**Plan View of Typical Single Bearing**

(O° < Skew ≤ 15° shown, Skew = 0° Similar)

**Plan View of Typical Double Bearing**

(Positive Cross Slope shown, Negative Cross Slope similar)

---

**Notes:**
1. Work this sheet with the 'BEVELED BEARING PLATE DATA TABLE' in the plans.
2. Beveled Bearing Plates B with Embedded Bearing Plates A are required for beams only as scheduled in the TABLE OF BEAM VARIABLES on Beam Sheets.
3. Bearing plate material shall conform to ASTM A36 or ASTM A709 (Grade 36 or 50). Headed Concrete Anchor Studs shall conform to Specification Section 502. Hot-dip galvanized Bearing Plates A & B after fabrication except Galvanized Caps may be welded in place after hot-dip galvanizing. Drill Bearing Plates A and B as an assembled unit. Thread Bearing Plate A only. Drill and thread holes perpendicular to bottom of Plate B and prior to plates being galvanized (ASTM A 123).
4. Provide Electroplated Flat Countersunk Head Cap Screws in accordance with ASTM F 835. Electroplating shall be ASTM B 633, SC 2, Type 1. Provide screws long enough to maintain a \( \frac{1}{2} \) minimum embedment into Embedded Bearing Plate A and Galvanized Cap. Provide steel Galvanized Caps with \( \frac{1}{2} \) Min. to \( \frac{1}{2} \) Max. height and nominal \( 1\) inside diameter.
5. Include the cost of Beveled Bearing Plates in the pay item for Prestressed Beams (Florida U-Beams).
6. For Dimensions C and D, see 'BEVELED BEARING PLATE DATA TABLE' in the Structures Plans. For Dimensions J, K1, and K2, see 'TABLE OF BEAM VARIABLES' on Beam Sheets.
7. All details and dimensions shown are along \( \frac{1}{2} \) Beam for single bearings or \( \frac{1}{2} \) Plate parallel to \( \frac{1}{2} \) Beam for double bearings, except for dimensions to \( \frac{3}{8} \) Dia. Screws and \( \frac{1}{2} \) Dia. x \( \frac{3}{8} \) Anchor Studs, which are along \( \frac{3}{8} \) Screws or \( \frac{1}{2} \) Anchor Studs. Positive Slope shown, Negative Slope similar.
8. When Skew = 6°, dimensions for Embedded Bearing Plate A are D x C x \( \frac{1}{2} \) and for Beveled Plate B are D x C x \( \frac{1}{2} \) Min.

---

**Design Standards**

Prestressed Florida-U Beams

Beveled Bearing Plate Details - FHWA/FL/PSDB/2013-001

**Last Revision:** 01/01/10

**Description:** FDOT 2014

**Index No.:** 20502

**Sheet No.:** 1 of 1

---

**FLORIDA-U BEAMS**

---

**Notes:**

- Work this sheet with the 'BEVELED BEARING PLATE DATA TABLE' in the plans.
- Beveled Bearing Plates B with Embedded Bearing Plates A are required for beams only as scheduled in the TABLE OF BEAM VARIABLES on Beam Sheets.
- Bearing plate material shall conform to ASTM A36 or ASTM A709 (Grade 36 or 50). Headed Concrete Anchor Studs shall conform to Specification Section 502. Hot-dip galvanized Bearing Plates A & B after fabrication except Galvanized Caps may be welded in place after hot-dip galvanizing. Drill Bearing Plates A and B as an assembled unit. Thread Bearing Plate A only. Drill and thread holes perpendicular to bottom of Plate B and prior to plates being galvanized (ASTM A 123).
- Provide Electroplated Flat Countersunk Head Cap Screws in accordance with ASTM F 835. Electroplating shall be ASTM B 633, SC 2, Type 1. Provide screws long enough to maintain a \( \frac{1}{2} \) minimum embedment into Embedded Bearing Plate A and Galvanized Cap. Provide steel Galvanized Caps with \( \frac{1}{2} \) Min. to \( \frac{1}{2} \) Max. height and nominal \( 1\) inside diameter.
- Include the cost of Beveled Bearing Plates in the pay item for Prestressed Beams (Florida U-Beams).
- For Dimensions C and D, see 'BEVELED BEARING PLATE DATA TABLE' in the Structures Plans. For Dimensions J, K1, and K2, see 'TABLE OF BEAM VARIABLES' on Beam Sheets.
- All details and dimensions shown are along \( \frac{1}{2} \) Beam for single bearings or \( \frac{1}{2} \) Plate parallel to \( \frac{1}{2} \) Beam for double bearings, except for dimensions to \( \frac{3}{8} \) Dia. Screws and \( \frac{1}{2} \) Dia. x \( \frac{3}{8} \) Anchor Studs, which are along \( \frac{3}{8} \) Screws or \( \frac{1}{2} \) Anchor Studs. Positive Slope shown, Negative Slope similar.
- When Skew = 6°, dimensions for Embedded Bearing Plate A are D x C x \( \frac{1}{2} \) and for Beveled Plate B are D x C x \( \frac{1}{2} \) Min.
TYPICAL SECTION TYPE A, D & E PAD

TYPICAL SECTION TYPE C, F & G PAD

TYPICAL SECTION TYPE H PAD

TYPICAL SECTION TYPE J & K PAD

BEARING PAD NOTES:

1. Neoprene in Type A, D, E & F bearing pads shall have a shear modulus (G) of 150 psi. Neoprene in Type C, G, H, J & K bearing pads shall have a shear modulus (G) of 110 psi. Neoprene in Type A, D, E & F bearing pads shall have a shear modulus (G) of 150 psi.

2. Steel Plates in bearing pads shall conform to ASTM A1011 Grade 36, Type 1.

3. See Bearing Pad Data Table in Structures Plans for quantities of Type A, C, D, E, F, G, H, J and/or K Bearing Pads.

** Offset to End of Beam is reduced to 2" for Type K Pad using Index No. 20512.

* Work this sheet with the appropriate type Bearing Plate Detail (See Bearing Plate Data Table) and BEARING PAD DATA TABLE in the Structures Plans. See TABLE OF BEAM VARIABLES and BEARING PLATE DATA TABLE in the Structures Plans for locations where beveled bearing plates are required.

FLORIDA BEAM

I-B BEAM

COMPOSITE ELASTOMERIC BEARING PADS - PRESTRESSED FLORIDA-I & AASHTO TYPE II BEAM

INDEX NO. 20510
**BEVELED BEARING PLATE B**  
(Along Q Beam)  
(Positive Slope shown; Negative Slope similar)

**LEGEND:**

- Bearing Plates A & B - Embedded Plate A (G x G x F) & Beveled Plate B (G’ Min. x E x F) (Typ.) See Note B
- Embedded Bearing Plates A are required for all Florida-I beams.  Beveled Bearing Plates B with Embedded Bearing Plates A are required for beams as scheduled in the BEARING PLATE DATA TABLE in the Structures Plans.

**NOTES:**

1. Work this sheet with Index No. 20510 - Composite Elastomeric Bearing Pads, and BEARING PLATE DATA TABLE in the Structures Plans.
2. Embedded Bearing Plates A are required for all Florida-I beams. Beveled Bearing Plates B with Embedded Bearing Plates A are required for beams as scheduled in the BEARING PLATE DATA TABLE in the Structures Plans.
3. Bearing plate material shall conform to ASTM A36 or ASTM A709 (Grade 36 or 50). Headed Concrete Anchor Studs shall conform to Specification Section S02. Hot-dip galvanize Bearing Plates A & B after fabrication except that Galvanized Caps may be welded in place after hot-dip galvanizing. Drill Bearing Plates A and B as an assembled unit, thread Bearing Plate A only. Holes are not required in Plate A when Plate B is not required. Drill and Thread holes perpendicular to Embedded Plate A and prior to plates being galvanized (ASTM A123).
4. Provide Electroplated, Flat Countersunk Head Cap Screws in accordance with ASTM F 835. Electroplating shall be ASTM B633, SC 2, Type 1. Provide screws long enough to maintain a 3/8" minimum embedment into Embedded Bearing Plate A and Galvanized Cap. Provide steel Galvanized Caps with 1/2" Min. to 1/2" Max. height and nominal 1" inside diameter.
5. Include the cost of Bearing Plates in the pay item for Prestressed Beams.
6. For Pad Type and Dimensions C, D, E, F and G, see the BEARING PLATE DATA TABLE in the Structures Plans. For Dimensions J, K1 and K2, see TABLE OF BEAM VARIABLES in the Structures Plans.
7. All details and dimensions shown are along Q Beam, except for dimensions to 1/2" Dia. Screws or 1/2" Dia. x 2 1/4" Anchor Studs, which are along Q Screws or Q Anchor Studs. Positive Slope shown, Negative Slope similar.
8. When Skew = 0°, F = 3'-0" (Florida-I Beams) or 1'-4" (AASHTO Type II Beams) and E = C.
9. Slope is determined along Q Beam at Q Bearing. See BEARING PLATE DATA TABLE in the Structures Plans for Slope and Angles.
**Description:**

WITHOUT BEVELED BEARING PLATES

(Slopes ≤ 0.5% along Q Beam) (See Note 7)

**Side Elevation**

**End Elevation**

WITHOUT BEVELED BEARING PLATE

LEGEND:

- \( H = \frac{15}{32} \) for all Pads with End Diaphragms and Pad Type A, C & K without End Diaphragms.
- \( = 3' \) for all Pads without End Diaphragms, except Pad Type A, C & K
SIDE ELEVATION WITHOUT BEVELED BEARING PLATES (Slopes ≤ 0.5% along ℄ Beam) (See Note 7)

SIDE ELEVATION WITHOUT BEVELED BEARING PLATES (0.5% < Slopes ≤ 2% along ℄ Beam) (See Note 7)

* ½" for Pad Type A, C & K