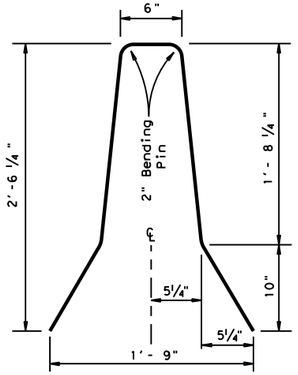
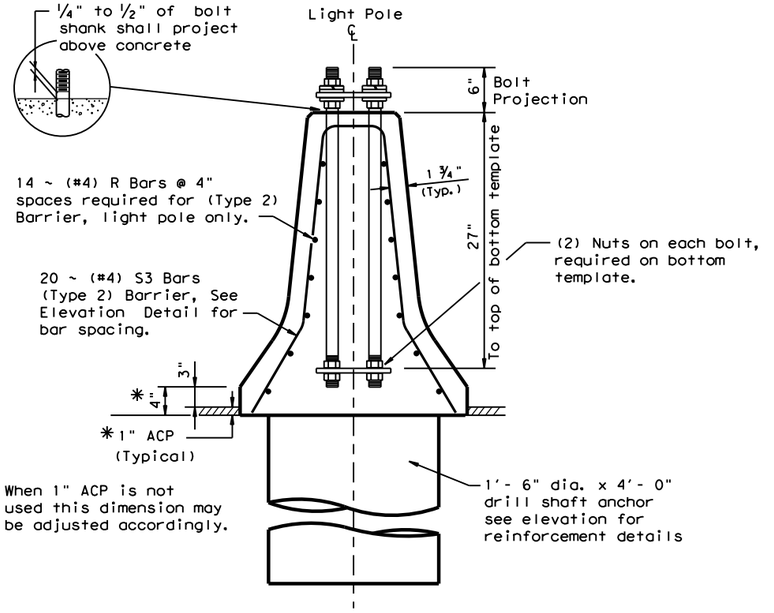
DATE:
FILE:



S3 BAR (#4)

(20) At each light pole section of barrier

Note:
The reinforcement cage may rest on top of the finished grade.



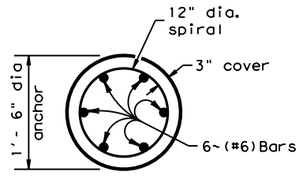
(ROADWAY) SECTION AT LIGHT POLE

Symmetrical about center line

Schedule of reinforcement for each 10 foot cast-in-place section at light poles (excluding anchorage)

BAR	SIZE	QUANTITY
S3	#4	20
R	#4	14

Welded Wire Reinforcement (WWR): IS NOT APPROVED FOR USE WITH (TYPE 2) BARRIER.

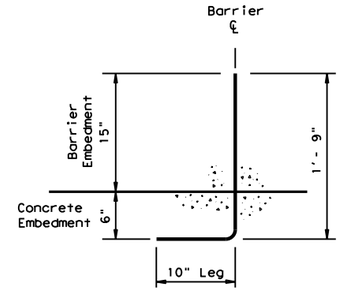


No.3 spiral at 6" pitch
(one flat turn top and bottom)

SECTION A-A

GENERAL NOTES

1. All concrete shall be Class C, unless otherwise specified in the plans.
2. Anchor bolts, junction box, non-metallic flexible conduit, and bonding to steel shall not be paid for directly, but will be subsidiary to the various bid items.
3. For proper installation and material requirements for the anchor bolts and light pole, see Traffic Engineering RIP standard sheets.
4. Junction boxes shall be polymer concrete, and shall be mounted flush (+0, - 1/2") with concrete surface. For details and material requirements on barrier junction box, see DMS-11030.
5. Install 12 AWG stranded conductors from load side of fused breakaway connector to luminaire. Fused breakaway connectors shall be installed as required on Traffic Engineering RID Sheets. Typically fused breakaway connectors are installed in the barrier junction box adjacent to each light pole. If fused breakaway connectors are installed in the pole's handhole, increase the size of the 3/4" flexible non-metallic conduit according to the NEC as needed to accomodate the branch circuit conductors.
6. Anchor bolts and their assemblies shall be in accordance with Item 449, "Anchor Bolts" High-Strength Steel or Alloy Steel. Galvanization requirements for anchor bolts are shown on RIP sheets.
7. The required anchorage for Type 2 barrier (drill shaft, standard or optional concrete anchorage) shall not be paid for directly, but is subsidiary to Item 514, "Permanent Concrete Traffic Barrier."
8. Bond anchor bolt to rebar cage with #6 bare stranded copper conductor. Use listed mechanical connectors rated for embedment in concrete. The bonded steel in the foundation creates a concrete encased grounding electrode which replaces the ground rod.

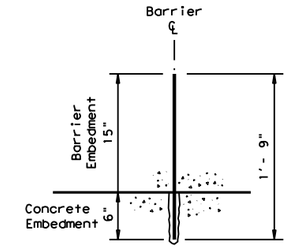


STANDARD "CONCRETE" ANCHORAGE

(#6) Bar

Concrete Pavement / Bridge Deck Anchorage: Cast-in-Place or Slip-Formed Barrier

Standard Anchorage Note:
10" leg may be oriented 90 degrees in any direction about the barrier ℄.

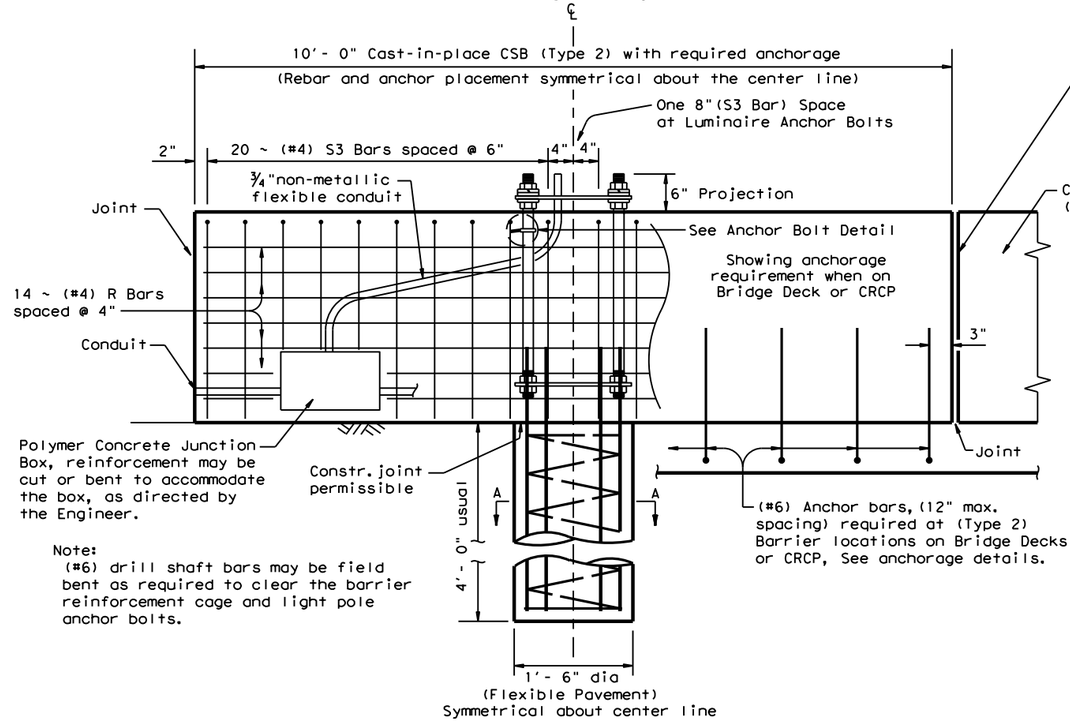


"OPTIONAL" EPOXY ANCHORAGE

(#6) Bar
Type III, Class C Epoxy

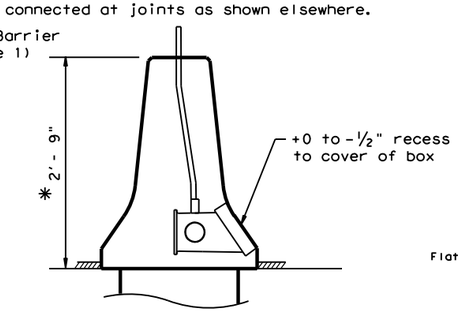
Concrete Pavement / Bridge Deck Anchorage: Cast-in-Place or Slip-Formed Barrier

Epoxy Note:
If epoxy coated anchor bars are required, the lower 6" of the bars must not be epoxy coated.

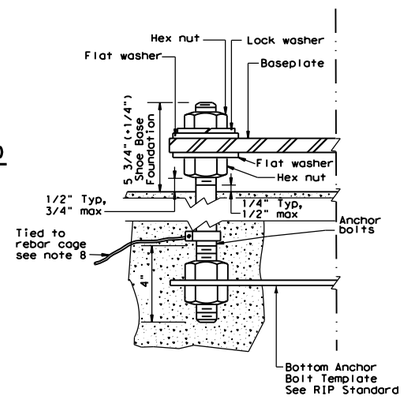


Note:
(#6) drill shaft bars may be field bent as required to clear the barrier reinforcement cage and light pole anchor bolts.

Each end of cast-in-place light pole section shall be formed to mate with the adjacent precast (Type 1) roadway barrier. The cast-in-place section shall be connected at each end to the precast sections in the same manner that precast sections are connected at joints as shown elsewhere.



SECTION SHOWING JUNCTION BOX CONCRETE SAFETY BARRIER (TYPE 2)



ANCHOR BOLT DETAIL

ELEVATION SHOWING THE REQUIRED REINFORCEMENT AND ANCHORAGE OF (TYPE 2) BARRIER

The "Drilled Shaft Anchor" is the required anchorage for (Type 2) barrier on roadways with Flexible Pavement.
The #6 Anchor Bars (Shown) is the required anchorage for (Type 2) barrier on Bridge Decks and CRCP.

Texas Department of Transportation

Design Division Standard

CONCRETE SAFETY BARRIER (F-SHAPE) CAST-IN-PLACE (TYPE 2) AT LIGHT POLE TL-3 MASH COMPLIANT

CSB(4)-19

FILE: csb419.dgn	DN: TxDOT	CK: KM	DW: BD	CK:
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	DIST	COUNTY		SHEET NO.