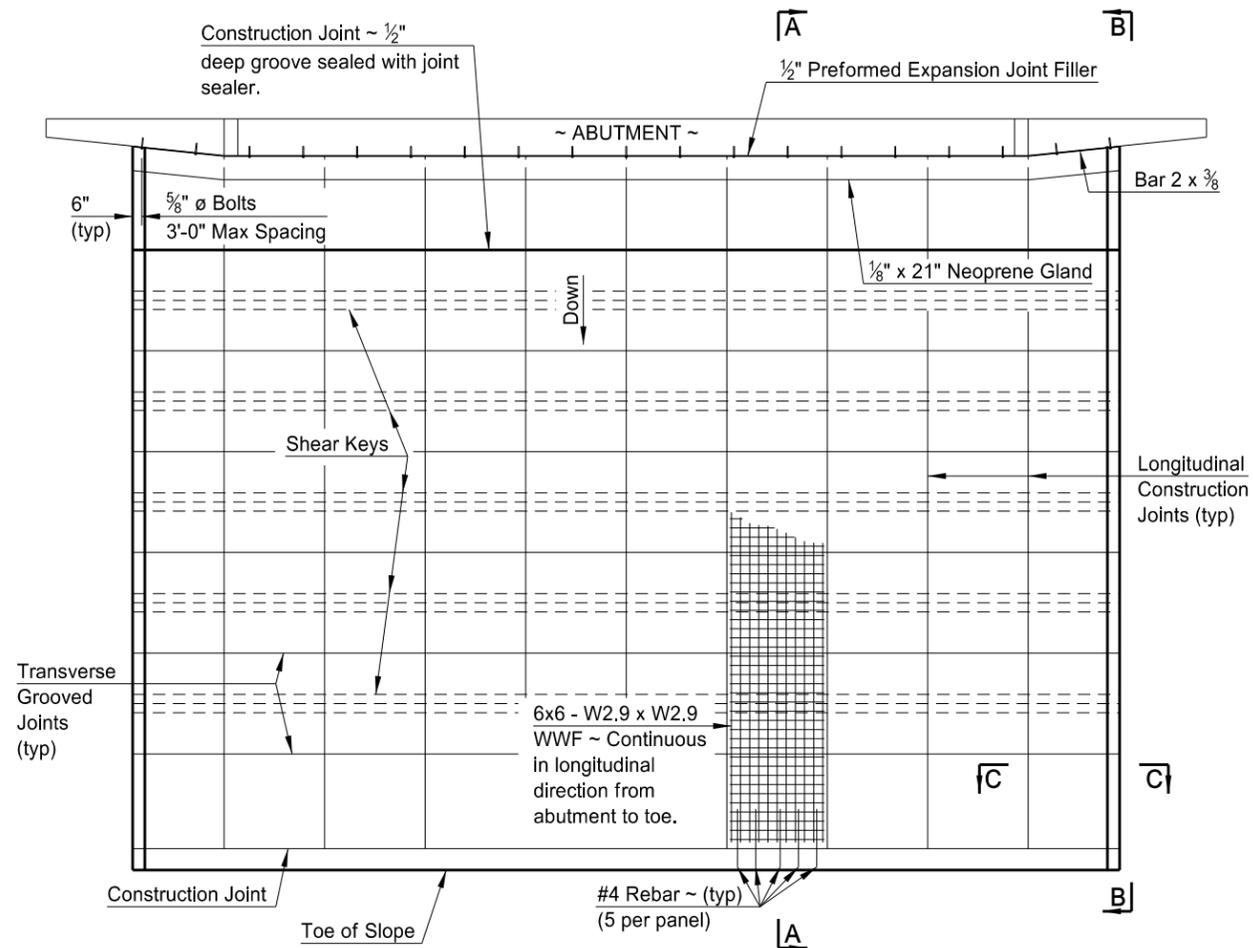


STANDARD SLOPE PROTECTION UNDER BRIDGES

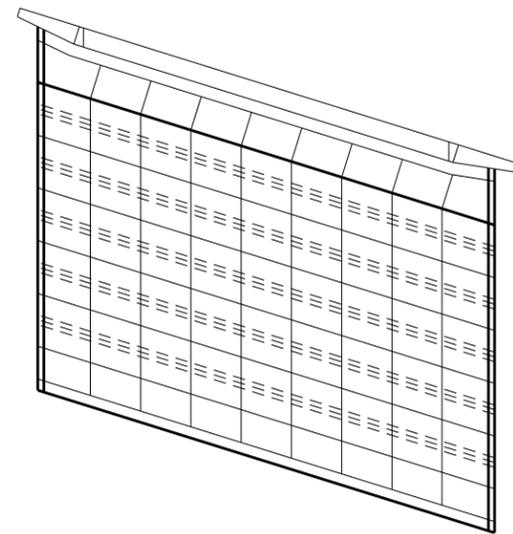
D-708-1

NOTES:

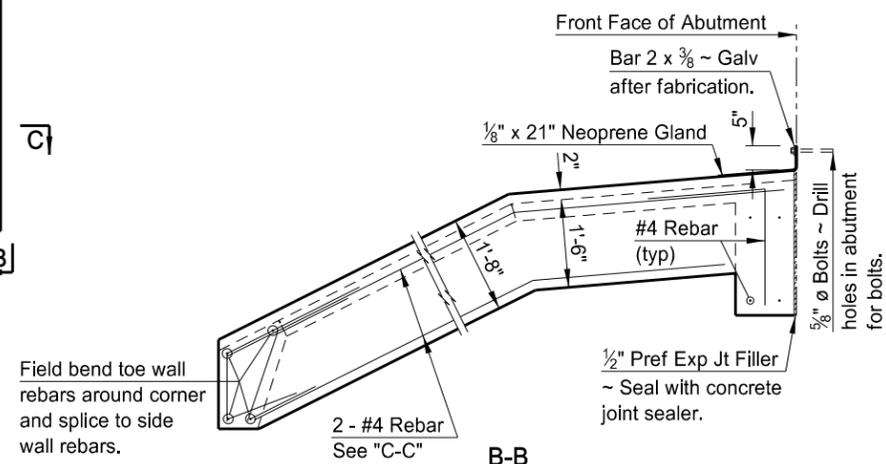
- The toe wall shall be placed before concrete is placed on the slope.
- All inside panels shall be 5'-6" square. All outside panels shall be adjustable from 5'-0" minimum to 8'-0" maximum.
- All transverse joints shall be 1/2" deep grooved joints sealed with concrete joint sealer. All longitudinal joints shall be construction joints with 1/2" deep grooves sealed with concrete joint sealer. All cracks that may have developed before the project has been accepted shall also be sealed with concrete joint sealer. An elastomeric joint sealant which meets ASTM C-920, CI 25, can be used in lieu of the sealants allowed in 826.02 of the ND Standard Specifications.
- Wherever parts of a structure, such as piers, etc. are contacted by the slope protection, preformed expansion joint filler shall be installed between the contact areas as shown.
- Shear keys shall be placed in every panel on the slope, as shown.
- The welded wire fabric (WWF) shall be supplied in sheets. When it is necessary to make the WWF continuous, a lap splice at least 8" long shall be used.
- Several shorter bars may be substituted for the continuous Bar 2 x 3/8. If the substitution is made, the space from the end of the bar to the first hole shall not be more than 6 inches.
- The bolts to hold the neoprene gland in place shall be installed into the abutment by a mechanical or chemically bonded method.



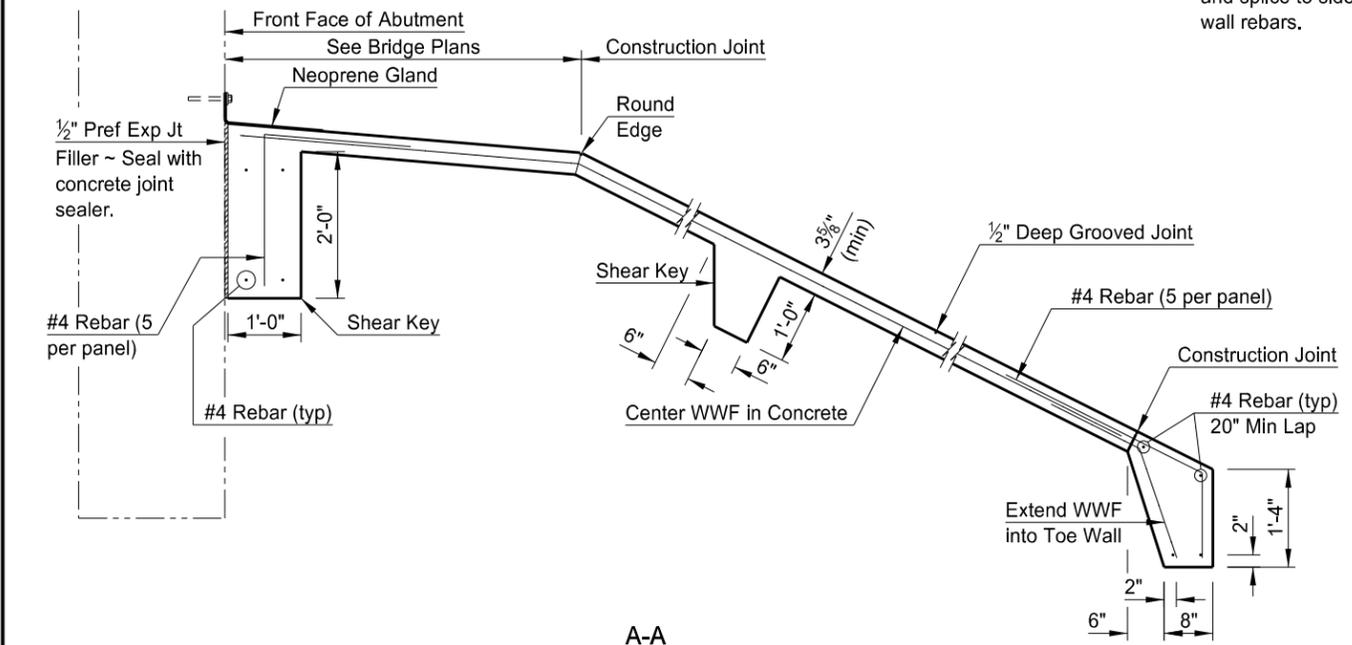
SLOPE PROTECTION LAYOUT



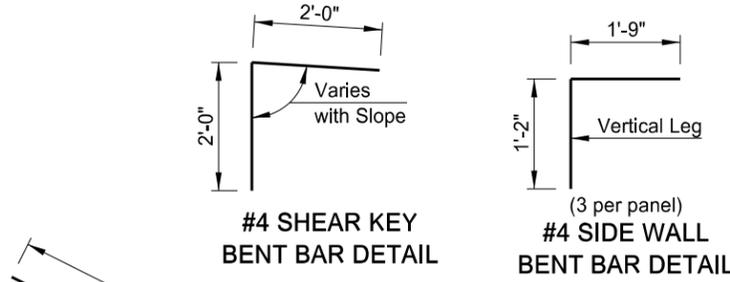
SKEWED SLOPE PROTECTION LAYOUT



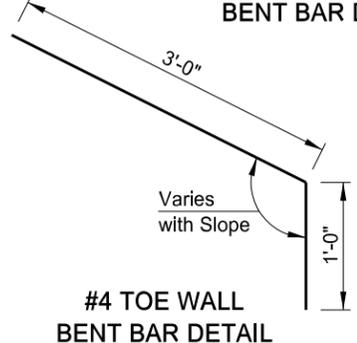
B-B



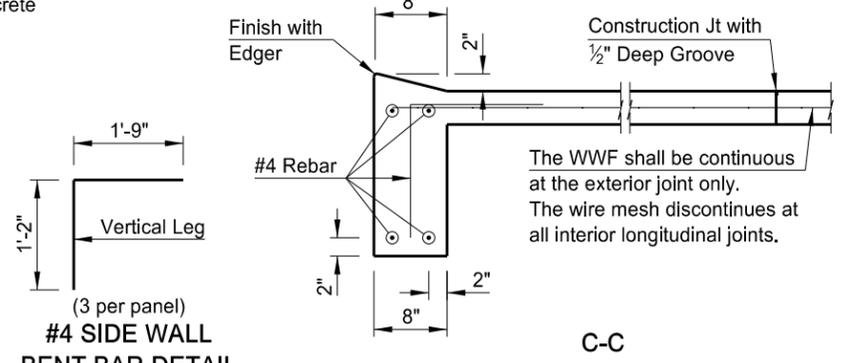
A-A



#4 SHEAR KEY BENT BAR DETAIL



#4 TOE WALL BENT BAR DETAIL



#4 SIDE WALL BENT BAR DETAIL

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION	
09/14/11	
REVISIONS	
DATE	CHANGE

This document was originally issued and sealed by Terrence R. Udland, Registration Number PE-2674, on 09/14/11 and the original document is stored at the North Dakota Department of Transportation