



# MEMO

July 10, 2014

**To:** District Engineers

**From:** Gregg A. Freeby, P.E.  
Division Director, Bridge Division

**Subject:** Revised Prestressed Concrete U-Beam Standard Drawings

---

Revised prestressed concrete U-beam standard drawings, with an issue date of July 2014, are posted on the TxDOT web site and available for immediate use.

The revised standard drawings have the following changes:

**Prestressed Concrete U-Beam Details (UBD)**

- Increased length of end blocks
- Added reinforcement for strand confinement and to increase horizontal shear strength at web-flange interface
- Note to reference UBEB for required embedded plate, when applicable
- Detailed with clear cover dimensions and out-to-out bar dimensions

**Elastomeric Bearing and Beam End Details (UBEB)**

- New bearing pad sizes for U40 and U54
- Increased centerline of bearing to 1'-0"
- Addition of beveled sole plate when cross-slope or longitudinal slope exceeds 5 percent

**Miscellaneous Slab Details (UBMS)**

- New and revised Slab over Inverted-T Bent details
- Detailed with clear cover dimensions and out-to-out bar dimensions

**Prestressed Concrete U-Beams Design Data (UBND)**

- Editorial changes

**Thickened Slab End Details (UBTS)**

- Reinforcing steel changes
- Detailed with clear cover dimensions and out-to-out bar dimensions

**Minimum Erection and Bracing Requirements (MEBR(U) )**

- Clarify details for Minimum Beam Bracing

**OUR GOALS**

MAINTAIN A SAFE SYSTEM ▪ ADDRESS CONGESTION ▪ CONNECT TEXAS COMMUNITIES ▪ BEST IN CLASS STATE AGENCY

*An Equal Opportunity Employer*

These revised standard drawings apply to construction projects beginning with the January 2015 letting. Prior use is at the option of each District.

These and other bridge standard drawings are available on the Bridge Standards web page in MicroStation® “dgn” and Adobe® Acrobat® “pdf” formats. See <http://www.dot.state.tx.us/business/standardplanfiles.htm>.

For questions or comments concerning these standard drawings, please contact Amy E. Smith, P.E. at 512/416-2261 or Jon T. Ries, at 512/416-2191.

Note: Original Signed By Gregg A. Freeby

**CC:** Federal Highway Administration  
Bridge Design Consultants  
Administration  
Division and Office Directors  
Directors of Transportation Planning and Development  
District Bridge Engineers  
Bridge Division Employees