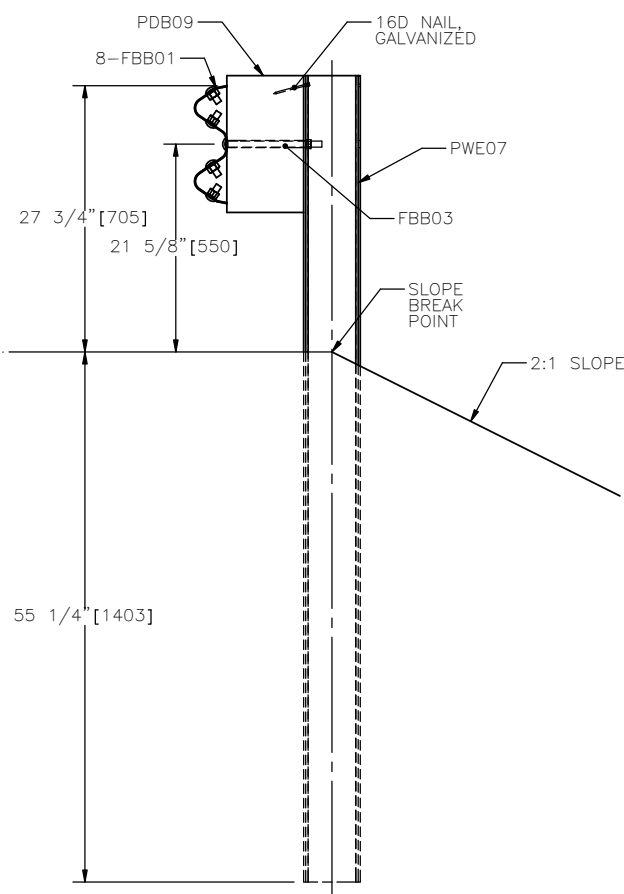
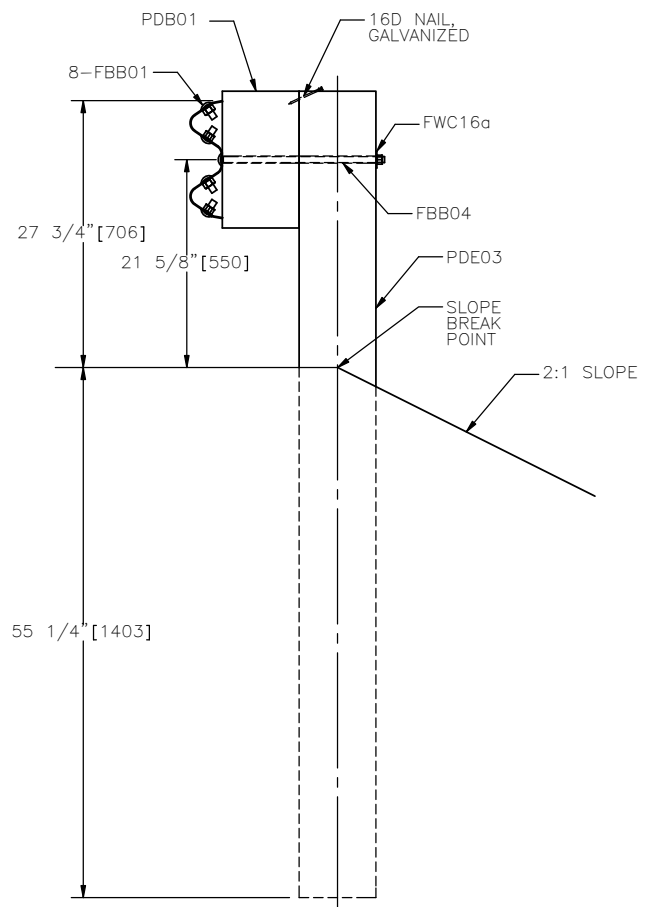


ELEVATION



SGR24a  
SECTION A-A



SGR24b

REDUCED SPACING, STRONG-POST, W-BEAM GUARDRAIL ON A SLOPE



SGR24a-b

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### INTENDED USE

Strong-Post W-Beam Guardrail on a Slope, with 1/2 post spacing on a 2H:1V slope (SGR24a-b) should be used in locations where a maximum dynamic deflection of 38 5/8" [981] or less is acceptable. The posts should be positioned such that the center of the post is coincident with the slope break point. W-Beam on a Slope should be anchored and terminated using a suitable guardrail end treatment. W-Beam on a Slope can be used with wide-flange steel posts (PWE07) or timber posts (PDE03). Guardrail sections measuring 300" [7620] long can be used in lieu of the 150" [3860] long sections. This system is TL-3 NCHRP 350 accepted.

### COMPONENTS

Unit Length = 150" [3810]

| DESIGNATOR | COMPONENT                       | SYSTEM | NUMBER |
|------------|---------------------------------|--------|--------|
| FBB01      | Guardrail splice bolts and nuts | a-b    | 8      |
| FBB03      | Guardrail post bolts and nuts   | a      | 4      |
| FBB04      | Guardrail post bolts and nuts   | b      | 4      |
| FWC16a     | Round washer                    | b      | 4      |
| PDB01      | W-beam timber blockout          | b      | 4      |
| PDB09      | Timber blockout                 | a      | 4      |
| PDE03      | Timber guardrail post           | b      | 4      |
| PWE07      | Wide-flange guardrail post      | a      | 4      |
| RWM04a     | W-beam rail                     | a-b    | 1      |
| -----      | 16D nail, galvanized            | a-b    | 4      |

### ACCEPTANCE

FHWA Acceptance Letter B-64C, April 21, 2003.

### REFERENCES

Polivka, K.A., Faller, R.K., Sicking, D.L., Rohde, J.R., Holloway, J.C., and Keller, E.A., Development of a W-Beam Guardrail System for Use on a 2:1 Slope, Final Report to the Midwest State's Regional Pooled Fund Program, Transportation Research Report No. TRP-03-99-00, Project No. SPR-3(017)-Years 9 & 10, Midwest Roadside Safety Facility, University of Nebraska-Lincoln, October 16, 2000.

Polivka, K.A., Sicking, D.L., Faller, R.K., and Rohde, J.R., A W-Beam Guardrail Adjacent to a Slope, Paper No. 01-0343, Transportation Research Record No. 1743, Transportation Research Board, National Research Council Washington, Washington, D.C., January 2001. pp. 80-87.

### CONTACT INFORMATION

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## REDUCED SPACING, STRONG-POST, W-BEAM GUARDRAIL ON A SLOPE

# SGR24a-b

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