

DESIGN STANDARDS (ENGLISH UNITS).

(REV 2-5-02) (7-02)

SUBARTICLE 5-1.1 (Page 26). The “Design Standards” booklet for English Units, dated January 2002, is modified as follows:

Index No. 216 (Sheet 2 of 3), ‘HANDRAIL FOR FLUME IN SIDEWALK’, Notation tagged to handrail reference to Index 520 – Text ‘Index 520’ deleted and text ‘Index No. 521’ substituted. Notations tagged to ‘Sidewalk Toewall’ deleted and tags ‘6” Thick Sidewalk Toewall’ substituted.

Index No. 220 (Sheet 1 of 1), ‘GENERAL NOTES’ – Note 6 added as follows: ‘6. Inlets to be paid for under the contract price for Inlets (Gutter Type S), EA’.

Index No. 221 (Sheet 1 of 1), ‘GENERAL NOTES’ – Note 7 added as follows: ‘7. Inlet to be paid for under the contract unit price for Inlets (Gutter Type V), EA’.

Index No. 230 (Sheet 1 of 1), ‘GENERAL NOTES’ – Note 7 added as follows: ‘7. Inlet to be paid for under the contract unit price for Inlets (Dt Bot Type A), EA’.

Index No. 282 (Sheet 1 of 1), ‘INLET TYPE C (MODIFIED)’, ‘FRONT ELEVATION’ and ‘SPECIAL CONCRETE ENDWALL’, ‘FRONT ELEVATION’ and ‘SECTION AA’, Tagged references to Index No. 520 – Text ‘520’ deleted and text ‘521’ substituted.

Index No. 304 (Sheet 1 of 5), ‘GENERAL NOTES’, Note 3, Paragraph 1, Sentences 3 and 4 – Sentences 3 and 4 deleted.

Index No. 400 (Sheet 12 of 32), ‘PLAN’ view, notation for “Thrie-Beam Terminal Connector”, line five – Text “(3 1/2” Min. Thread Length)” inserted after word ‘Bolts’.

Index No. 400 (Sheet 13 of 32), Flagged footnote for “Thrie Beam Terminal Connector”, lines 1 and 2, text in second parentheses – Text “With 3 1/2” Min. Thread Length” inserted after ‘15” Long’, and “or 12” long for Vertical Face Retrofit Barrier” inserted between word ‘Railings’ and close parenthesis.

Index No. 400 (Sheet 16 of 32), ‘PERMISSIBLE POST AND OFFSET BLOCK COMBINATION’ table, Notes – Note 4 added, stating: “Recycled plastic offset blocks included on the Qualified Products List that have width dimensions ≥ 4 ” ≤ 6 ” and which have molded protrusions from the back along each side to prevent rotation can be used with standard steel guardrail posts”.

Index No. 400 (Sheet 18 of 32), 5/8” OVAL SHOULDER BUTTON HEAD BOLT table, footnotes – Inserted between the upper and lower footnotes is a footnote stating “For

applications where special bolts having lengths greater than 25” are required, the Contractor may use a 5/8” Ø threaded rod (field cut to length). A hex nut and beam washer shall be used at the guardrail face with no more than 3/4” of the threaded rod projecting beyond the top of the nut. The projecting thread on both ends shall be distorted to forbid removal of the nuts, and both ends of the threaded rod metalized with organic zinc-rich coating”. Note above table title is deleted.

‘HEX BOLTS AND NUTS’ bracketed text – The text is deleted and the following text substituted: “HS Hex bolts for THRIE – BEAM TERMINAL CONNECTORS shall conform to the requirements of ASTM A449 (Type 1) with heavy hex nuts and washers. All other hex bolts shall conform to the requirements of ASTM A563. Bolts, nuts and washers shall be hot dip galvanized. Heavy hex nut may be used in lieu of hex nuts and hex nuts used for jam nuts.”

Index No. 400 (Sheet 20 of 32), ‘GUARDRAIL POSTS’, ‘SPECIAL STEEL GUARDRAIL POSTS’, ‘FOR MOUNTING GUARDRAIL ON EXISTING APPROACH SLABS AND BRIDGE SIDEWALKS’, ‘TOP VIEW’ – Additional 1” Ø holes to be located front, back and each side of the base plate at mid points between existing corner holes, to accommodate anchor bolt placement where corner anchor bolt edge clearance can not be achieved; one front hole anchor bolt required with any combination of three other anchor bolts (total 4 bolts required); refer to Structures Index series 770 and 780 for guidelines to post location and anchor bolt orientation.

Index No. 400 (Sheet 25 of 32), End Anchorage Assembly Type ET 2000 posts can be replaced by hinged steel breakaway posts and the steel channel offset strut can be replaced by two parallel 3”x 3”x 1/4” steel angles, one angle each side between Posts No. 1 and No. 2. Post No. 1 can be replaced by the steel hinged post; with the manufacturers identification of HBA Post Type J1, and Posts Nos. 2 through 8 can be replaced by steel hinged posts with the manufacturers identification of HBA Post Type J2.

Index No. 400 (Sheet 28 of 32), End Anchorage Assembly Type LET posts can be replaced by hinged steel breakaway posts and the steel channel offset strut can be replaced by two parallel 3”x 3”x 1/4” steel angles, one angle each side between Post No. 1 and No. 2 Post No. 1 can be replaced by the steel hinged post with the manufacturers identification of HBA Post Type J1, and Posts Nos. 2 through 7 can be replaced by steel hinged posts with the manufacturers identification of HBA Post Type J2.

Index No. 400 (Sheet 30 of 32) – Sheet deleted and Interim Index No. 400 (Sheet 30 of 32) substituted.

Index No. 0400 (Sheet 30 of 32) – Interim index sheet subtitled ‘END ANCHORAGE ASSEMBLY TYPE FLEAT –350’; sheet marked ‘Revised 01-31-02’.

Index No. 0400 (Sheets 1 & 2 of 2) – Interim index sheets subtitled ‘DETAIL E’ and marked ‘Date: 01-28-02’; sheets are supplements to Index No. 400 (Sheet 13 of 32) and, sheets

are typical applications for approach guardrail transitions and connections to bridge retrofit three-beam traffic railing barriers under Structures Index Nos. 770-779.

Index No. 505 (Sheets 1-3 of 3) – Index deleted and Interim Index No. 0505 (Sheets 1-3 of 3) substituted.

Index No. 0505 (Sheets 1-3 of 3) – Interim Index is a replacement for Index No. 505. Index required in plans let to contract beginning January 2003. Use of the index prior to the letting beginning January 2003 will be at the District's discretion. For projects that do not involve rigid pavement construction, only Sheet 1 of 3 needs to be included in the plans.

Index No. 525 (Sheet 1 of 5), 'THREE APPROACH LANES – TWO THRU LANES, DETAIL B', traffic directional arrow shown in recovery area (taper beyond nose) – Arrow deleted.

Index No. 525 (Sheet 4 of 5), Subtitle and header – Word 'EXPRESSWAY' deleted and word FREEWAY substituted. Sketches for 'ACCELERATION LANE WITH SHOULDER GUTTER' and 'DECELERATION LANE WITH SHOULDER GUTTER' – Shoulder pavement width 4' deleted and width 8' substituted. Sketches for 'ACCELERATION LANE WITHOUT SHOULDER GUTTER' AND 'DECELERATION LANE WITHOUT SHOULDER GUTTER' – Shoulder pavement width 6' deleted and width 10' substituted.

Index No. 602 (Sheet 1 of 1), Notation referring to the placement of cones at the 'Work Area', line three – Length 25' deleted and length 250' substituted.

Index No. 11861, (Sheet 1 of 2), 'NOTES', Note '5a' – Note text deleted and the following text substituted: "Frangible Supports: The Column (Post) shall be driven into the ground to the depth indicated or set into preformed holes to the specified depth with suitable backfill tamped into compacted layers not exceeding 6", or filled with flowable fill or bagged concrete. The cost of the flowable fill or bagged concrete shall be included in the cost of the sign."

Index No. 11862, (Sheet 1 of 2), 'NOTES', Note '5a' – Note text deleted and the following text substituted: "Frangible Supports: The Column (Post) shall be driven into the ground to the depth indicated or set into preformed holes to the specified depth with suitable backfill tamped into compacted layers not exceeding 6", or filled with flowable fill or bagged concrete. The cost of the flowable fill or bagged concrete shall be included in the cost of the sign."

Index No. 11863, (Sheet 1 of 2), 'NOTES', Note '5a' – Note text deleted and the following text substituted: "Frangible Supports: The Column (Post) shall be driven into the ground to the depth indicated or set into preformed holes to the specified depth with suitable backfill tamped into compacted layers not exceeding 6", or filled with flowable fill or bagged concrete. The cost of the flowable fill or bagged concrete shall be included in the cost of the sign."

Index No. 11864, (Sheet 1 of 2), 'NOTES', Note '5a' – Note text deleted and the following text substituted: "Frangible Supports: The Column (Post) shall be driven into the ground to the depth indicated or set into preformed holes to the specified depth with suitable backfill tamped into compacted layers not exceeding 6", or filled with flowable fill or bagged concrete. The cost of the flowable fill or bagged concrete shall be included in the cost of the sign."

Index No. 11865 (Sheet 1 of 2), 'NOTES', Note '1d' – Note text deleted and the following text substituted: The contractor shall set the posts in preformed holes to the specified depth with suitable backfill tamped in compacted layers not exceeding 6", or filled with flowable fill or bagged concrete. The cost of the flowable fill or bagged concrete shall be included in the cost of the sign. At the contractor's option, steel posts may be driven.

Index No. 17344 (Sheet 1 of 6), 'Notes', Note 4, Line 3, Text 'sheet 9 of 13' – Text deleted and text 'sheets 2 and 7 of 13' substituted.

Index No. 17346 (Sheet 12 of 13), 'MAJOR INTERSECTION WITH RIGHT TURN DROP LANE AND DESIGNATED OR UNDESIGNATED BIKE LANE URBAN TYPICAL SECTION (CURB AND GUTTER)', '6" WHITE 2"x4" SKIP' – Dimension '2"x4"' deleted and 2'-4' substituted.

Index No. 17346 (Sheet 13 of 13), 'INTERCHANGE RAMPS RURAL TYPICAL SECTION (PAVED SHOULDER)', '6" White 2"x4" SKIP' – Dimension '2"x4"' deleted and 2'-4' substituted.

Index No. 17502 (Sheet 2 of 4), 'POLE SPECIFICATIONS', Second paragraph – Paragraph expanded with a second sentence as follows: Drilling through the handhole reinforcement or the pole for the attachment of the handhole cover is not allowed. A cover clip to the handhole frame shall be provided.

Index No. 17600 (Sheet 1 of 2), 'CALL BOX DETAIL BEHIND GUARDRAIL', 'SIDE VIEW', dimension '24" MAX' – Dimension '24" MAX' deleted and dimension 14" ± 1" substituted.

Index No. 17890 (Sheet 1 of 3), The following design note is added: "In accordance with Traffic Engineering Manual (Topic Number 750-00-005) Section 2.1, Slippery when wet signs shall be placed in advance of all movable and non-movable steel deck bridges."

Index No. 17900 (Sheet 1 of 9), General Notes, Note 3 – Note 3 deleted.

Index No. 17900 (Sheet 2 of 9), General Notes, Note 3 – Note 3 deleted.

Index No. 17900 (Sheet 3 of 9) – Sheet deleted and sheet Interim Index No. 017900 (Sheet 3 of 9) substituted.

Index No. 017900 (Sheet 3 of 9) – Interim Index sheet subtitled ‘CABINET BACKPLANE
DETAIL’. Circuitry modified.

Index No. 17900 (Sheet 5 of 9) – Sheet deleted and sheet Interim Index No. 017900 (Sheet 5 of
9) substituted.

Index No. 017900 (Sheet 5 of 9) – Interim Index sheet subtitled ‘LOOP AND PIEZOELECTRIC
VEHICLE SENSOR DETAIL’ to be inserted in the plans when Index No. 17900
applicable. Details modified and detail added.

Index No. 17900 (Sheet 6 of 9), Elevation (cross sectional) detail, 5’ offset dimension –
Dimension 5’ deleted and dimension 15’ substituted.

Index No. 17900 (Sheet 8 of 9), detail ‘H’, ‘SIX LANE, DIVIDED – TWO WAY’ – Text ‘SIX’
deleted and text ‘EIGHT’ substituted.