

LETTING DATE 02-16-2021
SLIDE REPAIR ER-065-3(85)--28-91

WARREN CO.



Highway Division

PLANS OF PROPOSED IMPROVEMENT ON THE
PRIMARY ROAD SYSTEM
WARREN COUNTY
SLIDE REPAIR

0.69 mi S of Co Rd G58 (NB)

SCALES: As Noted

Refer to the Proposal Form for list of applicable specifications.

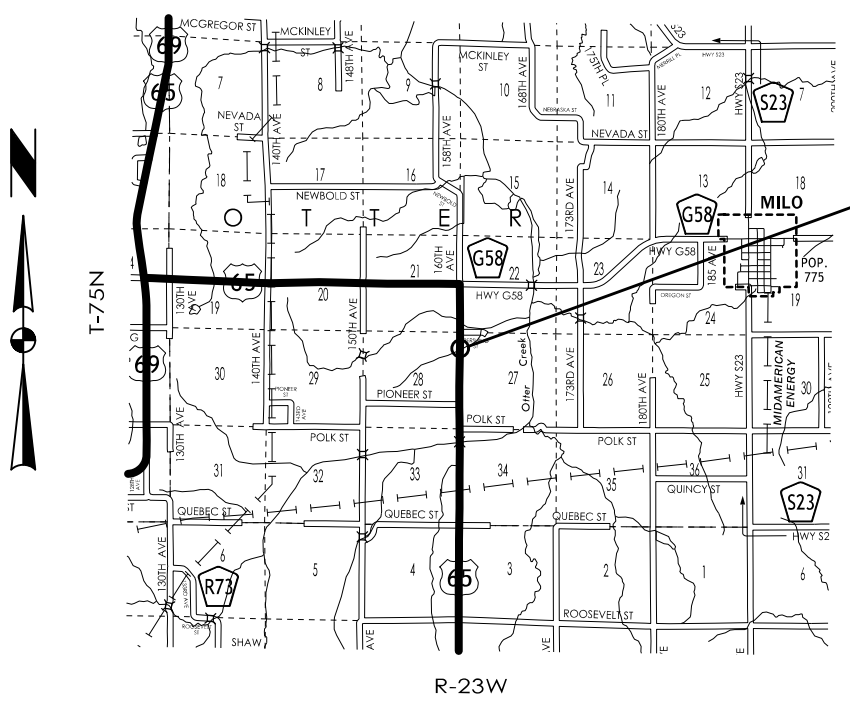
Value Engineering Saves. Refer to Article 1105.14 of the Specifications.



REVISIONS

TOTAL	--
PROJECT IDENTIFICATION NUMBER	21-91-065-010
PROJECT NUMBER	ER-065-3(85)--28-91
R.O.W. PROJECT NUMBER	NHSN-065-3(86)--2R-91

INDEX OF SHEETS	
No.	DESCRIPTION
A Sheets	Title Sheets
A.1	Title Sheet and Location Map
D Sheets	Mainline Plan and Profile Sheets
* D.1	Plan & Profile Legend & Symbol Information Sheet
* D.2	US 65
G Sheets	Survey Sheets
G.1 - 3	Reference Ties and Bench Marks
J Sheets	Traffic Control and Staging Sheets
J.1	Traffic Control Plan
Q Sheets	Soils Sheets
Q.1	Soils Sheet US 65
W Sheets	Mainline Cross Sections
W.1 - 3	US 65 Cross Sections
	* Color Plan Sheets



PROJECT LOCATION
SITE 1
REF. LOC. 49.7
STA. 452+00

DESIGN DATA RURAL			
2016	AADT	2360	V.P.D.
20--	AADT	--	V.P.D.
20--	DHV	--	V.P.H.
	TRUCKS	9.7	%
	Total		
	Design ESALs	--	

INDEX OF SEALS		
SHEET NO.	NAME	TYPE
A.1	Jason Holst	Primary Signature Block
X	X	X

PRELIMINARY PLANS

Subject to change by final design.

D5 PLAN - Date: 10-08-2020

SURVEY SYMBOLS

- PI Tangent Point
- CP Control Point
- WC Wild Card (Misc. Field Shot)
- REF Reference Tie Point
- EP Edge of Paved Roads (ML or SR)
- C Centerline BL of Road (ML or SR)
- FW Wire Fence
- D Centerline Draw or Stream (Down)
- CON Concrete or A/C Slab
- BNK Stream Bank
- BL Topo Breakline
- PLG Location of General Photo
- GR Ground Shot
- SNP Unpaved Shoulder
- SOP Size of Pipe or Culvert
- TDC Tree Deciduous
- TLNL Tree Line Left
- WL1D Water Line Co. 1 - Quality D
- PRO Profile Shot
- POT Tangent Point
- SCR Section Corner
- SHR Shrub
- FO Fiber Optic

UTILITY LEGEND

- Warren Water District
Stan Ripperger
1204 East 2nd Avenue
Indianola, IA 50125
515-962-1200
sripperger@warrenwaterdistrict.com
- Windstream Communications (CLEC)(ILEC)
Luke Niles
4001 N. Rodney Parham, 3rd floor
Little Rock, AR 72212
501-748-5893
Luke.t.niles@windstream.com

PLAN VIEW COLOR LEGEND OF PLAN AND PROFILE SHEETS

LINEWORK		Design Color No.	
Green	(2)		Existing Topographic Features and Labels
Blue	(1)		Proposed Alignment, Stationing, Tic Marks, and Alignment Annotation
Magenta	(5)		Existing Utilities
SHADING		Design Color No.	
Yellow	(4)		Highlight for Critical Notes or Features
Red	(3)		Delineates Restricted Areas
Lavender	(9)		Temporary Pavement Shading
Gray, Light	(48)		Proposed Pavement Shading
Gray, Med	(80)		Proposed Granular Shading
Gray, Dark	(112)		Proposed Grade and Pave Shading "In conjunction with a paving project"
Brown, Light	(236)		Grading Shading
Tan	(8)		Proposed Sidewalk Shading
Blue, Light	(230)		Proposed Sidewalk Landing Shading
Pink	(11)		Proposed Sidewalk Ramp Shading

PROFILE VIEW COLOR LEGEND OF PLAN AND PROFILE SHEETS

LINEWORK		Design Color No.	
Green	(2)		Existing Ground Line Profile
Blue	(1)		Proposed Profile and Annotation
Magenta	(5)		Existing Utilities
Blue, Light	(230)		Proposed Ditch Grades, Left
Black	(0)		Proposed Ditch Grades, Median
Rust	(14)		Proposed Ditch Grades, Right

- Reference Point
- Station
- Survey Line
- Section Corner
- Ground Line Intercept
- Saw Cut
- Guardrail
- Trench Drain
- High Tension Cable Guardrail
- Sheet Pile
- Pavement Removal
- Clearing & Grubbing Area

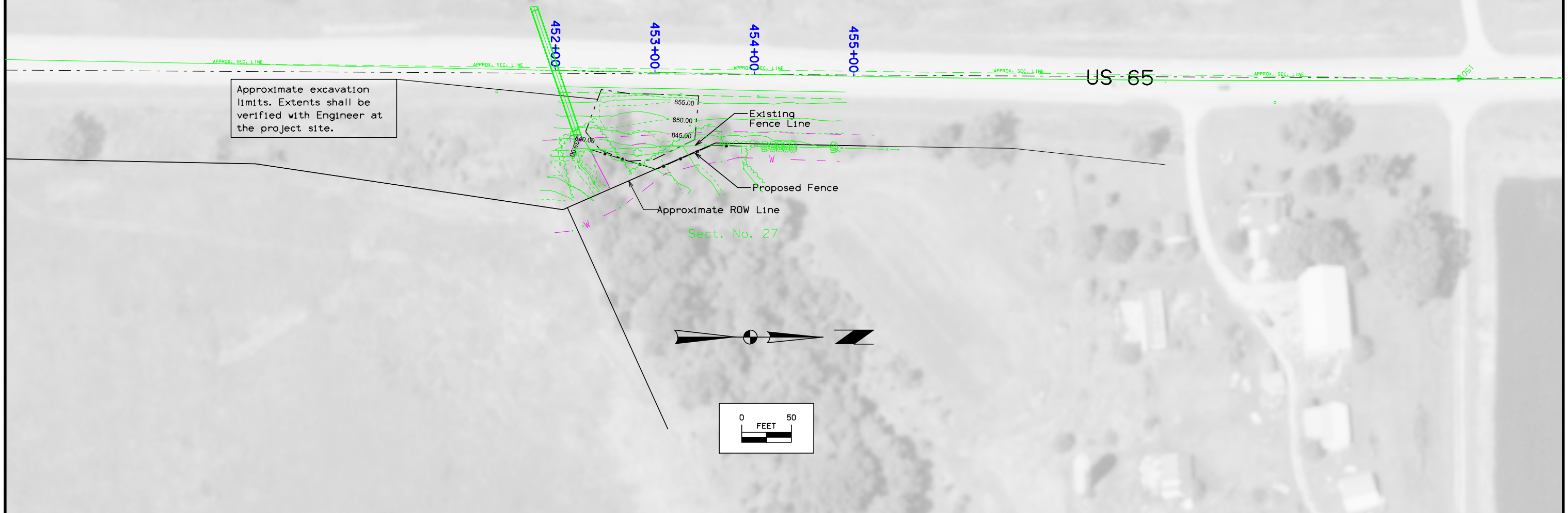
- ### RIGHT-OF-WAY LEGEND
- Proposed Right-of-Way
 - Existing Right of Way
 - Existing and Proposed Right-of-Way
 - Easement and Existing Right-of-Way
 - Easement (Temporary)
 - Easement
 - Access Control
 - Property Line

PLAN AND PROFILE LEGEND AND SYMBOL INFORMATION SHEET

(COVERS SHEET SERIES D, E, F, & K)

Sta. 451+99.8
 Skew 19°56'04.3" RT AH
 6'x8'x136' RCB
 D.A.=258 Acres-H

Otter Twp.
 T-75N R-23W
 SEC. 28



Approximate excavation limits. Extents shall be verified with Engineer at the project site.

Survey Information

Warren County
ER-065-3(85)--28-91
Slide Repair
0.69 mi S of Co Rd G58 (NB)
21-91-065-010
Sap-804.1

Party Personnel

Mike Rummelhart- Party Chief
Anthony Ruperto - Intern

Date(s) of Survey

Begin Date 07/29/2020
End Date 08/27/2020

General Information

Measurement units for this survey are US survey feet. This survey is for slide repair .69 miles south County Rd. G58 (NB). Project datum and control information is provided by Design Survey Office. This project is a full field survey.

Vertical Control

Vertical Control was established on this project by 6 hour static sessions. Vertical datum for this survey is relative to NAVD88. Geoid 12 B was used in processing. GRS80 Ellipsoidal Height was computed at project points. Vertical control was checked with IARTN checks.

Horizontal Control

The project coordinate system for this survey is Iowa RCS Zone 8 (U.S. Survey Feet). This survey control is relative to IARTN reference stations. IARTN Reference Station coordinates are relative to the National Reference Station network datum: NAD83 (2011). Coordinates were determined by conducting six hour static observations. Horizontal control was checked with IARTN checks.

Alignment Information

US Hwy 65

The horizontal alignment for this survey is a retrace from As-built Plans Project # 1074. Survey stationing was equated to the Plan PI @ Sta. 458+13.8 and run back and ahead without equation throughout the survey.

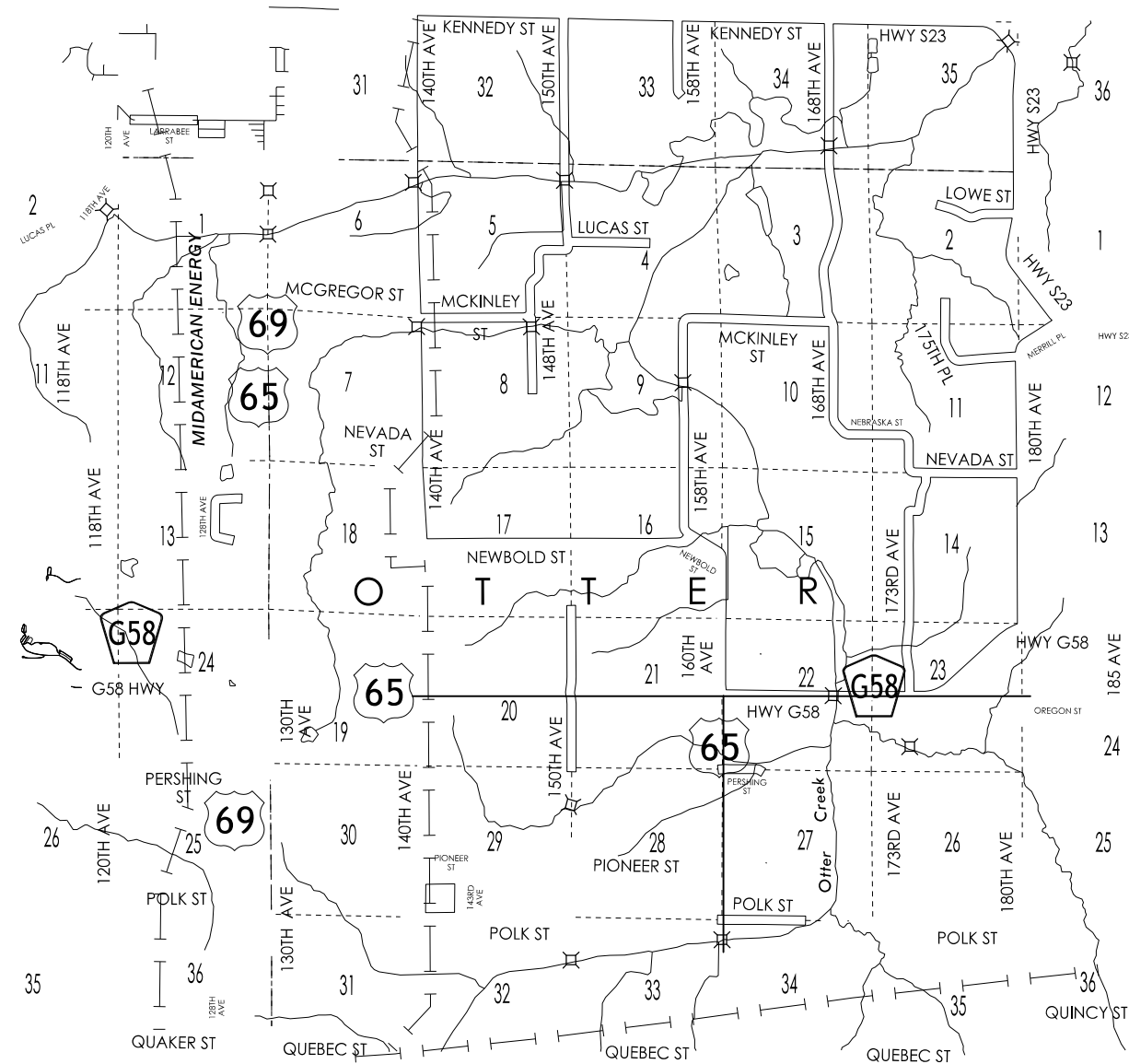
Survey stationing relates to as built plan stationing as follows:

PI Sta. 429+44.9 As-built Plans Project No. 1074
= PI Sta. 429+45.89 this survey

PI Sta. 458+13.8 As-built Plans Project No. 1074
= PI Sta. 458+13.8 this survey

CONTROL POINT VICINITY MAP

This map is a guide to the vicinity of the primary project control points
 Primary control is for use with RTK base stations and for RTN validation.
 Future surveys will use primary project control to establish temporary
 control as needed for construction or other surveying applications.



HORIZ. DATUM: NAD83(2011) EPOCH 2010.00

VERT. DATUM: NAVD88

1a. Regional Coordinate System Zone 8

Coordinate listing from next sheet will be used with 1aRTN for monument
 recovery. No other reference ties are given.

HORIZONTAL AND VERTICAL PROJECT CONTROL COORDINATE LISTING

HORIZ. DATUM: NAD83(2011) EPOCH 2010.00

VERT. DATUM: NAVD88

Ia. Regional Coordinate System Zone 8

Point	Northing	Easting	Elevation	Feature	Description
CP2	7388948.60	18543496.05	939.98	CP	Feno Monument 6" below ground _28' SW from centerline old US Hwy 65_17' NW NE corner telephone pedestal_30' SW warning sign post_90' N. power pole
CP3	7371143.78	18559362.67	927.25	CP	Conc Monument 73' E. of CL US Hwy 65_38' E. of no passing zone Sign_22' SW of Sta. Sign 340_10' W of Fence.
CP4	7376890.00	18559559.79	885.85	CP	Set Feno Monument 6" below ground. 101' NW. of Residential Entrance @ CL US Hwy 65_90' S. of Power Pole_83' W. of US Hwy 65.

NO ACCESS RIGHTS ARE TO BE ACQUIRED ON THIS PROJECT.

ACCESS CONTROL PREVIOUSLY ACQUIRED.



Sta. 451+99.8
 Skew 19°56'04.3" RT AH
 6'x8'x136' RCB
 D.A.=258 Acres-H

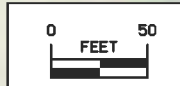
US 65

Existing Fence Line
 453+92
 78'
 453+59
 78'
 Proposed Fence
 453+04
 103'
 452+95
 101'±Ex.R/W

TEMPORARY EASEMENT TO PLACE ACCESS CONTROL FENCING

1
 NORMAN F. &
 CAROL A. FLEAGLE

Right of Way Design Information	
THIS SHEET INCLUDED FOR INFORMATION ONLY	
ROW Team: CUVA /CARMAN	
ROW #: NHSN-065-3(86)--2R-91	
Plan Date: 10/22/2020	
Color Legend:	
	Property Lines
	Temporary Easement
	Permanent Acquisition



108-23A 08-01-08
TRAFFIC CONTROL PLAN
Traffic on US 65 shall be maintained at all times.

111-01 04-17-12						
COORDINATED OPERATIONS						
Other work in progress during the same period of time will include the construction of the projects listed. Coordinate operations with those of other contractors working within the same area.						
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: center;">Project</td> <td style="width: 50%; text-align: center;">Type of Work</td> </tr> <tr> <td style="height: 20px;"> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> </tr> </table>	Project	Type of Work				
Project	Type of Work					

108-25 10-21-14												
511 TRAVEL RESTRICTIONS												
Route	Direction	County	Location Description	Feature Crossed	Object Type	Maint. Bridge No., Structure ID, or FHWA No.	Type of Restriction	Existing Measurement	Construction Measurement	Construction Measurement as Signed	Projected As Built Measurement	Remarks
			No restrictions expected.									

US 65 Slide Repair

Bench and rebuild the right (east) foreslope of northbound US 65 to the previously constructed slope (approximately 3:1) starting at Station 452+40 and extending to Station 453+35. The actual limits of the repair may change at the time of construction.

Benches shall extend a minimum of 6 feet into the undisturbed foreslope.

All slough material present on the slope shall be stripped/removed and wasted.

The repair shall start near the toe of slope, and then extend upslope to outside edge of the gravel shoulder.

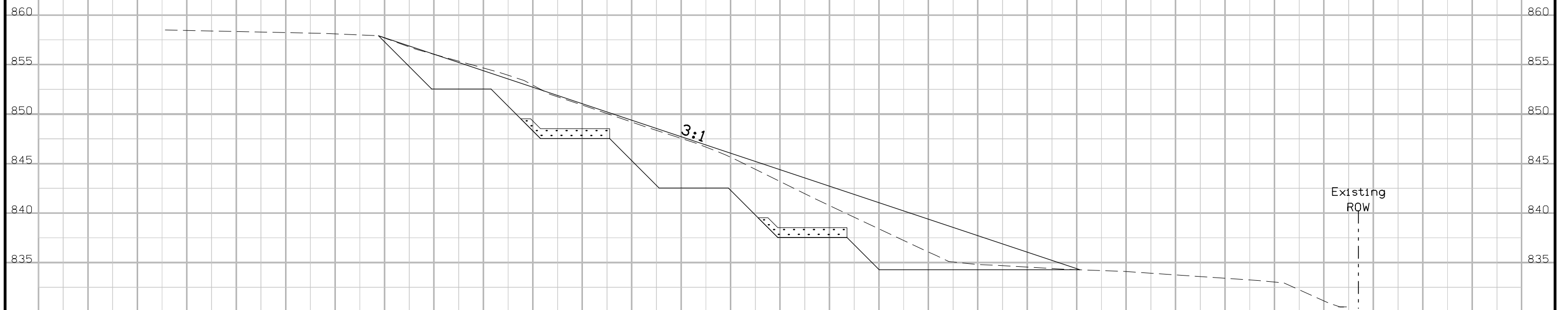
The backfill material shall consist of suitable cohesive soil meeting Std. Spec. 2102.02,D,1,a, except that it does not need to be of glacial origin.

Install a foreslope bench drains on the benches as shown on the Sheets W.1-W.3 and detailed in Tab 104-9 on sheet CS.1.

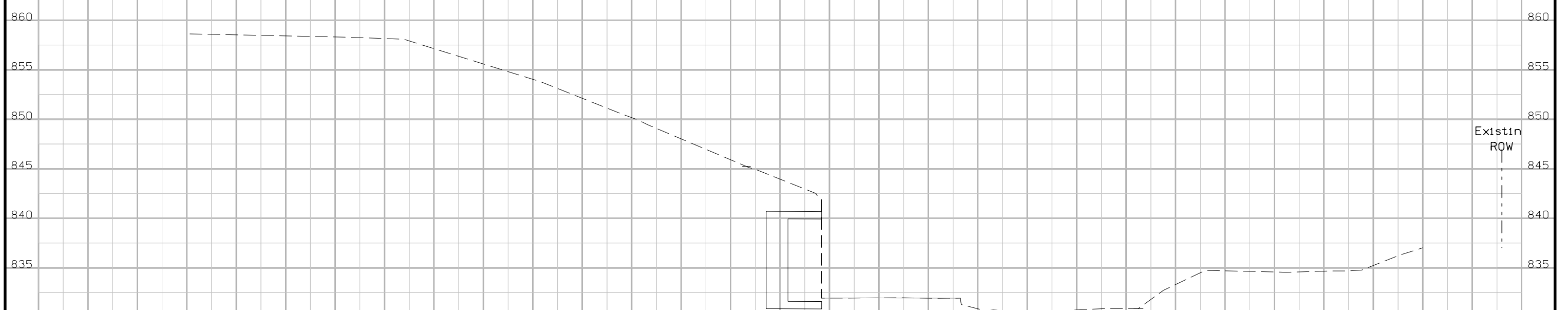
Spread 8 inches of furnished topsoil material after rebuilding the foreslope.

The area beyond the rebuilt toe of slope shall be properly graded to drain to the RCB culvert at Station 452+00.

US 65

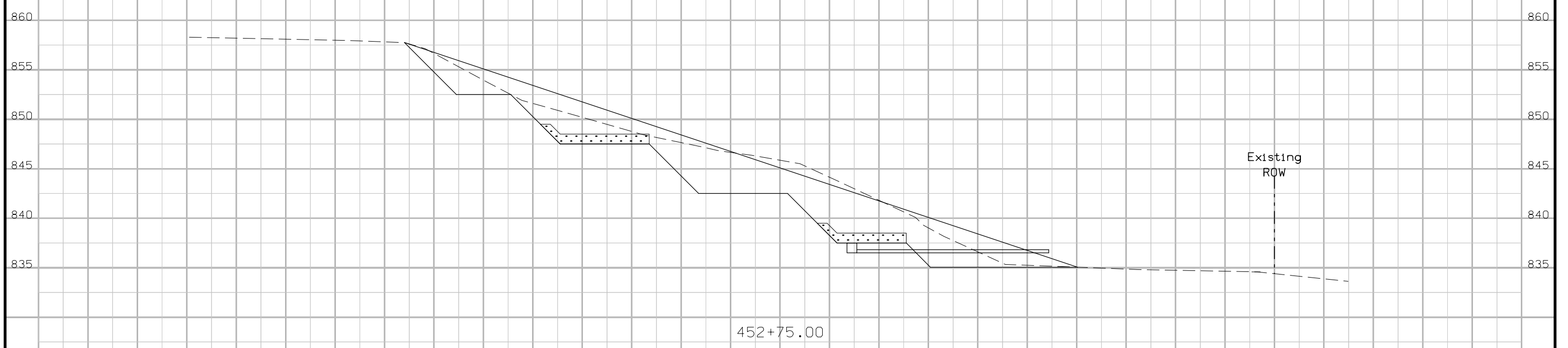
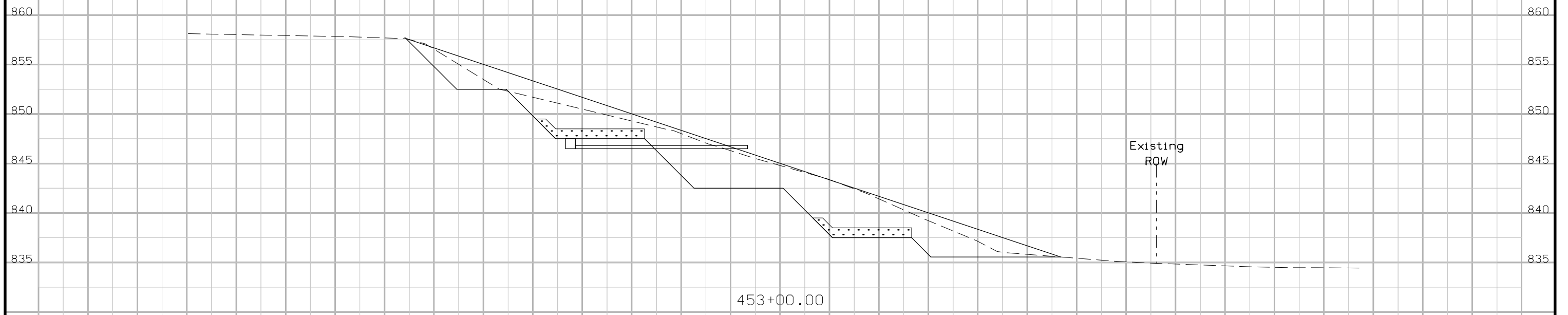


452+50.00



452+25.00

US 65



US 65

