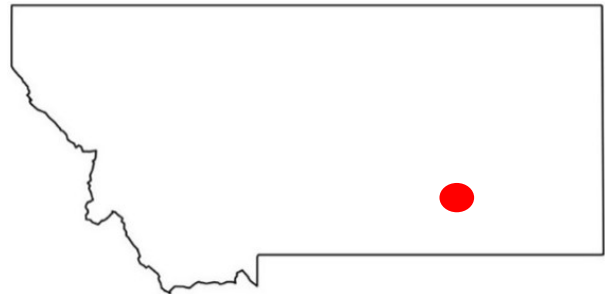
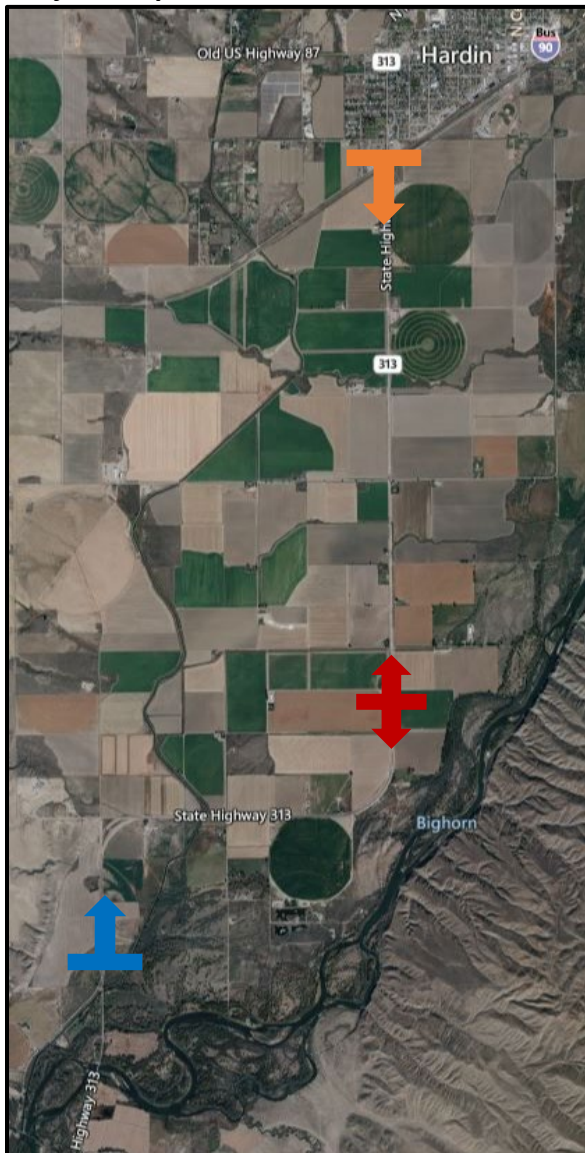


**Experimental Feature Work Plan  
 September 2022**

<b>Experimental Feature:</b>	TENAX LBO 220 Geogrid
<b>Location:</b>	Billings District, Big Horn County, MT Hwy 313, RP 1.3 – 7.8
<b>MDT Project Name:</b>	Hardin – South
<b>MDT Project Number:</b>	STPS 313-1(17)1[5793]
<b>Experimental Project Number:</b>	MT-21-03
<b>Principle Investigator:</b>	Chad DeAustin, Experimental Project Manager (ExPM)

**Project Map**

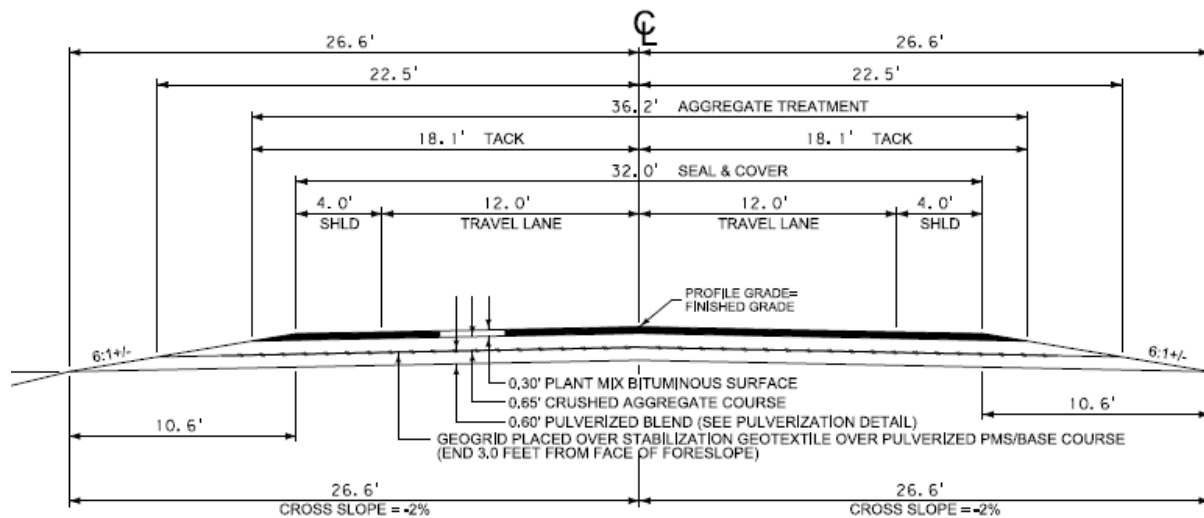


← to ← completed in 2021  
 ← to ← completed in 2022

## Project Description & Outline

TENAX LBO 220 is a geogrid made with of a high-quality polypropylene resin that is intended to stabilize and reinforce weak soils or aggregate base by preventing lateral shearing. This project was chosen as a test site for this product due to poor subgrade in an agriculture dominated landscape. The geogrid is to be used in conjunction with a stabilization geotextile fabric that and will be laid to separate the subgrade and crushed aggregate base.

There are a few different surfacing sections on this project. The crushed aggregate base calls for depths of .65' and .85' while the plant mix surfacing is mostly .3' with some .5' at the bridge ends. To aid in the stabilization efforts, there are also two sections that require pulverization blends below the crushed aggregate base. These sections will be watched for any variation of wear or differing results. Below is a sample typical section.



## Evaluation Procedures & Schedule

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

- Construction practices (constructability, construction time, cost effectiveness, etc.),
- Visual inspection of the surfacing,
- Rut and ride analysis of the roadway.

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.

2022: Installation/Construction Report  
2023-2026: Annual Inspections/Evaluation Reports  
2027: Final Evaluation Report/Project Conclusion

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

### Preconstruction Documentation – March 2021



↑ Examples of preconstruction roadway conditions. Left photo is view south and right is view north. There is heavy rutting as well as longitudinal and transverse cracking. Per the project manager, the northbound lane experiences higher amounts heavy commercial truck traffic due to sugar beet operations in the area.

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