.00	Fill	6.5	7	39	9	-49
123+50.00	Fill	3.0	4	43	5	-54
123+75.00	Fill	5.2	4	47	5	-59
124+00.00	Fill	6.3	5	52	6	-65
124+25.00	Fill	2.6	4	56	5	-70

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Earthwork Data Table

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	ROM-0300(135)	11	4

Station	Material	End Area (SF)	Vol. (CY)	Accum. Vol. (CY)	Adj. Vol. (CY*)	Adj. Accum. Vol. (CY)
K6N-1						
6+75.00	Fill	5.3	0	0	0	0
7+00.00	Fill	2.4	4	4	5	-5
7+50.00	Fill	12.0	13	17	16	-21
7+75.00	Fill	11.4	11	28	14	-35
8+00.00	Fill	3.8	7	35	9	-44
8+25.00	Fill	8.9	6	41	8	-51
8+50.00	Fill	4.3	6	47	8	-59
8+75.00	Fill	6.5	5	52	6	-65
9+00.00	Fill	4.5	5	57	6	-71
9+25.00	Fill	8.0	6	63	8	-79
9+50.00	Fill	6.2	7	70	9	-88
9+75.00	Fill	15.6	10	80	13	-100
K6N-2						
39+25.00	Fill	12.1	22	22	28	-28
39+50.00	Fill	14.2	12	34	15	-43
39+75.00	Fill	14.4	13	47	16	-59
40+00.00	Fill	13.2	13	60	16	-75
40+25.00	Fill	12.8	12	72	15	-90
40+50.00	Fill	23.9	17	89	21	-111
40+75.00	Fill	21.7	21	110	26	-138
41+00.00	Fill	18.3	18	128	23	-160
41+25.00	Fill	18.6	17	145	21	-181
41+50.00	Fill	13.0	15	160	19	-200
41+75.00	Fill	8.0	10	170	13	-213
42+00.00	Fill	14.3	10	180	13	-225
42+25.00	Fill	18.4	15	195	19	-244
42+50.00	Fill	23.8	20	215	25	-269
42+75.00	Fill	27.2	24	239	30	-299
43+00.00	Fill	28.8	26	265	33	-331
43+25.00	Fill	27.1	26	291	33	-364
43+50.00	Fill	15.3	20	311	25	-389
43+75.00	Fill	15.0	14	325	18	-406
44+00.00	Fill	15.7	14	339	18	-424
44+25.00	Fill	16.6	15	354	19	-443
44+50.00	Fill	26.2	20	374	25	-468
44+75.00	Fill	17.7	20	394	25	-493

*An additional volume of 25% has been included to allow for shrinkage in permanent embankment.

Station	Material	End Area (SF)	Vol. (CY)	Accum. Vol. (CY)	Adj. Vol. (CY*)	Adj. Accum. Vol. (CY)
K6N-3						
124+00.00	Fill	1.7	0	0	0	0
124+25.00	Fill	4.8	3	3	4	-4
124+50.00	Fill	6.3	5	8	6	-10
124+75.00	Fill	6.9	6	14	8	-18
125+00.00	Fill	20.3	13	27	16	-34
125+25.00	Fill	23.0	20	47	25	-59
125+50.00	Fill	29.6	24	71	30	-89
125+75.00	Fill	26.3	26	97	33	-121
126+00.00	Fill	18.3	21	118	26	-148
126+25.00	Fill	12.4	14	132	18	-165
126+50.00	Fill	9.7	10	142	13	-178
126+75.00	Fill	10.5	9	151	11	-189
127+00.00	Fill	12.8	11	162	14	-203
127+25.00	Fill	16.0	13	175	16	-219
127+50.00	Fill	17.0	15	190	19	-238
127+75.00	Fill	18.0	16	206	20	-258
128+00.00	Fill	18.7	17	223	21	-279
128+25.00	Fill	19.7	18	241	23	-301
128+50.00	Fill	20.6	19	260	24	-325
128+75.00	Fill	21.9	20	280	25	-350
129+00.00	Fill	21.8	20	300	25	-375
129+25.00	Fill	21.9	20	320	25	-400
129+50.00	Fill	21.7	20	340	25	-425
129+75.00	Fill	23.4	21	361	26	-451
130+00.00	Fill	24.1	22	383	28	-479
130+25.00	Fill	22.5	22	405	28	-506
130+50.00	Fill	20.8	20	425	25	-531
130+75.00	Fill	9.3	14	439	18	-549
131+00.00	Fill	10.1	9	448	11	-560
131+25.00	Fill	12.1	10	458	13	-573
131+50.00	Fill	17.7	14	472	18	-590
131+75.00	Fill	11.9	14	486	18	-608
132+00.00	Fill	3.7	7	493	9	-616
132+25.00	Fill	4.6	4	497	5	-621
132+50.00	Fill	11.0	7	504	9	-630
132+75.00	Fill	11.8	11	515	14	-644
133+00.00	Fill	12.2	11	526	14	-658
133+25.00	Fill	8.4	10	536	13	-670
134+00.00	Fill	2.0	14	550	18	-688
134+25.00	Fill	5.2	3	553	4	-691
134+50.00	Fill	6.2	5	558	6	-698
134+75.00	Fill	12.1	8	566	10	-708
135+00.00	Fill	10.9	11	577	14	-721
135+25.00	Fill	9.9	10	587	13	-734
135+50.00	Fill	1.2	5	592	6	-740

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Earthwork Data Table

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	11	5

Station	Material	End Area (SF)	Vol. (CY)	Accum. Vol. (CY)	Adj. Vol. (CY*)	Adj. Accum. Vol. (CY)
K6N-4						
141+75.00	Fill	1.8	0	0	0	0
142+00.00	Fill	6.0	4	4	5	-5
142+25.00	Fill	4.5	5	9	6	-11
142+50.00	Fill	3.6	4	13	5	-16
143+50.00	Fill	4.6	15	28	19	-35
143+75.00	Fill	4.1	4	32	5	-40
144+00.00	Fill	2.2	3	35	4	-44
144+25.00	Fill	4.0	3	38	4	-48
144+50.00	Fill	7.0	5	43	6	-54
144+75.00	Fill	7.6	7	50	9	-63
145+00.00	Fill	5.3	6	56	8	-70
145+25.00	Fill	3.5	4	60	5	-75
145+50.00	Fill	3.9	3	63	4	-79
145+75.00	Fill	2.8	3	66	4	-83
146+00.00	Fill	3.8	3	69	4	-86
146+25.00	Fill	2.0	3	72	4	-90

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Earthwork Data Table

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	ROM-0300(135)	11	6

Station	Material	End Area (SF)	Vol. (CY)	Accum. Vol. (CY)	Adj. Vol. (CY*)	Adj. Accum. Vol. (CY)
K7-1						
8+00.00	Fill	5.2	0	0	0	0
8+25.00	Fill	21.6	12	12	15	-15
8+50.00	Fill	27.3	23	35	29	-44
8+75.00	Fill	28.4	26	61	33	-76
9+00.00	Fill	43.1	33	94	41	-118
9+25.00	Fill	45.2	41	135	51	-169
9+50.00	Fill	42.7	41	176	51	-220
9+75.00	Fill	48.8	42	218	53	-273
10+00.00	Fill	54.4	48	266	60	-333
10+25.00	Fill	58.1	52	318	65	-398
10+50.00	Fill	56.6	53	371	66	-464
10+75.00	Fill	54.8	52	423	65	-529
11+00.00	Fill	49.0	48	471	60	-589
11+25.00	Fill	46.0	44	515	55	-644
11+50.00	Fill	48.3	44	559	55	-699
11+75.00	Fill	52.4	47	606	59	-758
12+00.00	Fill	23.2	35	641	44	-801
12+25.00	Fill	34.8	27	668	34	-835
12+50.00	Fill	61.2	44	712	55	-890
12+75.00	Fill	66.8	59	771	74	-964
13+00.00	Fill	56.2	57	828	71	-1,035
13+25.00	Fill	52.1	50	878	63	-1,098
13+50.00	Fill	24.8	36	914	45	-1,143
K7-2						
62+00.00	Fill	9.4	0	0	0	0
62+25.00	Fill	17.6	13	13	16	-16
62+50.00	Fill	29.1	22	35	28	-44
62+75.00	Fill	33.0	29	64	36	-80
63+00.00	Fill	39.6	34	98	43	-123
63+25.00	Fill	44.7	39	137	49	-171
63+50.00	Fill	34.5	37	174	46	-218
63+75.00	Fill	32.3	31	205	39	-256
64+00.00	Fill	37.0	32	237	40	-296
64+25.00	Fill	40.1	36	273	45	-341
64+50.00	Fill	17.9	27	300	34	-375
64+75.00	Fill	7.7	12	312	15	-390

*An additional volume of 25% has been included to allow for shrinkage in permanent embankment.

Station	Material	End Area (SF)	Vol. (CY)	Accum. Vol. (CY)	Adj. Vol. (CY*)	Adj. Accum. Vol. (CY)
K7-3						
69+25.00	Fill	18.6	0	0	0	0
69+50.00	Fill	32.9	24	24	30	-30
69+75.00	Fill	31.8	30	54	38	-68
70+00.00	Fill	31.5	29	83	36	-104
70+25.00	Fill	32.6	30	113	38	-141
70+50.00	Fill	17.5	23	136	29	-170
70+75.00	Fill	12.1	14	150	18	-188
71+00.00	Fill	12.4	11	161	14	-201
71+25.00	Fill	14.2	12	173	15	-216
71+50.00	Fill	26.2	19	192	24	-240
71+75.00	Fill	45.7	33	225	41	-281
72+00.00	Fill	46.9	43	268	54	-335
72+25.00	Fill	47.8	44	312	55	-390
72+50.00	Fill	46.2	44	356	55	-445
72+75.00	Fill	29.8	35	391	44	-489
73+00.00	Fill	18.8	22	413	28	-516
73+25.00	Fill	18.1	17	430	21	-538
73+50.00	Fill	17.4	16	446	20	-558
73+75.00	Fill	13.1	14	460	18	-575
74+00.00	Fill	13.9	13	473	16	-591
74+25.00	Fill	15.1	13	486	16	-608
74+50.00	Fill	11.2	12	498	15	-623
74+75.00	Fill	9.2	9	507	11	-634
75+00.00	Fill	6.2	7	514	9	-643
75+25.00	Fill	6.8	6	520	8	-650
K7-4						
97+50.00	Fill	3.2	0	0	0	0
97+75.00	Fill	5.5	4	4	5	-5
98+00.00	Fill	9.6	7	11	9	-14
98+25.00	Fill	18.3	13	24	16	-30
98+50.00	Fill	15.8	16	40	20	-50
98+75.00	Fill	29.1	21	61	26	-76
99+00.00	Fill	31.6	28	89	35	-111
99+25.00	Fill	30.0	29	118	36	-148
99+50.00	Fill	35.8	30	148	38	-185
99+75.00	Fill	48.0	39	187	49	-234
100+00.00	Fill	32.9	37	224	46	-280
100+25.00	Fill	27.2	28	252	35	-315
100+50.00	Fill	34.5	29	281	36	-351
100+75.00	Fill	40.1	35	316	44	-395
101+00.00	Fill	43.0	38	354	48	-443
101+25.00	Fill	58.7	47	401	59	-501
101+50.00	Fill	63.2	56	457	70	-571
101+75.00	Fill	67.4	60	517	75	-646
102+00.00	Fill	47.1	53	570	66	-713
102+25.00	Fill	12.7	28	598	35	-748

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Earthwork Data Table

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	11	7

Station	Material	End Area (SF)	Vol. (CY)	Accum. Vol. (CY)	Adj. Vol. (CY*)	Adj. Accum. Vol. (CY)
K7-5						
106+50.00	Fill	14.8	0	0	0	0
106+75.00	Fill	18.0	15	15	19	-19
107+00.00	Fill	24.6	20	35	25	-44
107+25.00	Fill	21.6	21	56	26	-70
107+50.00	Fill	11.2	15	71	19	-89
107+75.00	Fill	7.4	9	80	11	-100
108+00.00	Fill	5.0	6	86	8	-108
K7-6						
111+50.00	Fill	2.3	0	0	0	0
111+75.00	Fill	7.0	4	4	5	-5
112+00.00	Fill	8.2	7	11	9	-14
112+25.00	Fill	8.5	8	19	10	-24
112+50.00	Fill	6.9	7	26	9	-33
112+75.00	Fill	5.0	6	32	8	-40
113+00.00	Fill	11.4	8	40	10	-50
113+25.00	Fill	6.1	8	48	10	-60
K7-7						
150+75.00	Fill	5.3	0	0	0	0
151+00.00	Fill	13.5	9	9	11	-11
151+25.00	Fill	14.3	13	22	16	-28
151+50.00	Fill	13.1	13	35	16	-44
151+75.00	Fill	16.8	14	49	18	-61
152+00.00	Fill	21.5	18	67	23	-84
152+25.00	Fill	5.9	13	80	16	-100
K7-8						
168+00.00	Fill	3.5	0	0	0	0
168+25.00	Fill	3.2	3	3	4	-4
168+50.00	Fill	4.2	3	6	4	-8
168+75.00	Fill	2.2	3	9	4	-11
169+00.00	Fill	2.1	2	11	3	-14
169+25.00	Fill	2.5	2	13	3	-16
169+50.00	Fill	2.2	2	15	3	-19
169+75.00	Fill	1.4	2	17	3	-21
170+00.00	Fill	0.8	1	18	1	-23
170+25.00	Fill	1.4	1	19	1	-24
170+50.00	Fill	2.3	2	21	3	-26
172+00.00	Fill	2.2	12	33	15	-41
172+25.00	Fill	2.2	2	35	3	-44
172+50.00	Fill	2.3	2	37	3	-46

*An additional volume of 25% has been included to allow for shrinkage in permanent embankment.

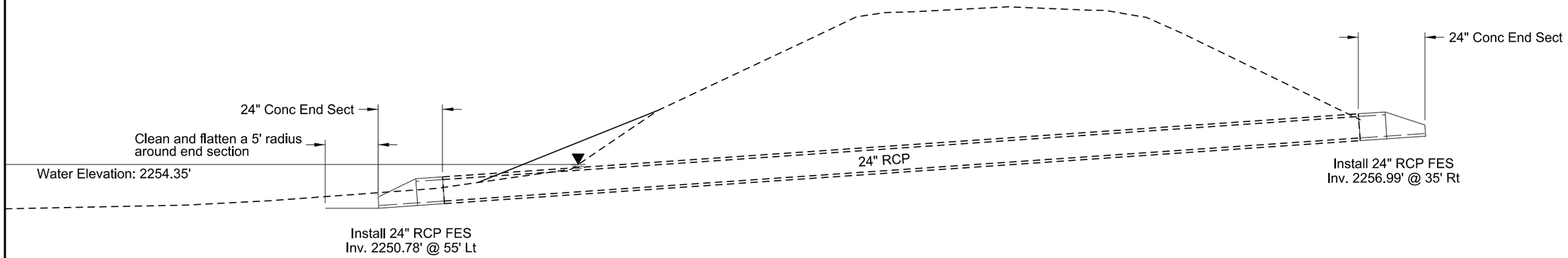
Station	Material	End Area (SF)	Vol. (CY)	Accum. Vol. (CY)	Adj. Vol. (CY*)	Adj. Accum. Vol. (CY)
K7-9						
197+25.00	Fill	3.5	0	0	0	0
197+50.00	Fill	7.8	5	5	6	-6
197+75.00	Fill	4.3	6	11	8	-14
198+00.00	Fill	1.2	3	14	4	-18
199+00.00	Fill	2.7	7	21	9	-26
199+25.00	Fill	5.7	4	25	5	-31
201+00.00	Fill	2.2	25	50	31	-63
201+25.00	Fill	8.7	5	55	6	-69
201+50.00	Fill	18.1	12	67	15	-84
201+75.00	Fill	24.1	20	87	25	-109
202+00.00	Fill	20.5	21	108	26	-135
202+25.00	Fill	11.3	15	123	19	-154
202+50.00	Fill	2.1	6	129	8	-161
K7-10						
273+50.00	Fill	3.9	0	0	0	0
273+75.00	Fill	5.3	4	4	5	-5
274+00.00	Fill	3.8	4	8	5	-10
274+25.00	Fill	4.6	4	12	5	-15
274+50.00	Fill	8.1	6	18	8	-23
274+75.00	Fill	7.9	7	25	9	-31
275+00.00	Fill	7.3	7	32	9	-40
275+25.00	Fill	7.7	7	39	9	-49
275+50.00	Fill	7.5	7	46	9	-58
275+75.00	Fill	7.4	7	53	9	-66
276+00.00	Fill	6.9	7	60	9	-75
276+25.00	Fill	1.6	4	64	5	-80

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Earthwork Data Table

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	20	1

END SECT-CONC REINF 24IN	Qty
Sta 7+56 Lt	1 EA
Sta 7+58 Rt	1 EA

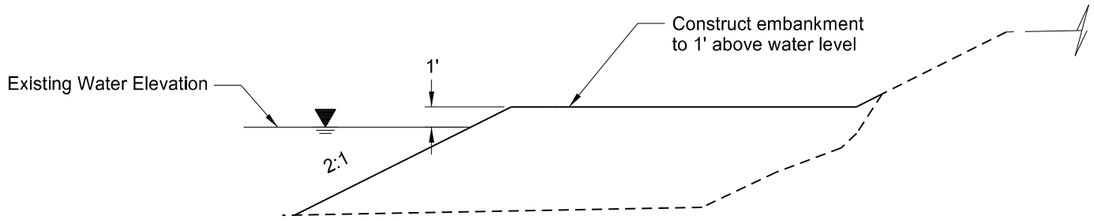


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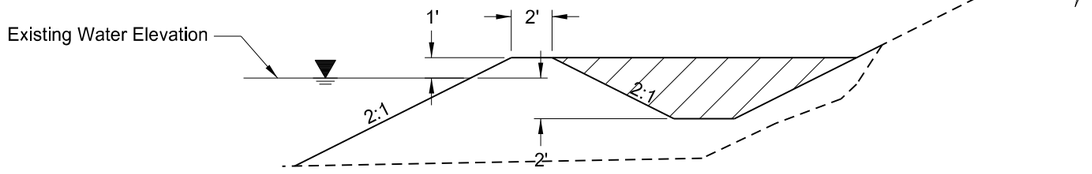
RCP End Sections
J10-1 Pipe
Mountrail County

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	20	2

STAGE 1 - Embankment



STAGE 2 - Excavation

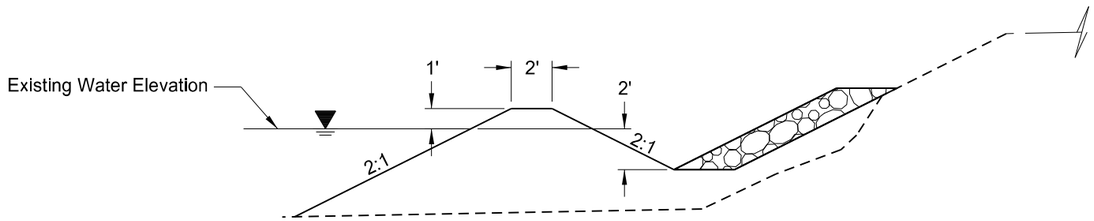


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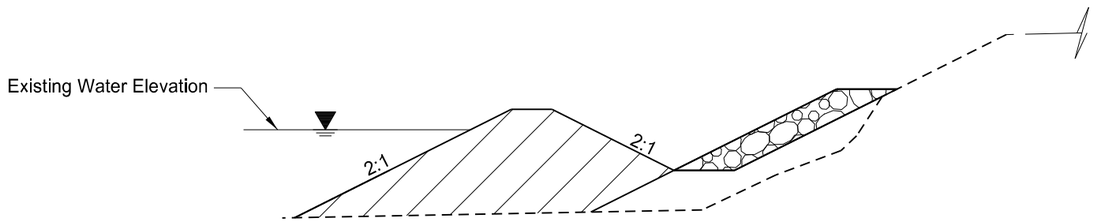
Rip Rap or Concrete Blanket

Excavated Material

STAGE 3 - Place Fabric and Riprap or Concrete Blanket



STAGE 4 - Remove Keyway Berm

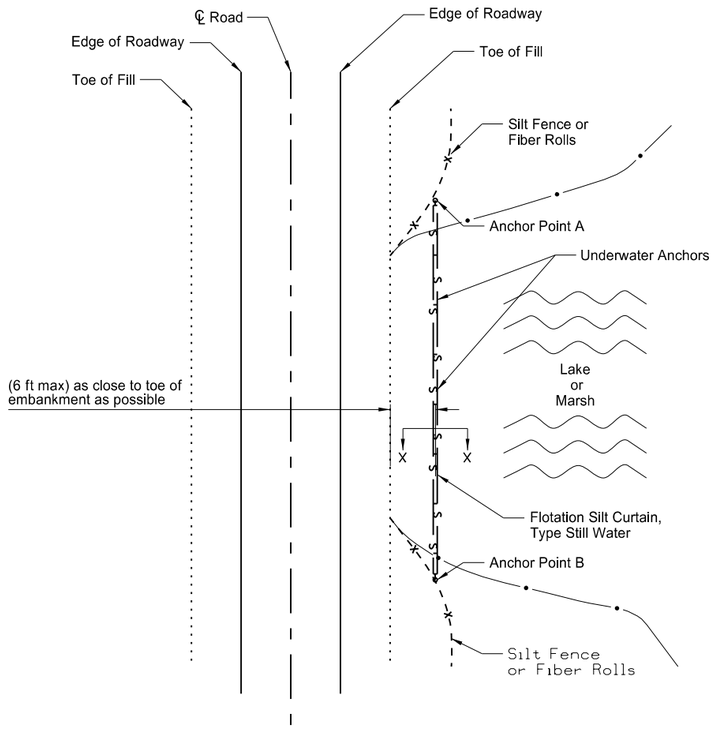


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Berm Detail

TYPICAL INSTALLATIONS
May vary with conditions

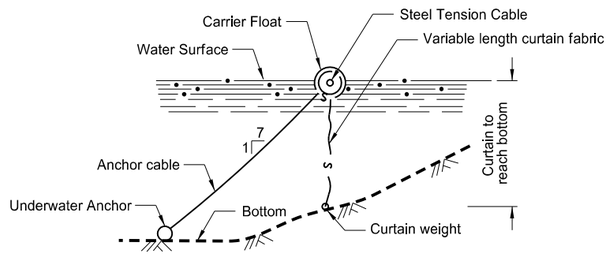
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	20	3



PLAN VIEW

FLOTATION SILT CURTAIN - TYPE STILL WATER

Extend silt curtain onto shore and anchor there also.



SECTION X-X

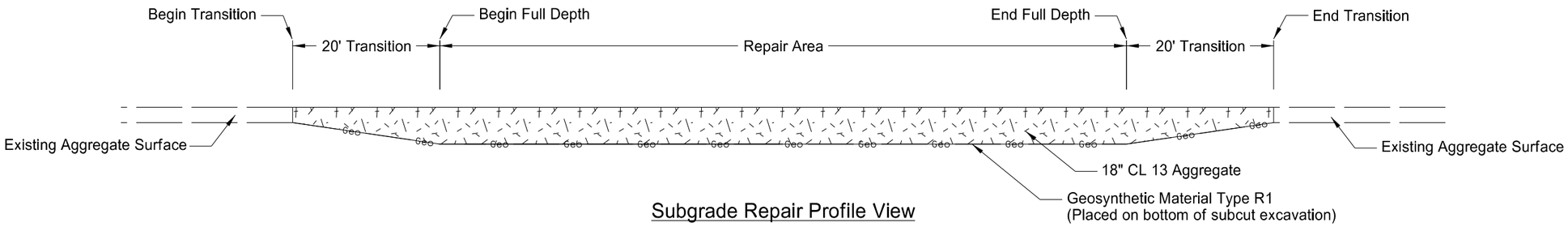
FLOTATION SILT CURTAINS

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

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Temporary Erosion Control - Flotation Silt Curtain

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	20	4



Subgrade Repair Profile View

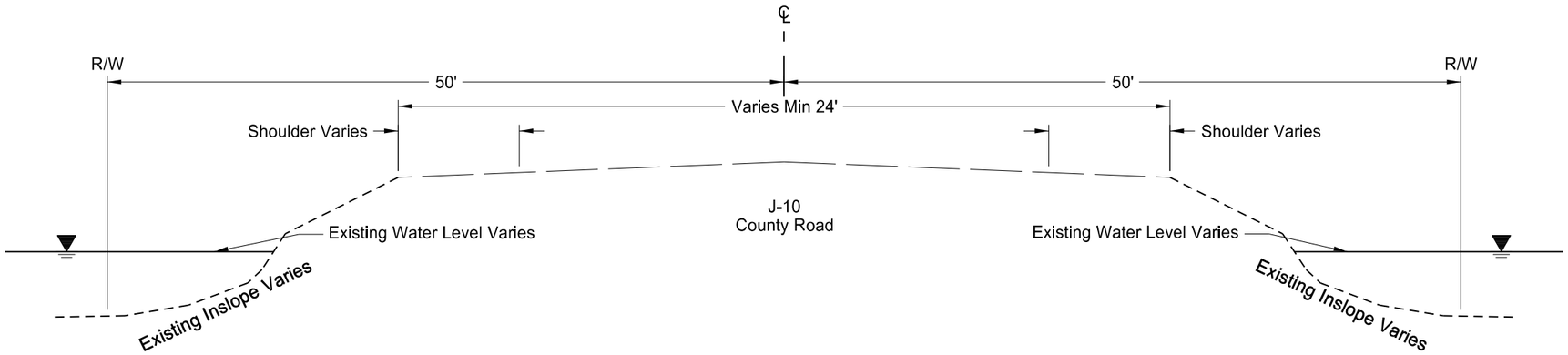
Subcut Repair Summary											
Site	Begin Transition	Begin Full Depth	End Full Depth	End Transition	Offset	Width (Ft)	Subcut Full Depth Length (Ft)	Subcut Depth (In)	Common Exc. Subcut (CY)	Geosynthetic Material Type R1 (SY)	Aggregate Surface Course CL 13 (1.875 Tons/CY)
K6S-1	6+60	6+80	7+80	8+00	RT	8	100	18	54	125	101
K6S-6	55+30	55+50	57+50	57+70	RT	8	200	18	98	214	184
	57+80	58+00	59+00	59+20	RT	8	100	18	54	125	101
K6S-8	103+80	104+00	105+00	105+20	RT	8	100	18	54	125	101
								Total	**260**	**589**	**487**

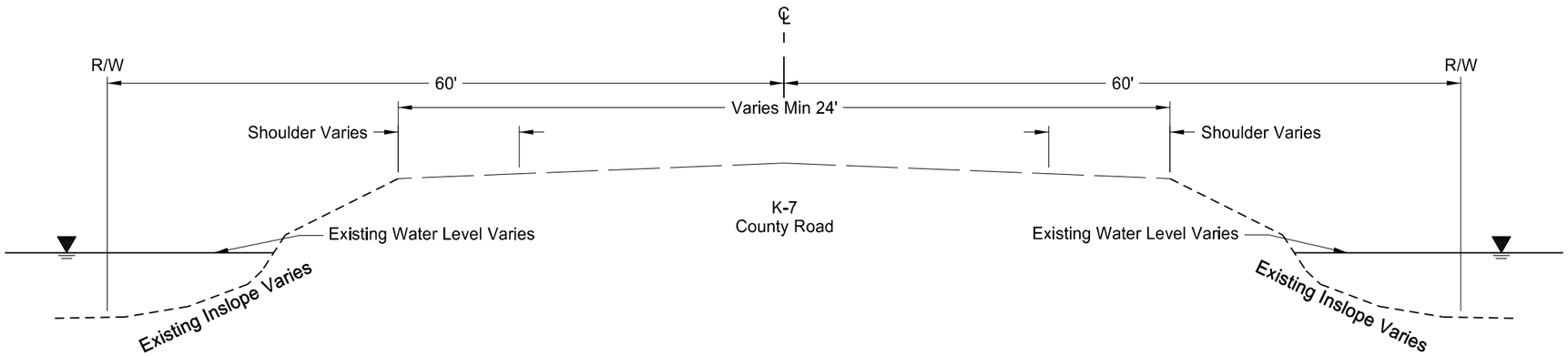
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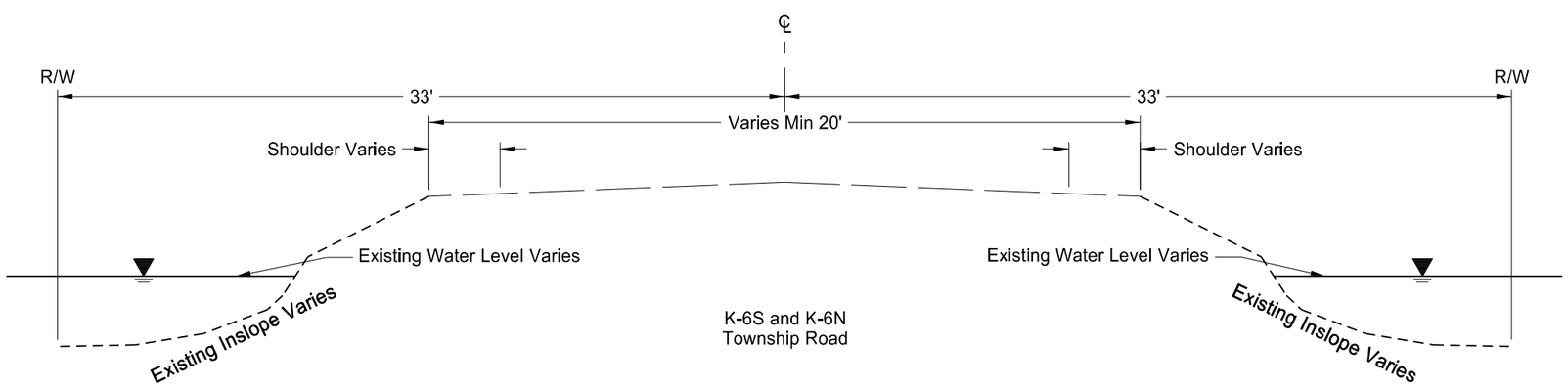
Subcut Repair Detail

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	30	1

Note: Water levels will vary, those provided are as of 6/1/17.



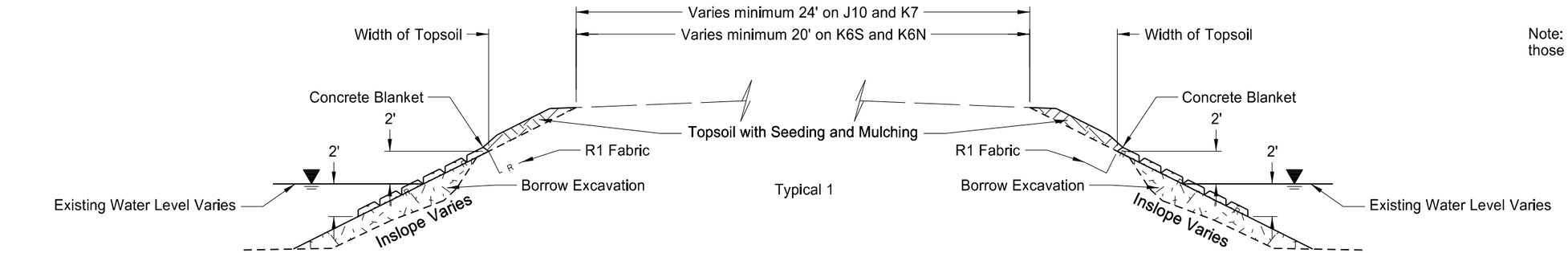




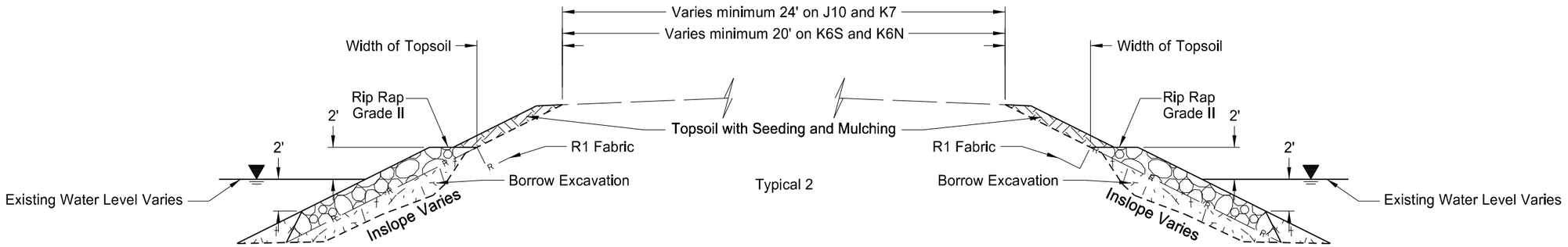
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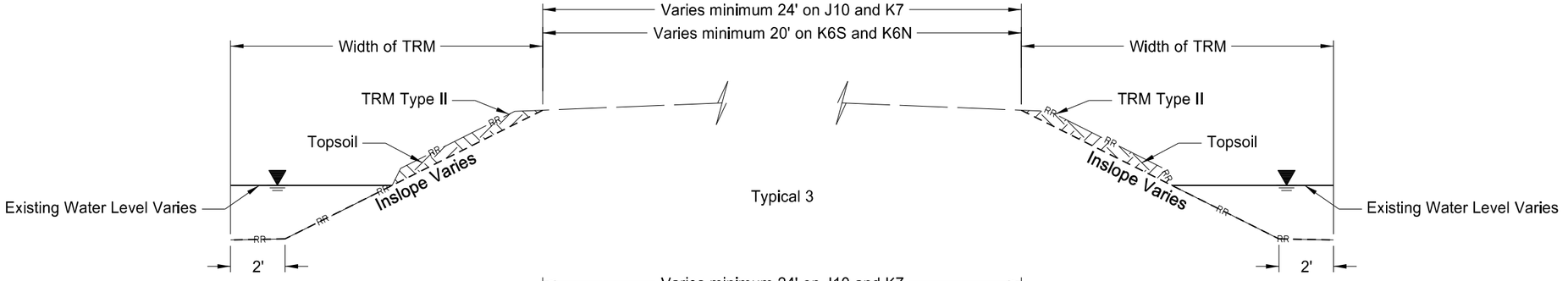
Existing Typical Sections

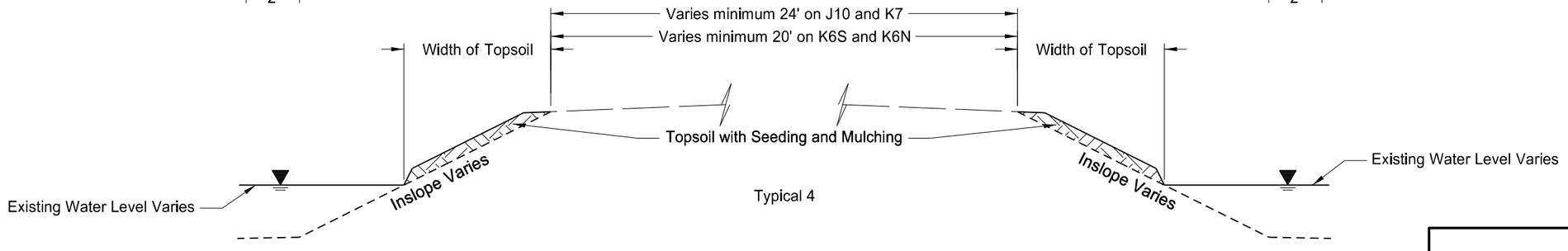
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	30	2



Note: Water levels will vary, those provided are as of 6/1/17.



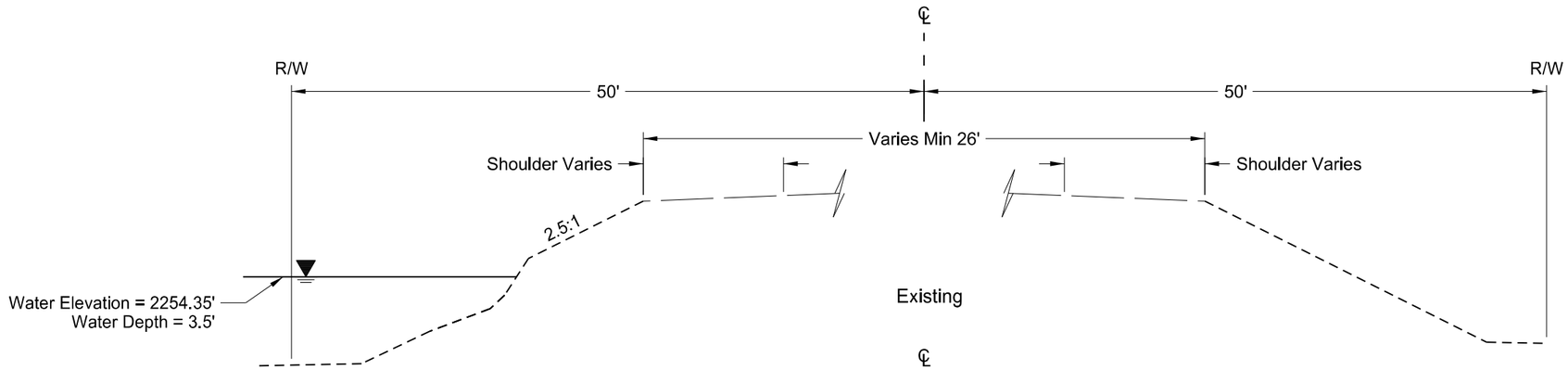




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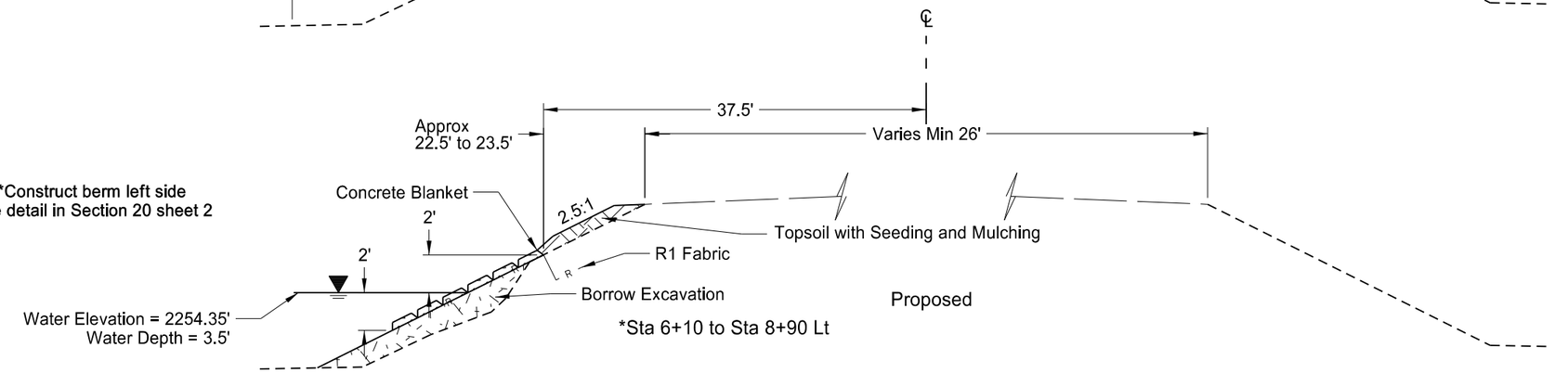
Proposed Typical Sections

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	30	3

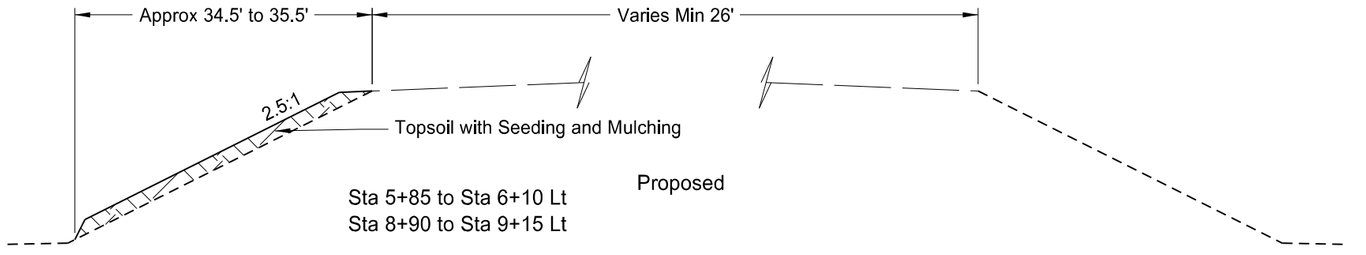


Notes:
Water levels will vary,
those provided are as of 6/1/17.

The design inslope varies for 25 ft. as it transitions into the existing inslope.



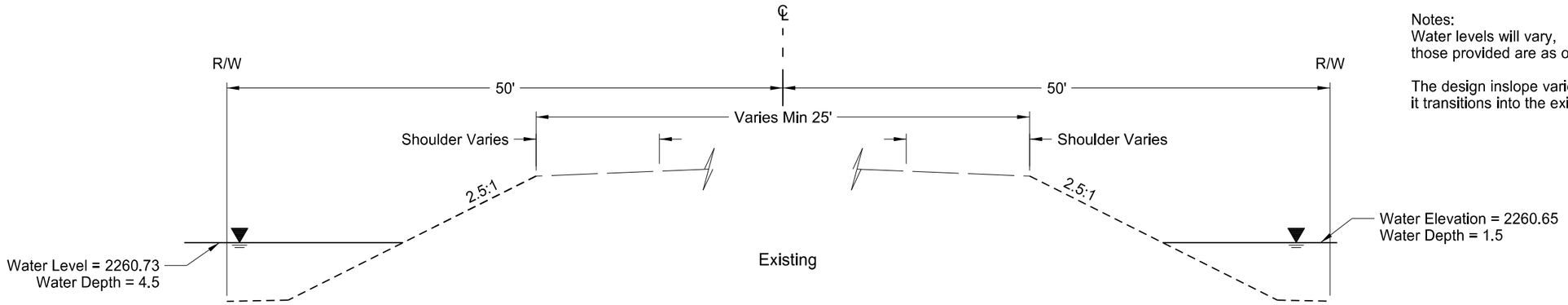
*Construct berm left side
See detail in Section 20 sheet 2



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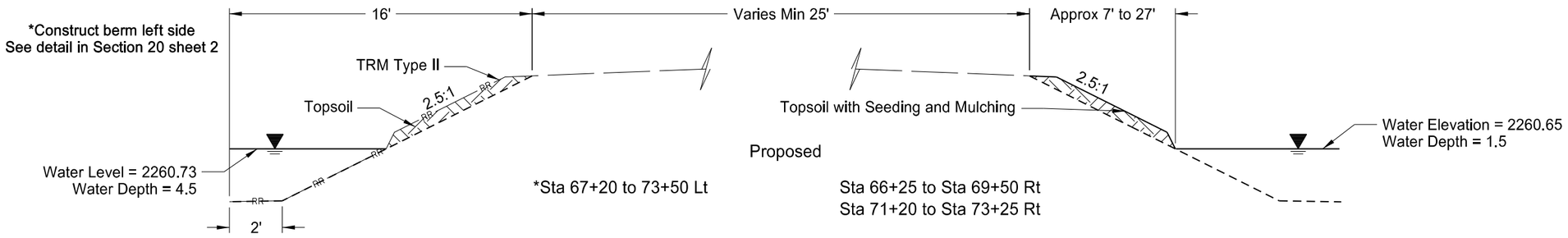
J10-1
Typical Sections
Mountrail County

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	30	4



Notes:
Water levels will vary,
those provided are as of 6/1/17.

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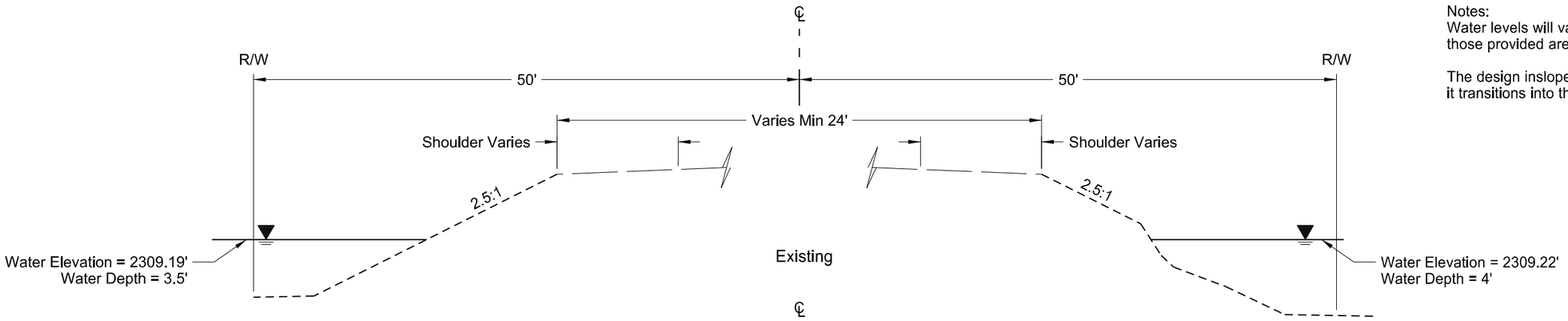
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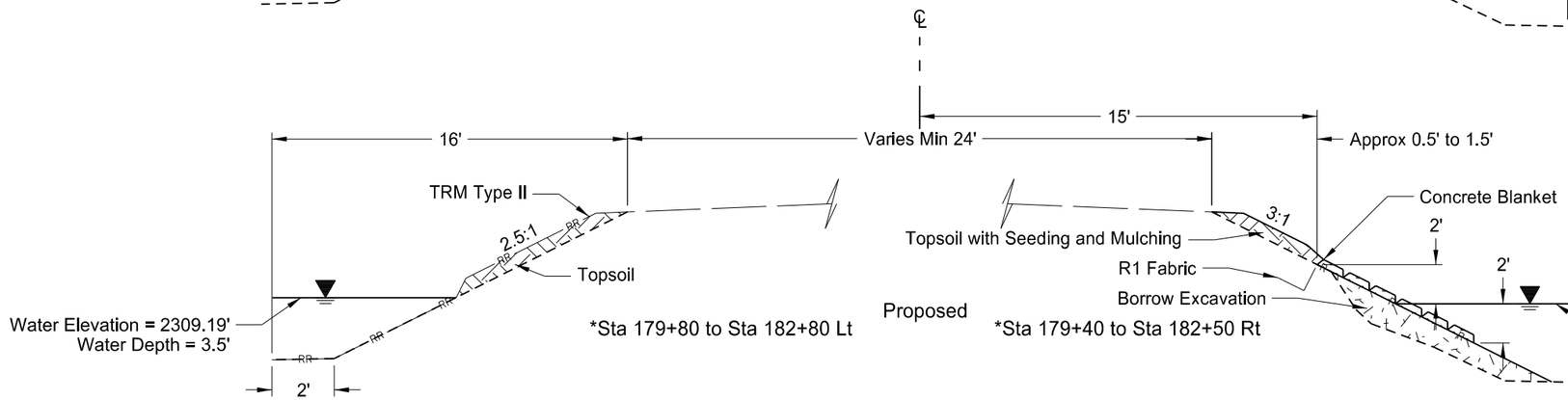
J10-2
Typical Sections
Mountrail County

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	30	5

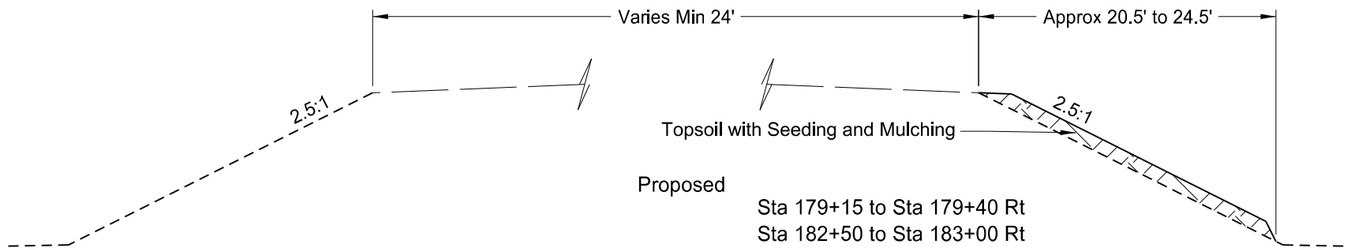
Notes:
Water levels will vary,
those provided are as of 6/1/17.

The design inslope varies for 25 ft. as it transitions into the existing inslope.





*Construct berm right side
See detail in Section 20 sheet 2



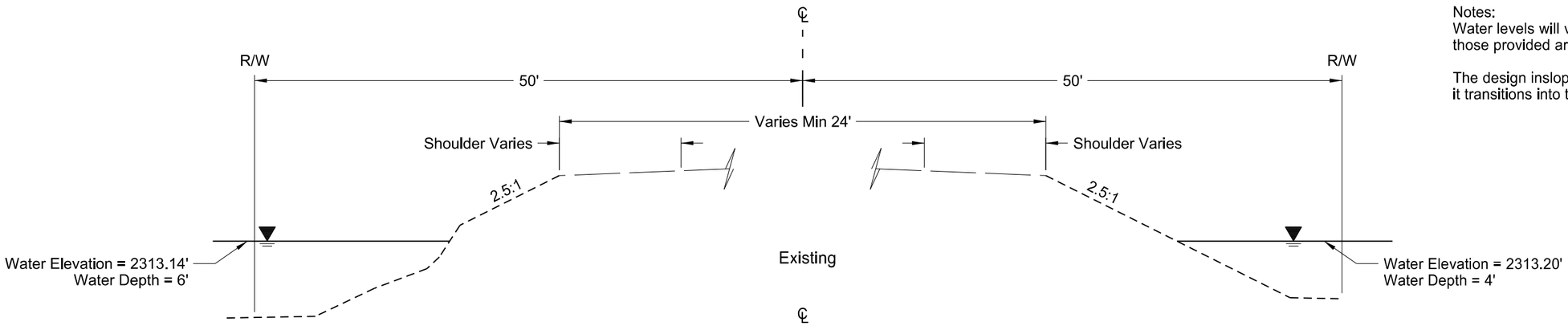
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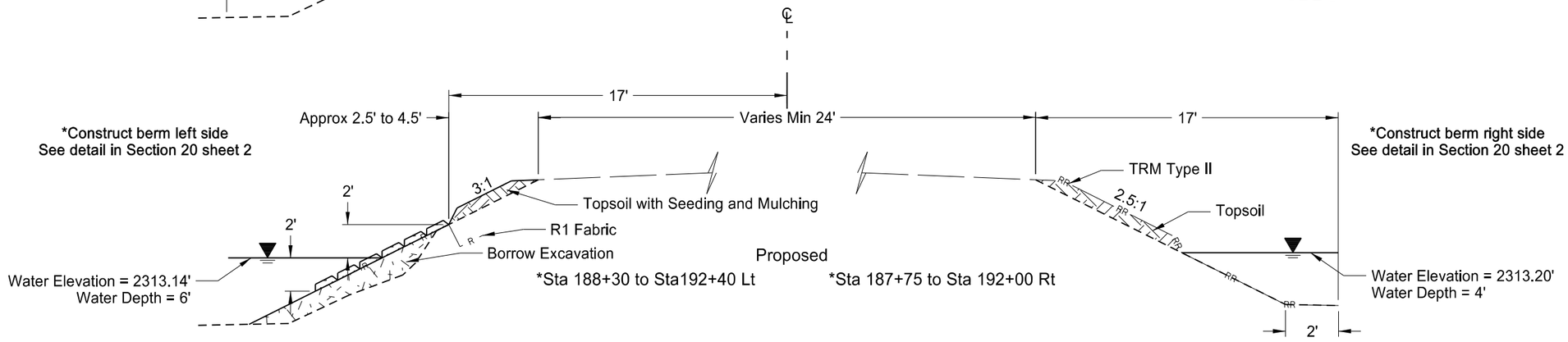
J10-3
Typical Sections
Mountrail County

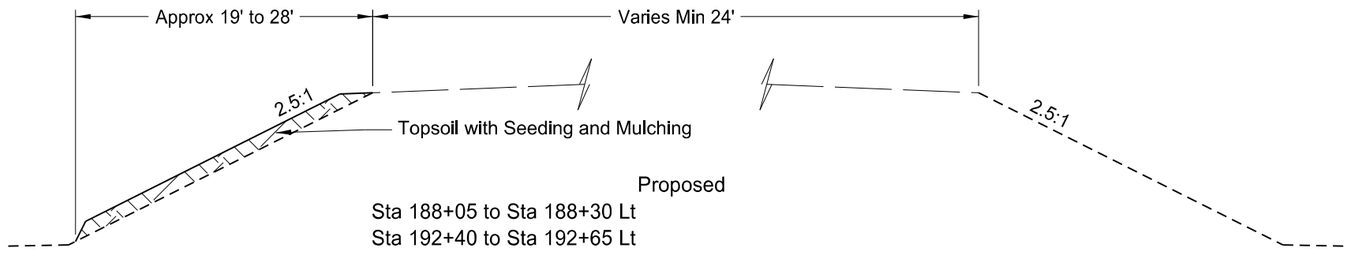
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	30	6

Notes:
Water levels will vary,
those provided are as of 6/1/17.

The design inslope varies for 25 ft. as it transitions into the existing inslope.







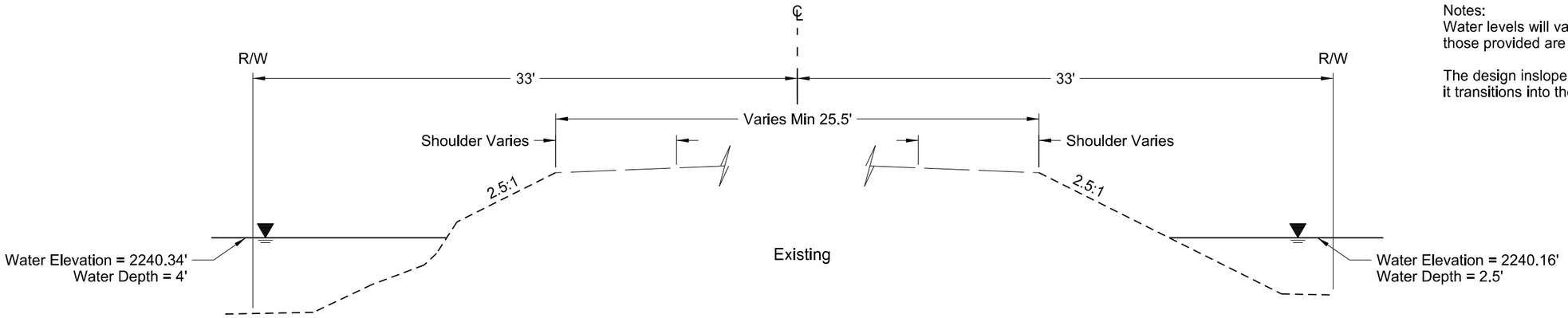
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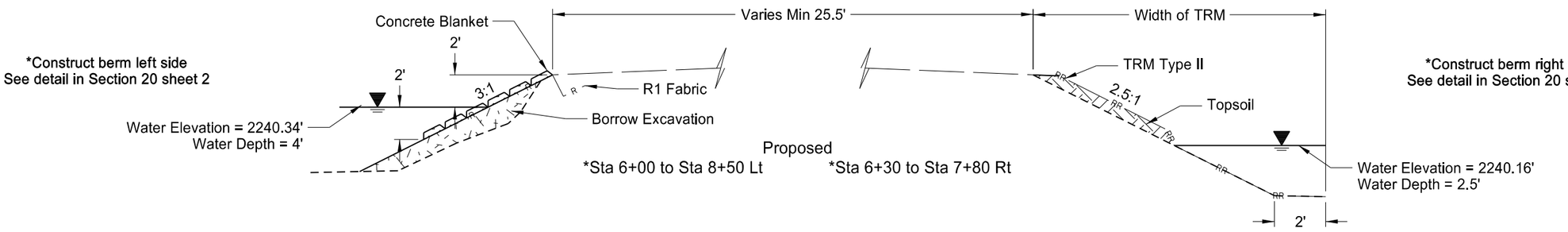
J10-4
Typical Sections
Mountrail County

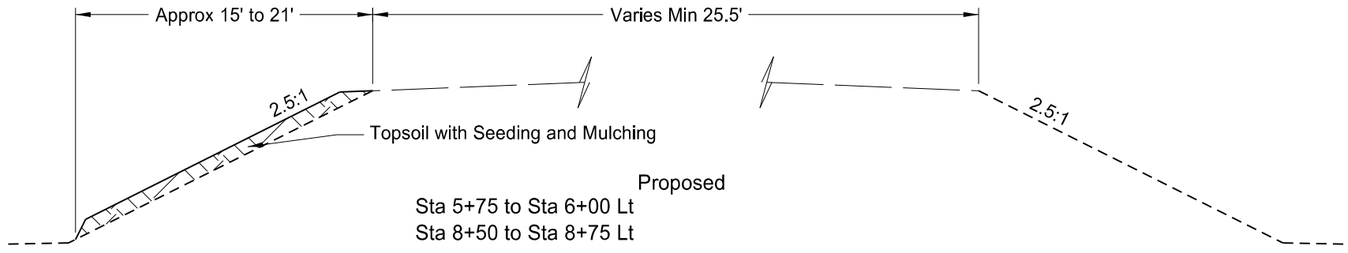
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	30	7

Notes:
Water levels will vary,
those provided are as of 6/1/17.

The design inslope varies for 25 ft. as it transitions into the existing inslope.



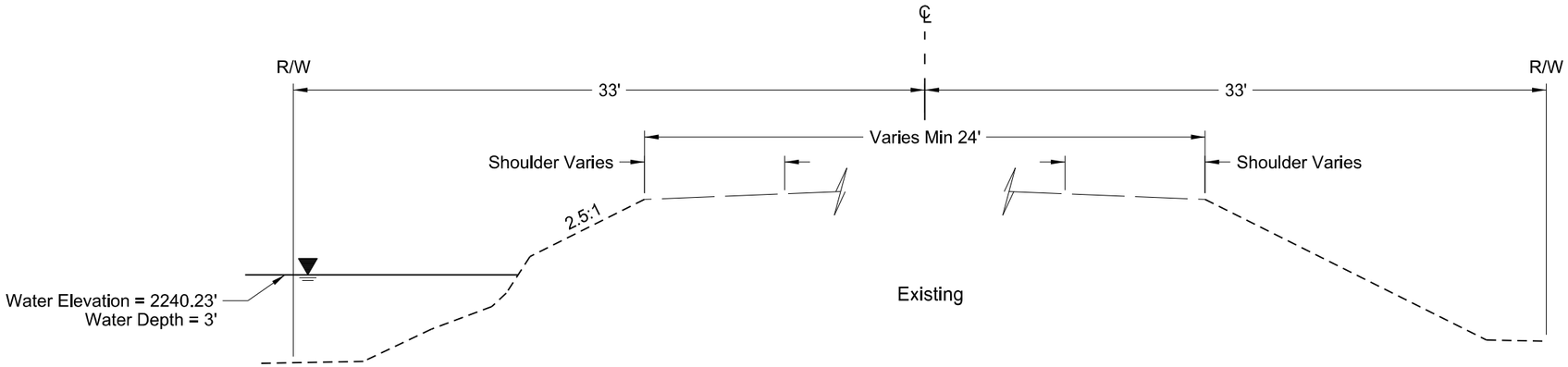




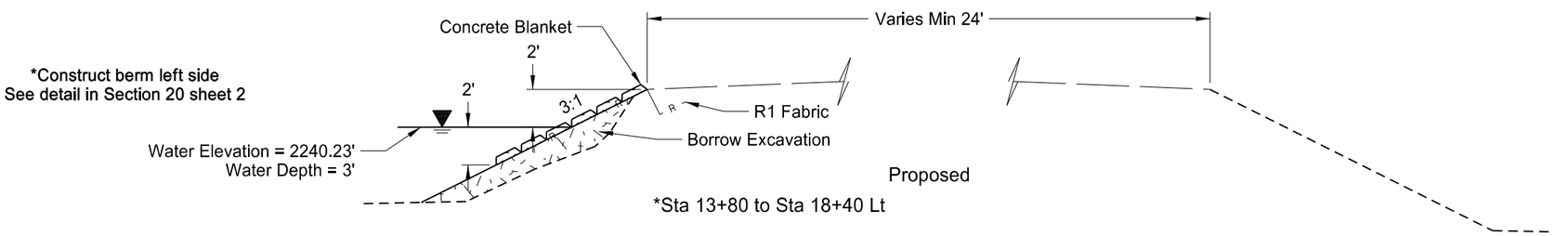
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K6S-1
Typical Sections
Mountrail County

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	30	8

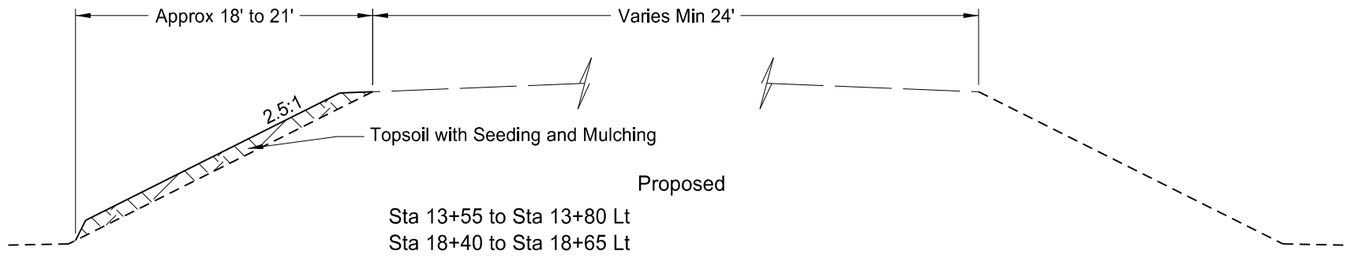


Existing



Proposed

*Sta 13+80 to Sta 18+40 Lt



Proposed

Sta 13+55 to Sta 13+80 Lt
Sta 18+40 to Sta 18+65 Lt

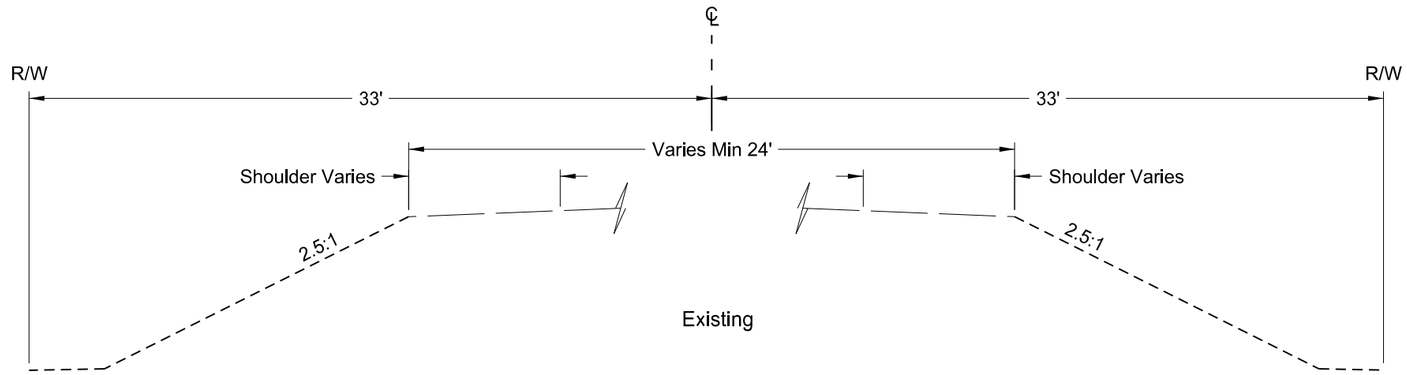
Notes:
Water levels will vary,
those provided are as of 6/1/17.

The design inslope varies for 25 ft. as it transitions into the existing inslope.

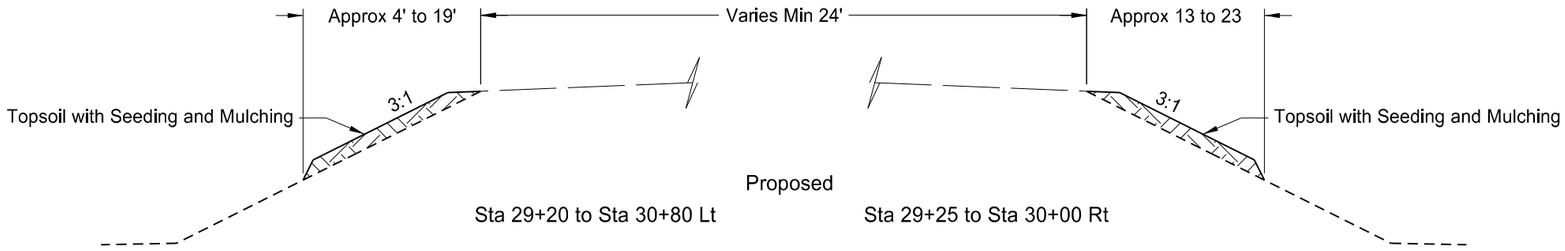
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K6S-2
Typical Sections
Mountrail County

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	30	9



Existing



Proposed

Sta 29+20 to Sta 30+80 Lt

Sta 29+25 to Sta 30+00 Rt

Notes:
Water levels will vary,
those provided are as of 6/1/17.

The design inslope varies for 25 ft. as it transitions into the existing inslope.

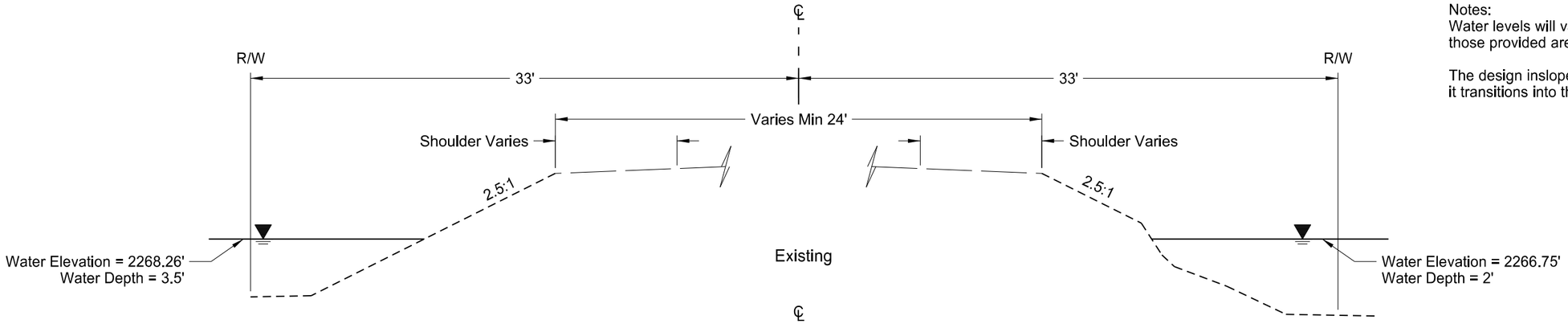
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K6S-3
Typical Sections
Mountrail County

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	30	10

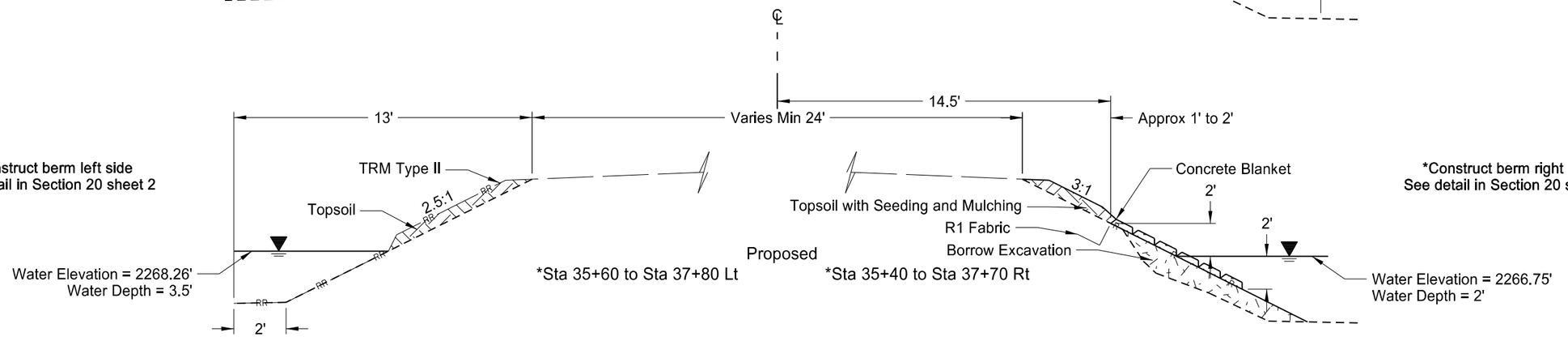
Notes:
Water levels will vary,
those provided are as of 6/1/17.

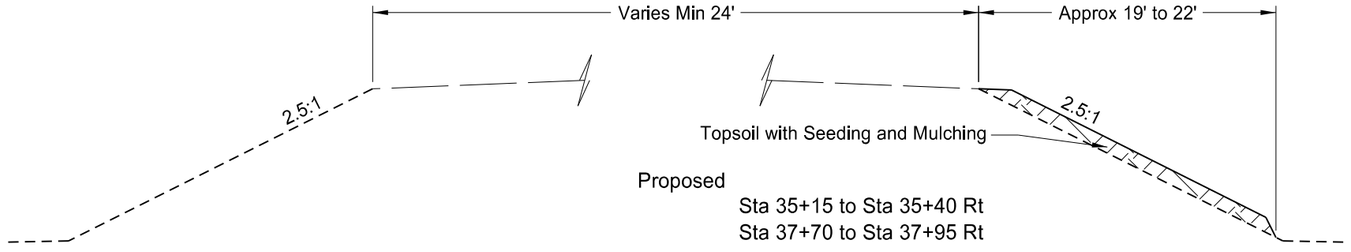
The design inslope varies for 25 ft. as it transitions into the existing inslope.



*Construct berm left side
See detail in Section 20 sheet 2

*Construct berm right side
See detail in Section 20 sheet 2





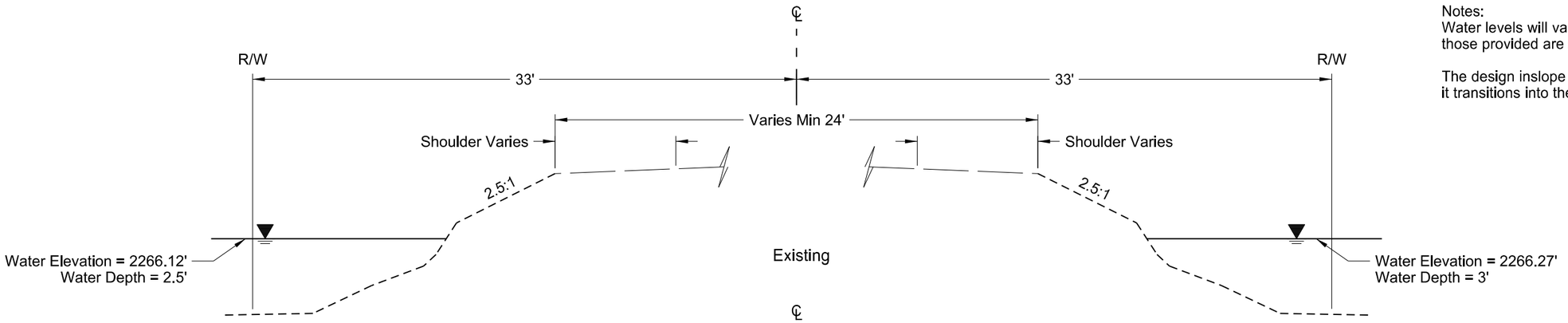
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K6S-4
Typical Sections
Mountrail County

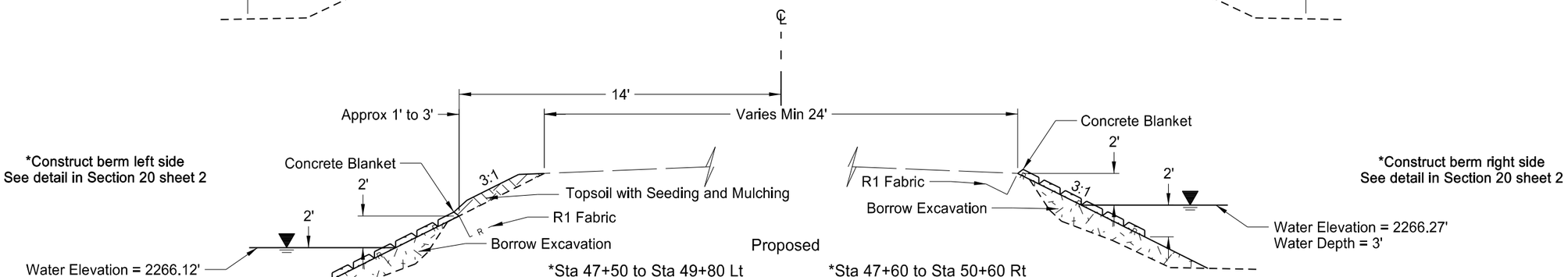
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	30	11

Notes:
Water levels will vary,
those provided are as of 6/1/17.

The design inslope varies for 25 ft. as it transitions into the existing inslope.



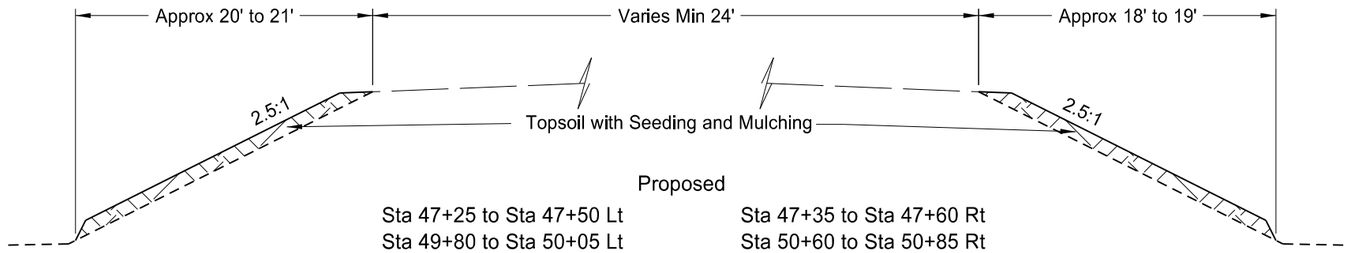
Existing



Proposed

*Sta 47+50 to Sta 49+80 Lt

*Sta 47+60 to Sta 50+60 Rt



Proposed

Sta 47+25 to Sta 47+50 Lt
Sta 49+80 to Sta 50+05 Lt

Sta 47+35 to Sta 47+60 Rt
Sta 50+60 to Sta 50+85 Rt

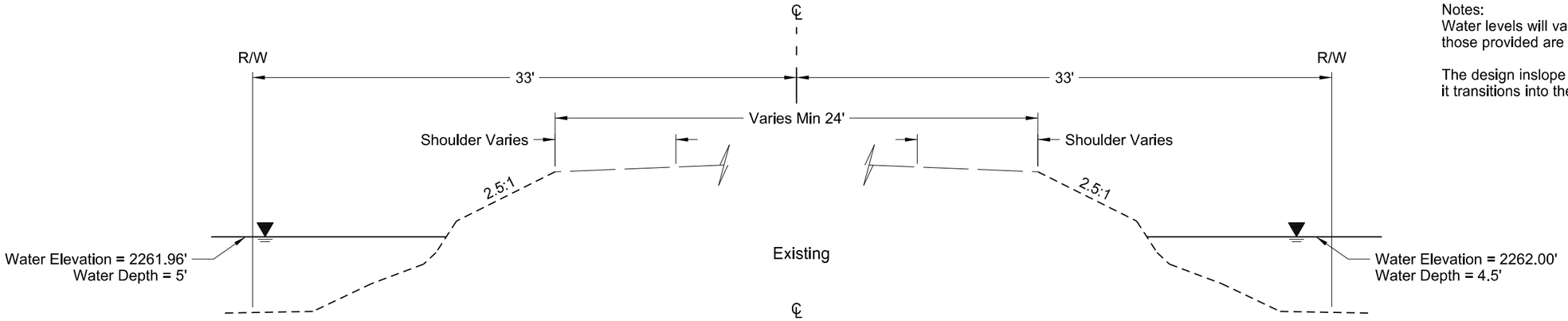
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K6S-5
Typical Sections
Mountrail County

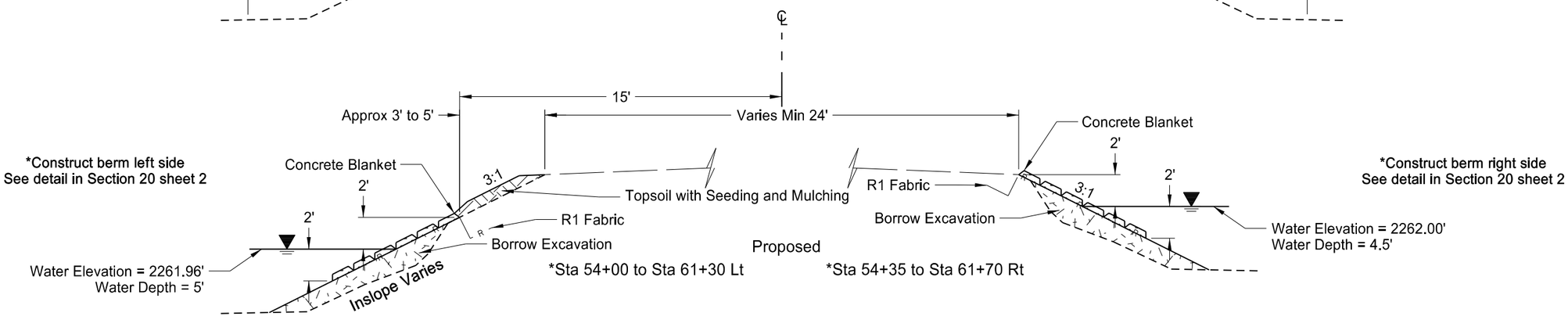
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	30	12

Notes:
Water levels will vary,
those provided are as of 6/1/17.

The design inslope varies for 25 ft. as it transitions into the existing inslope.



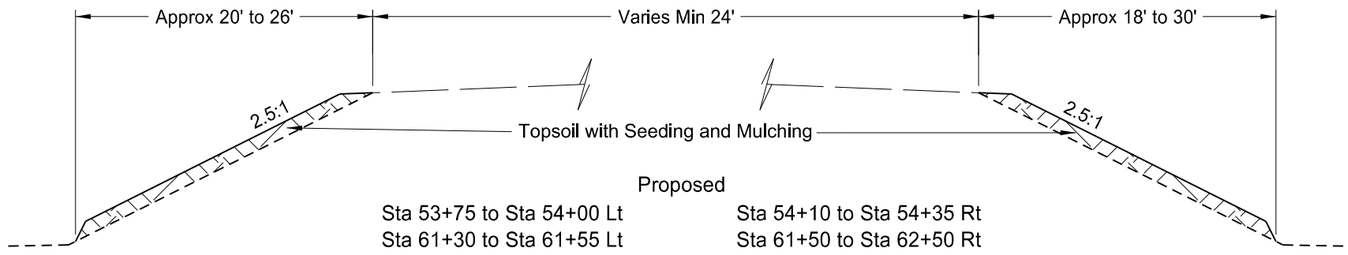
Existing



Proposed

*Sta 54+00 to Sta 61+30 Lt

*Sta 54+35 to Sta 61+70 Rt



Proposed

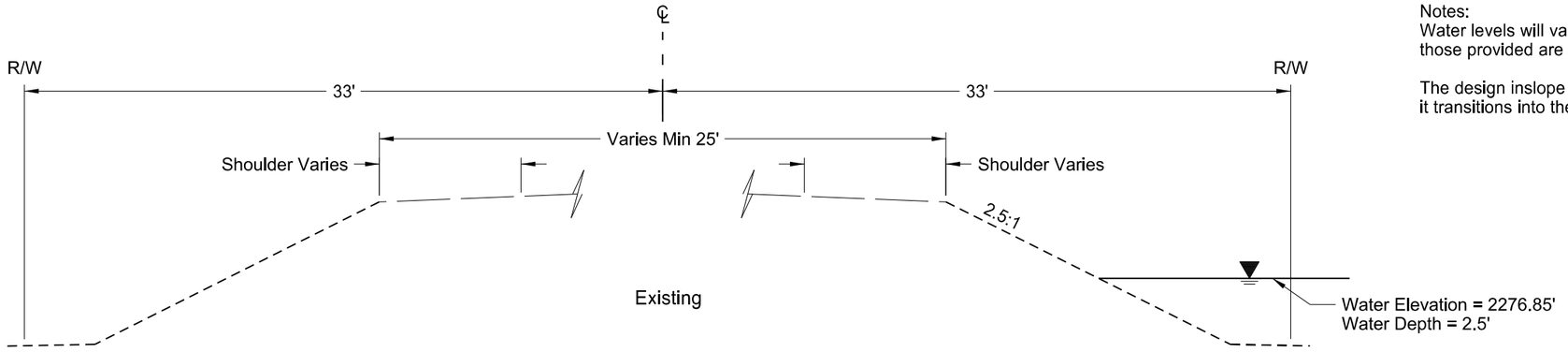
Sta 53+75 to Sta 54+00 Lt
Sta 61+30 to Sta 61+55 Lt

Sta 54+10 to Sta 54+35 Rt
Sta 61+50 to Sta 62+50 Rt

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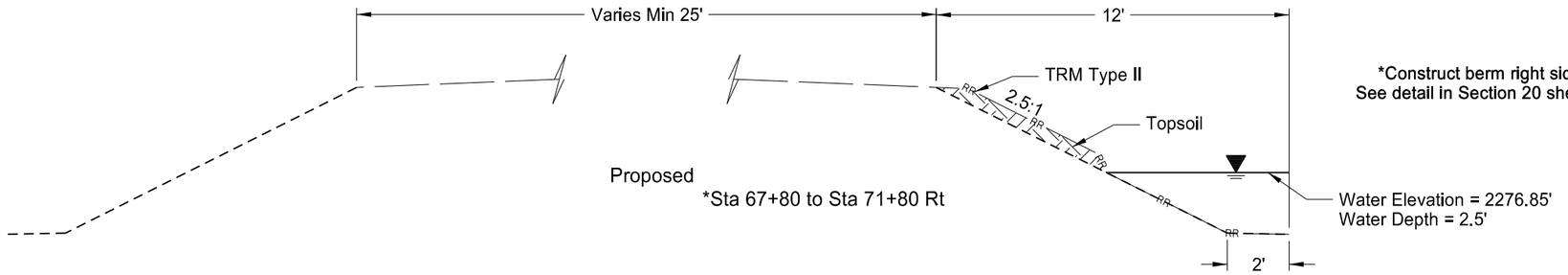
K6S-6
Typical Sections
Mountrail County

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	30	13

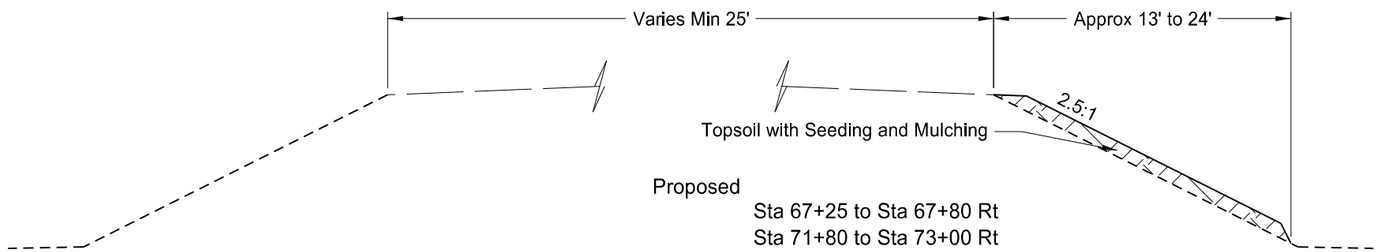


Notes:
Water levels will vary,
those provided are as of 6/1/17.

The design inslope varies for 25 ft. as it transitions into the existing inslope.



*Construct berm right side
See detail in Section 20 sheet 2



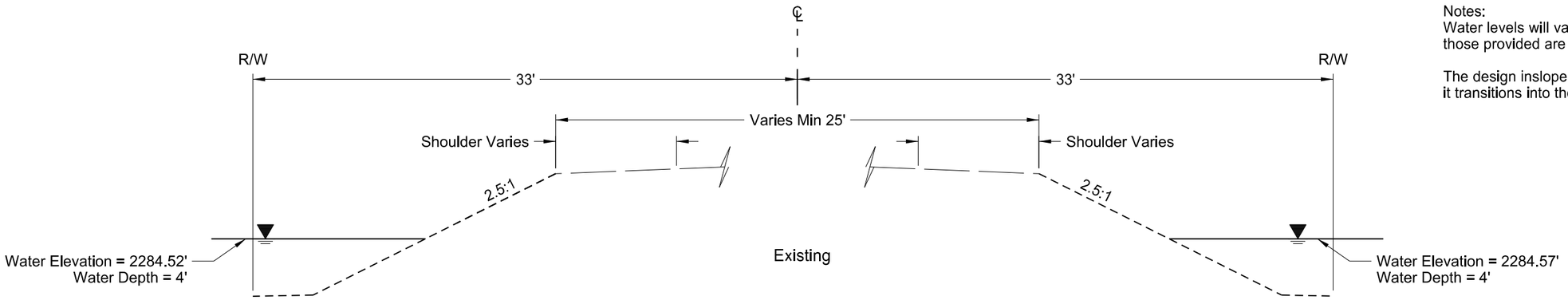
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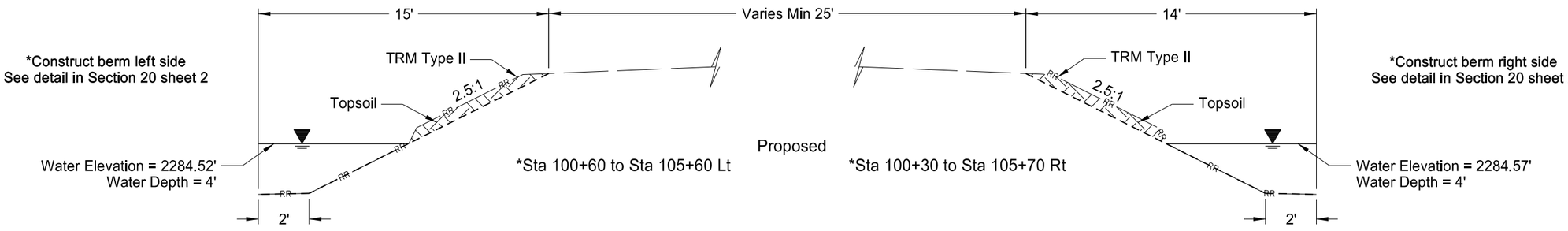
K6S-7
Typical Sections
Mountrail County

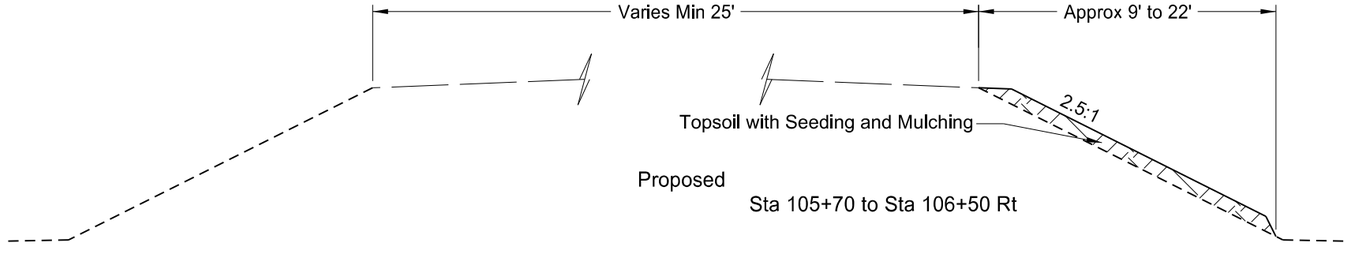
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	30	14

Notes:
Water levels will vary,
those provided are as of 6/1/17.

The design inslope varies for 25 ft. as it transitions into the existing inslope.



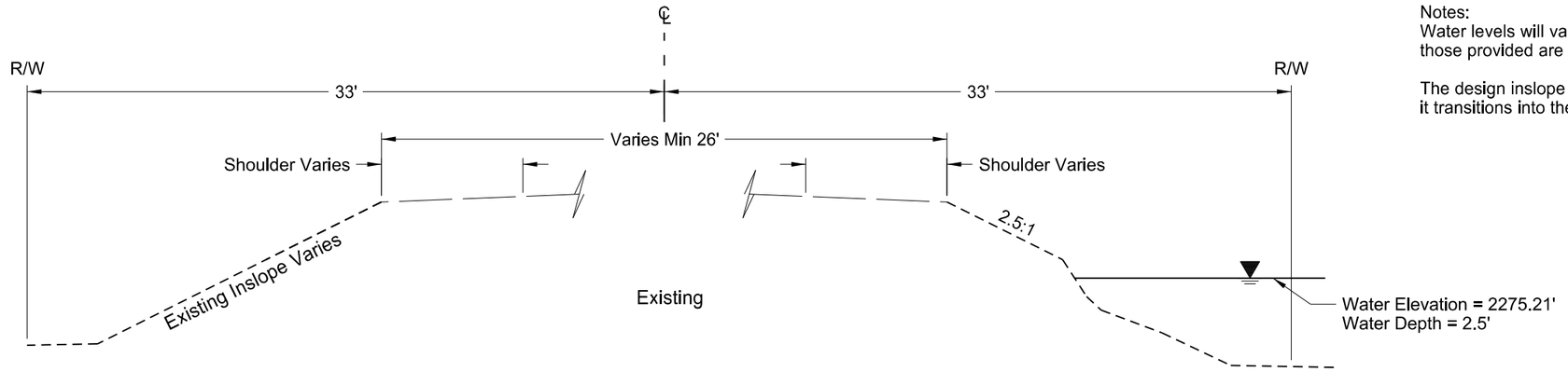




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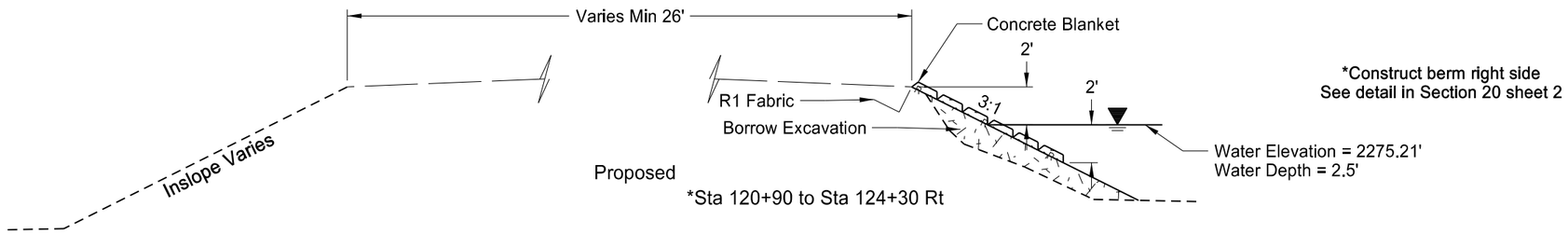
K6S-8
Typical Sections
Mountrail County

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	30	15



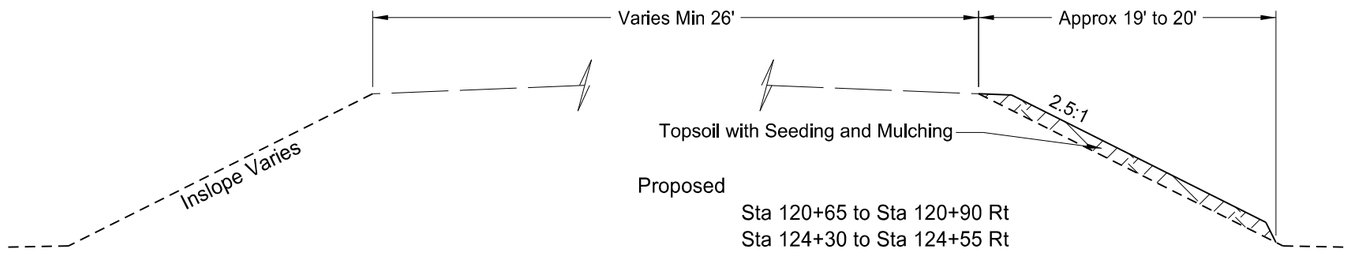
Notes:
Water levels will vary,
those provided are as of 6/1/17.

The design inslope varies for 25 ft. as it transitions into the existing inslope.



Proposed
*Sta 120+90 to Sta 124+30 Rt

*Construct berm right side
See detail in Section 20 sheet 2

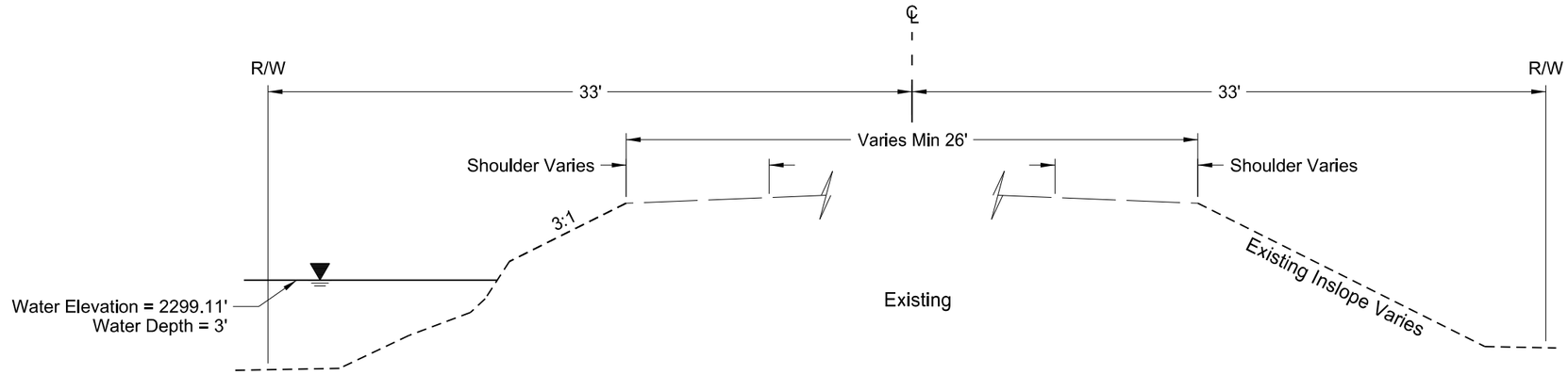


Proposed
Sta 120+65 to Sta 120+90 Rt
Sta 124+30 to Sta 124+55 Rt

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K6S-9
Typical Sections
Mountrail County

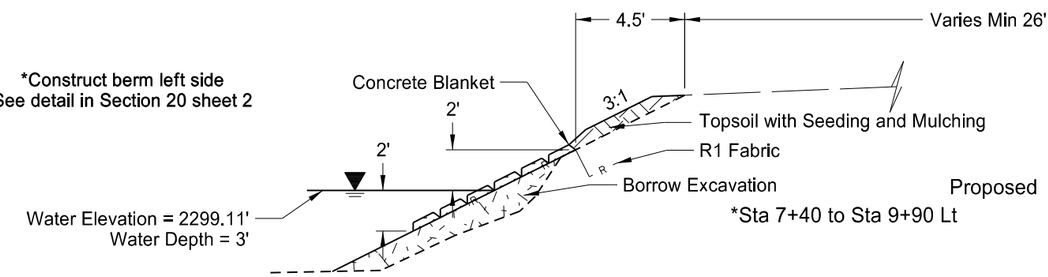
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	30	16

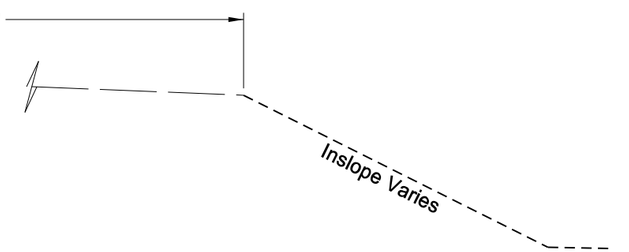


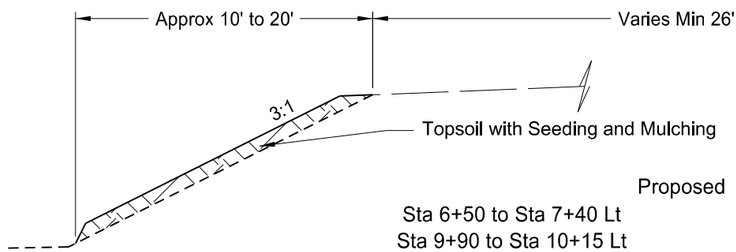
Notes:
Water levels will vary,
those provided are as of 6/1/17.

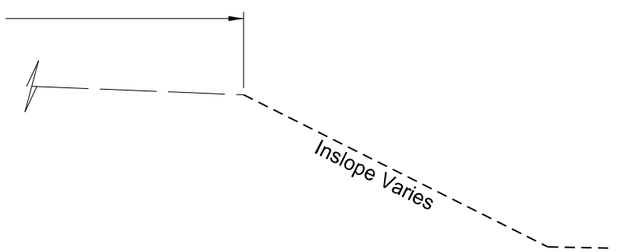
The design inslope varies for 25 ft. as it transitions into the existing inslope.

*Construct berm left side
See detail in Section 20 sheet 2









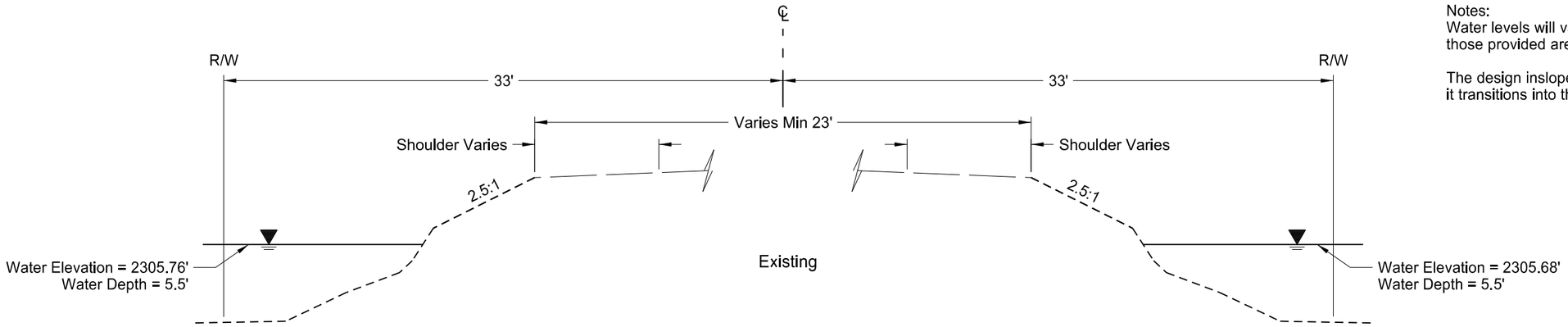
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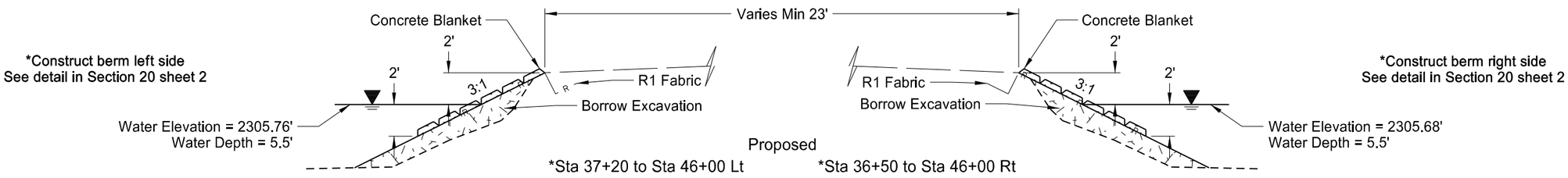
K6N-1
Typical Sections
Mountrail County

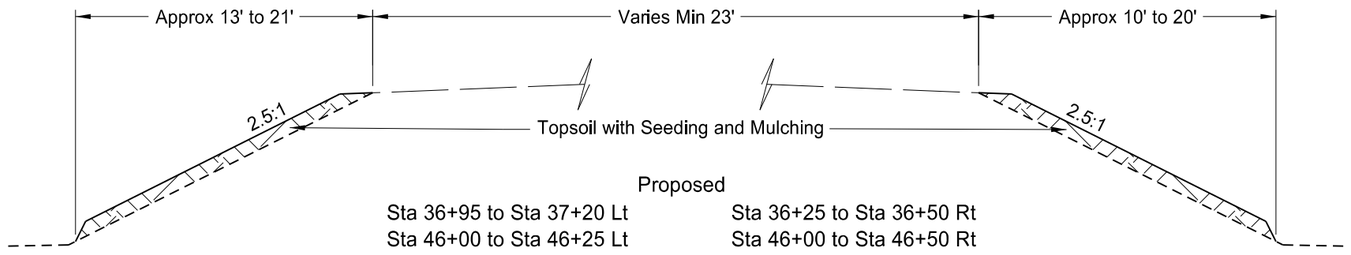
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	30	17

Notes:
Water levels will vary,
those provided are as of 6/1/17.

The design inslope varies for 25 ft. as it transitions into the existing inslope.



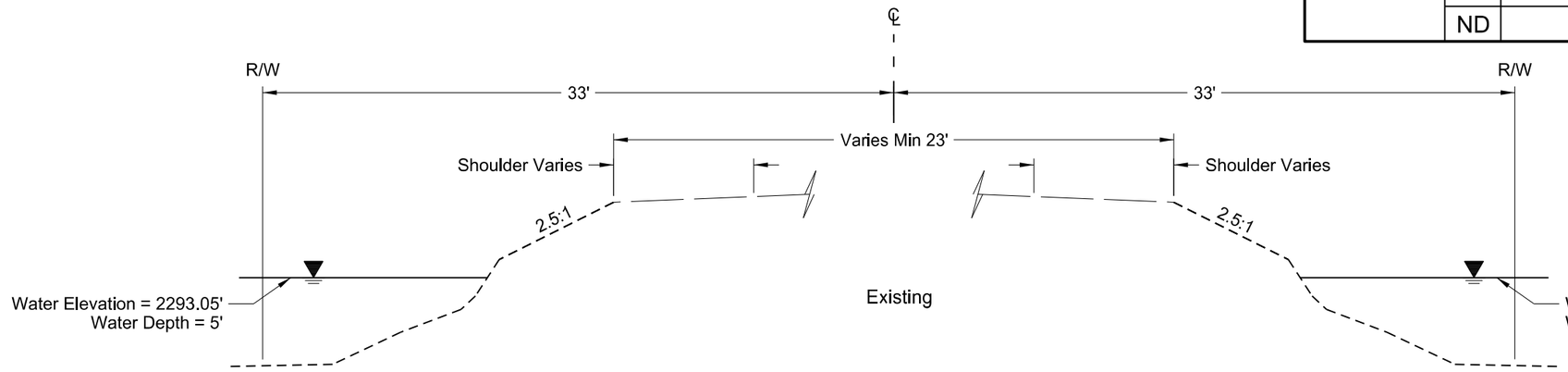




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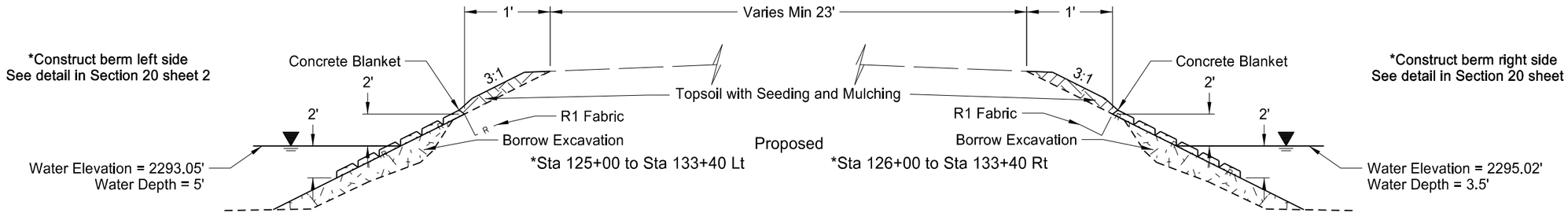
K6N-2
Typical Sections
Mountrail County

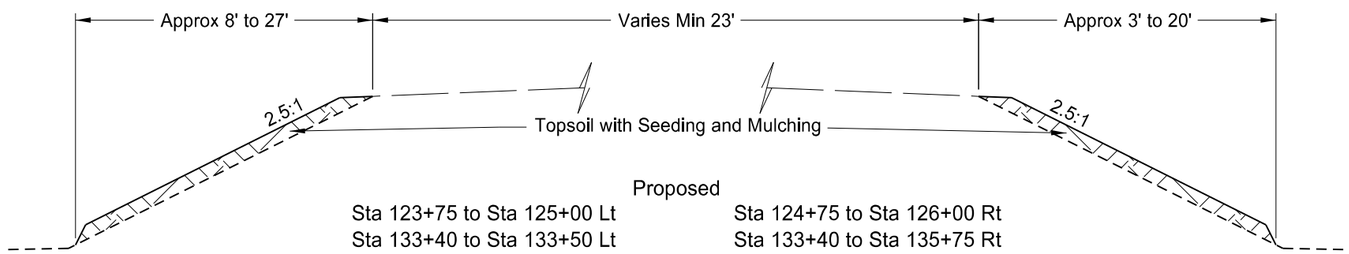
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	30	18



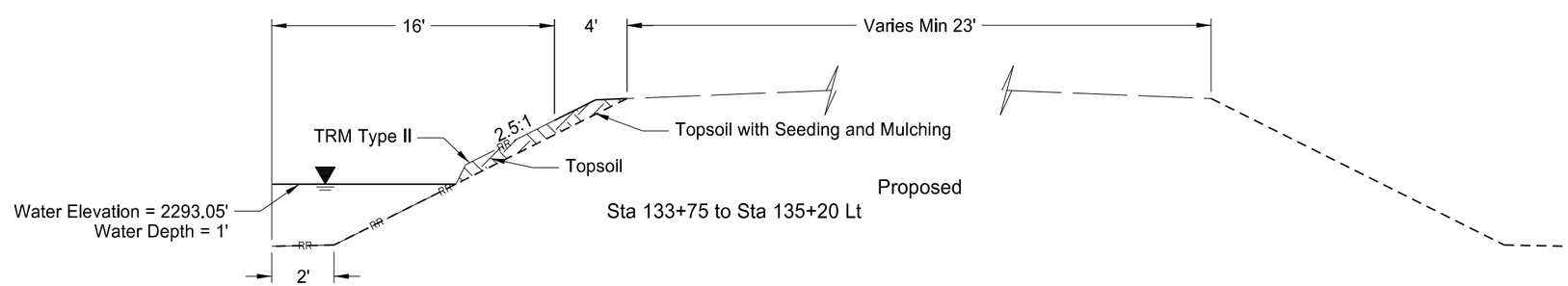
Notes:
Water levels will vary,
those provided are as of 6/1/17.

The design inslope varies for 25 ft. as it transitions into the existing inslope.





Proposed
Sta 123+75 to Sta 125+00 Lt
Sta 133+40 to Sta 133+50 Lt
Sta 135+00 to Sta 135+45 Lt
Sta 124+75 to Sta 126+00 Rt
Sta 133+40 to Sta 135+75 Rt



Proposed
Sta 133+75 to Sta 135+20 Lt

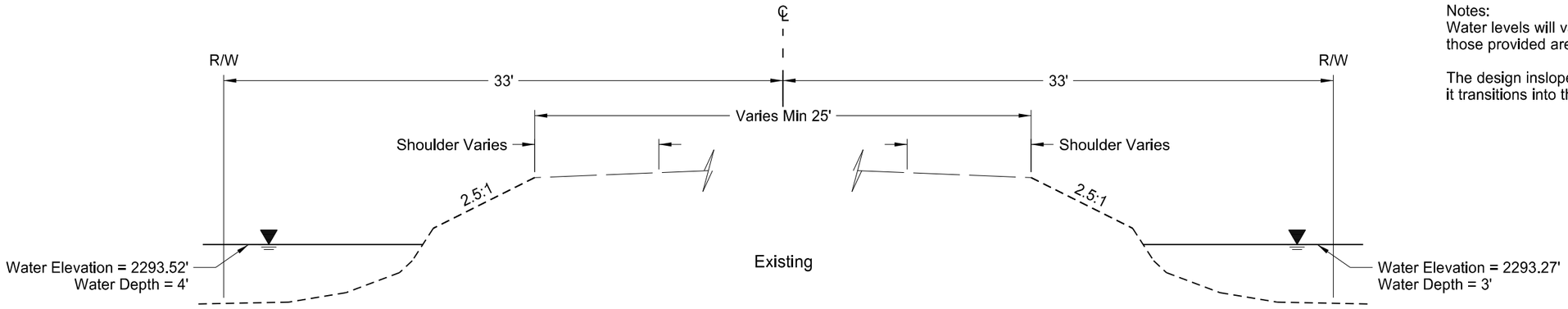
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K6N-3
Typical Sections
Mountrail County

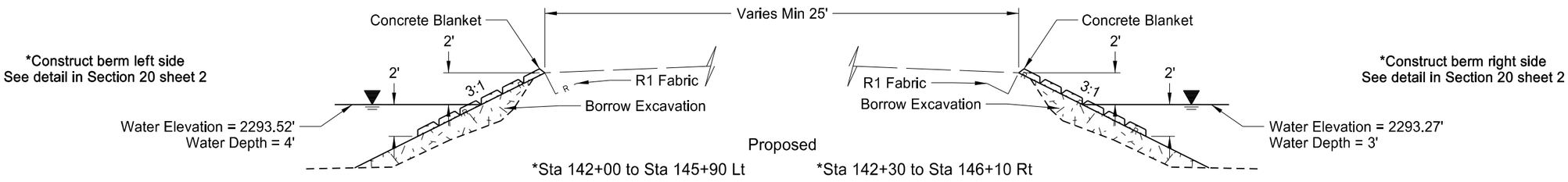
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	30	19

Notes:
Water levels will vary,
those provided are as of 6/1/17.

The design inslope varies for 25 ft. as it transitions into the existing inslope.



Existing



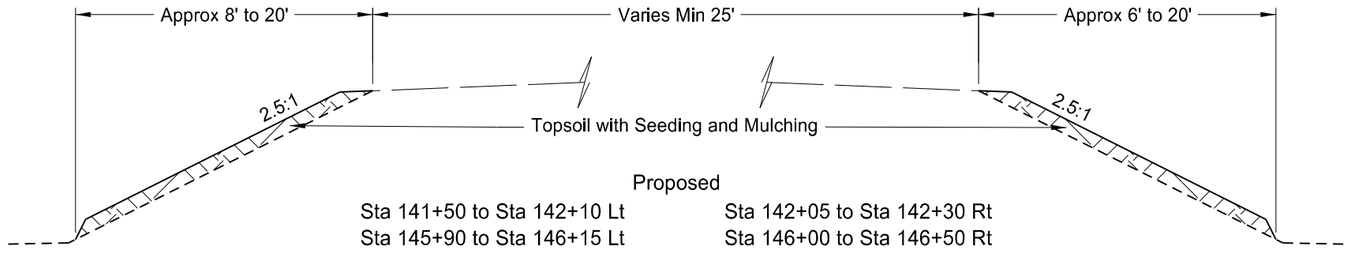
***Construct berm left side**
See detail in Section 20 sheet 2

***Construct berm right side**
See detail in Section 20 sheet 2

Proposed

*Sta 142+00 to Sta 145+90 Lt

*Sta 142+30 to Sta 146+10 Rt



Proposed

Sta 141+50 to Sta 142+10 Lt

Sta 145+90 to Sta 146+15 Lt

Sta 142+05 to Sta 142+30 Rt

Sta 146+00 to Sta 146+50 Rt

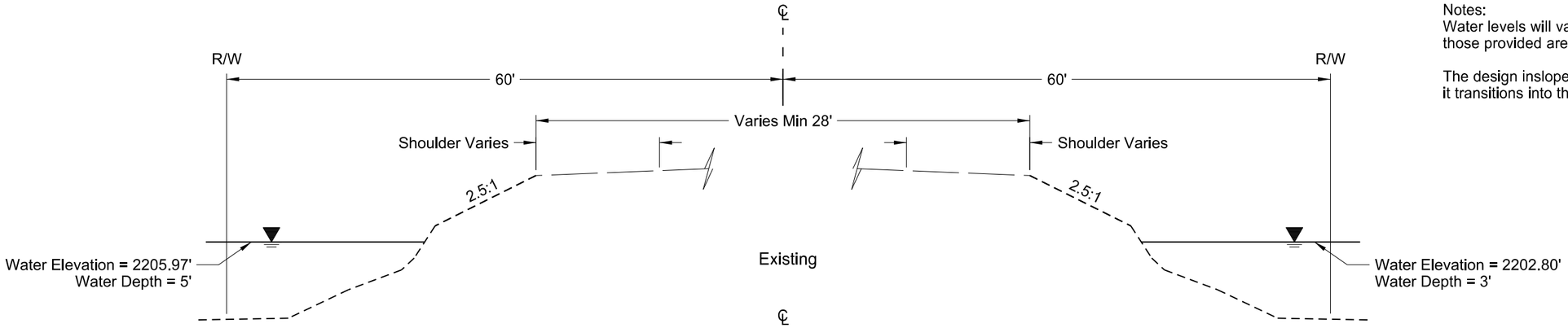
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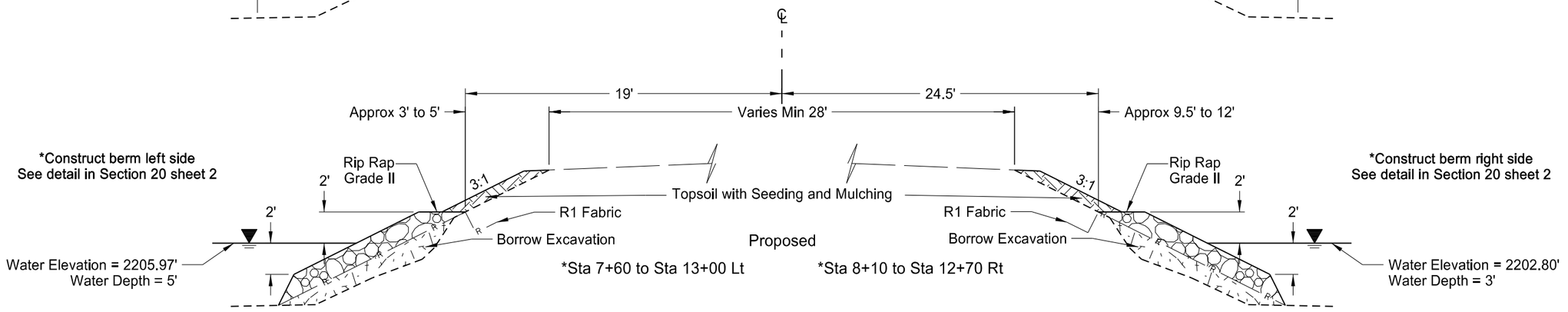
K6N-4
Typical Sections
Mountrail County

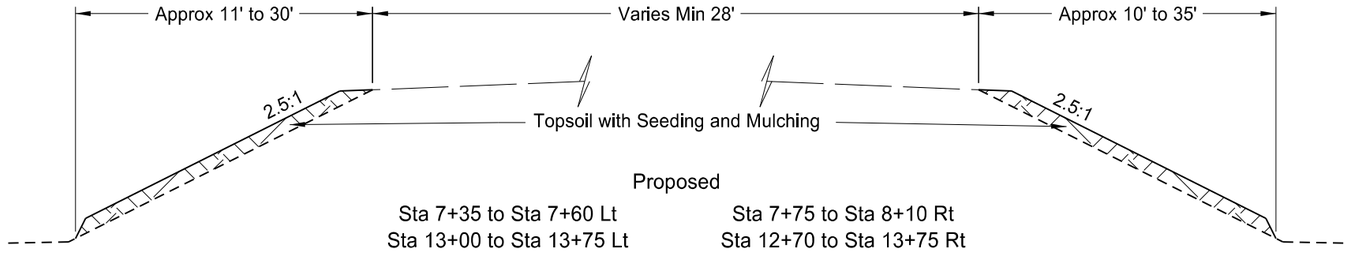
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	30	20

Notes:
Water levels will vary,
those provided are as of 6/1/17.

The design inslope varies for 25 ft. as it transitions into the existing inslope.







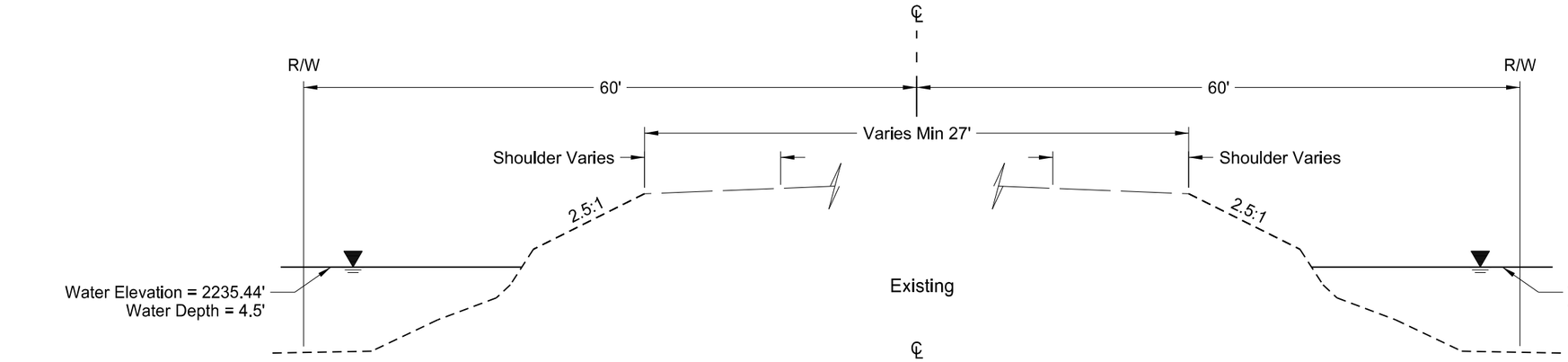
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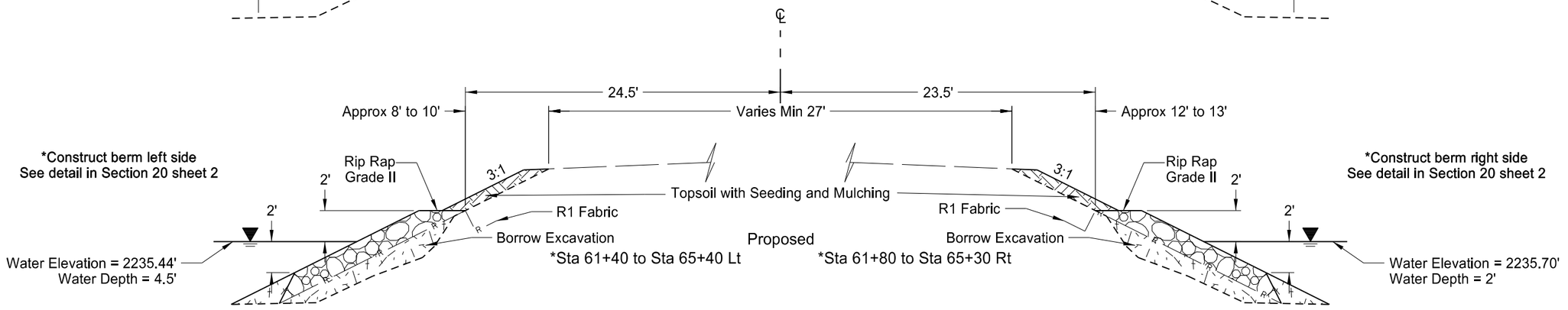
K7-1
Typical Sections
Mountrail County

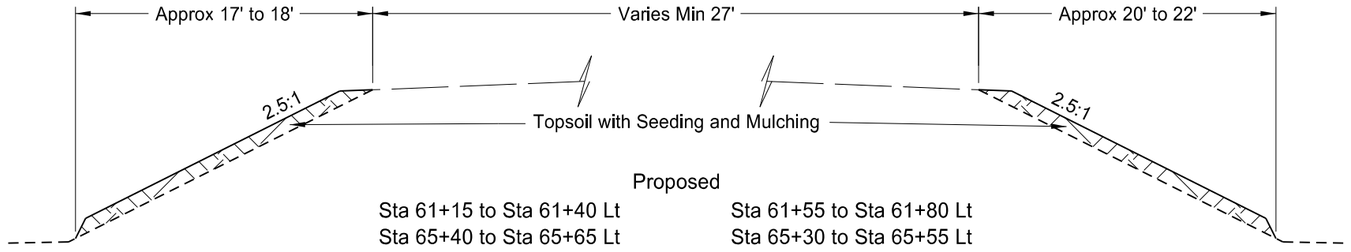
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	30	21

Notes:
Water levels will vary,
those provided are as of 6/1/17.

The design inslope varies for 25 ft. as it transitions into the existing inslope.







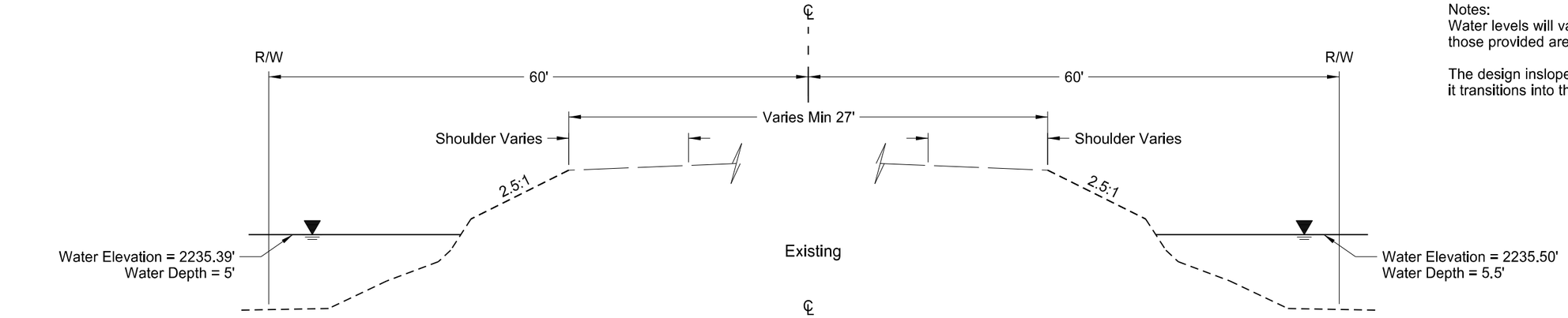
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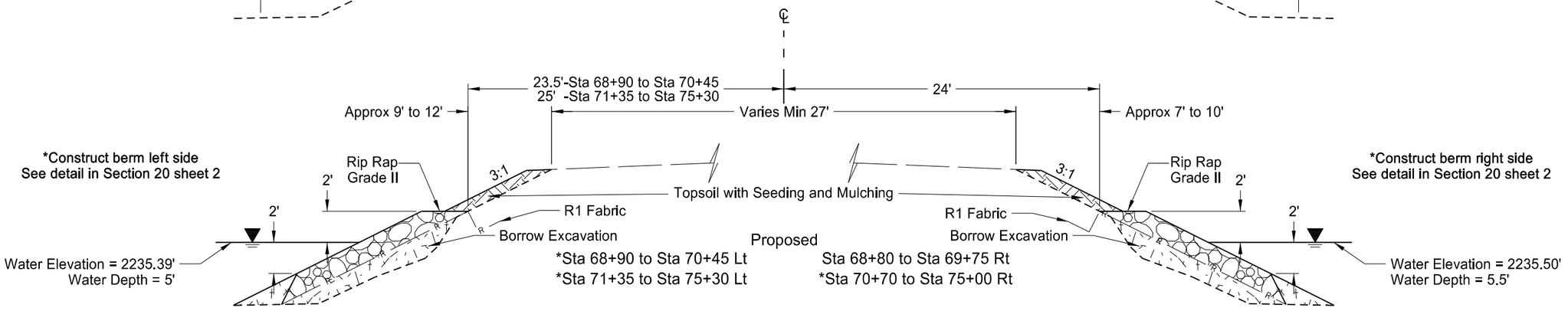
K7-2
Typical Sections
Mountrail County

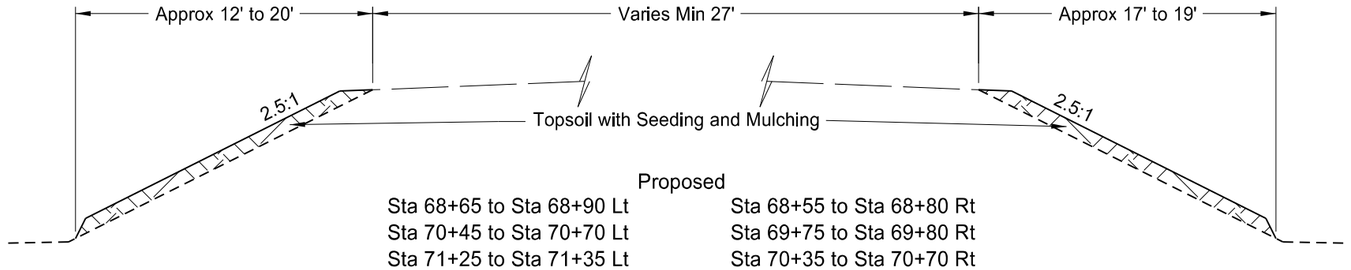
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	30	22

Notes:
Water levels will vary,
those provided are as of 6/1/17.

The design inslope varies for 25 ft. as it transitions into the existing inslope.







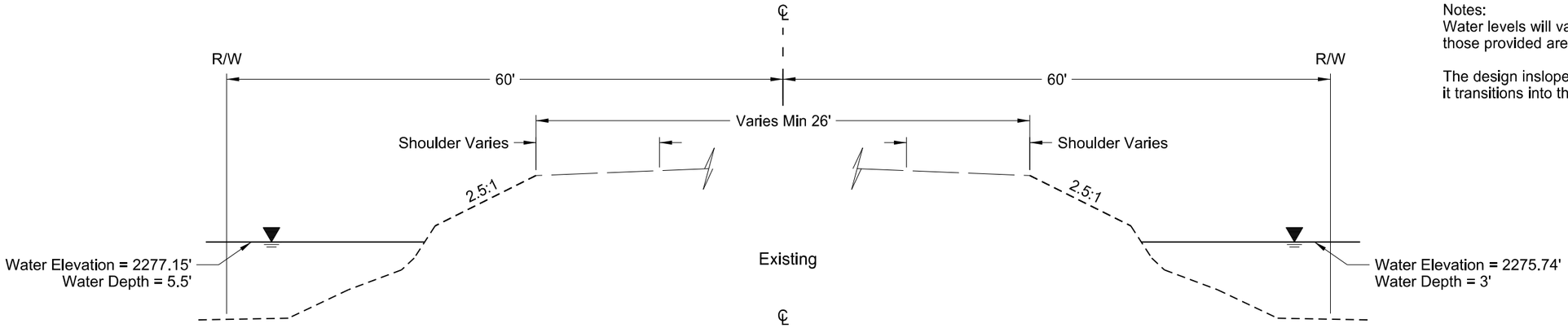
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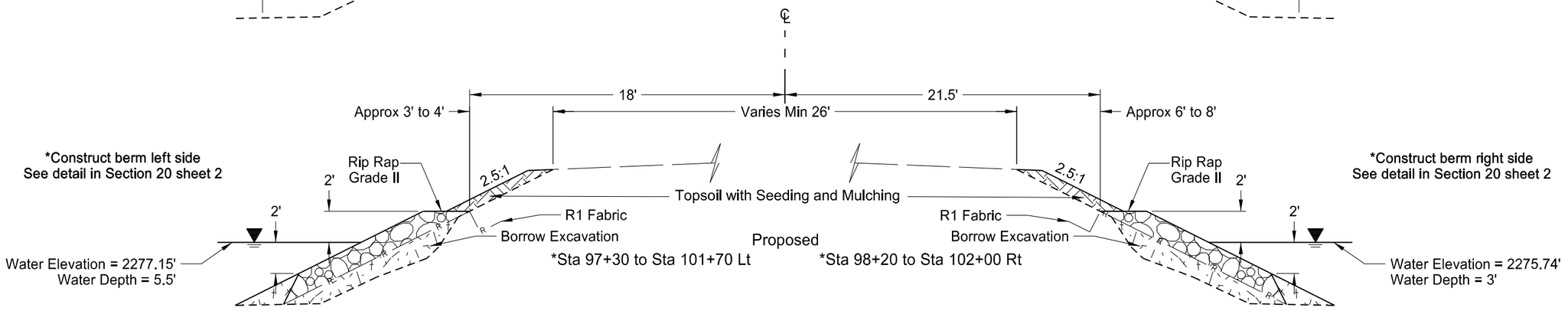
K7-3
Typical Sections
Mountrail County

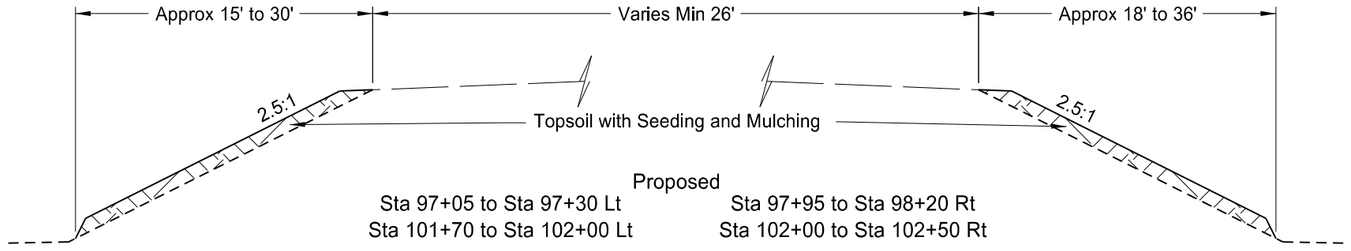
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	30	23

Notes:
Water levels will vary,
those provided are as of 6/1/17.

The design inslope varies for 25 ft. as it transitions into the existing inslope.







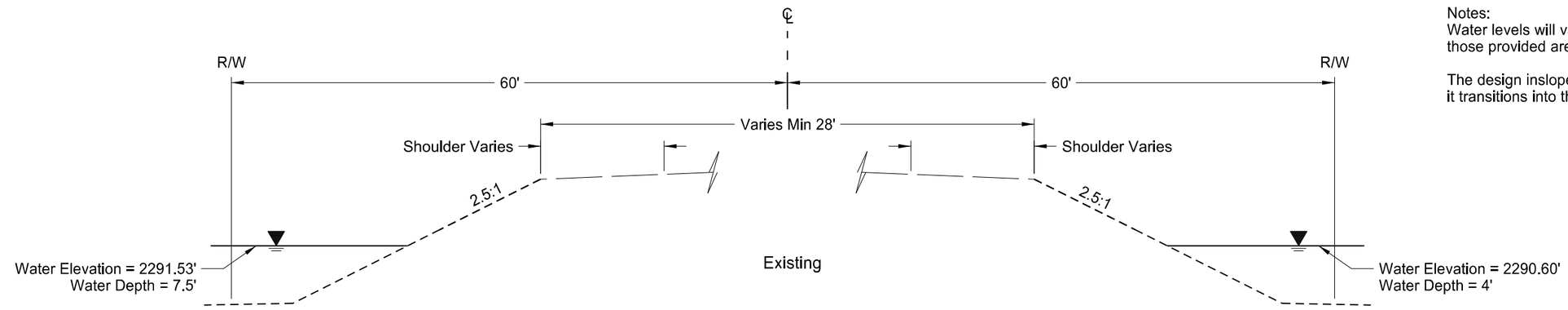
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K7-4
Typical Sections
Mountrail County

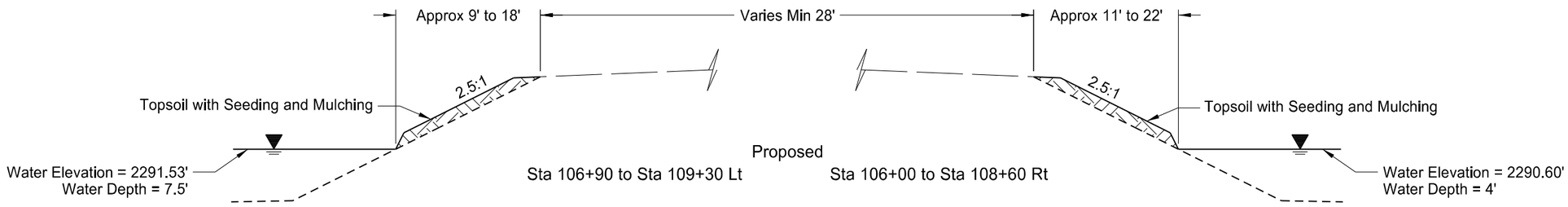
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	30	24

Notes:
Water levels will vary,
those provided are as of 6/1/17.

The design inslope varies for 25 ft. as it transitions into the existing inslope.



Existing



Proposed

Sta 106+90 to Sta 109+30 Lt

Sta 106+00 to Sta 108+60 Rt

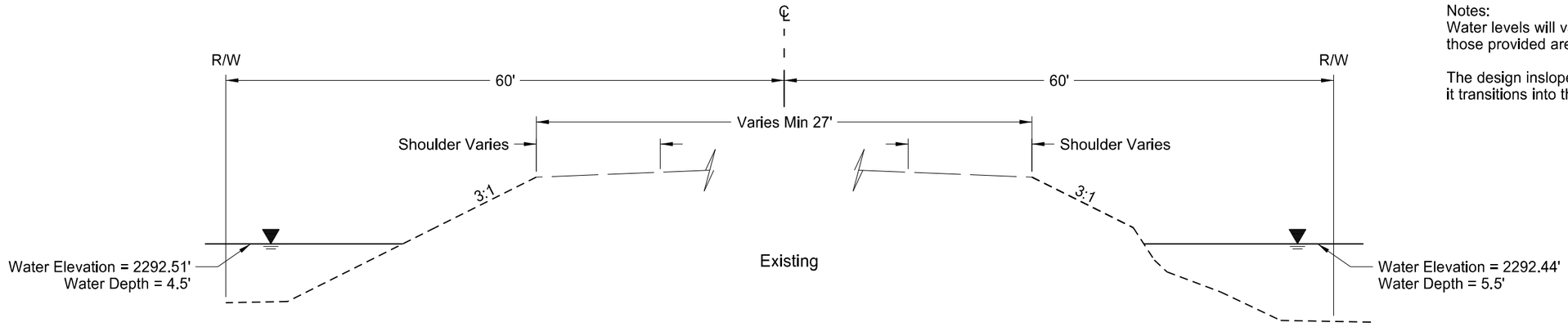
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K7-5
Typical Sections
Mountrail County

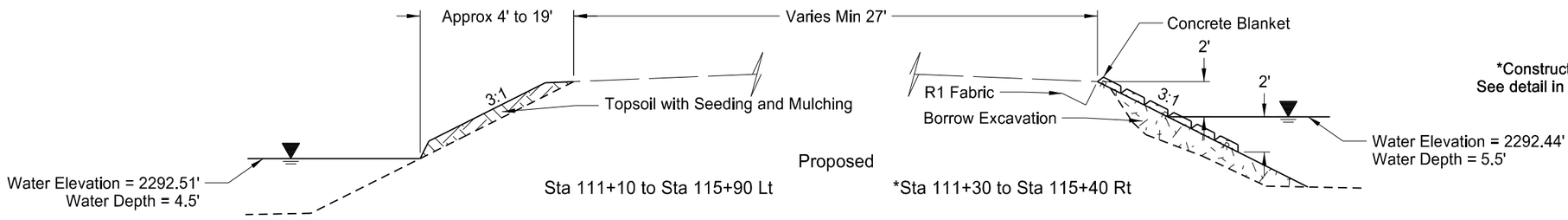
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	30	25

Notes:
Water levels will vary,
those provided are as of 6/1/17.

The design inslope varies for 25 ft. as it transitions into the existing inslope.



Existing

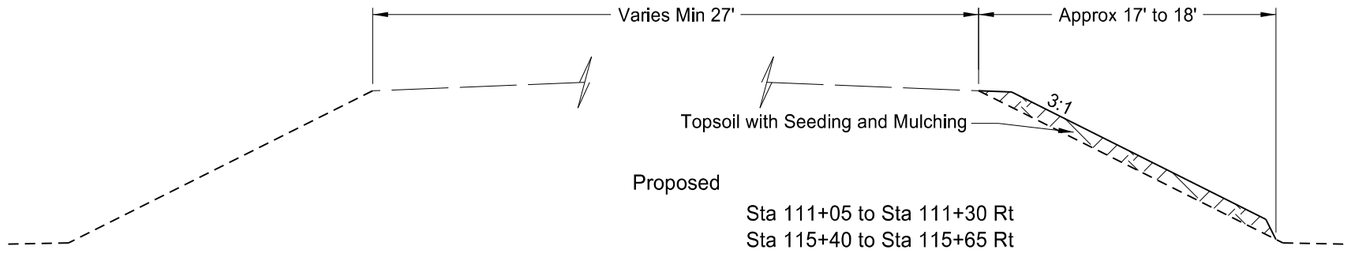


Proposed

Sta 111+10 to Sta 115+90 Lt

*Sta 111+30 to Sta 115+40 Rt

***Construct berm right side**
See detail in Section 20 sheet 2



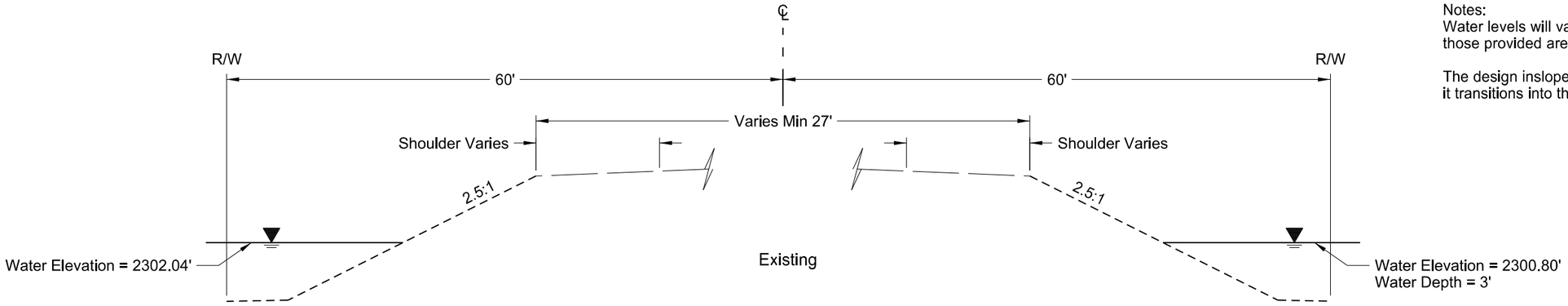
Proposed

Sta 111+05 to Sta 111+30 Rt
Sta 115+40 to Sta 115+65 Rt

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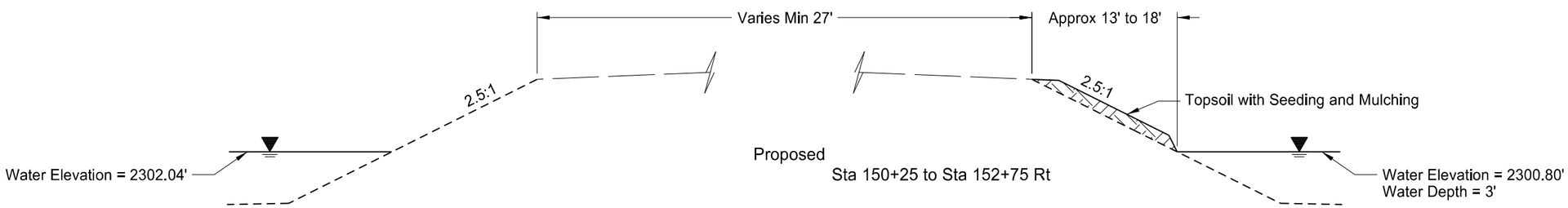
K7-6
Typical Sections
Mountrail County

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	30	26



Notes:
Water levels will vary,
those provided are as of 6/1/17.

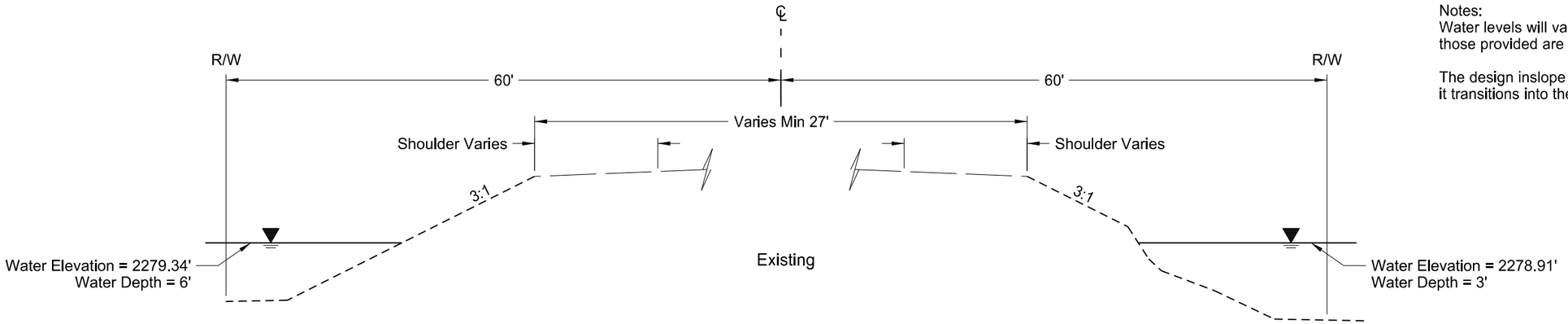
The design inslope varies for 25 ft. as it transitions into the existing inslope.



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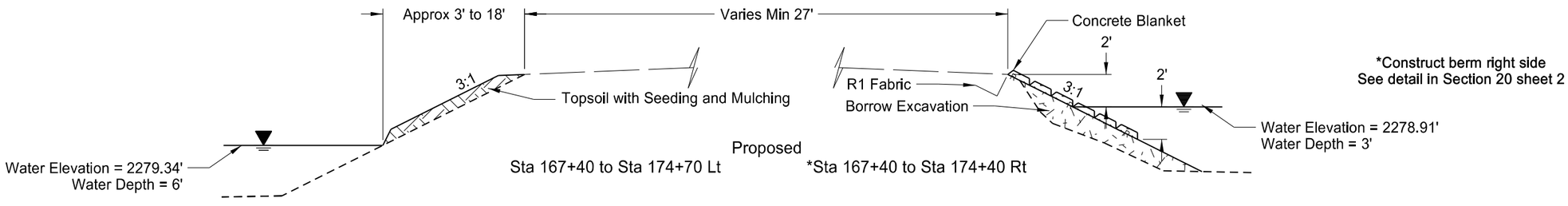
K7-7
Typical Sections
Mountrail County

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	30	27

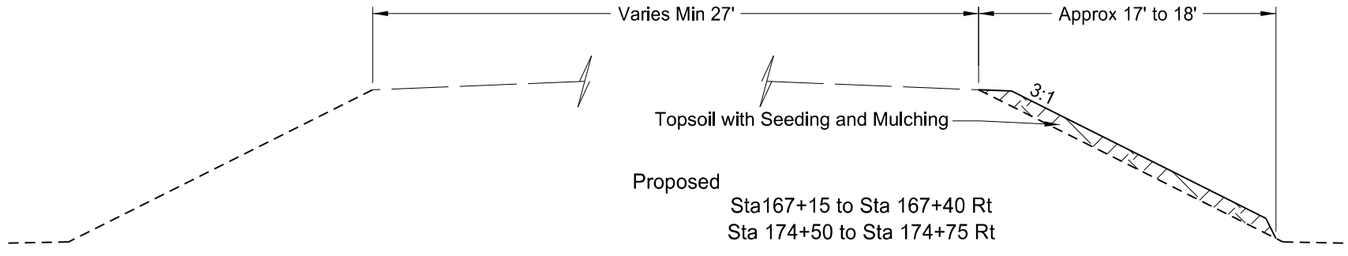


Notes:
Water levels will vary,
those provided are as of 6/1/17.

The design inslope varies for 25 ft. as it transitions into the existing inslope.



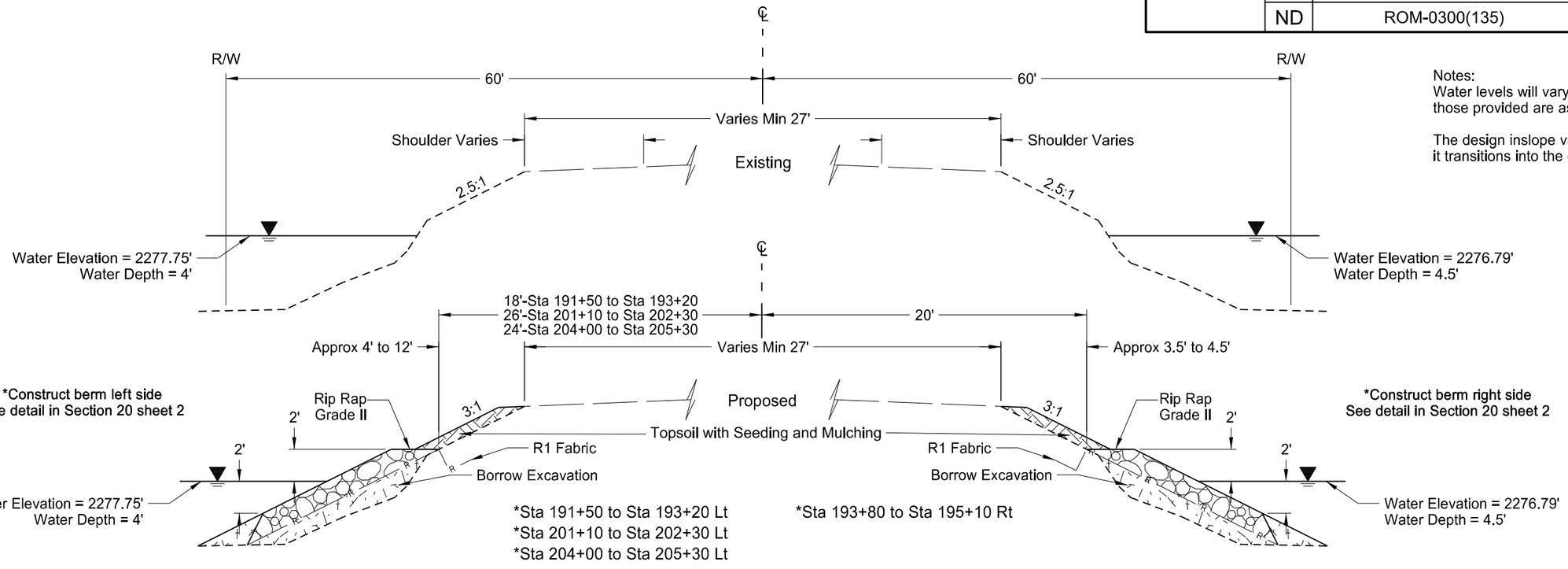
*Construct berm right side
See detail in Section 20 sheet 2



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K7-8
Typical Sections
Mountrail County

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	ROM-0300(135)	30	28



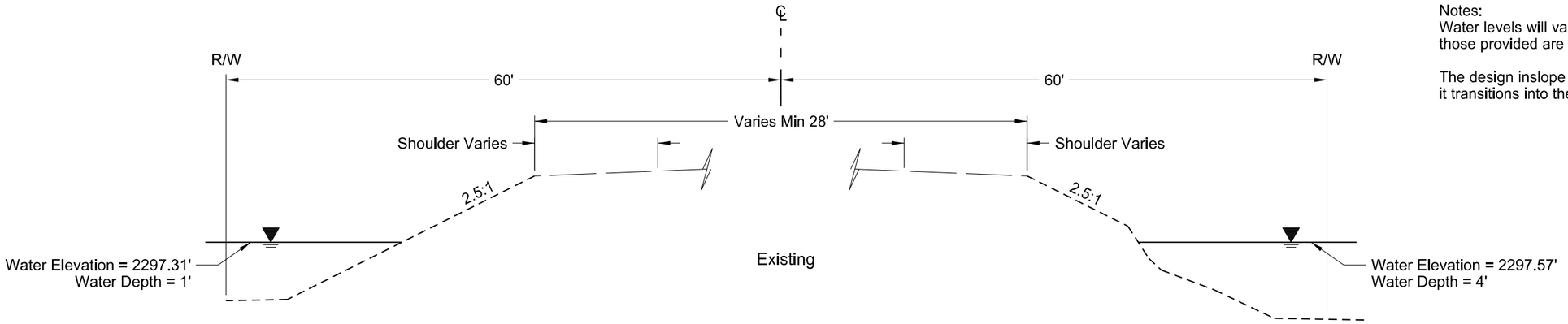
Notes:
Water levels will vary,
those provided are as of 6/1/17.

The design inslope varies for 25 ft. as it transitions into the existing inslope.

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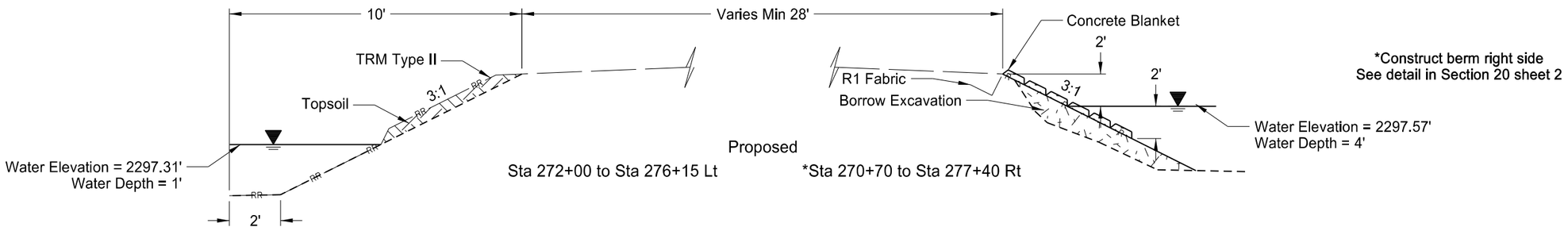
K7-9
Typical Sections
Mountrail County

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	30	29



Notes:
Water levels will vary,
those provided are as of 6/1/17.

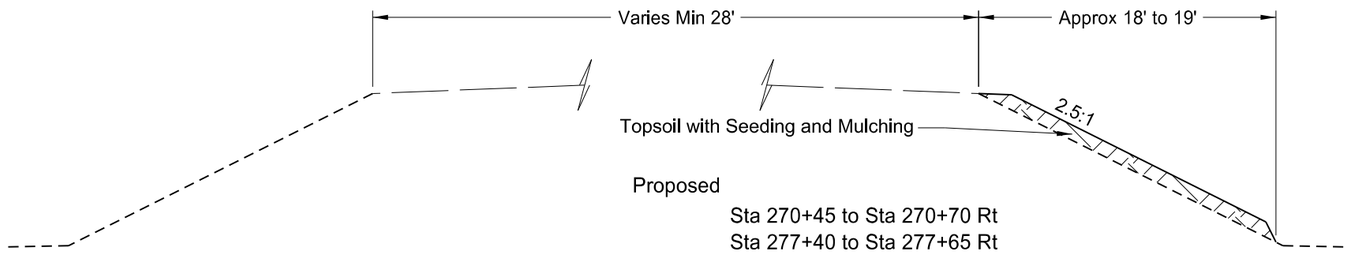
The design inslope varies for 25 ft. as it transitions into the existing inslope.



Proposed
Sta 272+00 to Sta 276+15 Lt

*Sta 270+70 to Sta 277+40 Rt

*Construct berm right side
See detail in Section 20 sheet 2



Proposed
Sta 270+45 to Sta 270+70 Rt
Sta 277+40 to Sta 277+65 Rt

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K7-10
Typical Sections
Mountrail County

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	ROM-0300(135)	50	1

Site	Station	Existing Pipe Size	Existing Length (ft)	Proposed Pipe Size	Drainage Area (Acres)	Manning's n	25-year Data				100-year Data		
							Design Discharge (cfs)	Headwater Depth (ft)	Design Velocity (ft/sec)	Design Stage (ft)	100-year Discharge (cfs)	Headwater Depth (ft)	Design Velocity (ft/sec)
J10-1	7+56	24" RCP	85	24" CMP	915.2	0.012	96.5				156.3		
					159.5	0.024							
J10-2	68+25			18" CMP	48.9	0.012	63.7				103.4		
					180.0	0.024							
J10-3	181+50			18" CMP	26.1	0.012	16.7				27.2		
					36.5	0.024							
J10-4	190+21	24" CSP	48	18" CMP	57.1	0.012	5.0	1.09	1.68		7.9	1.47	2.69
					8.1	0.024							
K6S-1	6+77	18" CSP		18" CMP	119.1	0.012	32.1				52.1		
					81.7	0.024							
K6S-2	16+75	18" CSP	35	18" CMP	47.4	0.012	24.8				39.8		
					328.5	0.024							
K6S-4	36+50			18" CMP	61.7	0.012	33.8				54.9		
					26.0	0.024							
K6S-5	49+00			18" CMP	47.1	0.012	6.4				10.5		
					43.1	0.024							
K6S-6	56+30	18" CSP (3)	51	18" CMP	34.4	0.012	26.9				43.9		
					123.2	0.024							
K6S-7	69+50			18" CMP	159.0	0.012	16.5				26.7		
					29.2	0.024							
K6S-8	104+25			18" CMP	29.0	0.012	10.0				16.4		
					9.9	0.024							
K6S-9	122+50			24" CMP	158.0	0.012	21.5				34.0		
					32.2	0.024							
K6N-1	8+86	24" CSP	52	18" CMP	73.6	0.012	22.2				35.7		
					9.6	0.024							
K6N-2	39+22	24" CSP	47	18" CMP	118.8	0.012	13.9				22.1		
					65.6	0.024							
K6N-3	129+50			24" CMP	366.2	0.012	28.7				44.3		
					47.7	0.024							
K6N-4	144+50			24" CMP	2692.1	0.012	46.4				71.2		
					41.2	0.024							
K7-1	10+18	18" CSP	43	24" CMP	235.0	0.012	207.2				336.6		
					2515.0	0.024							
K7-2	63+31	18" CSP	52	30" CMP	187.4	0.012	76.7				124.3		
					936.1	0.024							
K7-3	71+93	24" CSP	55	24" CMP	442.8	0.012	58.8				95.2		
					663.2	0.024							
K7-4	99+27	18" CSP	43	18" CMP	225.4	0.012	36.2				57.5		
					86.4	0.024							
K7-5	107+75			24" CMP	99.1	0.012	16.1				25.6		
					19.6	0.024							
K7-6	113+50			24" CMP	50.0	0.012	37.9				61.3		
					149.2	0.024							
K7-7	151+75			24" CMP	96.4	0.012	38.9				62.5		
					78.0	0.024							
K7-8	170+00			18" CMP	21.6	0.012	4.1				6.7		
					3.9	0.024							
K7-9	198+94	18" CSP	45	18" CMP	10.2	0.012	1.2				2.0		
					4.5	0.024							
K7-10	274+00			24" CMP	19.8	0.012	23.3				35.3		
					269.6	0.024							

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Hydraulic Data

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	51	1

Alignment	Centerline Pipe Location	Begin Station /Location	Begin Offset	End Station /Location	End Offset	Pipe Installation Pay Item			Allowable Material	Required Diamater (in)	Steel Pipe Coating	Steel Pipe Corrugations	Steel Pipe Minimum Thickness (In)	R1 Fabric Pay Item (SY)	End Sections		Applicable Backfill Detail
						Pipe Size (in)	Bid Item	LF							Begin (Ea)	End (Ea)	
J-10	Site 1	7+57	55 Lt	7+57	35 Rt	24	END SECT-CONC REINF 24IN		Reinforced Concrete End Section						FES	FES	
J-10	Site 2	68+25	23 Lt	68+25	22 Rt	18	PIPE CONDUIT 18IN	45	Corrugated Steel Pipe	18	Z, A, P	2	0.064	120	FES	FES	D-714-25
J-10	Site 3	181+50	20 Lt	181+50	25 Rt	18	PIPE CONDUIT 18IN	45	Corrugated Steel Pipe	18	Z, A, P	2	0.064	237	FES	FES	D-714-26
J-10	Site 4	190+21	27 Lt	190+22	21 Rt	18	PIPE CONDUIT 18IN	48	Corrugated Steel Pipe	18	Z, A, P	2	0.064	248	FES	FES	D-714-26
K-6S	Site 1	6+77	21 Lt	6+77	20 Rt	18	PIPE CONDUIT 18IN	41	Corrugated Steel Pipe	18	Z, A, P	2	0.064	212	FES	FES	D-714-26
K-6S	Site 2	16+75	22 Lt	16+75	15 Rt	18	PIPE CONDUIT 18IN	37	Corrugated Steel Pipe	18	Z, A, P	2	0.064	185	FES	FES	D-714-26
K-6S	Site 4	36+50	14 Lt	36+50	21 Rt	18	PIPE CONDUIT 18IN	35	Corrugated Steel Pipe	18	Z, A, P	2	0.064	167	FES	FES	D-714-26
K-6S	Site 5	49+00	22 Lt	49+00	21 Rt	18	PIPE CONDUIT 18IN	43	Corrugated Steel Pipe	18	Z, A, P	2	0.064	223	FES	FES	D-714-26
K-6S	Site 6	55+04	26 Lt	55+02	28 Rt	18	PIPE CONDUIT 18IN	54	Corrugated Steel Pipe	18	Z, A, P	2	0.064	153	FES	FES	D-714-25
K-6S	Site 6	56+31	26 Lt	56+30	29 Rt	18	PIPE CONDUIT 18IN	55	Corrugated Steel Pipe	18	Z, A, P	2	0.064	160	FES	FES	D-714-25
K-6S	Site 6	57+18	21 Lt	57+18	24 Rt	18	PIPE CONDUIT 18IN	45	Corrugated Steel Pipe	18	Z, A, P	2	0.064	117	FES	FES	D-714-25
K-6S	Site 7	69+50	20 Lt	69+50	18 Rt	18	PIPE CONDUIT 18IN	38	Corrugated Steel Pipe	18	Z, A, P	2	0.064	199	FES	FES	D-714-26
K-6S	Site 8	104+25	19 Lt	104+25	17 Rt	18	PIPE CONDUIT 18IN	36	Corrugated Steel Pipe	18	Z, A, P	2	0.064	189	FES	FES	D-714-26
K-6S	Site 9	122+50	16 Lt	122+50	18 Rt	24	PIPE CONDUIT 24IN	34	Corrugated Steel Pipe	24	Z, A, P	2	0.064	168	FES	FES	D-714-26
K-6N	Site 1	8+92	22 Lt	8+79	27 Rt	18	PIPE CONDUIT 18IN	51	Corrugated Steel Pipe	18	Z, A, P	2	0.064	260	FES	FES	D-714-26
K-6N	Site 2	39+23	24 Lt	39+22	23 Rt	18	PIPE CONDUIT 18IN	47	Corrugated Steel Pipe	18	Z, A, P	2	0.064	253	FES	FES	D-714-25
K-6N	Site 4	144+50	18 Lt	144+50	18 Rt	24	PIPE CONDUIT 24IN	36	Corrugated Steel Pipe	24	Z, A, P	2	0.064	174	FES	FES	D-714-26
K-7	Site 1	10+18	32 Lt	10+19	33 Rt	24	PIPE CONDUIT 24IN	65	Corrugated Steel Pipe	24	Z, A, P	2	0.064	375	FES	FES	D-714-25
K-7	Site 2	63+31	29 Lt	63+32	33 Rt	30	PIPE CONDUIT 30N	62	Corrugated Steel Pipe	30	Z, A, P	2	0.064	181	FES	FES	D-714-25
K-7	Site 3	71+93	34 Lt	71+94	35 Rt	24	PIPE CONDUIT 24IN	69	Corrugated Steel Pipe	24	Z, A, P	2	0.064	217	FES	FES	D-714-25
K-7	Site 4	99+27	32 Lt	99+27	32 Rt	18	PIPE CONDUIT 18IN	64	Corrugated Steel Pipe	18	Z, A, P	2	0.064	353	FES	FES	D-714-25
K-7	Site 5	107+75	22 Lt	107+75	25 Rt	24	PIPE CONDUIT 24IN	47	Corrugated Steel Pipe	24	Z, A, P	2	0.064	267	FES	FES	D-714-25
K-7	Site 6	113+50	20 Lt	113+50	21 Rt	24	PIPE CONDUIT 24IN	41	Corrugated Steel Pipe	24	Z, A, P	2	0.064	205	FES	FES	D-714-26
K-7	Site 7	151+75	23 Lt	151+75	24 Rt	24	PIPE CONDUIT 24IN	47	Corrugated Steel Pipe	24	Z, A, P	2	0.064	132	FES	FES	D-714-25
K-7	Site 8	170+00	15 Lt	170+00	20 Rt	18	PIPE CONDUIT 18IN	35	Corrugated Steel Pipe	18	Z, A, P	2	0.064	159	FES	FES	D-714-26
K-7	Site 10	274+00	17 Lt	274+00	21 Rt	24	PIPE CONDUIT 24IN	38	Corrugated Steel Pipe	24	Z, A, P	2	0.064	177	FES	FES	D-714-26

FES = Flared End Section

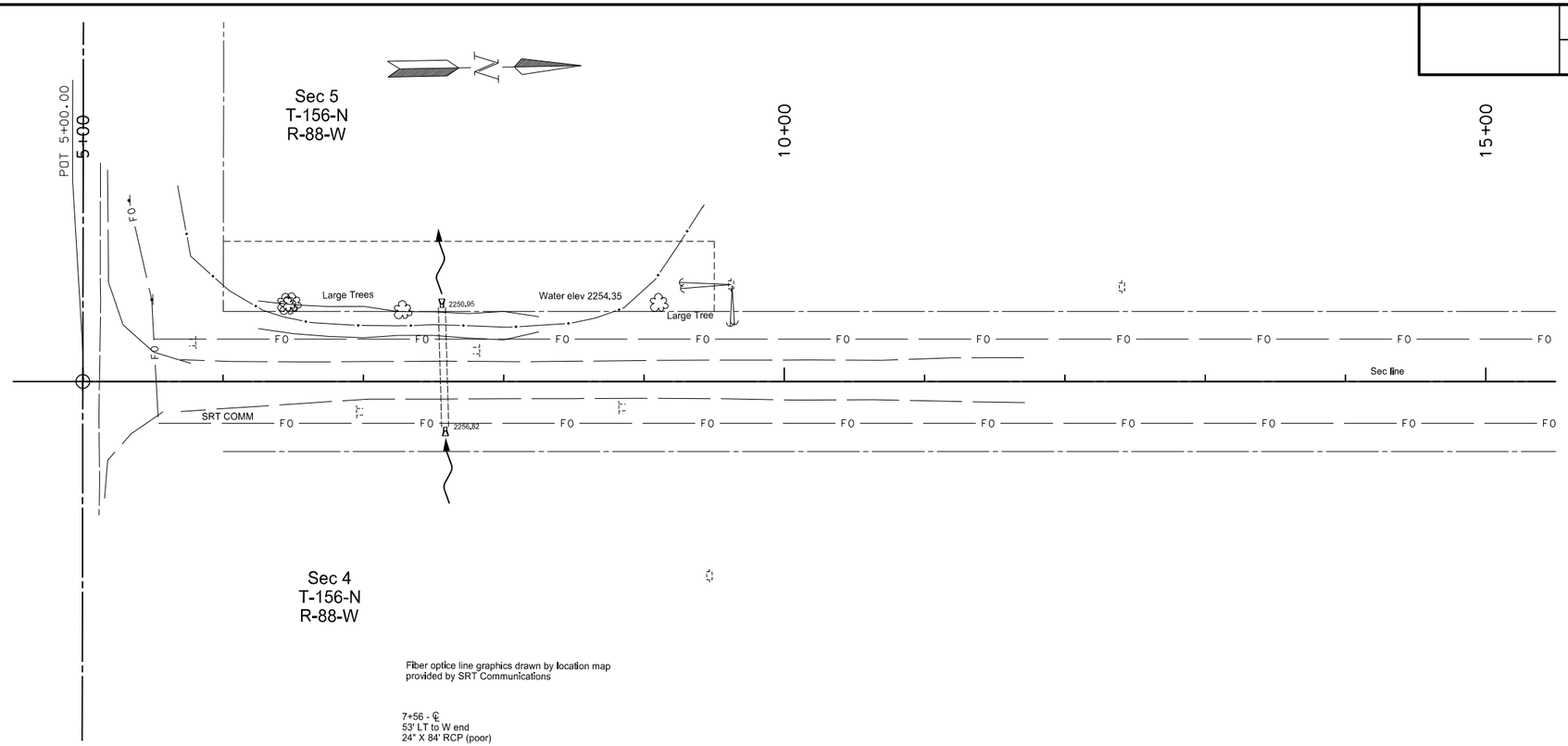
Coatings: **Z**=Zinc
A=Aluminum
P=Polymeric (over Zinc or Aluminum)

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

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Allowable Pipe Materials List

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	60	1



Fiber optice line graphics drawn by location map provided by SRT Communications

7+56 - ℄
53' LT to W end
24" X 84' RCP (poor)

Sta 7+56 - ℄
Lt Install 24" RCP FES
Rt Install 24" RCP FES
In 2256.99 @ 35' Rt
Out 2250.78 @ 55' Lt

2285 2280 2275 2270 2265 2260 2255 2250

2,273.71 2,272.70 2,270.97 2,269.61 2,269.02 2,269.19 2,270.19 2,272.00 2,274.56 2,277.83 2,281.73 2,286.07 2,290.54

6+00 7+00 8+00 9+00 10+00 11+00

END SECT-CONC REINF 24IN

	Qty
Sta 7+56	2 EA

REMOVAL OF TREES 10IN

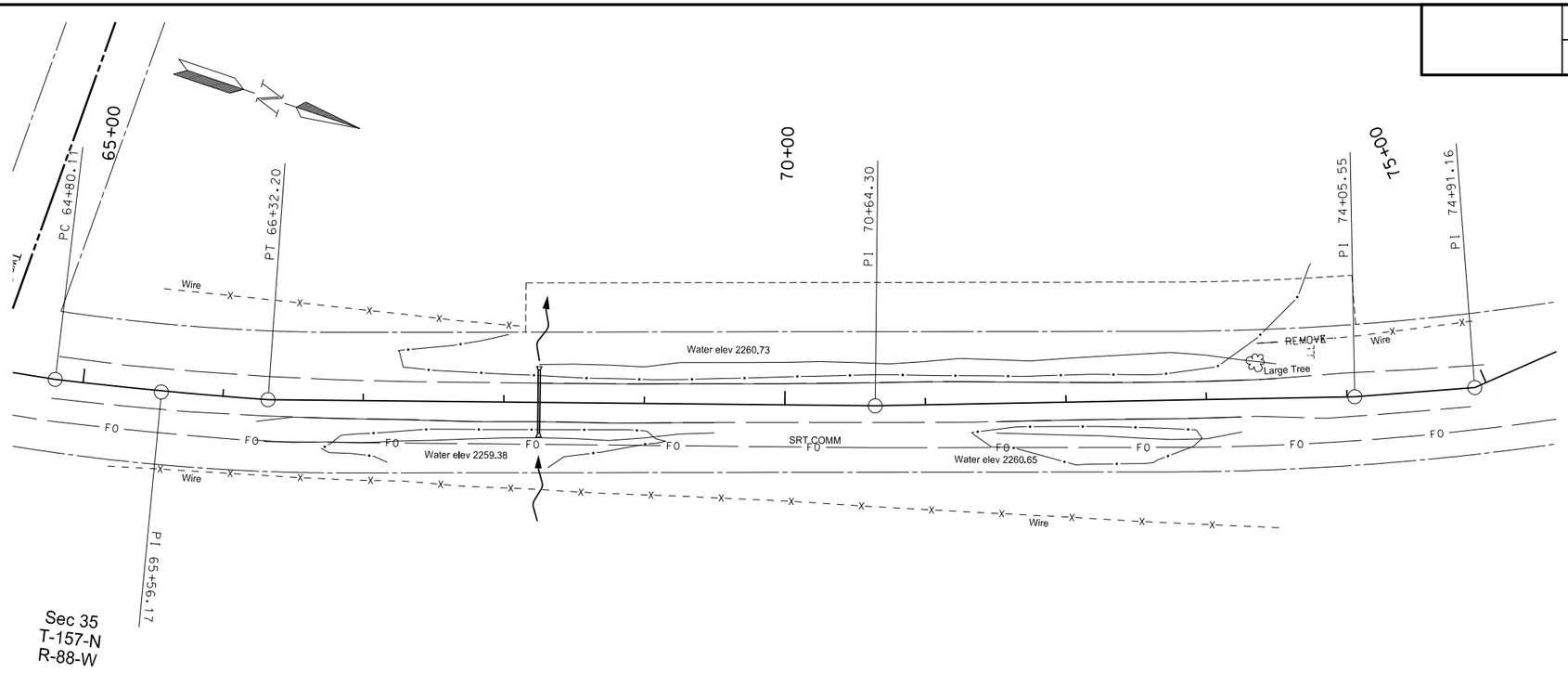
	Qty
Sta 6+46 LT	2 EA
Sta 7+28 LT	1 EA

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J10-1

Mountrail County

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	60	2

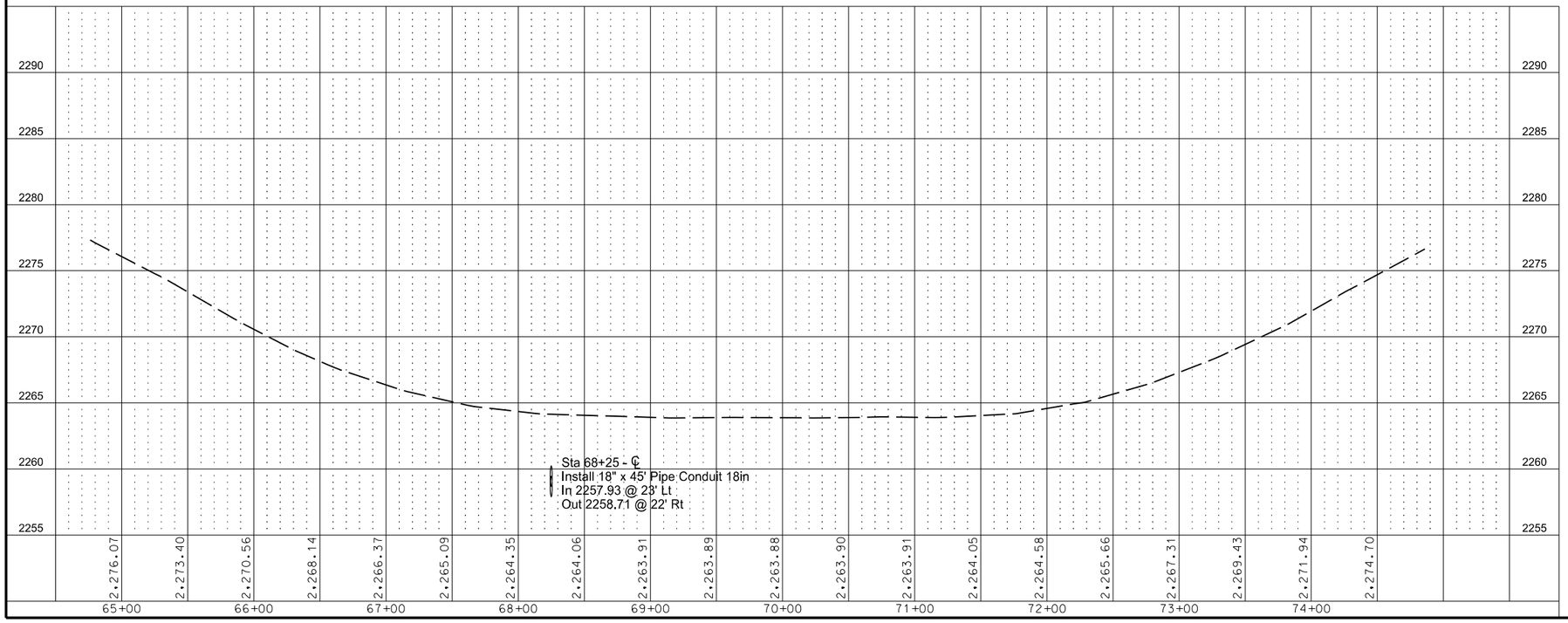


Fiber optice line graphics drawn by location map provided by SRT Communications

REMOVAL OF TREES 10IN — Qty
Sta 73+35 LT — 1 EA

REMOVE EXISTING FENCE — Qty
Sta 73+36 LT to 73+93 LT — 57 LF

PIPE CONDUIT 18IN — Qty
Sta 68+25 — 45 LF



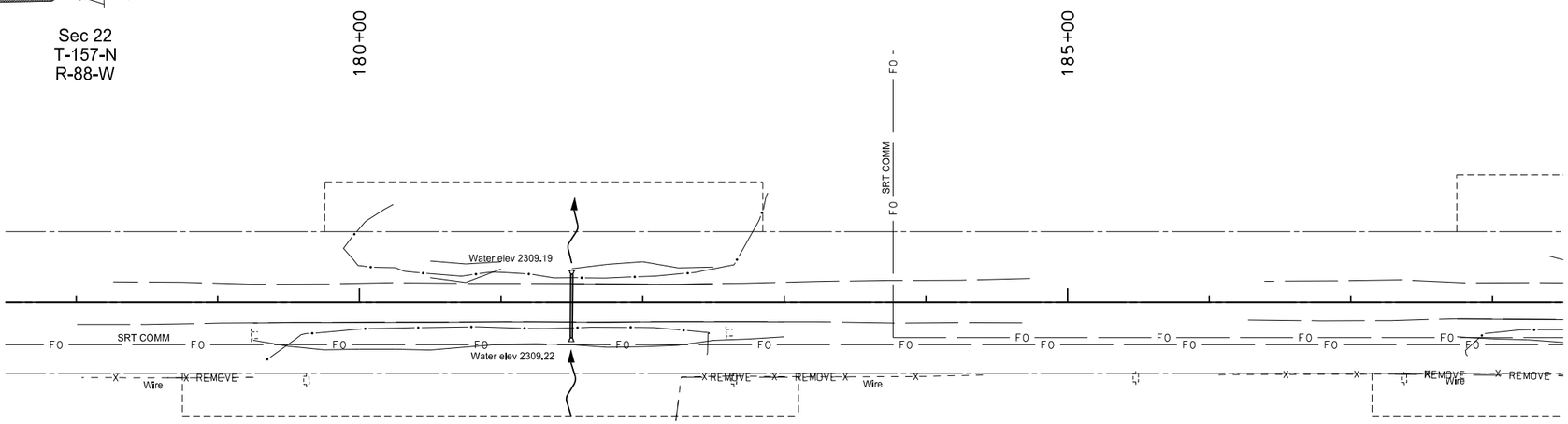
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J10-2

Mountrail County

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	60	3

Sec 22
T-157-N
R-88-W

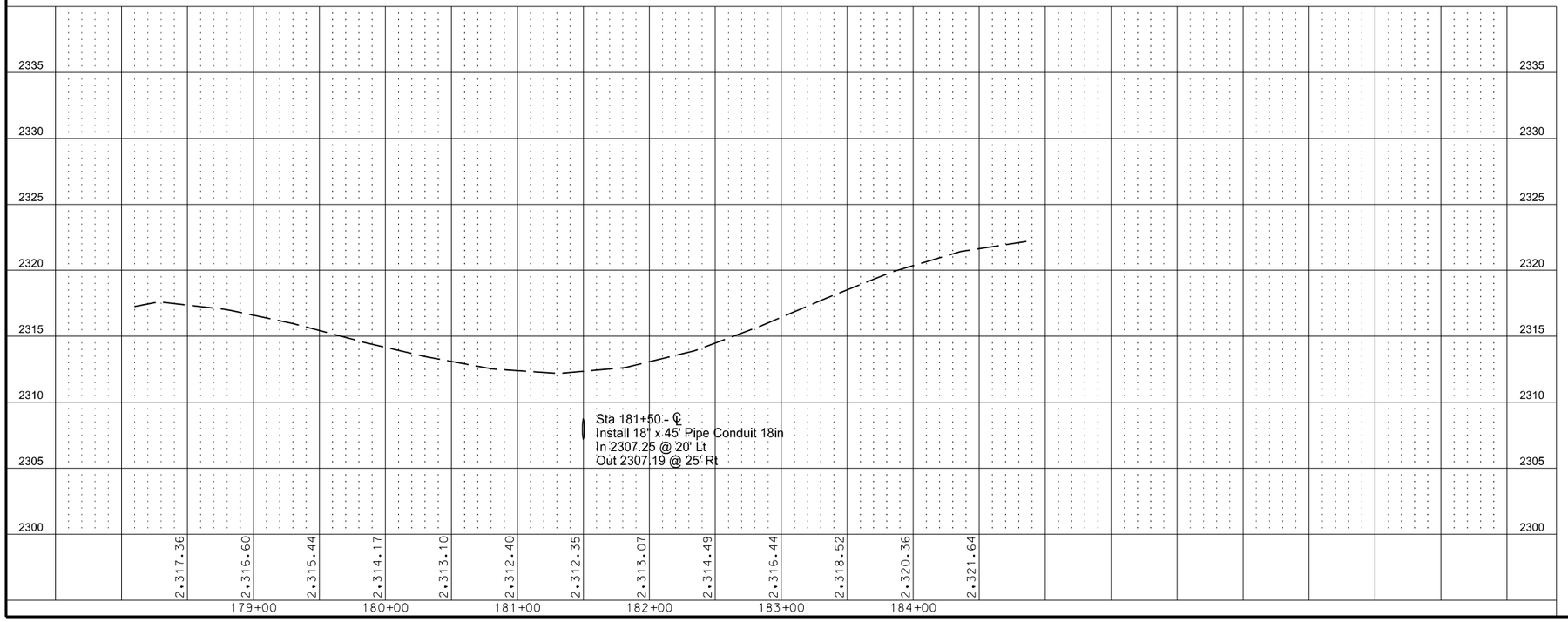


REMOVE EXISTING FENCE	Qty
Sta 178+65 RT to 179+25 RT	60 LF
Sta 182+23 RT to 183+45 RT	122 LF

PIPE CONDUIT 18IN	Qty
Sta 181+50	45 LF

Sec 23
T-157-N
R-88-W

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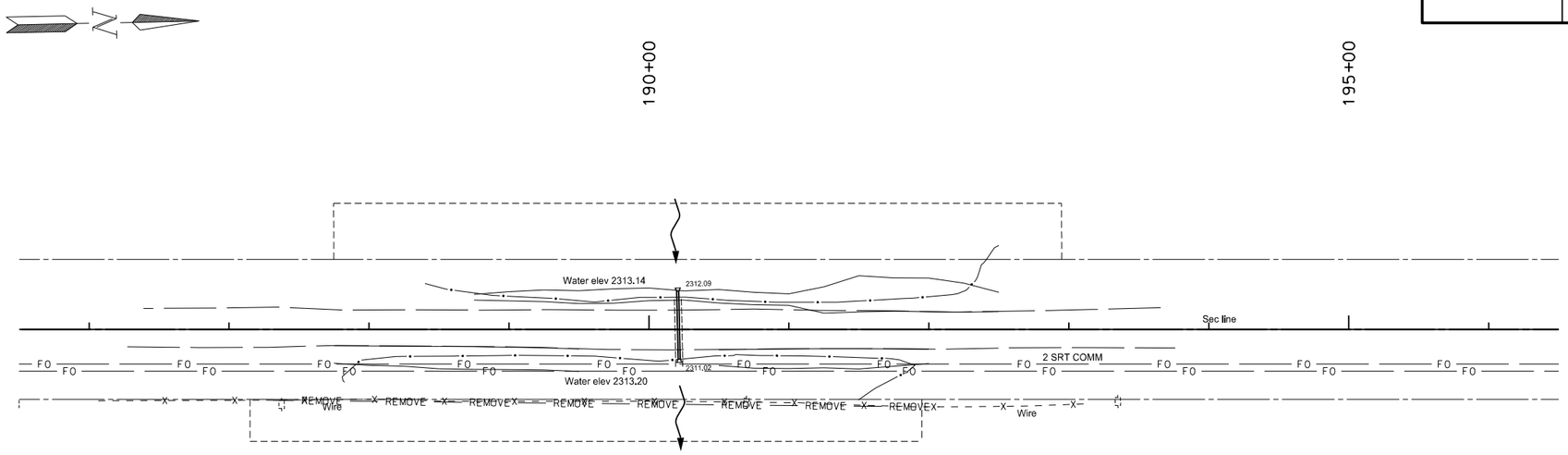


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J10-3

Mountrail County

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	60	4



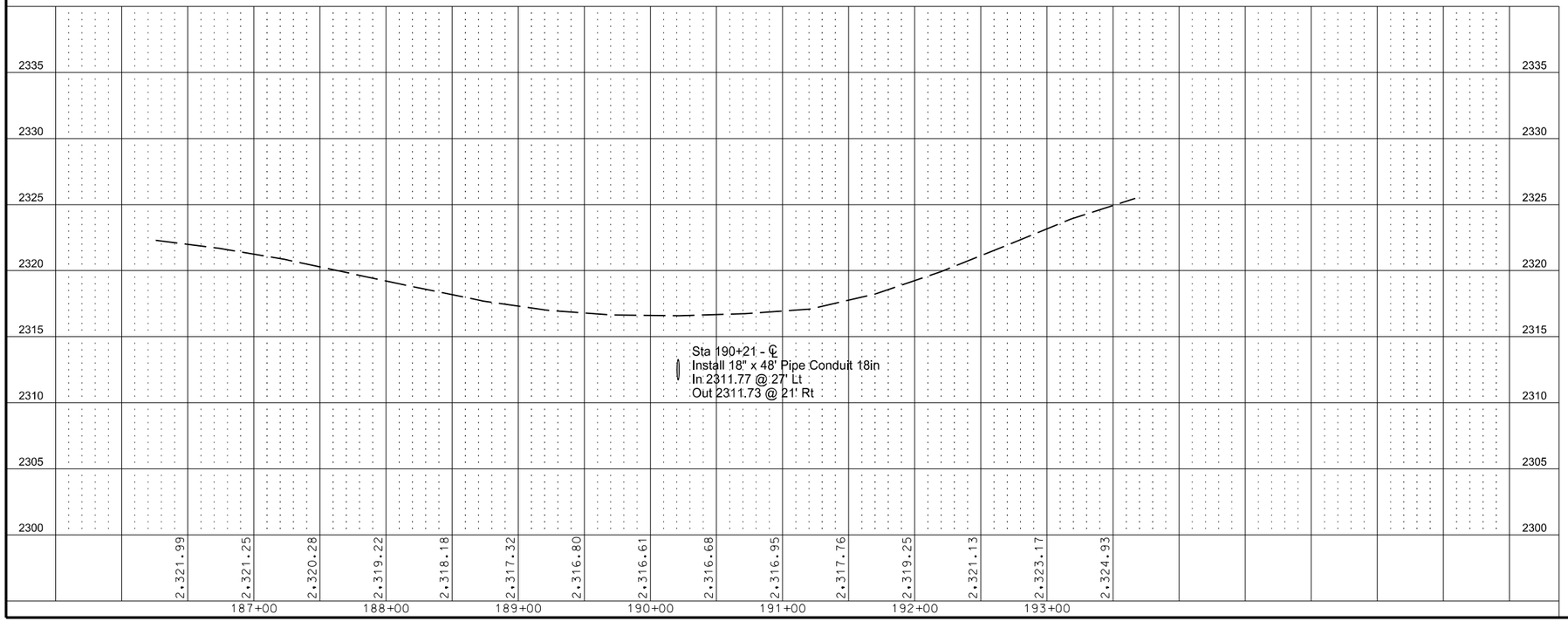
REMOVAL OF PIPE ALL TYPES AND SIZES — Qty
Sta 190+21 — 48 LF

REMOVE EXISTING FENCE — Qty
Sta 187+31 RT to 192+08 RT — 477 LF

PIPE CONDUIT 18IN — Qty
Sta 190+21 — 48 LF

Fiber optice line graphics drawn by location map provided by SRT Communications

190+21 - ℄
24" X 48' CSP (good)
2 CSFES (good)

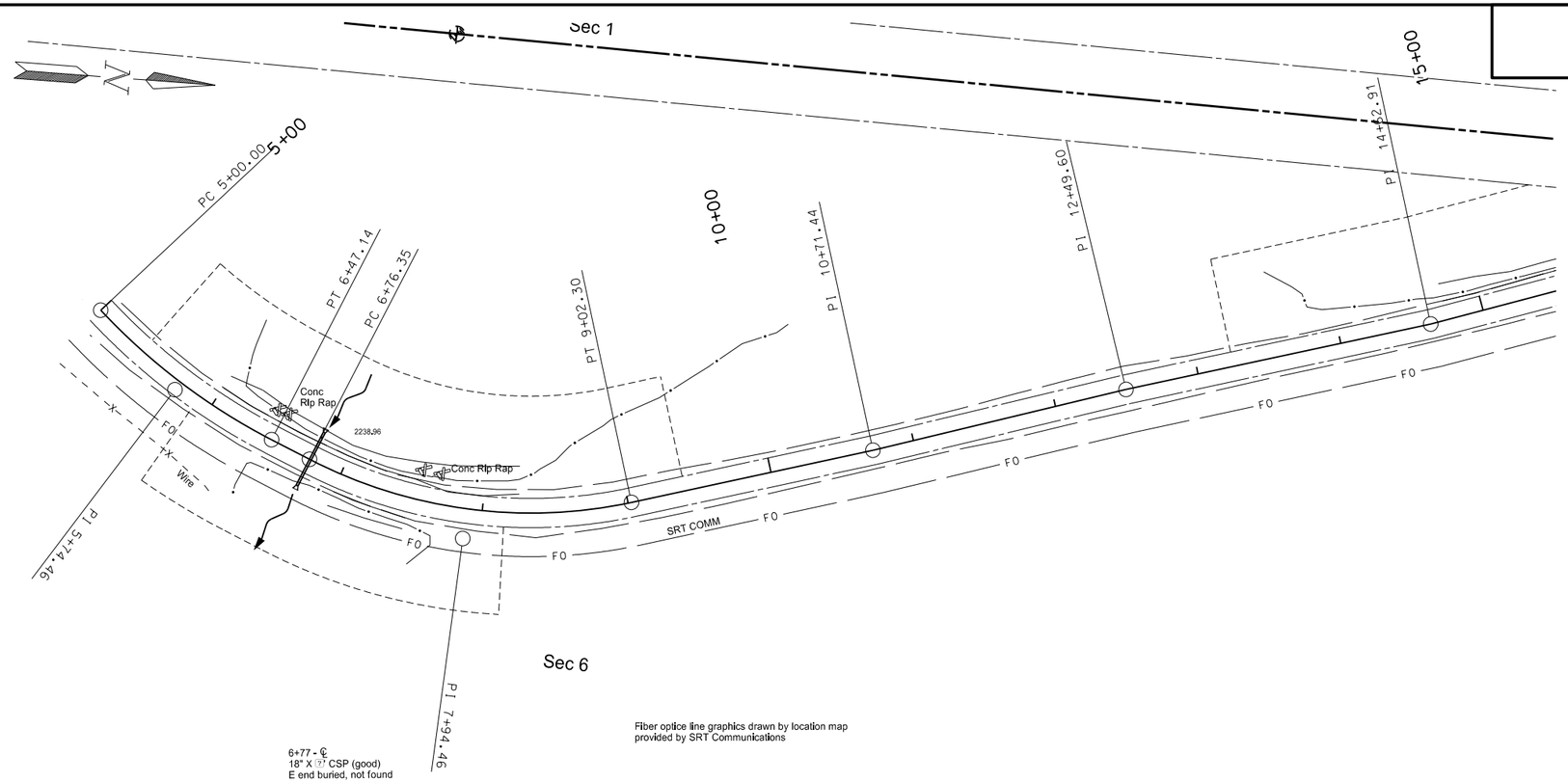


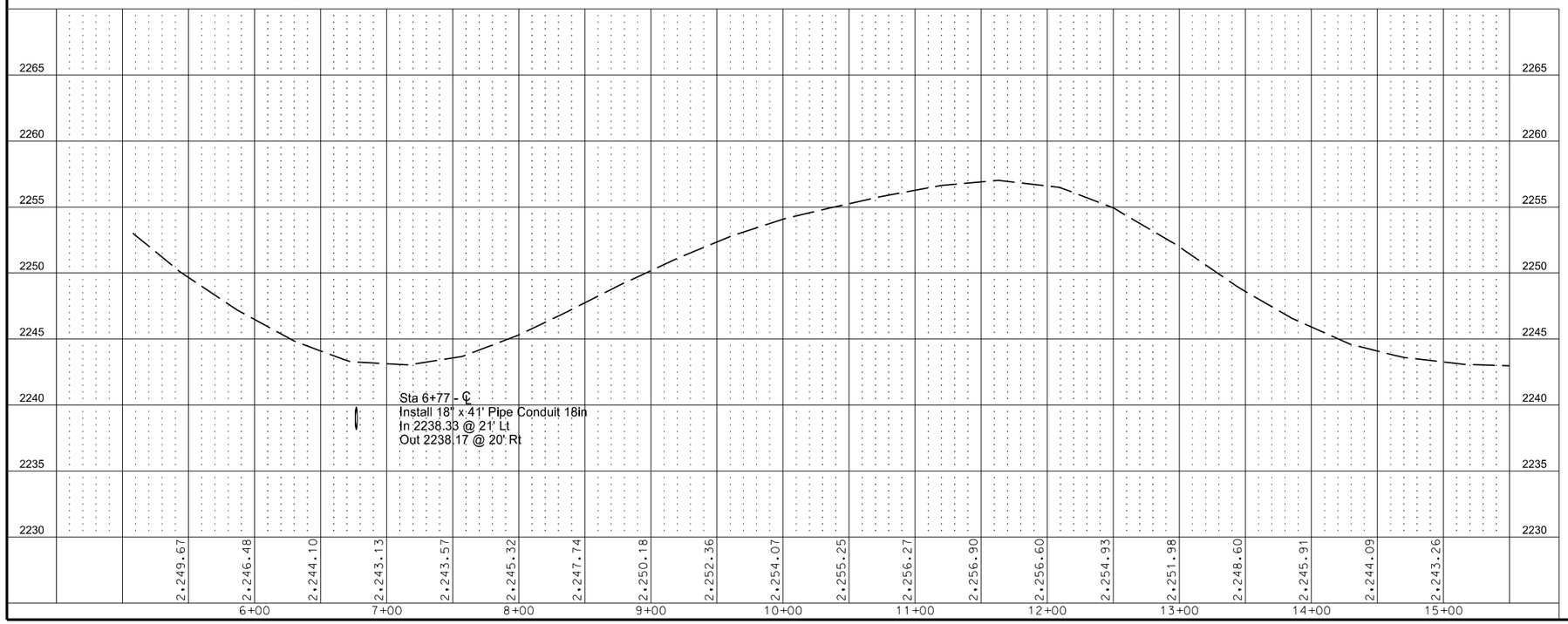
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J10-4

Mountrail County

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	ROM-0300(135)	60	5





REMOVAL OF PIPE ALL TYPES AND SIZES — Qty
Sta 6+77 — 40 LF

REMOVAL OF RIPRAP - LOOSE ROCK — Qty
Sta 6+05 LT to 8+17 LT — 47 CY

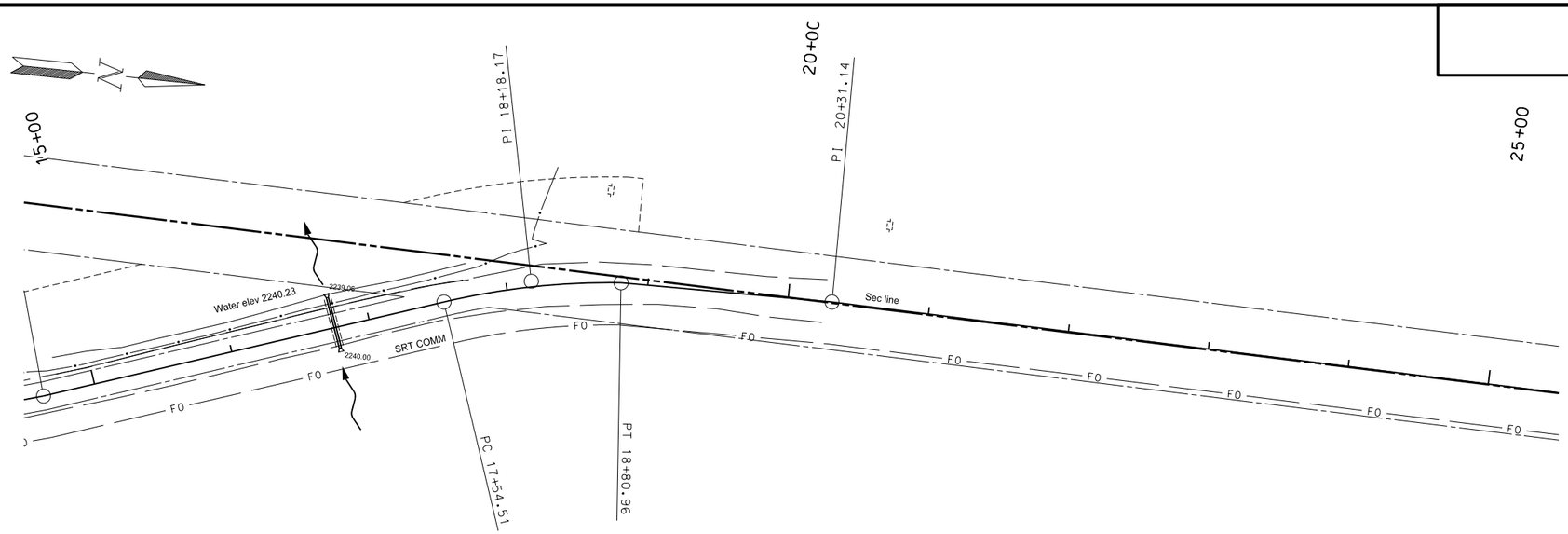
PIPE CONDUIT 18IN — Qty
Sta 6+77 — 41 LF

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K6S-1 & K6S-2

Mountrail County

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	60	6

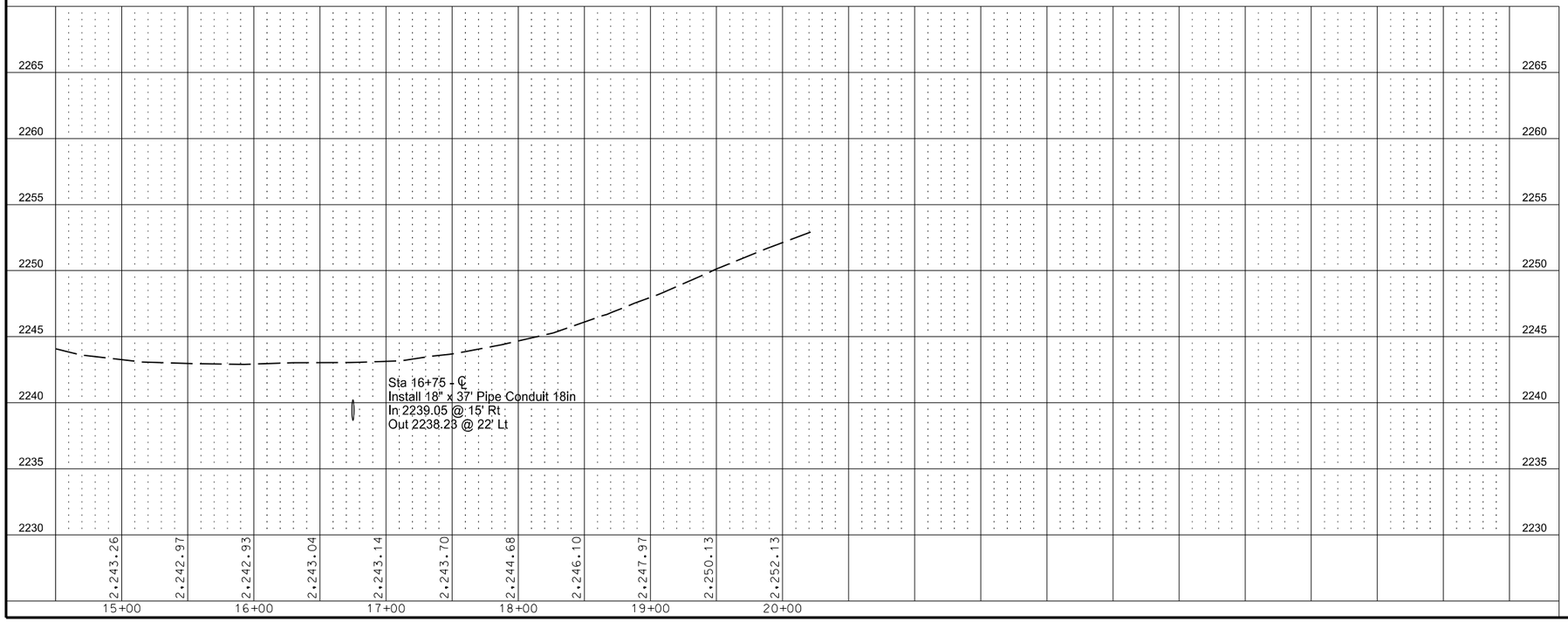


REMOVAL OF PIPE ALL TYPES AND SIZES — Qty
Sta 16+75 — 34 LF

PIPE CONDUIT 18IN — Qty
Sta 16+75 — 37 LF

16+75 - ℄
18" X 34' CSP (good)

Fiber optice line graphics drawn by location map
provided by SRT Communications

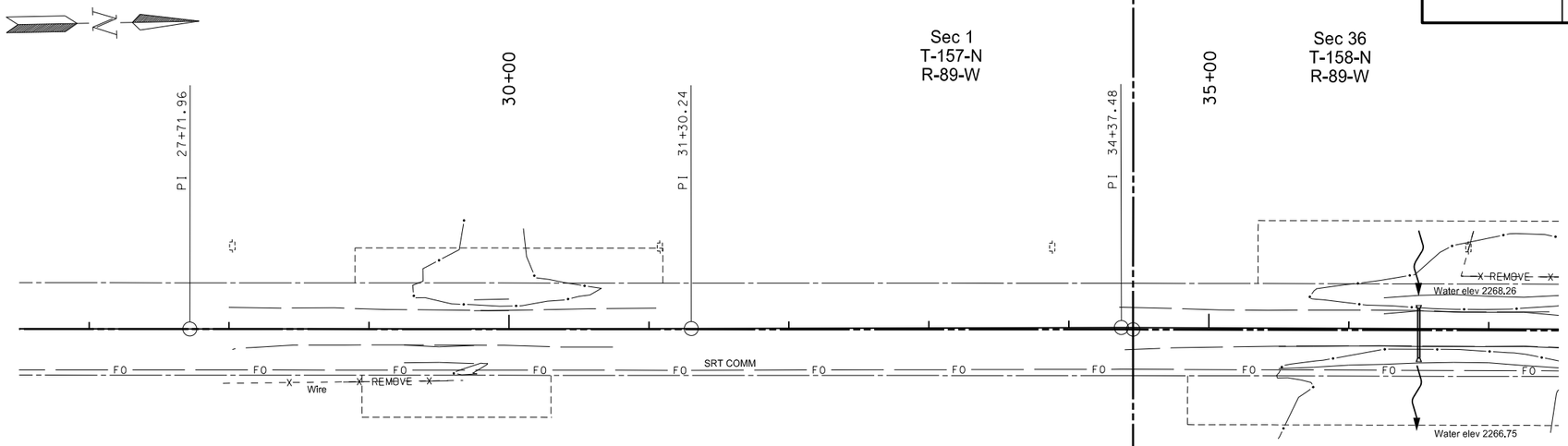


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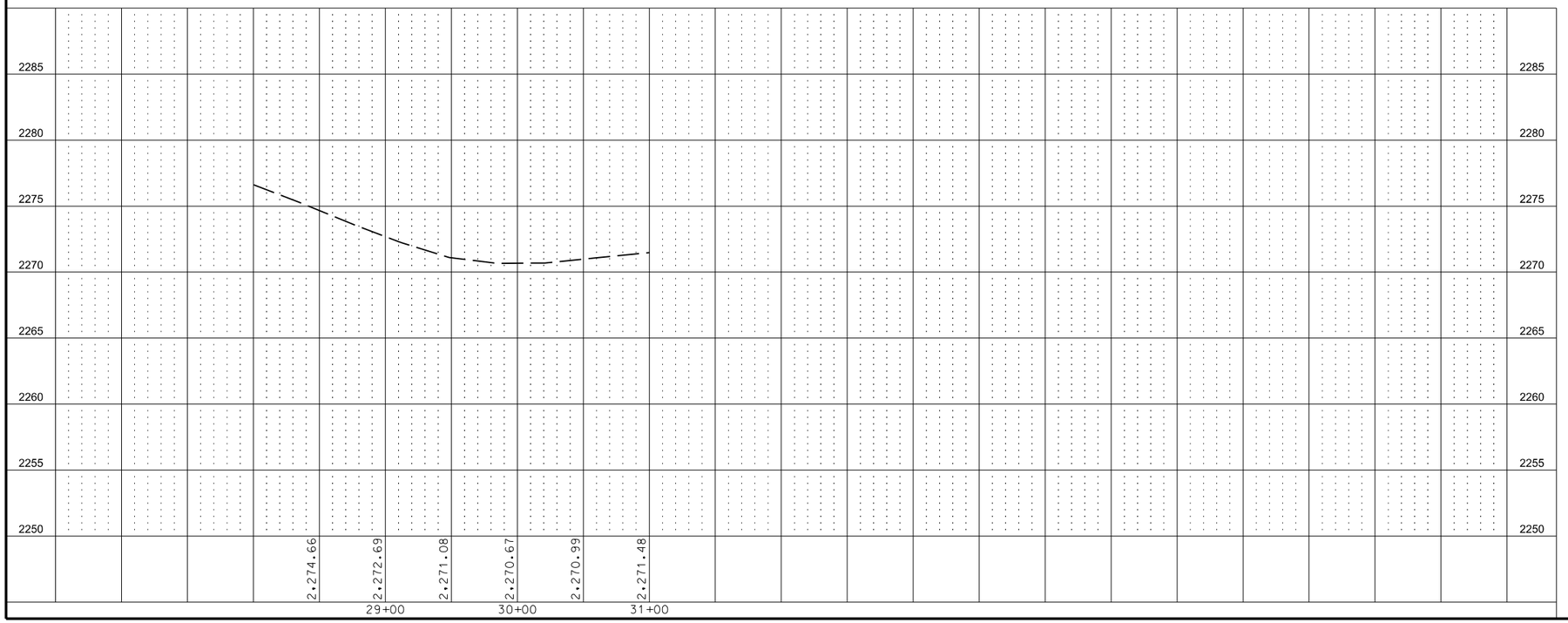
K6S-2

Mountrail County

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	60	7



Fiber optice line graphics drawn by location map provided by SRT Communications



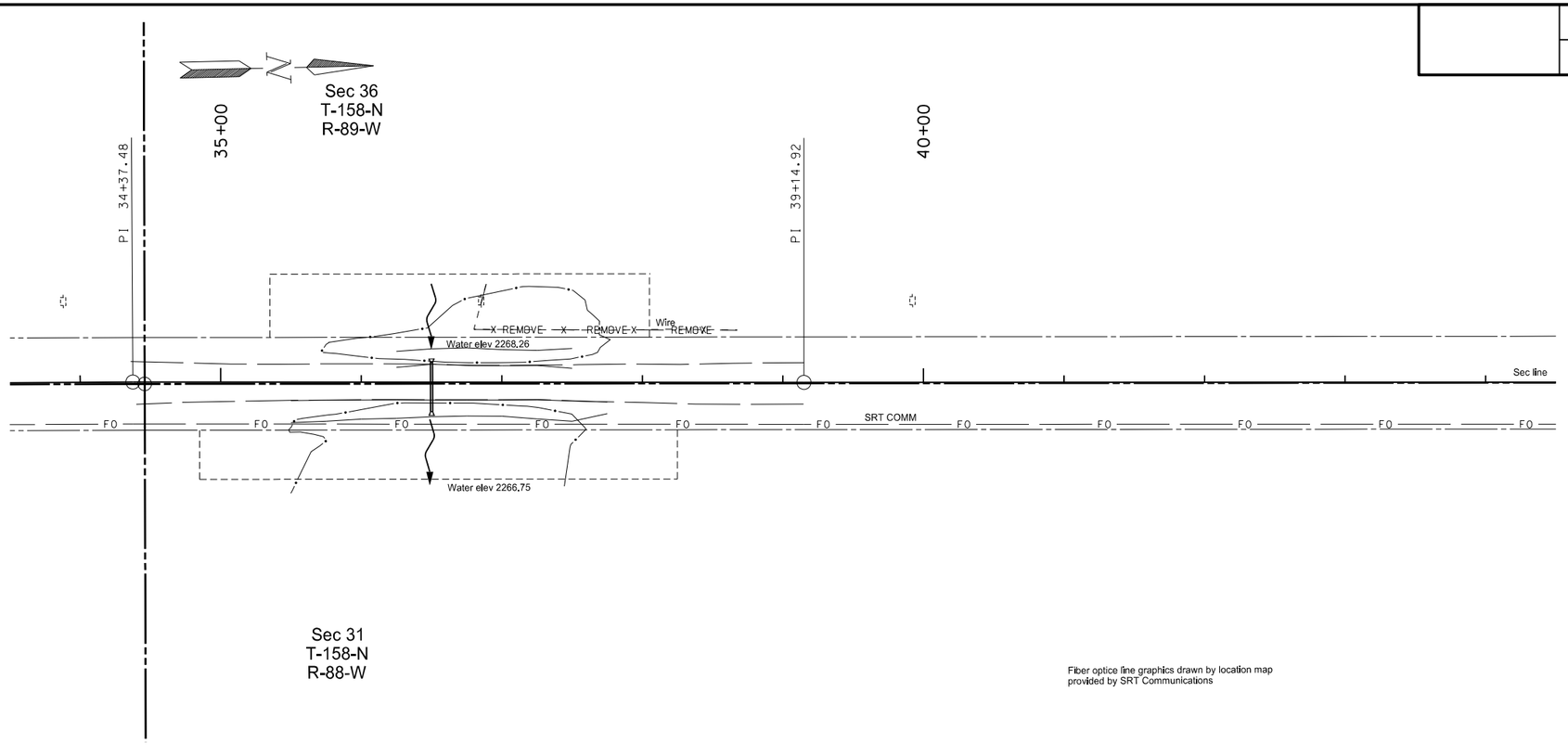
REMOVE EXISTING FENCE — Qty
Sta 28+21 RT to 29+67 RT — 146 LF

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K6S-3

Mountrail County

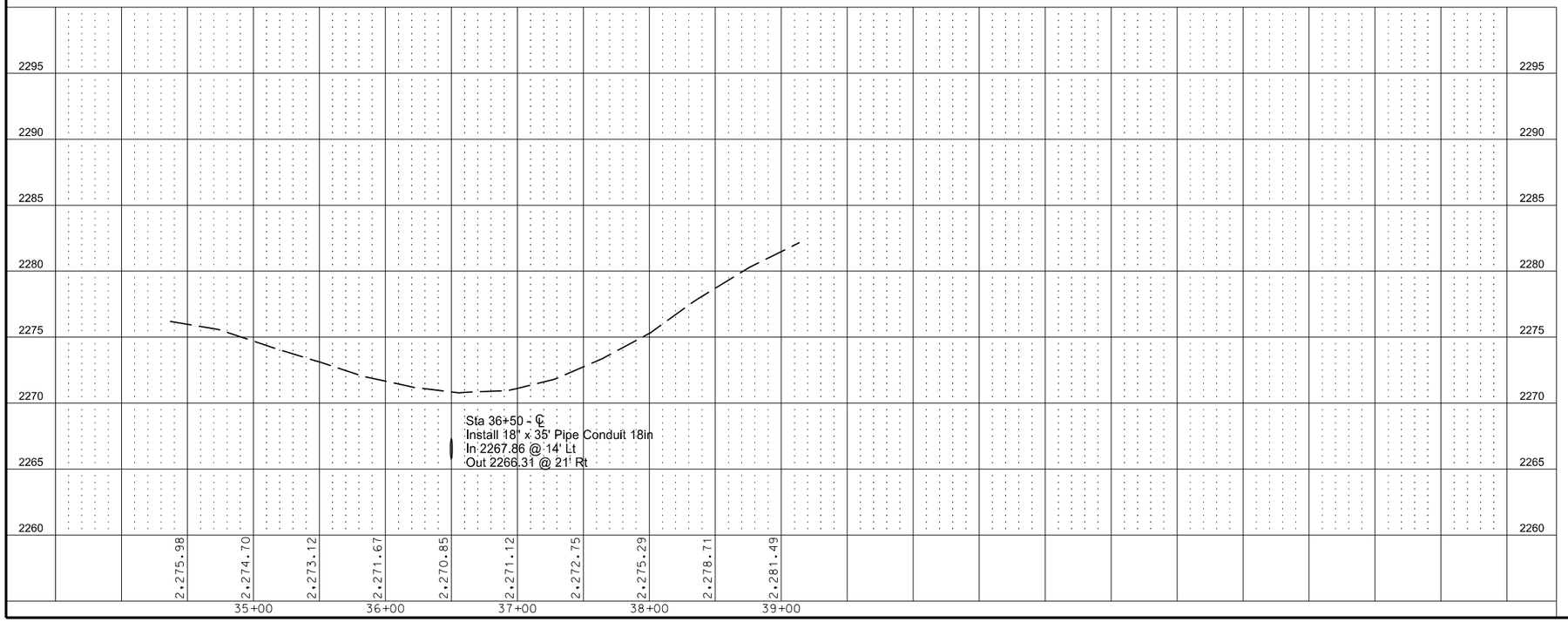
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	60	8



Fiber optice line graphics drawn by location map provided by SRT Communications

REMOVE EXISTING FENCE — Qty
Sta 36+80 LT to 38+67 LT — 221 LF

PIPE CONDUIT 18IN — Qty
Sta 36+50 — 35 LF

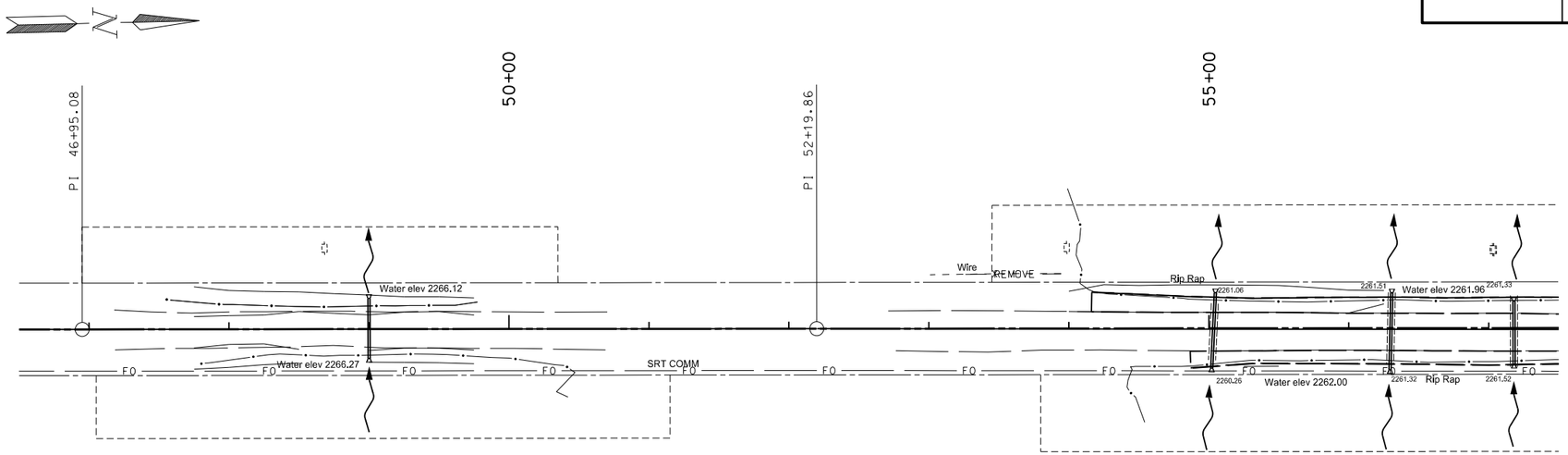


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K6S-4

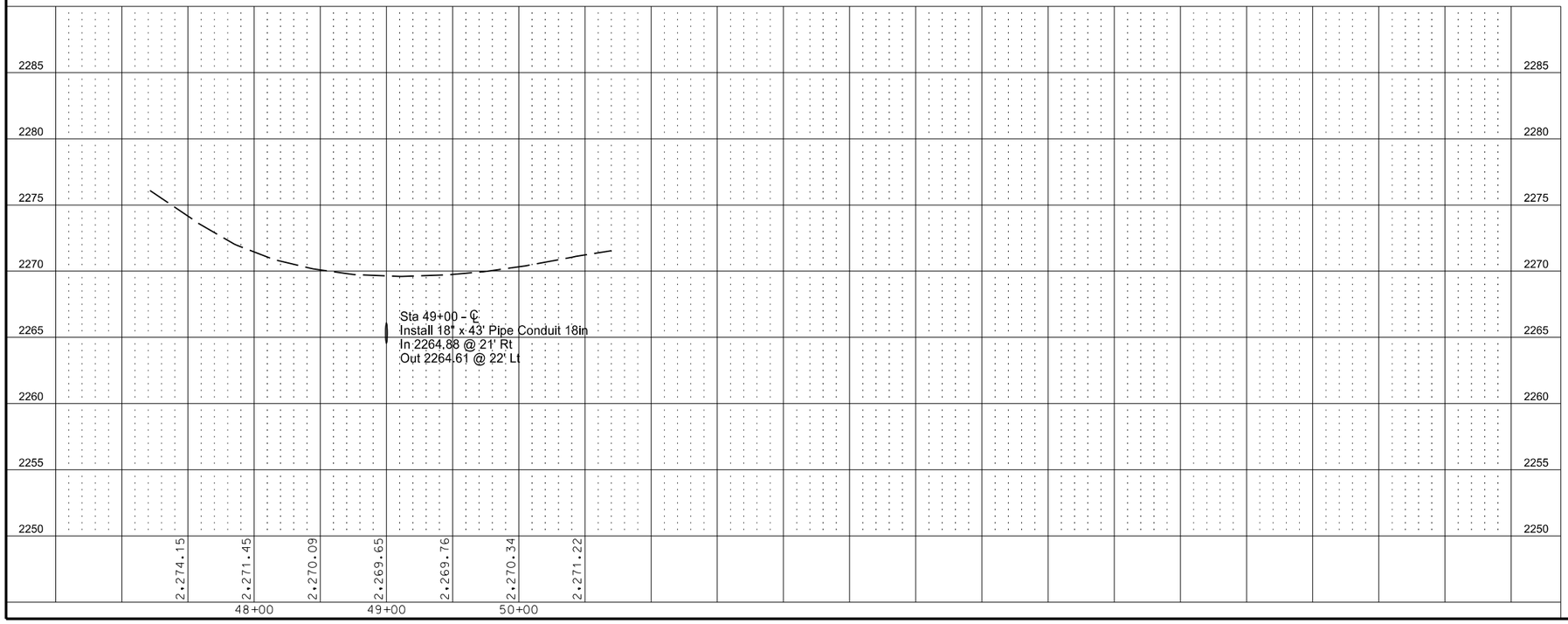
Mountrail County

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	60	9



PIPE CONDUIT 18IN — Qty
Sta 49+00 — 43 LF

Fiber optice line graphics drawn by location map provided by SRT Communications



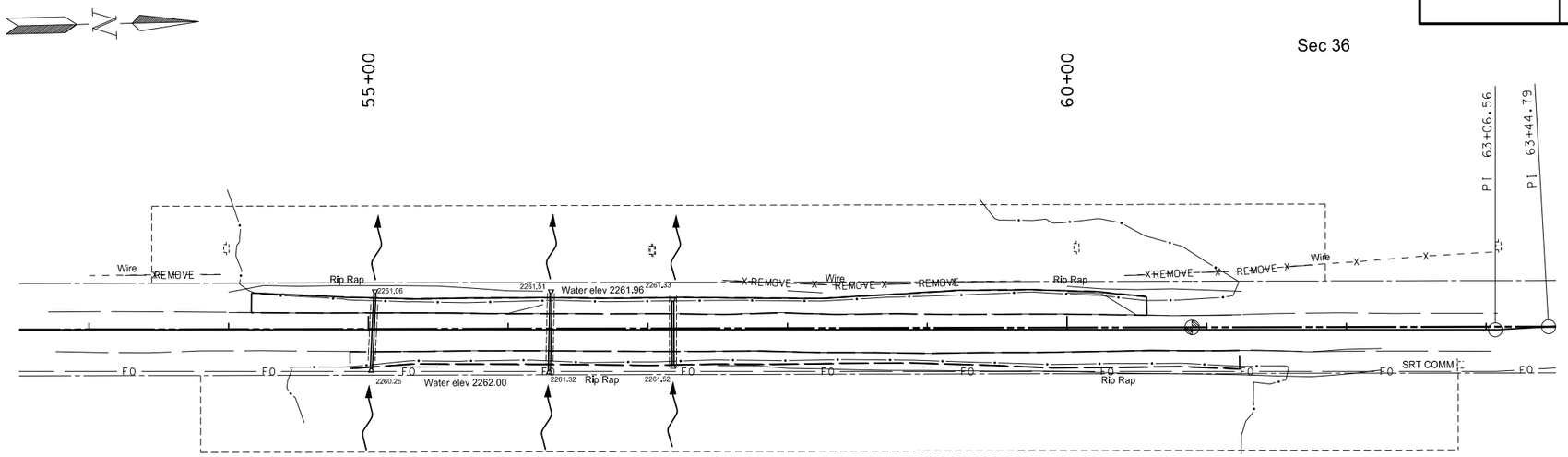
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K6S-5

Mountrail County

9/8/2017 3:01:06 PM cschatz N:\20732\ROM-0300(135)\Design\Mountrail\060PP\060PP_009.dgn

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	60	10



REMOVAL OF PIPE ALL TYPES AND SIZES	Qty
Sta 55+03	40 LF
Sta 56+30	51 LF
Sta 57+18	50 LF

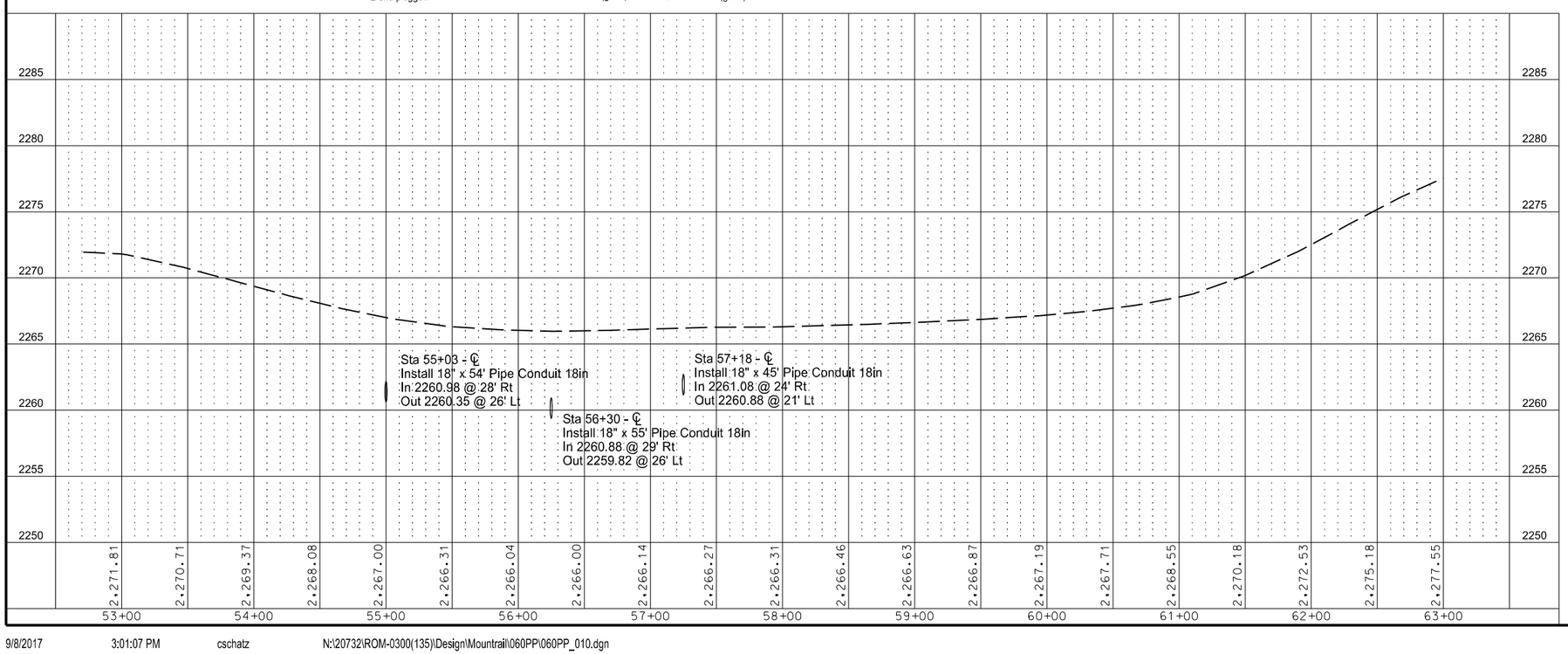
REMOVE EXISTING FENCE	Qty
Sta 53+26 LT to 53+95 LT	69 LF
Sta 57+53 LT to 59+67 LT	214 LF
Sta 60+41 LT to 62+01 LT	160 LF

REMOVAL OF RIPRAP - LOOSE ROCK	Qty
Sta 54+87 RT to Sta 61+23 RT	231 CY
Sta 54+16 LT to Sta 60+57 LT	304 CY

PIPE CONDUIT 18IN	Qty
Sta 55+03	54 LF
Sta 56+30	55 LF
Sta 57+18	45 LF

Fiber optice line graphics drawn by location map provided by SRT Communications

Sec 31



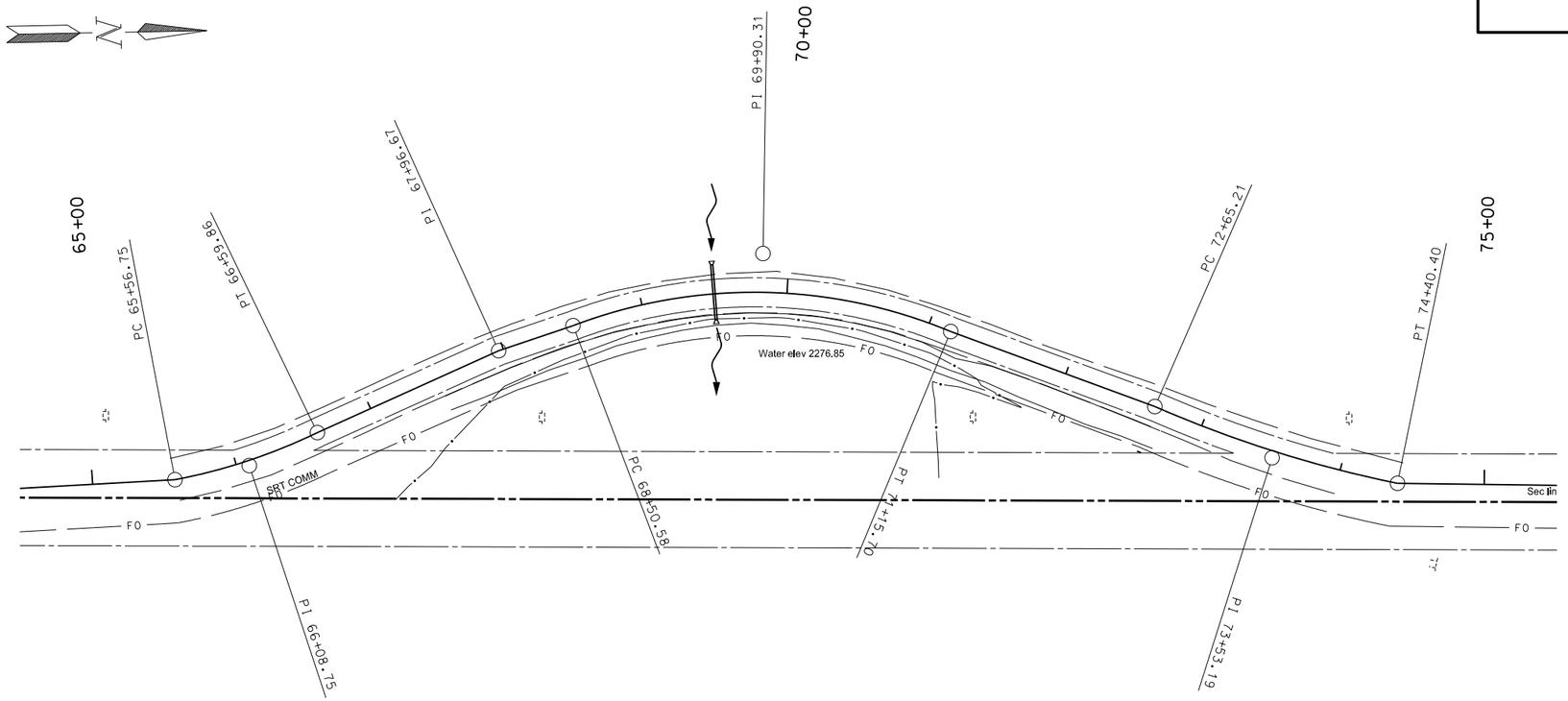
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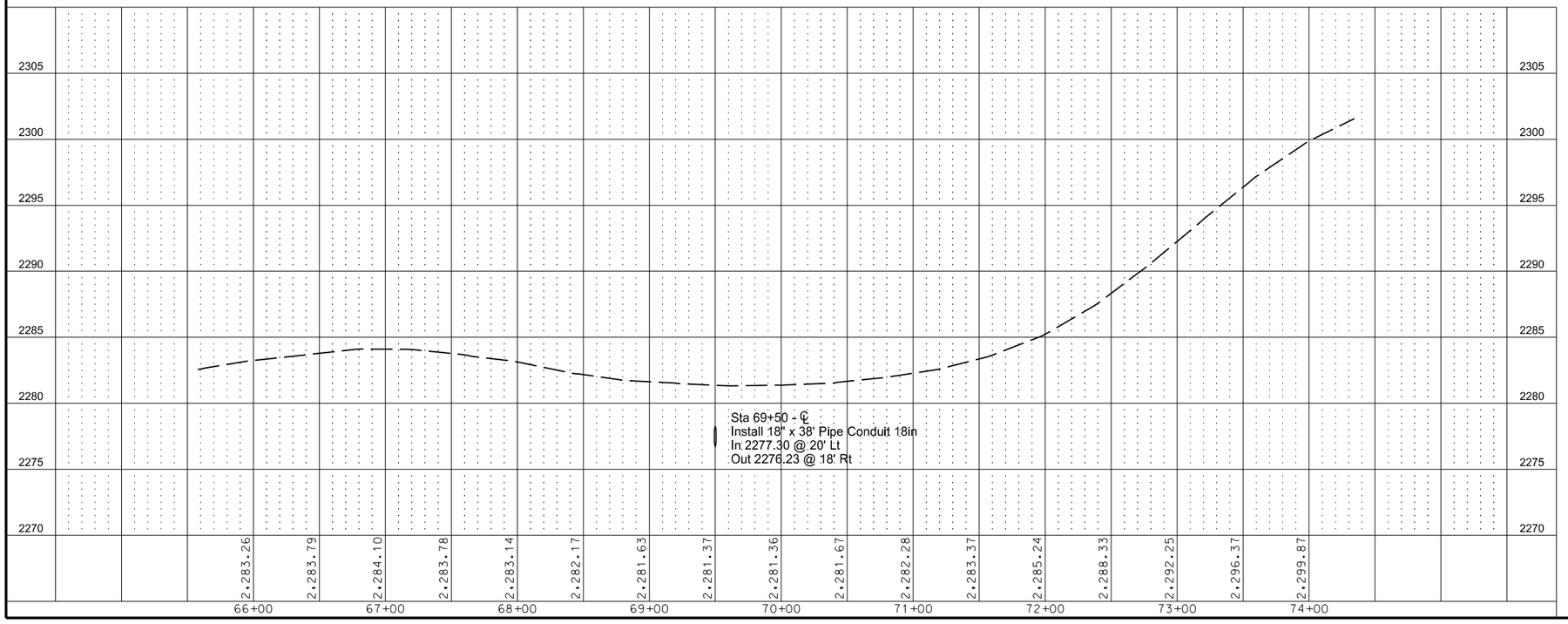
K6S-6

Mountrail County

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	60	11

PIPE CONDUIT 18IN — Qty
Sta 69+50 — 38 LF



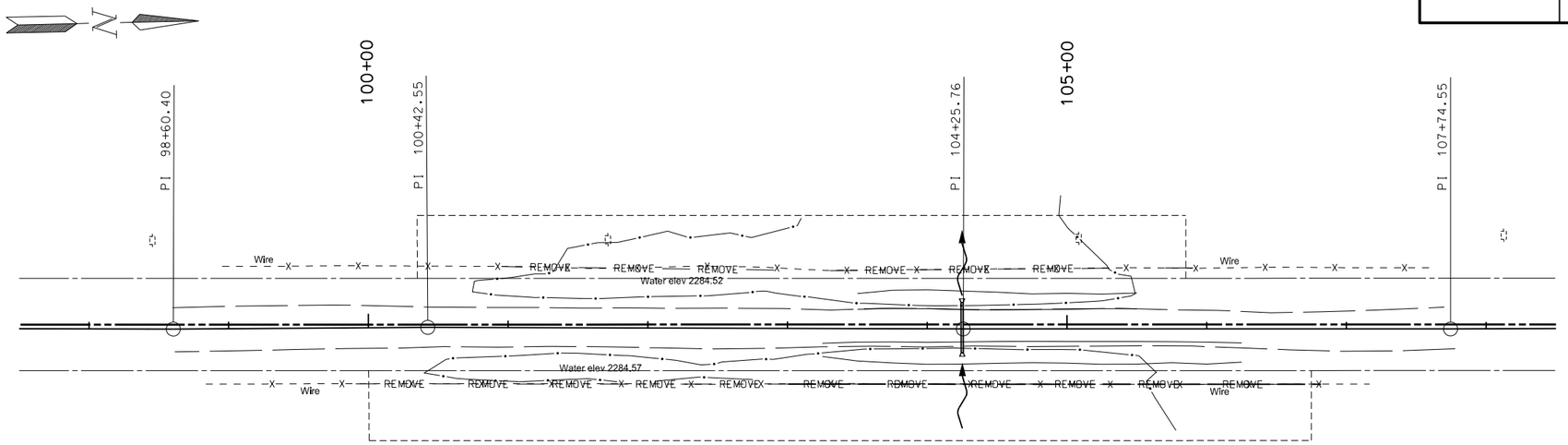


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K6S-7

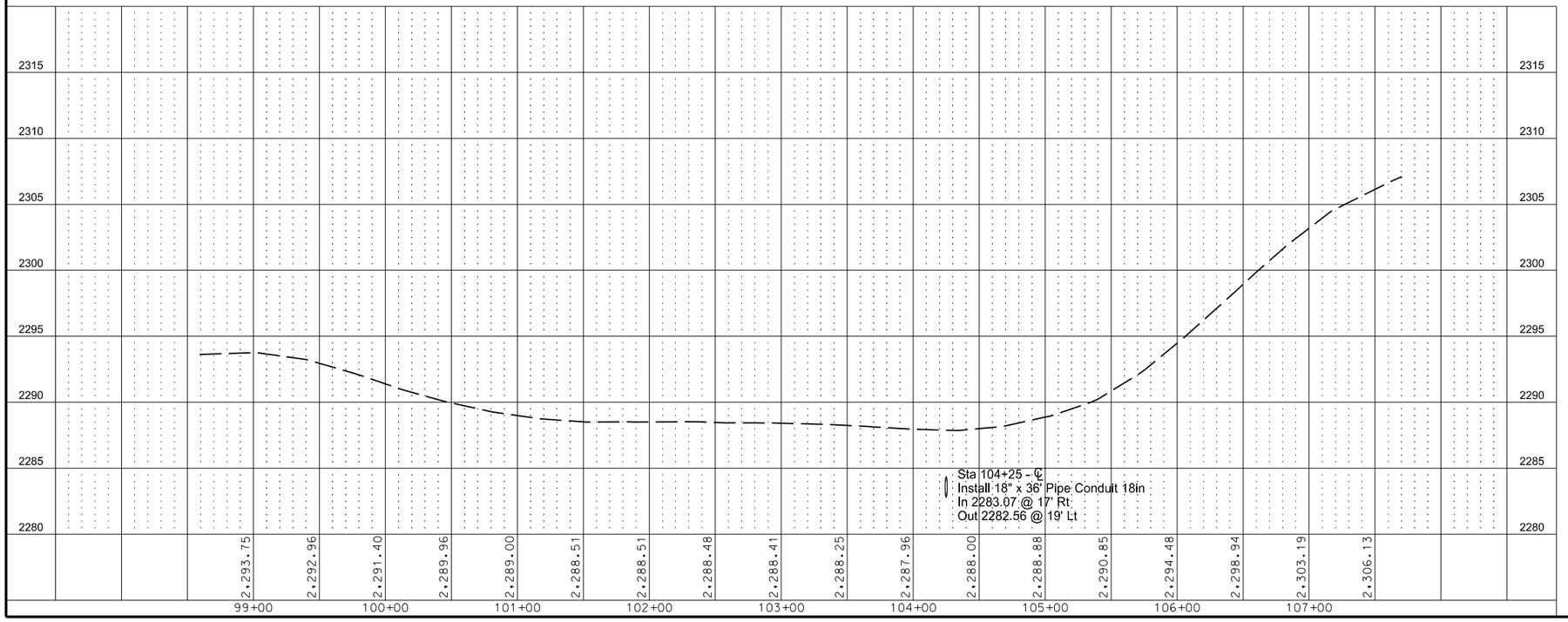
Mountrail County

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	60	12



REMOVE EXISTING FENCE	Qty
Sta 100+95 LT to 106+23 LT	582 LF
Sta 99+91 RT to 106+82 RT	691 LF

PIPE CONDUIT 18IN	Qty
Sta 104+25	36 LF

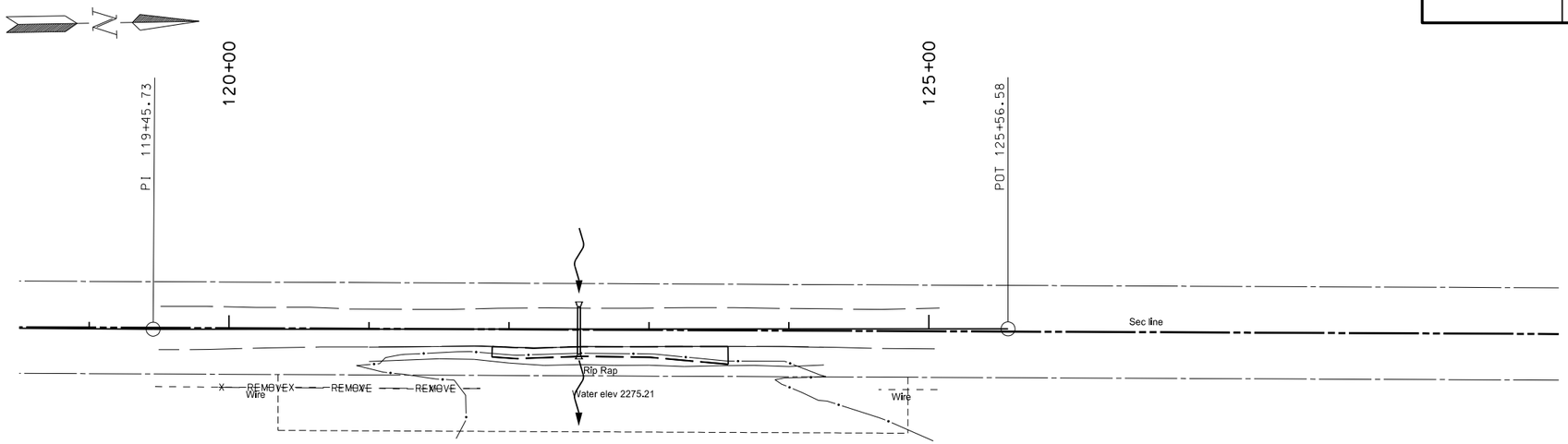


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K6S-8

Mountrail County

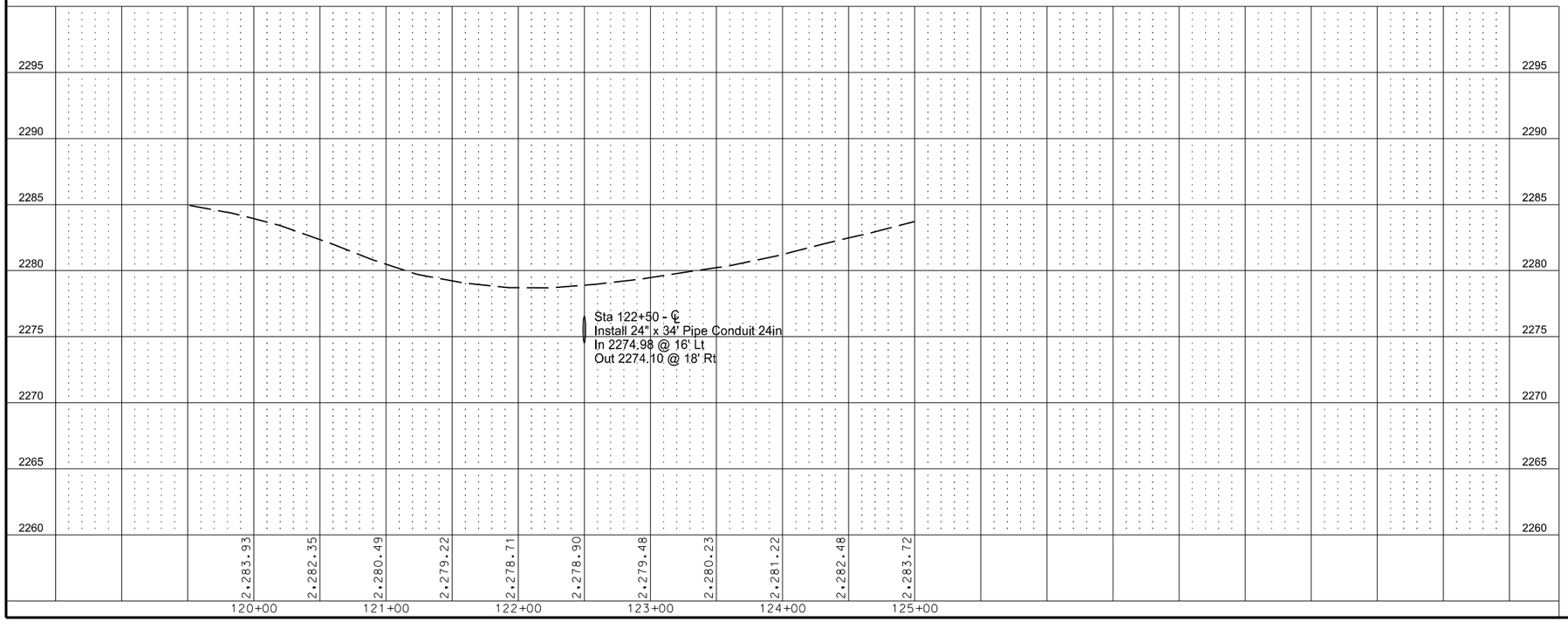
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	60	13



REMOVE EXISTING FENCE — Qty
Sta 119+93 RT to 121+80 RT — 187 LF

REMOVAL OF RIPRAP - LOOSE ROCK — Qty
Sta 121+88 RT to Sta 123+56 RT — 52 CY

PIPE CONDUIT 24IN — Qty
Sta 122+50 — 34 LF

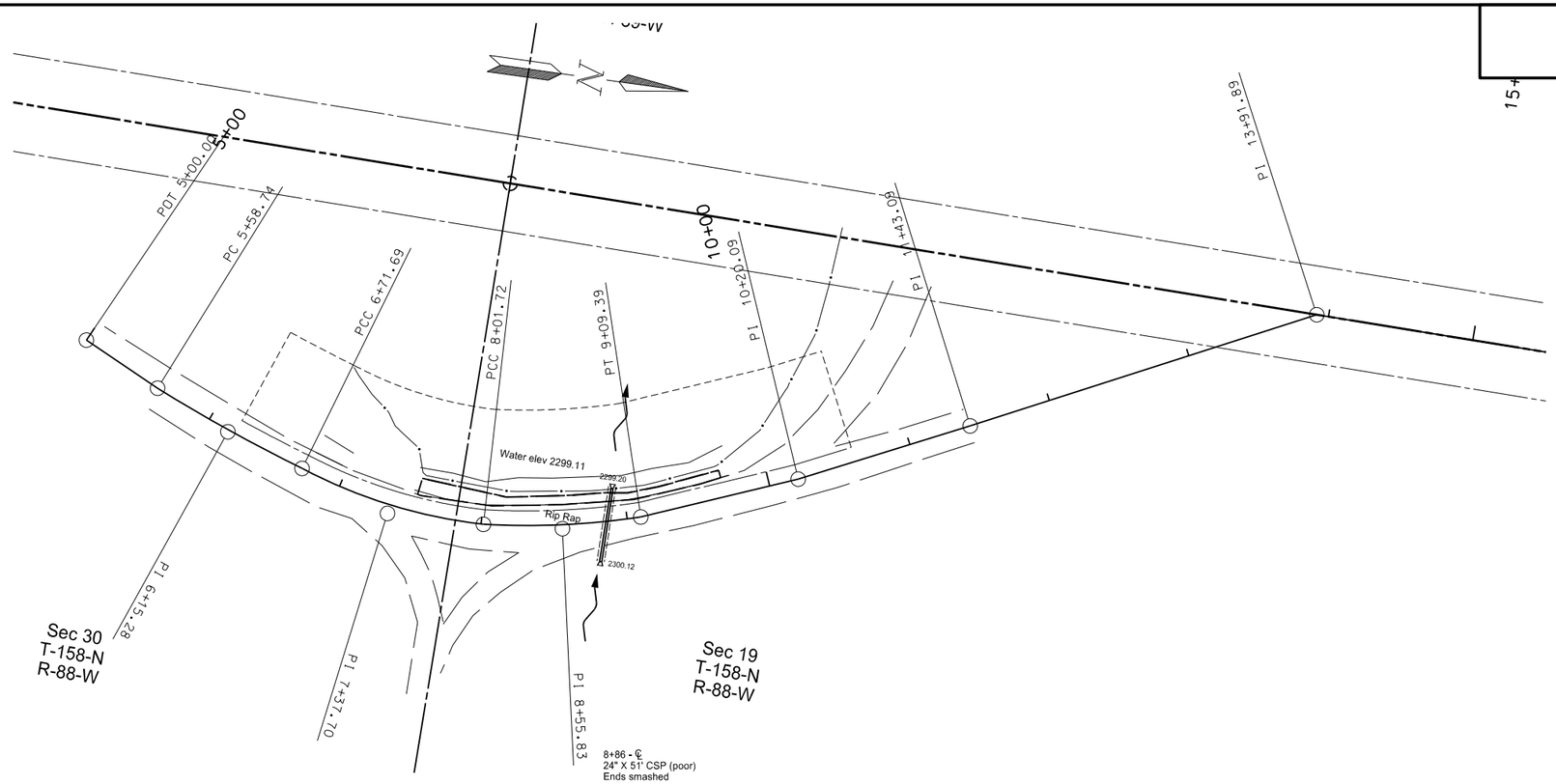


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K6S-9

Mountrail County

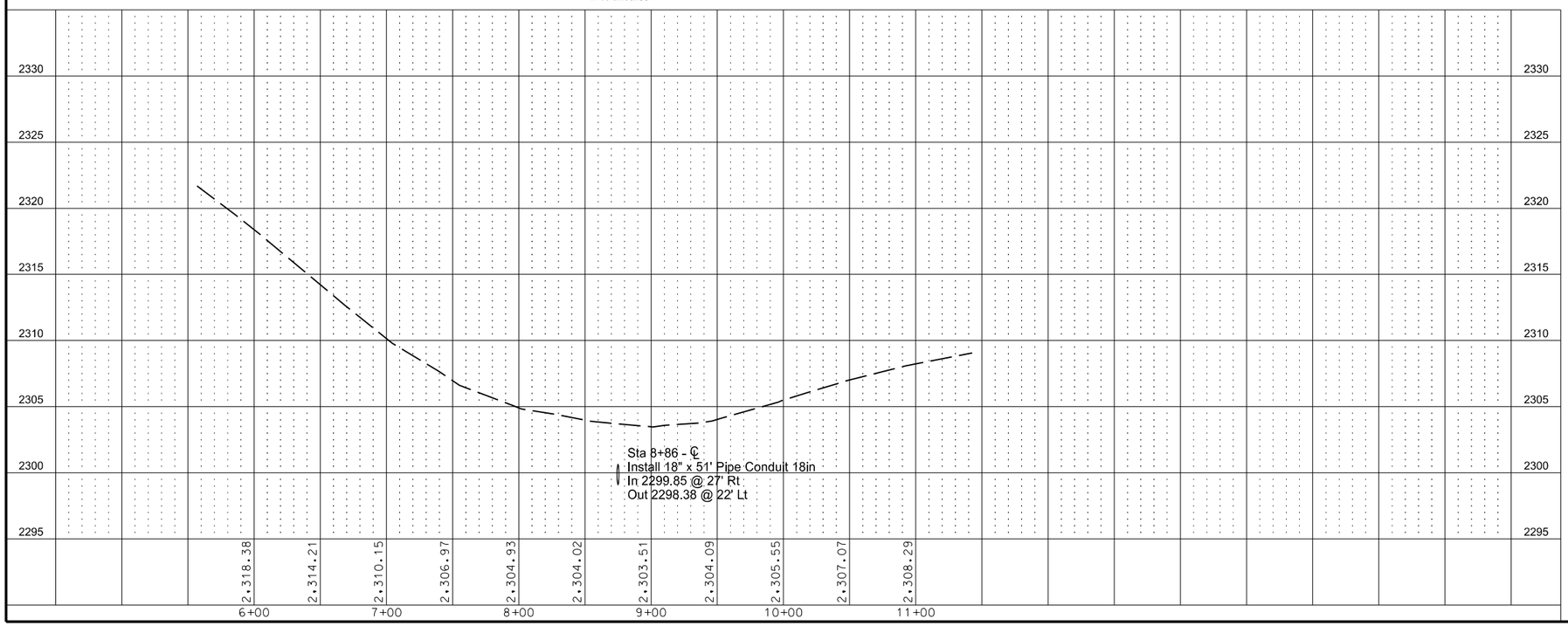
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	60	14



REMOVAL OF PIPE ALL TYPES AND SIZES — Qty
Sta 8+86 — 51 LF

REMOVAL OF RIPRAP - LOOSE ROCK — Qty
Sta 7+53 LT to Sta 9+69 LT — 51 CY

PIPE CONDUIT 18IN — Qty
Sta 8+86 — 51 LF

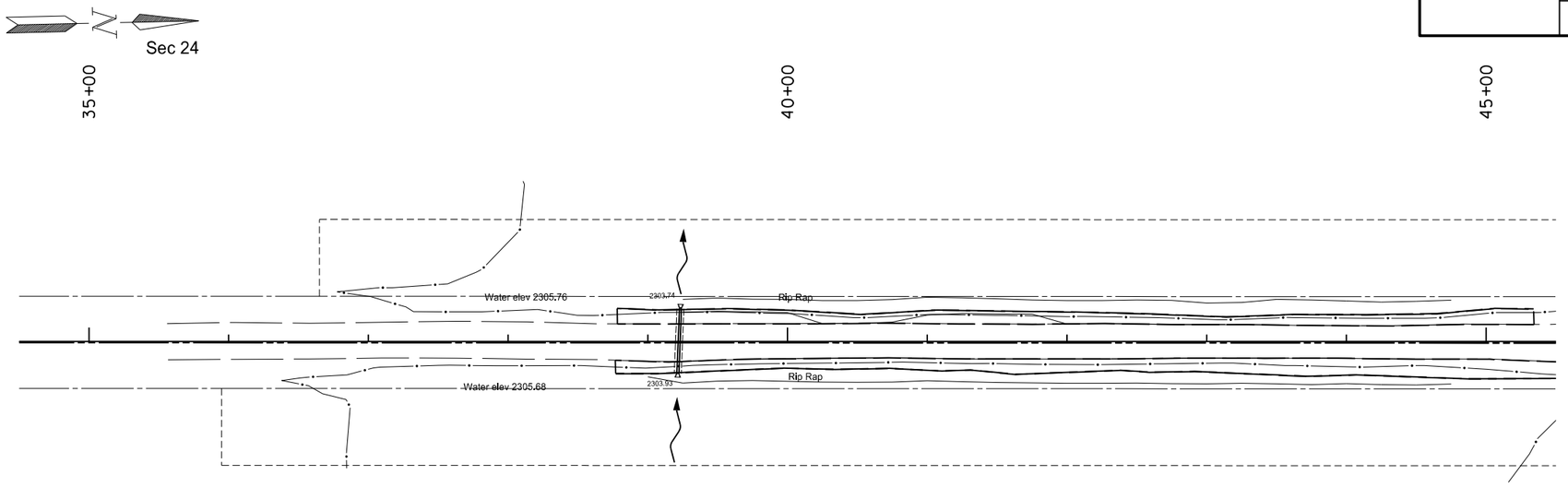


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K6N-1

Mountrail County

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	60	15

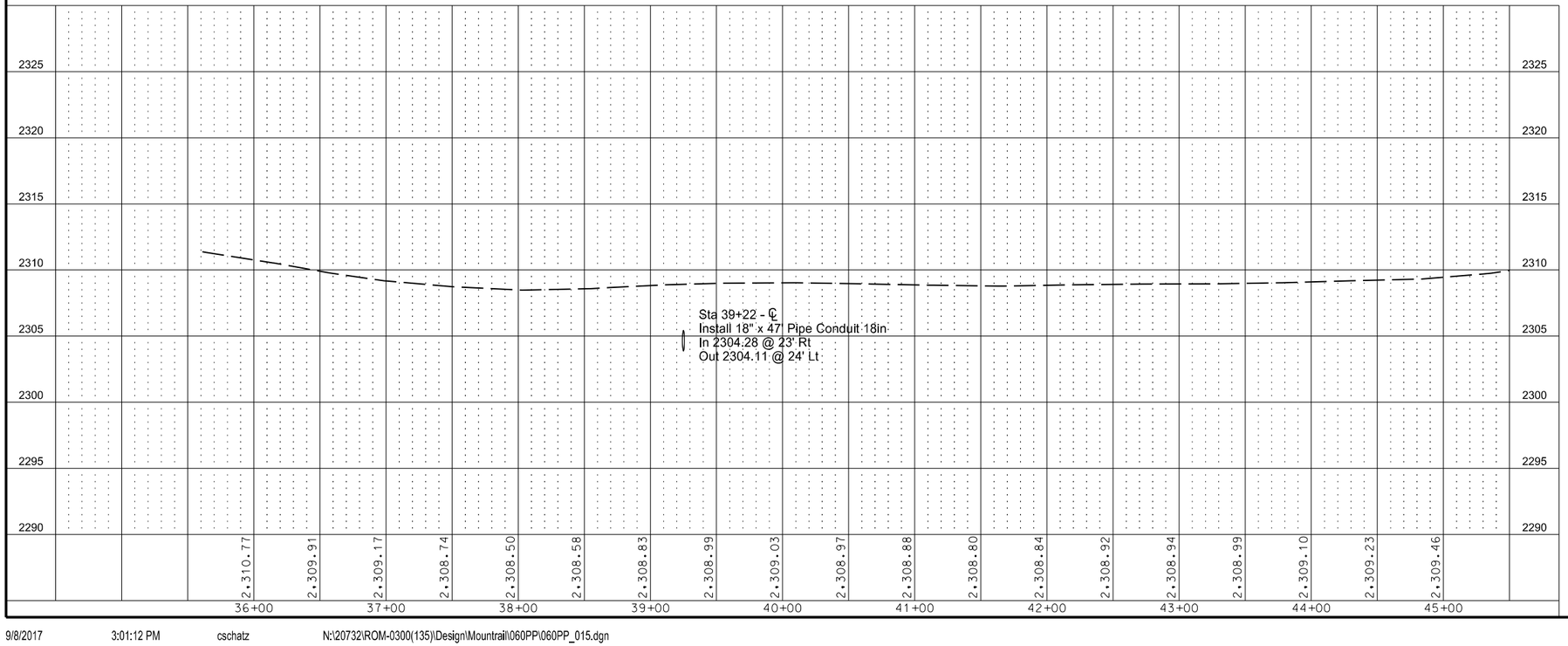


REMOVAL OF PIPE ALL TYPES AND SIZES	Qty
Sta 39+22	46 LF

REMOVAL OF RIPRAP - LOOSE ROCK	Qty
Sta 38+77 RT to Sta 45+57 RT	251 CY
Sta 38+78 LT to Sta 45+34 LT	208 CY

PIPE CONDUIT 18IN	Qty
Sta 39+22	47 LF

Sec 19

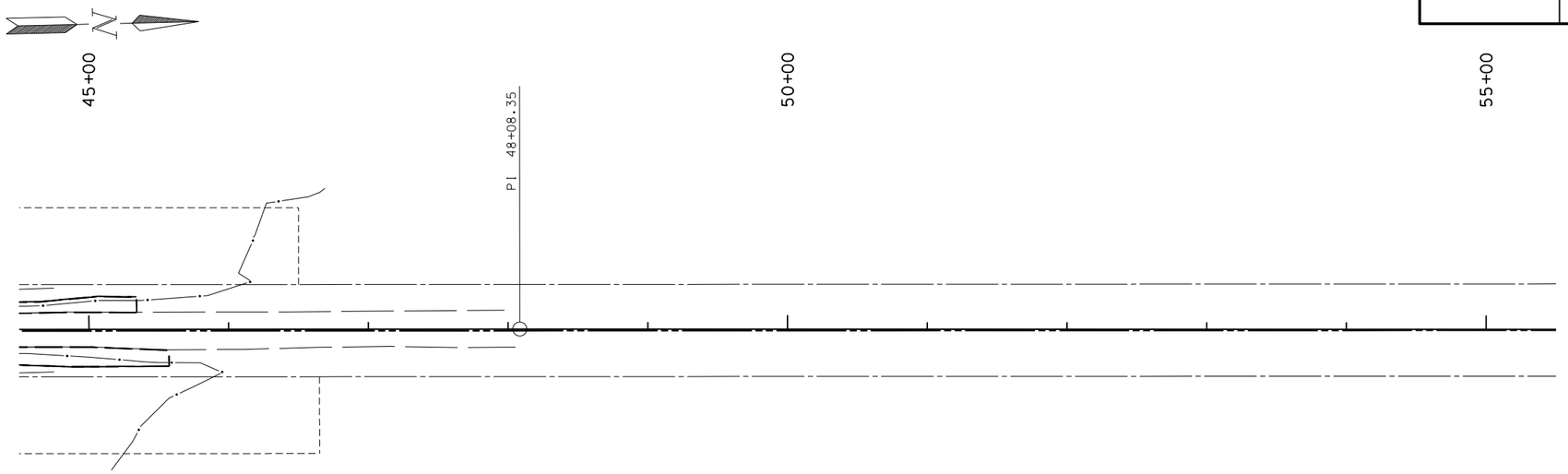


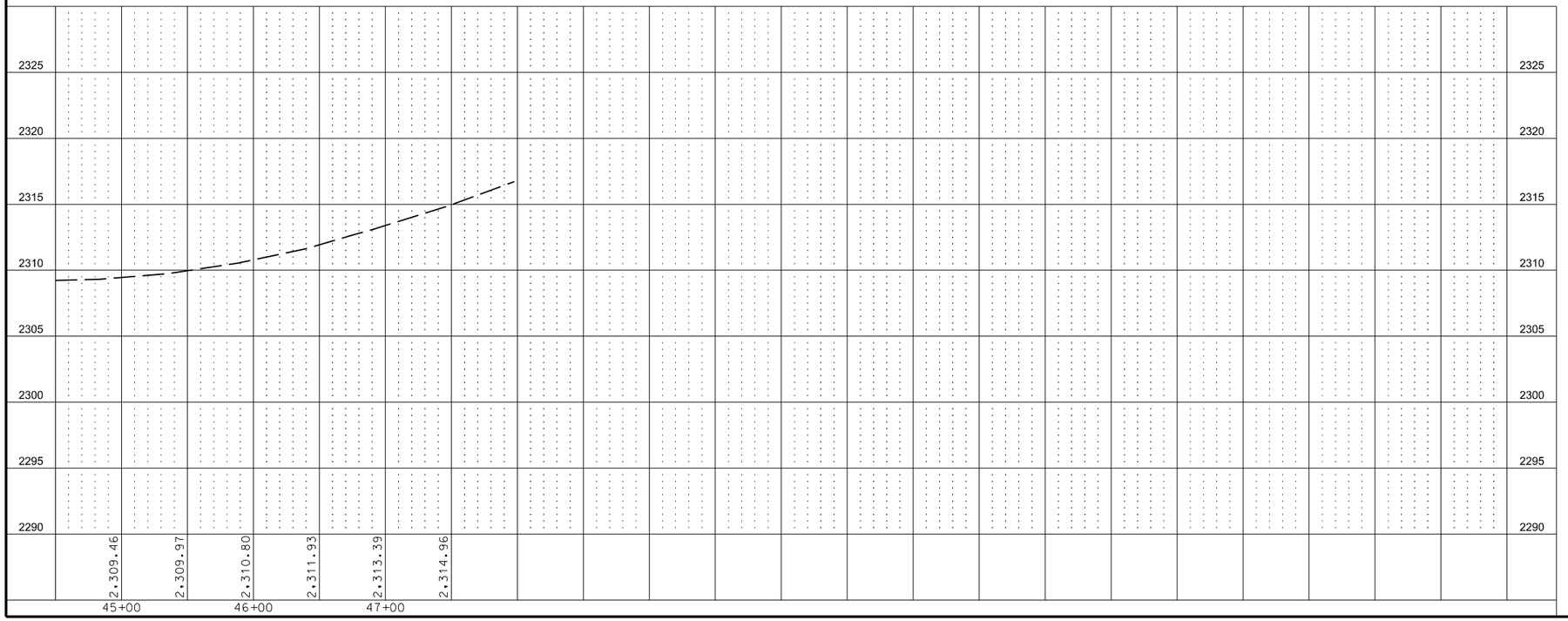
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K6N-2

Mountrail County

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	60	16





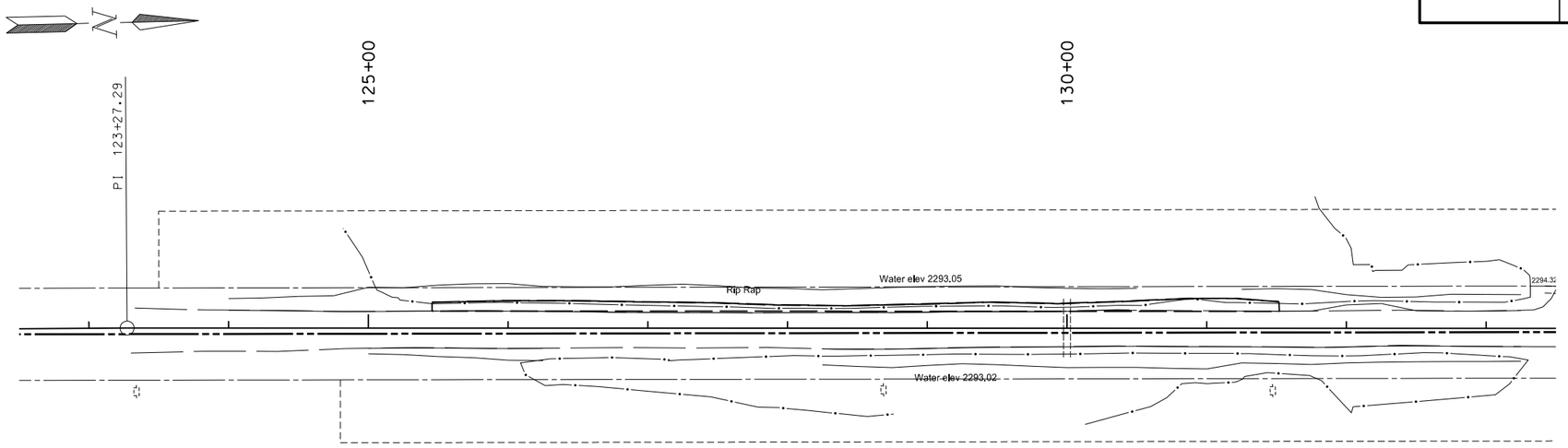
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K6N-2

Mountrail County

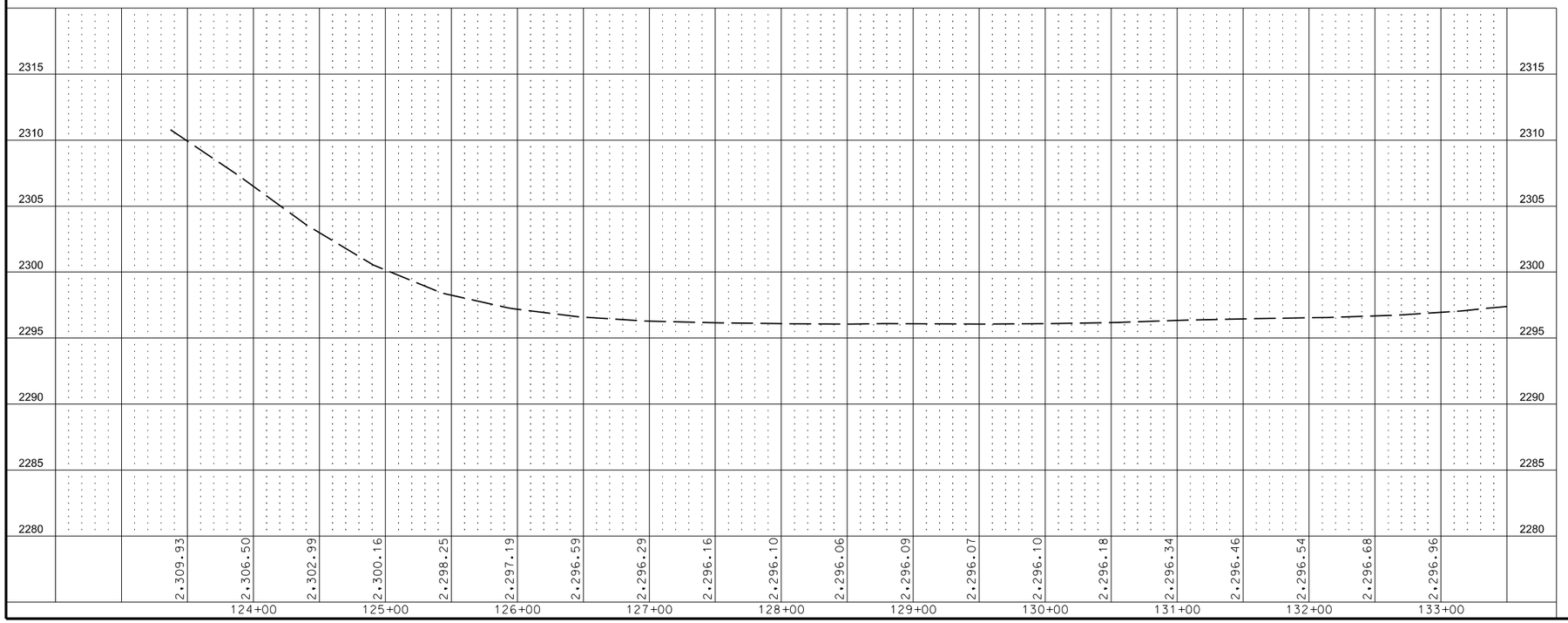
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	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	60	17



REMOVAL OF RIPRAP - LOOSE ROCK — Qty
Sta 125+45 LT to Sta 131+52 LT — 143 CY

Approximate Location - ℄
24" X 42' CMP (good)



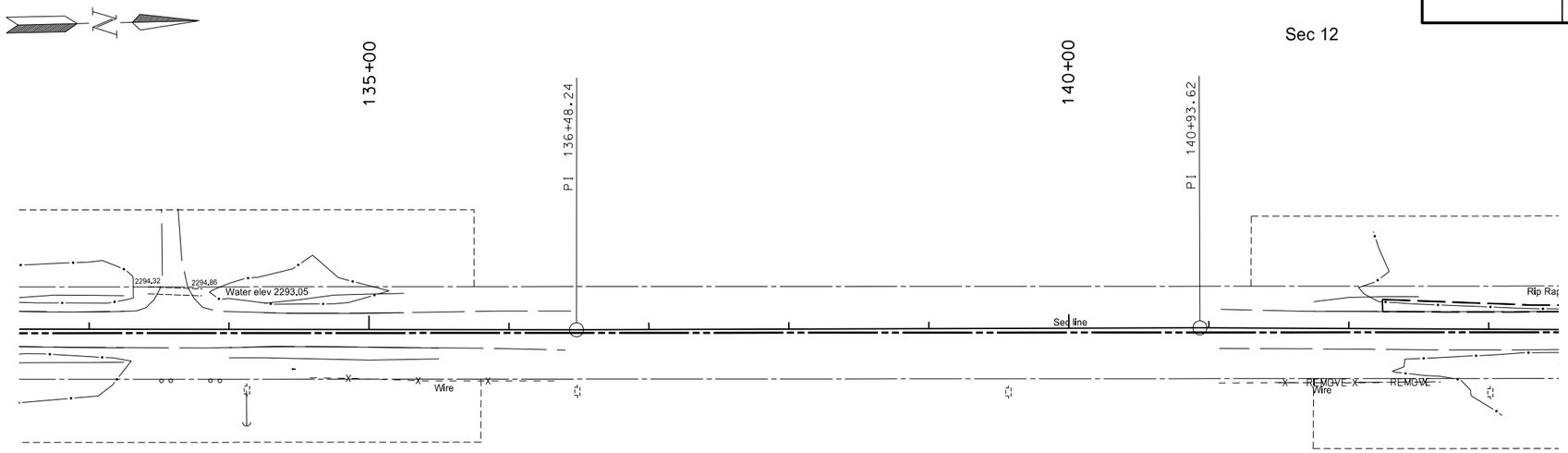
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K6N-3

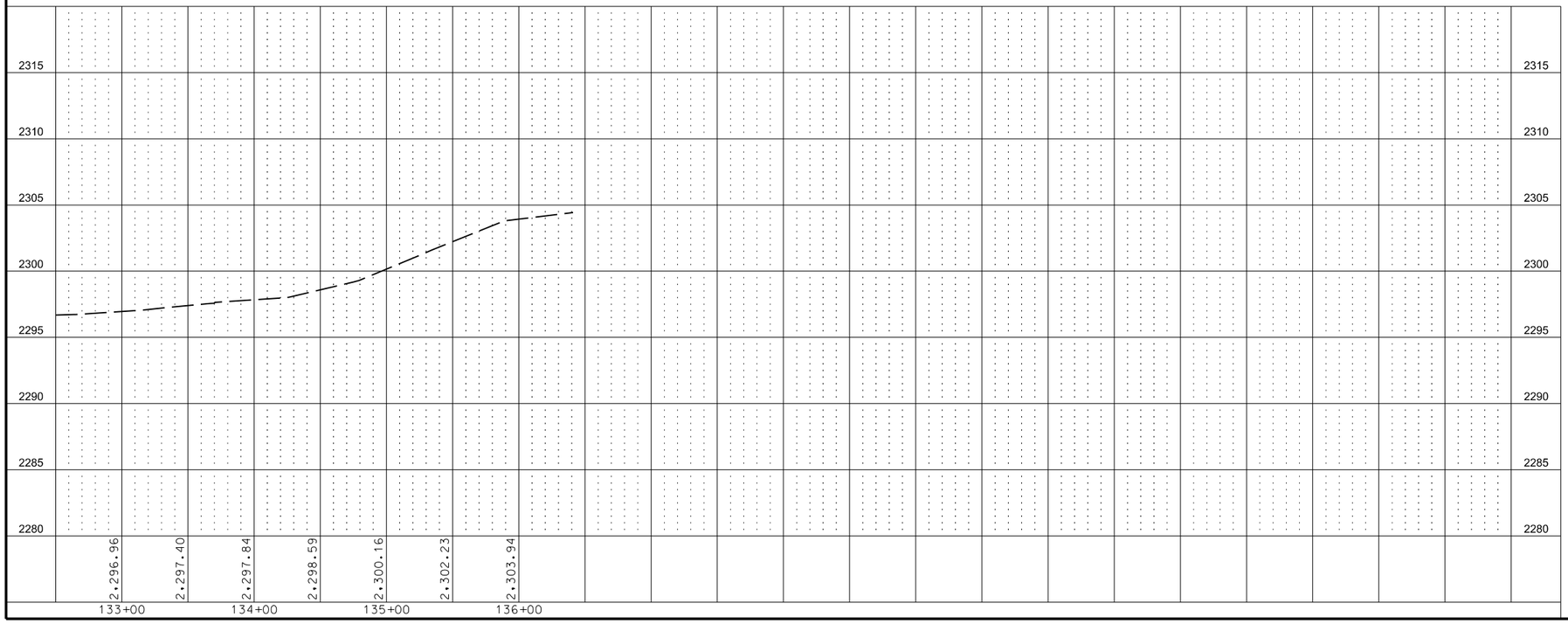
Mountrail County

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	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	60	18



Sec 7



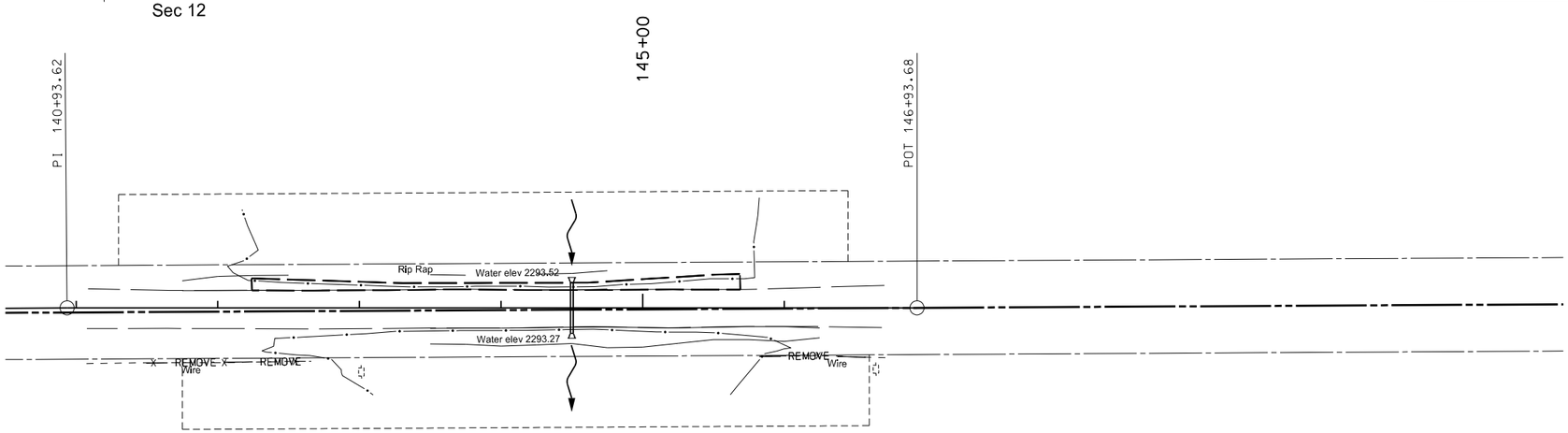
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K6N-3 & K6N-4

Mountrail County

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	60	19

Sec 12

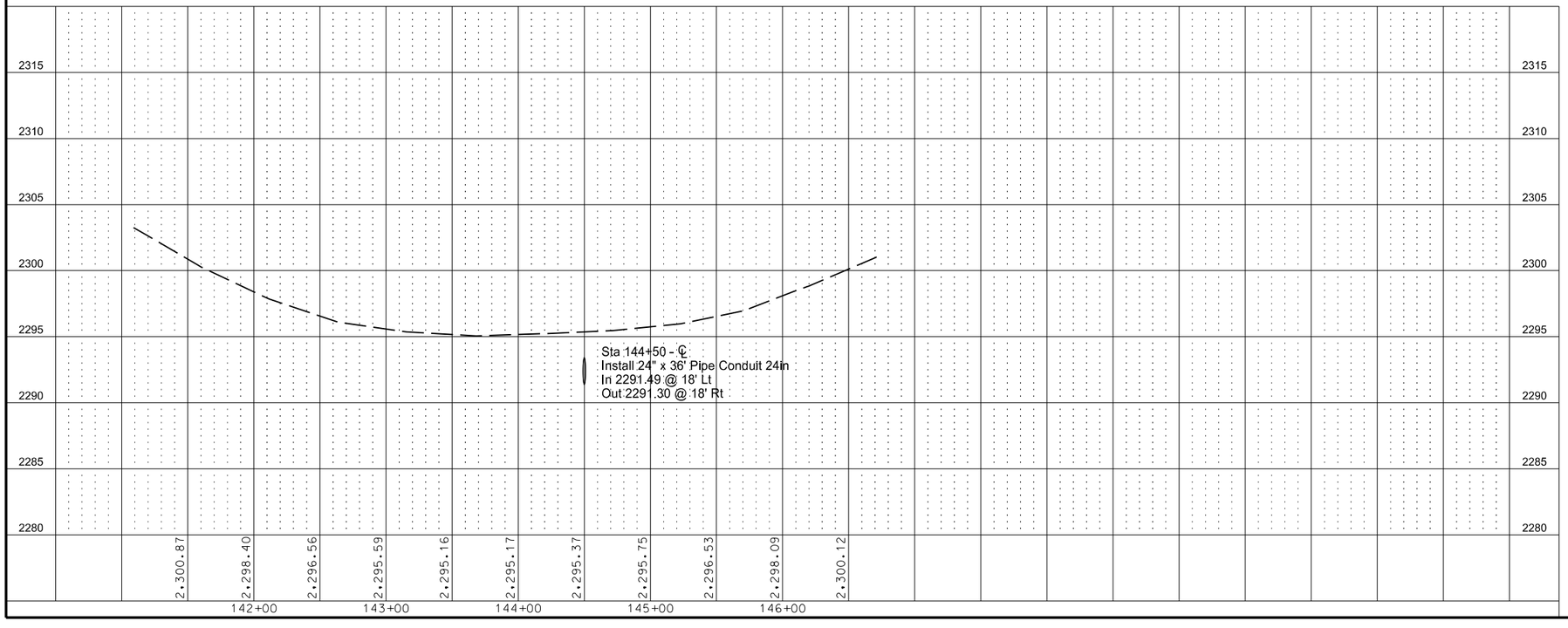


Sec 7

REMOVE EXISTING FENCE	Qty
Sta 141+50 RT to Sta 142+66 RT	116 LF
Sta 145+82 RT to Sta 146+72 RT	90 LF

REMOVAL OF RIPRAP - LOOSE ROCK	Qty
Sta 142+24 LT to Sta 145+69 LT	83 CY

PIPE CONDUIT 24IN	Qty
Sta 144+50	36 LF

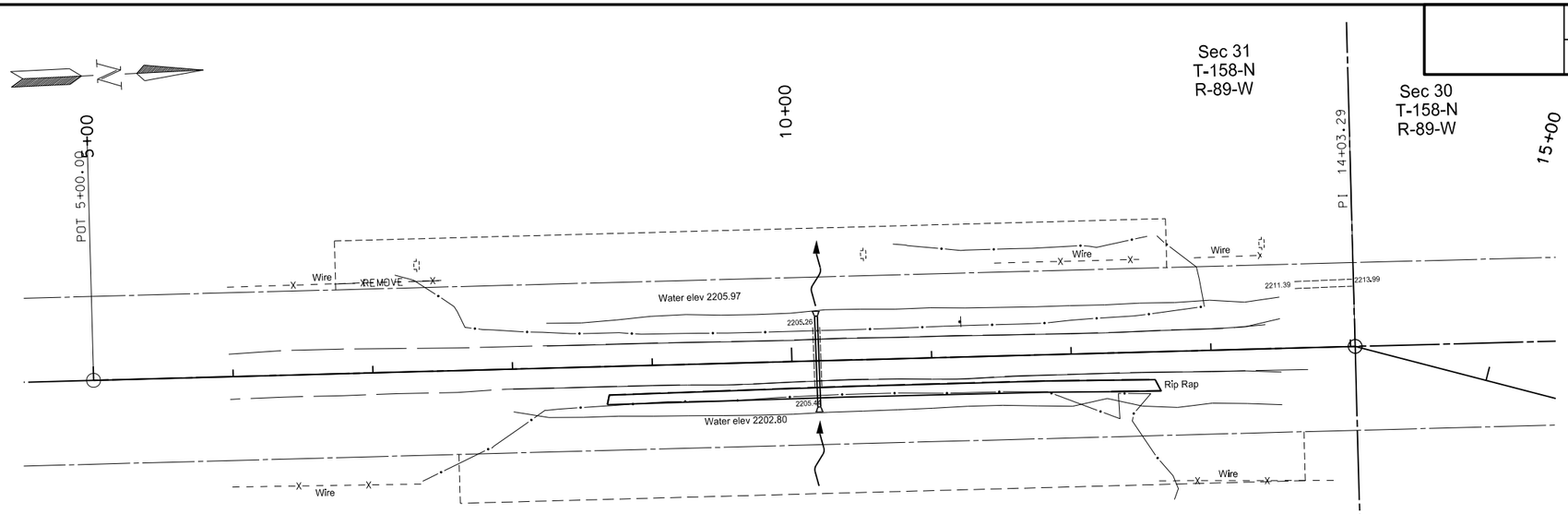


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K6N-4

Mountrail County

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	ROM-0300(135)	60	20

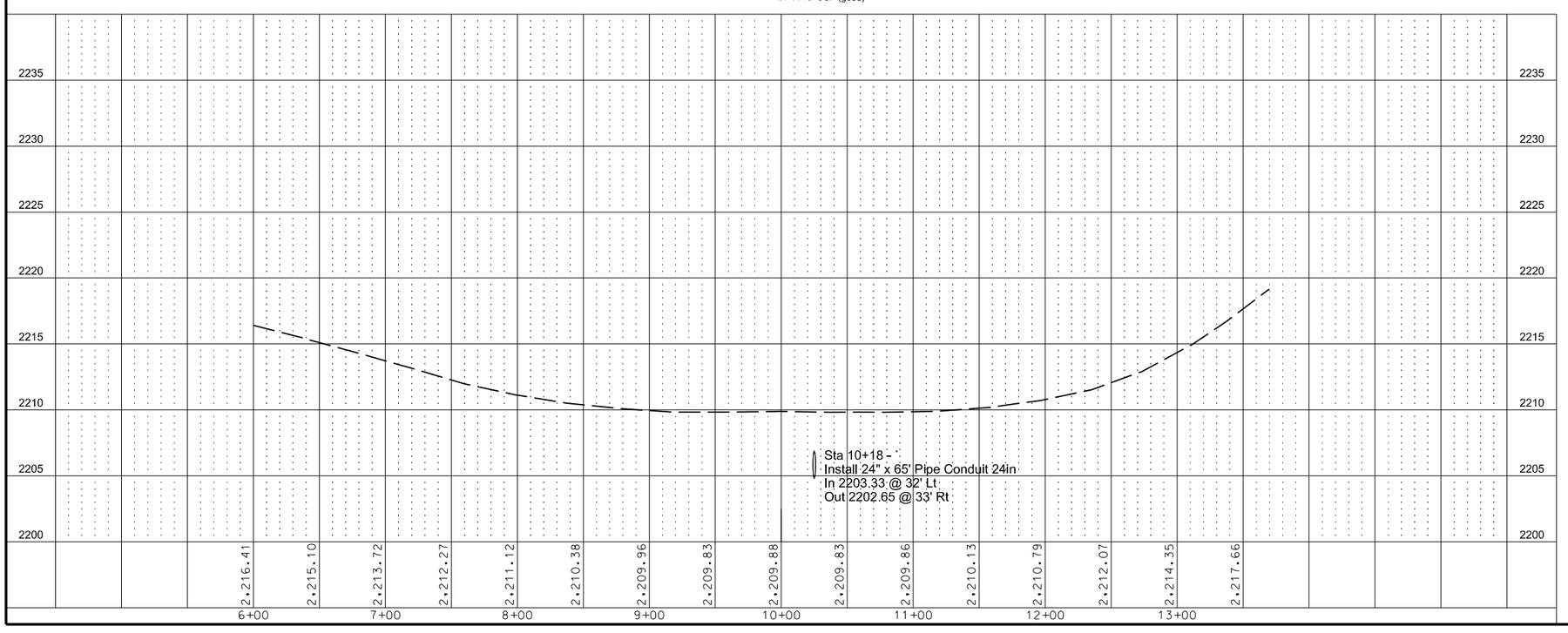


REMOVAL OF PIPE ALL TYPES AND SIZES — Qty
Sta 10+18 — 43 LF

REMOVE EXISTING FENCE — Qty
Sta 6+74 LT to Sta 7+51 LT — 77 LF
Sta 11+46 LT to Sta 12+51 LT — 105 LF

REMOVAL OF RIPRAP - LOOSE ROCK — Qty
Sta 8+69 RT to 12+60 RT — 110 CY

PIPE CONDUIT 24IN — Qty
Sta 10+18 — 65 LF

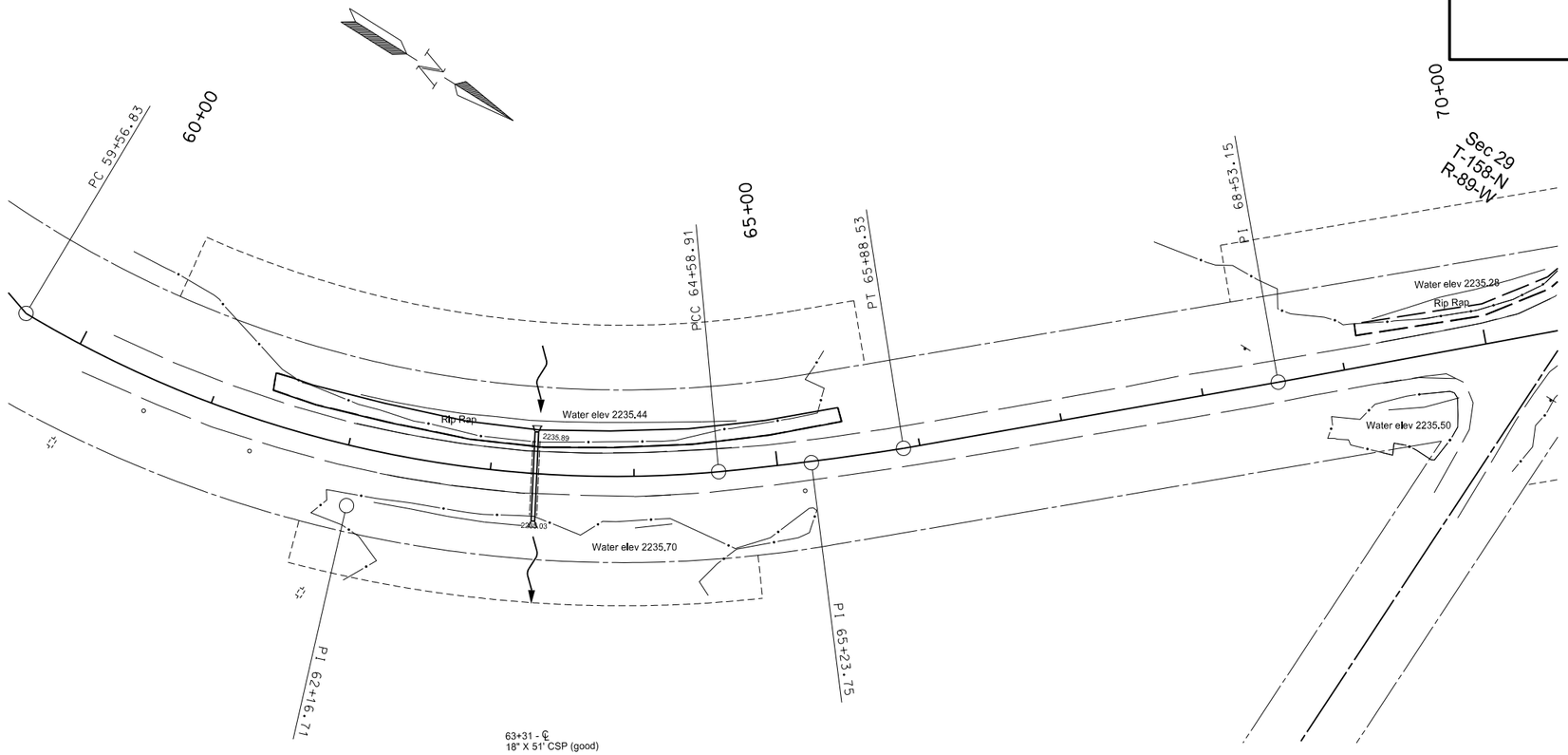


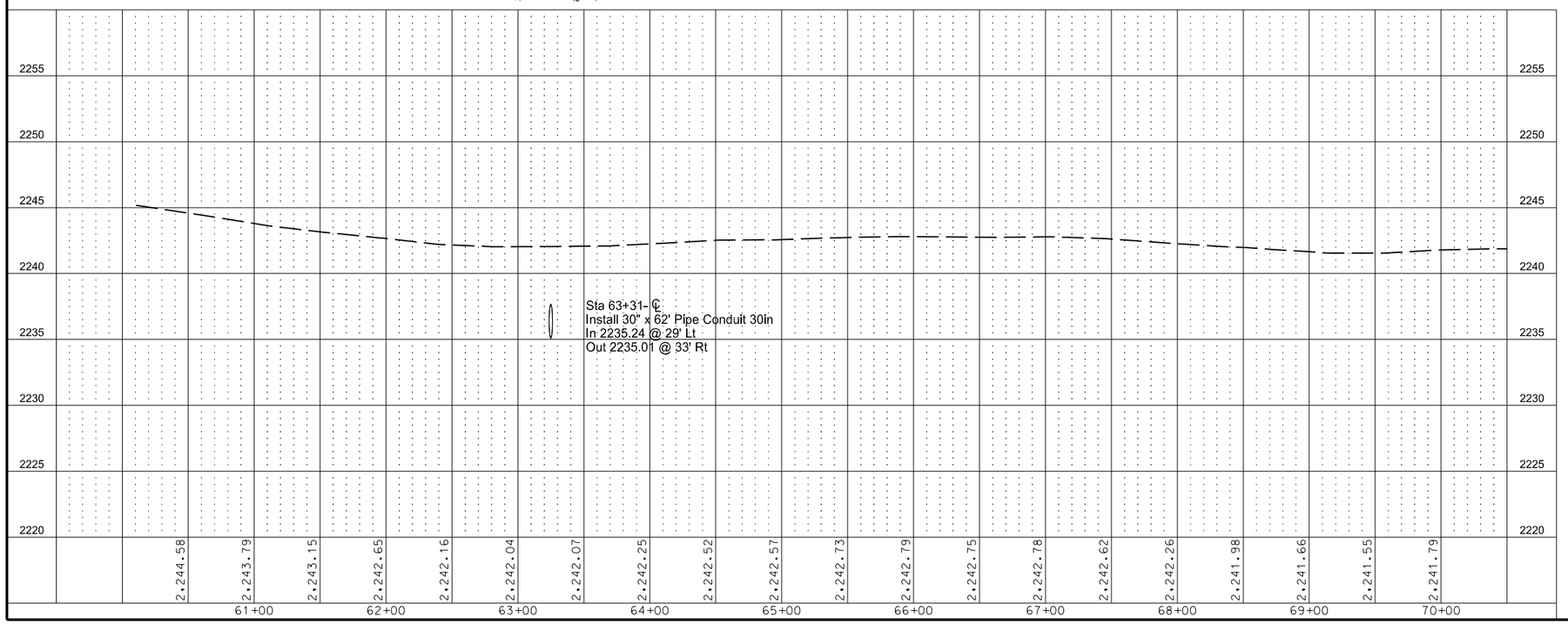
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K7-1

Mountrail County

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	60	21





REMOVAL OF PIPE ALL TYPES AND SIZES — Qty
Sta 63+31 — 51 LF

REMOVAL OF RIPRAP - LOOSE ROCK — Qty
Sta 61+38 LT to Sta 65+48 LT — 172 CY

PIPE CONDUIT 30IN — Qty
Sta 63+31 — 62 LF

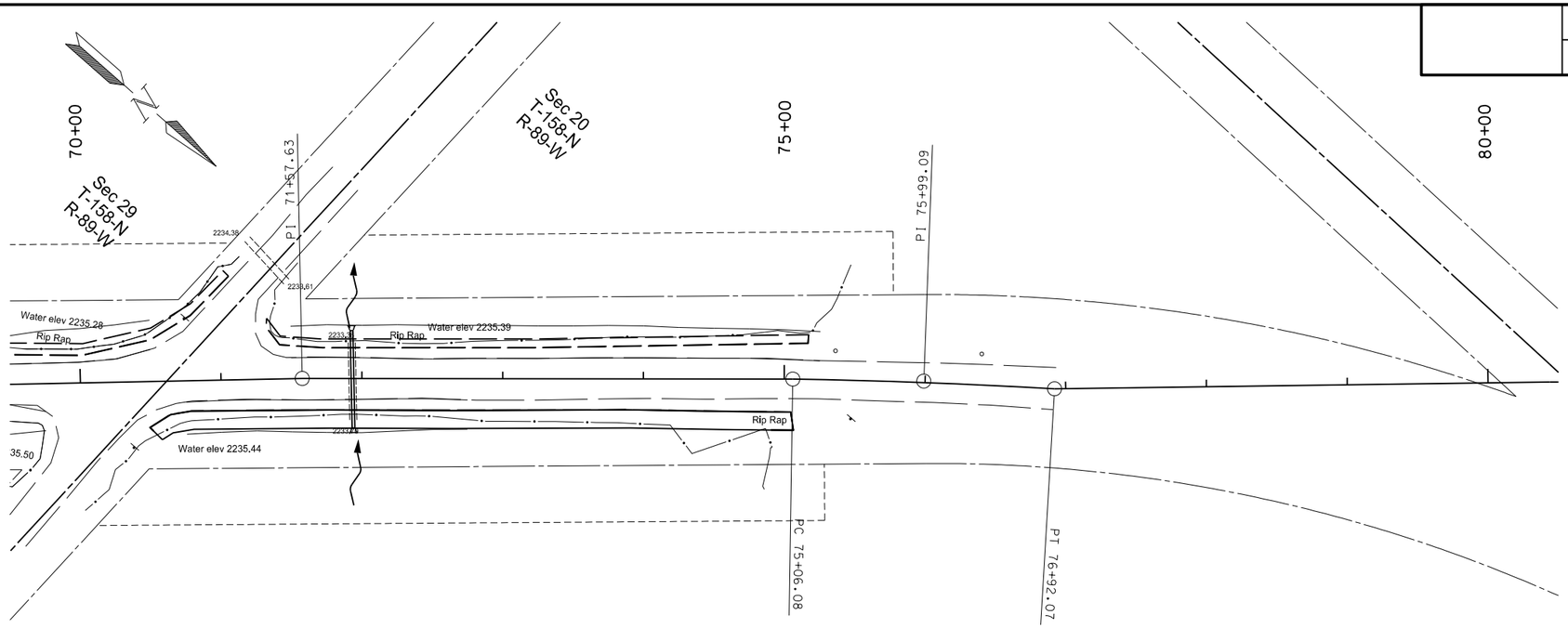
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K7-2 & K7-3

Mountrail County

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	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	60	22



REMOVAL OF PIPE ALL TYPES AND SIZES

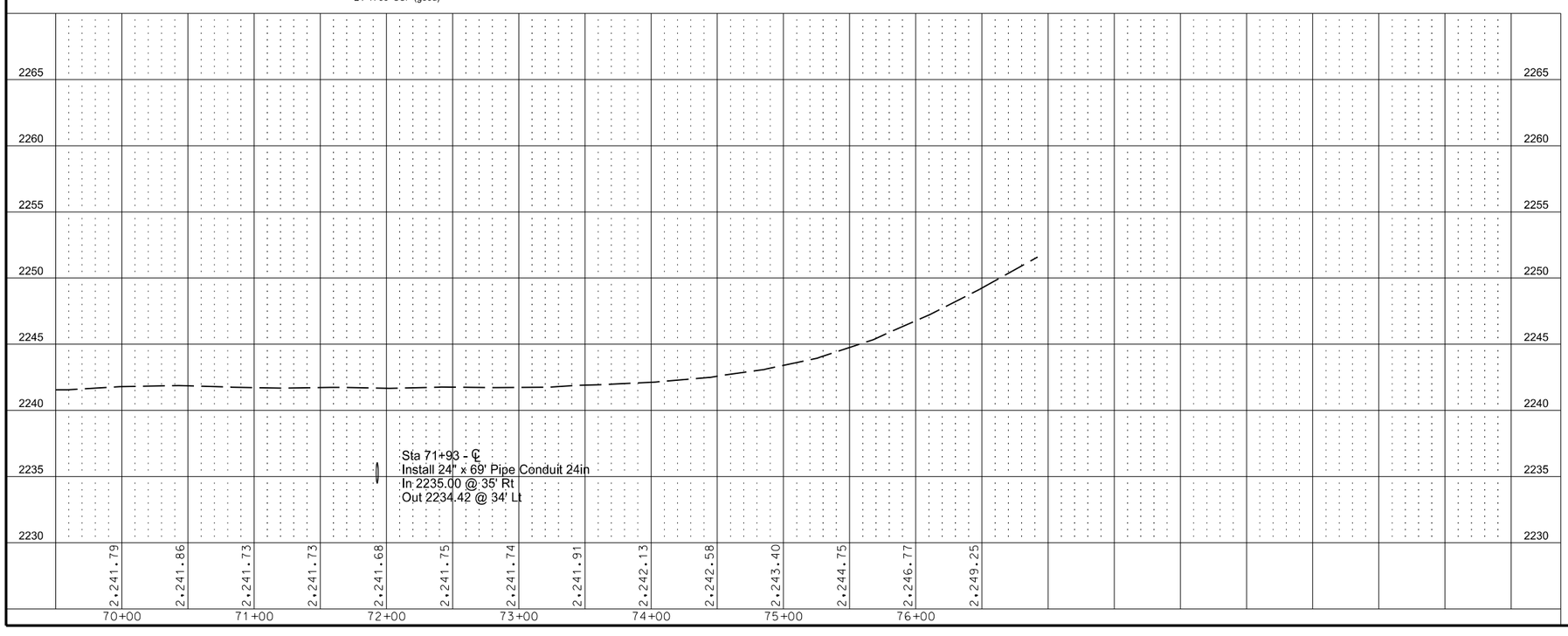
	Qty
Sta 71+93	55 LF

REMOVAL OF RIPRAP - LOOSE ROCK

	Qty
Sta 70+49 to Sta 75+05	217 CY
Sta 69+12 to Sta 71+07	89 CY
Sta 71+33 to Sta 75+16	59 CY

PIPE CONDUIT 24IN

	Qty
Sta 71+93	69 LF



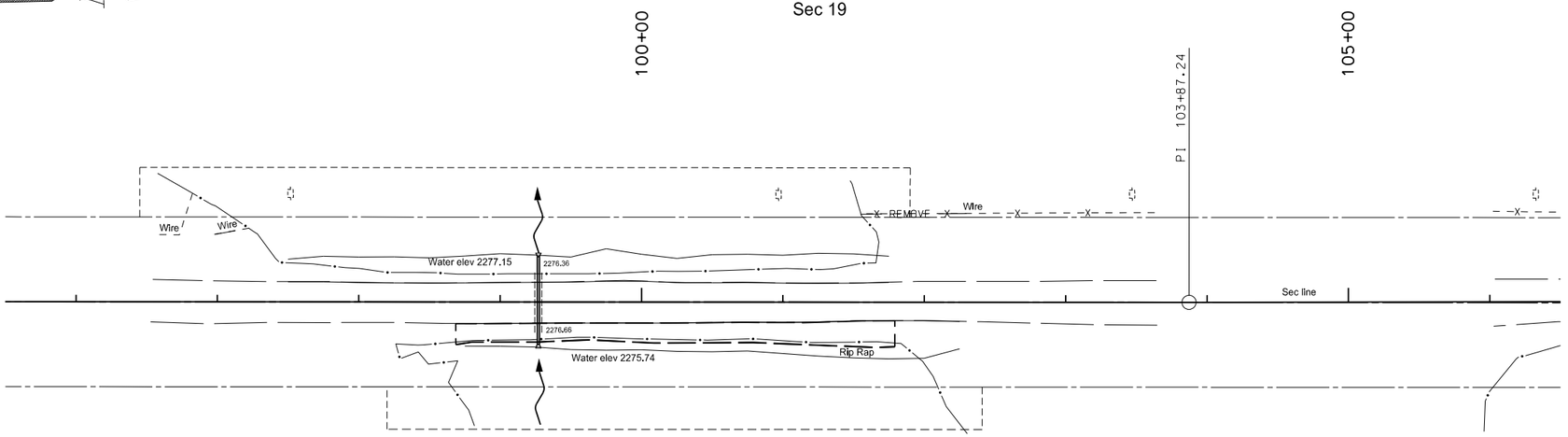
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K7-3

Mountrail County

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	60	23

Sec 19



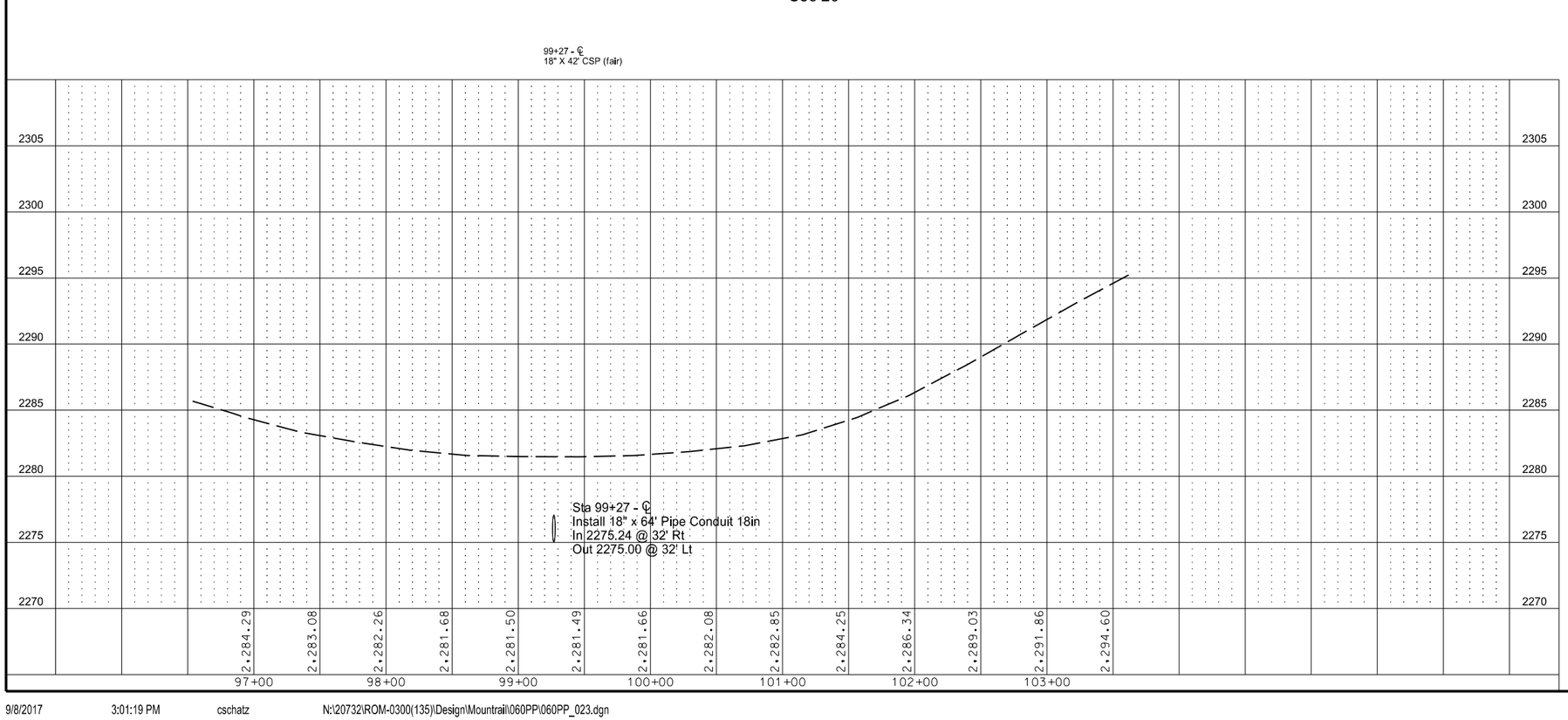
REMOVAL OF PIPE ALL TYPES AND SIZES — Qty
Sta 99+27 — 42 LF

REMOVE EXISTING FENCE — Qty
Sta 96+98 LT to 97+22 LT — 24 LF
Sta 101+55 LT to 102+59 LT — 104 LF

REMOVAL OF RIPRAP - LOOSE ROCK — Qty
Sta 98+69 RT to Sta 101+79 RT — 167 CY

PIPE CONDUIT 18IN — Qty
Sta 99+27 — 64 LF

Sec 20

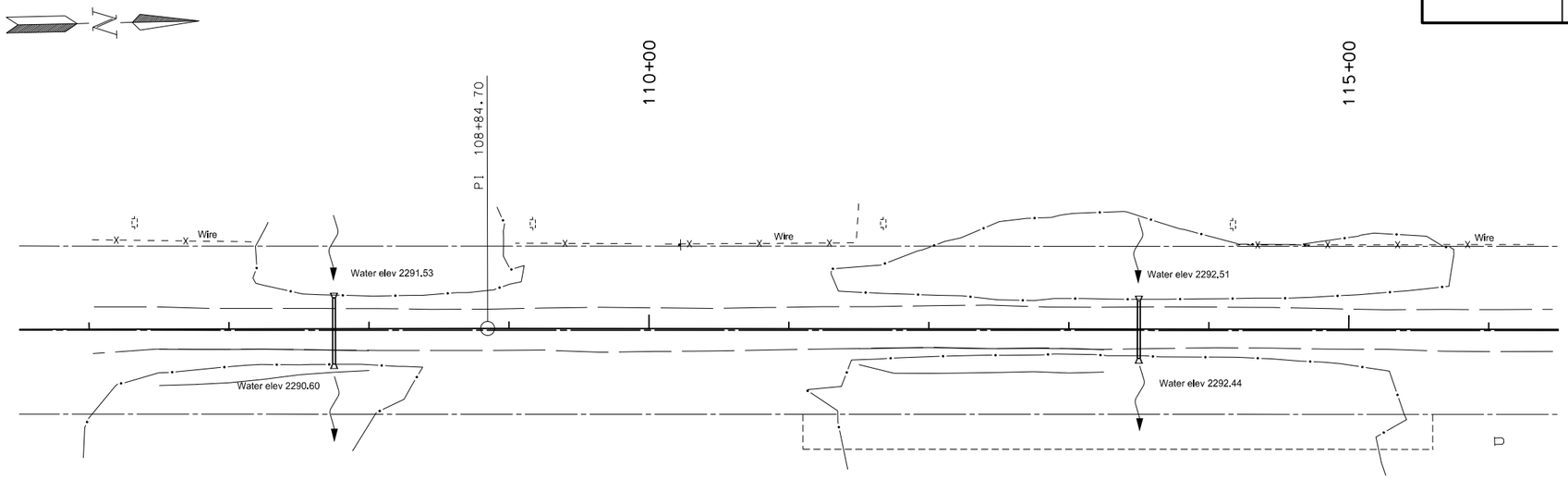


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K7-4

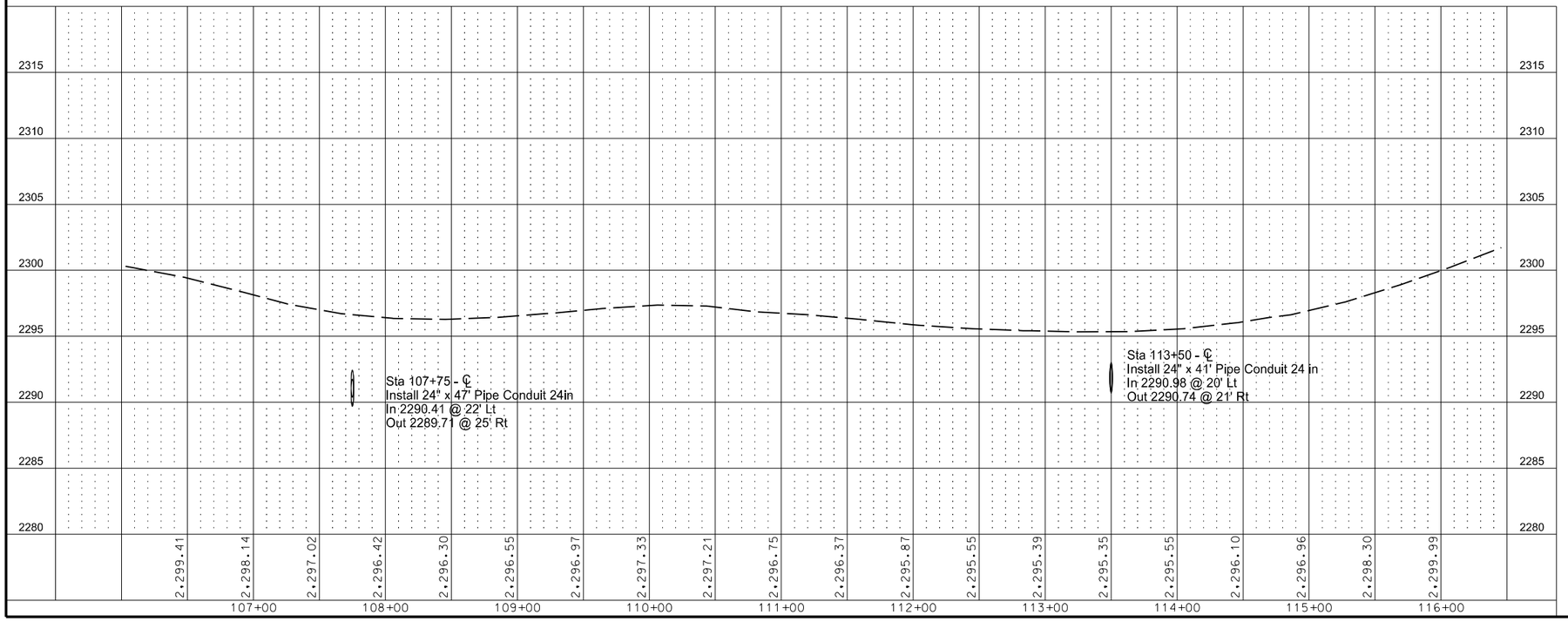
Mountrail County

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	60	24



PIPE CONDUIT 24IN

	Qty
Sta 107+75	47 LF
Sta 113+50	41 LF

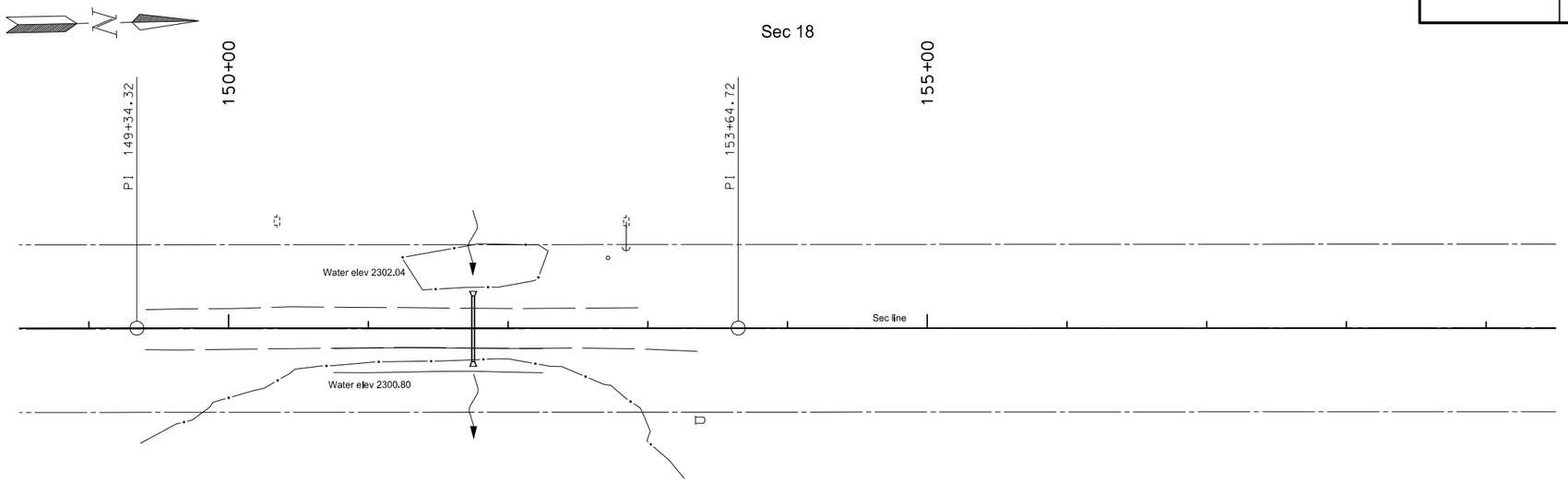


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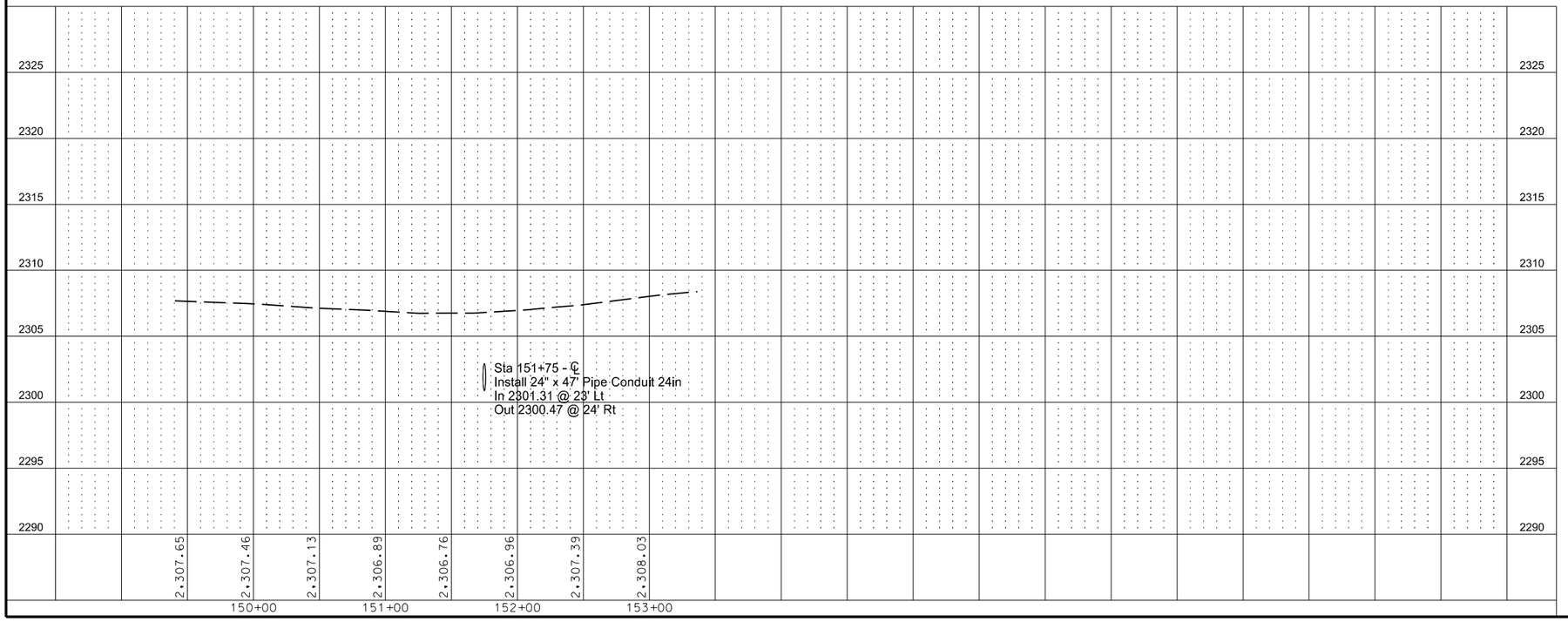
K7-5 & K7-6

Mountrail County

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	60	25



Sec 17



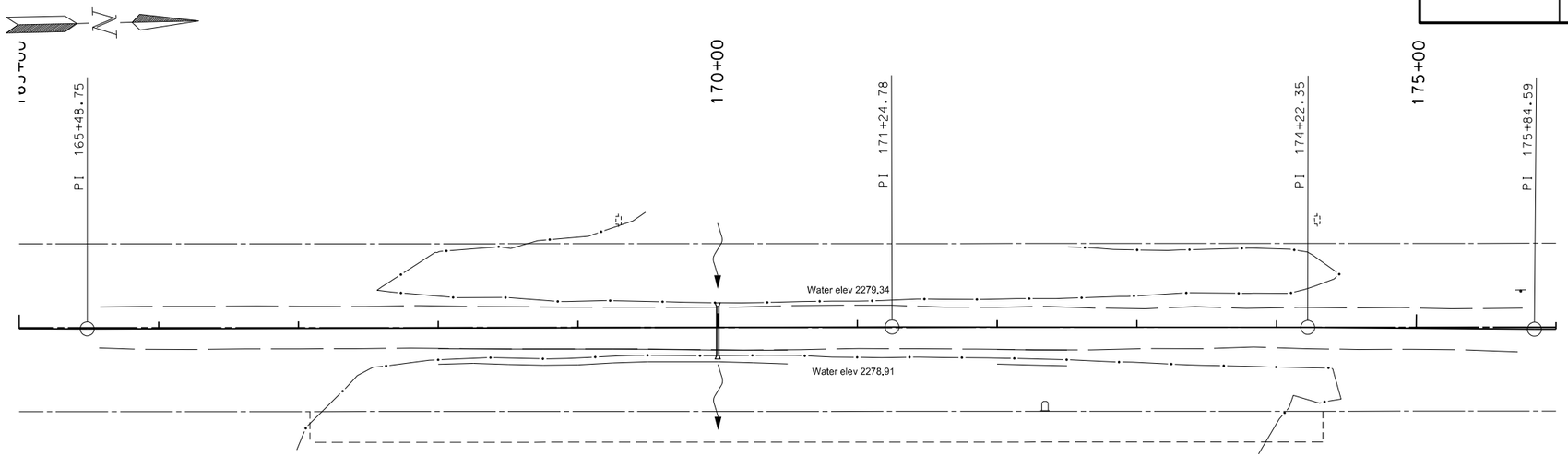
PIPE CONDUIT 24IN — Qty
Sta 151+75 — 47 LF

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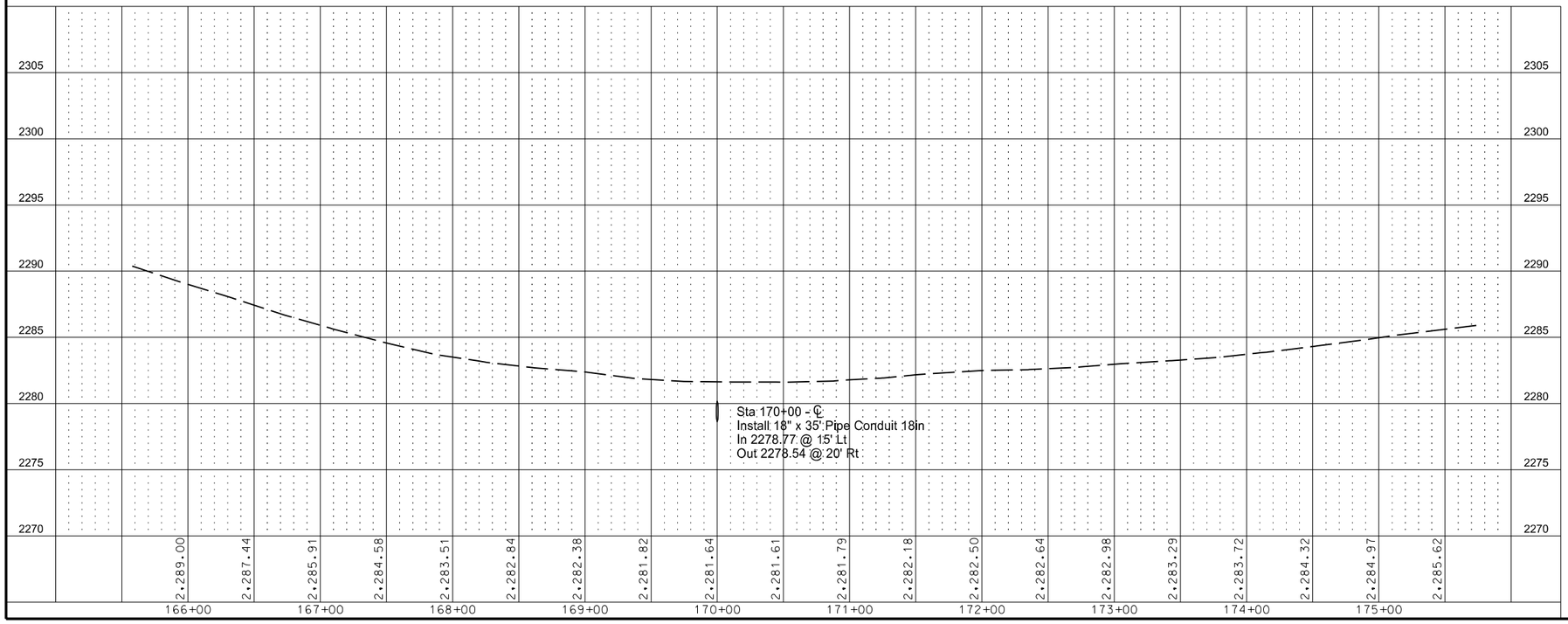
K7-7

Mountrail County

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	60	26



PIPE CONDUIT 18IN — Qty
Sta 170+00 — 35 LF



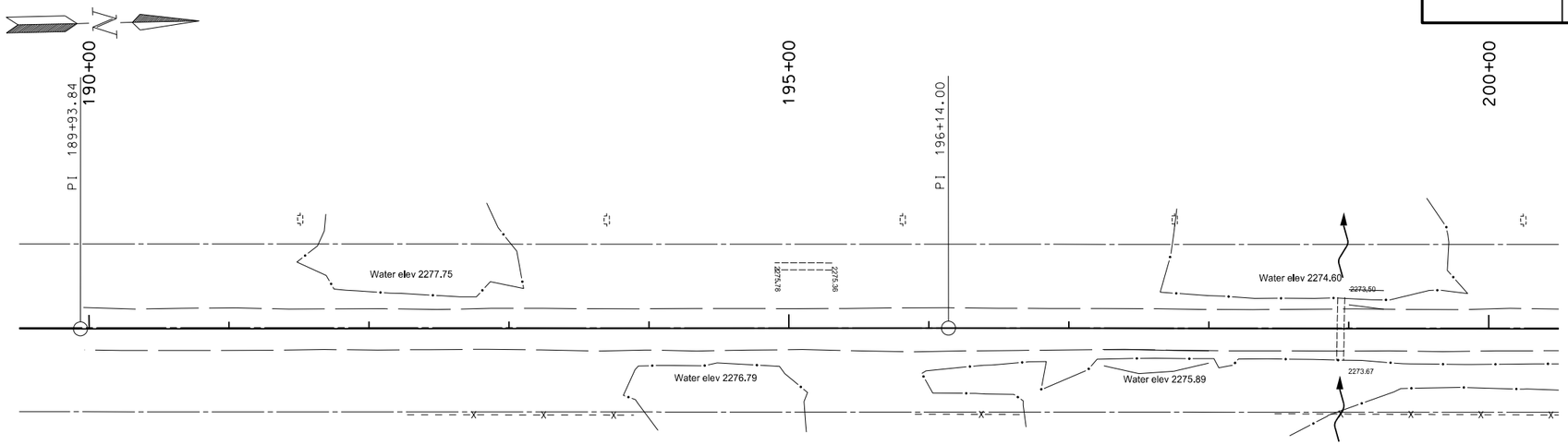
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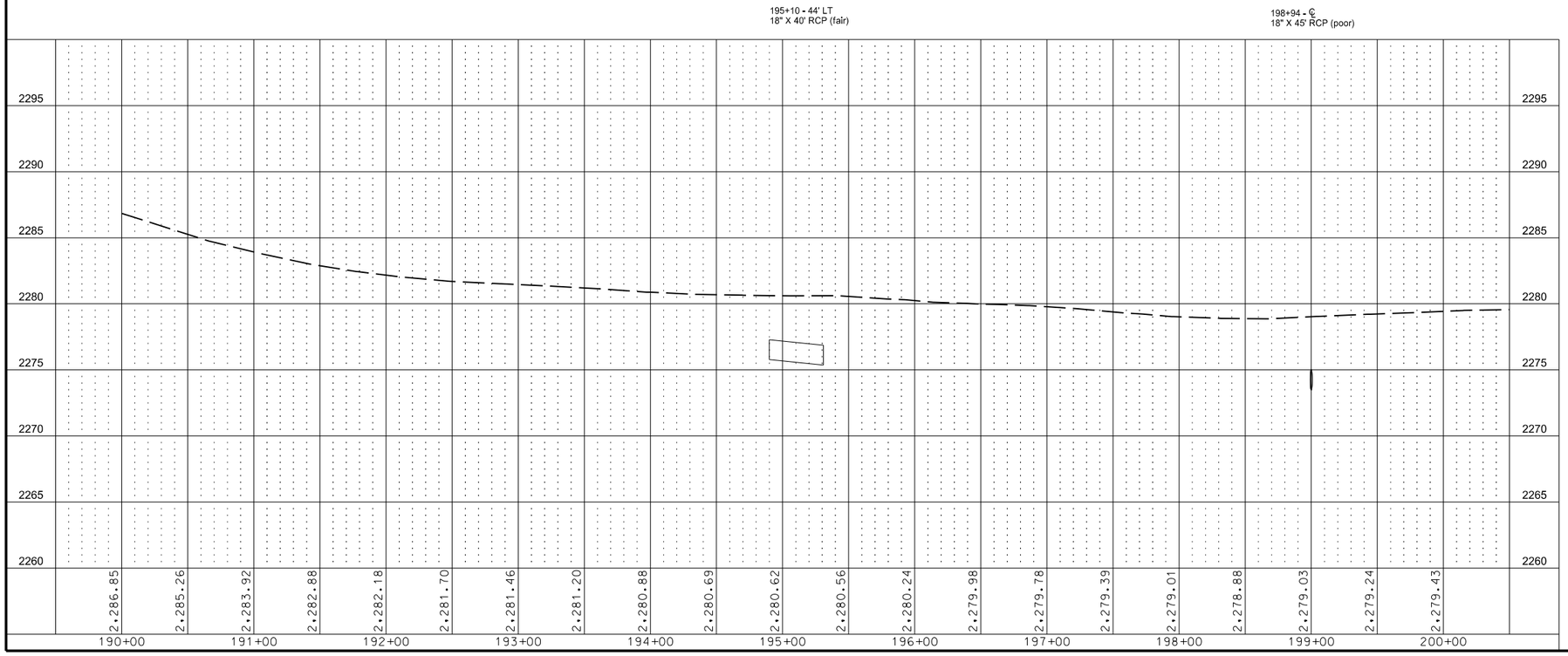
K7-8

Mountrail County

9/8/2017 3:01:22 PM cschatz N:\20732\ROM-0300(135)\Design\Mountrail\060PP\060PP_026.dgn

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	60	27



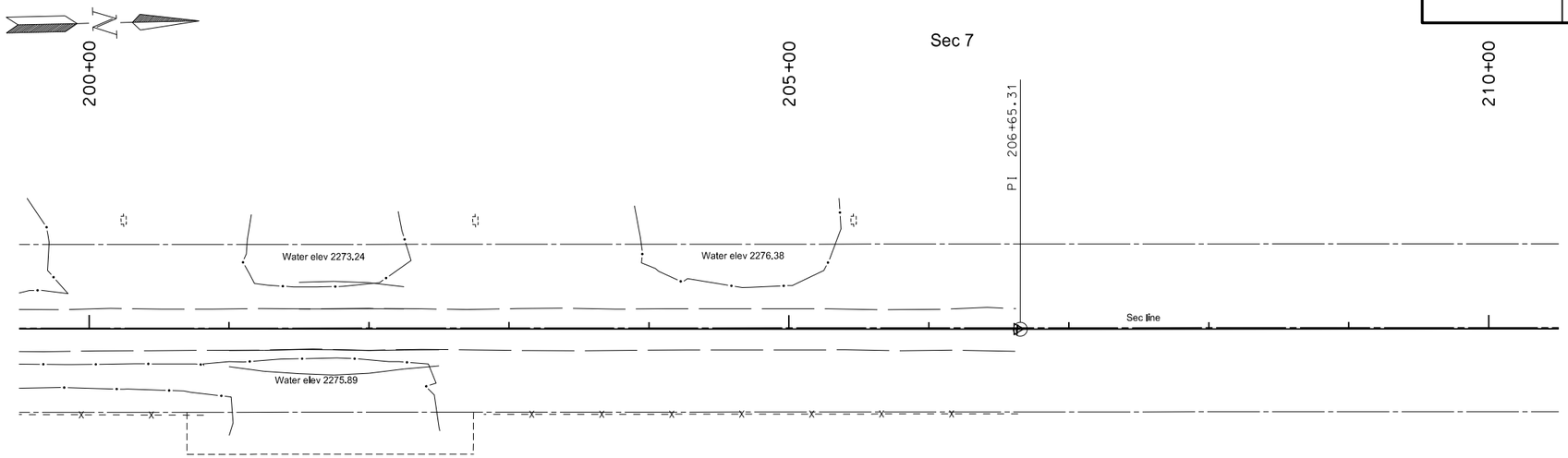


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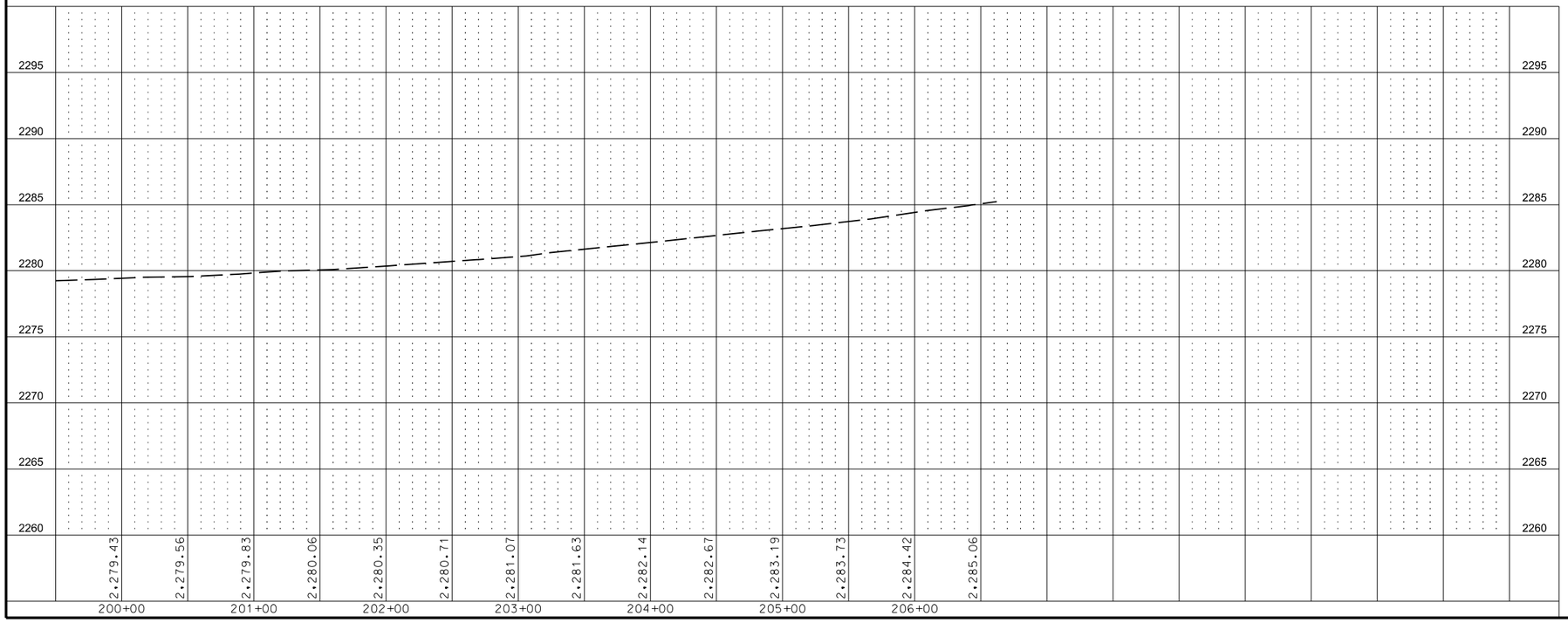
K7-9

Mountrail County

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	60	28



Sec 8

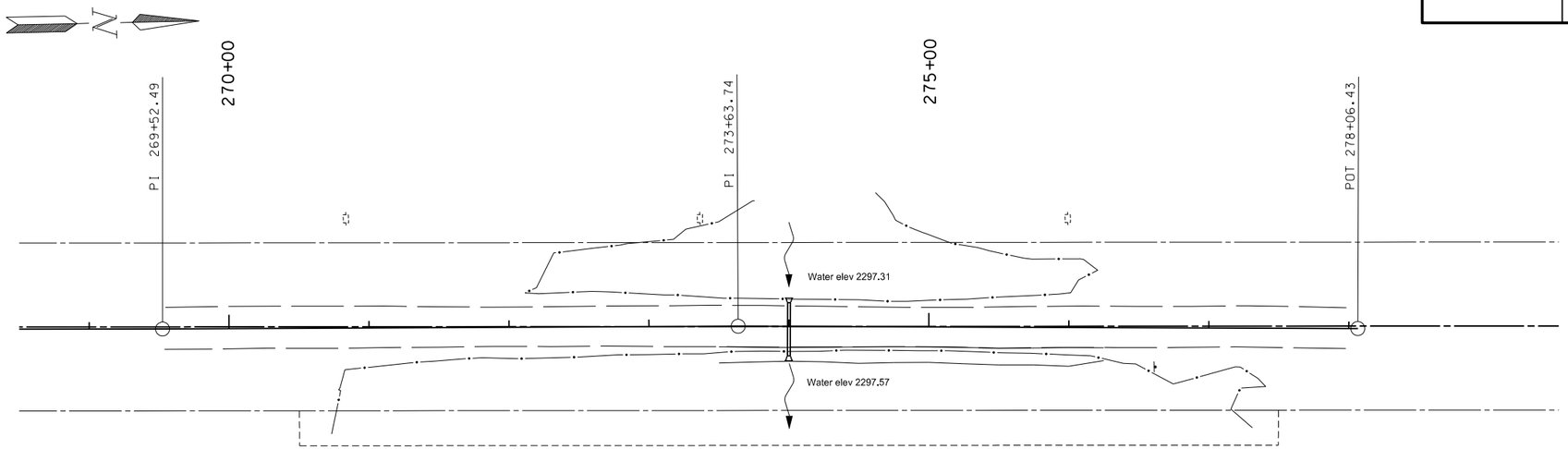


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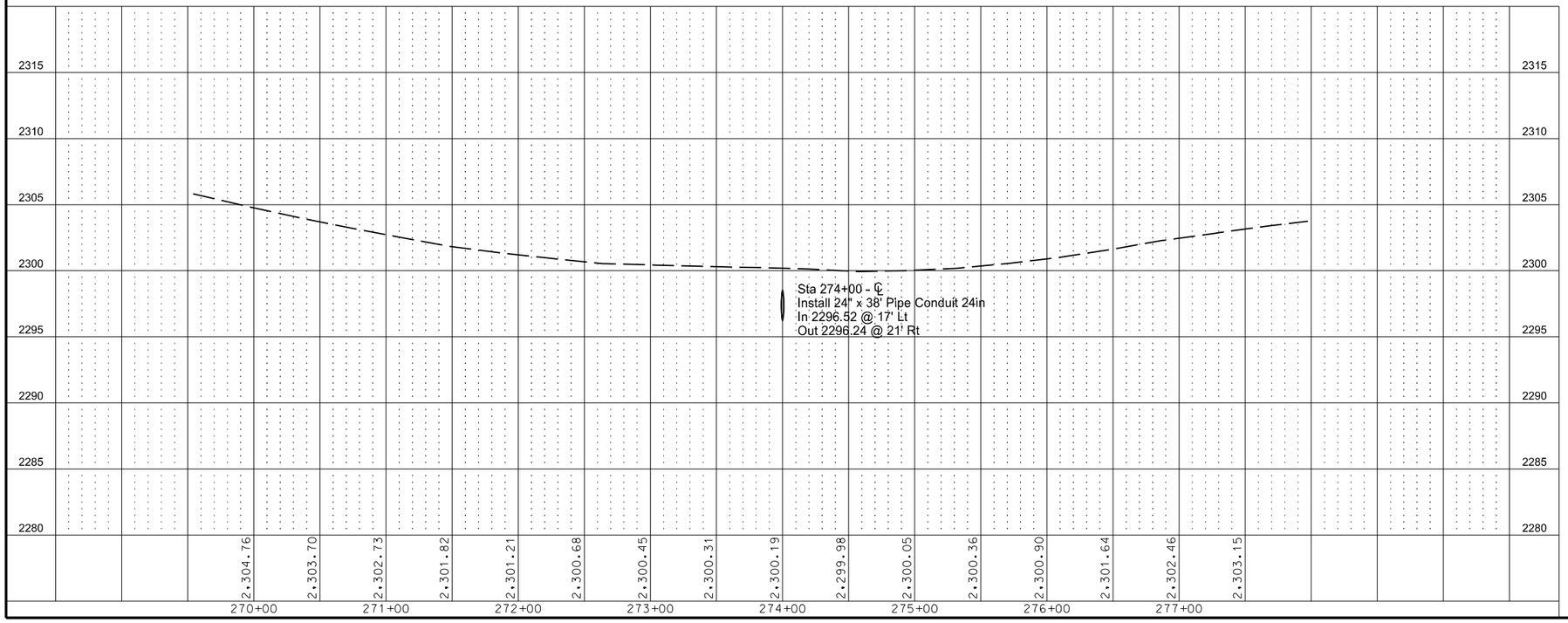
K7-9

Mountrail County

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	60	29



PIPE CONDUIT 24IN — Qty
Sta 274+00 — 38 LF



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K7-10

Mountrail County

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	ROM-0300(135)	75	1

POT 5+00.00

5+00

Sec 5
T-156-N
R-88-W

Wetland 33a Impacts
Temporary: 0.42 Acres
Permanent: 0.08 Acres
Mitigation: 0.00 Acres

Grading Tie

10+00

15+00

33a

Sec line

SRT COMM

33b

Sec 4
T-156-N
R-88-W

Wetland 33b Impacts
Temporary: 0.00 Acres
Permanent: 0.00 Acres
Mitigation: 0.00 Acres

Fiber optice line graphics drawn by location map
provided by SRT Communications

65+00

PC 64+80.11

Curve J10-1
PI = 65+56.17
Delta = 2° 40' 00" (LT)
Da = 1° 45' 12"
R = 3,267.82
T = 76.06
L = 152.09

PT 66+32.20

70+00

PI 70+64.30

Wetland 32a Impacts
Temporary: 0.69 Acres
Permanent: 0.00 Acres
Mitigation: 0.00 Acres

Grading Tie

75+00

PI 74+05.55

PI 74+91.16

32a

32a

SRT COMM

32b

32b

32c

32c

PI 65+56.17

Wetland 32c Impacts
Temporary: 0.09 Acres
Permanent: 0.00 Acres
Mitigation: 0.00 Acres

Grading Tie

Grading Tie

Wetland 32b Impacts
Temporary: 0.05 Acres
Permanent: 0.00 Acres
Mitigation: 0.00 Acres

Sec 35
T-157-N
R-88-W

Fiber optice line graphics drawn by location map
provided by SRT Communications

Temporary Wetland Impact

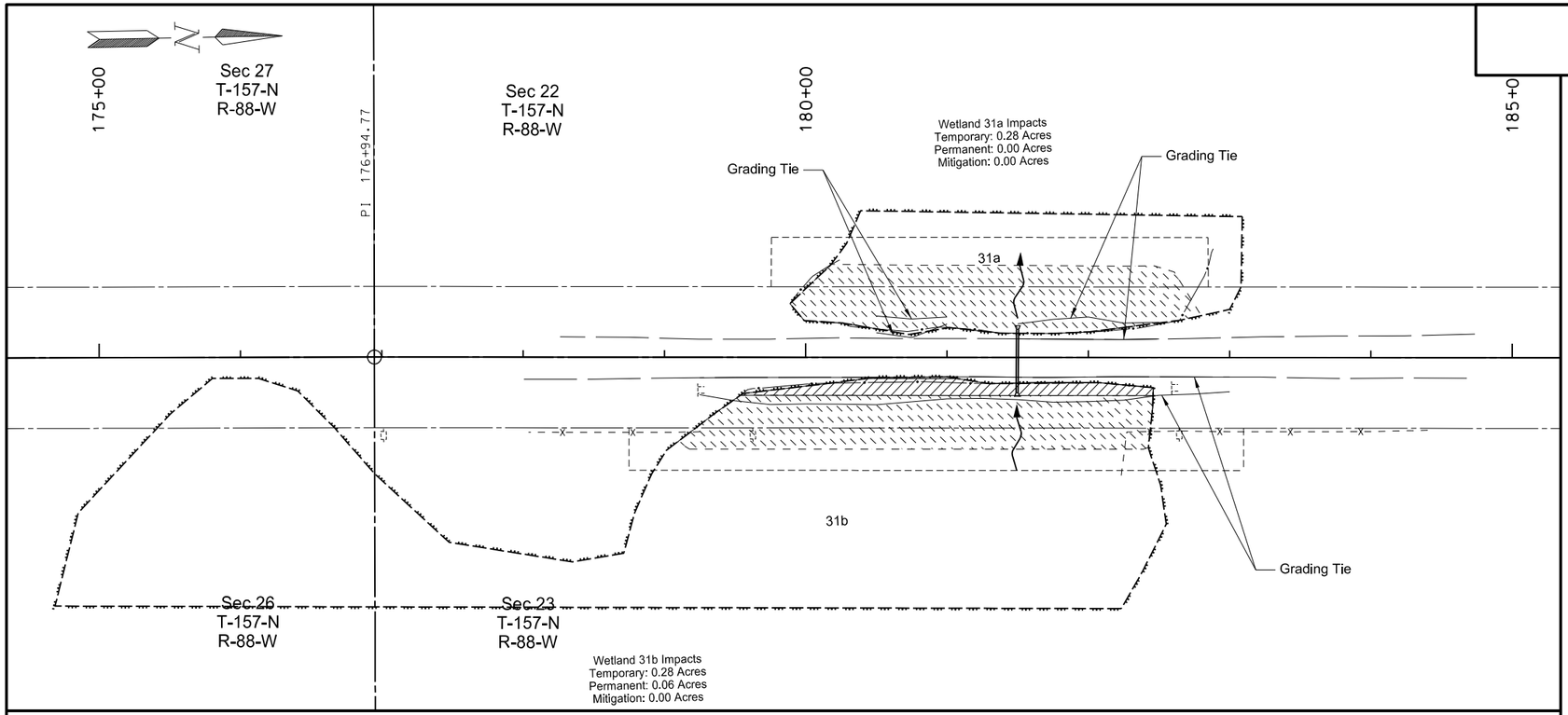
Permanent Wetland Impact

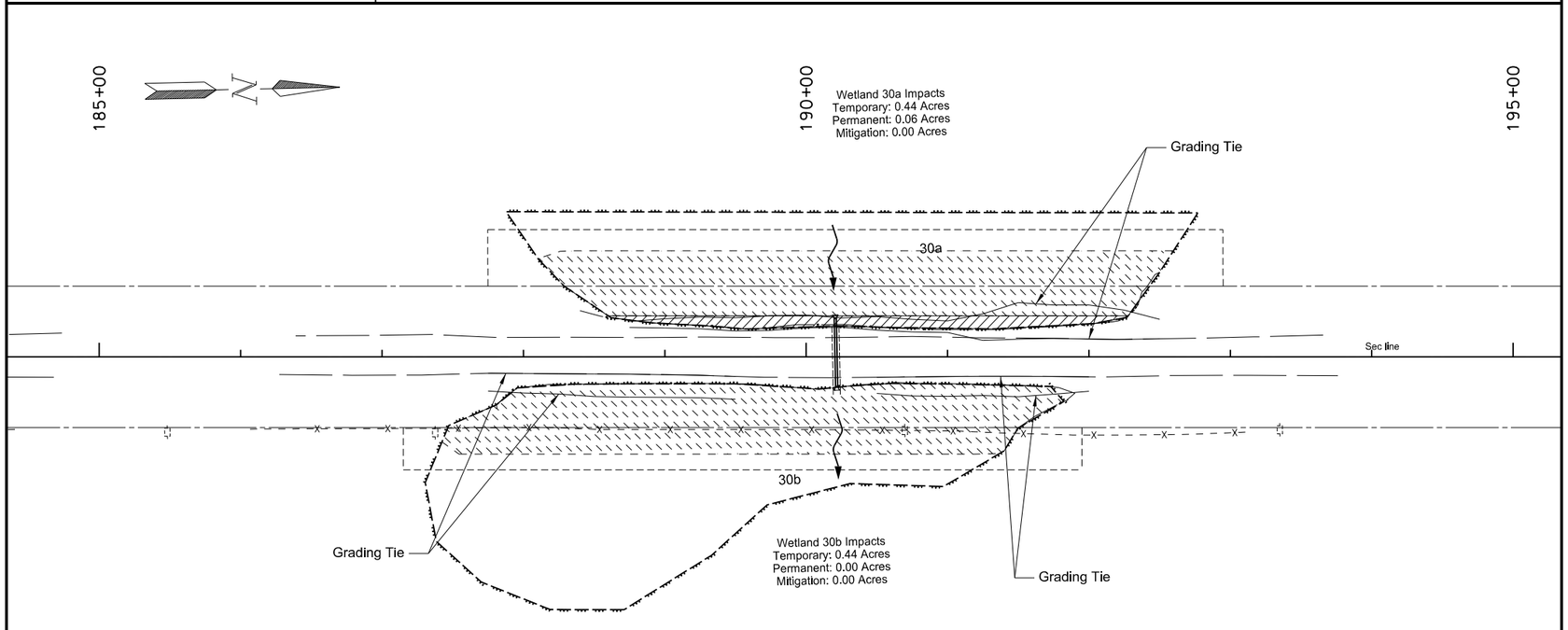
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J10-1 & J10-2

Wetland Impacts

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	ROM-0300(135)	75	2





Temporary Wetland Impact

Permanent Wetland Impact

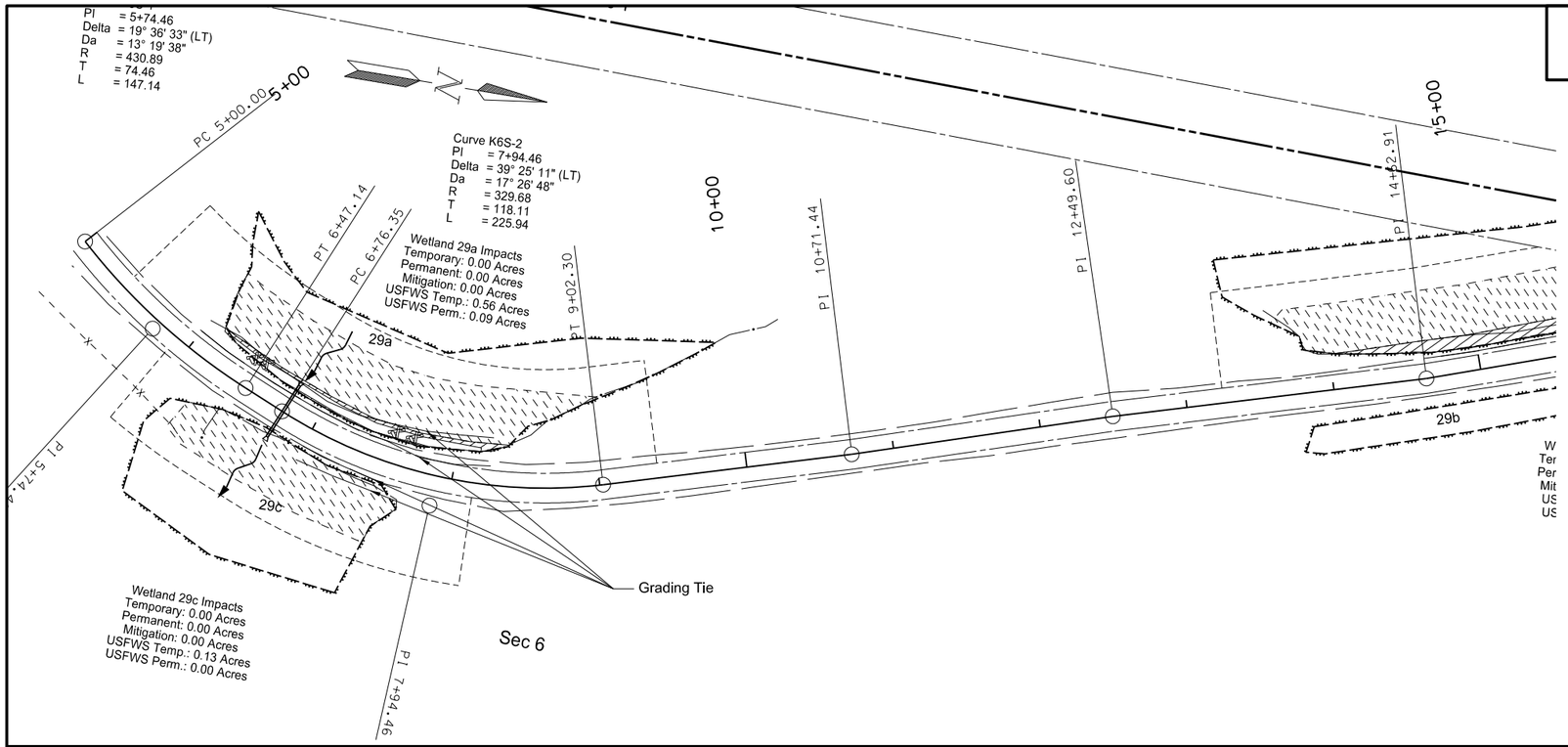
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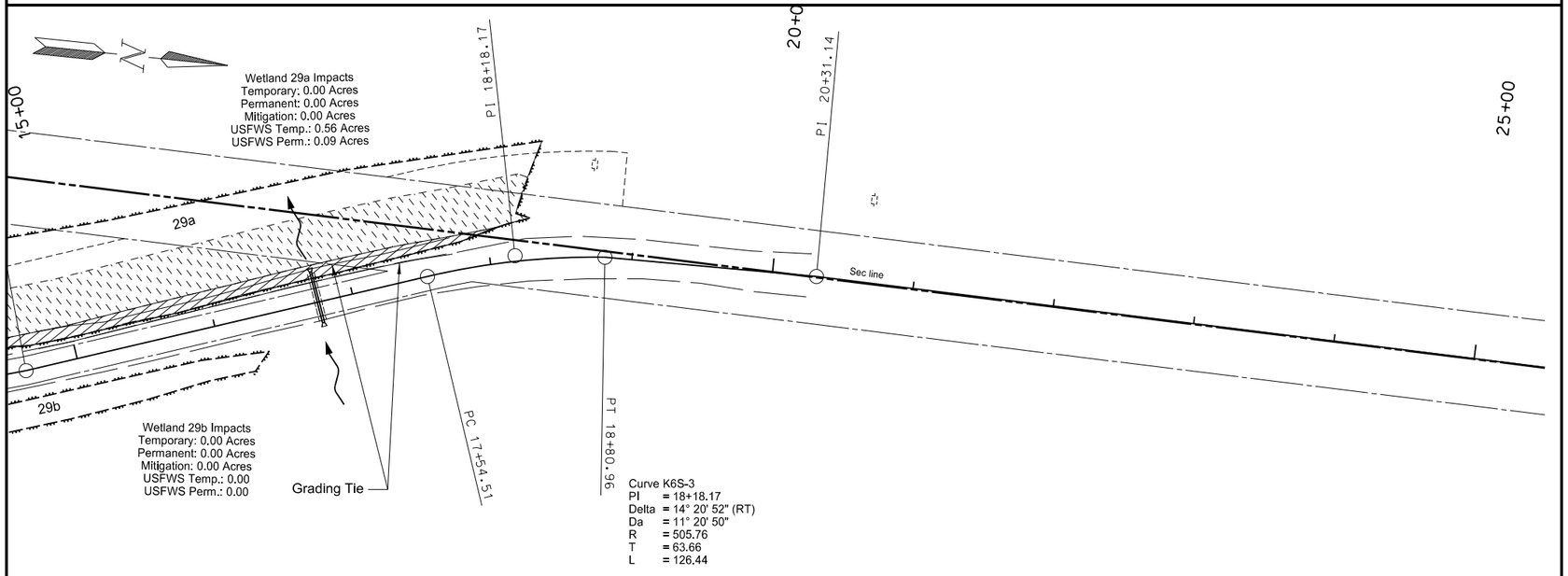
J10-3 & J10-4

Wetland Impacts

9/8/2017 11:30:31 AM bschaff N:\20732\ROM-0300(135)\Design\Mountrail\075_Wetlands\075WL_002.dgn

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	ROM-0300(135)	75	3





Temporary Wetland Impact

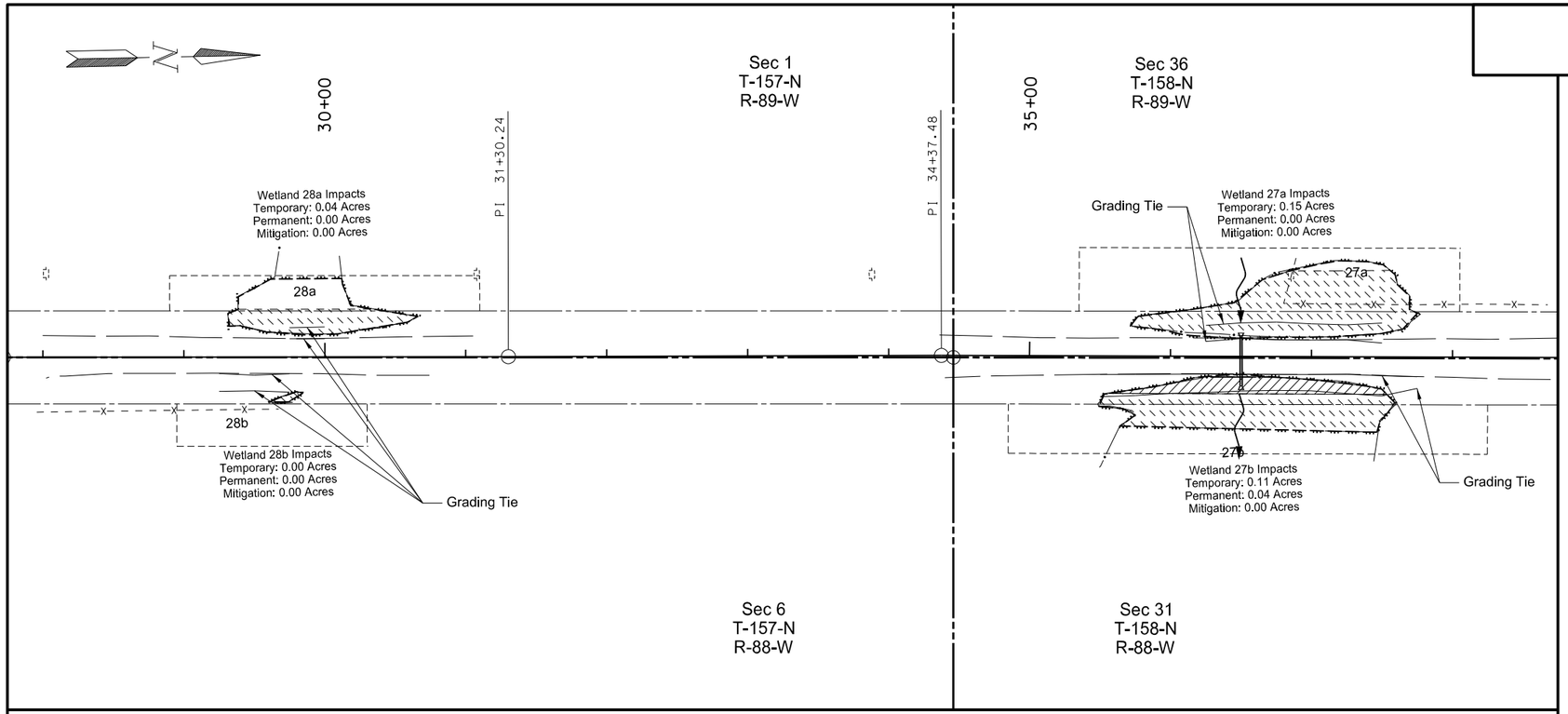
Permanent Wetland Impact

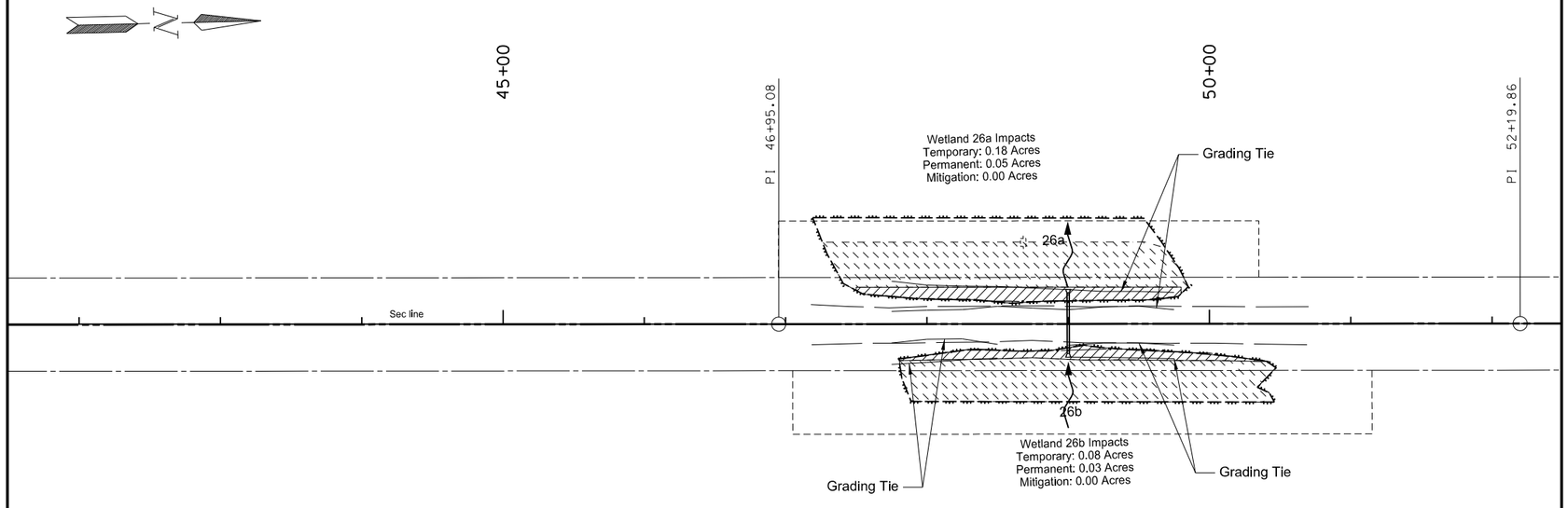
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K6S-1 & K6S-2

Wetland Impacts

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	75	4





Temporary Wetland Impact

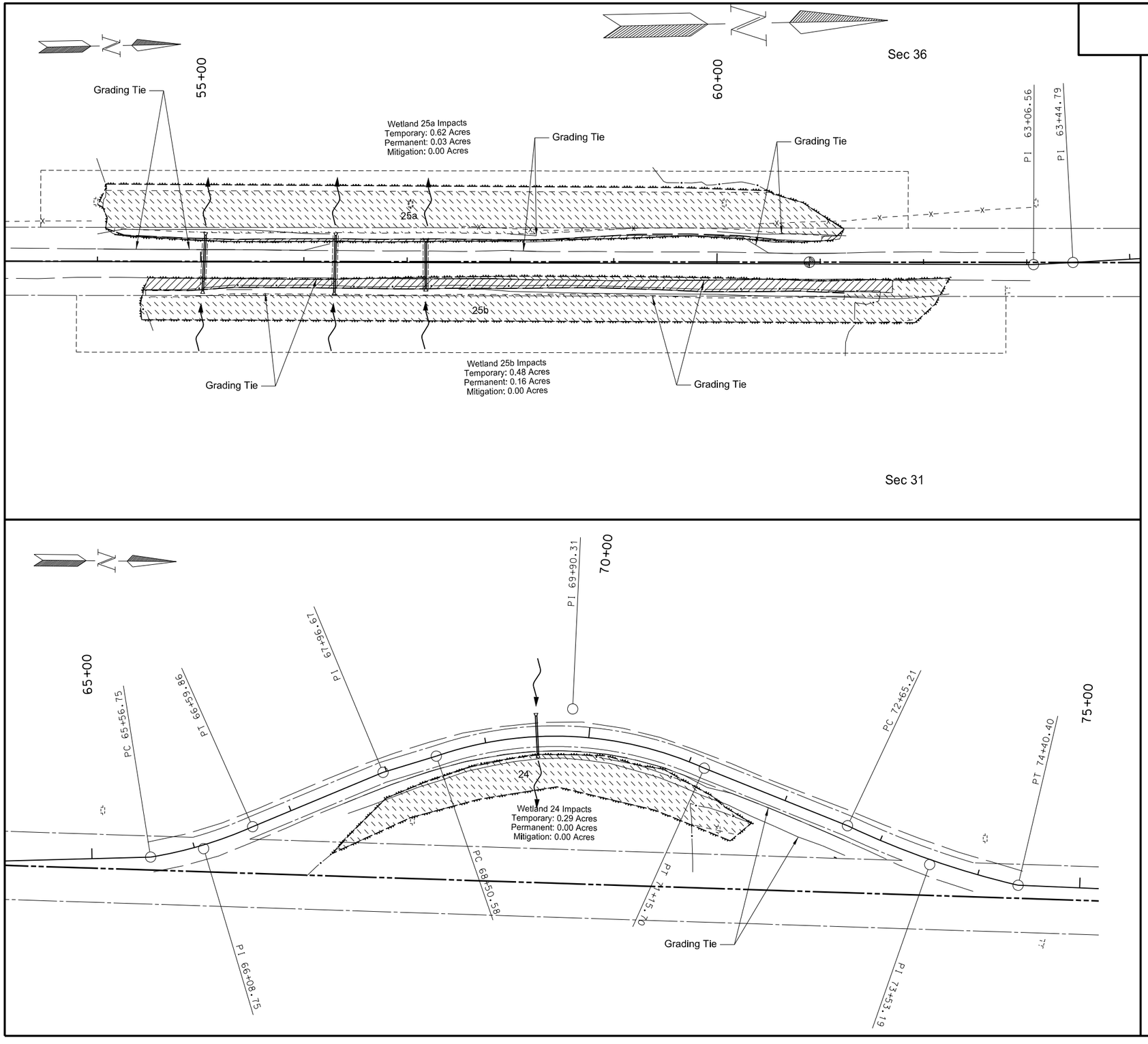
Permanent Wetland Impact

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K6S-3, K6S-4, K6S-5

Wetland Impacts

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	ROM-0300(135)	75	5



Temporary Wetland Impact

Permanent Wetland Impact

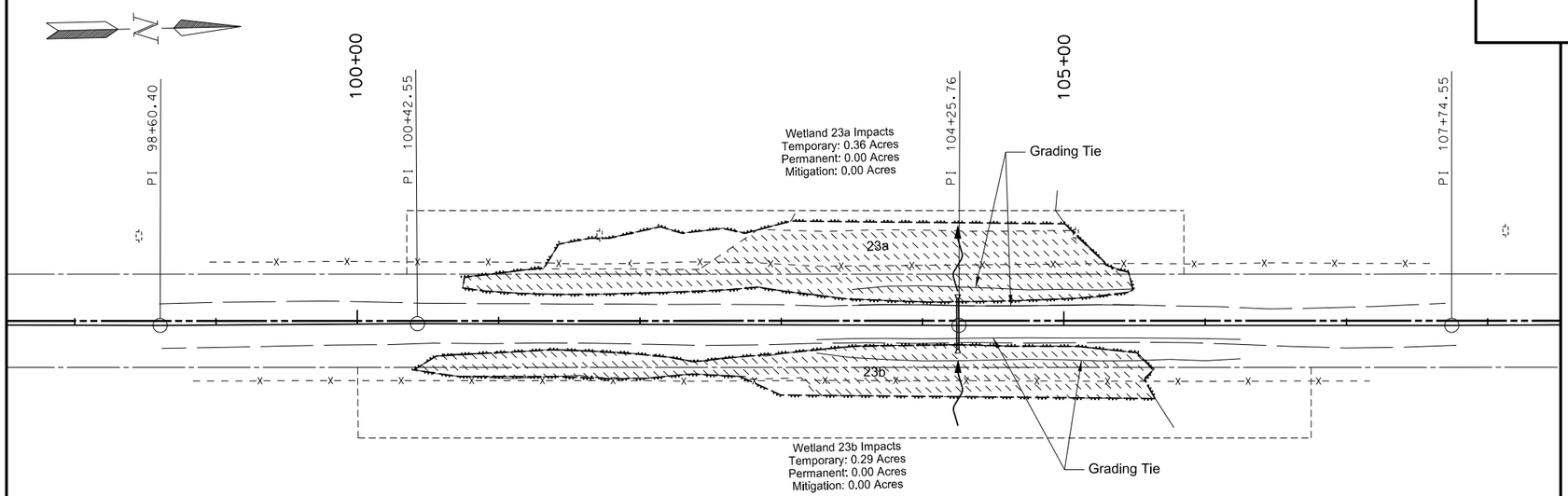
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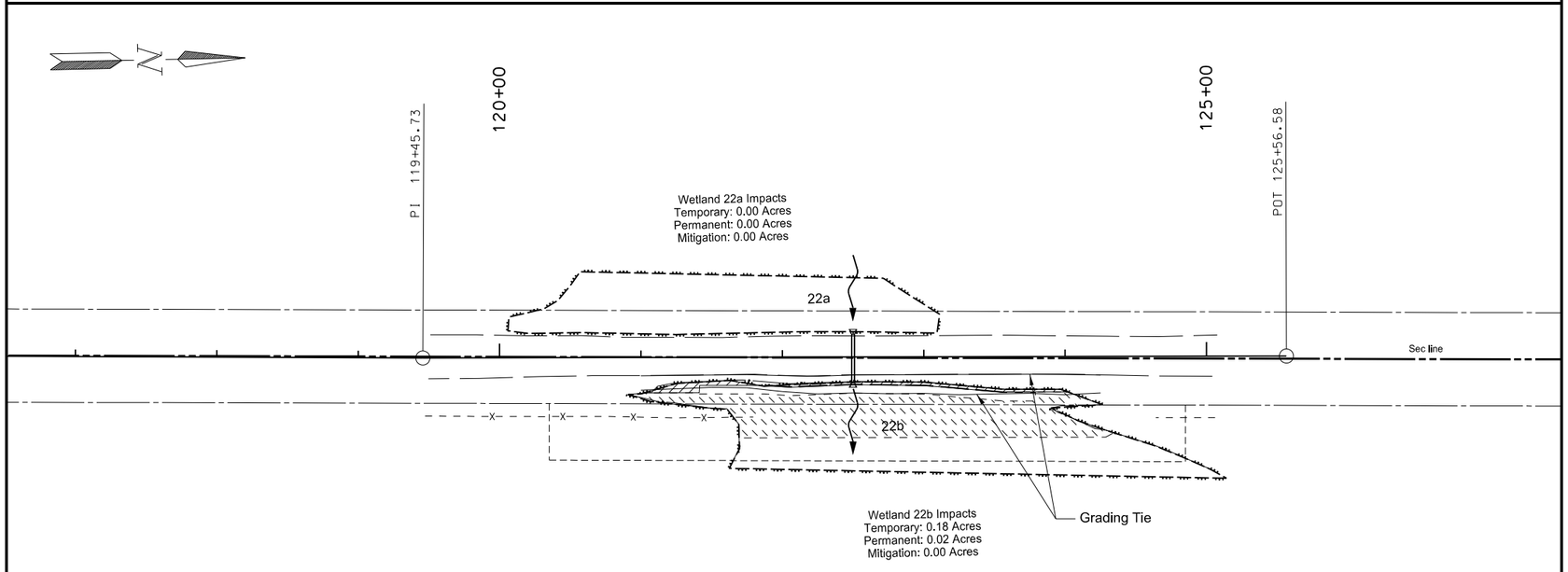
K6S-6 & K6S-7

Wetland Impacts

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STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	ROM-0300(135)	75	6





Temporary Wetland Impact

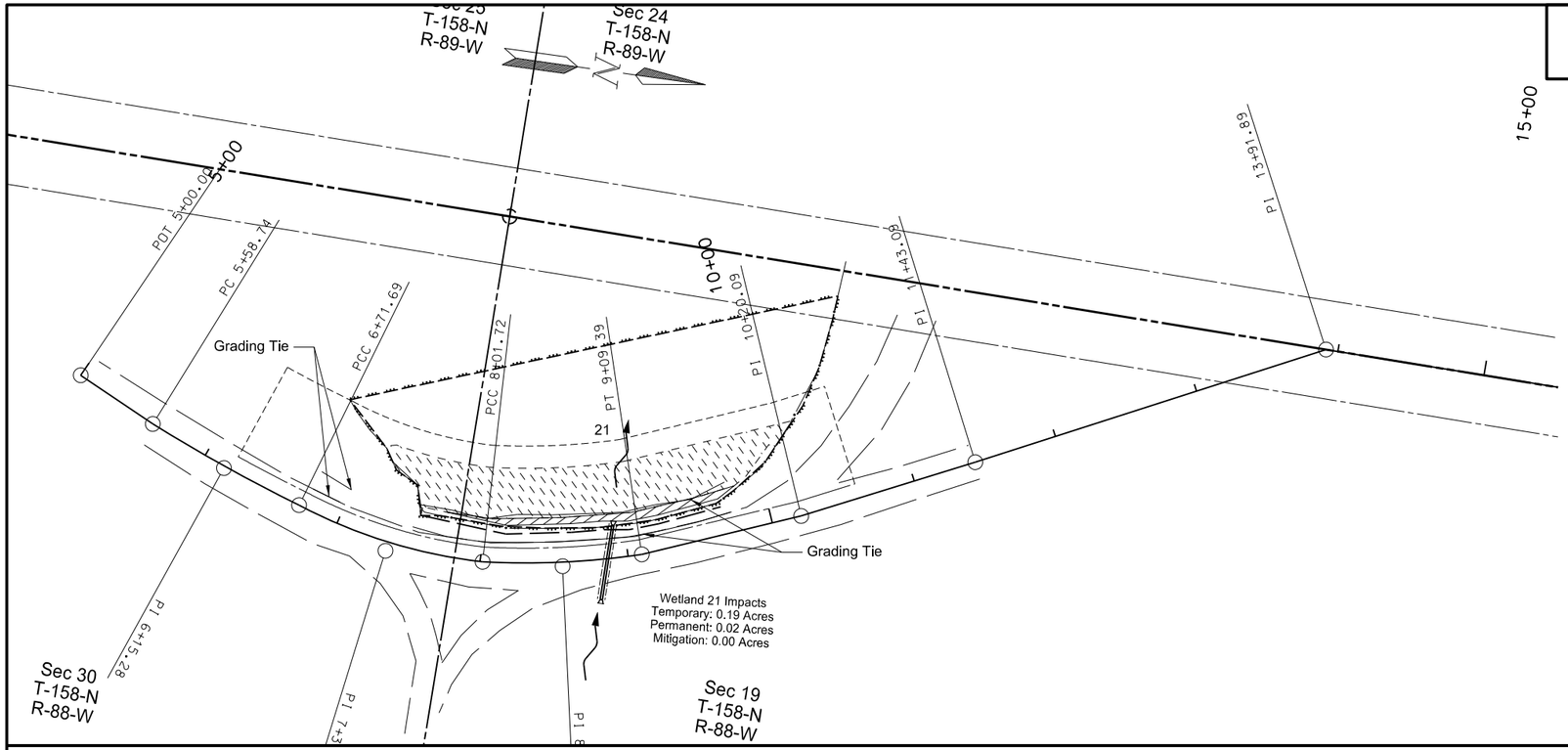
Permanent Wetland Impact

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K6S-8 & K6S-9

Wetland Impacts

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	75	7



Temporary Wetland Impact

Permanent Wetland Impact

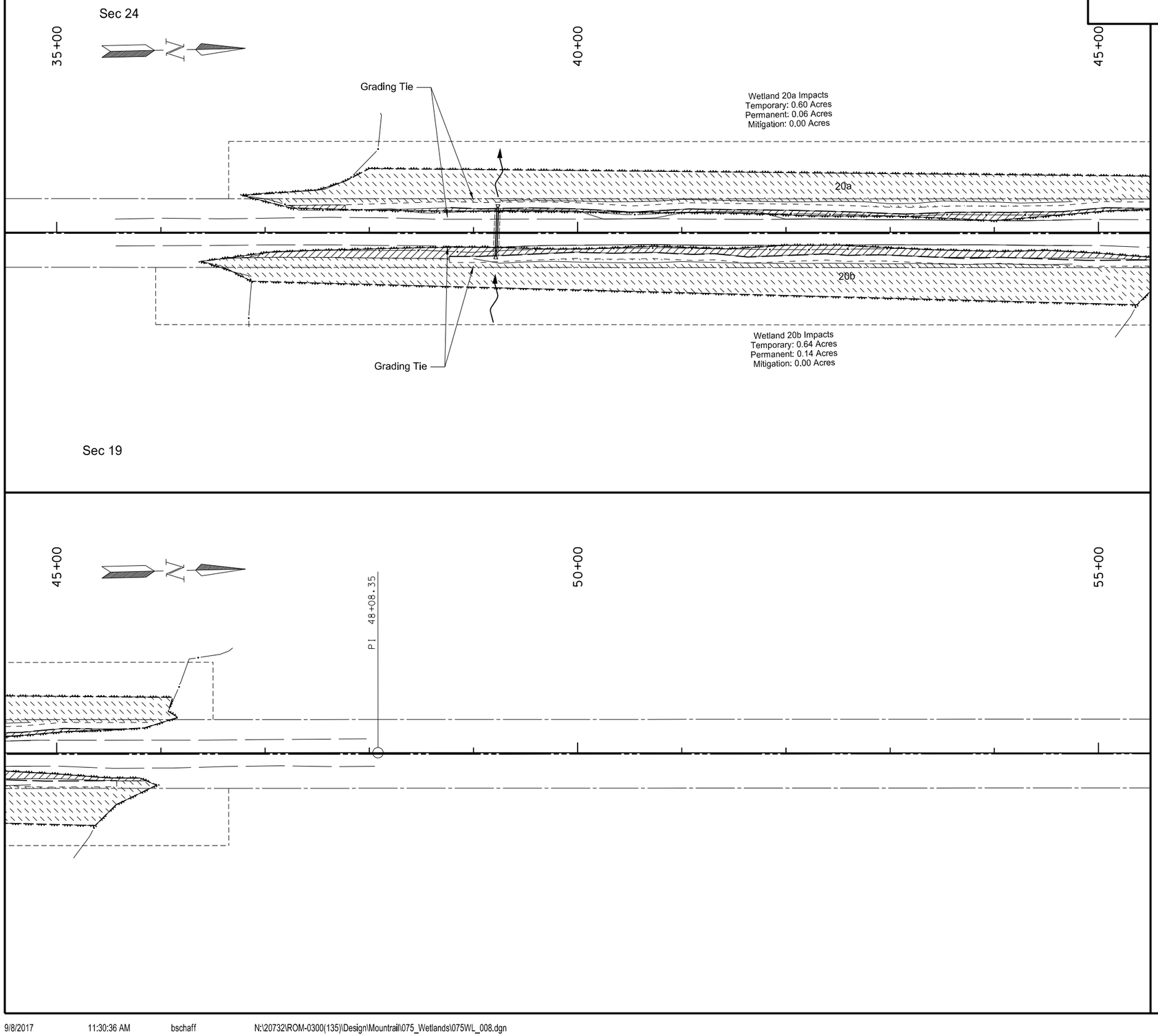
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K6N-1

Wetland Impacts

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STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	ROM-0300(135)	75	8



Temporary Wetland Impact

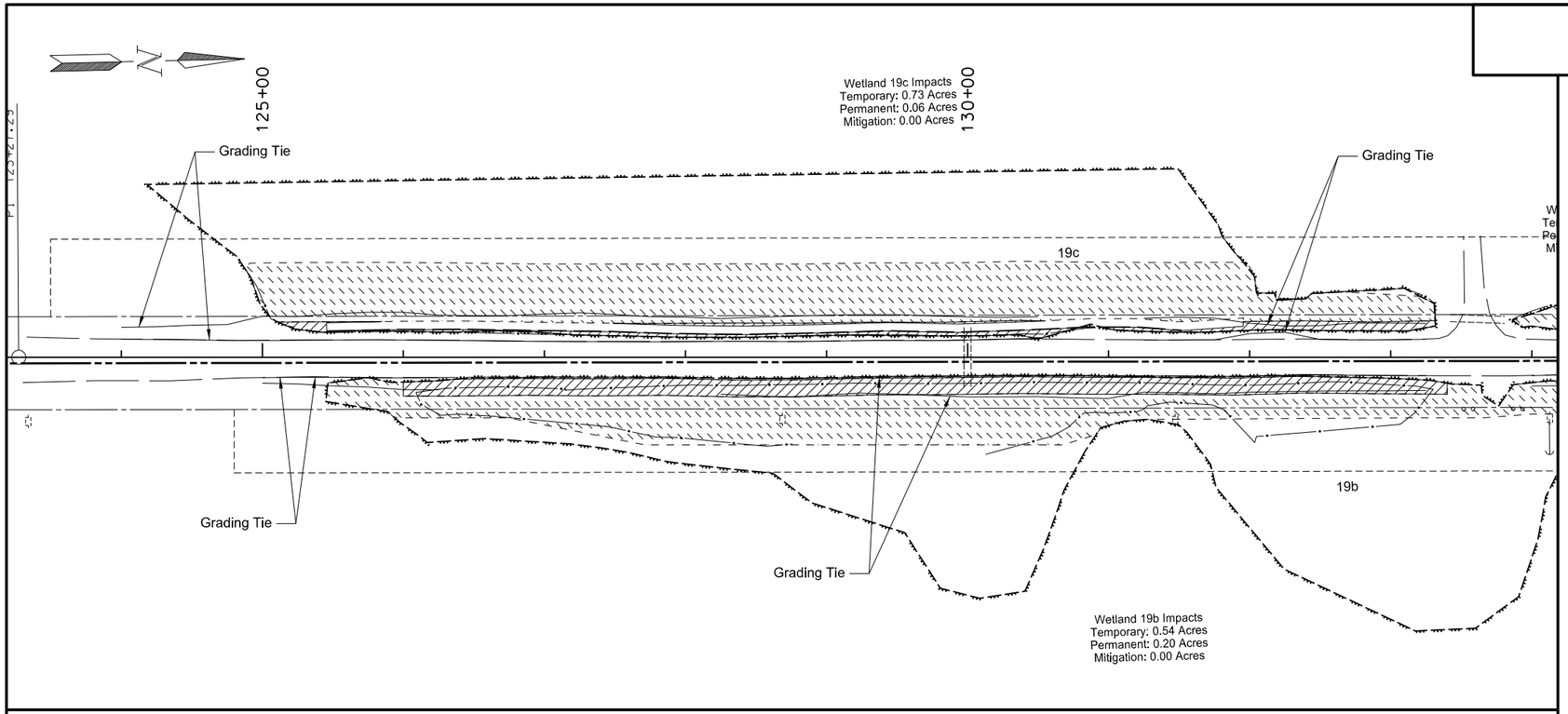
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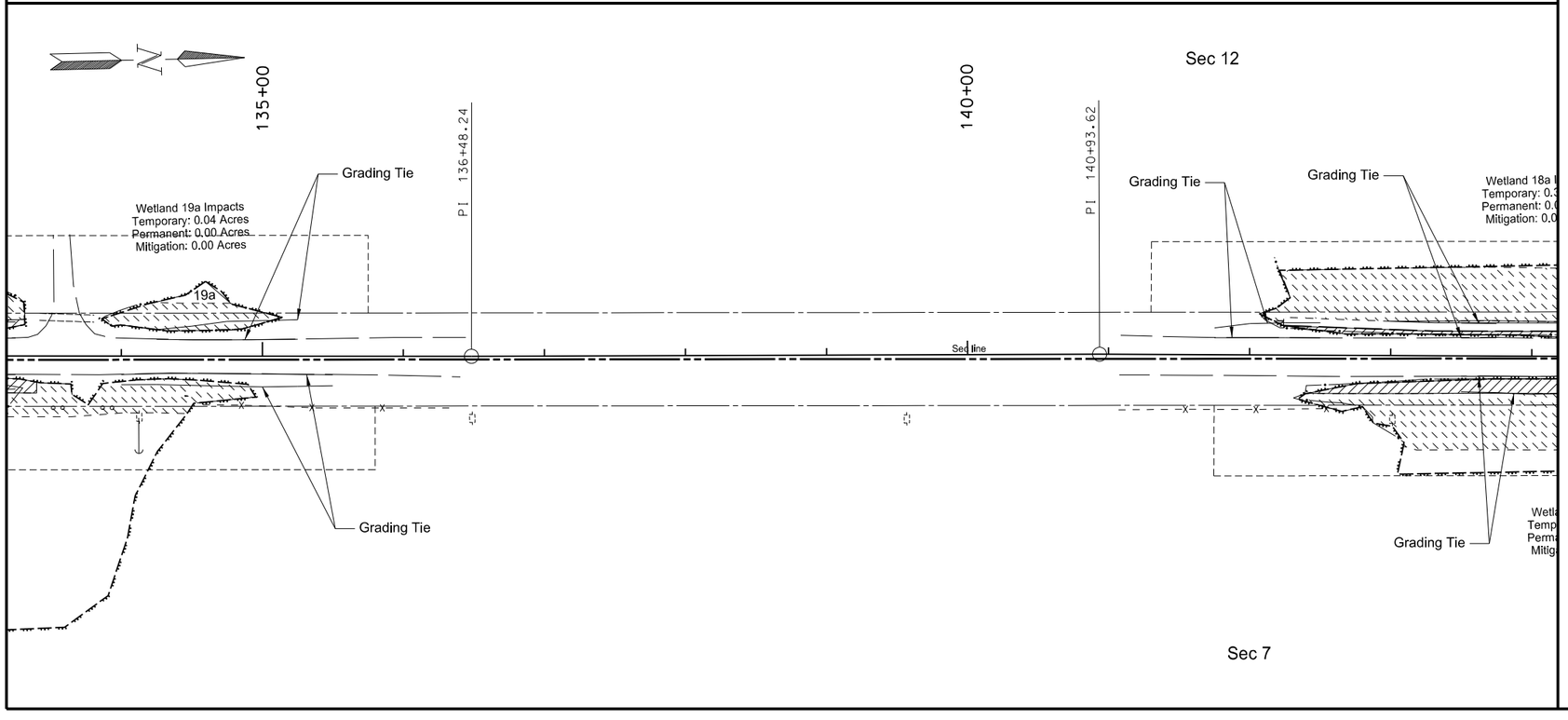
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K6N-2

Wetland Impacts

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	ROM-0300(135)	75	9





Temporary Wetland Impact

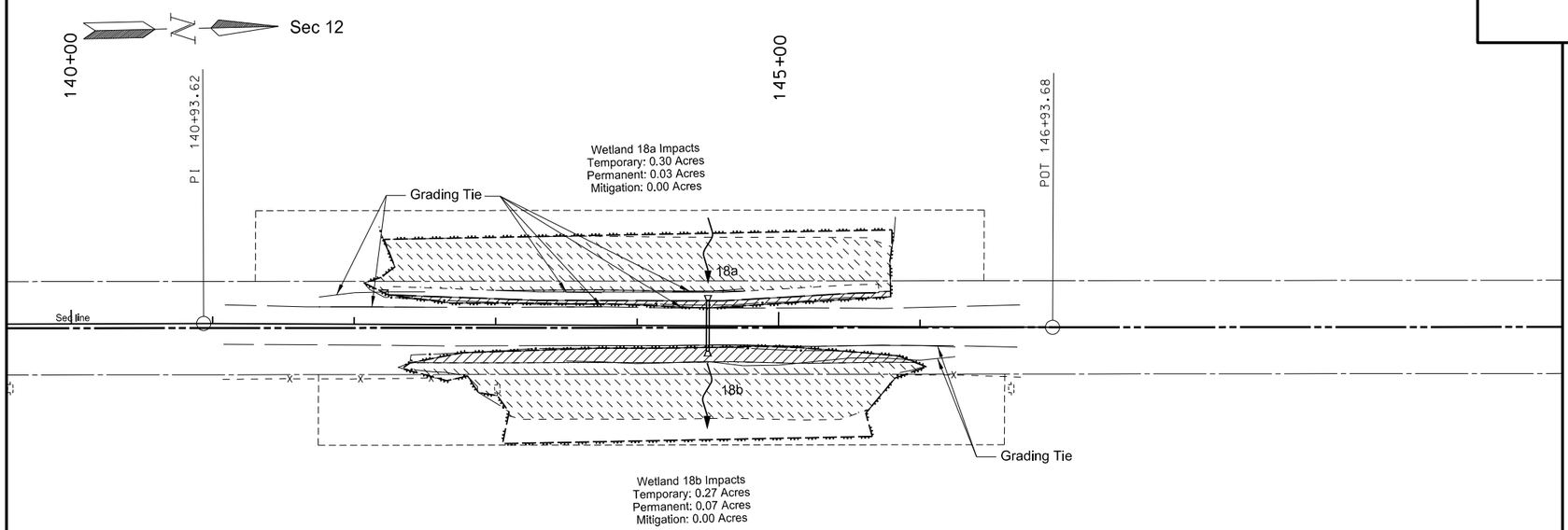
Permanent Wetland Impact

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K6N-3

Wetland Impacts

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	ROM-0300(135)	75	10



Temporary Wetland Impact

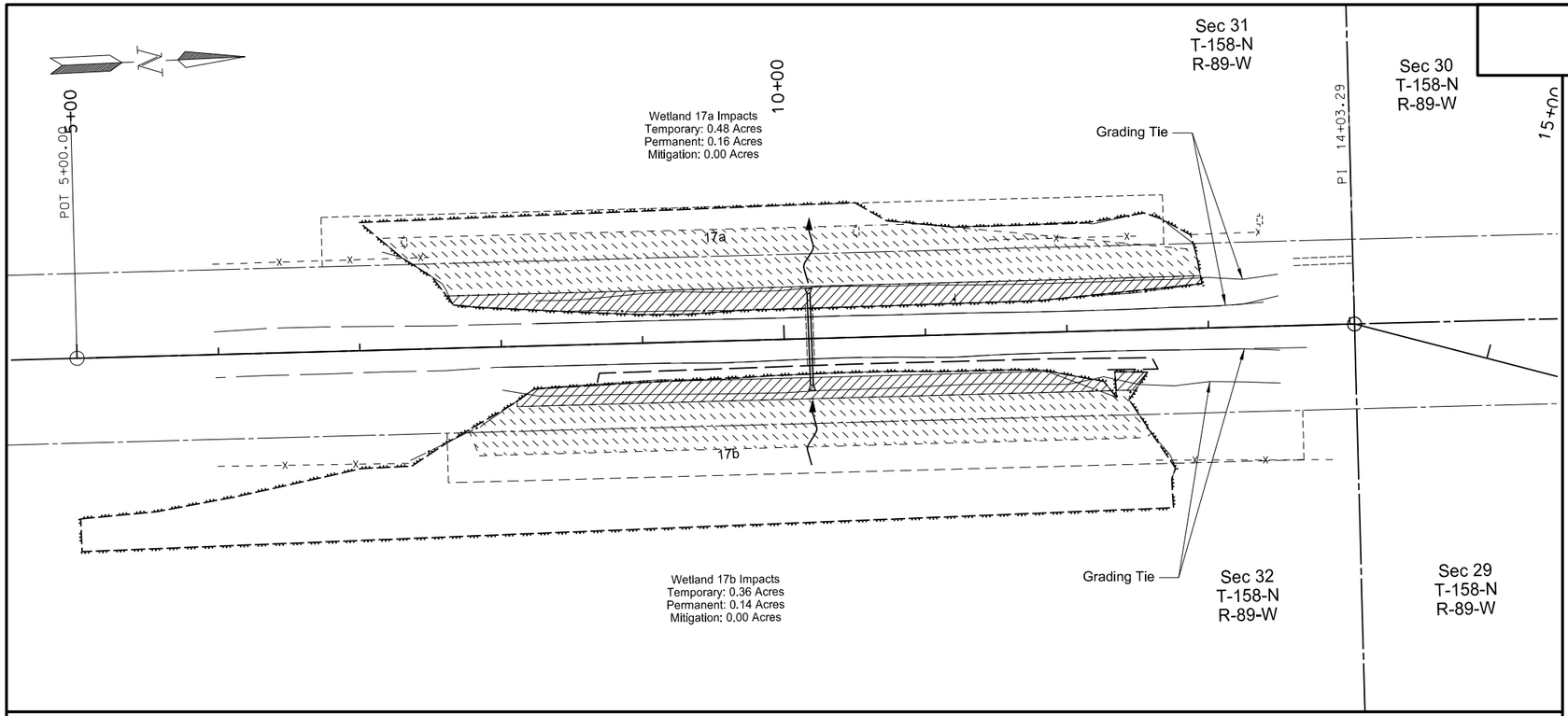
Permanent Wetland Impact

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K6N-4

Wetland Impacts

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	75	11



Temporary Wetland Impact

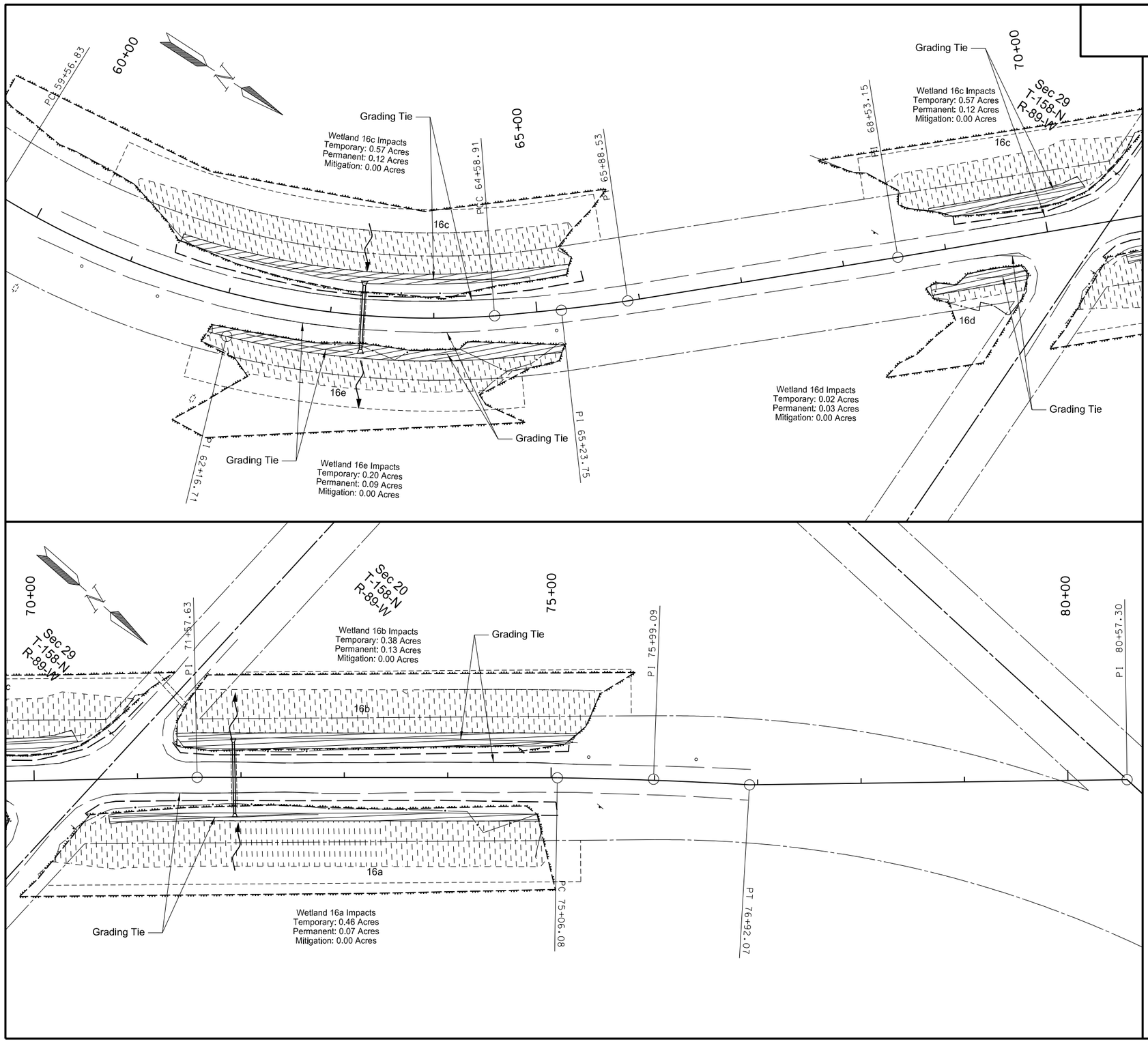
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K7-1

Wetland Impacts

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	ND	ROM-0300(135)	75	12



Temporary Wetland Impact

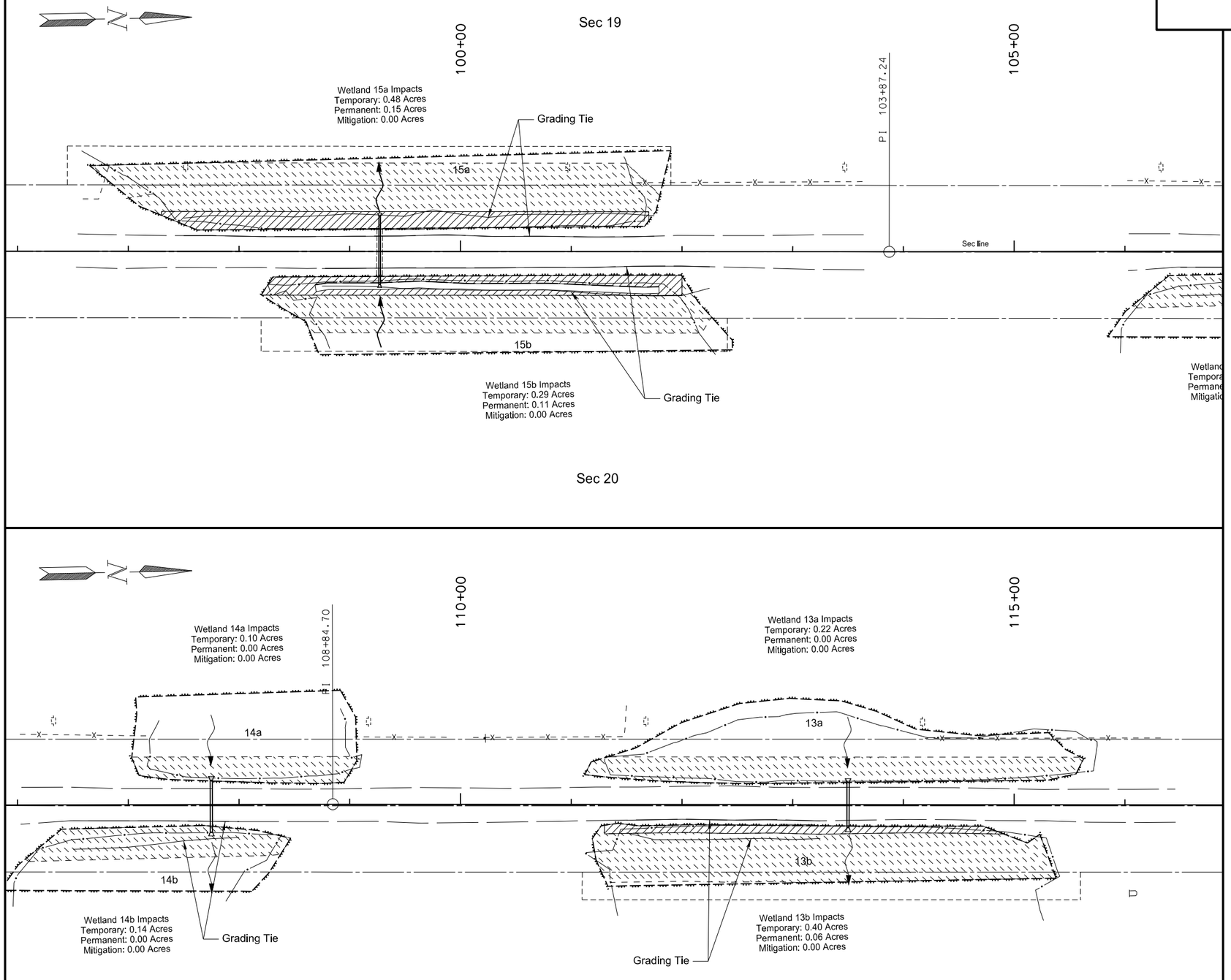
Permanent Wetland Impact

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K7-2 & K7-3

Wetland Impacts

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	ROM-0300(135)	75	13



Temporary Wetland Impact

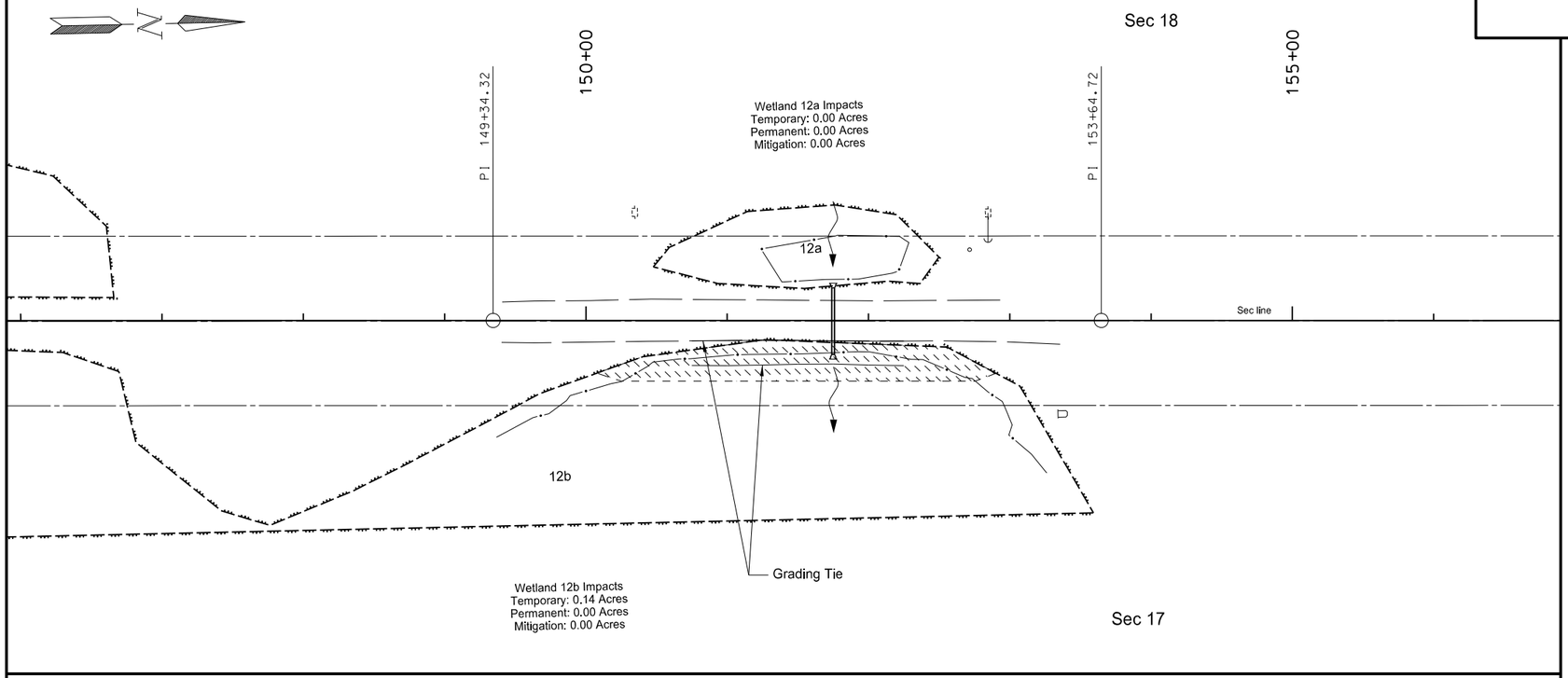
Permanent Wetland Impact

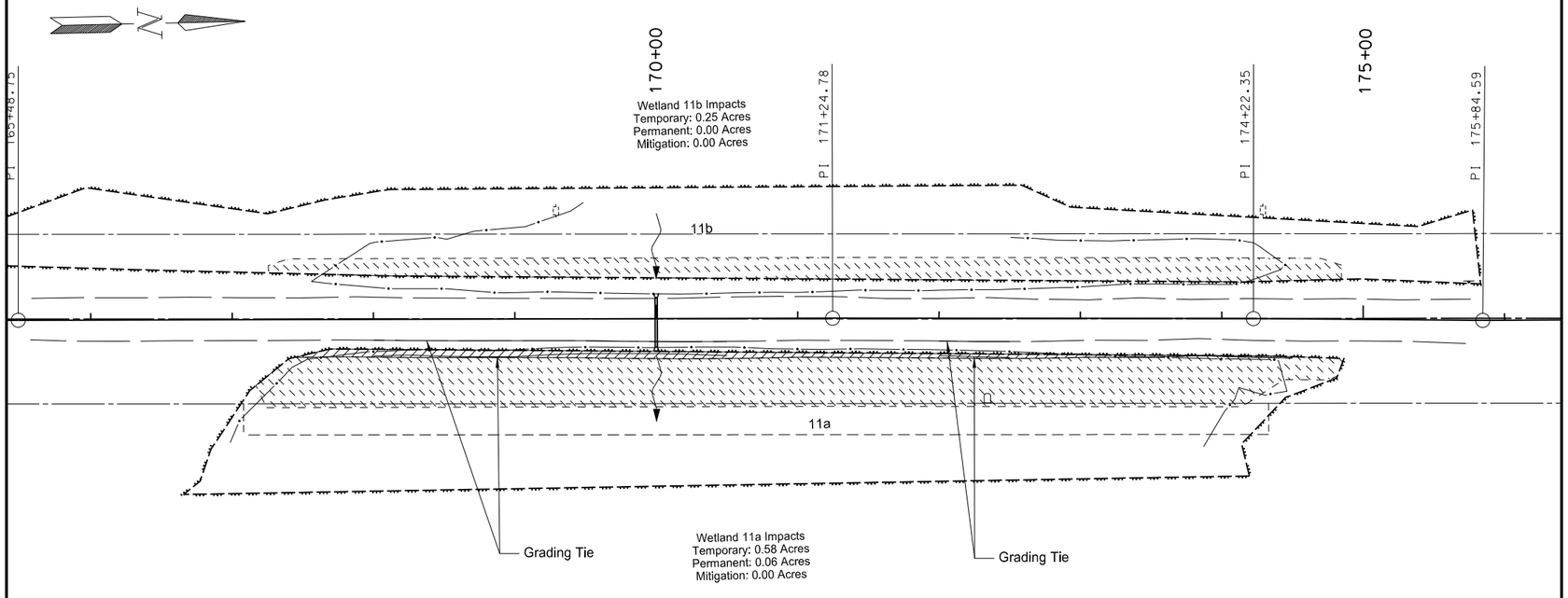
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K7-4, K7-5, K7-6

Wetland Impacts

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	ROM-0300(135)	75	14





Temporary Wetland Impact

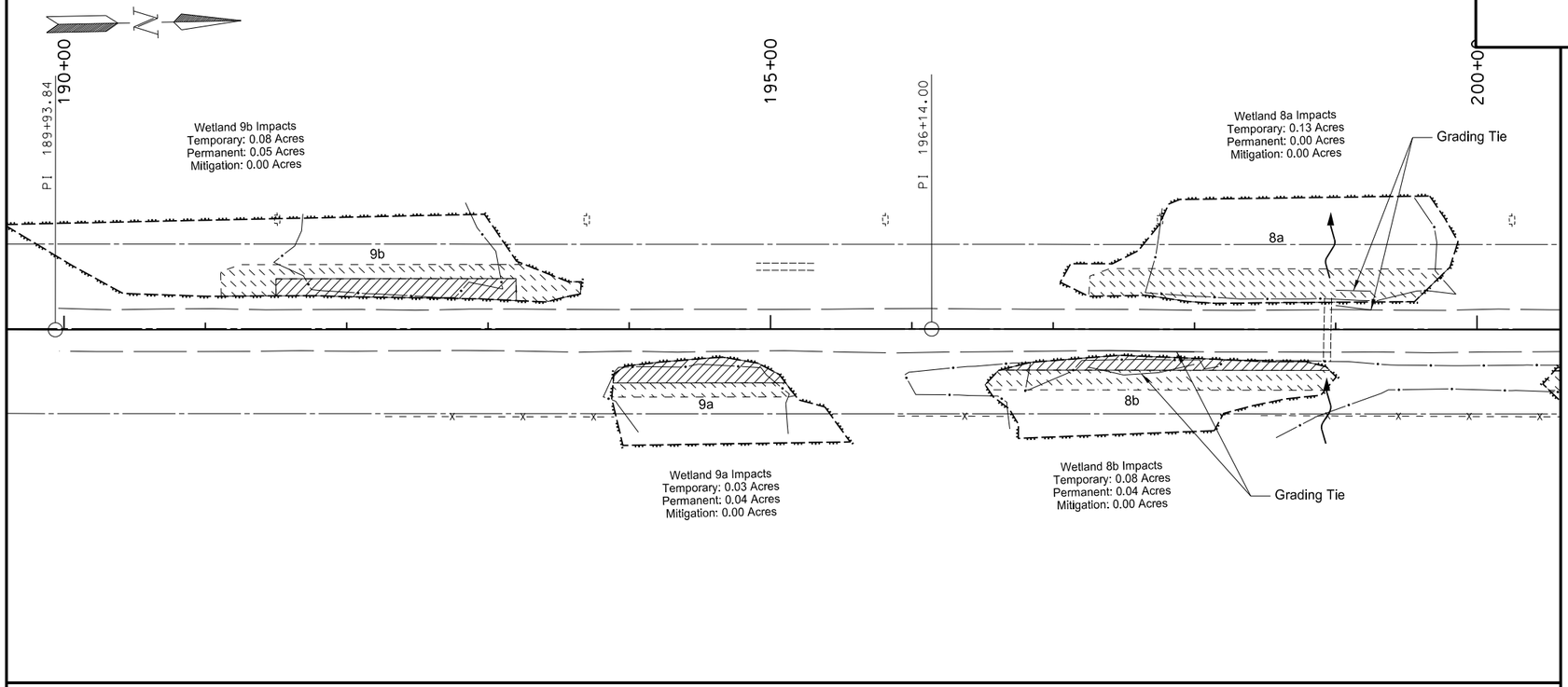
Permanent Wetland Impact

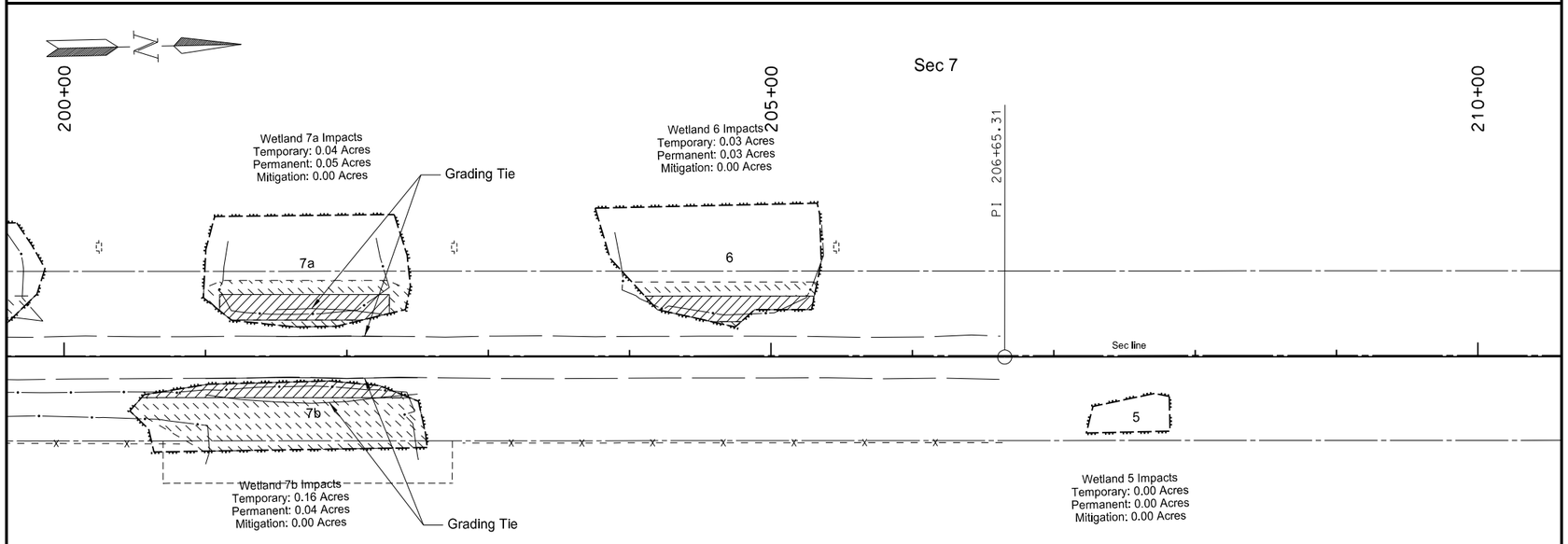
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K7-7 & K7-8

Wetland Impacts

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	ROM-0300(135)	75	15





Temporary Wetland Impact

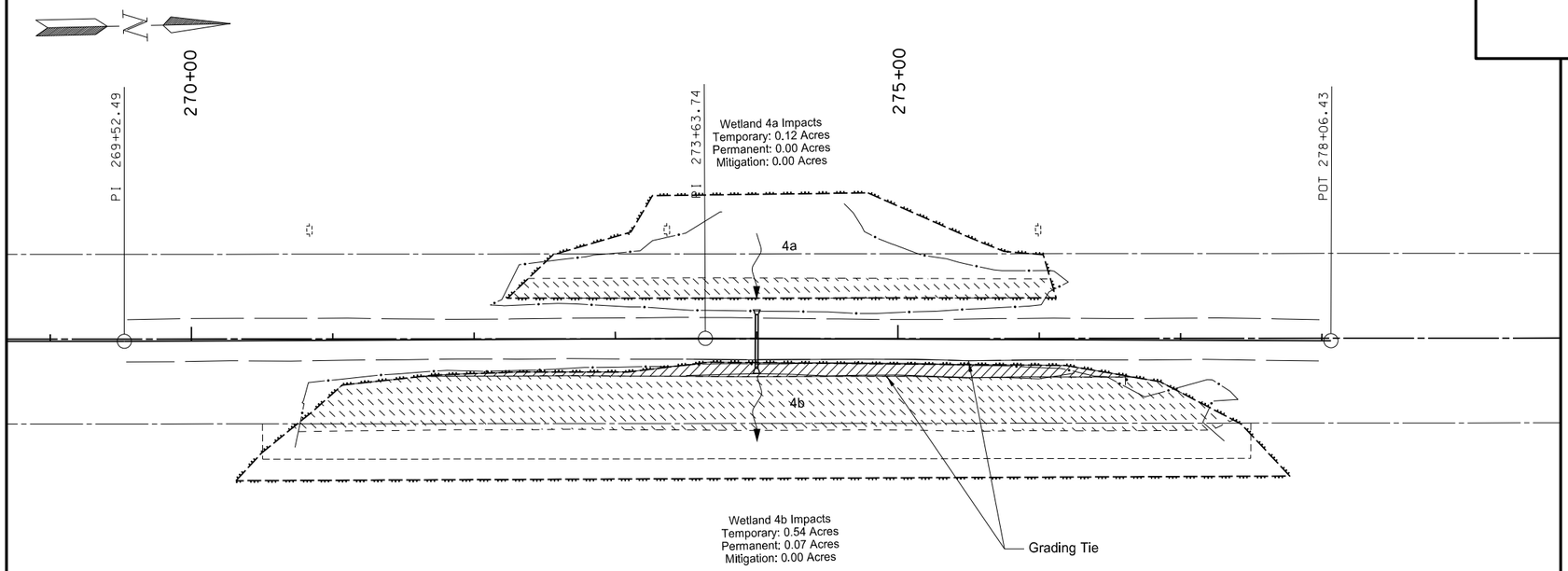
Permanent Wetland Impact

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K7-9

Wetland Impacts

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	75	16



Temporary Wetland Impact

Permanent Wetland Impact

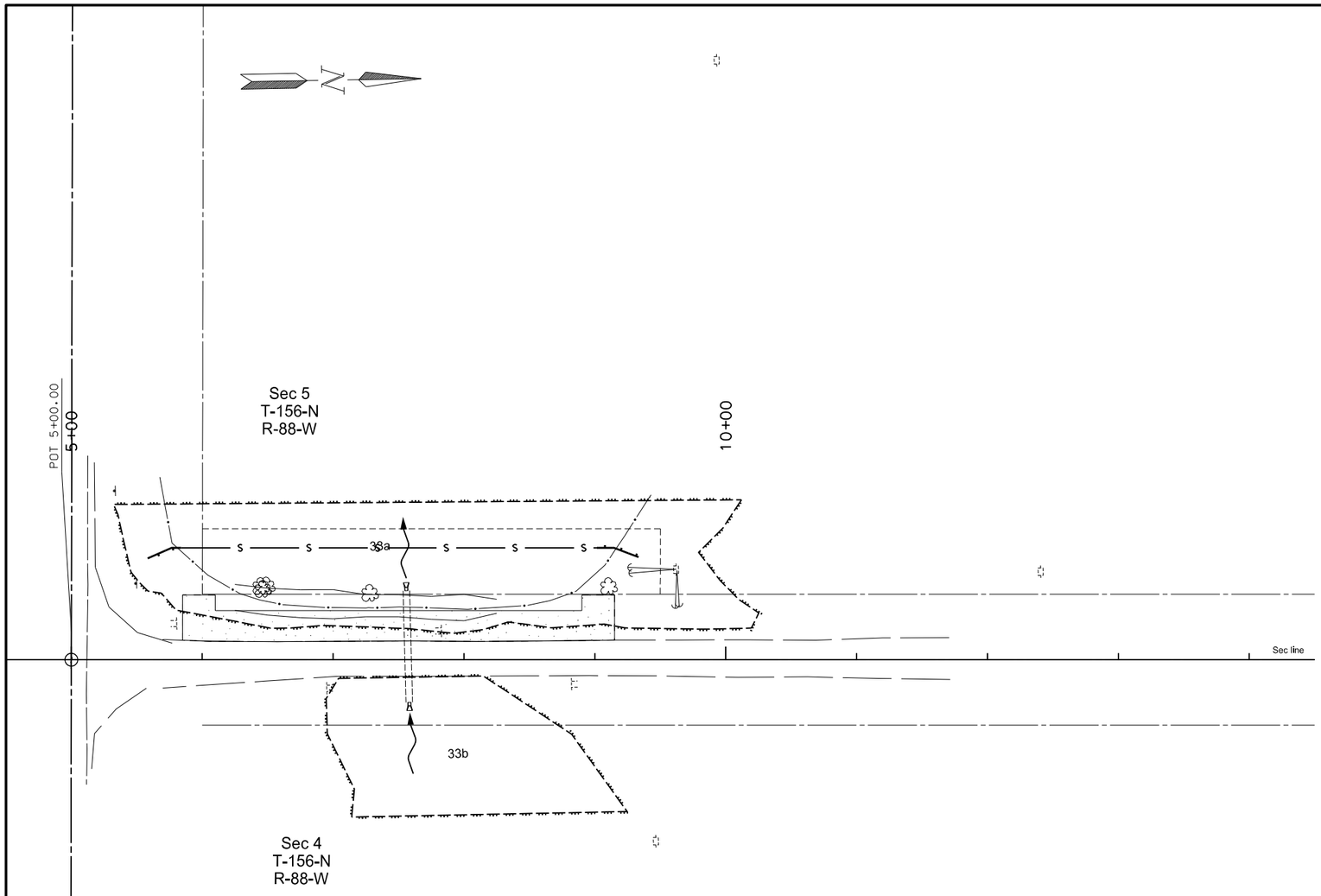
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K7-10

Wetland Impacts

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	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	76	1



See sheets 28-29 for quantities

MULCHING/TEMPORARY COVER CROP

TEMPORARY FIBER ROLLS

SF — TEMPORARY SILT FENCE UNSUPPORTED

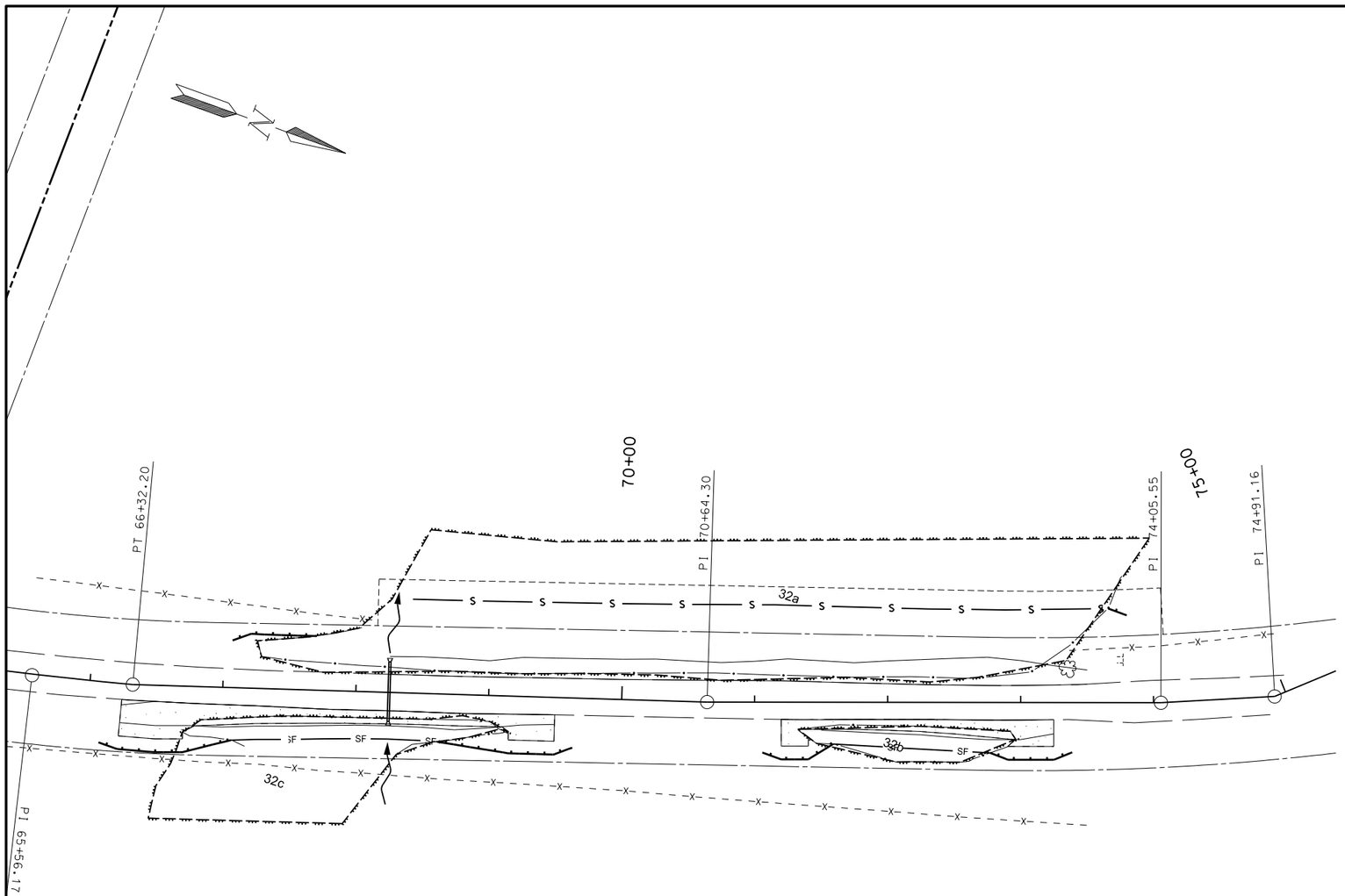
S — TEMPORARY SILT CURTAIN

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J10-1

Temporary Erosion Control

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	76	2



See sheets 28-29 for quantities

MULCHING/TEMPORARY COVER CROP

TEMPORARY FIBER ROLLS

SF TEMPORARY SILT FENCE UNSUPPORTED

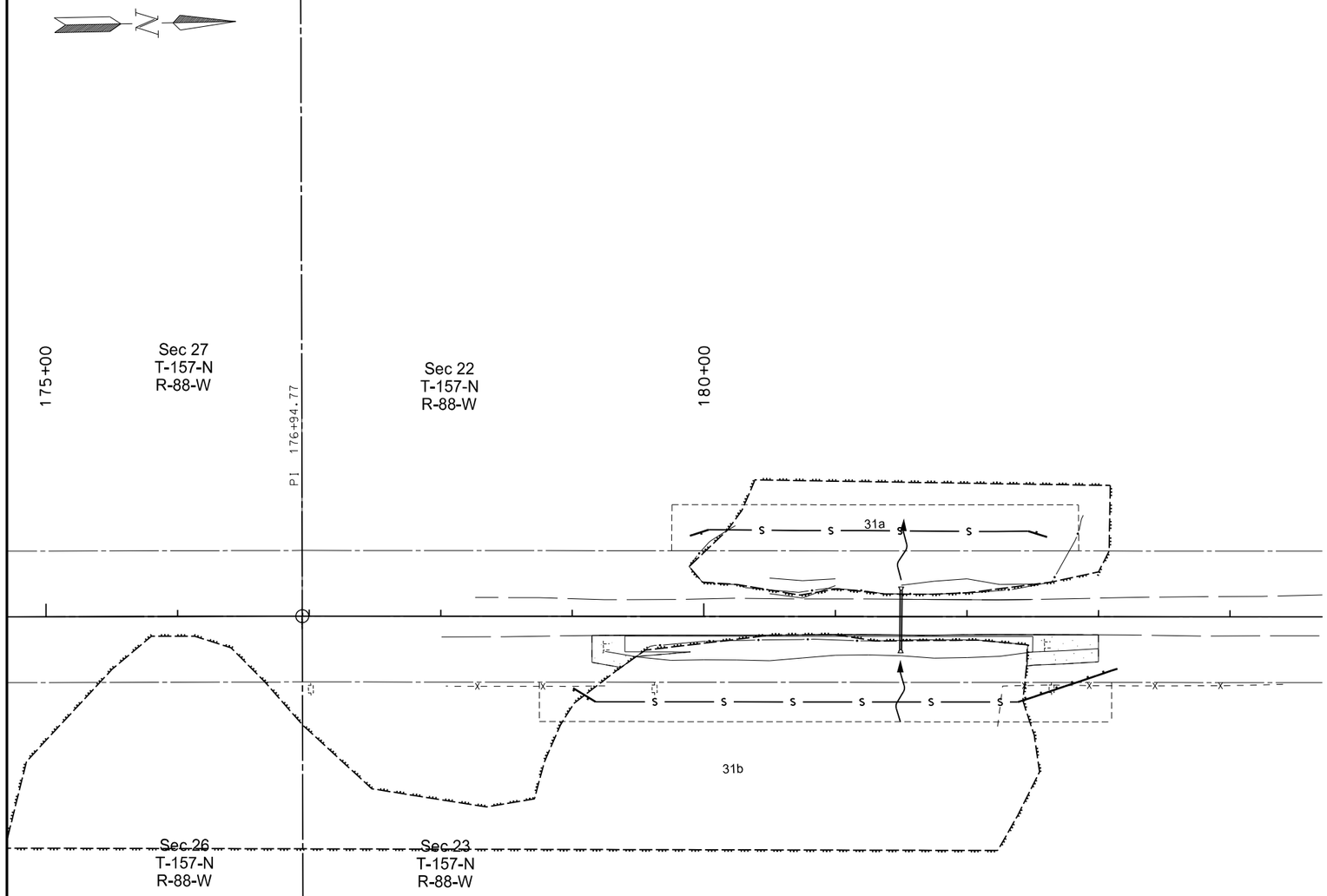
S TEMPORARY SILT CURTAIN

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J10-2

Temporary Erosion Control

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	76	3



See sheets 28-29 for quantities

MULCHING/TEMPORARY COVER CROP

TEMPORARY FIBER ROLLS

SF — TEMPORARY SILT FENCE UNSUPPORTED

S — TEMPORARY SILT CURTAIN

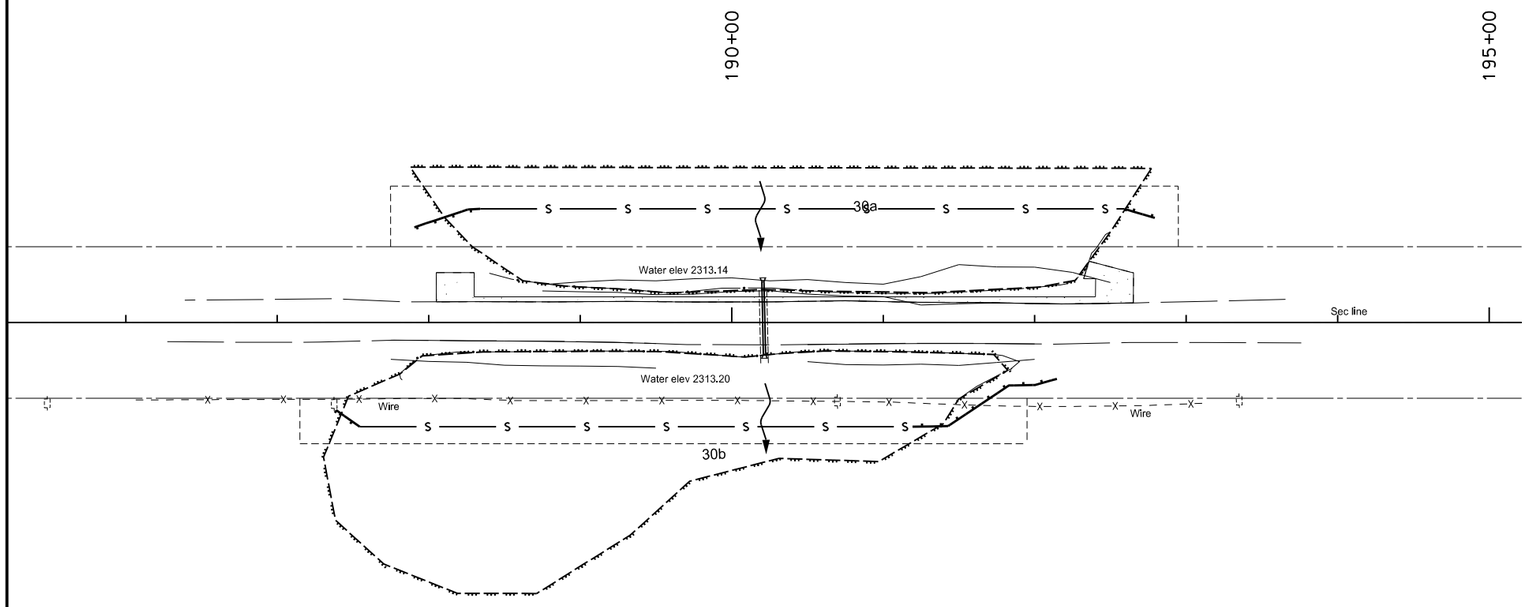
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J10-3

Temporary Erosion Control

9/8/2017 2:16:13 PM bschaff N:\20732\ROM-0300(135)\Design\Mountrail\076_TempEC\076WL_03.dgn

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	76	4



See sheets 28-29 for quantities

MULCHING/TEMPORARY COVER CROP

TEMPORARY FIBER ROLLS

SF — TEMPORARY SILT FENCE UNSUPPORTED

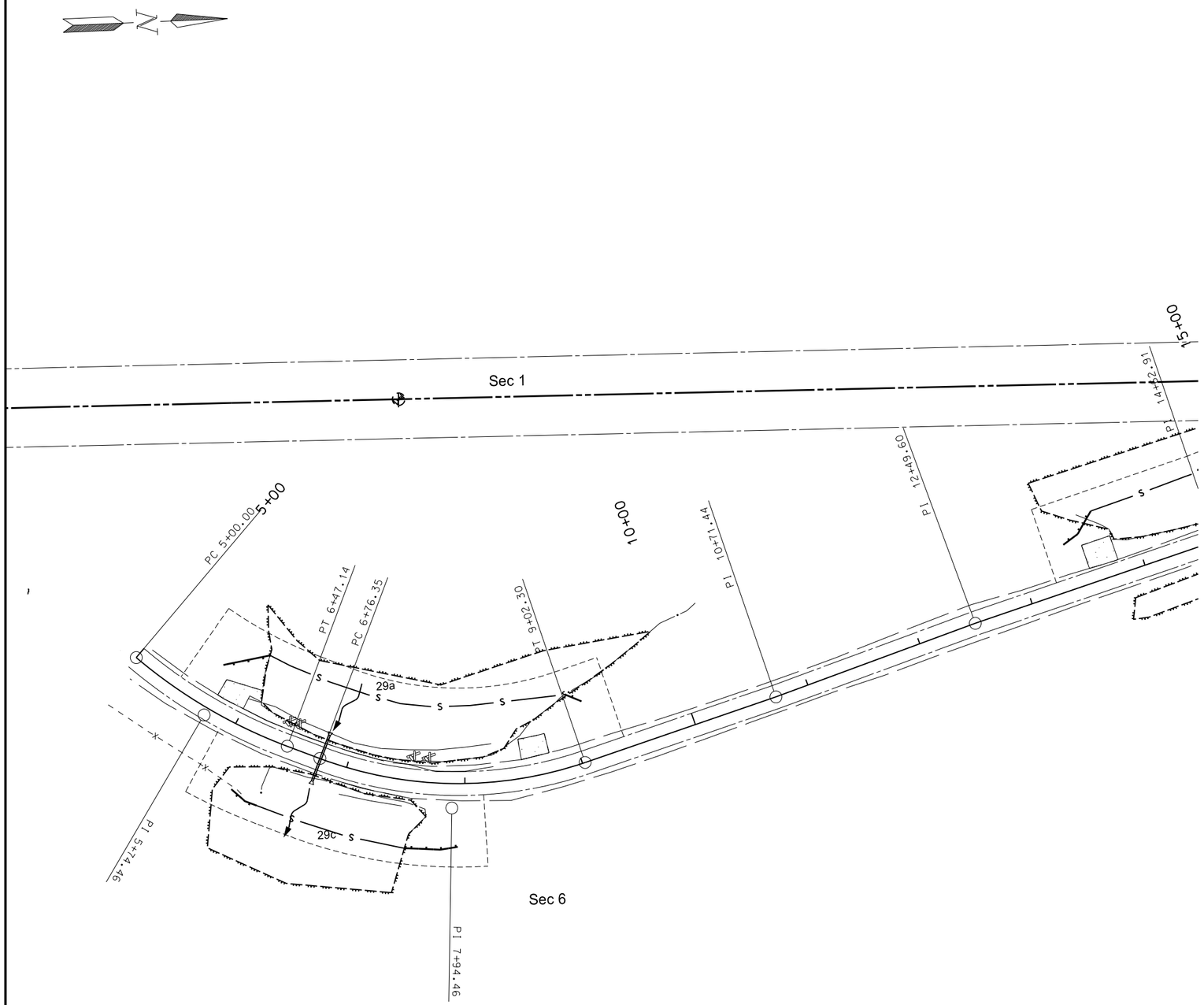
S — TEMPORARY SILT CURTAIN

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J10-4

Temporary Erosion Control

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	76	5



See sheets 28-29 for quantities

MULCHING/TEMPORARY COVER CROP

TEMPORARY FIBER ROLLS

SF — TEMPORARY SILT FENCE UNSUPPORTED

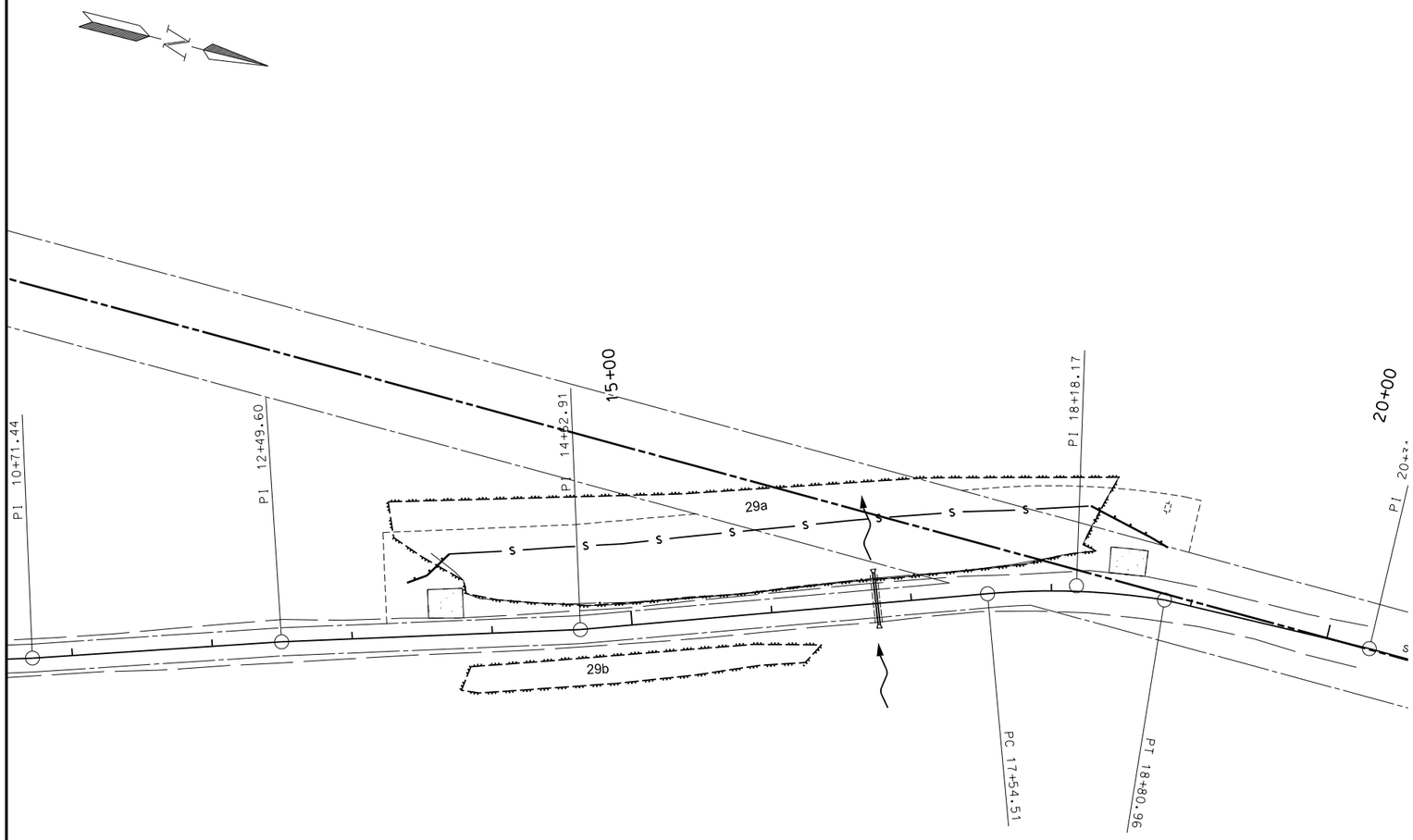
S — TEMPORARY SILT CURTAIN

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K6S-1

Temporary Erosion Control

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	76	6



See sheets 28-29 for quantities

MULCHING/TEMPORARY COVER CROP

TEMPORARY FIBER ROLLS

SF — TEMPORARY SILT FENCE UNSUPPORTED

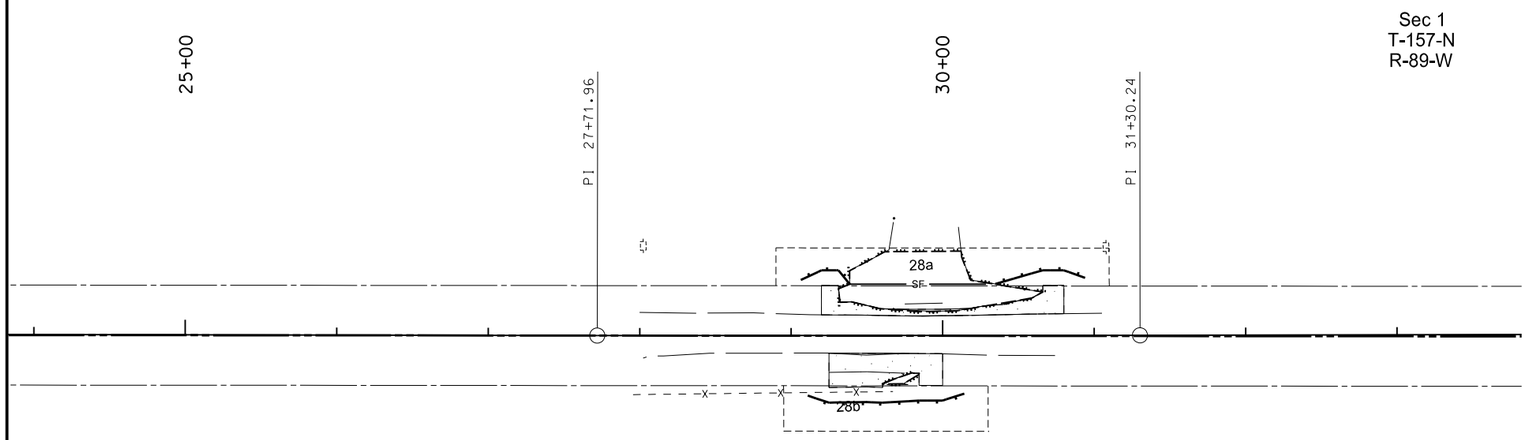
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K6S-2

Temporary Erosion Control

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	76	7



Sec 1
T-157-N
R-89-W

Sec 6
T-157-N
R-88-W

See sheets 28-29 for quantities

MULCHING/TEMPORARY COVER CROP

TEMPORARY FIBER ROLLS

SF — TEMPORARY SILT FENCE UNSUPPORTED

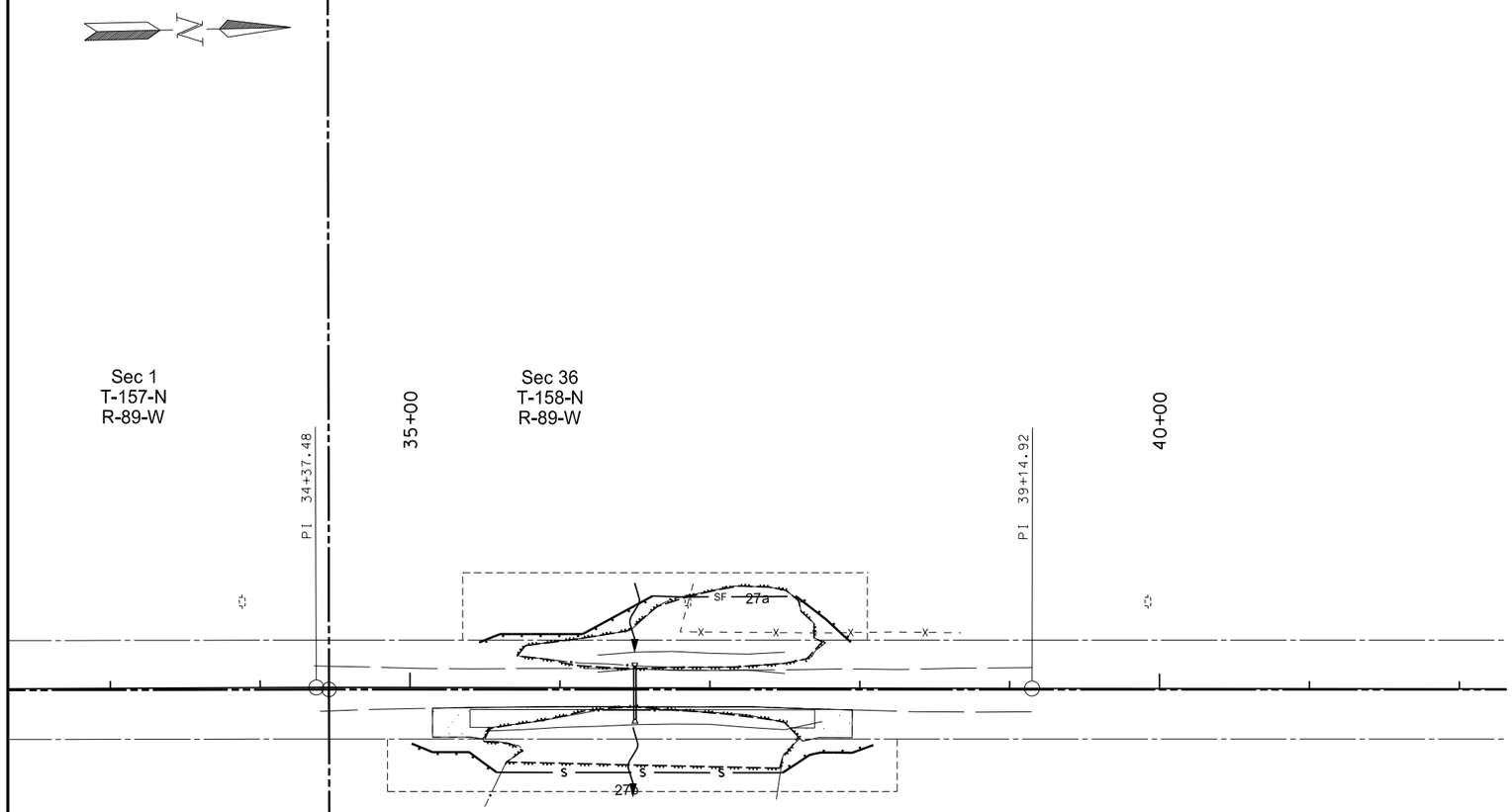
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K6S-3

Temporary Erosion Control

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	76	8



See sheets 28-29 for quantities

MULCHING/TEMPORARY COVER CROP

TEMPORARY FIBER ROLLS

SF — TEMPORARY SILT FENCE UNSUPPORTED

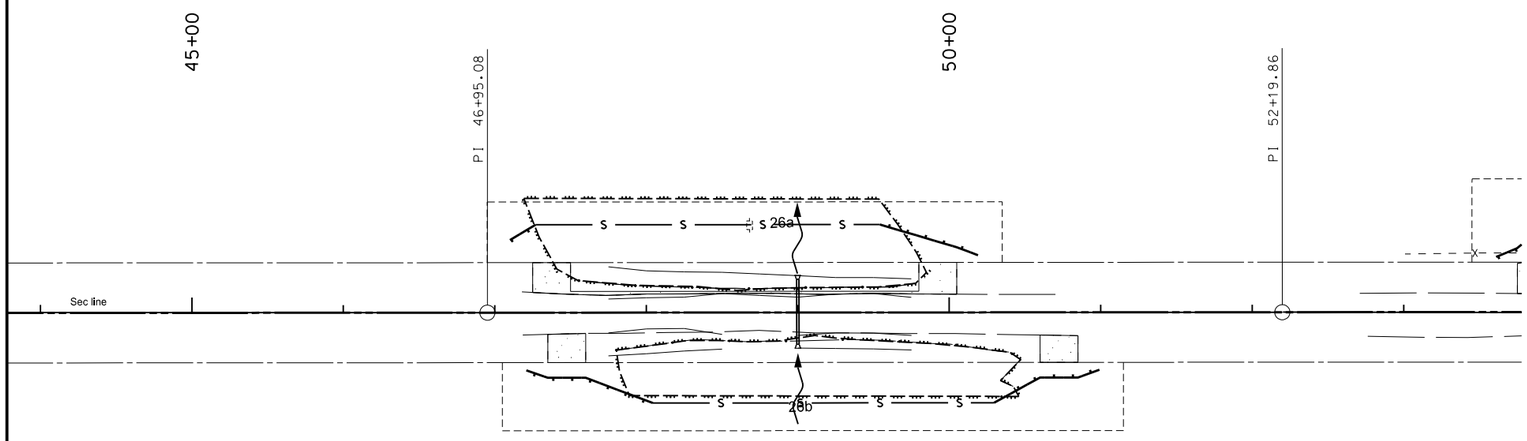
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K6S-4

Temporary Erosion Control

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	76	9



See sheets 28-29 for quantities

MULCHING/TEMPORARY COVER CROP

TEMPORARY FIBER ROLLS

SF — TEMPORARY SILT FENCE UNSUPPORTED

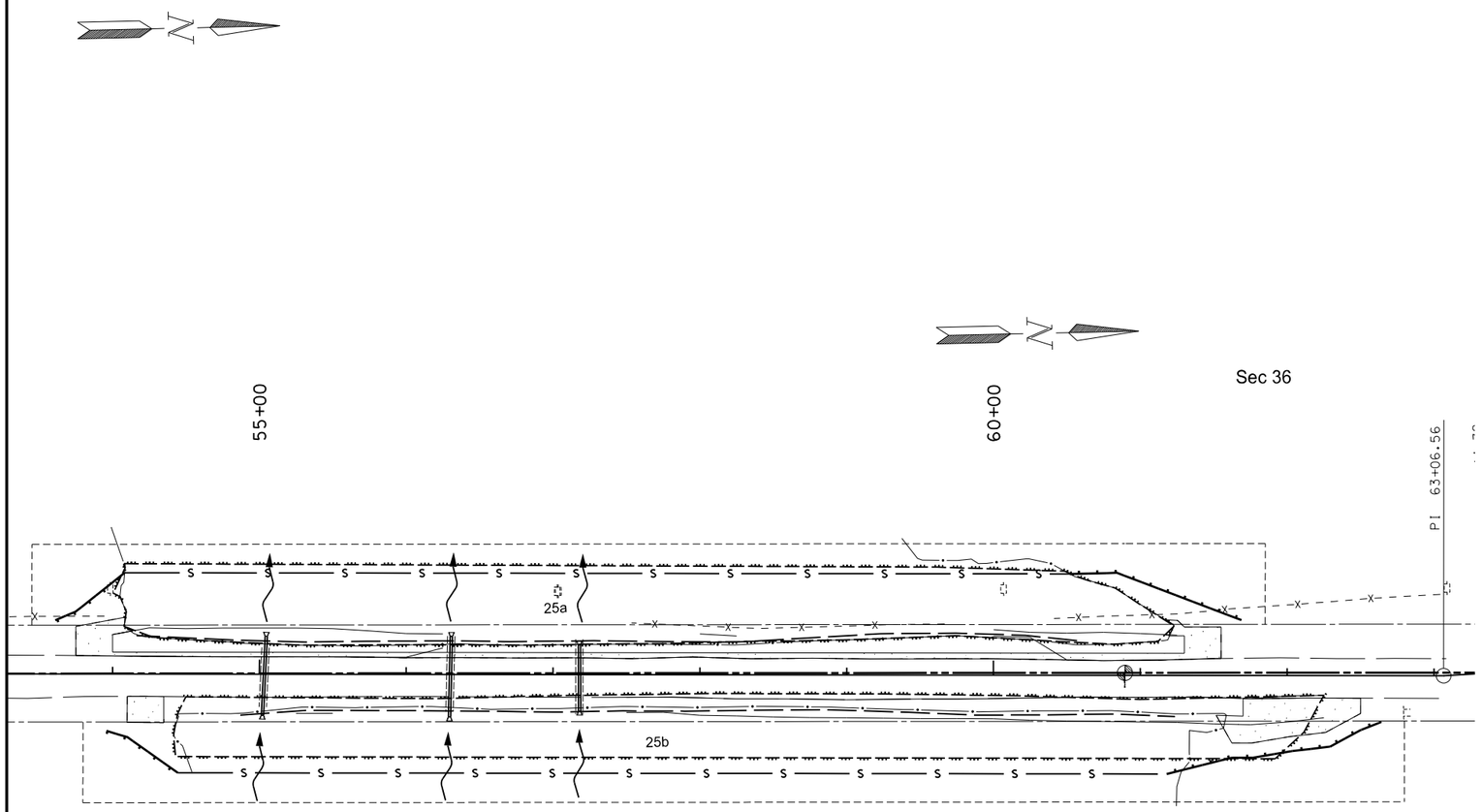
S — TEMPORARY SILT CURTAIN

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K6S-5

Temporary Erosion Control

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	76	10



See sheets 28-29 for quantities

MULCHING/TEMPORARY COVER CROP

TEMPORARY FIBER ROLLS

SF — TEMPORARY SILT FENCE UNSUPPORTED

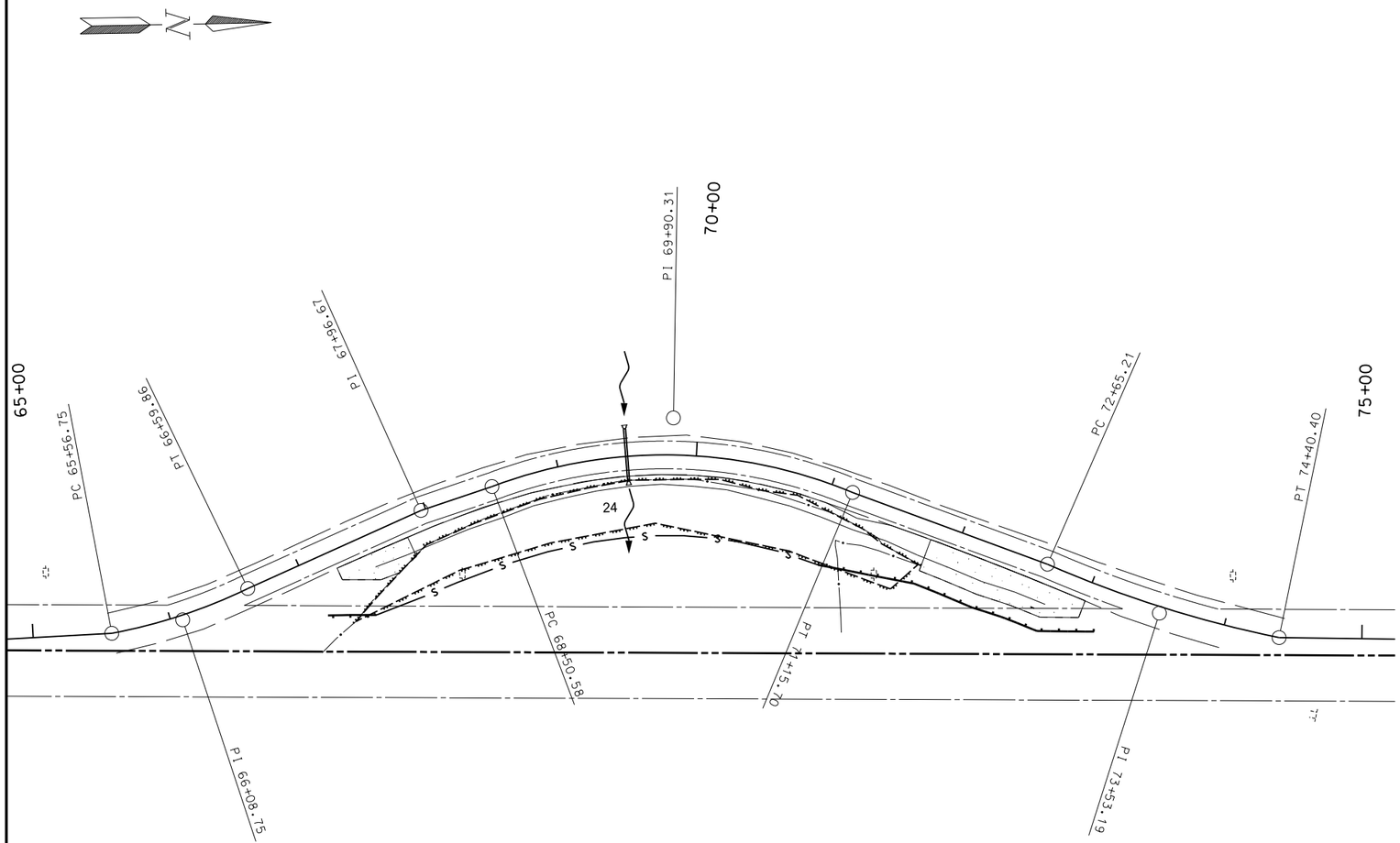
S — TEMPORARY SILT CURTAIN

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K6S-6

Temporary Erosion Control

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	76	11



See sheets 28-29 for quantities

MULCHING/TEMPORARY COVER CROP

TEMPORARY FIBER ROLLS

SF — TEMPORARY SILT FENCE UNSUPPORTED

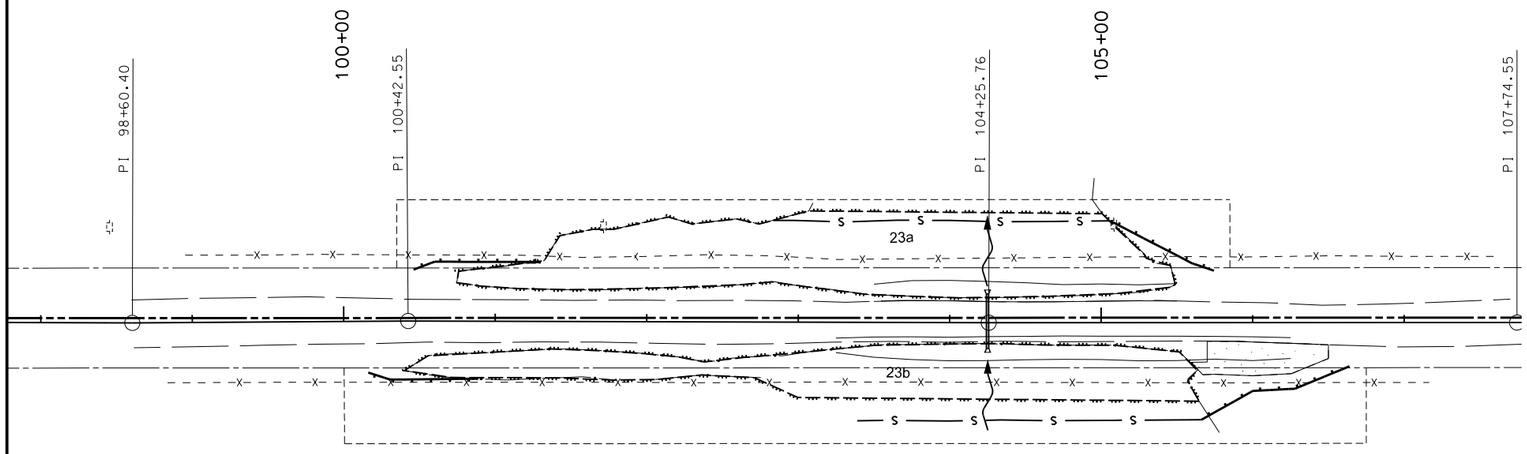
S — TEMPORARY SILT CURTAIN

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K6S-7

Temporary Erosion Control

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	76	12



See sheets 28-29 for quantities

MULCHING/TEMPORARY COVER CROP

TEMPORARY FIBER ROLLS

SF — TEMPORARY SILT FENCE UNSUPPORTED

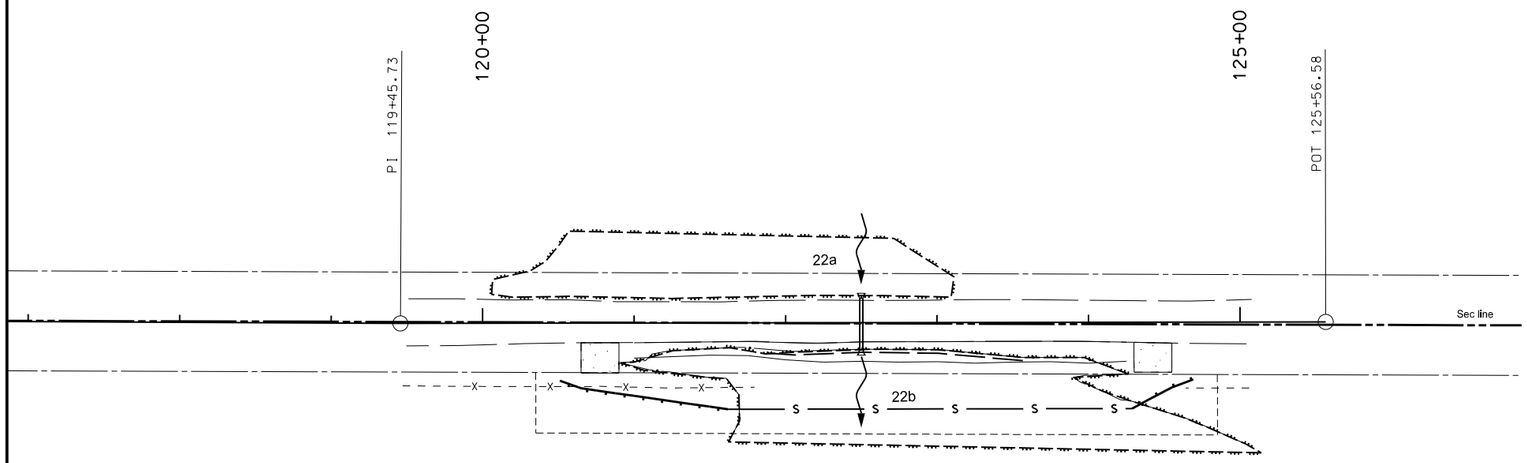
S — TEMPORARY SILT CURTAIN

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K6S-8

Temporary Erosion Control

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	76	13



See sheets 28-29 for quantities

MULCHING/TEMPORARY COVER CROP

TEMPORARY FIBER ROLLS

SF — TEMPORARY SILT FENCE UNSUPPORTED

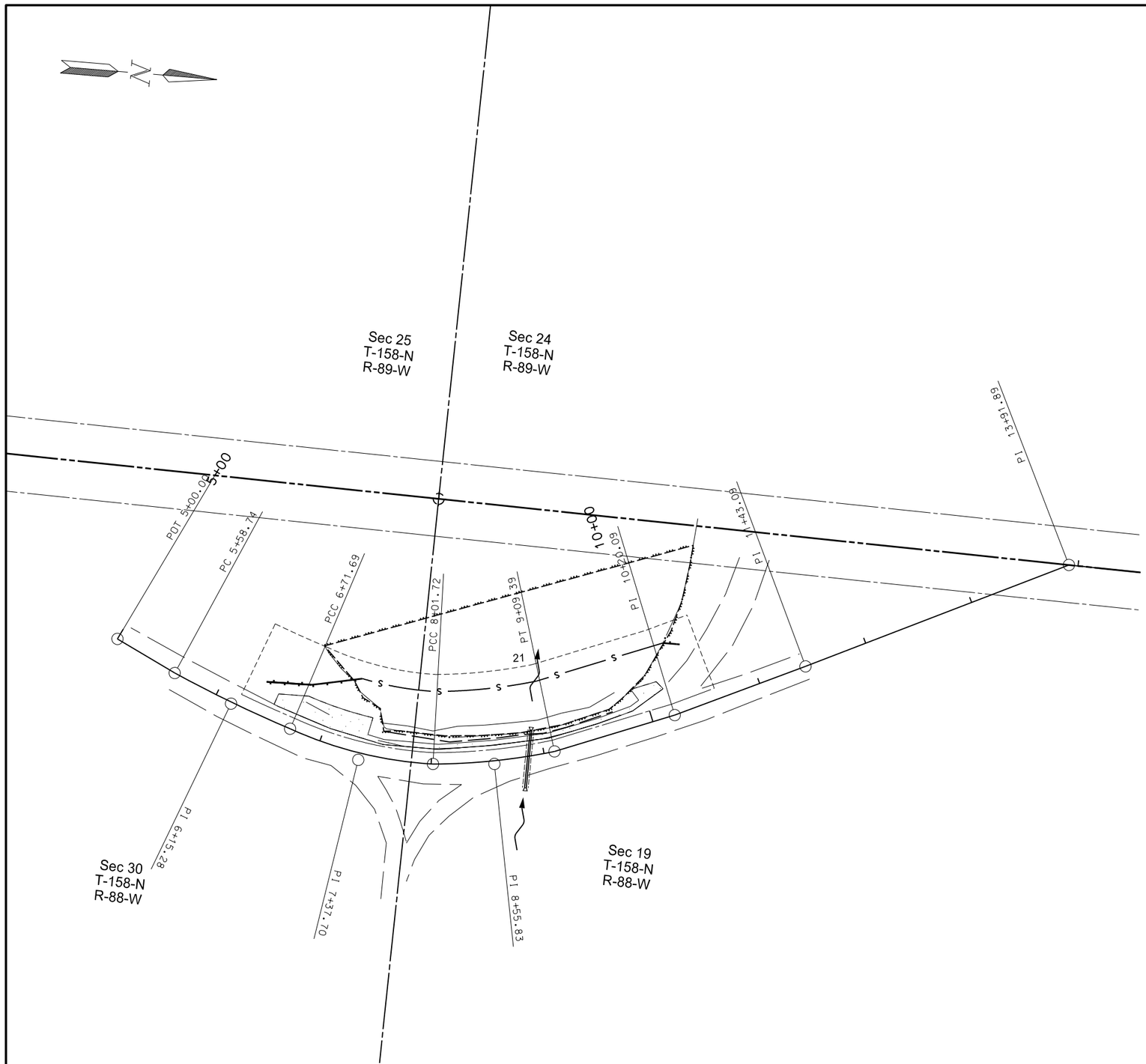
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K6S-9

Temporary Erosion Control

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	76	14



See sheets 28-29 for quantities

MULCHING/TEMPORARY COVER CROP

TEMPORARY FIBER ROLLS

SF — TEMPORARY SILT FENCE UNSUPPORTED

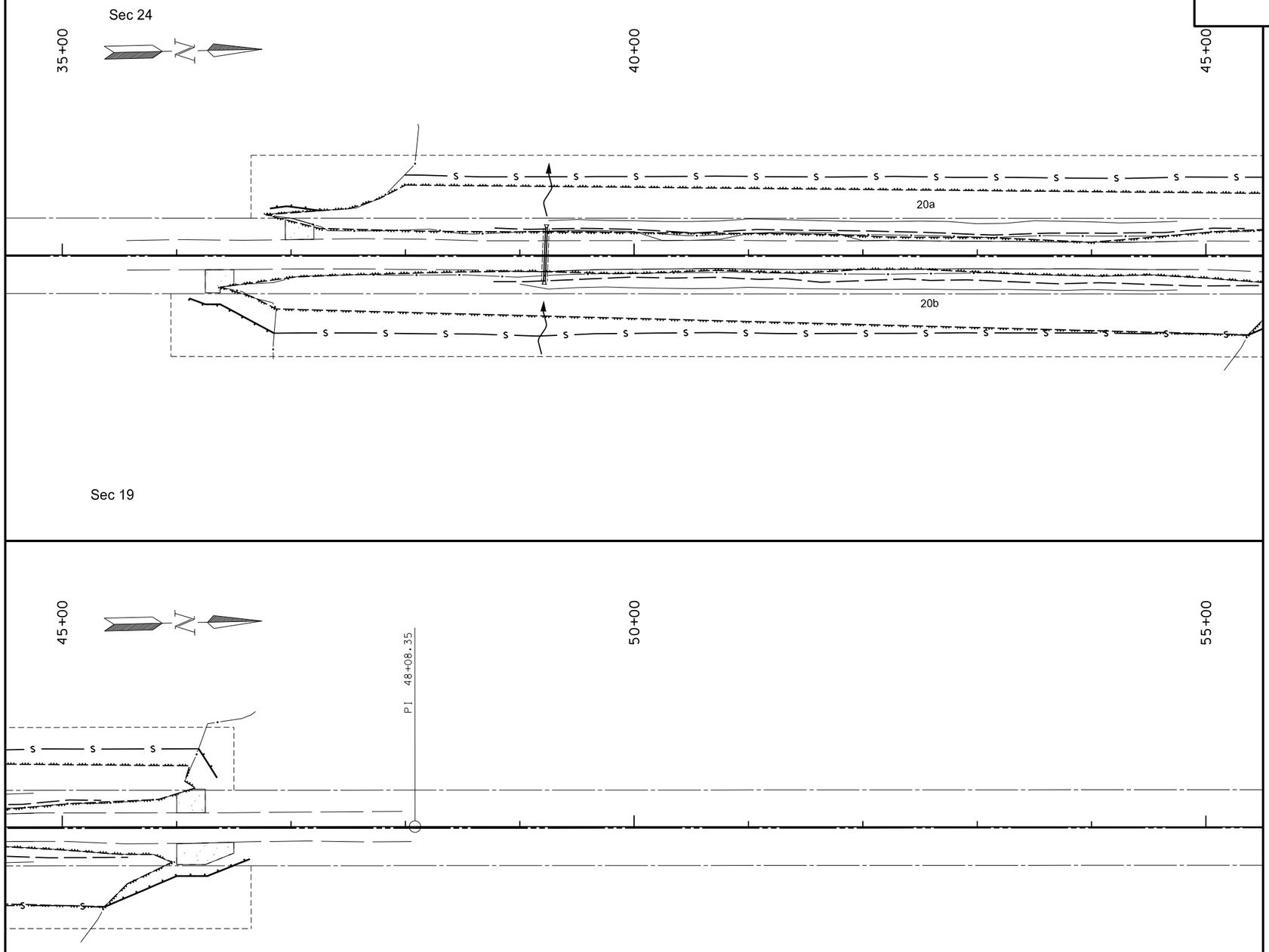
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K6N-1

Temporary Erosion Control

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	ROM-0300(135)	76	15



See sheets 28-29 for quantities

MULCHING/TEMPORARY COVER CROP

TEMPORARY FIBER ROLLS

SF — TEMPORARY SILT FENCE UNSUPPORTED

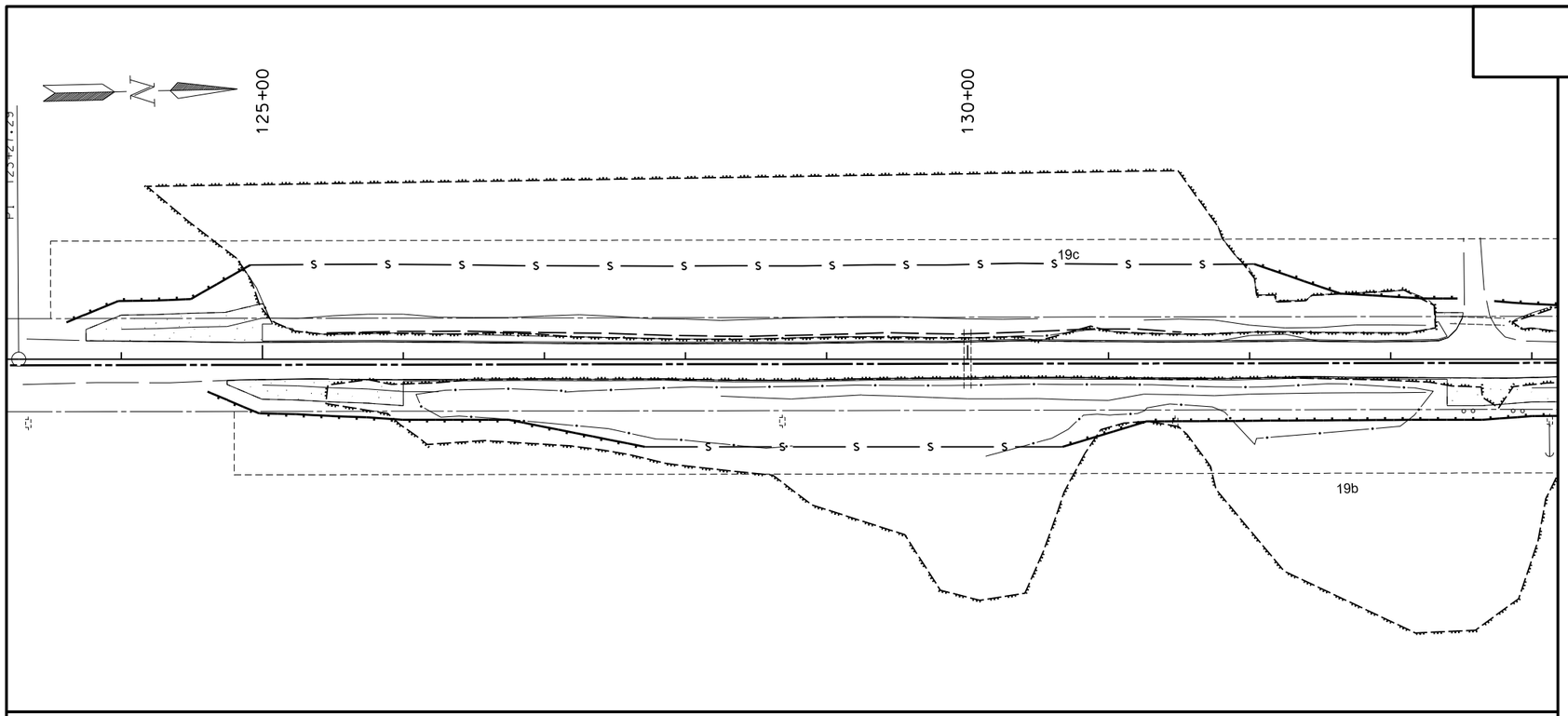
S — TEMPORARY SILT CURTAIN

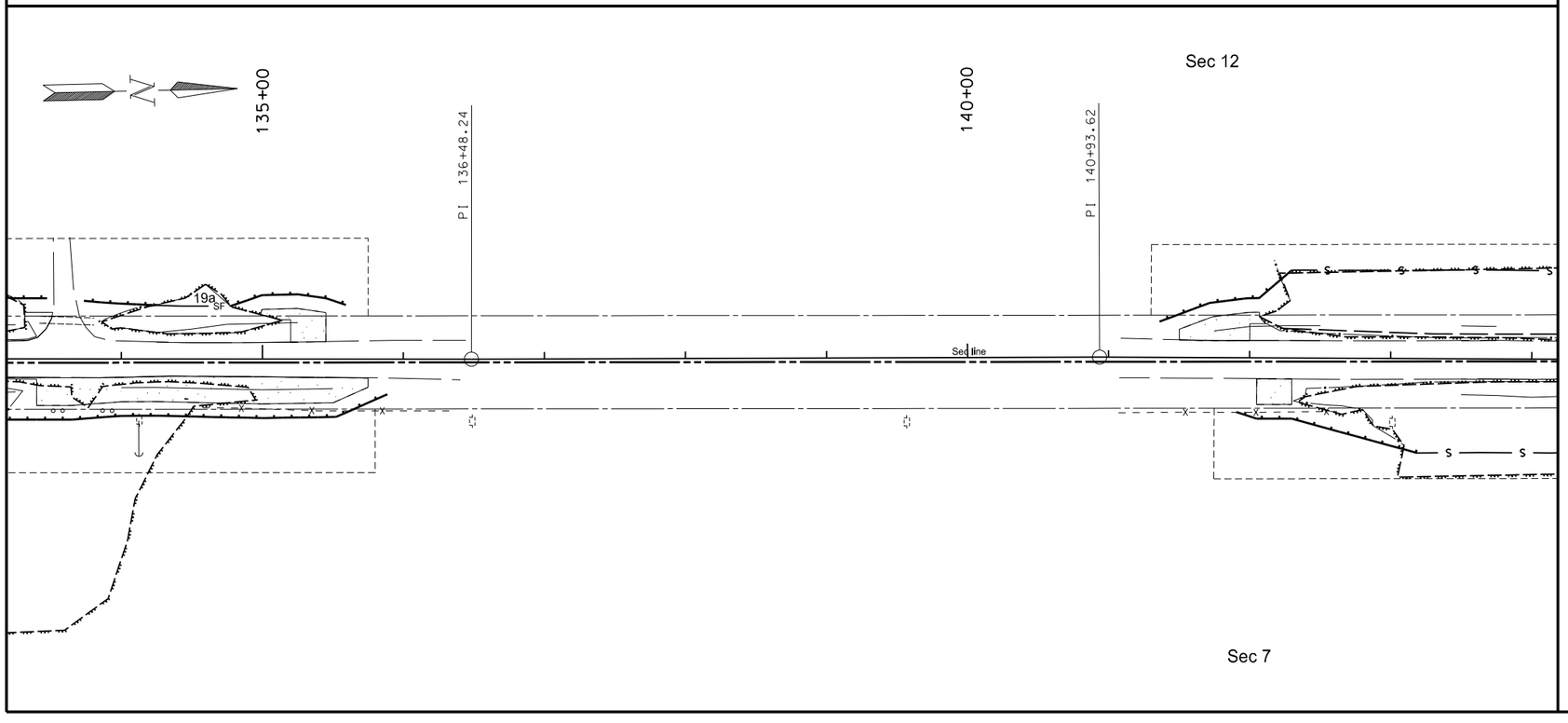
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K6N-2

Temporary Erosion Control

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	ROM-0300(135)	76	16





See sheets 28-29 for quantities

MULCHING/TEMPORARY COVER CROP

TEMPORARY FIBER ROLLS

SF — TEMPORARY SILT FENCE UNSUPPORTED

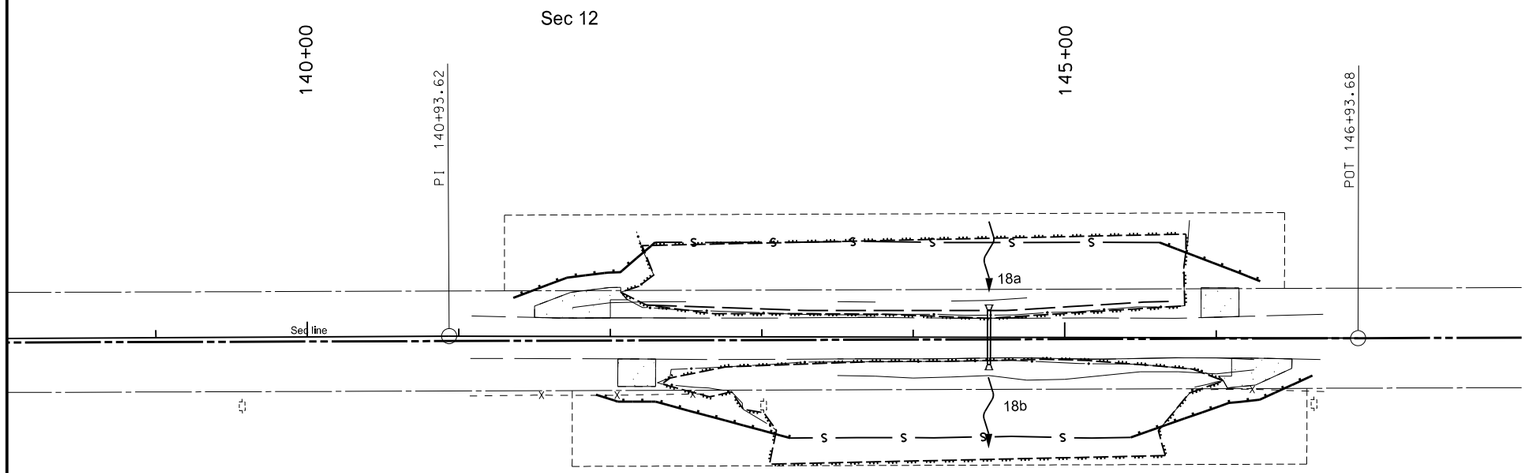
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K6N-3

Temporary Erosion Control

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	76	17



See sheets 28-29 for quantities

MULCHING/TEMPORARY COVER CROP

TEMPORARY FIBER ROLLS

SF — TEMPORARY SILT FENCE UNSUPPORTED

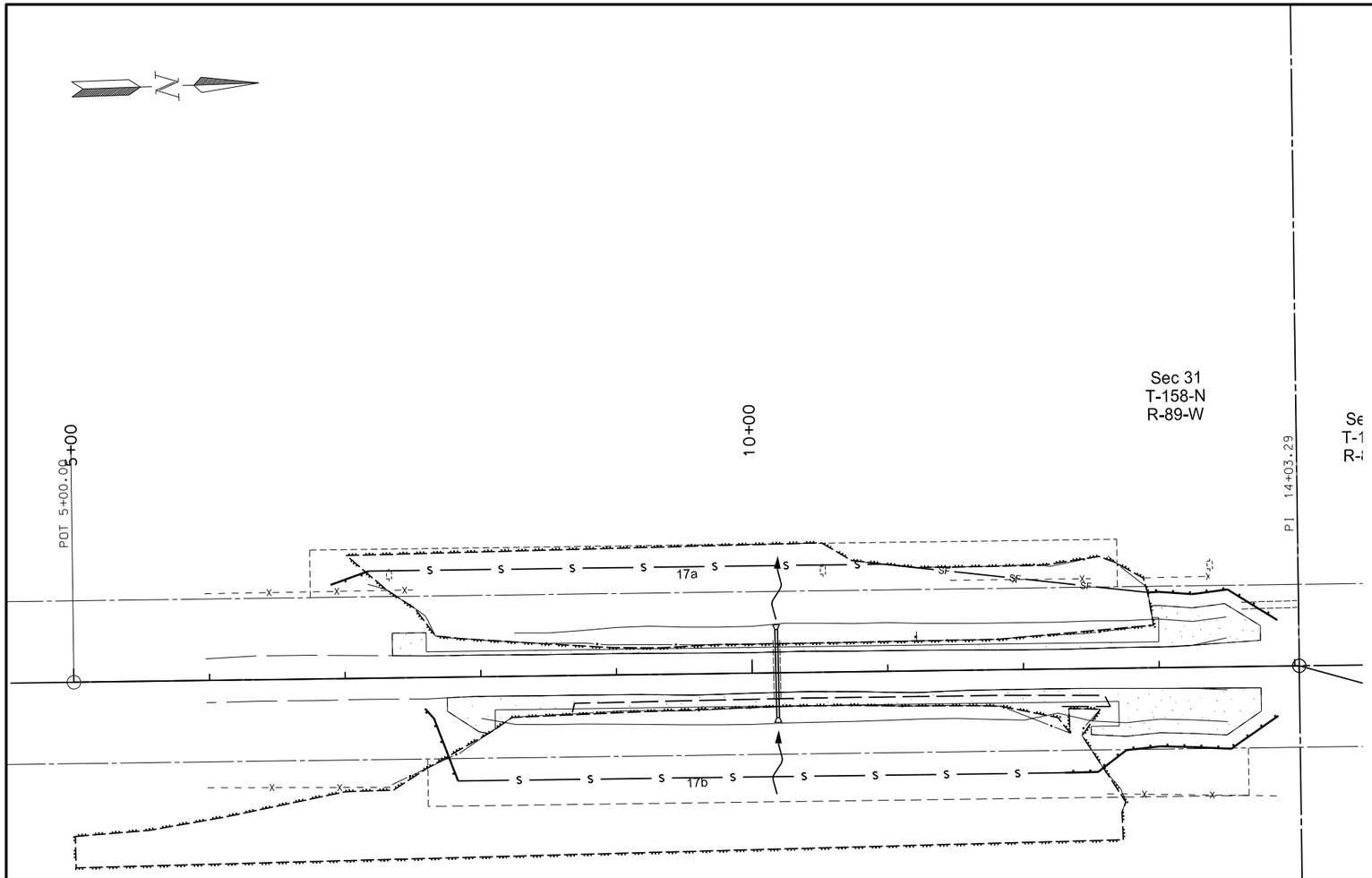
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K6N-4

Temporary Erosion Control

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	76	18



See sheets 28-29 for quantities

MULCHING/TEMPORARY COVER CROP

TEMPORARY FIBER ROLLS

SF — TEMPORARY SILT FENCE UNSUPPORTED

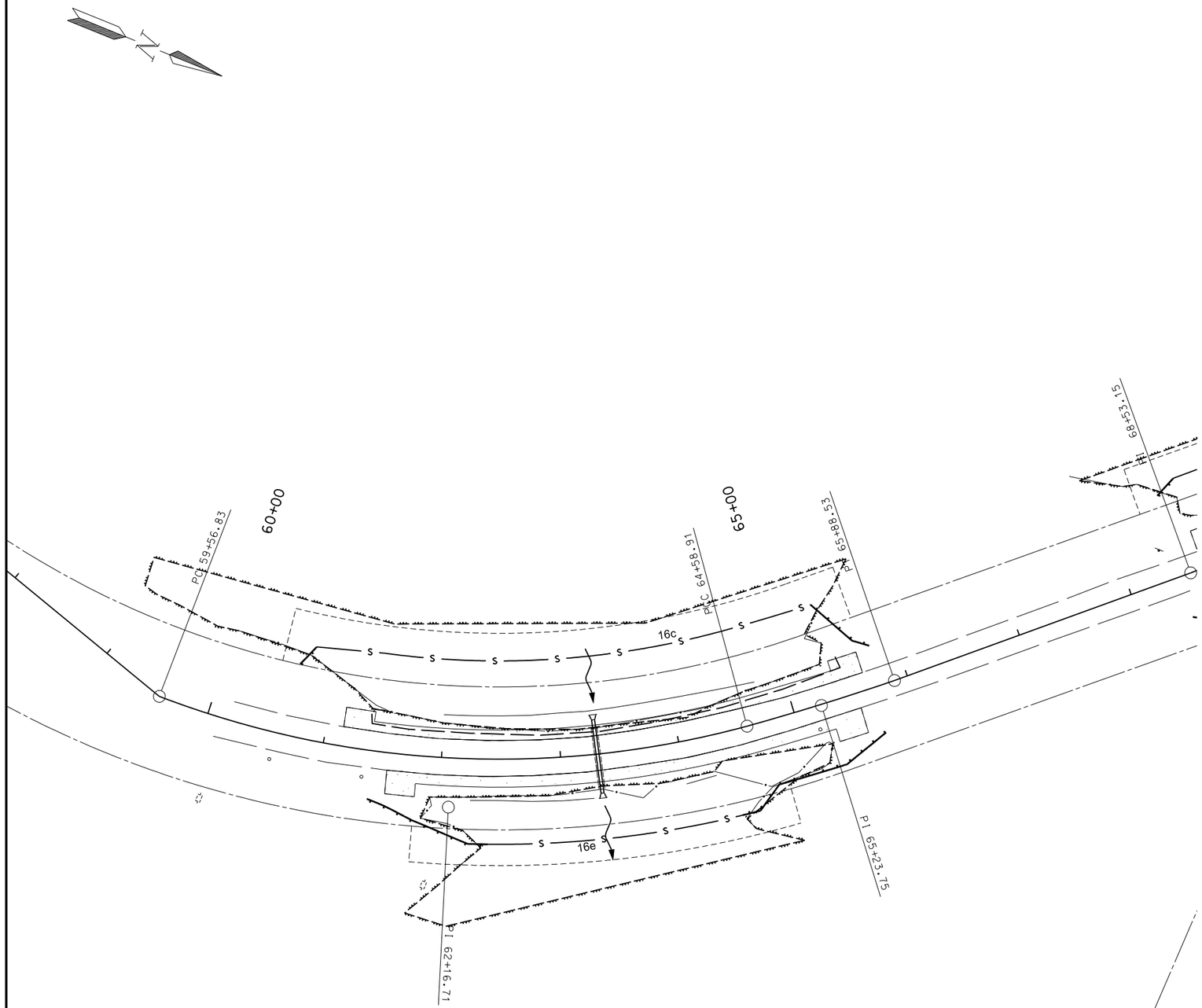
S — TEMPORARY SILT CURTAIN

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K7-1

Temporary Erosion Control

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	76	19



See sheets 28-29 for quantities

MULCHING/TEMPORARY COVER CROP

TEMPORARY FIBER ROLLS

SF TEMPORARY SILT FENCE UNSUPPORTED

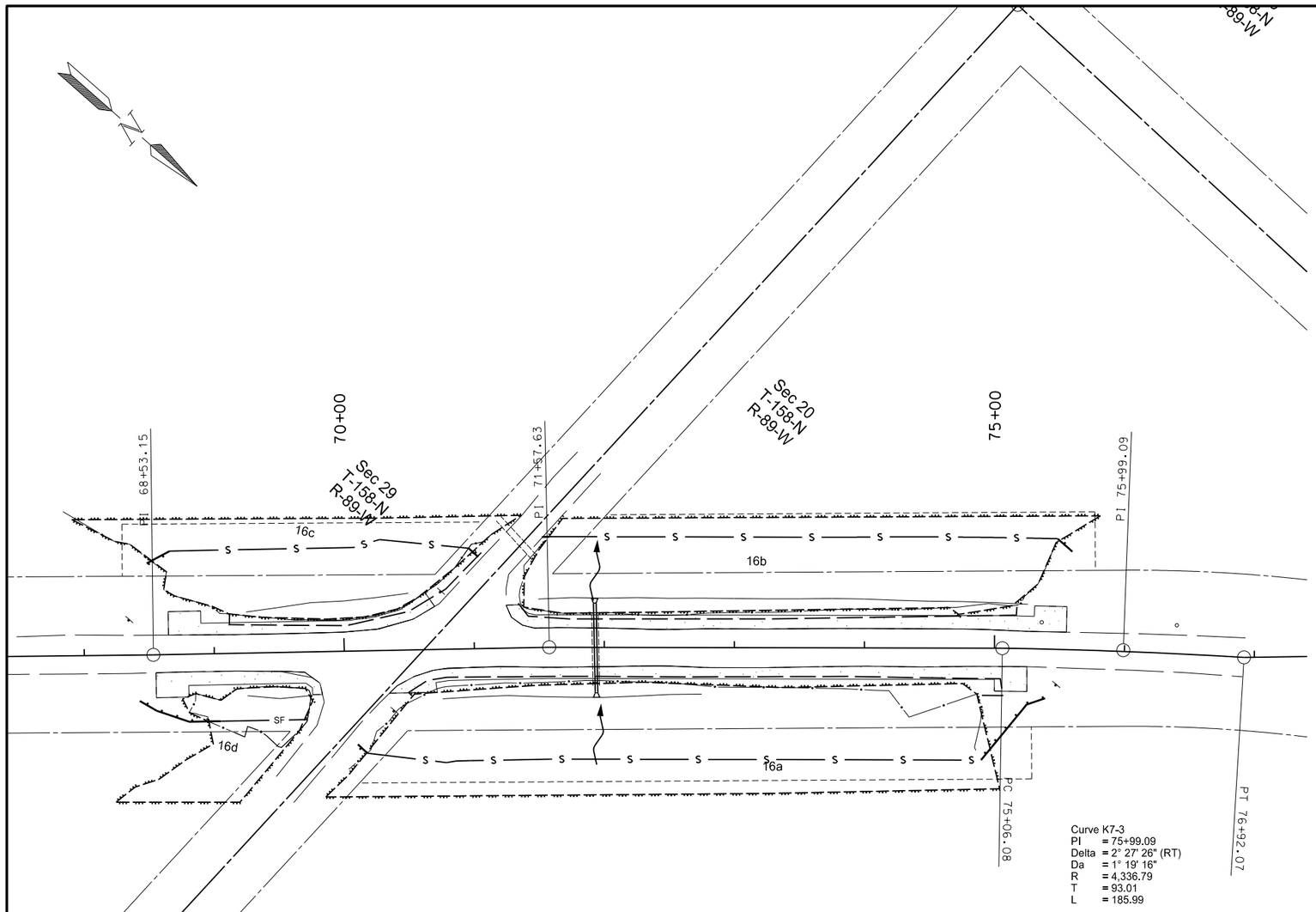
S TEMPORARY SILT CURTAIN

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K7-2

Temporary Erosion Control

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	76	20



See sheets 28-29 for quantities

MULCHING/TEMPORARY COVER CROP

TEMPORARY FIBER ROLLS

SF TEMPORARY SILT FENCE UNSUPPORTED

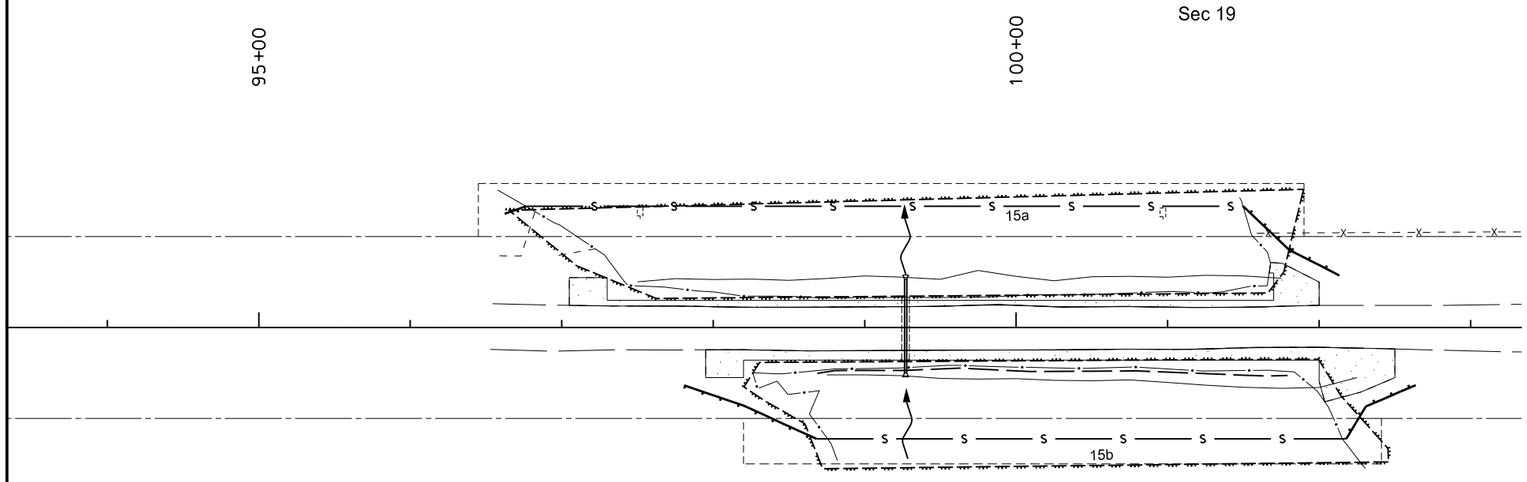
S TEMPORARY SILT CURTAIN

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K7-3

Temporary Erosion Control

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	76	21



See sheets 28-29 for quantities

MULCHING/TEMPORARY COVER CROP

TEMPORARY FIBER ROLLS

SF — TEMPORARY SILT FENCE UNSUPPORTED

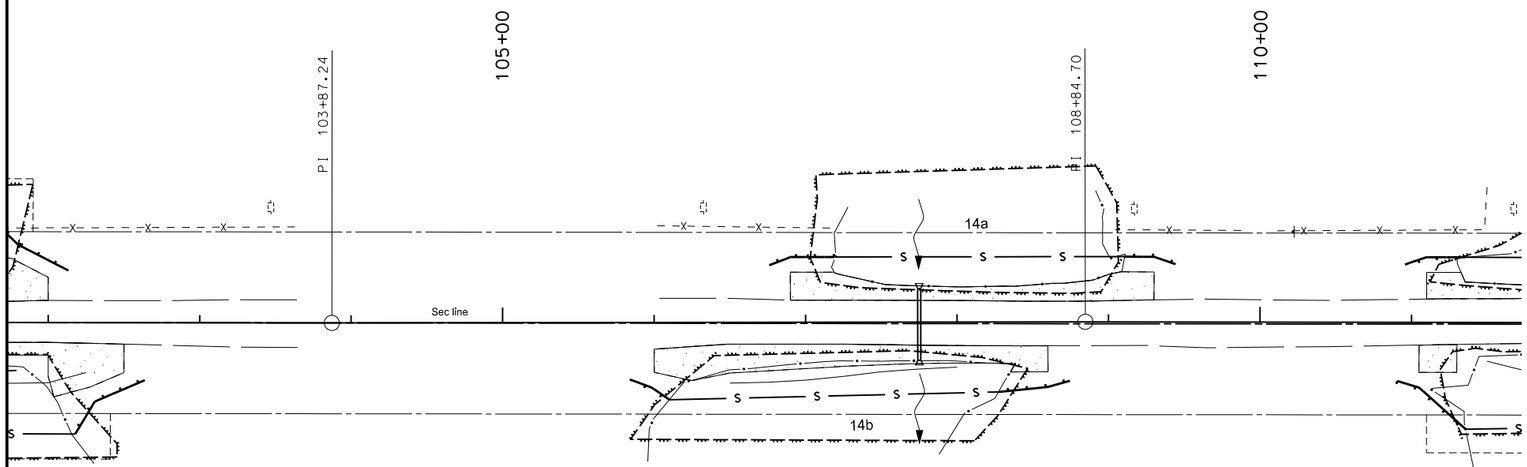
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K7-4

Temporary Erosion Control

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	76	22



See sheets 28-29 for quantities

MULCHING/TEMPORARY COVER CROP

TEMPORARY FIBER ROLLS

SF — TEMPORARY SILT FENCE UNSUPPORTED

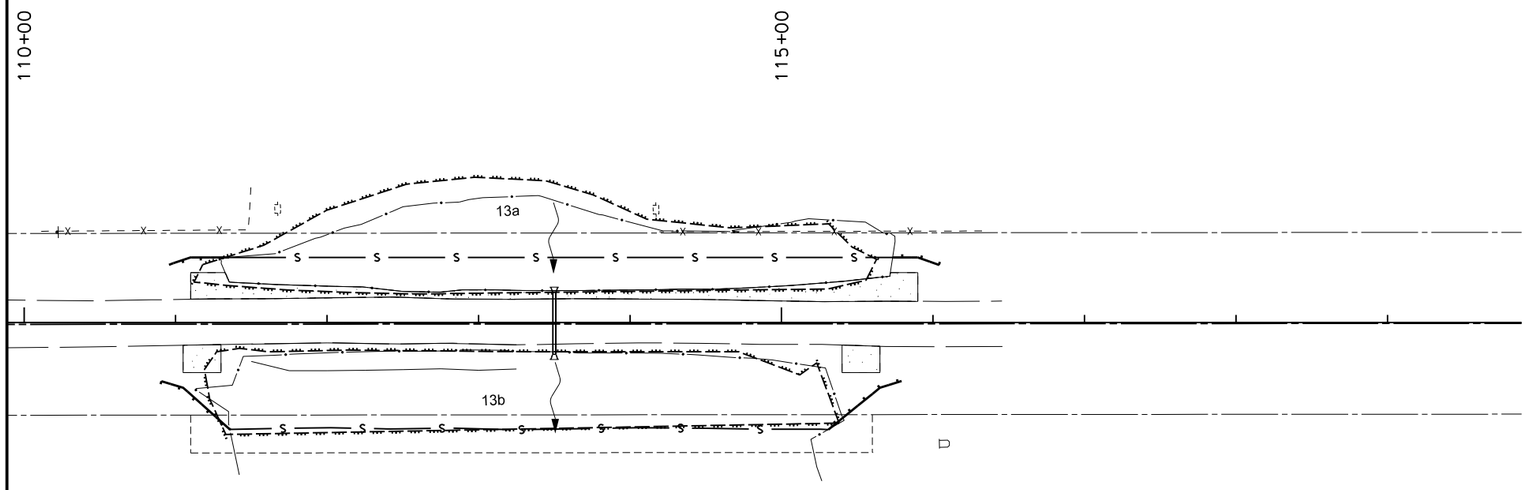
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K7-5

Temporary Erosion Control

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	76	23



See sheets 28-29 for quantities

MULCHING/TEMPORARY COVER CROP

TEMPORARY FIBER ROLLS

SF — TEMPORARY SILT FENCE UNSUPPORTED

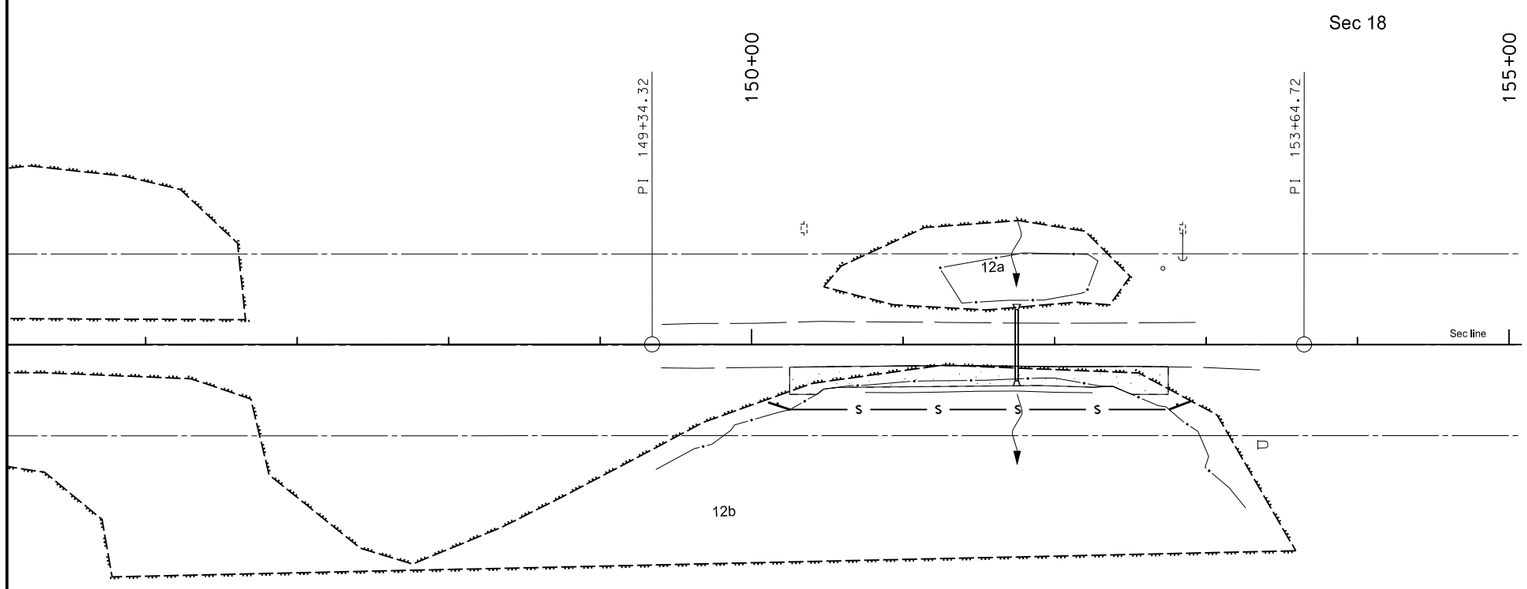
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K7-6

Temporary Erosion Control

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	76	24



See sheets 28-29 for quantities

MULCHING/TEMPORARY COVER CROP

TEMPORARY FIBER ROLLS

SF — TEMPORARY SILT FENCE UNSUPPORTED

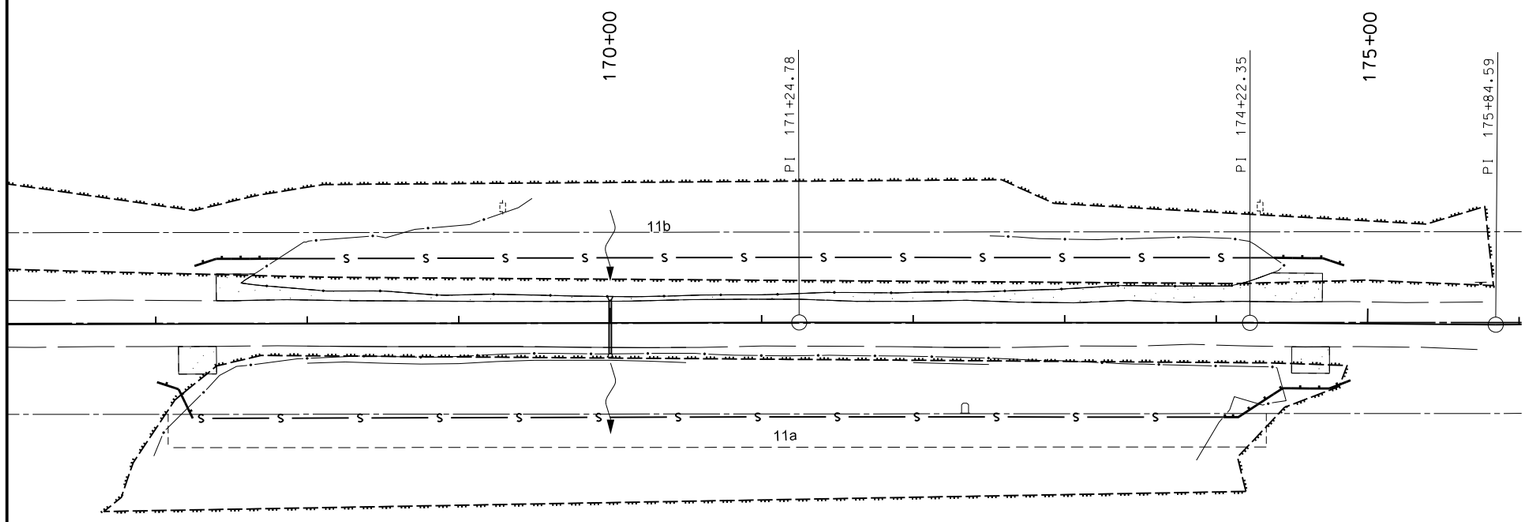
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K7-7

Temporary Erosion Control

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	76	25



See sheets 28-29 for quantities

MULCHING/TEMPORARY COVER CROP

TEMPORARY FIBER ROLLS

SF — TEMPORARY SILT FENCE UNSUPPORTED

S — TEMPORARY SILT CURTAIN

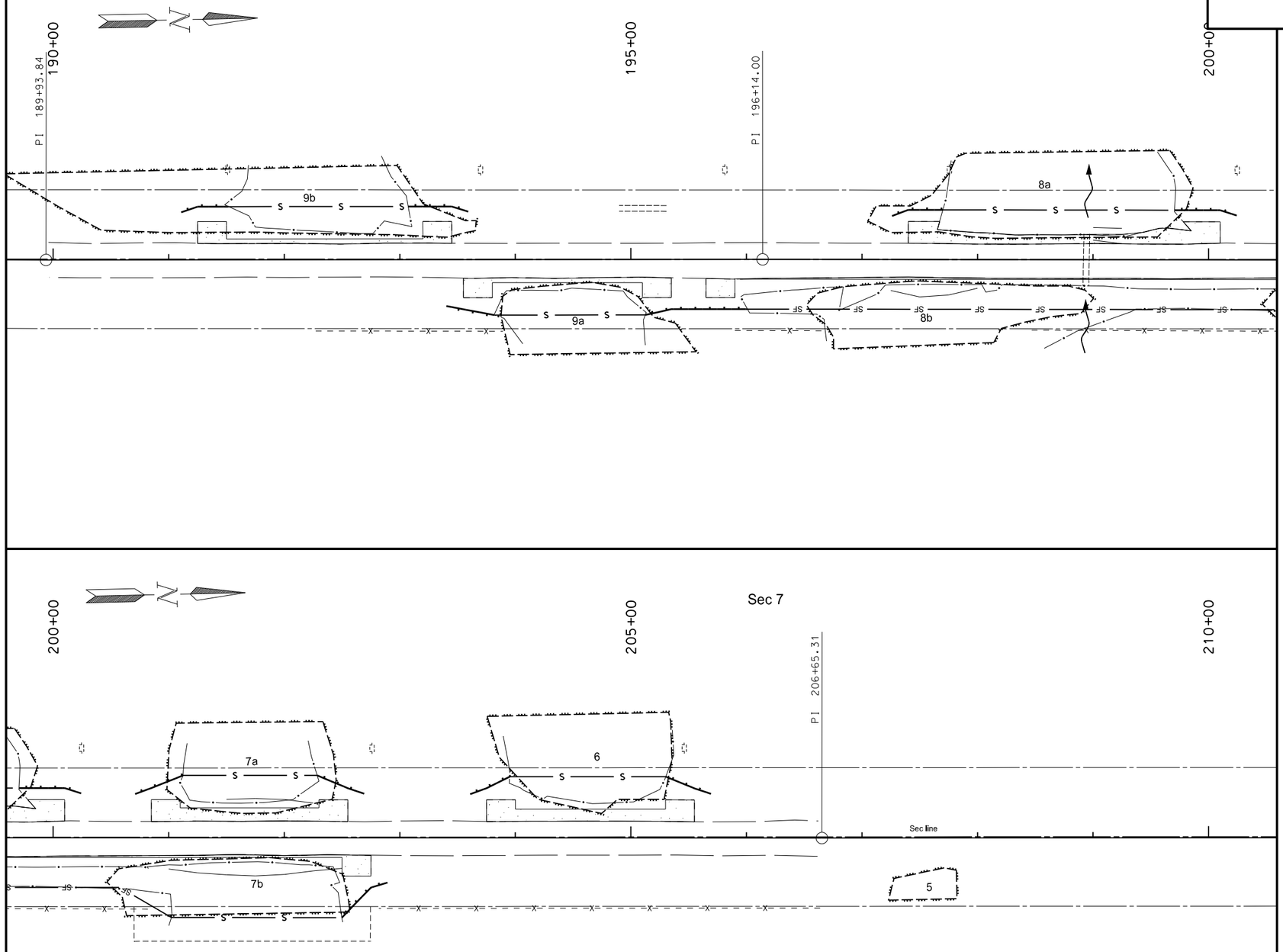
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K7-8

Temporary Erosion Control

9/8/2017 2:16:29 PM bschaff N:\20732\ROM-0300(135)\Design\Mountrail\076_TempEC\076WL_025.dgn

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	ROM-0300(135)	76	26



See sheets 28-29 for quantities

MULCHING/TEMPORARY COVER CROP

TEMPORARY FIBER ROLLS

SF — TEMPORARY SILT FENCE UNSUPPORTED

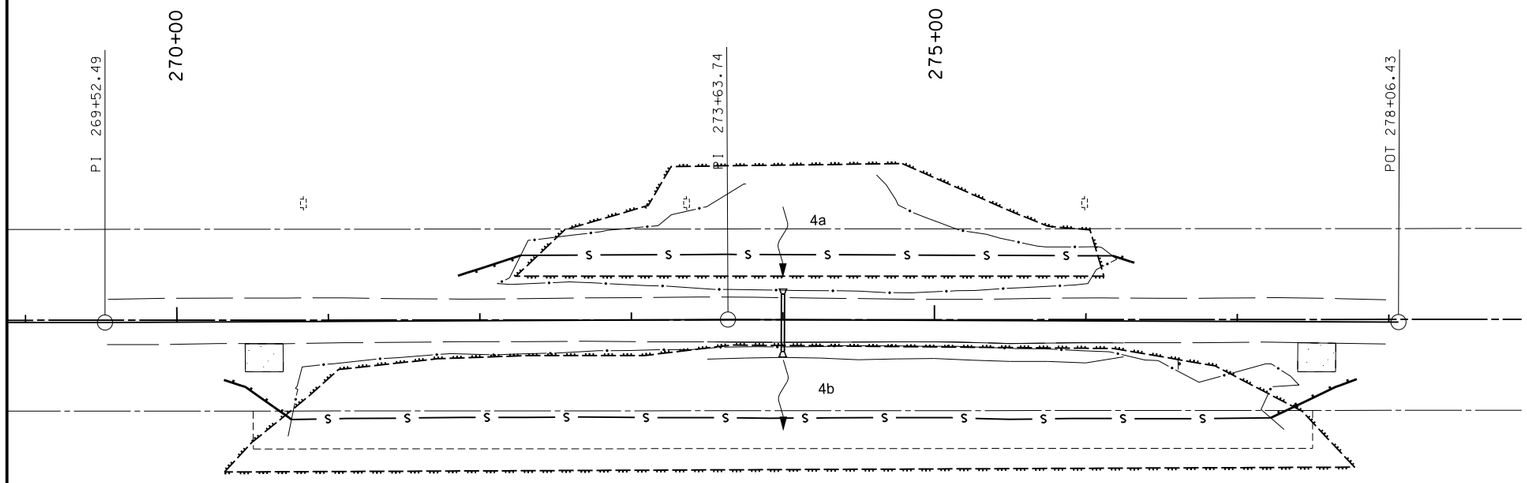
S — TEMPORARY SILT CURTAIN

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K7-9

Temporary Erosion Control

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	76	27



See sheets 28-29 for quantities

MULCHING/TEMPORARY COVER CROP

TEMPORARY FIBER ROLLS

SF — TEMPORARY SILT FENCE UNSUPPORTED

S — TEMPORARY SILT CURTAIN

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K7-10

Temporary Erosion Control

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	ROM-0300(135)	76	28

Temporary Erosion Control				Offset	12" Fiber Rolls (LF)		Silt Fence (LF)		Silt Curtain (LF)	
Site	Stationing			Feet	LT	RT	LT	RT	LT	RT
J10-1	5+66	to	6+03	57-65	39					
	6+03	to	9+01	65-66					297	
	9+01	to	9+33	66-69	34					
J10-2	66+12	to	67+07	46-40		102				
	67+07	to	68+63	40-36				155		
	68+64	to	69+64	36-38		103				
	67+06	to	67+68	35-41	63					
	68+41	to	73+66	71					523	
	73+67	to	73+80	71-66	15					
	71+06	to	71+59	38-32		57				
	71+59	to	72+77	32-38				118		
	72+77	to	73+39	38-38		64				
J10-3	179+89	to	180+04	61-66	15					
	180+04	to	182+47	65-66					243	
	182+47	to	182+61	61-66	15					
	179+00	to	179+18	55-65		20				
	179+18	to	182+39	65						321
	182+39	to	183+14	65-40		80				
J10-4	187+91	to	188+26	63-75	46					
	188+26	to	192+41	75					415	
	192+41	to	192+79	69-75	21					
	187+39	to	187+51	58-66		19				
	187+51	to	191+19	66-69						365
	191+19	to	192+15	69-37		104				
K6S-1	5+66	to	6+00	38-64	40					
	6+00	to	9+05	64-60					255	
	9+05	to	9+16	60-49	15					
	6+19	to	6+42	51-56		26				
	6+42	to	7+56	56-57						129
	7+56	to	7+94	53-57		45				
K6S-2	13+41	to	13+72	38-58	37					
	13+72	to	18+26	58-61					463	
	18+26	to	18+78	47-61	63					
K6S-3	29+06	to	29+39	37-34	38					
	29+39	to	30+29	34			96			
	30+35	to	30+94	34-38	62					
	29+11	to	30+14	40-38	106					
K6S-4	35+01	to	35+58	37-57		62				
	35+58	to	37+49	57						191
	37+49	to	38+09	38-57		65				
	35+01	to	36+62	37-61	123					
	36+62	to	37+94	61			96			
	37+57	to	38+09	31-61	48					
K6S-5	47+10	to	47+27	48-58	20					
	47+27	to	49+54	58					227	
	49+54	to	50+19	38-58	68					
	47+21	to	48+04	38-60		87				
	48+04	to	50+30	60						225

Temporary Erosion Control				Offset	12" Fiber Rolls (LF)		Silt Fence (LF)		Silt Curtain (LF)	
Site	Stationing			Feet	LT	RT	LT	RT	LT	RT
K6S-5	50+30	to	50+99	38-60		75				
K6S-6	53+61	to	54+09	37-69	58					
	54+09	to	60+51	69					644	
	60+51	to	61+68	69-38	123					
	53+96	to	54+45	39-67		57				
	54+45	to	61+26	67						673
	61+26	to	62+64	31-67		152				
K6S-7	67+06	to	67+38	40-53		35				
	67+38	to	71+12	53-58						330
	71+12	to	73+13	43-33		207				
K6S-8	100+46	to	101+27	34-39	85					
	102+83	to	105+06	67					222	
	105+06	to	105+74	67-34	76					
	100+16	to	100+89	34-38		73				
	103+39	to	105+65	65-64						227
	105+65	to	106+64	64-29		106				
K6S-9	120+51	to	121+62	38-57		113				
	121+62	to	124+28	57						267
	124+28	to	124+69	38-57		45				
K6N-1	6+36	to	7+20	29-64	85					
	7+20	to	10+32	64					272	
	10+32	to	10+46	57-64	15					
K6N-2	36+82	to	37+25	41-39	44					
	38+01	to	46+17	70-68					820	
	46+17	to	46+35	68-43	30					
	36+11	to	36+85	38-68		82				
	36+85	to	45+36	68-70						851
	45+36	to	46+64	70-28		136				
K6N-3	123+61	to	124+92	26-67	140					
	124+96	to	132+04	67					712	
	132+04	to	133+47	67-43	148					
	133+74	to	134+24	41-38	51					
	134+24	to	134+77	38			53			
	134+77	to	135+59	38-39	84					
	124+61	to	127+71	23-62		315				
	127+71	to	130+67	62						296
	130+67	to	135+89	25-62		528				
K6N-4	141+36	to	142+30	25-62	104					
	142+30	to	145+62	62-63					333	
	145+62	to	146+29	37-63	71					
	141+91	to	143+19	39-67		132				
	143+19	to	146+44	66-67						225
	145+44	to	146+64	59-25		127				
K7-1	6+90	to	7+18	69-78	30					
	7+18	to	10+97	78-79					379	
	10+97	to	12+91	79-56			196			
	12+92	to	13+88	56-34	102					
	7+58	to	7+82	23-77		59				

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Temporary Erosion Control

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	76	29

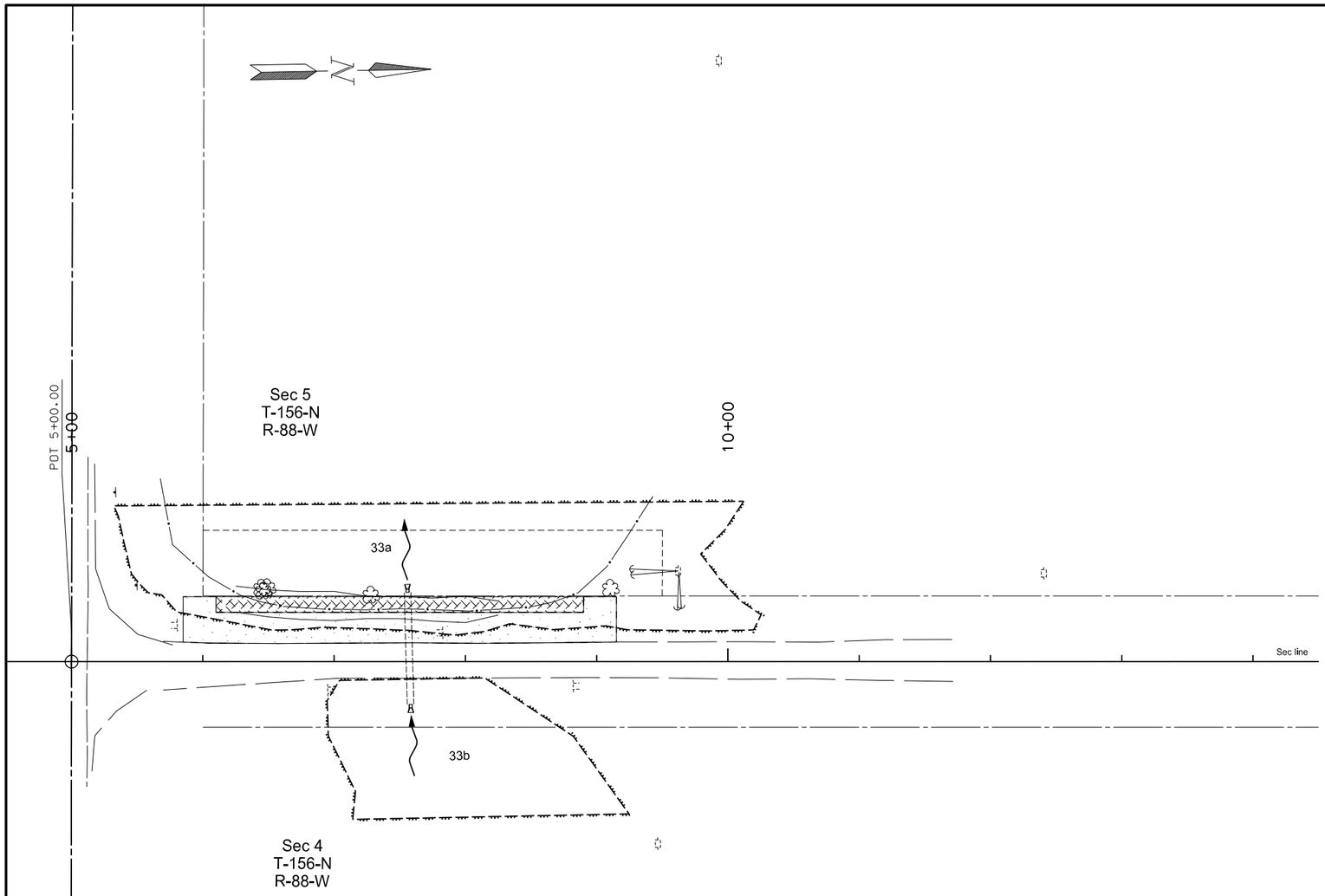
Temporary Erosion Control				Offset	12" Fiber Rolls (LF)		Silt Fence (LF)		Silt Curtain (LF)	
Site	Stationing			Feet	LT	RT	LT	RT	LT	RT
K7-1	7+82	to	12+29	77						447
	12+29	to	13+87	37-77		171				
K7-2	60+66	to	60+78	61-78	20					
	60+78	to	65+41	78-83					420	
	65+41	to	65+77	34-83	61					
	61+42	to	62+40	41-72		110				
	62+40	to	64+38	72						216
	64+38	to	65+68	39-72		144				
K7-3	68+49	to	68+67	70-80	20					
	68+67	to	70+97	77-80					231	
	70+97	to	71+04	70-77	10					
	68+42	to	69+04	35-52		66				
	69+04	to	69+71	52						67
	70+09	to	70+16	72-79		10				
	70+16	to	74+90	79-86						472
	74+90	to	75+40	38-86		70				
	71+54	to	71+58	85	5					
	71+58	to	75+47	85					392	
	75+47	to	75+57	75-85	15					
K7-4	96+62	to	96+77	75-80	15					
	96+77	to	101+50	80					473	
	101+50	to	102+13	80-34	79					
	97+81	to	98+68	38-74		94				
	98+68	to	102+18	74						350
	102+18	to	102+64	38-74		61				
K7-5	105+86	to	106+10	38-51		30				
	106+10	to	108+27	51-46						217
	108+27	to	108+74	46-39		48				
	106+76	to	107+20	38-43	44					
	107+20	to	109+11	43					191	
	109+11	to	109+44	43-38	34					
K7-6	110+91	to	111+36	39-71		56				
	111+36	to	115+31	71						395
	115+31	to	115+79	71-39		59				
	110+96	to	111+35	38-43	41					
	111+35	to	115+72	43					438	
	115+72	to	116+04	43-38	32					
K7-7	150+11	to	150+25	38-43		15				
	150+25	to	152+76	43						250
	152+76	to	152+90	43-38		15				
K7-8	167+01	to	167+24	38-62		36				
	167+24	to	174+05	62						680
	174+05	to	174+89	43-38		90				
	167+26	to	167+81	38-43	56					
	167+81	to	174+38	43					657	
	174+38	to	174+84	43-38	47					
K7-9	191+11	to	191+52	41-46	42					
	191+52	to	193+07	46					156	

Temporary Erosion Control				Offset	12" Fiber Rolls (LF)		Silt Fence (LF)		Silt Curtain (LF)	
Site	Stationing			Feet	LT	RT	LT	RT	LT	RT
K7-9	193+07	to	193+59	46-41	53					
	193+40	to	193+82	40-48		42				
	193+82	to	195+14	48						131
	195+14	to	196+01	48-43		89				
	196+01	to	201+02	43-69				509		
	201+02	to	202+50	69						147
	202+50	to	202+89	39-69		51				
	197+26	to	197+70	38-43	45					
	197+70	to	199+70	43					200	
	199+70	to	200+24	43-38	55					
	200+71	to	201+12	38-54	44					
	201+12	to	202+28	54					116	
	202+28	to	202+69	38-54	44					
	203+61	to	203+95	38-53	38					
	203+95	to	205+31	53					135	
	205+31	to	205+69	38-53	42					
K7-10	270+31	to	270+75	38-64		52				
	270+75	to	277+22	64						647
	277+22	to	277+79	38-64		62				
	271+86	to	272+27	30-43	44					
	272+27	to	276+18	43					391	
	276+18	to	276+32	38-43	15					
				Subtotal	3,000	4,447	441	782	9,605	8,119
				Engineers Discretion (5%)	150	222	22	39	480	406
				Total	**3,150**	**4,669**	**463**	**821**	**10,085**	**8,525**

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Temporary Erosion Control

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	77	1



See sheets 28-30 for quantities

SEEDING CLASS II

TRM TYPE II

CONCRETE EROSION CONTROL BLANKET

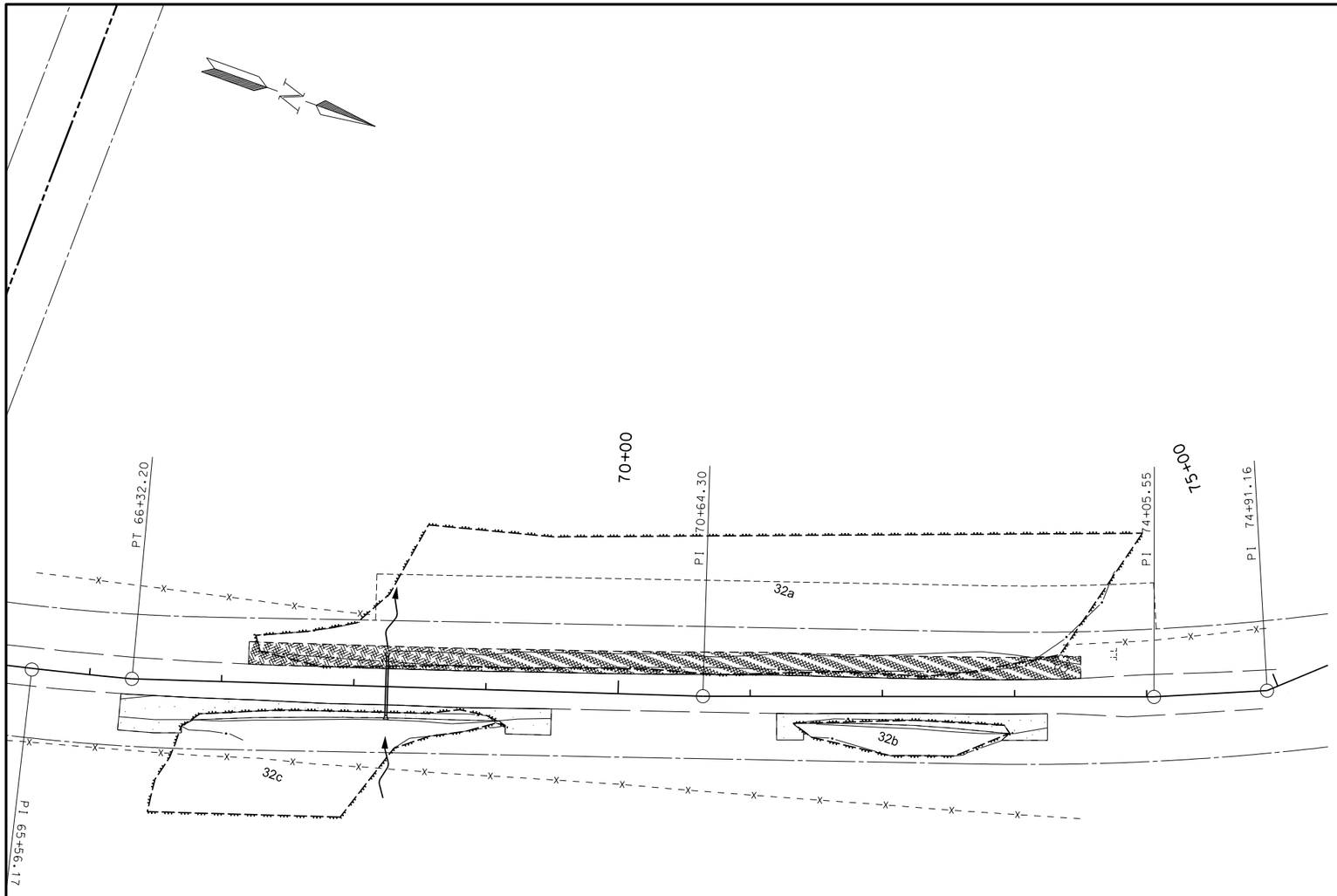
RIPRAP GRADE II

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J10-1

Permanent Erosion Control

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	77	2



See sheets 28-30 for quantities

SEEDING CLASS II

TRM TYPE II

CONCRETE EROSION CONTROL BLANKET

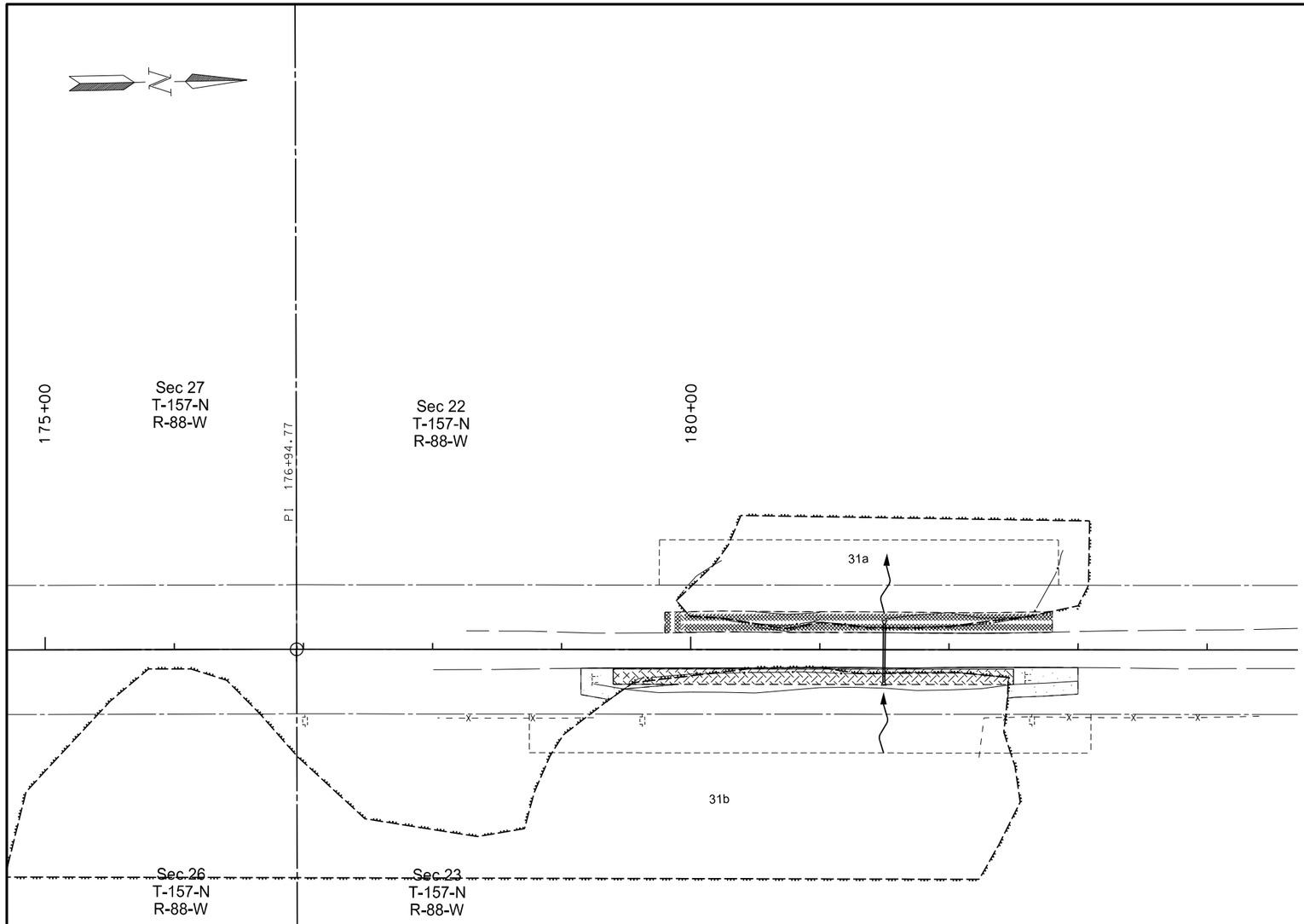
RIPRAP GRADE II

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J10-2

Permanent Erosion Control

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	77	3



See sheets 28-30 for quantities

SEEDING CLASS II

TRM TYPE II

CONCRETE EROSION CONTROL BLANKET

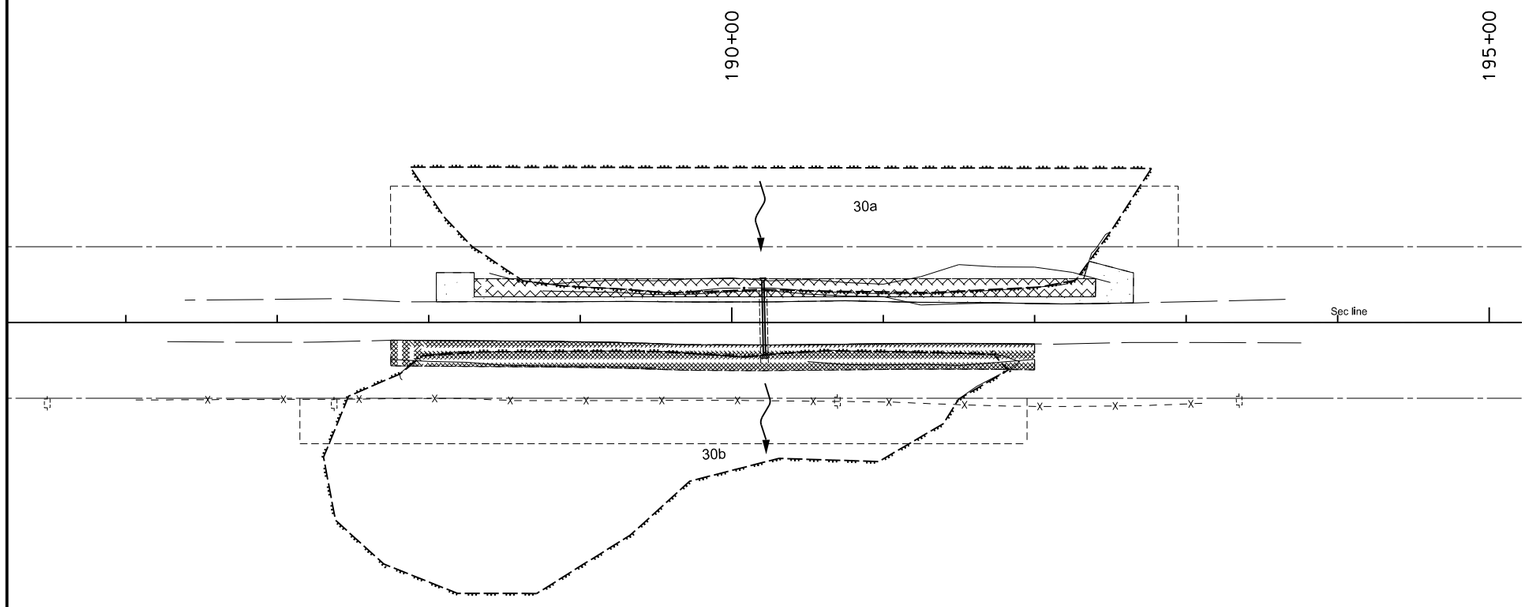
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J10-3

Permanent Erosion Control

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	77	4



See sheets 28-30 for quantities

SEEDING CLASS II

TRM TYPE II

CONCRETE EROSION CONTROL BLANKET

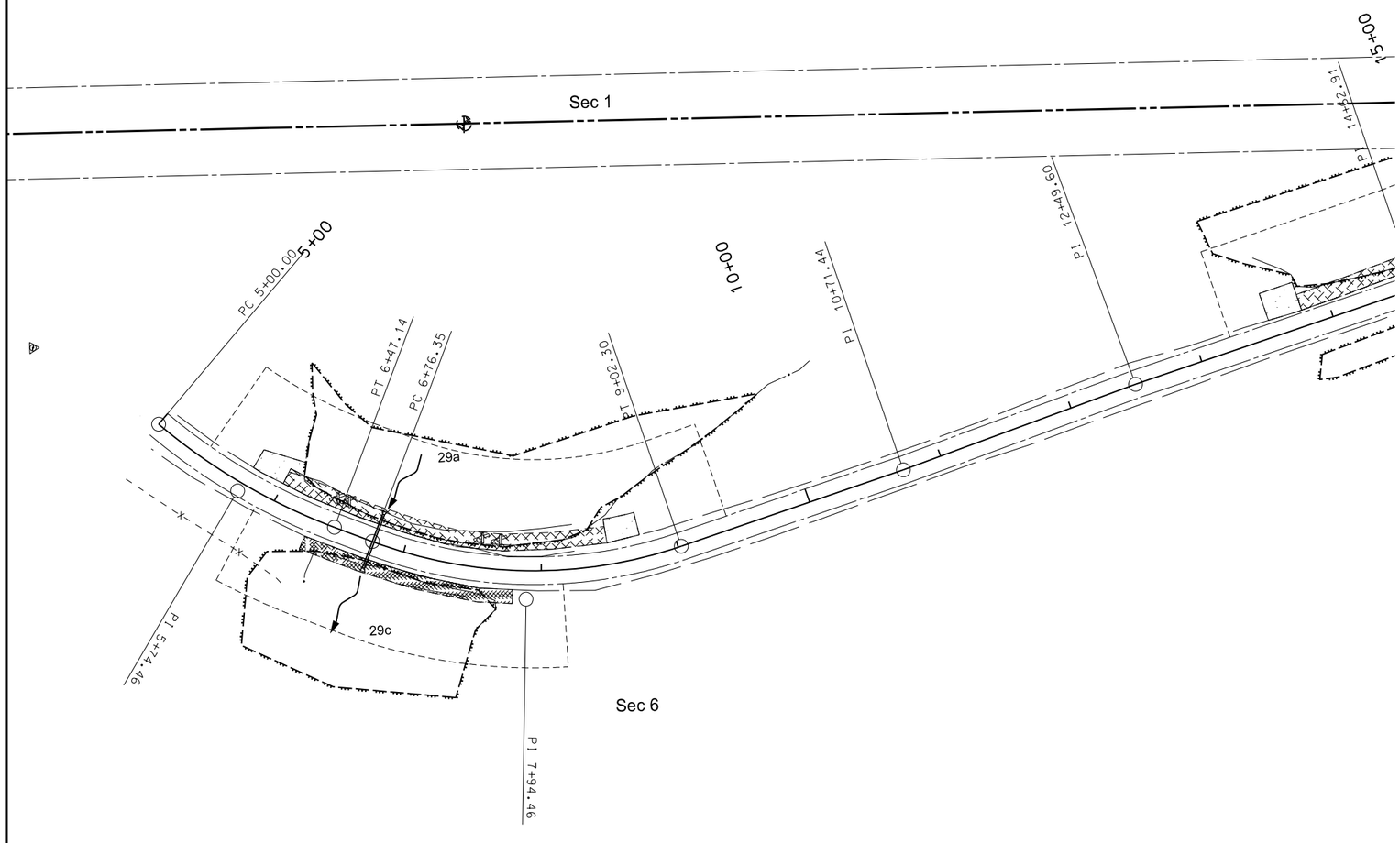
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J10-4

Permanent Erosion Control

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	77	5



See sheets 28-30 for quantities

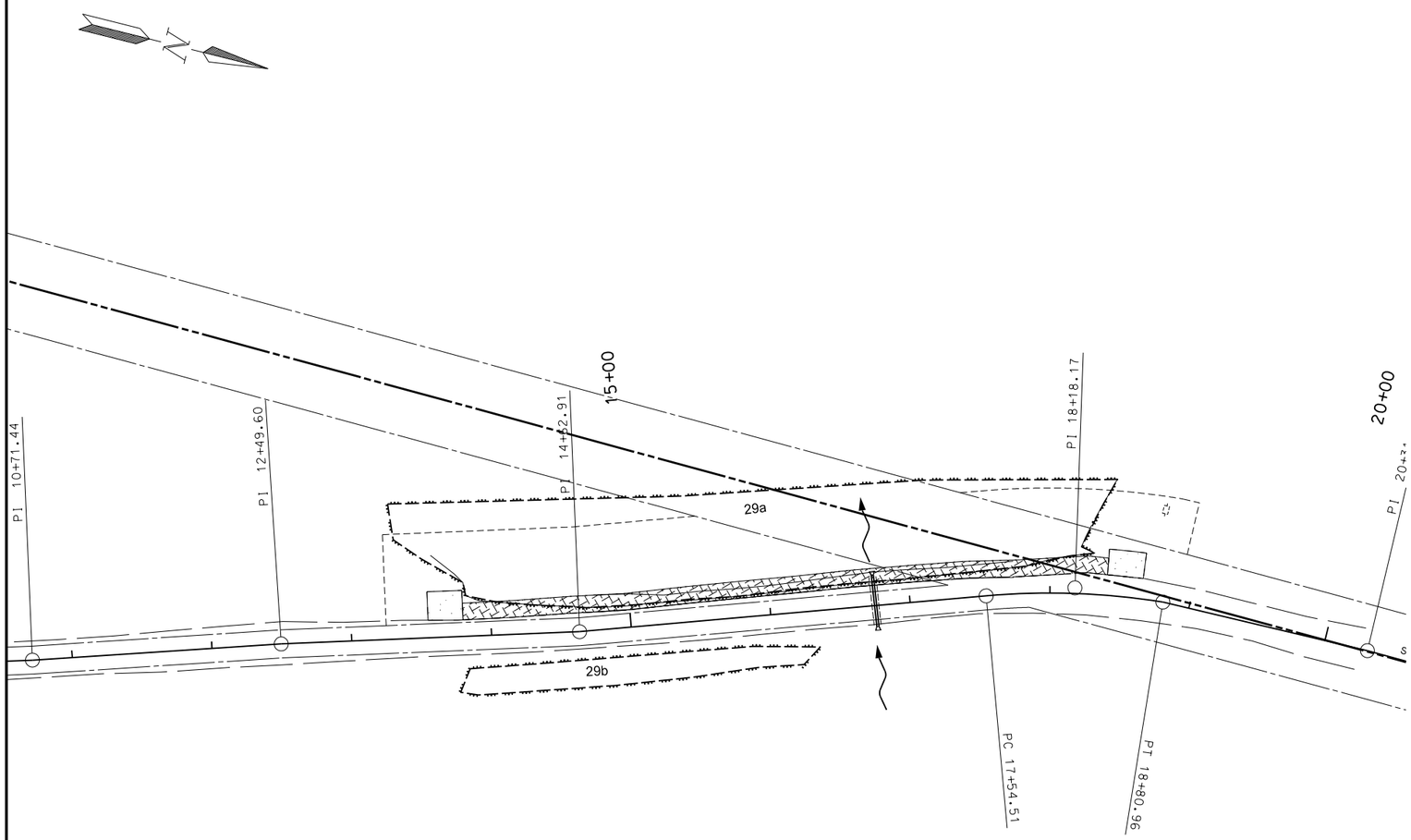
- SEEDING CLASS II
- TRM TYPE II
- CONCRETE EROSION CONTROL BLANKET
- RIPRAP GRADE II

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K6S-1

Permanent Erosion Control

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	77	6



See sheets 28-30 for quantities

SEEDING CLASS II

TRM TYPE II

CONCRETE EROSION CONTROL BLANKET

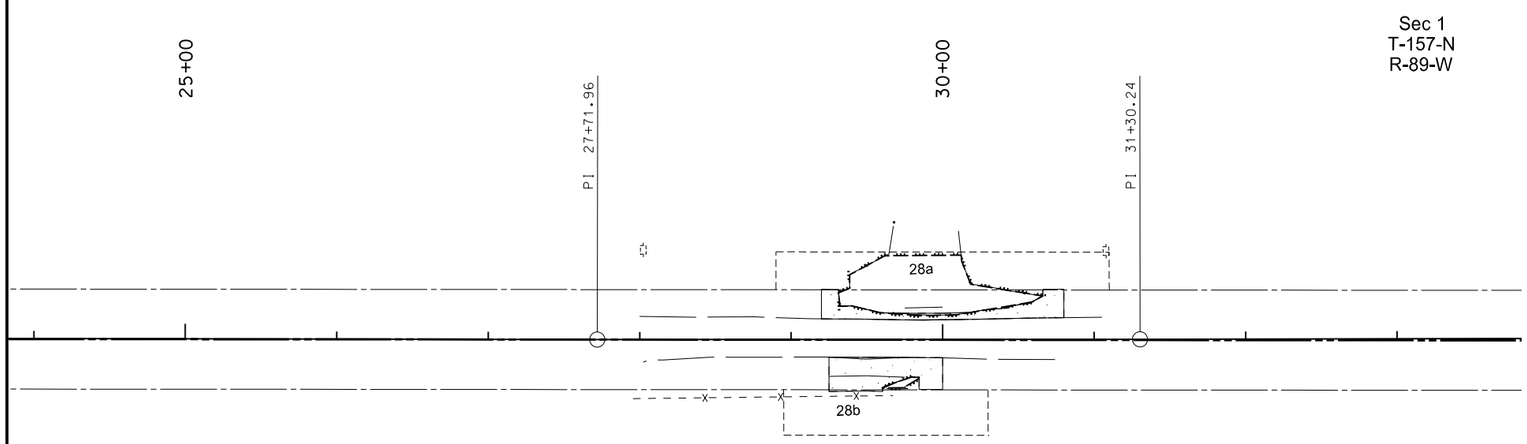
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K6S-2

Permanent Erosion Control

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	77	7



Sec 1
T-157-N
R-89-W

Sec 6
T-157-N
R-88-W

See sheets 28-30 for quantities

SEEDING CLASS II

TRM TYPE II

CONCRETE EROSION CONTROL BLANKET

RIPRAP GRADE II

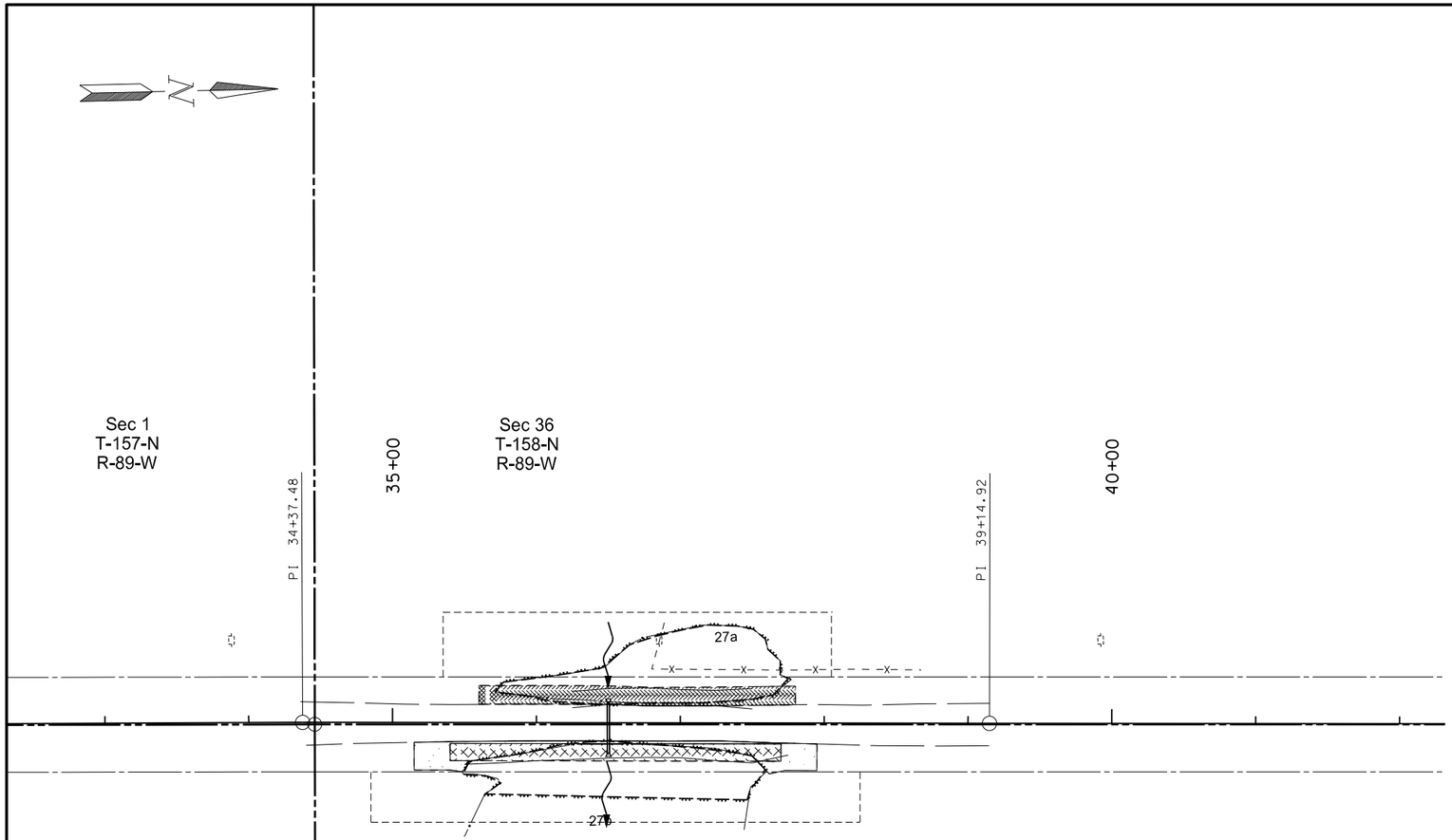
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K6S-3

Permanent Erosion Control

9/8/2017 2:07:48 PM bschaff N:\20732\ROM-0300(135)\Design\Mountrail\077_PermanentEC\077WL_07.dgn

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	77	8



See sheets 28-30 for quantities

SEEDING CLASS II

TRM TYPE II

CONCRETE EROSION CONTROL BLANKET

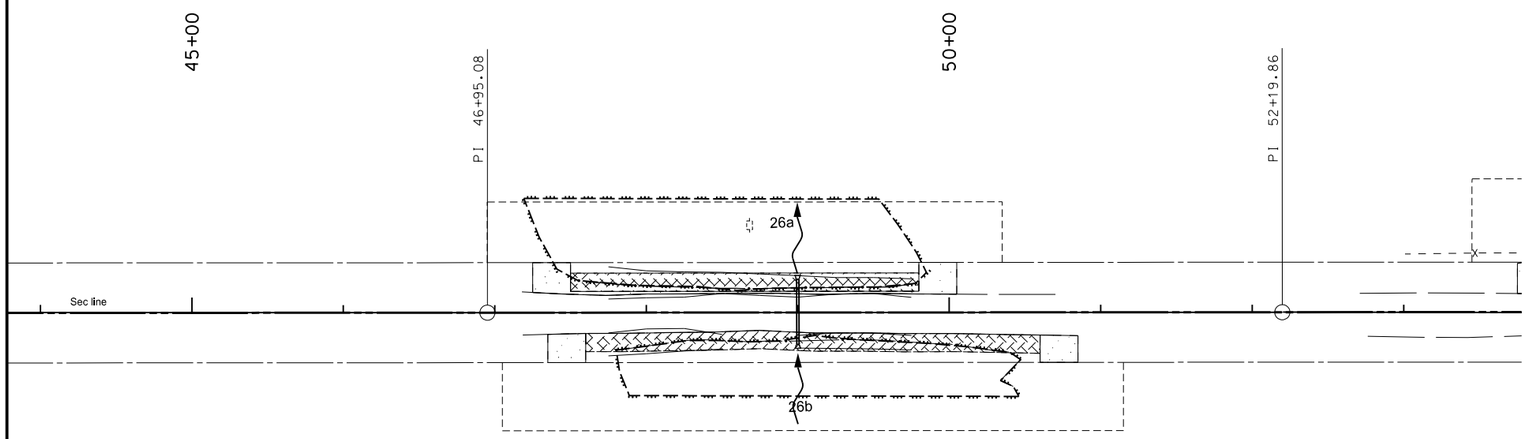
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K6S-4

Permanent Erosion Control

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	77	9



See sheets 28-30 for quantities

SEEDING CLASS II

TRM TYPE II

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K6S-5

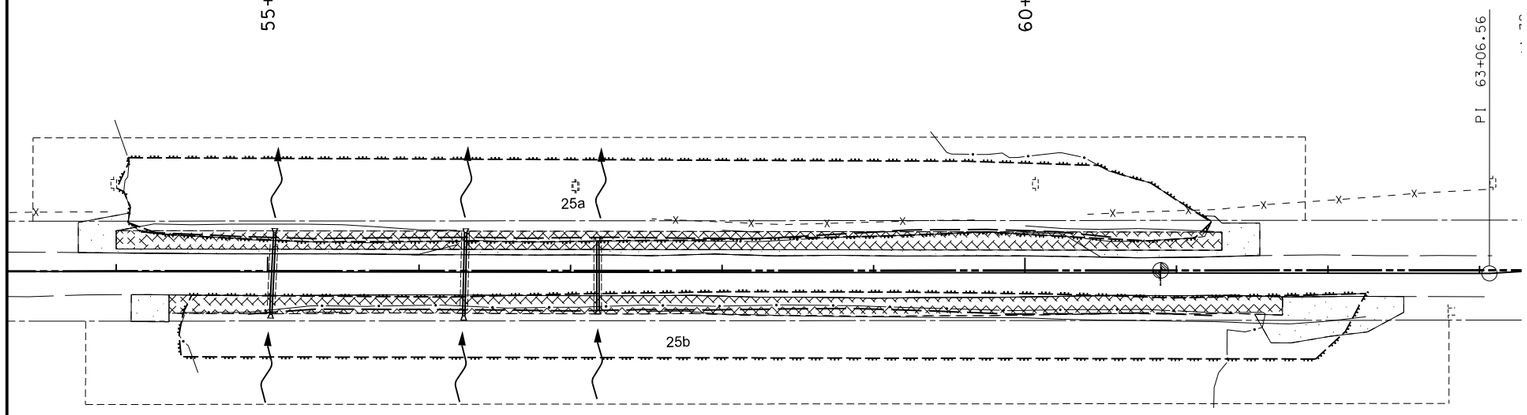
Permanent Erosion Control

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	77	10

55+00

60+00

Sec 36



Sec 31

See sheets 28-30 for quantities

SEEDING CLASS II

TRM TYPE II

CONCRETE EROSION CONTROL BLANKET

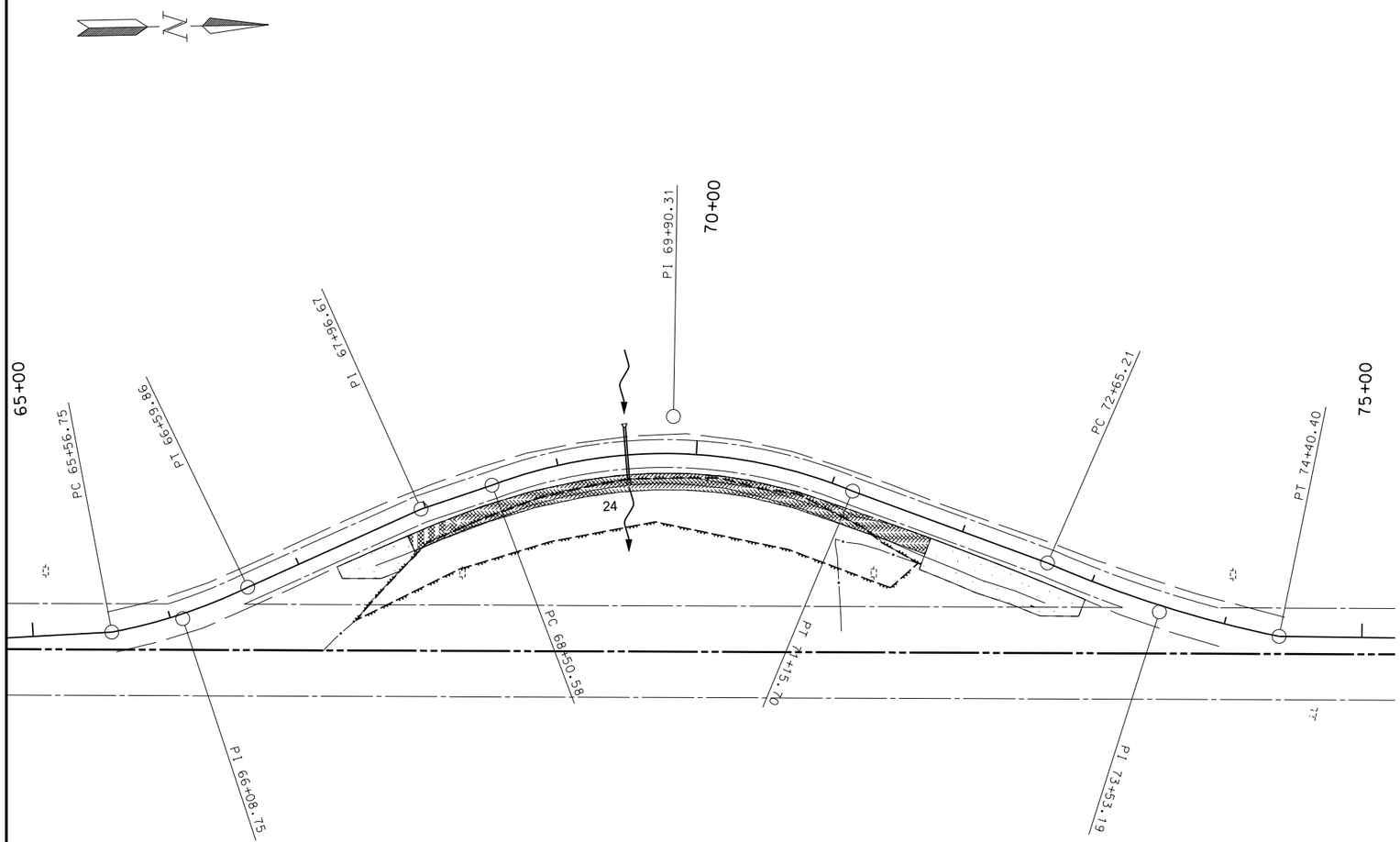
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K6S-6

Permanent Erosion Control

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	77	11



See sheets 28-30 for quantities

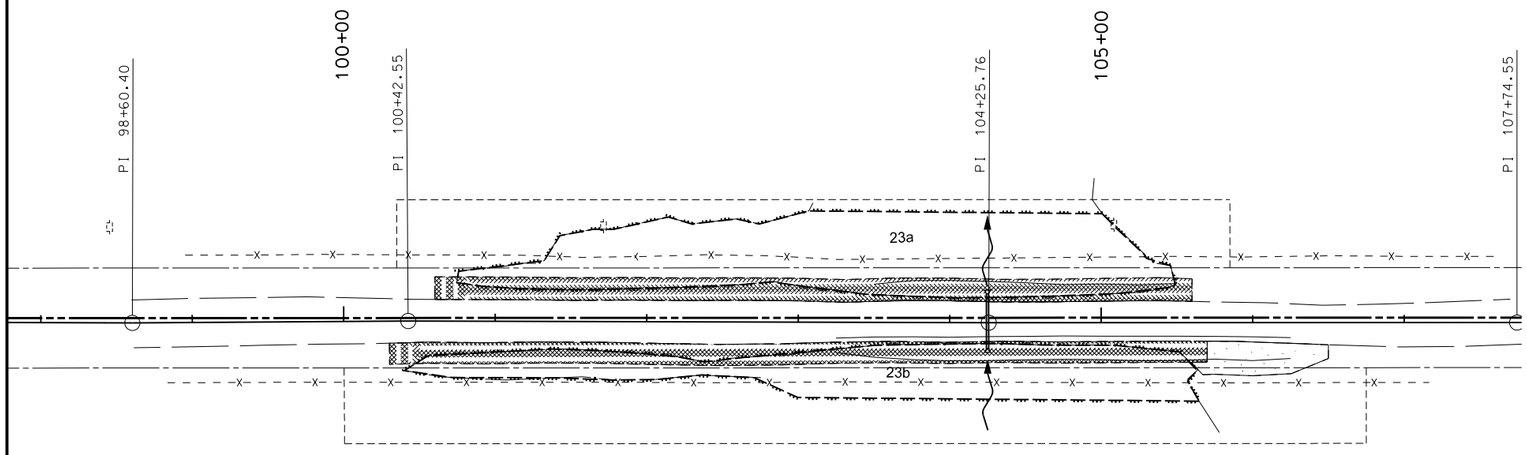
- SEEDING CLASS II
- TRM TYPE II
- CONCRETE EROSION CONTROL BLANKET
- RIPRAP GRADE II

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K6S-7

Permanent Erosion Control

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	77	12



See sheets 28-30 for quantities

SEEDING CLASS II

TRM TYPE II

CONCRETE EROSION CONTROL BLANKET

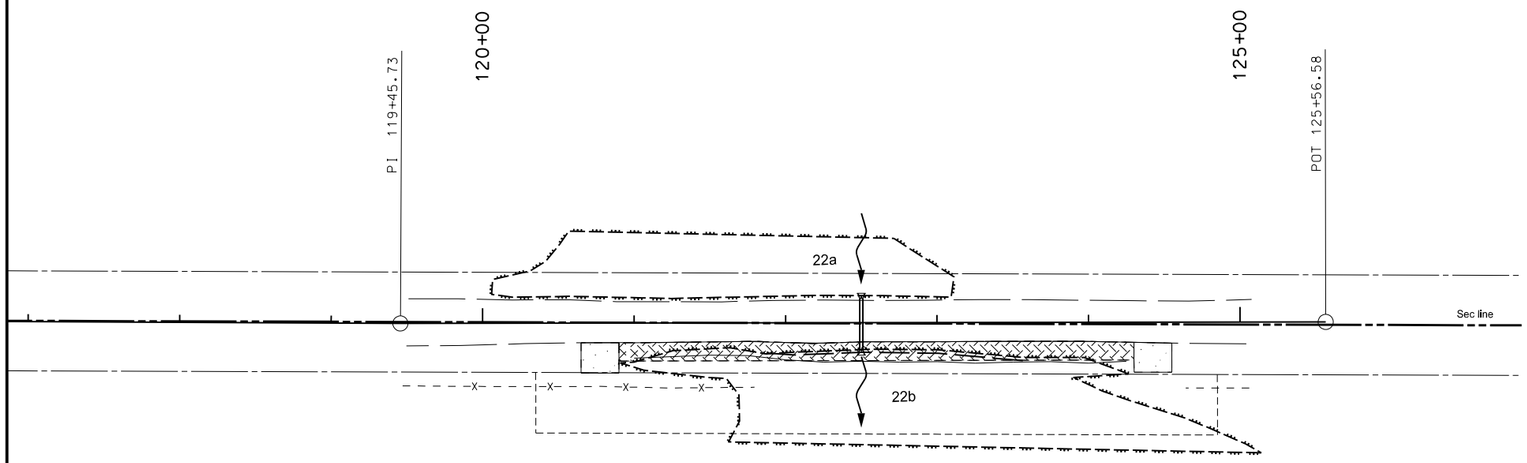
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K6S-8

Permanent Erosion Control

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	77	13



See sheets 28-30 for quantities

SEEDING CLASS II

TRM TYPE II

CONCRETE EROSION CONTROL BLANKET

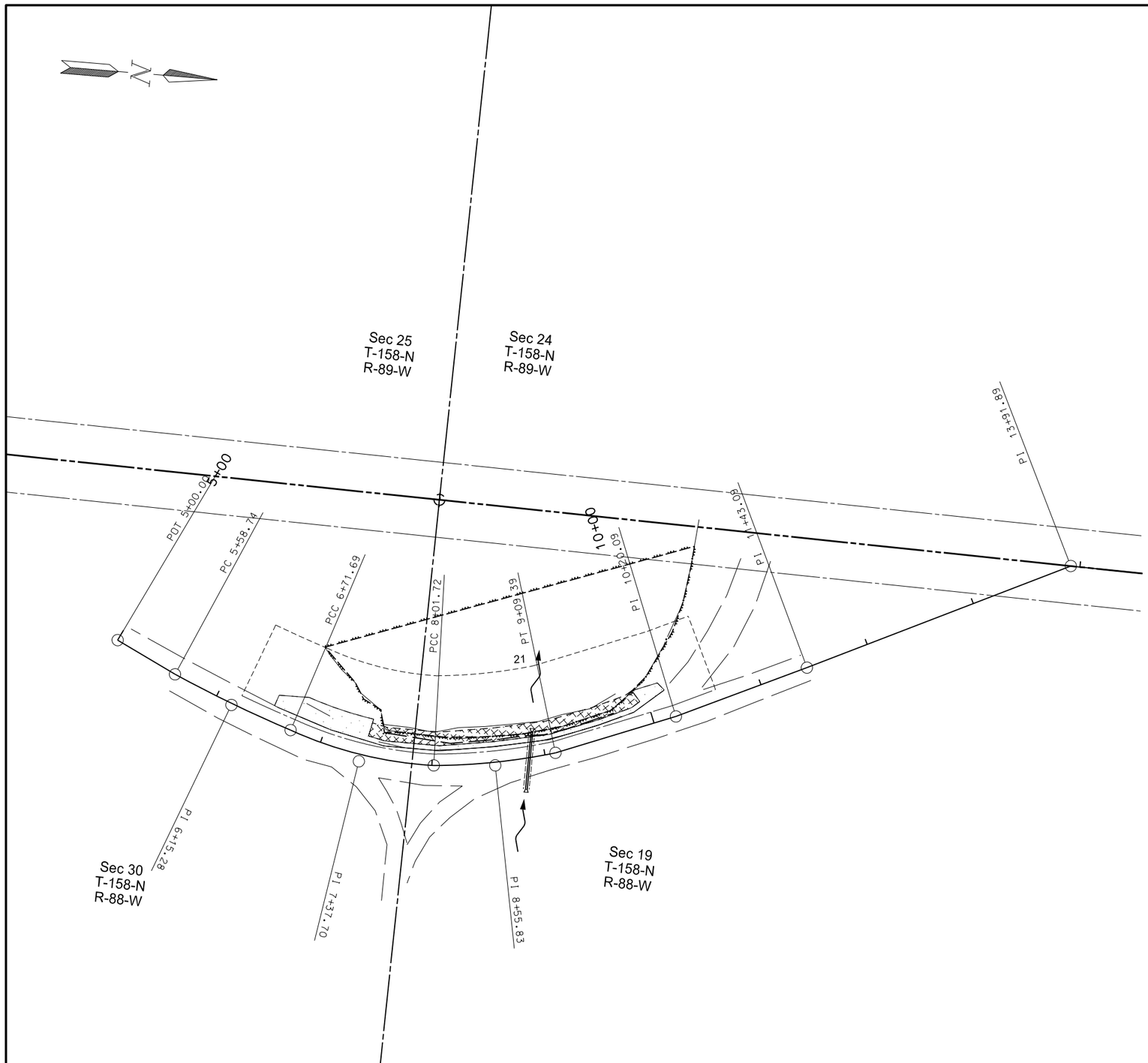
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K6S-9

Permanent Erosion Control

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	77	14



See sheets 28-30 for quantities

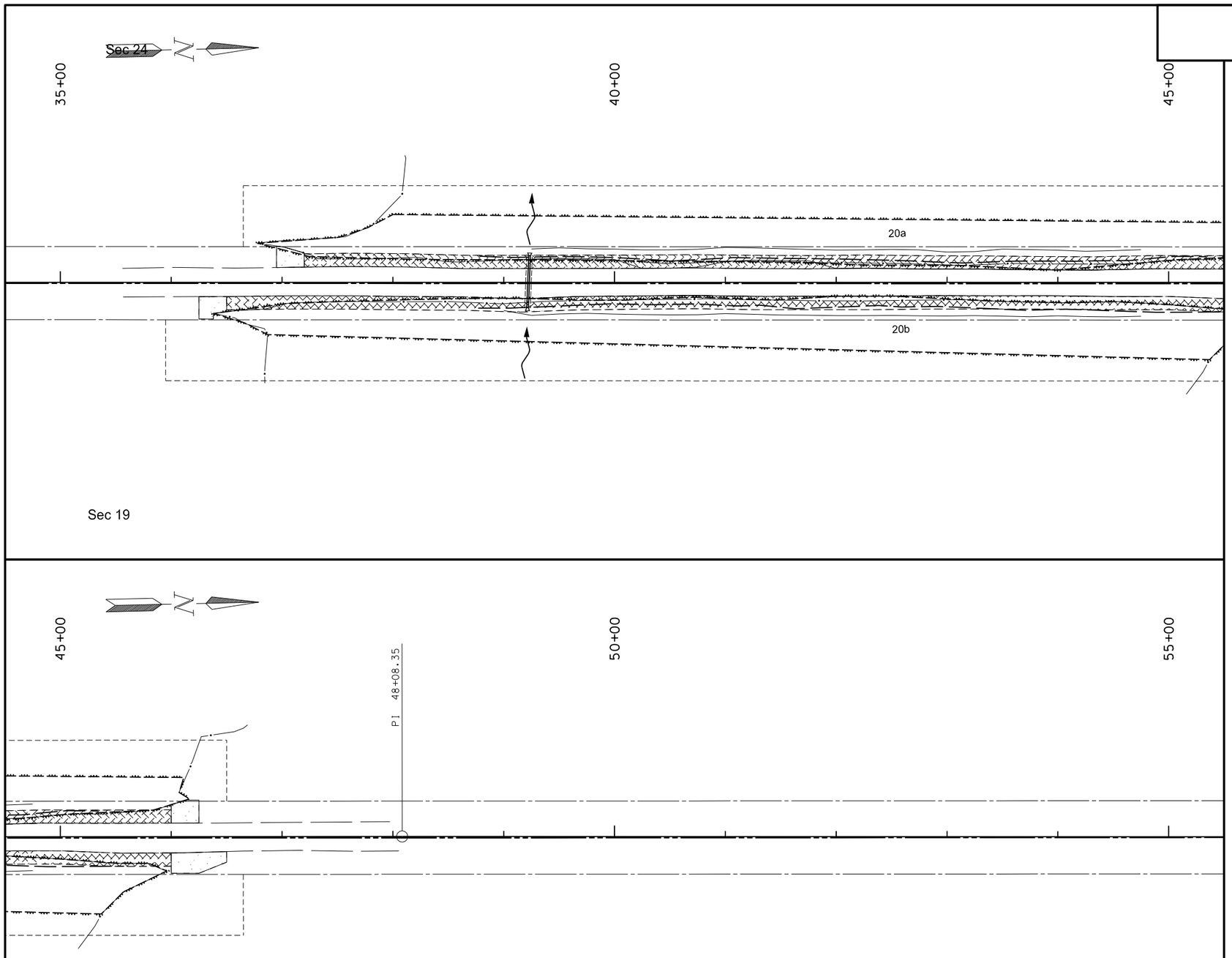
- SEEDING CLASS II
- TRM TYPE II
- CONCRETE EROSION CONTROL BLANKET
- RIPRAP GRADE II

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K6N-1

Permanent Erosion Control

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	ROM-0300(135)	77	15



See sheets 28-30 for quantities

SEEDING CLASS II

TRM TYPE II

CONCRETE EROSION CONTROL BLANKET

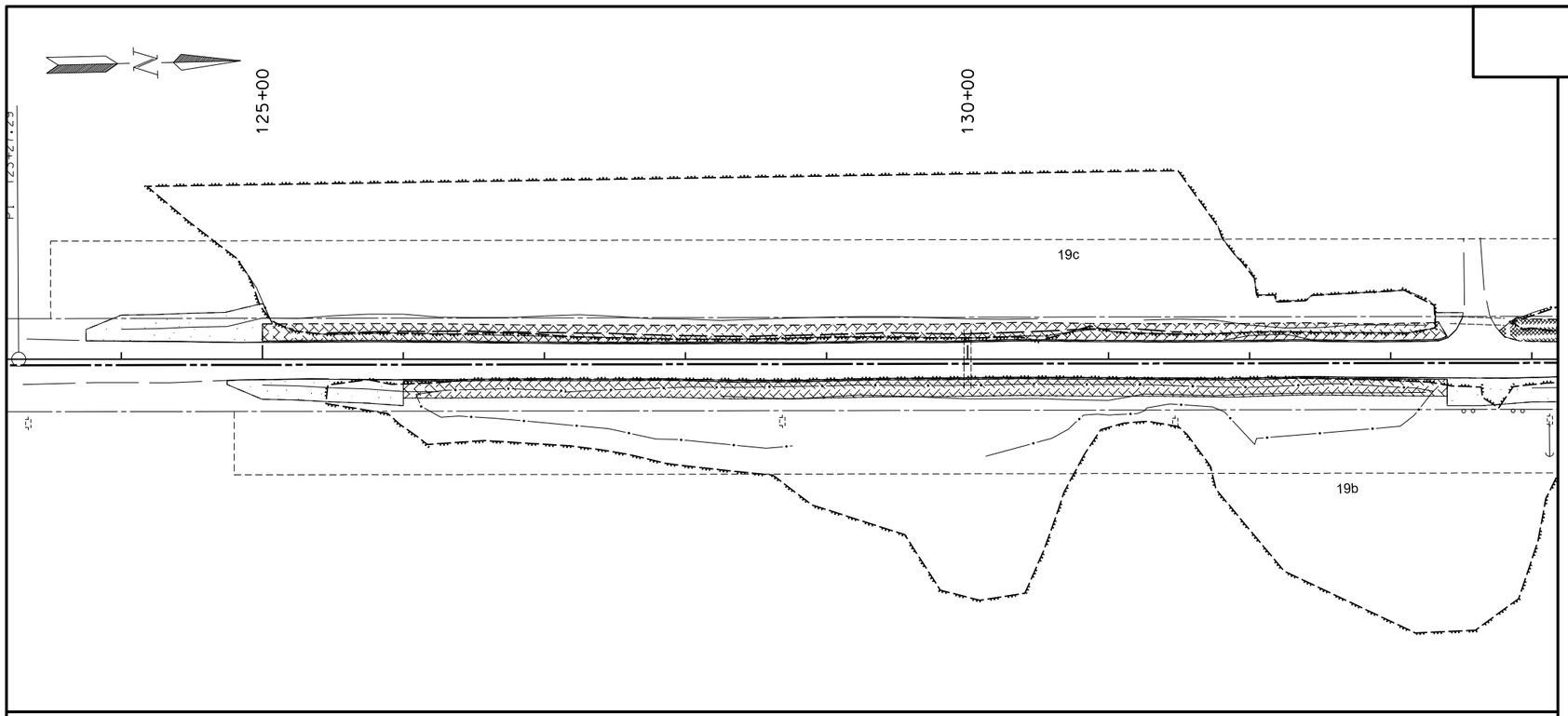
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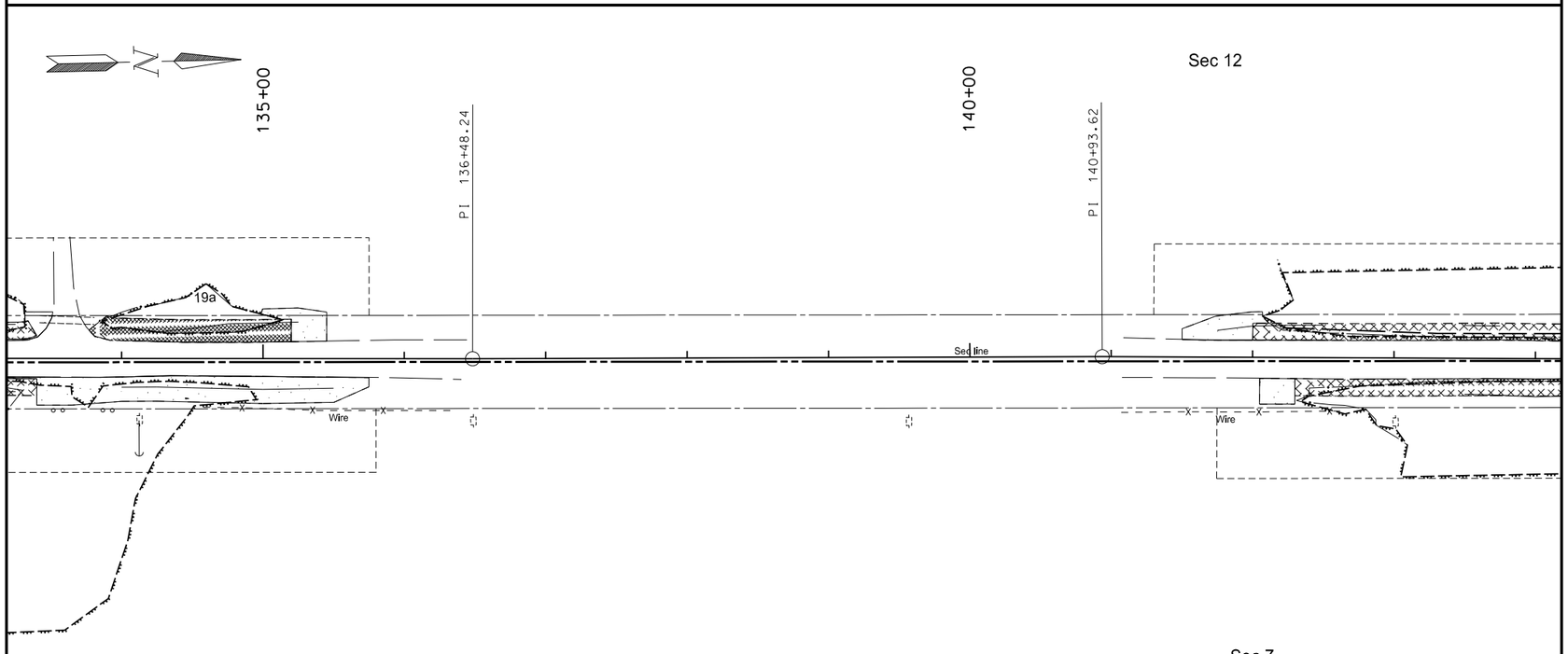
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K6N-2

Permanent Erosion Control

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	ROM-0300(135)	77	16





See sheets 28-30 for quantities

SEEDING CLASS II

TRM TYPE II

CONCRETE EROSION CONTROL BLANKET

RIPRAP GRADE II

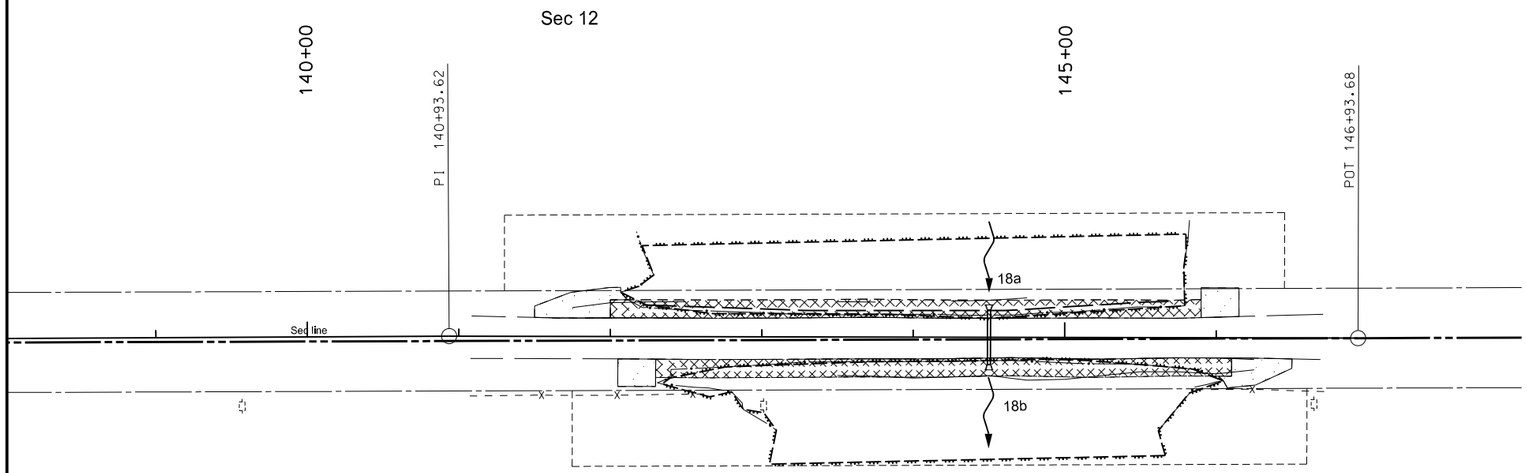
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K6N-3

Permanent Erosion Control

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	77	17

Sec 12



Sec 7

See sheets 28-30 for quantities

SEEDING CLASS II

TRM TYPE II

CONCRETE EROSION CONTROL BLANKET

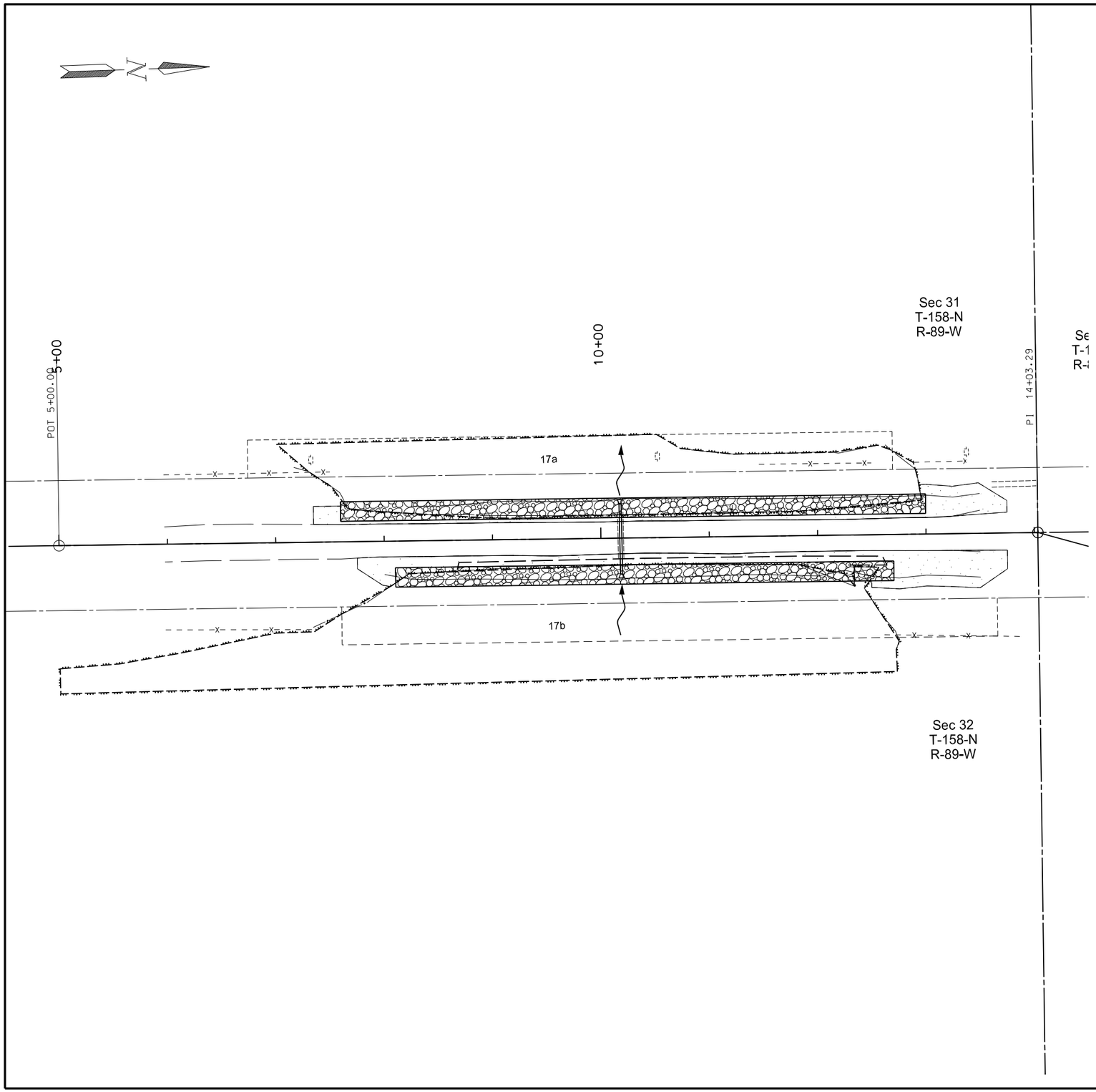
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K6N-4

Permanent Erosion Control

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	77	18



See sheets 28-30 for quantities

SEEDING CLASS II

TRM TYPE II

CONCRETE EROSION CONTROL BLANKET

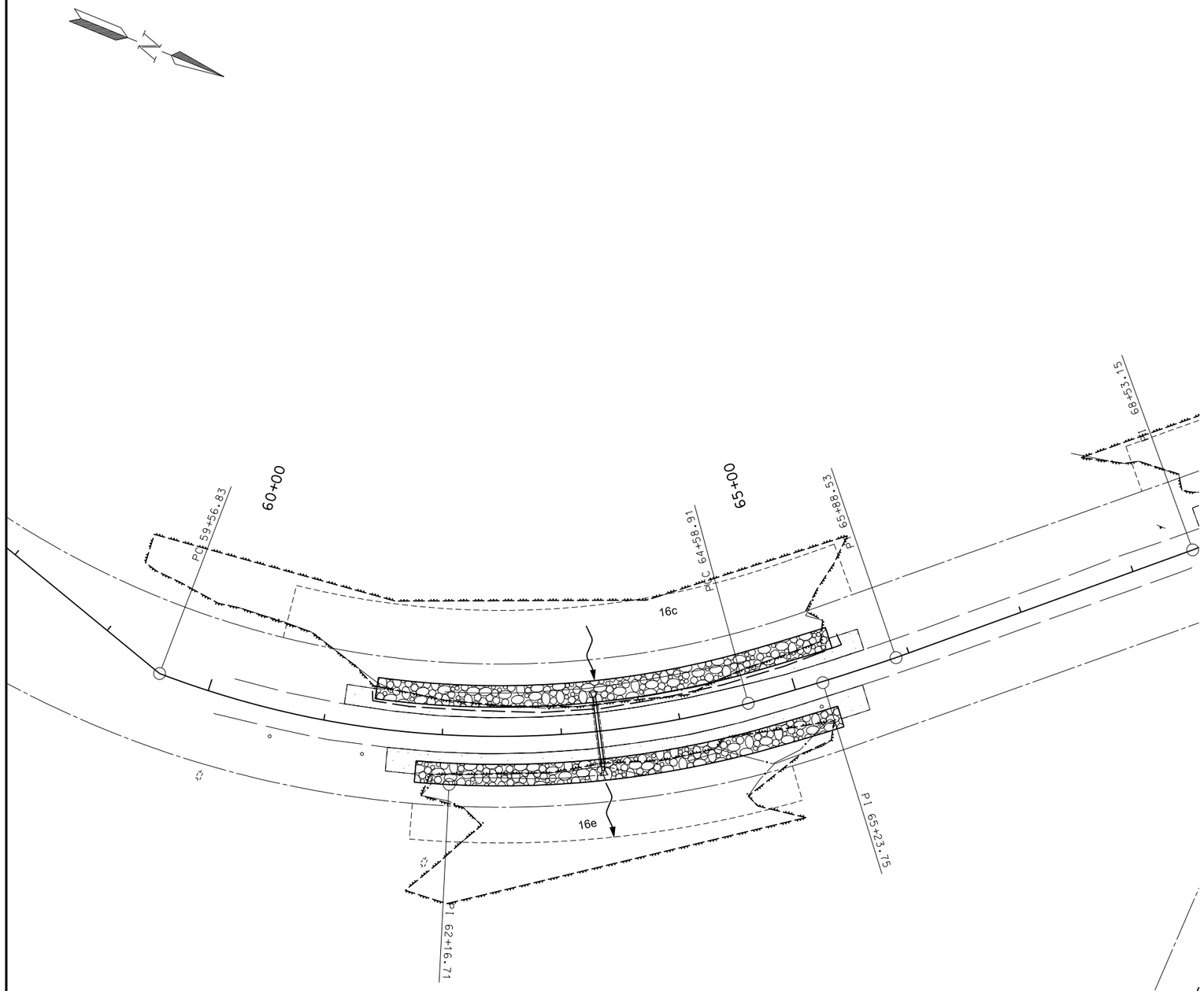
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K7-1

Permanent Erosion Control

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	77	19



See sheets 28-30 for quantities

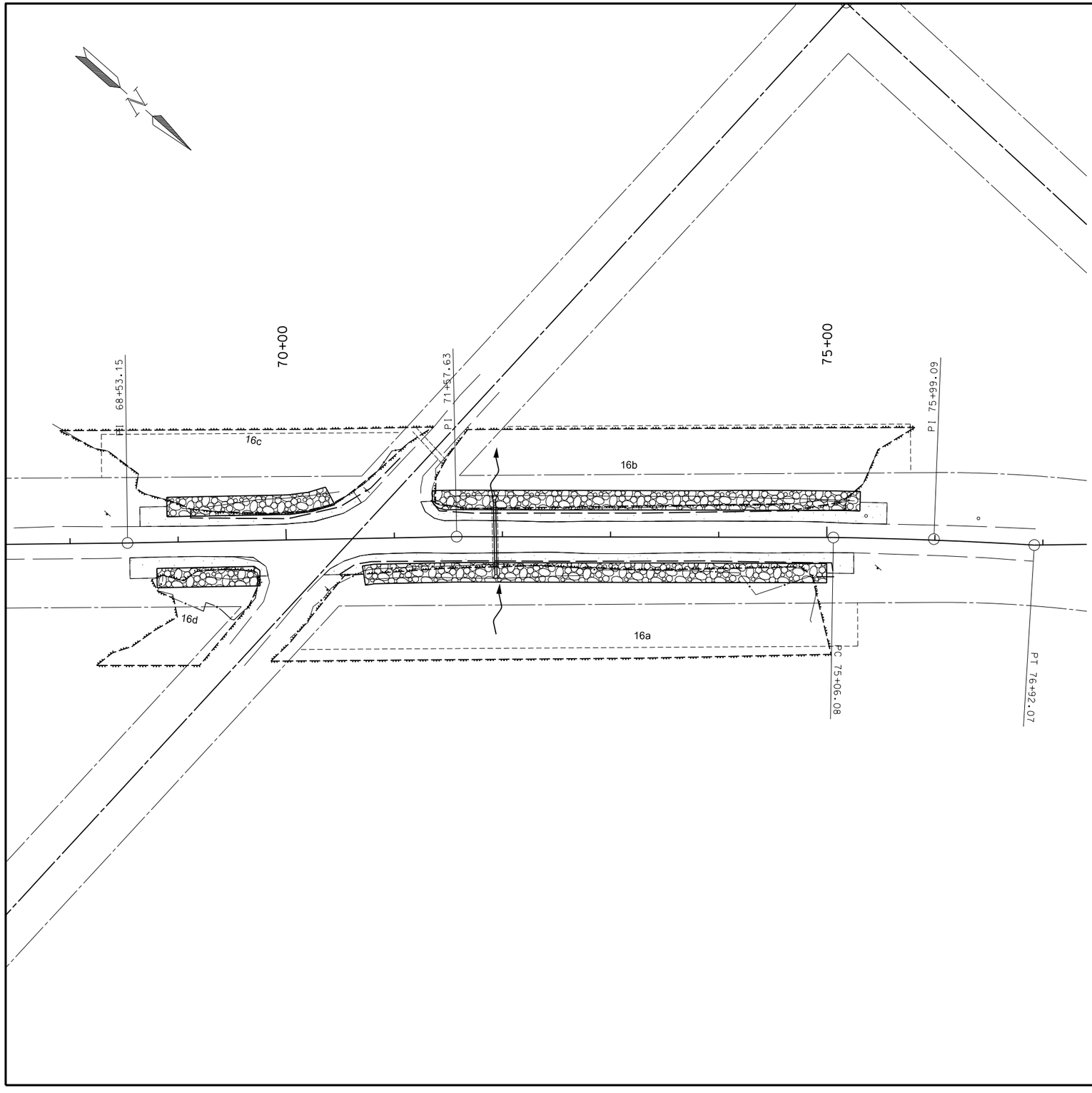
- SEEDING CLASS II
- TRM TYPE II
- CONCRETE EROSION CONTROL BLANKET
- RIPRAP GRADE II

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K7-2

Permanent Erosion Control

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	77	20



See sheets 28-30 for quantities

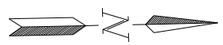
- SEEDING CLASS II
- TRM TYPE II
- CONCRETE EROSION CONTROL BLANKET
- RIPRAP GRADE II

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K7-3

Permanent Erosion Control

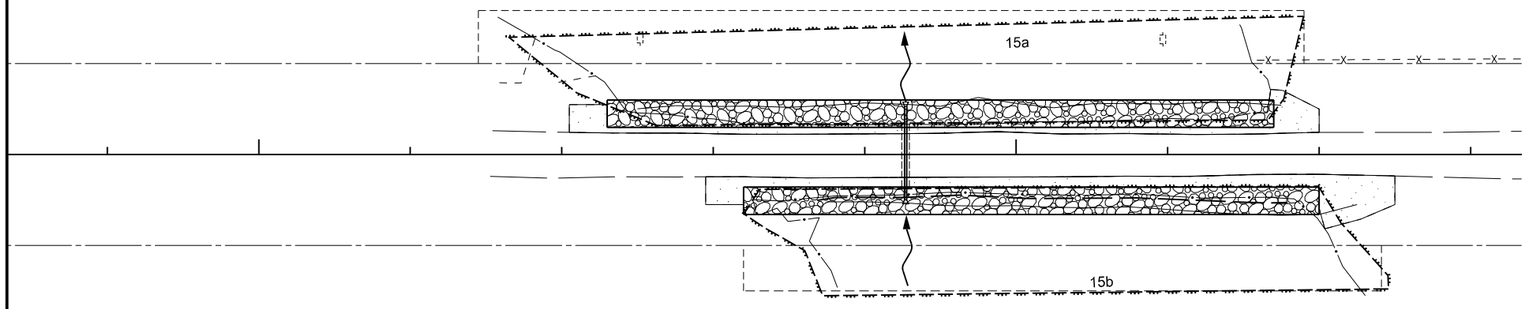
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	77	21



95+00

100+00

Sec 19



Sec 20

See sheets 28-30 for quantities

SEEDING CLASS II

TRM TYPE II

CONCRETE EROSION CONTROL BLANKET

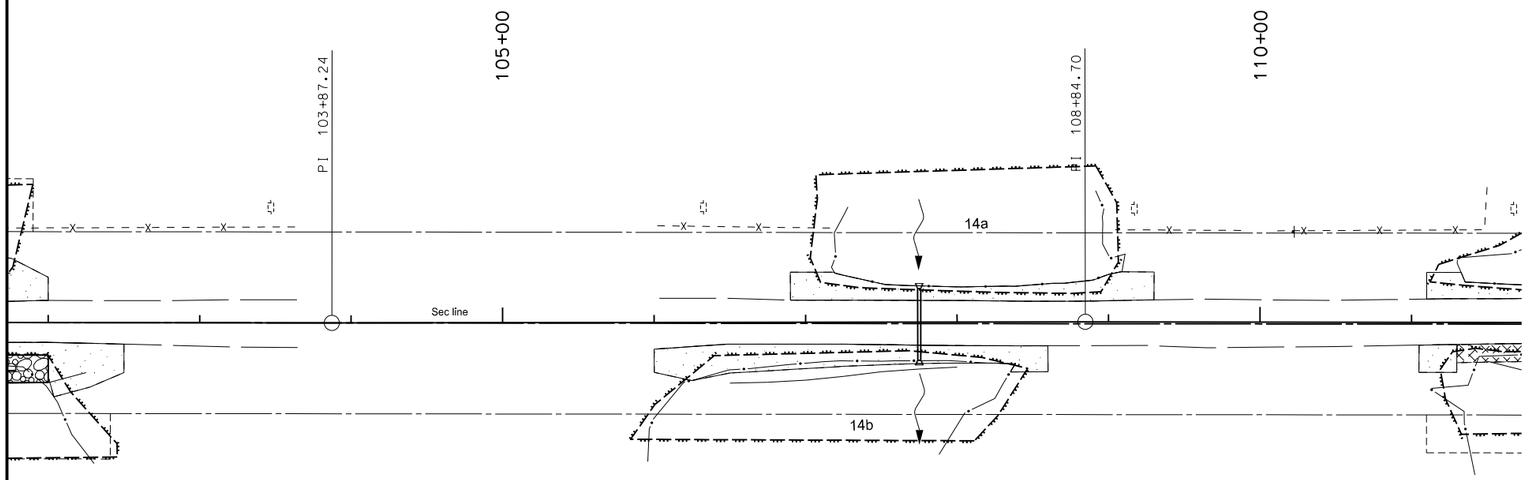
RIPRAP GRADE II

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K7-4

Permanent Erosion Control

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	77	22



See sheets 28-30 for quantities

SEEDING CLASS II

TRM TYPE II

CONCRETE EROSION CONTROL BLANKET

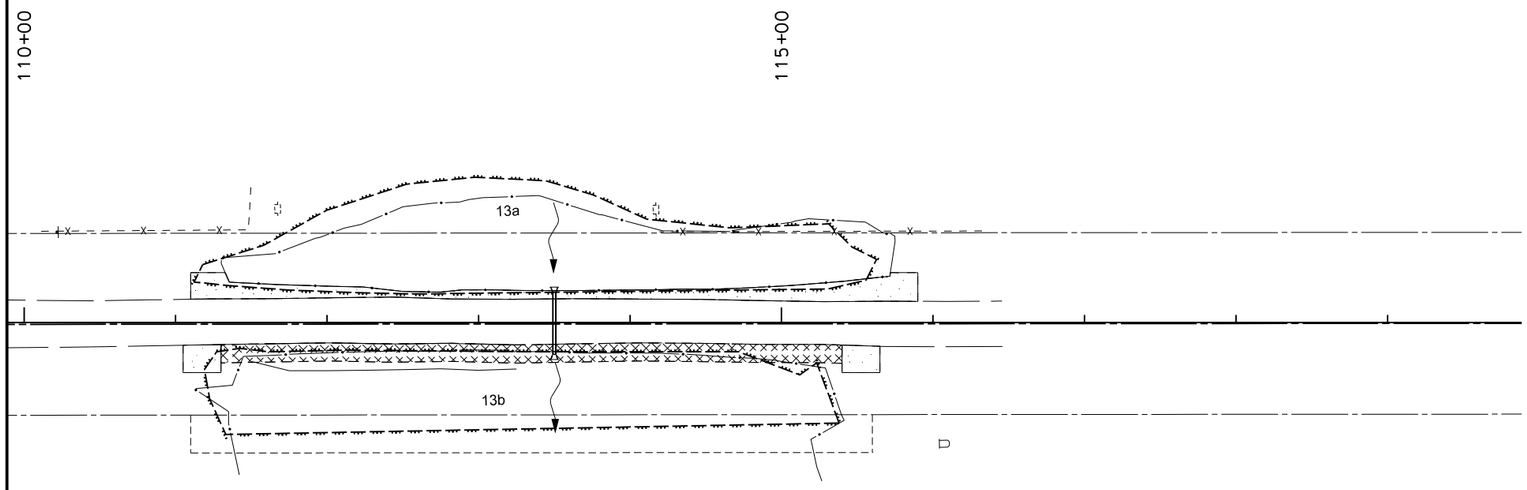
RIPRAP GRADE II

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K7-5

Permanent Erosion Control

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	77	23



See sheets 28-30 for quantities

SEEDING CLASS II

TRM TYPE II

CONCRETE EROSION CONTROL BLANKET

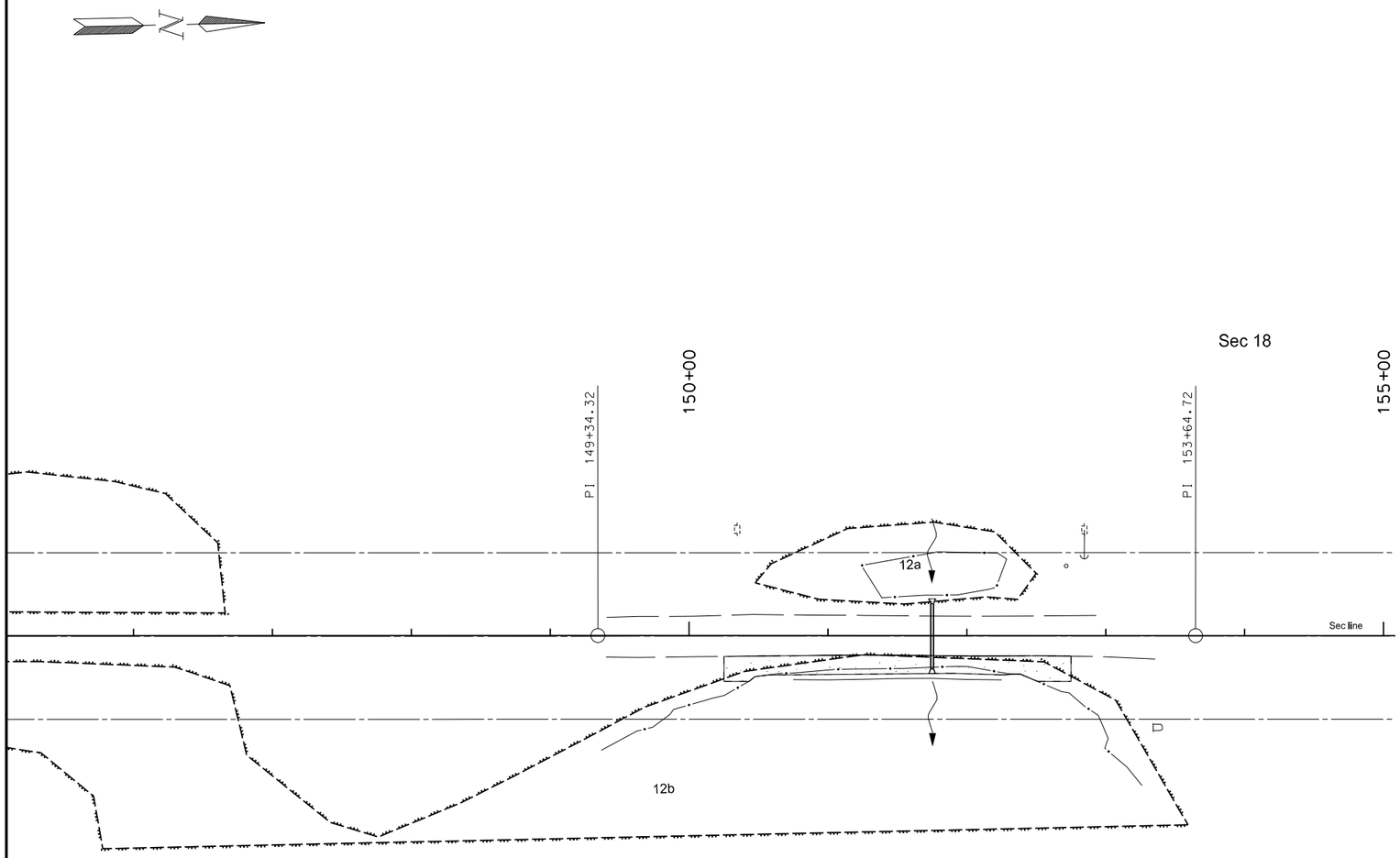
RIPRAP GRADE II

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K7-6

Permanent Erosion Control

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	77	24



See sheets 28-30 for quantities

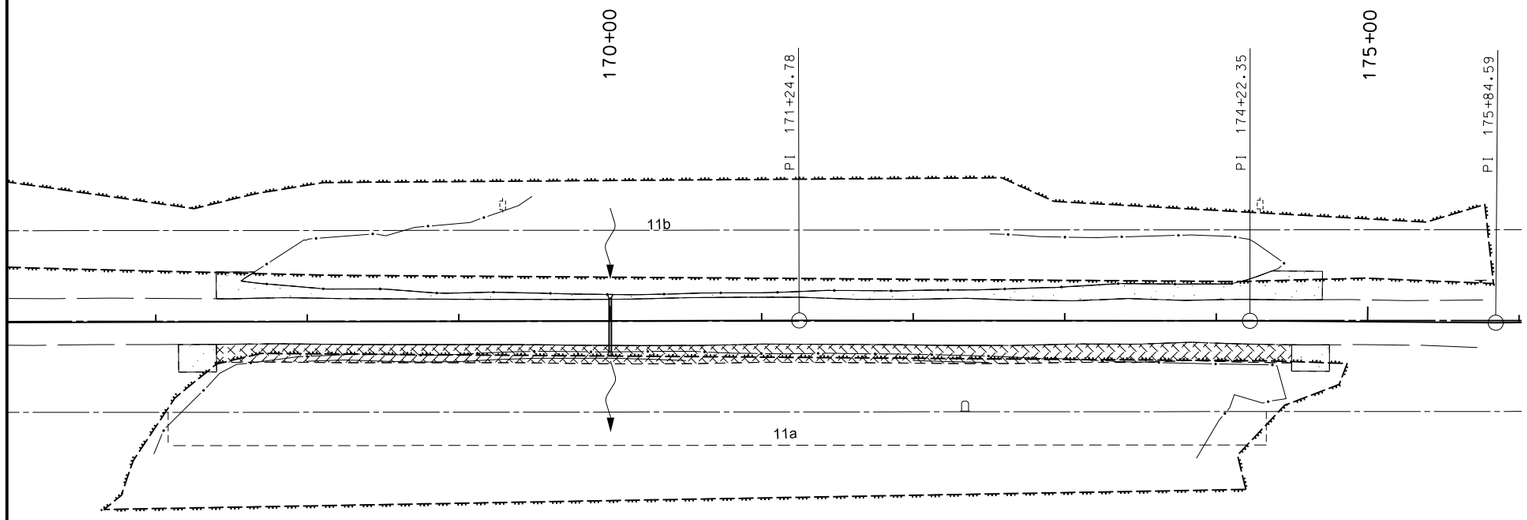
- SEEDING CLASS II
- TRM TYPE II
- CONCRETE EROSION CONTROL BLANKET
- RIPRAP GRADE II

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K7-7

Permanent Erosion Control

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	77	25



See sheets 28-30 for quantities

SEEDING CLASS II

TRM TYPE II

CONCRETE EROSION CONTROL BLANKET

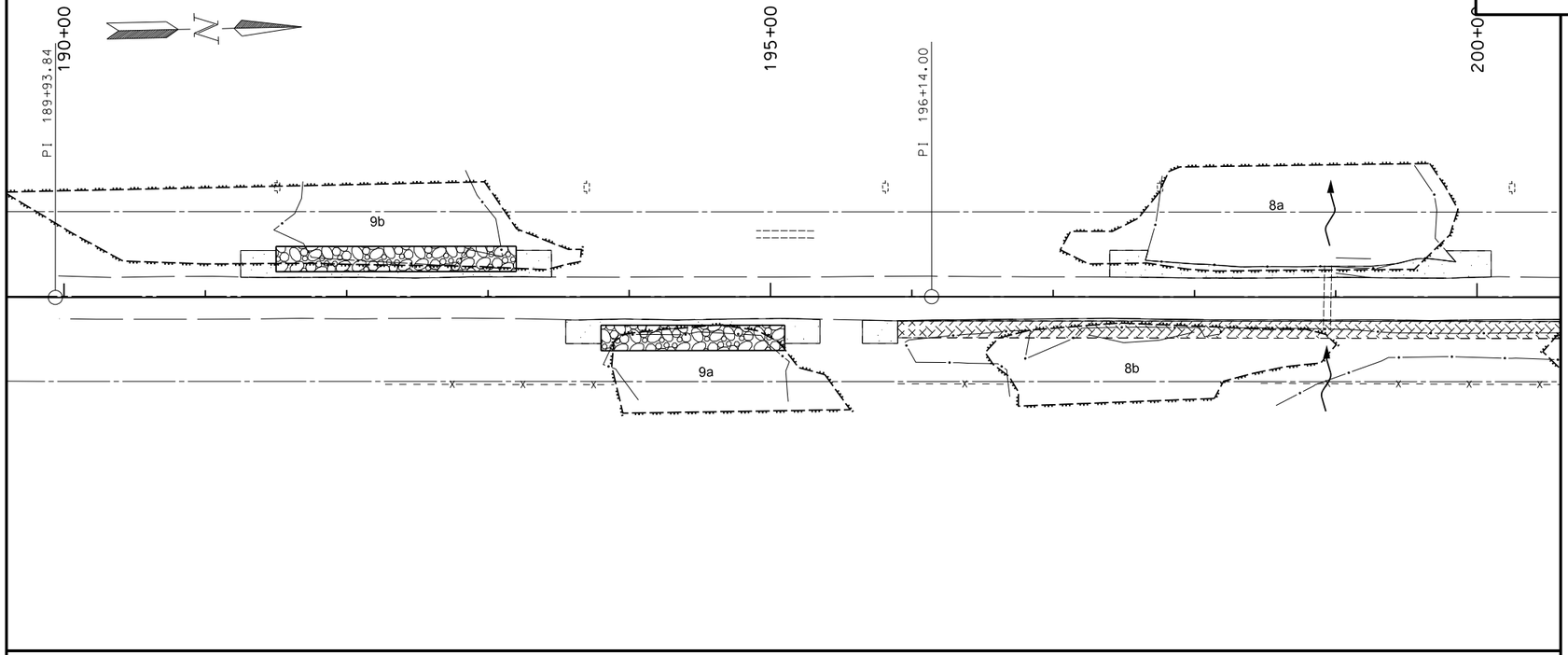
RIPRAP GRADE II

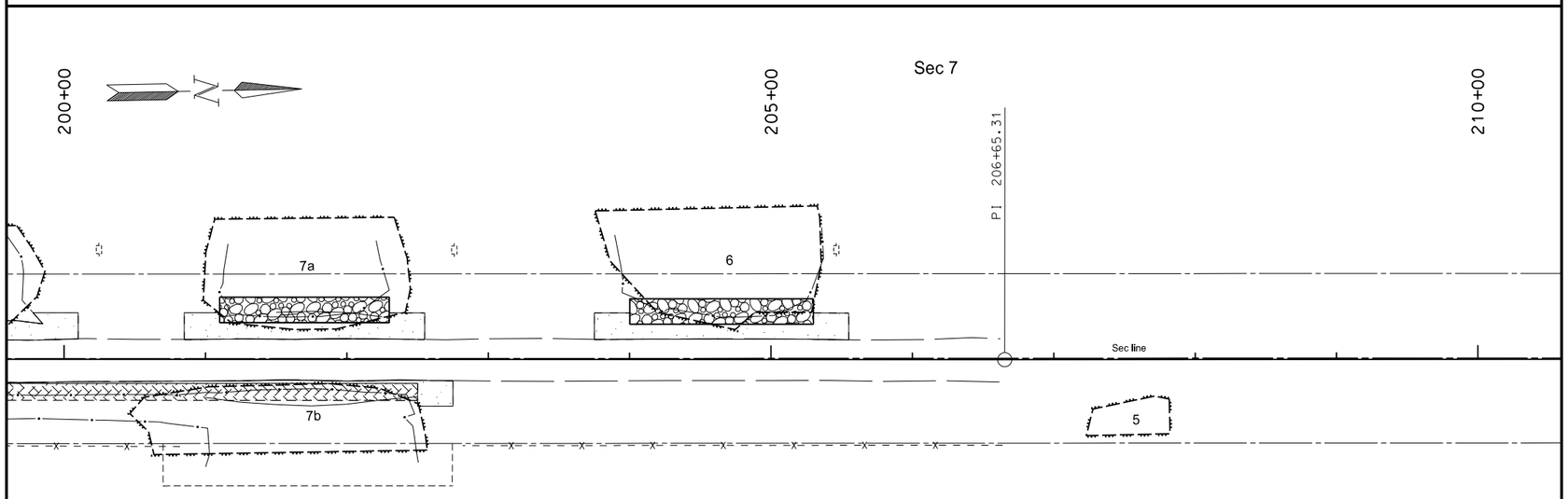
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K7-8

Permanent Erosion Control

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	ROM-0300(135)	77	26





Sec 7

Sec 8

See sheets 28-30 for quantities

SEEDING CLASS II

TRM TYPE II

CONCRETE EROSION CONTROL BLANKET

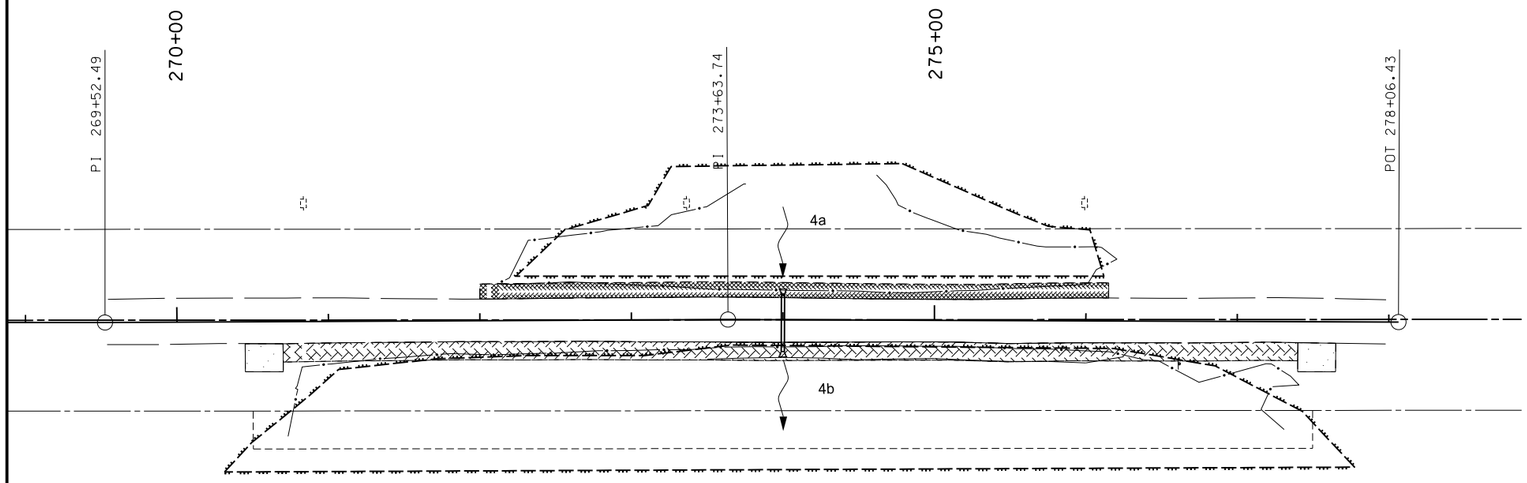
RIPRAP GRADE II

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K7-9

Permanent Erosion Control

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	77	27



See sheets 28-30 for quantities

SEEDING CLASS II

TRM TYPE II

CONCRETE EROSION CONTROL BLANKET

RIPRAP GRADE II

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K7-10

Permanent Erosion Control

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	ROM-0300(135)	77	28

Permanent Erosion Control

Location	Begin Sta	End Sta	Offset	CL Offset	Length (Ft)	Width (Ft)	Area (Acres)	Volume (CY)	Water Depth	Erosion Control
J10-1	5+85	9+15	LT	Begin at Shoulder	330	-	0.190	-	3.5	Seed/Mulch
	6+10	8+90	LT	37.5	280	12	-	-		Concrete Blanket
J10-2	67+20	73+50	LT	Begin at Shoulder	630	17	-	-	4.5	TRM
	66+25	69+50	RT	Begin at Shoulder	325	-	0.111	-	1.5	Seed/Mulch
	71+20	73+25	RT	Begin at Shoulder	205	-	0.057	-	1.5	Seed/Mulch
J10-3	179+80	182+80	LT	Begin at Shoulder	300	16	-	-	3.5	TRM
	179+15	183+00	RT	Begin at Shoulder	385	-	0.049	-	4	Seed/Mulch
	179+40	182+50	RT	15	310	12	-	-		Concrete Blanket
J10-4	188+05	192+65	LT	Begin at Shoulder	460	-	0.059	-	6	Seed/Mulch
	188+30	192+40	LT	17	410	12	-	-		Concrete Blanket
	187+75	192+00	RT	Begin at Shoulder	425	17	-	-	4	TRM
K6S-1	5+75	6+00	LT	Begin at Shoulder	25	-	0.011	-	4	Seed/Mulch
	6+00	8+50	LT	14 - Begin at Shoulder	250	12	-	-		Concrete Blanket
	8+50	8+75	LT	Begin at Shoulder	25	-	0.009	-		Seed/Mulch
	6+30	7+80	RT	Begin at Shoulder	150	10	-	-	2.5	TRM
K6S-2	13+55	13+80	LT	Begin at Shoulder	25	-	0.012	-	3	Seed/Mulch
	13+80	18+40	LT	12-13 - Begin at Shoulder	460	6	-	-		Concrete Blanket
	18+40	18+65	LT	Begin at Shoulder	25	-	0.011	-		Seed/Mulch
K6S-3	29+20	30+80	LT	Begin at Shoulder	160	-	0.031	-	2	Seed/Mulch
	29+25	30+00	RT	Begin at Shoulder	75	-	0.034	-	0.5	Seed/Mulch
K6S-4	35+60	37+80	LT	Begin at Shoulder	220	13	-	-	3.5	TRM
	35+15	37+95	RT	Begin at Shoulder	280	-	0.035	-	2	Seed/Mulch
	35+40	37+70	RT	14.5	230	12	-	-		Concrete Blanket
K6S-5	47+25	50+05	LT	Begin at Shoulder	280	-	0.033	-	2.5	Seed/Mulch
	47+50	49+80	LT	14	230	12	-	-		Concrete Blanket
	47+35	50+85	RT	Begin at Shoulder	350	-	0.011	-	3	Seed/Mulch
	47+60	50+60	RT	Begin at Shoulder	300	12	-	-		Concrete Blanket
K6S-6	53+75	61+55	LT	Begin at Shoulder	780	-	0.092	-	5	Seed/Mulch
	54+00	61+30	LT	15	730	12	-	-		Concrete Blanket
	54+10	54+35	RT	Begin at Shoulder	25	-	0.010	-	4.5	Seed/Mulch
	54+35	61+70	RT	Begin at Shoulder	735	12	-	-		Concrete Blanket
	61+50	62+50	RT	Begin at Shoulder	100		0.049	-		Seed/Mulch
K6S-7	67+25	67+80	RT	Begin at Shoulder	55	-	0.022	-	2.5	Seed/Mulch
	67+80	71+80	RT	Begin at Shoulder	400	12	-	-		TRM
	71+80	73+00	RT	Begin at Shoulder	120	-	0.063	-		Seed/Mulch
K6S-8	100+60	105+60	LT	Begin at Shoulder	500	15	-	-	4	TRM
	100+30	105+70	RT	Begin at Shoulder	540	14	-	-	4	TRM
	105+70	106+50	RT	Begin at Shoulder	80	-	0.037	-		Seed/Mulch
K6S-9	120+65	120+90	RT	Begin at Shoulder	25	-	0.012	-	2.5	Seed/Mulch
	120+90	124+30	RT	Begin at Shoulder	340	12	-	-		Concrete Blanket
	124+30	124+55	RT	Begin at Shoulder	25	-	0.011	-		Seed/Mulch

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Permanent Erosion Control

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	ROM-0300(135)	77	29

Permanent Erosion Control

Location	Begin Sta	End Sta	Offset	CL Offset	Length (Ft)	Width (Ft)	Area (Acres)	Volume (CY)	Water Depth	Erosion Control
K6N-1	6+50	10+15	LT	Begin at Shoulder	365	-	0.067	-	3	Seed/Mulch
	7+40	9+90	LT	4.5 - From Shoulder	250	12	-	-		Concrete Blanket
K6N-2	36+95	37+20	LT	Begin at Shoulder	25	-	0.009	-	5.5	Seed/Mulch
	37+20	46+00	LT	Begin at Shoulder	880	12	-	-		Concrete Blanket
	46+00	46+25	LT	Begin at Shoulder	25	-	0.011	-		Seed/Mulch
	36+25	36+50	RT	Begin at Shoulder	25	-	0.010	-	5.5	Seed/Mulch
	36+50	46+00	RT	Begin at Shoulder	950	12	-	-		Concrete Blanket
	46+00	46+50	RT	Begin at Shoulder	50	-	0.019	-		Seed/Mulch
K6N-3	123+75	133+50	LT	Begin at Shoulder	975	-	0.081	-	5	Seed/Mulch
	125+00	133+40	LT	1 ft from Shoulder	840	12	-	-		Concrete Blanket
	133+75	135+20	LT	4 ft from Shoulder	145	16	-	-	1	TRM
	135+00	135+45	LT	Begin at Shoulder	45	-	0.016	-		Seed/Mulch
	124+75	135+75	RT	Begin at Shoulder	1,100	-	0.155	-	3.5	Seed/Mulch
	126+00	133+40	RT	1 ft from Shoulder	740	12	-	-		Concrete Blanket
K6N-4	141+50	142+10	LT	Begin at Shoulder	60	-	0.019	-	4	Seed/Mulch
	142+00	145+90	LT	Begin at Shoulder	390	12	-	-		Concrete Blanket
	145+90	146+15	LT	Begin at Shoulder	25	-	0.011	-		Seed/Mulch
	142+05	142+30	RT	Begin at Shoulder	25	-	0.010	-	4.5	Seed/Mulch
	142+30	146+10	RT	Begin at Shoulder	380	12	-	-		Concrete Blanket
	146+00	146+50	RT	Begin at Shoulder	50	-	0.014	-		Seed/Mulch

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Permanent Erosion Control

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	ROM-0300(135)	77	30

Permanent Erosion Control

Location	Begin Sta	End Sta	Offset	CL Offset	Length (Ft)	Width (Ft)	Area (Acres)	Volume (CY)	Water Depth	Erosion Control
K7-1	7+35	13+75	LT	Begin at Shoulder	640	-	0.101	-	5	Seed/Mulch
	7+60	13+00	LT	19	540	12	-	480		Rip Rap
	7+75	13+75	RT	Begin at Shoulder	600	-	0.199	-	3	Seed/Mulch
	8+10	12+70	RT	24.5	460	12	-	409		Rip Rap
K7-2	61+15	65+65	LT	Begin at Shoulder	450	-	0.099	-	4.5	Seed/Mulch
	61+40	65+40	LT	24.5	400	12	-	356		Rip Rap
	61+55	65+55	RT	Begin at Shoulder	400	-	0.102	-	2	Seed/Mulch
	61+80	65+30	RT	23.5	350	12	-	311		Rip Rap
K7-3	68+65	70+70	LT	Begin at Shoulder	205	-	0.050	-	4	Seed/Mulch
	68+90	70+45	LT	23.5	155	12	-	138		Rip Rap
	71+25	75+55	LT	Begin at Shoulder	430	-	0.109	-	5	Seed/Mulch
	71+35	75+30	LT	25	395	12	-	351		Rip Rap
	68+55	69+80	RT	Begin at Shoulder	125	-	0.034	-	1.5	Seed/Mulch
	68+80	69+75	RT	24	95	12	-	84		Rip Rap
	70+35	75+25	RT	Begin at Shoulder	490	-	0.112	-	5.5	Seed/Mulch
	70+70	75+00	RT	24	430	12	-	382		Rip Rap
K7-4	97+05	102+00	LT	Begin at Shoulder	495	-	0.069	-	5.5	Seed/Mulch
	97+30	101+70	LT	18	440	12	-	391		Rip Rap
	97+95	102+50	RT	Begin at Shoulder	455	-	0.104	-	3	Seed/Mulch
	98+20	102+00	RT	21.5	380	12	-	338		Rip Rap
K7-5	106+90	109+30	LT	Begin at Shoulder	240	-	0.072	-	7.5	Seed/Mulch
	106+00	108+60	RT	Begin at Shoulder	260	-	0.093	-	4	Seed/Mulch
K7-6	111+10	115+90	LT	Begin at Shoulder	480	-	0.096	-	4.5	Seed/Mulch
	111+05	111+30	RT	Begin at Shoulder	25	-	0.010	-	5.5	Seed/Mulch
	111+30	115+40	RT	Begin at Shoulder	410	12	-	-		Concrete Blanket
	115+40	115+65	RT	Begin at Shoulder	25	-	0.010	-		Seed/Mulch
K7-7	150+25	152+75	RT	Begin at Shoulder	250	-	0.083	-	3	Seed/Mulch
K7-8	167+40	174+70	LT	Begin at Shoulder	730	-	0.121	-	6	Seed/Mulch
	167+15	167+40	RT	Begin at Shoulder	25	-	0.010	-	3	Seed/Mulch
	167+40	174+60	RT	Begin at Shoulder	720	12	-	-		Concrete Blanket
	174+50	174+75	RT	Begin at Shoulder	25	-	0.010	-		Seed/Mulch
K7-9	191+25	193+45	LT	Begin at Shoulder	220	-	0.038	-	1.5	Seed/Mulch
	191+50	193+20	LT	18	170	12	-	151		Rip Rap
	193+55	195+35	RT	Begin at Shoulder	180	-	0.032	-	1.5	Seed/Mulch
	193+80	195+10	RT	20	130	12	-	116		Rip Rap
	195+65	202+75	RT	Begin at Shoulder	710	-	0.038	-	4.5	Seed/Mulch
	195+90	202+50	RT	17	660	12	-	-		Concrete Blanket
	197+40	200+10	LT	Begin at Shoulder	270	-	0.071	-	4	Seed/Mulch
	200+85	202+55	LT	Begin at Shoulder	170	-	0.054	-	1.5	Seed/Mulch
	201+10	202+30	LT	26	120	12	-	107		Rip Rap
	203+75	205+55	LT	Begin at Shoulder	180	-	0.053	-	1.5	Seed/Mulch
	204+00	205+30	LT	25	130	12	-	116		Rip Rap
K7-10	272+00	276+15	LT	Begin at Shoulder	415	10	-	-	1	TRM
	270+45	270+70	RT	Begin at Shoulder	25	-	0.011	-	4	Seed/Mulch
	270+70	277+40	RT	Begin at Shoulder	670	12	-	-		Concrete Blanket
	277+40	277+65	RT	Begin at Shoulder	25	-	0.011	-		Seed/Mulch

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Permanent Erosion Control

PRELIMINARY SURVEY COORDINATE DATA - MINOT MINUTEMAN COMPLEX INSLOPE REPAIR - MOUNTRAIL COUNTY

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	ROM-0300(135)	81	1

HORIZONTAL ALIGNMENT

PNT	STATION	NORTHING	EASTING

CURVE DATA

ARC DEFINITION	

US PUBLIC LAND SURVEY DATA

DESC.	SEC-TWP-RGE	NORTHING	EASTING
SE Cor Sec	5 T-156-N R-88-W	498336.55	1601937.02
E Qtr Cor	5 T-156-N R-88-W	500976.10	1601984.20
NE Cor Sec	5 T-156-N R-88-W	504267.57	1602043.15
SE Cor Sec	34 T-157-N R-88-W	504306.06	1600112.68
E Qtr Cor	34 T-157-N R-88-W	506949.72	1600165.40
SE Cor Sec	27 T-157-N R-88-W	509593.28	1600216.89
E Qtr Cor	27 T-157-N R-88-W	512236.83	1600271.56
SE Cor Sec	22 T-157-N R-88-W	514880.44	1600318.15
E Qtr Cor	22 T-157-N R-88-W	517526.64	1600373.05
SE Cor Sec	15 T-157-N R-88-W	520167.74	1600419.92
SE Cor Sec	1 T-157-N R-89-W	531177.51	1579563.22
E Qtr Cor	1 T-157-N R-89-W	533820.36	1579617.34
SE Cor Sec	36 T-158-N R-89-W	536463.61	1579671.54
E Qtr Cor	36 T-158-N R-89-W	539106.59	1579730.41
SE Cor Sec	25 T-158-N R-89-W	541749.64	1579789.34
E Qtr Cor	25 T-157-N R-89-W	544393.05	1579848.68
SE Cor Sec	24 T-158-N R-89-W	547036.48	1579908.07
SE Cor Sec	13 T-158-N R-89-W	552323.79	1580026.59
SE Cor Sec	12 T-158-N R-89-W	557610.82	1580145.18
SE Cor Sec	1 T-158-N R-89-W	562897.76	1580261.55
SE Cor Sec	31 T-158-N R-89-W	537047.84	1553271.41
SE Cor Sec	30 T-158-N R-89-W	542328.72	1553383.10
SE Cor Sec	19 T-158-N R-89-W	547607.87	1553499.76
SE Cor Sec	18 T-158-N R-89-W	552896.41	1553613.39
SE Cor Sec	7 T-158-N R-89-W	558186.02	1553729.24
SE Cor Sec	6 T-158-N R-89-W	563475.08	1553843.86
SE Cor Sec	31 T-159-N R-89-W	568774.32	1553958.69

SURVEY CONTROL POINTS

PNT	NORTHING	EASTING	ELEV	STATION	OFFSET
CONTROL POINT DESCRIPTION					
3	519233.64	1600437.75	2375.88	203+41.53 J10	29.28' Rt
5/8" Rebar w/Alum cap stamped - GPS-3					
4	504106.98	1601988.03	2286.68	62+70.44 J10	50.56' LT
5/8" Rebar w/Alum cap stamped - GPS-4					
5	528326.08	1579538.92	2260.49	South of K6S	
5/8" Rebar w/Alum cap stamped - GPS-5					
6	558095.46	1580187.09	2321.03	118+95.70 K6N	33.52' Rt
5/8" Rebar w/Alum cap stamped - GPS-6					
7	563023.41	1553783.42	2320.28	227+42.33 K7	50.80' Lt
5/8" Rebar w/Alum cap stamped - GPS-7					
8	535254.64	1553286.93	2252.99	South of K7	
5/8" Rebar w/Alum cap stamped - GPS-8					

NOTES: Sheet 1 of 2

Date Survey Completed 06/01/17

☐ Assumed Coordinates

☒ All coordinates on this sheet are Mountrail County ground coordinates. They are derived from the NAD83(2011) reference frame; North Dakota North Zone Combination Factor (cf) = .9998350

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

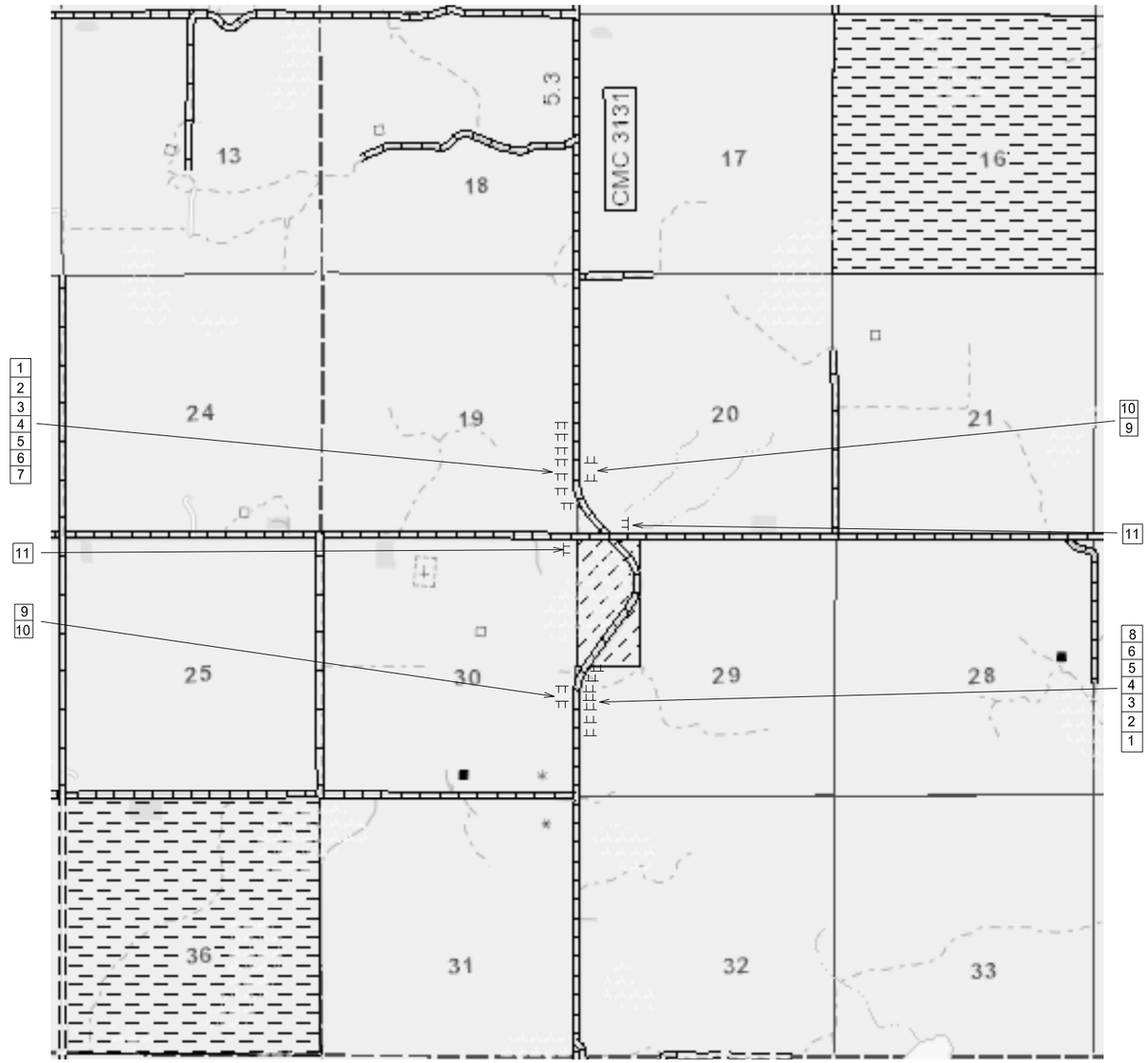
INITIALIZING BENCH MARK

☒ NAVD-88
☐ NGVD-29

☐ GEOID 09 ☐ _____
☒ GEOID 12B

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	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	100	2



1 — SPEED LIMIT ENFORCED / MINIMUM FEE $80 WHEN WORKERS PRESENT
G20-55-96
Post Mounted

2 — ROAD WORK XXXX FT
W20-1-48
Post mounted

3 — ONE LANE ROAD XXXX FT
W20-4-48
Post mounted

4 — SPEED LIMIT XX
W3-5-48
Post mounted

5 — W20-7-48 Post mounted & XX FEET W16-2P-30

6 — SPEED LIMIT XX
R2-1-48
Post mounted
& MINIMUM FEE $80
R2-1a-24

7 — W1-6(L)-48
Barricade mounted

8 — W1-6(R)-48
Barricade Mounted

9 — SPEED LIMIT XX
R2-1-48
Post Mounted

10 — END ROAD WORK
G20-2-48
Post mounted

11 — ROAD WORK ⇦ NEXT 00 MILES / NEXT 00 MILES ⇨
G20-52a-72
Post mounted

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K6N-1

Traffic Control Plan

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	100	3



1 — SPEED LIMIT ENFORCED / MINIMUM FEE $80 WHEN WORKERS PRESENT
G20-55-96
Post Mounted

2 — ROAD WORK XXXX FT
W20-1-48
Post mounted

3 — ONE LANE ROAD XXXX FT
W20-4-48
Post mounted

4 — SPEED LIMIT XX
W3-5-48
Post mounted

5 — & XX FEET
W20-7-48
Post mounted
W16-2P-30

6 — SPEED LIMIT XX & MINIMUM FEE $80
R2-1-48
Post mounted
R2-1a-24

7 — W1-6(L)-48
Barricade Mounted

8 — W1-6(R)-48
Barricade Mounted

9 — SPEED LIMIT XX
R2-1-48
Post mounted

10 — END ROAD WORK
G20-2-48
Post mounted

11 — ROAD WORK ⇦ NEXT 00 MILES / NEXT 00 MILES ⇨
G20-52a-72
Post mounted

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K7-3

Traffic Control Plan

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	ROM-0300(135), PCN 21835	100	1

SIGN NUMBER	SIGN SIZE	DESCRIPTION	AMOUNT REQUIRED	UNITS PER AMOUNT	UNITS SUB TOTAL
D3-36	36"x6"	STREET NAME SIGN (Sign and installation only)		6	
G20-1-60	**60"x24"**	**ROAD WORK NEXT __ MILES**	**8**	**34**	**272**
G20-1b-60	60"x24"	WORK IN PROGRESS/ NO WORK IN PROGRESS (Sign and installation only)		26	
G20-2-48	**48"x24"**	**END ROAD WORK**	**12**	**19**	**228**
G20-4-36	36"x18"	PILOT CAR FOLLOW ME (Mounted to back of pilot car)		18	
G20-10-108	108"x48"	CONTRACTOR SIGN		64	
G20-50a-72	**72"x36"**	**ROAD WORK NEXT __ MILES RT & LT ARROWS**	**26**	**37**	**962**
G20-52a-72	**72"x24"**	**ROAD WORK NEXT __ MILES RT or LT ARROW**	**4**	**30**	**120**
G20-55-96	**96"x48"**	**SPEED LIMIT ENFORCED - MINIMUM FEE $80 WHEN WORKERS PRESENT**	**4**	**59**	**236**
M1-1-36	36"x36"	INTERSTATE ROUTE MARKER (Post and installation only)		10	
M1-4-24	24"x24"	U.S. ROUTE MARKER (Post and installation only)		10	
M1-5-24	24"x24"	STATE ROUTE MARKER (Post and installation only)		10	
M3-1-24	24"x12"	NORTH (Mounted on route marker post)		7	
M3-2-24	24"x12"	EAST (Mounted on route marker post)		7	
M3-3-24	24"x12"	SOUTH (Mounted on route marker post)		7	
M3-4-24	24"x12"	WEST (Mounted on route marker post)		7	
M4-8-24	24"x12"	DETOUR (Mounted on route marker post)		7	
M4-9-30	30"x24"	DETOUR ARROW RIGHT or LEFT/AHD AND RT or LT		15	
M4-10-48	48"x18"	DETOUR ARROW RIGHT or LEFT		23	
M5-1-21	21"x15"	ARROW AHD AND RT or LT(Mounted on route marker post)		7	
M5-2-21	21"x15"	ARROW AHD UP & RT or LT (Mounted on route marker post)		7	
M6-1-21	21"x15"	ARROW RT or LT (Mounted on route marker post)		7	
M6-2-21	21"x15"	ARROW UP & RT or LT (Mounted on route marker post)		7	
M6-3-21	21"x15"	ARROW AHD (Mounted on route marker post)		7	
R1-1-48	**48"x48"**	**STOP**	**2**	**32**	**64**
R1-1a-18	**18"x18"**	**STOP and SLOW PADDLE Back to Back**	**16**	**5**	**80**
R1-2-60	60"x60"	YIELD		29	
R2-1-48	**48"x60"**	**SPEED LIMIT __**	**24**	**39**	**936**
R2-1a-24	24"x18"	MINIMUM FEE $80 (Mounted on Speed Limit post)		10	
R3-7-48	48"x48"	LEFT or RIGHT LANE MUST TURN LEFT or RIGHT		35	
R4-1-48	48"x60"	DO NOT PASS		39	
R4-7-48	48"x60"	KEEP RIGHT SYMBOL		39	
R5-1-48	48"x48"	DO NOT ENTER		35	
R6-1-36	36"x12"	ONE WAY RIGHT or LEFT		13	
R7-1-12	12"x18"	NO PARKING		11	
R10-6-24	24"x36"	STOP HERE ON RED		16	
R11-2-48	48"x30"	ROAD CLOSED		28	
R11-2a-48	48"x30"	STREET CLOSED		28	
R11-3a-60	60"x30"	ROAD CLOSED __ MILES AHEAD LOCAL TRAFFIC ONLY		31	
R11-3c-60	60"x30"	STREET CLOSED __ MILES AHEAD LOCAL TRAFFIC ONLY		31	
R11-4a-60	60"x30"	STREET CLOSED TO THRU TRAFFIC		31	
W1-3-48	48"x48"	RIGHT or LEFT SHARP REVERSE CURVE ARROW		35	
W1-4-48	48"x48"	RIGHT or LEFT REVERSE CURVE ARROW		35	
W1-4b-48	48"x48"	DOUBLE RIGHT or LEFT REVERSE CURVE ARROW		35	
W1-6-48	**48"x24"**	**LARGE ARROW**	**4**	**26**	**104**
W3-1-48	48"x48"	STOP AHEAD SYMBOL		35	
W3-3-48	48"x48"	SIGNAL AHEAD SYMBOL		35	
W3-4-48	**48"x48"**	**BE PREPARED TO STOP**	**16**	**35**	**560**
W3-5-48	**48"x48"**	**SPEED REDUCTION AHEAD**	**4**	**35**	**140**
W4-2-48	48"x48"	RIGHT or LEFT LANE TRANSITION SYMBOL		35	
W5-1-48	48"x48"	ROAD NARROWS		35	
W5-8-48	48"x48"	THRU TRAFFIC RIGHT LANE		35	
W5-9-48	48"x48"	ROAD WORK TRAFFIC ONLY DOWN & LT or RT ARROW		35	
W6-3-48	48"x48"	TWO WAY TRAFFIC SYMBOL		35	
W8-1-48	48"x48"	BUMP		35	
W8-3-48	48"x48"	PAVEMENT ENDS		35	
W8-7-48	48"x48"	LOOSE GRAVEL		35	
W8-9a-48	48"x48"	SHOULDER DROP-OFF		35	
W8-11-48	48"x48"	UNEVEN LANES		35	
W8-12-48	48"x48"	NO CENTER STRIPE		35	
W8-53-48	48"x48"	TRUCKS ENTERING HIGHWAY		35	
W8-54-48	**48"x48"**	**TRUCKS ENTERING AHEAD or __ FT.**	**2**	**35**	**70**
W8-55-48	48"x48"	TRUCKS CROSSING AHEAD or __ FT.		35	
W8-56-48	48"x48"	TRUCKS EXITING HIGHWAY		35	
W9-3a-48	48"x48"	CENTER LANE CLOSED SYMBOL		35	
W12-2-48	48"x48"	LOW CLEARANCE SYMBOL		35	
W13-1-24	24"x24"	__ MPH ADVISORY SPEED PLATE (Mounted on warning sign post)		11	
W13-4-48	48"x60"	RAMP ARROW		39	
W14-3-48	48"x36"	NO PASSING ZONE		23	
W20-1-48	**48"x48"**	**ROAD WORK AHEAD or _FT or _ MILE**	**20**	**35**	**700**
W20-2-48	48"x48"	DETOUR AHEAD or __ FT		35	
W20-3-48	48"x48"	ROAD or STREET CLOSED AHEAD or __ FT.		35	
W20-4-48	**48"x48"**	**ONE LANE ROAD AHEAD or __ FT.**	**4**	**35**	**140**
W20-5-48	48"x48"	RIGHT or LEFT LANE CLOSED AHEAD or __ FT.		35	
W20-7a-48	**48"x48"**	**FLAGGING SYMBOL**	**20**	**35**	**700**
W20-7k-24	24"x18"	__ FEET (Mounted on warning sign post)		10	
W20-8-48	48"x48"	STREET CLOSED		35	
W20-51-48	48"x48"	EQUIPMENT WORKING		35	
W20-52-54	**54"x12"**	**NEXT __ MILES (Mounted on warning sign post)**	**16**	**12**	**192**
W21-1a-48	48"x48"	WORKERS SYMBOL		35	
W21-2-48	48"x48"	FRESH OIL		35	
W21-3-48	48"x48"	ROAD MACHINERY AHEAD or __ FT		35	
W21-5-48	48"x48"	SHOULDER WORK		35	
W21-5a-48	48"x48"	RIGHT or LEFT SHOULDER CLOSED		35	
W21-5b-48	48"x48"	RIGHT or LEFT SHOULDER CLOSED AHEAD or __ FT.		35	
W21-6a-48	48"x48"	SURVEY CREW AHEAD		35	
W21-50-48	48"x48"	BRIDGE PAINTING AHEAD or __ FT.		35	
W21-51-48	**48"x48"**	**MATERIAL ON ROADWAY**	**4**	**35**	**140**
W22-8-48	48"x48"	FRESH OIL LOOSE ROCK		35	

SPECIAL SIGNS

SPEC & CODE

704-1000	**TRAFFIC CONTROL SIGNS**	**TOTAL UNITS**	**5644**

SPEC & CODE	DESCRIPTION	UNIT	QUANTITY
704-0100	**FLAGGING**	**MHR**	**5616**
704-1041	ATTENUATION DEVICE-TYPE B-55	EACH	
704-1043	ATTENUATION DEVICE-TYPE B-65	EACH	
704-1044	ATTENUATION DEVICE-TYPE B-70	EACH	
704-1050	TYPE I BARRICADES	EACH	
704-1051	TYPE II BARRICADES	EACH	
704-1052	**TYPE III BARRICADES**	**EACH**	**10**
704-1060	DELINEATOR DRUMS	EACH	
704-1065	TRAFFIC CONES	EACH	
704-1067	TUBULAR MARKERS	EACH	
704-1070	DELINEATOR	EACH	
704-1072	FLEXIBLE DELINEATORS	EACH	
704-1081	**VERTICAL PANELS - BACK TO BACK**	**EACH**	**25**
704-1085	SEQUENCING ARROW PANEL - TYPE A	EACH	
704-1086	SEQUENCING ARROW PANEL - TYPE B	EACH	
704-1087	SEQUENCING ARROW PANEL - TYPE C	EACH	
704-1088	SEQUENCING ARROW PANEL - TYPE C - CROSSOVER	EACH	
704-1095	TYPE B FLASHERS	EACH	
704-1500	OBLITERATION OF PVMT MK	SF	
704-3501	PORTABLE PRECAST CONCRETE MED BARRIER	LF	
704-3510	PRECAST CONCRETE MED BARRIER - STATE FURNISHED	EACH	
762-0200	RAISED PAVEMENT MARKERS	EACH	
762-0420	SHORT TERM 4IN LINE - TYPE R	LF	
762-0430	SHORT TERM 4IN LINE - TYPE NR	LF	
772-2110	FLASHING BEACON - POST MOUNTED	EACH	

NOTE:
If additional signs are required, units will be calculated using the formula from Section III-19.06 of the Design Manual.
http://www.dot.nd.gov/

Traffic Control Devices List
Minuteman Missile-Inslope Repairs
Located in Burke/Mountrail Counties
Various Locations

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	N.D.	ROM-0300(315), PCN 21835	110	1

Station / RP	Sign No.	Assembly No.	Flat Sheet For Signs IV SF	Flat Sheet For Signs XI SF	Sign Support Length 1st LF	2nd LF	3rd LF	4th LF	Vert Clear-ance FT	Support Size	Max Post Len LF	Sleeve Length 1st LF	2nd LF	3rd LF	4th LF	Sleeve Size	Anchor EA	Anchor LF	Anchor Size	Reset Sign Panel EA	Reset Sign Support EA	Break-Away EA	Comments
62+80 Rt		53		8.5	12.30				5.0	2.5 x 2.5 10 ga	14.7						1	4	3 x 3 7 ga			1	
73+45 Rt	W1-8			6.0	10.00				5.0	2 x 2 12 ga	14.6						1	4	2.25 x 2.25 12 ga				
74+25 Rt	W1-8			6.0	10.00				5.0	2 x 2 12 ga	14.6						1	4	2.25 x 2.25 12 ga				
75+05 Rt	W1-8			6.0	10.00				5.0	2 x 2 12 ga	14.6						1	4	2.25 x 2.25 12 ga				
75+85 Rt	W1-8			3.0	10.00				5.0	2 x 2 12 ga	14.6						1	4	2.25 x 2.25 12 ga				
77+00 Lt		53		8.5	12.30				5.0	2.5 x 2.5 10 ga	14.7						1	4	3 x 3 7 ga			1	
77+00 Rt		53		8.5	12.30				5.0	2.5 x 2.5 10 ga	14.7						1	4	3 x 3 7 ga			1	
Sub Total			0.00	46.50		**Total**	76.90										**Total**	28		0	0	3	
Grand Total			**0.0**	**46.5**		**Total**	**76.90**										**Total**	**28**	**0**	**0**	**0**	**3**	

8/25/2017 1:24:43PM
Page 1 of 1

Sign Summary
Perforated Tube

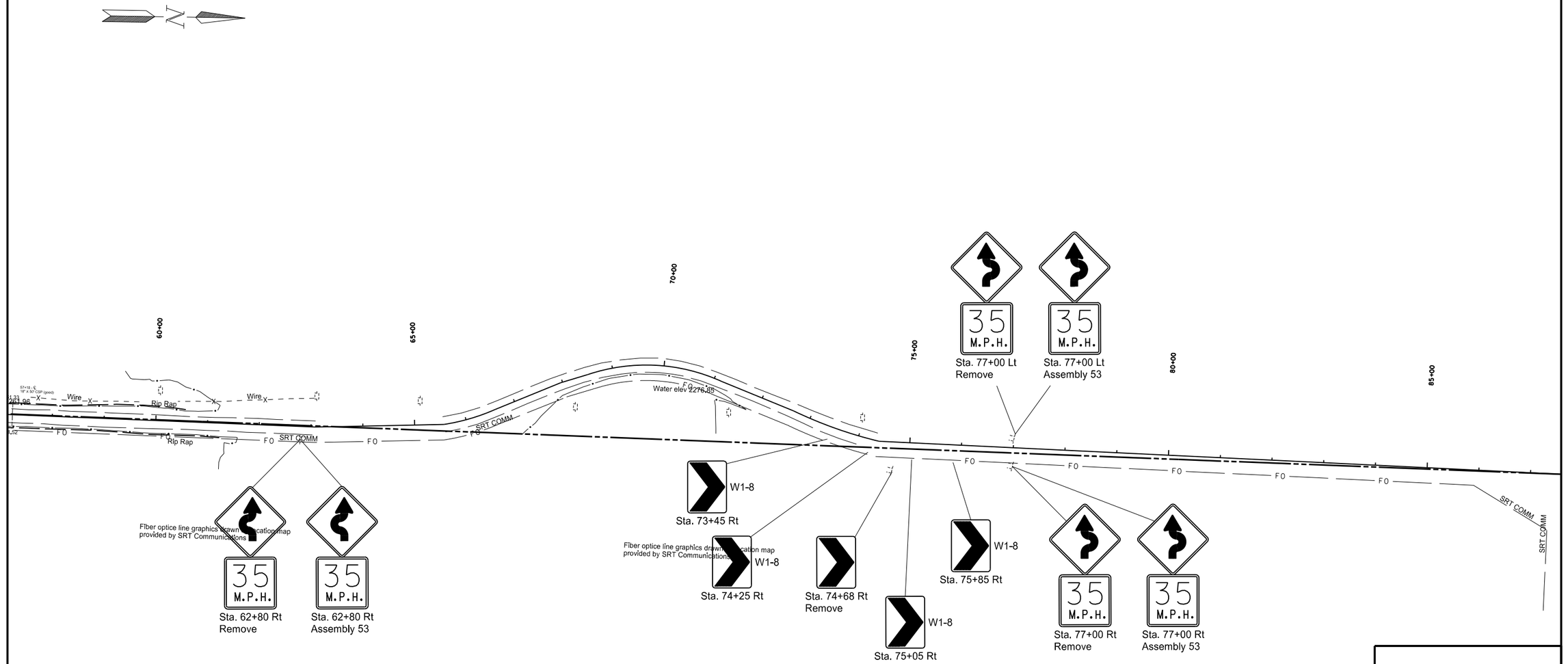
Minuteman Missile-Inslope Repairs

Located in Mountrail County

Alignment K6-S

Curve advisory speed is 35 mph

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	110	2



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K6S

Sign Layout

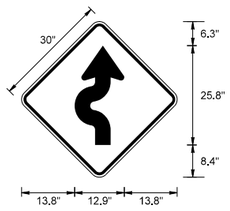
STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	ROM-0300(135)	110	3

SIGN NUMBER	SN X
WIDTH X HEIGHT	2'-6" x 2'-6"
BORDER WIDTH	0.75" (inset 0.5")
CORNER RADIUS	1.875"
MOUNTING	Ground
BACKGROUND	TYPE: XI Reflective
	COLOR: Yellow
LEGEND/BORDER	TYPE: Non-reflective
	COLOR: Black

SYMBOL	X	Y	WID	HT	ANGLE
ARW_C_CRV	13.8	8.4	12.9	25.8	0

STATION(S):
Conventional Roadway Use

AREA: 11.4 Sq.Ft.



Dimensions are in inches.tenths

Letter locations are panel edge to lower left corner

PANEL STYLE: ND_Misc_Warning.ssl

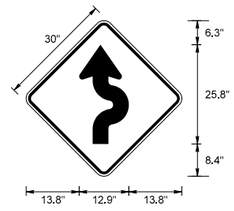
LETTER POSITION (X)	LENGTH	SIZE	SERIES

SIGN NUMBER	SN X
WIDTH X HEIGHT	2'-6" x 2'-6"
BORDER WIDTH	0.75" (inset 0.5")
CORNER RADIUS	1.875"
MOUNTING	Ground
BACKGROUND	TYPE: XI Reflective
	COLOR: Yellow
LEGEND/BORDER	TYPE: Non-reflective
	COLOR: Black

SYMBOL	X	Y	WID	HT	ANGLE
ARW_C_CRV	13.8	8.4	12.9	25.8	0

STATION(S):
Conventional Roadway Use

AREA: 11.4 Sq.Ft.



Dimensions are in inches.tenths

Letter locations are panel edge to lower left corner

PANEL STYLE: ND_Misc_Warning.ssl

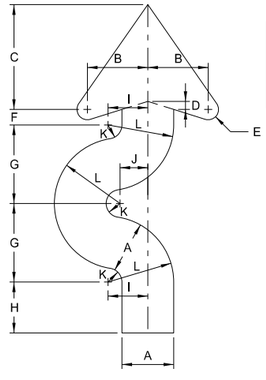
LETTER POSITION (X)	LENGTH	SIZE	SERIES

SIGN NUMBER	
WIDTH X HEIGHT	
BORDER WIDTH	
CORNER RADIUS	
MOUNTING	
BACKGROUND	TYPE:
	COLOR:
LEGEND/BORDER	TYPE:
	COLOR:

SYMBOL	X	Y	WID	HT	ANGLE

PANEL STYLE:

LETTER POSITION (X)	LENGTH	SIZE	SERIES



SIGN	A	B	C	D	E	F
2'-6" x 2'-6"	4.063"	4.75"	8.25"	0.625"	0.813"	1.204"
3'-0" x 3'-0"	4.875"	5.625"	9.875"	.75"	1"	1.469"
4'-0" x 4'-0"	6.5"	7.5"	13.188"	1"	1.625"	1.937"

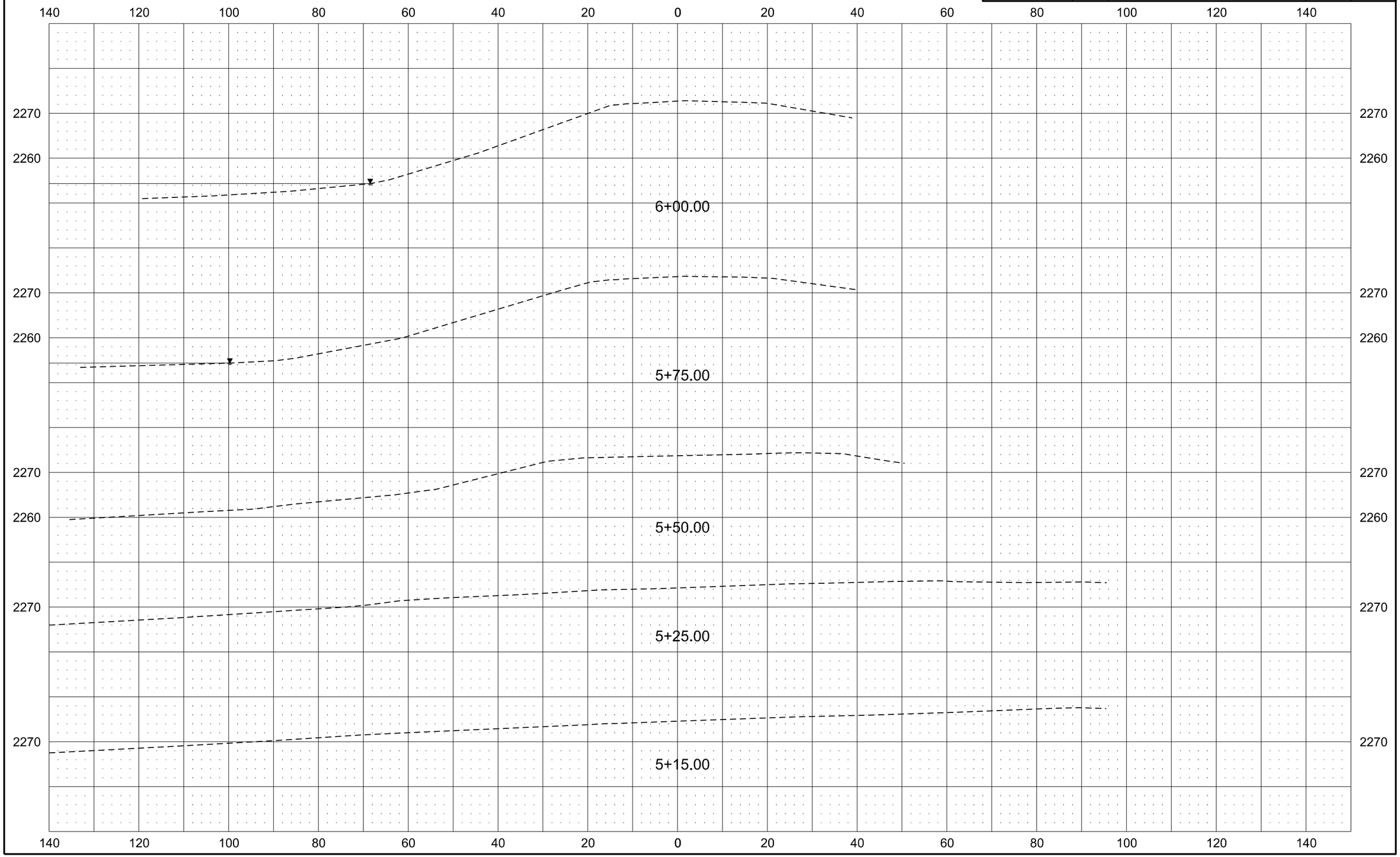
G	H	I	J	K	L
6.180"	4"	3.126"	2.188"	1.094"	5.157"
7.416"	4.75"	3.75"	2.625"	1.313"	6.188"
9.887"	6.375"	5"	3.5"	1.75"	8.25"

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Sign Details

Alignment J-10

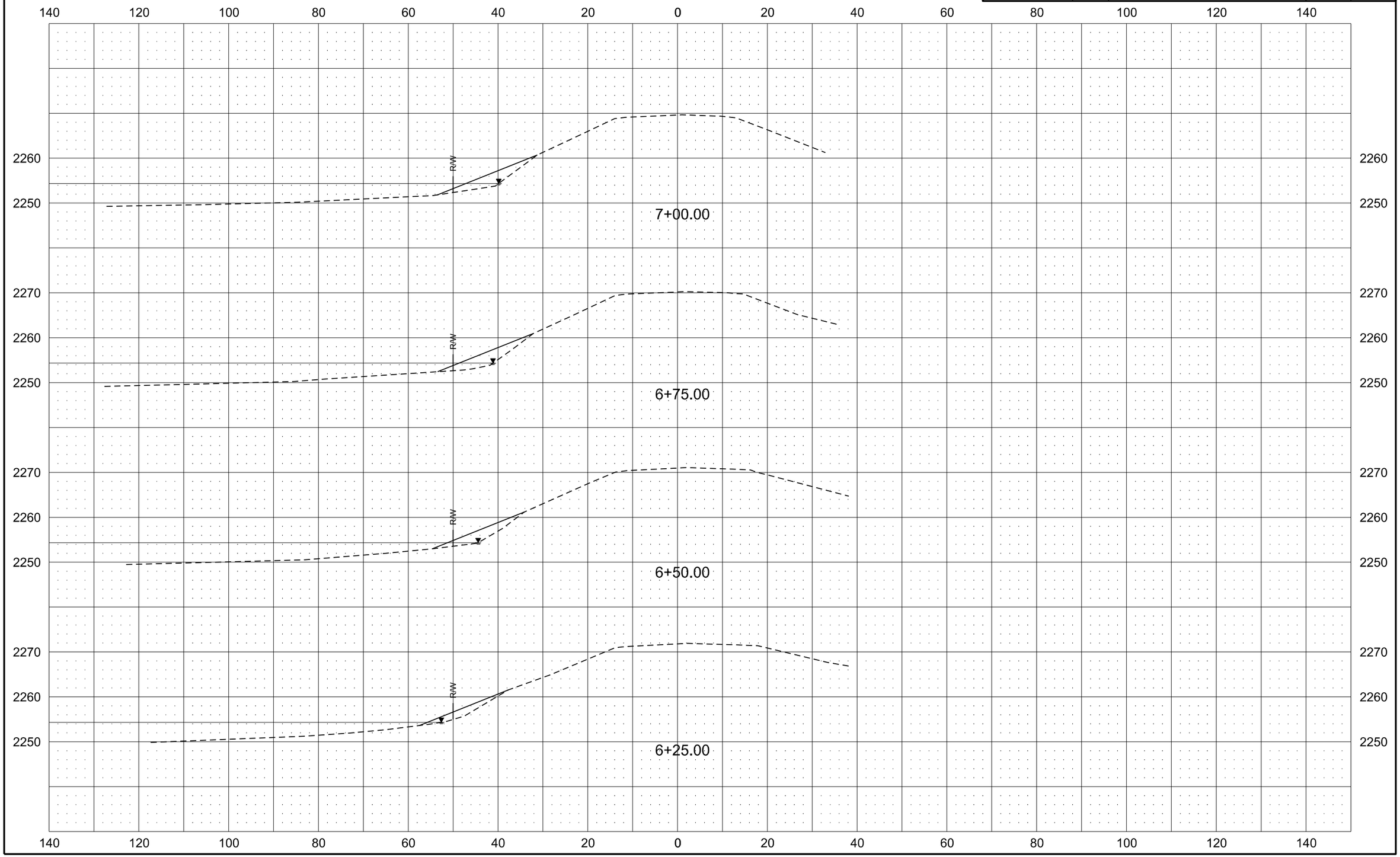
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	ND	ROM-0300(135)	200	1



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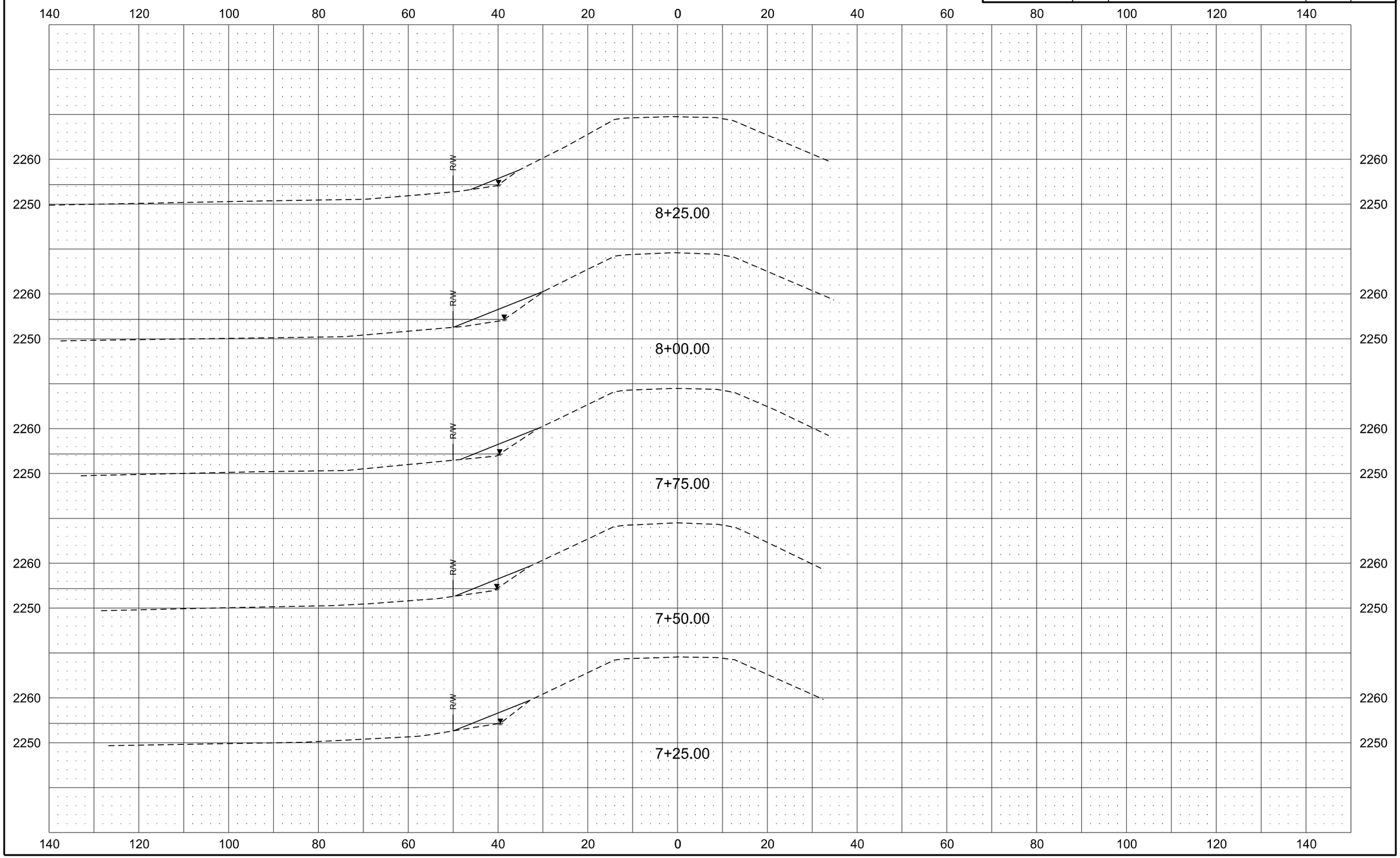
Alignment J-10

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	2



Alignment J-10

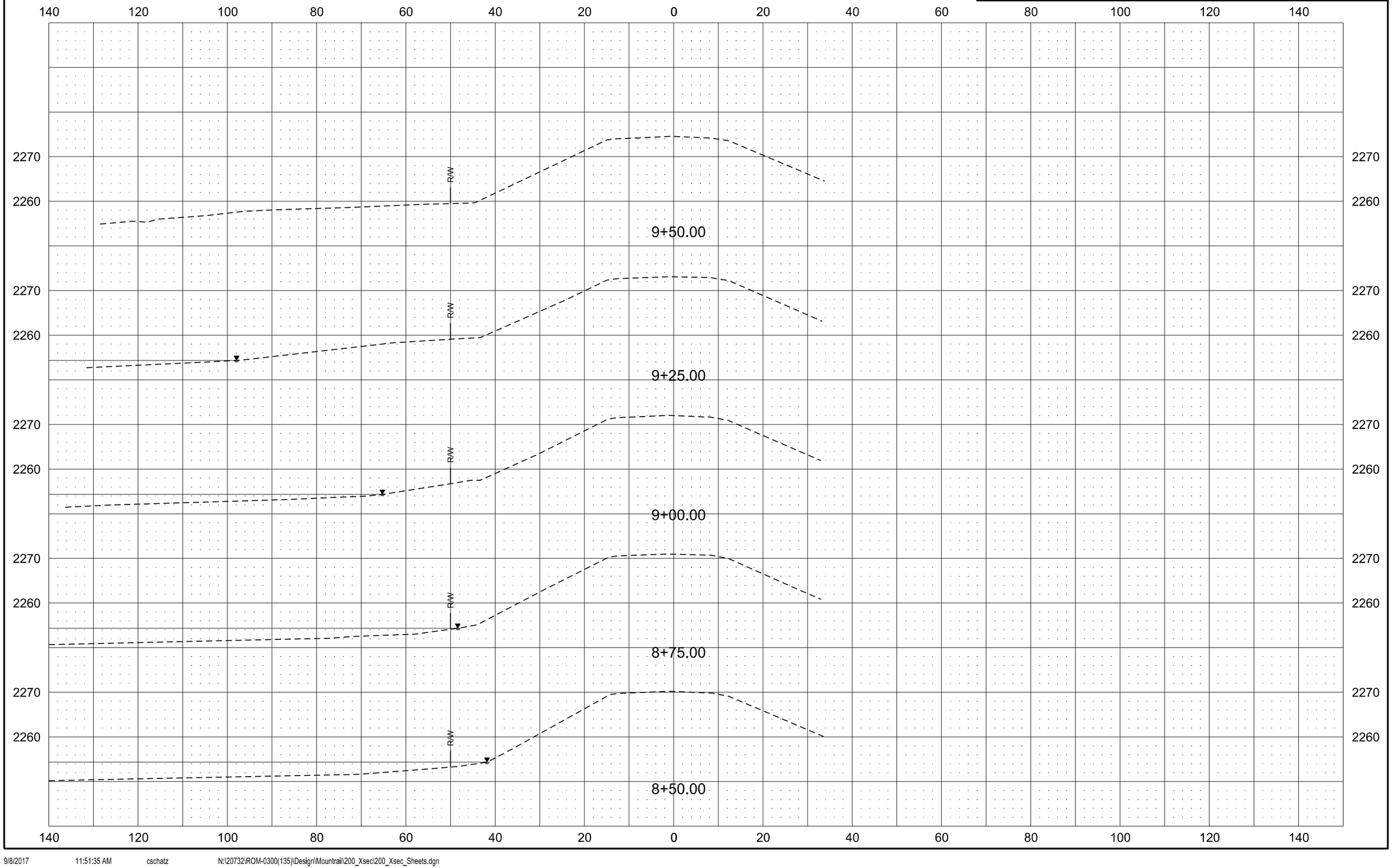
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	3



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Alignment J-10

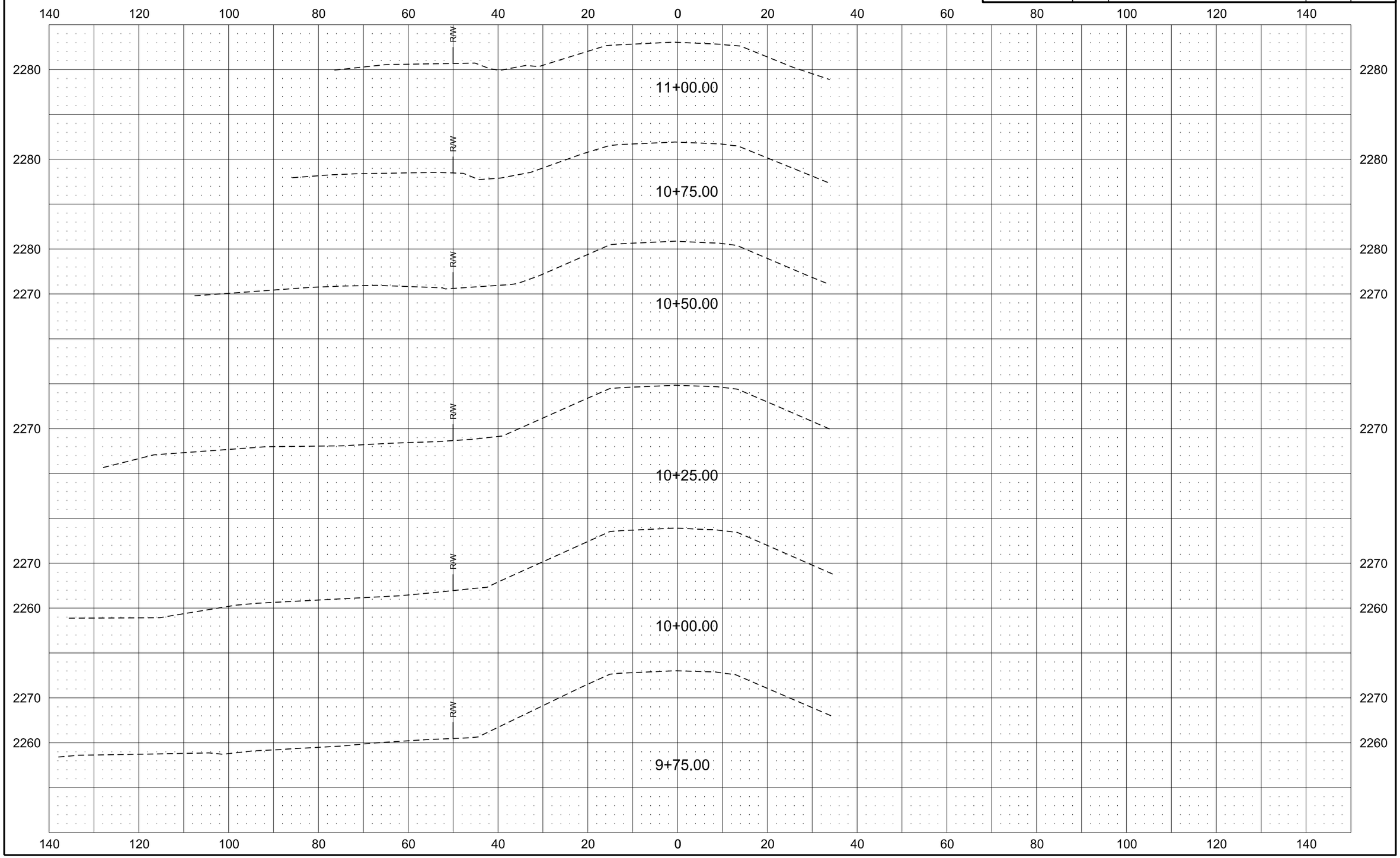
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	4



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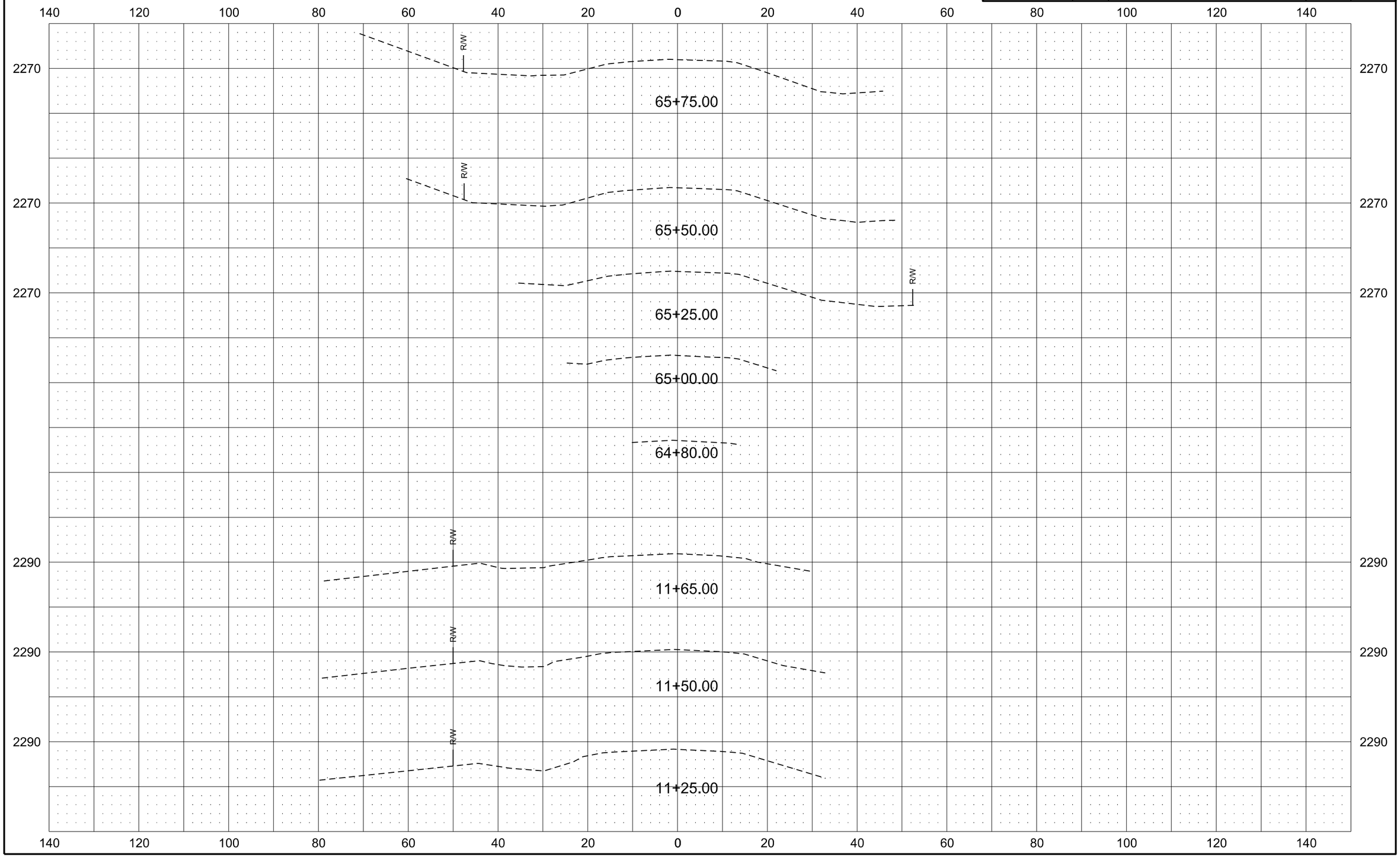
Alignment J-10

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	5



Alignment J-10

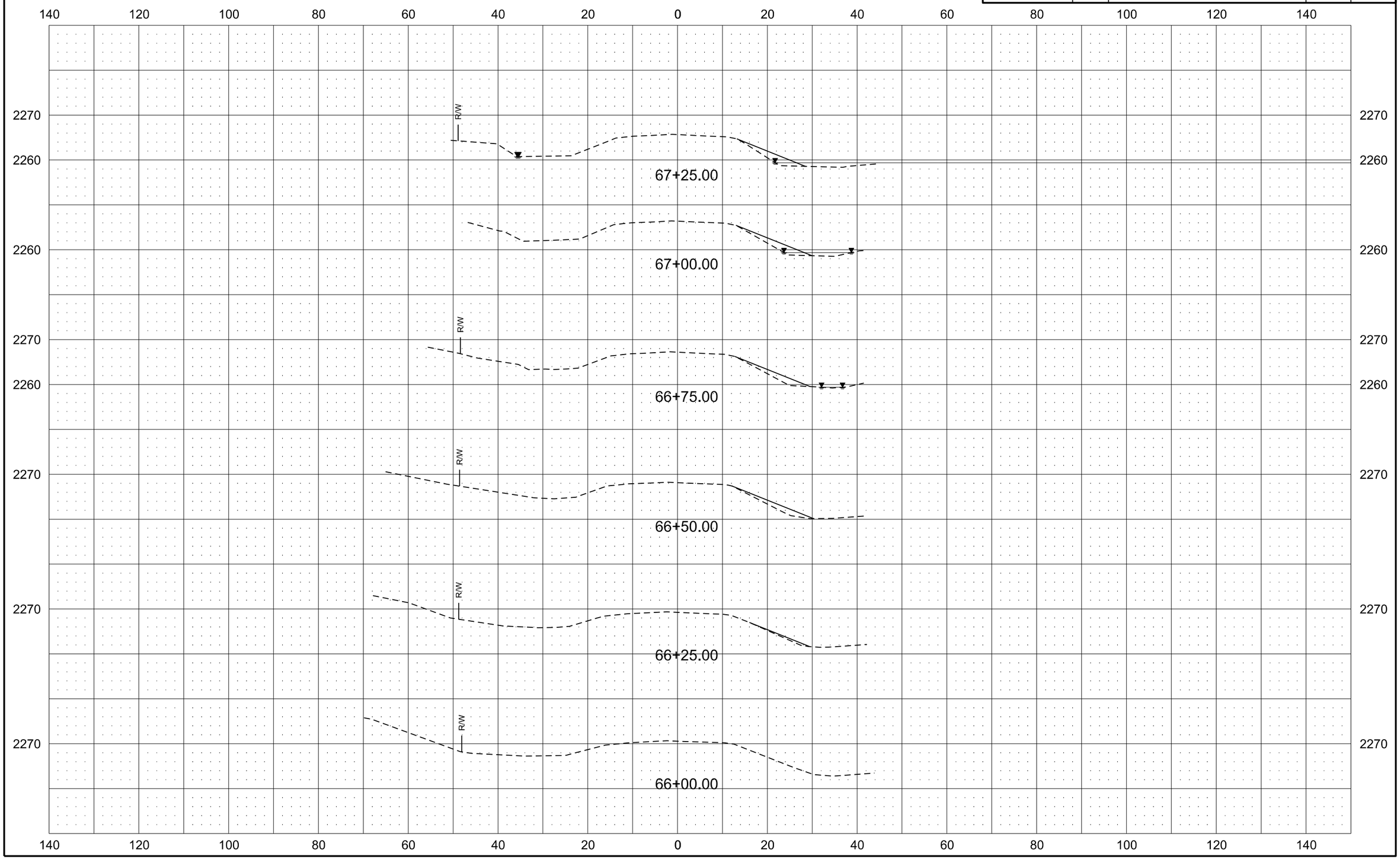
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	ND	ROM-0300(135)	200	6



9/8/2017 11:51:44 AM cschatz N:\20732\ROM-0300(135)\Design\Mountrail\200_Xsec\200_Xsec_Sheets.dgn

Alignment J-10

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	7



Alignment J-10

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	8

140 120 100 80 60 40 20 0 20 40 60 80 100 120 140

2260 2260 2260 2260 2260 2270 2260

R/W

69+00.00

68+75.00

68+50.00

68+25.00

68+00.00

67+75.00

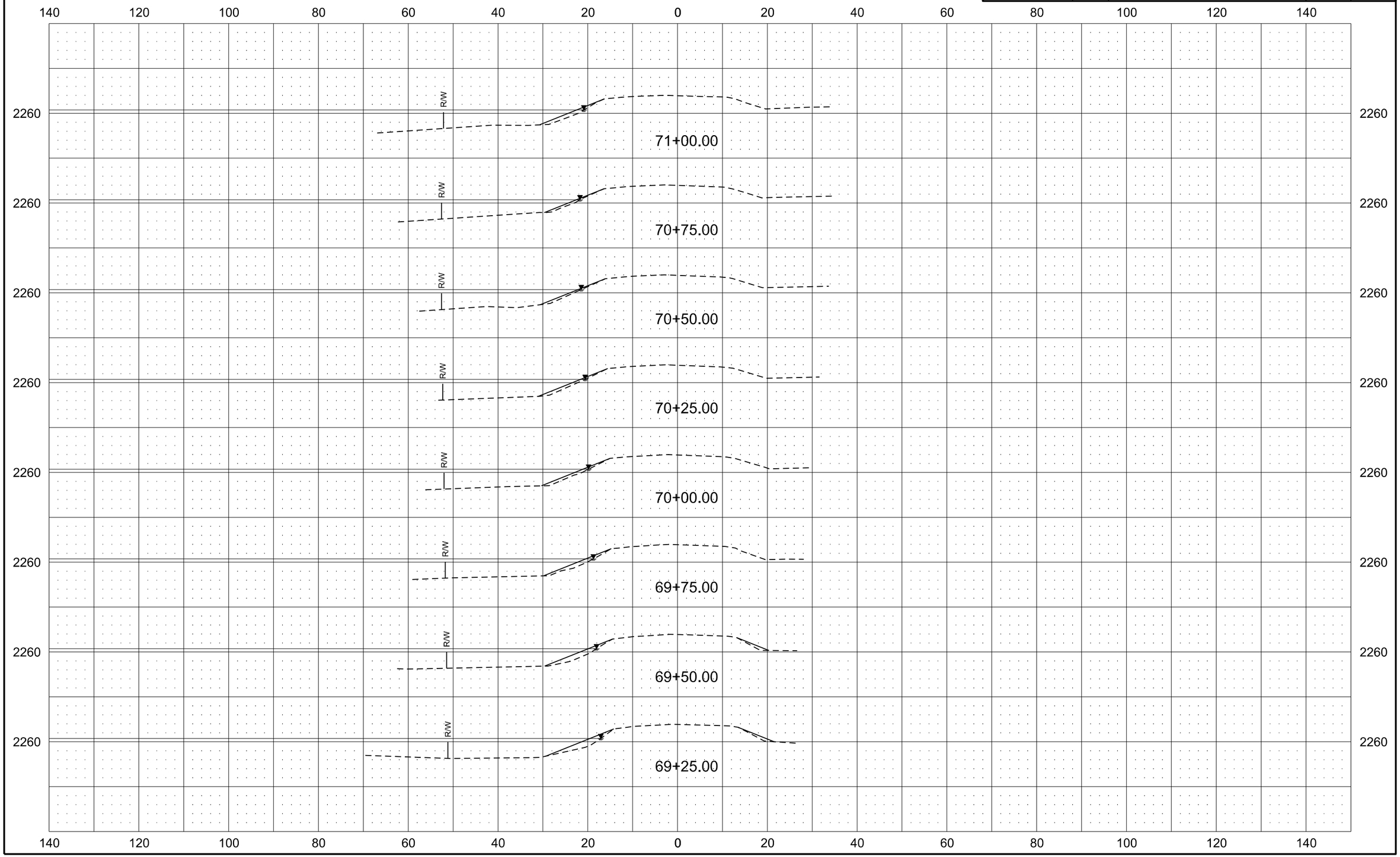
67+50.00

140 120 100 80 60 40 20 0 20 40 60 80 100 120 140

9/8/2017 11:51:52 AM cschatz N:\20732\ROM-0300(135)\Design\Mountrail\200_Xsec\200_Xsec_Sheets.dgn

Alignment J-10

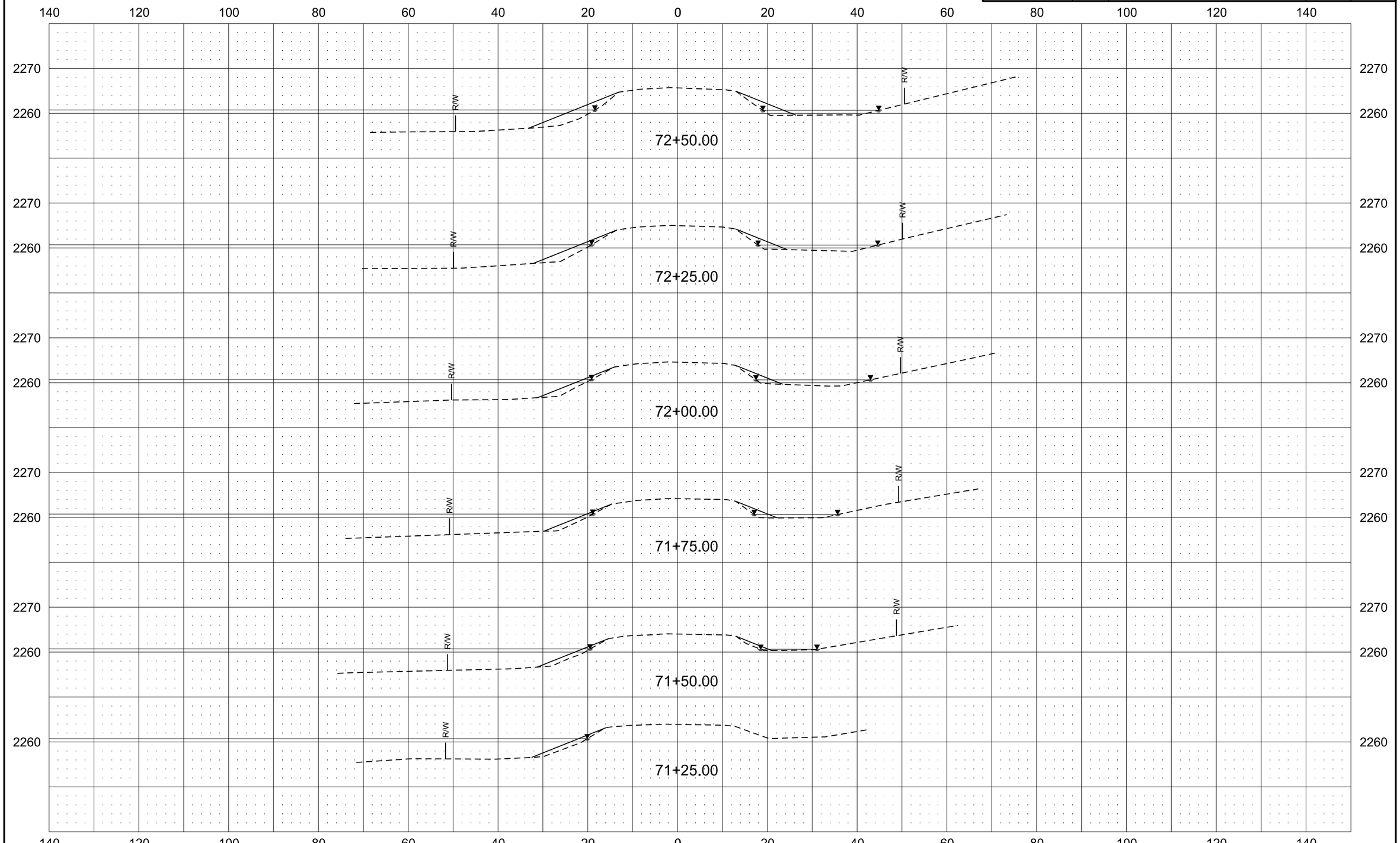
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	9



9/8/2017 11:51:56 AM cschatz N:\20732\ROM-0300(135)\Design\Mountrail\200_Xsec\200_Xsec_Sheets.dgn

Alignment J-10

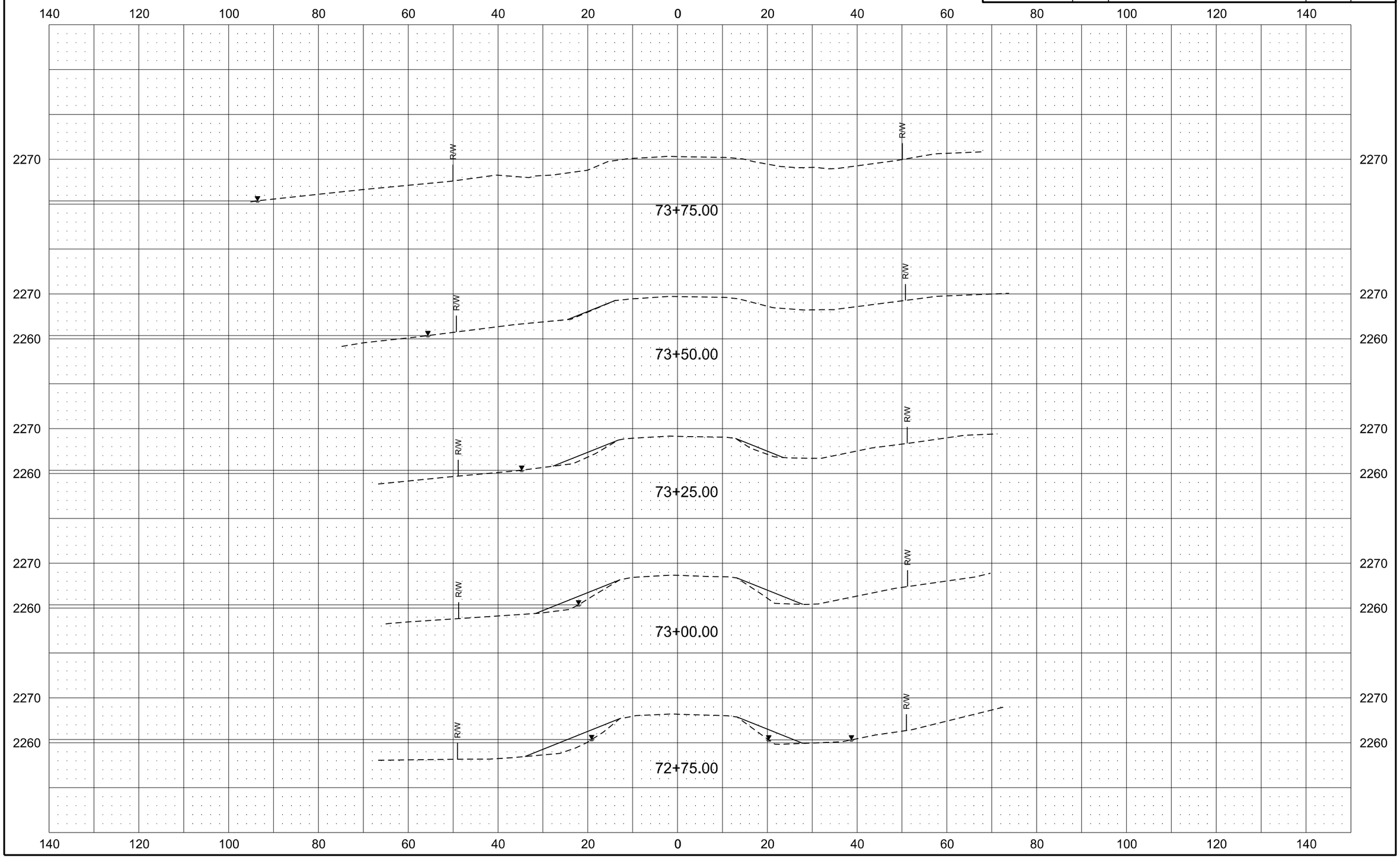
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	10



9/8/2017 11:52:01 AM cschatz N:\20732\ROM-0300(135)\Design\Mountrail\200_Xsec\200_Xsec_Sheets.dgn

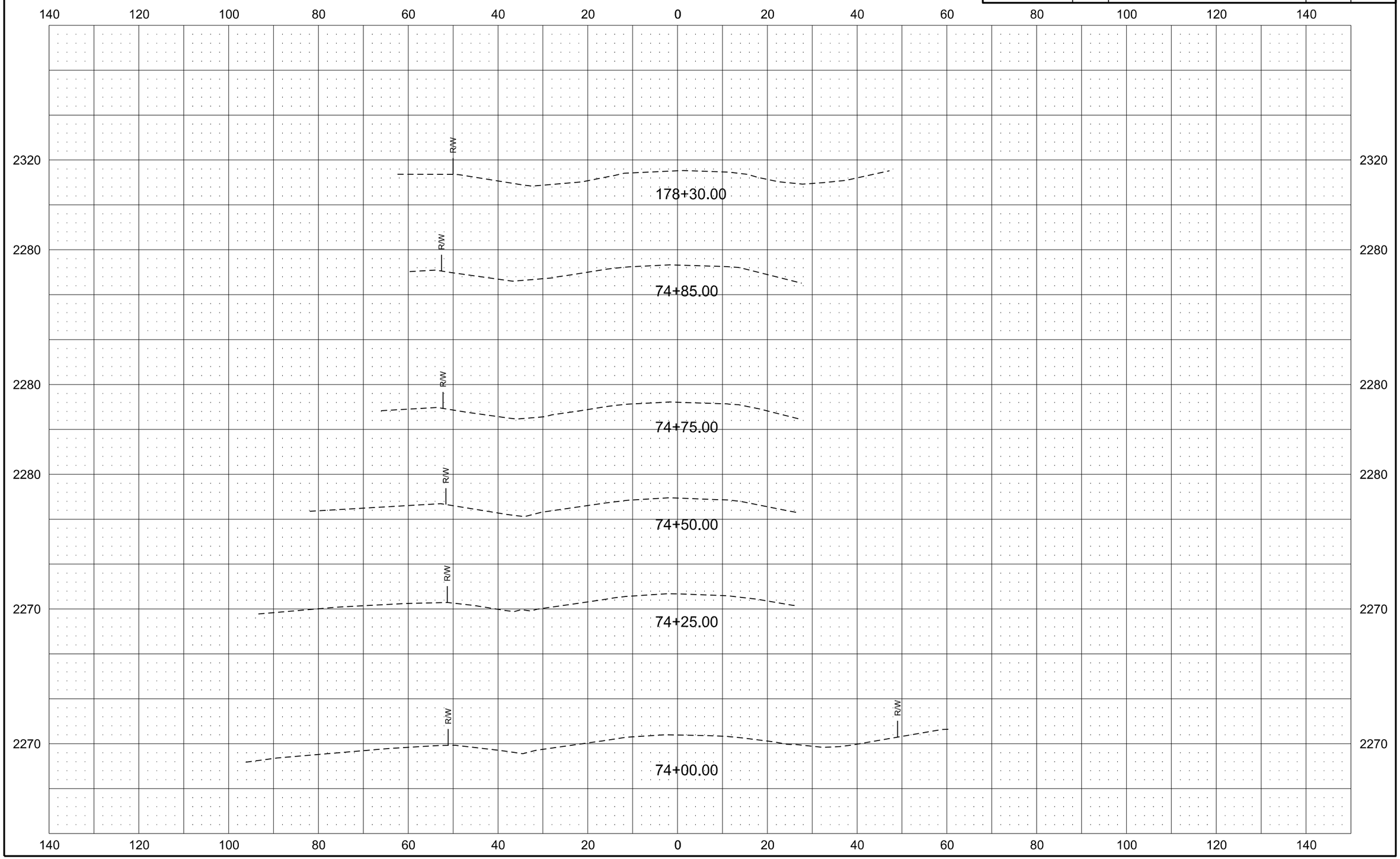
Alignment J-10

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	11



Alignment J-10

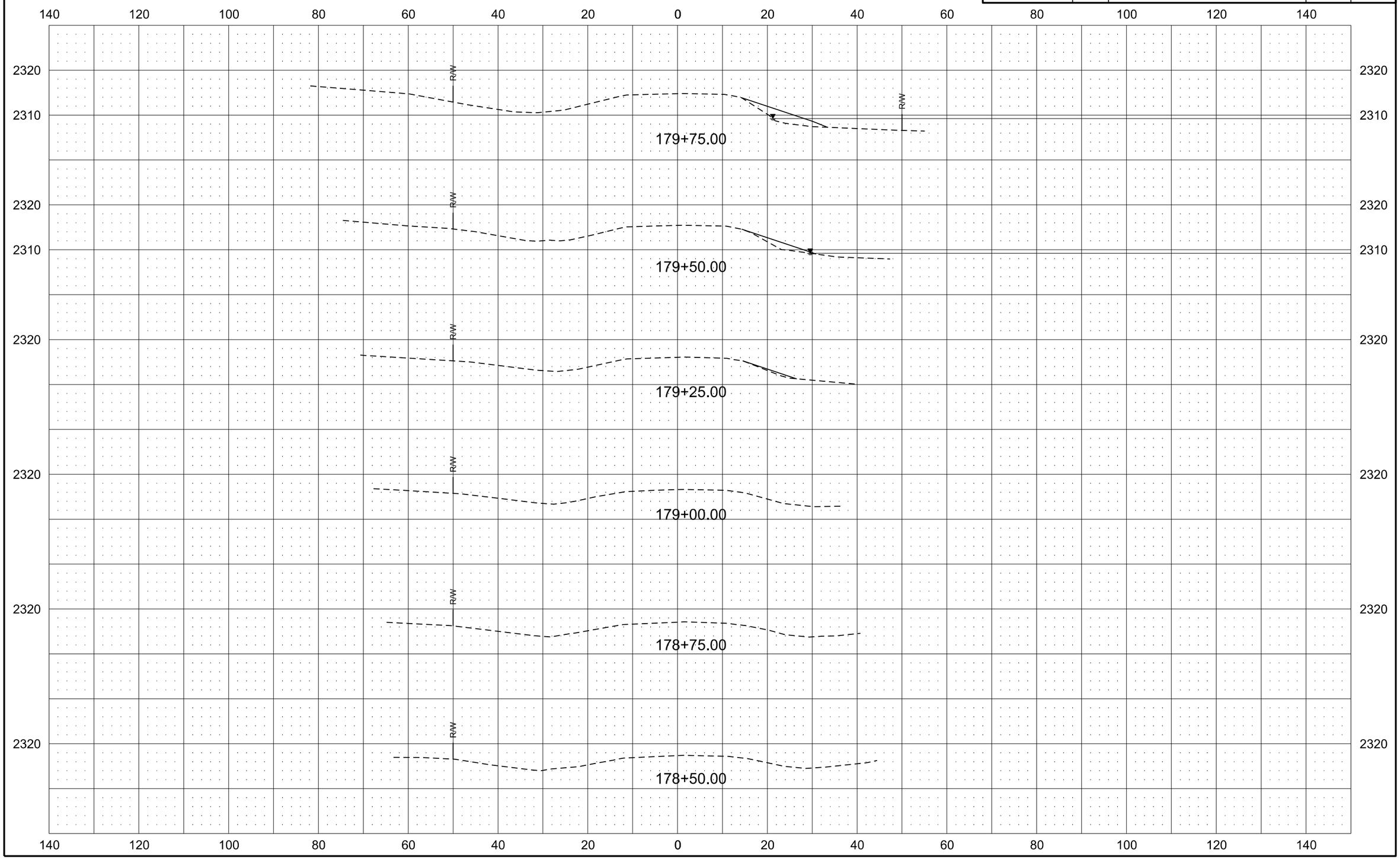
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	12



9/8/2017 11:52:09 AM cschatz N:\20732\ROM-0300(135)\Design\Mountrail\200_Xsec\200_Xsec_Sheets.dgn

Alignment J-10

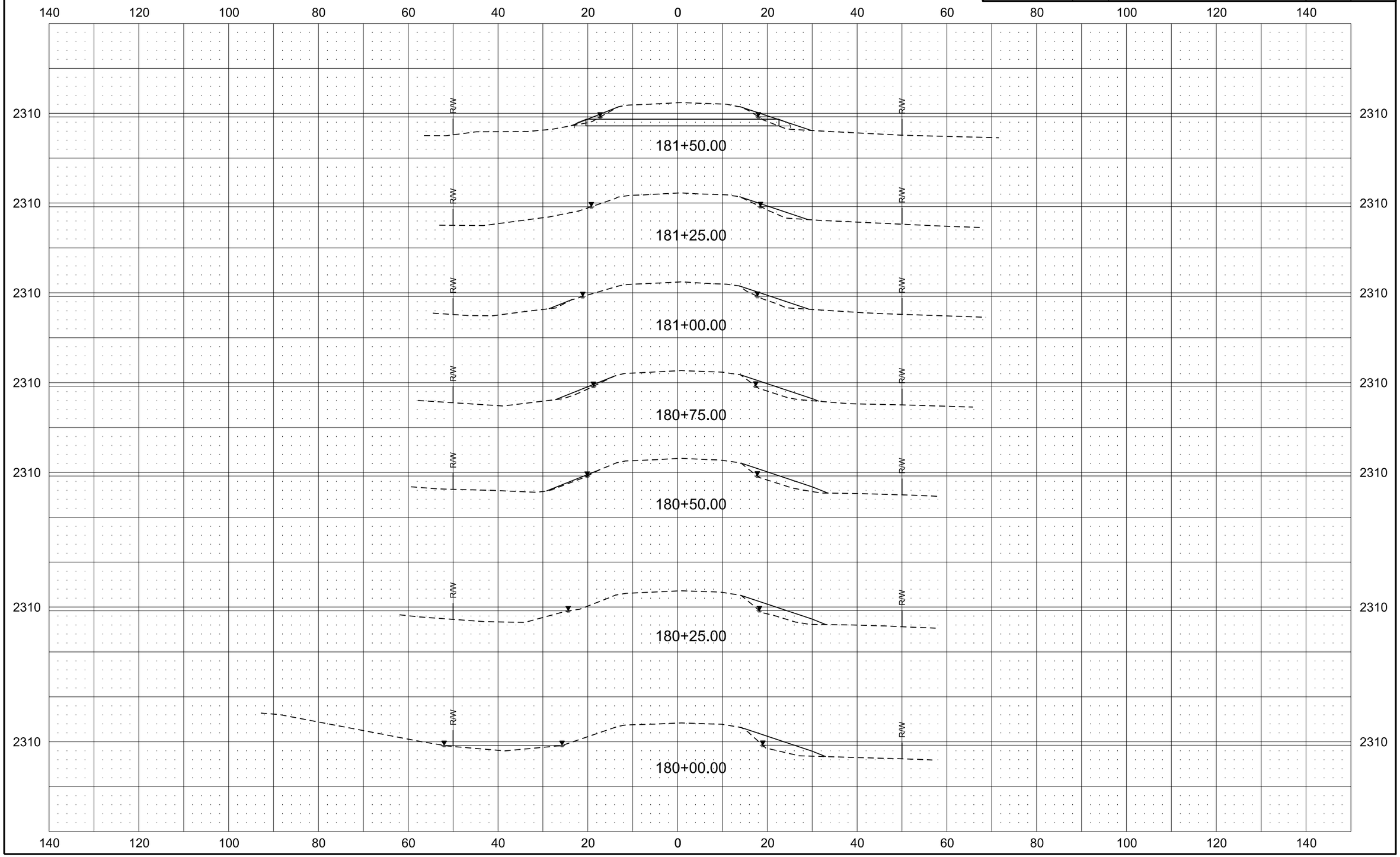
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	13



9/8/2017 11:52:14 AM cschatz N:\20732\ROM-0300(135)\Design\Mountrail\200_Xsec\200_Xsec_Sheets.dgn

Alignment J-10

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	14



Alignment J-10

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	15

140 120 100 80 60 40 20 0 20 40 60 80 100 120 140

2320
2310

R/W

183+50.00

183+25.00

183+00.00

182+75.00

182+50.00

182+25.00

182+00.00

181+75.00

Alignment J-10

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	16

140 120 100 80 60 40 20 0 20 40 60 80 100 120 140

2320

187+25.00

R/W

187+00.00

R/W R/W

186+75.00

R/W R/W

186+50.00

R/W

184+25.00

R/W

184+00.00

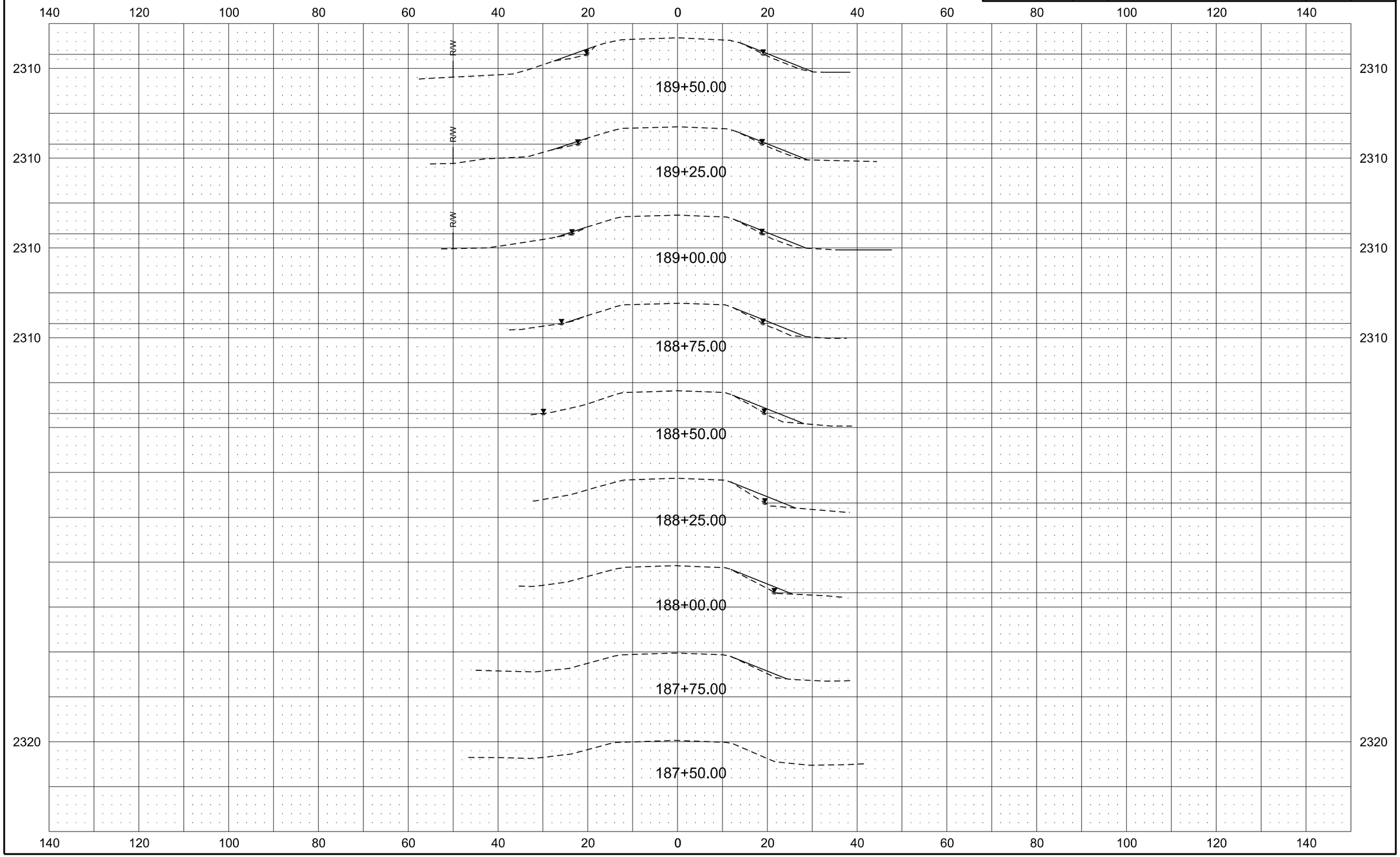
R/W

183+75.00

140 120 100 80 60 40 20 0 20 40 60 80 100 120 140

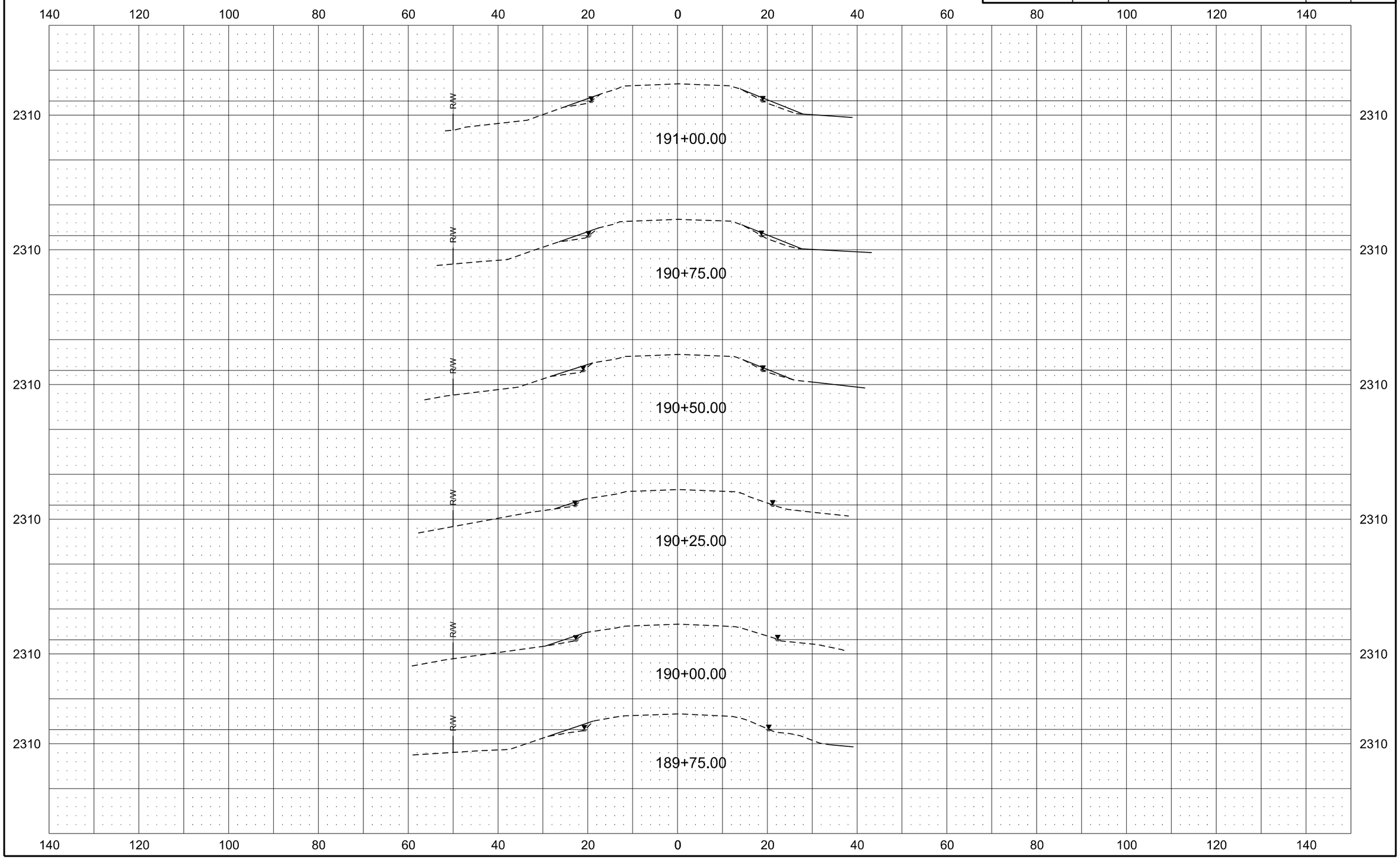
Alignment J-10

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	17



Alignment J-10

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	18



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Alignment J-10

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	19

140 120 100 80 60 40 20 0 20 40 60 80 100 120 140

2320
2310

RW

192+50.00

192+25.00

192+00.00

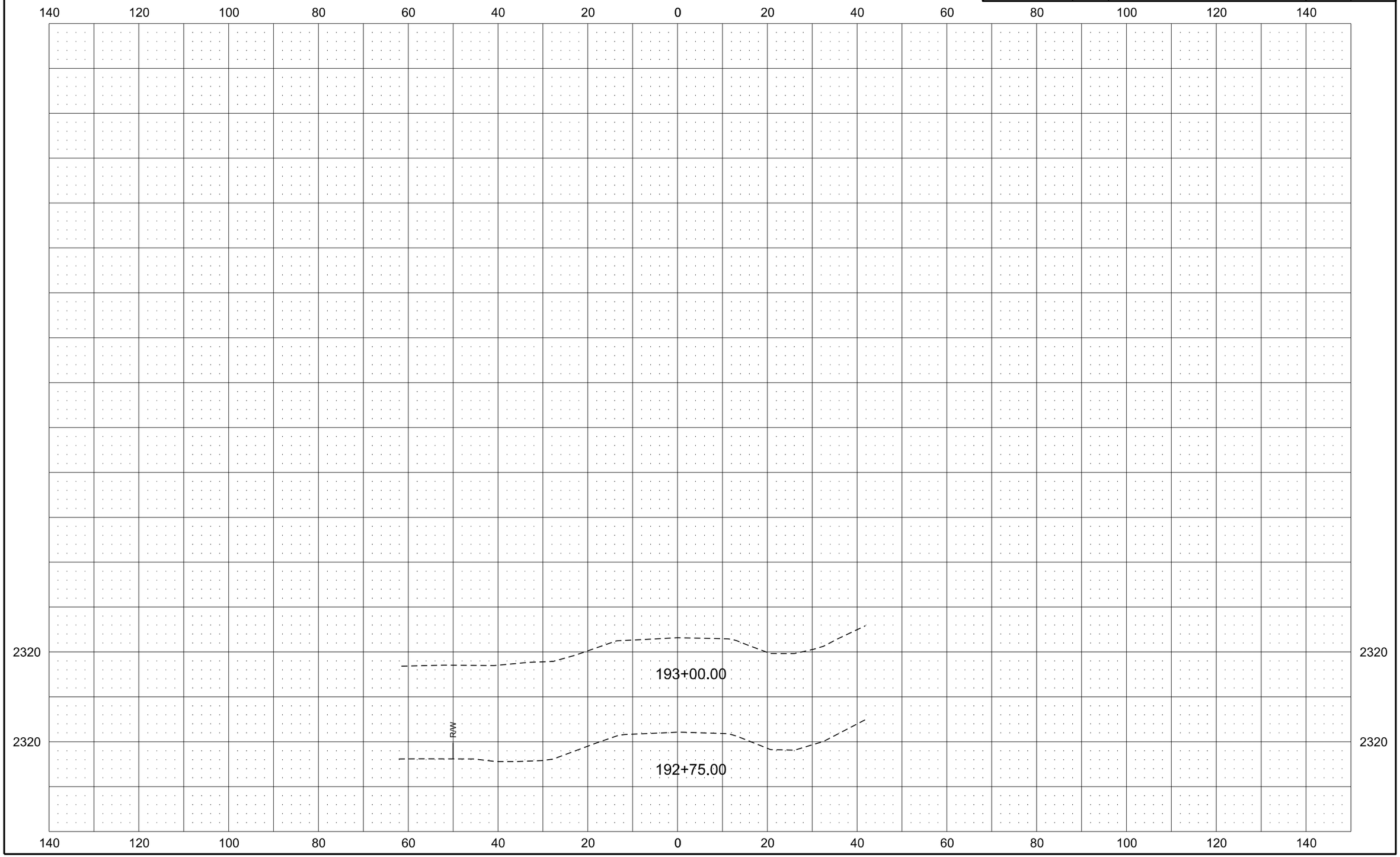
191+75.00

191+50.00

191+25.00

Alignment J-10

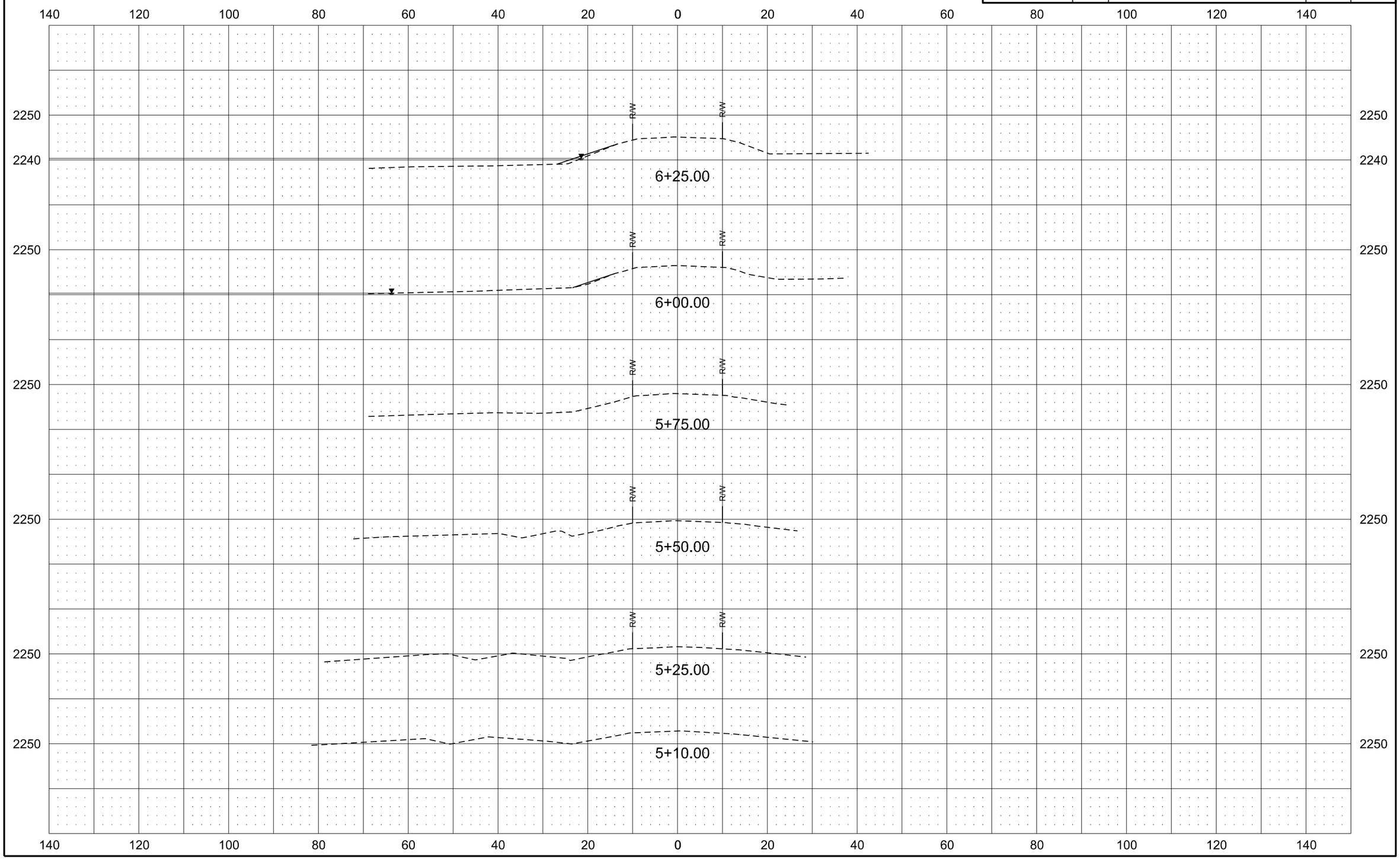
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	20



9/8/2017 11:52:43 AM cschatz N:\20732\ROM-0300(135)\Design\Mountrail\200_Xsec\200_Xsec_Sheets.dgn

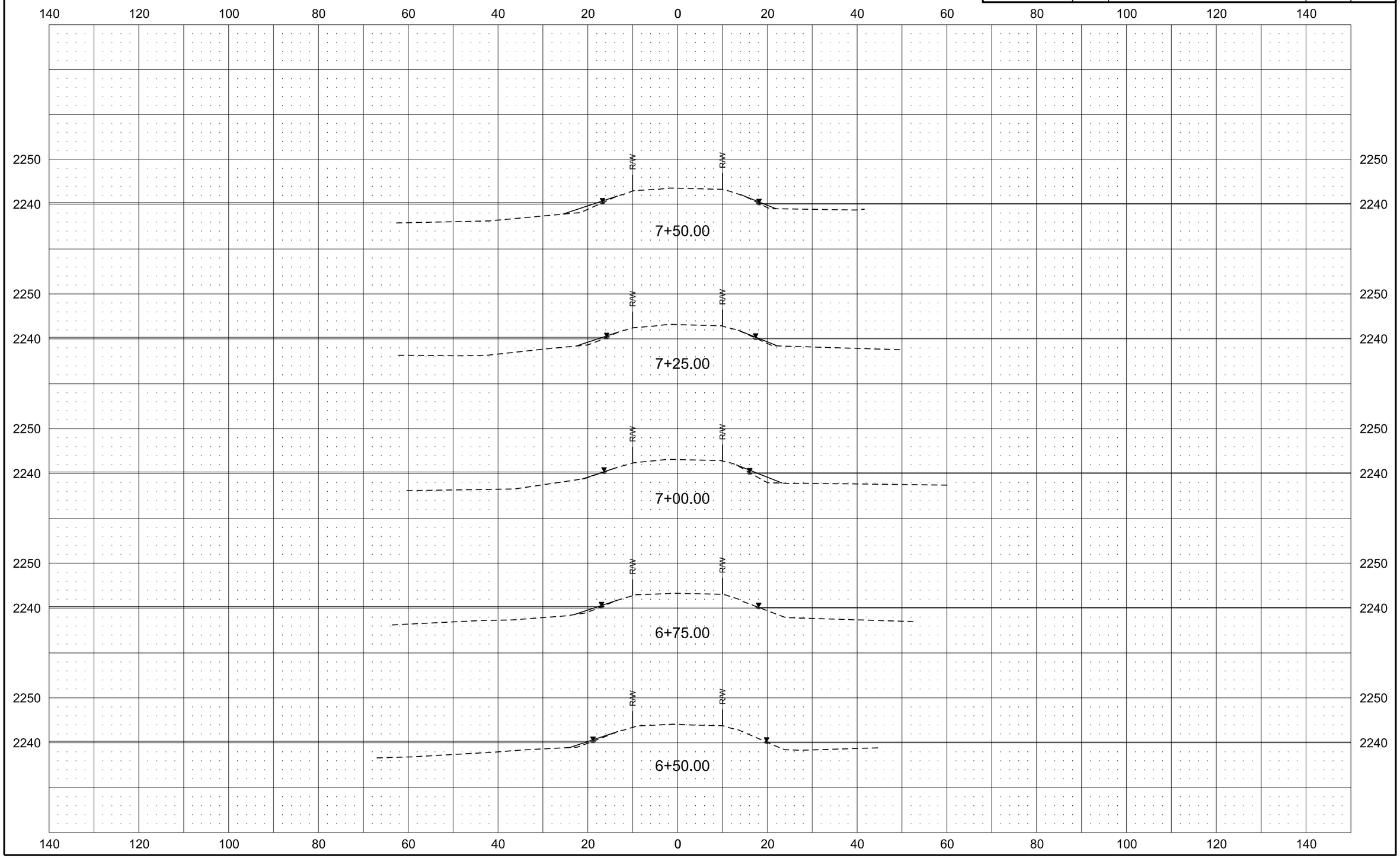
Alignment K-6S

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	21



Alignment K-6S

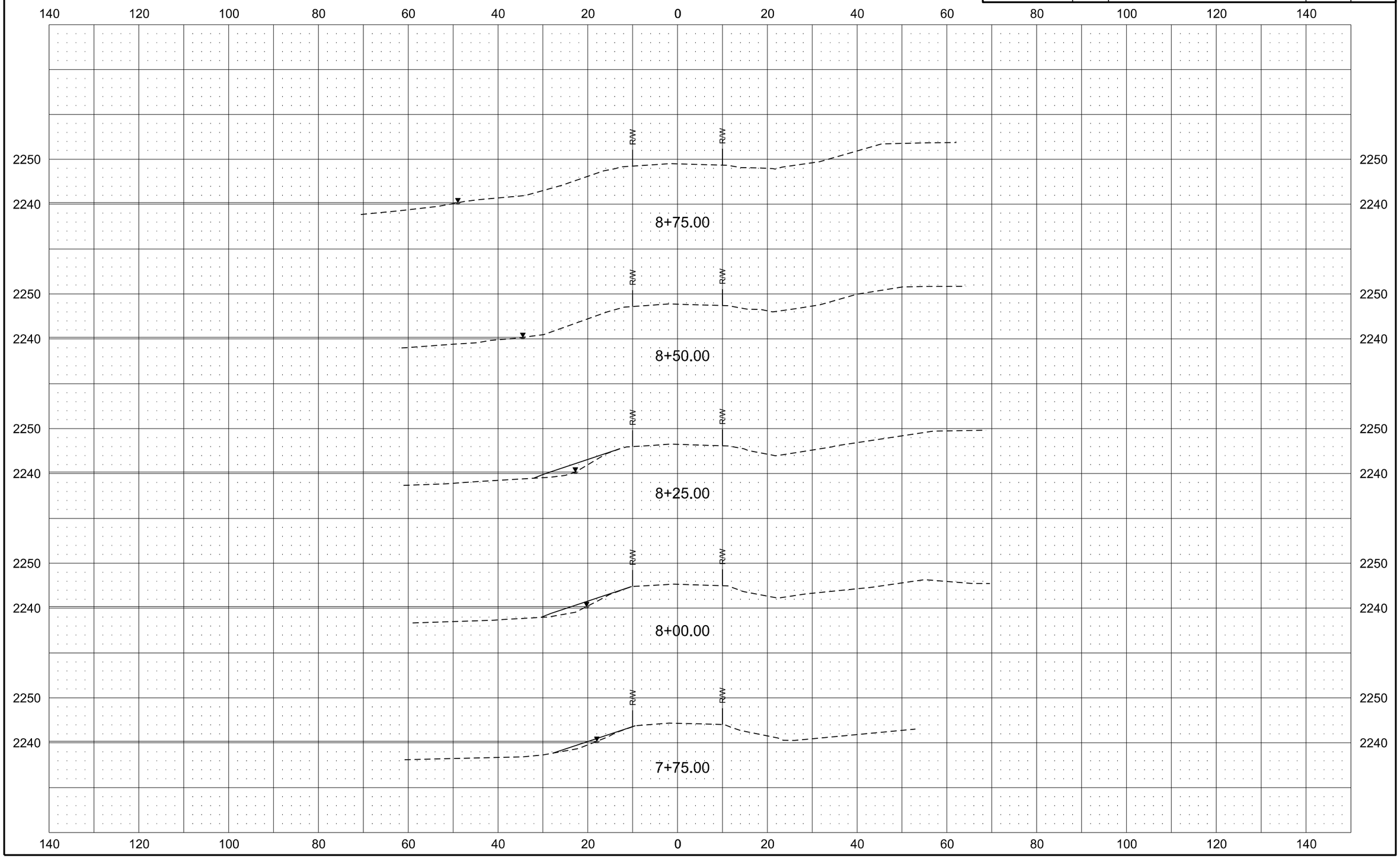
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	22



9/8/2017 11:52:51 AM cschatz N:\20732\ROM-0300(135)\Design\Mountrail\200_Xsec\200_Xsec_Sheets.dgn

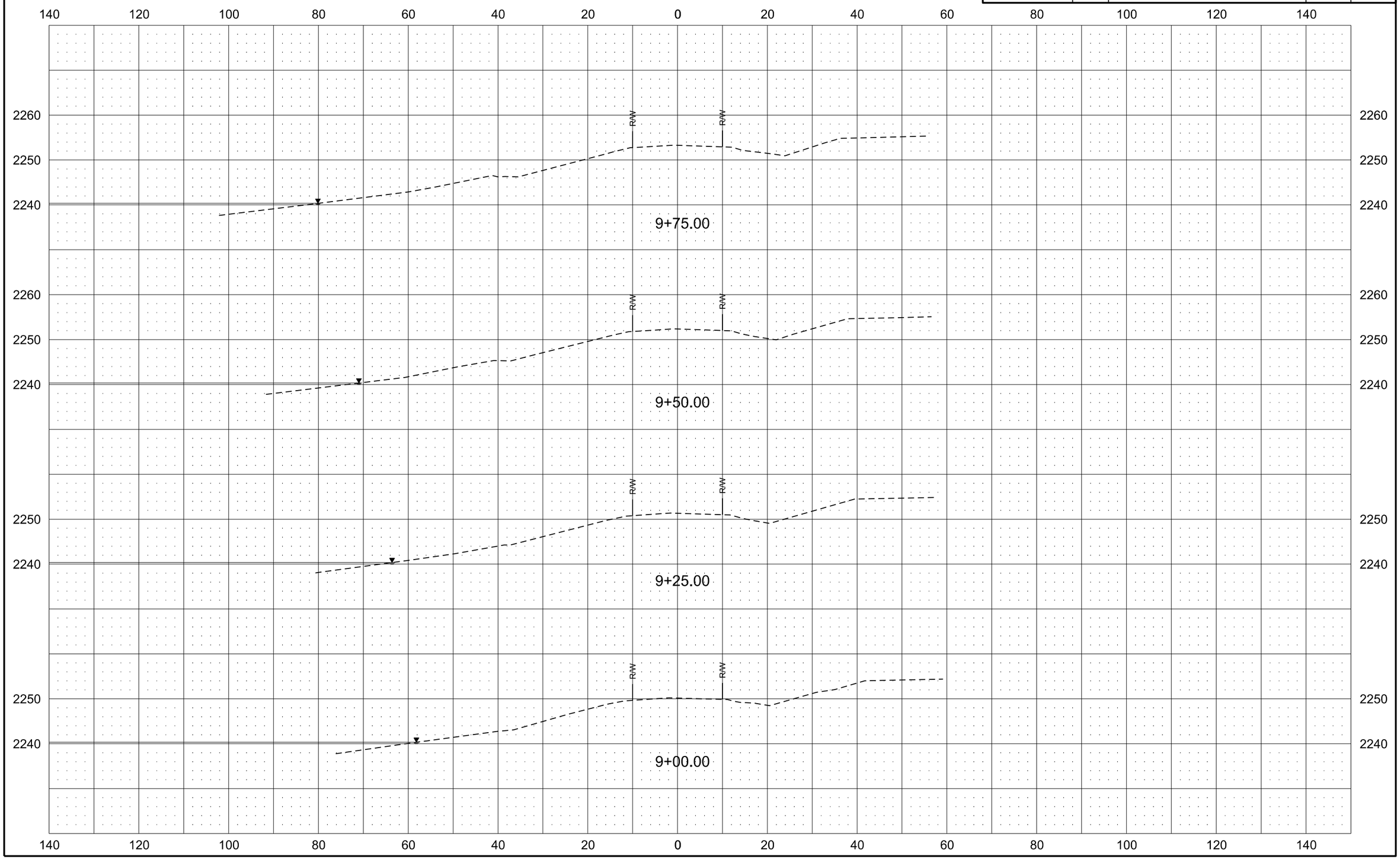
Alignment K-6S

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	23



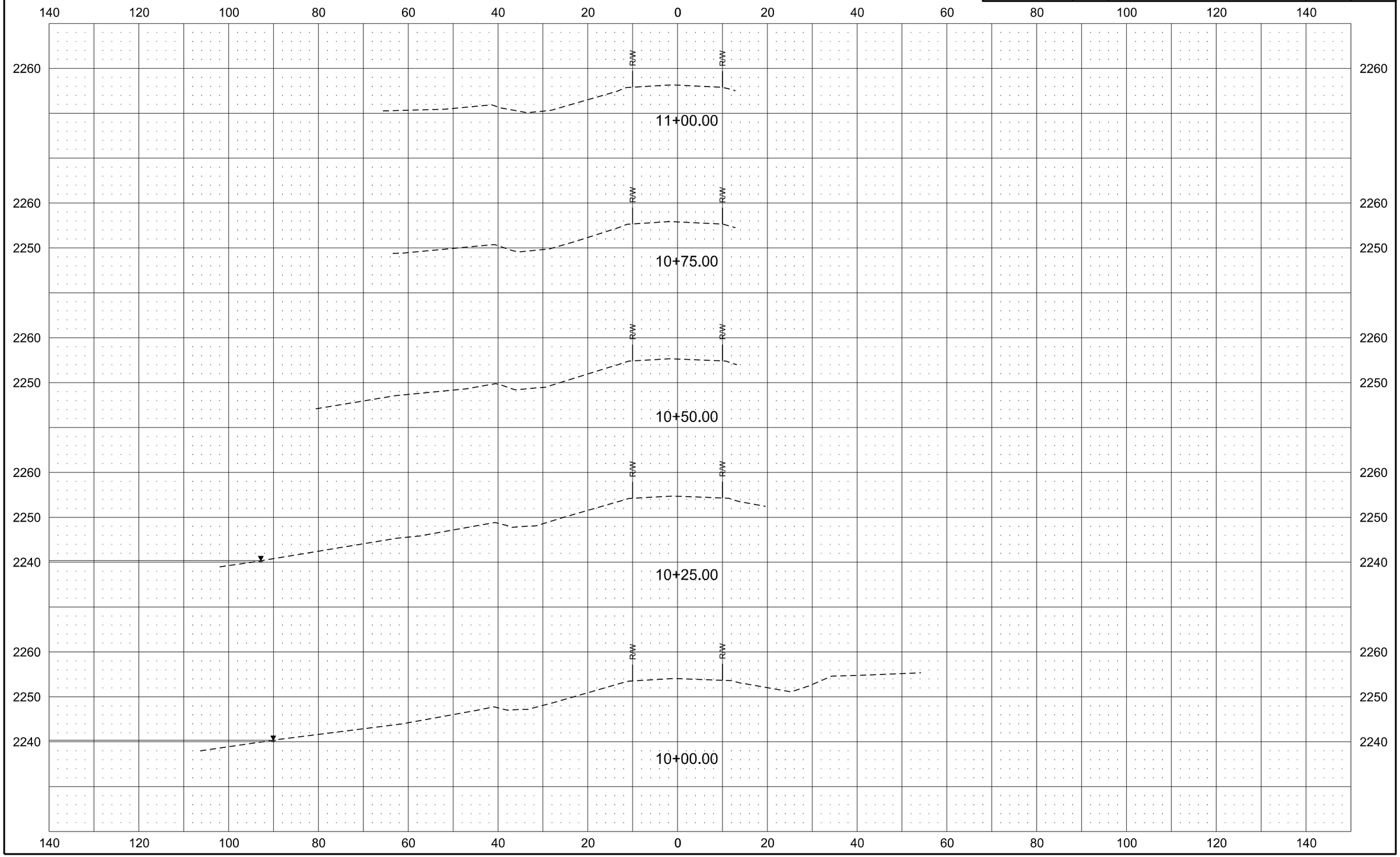
Alignment K-6S

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	24



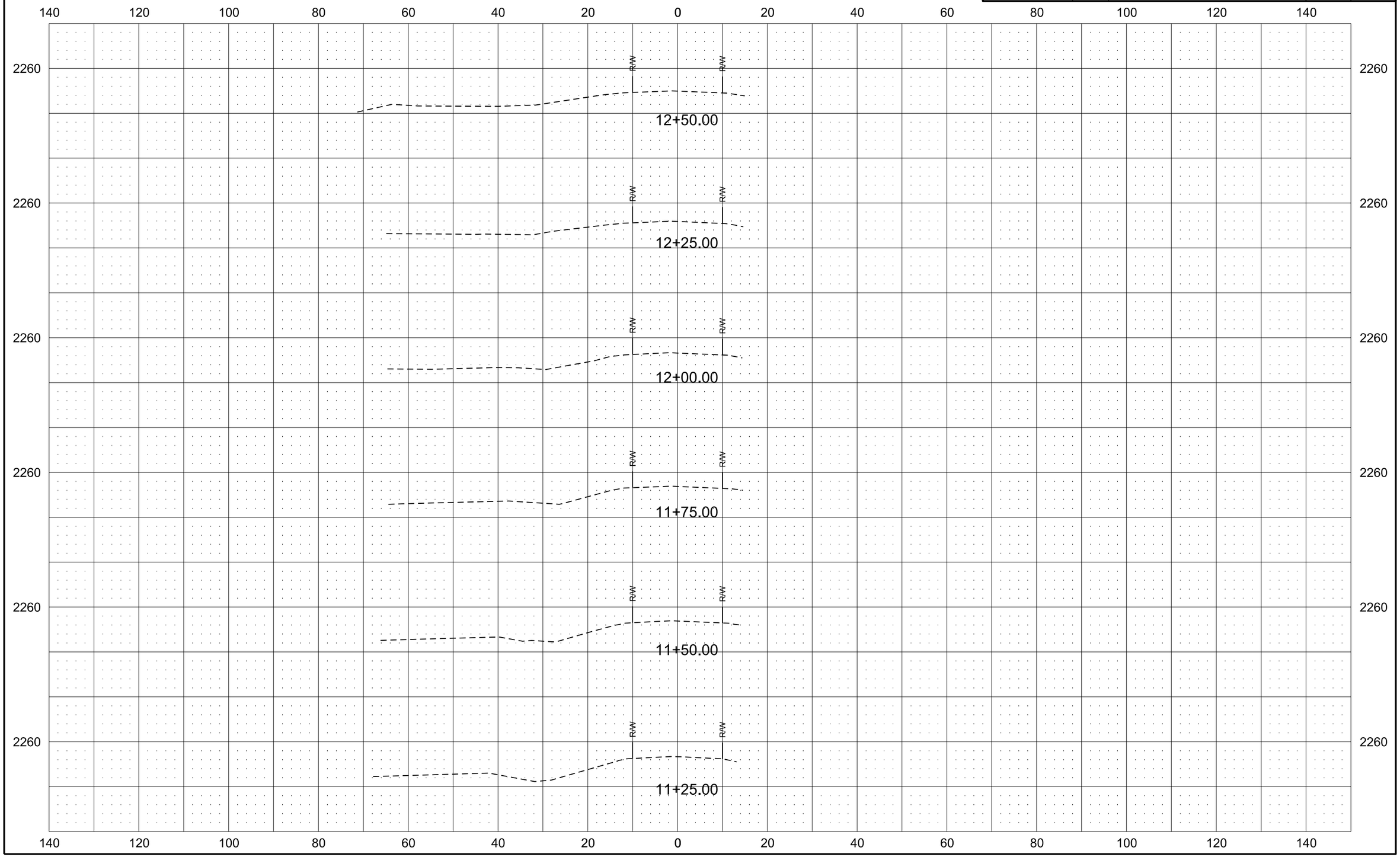
Alignment K-6S

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	25



Alignment K-6S

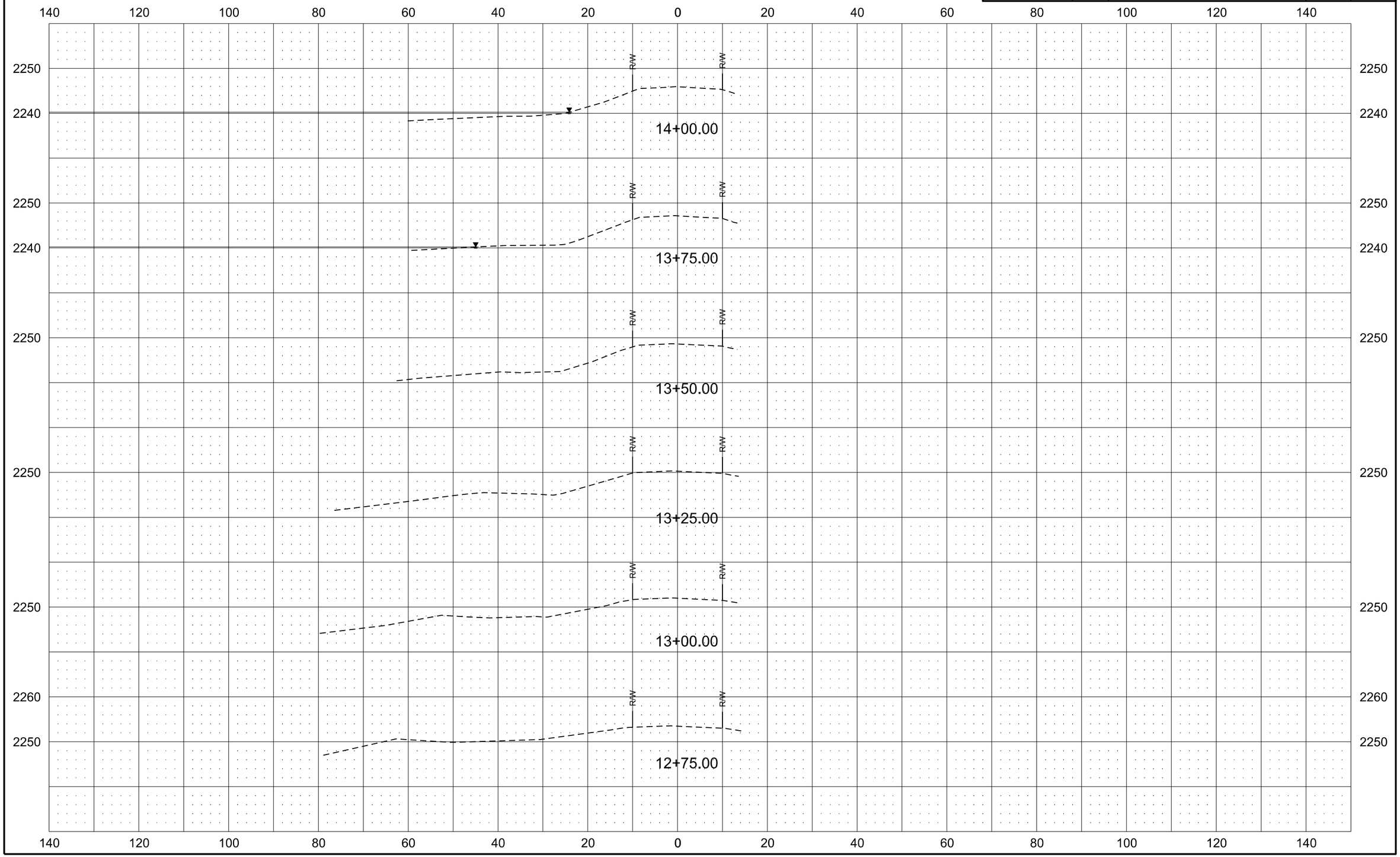
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	26



9/8/2017 11:53:08 AM cschatz N:\20732\ROM-0300(135)\Design\Mountrail\200_Xsec\200_Xsec_Sheets.dgn

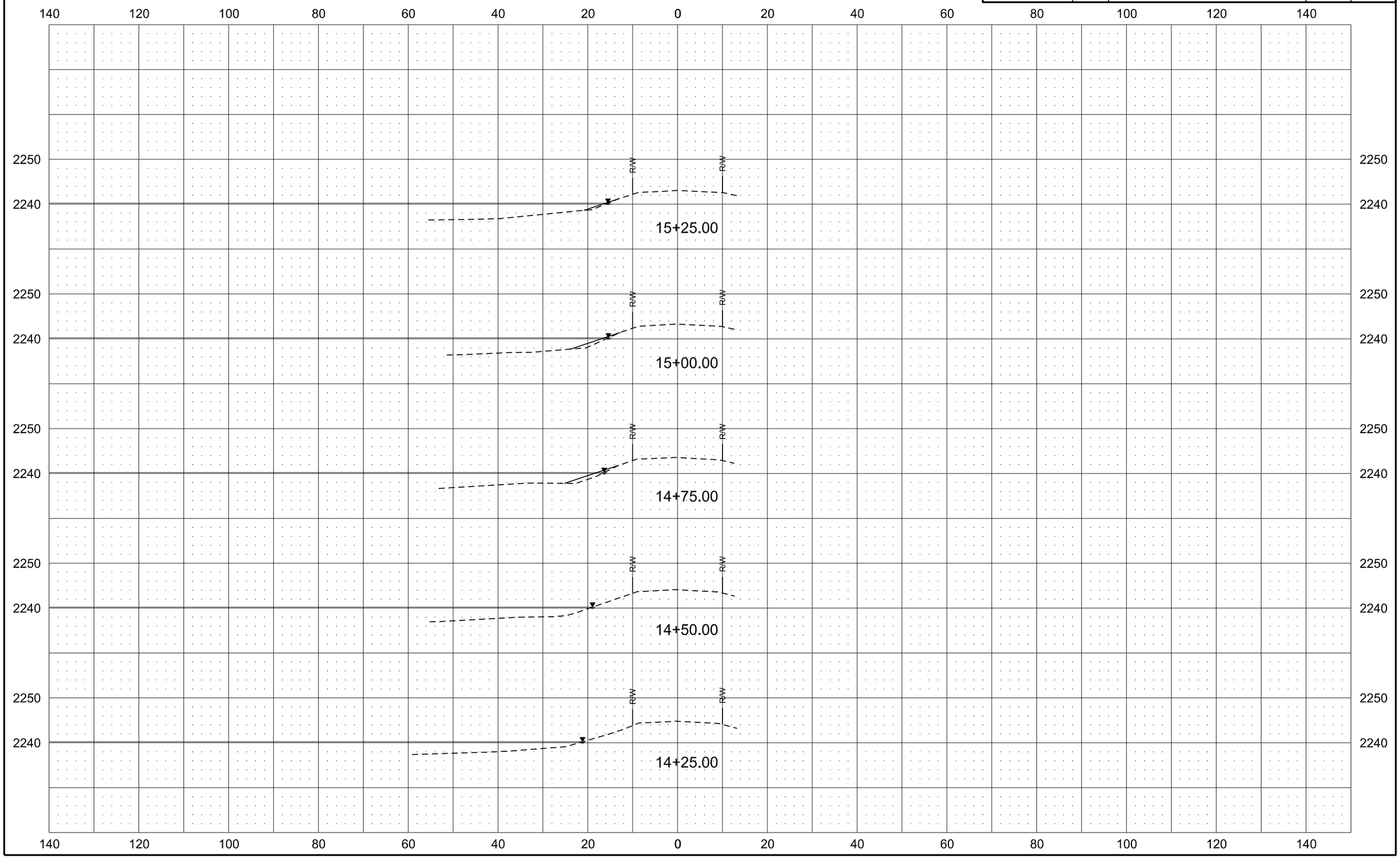
Alignment K-6S

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	27



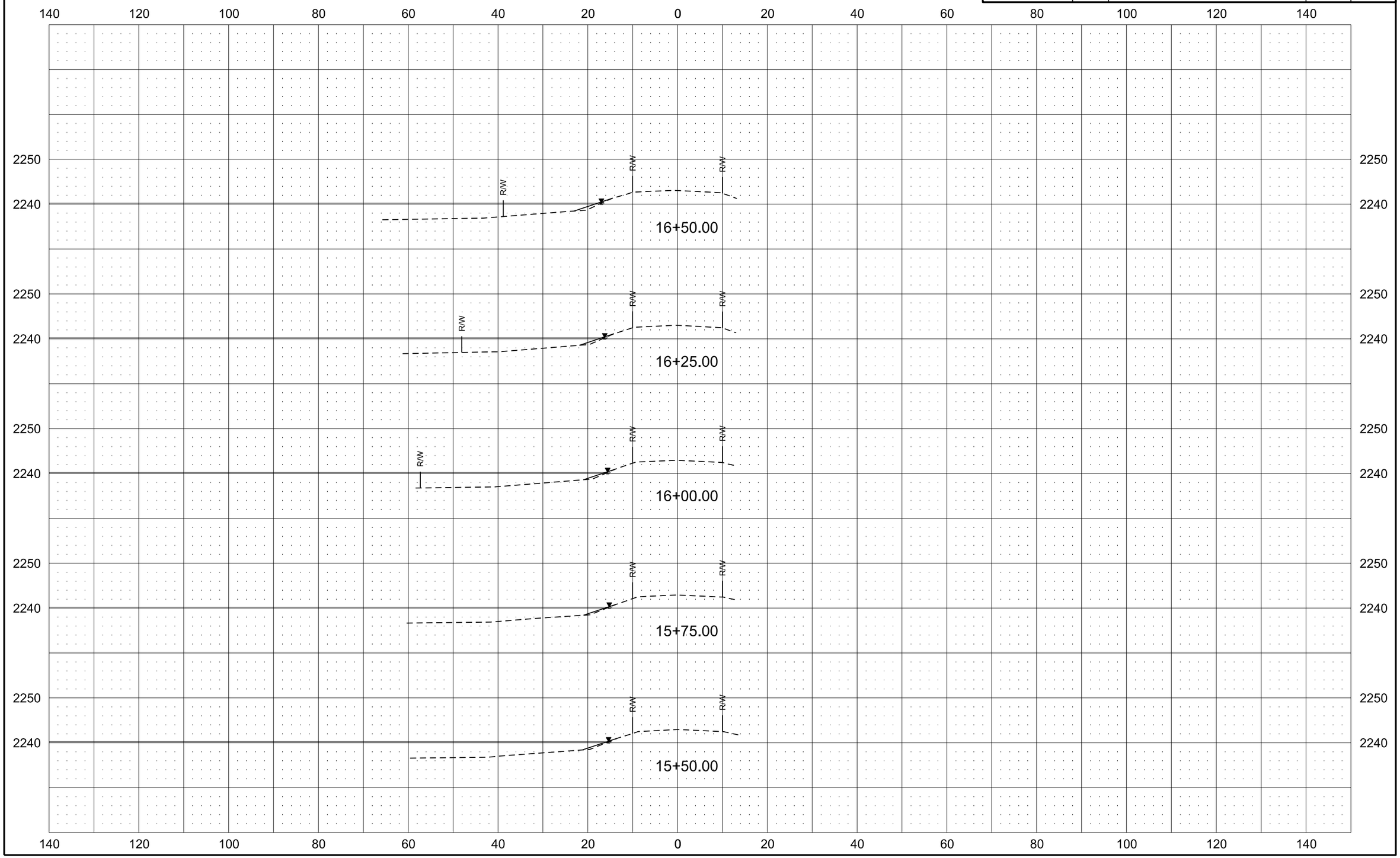
Alignment K-6S

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	28



Alignment K-6S

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	29



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Alignment K-6S

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	30

140 120 100 80 60 40 20 0 20 40 60 80 100 120 140

2250
2240

R/W

17+75.00

17+50.00

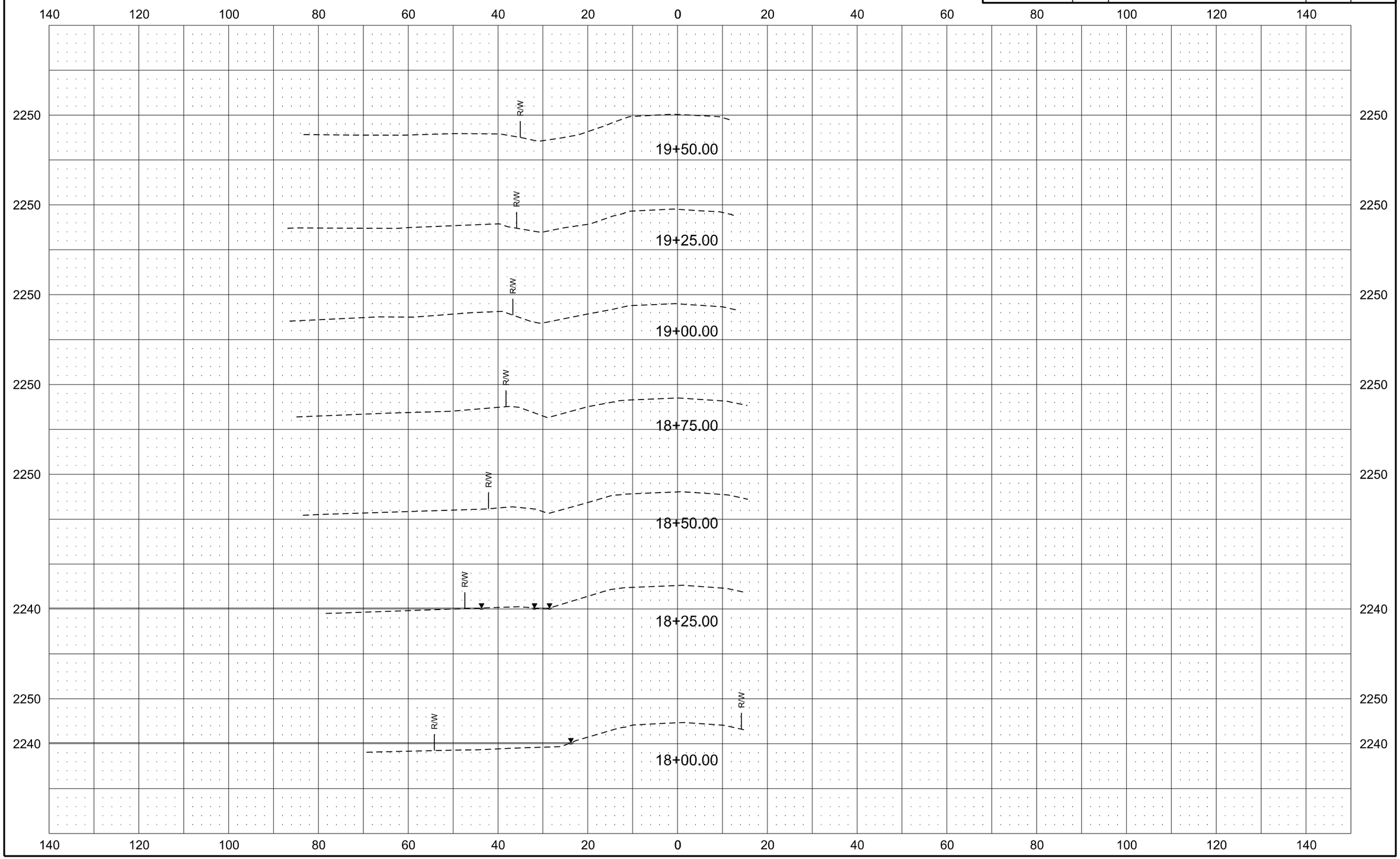
17+25.00

17+00.00

16+75.00

Alignment K-6S

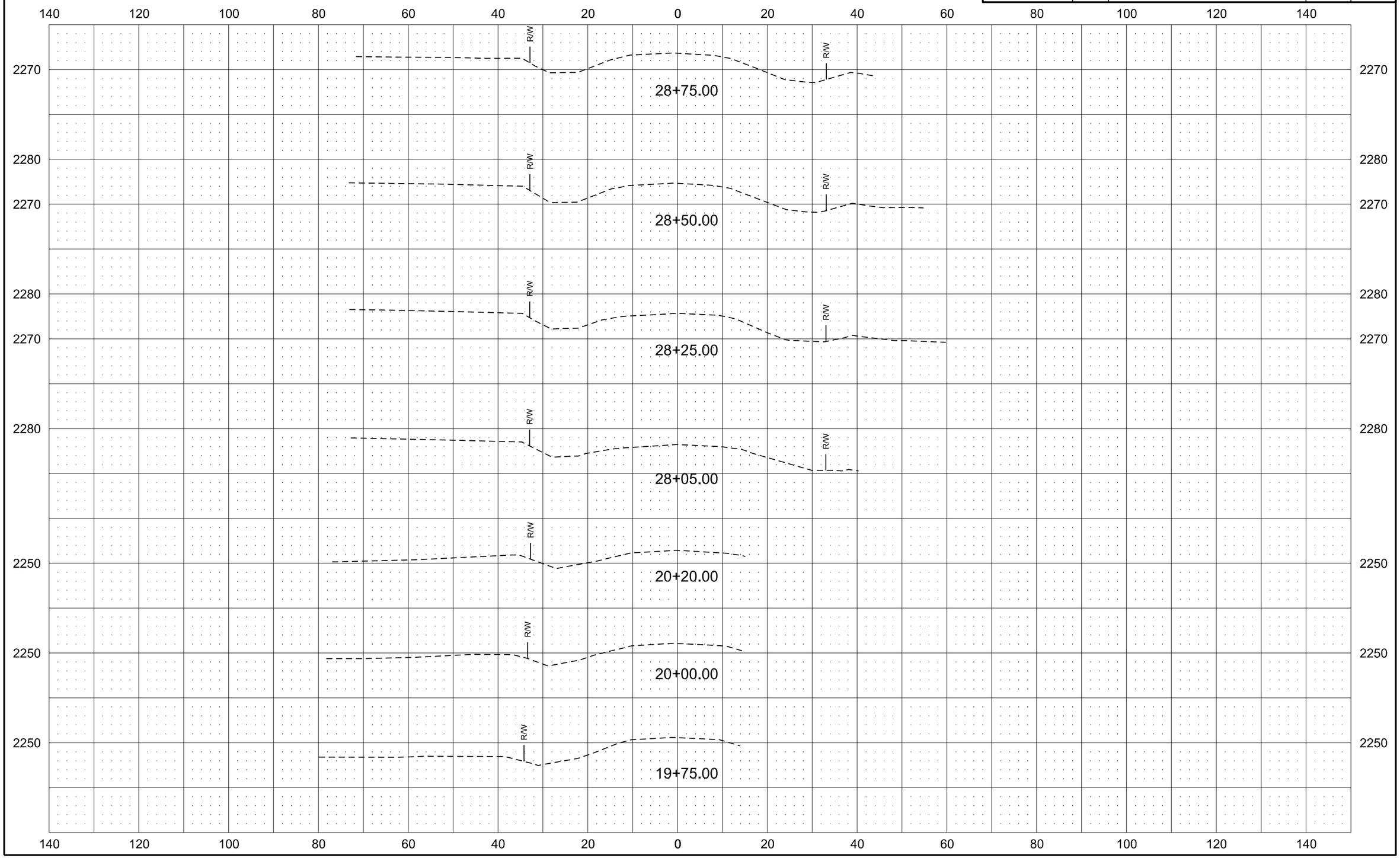
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	31



9/8/2017 11:53:29 AM cschatz N:\20732\ROM-0300(135)\Design\Mountrail\200_Xsec\200_Xsec_Sheets.dgn

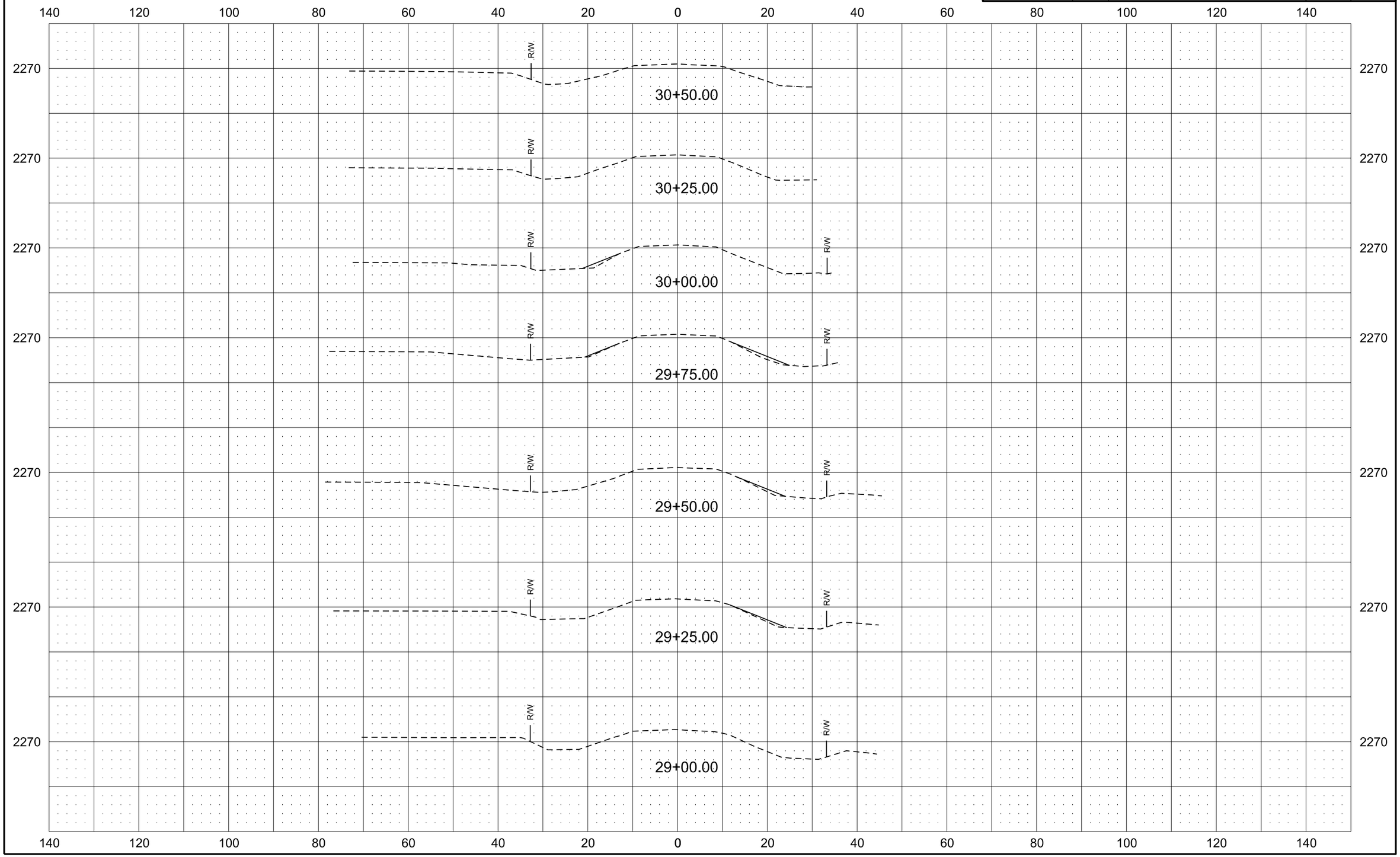
Alignment K-6S

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	32



Alignment K-6S

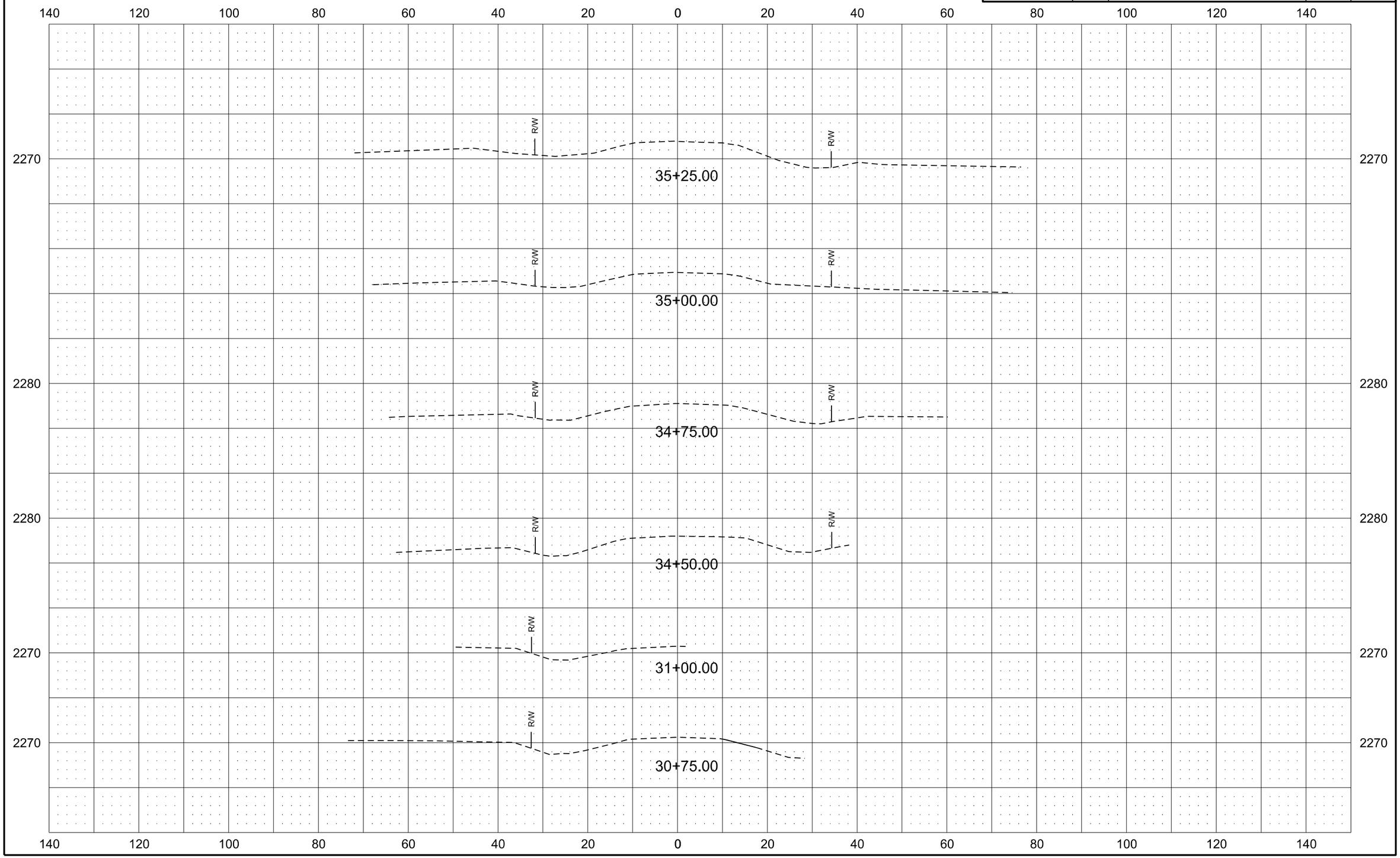
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	33



9/8/2017 11:53:37 AM cschatz N:\20732\ROM-0300(135)\Design\Mountrail\200_Xsec\200_Xsec_Sheets.dgn

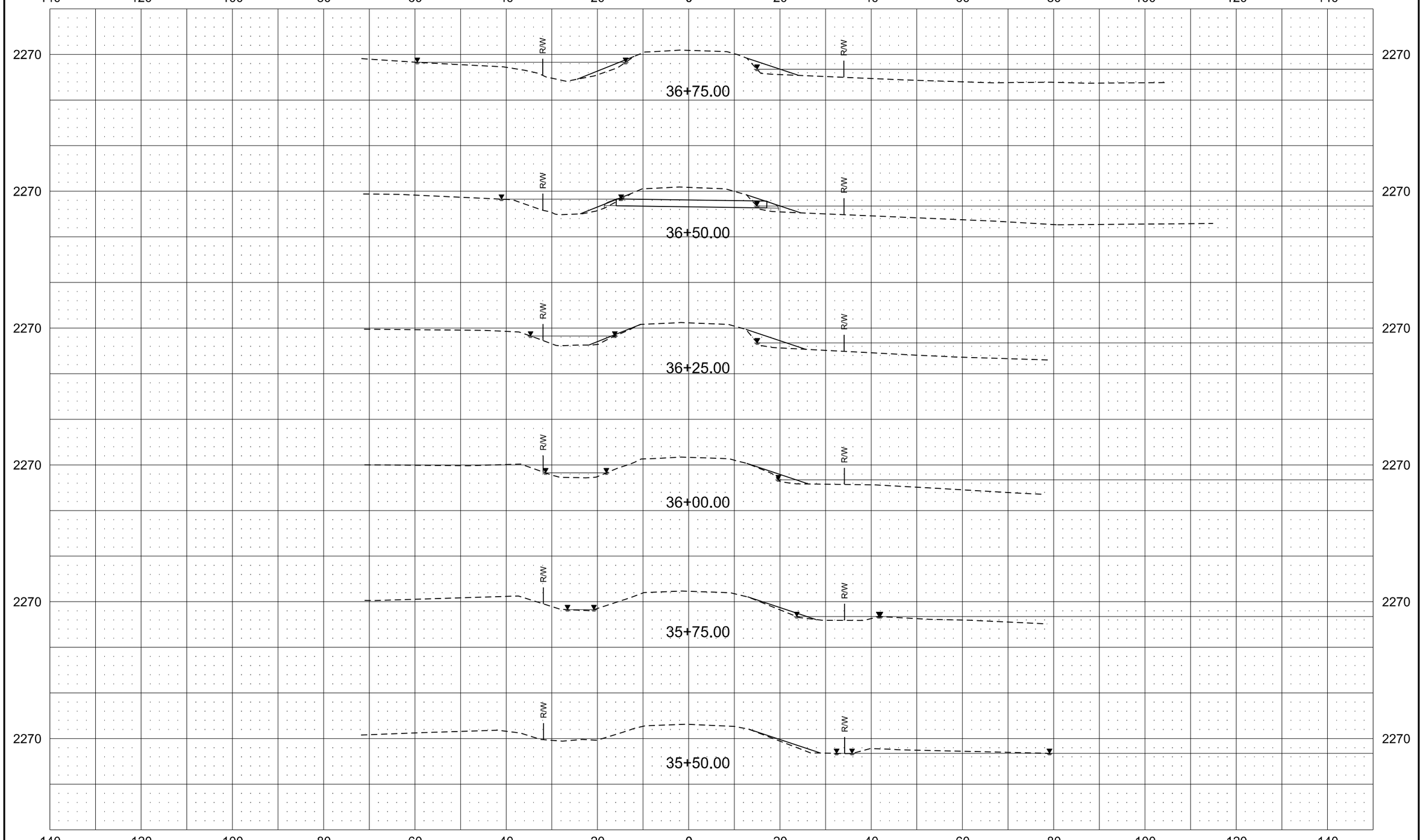
Alignment K-6S

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	34



Alignment K-6S

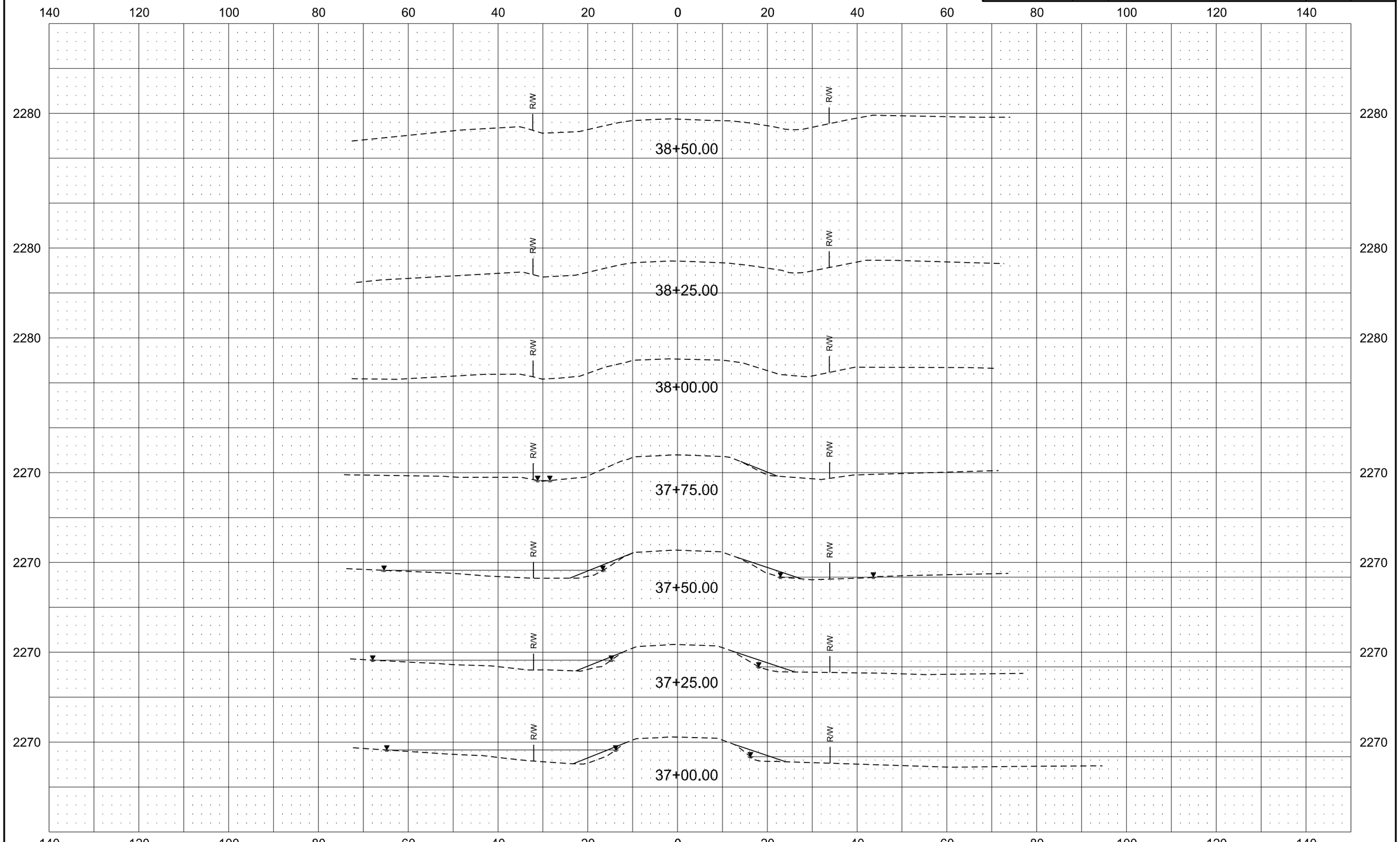
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	35



9/8/2017 11:53:46 AM cschatz N:\20732\ROM-0300(135)\Design\Mountrail\200_Xsec\200_Xsec_Sheets.dgn

Alignment K-6S

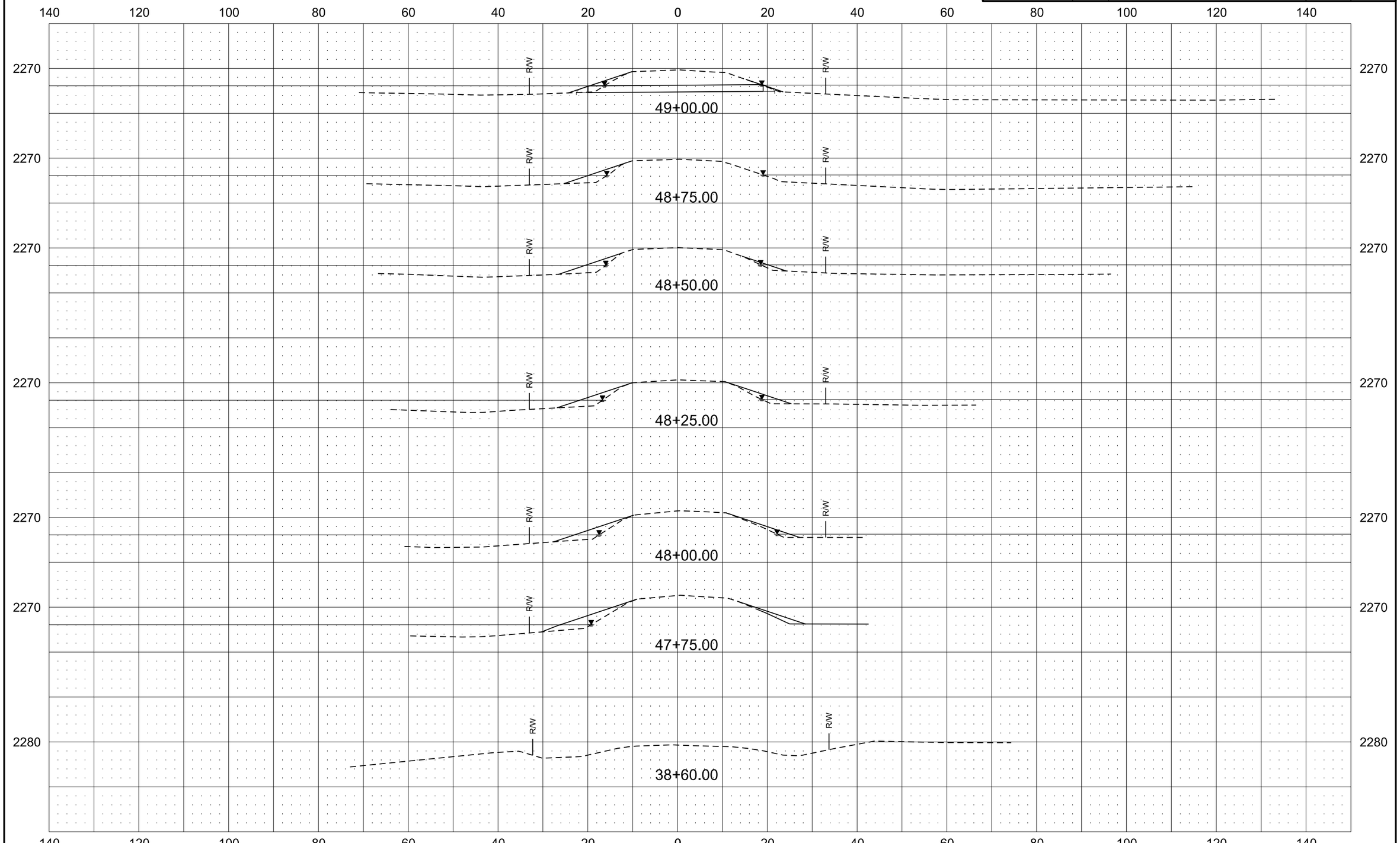
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	36



9/8/2017 11:53:50 AM cschatz N:\20732\ROM-0300(135)\Design\Mountrail\200_Xsec\200_Xsec_Sheets.dgn

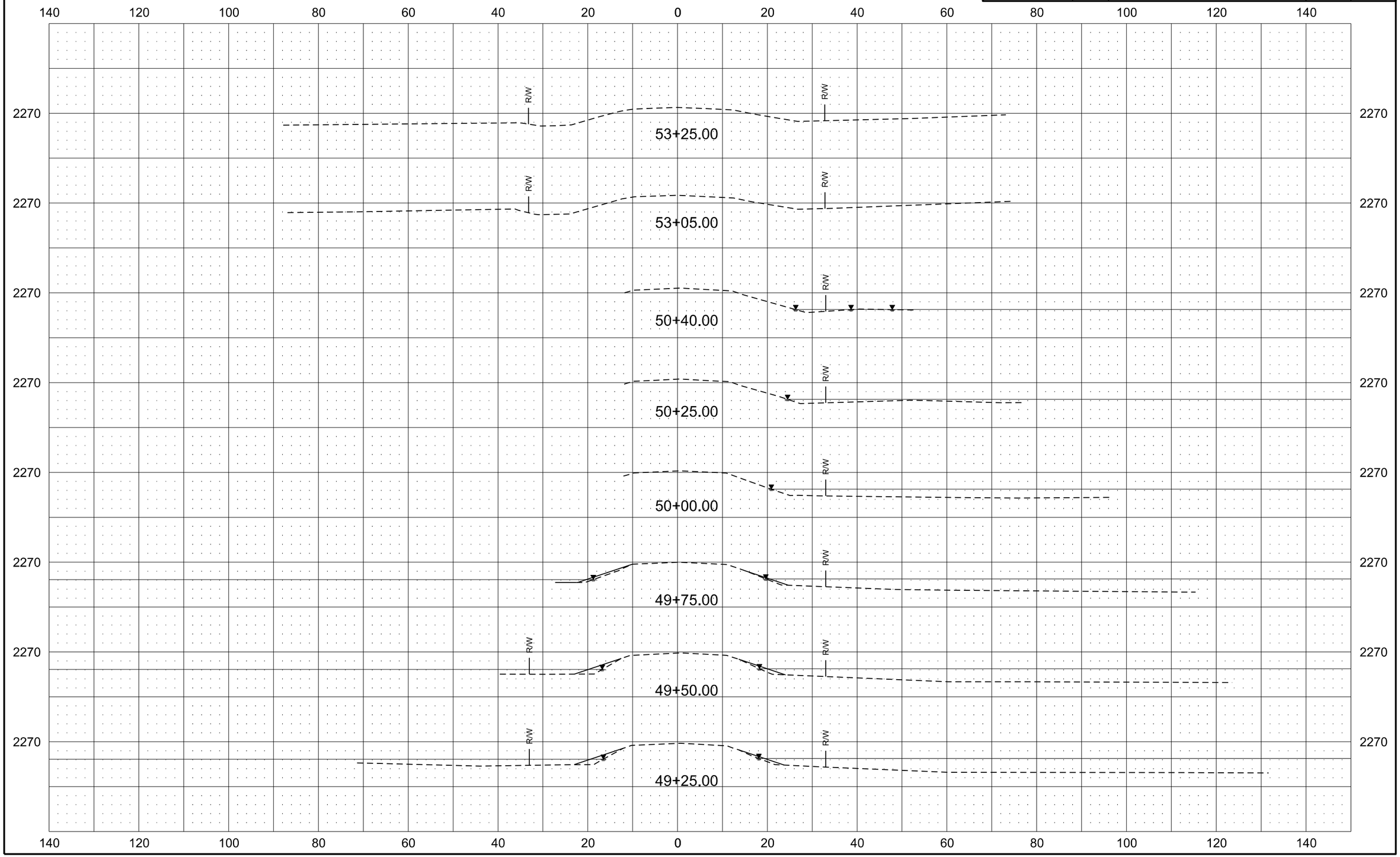
Alignment K-6S

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	37



Alignment K-6S

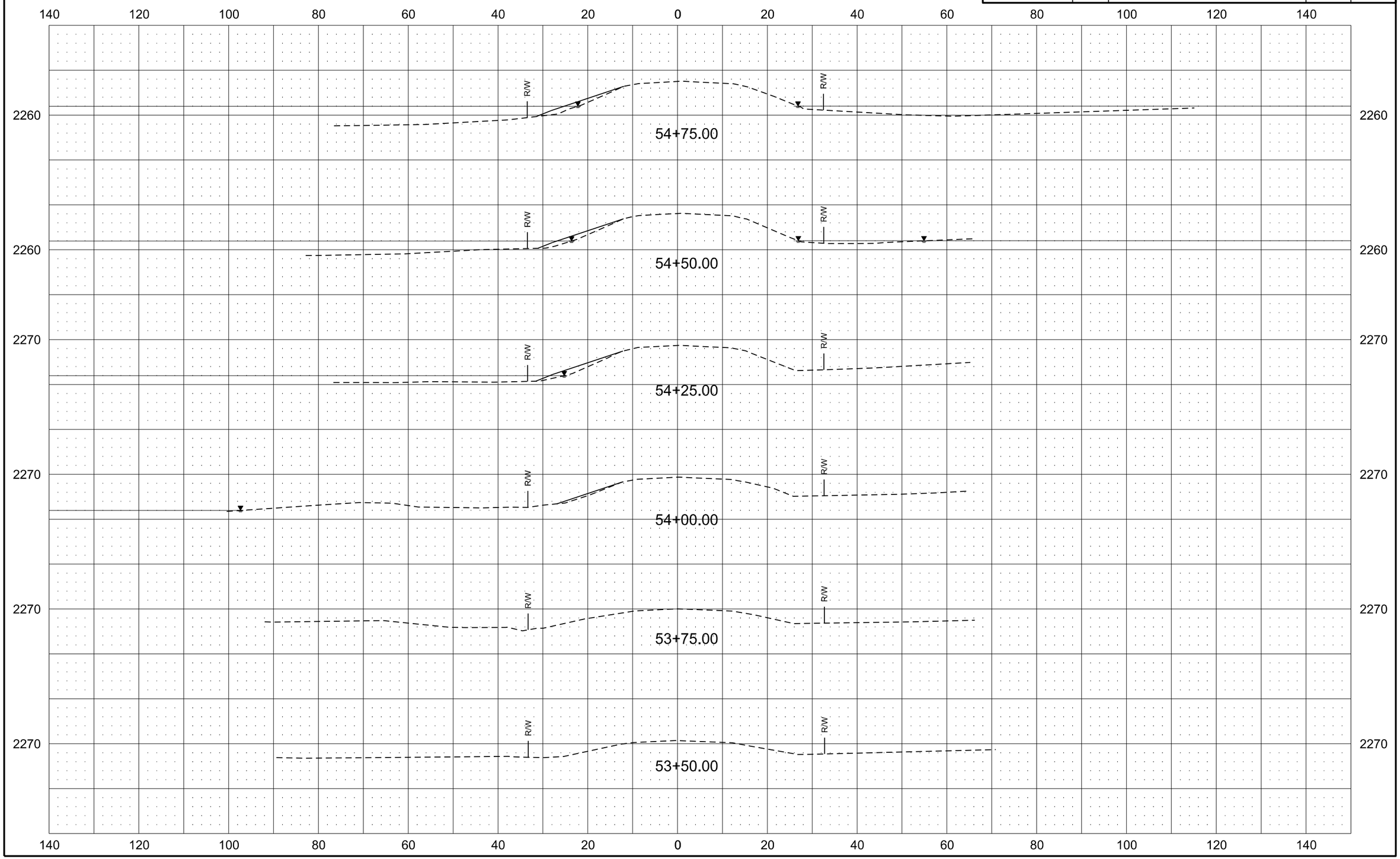
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	38



9/8/2017 11:53:58 AM cschatz N:\20732\ROM-0300(135)\Design\Mountrail\200_Xsec\200_Xsec_Sheets.dgn

Alignment K-6S

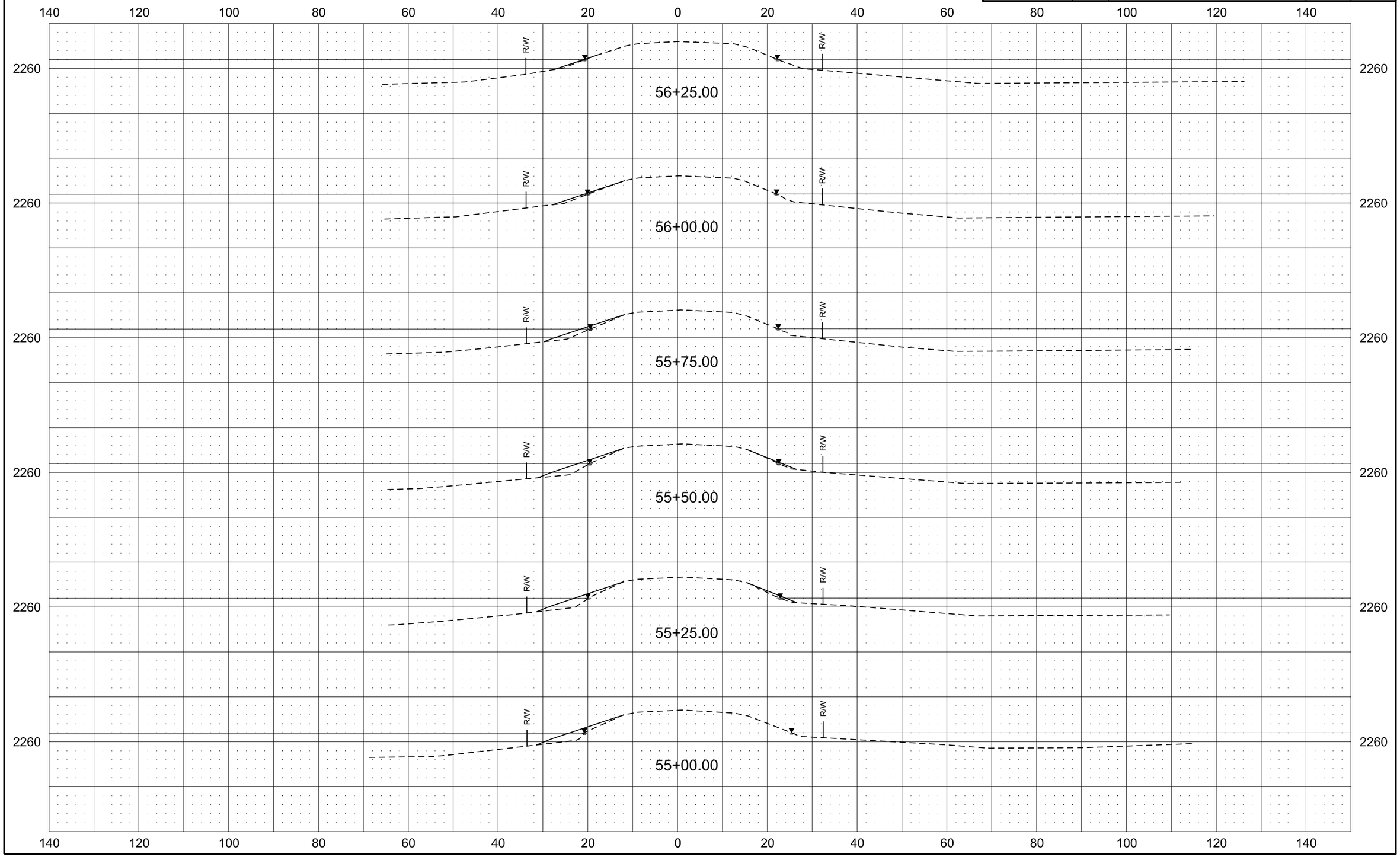
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	39



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Alignment K-6S

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	40



Alignment K-6S

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	41

140 120 100 80 60 40 20 0 20 40 60 80 100 120 140

2260

R/W R/W

57+75.00

57+50.00

57+25.00

57+00.00

56+75.00

56+50.00

Alignment K-6S

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	42

140 120 100 80 60 40 20 0 20 40 60 80 100 120 140

2260

R/W

59+25.00

59+00.00

58+75.00

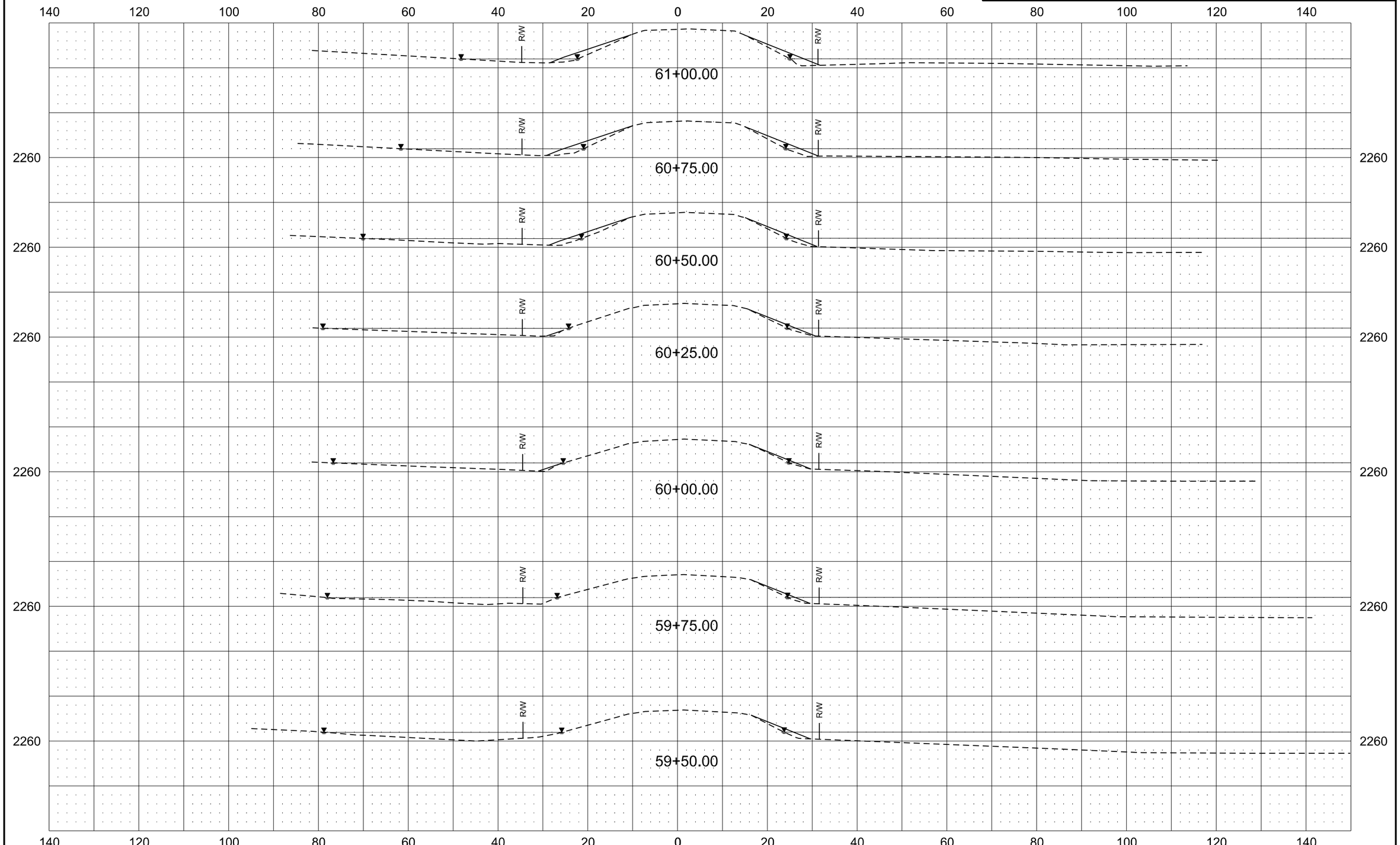
58+50.00

58+25.00

58+00.00

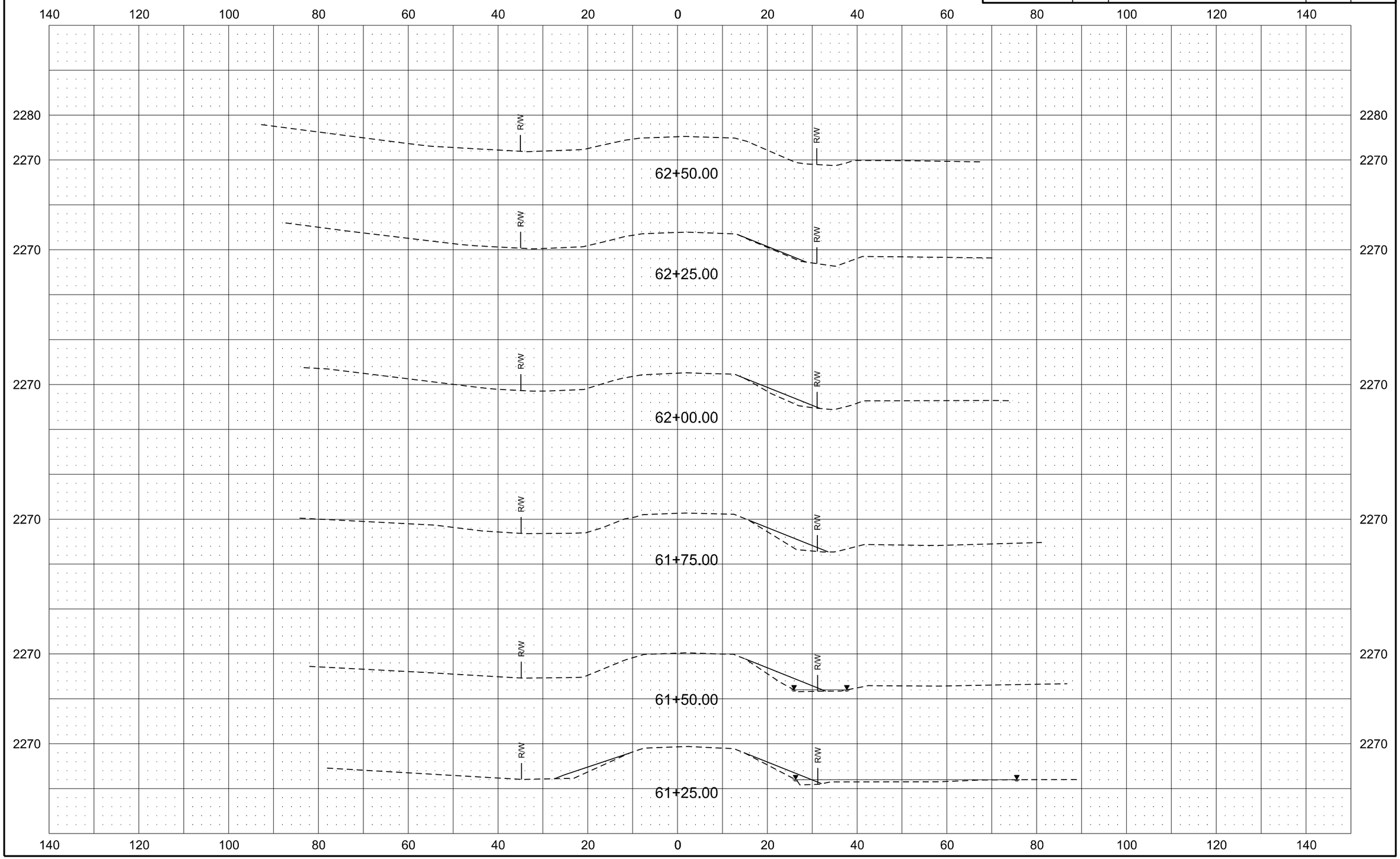
Alignment K-6S

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	43



Alignment K-6S

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	44



Alignment K-6S

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	45

140 120 100 80 60 40 20 0 20 40 60 80 100 120 140

2290
2280

R/W R/W
66+25.00

R/W R/W
66+00.00

R/W R/W
65+75.00

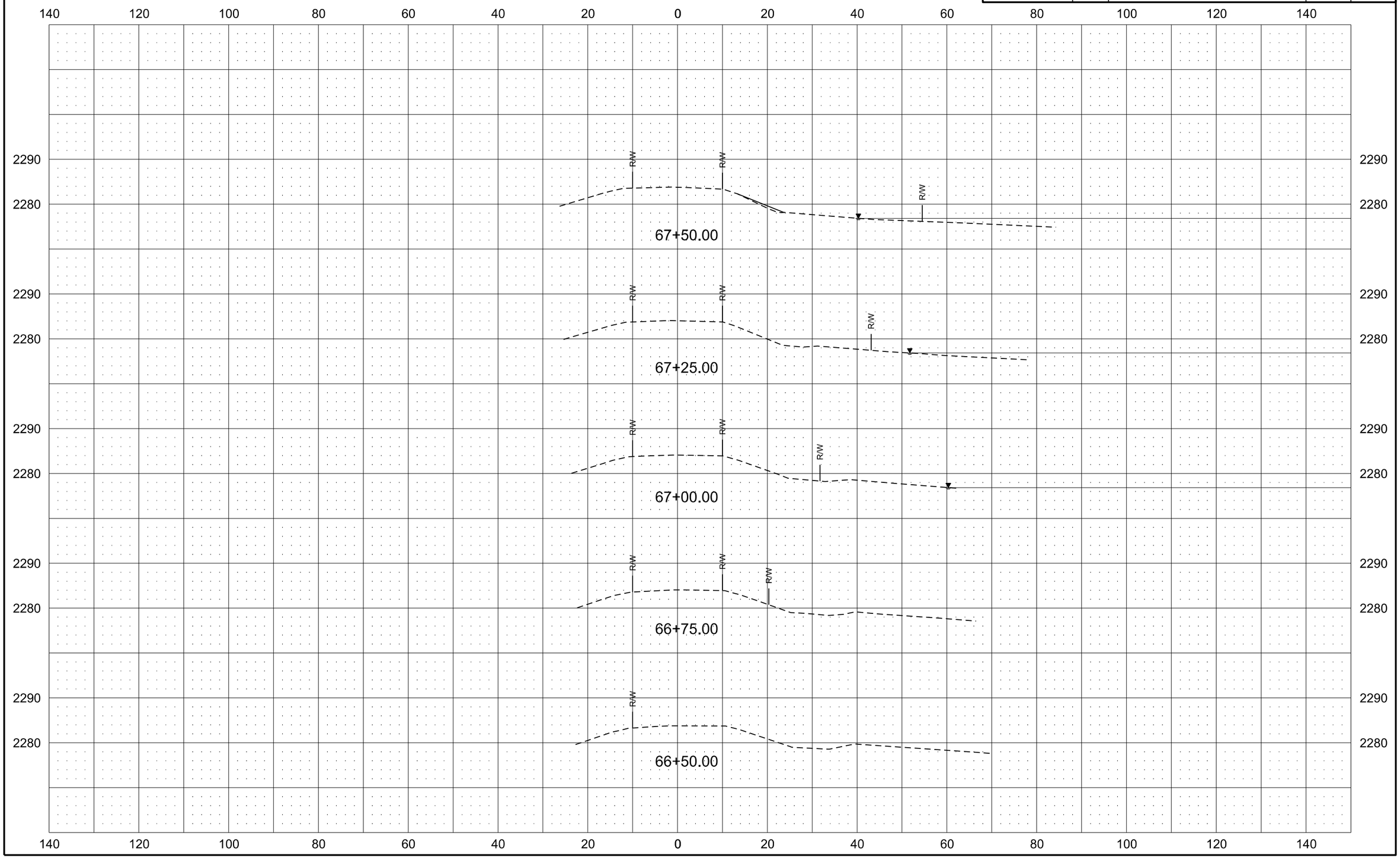
R/W R/W
65+60.00

R/W R/W
63+00.00

R/W R/W
62+75.00

Alignment K-6S

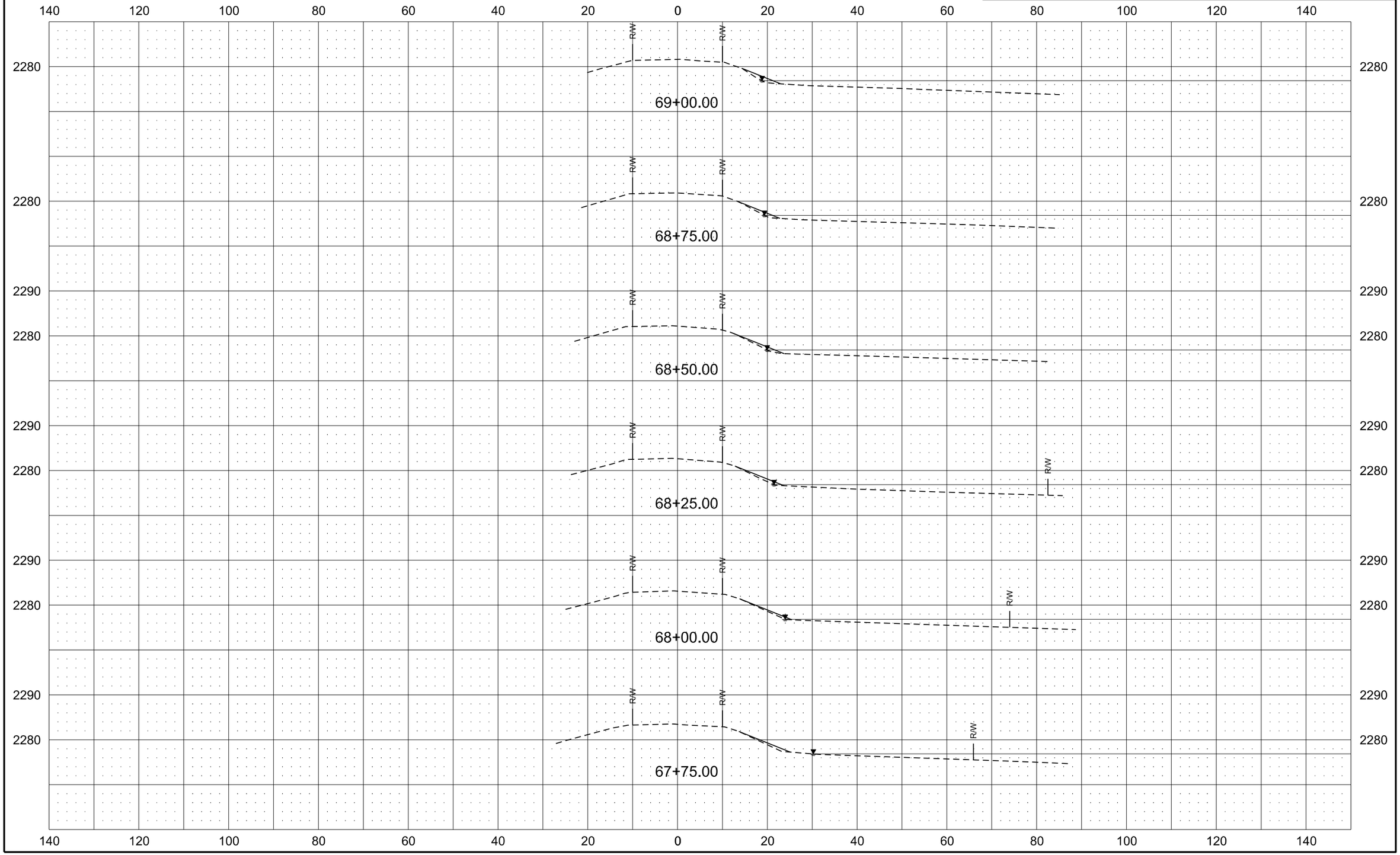
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	46



9/8/2017 11:54:32 AM cschatz N:\20732\ROM-0300(135)\Design\Mountrail\200_Xsec\200_Xsec_Sheets.dgn

Alignment K-6S

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	47



Alignment K-6S

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	48

140 120 100 80 60 40 20 0 20 40 60 80 100 120 140

2280

RW RW

70+50.00

70+25.00

70+00.00

69+75.00

69+50.00

69+25.00

Alignment K-6S

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	49

140 120 100 80 60 40 20 0 20 40 60 80 100 120 140

2290
2280

R/W R/W R/W

71+75.00

71+50.00

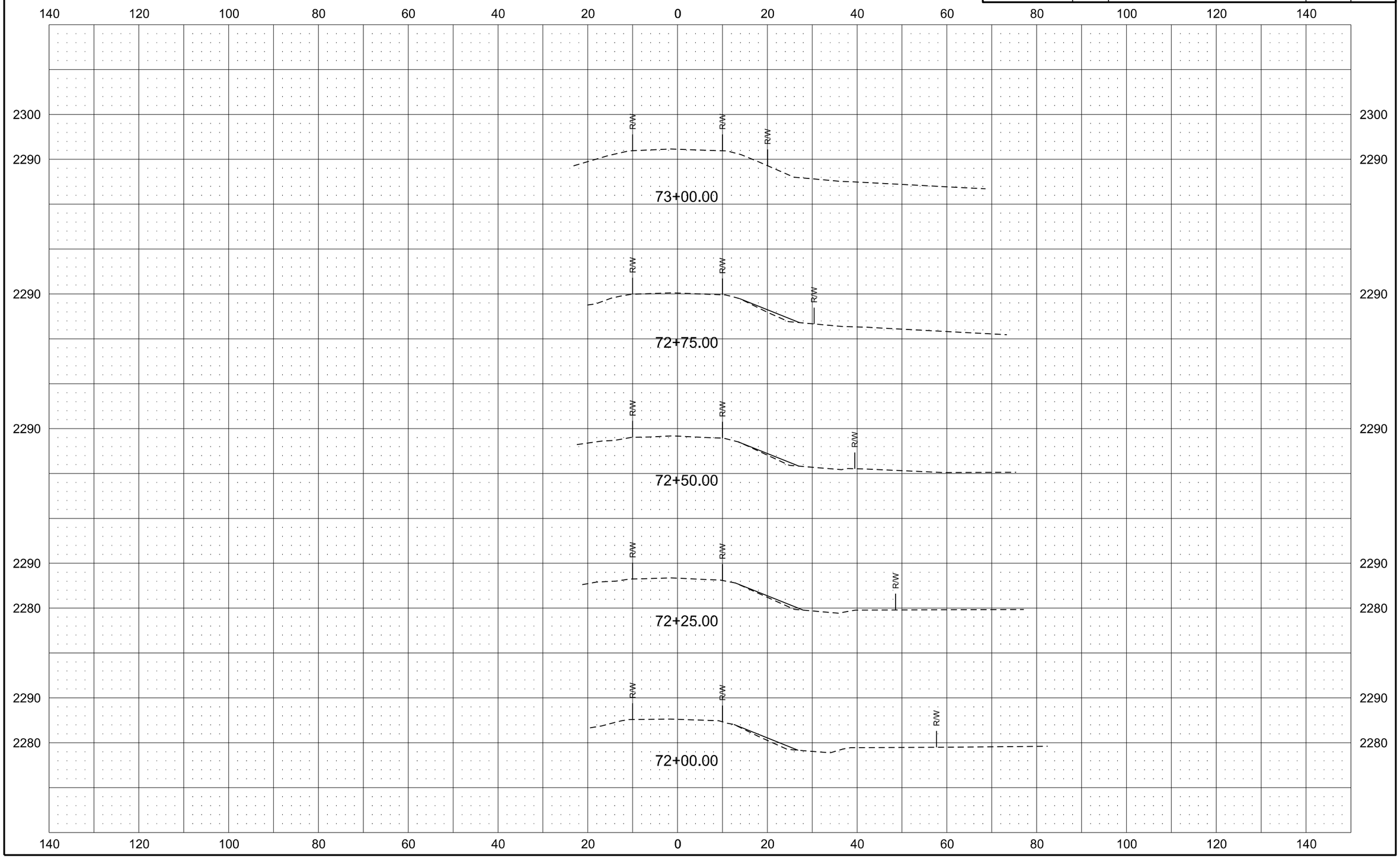
71+25.00

71+00.00

70+75.00

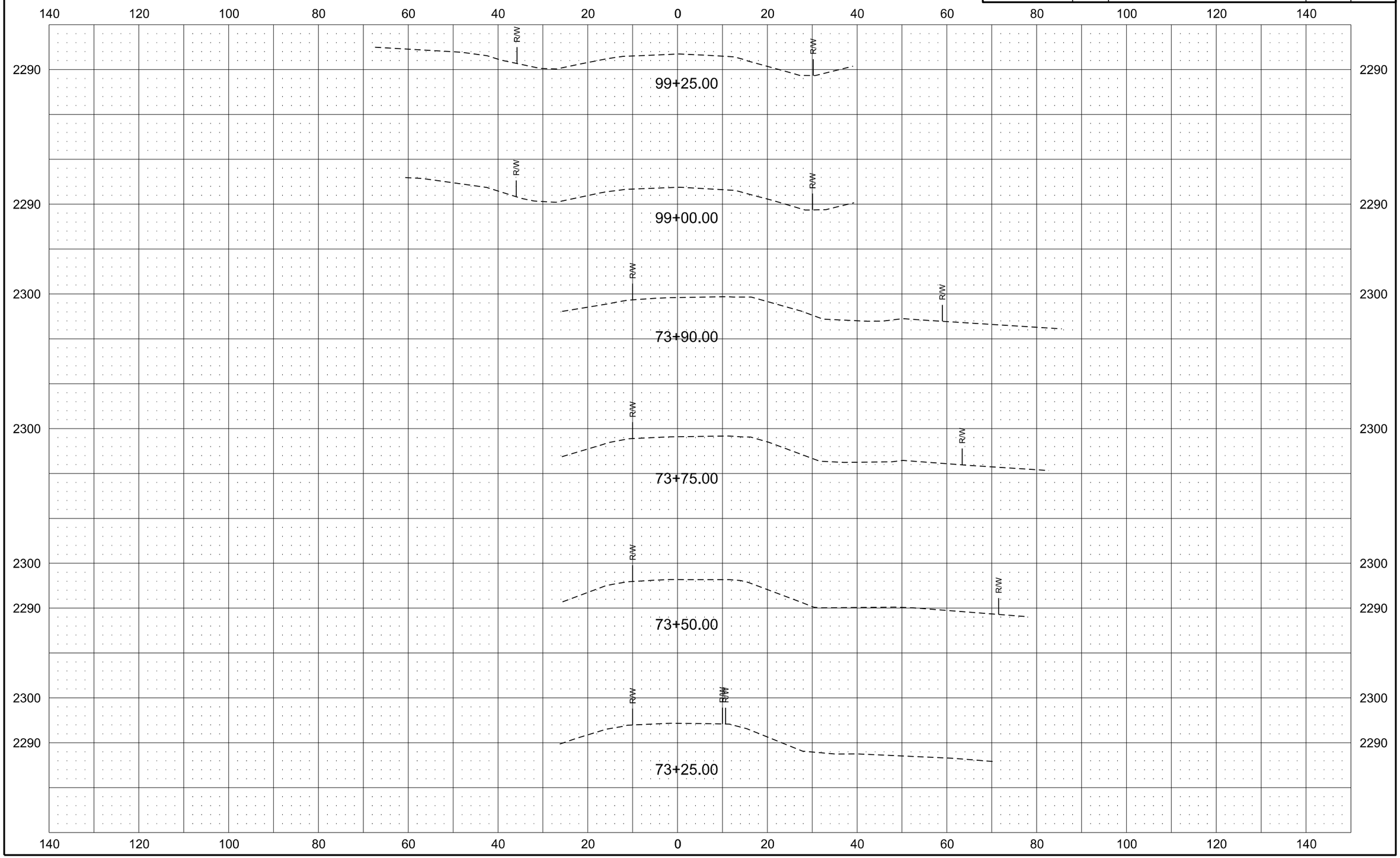
Alignment K-6S

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	50



Alignment K-6S

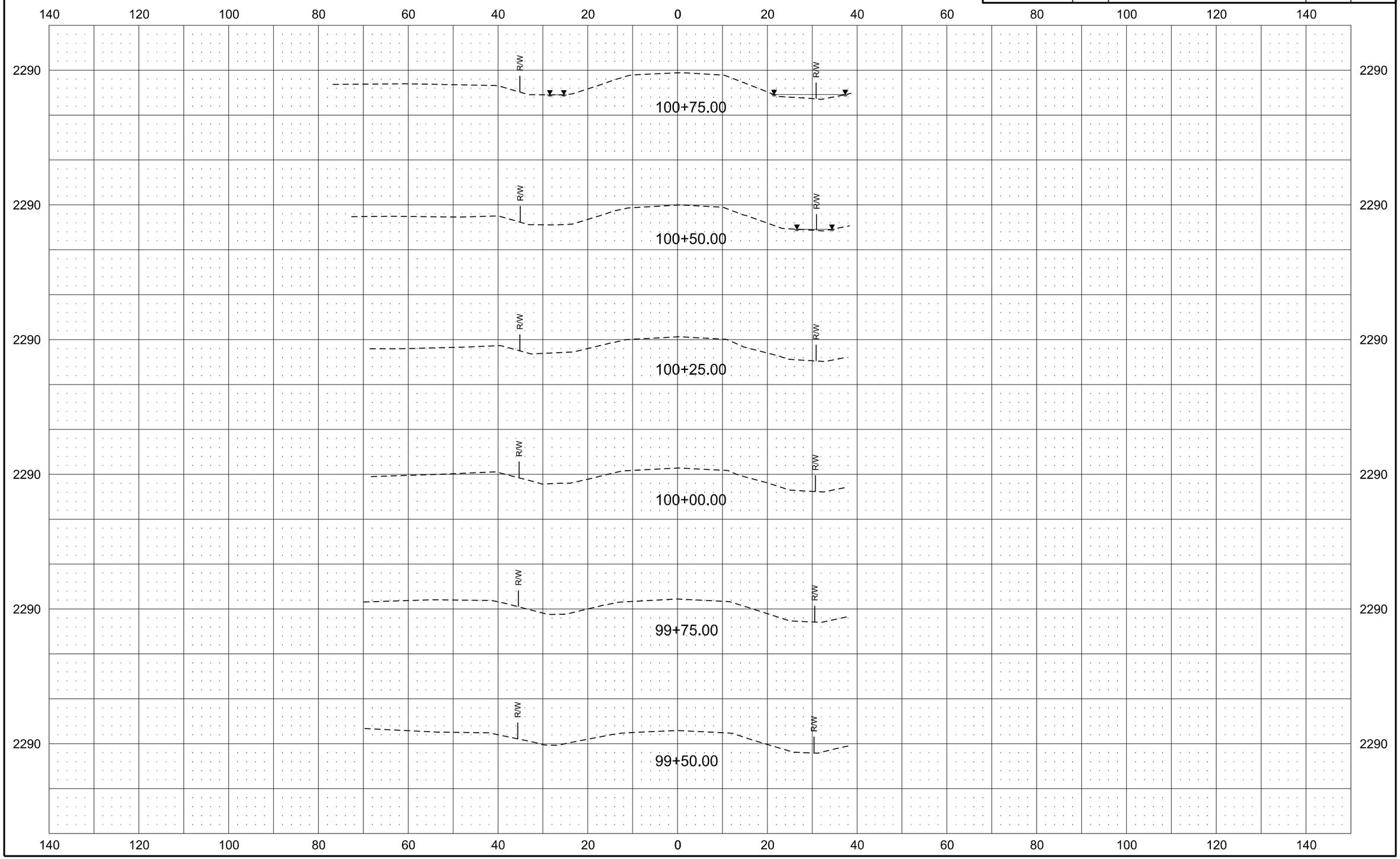
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	51



9/8/2017 11:54:53 AM cschatz N:\20732\ROM-0300(135)\Design\Mountrail\200_Xsec\200_Xsec_Sheets.dgn

Alignment K-6S

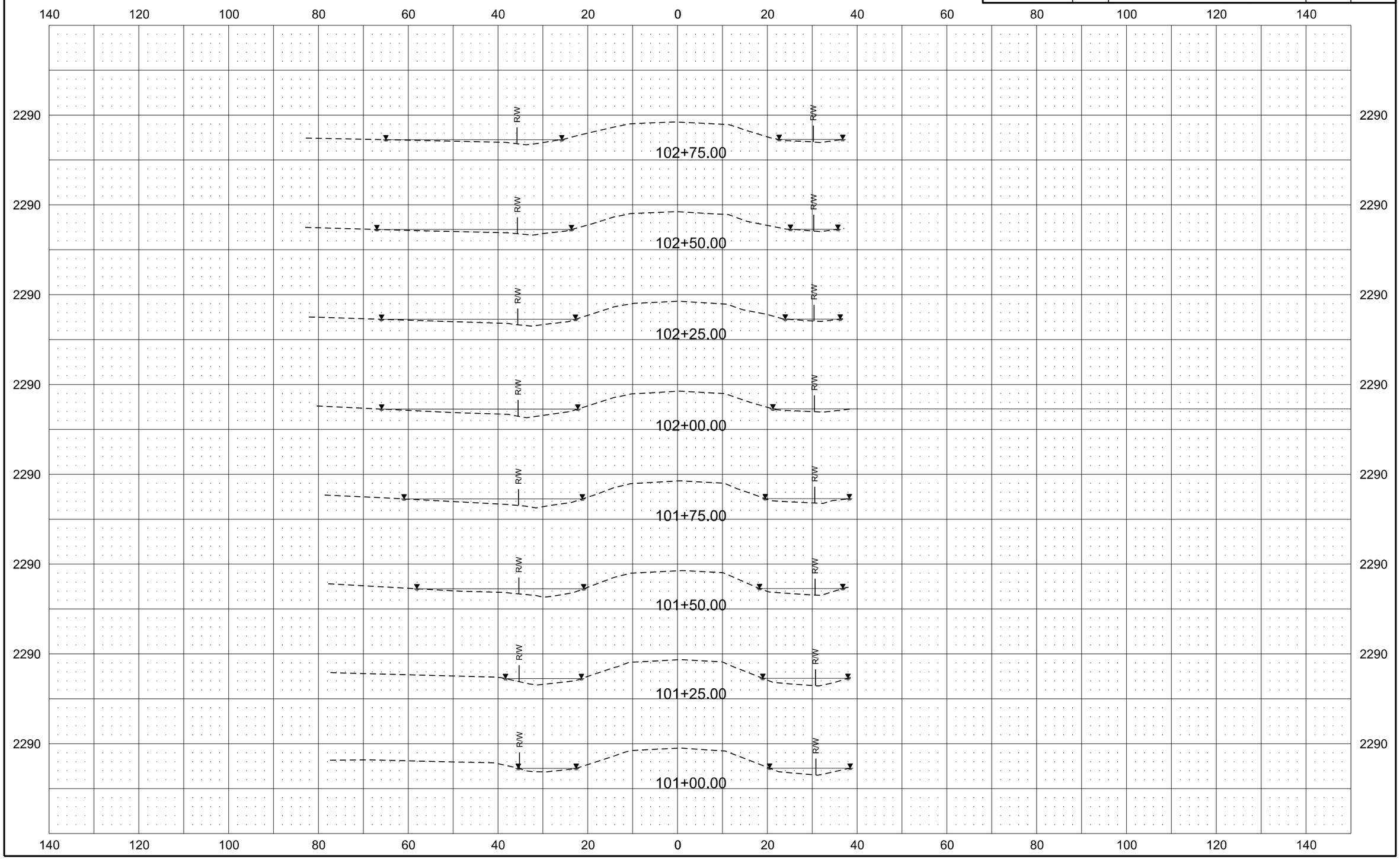
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	52



9/8/2017 11:54:57 AM cschatz N:\20732\ROM-0300(135)\Design\Mountrail\200_Xsec\200_Xsec_Sheets.dgn

Alignment K-6S

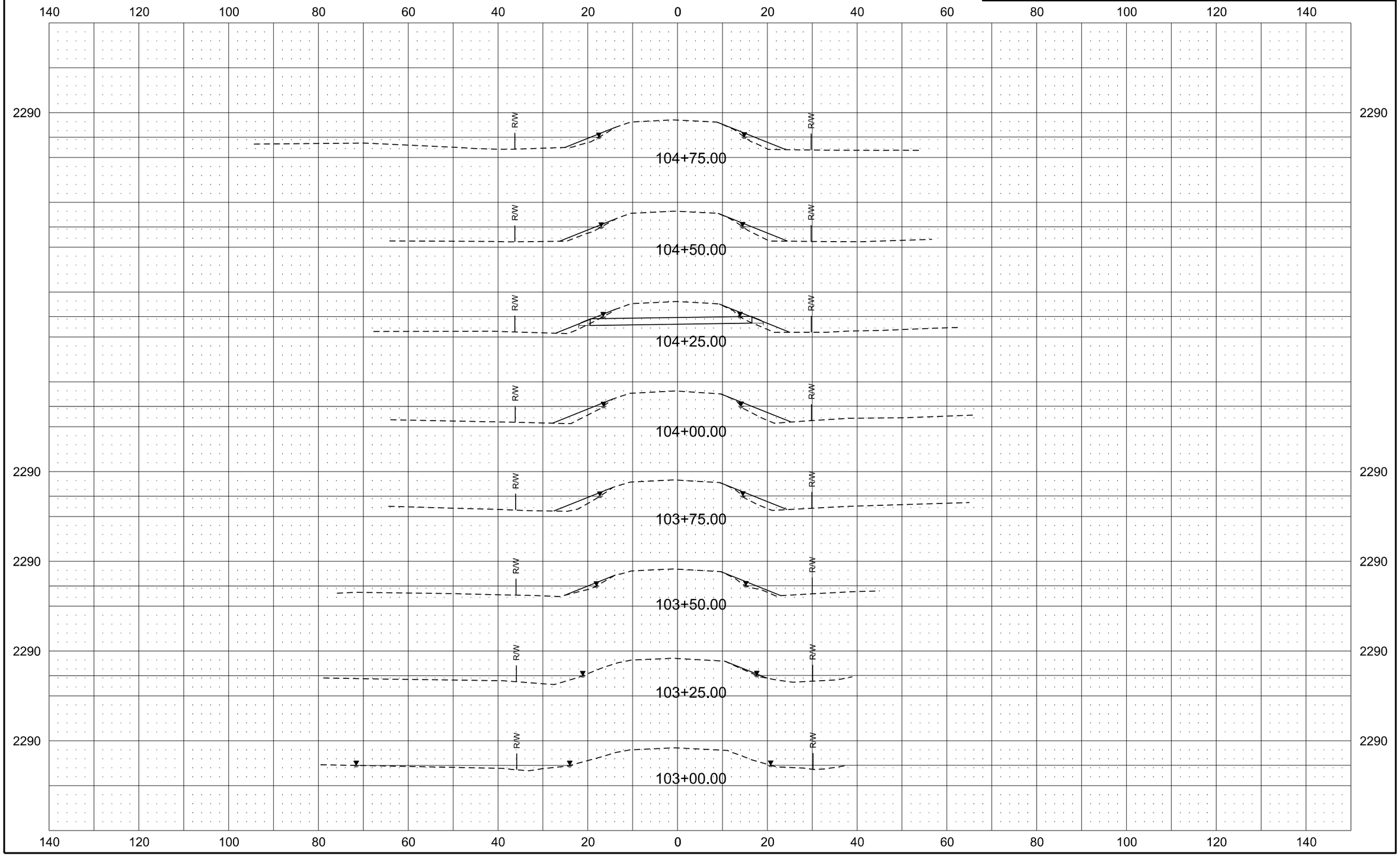
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	53



9/8/2017 11:55:01 AM cschatz N:\20732\ROM-0300(135)\Design\Mountrail\200_Xsec\200_Xsec_Sheets.dgn

Alignment K-6S

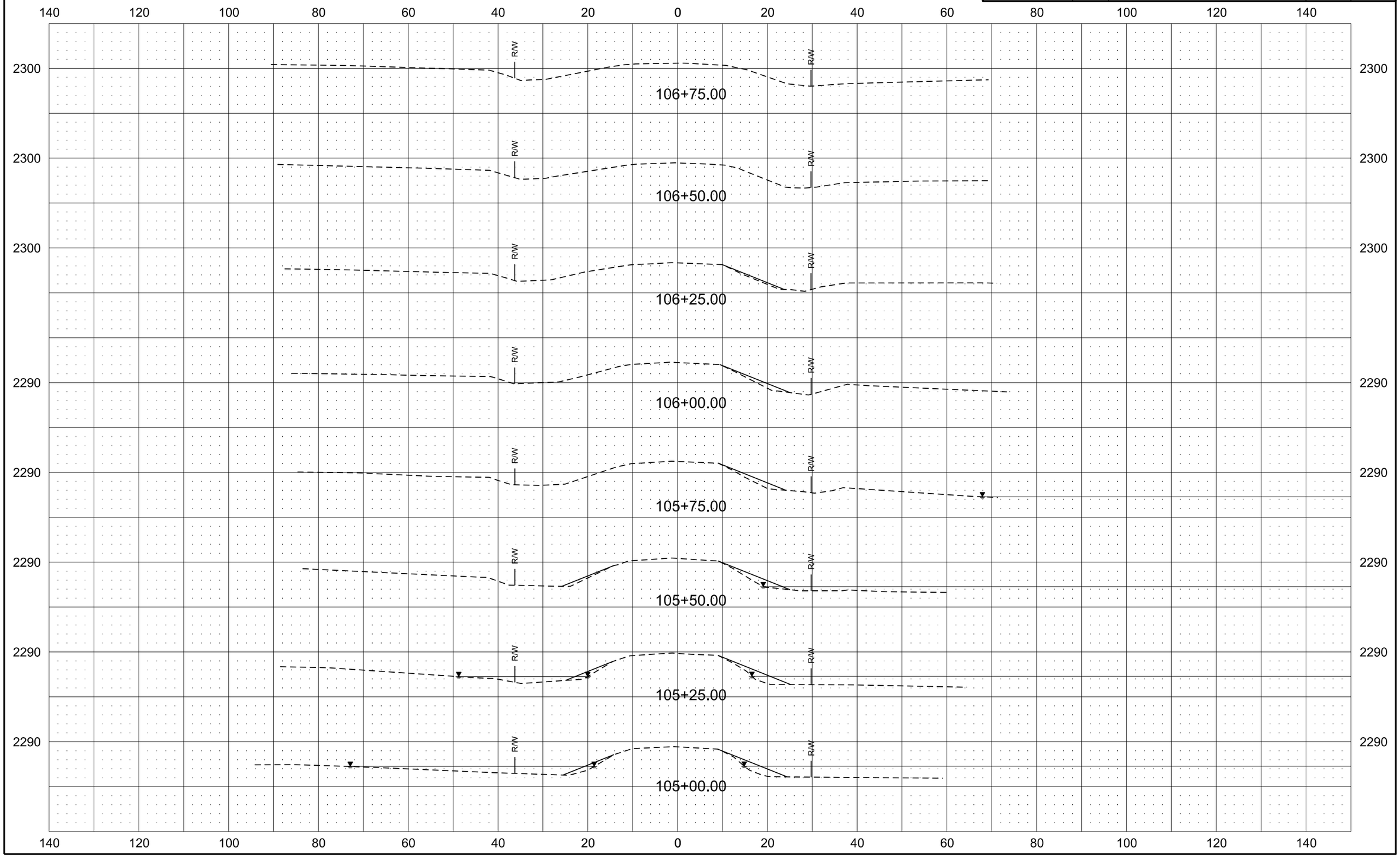
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	54



9/8/2017 11:55:05 AM cschatz N:\20732\ROM-0300(135)\Design\Mountrail\200_Xsec\200_Xsec_Sheets.dgn

Alignment K-6S

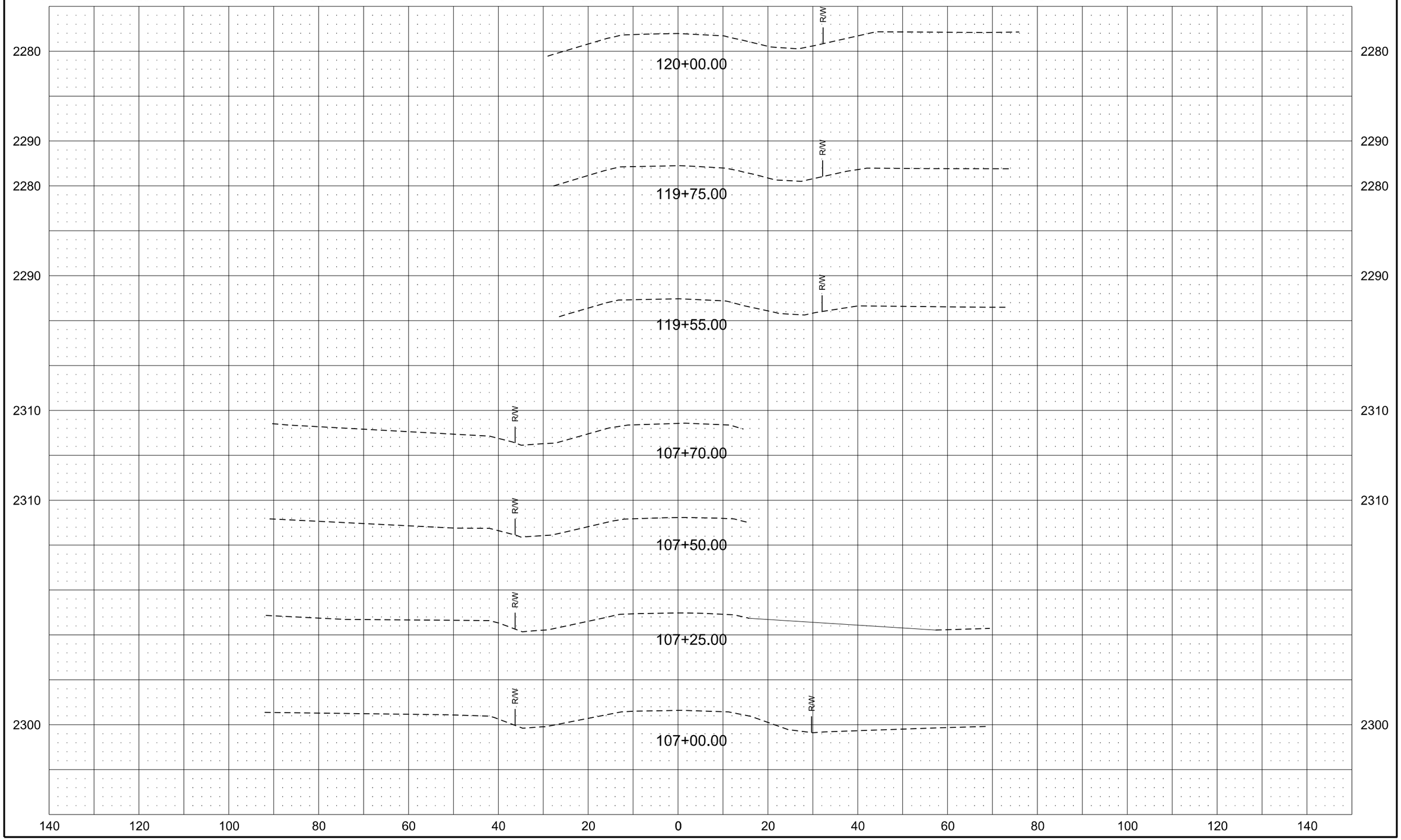
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	55



9/8/2017 11:55:09 AM cschatz N:\20732\ROM-0300(135)\Design\Mountrail\200_Xsec\200_Xsec_Sheets.dgn

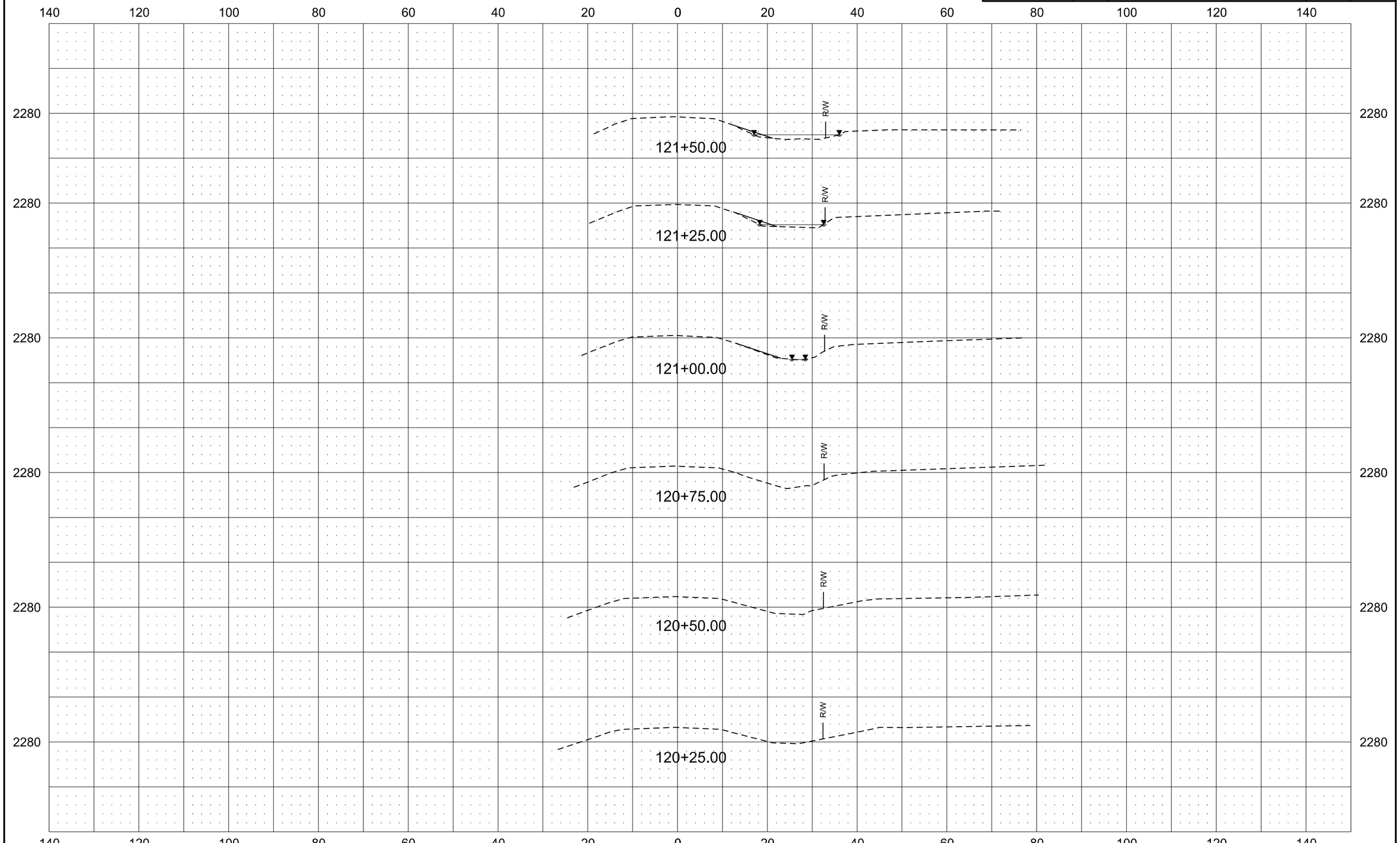
Alignment K-6S

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	56



Alignment K-6S

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	57



9/8/2017 11:55:18 AM cschatz N:\20732\ROM-0300(135)\Design\Mountrail\200_Xsec\200_Xsec_Sheets.dgn

Alignment K-6S

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	58

140 120 100 80 60 40 20 0 20 40 60 80 100 120 140

2280

123+50.00 R/W

123+25.00 R/W

123+00.00 R/W

122+75.00 R/W

122+50.00 R/W

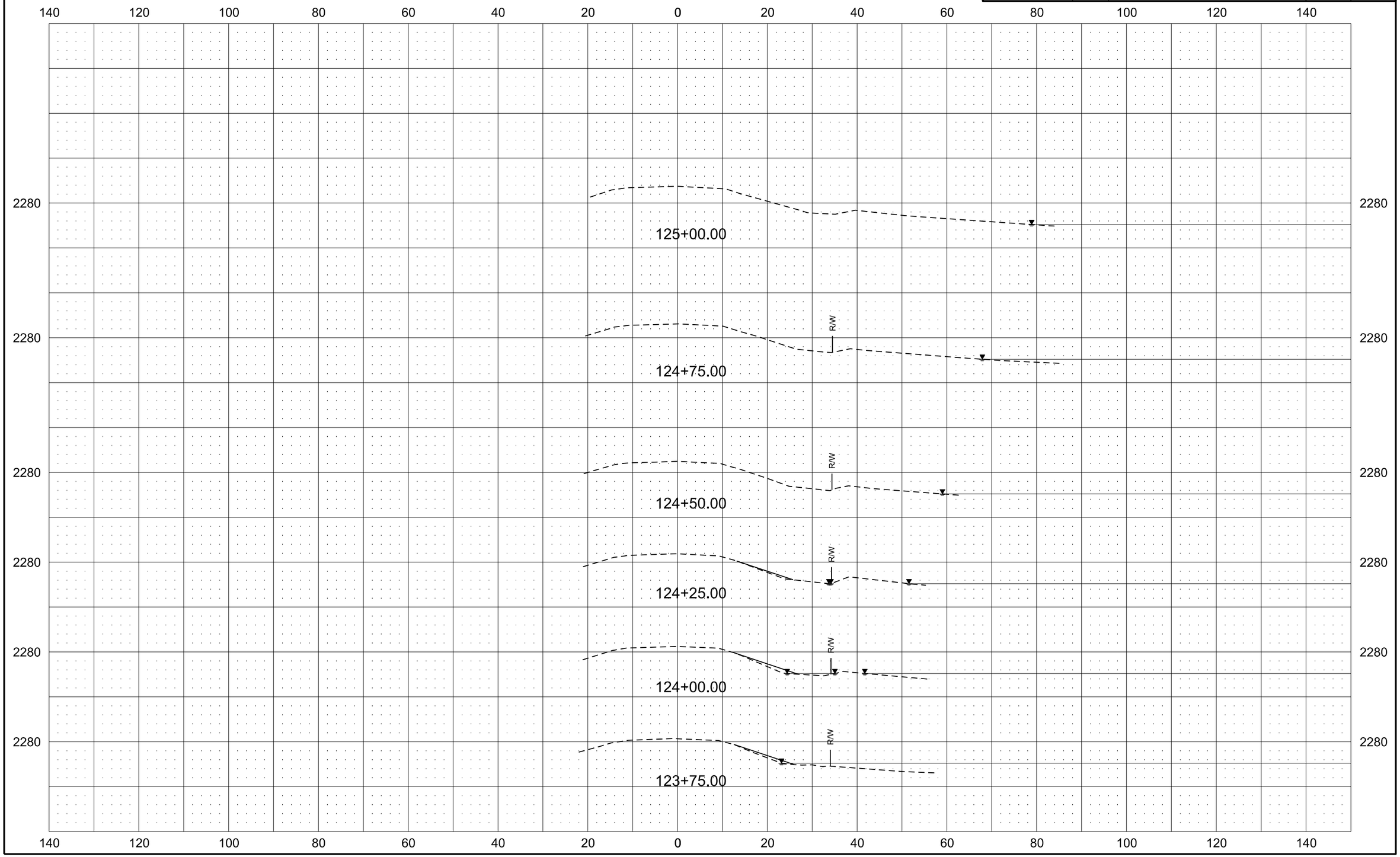
122+25.00 R/W

122+00.00 R/W

121+75.00 R/W

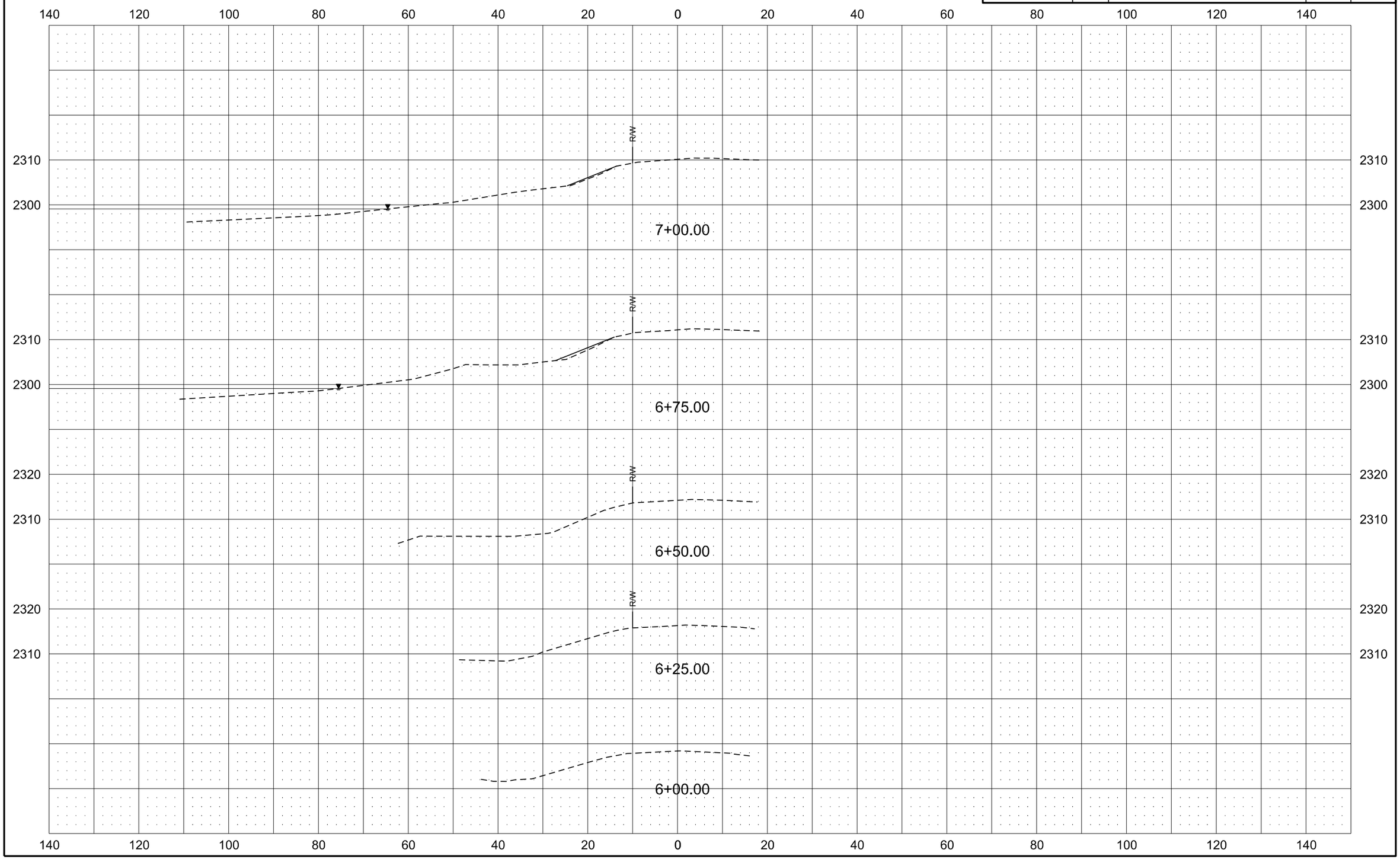
Alignment K-6S

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	59



Alignment K-6N

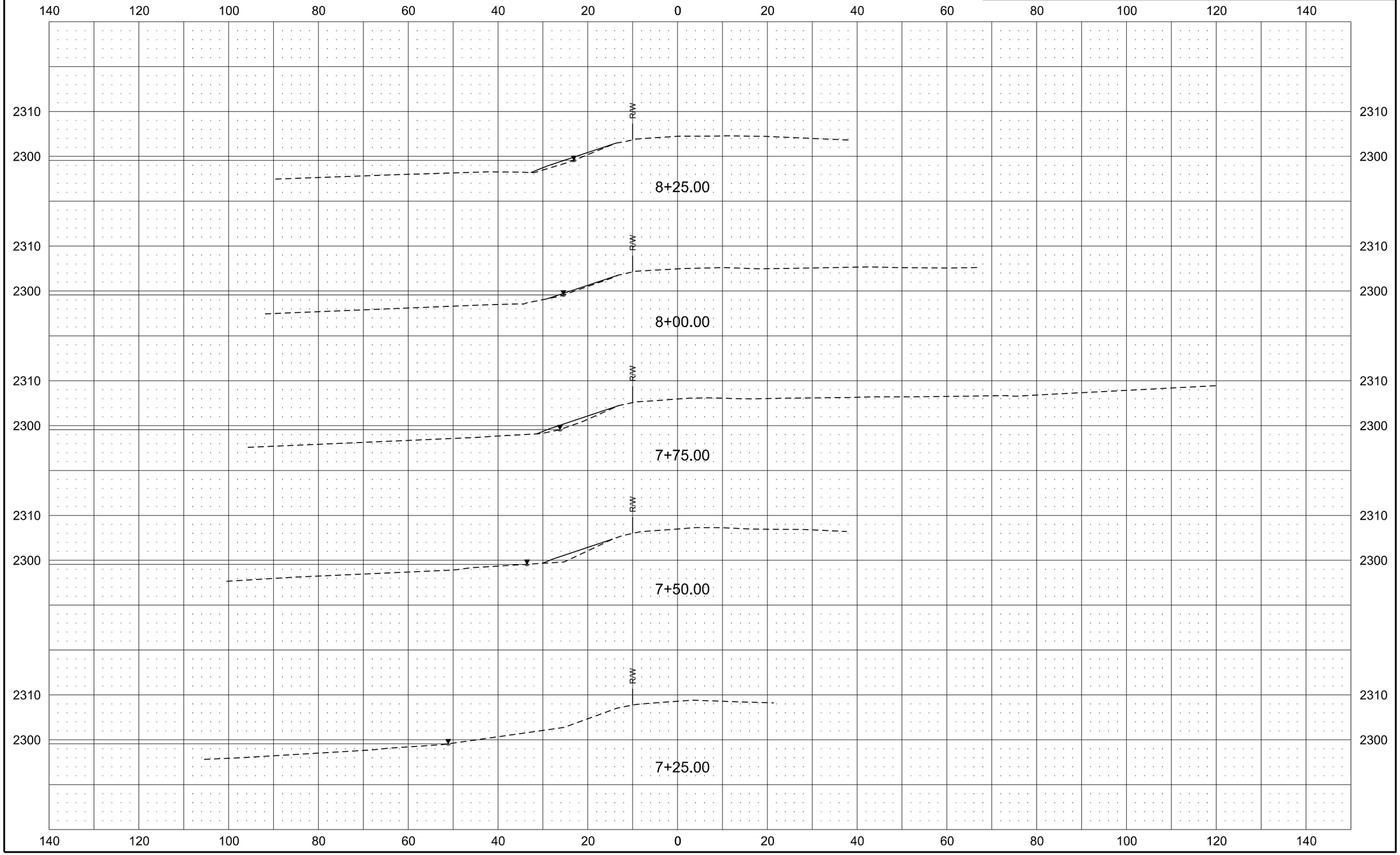
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	60



9/8/2017 11:55:30 AM cschatz N:\20732\ROM-0300(135)\Design\Mountrail\200_Xsec\200_Xsec_Sheets.dgn

Alignment K-6N

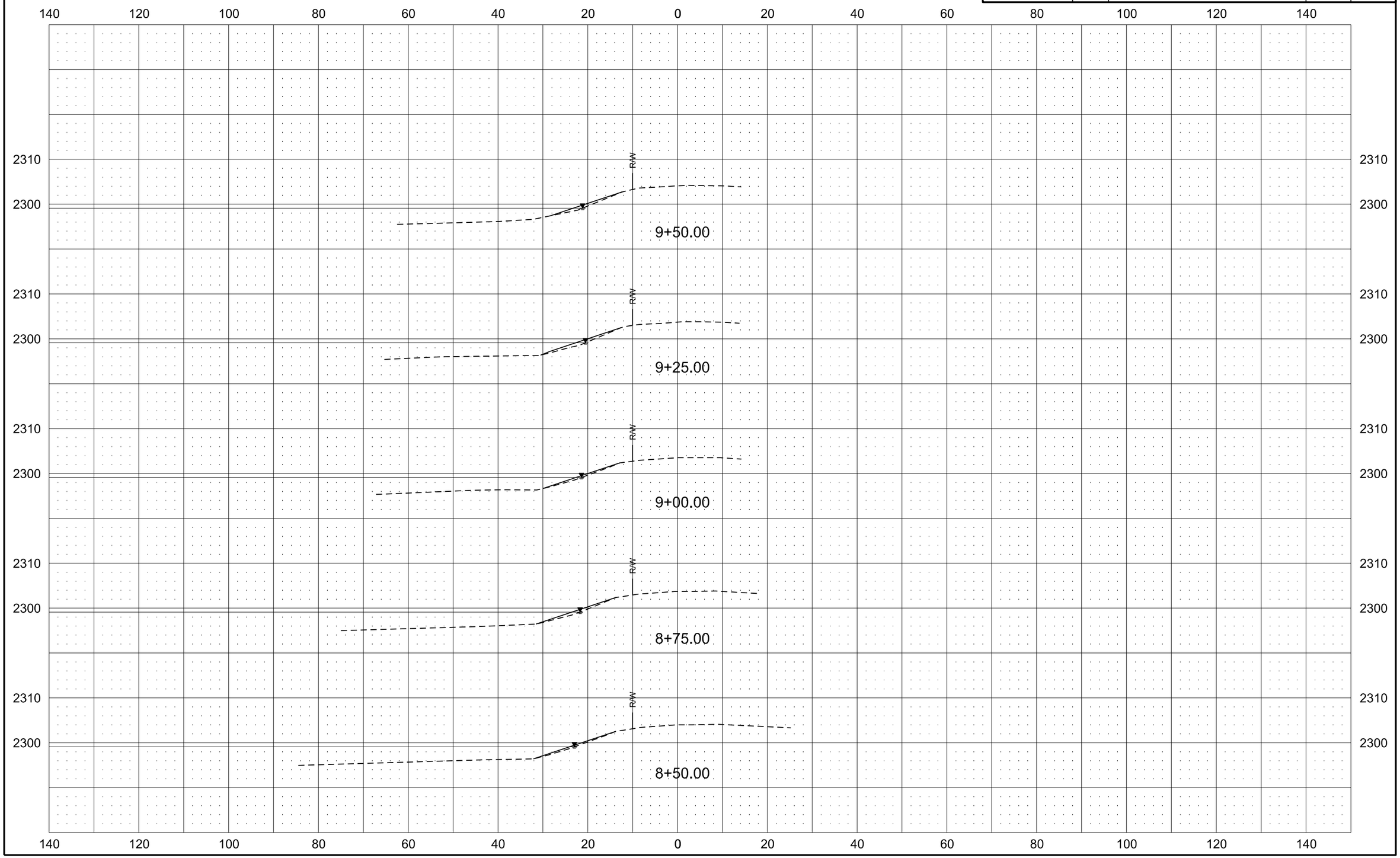
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	61



9/8/2017 11:55:34 AM cschatz N:\20732\ROM-0300(135)\Design\Mountrail\200_Xsec\200_Xsec_Sheets.dgn

Alignment K-6N

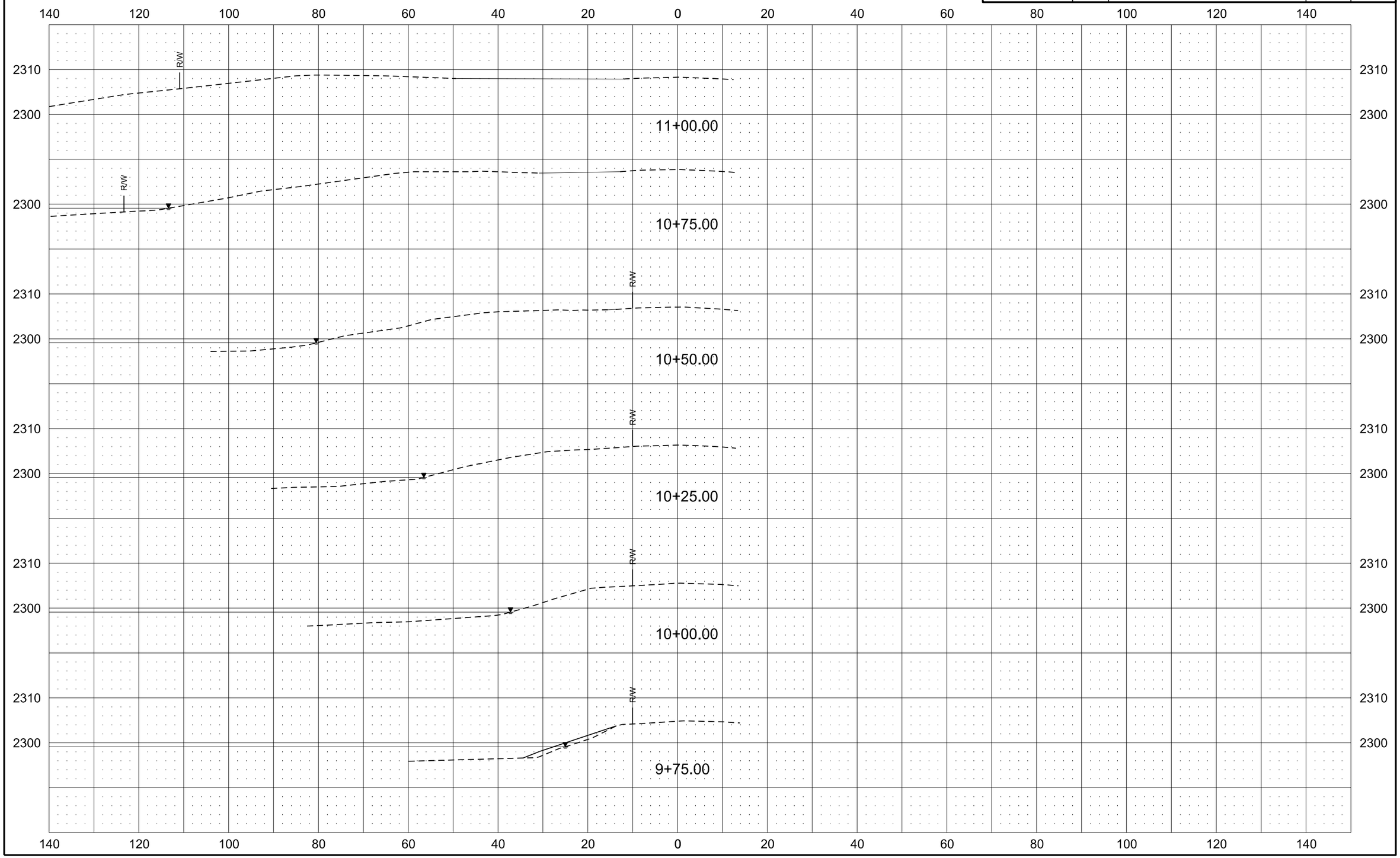
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	62



9/8/2017 11:55:39 AM cschatz N:\20732\ROM-0300(135)\Design\Mountrail\200_Xsec\200_Xsec_Sheets.dgn

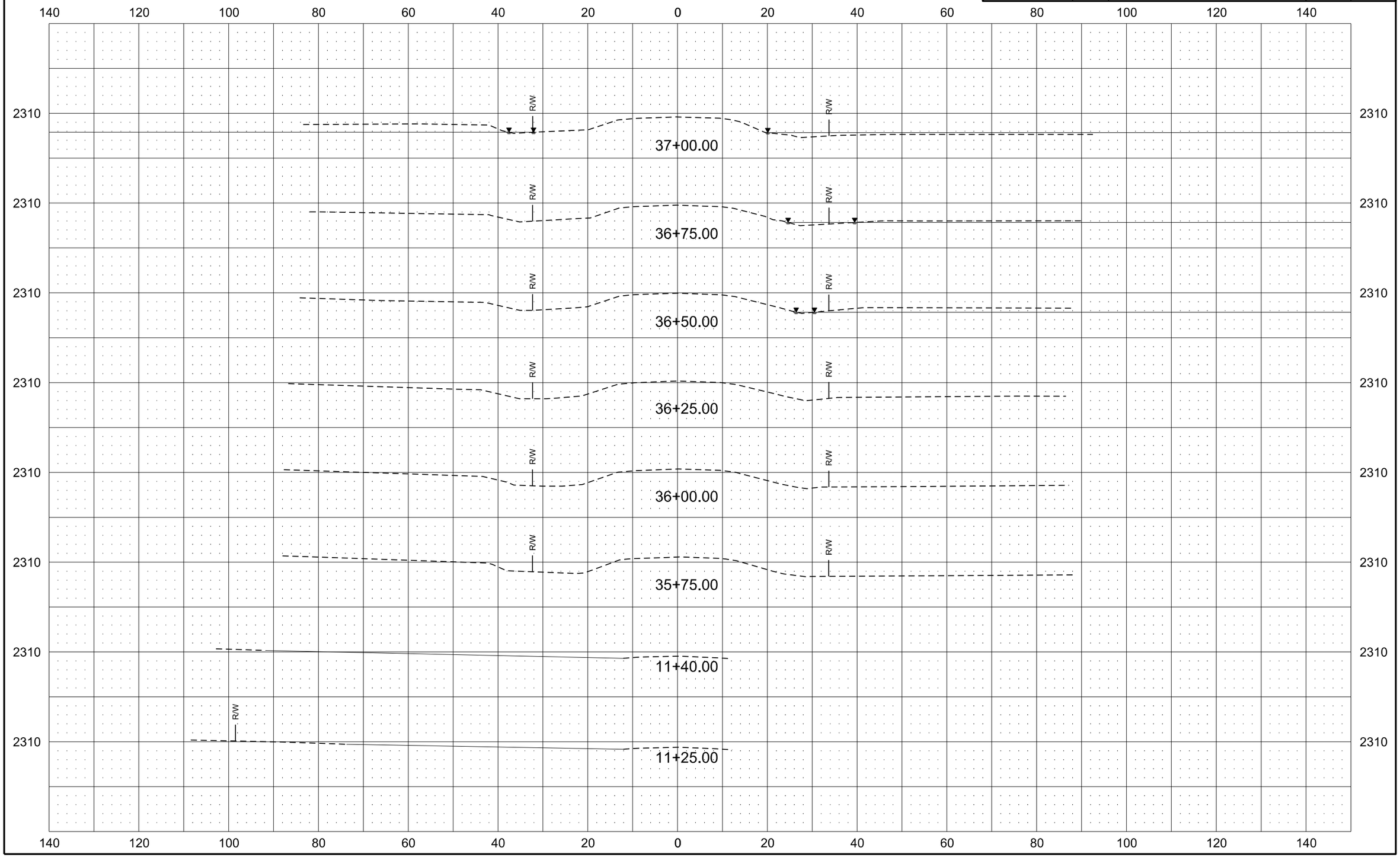
Alignment K-6N

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	63



Alignment K-6N

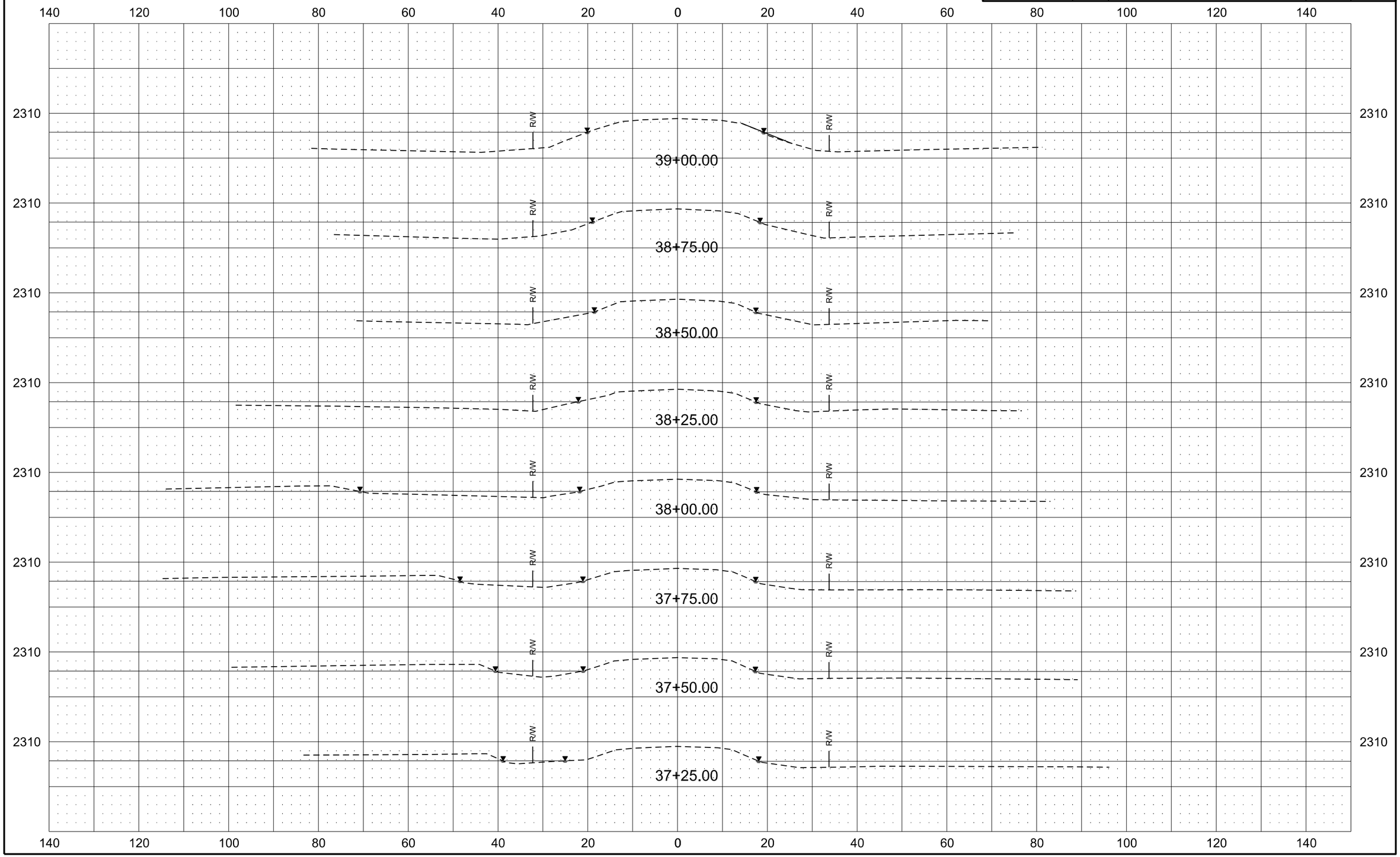
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	64



9/8/2017 11:55:47 AM cschatz N:\20732\ROM-0300(135)\Design\Mountrail\200_Xsec\200_Xsec_Sheets.dgn

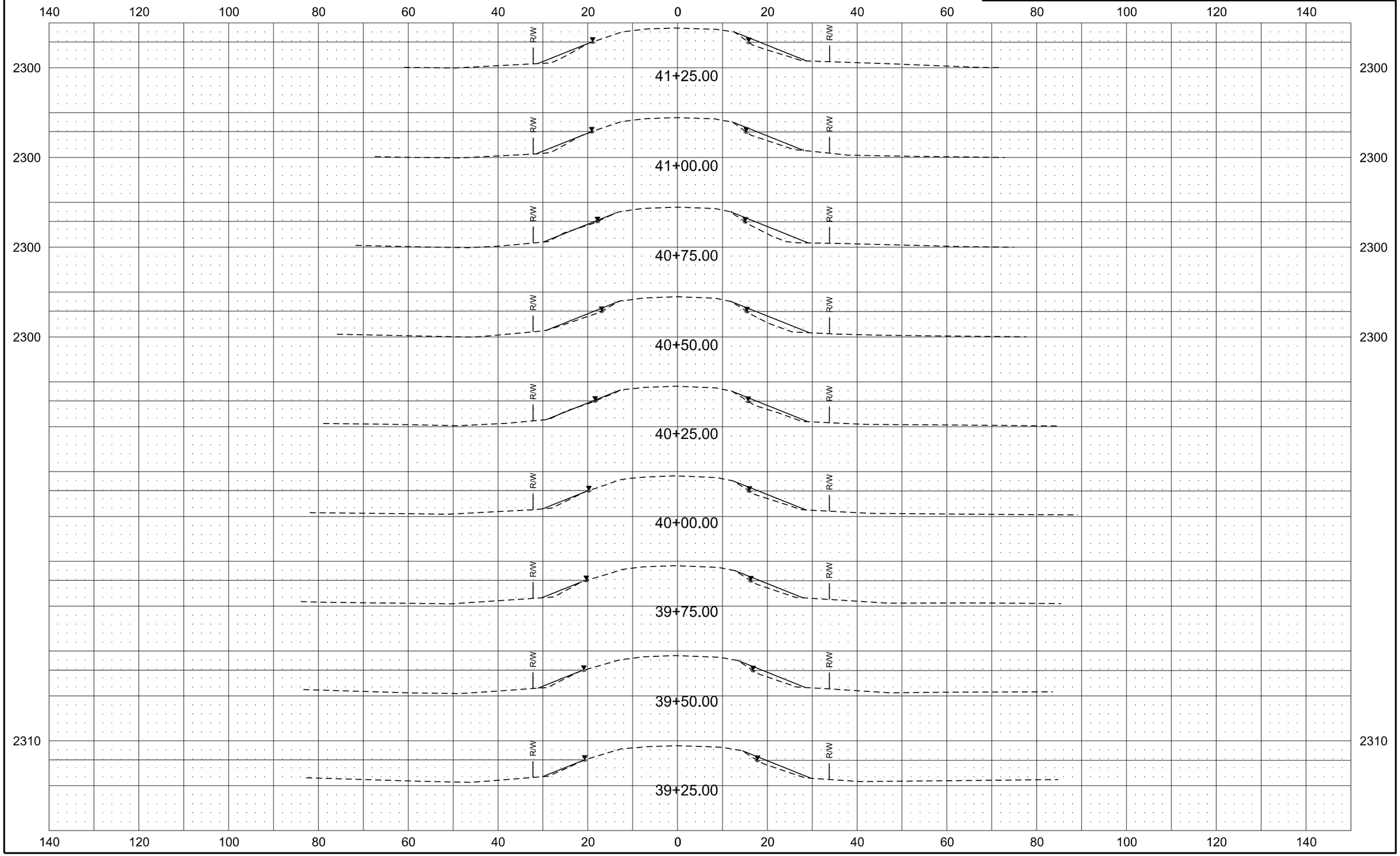
Alignment K-6N

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	65



Alignment K-6N

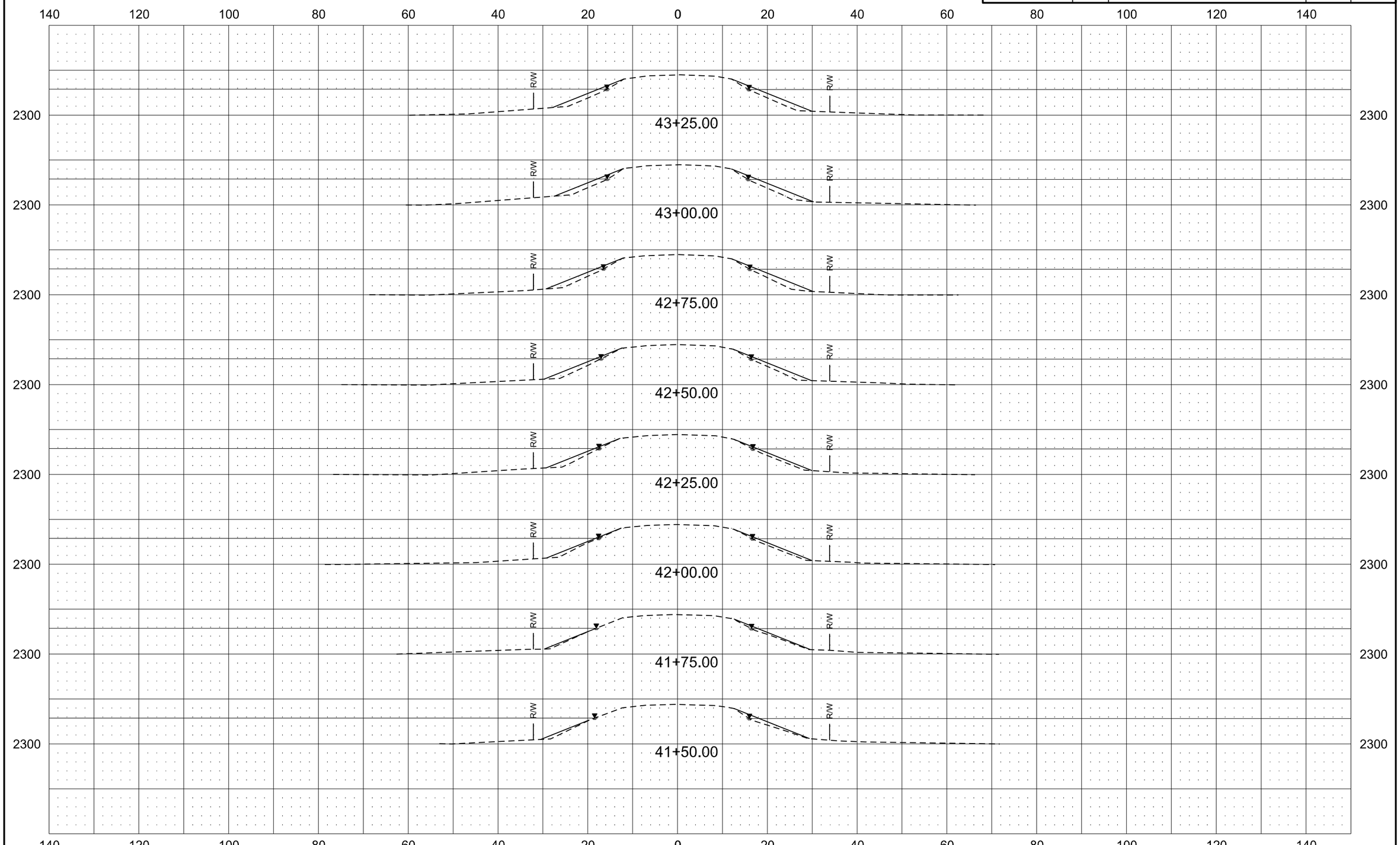
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	66



9/8/2017 11:55:55 AM cschatz N:\20732\ROM-0300(135)\Design\Mountrail\200_Xsec\200_Xsec_Sheets.dgn

Alignment K-6N

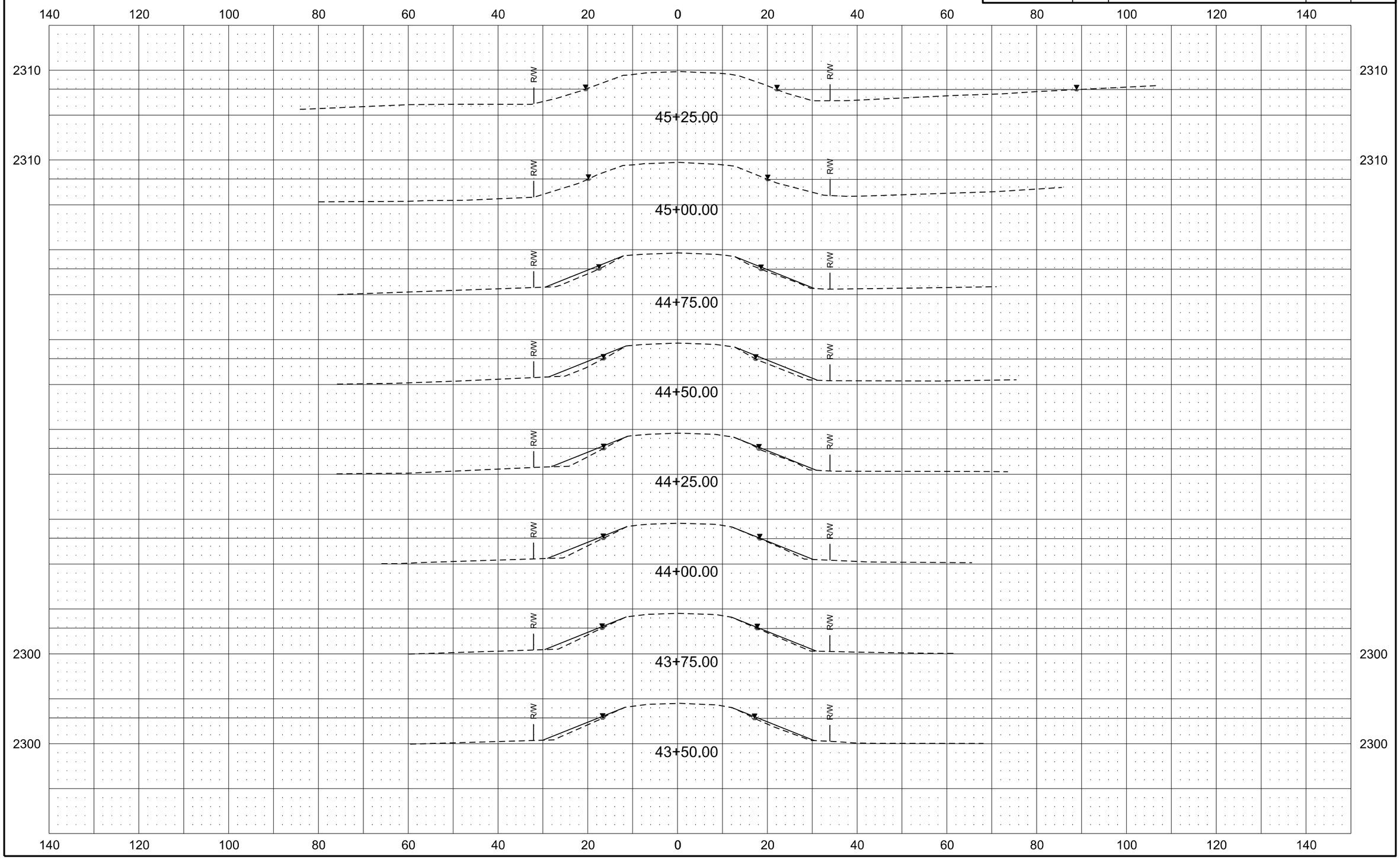
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	67



9/8/2017 11:56:09 AM cschatz N:\20732\ROM-0300(135)\Design\Mountrail\200_Xsec\200_Xsec_Sheets.dgn

Alignment K-6N

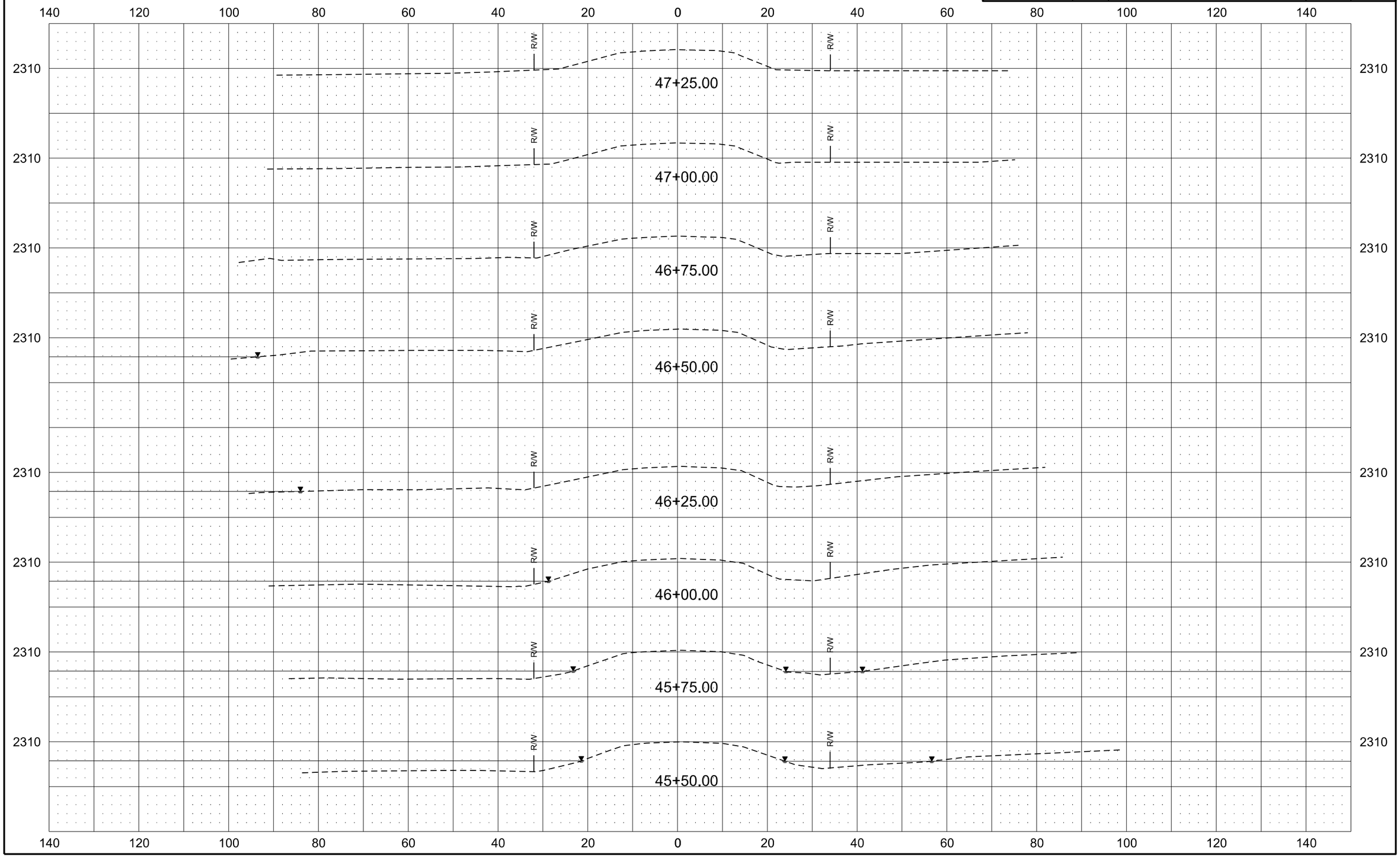
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	68



9/8/2017 11:56:13 AM cschatz N:\20732\ROM-0300(135)\Design\Mountrail\200_Xsec\200_Xsec_Sheets.dgn

Alignment K-6N

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	69



9/8/2017 11:56:17 AM cschatz N:\20732\ROM-0300(135)\Design\Mountrail\200_Xsec\200_Xsec_Sheets.dgn

Alignment K-6N

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	70

140 120 100 80 60 40 20 0 20 40 60 80 100 120 140

2310
2300

R/W R/W

124+25.00

R/W R/W

124+00.00

R/W R/W

123+75.00

R/W R/W

123+50.00

R/W R/W

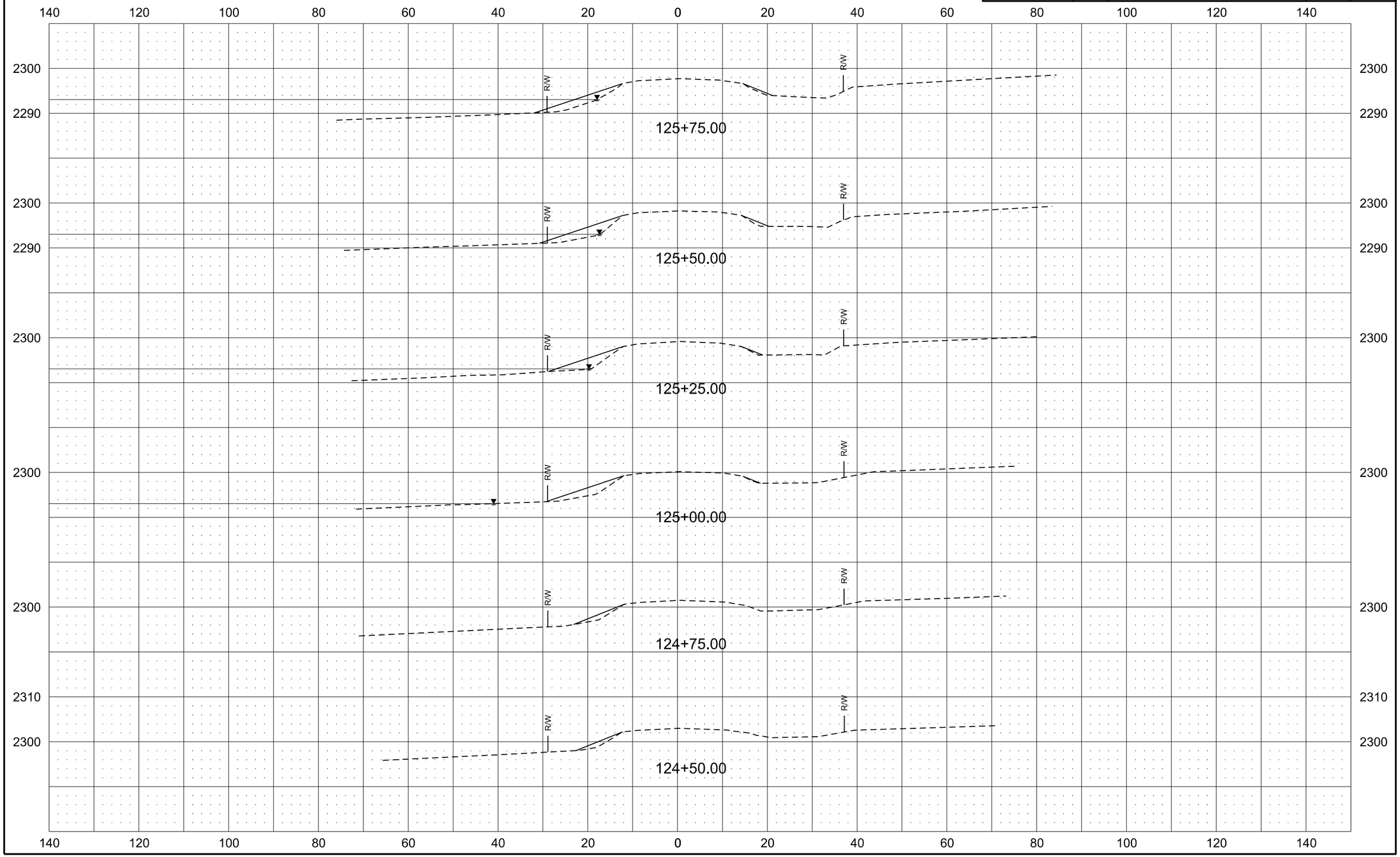
47+75.00

R/W R/W

47+50.00

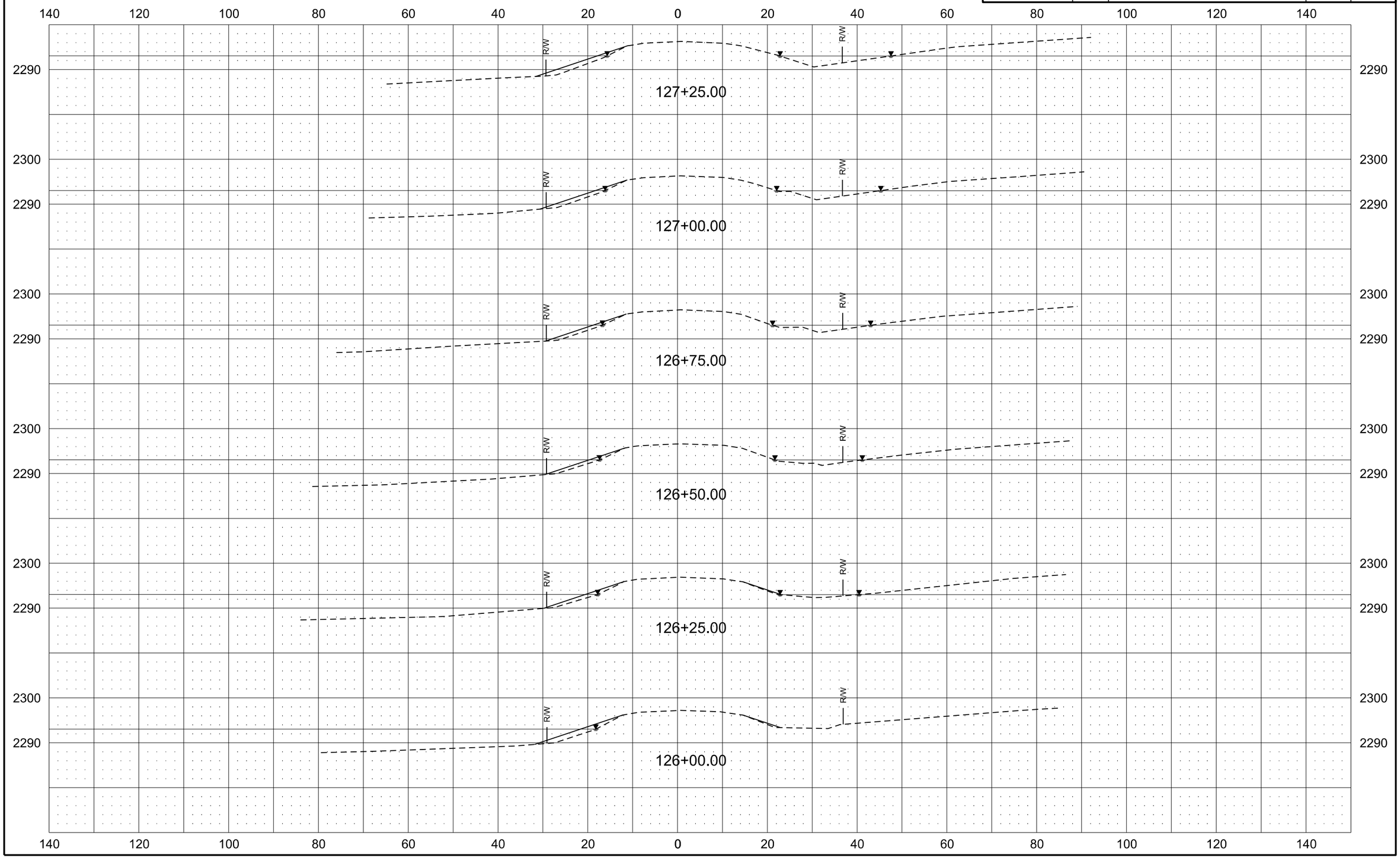
Alignment K-6N

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	71



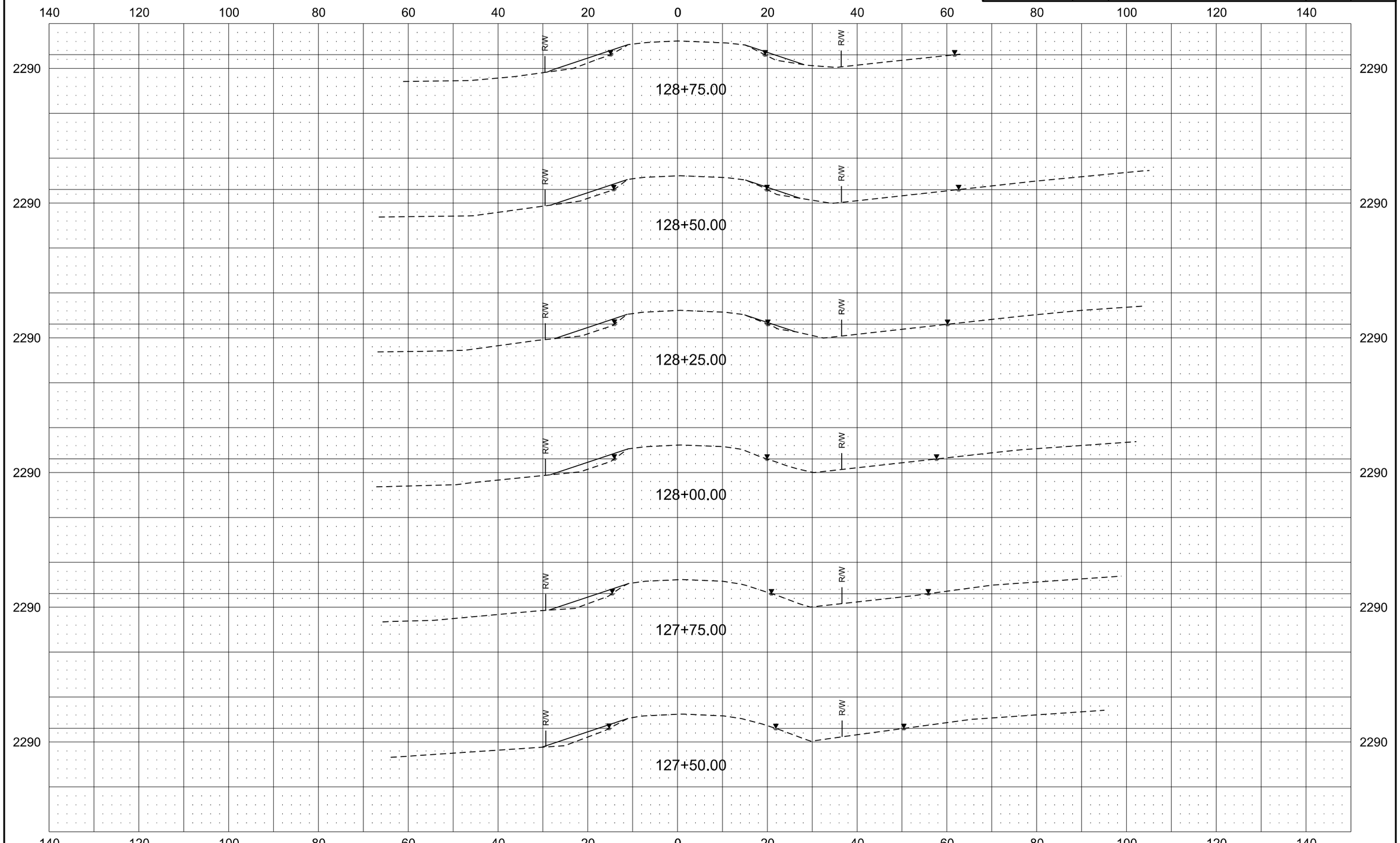
Alignment K-6N

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	72



Alignment K-6N

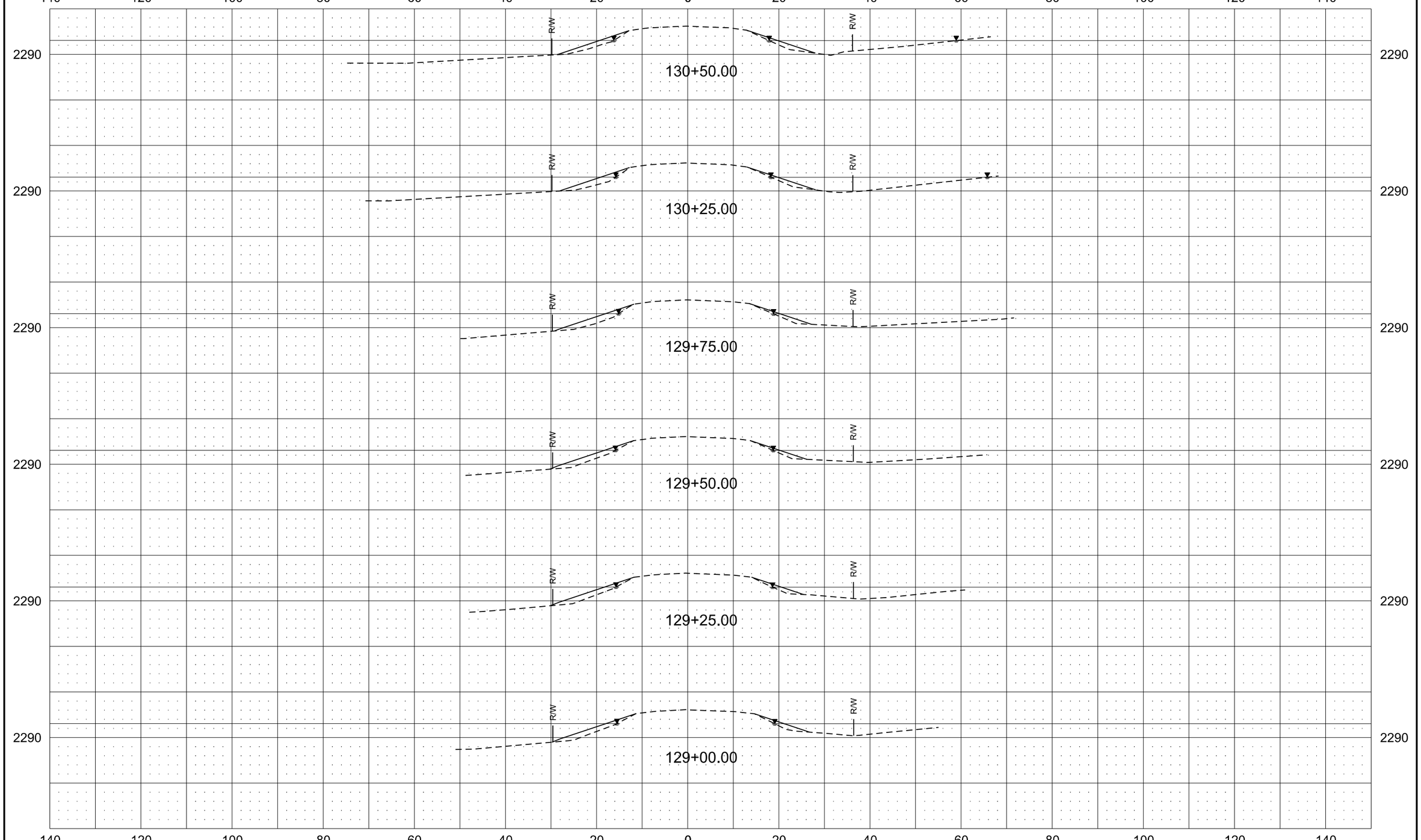
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	73



9/8/2017 11:56:34 AM cschatz N:\20732\ROM-0300(135)\Design\Mountrail\200_Xsec\200_Xsec_Sheets.dgn

Alignment K-6N

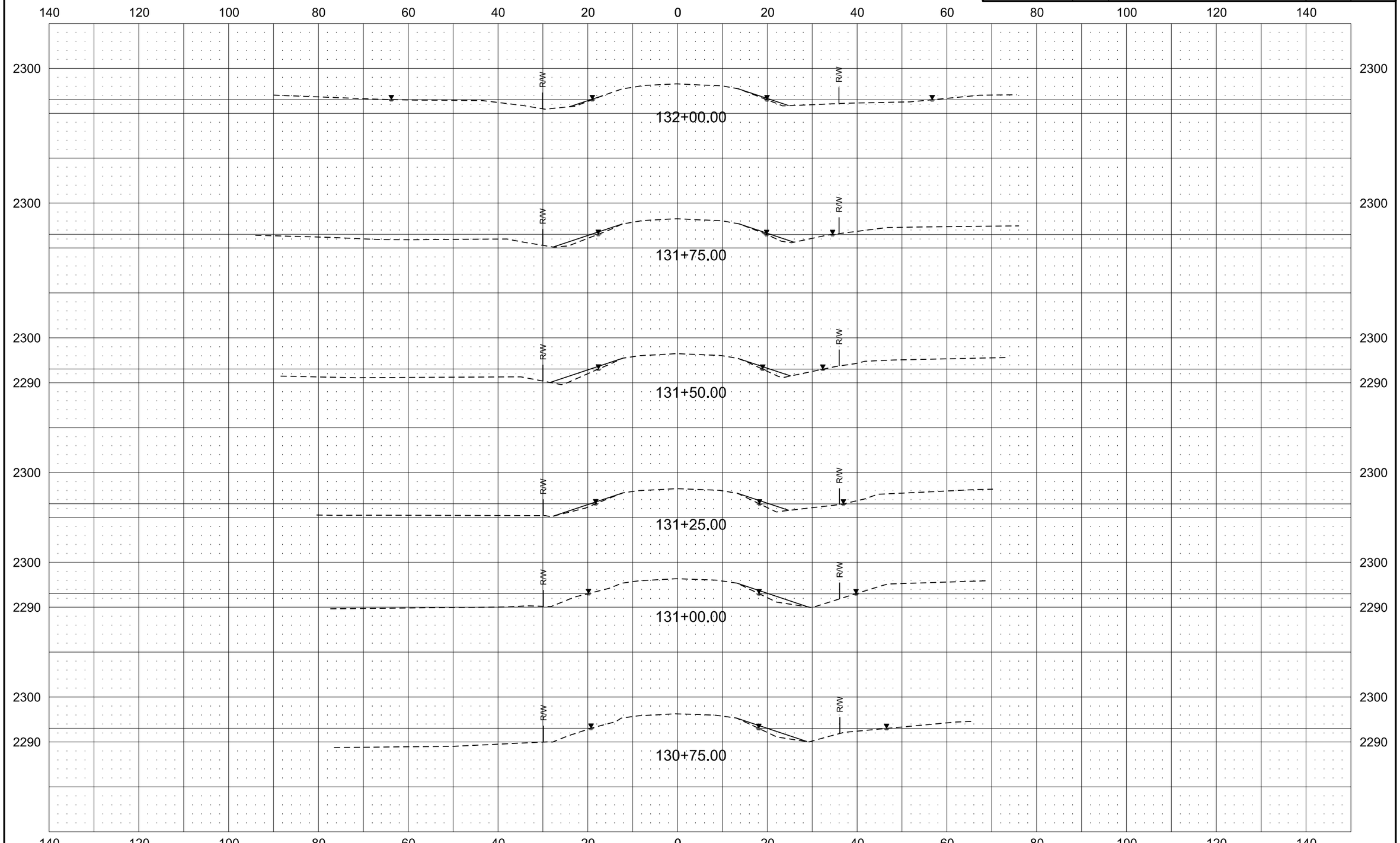
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	74



9/8/2017 11:56:38 AM cschatz N:\20732\ROM-0300(135)\Design\Mountrail\200_Xsec\200_Xsec_Sheets.dgn

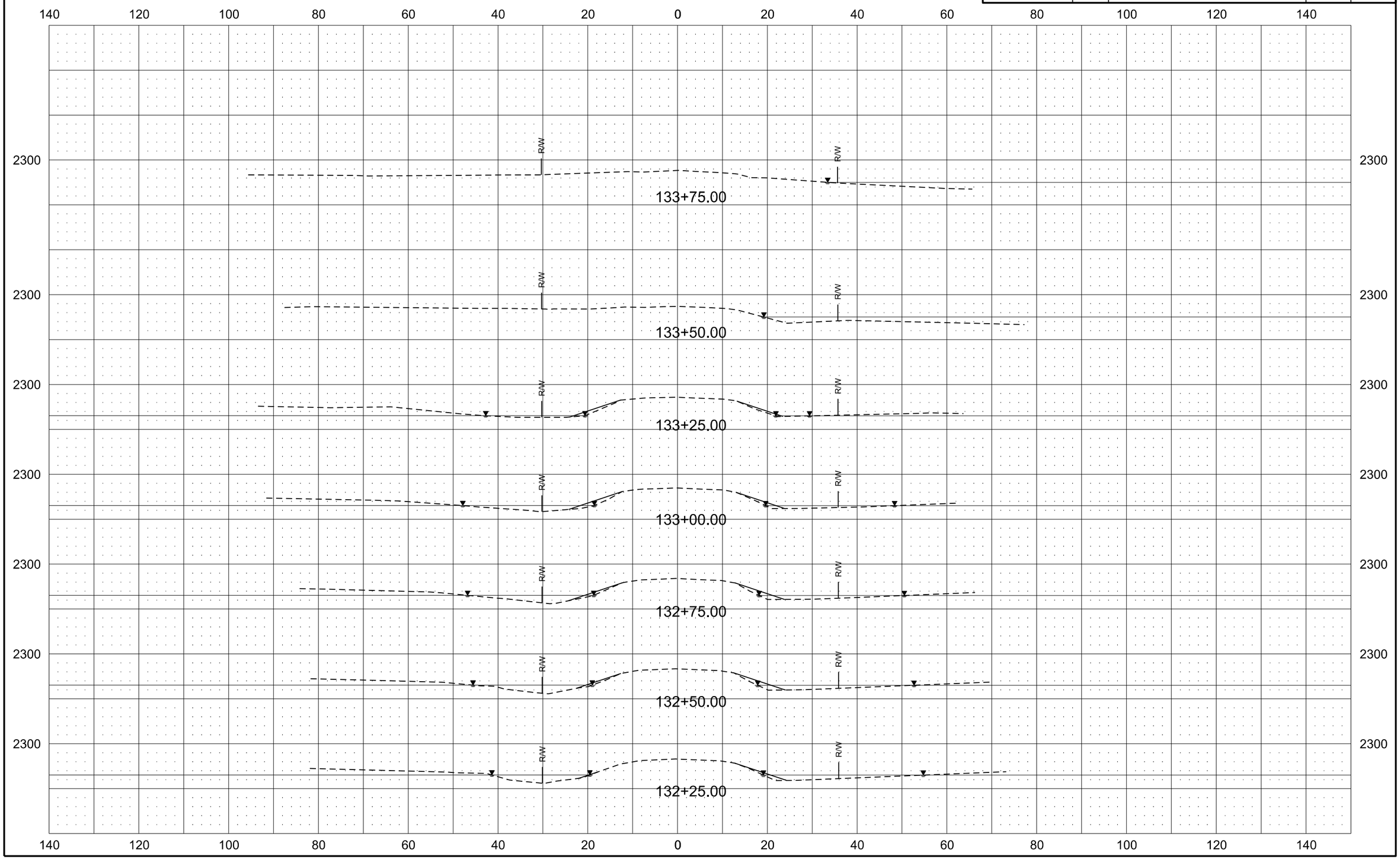
Alignment K-6N

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	75



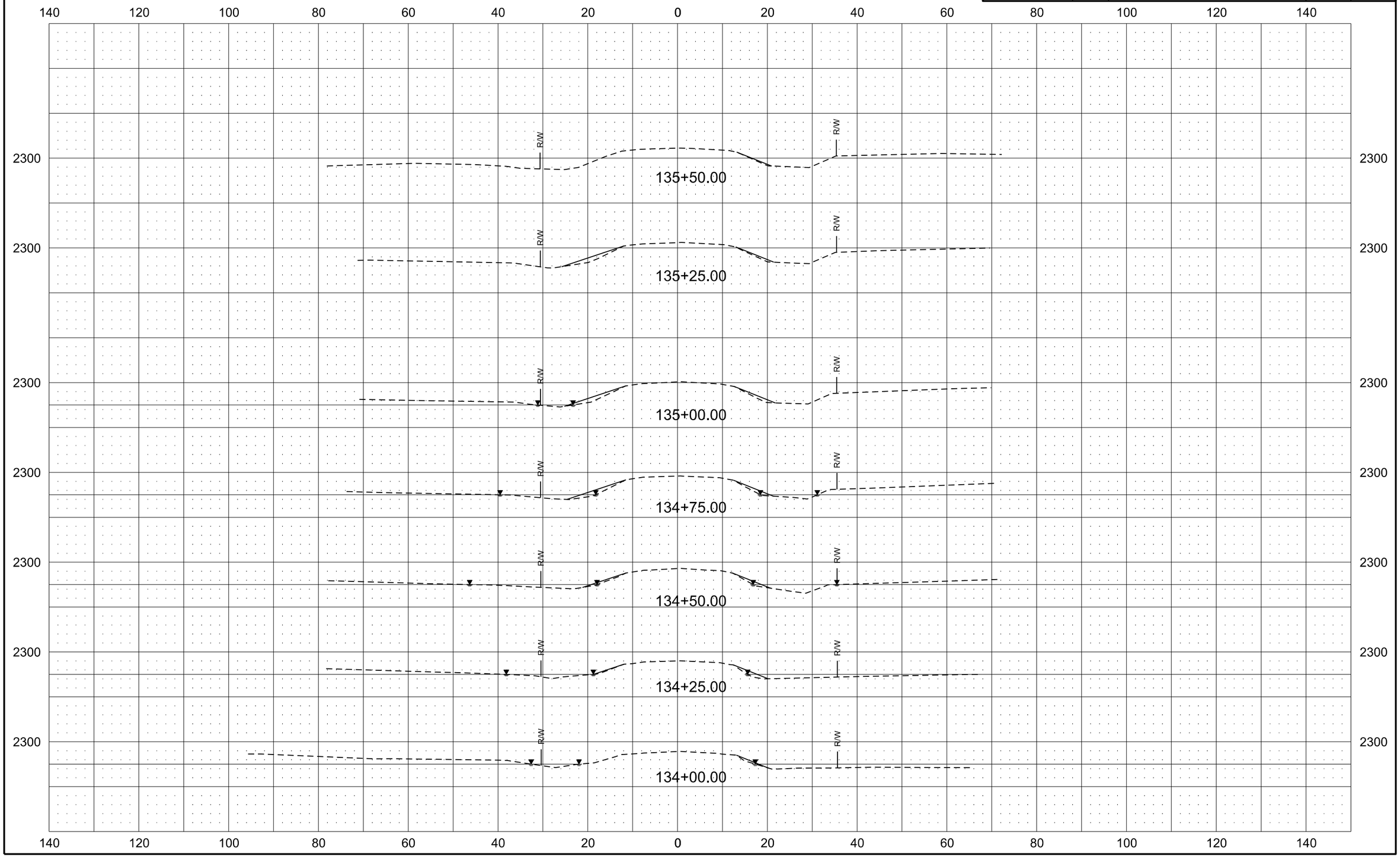
Alignment K-6N

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	76



Alignment K-6N

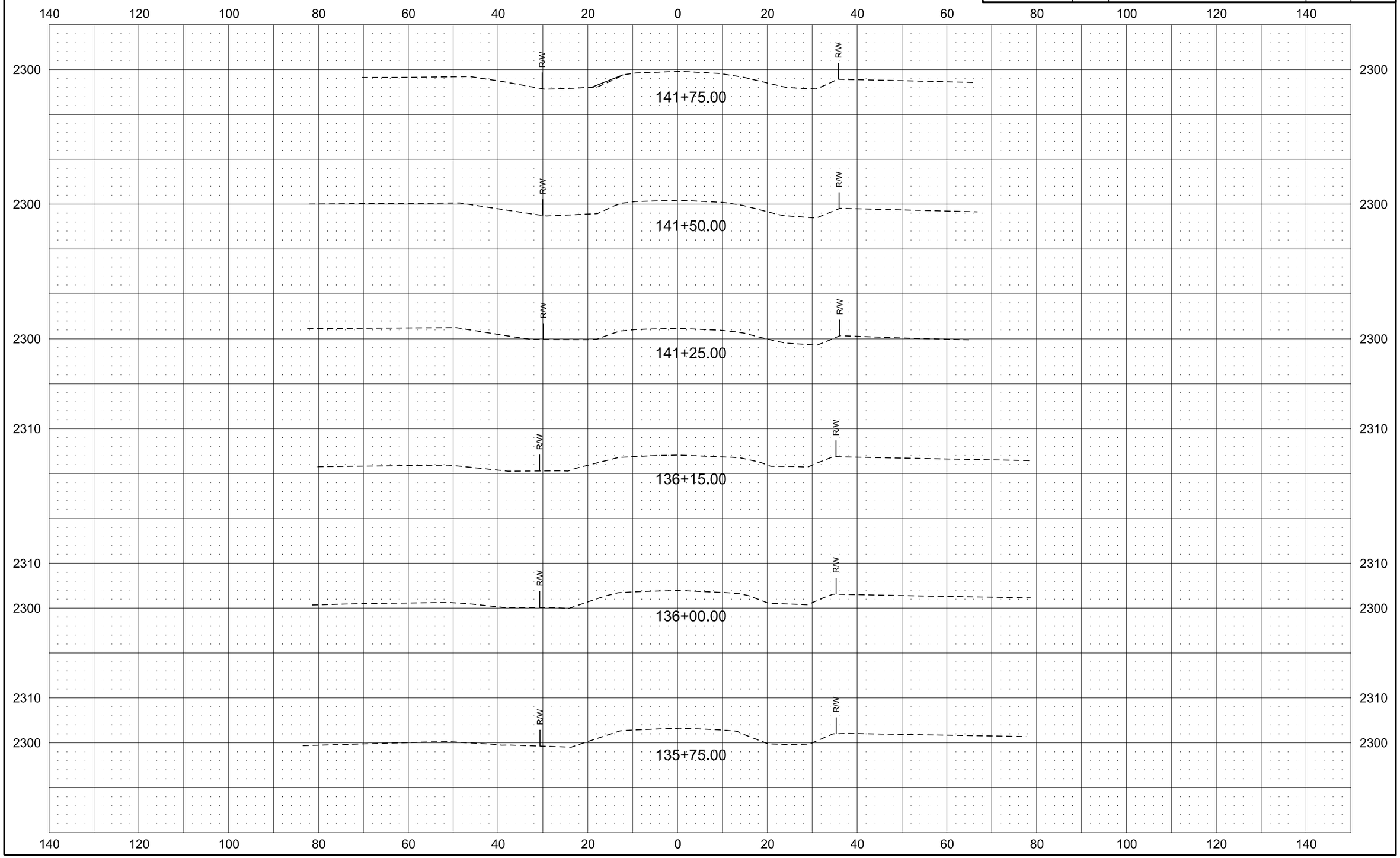
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	77



9/8/2017 11:56:50 AM cschatz N:\20732\ROM-0300(135)\Design\Mountrail\200_Xsec\200_Xsec_Sheets.dgn

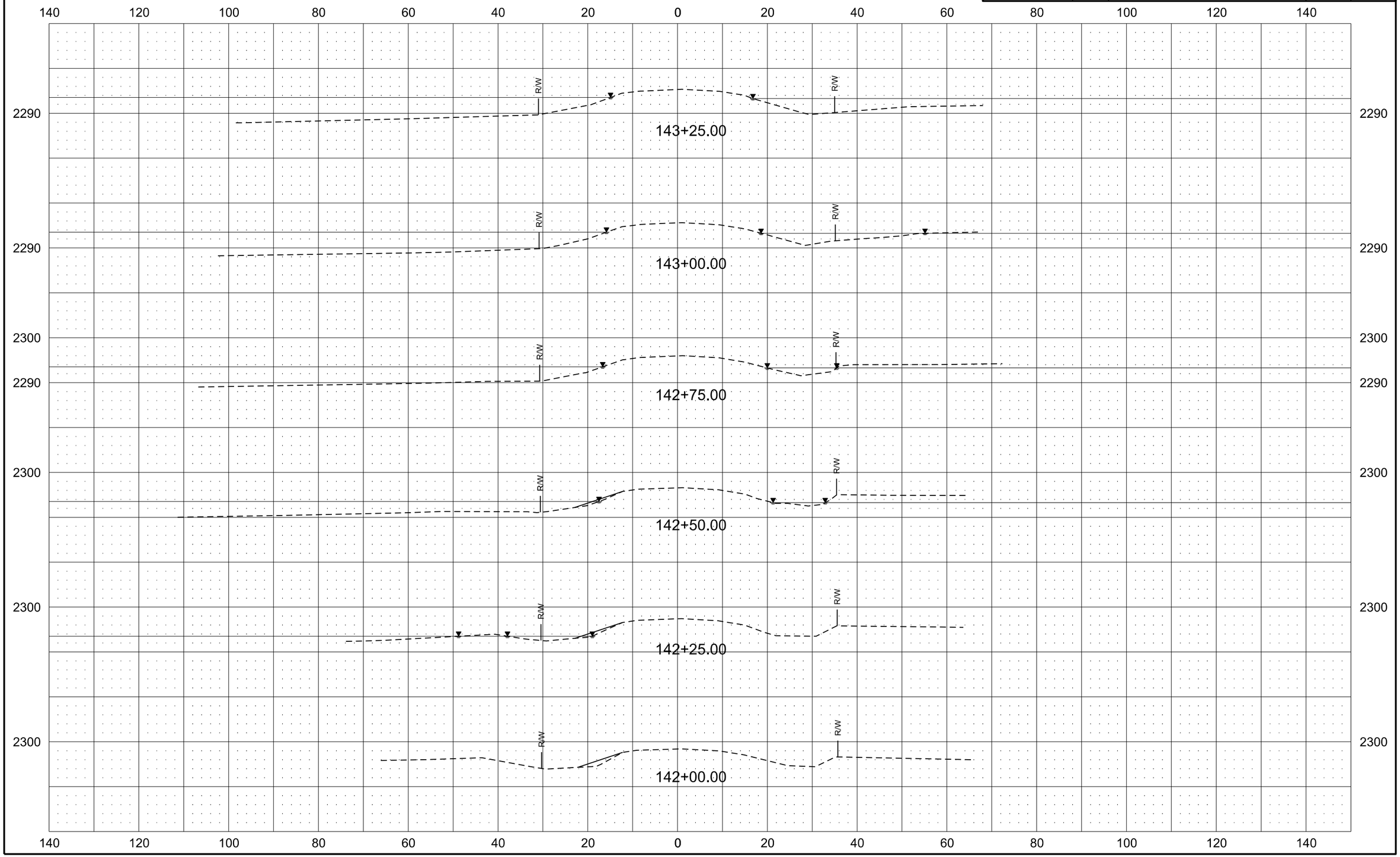
Alignment K-6N

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	78



Alignment K-6N

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	79



Alignment K-6N

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	80

140 120 100 80 60 40 20 0 20 40 60 80 100 120 140

145+25.00

145+00.00

144+75.00

144+50.00

144+25.00

144+00.00

143+75.00

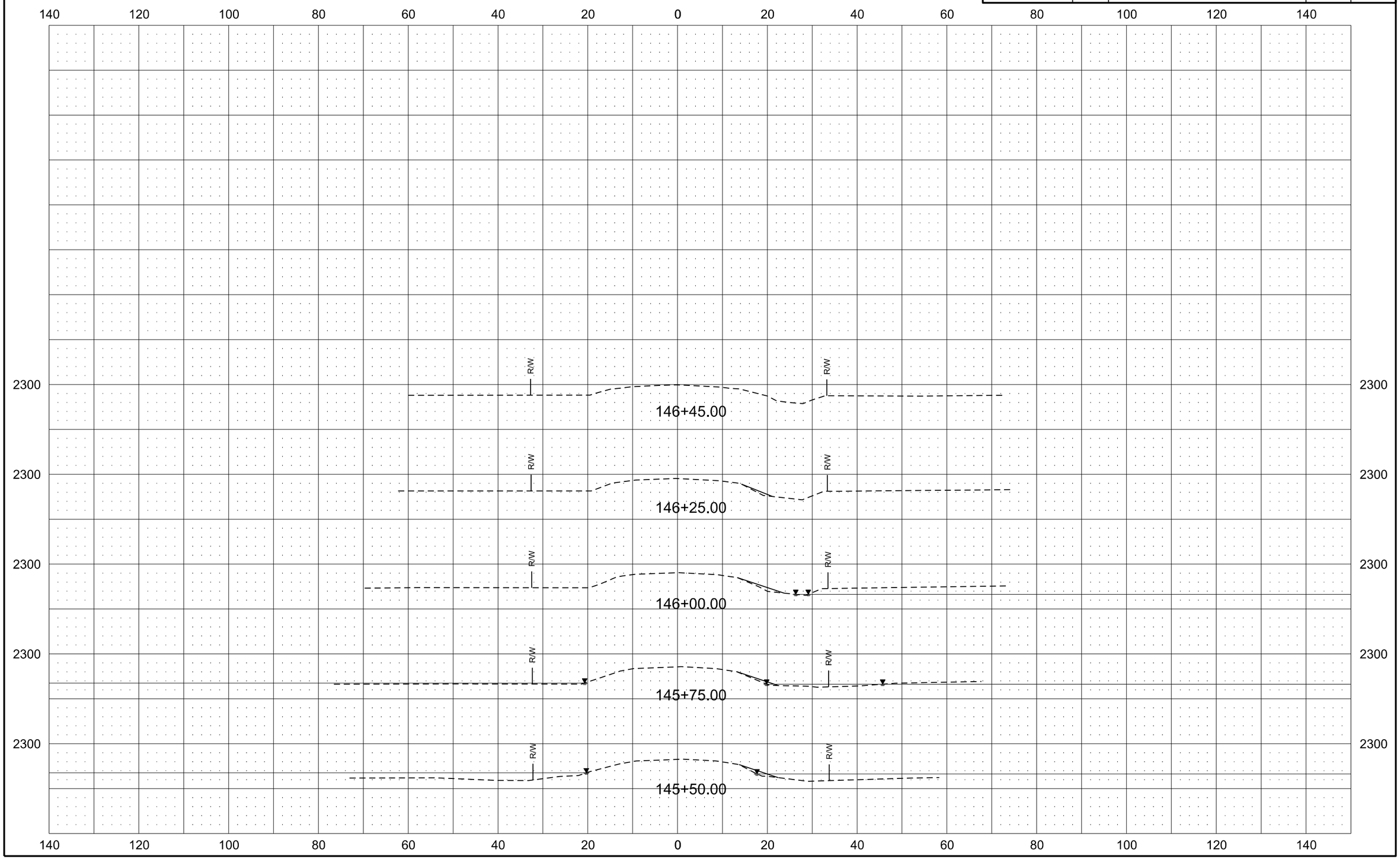
143+50.00

R/W

2290

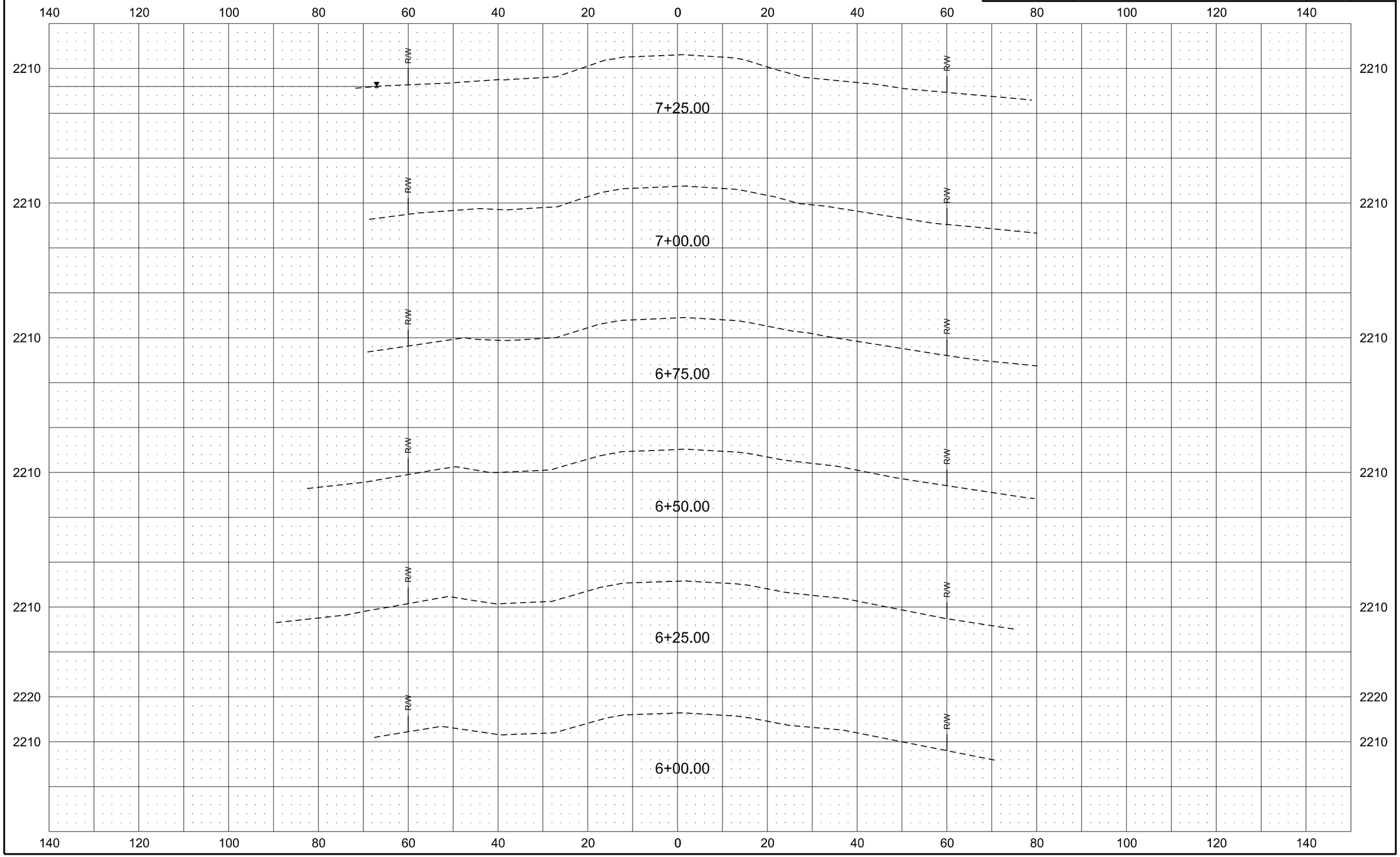
Alignment K-6N

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	81



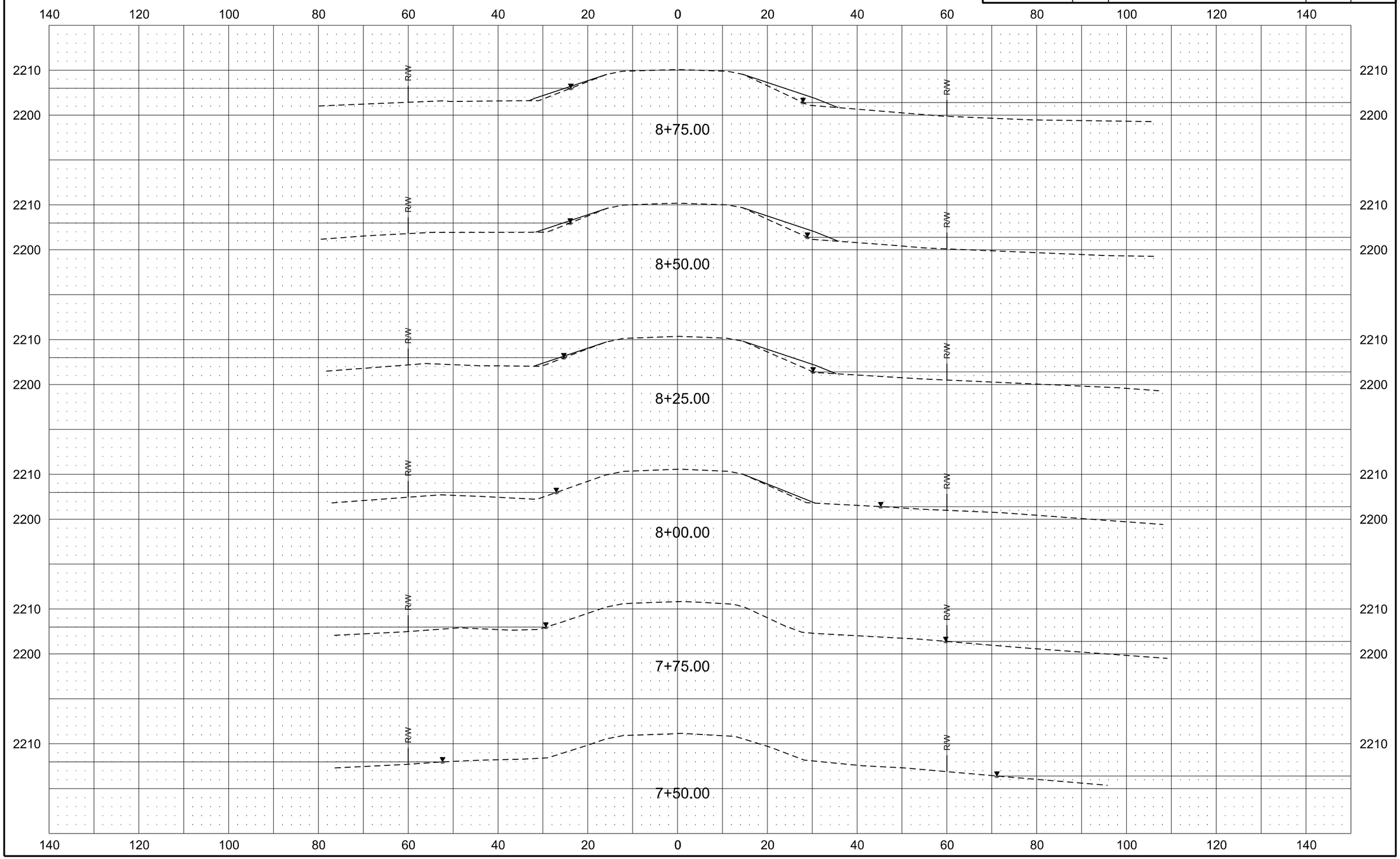
Alignment K-7

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	82



Alignment K-7

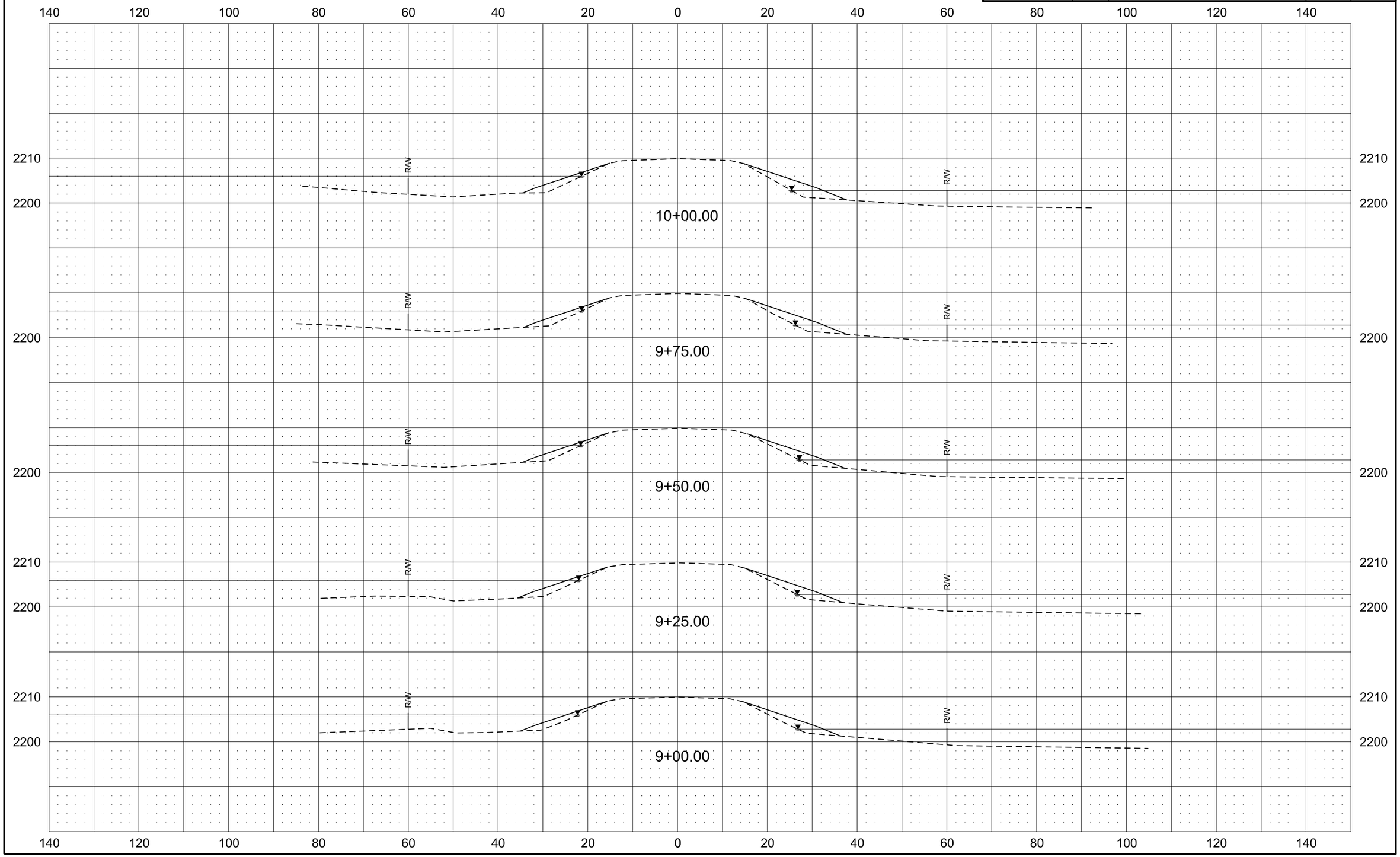
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	83



9/8/2017 11:57:15 AM cschatz N:\20732\ROM-0300(135)\Design\Mountrail\200_Xsec\200_Xsec_Sheets.dgn

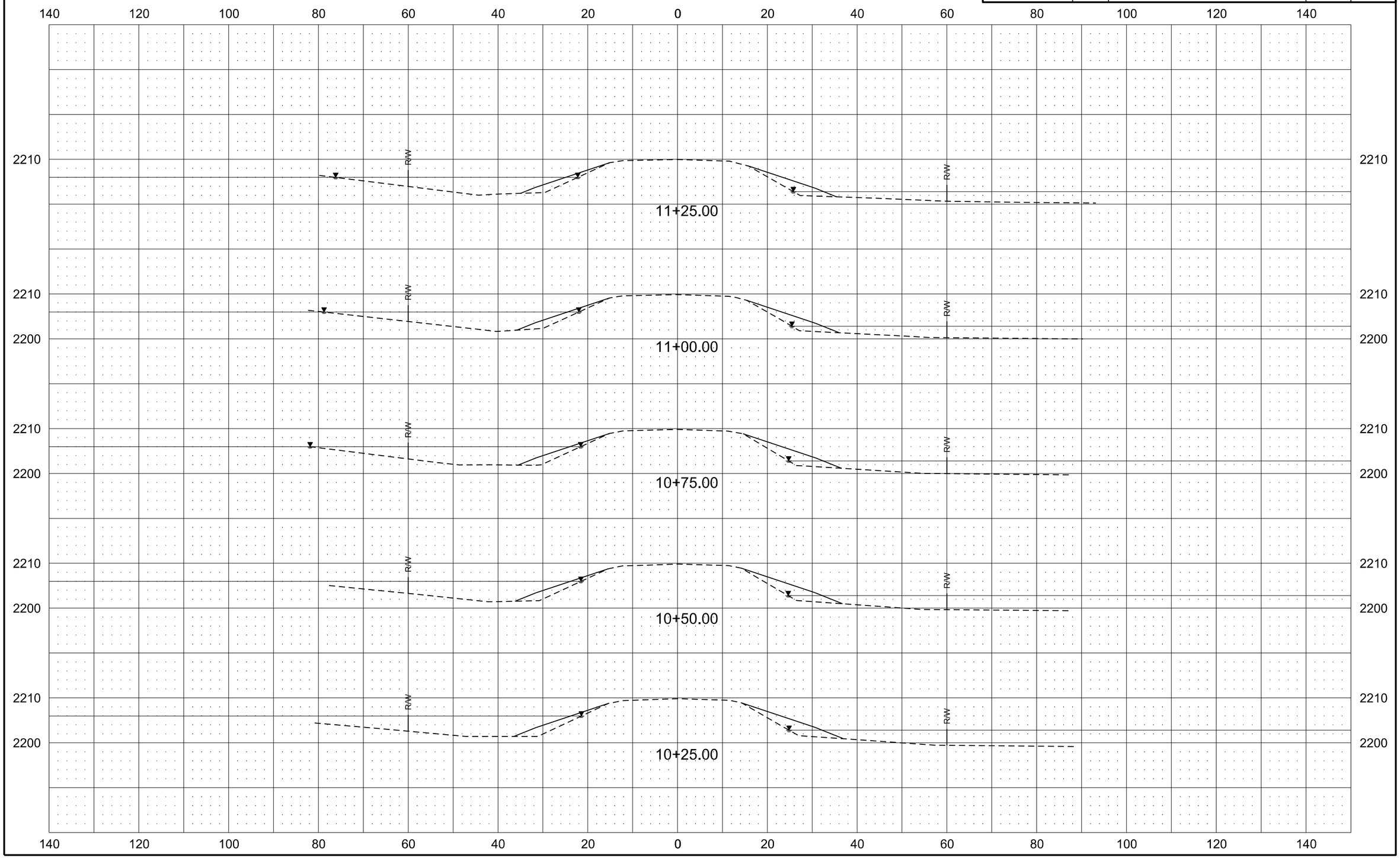
Alignment K-7

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	84



Alignment K-7

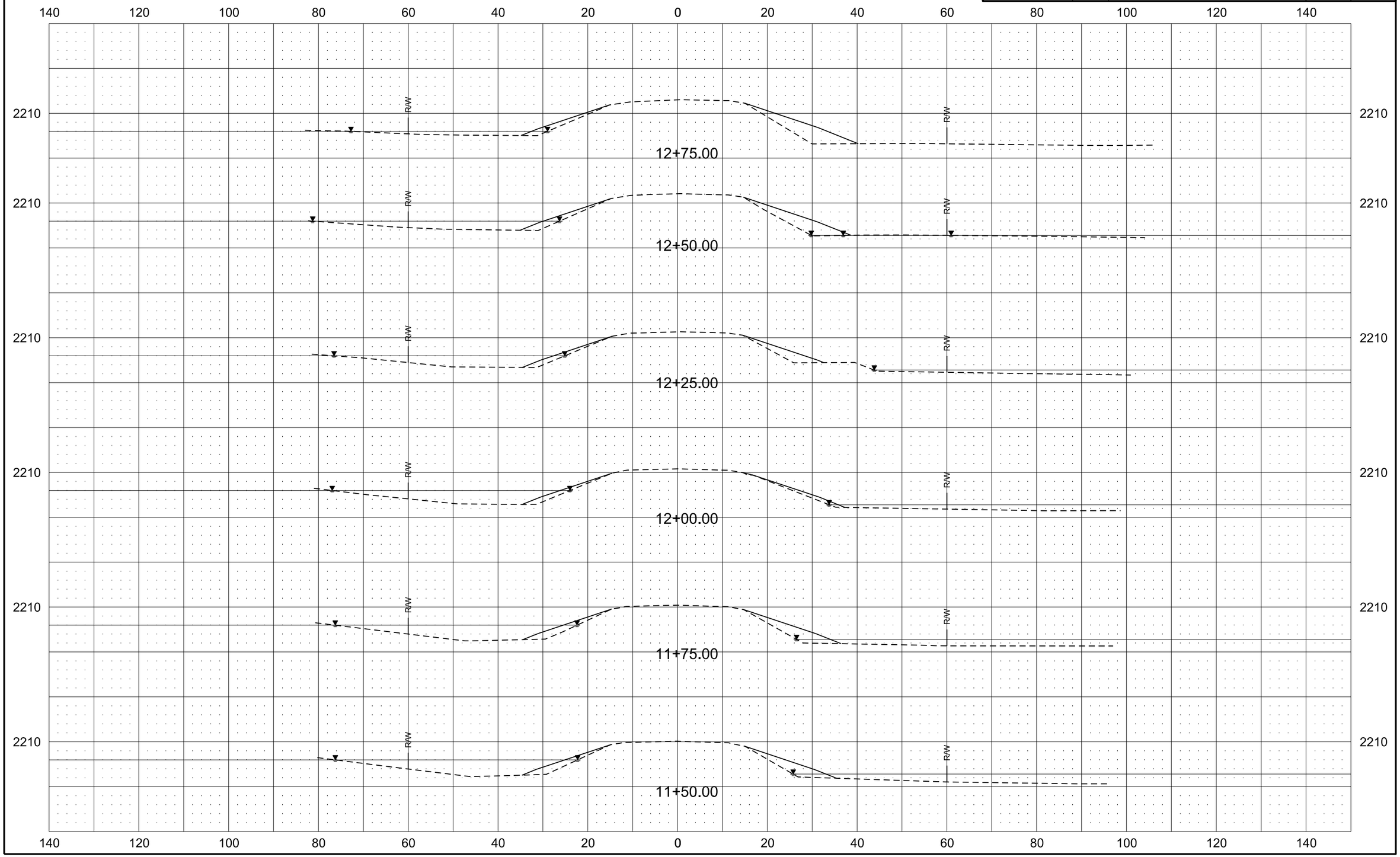
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	85



9/8/2017 11:57:23 AM cschatz N:\20732\ROM-0300(135)\Design\Mountrail\200_Xsec\200_Xsec_Sheets.dgn

Alignment K-7

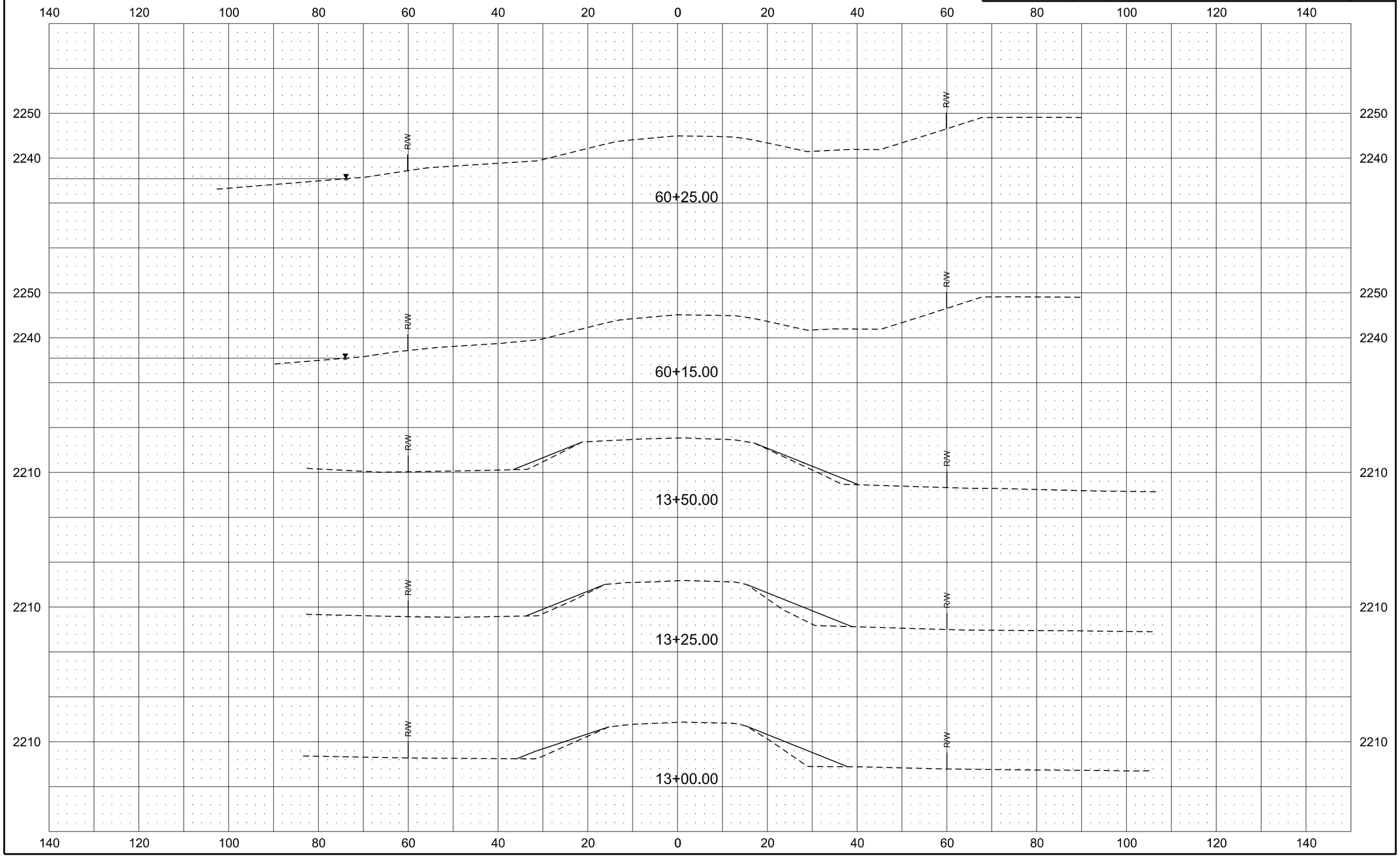
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	86



9/8/2017 11:57:28 AM cschatz N:\20732\ROM-0300(135)\Design\Mountrail\200_Xsec\200_Xsec_Sheets.dgn

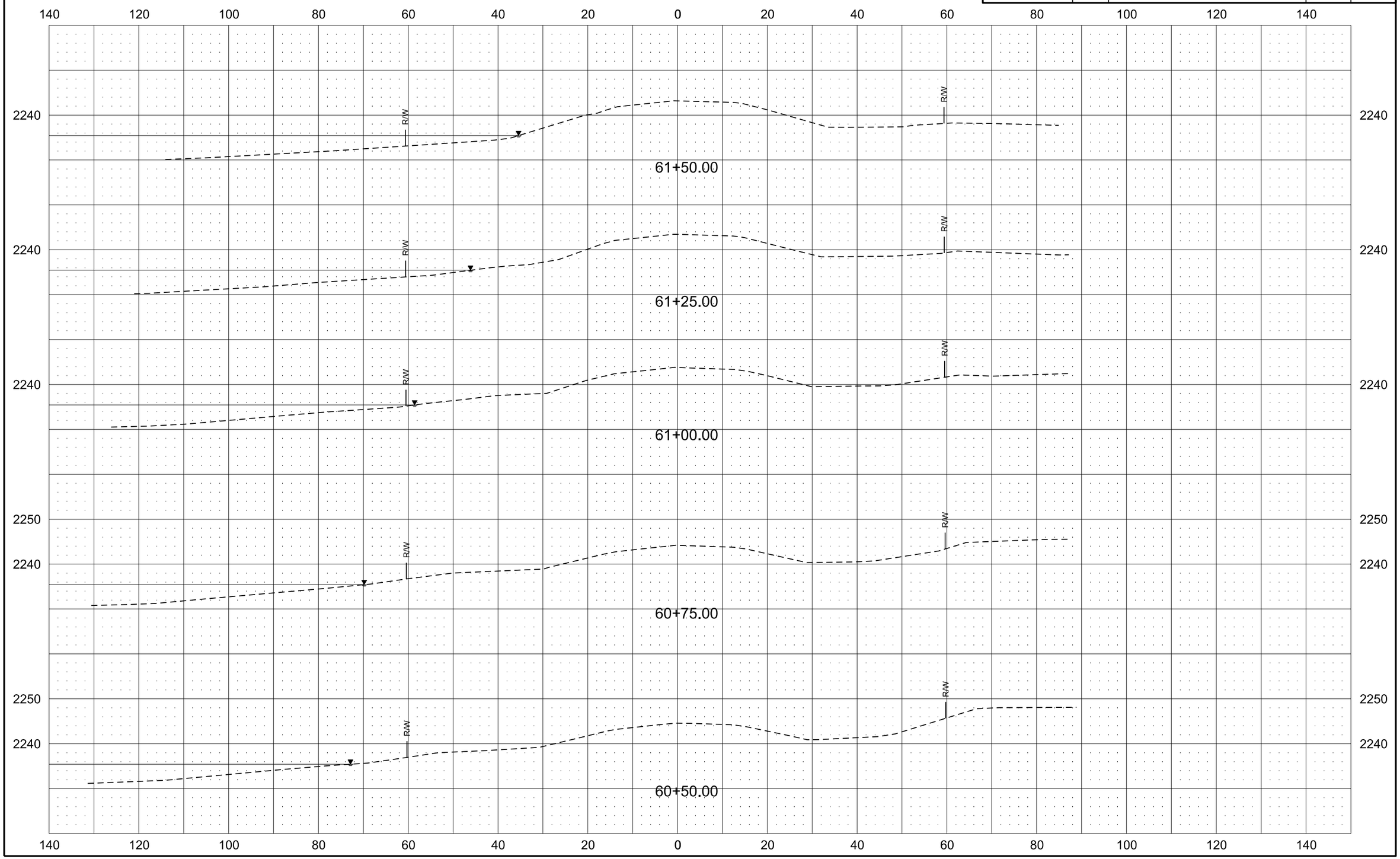
Alignment K-7

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	87



Alignment K-7

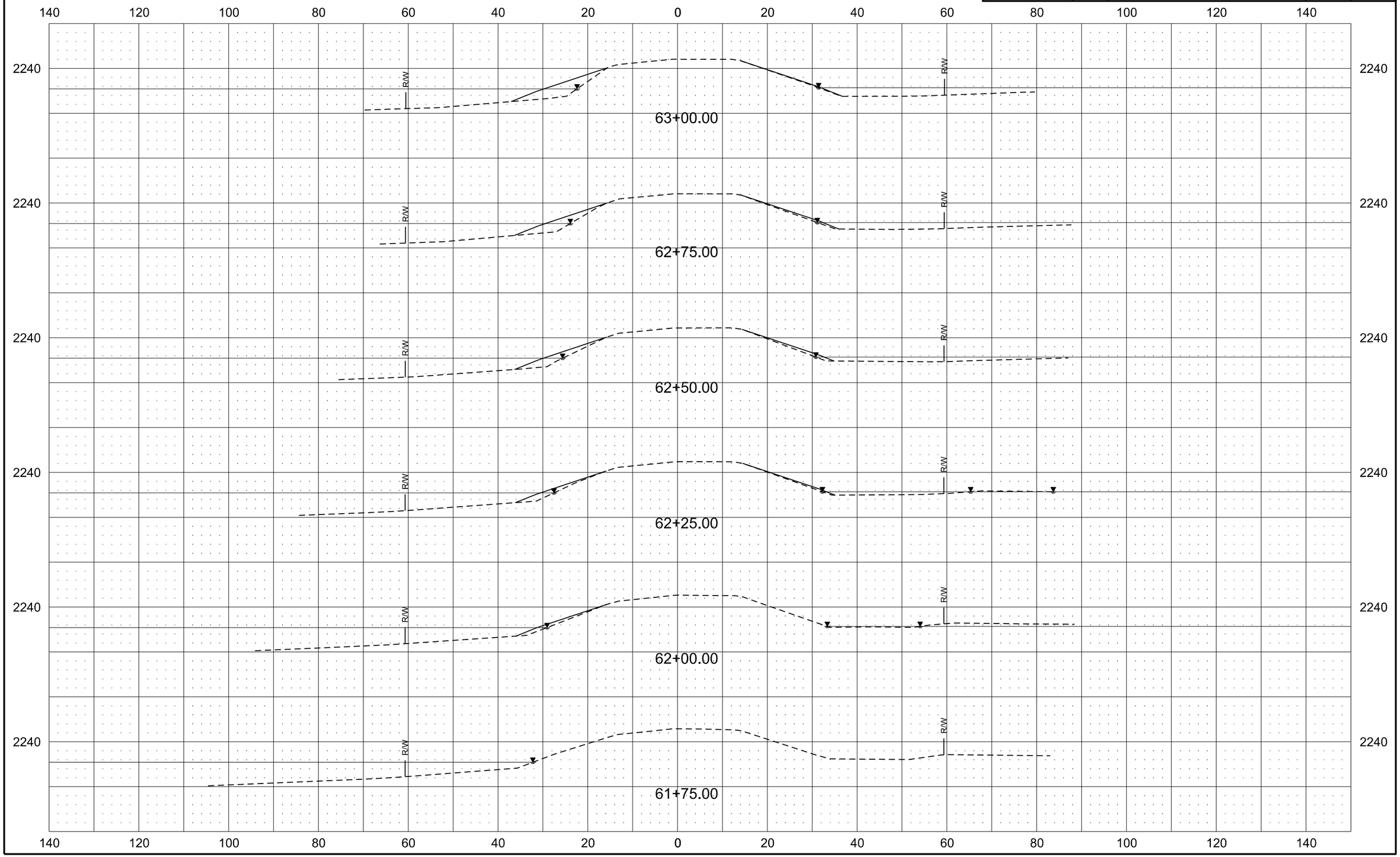
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	88



9/8/2017 11:57:36 AM cschatz N:\20732\ROM-0300(135)\Design\Mountrail\200_Xsec\200_Xsec_Sheets.dgn

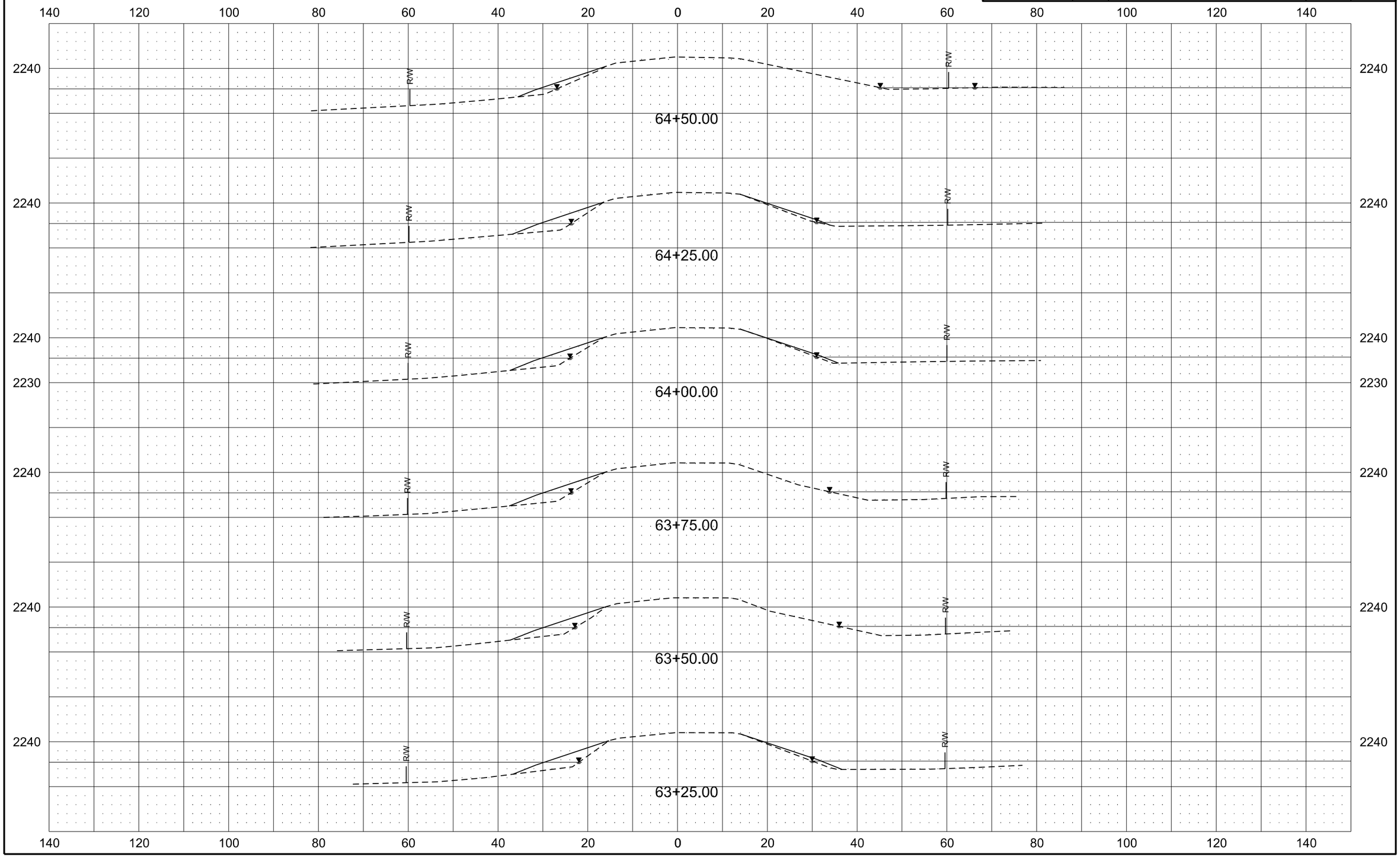
Alignment K-7

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	89



Alignment K-7

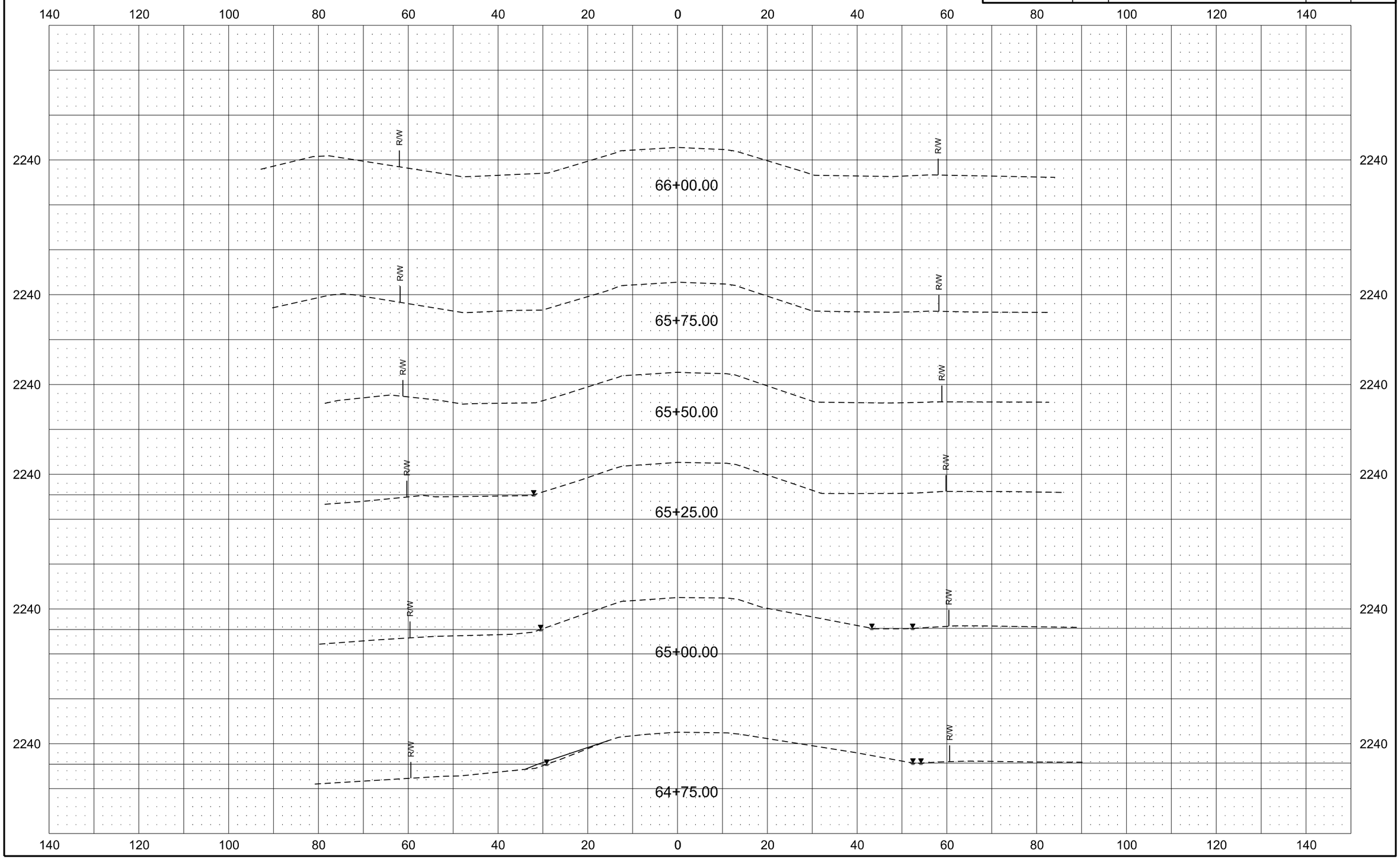
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	90



9/8/2017 11:57:44 AM cschatz N:\20732\ROM-0300(135)\Design\Mountrail\200_Xsec\200_Xsec_Sheets.dgn

Alignment K-7

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	91



Alignment K-7

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	92

140 120 100 80 60 40 20 0 20 40 60 80 100 120 140

2240

R/W

67+50.00

67+25.00

67+00.00

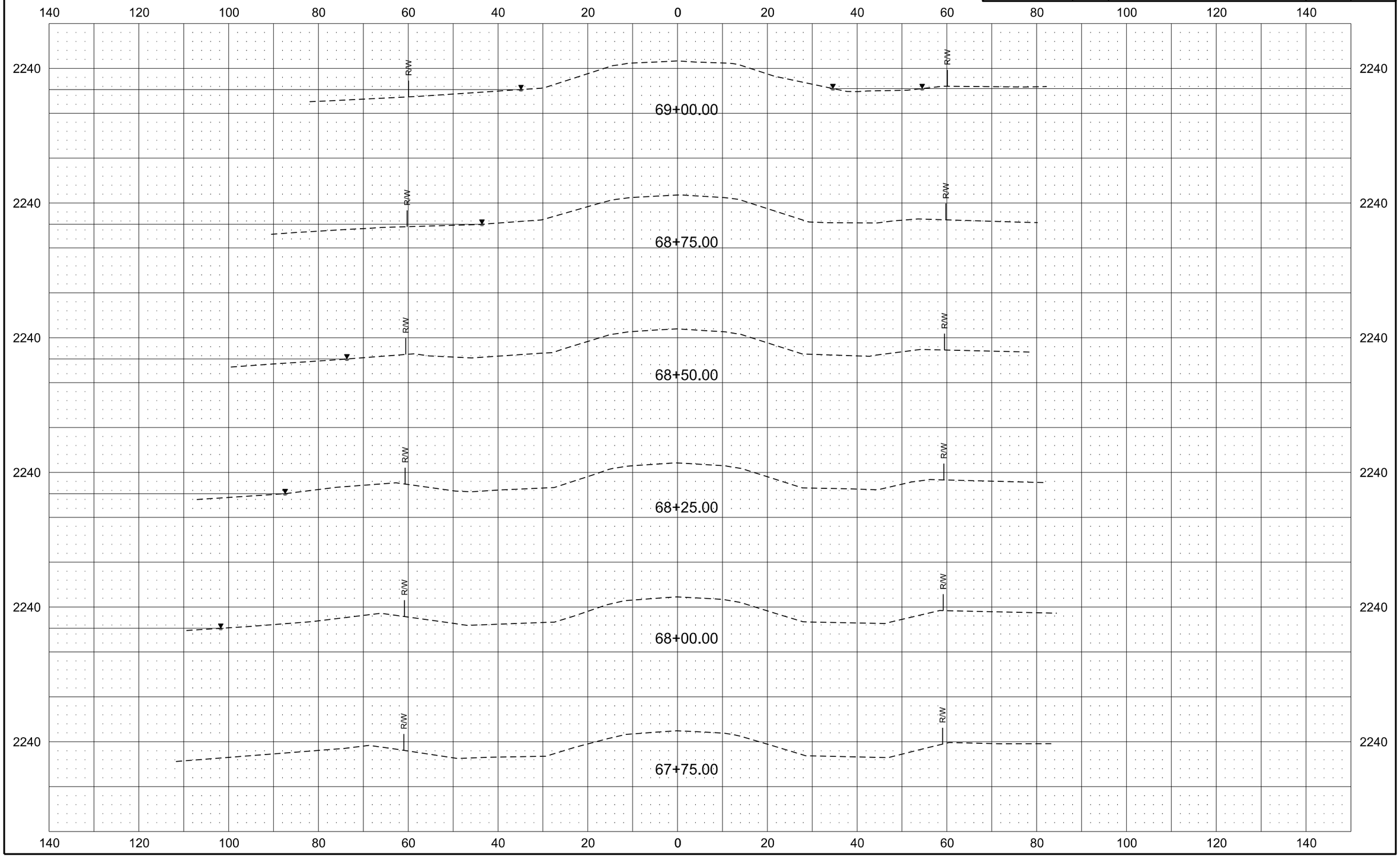
66+75.00

66+50.00

66+25.00

Alignment K-7

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	93



Alignment K-7

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	94

140 120 100 80 60 40 20 0 20 40 60 80 100 120 140

2240
2230

R/W

70+50.00

70+25.00

70+00.00

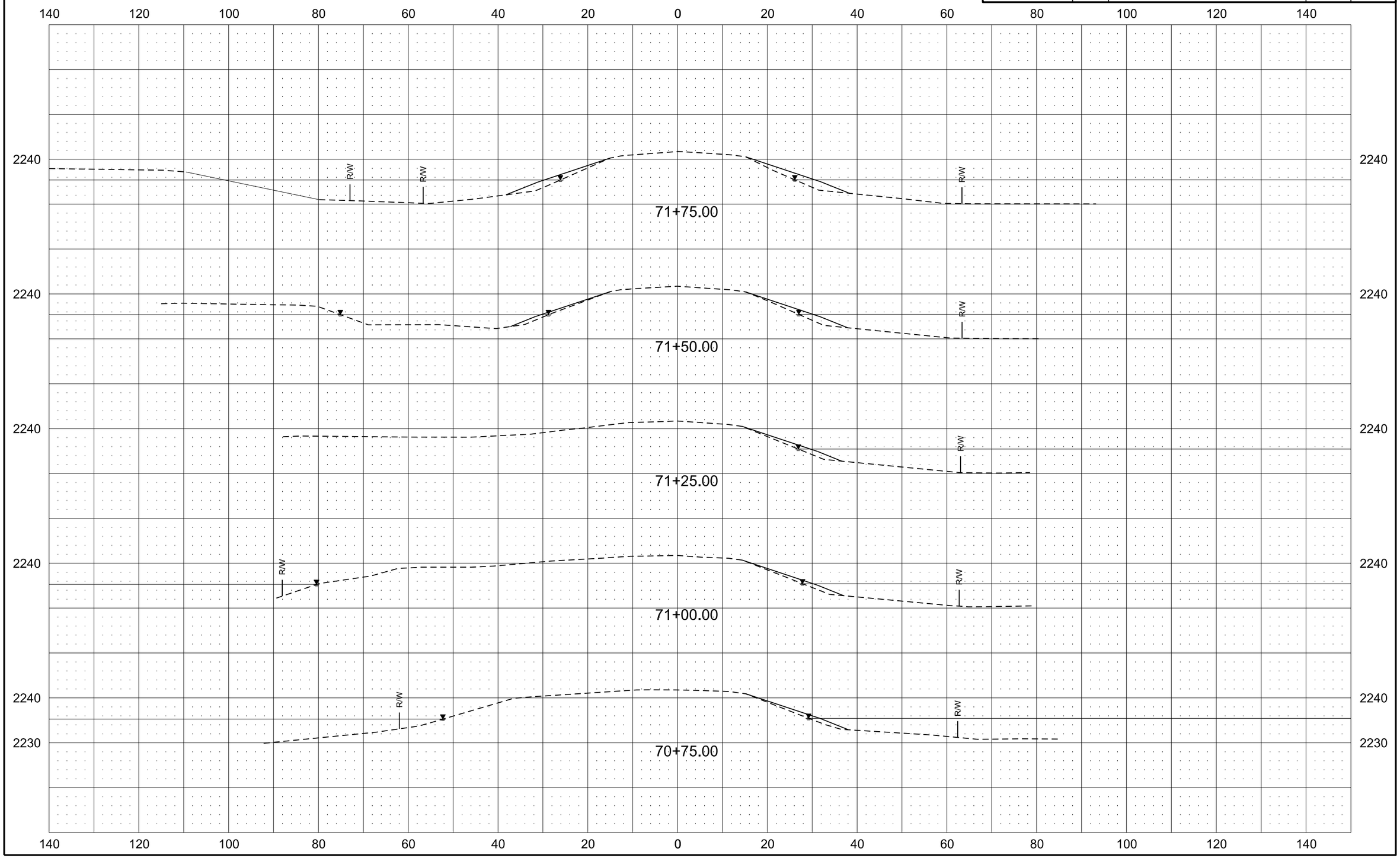
69+75.00

69+50.00

69+25.00

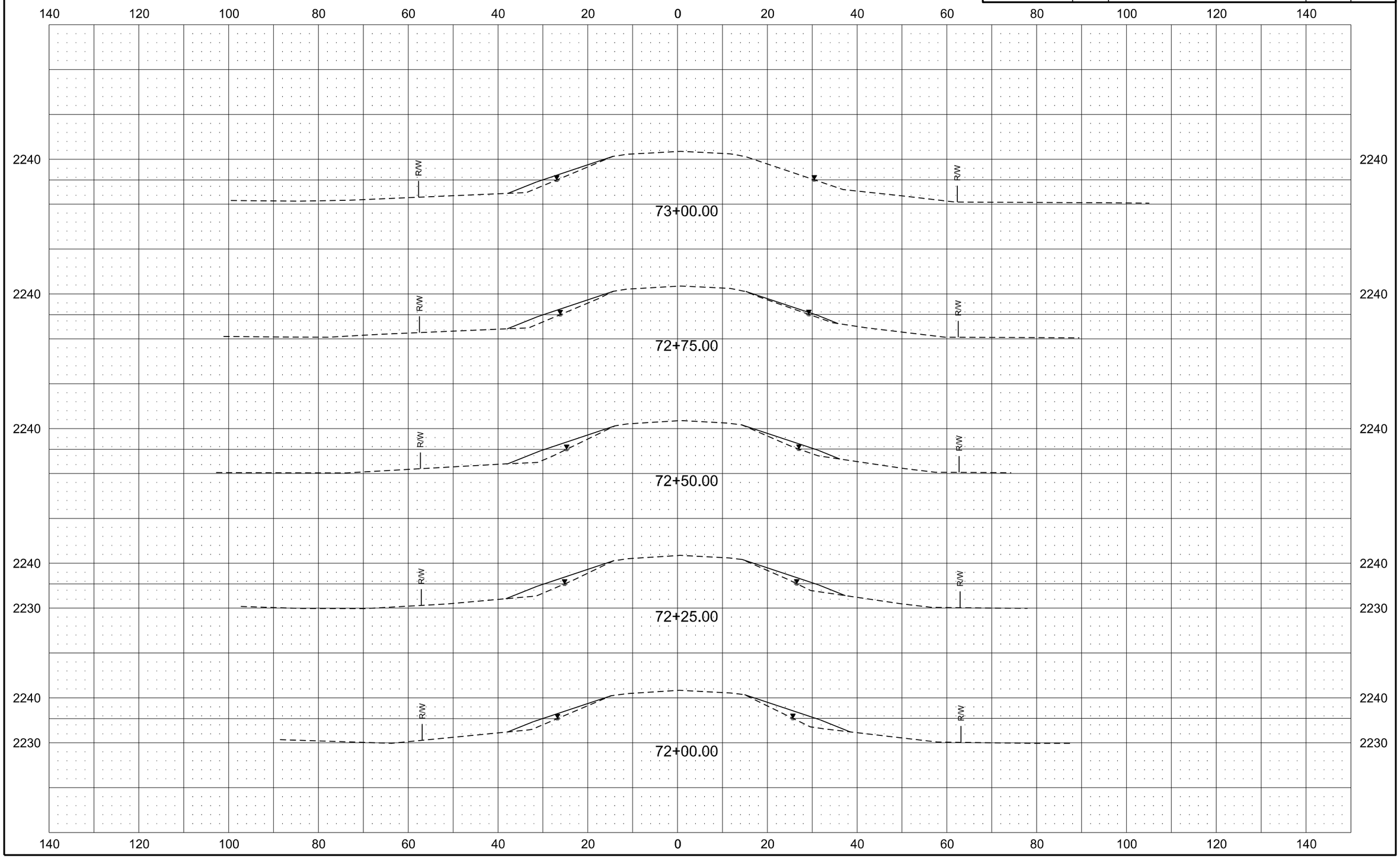
Alignment K-7

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	95



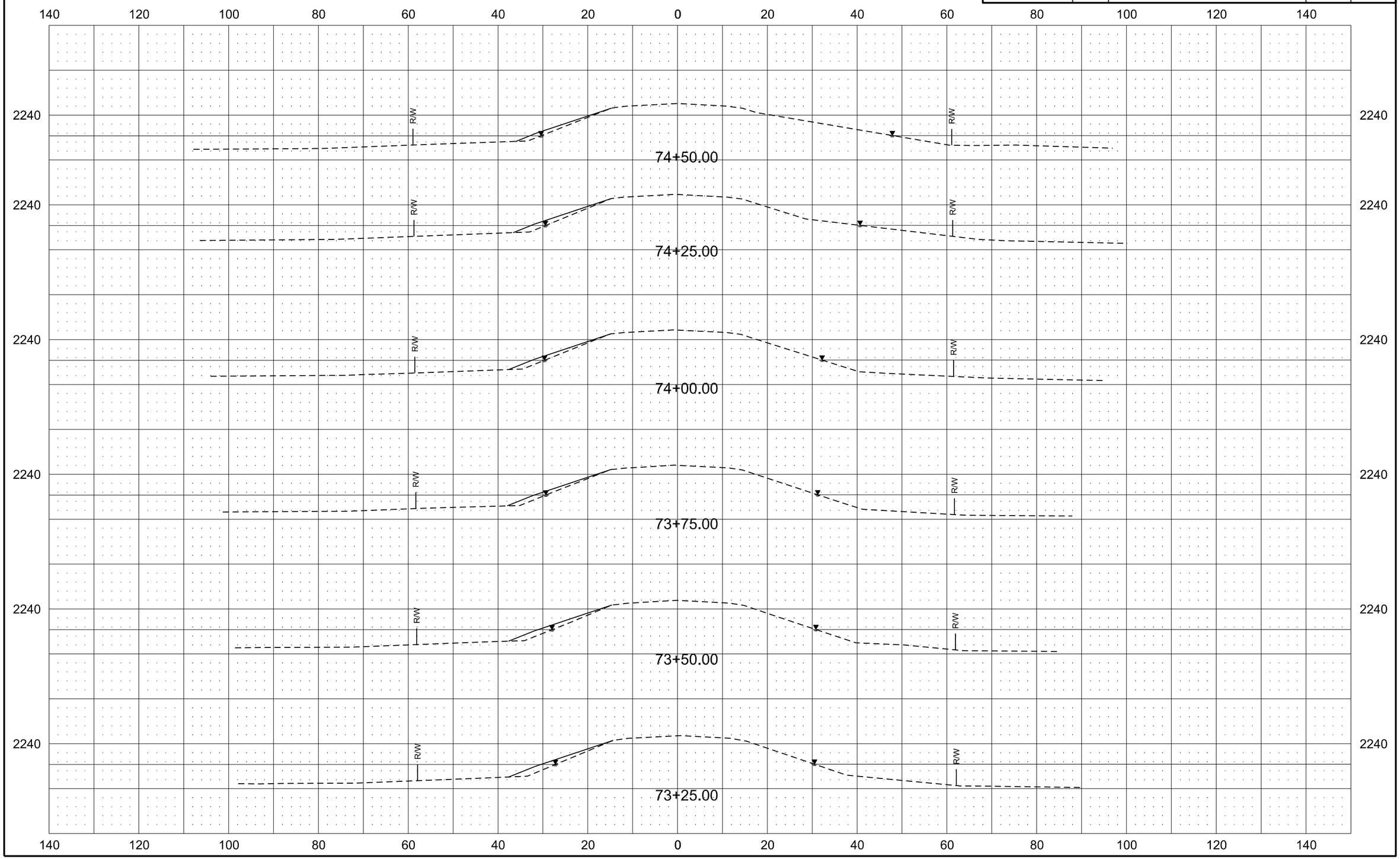
Alignment K-7

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	96



Alignment K-7

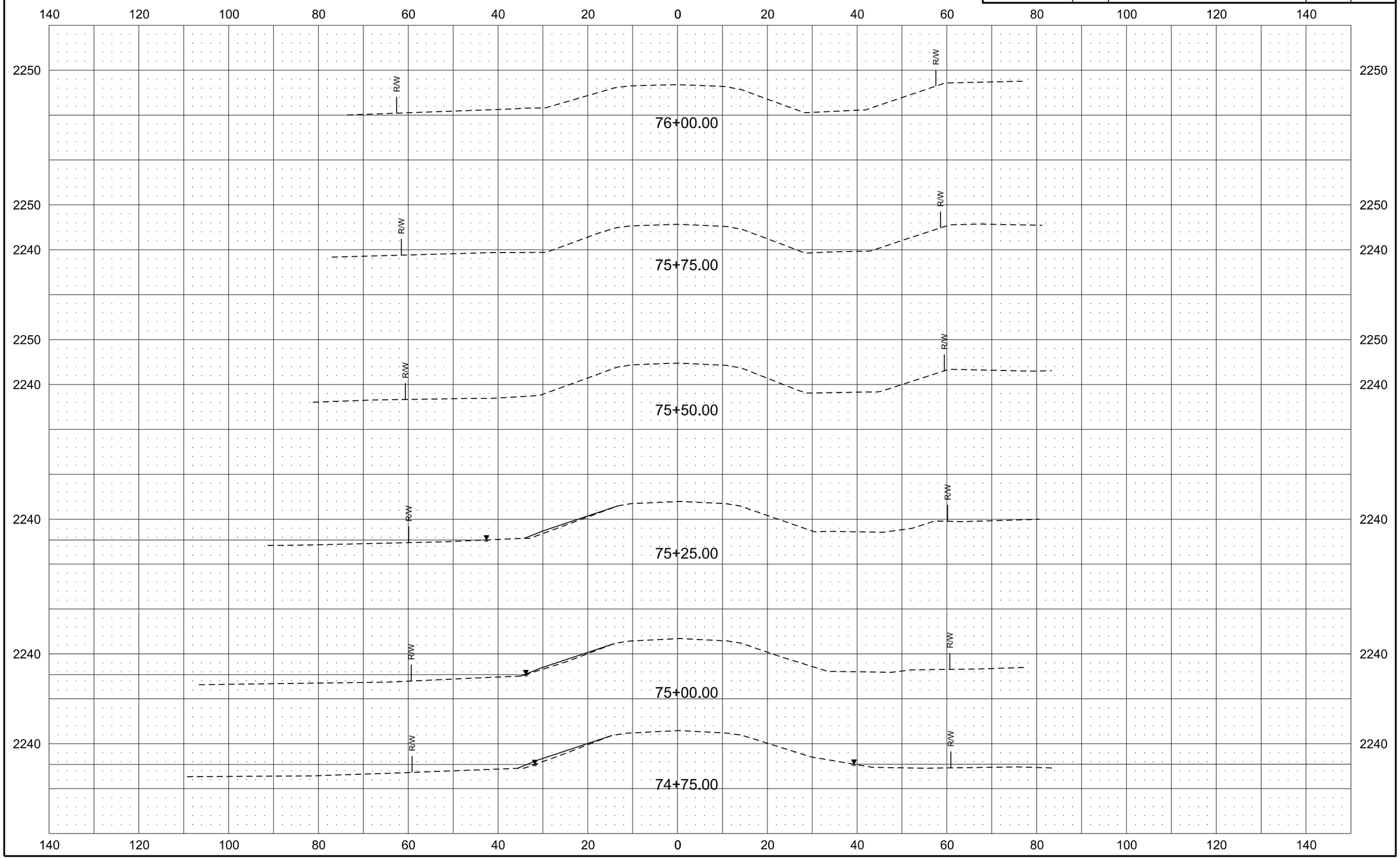
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	97



9/8/2017 11:58:14 AM cschatz N:\20732\ROM-0300(135)\Design\Mountrail\200_Xsec\200_Xsec_Sheets.dgn

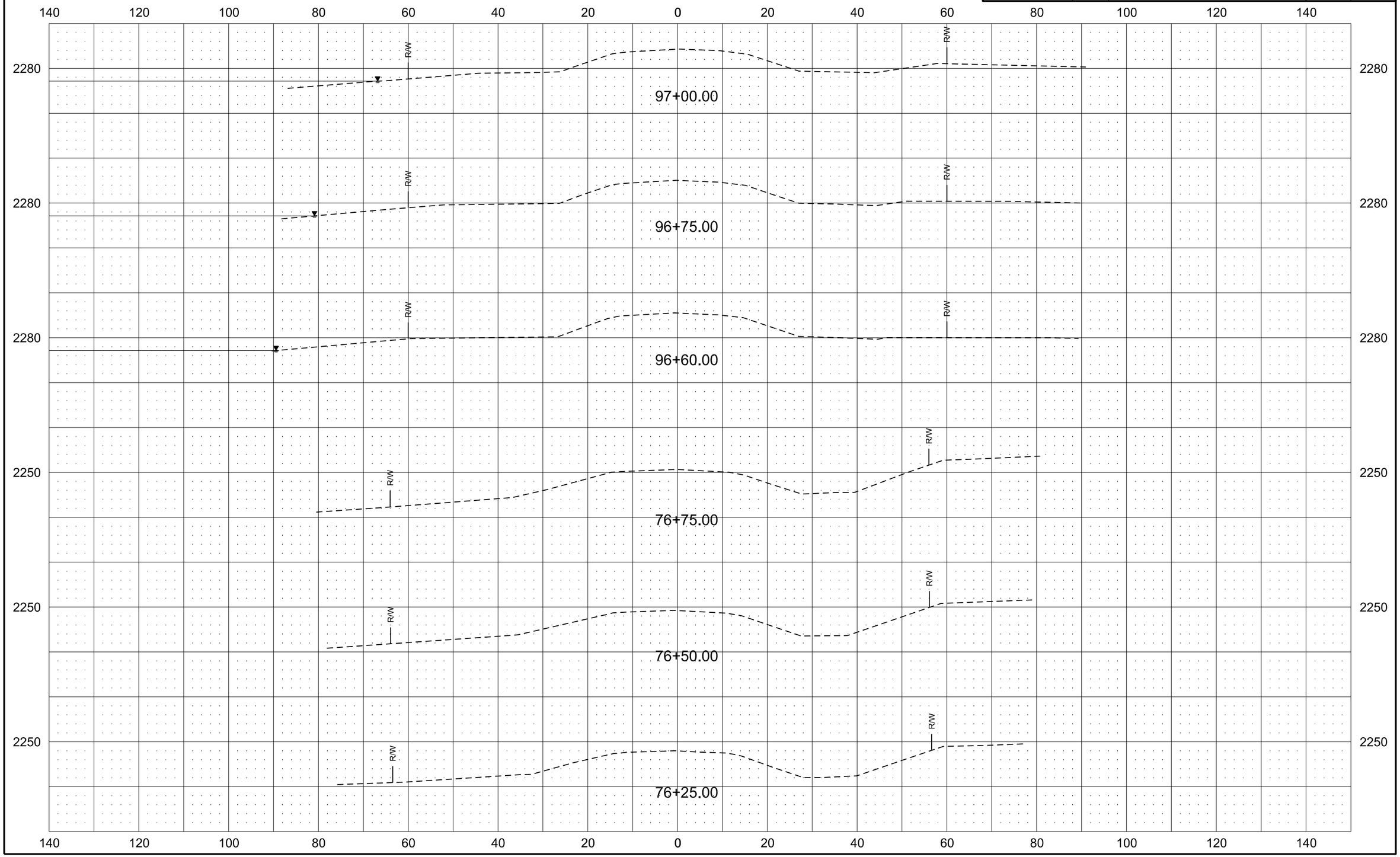
Alignment K-7

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	98



Alignment K-7

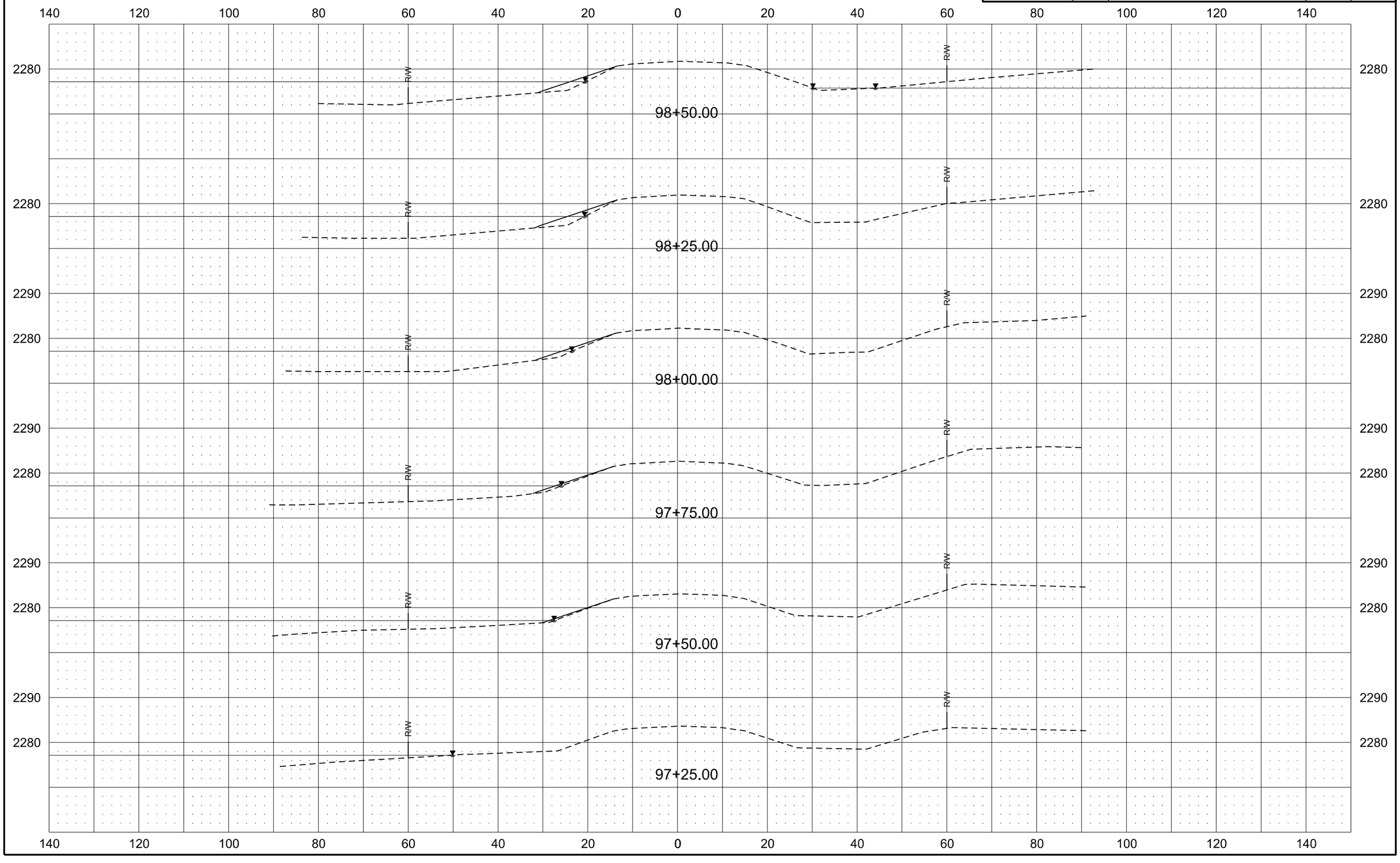
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	99



9/8/2017 11:58:22 AM cschatz N:\20732\ROM-0300(135)\Design\Mountrail\200_Xsec\200_Xsec_Sheets.dgn

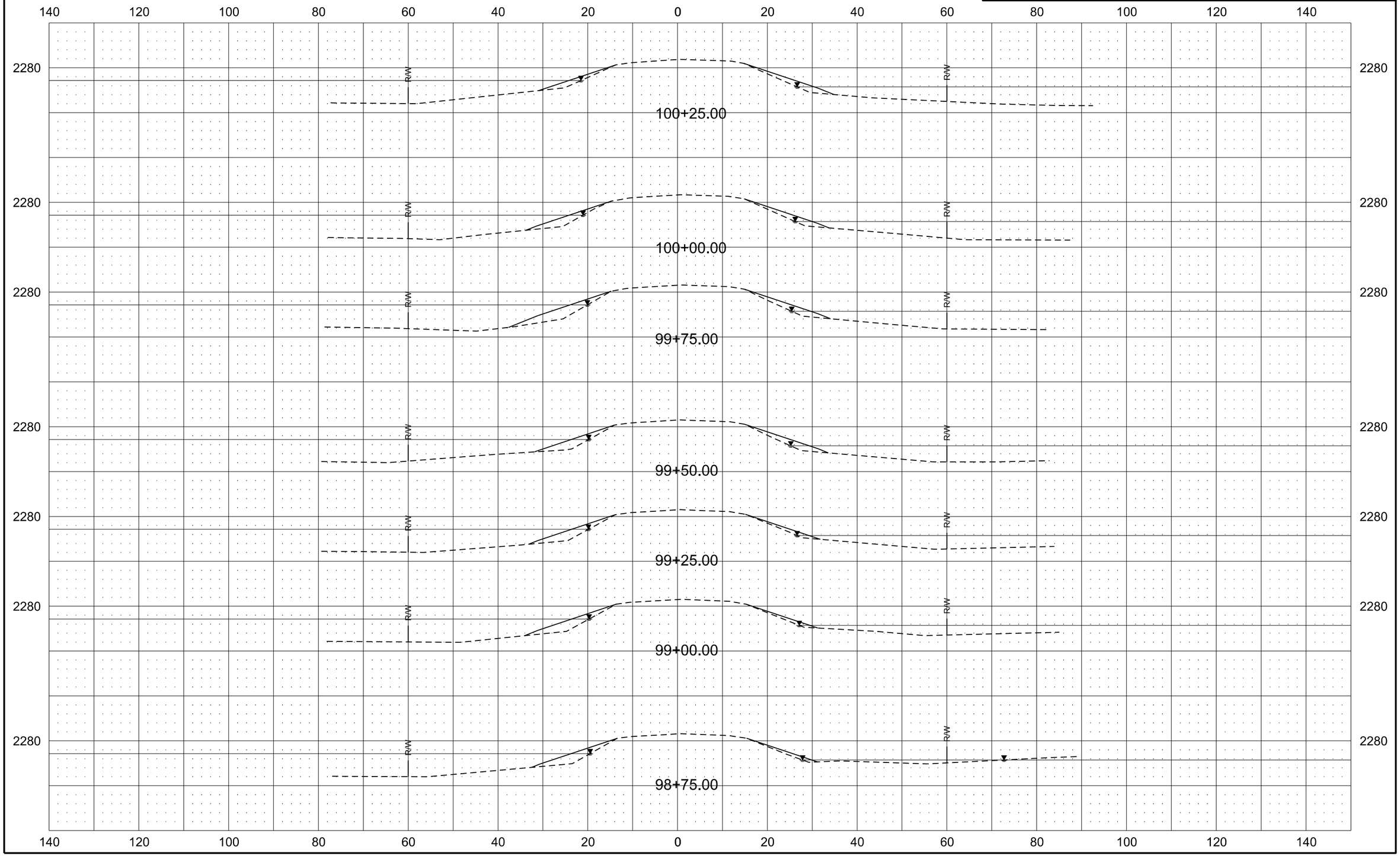
Alignment K-7

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	100



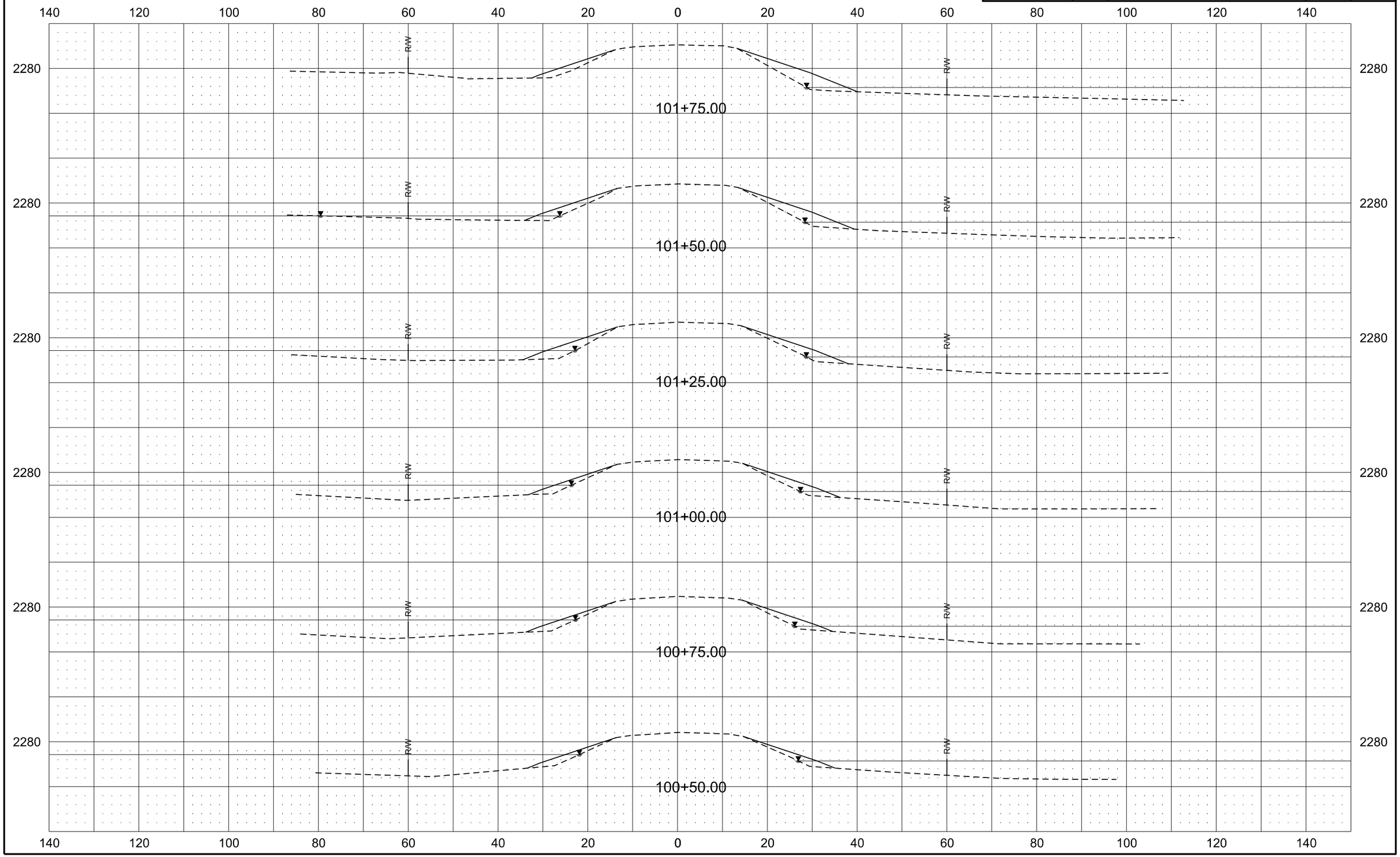
Alignment K-7

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	101



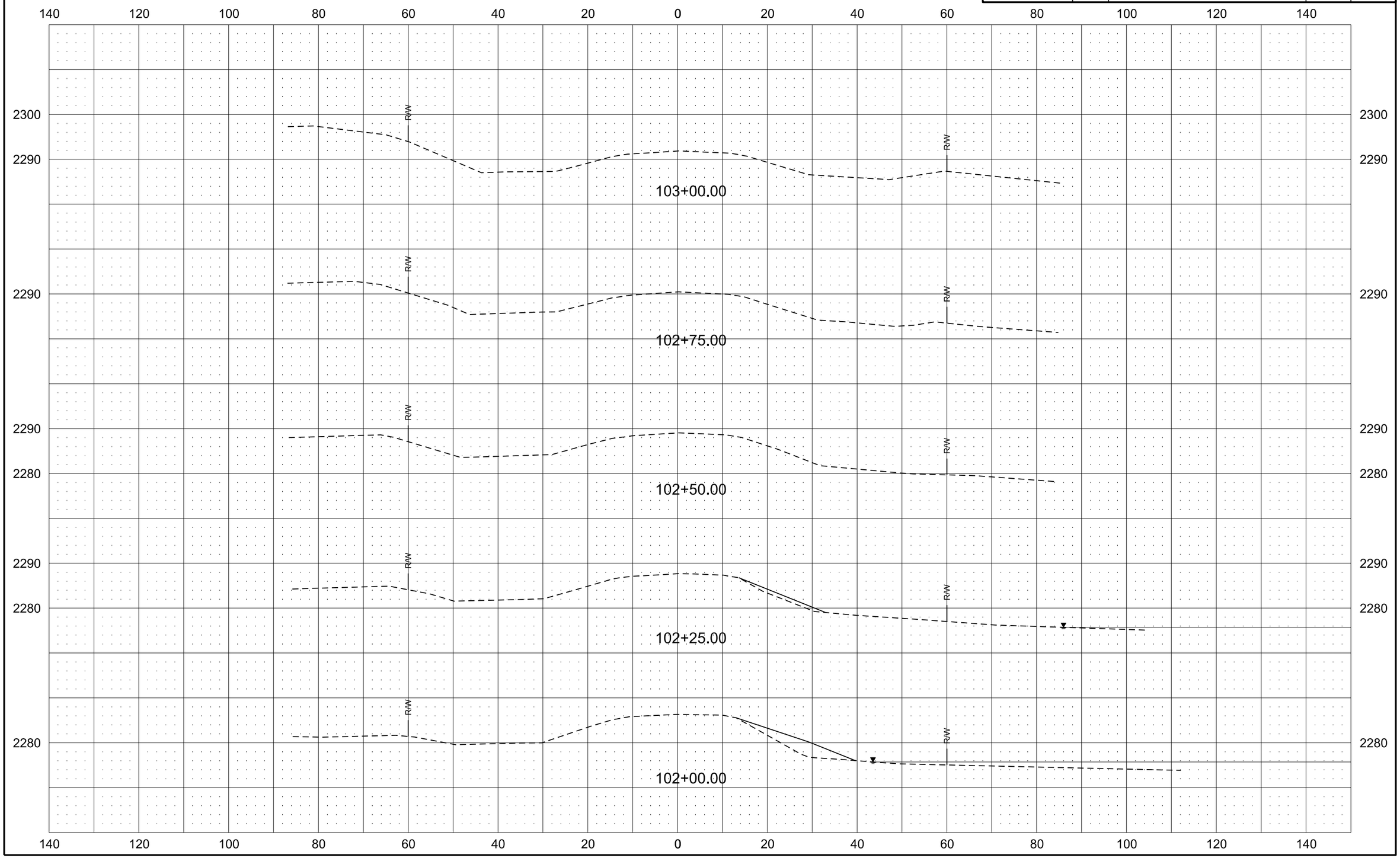
Alignment K-7

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	102



Alignment K-7

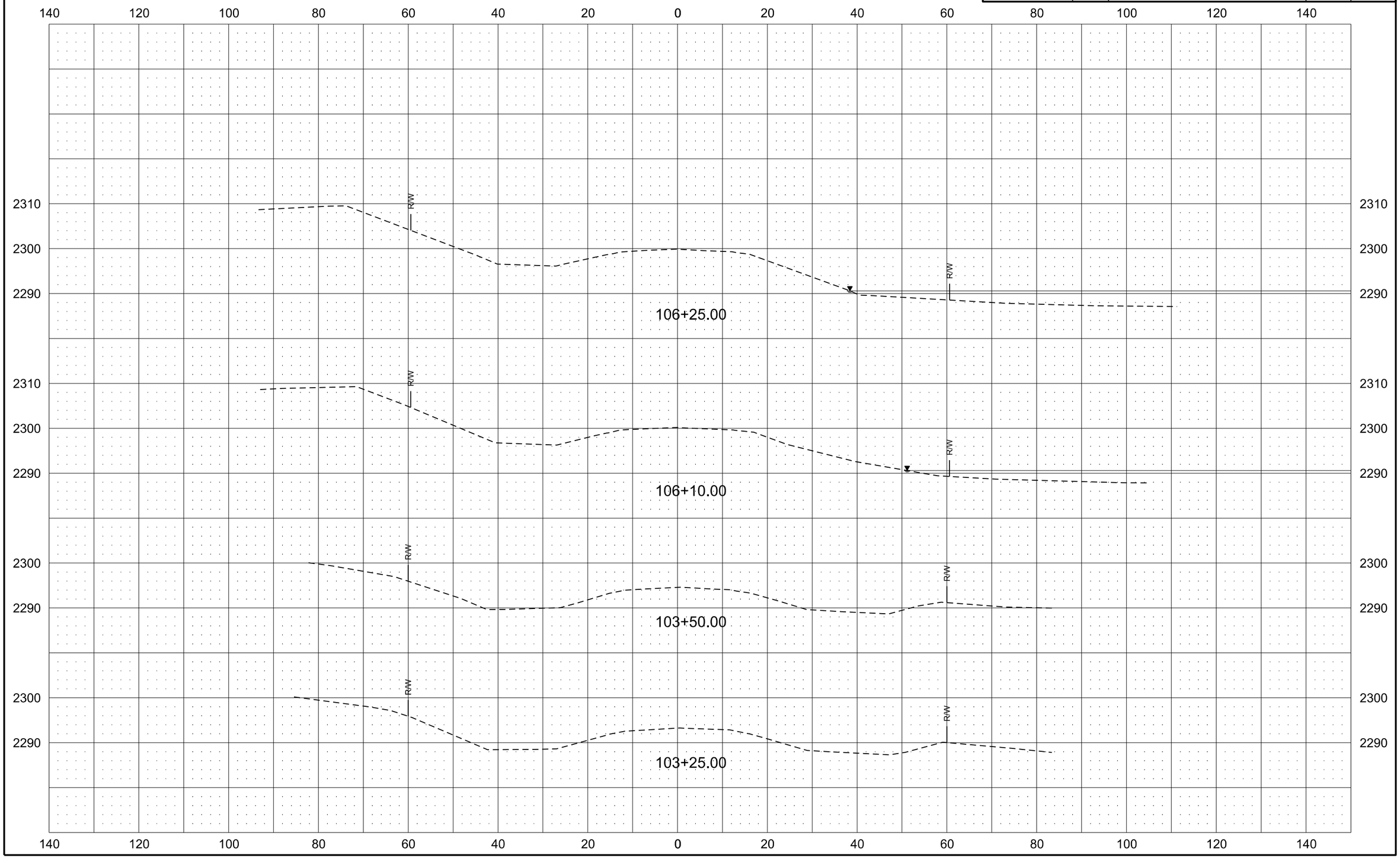
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	103



9/8/2017 11:58:39 AM cschatz N:\20732\ROM-0300(135)\Design\Mountrail\200_Xsec\200_Xsec_Sheets.dgn

Alignment K-7

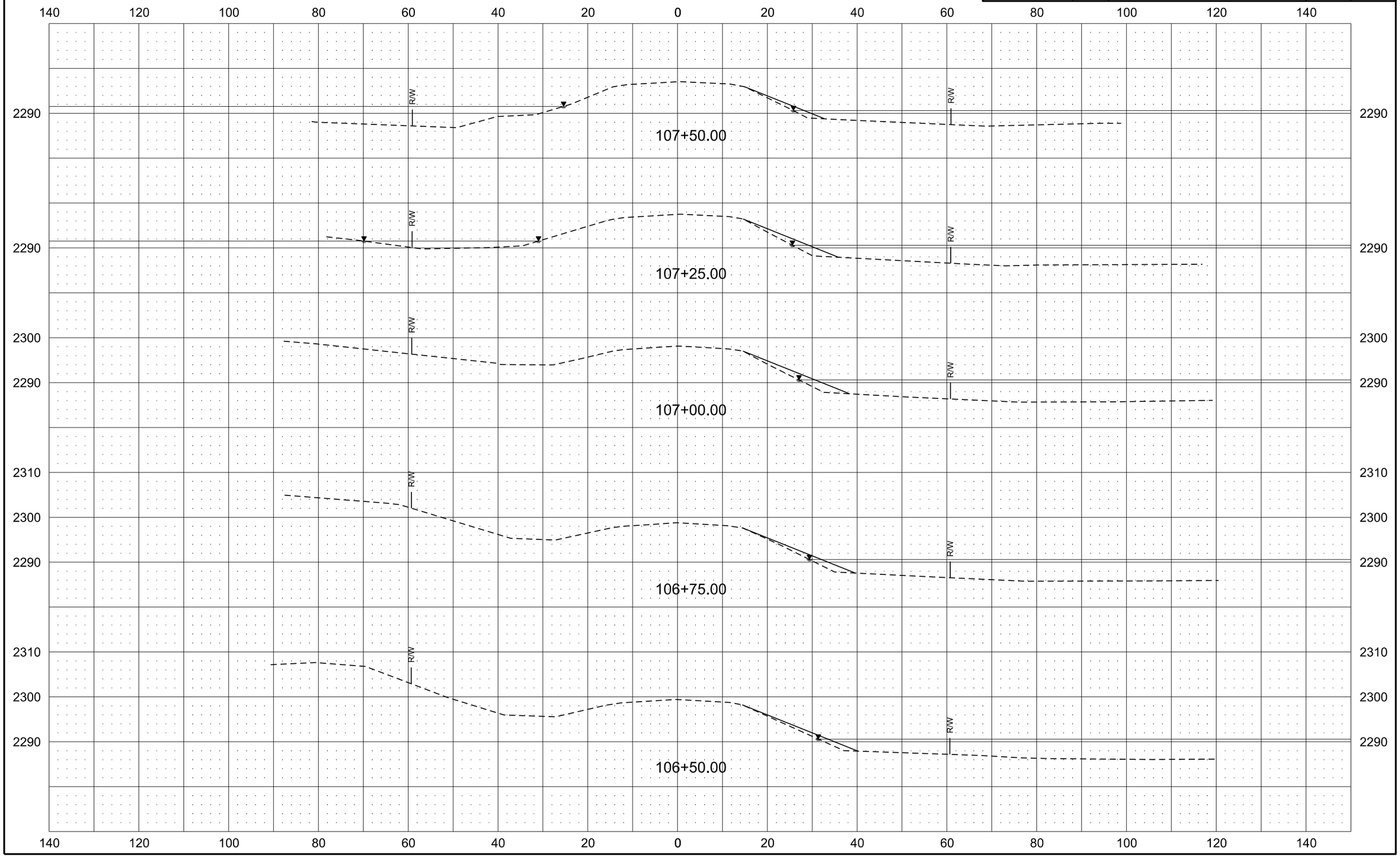
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	104



9/8/2017 11:58:43 AM cschatz N:\20732\ROM-0300(135)\Design\Mountrail\200_Xsec\200_Xsec_Sheets.dgn

Alignment K-7

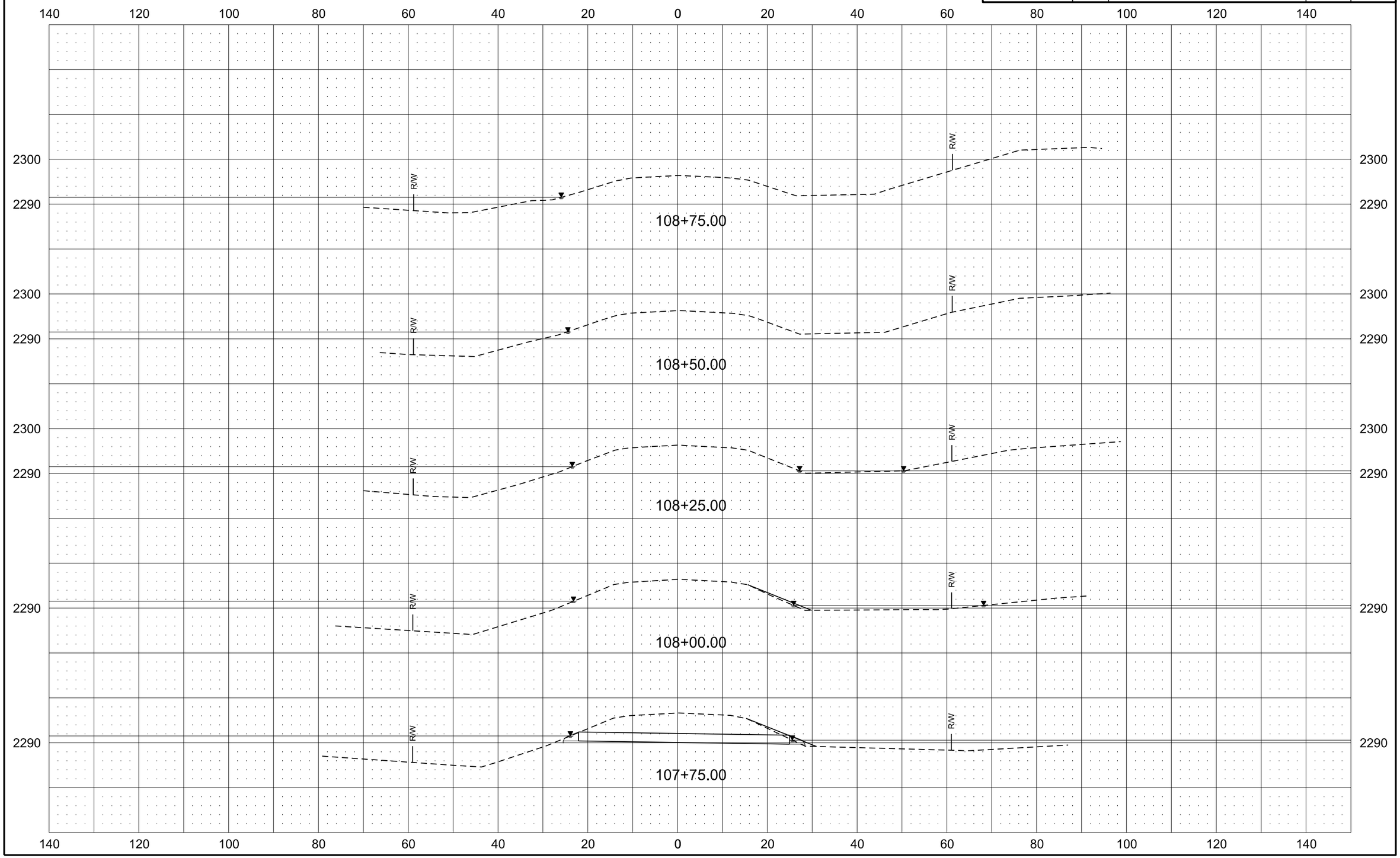
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	105



9/8/2017 11:58:47 AM cschatz N:\20732\ROM-0300(135)\Design\Mountrail\200_Xsec\200_Xsec_Sheets.dgn

Alignment K-7

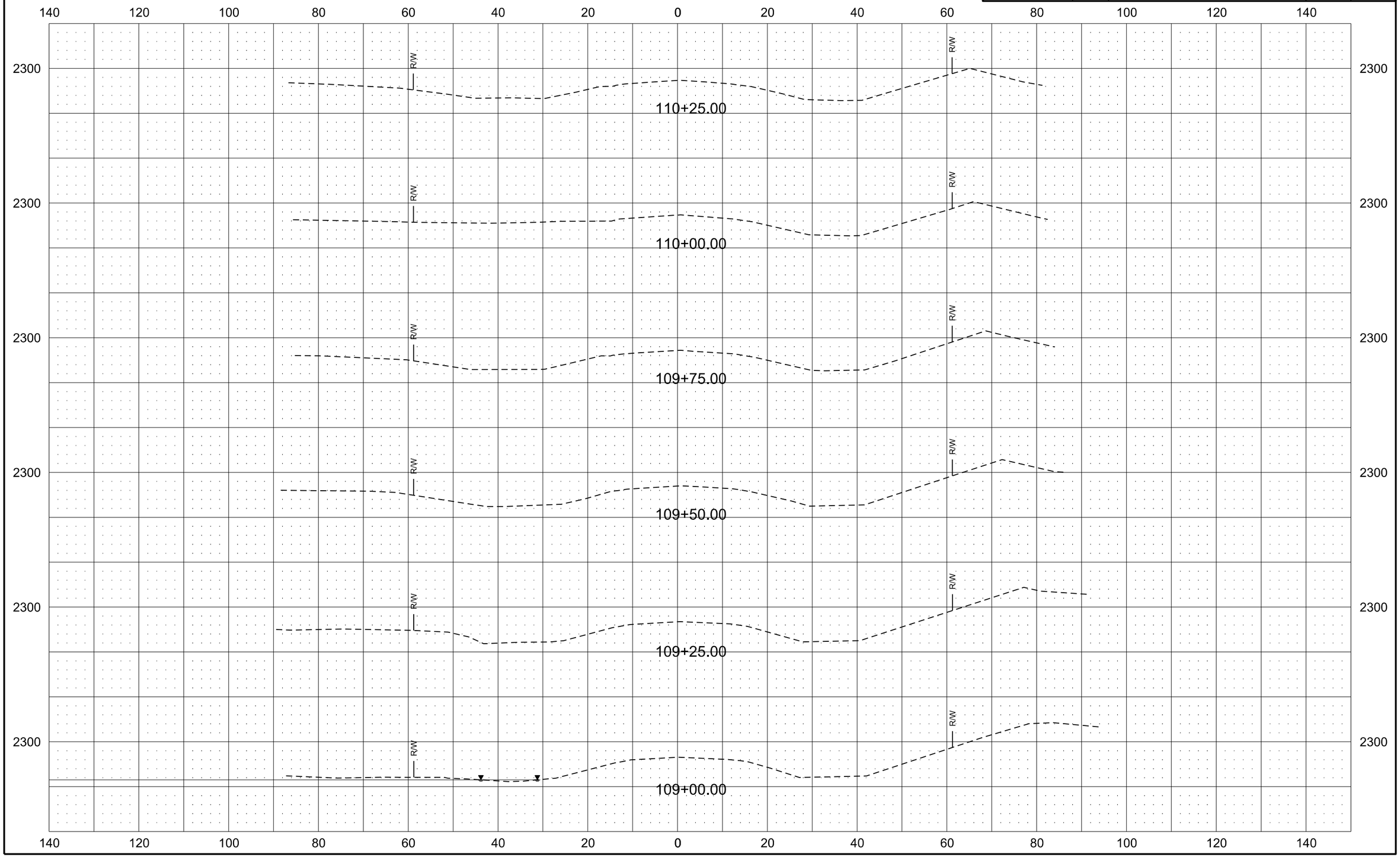
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	106



9/8/2017 11:58:52 AM cschatz N:\20732\ROM-0300(135)\Design\Mountrail\200_Xsec\200_Xsec_Sheets.dgn

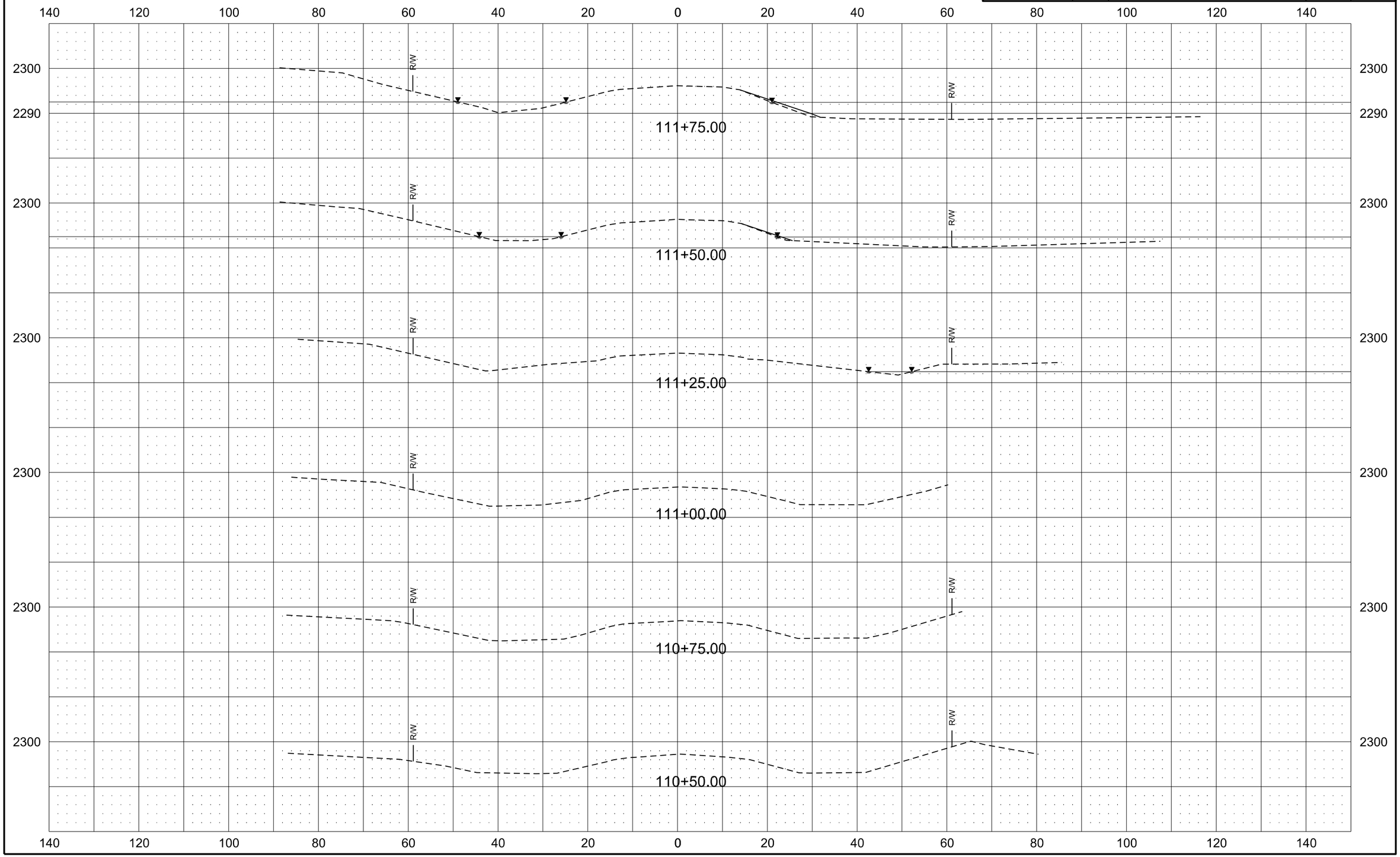
Alignment K-7

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	107



Alignment K-7

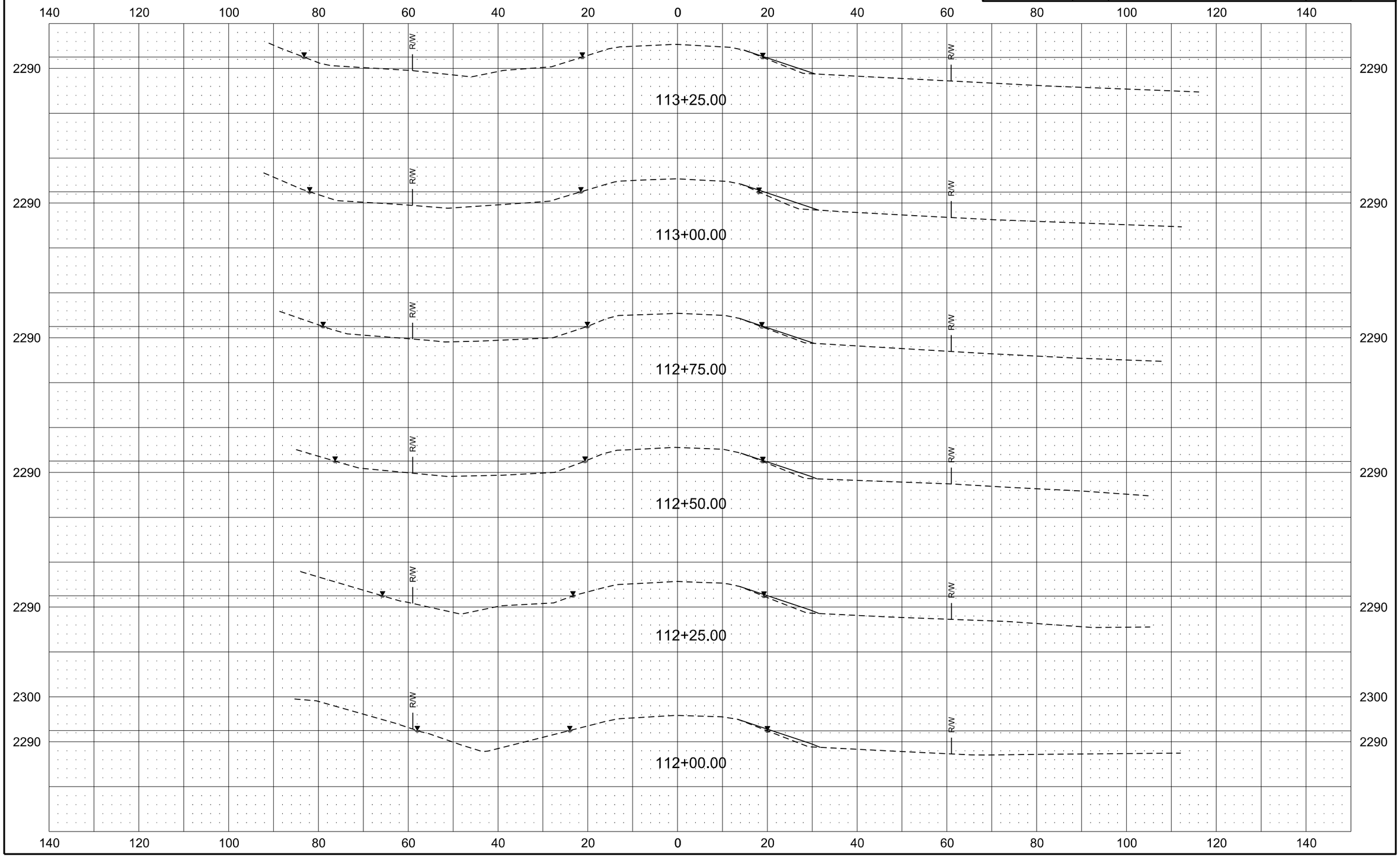
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	108



9/8/2017 11:59:00 AM cschatz N:\20732\ROM-0300(135)\Design\Mountrail\200_Xsec\200_Xsec_Sheets.dgn

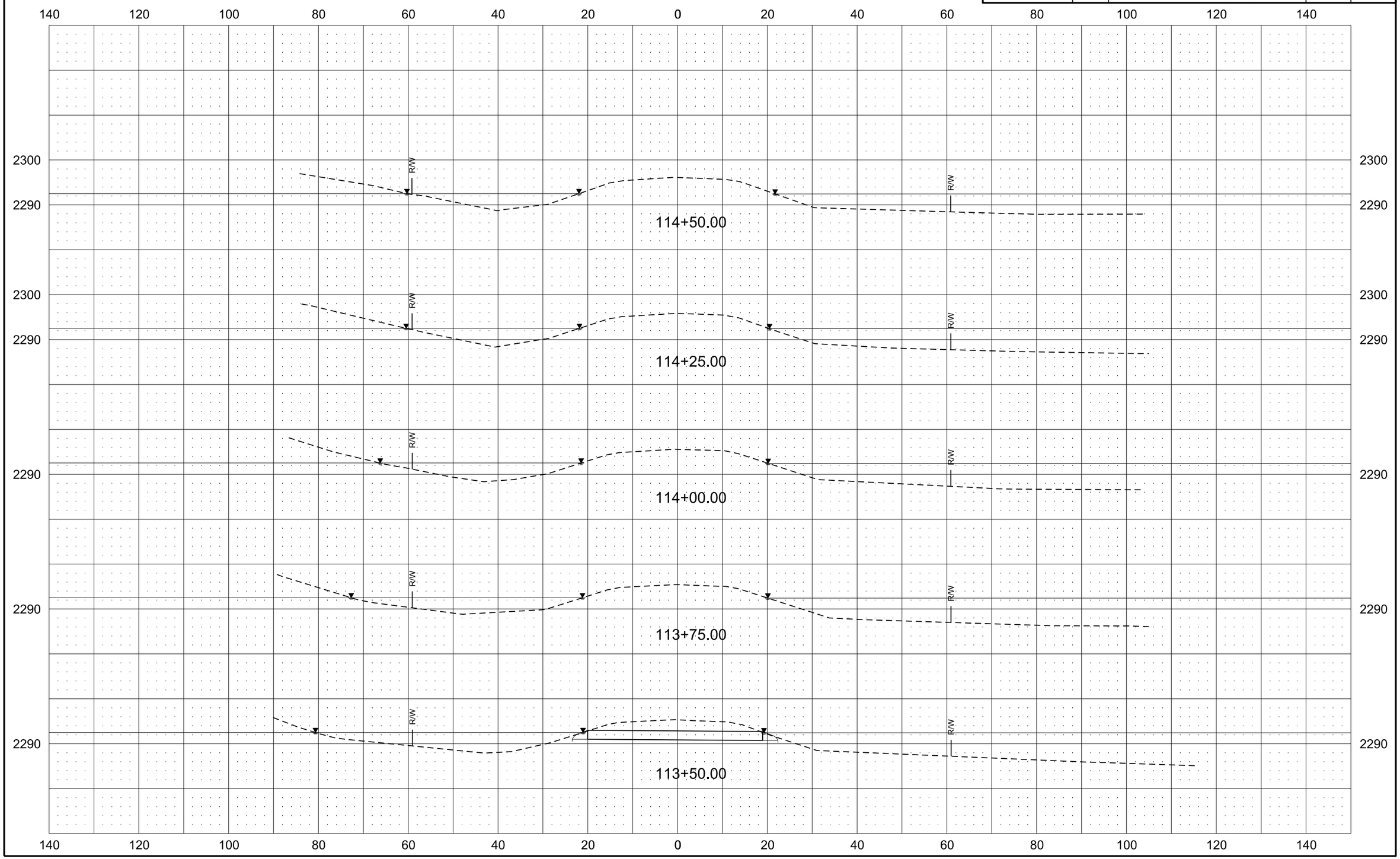
Alignment K-7

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	109



Alignment K-7

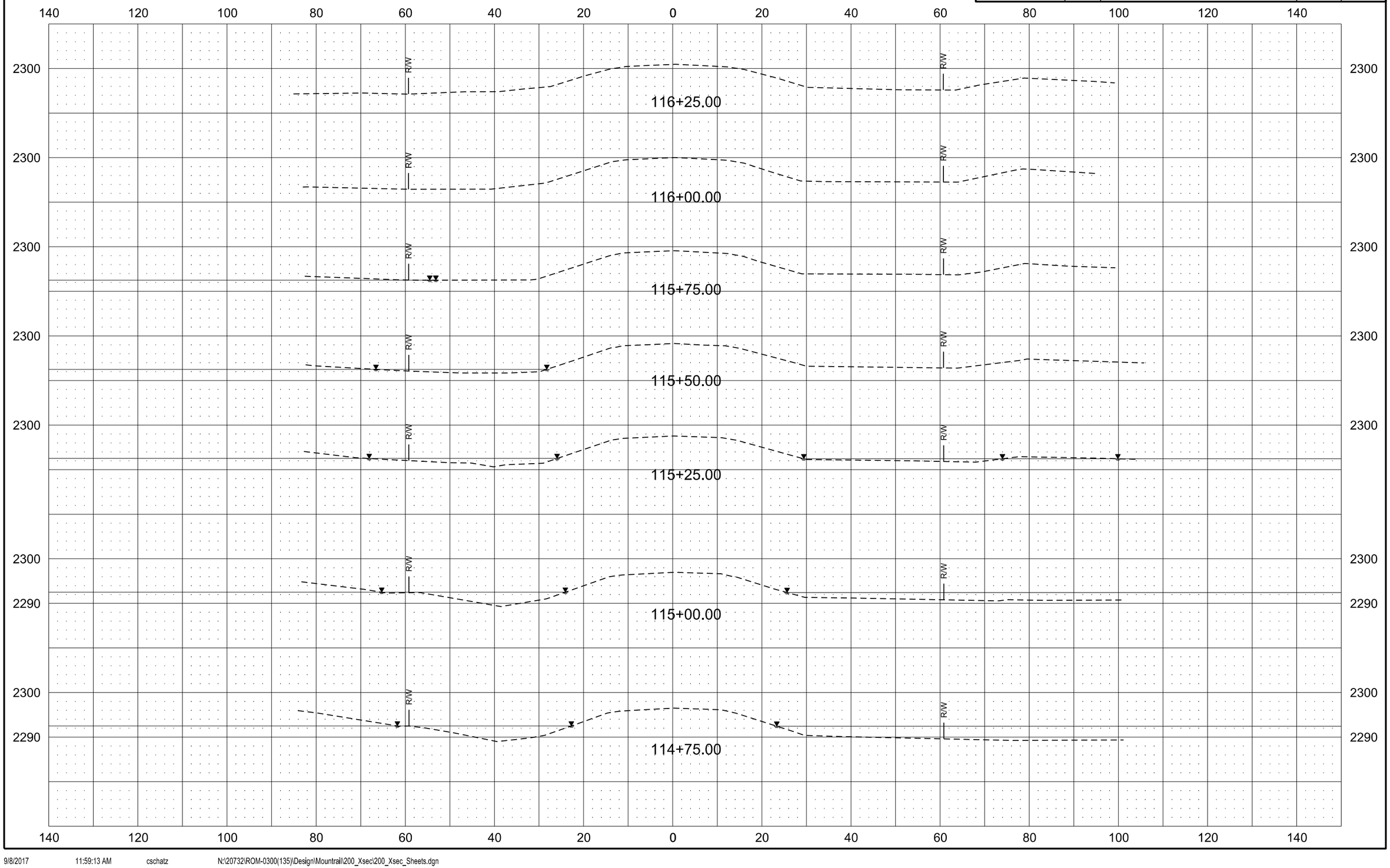
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	110



9/8/2017 11:59:08 AM cschatz N:\20732\ROM-0300(135)\Design\Mountrail\200_Xsec\200_Xsec_Sheets.dgn

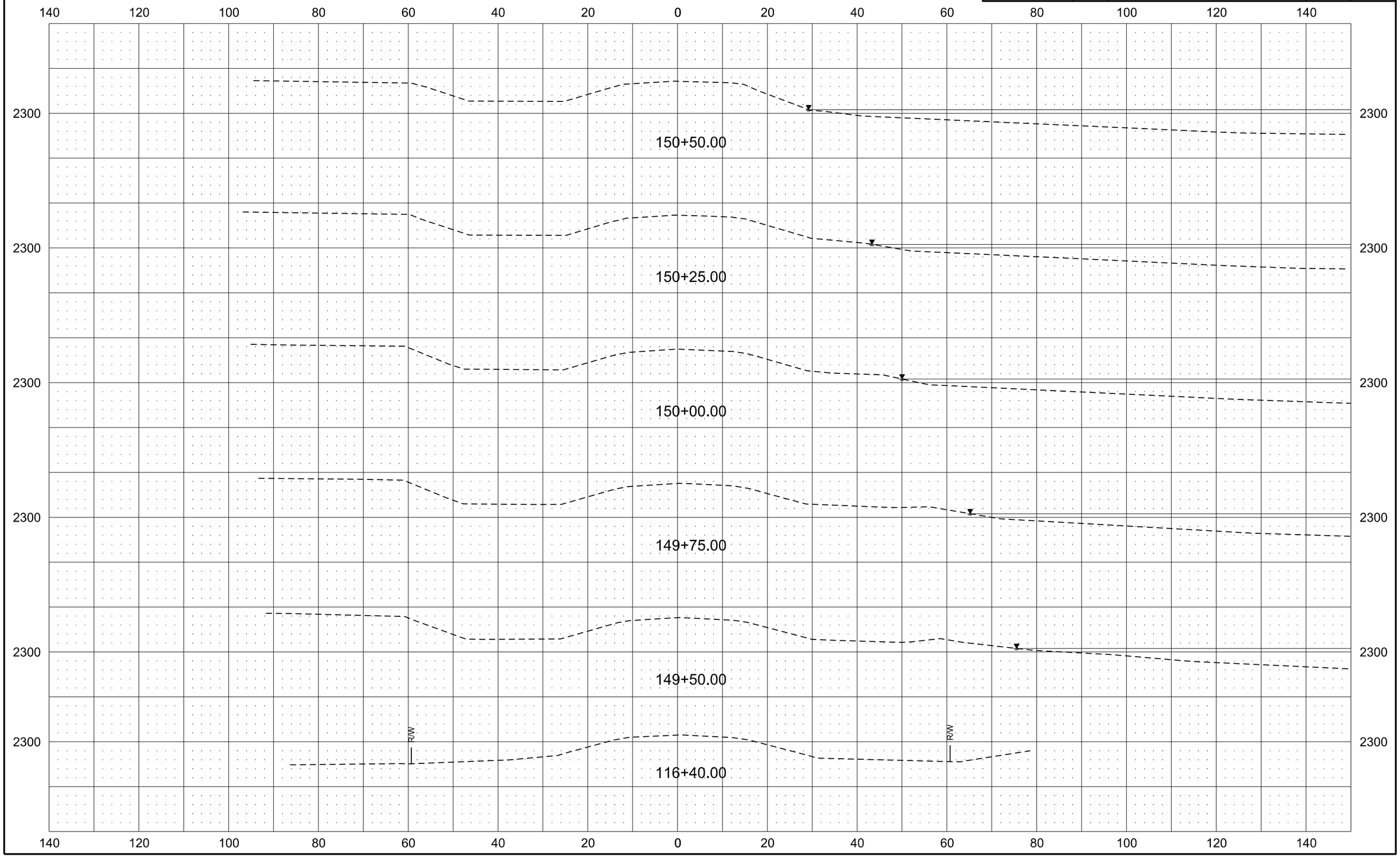
Alignment K-7

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	111



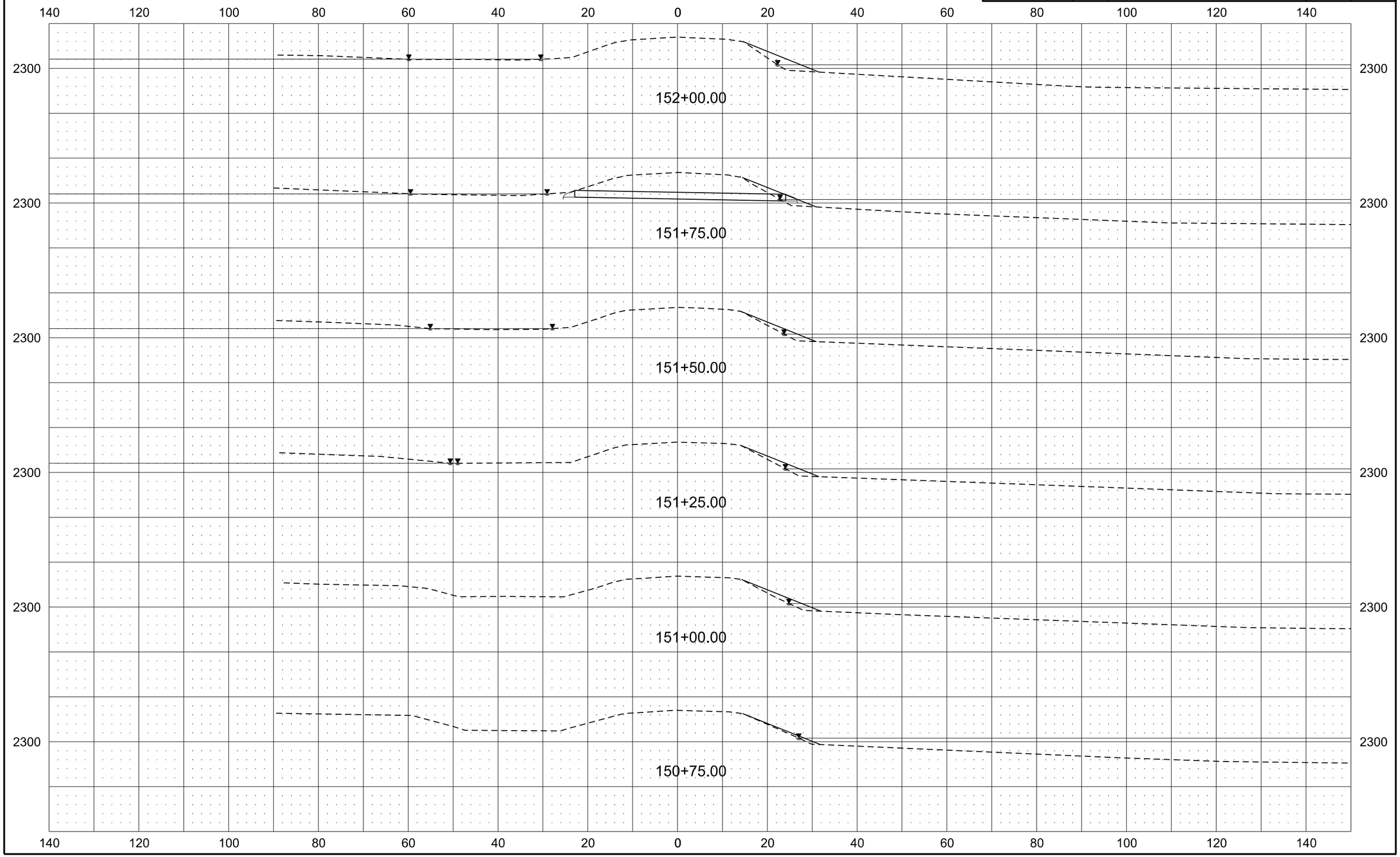
Alignment K-7

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	112



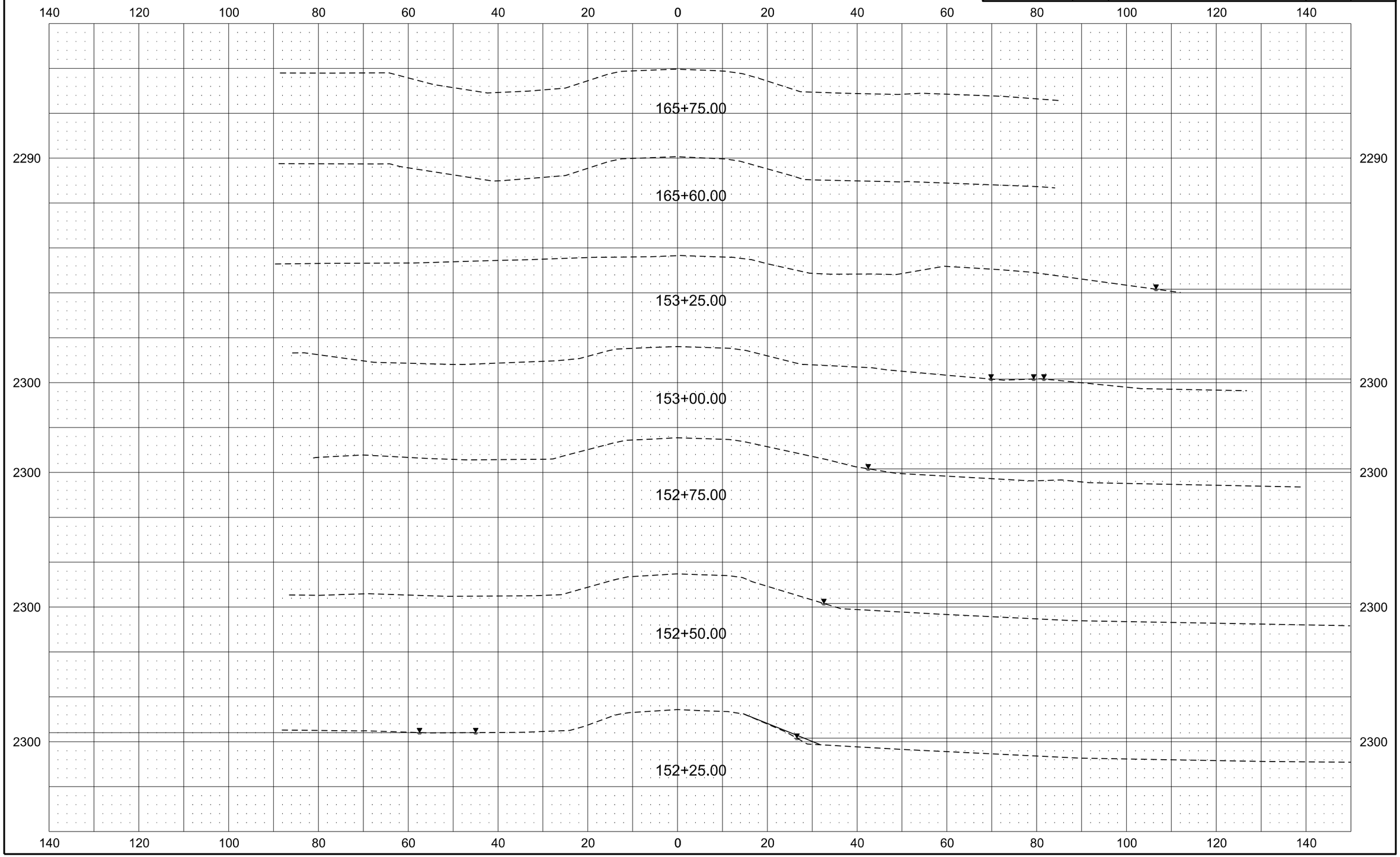
Alignment K-7

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	113



Alignment K-7

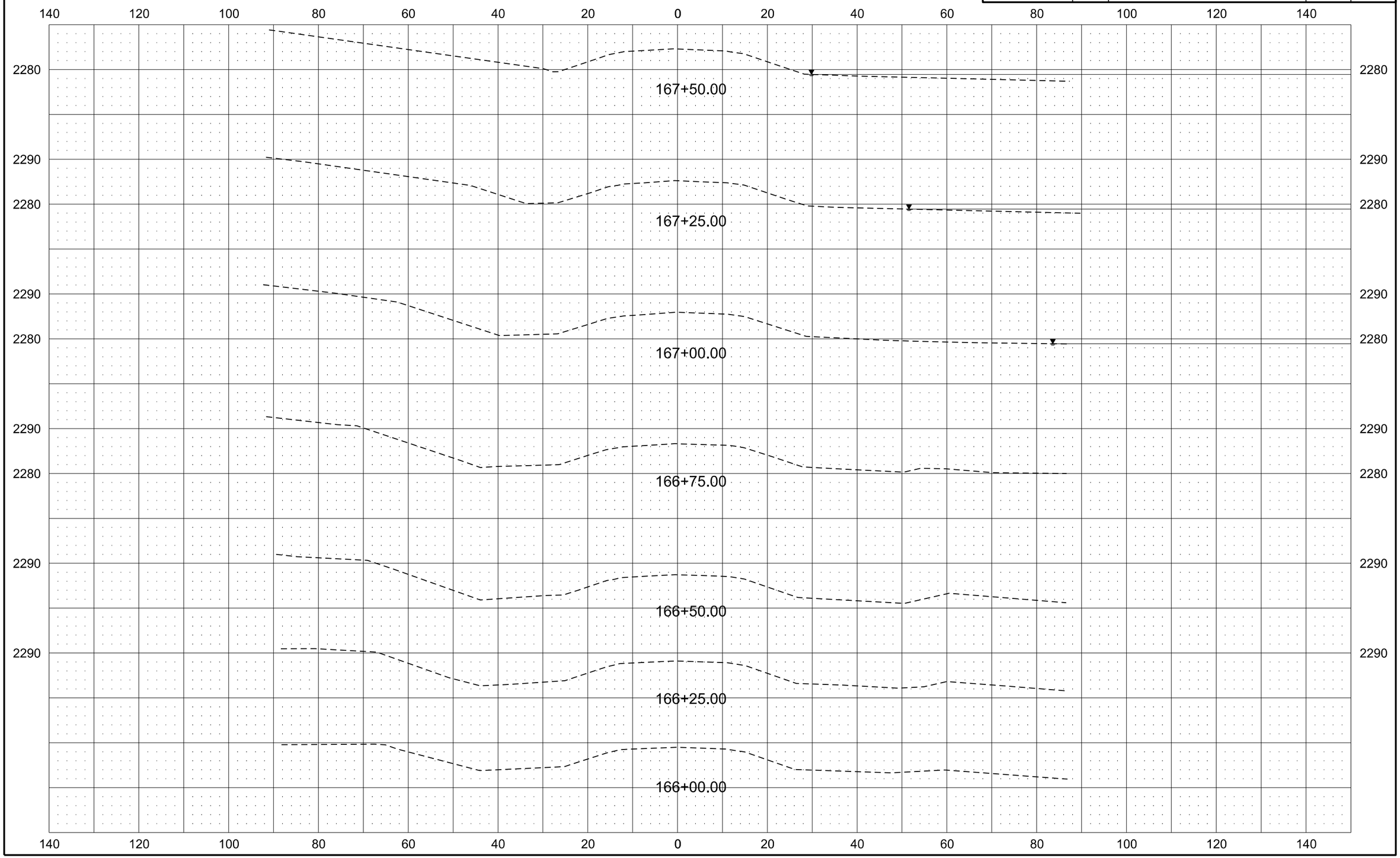
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	114



9/8/2017 11:59:25 AM cschatz N:\20732\ROM-0300(135)\Design\Mountrail\200_Xsec\200_Xsec_Sheets.dgn

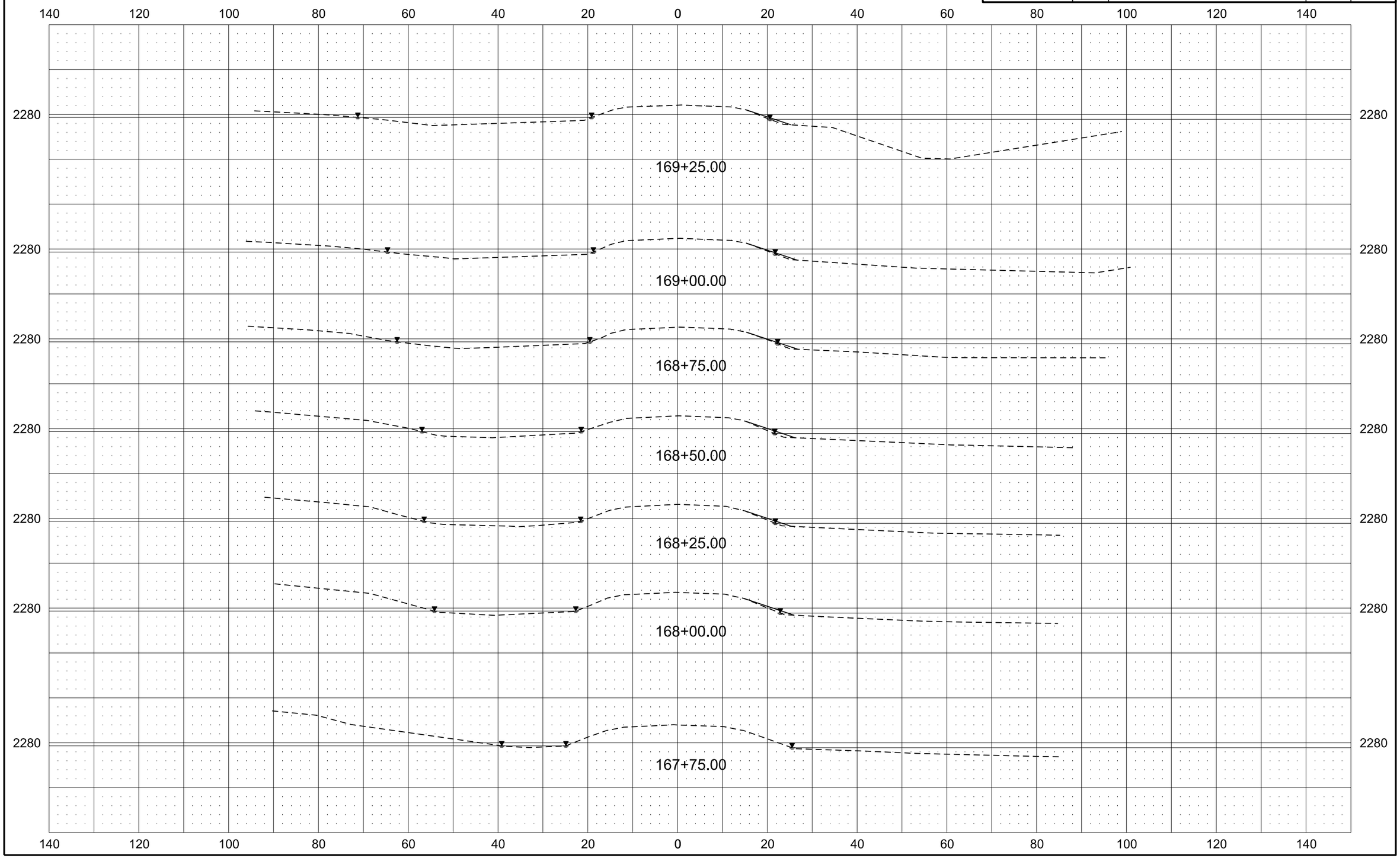
Alignment K-7

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	115



Alignment K-7

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	116



9/8/2017 11:59:33 AM cschatz N:\20732\ROM-0300(135)\Design\Mountrail\200_Xsec\200_Xsec_Sheets.dgn

Alignment K-7

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	117

140 120 100 80 60 40 20 0 20 40 60 80 100 120 140

2280

171+25.00

171+00.00

170+75.00

170+50.00

170+25.00

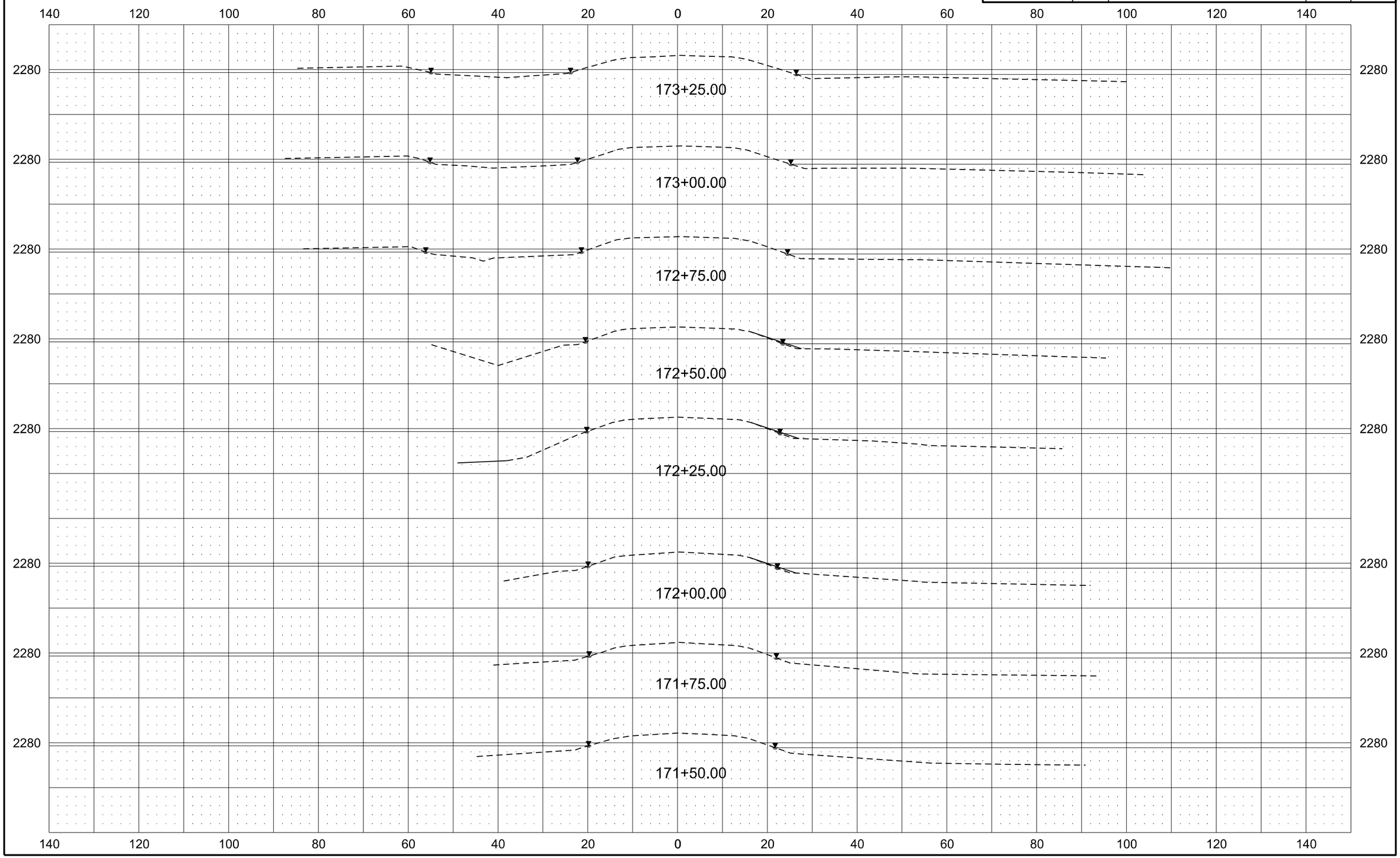
170+00.00

169+75.00

169+50.00

Alignment K-7

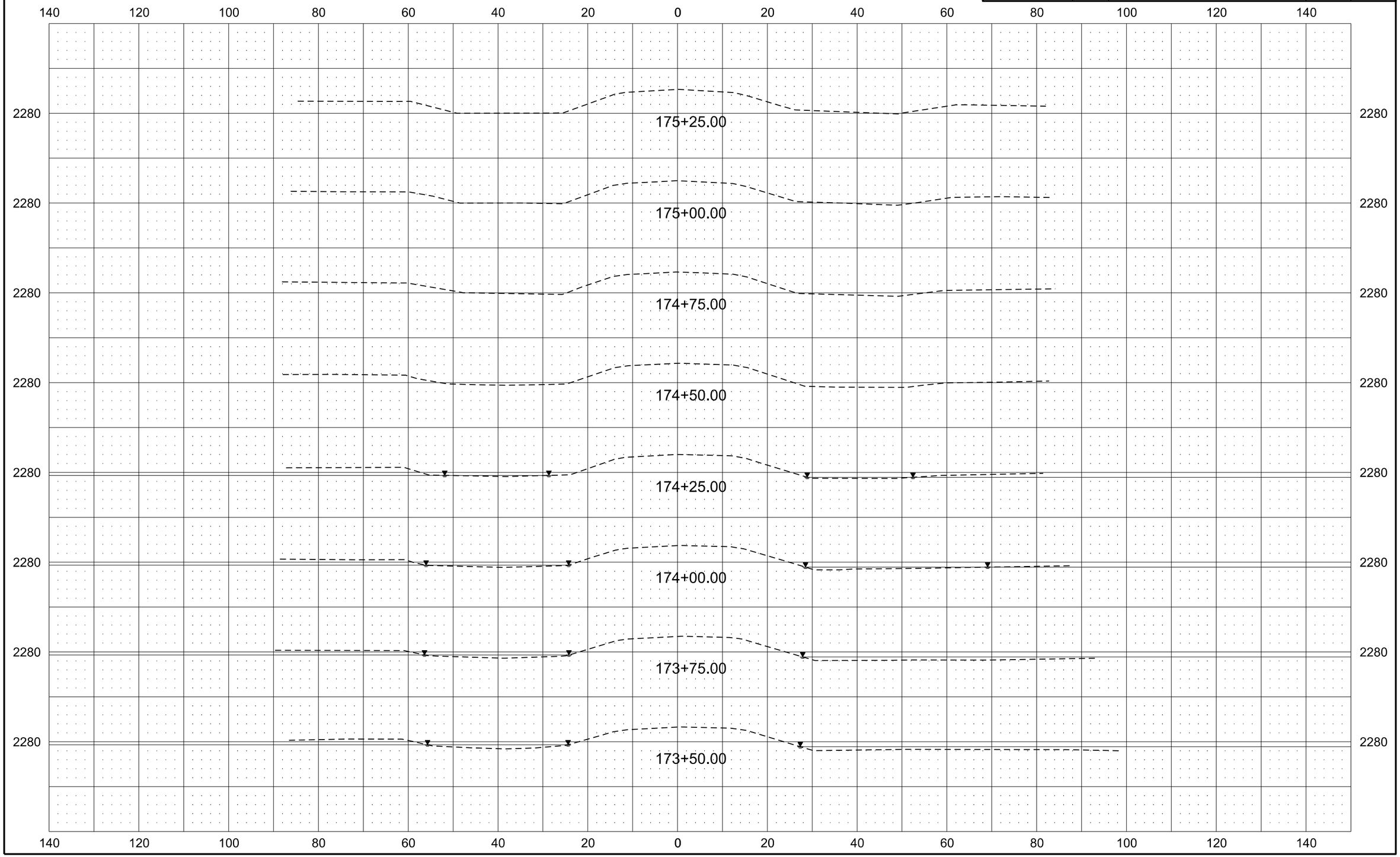
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	118



9/8/2017 11:59:42 AM cschatz N:\20732\ROM-0300(135)\Design\Mountrail\200_Xsec\200_Xsec_Sheets.dgn

Alignment K-7

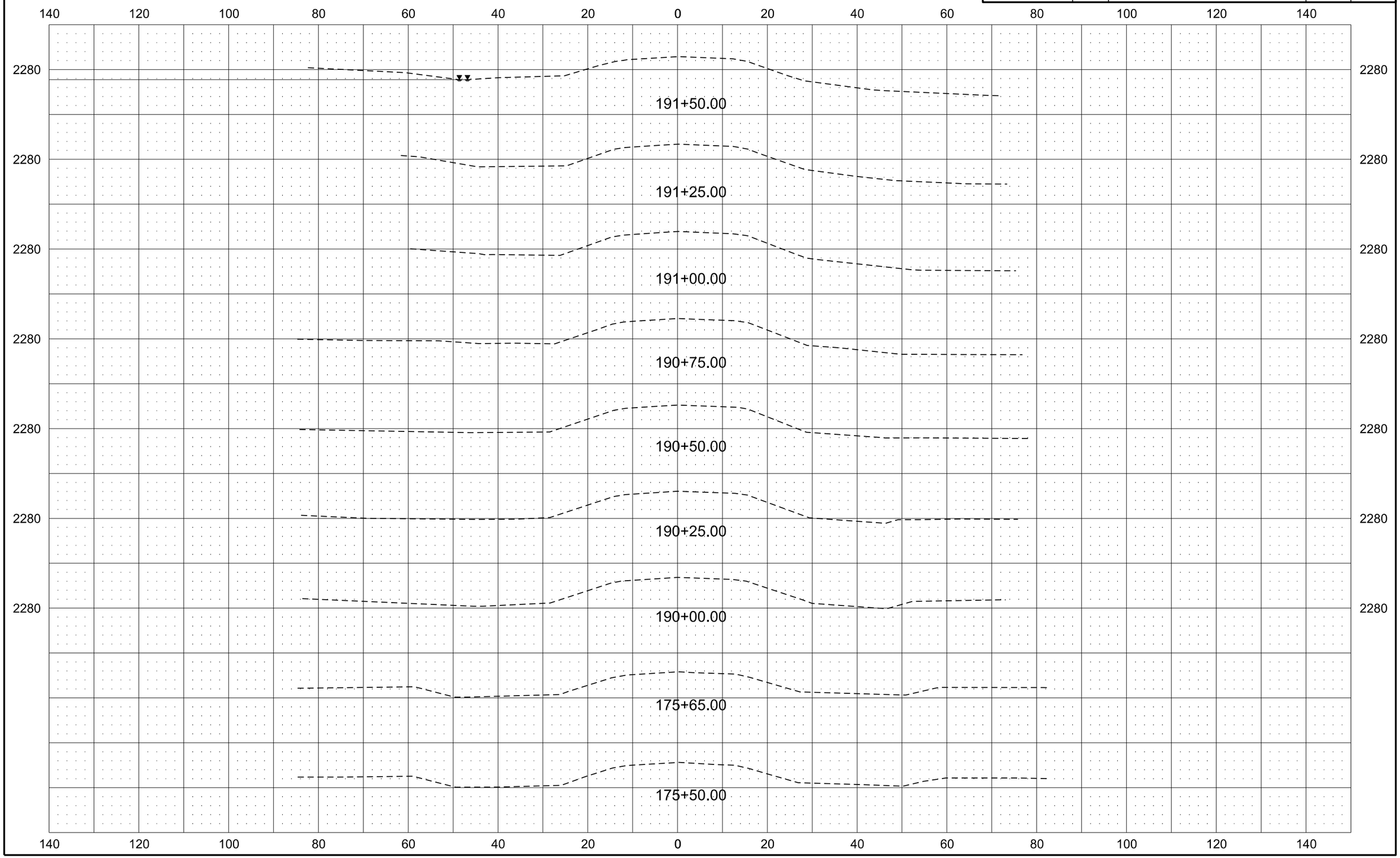
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	119



9/8/2017 11:59:46 AM cschatz N:\20732\ROM-0300(135)\Design\Mountrail\200_Xsec\200_Xsec_Sheets.dgn

Alignment K-7

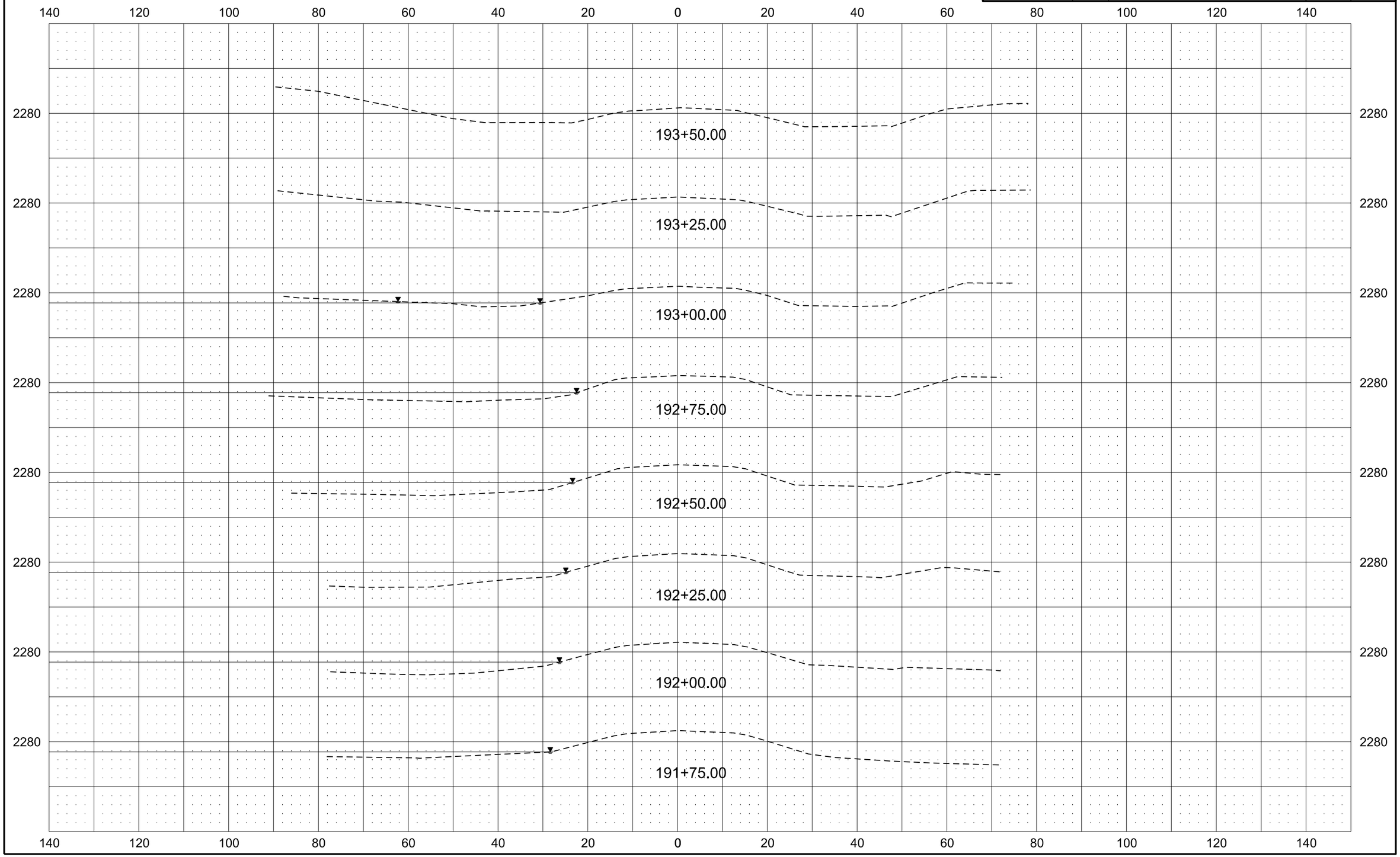
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	120



9/8/2017 11:59:50 AM cschatz N:\20732\ROM-0300(135)\Design\Mountrail\200_Xsec\200_Xsec_Sheets.dgn

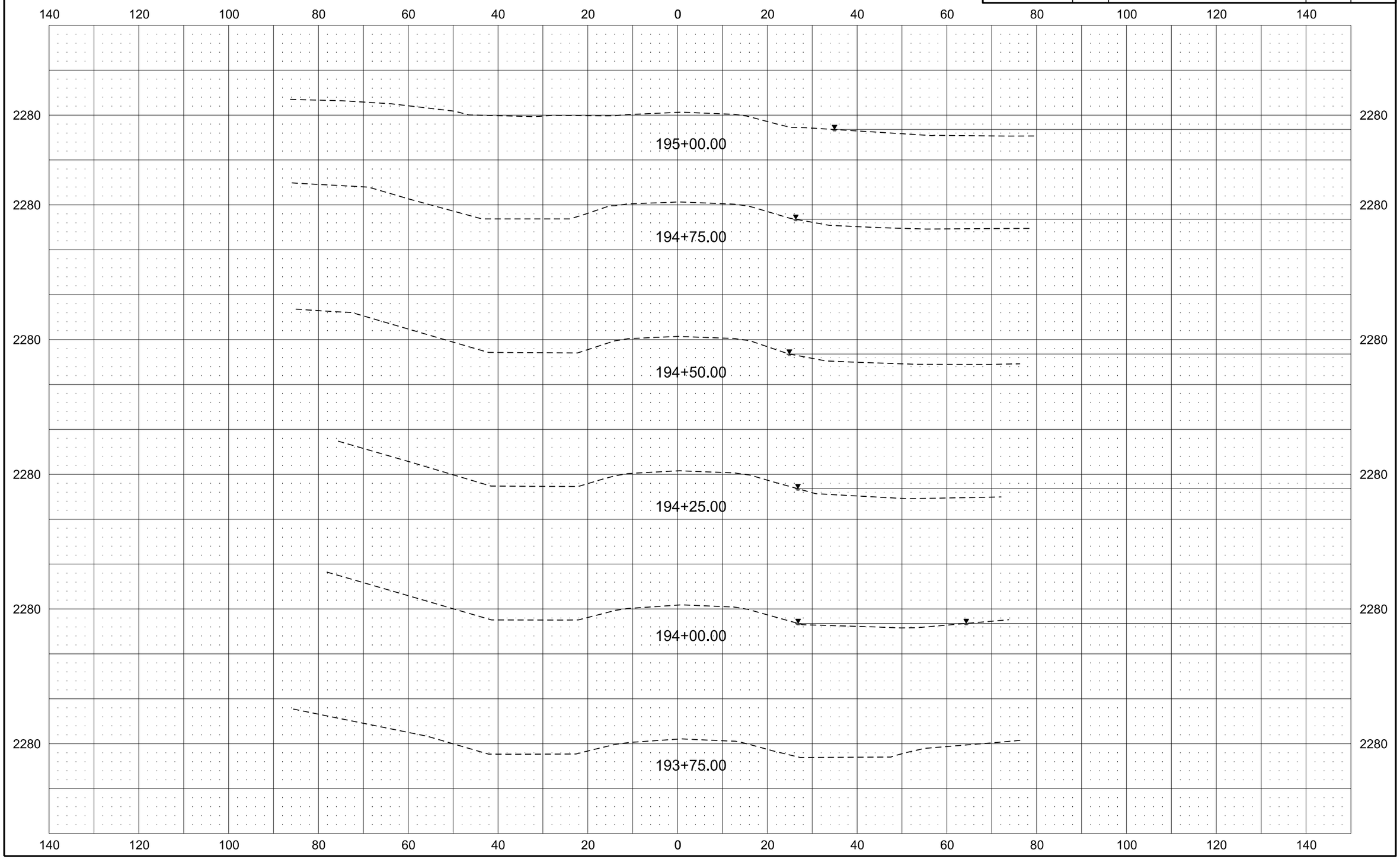
Alignment K-7

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	121



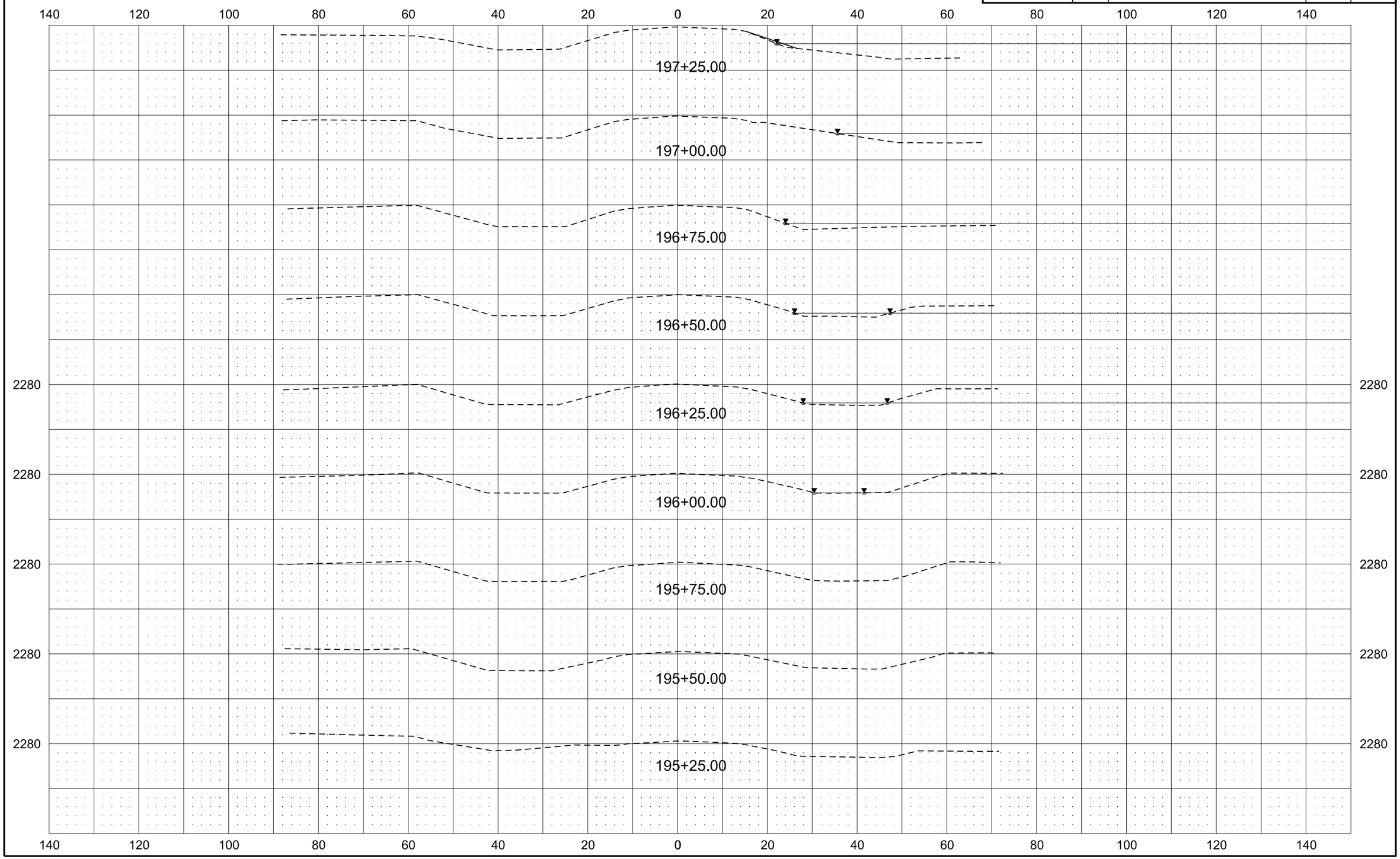
Alignment K-7

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	122



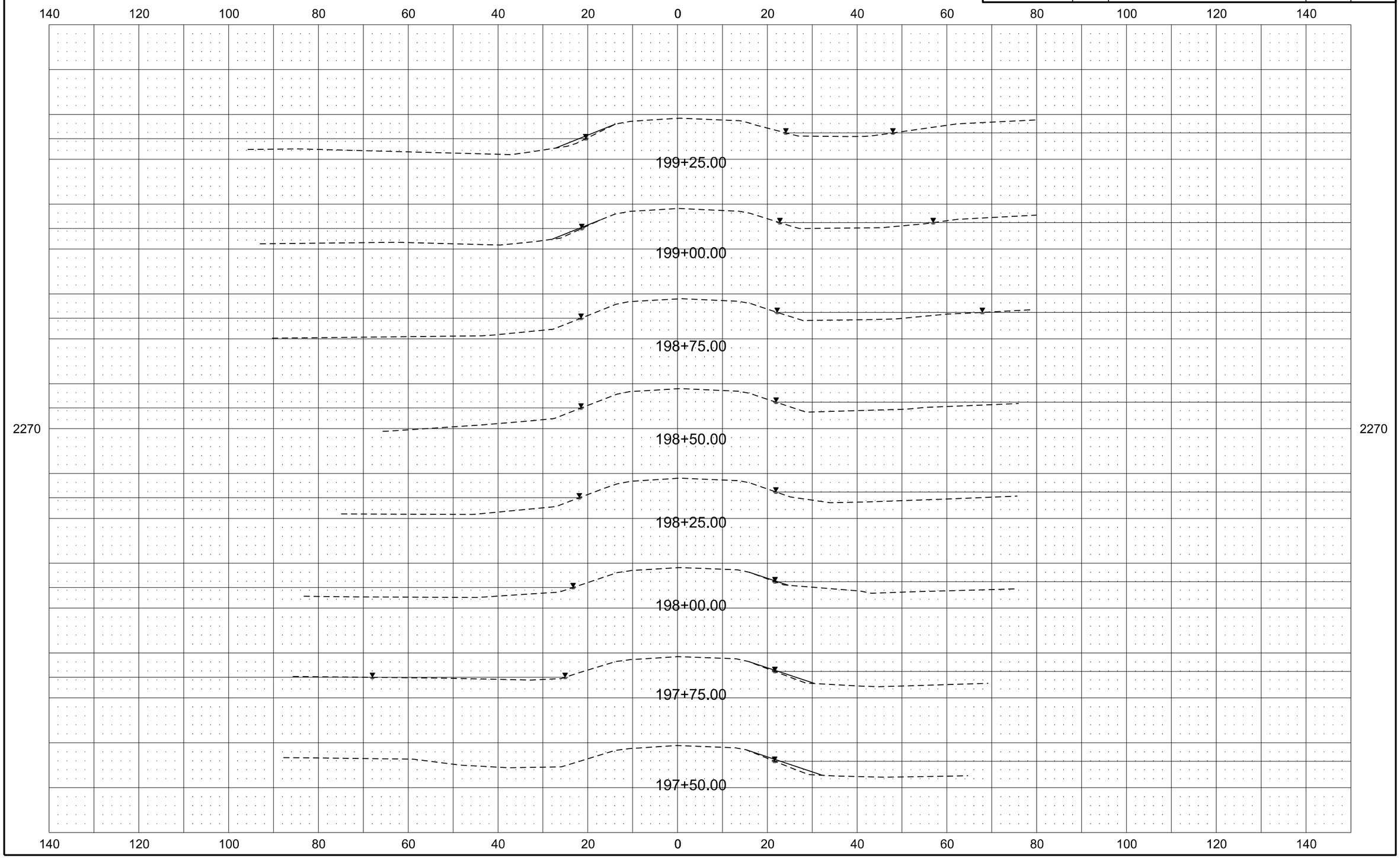
Alignment K-7

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	123



Alignment K-7

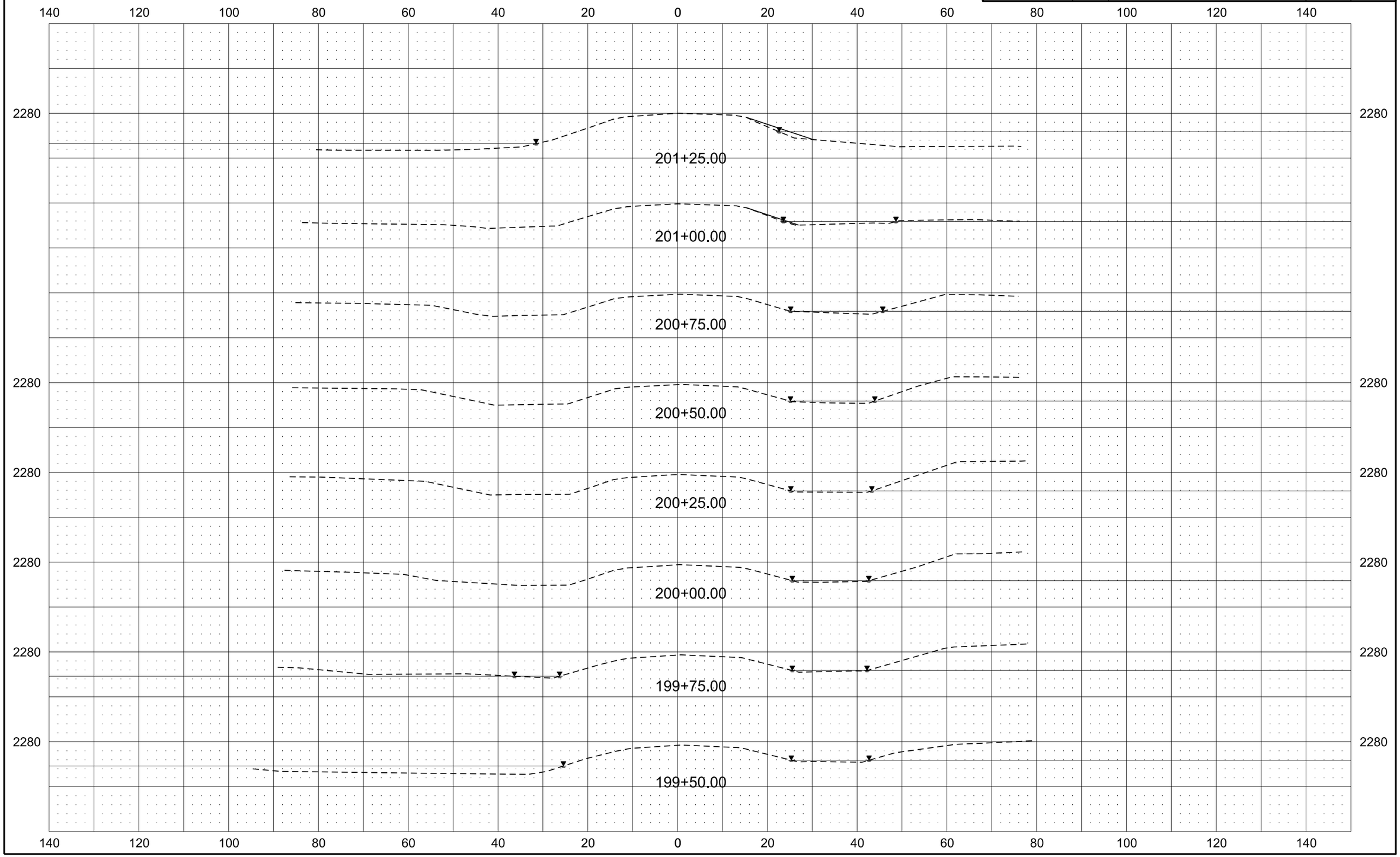
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	124



9/8/2017 12:00:07 PM cschatz N:\20732\ROM-0300(135)\Design\Mountrail\200_Xsec\200_Xsec_Sheets.dgn

Alignment K-7

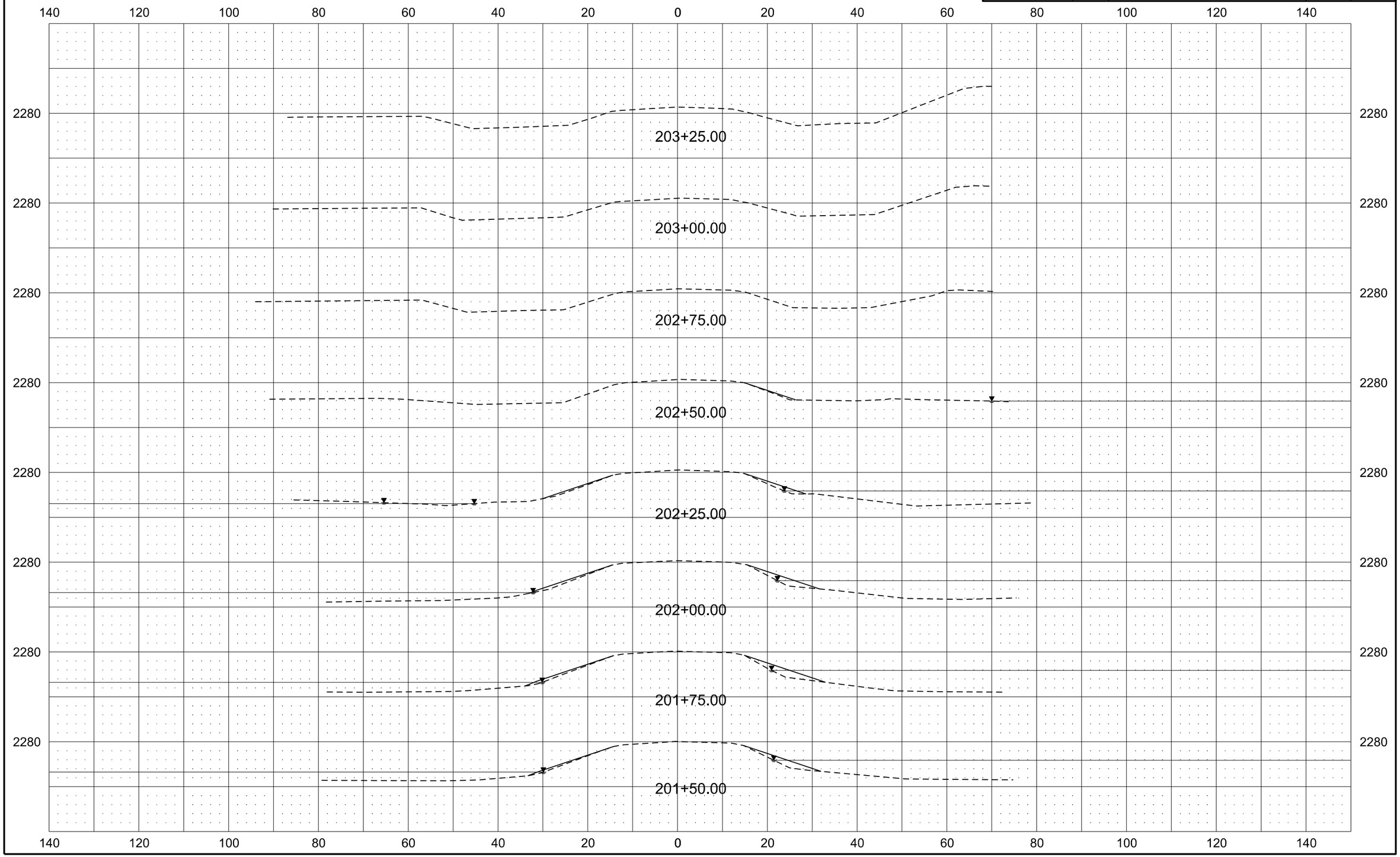
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	125



9/8/2017 12:00:12 PM cschatz N:\20732\ROM-0300(135)\Design\Mountrail\200_Xsec\200_Xsec_Sheets.dgn

Alignment K-7

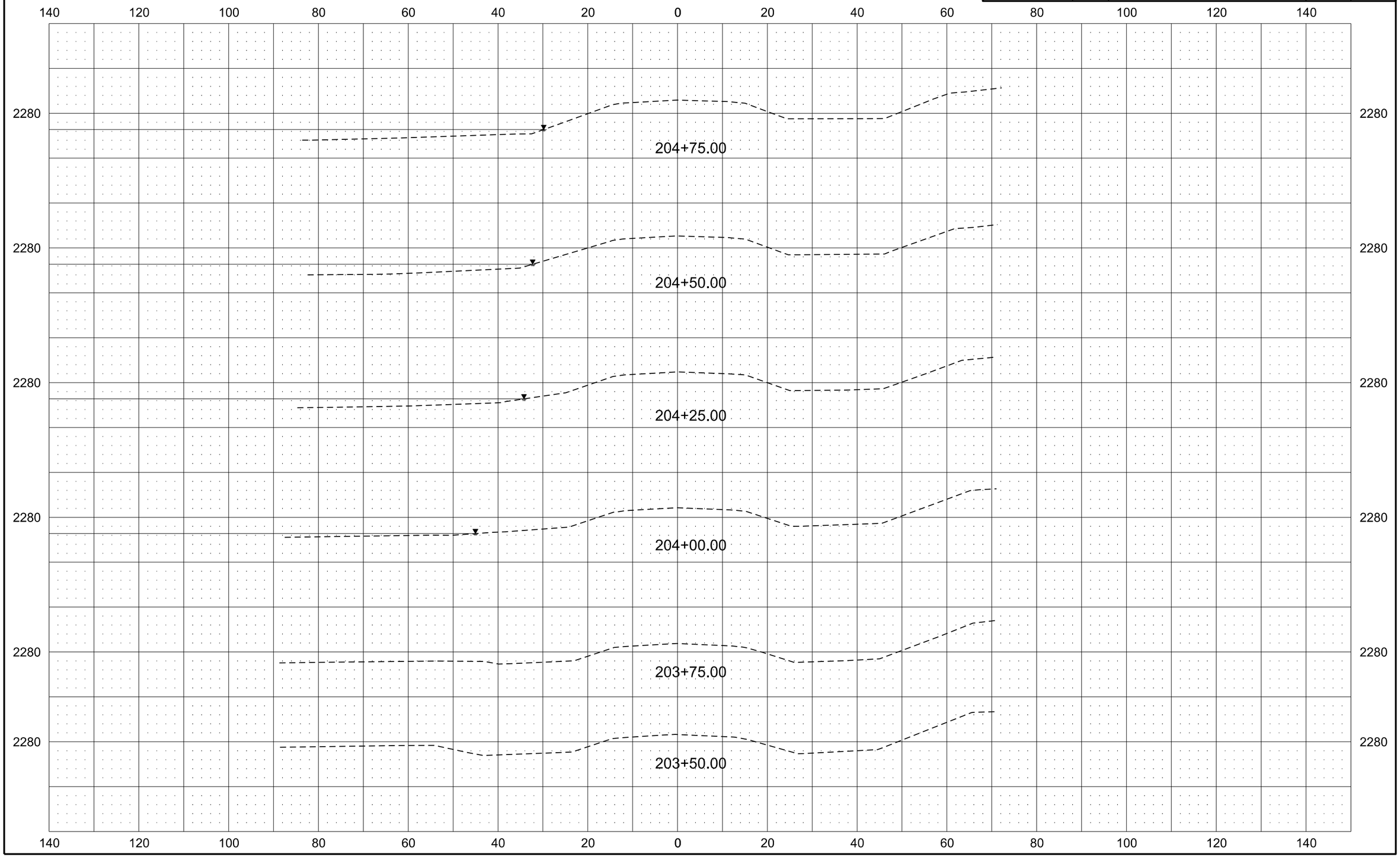
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	126



9/8/2017 12:00:16 PM cschatz N:\20732\ROM-0300(135)\Design\Mountrail\200_Xsec\200_Xsec_Sheets.dgn

Alignment K-7

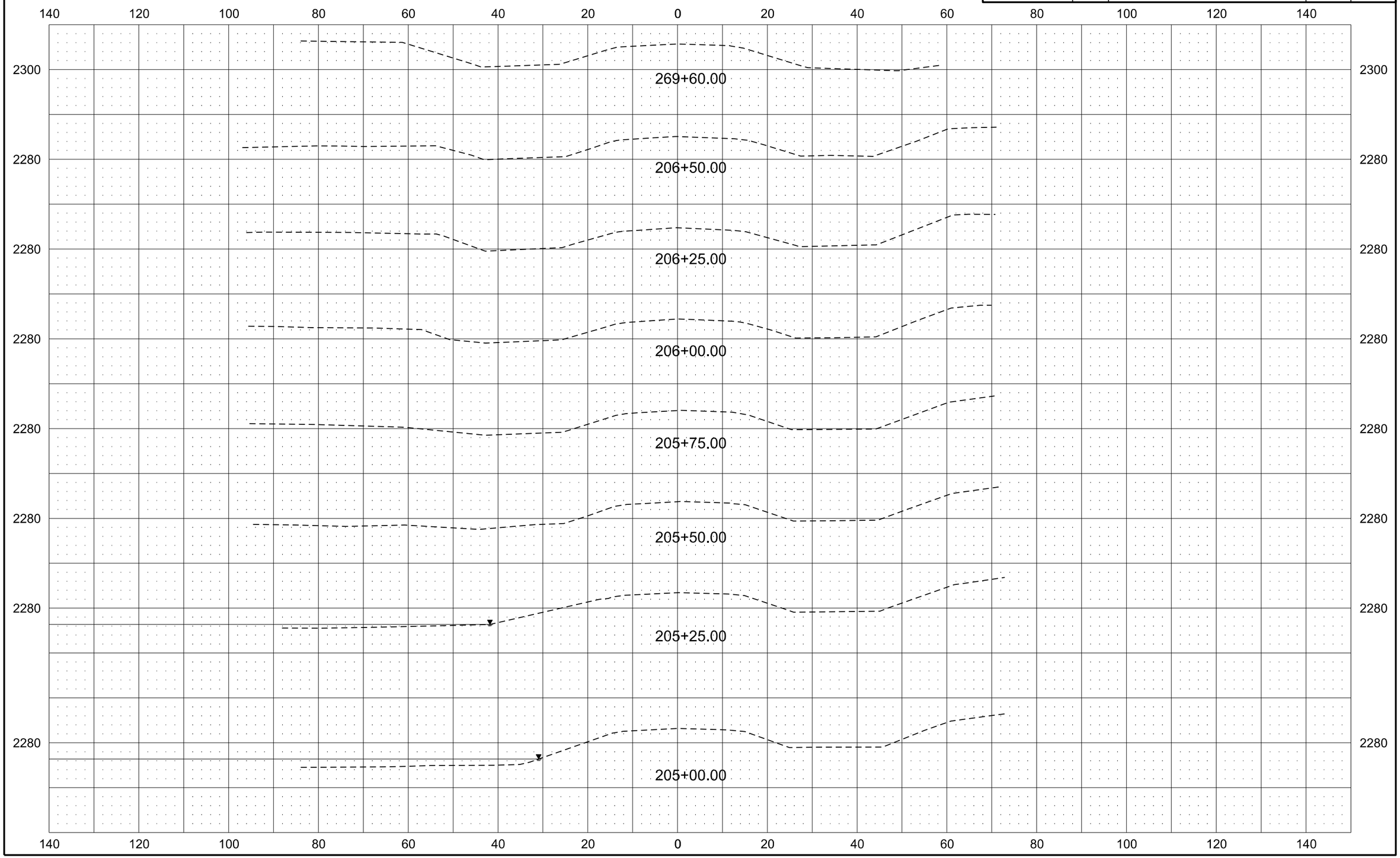
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	127



9/8/2017 12:00:20 PM cschatz N:\20732\ROM-0300(135)\Design\Mountrail\200_Xsec\200_Xsec_Sheets.dgn

Alignment K-7

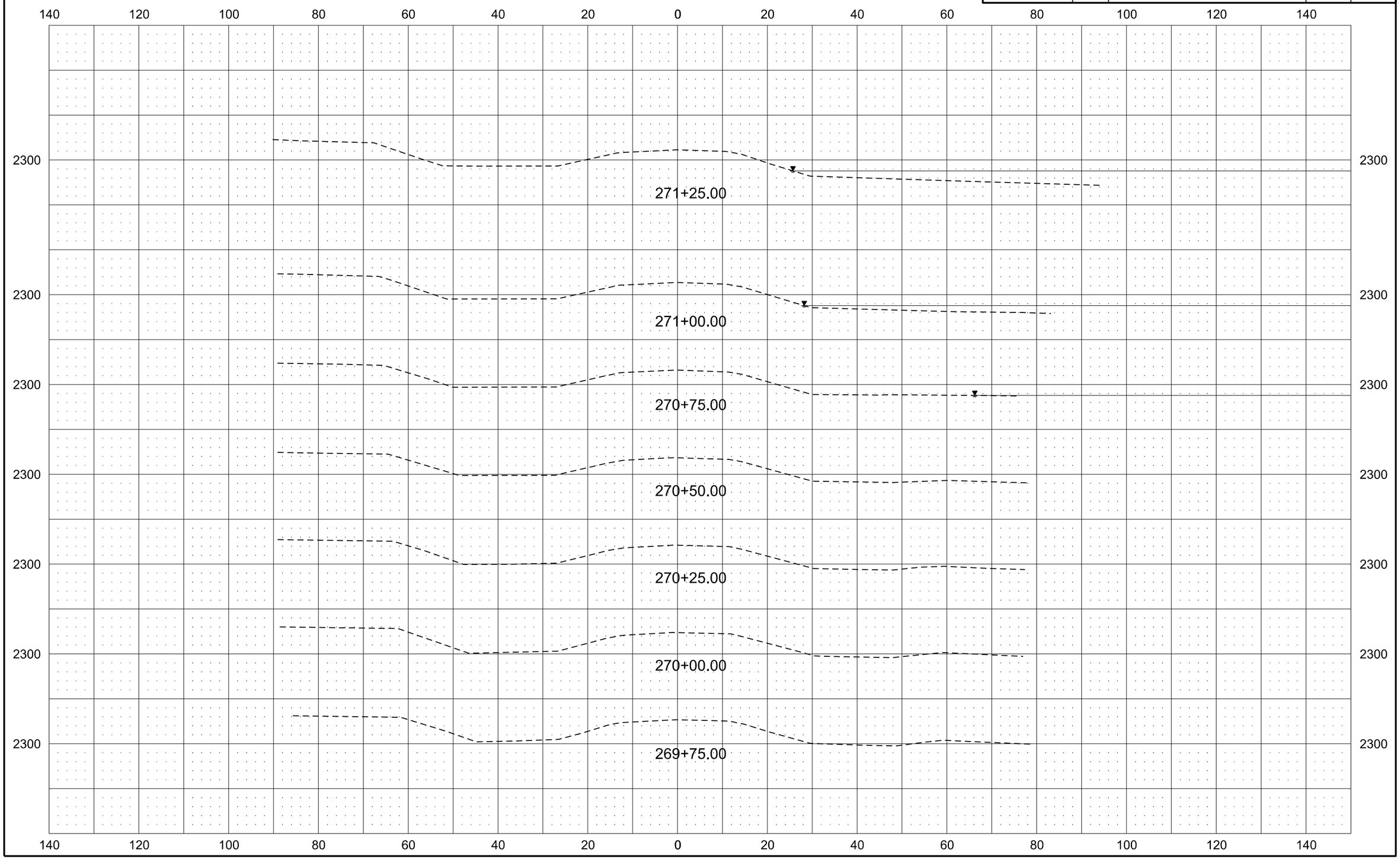
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	128



9/8/2017 12:00:24 PM cschatz N:\20732\ROM-0300(135)\Design\Mountrail\200_Xsec\200_Xsec_Sheets.dgn

Alignment K-7

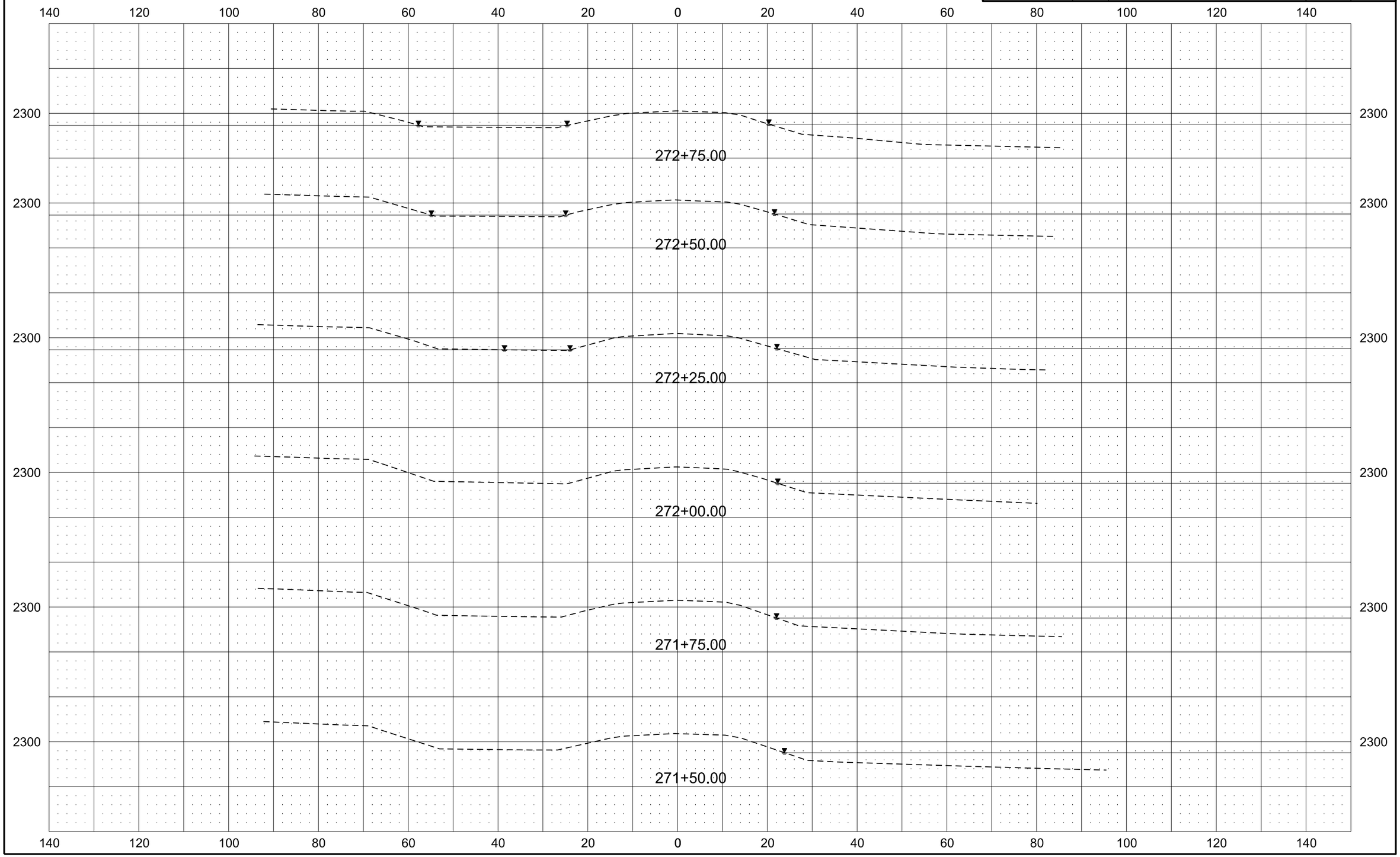
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	129



9/8/2017 12:00:28 PM cschatz N:\20732\ROM-0300(135)\Design\Mountrail\200_Xsec\200_Xsec_Sheets.dgn

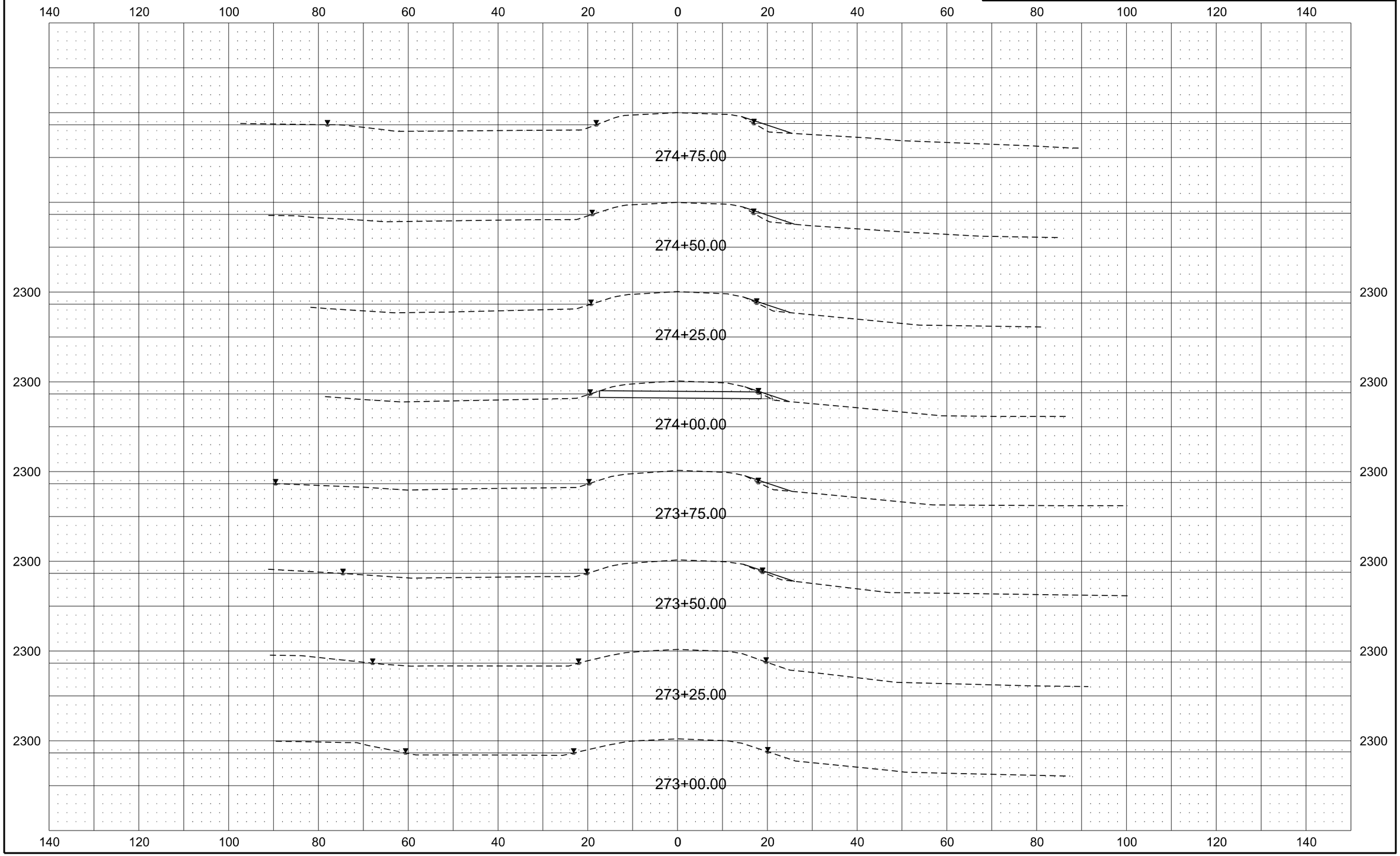
Alignment K-7

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	130



Alignment K-7

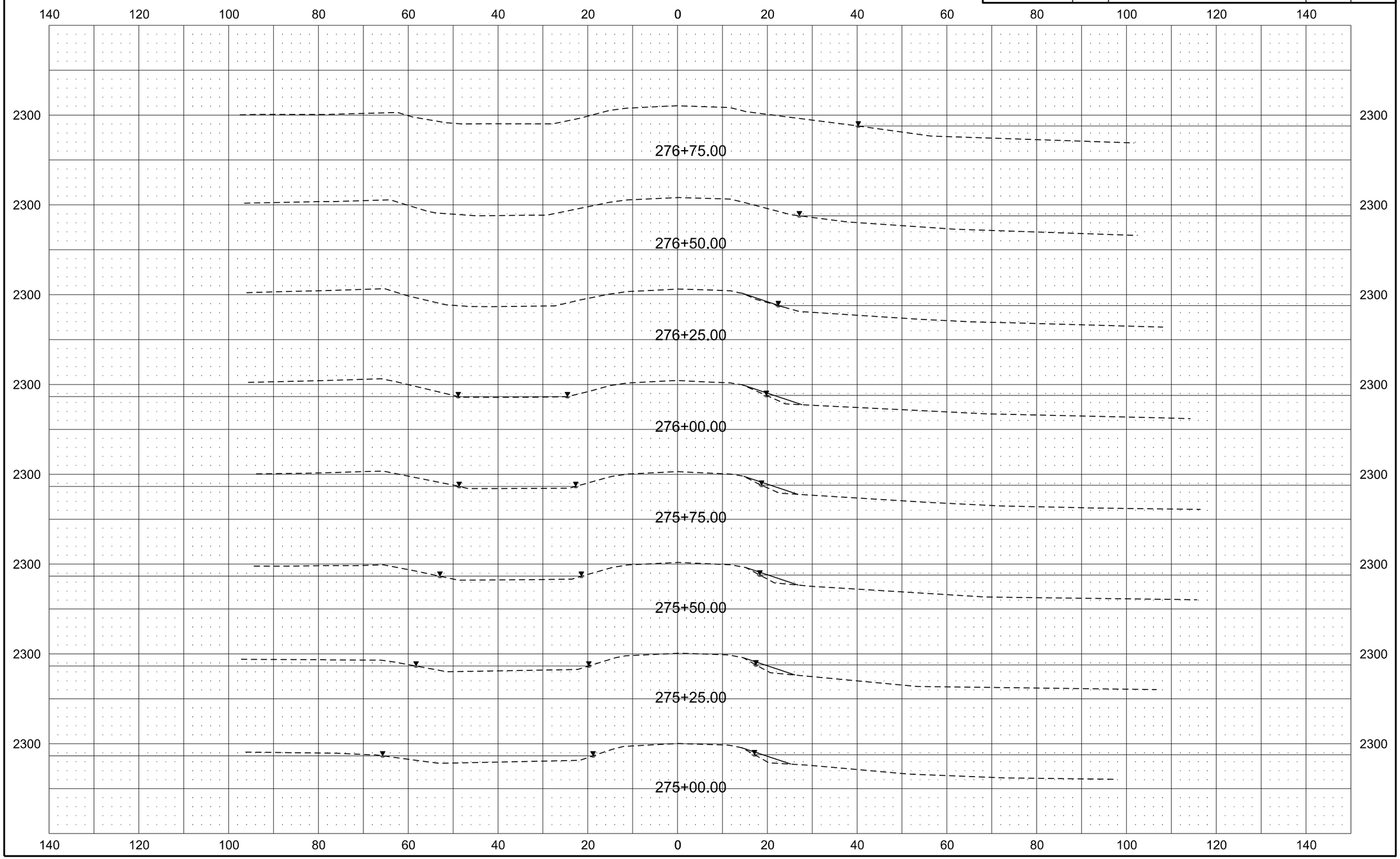
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	131



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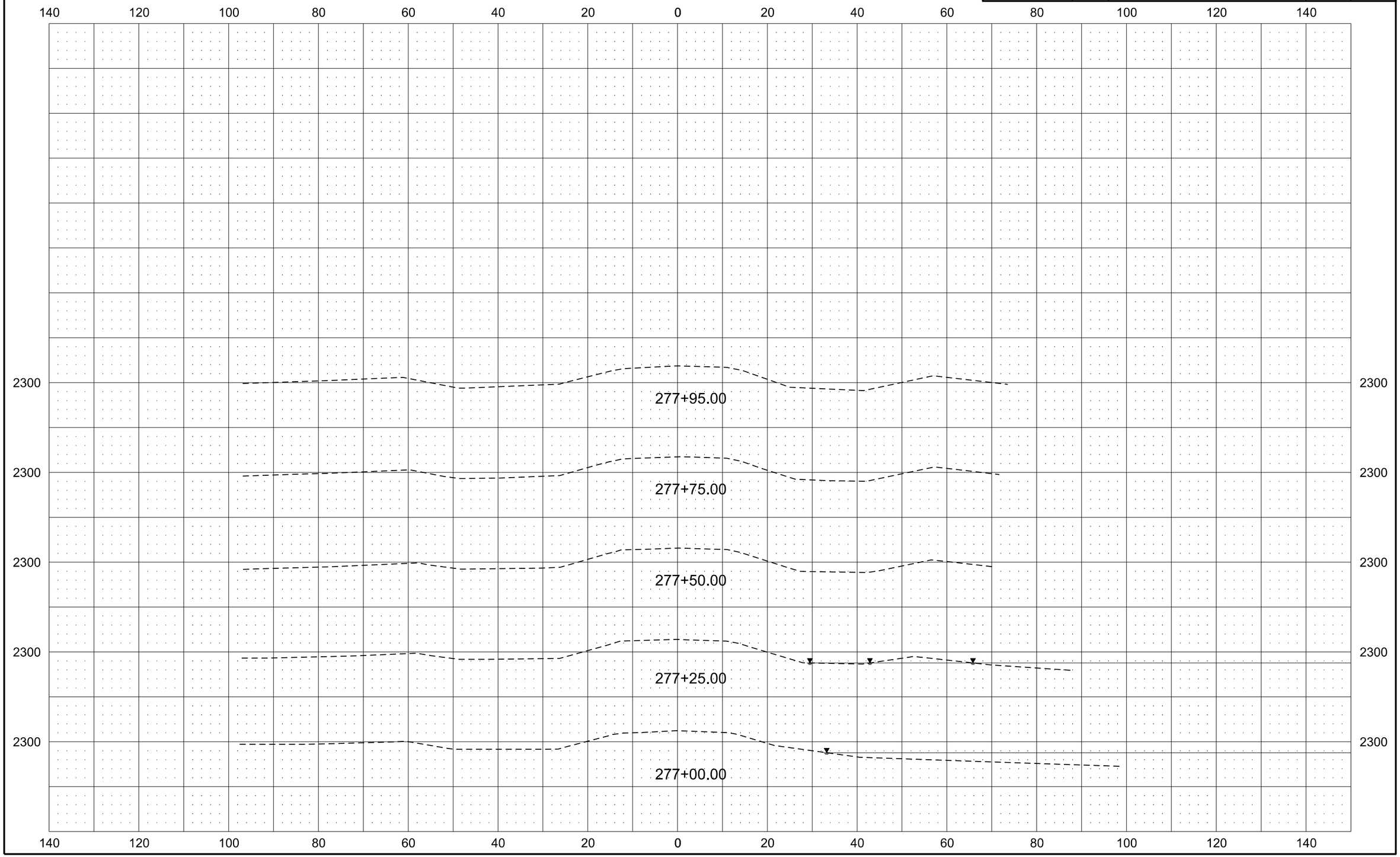
Alignment K-7

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	132



Alignment K-7

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	ROM-0300(135)	200	133



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