**DESIGN NOTES:**

- Designed in accordance with AASHTO LRFD Bridge Design Specifications.
- Prestress losses for the designed beams have been calculated for a relative humidity of 60 percent and 0°F dew point. Optional designs must likewise conform.
- Beam designs are applicable for 5" concrete slabs without overlay and 0 degree slab slope.
- Use low relaxation strands, each pretensioned to 75 percent of fpu.
- Provide Class H concrete.

**FABRICATION NOTES:**

- Use low relaxation strands, each pretensioned to 75 percent of fpu. Use only low relaxation strands, each pretensioned to 75 percent of fpu.
- When shown on this sheet, the fabricator has the option of furnishing either the designed beam or an approved optional beam design. All optional design tabulations and shop drawings must be signed, stamped and dated by a Professional Engineer registered in the State of Texas.
- Locate strands for the designed beam as low as possible on the 2" grid system unless a non-standard strand pattern is indicated. X50 row 2.5" thick, row 3.0", then row 3.5" thick. Place strands within a row as follows:
  1) Locate a strand in each "1" position.
  2) Place strand symmetrically about vertical centerline of box.
  3) Space strands as equally as possible across the entire width. Strand debonding must comply with Item 424.4.2.2.2.4.
- Locate strands with consideration given to the following:
  1. Full-length debonded strands are only permitted in positions marked .
  2. Do not debond strands in position "1". Distribute debonded strands equally about the vertical centerline of box.
  3. Space strands as equally as possible across the entire width.
  4. Elastic modulus of full HL93.

**OPTIONAL DESIGN**

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**PRESTR CONC BOX BEAM**

**STANDARD DESIGNS**

- 

**Prebend Schedule**

- 

**Dimensions**

- 

**Details**

- 

**Notes**

- 

**Texas Department of Transportation**

**Bridge Design Standard**

**PRESTR CONC BOX BEAM STANDARD DESIGNS TYPE B20 24' RDWY (WITH SLAB)**

**BBSDS-B20-24**

**EXHIBIT**

**Drawing Number**

**Date**

**Scale**

**Sheet**

**Designated by**

**Prebend Schedule**

**Dimensions**

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**Notes**