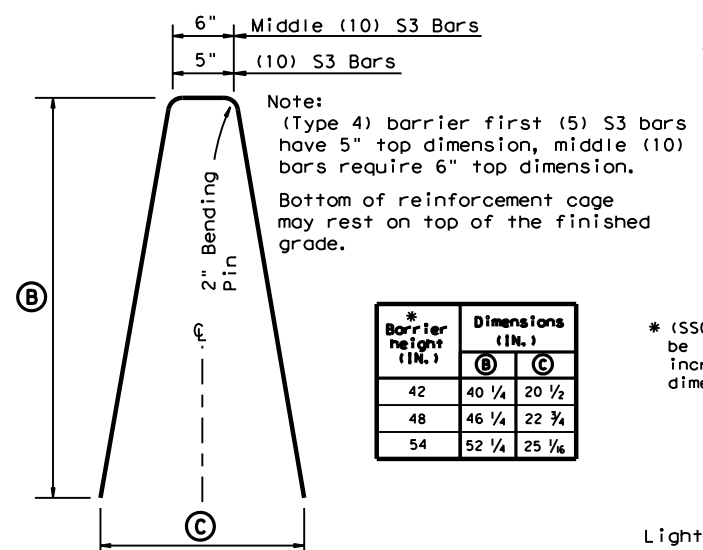


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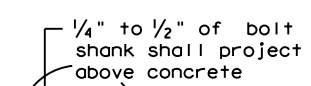
* Barrier height (IN.)	Dimensions (IN.)	
	B	C
42	40 1/4	20 1/2
48	46 1/4	22 3/4
54	52 1/4	25 1/4

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

BAR	SIZE	QUANTITY
S3	#4	20
R	#4	18

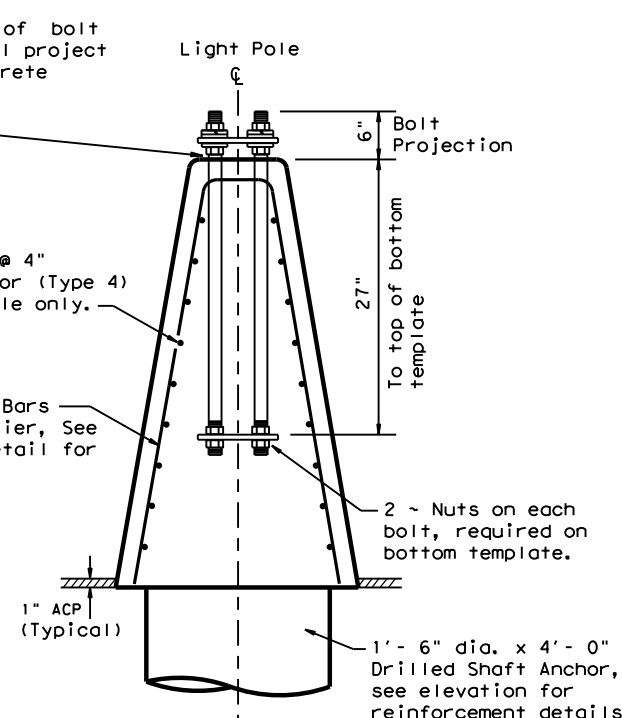
Welded Wire Reinforcement (WWR) IS NOT APPROVED FOR USE WITH (TYPE 4) BARRIER.

\*(SSCB) (42") (Type 4) Barrier height may be increased to 48" or 54". This would increase the barrier and reinforcement dimensions accordingly.



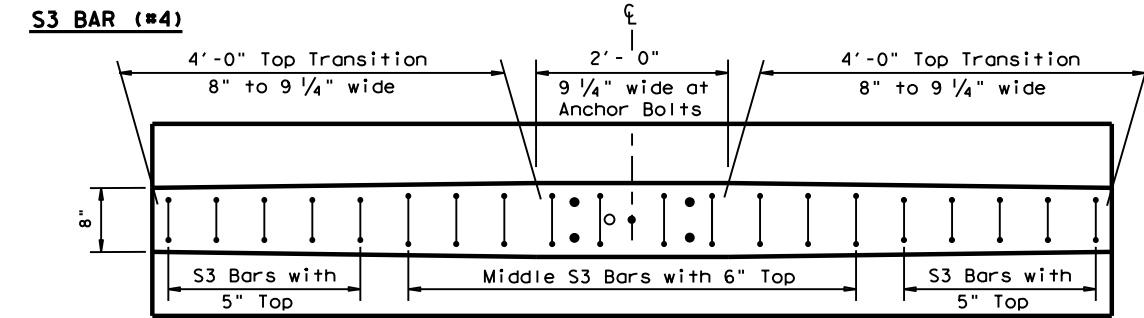
18 ~ (#4) R Bars @ 4" spaces required for (Type 4) Barrier, light pole only.

20 ~ (#4) S3 Bars (Type 4) Barrier, See Elevation Detail for bar spacing.

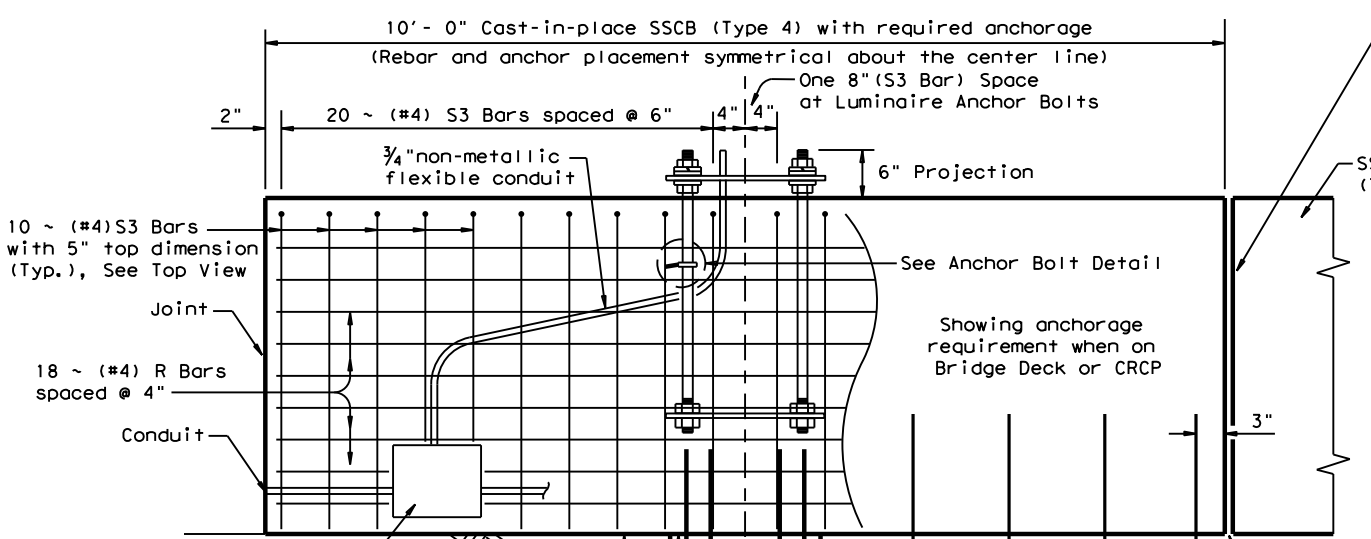


(ROADWAY) SECTION AT LIGHT POLE  
Symmetrical about center line

- GENERAL NOTES**
- All concrete shall be Class C.
  - Anchor bolts, junction box, non-metallic flexible conduit, and bonding to steel shall not be paid for directly, but will be considered subsidiary to the various bid items.
  - For proper installation and material requirements for the anchor bolts and light pole, see Traffic Engineering RIP standard sheets.
  - 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.
  - 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 accommodate the branch circuit conductors.
  - 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.
  - The required anchorage for Type 4 barrier (drill shaft, standard or optional concrete anchorage) shall not be paid for directly, but is subsidiary to Item 514, "Permanent Concrete Traffic Barrier."
  - 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.



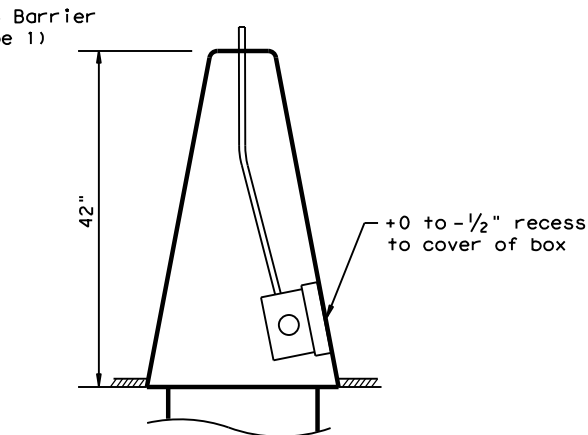
**BARRIER (TYPE 4) TOP VIEW**  
Showing S3 Bars and top dimension.



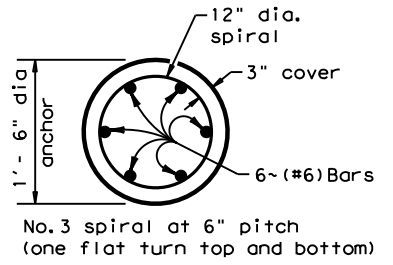
**ELEVATION SHOWING THE REQUIRED REINFORCEMENT AND ANCHORAGE FOR (TYPE 4) BARRIER**

The "Drilled Shaft Anchor" is the required anchorage for (Type 4) barrier on roadways with Flexible Pavement. The #6 Anchor Bars (Shown) is the required anchorage for (Type 4) barrier on Bridge Decks and CRCP.

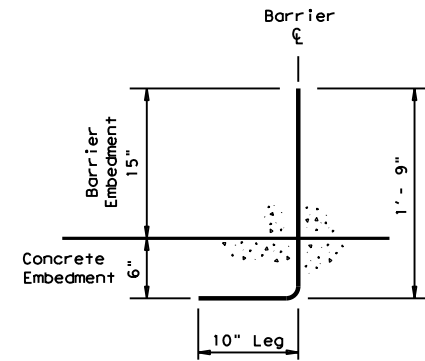
Each end of cast-in-place light pole section shall be formed to mate with the adjacent precast (Type 1) roadway barrier. The cast-in-place section shall be connected at each end to the precast sections in the same manner that precast sections are connected at joints as shown elsewhere.



**SECTION SHOWING JUNCTION BOX CONCRETE SAFETY BARRIER (TYPE 4)**

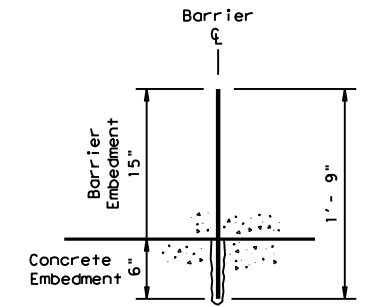


**SECTION A-A**



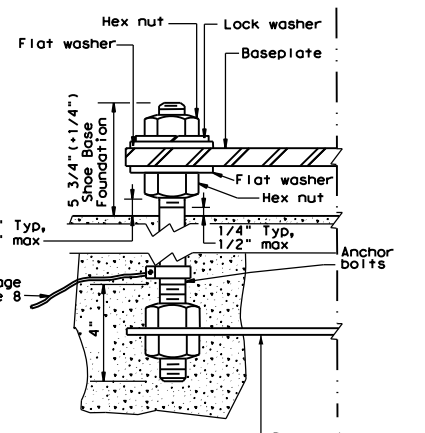
**STANDARD "CONCRETE" ANCHORAGE**

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



**"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. Follow the manufacturer's directions for installing the epoxied anchor bars.



**ANCHOR BOLT DETAIL**

Texas Department of Transportation  
**SINGLE SLOPE CONCRETE BARRIER**  
CAST-IN-PLACE (TYPE 4) AT LIGHT POLE  
TL-4 MASH COMPLIANT  
**SSCB (4) - 19**

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Design Division Standard

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