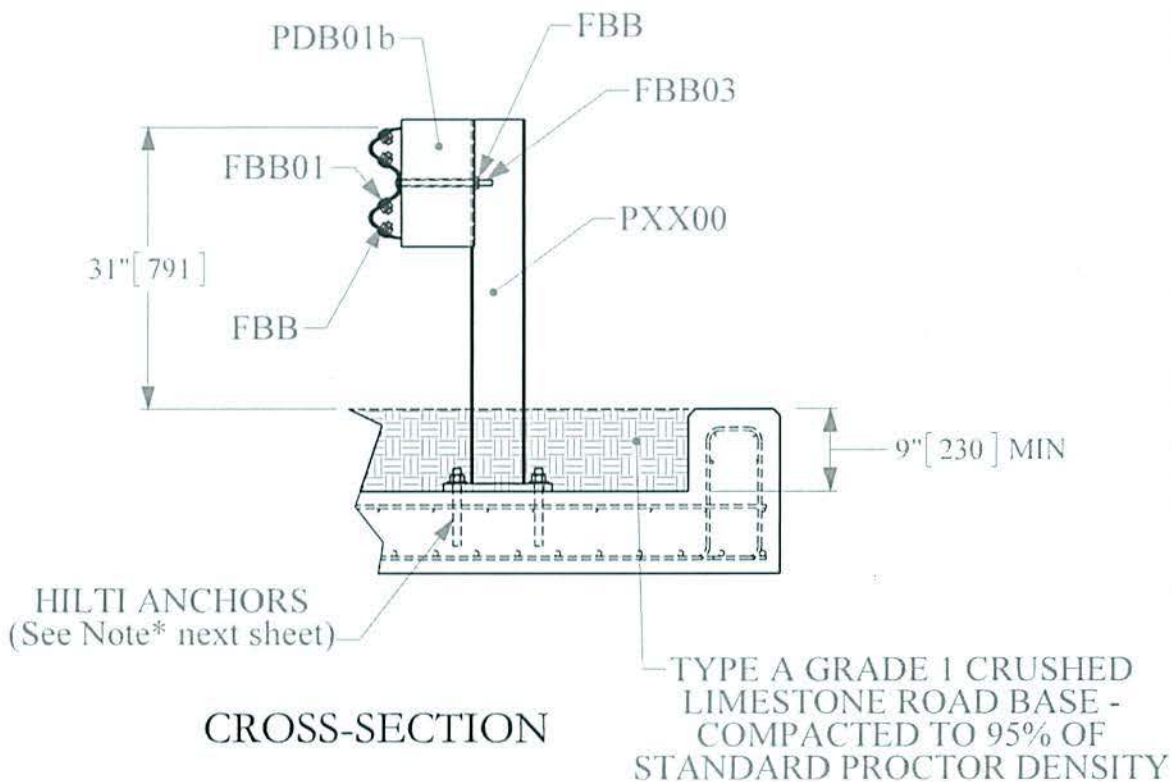


ELEVATION VIEW



2012

W-Beam Guardrail on Box Culvert



SXX00

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INTENDED USE

This guardrail system is intended for use over a concrete culvert. This drawing and specification address only the bridge railing and not the design or detailing of the concrete and rebar components of the culvert, but this system is not to be used if concrete strength of the box culvert is less than 5000 psi (34.5 MPa).

COMPONENTS
Unit Length = 105' [32m]

#	PART NUMBER	QTY.	ARTBA
1	Box Culvert Post	17	PXX00
2	12' 6" W-Beam, 4- space 12 gauge	9	RWM02a
3	Blockout, 8-inch W-beam Routered	17	PDB01b
4	Bolt, Button-head 10 inch	17	FBB03
5	Nut, Recessed Guardrail	89	FBB
6	Bolt, Button-head 1-1/4"	72	FBB01
7	Hilti Anchor *	68	

* Hilti HAS-E Ø7/8 Anchor (cut off to 8-1/2" [215] long) with washer and nut. Installed with Hilti RE500 epoxy according to label directions with minimum 6" [150] embedment.

REFERENCES

MASH Test 3-11 of the W-beam Guardrail on low-fill Culvert, Roadside Safety Research Program, Pool Fund Study No. TPF-5 (119) Test No. 405160-23 (1 and 2), November, 2011.

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W-Beam Guardrail on Box Culvert



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