DISCLAIMER: The use of this standard is governed by the "Texas Engineering Practice Act." No warranty of any of this standard to other formats or for incorrect results or damages resulting from its use.

FILE: TxDOT

PLAN

(Grate not shown for clarity)

SECTION A-A

(Grate not shown for clarity)

PLAN

(Grate not shown for clarity)

SECTION B-B

ASSEMBLED END VIEW OF FRAME AND GRATE

1. Electric arc end-weld stud anchors to plates with complete fusion.
2. After nuts have been tack welded to the frame, test the assembly for fit of frame and grate with hex bolt assembly.
3. During fabrication, test fit grate as far as possible to accommodate assembly in the field.

This sheet is intended for use as a guide for fabricating and installing bridge deck drains in prestressed concrete beam and simply supported steel beam bridge decks. The size of this drain makes it undesirable for use in negative moment regions of continuous beams where slab bearing stresses are high. Appropriate details and notes should be prepared for the specific application based on the information presented herein. This drain is not approved for use in any type of spread footing. The design and layout of this sheet may need to be amended and/or expanded if the exact conditions are not covered. Special consideration should be given to beam, slab and slab reinforcing configuration with respect to the deck drain. Pipe configuration and support details must be done in accordance with manufacturer's recommendations, and drain outlet at the base of the column constructed in such a manner as to disrupt the cap and column reinforcing steel as little as possible. In all cases, details and notes not required must be crossed out or eliminated. Sheet added to the title block, the phrase "(Not to be used as a standard)" removed, and the reinforcing steel as little as possible. In all cases, details and notes not required must be crossed out or eliminated. Sheet added to the title block, the phrase "(Not to be used as a standard)" removed, and the reinforcing steel as little as possible. In all cases, details and notes not required must be crossed out or eliminated.
If prestressed concrete panels are used, place panels 3' Min from edges of drain. Conventionally reinforce the portion of cast-in-place slab as detailed on the slab, unit sheets, or miscellaneous standard details and as directed by the Engineer.

**GENERAL NOTES:**
- Reinforcement shall be in accordance with Item 445 "Reinforced Concrete Slab". When placing concrete, take care to prevent honeycombing or air pockets around or beneath the drain.
- Bend or cut slab reinforcing bars to clear drain by 1". When bending is not possible, stop or cut reinforcing bars to clear drain as necessary to ensure uniform bearing between contact surfaces of grate and frame.
- Prestressed concrete panels shall be directed by the Engineer prior to placement. Place panels as directed by the Engineer.

**TROWELED DEPRESSION**
- Place edge of bridge drain close to the toe of rail.
- Provide 4 additional #5 bars around perimeter in the top mat of reinforcing and 4 additional #5 bars around perimeter in bottom mat of reinforcing. Extend bars 1'-6" from edges of drain.

**SHOWING TYPICAL SLAB REINFORCING**
- Provide 4 additional #5 bars around perimeter in the top mat of reinforcing and 4 additional #5 bars around perimeter in bottom mat of reinforcing. Extend bars 1'-6" from edges of drain.

**VERTICAL PIPE SUPPORT**
- Hook-up to inlet with vertical pipe support.

**DEVOTIONS FROM BRIDGE DRAIN DETAILS CONTAINED HERIN WILL NOT BE PERMITTED WITHOUT PRIOR APPROVAL FROM THE ENGINEER.**
- Average weight of Grate and Frame: 321 Lb total
  - 148 Lb (Grate)
  - 173 Lb (Frame)
- Average weight of Grate and Frame: 321 Lb total
  - 148 Lb (Grate)
  - 173 Lb (Frame)
- Payment will be by each Grate and Frame (Bridge Drain).