

**Experimental Feature Construction Report
 February 2022**

Experimental Feature:	CAC Slope Treatment
Location:	Glendive District, Dawson County, I-94, Bad Route Interchange, RP 192.6 – 199.2
MDT Project Name:	Bad Route Interchange – NE
MDT Project Number:	IM 94-6(59)193[8150]
Experimental Project Number:	MT-21-04
Principle Investigator:	Chad DeAustin, Experimental Project Manager, (ExPM)
Construction Date:	Spring 2021

Project Map



Project Description & Outline

Standard construction practice to enhance revegetation and prevent erosion involves placing topsoil on top of finished gravel slopes up to the toe of the constructed asphalt, which is then seeded, to provide a base for plant life to grow to help anchor the soil and aggregate in place. However, for this experimental feature, it is thought that the topsoil is causing drainage problems, resulting in moisture to pool and seep into the roadway. Therefore, for this project there will be test sections without topsoil on the finished gravel slope.

The project has a total length of 6.8 miles with the experimental design sections listed below. The control sections not referenced in the below section are standard construction with topsoil placement.

- a) One of the test sections will contain a 4.4 ft. slope with aggregate only. The typicals with this treatment are 1, 3, 5, and 6 (see below table for breakdown).
- b) The other test section will contain a 6.8 ft. slope with aggregate only. The typical with this treatment is 2 (see below table for breakdown).
- c) The control for this project is called out in the “Detail: Experimental Test Section” page of the plans. The control is from station 2425+00 to 2450+00 or RP 193.70 to 194.17.

Control/Test	Typical #	Start RP	End RP	Distance (ft)
Test	1	192.60	193.70	5800'
Control	1	193.70	193.87	900'
Control	2	193.87	194.17	1600'
Test	2	194.17	194.75	3052'
Test	3	194.75	194.77	100'
Test	2	194.77	195.06	1506'
Bridge Section	5	195.06	195.18	660'
Test	2	195.18	195.33	777'
Test	3	195.33	195.35	100'
Test	2	195.35	195.66	1659'
Test	3	195.66	195.68	100'
Test	2	195.68	195.95	1439'
Test	3	195.95	195.97	100'
Test	2	195.97	196.28	1658'
Test	3	196.28	196.30	100'
Test	2	196.30	196.51	1099'
Test	3	196.51	196.53	100'
Test	2	196.53	197.27	3892'
Test	3	197.27	197.29	100'
Test	2	197.29	197.59	1558'
Test	1	197.59	197.88	1540'
Test	3	197.88	197.90	100'

Test	1	197.90	198.11	1114'
Test	3	198.11	198.13	100'
Test	1	198.13	198.59	2415'
Bridge Section	5,6	198.59	198.73	738'
Test	1	198.73	199.20	2363'

- Note this table is based on westbound information, eastbound is similar with a few differences.

Evaluation Procedures & Schedule

The measure of effectiveness (MOE) prevalent with this project will focus on:

- Construction practices (constructability, construction time, cost effectiveness, etc.),
- Monitor of slope in test and control sections,
- Visual inspection of erosion and revegetation.

In accordance with the Department's 'Experimental Project Procedures,' Research will monitor and report on performance for a minimum of five years annually. This includes delivery of a work plan, construction report, annual reports, and final project report.

2021: Installation/Construction Report
2022-2025: Annual Inspections/Evaluation Reports
2026: Final Evaluation Report/Project Conclusion

A web page will be dedicated to display all reporting from the project.

Construction Documentation – Spring 2021



↑ RP 192.60, view east. Westbound shoulder, west end of the project, test section.



↑ RP 199.20, view west. Westbound shoulder, east end of the project, test section.



↑ RP 193.50, view east. Westbound shoulder, test section, typical 1.



↑ RP 197.60, view east. Westbound shoulder, test section, typical 1.

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