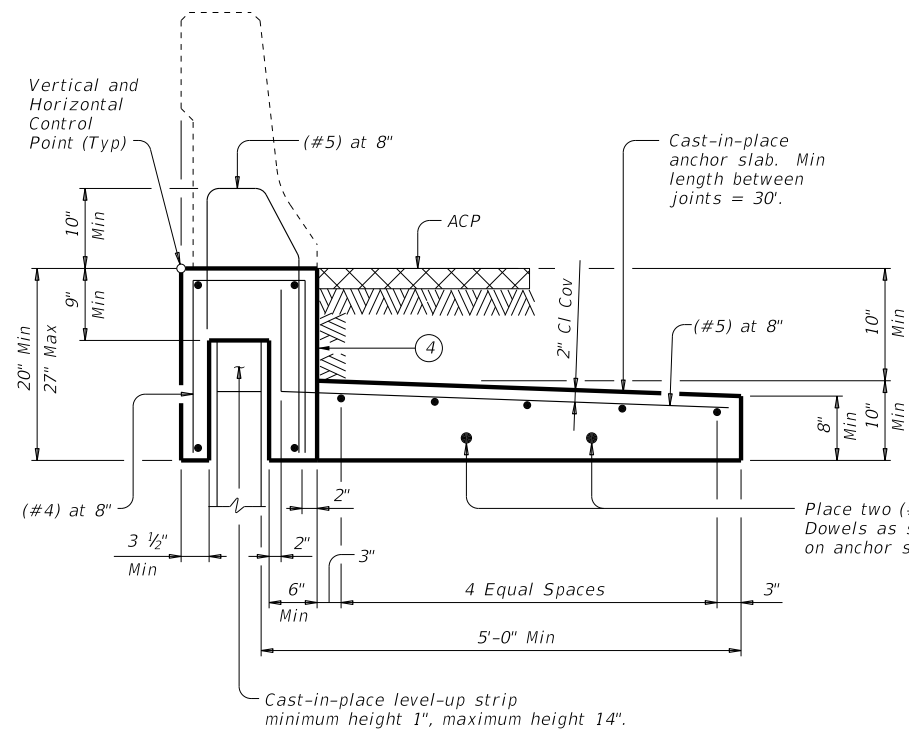
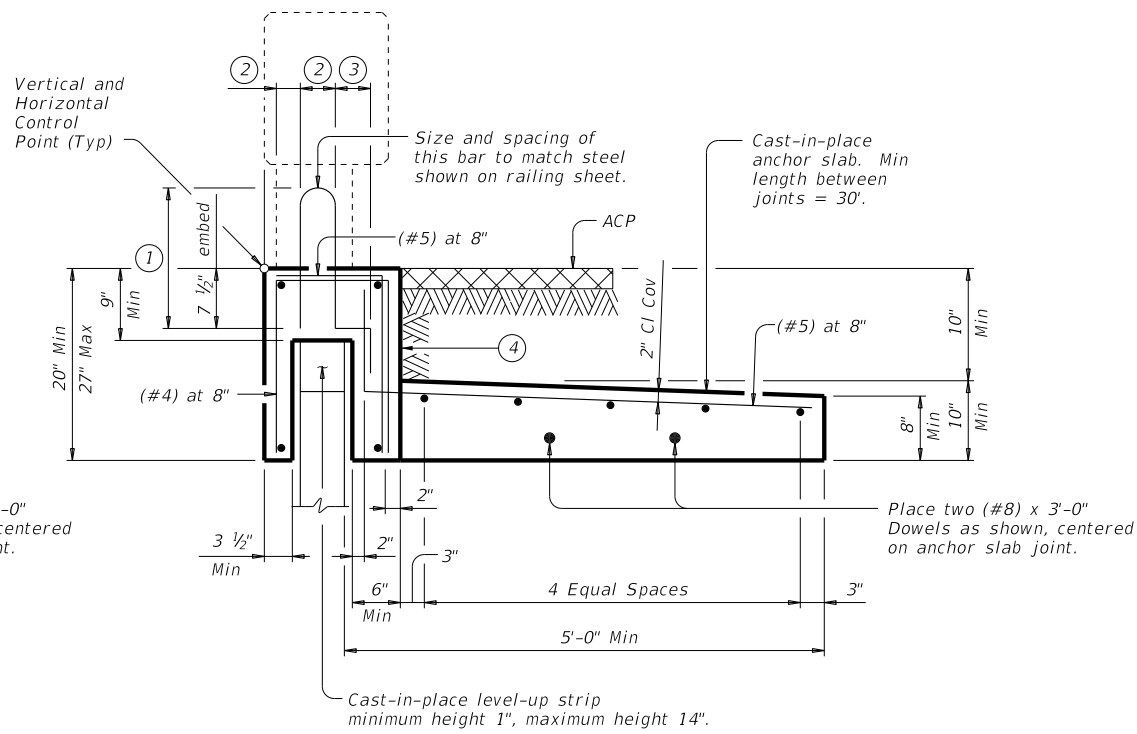


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**"WIDE BASED"
ADJACENT TO ACP**

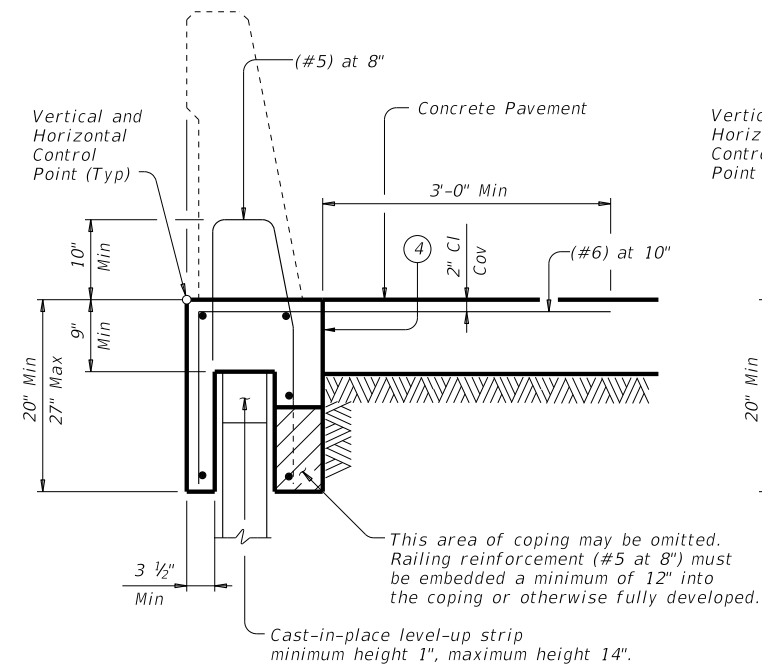
(Showing T551 Rail, other rails listed similar)



**"NARROW BASED"
ADJACENT TO ACP**

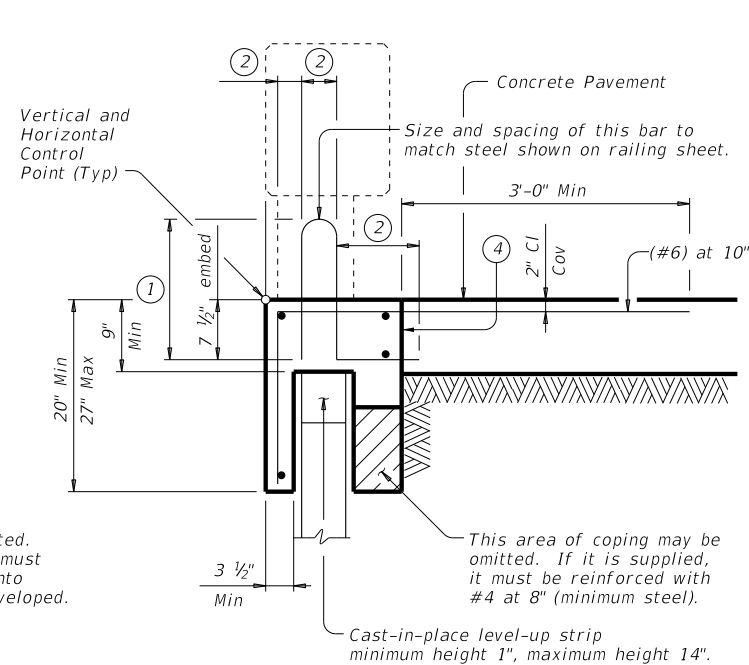
(Showing T223 Rail, other rails listed similar)

- ① Reinforcement length equal to length shown on the appropriate Rail standard plus 1".
- ② Match dimension on the appropriate Rail standard.
- ③ Match dimension on the appropriate Rail standard. Bend end of rail anchorage reinforcing as shown as required to maintain clear cover.
- ④ See "Coping Joint Sealer Details".
- ⑤ Use of these rails will result in a railing acceptable for MASH Test Level 3 (TL-3) regardless of the higher ratings that may be indicated on the rail standard.



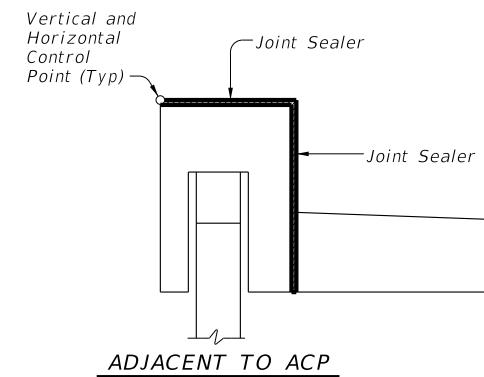
**"WIDE BASED"
ADJACENT TO CONCRETE PAVEMENT**

(Showing SSTR Rail, other rails listed similar)

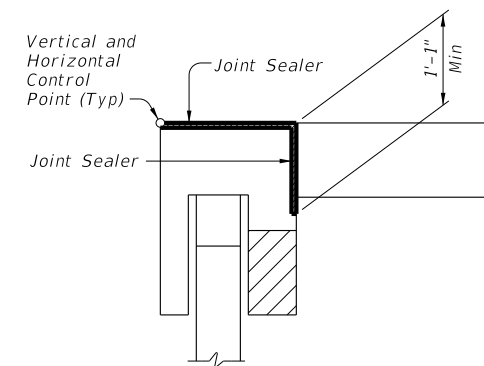


**"NARROW BASED"
ADJACENT TO CONCRETE PAVEMENT**

(Showing T223 Rail, other rails listed similar)



ADJACENT TO ACP



**ADJACENT TO
CONCRETE PAVEMENT**

**COPING
JOINT SEALER DETAILS**

(Reinforcing steel not shown for clarity)

Rail Type ⑤	Detail	Precasting Rail with Coping Allowed
T1F/T1W/C1W/T2P/C2P	NARROW	NO
T221/C221/T222	NARROW	YES
T223/C223	NARROW	NO
T401/T402/C402	NARROW	NO
T411/C411	NARROW	NO
T551/T552	WIDE	YES
T66	NARROW	NO
SSTR	WIDE	YES

CAST-IN-PLACE COPINGS:

Provide compressible material to isolate precast panel from cast-in-place coping to prevent cracking. Attach compressible material to both sides of precast panel prior to casting concrete for coping.

When cast-in-place coping is anchored to reinforced concrete pavement, a smooth level-up strip must be provided on the top of the precast panels. The purpose of the level-up is to allow the pavement and coping to move longitudinally relative to the wall without causing damage.

Align coping and railing joints with precast panel joints. Optional rail joints are allowed as approved by Engineer. Provide railing construction joints or expansion joints at no greater than 100' spacing.

PRECAST COPINGS:

Provide a smooth level-up strip on top of the precast panels prior to installation of the coping. Shims may be used on top of the level-up strip to facilitate alignment. Total shim thickness not to exceed 1".

Provide precast coping in 10' minimum lengths.

JOINED CONCRETE PAVEMENT:

When coping is adjacent to and anchored into jointed concrete pavement, the coping joints must coincide with the pavement joints.

JOINT SEALER:

Seal joints between coping segments in accordance with Item 438, "Cleaning and Sealing Joints". Provide Class 4 joint seal. Place sealant flush with coping surface. The purpose of the joint sealing is to reduce surface drainage infiltration into the retaining wall backfill. Sealing coping joint is considered subsidiary to other items.

GENERAL NOTES:

Details on this sheet are to be used in development of specific details for mounting traffic railing on mechanically stabilized earth (MSE) walls.

The specific details proposed must have strengths equivalent to those shown on this sheet. Areas of particular importance are the connection of the coping to the railing, the strength of the vertical coping leg connecting the railing to the anchor slab, and the connection of the coping to the anchor slab or concrete pavement.

Submit shop drawings for the traffic railing foundations to the Engineer in accordance with Item 423 "Retaining Wall". The shop drawings must include bar bending details.

Precasting of railing with the coping will be allowed as noted in the table on this sheet.

The Contractor's attention is directed to the fact that various configurations of precast coping/railing combinations are covered by patent. The contractor must provide for use of these systems in accordance with Article 7.3.

Provide Class C concrete (f'c=3,600 psi).

Provide Grade 60 reinforcing steel.

Provide (#4) longitudinal bars, unless otherwise shown.

Coping and anchor slabs are considered subsidiary to Item 423 "Retaining Wall". Payment for traffic railing is per the linear foot for the appropriate railing type.

		Bridge Division Standard	
<h2>RETAINING WALL TRAFFIC RAILING FOUNDATIONS</h2>			
<h3>RW(TRF)</h3>			
FILE: rwstd03-20.dgn	DN: TxDOT	CK: TxDOT	DW: JTR
CONTRACT: 03-18	SECTION: 02-20	JOB: 03-18	HIGHWAY: 03-18
REVISIONS 01-13: Precast option with Rails. 03-18: Cast-in-place Copings, railing construction and expansion joints. 02-20: Note 5 added for precast rail option.		DIST:	COUNTY:
		SHEET NO.:	

DATE: FILE: