DESIGN STANDARDS MODIFICATIONS

(2000 Booklet)
(Metric Units)

Effective Date: July 1, 2005

NOTE: Interim Indexes listed in these Modifications may be viewed by going to www.dot.state.fl.us/rddesign and clicking on "Design Standards".

(NOTE: A typographical error was corrected 4/29/05. See Interim Index No. 5110.)

Index No. 001 (Sheets 1 and 2 of 2) – Abbreviation listing expanded to include the following: FRP Fiber Reinforced Pipe; HAR Highway Advisory Radio; LEO Law Enforcement With Flashing Light and Radar; PRS Portable Regulatory Sign; RSDU Radar Speed Display Unit.

Index No. 102 (Sheet 3 of 3), "TYPE IV SILT FENCE", "ELEVATION", notation tagged to fence; "Line 3", text "Sec. 966" – Text "Sec. 966" deleted and text "Sec. 550" substituted.

Index No.104 (Sheets 1-2 of 2) "PERMANENT EROSION CONTROL", is deleted and Interim Index No. 0104, Dated 12-14-01, is substituted.

Index No. 105 (Sheet 1 of 1), "SEEDING RATES (kg/ha)" table, footnotes, "Note:" – Second sentence added that states 'Wildflowers destroyed by shoulder reworking are to be re-established under the seeding rates prescribed for permanent wildflower #2 Group shown by table on Index No. 104."

Index No. 199 (Sheet 1 of 1) "GEOTEXTILE CRITERIA", is deleted and Interim Index No. 0199, Dated 8-24-00, is substituted.

Index No. 201 (Sheet 2 of 6), "TEMPORARY DRAINS FOR SUBGRADE AND BASE", "Note:", Second sentence –Second sentence deleted and sentence "See Index No. 102 for sediment control at inlet." substituted.

Index No. 205 (Sheet 2 of 5) "COVER HEIGHT", is deleted and Interim Index No. 0205 Dated 12-05-00, is substituted.

Interim Index No. 216 (Sheets 1-3 of 3) "CLOSED FLUME INLET", Dated 12-04-00, is added.

Index No. 219 (Sheet 1 of 2), “GENERAL NOTES”, Note 5 – Text “209” deleted.

Index No. 220 (Sheet 1 of 1) – Table “RECOMMENDED MAXIMUM PIPE SIZE”, “PIPE SIZE” – Size “900” deleted and size “750” substituted. “GENERAL NOTES” – Note 6 added as follows: “Inlets to be paid for under the contract unit price for Inlets (Gutter Type S), EA.”

Index No. 221 (Sheet 1 of 1), “RECOMMENDED MAXIMUM PIPE SIZE” – Size “940” deleted and size “750” substituted. “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), Table “RECOMMENDED MAXIMUM PIPE SIZE”, “PIPE SIZE” – Size “600” deleted and size “450” substituted. “GENERAL NOTES” – Note 7 added as follows: “7. Inlets to be paid for under the contract unit price for Inlets (Dt Bot Type A), EA.”

Index No. 231 (Sheet 2 of 2), “GENERAL NOTES”, note 7-Note deleted.

Index No. 232 (Sheet 1 of 5), “INLETS”, “TYPE C”, “940 Wall – 600 Pipe” footnote – Added text as follows: “(450 where an 450 pipe enters a 600 wall)”; also, “TYPE E’, “1370 Wall – 1050 Pipe” footnote – “1050 Pipe” deleted and “900 Pipe” substituted.

Index No. 232 (Sheet 4 of 5), “METHOD OF PAYMENT FOR TRAVERSABLE SLOT INLETS (PARTIAL) FOR EXISTING INLETS”, Note 3 – Note 3 deleted and the following substituted: “3. Concrete inlet pavement and sodding shall be in accordance with the sections on this detail and with the plan on Sheet 2 and Sections AA, BB and CC (as Case 1) and tabular quantities on Sheet 3.”

Index No. 234 (Sheet 1 of 1), Table “RECOMMENDED MAXIMUM PIPE SIZE”, “PIPE SIZE” - Size “900” deleted and size “750” substituted.

Index No. 251 (Sheet 1 of 2), “ESTIMATED QUANTITIES”, “Reinforcing Steel”, “kg”, “RCP” & “CMP” - Quantities “495” deleted and “315” substituted.

Index No. 251 (Sheet 2 of 2), “ESTIMATED QUANTITIES”, “Reinforcing Steel”, “kg”, “RCP” & “CMP” – Quantities “587” deleted and “374” substituted.

Index No. 252 (Sheet 1 of 2), “ESTIMATED QUANTITIES”, “Reinforcing Steel”, “kg”, “RCP” & “CMP” – Quantities “660” deleted and “531” substituted.

Index No. 252 (Sheet 2 of 2), “ESTIMATED QUANTITIES”, “Reinforcing Steel”, “kg”, “RCP” & “CMP” – Quantities “797” deleted and “638” substituted.

Index No. 253 (Sheet 1 of 2), “ESTIMATED QUANTITIES”, “Reinforcing Steel”, “kg”, “RCP” & “CMP” – Quantities “704” deleted and “567” substituted.

Index No. 253 (Sheet 2 of 2), “ESTIMATED QUANTITIES”, “Reinforcing Steel”, “kg”, “RCP” & “CMP” – Quantities “864” deleted and “689” substituted.

Index No 260 (Sheet 1 of 1), “GENERAL NOTES’, Note 4 - Text “With Grate” deleted from the first sentence.

Index No. 261 (Sheet 1 of 3), “GENERAL NOTES”, Note 9 deleted and the following note substituted:”9. Endwall to be paid for under the contract unit price for U-Endwall, Each. Payment shall include cost of concrete, reinforcing steel, and when called for in the plans, steel grating and accessories. Quantities shown are for estimating purposes only.”

Index No. 280 (Sheet 2 of 4) “GUARD AT PIPE ENDS”, “Note” text “for Endwall Grate, LB” deleted and “Reinforcing Steel (Miscellaneous)” substituted. “CONCRETE GUTTER AND DRAINS AT RETAINING WALLS”-“Note:” deleted and the following note substituted: “PVC pipe, Schedule 40, to be paid for under the contract unit price for Polyvinyl Chloride Pipe Culvert (100mm) M1.”

Index No. 282 (Sheet 1 of 1), Handrail notations referring to ‘Index No. 520’ – ‘Index No. 520’ text deleted and text “See Plans For Handrail Requirements” substituted.

Index No. 286 (Sheet 1 of 2), “DESIGN NOTES”, “Note 6”-text deleted and the following note substituted:

“The designer should detail in the plans, the location of: (a) Type V underdrain, (b) non-standard locations of Type I, II, and III underdrain, (c) underdrain inspection boxes, (d) cleanouts for Type V underdrain, and (e) underdrain outlet pipes.”

“Note 7” – text deleted and the following text substituted:

“The designer should specify the flow line elevations at the beginning, bends, junctions, and ends of underdrain pipes and outlet pipes.”

“Note 8” added “The designer should evaluate whether an external filter fabric envelope is required around underdrain Types I and III. When required, fabric shall be specified in the plans.”

“GENERAL NOTES”, “Note 10” text deleted and the following text substituted:

“10. Pay Item shall be based on the size of the smooth interior products. The contract unit price for Underdrain, M1, shall include the cost of pipe, fittings, aggregate, sock, filter fabric, underdrain cleanouts, and concrete aprons.

The contract unit price for Underdrain Outlet Pipe, M1, shall be full compensation for trench excavation, pipe and fittings, concrete aprons, hardware cloth for concrete aprons, stubbing into drainage structures, backfill in place, and disposal of excess materials. The contract unit price for Underdrain Inspection Box, EA. shall be for the number completed and accepted.”

Index No. 287 (Sheet 2 and 3 of 3) - All surfaces tagged ‘Type S’ and references to ‘Type S’ are deleted and Type SP substituted.

"NOTES FOR DRAINCRETE PAVEMENT SUBDRAINAGE", Note 1 – Text "Alteration #1" deleted. "FOR REHABILITATION:", Note 1, paragraph 3 – text "Concrete apron shall be paid for under the contract unit price for Class I Concrete (Miscellaneous), M3 " deleted and paragraph 6 - Text "Tack coat shall be paid for under the contact unit price for Bit Mat'l (Tack Coat), GA." deleted.

Index No. 290 (Sheet 1 of 5), 'TABLE OF MINIMUM BAR SPLICE LENGTHS' – All tabulated values deleted and the following tabular values substituted:

Bar Size	Splice	Bar Size	Splice
#13	690	#25	1.700
#16	850	#29	1.920
#19	1.020	#32	2.160
#22	1.500	#36	2.400

Index No. 301 (Sheet 1 of 1) "TURN LANES", is deleted and Interim Index No. 0301, Dated 12-06-02, is substituted.

Index No. 302 (Sheet 1 of 1), "TYPE IV CONCRETE TRAFFIC SEPARATOR", "OPTION II", and "TYPE I CONCRETE TRAFFIC SEPARATOR", "OPTION II", Notations "No Extra Payment For Pavement" – Notations deleted and the following notations substituted: "Cost Of The Flexible Pavement Under The Option II Separator Included In The Cost Of The Separator."

Index No. 304 (Sheets 1 thru 5 of 5), "PUBLIC SIDEWALK CURB RAMPS" is deleted and Interim Index No. 0304 (Sheets 1 thru 6 of 6) Dated 01-01-05 is substituted.

Index No.305 (Sheet 5 of 5), joints labeled "Expansion Joint" – "Expansion Joint" deleted and label "Contraction Joint (Typ)" substituted.

Index No. 310 (Sheets 1-2 of 2), "CONCRETE SIDEWALK" is deleted and Interim Index No. 0310, Dated 07-24-02 is substituted.

Interim Index No. 0310 (Sheet 1 of 2) Revised 7-24-02, "SECTION AA" Sidewalk surface cross slope "0.02" deleted and "0.02 Max" substituted.
"SECTION BB" Sidewalk surface cross slope "0.02" deleted and "0.02 Max" substituted.

Interim Index No. 0310 (Sheet 2 of 2) Revised 7-24-02, "SECTION CC" Sidewalk surface cross slope "0.02" deleted and "0.02 Max" substituted.

Interim Index No. 0400 "GUARDRAIL" with the following Index Dates is added (see Interim listing on webpage for details.) 12-18-01, 12-28-01, 05-05-00, 01-30-02, and 03-26-01.

Index No.400 (Sheet 1 of 31), “GENERAL NOTES”, Note 6, add the following text: “Guardrail end anchorage assemblies shall be of the type called for in the plans. If the plans call for end anchorage assembly “flared” and does not identify the specific system(s) to be used, the contractor has the option to construct any FDOT approved flared assembly provided in this Index or identified on the Qualified Products List (QPL), subject to the conditions identified in the approved Index drawings, or QPL drawings if applicable.

If the plans call for end anchorage assembly “parallel” and does not identify the specific system(s) to be used, the contractor has the option to construct any FDOT approved parallel assembly provided in this Index or identified on the QPL, subject to the conditions identified in the approved Index drawings, or QPL drawings if applicable.

If the plans call for a specific end anchorage assembly, substitutions with other end anchorage assemblies will not be permitted unless approved by the Engineer. Approved substitutions will not be eligible for VECP consideration.

Proprietary end anchorage systems must be identified on the QPL. Manufacturers seeking approval of proprietary end anchorage systems for inclusion on the QPL must submit application along with design documentation showing the end anchorage system is crash tested to NCHRP Report 350 Test Level 3 criteria, is accepted by FHWA for use as a guardrail end anchorage system, and is compatible with FDOT guardrail systems. System approvals will be contingent on FDOT’s evaluation of crash test performance results for consistency with FDOT guardrail application and use. If approved, installation drawings signed and sealed by a professional engineer licensed in the State of Florida will be required.”

Note 8 – Word “curved” in second line deleted and word “curbed” substituted.

Note 20 added as follows:
“20. On roadways designated for reverse laning, all downstream ends of guardrail that are not shielded or that are not designed as approach end terminals shall be marked with post-mounted Type 3 Object Markers. Trailing bridge ends and trailing shoulder concrete barrier wall ends shall be marked with Type 3 Object Markers except where there is trailing end guardrail. Object markers to be installed facing reverse laning traffic.”

Index No. 400 (Sheet 4 of 31), “GUARDRAIL APPLICATION FOR ROADSIDE HAZARD”, “Notes For Details B & C:”, text “When divided roadways are designated evacuation routes, approach end anchorage assemblies should be used for trailing end anchorage.” - Text deleted.

Index No. 400 (Sheet 5 of 31), “GUARDRAIL APPLICATIONS FOR BRIDGES WITH FULL WIDTH SHOULDERS AND SAFETY SHAPE TRAFFIC RAILING BARRIER EXTENDING FULL LENGTH OF APPROACH SLAB”, “Notes for Details O & P:”, text “When divided roadways are designated evacuation routes, approach end anchorage assemblies should be used for trailing end anchorage.”- Text deleted.

Index No. 400 (Sheet 6 of 31), “GUARDRAIL APPLICATIONS FOR BRIDGES WITH FULL WIDTH SHOULDERS AND SAFETY SHAPE TRAFFIC RAILING BARRIER EXTENDING LESS THAN FULL APPROACH SLAB LENGTH”, “Notes for Details H&I:” and “GUARDRAIL APPLICATIONS FOR BRIDGES WITH LESS THAN FULL WIDTH SHOULDERS AND SAFETY SHAPE TRAFFIC RAILING BARRIER EXTENDING LESS THAN FULL APPROACH SLAB LENGTH”, “Notes for Details S&T:”, text “When divided roadways are designated evacuation routes, approach end anchorage assemblies should be used for trailing end anchorage.”- Text deleted.

Index No. 400 (Sheet 16 of 31), “PERMISSIBLE POST AND OFFSET BLOCK COMBINATION”, table -all references to “554” for length of steel modified offset block – “554” deleted and “432” substituted. Text "M14x17.2" deleted and "M14x18" substituted. Table footnotes – “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.”
“SPECIAL SAFETY PIPE RAIL’ – Subtitle deleted and subtitle ‘PEDESTRIAN SAFETY TREATMENT” substituted. “STEEL MODIFIED THRIE-BEAM OFFSET BLOCK”, height dimension “554” – “554” deleted and “432” substituted; all hole sizes and locations remain the same and the v-notch size, shape and position remain the same but in location relative to the bottom of the 432mm block.

Index No. 400 (Sheet 18 of 31), “M16 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 640 mm are required, the Contractor may use a M16 Ø threaded rod (field cut to length). A hex nut and beam washer shall be used at the guardrail face with no more than 19 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 19 of 31), “THRIE-BEAM TERMINAL CONNECTOR” – The six (6) interior 24 by 45 mm slots rotated to match the orientation of the six (6) end slots.

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 24 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.
"FOR CONSTRUCTION OF GUARDRAIL WHERE CULVERT, PIER FOOTING OR OTHER STRUCTURE PRECLUDES NORMAL POST INSTALLATION", "SIDE VIEW", "22 mm Ø" dimension – "22 mm Ø" deleted and "19 mm Ø" substituted.

Index No. 400 (Sheet 24 of 31), 'CONTROLLED RELEASE RETURN NOTES', note 1, last line-Insert SKT.

Index No. 400 (Sheet 25 of 31), "ET 2000 NOTES" - Note 6 deleted and the following text substituted:
"Post Options:
(a) Posts at location Nos 1, 2, 3 and 4 are timber breakaway posts with steel foundation tubes. The breakaway posts at location Nos. 5, 6, 7 and 8 may be constructed as shown in Section CC or may utilize timber breakaway posts with steel foundation tubes as shown in Section BB.
(b) Posts shown in Option (a) can be replaced by hinged steel breakaway posts and the steel channel offset strut can be replaced by one 3" x 3" x 1/4" steel angle on the back side between Post No. 1 and No. 2." Post No 1 can be replaced by the steel hinged post with the manufacturer's identification of HBA Post Type J1, and Post Nos. 2 through 8 can be replaced by steel hinged posts with the manufacturer's identification of HBA Post Type J2."

Index No. 400 (Sheet 28 of 31), "LET NOTES" - Note 6 deleted and the following text substituted:
"Post Options:
(a) Posts at location Nos 1, and 2 are timber breakaway posts with special length steel foundations tubes without soil plates. Posts at locations Nos. 3, 4, 5, 6 and 7 are CRT timber posts.
(b) Posts shown in Option (a) can be replaced by hinged steel breakaway posts and the steel channel offset strut can be replaced by one 3" x 3" x 1/4" steel angle on the back side between Post No. 1 and No. 2." Post No 1 can be replaced by the steel hinged post with the manufacturer's identification of HBA Post Type J1, and Post Nos. 2 through 8 can be replaced by steel hinged posts with the manufacturer's identification of HBA Post Type J2."

Index No. 400 (Sheet 29 of 31), "END ANCHORAGE ASSEMBLY TYPE SKT-350", "ELEVATION" view and footnote "Do Not Attach Rail To Block At Post Locations 3, 5 and 7, and, Rail To Post At Post No. 1. " – Post bolts required and to be indicated at Posts Nos. 3, 5 and 7; the text in the footnote to be deleted and text "Do Not Attach Rail To Post At Post No. 1." substituted.

"SECTION BB", "Note: Do not attach rail to block at post locations 3, 5 and 7." – Note deleted.

Index No. 400 (Sheet 31 of 31), "END ANCHORAGE ASSEMBLY TYPE REGENT" is deleted and Interim Index No. 0400, Sheet 1 of 1, dated 08-21-03 is substituted.

Index No. 410 (Sheets 1-22 of 22), – All reinforcing steel with undesignated size shall be #13 bars.

Interim Index No 412 (Sheets 1-5 of 5), "PORTABLE TEMPORARY LOW PROFILE BARRIER FOR ROADSIDE SAFETY", dated 9-29-03 is added.

Interim Index 412 (Sheet 1 of 5), - Dated 09-29-03 Sheet 1 of 5 "GENERAL NOTES", Note 3, second paragraph, first sentence, text deleted and the following substituted: "Barrier wall units shall conform to Section 521 of the Standard Specifications and produced in Department approved plants with quality control plans for precasting concrete barrier wall."

Interim Index No. 412 (Sheet 1 of 5), Dated 09-29-03, "General Notes", Note 4, The following added as paragraph 2: "Low profile barrier wall units shall be installed so as to be in firm contact with adjoining units. Nuts and tensioning rods shall be installed snug tight".

Interim Index No.412 (Sheet 1 of 5), Dated 09-29-03 Sheet 1 of 5 "GENERAL NOTES", Note 6, the following sentence added: "The cost of the tubular markers and Type 1 object marker shall be included in the cost of the low profile barrier."

Interim Index No. 413 (Sheet 1 of 1) "PROPRIETARY TEMPORARY CONCRETE BARRIER", Dated 07-01-03, is added.

Interim Index No. 413 (Sheet 1 of 1), "GNERAL NOTES", Note 4 added as follows: "4. Barrier wall units shall conform to Section 521 of the Standard Specifications and produced in Department approved plants with quality control plans for precasting concrete barrier wall."

Index No. 415 (Sheet 1-10 of 10), "TEMPORARY CONCRETE BARRIER", is deleted and Interim Index No. 0415, Dated 07-01-03, is substituted.

Interim Index No. 0416 (Sheet 1 of 1), "TEMPORARY WATER FILLED BARRIERS", Dated 03-31-03, is added.

Index No. 416 (Sheet 1 of 5), "GENERAL NOTES", Note 10, lines two and three, text "or Barrier (Temporary) (Optional, LF)". "If the plans specify Barrier (Temporary) (Optional), the Contractor has the option to furnish either concrete or water filled barriers." – text deleted.

"SUPPLEMENTAL GENERAL NOTES FOR THE TRITON BARRIER", Note 7, line two, text "or Barrier (Temporary) (Optional), M1" – text deleted.

Index No. 416 (Sheet 5 of 5), "SUPPLEMENTAL GENERAL NOTES FRO THE GUARDIAN BARRIER", Note 7, line two, text "or Barrier (Temporary) (Optional), M1" – text deleted.

Index No. 417 (Sheet 1 of 1), "NOTES FOR TEMPORARY INERTIAL CRASH CUSHIONS" - Note 1 deleted and the following note substituted:

"1. The crash cushion arrays shown on this Index can be used on the State Highway System only when all of the following conditions are met:

a. Use is limited to shielding temporary concrete barrier wall approach ends.
b. Use only when a temporary gating crash cushion or inertial crash cushion is specifically called for in the plans.
c. Use is limited to installations that will not exceed 30 calendar days in duration, unless otherwise called for in the plans.
When the plans do not specifically call for a temporary gating crash cushion, and/or when the installation will exceed 30 days in duration, a redirective crash cushion system in accordance with Index 415 is required."

Note 5 deleted and the following note substituted:
"5. A yellow post mounted Type 1 Object Marker shall be centered 1.0 m in front of the nose of all crash cushion arrays. Mounting hardware shall be in accordance with Index Nos. 11860 and 11865. The cost of the Object Marker shall be included in the cost of the array."
Note 6 deleted and the following note substituted:
"6. Temporary gating crash cushion systems listed on the Department's Qualified Products List (QPL) may be substituted for the crash cushion arrays shown in this Index, provided a configuration using the system for this substitution has been detailed in the approved QPL drawings. Manufacturers seeking approval of temporary gating crash cushions for inclusion on the QPL must submit application along with design documentation showing the crash cushion system is crash tested to NCHRP Report 350 Test Level 3 criteria, is accepted by FHWA and is compatible with FDOT temporary barrier wall systems. System approvals will be contingent on FDOT's evaluation of crash test performance results for consistency with FDOT temporary barrier wall end shielding applications and uses. If approved, installation drawings signed and sealed by a professional engineer licensed in the State of Florida will be required.
"Note 7 added as follows: "7. Temporary crash cushions (gating) are to be paid per array for under the contract unit price for Vehicular Impact Attenuator/Crash Cushion (Gating) (Temporary), LO."

Index No. 435, "QUADGUARD" – Note that details for the QuarGuard HS are posted on the Qualified Products List.

Index No. 435 (Sheet 2 of 6), “QUARDGUARD”, is deleted and Interim Index No. 0435, Dated 7-10-01, is substituted.

Index No. 435 (Sheet 3 of 6), “ASPHALTIC CONCRETE FOUNDATIONS”, “PLAN” – detail deleted.

Index No. 436 (Sheet 1 of 1), “DESIGN AND MAINTENANCE NOTES AND GUIDELINES”, note 5, last line, reference to “general Note 12” – Text “12” deleted and text “13” substituted.

Index No. 440, “TRACC SYSTEMS” – Note that details for the WideTRACC and the TRACC Modular Base are posted on the Qualified Products List.

Index No. 440 (Sheet 1-2 of 2), “TRACC SYSTEMS”, is deleted and Interim Index No. 0440 (Sheet 1-5 of 5), “, Dated 05-04-01, is substituted.

Interim Index No. 0440 (Sheet 1 of 5), “GENERAL NOTES”, Note 7, the text is deleted and the following substituted: “All permanent units shall be factory new at completion of construction. Temporary construction units and units under Maintenance responsibility may be shop repaired units utilizing new or salvaged parts which will produce condition new units.”

Interim Index No. 0440 (Sheet 1 of 5), “DESIGN NOTES AND GUIDELINES”, Note 2, The text is deleted and the following substituted: “When equipped with the modular base, the TRACC is a restorable system that is well suited to shielding hazards subject to high speed traffic with a history of frequent errant vehicle departures from the roadway or the potential exists for such departures. The TRACC is also well suited to shielding hazards where the approach space is limited; and for conditions where the terminal must be located close to the traffic lane.”

Index No. 441, “TAU-II” – Note that details for the TAU-II Revised and Universal TAU-II are posted on the Qualified Products List.

Index No. 441 (Sheets 1-8 of 8), “TAU-II”, is deleted and Interim Index No. 0441 Dated 11-14-02, is substituted.

Index No. 451 Sheet 1of 2, “GENERAL NOTES”, Note 19 - text last sentence “Type A” deleted.
Note 20 - text first sentence “and pay” deleted.
Note 21- Note deleted and the following substituted: “This index details fencing that is constructed with farm fabric 1.18 (1.2 nominal) in height and with specific ground clearance and specific barbed wire spacings.”
Note 22 added with the following text- “22. All posts, braces, tension wires, fabric, tie wires, Class 1 concrete and all miscellaneous fittings and hardware to be included in the cost for Fencing, M1. Fencing shall be inclusive of the lengths of pull, end and corner post assemblies, but exclusive of gate widths.”

Index No. 452 (Sheet 1 of 2), notations tagged to “14 Ga. Tension Bands”-Spacing dimension “(≤180)” deleted and dimension “(≤380)” substituted.
“GENERAL NOTES”, notes “7(c)” and “7(d)” – Note “7(c)” deleted and note “7(d)” redesignated note “7(c)”. Table “TYPE IV VINYL COATED FABRIC”, subheading “Specification Section 966 And AASHTO M181 Table 4 Redefined As Follows” – Text “Specification Section 966 And” deleted.
Note 11- text last sentence “Type B,” deleted.
Note 12-text deleted and the following substituted: “For construction purposes, corner post assemblies shall consist of one corner post, two braces, two truss rods, and all necessary fittings and hardware as detailed above. End Post assemblies shall consist of one end post, one brace, one truss rod and all necessary fittings and hardware as detailed above.”
“Note 13” added with the following text: “All posts, tension wires, chain link fabric, tie wires, Class I concrete, and all miscellaneous fittings and hardware to be included in the cost for Fencing, M1.”

Index No. 452 (Sheet 2 of 2), “BARB WIRE ATTACHMENT”, “NOTES”, - text “Attachments to be paid for under the contract unit price for Fencing, Type B (With Barb Wire Attachment) M1.” deleted.

Index No. 461 (Sheet 1 of 1), “GENERAL NOTES”, note 2, end of line three “(3)-16mm” added.

Interim Index No. 0501 (Sheets 1-8 of 8), “GEOSYNTHETIC REINFORCED SOILS”, Dated 08-24-00, and (Sheet 6 of 8) Dated 02-28-02, is added.

Index No. 505 (Sheets 1-3 of 3), “EMBANKMENT UTILIZATION”, is deleted and Interim Index No. 0505, Dated 11-14-01 is substituted.

Index No. 510 (Sheet 2 of 3), “SHOULDER CONSTRUCTION WITH SUPERELEVATION”, notation “SHOULDER ON HIGH SIDE:”, Second paragraph-Paragraph deleted.

Index No. 514 (Sheet 1 of 2), base group table, column 7 – “ABC-3 (Min. Marshall Stability 4500N)” heading deleted and heading “Type B-12.5 (ABC-3)” substituted; and, column 8 – “ABC-3 and 100 mm Granular Base, LBR-100*”- heading deleted and heading “Type B-12.5 (ABC-3) and 100mm Granular subbase, LBR 100*” substituted. “GENERAL NOTES”, note 4; and; asterisk (*) notation, line one(1) and line four (4) – text “ABC-3” deleted and text “Type B-12.5 (ABC-3)” substituted.

Index No. 515 (Sheet 1 of 6), table “SUMMARY OF GEOMETRIC REQUIREMENTS FOR TURNOUTS’, line ‘CONNECTION WIDTH W”, columns indicating “36’ Max.” – A superscript ✯ symbol added for footnote reference. Table footnotes –✯symbol and footnote added with the following text: “✯When more than 2 lanes in the turnout connection are required, the 36’ max. width may be increased to relieve interference

between entering and exiting traffic which adversely affects traffic flow. These cases require documented site specific study and design."

Index No. 515 (Sheet 2 of 6), "SPECIAL NOTES FOR URBAN FLARED TURNOUTS", Note 11 is added as follows:" All sidewalk surfaces crossing driveways with a cross slope shown in this Index to be 0.02 shall be 0.02 Maximum".

Index No. 515 (Sheet 6 of 6), "URBAN TURNOUT PROFILES" and "RURAL TURNOUT PROFILES" "Maximum Grades", "Commercial =10%' – A ☐ superscript add to each "Commercial= 10% entry for footnote reference. The ☐ symbol and footnote added with the following text:
"☐ When restoring or reconstructing existing commercial turnout connections on new construction and reconstruction projects, the maximum 10% commercial grade may be exceeded provided this does not create any adverse roadway operational or safety impacts. This shall be approved by the District Design Engineer and be supported by documented site specific findings."

Index No. 516 (Sheet 1 of 1), "GENERAL NOTES", note 6 last line, "FC-2" – "FC-2" deleted and "FC-5" substituted.

Index No. 518 (Sheet 2 of 2), "GROUND-IN RUMBLE STRIPS", is deleted and Interim Index No. 0518, Dated 11-28-00 is substituted.

Index No. 520 (Sheet 2 of 2), Sheet deleted.

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 "DECELARATION LANE WITH SHOULDER GUTTER" – Shoulder pavement width 1.2 deleted and width "2.4" substituted. Sketches for "ACCELERATION LANE WITHOUT SHOULDER GUTTER" AND "DECELARATION LANE WITHOUT SHOULDER GUTTER" – Shoulder pavement width "1.8" deleted and width "3.0" substituted.

Index No. 600 (Sheet 1of 11), "PREFACE" first paragraph, 3rd sentence - Text deleted and the following text substituted: - "This index contains information specific to Federal and State guidelines and standards for the preparation of traffic control plans and for the execution of traffic control in work zones, for construction and maintenance operations and utility work on highways, roads and streets on the State Highway System. Certain requirements in this Index are based on the high volume nature of State Highways. For highways, roads and streets off the State Highway System, the local agency (City/County) having jurisdiction may adopt requirements based on the minimum requirements provided in the MUTCD."

Index No. 600 (Sheet 2 of 11), Add new heading "OVERHEAD WORK" – Add the following text:

"Work is only allowed over a traffic lane when one of the following options is used:

OPTION 1 (OVERHEAD WORK USING A MODIFIED LANE CLOSURE)
Overhead work using a modified lane closure is allowed if all of the following conditions are met:

a. Work operation is located in a signalized intersection and limited to signals, signs, lighting and utilities.
b. Work operations are 60 minutes or less.
c. Speed limit is 45 mph or less.
d. Aerial lift equipment in the work area has high-intensity, rotating, flashing, oscillating, or strobe lights operating.
e. Aerial lift equipment is placed directly below the work area to close the lane.
f. Traffic control devices are placed in advance of the vehicle/equipment closing the lane using a minimum 30m foot taper.
g. Volume or complexity of the roadway may dictate additional devices, signs, flagmen and/or a traffic control officer.

OPTION 2 (OVERHEAD WORK ABOVE AN OPEN TRAFFIC LANE)
Overhead work above a open traffic lane is allowed if all of the following conditions are met:

a. Work operation is located on a utility pole, light pole, signal pole, or their appurtenances.
b. Work operations are 60 minutes or less.
c. Speed limit is 45 mph or less.
d. No encroachment by any part of the work activities and equipment within an area bounded by 0.6m feet outside the edge of travel way and 5.5m high.
e. Aerial lift equipment in the work area has high-intensity, rotating, flashing, oscillating, or strobe lights operating.
f. Volume or complexity of the roadway may dictate additional devices, signs, flagmen and/or a traffic control officer.
g. Adequate precautions are taken to prevent parts, tools, equipment and other objects from falling into open lanes of traffic.
h. Other Governmental Agencies, Rail facilities, or Codes may require a greater clearance. The greater clearance required prevails as the rule.

OPTION 3 (OVERHEAD WORK USING A STANDARD LANE CLOSURE)
The lane directly below the overhead work is closed in accordance with the appropriate standard index drawing or detailed in the plans."

Index 600 Sheet 2 of 11, add new heading "TEMPORARY TRAFFIC CONTROL DEVICES" – Add text:

"All temporary traffic control devices shall be removed as soon as practical when they are no longer needed. When work is suspended for short periods of time, temporary traffic control devices that are no longer appropriate shall be removed or covered. Arrow Panels, Portable Changeable Message Signs, Radar Speed Display Trailers, Portable Regulatory Signs, and any other NCHRP 350 Category 4 devices shall be delineated with retroreflective TTC devices when in use and shall be moved outside the travel way and clear zone or be shielded by a barrier or crash cushion when not in use."

Index No. 600 (Sheet 4 of 11), Add New Heading - "GROOVED PAVEMENT AHEAD SIGN" and text "The GROOVED PAVEMENT AHEAD sign is required 500' in advance of a milled or grooved surface open to traffic."

Add Heading - "Utility Work Sign" with note "THE UTILITY WORK (W21-7) sign may be used as an alternate to the ROAD (STREET) WORK (W20-1) sign for utility operations on or adjacent to a highway.

Index No. 600 (Sheet 5 of 11), "SPEEDING FINES DOUBLED WHEN WORKERS PRESENT SIGN", second paragraph-Paragraph deleted and the following text substituted: "The placement should be 150 meters downstream of the first ROAD WORK AHEAD sign or midway to the next sign whichever is less."

Add "TRANSVERSE JOINTS to existing header "MANHOLES/CROSSWALKS" – Add the following text after the first paragraph – "All transverse joints that have any difference in elevation shall have a temporary asphalt apron constructed as shown in the diagram below."

Index No. 600 (Sheet 6 of 11), "DROPOFF NOTES", Note "3(c)" deleted. DROPOFF DETAIL Top center, delete text "For concrete barrier wall, 0.6 min" and substitute text "Min. 0.6 m on 1:10 slope or flatter for concrete barrier wall on roadways. For concrete barrier wall on bridges see Structures Design Standard No. 715."

Index No. 600 (Sheet 7 of 11), Sheet deleted.

Index No. 600 (Sheet 8 of 11), "CHANNELIZING AND LIGHTING DEVICE NOTES," note 9.3.-Word "sole" deleted.

Index No. 600 (Sheet 9 of 11), subtitle "LANE DROP AND LANE SHIFTS-PLAN SHOWN FOR RIGHT LANE MERGE LEFT-INVERTED PLAN FOR LEFT LANE MERGE RIGHT", notation right hand top "Reflectorized Pavement Markings:," last line-Text "Or, Lane Line (No Passing)" deleted.

Index No. 600 (Sheet 11 of 11), "NOTES", note 1, second sentence-Sentence extended by the following text: "with the exception that Class D markers be placed at a maximum spacing of 1.5' center to center."

Index No. 602 (Sheet 1 of 1), “GENERAL NOTES,” note 3, line one-Delete word “vehicles” and substitute “work vehicles”

Index No. 609 (Sheet 1 of 1), “GENERAL NOTES”, note “9”; tag line notation upper left; and, “CONDITIONS” – All words “detour” and “DETOUR” changed to “diversion” and “DIVERSION”.

Index No. 612 (Sheet 1 of 1), Upper right hand drawing, mark “L/2” – “Mark L/2” deleted mark “L” substituted.

Index No. 614 (Sheet 1 of 2), “Notes:” note “(a)”, last line – Text “22.5” deleted and text “24.6” substituted. ‘GENERAL NOTES’, note ‘12.’ Second line, word ‘approved’ – Word ‘approved’ deleted and word ‘qualified’ substituted.

Index No. 628 (Sheet 1 of 1), “GENERAL NOTES,” note 1.-Text “one traffic lane’ deleted and text ‘two-way left turn” substituted.

Index No. 631 (Sheet 2 of 2), “TEMPORARY CROSSOVER”, is deleted and Interim Index No. 0631, Dated 08-24-00 is substituted.

Index No. 640 (Sheet 2 of 2),”GENERAL NOTES,” note 5-Note text deleted and the following text substituted: “Warning devices shall be in conformance with ‘DROPOFFS IN WORK ZONES’, Index No. 600.”
In the plan view, notation ‘White Reflectorized Pavement Markings’, ‘Yellow Reflectorized Markings’-Text in parenthesis deleted and the text “(Double Line Reflectorized Marking In No-Passing Zones As Directed By The Engineer)” substituted.

Index No. 650 (Sheet 1 of 2), “PHASE I”, note 2.-Text deleted and text “Construct temporary structure, approaches and guardrail; and, construct crash cushions at each end of truss if center truss constructed.” substituted.
Notation tagged to “END ROAD WORK” sign, line 3-Kilometer value “3.2” deleted and value “1.6” substituted.
‘Phase II’, notation tagged to R4 7 sign-Text ‘To Protect Center Truss’ is deleted and text ‘If Center Truss Constructed’ substituted.

Signing for “Temporary Structure” – Legend sign for “Slippery When Wet”, designation “W8-5” shall be placed in advance of bridges with steel decks.

Index No. 650 (Sheet 2 of 2), “GENERAL NOTES”, note “4”, last line – Word “detour” deleted and word “diversion” substituted; note “5” – Note expanded by the following text: “Cost of temporary guardrail systems, including end anchorage assemblies, transitions and attachment to temporary structures, are to be included in the contract unit price for guardrail (temporary), M1.”; note “7” – Note deleted and the following note substituted:

"7. Only temporary crash cushions approved by the Department shall be used unless specified devices called for in the plans."

'GENERAL NOTES', Note 4, Line 3, text "detour" – Text deleted and text "diversion" substituted.

Index No. 670 (Sheet 1 0f 1), "MOTORIST AWARENESS SYSTEM", Dated 11-28-00, is added.

Index No. 700 (Sheet 1-2 of 2), "ROADSIDE OFFSETS", Dated 11-22-02 is added.

Index No. 5000 (Sheet 1 of 1) "RETAINING WALL SYSTEM GENERAL NOTES" is deleted and Interim Index No. 05000, (Sheet 1 of 1) Dated 08-21-03 is substituted.

Index No. 5012 (Sheet 20 of 20), X-5, Superimposed sheet image-Image deleted.

Index No. 5015 (Sheets 1-14 of 14), "RETAINING WALL SYSTEM, REINFORCED EARTH COMPANY, REINFORCED EARTH WALL" is deleted and Interim Index No. 05015 (Sheets 1-16 of 16) Dated01-01-05 is substituted.

Index No. 5021 (Sheets 1-13 of 13), - Index Deleted.

Index No. 5025 (Sheets 1-17 of 17), "RETAINING WALL SYSTEM, TENSAR EARTH TECHNOLOGIES, MSE RETAINING WALL" is deleted and Interim Index No. 05025 (Sheets 1-16 of 16) Dated 01-01-05 is substituted.

Interim Index No. 5035 (Sheets 1-14 of 14), "RETAINING WALL SYSTEM, SSL, MSE PLUS WALL SYSTEM" Dated 01-01-05 is added.

Interim Index No. 5110 (Sheets 1-5 of 5), "RETAINING WALL SYSTEMS, T & B STRUCTURAL SYSTEMS, INC., GABION WIRE WALL", Dated 01-01-05 is added. (This Interim was previously incorrectly listed as No. 5130. Error corrected 4/29/05.)

Index No 5115 (Sheets 1-4 of 4), "RETAINING WALL SYSTEM, THE REINFORCED EARTH COMPANY, TERRATREL WIRE WALL" is deleted and Interim Index No. 05115 (Sheets 1-6 of 6) Dated 01-01-05 is substituted.

Index No. 5120 (Sheets 1-4 of 4), - Index Deleted.

Index No. 5125 (Sheets 1-3 of 3), "RETAINING WALL SYSTEM, TENSAR EARTH TECHNOLOGIES, TEMPORARY RETAINING WALL" is deleted and Interim Index 05125 (Sheets 1-5 of 5) Dated 01-01-05 is substituted.

Index No. 11860 (Sheet 1 of 3), table, sign number “88”, “TYPE OF SIGN BRACKET” text “DO NOT USE SINGLE COLUMN” – Text deleted and the following text substituted: “SEE NOTES”, “NOTE:”, note “5”. – Note text deleted and the following text substituted: “Footing shall be 600Ø by 1500 deep.”
Note 6 added as follows: “Slip Base Details, see Index No. 11863”.

Index No. 11860 (Sheet 2 of 3), note “SIGN PANEL”, text “3 mm” – “3 mm” deleted and 2 mm substituted.

Index No. 11861 (Sheet 1 of 2), “NOTES”, note “4”, second line, dimension “4.0” – “4.0” deleted and “4” substituted; (i.e. 4 mm). 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 0.15 m 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. 11861 (Sheet 2 of 2), table, sign number ‘88’ ‘HEIGHT’- Line text ‘SEE NOTE INDEX NO 11860’ added.

Index No. 11862 No. (Sheet 1 of 2), “NOTES”, note “4”, second line, dimension “4.0” – “4.0” deleted and “4” substituted; (i.e. 4 mm). 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 0.15 m 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 No. (Sheet 2 of 2), table, sign number “88”, “HEIGHT” – Line text “SEE NOTE INDEX NO. 11860” added.

Index No. 11863 No. (Sheet 1 of 2), “NOTES”, note “4”, second line, dimension “4.0” – “4.0” deleted and “4” substituted; (i.e. 4 mm). 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 0.15 m 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 No. (Sheet 2 of 2), table, sign number “88”, “HEIGHT” – Line text “SEE NOTE INDEX No. 11860” added.

Index No. 11864 No. (Sheet 1 of 2), “NOTES”, note “4”, second line, dimension “4.0” – “4.0” deleted and “4” substituted; (i.e. 4 mm). 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 0.15 m 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 No. (Sheet 2 of 2), table, sign number "88", "HEIGHT" – Line text "SEE NOTE INDEX No. 11860" added.

Index No. 11865 No. (Sheet 1 of 2), "NOTES", note "4", second line, dimension "4.0" – "4.0" deleted and "4" substituted; (i.e. 4 mm). Note "1d" – 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 0.15 m 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 No. (Sheet 2 of 2), "ELEVATION" detail top center of page – Detail deleted and a detail substituted to accommodate placement of sign in concrete surfaces. The replacement detail is subtitled "SIGN POST IN CONCRETE (CROSSOVERS, MEDIANS & SIDEWALKS)". The replacement detail is described as follows: A PVC Sch. 40 Sleeve W/UV Inhibiter, 300 in length is installed with its top flush with the concrete surface. The sleeve is 19 larger in diameter than the frangible tube post that is to be installed through the sleeve and imbedded in the soil to the depth required for a specified sign.

"STEEL FLANGED CHANNEL POST DETAILS", "SIGN ATTACHMENT DETAIL", "Bearing Plate" – Bearing Plate deleted.

Index No. 17344 (Sheets 1-3 of 6), "SCHOOL SIGNS AND MARKINGS", are deleted and Interim Index No. 017344, Dated 12-26-01 is substituted.

Index No. 17345 (Sheet 3 of 4), "INTERCHANGE MARKING", is deleted and Interim Index No. 017345, Dated 12-26-01 is substituted.

Index No. 17346 (Sheets 1-9 of 9) "SPECIAL MARKING AREAS", is deleted and Interim Index No. 017346, (Sheets 1-13 of 13), Dated 12-26-01 is substituted.

Interim Index No. 17346 (Sheet 5 of 13) "SPECIAL MARKING AREAS" is deleted and Interim Index No. 017346 (Sheet 5 of 13) Dated 01-01-05 is substituted.

Index No. 17352 (Sheet 2 of 2), 'TRAFFIC LINES', inset-The color of the RPM's on the lane lines at the stop line is changed from "Mono-Colorless" to "Bi-directional white/Red".

Index No. 17355 "SPECIAL SIGN DETAILS", is expanded by the addition on Interim Index No.017355, (Sheets 8-14 of 14), Dated 12-27-01.

Index No. 17355 (Sheet 7 of 12), Sign FTP -49- Symbol text replace by international symbols.

Index No. 17357 (Sheet 1of 1), note “4.” –Words “to route” inserted between words “detour” and “around”.

Index No. 17500 (Sheet 1 of 3) “CONVENTIONAL LIGHTING” is deleted and Interim Index No. 017500 (Sheet 1 of 3) Dated 01-01-05 is substituted.

Index No. 17500 (Sheet 2 of 3), “GENERAL NOTES:” and “SURGE PROTECTOR SPECIFICATIONS” – General notes and surge protector specifications deleted.

Index No. 17501 (Sheet 1 of 1), General notes (24) through (28) and SURGE PROTECTOR SPECIFICATIONS added with the following text:

24) Luminaire shall be supplied with a regulator type ballast mounted on a hinged door or panel. The unit shall swing open to provide access to the ballast assembly by release of captive screws. The electrical connector shall be a quick disconnect plug. The unit shall be easily removed from the luminaire after release of the captive screws and disconnect plug.

25) All mounting heights are ±0.75 meter unless otherwise noted in plans.

26) A handhole is required in all poles. Handhole should be located opposite approaching traffic with cover fastened with Stainless Steel Screw. The handhole opening shall be at least 20 square inches.

27) The luminaire and arm on JOINT USE POLES shall be grounded.

28) Concrete slabs around poles and pull boxes shall be paid for under the contract unit price for Class I Concrete (Miscellaneous): the cost of reinforcing steel fabric shall be included in the price for Class I Concrete (Miscellaneous).

SURGE PROTECTOR SPECIFICATIONS

1. The unit shall withstand a surge current up to 20,000 Amps, and repetitive surges of 200 Amps for a minimum of 10,000 occurences.
2. The unit shall respond in less than 50 nanoseconds and within this time have a peak clamping voltage better than 1,100 Vrms.
3. The maximum allowable voltage that can pass continuously through the hot leg of the protector must be less than 550 Vrms.
4. The current drain shall be less than 100 microamps.
5. The unit shall be insulated 600 V to ground and shall be weatherproof.
6. The unit shall not allow holdover current or conduction to ground after the surge ends.

7. Protection shall be achieved for both the 480 V and neutral conductors with the surges being passed to ground and NOT to neutral.
8. There shall be no discharge lag in the protection of the 480 V conductor over the neutral conductor.
9. Underwriters Laboratory approval not required.

Index No. 17502 (Sheet 2 of 4), Add the following heading and text: "ALTERNATE POLE: A spun high mast prestressed concrete pole listed on the Qualified Products List may be substituted for a steel pole with approved shop drawing and calculations. If the concrete pole is provided as a substitute for the steel pole, payment will be made under the items bid for steel poles and associated foundations and plan quantity of these items will be the basis for payment."

Index No. 17502 (Sheet 3 of 4), Sectional View, Ground rod tagged notation – Length "3.0 long" deleted and "6.0 long": substituted; and, text "(resistance to ground not to exceed 25 OHMS.)" deleted.

Index No. 17503 (Sheet 1 of 1), "METAL POLE CONCRETE FOUNDATION DETAIL", tag notation "#13 Bars @1300 mm" – "1300" deleted and "300" substituted.

Index No. 17504 (Sheet 1 of 1), 'DETAIL A', Ground rod tag notation, "6.0 m long" – "6.0 m long" deleted and "12.0 m long" substituted.

Index No. 17505 (Sheet 1 of 2), "PLAN", Ground rod tag notation, "3.0 m long" –"3.0"m long" deleted and "6.0 m long" substituted.

Index No. 17515 (Sheets 1-7 of 7), "ALUMINUM LIGHT POLE", is deleted and Interim Index No. 017515, Dated 7-10-01 is substituted.

Index No. 17600 (Sheet 1 of 2), "CALL BOX DETAIL BEHIND GUARDRAIL", Plan View- The following notation added below the plan view: "A 760x1200 MANUEVERING SPACE WITH A 2% MAX SLOPE IN ANY DIRECTION, CENTERED IMMEDIATELY IN FRONT OF THE CALL BOX AND MEASUSRED FROM THE GRIP POINT OF THE UNIT IS REQUIRED."

Side View- Height dimension of "1350" deleted and height to handle dimension of "1170" substituted. Horizontal dimension of "600" deleted and offset from face of rail to face of box dimension equal "355" substituted. The following notation, tagged to the concrete pad surface, "NO MORE THAN 2% SLOPE IN ANY DIRECTION".

Interim Index No. 17723 (Sheets 1-3 of 3), "STEEL STRAIN POLE", Dated 09-26-00 is added.

Interim Index No.017725 (Sheet 1 of 1). "CONCRETE POLES", Dated 07-10-01 is added.

Index No. 17727 (Sheets 1 and 2 of 2), signal height tagged notation in lower right center details- Notations deleted and the following notations substituted: “The vertical clearance to the bottom of a vertical or horizontal vehicular signal head shall not be less than 5.33 m and the maximum height shall be in accordance with the 2000 MUTCD.”

Interim Index No. 17741 (Sheets 1-2 of 2), “ISTRUCTIONS AND EXAMPLES FOR DESIGNERS AND FABRICATORS OF STANDARD MAST AREM B & C ASSEMBLIES”, Dated 07-17-02 is added.

Interim Index 17743 (Sheet 1-2 of 2), “COMPONENT DATA FOR STANDARD MAST ARM B & C ASSEMBLIES”, Dated 07-17-02 is added.

Interim Index No. 17745 (Sheets 1-5 of 5), “MAST ARM ASSEMBLIES”, Dated 07-17-02 is added.

Interim Index No. 017746 Sheets 1-4 of 4), “MONOTUBE SIGNAL STRUCTURE”, Dated 07-10-01 is added.

Interim Index No. 017748 (Sheet 1 of 1), “FREE-SWINGING, INTERNALLY ILLUMINATED STREET SIGH ASSEMBLIES”, Dated 12-27-01, is added.

Index No 17764 (Sheet 1 of 1), Pedestrian signal assemblies-Assembly legends deleted and international symbols substituted.

Index No. 17781 (Sheet 1 of 2), “DETAILS FOR SPLICING LOOP WIRE TO LEAD-IN WIRE”- Detail deleted. “GENERAL NOTES”,- Note “6” text deleted and the following text substituted:

“6. Splice Connections in pull boxes with U.L. listed, watertight, insulated enclosures. Place one enclosure over the end of each conductor and place a third enclosure over the exposed end of the shielded cable.”

Notes “7” and “8”added with the following text:

“7. As an alternate, a larger diameter enclosure that will accommodate both the splices of the conductors and the exposed end of the shielded cable may be used.”

“8. The maximum area of asphalt to be disturbed shall be 6”x6”. This area shall be restored as directed by the Engineer.”

Detail drawings-A reference note “See General Note #8” is tagged to the access through the roadway pavement for the upper reach of the “Rigid Conduit” and the “PVC Coated Flexible Conduit”.

Index No. 17784 (Sheet 1 of 2), “FIGURE C”, “(Aerial Feed)”- Pedestrian signal assembly legends deleted and international symbols substituted.

Index No. 17784 (Sheet 2 of 2), Pedestrian assembly “FTP-49”-Legends deleted and international symbols substituted. Footnotes deleted and the following footnotes substituted:

"SIGN COLORS WHITE BACKGROUND WITH BLACK LEGEND AND BORDER"
"INTERNATIONAL WALK SYMBOL WHITE ON BLACK BACKGROUND"
"INTERNATIONAL DON'T WALK SYMBOL ORANGE ON BLACK BACKGROUND"

Index No. 17841 (Sheet 1 of 1), "INTERCONNECT JUNCTION BOX", "BASE MOUNTED", "6.0m (Min.) Ground Rod"-"6.0m (Min.)" deleted and "12.0 (Min.)" substituted.

Index No. 17870 (Sheet 1 of 2), "SIGNAL CLEARANCE TABLE", "SIGNAL INDICATIONS", column four – Indications in column deleted; asterisk in column five deleted; and, asterisk footnote below table deleted.

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, "TRAFFIC MONITORING SITE", is expanded by Interim Index No. 017900 (Sheet 1 of 1) Dated 08-24-00. (Sheet 3 of 9) is deleted and Interim Index No 017900 (Sheet 3 of 9) Dated 12-27-02, is substituted. (Sheet 5 of 9) is deleted and Interim Index No. 017900 (Sheet 5 of 9) Dated 01-01-05 is substituted.