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## **Mail Station 32**

## **ROADWAY DESIGN BULLETIN 10-01**

DATE:

January 12, 2010

TO:

District Design Engineers, Plans Preparation Manual Holders

FROM:

David C. O'Hagan, PE, State Roadway Design Engineer

COPIES:

Lora Hollingsworth, David Sadler, Tim Lattner, Robert Robertson,

Duane Brautigam, Mark Wilson, Chris Richter, FHWA

**SUBJECT:** 

Design Standards Modifications July 1, 2010

The Design Standards Modifications to the 2010 Design Standards booklet, Effective Date July 1, 2010, have been posted on the Roadway Design Office web site.

The Design Standards Modifications includes a listing of all Interim Design Standards issued since publication of the applicable booklet, plus all changes and corrections to notes and text within the booklet that do not warrant issuing Interim Indexes.

All plans beginning with the July 2010 letting shall include a reference to Design Standards Modifications Effective Date July 1, 2010, on the lower left corner of the Key Sheet below the Governing Specifications and Standards note, and above the Revisions area. For more information please see the Plans Preparation Manual, Volume II, Section 3.8 and Exhibit KS-1.

All Interim Indexes listed in the Design Standards Modifications publication will be applicable unless otherwise indicated in the contract documents. The July 1, 2010, Design Standards Modifications includes Interim Indexes as follows:

Interim Index No. 102 (Sheets 1-3 of 3), TEMPORARY EROSION AND SEDIMENT CONTROL – Dated 01/01/10: Sheet 1; modified chart and terminology. Sheet 2; updated terminology. Sheet 3; updated pay item name.

Interim Index No. 200 (Sheet I of 5), STRUCTURES BOTTOMS J AND P – Dated 01/01/10: Raised pipes to show grout underneath.

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Interim Index No. 201 (Sheets 3 & 4 of 5), SUPPLEMENTAL DETAILS FOR MANHOLES AND INLETS – Dated 01/01/10: Sheet 1; changed value of "h". Sheet 2; revised reinforcement in Note 4.

Interim Index No. 211 (Sheets 1-3 of 5), CURB INLET TOPS TYPE 5 & 6 – Dated 01/01/10: Sheet 1; added center of box reference point. Sheets 2 & 3; revised inlet bottom/riser details.

Interim Index No. 220 (Sheet 1 of 3), GUTTER INLET TYPE S – Dated 01/01/10: Clarified recess depth at top of inlet for steel grate.

Interim Index No. 221 (Sheet 1 of 2), GUTTER INLET TYPE V – Dated 01/01/10: Clarified recess depth at top of inlet for steel grate.

Interim Index No. 233 (Sheets 1-2 of 2), DITCH BOTTOM INLETS TYPES F & G – Dated 01/01/10: Sheet 1 & 2; added center of box reference points.

Interim Index No. 245 (Sheet 1 of 1), UNDERDRAIN INSPECTION BOX – Dated 01/01/10: Added center of box reference point.

Interim Index No. 289 (Sheet 5 of 7), CONCRETE BOX CULVERT DETAILS (LRFD) - Dated 01/01/10: Added 1 3/4" offset to base of traffic railing at coping in DETAIL I.

Interim Index No. 291 (Sheet 3 of 5), SUPPLEMENTAL DETAILS FOR PRECAST CONCRETE BOX CULVERTS, Dated 01/01/10: Added "or Joint Sealant" to the 1/2" horizontal joint detail in SECTION B-B.

Interim Index No. 310 (Sheet 1 of 2), CONCRETE SIDEWALK – Dated 01/01/10: Offset driveway tapers 1' from back of curb.

Interim Index No. 402 (Sheet 24 of 24), GUARDRAIL TRANSITIONS AND CONNECTIONS FOR EXISTING BRIDGES – Dated 01/01/10: Added note for bridge name plate as note 2.

Interim Index No. 403 (Sheet 3 of 3), GUARDRAIL TRANSITIONS FOR EXISTING BRIDGE TRAFFIC RAILING RETROFITS - Dated 01/01/10: Changed Concrete Class to "NS". Changed payment for Transition Block to "Concrete Curb (Special), LF".

Interim Index No. 410 (Sheet 7 of 25), CONCRETE BARRIER WALL – Dated 01/01/10: Added text "Shoulder Pavement" and aligned expanded shoulder with roadway shoulder.

Interim Index No. 470 (Sheet 1 of 3), TRAFFIC RAILING - (THRIE-BEAM RETROFIT) GENERAL NOTES & DETAILS - Dated 01/01/10: Changed REFLECTIVE RAILING MARKERS note to place marker at top of post.

Interim Index No. 501 (Sheets 5-10 of 10), GEOSYNTHETIC REINFORCED SOILS – Dated 01/01/10: Corrected"MARAFI" to "MIRAFI" (Sheet 5); Added Application Usage 2 for SYNTEEN SF

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11& SF 12 (Sheet 6); Added FORNIT 30 and Added Creep Resistance, Creep Reduction Factor and Usage Application 4 to FORNIT 20 (Sheet 7). New Sheet 8 Added; Sheets 8 & 9 renumbered to 9 & 10.

Interim Index No. 515 (Sheets 2 & 4 of 7), TURNOUTS – Dated 01/01/10: Offset driveway taper 1' from back of curb.

Interim Index No. 560 (Sheets 1-2 of 2), CROSSING SURFACES – Dated 01/01/10: Sheet 1; added TA surface and Note 7. Sheet 2; added 50' max FDOT participation details.

Interim Index No. 600 (Sheet 6 & 7 of 12), GENERAL INFORMATION FOR TRAFFIC CONTROL THROUGH WORK ZONES – Dated 01/01/10: Multiple revisions to notes, details and table.

Interim Index No. 667 (Sheet 6 of 6), TOLL PLAZA TRAFFIC CONTROL STANDARDS – Dated 01/01/10: Corrected 50' taper and number and spacing of channelizing devices.

Interim Index No. 801 (Sheet 1 of 3), FENCE TYPE A – Dated 01/01/10: Added requirements for recycled plastic posts in Note 7.

Interim Index No. 820 (Sheet 1 of 1), PEDESTRIAN/BICYCLE RAILING – Dated 01/01/10: Changed post offset dimensions to joints.

Interim Index No. 821 (Sheet 1 of 1), ALUMINUM PEDESTRIAN/BICYCLE BULLET RAILING FOR TRAFFIC RAILING (32" F SHAPE) – Dated 01/01/10: Changed post offset dimensions to joints.

Interim Index No. 850 (Sheets 1 & 4 of 5), STEEL PEDESTRIAN/BICYCLE PICKET RAILING - Dated 01/01/10: Added "ASTM A500, Grade B, C or D" for pipe rails and pickets in RAILS, PICKETS & POSTS note (Sheet 1); Added 4" tolerance to end hoop length in DETAIL "C" (Sheet 4).

Interim Index No. 860 (Sheet 4 of 5), ALUMINUM PEDESTRIAN/BICYCLE PICKET RAILING" – Dated 01/01/10: Added 4" tolerance to end hoop length in DETAIL "C".

Interim Index No. 5200 (Sheet 1 of 1), PRECAST SOUND BARRIERS - GENERAL NOTES - Dated 01/01/10: Second sentence in Note K.4 is deleted. Added patent information to Note K.5.

Interim Index No. 5202 (Sheets 1-6 of 6), PRECAST SOUND BARRIERS - FLUSH PANEL OPTION - Dated 01/01/10: 90 degree corner post details revised and 45 degree post added. New Sheets 4 & 5 added, other sheets renumbered.

Interim Index No. 5203 (Sheets 1-6 of 6), PRECAST SOUND BARRIERS - RECESSED PANEL OPTION - Dated 01/01/10: 90 degree corner post details revised. Sheet 4 added, other sheets renumbered.

Interim Index No. 5204 (Sheet 1 of 1), PRECAST SOUND BARRIERS - FIRE HOSE ACCESS HOLE & DRAINAGE DETAILS - Dated 01/01/10: Deleted 4 3/4" dimension at end of panel, and note requiring double mat of WWR for panels with drainage holes.

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Interim Index No. 5205 (Sheets 1, 2, & 3 of 7), PRECAST SOUND BARRIERS - PILE AND POST REINFORCING STEEL - Dated 01/01/10: Sheets redrawn and Sections renamed; Changed side cover in auger cast pile to 4" for Option A (Sheets 1 & 2). Corrected Bar C2 length in Option B (Sheet 3).

Interim Index No. 5206 (Sheet 1 of 1), PRECAST SOUND BARRIERS - PILE DEPTH AND REINFORCING SUMMARY - Dated 01/01/10: Changed dimensions of Bars P5 & P6 and radius of Bar P3 to 1'-2" in the BAR BENDING DETAILS.

Interim Index No. 5300 (Sheets 7, 13, 16, 17, & 18 of 19), PERMANENT RETAINING WALL SYSTEMS – Dated 01/01/10: Changed 1" Continuous Neoprene Strip, to 1" Preformed Joint Filler (Sheets 7, 13 & 17); Changed Note 9 to allow slip forming with approval and Anchor Bolt Design Notes 2 & 3 (Sheet 16); Deleted grout pad and weep hole details (Sheets 16-18).

Interim Index No. 11200 (Sheet 1-2 of 2), MULTI-COLUMN GROUND SIGN – Dated 01/01/10: Galvanized note changed: brass shim note added (Sheet 1); configuration revised and S3X5.7 post added (Sheet 2)

Interim Index No. 11300 (Sheet 1 of 1), OVERHEAD SIGN STRUCTURES – Dated 01/01/10: Modified U-Bolt material spec.

Interim Index No. 11860 (Sheet 5 of 8), SINGLE COLUMN GROUND SIGNS – Dated 01/01/10: Changed Slip Base Note 6.b. (Sheet 5).

Interim Index No. 13417 (Sheet 1of 1), MOUNTING EXIT NUMBERING PANELS TO HIGHWAY SIGNS – Dated 01/01/10: Gauge and dimension lines removed from Section AA.

Interim Index No. 17344 (Sheets 2 & 3 of 6), SCHOOL SIGNS AND MARKINGS – Dated 01/01/10: Cross walk markings revised.

Interim Index No. 17346 (Sheet 7 & 10 of 14), SPECIAL MARKING AREAS – Dated 01/01/10: Sheet 7; added Detail B. Sheet 10; Sign text changed in Scheme 3, R1-5bL with MUTCD changes.

Interim Index No. 17352 (Sheet 2 of 2), TYPICAL PLACEMENT OF REFLECTIVE PAVEMENT MARKERS – Dated 01/01/10: Raised reflective markers moved to center of chevrons. Added Note 2.

Interim Index No. 17354 (Sheet 1 of 1), TOURIST ORIENTED DIRECTIONAL SIGNS – Dated 01/01/10: New Design Standard.

Interim Index No. 17355 (Sheets 7 & 8 of 11), SPECIAL SIGN DETAILS – Dated 01/01/10: Sheet 7; changed designations for FTP 54 & 55 for left and right versions. Sheet 8; revised details of FTP-70-06.

Interim Index No. 17727 (Sheets 1-2 of 2), SIGNAL CABLE & SPAN WIRE INSTALLATION DETAILS – Dated 01/01/10: Vertical clearance note revised.

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Interim Index No. 17515 (Sheets 1, 2 & 3 of 8), STANDARD ALUMINUM LIGHTING - Dated 01/01/10: Added Vibration Dampers to poles (Sheet 1); Changed 'ROADWAY ALUMINUM LIGHT POLE NOTES' Note 3)d. (Sheet 2); Changed Fixture Arm Length and added Damper Details (Sheet 3).

Interim Index No. 18110 (Sheets 1-2 of 2), CAMERA MOUNTING DETAILS – Dated 01/01/10: Revised notes 2 and 3; added notes 7, 8 and 9; moved conduit to encase CCTV Lowering Cable (Sheet 1); General Notes, note 2 replaced and note 6 revised (Sheet 2).

Interim Index No. 18111 (Sheets 1-2 of 2), STEEL CCTV POLE – Dated 01/01/10: Sheets were completely revised.

Interim Index No. 18113 (Sheets 1-2 of 2), CONCRETE CCTV POLE – Dated 01/01/10: Sheets were completely revised.

Interim Index No. 20005 (Sheet 1 of 1), PRESTRESSED BEAM TEMPORARY BRACING - Dated 01/01/10: New Design Standard.

Interim Index No. 20010 (Sheets 1-2 of 2), TYPICAL FLORIDA-I BEAM DETAILS AND NOTES – Dated 01/01/10: New Design Standard.

Interim Index No. 20036 (Sheets 1-2 of 2), FLORIDA-I 36 BEAM - STANDARD DETAILS – Dated 01/01/10: New Design Standard.

Interim Index No. 20045 (Sheets 1-2 of 2), FLORIDA-I 45 BEAM - STANDARD DETAILS – Dated 01/01/10: New Design Standard.

Interim Index No. 20054 (Sheets 1-2 of 2), FLORIDA-I 54 BEAM - STANDARD DETAILS – Dated 01/01/10: New Design Standard.

Interim Index No. 20063 (Sheets 1-2 of 2), FLORIDA-I 63 BEAM - STANDARD DETAILS – Dated 01/01/10: New Design Standard.

Interim Index No. 20072 (Sheets 1-2 of 2), FLORIDA-I 72 BEAM - STANDARD DETAILS – Dated 01/01/10: New Design Standard.

Interim Index No 20078 (Sheets 1-2 of 2), FLORIDA-I 78 BEAM - STANDARD DETAILS – Dated 01/01/10: New Design Standard.

Interim Index No. 20199 (Sheet 1 of 1), BUILD-UP & DEFLECTION DATA FOR AASHTO, BULB-T BEAMS AND FLORIDA-I BEAMS – Dated 01/01/10: Added Florida-I Beams and changed the 3rd sentence in BEAM CAMBER AND BUILD-UP NOTES. Data Table Updated (See FDOT2008 MR1).

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Interim Index No. 20210 (Sheet 2 of 2), TYPICAL FLORIDA-U BEAM DETAILS AND NOTES, Dated 01/01/10: Changed Note 12 and "Timber Blocking" to "Temporary Blocking" in TEMPORARY BLOCKING detail.

Interim Index No. 20350 (Sheets 1-3 of 3), PRESTRESSED SLAB UNITS DETAILS AND NOTES - Dated 01/01/10: Data Table Updated (See FDOT2008 MR2).

Interim Index No. 20353 (Sheet 1 of 1), 12" CUSTOM WIDTH PRESTRESSED SLAB UNIT - STANDARD DETAILS - Dated 01/01/10: New Design Standard.

Interim Index No. 20354 (Sheet 1 of 1), 12"x48" PRESTRESSED SLAB UNIT - STANDARD DETAILS - Dated 01/01/10: New Design Standard.

Interim Index No. 20355 (Sheet 1 of 1), 12"x60" PRESTRESSED SLAB UNIT - STANDARD DETAILS - Dated 01/01/10: New Design Standard.

Interim Index No. 20363 (Sheet 1 of 1), 15" CUSTOM WIDTH PRESTRESSED SLAB UNIT - STANDARD DETAILS - Dated 01/01/10: New Design Standard.

Interim Index No. 20364 (Sheet 1 of 1), 15"x48" PRESTRESSED SLAB UNIT - STANDARD DETAILS - Dated 01/01/10: New Design Standard.

Interim Index No. 20365 (Sheet 1 of 1), 15"x60" PRESTRESSED SLAB UNIT - STANDARD DETAILS - Dated 01/01/10: New Design Standard.

Interim Index No 20399 (Sheet 1 of 1), OVERLAY & DEFLECTION DATA FOR PRESTRESSED SLAB UNITS - Dated 01/01/10: New Design Standard.

Interim Index No. 20500 (Sheet 1 of 1), COMPOSITE ELASTOMERIC BEARING PADS - PRESTRESSED AASHTO & BULB-T BEAMS - Dated 01/01/10: Changed Index Title.

Interim Index No. 20501 (Sheet 1 of 1), BEVELED BEARING PLATE DETAILS - PRESTRESSED AASHTO AND BULB-T BEAMS - Dated 01/01/10: Added material specifications to Note 3.

Interim Index No. 20502 (Sheet 1 of 1), BEVELED BEARING PLATE DETAILS - PRESTRESSED FLORIDA U-BEAMS - Dated 01/01/10: Added material specifications to Note 3.

Interim Index No. 20510 (Sheet 1 of 1), COMPOSITE ELASTOMERIC BEARING PADS - PRESTRESSED FLORIDA-I BEAMS – Dated 01/01/10: New Design Standard.

Interim Index No. 20511 (Sheet 1-2 of 2), BEARING PLATE DETAILS - PRESTRESSED FLORIDA-I BEAMS – Dated 01/01/10: New Design Standard.

Interim Index No. 20602 (Sheet 1 of 1), EDC INSTRUMENTATION FOR SQUARE PRESTRESSED CONCRETE PILES – Dated 01/01/10: Changed note.

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Interim Index No. 21100 (Sheet 2 of 3), STRIP SEAL EXPANSION JOINT – Dated 01/01/10: Changed "Direction of Movement" angle measurement and corrected skew angle details in MOVEMENT SCHEMATIC (Sheet 2 of 3); Data Table Updated (See FDOT2008 MR1 or later).

Interim Index No. 21200 (Sheets 1-2 of 2), LIGHT POLE PILASTER - Dated 01/01/10: Revised TYPICAL SECTIONS and "\*" Slip Forming note (Sheet 1); Added new Sheet 2; Added Bars 4J, Reinforcing Steel Note d, Table 1, and changed the number of Bars 4G and anchor bolt notes (Sheet 3); Deleted 1" PVC Weep Hole and Grout Pad (all sheets).

Interim Index No. 21240 (Sheet 1 of 2), MAINTENANCE LIGHTING FOR BOX GIRDERS - Date 01/01/10: Changed pay item Note 18 and INSTRUCTIONS TO DESIGNER Note 2.

The design Standards, Interim Indexes and Design Standards Modifications can be accessed at the following web site:

http://www.dot.state.fl.us/rddesign/DesignStandards/Standards.shtm

If you have any questions please contact this office.