Standards Updates: You Speak, We Listen

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Posting the revised CSAB, BAS, FD, PMDF, SGMD standards soon (est. end of month).
Adding a second option

**OPTION 1**

- New construction
- High plasticity fill (PI > 30)
- Poor native soil (high plasticity clays or expansive clays)

**OPTION 2**

- Construction only requiring PI controlled embankment fill or excavation in competent soils/rocks

CSAB-1

CSAB-2
Eliminating the requirement for a stress relieving pad

Provide a 1" (asphaltic concrete pavement or asphalt stabilized base) stress relieving pad between the approach slab and cement stabilized backfill or cement treated base. Other stress relieving pads may be used if approved by the Engineer.

Requirement for longitudinal joint serves same purpose.

Provide longitudinal joints as shown on the Longitudinal Saw Cut Joint Detail at lane lines and shoulders when width between longitudinal construction joints or edges of approach slab exceeds 16 feet. Saw cut joints within 24 hours of concrete placement to a depth of 1 1/2" and seal in accordance with Item 438. Alternately, provide a controlled joint consisting of 1 1/2" vinyl or plastic joint former (Stress Cap, Zip Strip, Stress Lock, or equal as approved by the Engineer.)
- If vertical column reinforcement size was resized then the FD had to be modified.

10. For 24" columns, use #7 FD bars (7' - 1") in place of #9 bars and deduct 116 lbs. For 36" columns, add 2 FD bars (55 lbs).

11. For 24" columns, use #7 FD bars (7' - 1") in place of #9 bars and deduct 116 lbs. For 36" columns, add 2 FD bars (55 lbs). For 42" columns, add 6 FD bars (172 lbs) (42" columns disallowed on 3 Pile Footings). Also corrected FD bar lengths and quantities.

- Replaced with

10. Adjust for FD quantity, size and weight used to match column reinforcing.
- Only covered what to do when not using panels for U beams and TxGirders.
- This raised question for when steel beams/girders are used.

- Added to the box note to include steel beams/girders

- Clarified that the added concrete/reinforcement when using PMDF instead of PCP is subsidiary to the span.
- Added stiffener clip alternate

**WELD TERMINATION DETAIL**

**ALTERNATE STIFFENER CLIP DETAIL**

(Welds not shown for clarity)
(Bottom shown, top similar)
Culverts and Drains

- Posted
- In general, updates to these standards include updating
  - reinforcement lap lengths;
  - adhesive anchor notes;
  - updating bolt callout to the current ASTM;
  - and editorial revisions.
  - In addition, if called for elsewhere in the plans, galvanized reinforcement may be used.
Notable additions and revisions to the standard drawings include:

**Single and Multiple Box Culverts (SCC and MCC)** now include box sizes 6’ x 2’, 8’ x 3’, 9’ x 4’, and 10’ x 4’. The culvert designs were updated to simplify the reinforcement scheme and to increase the minimum top slab thickness to 8 inches.

**Single and Multiple Box Culverts Miscellaneous Details (SCC-MD and MCC-MD)** have been updated to allow the use of adhesive anchors to lengthen culverts for all situations except skewed culverts with less than 2 feet of fill.

**Precast Single Box Culverts (SCP)** now include box sizes 6’ x 2’, 8’ x 3’, 9’ x 4’, and 10’ x 4. In addition, the reinforcement was updated to be in agreement with ASTM C1577.
Precast Inlets & Manholes now include the new Precast Area Zone Drain within Clear Zone (PAZD-CZ) standard. The PAZD-CZ is intended for use within the clear zone, but outside of the roadway. This is an area drain that is recessed in a riprap apron in order to allow errant vehicles to traverse over the top.
Inlets and Drains now include the new **Cast-in-Place Curb Inlet Outside of Roadway (CCO)**. The CCO can be used as an alternate to the Precast Curb Inlet Outside of Roadway (PCO).

- Include both standards (CCO and PCO) within a plan set, unless the District has a preference toward cast-in-place or precast. Then only include the appropriate standard.
- For precast only or precast with the cast-in-place alternate, use the bid codes for the precast curb inlets (0465 6XXX INLET (COMPL)(PCO)). If only cast-in-place is selected, use the bid codes for cast-in-place (0465 6XXX INLET (COMPL)(CCO)).