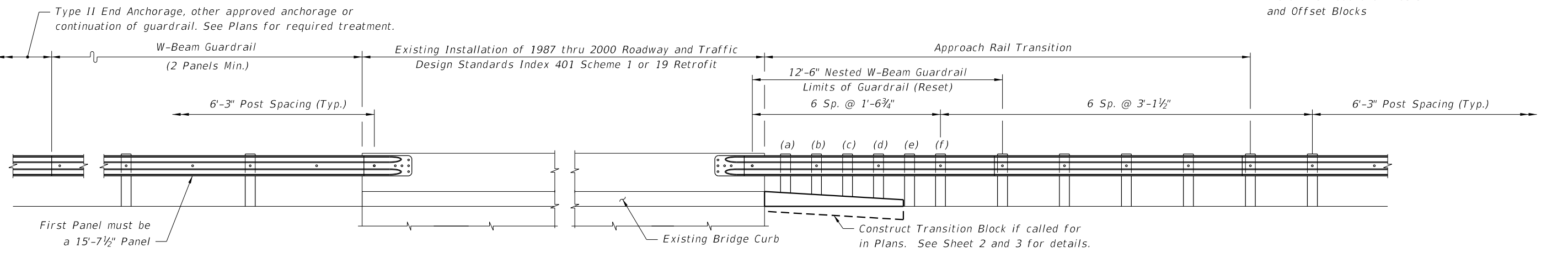
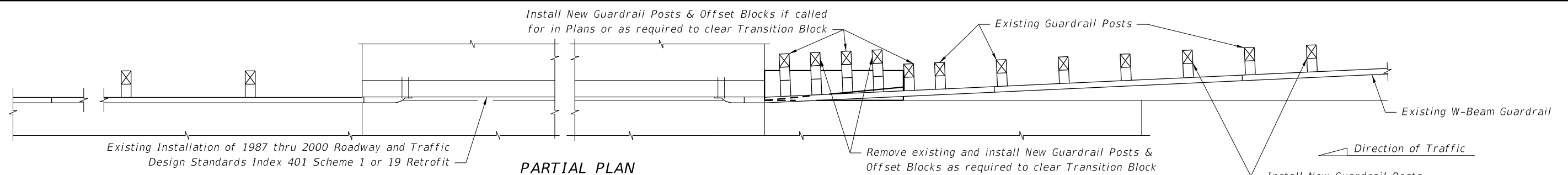


**W-BEAM BRIDGE TRAFFIC RAILING RETROFITS**

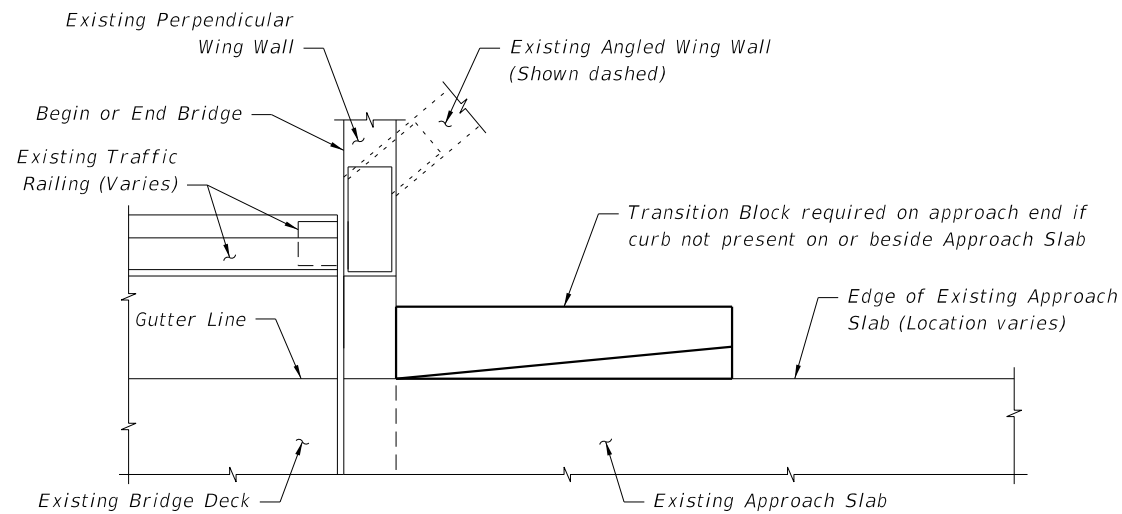


**VERTICAL FACE BRIDGE TRAFFIC RAILING RETROFITS**

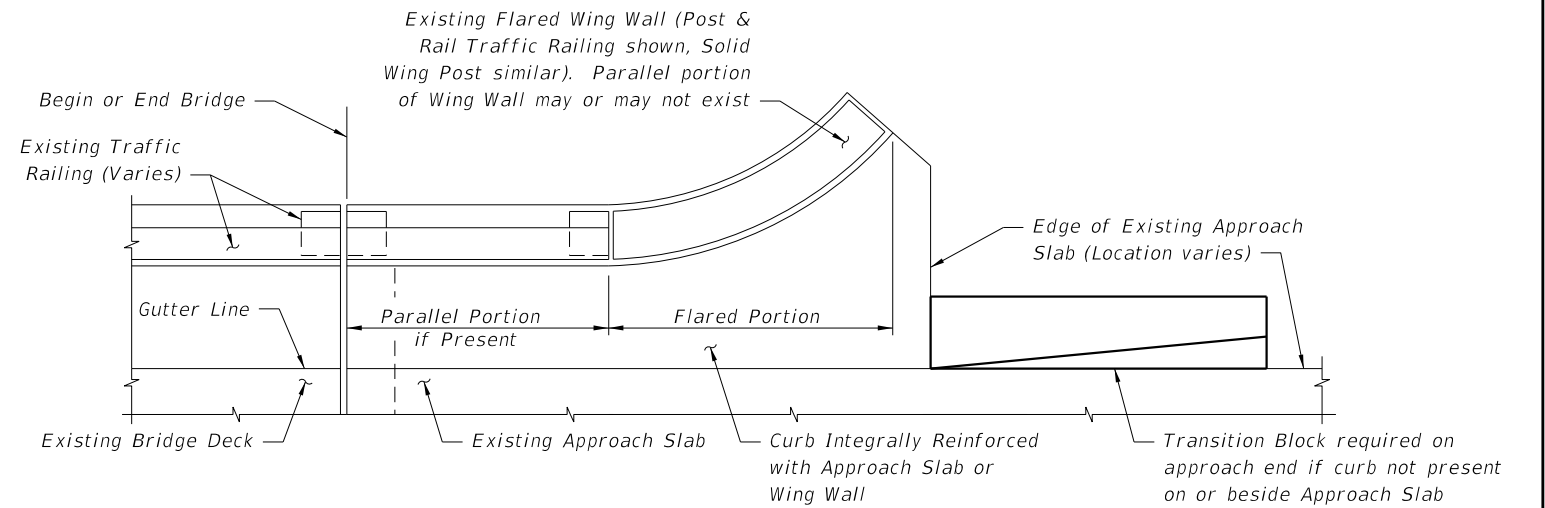
\* For use when outside of approach clear zone or horizontal clearance.

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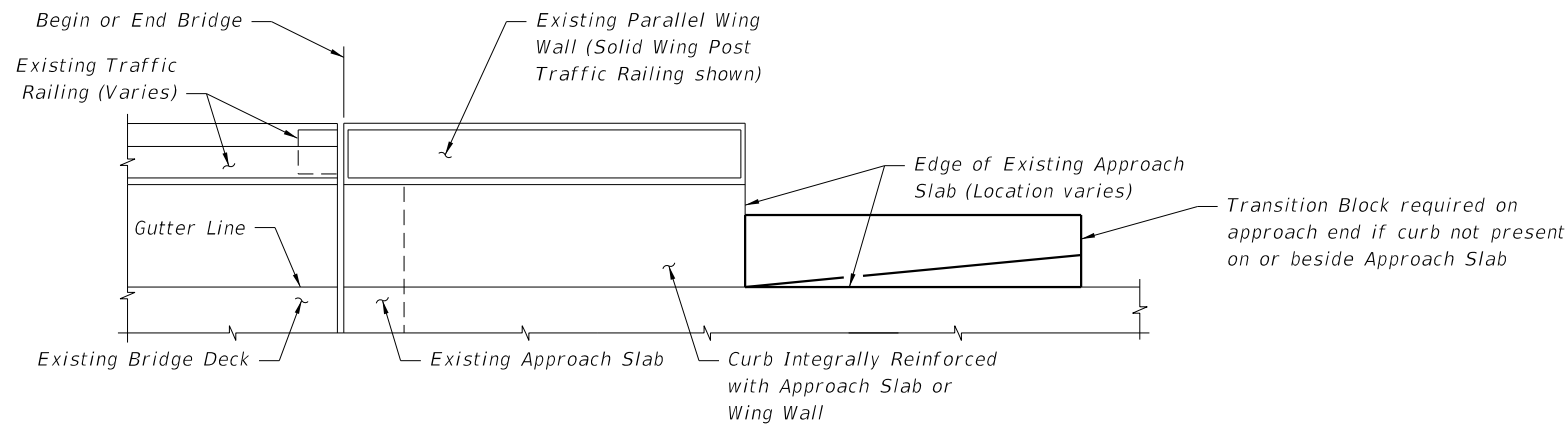
LAST REVISION 07/01/14	REVISION	DESCRIPTION:	 <b>2016</b> <b>DESIGN STANDARDS</b>	<b>GUARDRAIL TRANSITIONS FOR EXISTING BRIDGE TRAFFIC RAILING RETROFITS</b>	INDEX NO. <b>403</b>	SHEET NO. <b>1 of 3</b>
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PARTIAL PLAN VIEW OF EXISTING BRIDGE WITH PERPENDICULAR OR ANGLED WING WALLS




PARTIAL PLAN VIEW OF EXISTING BRIDGE WITH FLARED WING WALLS AND PARALLEL INTEGRALLY REINFORCED APPROACH SLAB CURBS (APPROACH SLAB WITH DETACHED CURBS OR SIDEWALK SIMILAR)

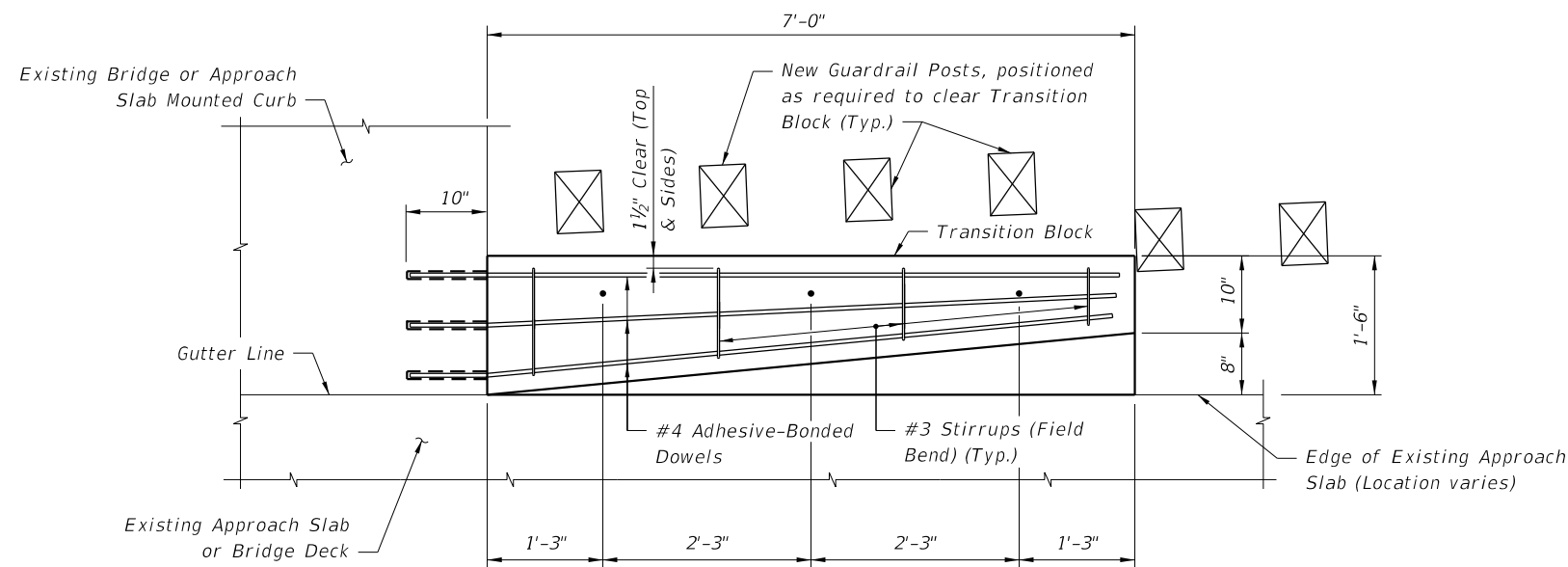


PARTIAL PLAN VIEW OF EXISTING BRIDGE WITH PARALLEL WING WALLS AND INTEGRALLY REINFORCED APPROACH SLAB CURBS (APPROACH SLAB WITH DETACHED CURBS OR SIDEWALK SIMILAR)

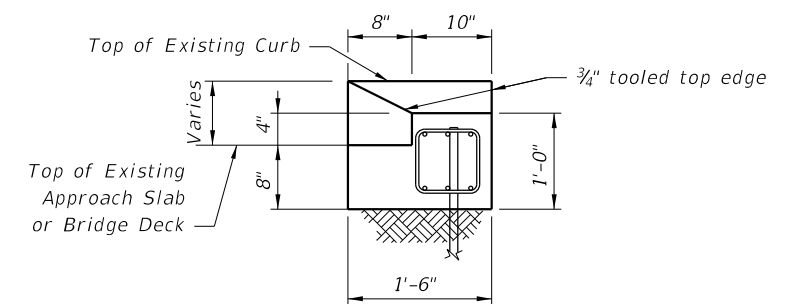
CROSS REFERENCE:  
For Transition Block Details,  
Quantities and reinforcement  
see Sheet 3.

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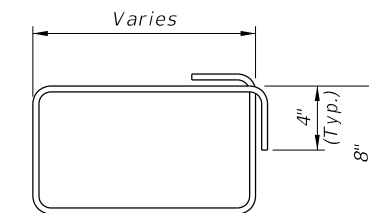
LAST REVISION 07/01/05	REVISION	DESCRIPTION:	 2016 DESIGN STANDARDS	GUARDRAIL TRANSITIONS FOR EXISTING BRIDGE TRAFFIC RAILING RETROFITS	INDEX NO. 403	SHEET NO. 2 of 3
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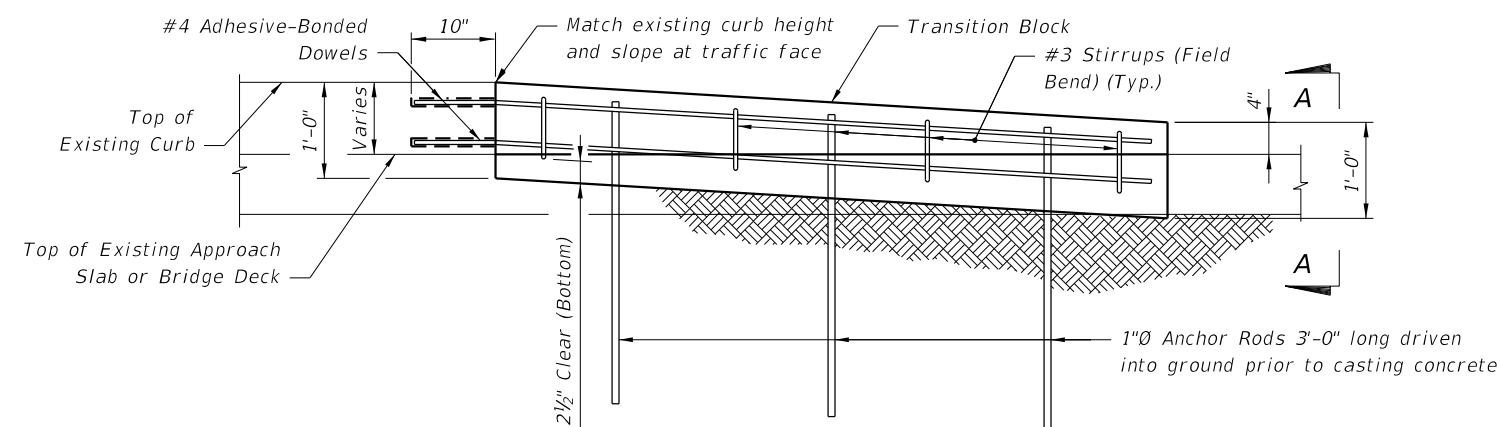
PLAN VIEW OF TRANSITION BLOCK  
(GUARDRAIL NOT SHOWN FOR CLARITY)



END VIEW A-A



#3 STIRRUP (FIELD BEND)



ELEVATION OF TRANSITION BLOCK  
(GUARDRAIL AND POSTS NOT  
SHOWN FOR CLARITY)

NOTES:

CONCRETE: Concrete for Transition Blocks shall be Class NS.

REINFORCING STEEL: Reinforcing steel shall be ASTM A615, Grade 60.

ANCHOR RODS: Steel Anchor Rods shall be ASTM A36, ASTM A709 Grade 36 or ASTM A615 Grade 60 hot-dip galvanized in accordance with Specification Section 962.

W BEAM GUARDRAIL: Guardrail components and installation shall be in accordance with Design Standards Index 400.

ADHESIVE-BONDED DOWELS: Adhesive Bonding Material Systems for Dowels shall comply with Specification Section 937 (Type HV) and be installed in accordance with Specification Section 416.

Adhesive Bonded Dowels are shown installed in an existing curb or sidewalk integrally reinforced with Approach Slab, Wingwall or Bridge Deck. For installations in existing detached curbs or sidewalks, install dowels in available sound concrete.

PAYMENT: Payment for Guardrail work will be made under Pay Item Guardrail (Reset) LF. Payment for Transition Block will be made under Pay Item Concrete Curb (Special), LF.

ESTIMATED QUANTITIES		
ITEM	UNIT	QUANTITY
Concrete Class NS	CY	0.4
Reinforcing Steel	LB	61
Guardrail (Reset)	LF	12.5

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LAST REVISION	DESCRIPTION:
01/01/10	