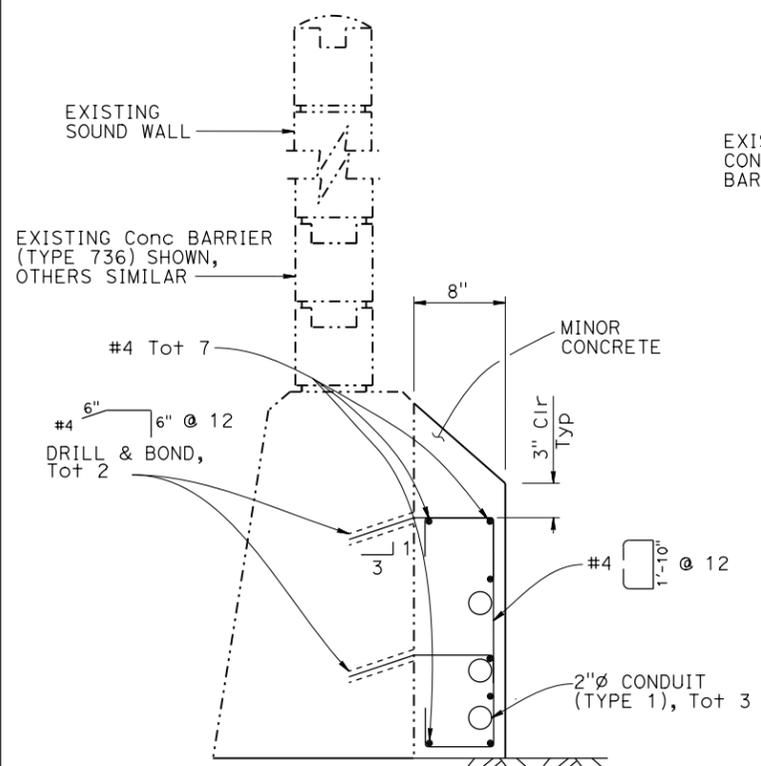
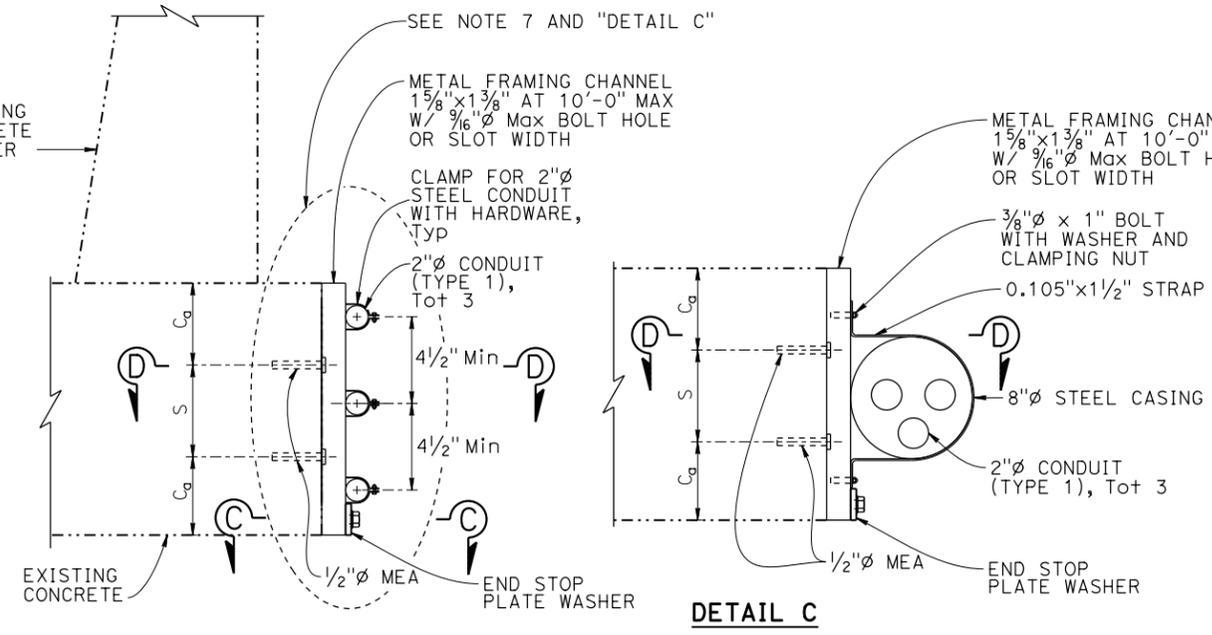


LEGEND:
 ----- Existing Structure
 MEA - Mechanical Expansion Anchor



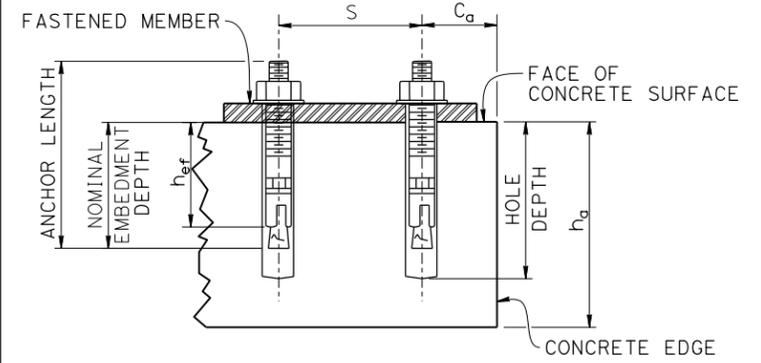
ATTACHMENT TO SOUND WALL ON BARRIER
 NO SCALE



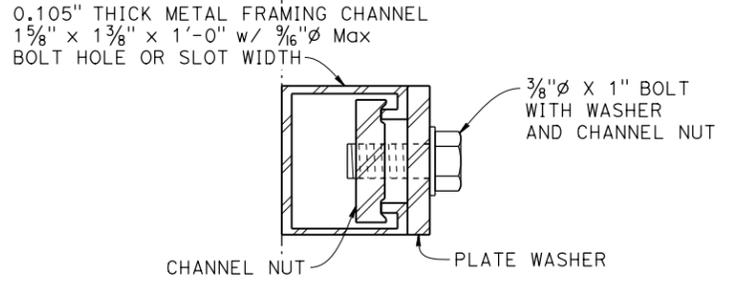
ATTACHMENT TO SLAB OR CULVERT DETAIL
 NO SCALE

NOTE: For "EXPANSION FITTING PLAN", see "COMMUNICATION CONDUIT (ATTACHMENT DETAILS)" sheet.

- NOTES:
- All attachments to any structure must remain within State Right-of-Way. To avoid encroachment outside of State Right-of-Way, refer to ROADWAY PLANS.
 - When existing utilities are located inside a barrier, drill and bond dowels are not allowed.
 - If scuppers are encountered, move bottom drill and bond dowel (beyond the limits of scupper) at least 4 inches.
 - Use aggregate with maximum diameter of 3/8" to minimize rock pockets in minor concrete.
 - Install expansion fittings at each structure expansion joint.
 - All mounting hardware shall be protected against corrosion.
 - In lieu of "ATTACHMENT TO SLAB OR CULVERT DETAIL", an installation using "DETAIL C" may be used, as directed by the Engineer.



TYPICAL STUD TYPE (WEDGE)
STUD MEA
 NO SCALE



SECTION C-C
 NO SCALE

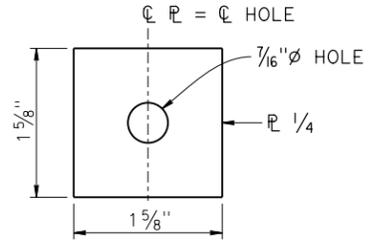
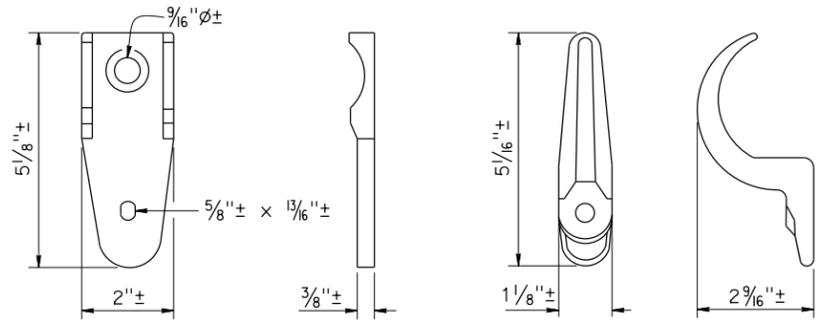
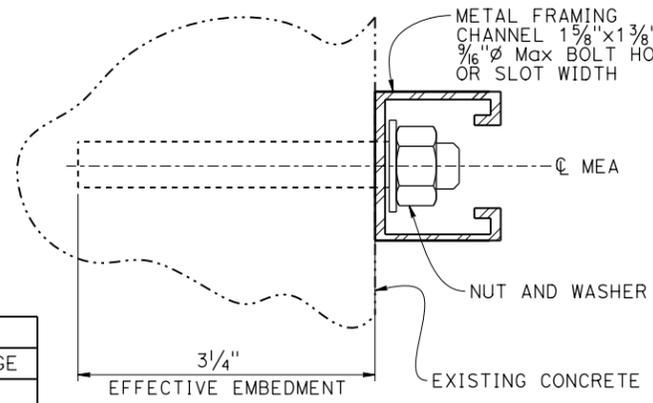


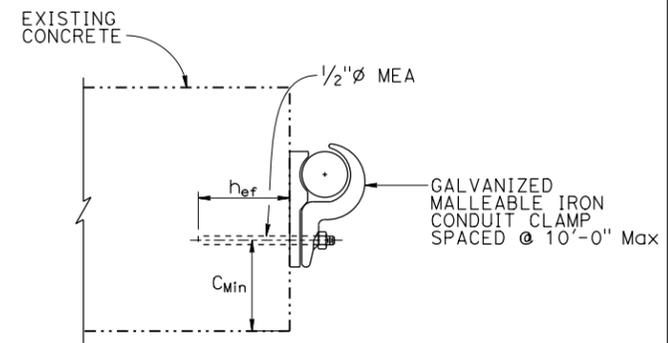
PLATE WASHER
 NO SCALE



2" CLAMP BACK
2" CONDUIT CLAMP
CONDUIT CLAMP DETAIL
 NO SCALE



SECTION D-D
 NO SCALE



ATTACHMENT TO SLAB OR CULVERT DETAIL
 NO SCALE

CONCRETE ANCHORAGE REQUIREMENTS				
Anchor Diameter (in)	Minimum Effective Embedment h _{ef} (in)	Minimum Concrete Thickness h _a (in)	Minimum Edge Distance C _a (in)	Minimum Anchor Spacing S (in)
1/2*	2	6	4	6
	3/4	6	4	4

* = Alternative embedment depths for 1/2" anchor.

EXPANSION FITTING INSTALLATION POSITION TABLE	
INSTALLATION PERIOD	% OF MAXIMUM EXPANSION RANGE
December to February	80%
March to May and September to November	50%
June to August	20%

BRIDGE STANDARD DETAILS

xs20-010-4 FILE NO.
 MAY 2023 APPROVAL DATE
 The components of the Bridge Standard Details have been prepared under the responsible charge of the Technical Owner, a registered civil engineer in the State of California.

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

BRIDGE No. XX-XXXX
 POST MILE X.X
COMMUNICATION CONDUIT (Exist CONCRETE)