

SUBNTS = SUBSTRUCTURE NOTES REVISED 12-10-15

--- NOTES ---

- L 001 STIRRUPS IN CAP MAY BE SHIFTED AS NECESSARY TO CLEAR ANCHOR BOLTS.
H 001 *** ***
- L 002 HOOKS ON "V" BARS MAY BE TURNED AS NECESSARY FOR PLACING REINFORCING STEEL.
H 002 *** ***
- L 003 THE _____ SPIRAL REINFORCING STEEL SHALL BE W20 OR D-20 COLD DRAWN WIRE OR #4 PLAIN OR DEFORMED BAR.
H 003 *** 7.4.5.1 COLUMNS, COLUMN REINFORCEMENT ***
- L 004 THE _____ SPIRAL REINFORCING STEEL SHALL BE W31 OR D-31 COLD DRAWN WIRE OR #5 PLAIN OR DEFORMED BAR.
H 004 *** 7.4.5.2 DRILLED SHAFTS, DRILLED SHAFT REINFORCEMENT ***
- L 005 FOR PILE SPLICE DETAILS, SEE END BENT___.
H 005 *** ***
- L 006 DETAILED DRAWINGS FOR FALSEWORK AND FORMS FOR THIS _____ SHALL BE SUBMITTED. SEE SHEET SN.
H 006 *** 9-4 SPECIAL NOTES & DETAILS; 12-7 PLANS FOR FALSEWORK FORMS ***
- L 007 FOR PIPE INSERT DETAILS, SEE BEARINGS SHEET.
H 007 *** 7.4.3.4 ANCHOR BOLTS AND DOWELS ***
- L 008 BACKWALL SHALL BE PLACED BEFORE APPLYING THE EPOXY PROTECTIVE COATING.
H 008 *** 7.2.6.6 EPOXY PROTECTIVE COATING ***
- L 009 THE TOP SURFACE AREAS OF THE _____ CAPS SHALL BE CURED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS EXCEPT THE MEMBRANE CURING COMPOUND METHOD SHALL NOT BE USED.
H 009 *** 7.2.6.6; 7.4.3.3 EPOXY PROTECTIVE COATING ***
- L 010 THE CONTRACTOR'S ATTENTION IS CALLED TO THE FACT THAT THE CENTERLINE JOINT IN THE DECK SLAB (CONTROL LINE) IS OFFSET FROM THE CENTERLINE BENT.
H 010 *** 7.4.3.1 PLAN LAYOUT ***
- L 011 THE TOP SURFACE OF THE CAP EXCEPT THE BRIDGE SEAT BUILDUPS SHALL BE SLOPED TRANSVERSELY FROM THE FILL FACE TO THE BACK FACE AT THE RATE OF 2%.
H 011 *** FIG. 7-9 ***
- L 012 THE CONCRETE IN THE SHADED AREA OF THE WING SHALL BE POURED AFTER THE JOINT BETWEEN THE DECK AND THE APPROACH SLAB HAS BEEN SAWED AND THE BARRIER RAIL (PARAPET AND END POST) ARE CAST IF SLIP FORMING IS USED.
H 012 *** FIG. 7-17 *** (ONLY USED WITH A BLOCKOUT IN WING)
- L 013 THE CONCRETE IN THE SHADED AREA OF THE WING SHALL BE POURED AFTER THE BARRIER RAIL (PARAPET AND END POST) ARE CAST IF SLIP FORMING IS USED.
H 013 *** FIG. 7-18 *** (ONLY USED WITH A BLOCKOUT IN WING)
- L 014 COFFERDAMS SHALL NOT BE DEWATERED WHEN THE WATER ELEVATION IS ABOVE

EL. _____.

H 014 *** 7.5 FOUNDATION EXCAVATION ***

L 015 ANCHOR BOLTS SHALL BE SET BY DRILLING HOLES AND GROUTING AFTER THE BREASTWALL HAS BEEN BACKFILLED TO 1'-0" +/- BELOW BRIDGE SEAT. CAREFUL ATTENTION SHALL BE GIVEN TO ANTICIPATED MOVEMENT OF BREASTWALL DURING BACKFILLING IN ORDER THAT REINFORCING WILL NOT FOUL THE DRILLED ANCHOR BOLT HOLES.

H 015 *** 7-8 REINFORCED CONCRETE ***

L 016 NO SEPARATE PAYMENT SHALL BE MADE FOR PIER SCOUR PROTECTION. THE ENTIRE COST OF SAME SHALL BE INCLUDED IN THE LUMP SUM PRICE FOR "FOUNDATION EXCAVATION".

H 016 *** 7.4.5.3 FOOTINGS, SCOUR ***

L 017 ALL STEEL IN THE DRILLED PIERS IS INCLUDED IN THE PAY ITEMS FOR "REINFORCING STEEL" AND "SPIRAL COLUMN REINFORCING STEEL" OR "EPOXY COATED SPIRAL COLUMN REINFORCING STEEL".

H 017 *** 7.4.5.2 DRILLED SHAFTS, DRILLED SHAFT REINFORCEMENT ***

L 018 THE CONTRACTOR'S ATTENTION IS CALLED TO THE FACT THAT THE LONGITUDINAL REINFORCEMENT FOR THE DRILLED PIERS IS DETAILED WITH 3 FEET OF EXTRA LENGTH.

H 018 *** 7.4.5.2 DRILLED SHAFTS, DRILLED SHAFT REINFORCEMENT ***

L 019 SPLICING OF THE LONGITUDINAL BARS IN THE DRILLED PIER WILL NOT BE PERMITTED.

H 019 *** 7.4.5.2 DRILLED SHAFTS, DRILLED SHAFT REINFORCEMENT ***

L 020 THE LOCATION OF THE CONSTRUCTION JOINT IN THE DRILLED PIERS IS BASED ON AN APPROXIMATE GROUND LINE ELEVATION. IF THE CONSTRUCTION JOINT IS ABOVE THE ACTUAL GROUND LINE ELEVATION, THE CONTRACTOR SHALL PLACE THE CONSTRUCTION JOINT 1 FT. BELOW THE GROUND LINE.

H 020 *** 7.4.5.2 DRILLED SHAFTS, DRILLED SHAFT REINFORCEMENT ***

L 021 RIP RAP NOT TO BE ABOVE STREAM BED.

H 021 *** FIG. 7-34 *** (FOR BENTS WITH SPREAD FOOTING LOCATED IN THE STREAM BED)

L 022 FOR MSE RETAINING WALLS, SEE SPECIAL PROVISIONS.

H 022 *** 12-13 PROPRIETARY RETAINING WALL AND ABUTMENT STRUCTURES ***

L 023 THE WATER/CEMENT RATIO FOR CONCRETE PILES SHALL NOT EXCEED 0.40.

H 023 *** 12-12 CORROSION PROTECTION MEASURES ***

L 024 THE COST OF THE FILTER FABRIC SHALL BE INCLUDED IN THE CONTRACT PRICE BID FOR RIP RAP CLASS II.

H 024 *** POLICY MEMO 4-28-04 *** (LUMP SUM PROJECTS)

L 025 CENTER UTILITY IN BLOCKOUT AND FILL ANNULAR SPACE AROUND UTILITY PIPE WITH JOINT FILLER IN ACCORDANCE WITH STANDARD SPECIFICATION ARTICLE 1028-1.

H 025 *** 7.2.3 END BENT BACKWALLS ***

L 026 NO SEPARATE PAYMENT SHALL BE MADE FOR ANY ADDITIONAL STEEL REQUIRED IN CONSTRUCTION OF DRILLED PIER AS THIS IS CONSIDERED INCIDENTAL TO THE LINEAR FOOT PRICE FOR DRILLED PIER.

H 026 ***POLICY MEMO 9-01-04 ***

L 027 EPOXY COAT THE [END] BENT CAP AFTER ADJUSTMENTS ARE MADE TO BEARINGS AND ANCHOR BOLTS ARE GROUTED.

H 027 *** 6.7.3 STEEL REINFORCED ELASTOMERIC BEARINGS ***

L 028 THE CONTRACTOR SHALL DETERMINE THE PILE LENGTH SUCH THAT THE FINAL TOP AND TIP ELEVATIONS WILL BE AS INDICATED.

H 028 *** 7-6 PILES, GENERAL *** (FENDER SYSTEMS)

L 029 APPLY AN 8 MIL THICK 1350 ALUMINUM (W-A1-1350) THERMAL SPRAYED COATING WITH A 0.5 MIL THICK SEAL COAT TO THE PILES IN ACCORDANCE WITH THE THERMAL SPRAYED COATINGS SPECIAL PROVISION AND SECTION 442 OF THE STANDARD SPECIFICATIONS. FOR THERMAL SPRAYED COATINGS, SEE SPECIAL PROVISIONS.

H 029 *** 12-13 THERMAL SPRAYED COATINGS ***

L 030 AFTER DRIVING THE PILES APPLY 1 COAT EACH OF 1080-11 BROWN AND 1080-11 GRAY PAINT TO THE EMBEDDED SECTION OF THE METALLIZED PILE PRIOR TO CONCRETE EMBEDMENT IN ACCORDANCE WITH SECTION 442 OF THE STANDARD SPECIFICATIONS.

H 030 *** 12-13 THERMAL SPRAYED COATINGS ***

L 031 PRIOR TO BEGINNING METALLIZATION THE CONTRACTOR WILL PROVIDE METALLIZED SAMPLES TO THE ENGINEER FOR APPROVAL.

H 031 *** 12-13 THERMAL SPRAYED COATINGS ***

L 032 THE STEEL PILES SHALL BE GALVANIZED IN ACCORDANCE WITH SECTION 1076 OF THE STANDARD SPECIFICATIONS.

H 032 *** ***

L 033 GALVANIZE THE FULL LENGTH OF EACH INTERIOR BENT PILE IN ACCORDANCE WITH SECTION 1076 OF THE STANDARD SPECIFICATIONS.

H 033 *** 7.4.4.1 PILES, STEEL PILES ***

L 034 GALVANIZE THE TOP _ FEET OF EACH INTERIOR BENT PILE IN ACCORDANCE WITH SECTION 1076 OF THE STANDARD SPECIFICATIONS.

H 034 *** 7.4.4.1 PILES, STEEL PILES ***

L 035 INSTALL THE 4" DIA. DRAIN PIPE THROUGH THE WING WALL AS REQUIRED FOR REINFORCED BRIDGE APPROACH FILLS, SEE THE ROADWAY PLANS. REINFORCING STEEL IN THE WING WALL MAY BE SHIFTED AS NECESSARY TO CLEAR THE DRAIN PIPE.

H 035 *** 7.2.4 END BENT WINGWALLS ***

L 036 FOR INTERIOR BENT(S) _, ONLY PARTIAL GALVANIZING OF THE PILES IS REQUIRED. SEE INTERIOR BENT SHEET(S) FOR REQUIRED GALVANIZED LENGTHS. PAYMENT FOR PARTIALLY GALVANIZED PILES WILL BE MADE UNDER THE CONTRACT UNIT PRICE FOR GALVANIZED STEEL PILES.

H 036 *** 7.4.4.1 PILES, STEEL PILES ***

L 037 THE TOP SURFACE OF THE END BENT CAP AND WINGS, EXCEPT THE BEARING AREA, SHALL BE RAKED TO A DEPTH OF 1/4".

H 037 *** FIG. 6-119, FIG 6-121***

L 038 FOR STEEL SHEET PILES, SEE SPECIAL PROVISIONS.

H 038 *** 7.2.7 END BENT WITH WALLS ***

L 039 SHEET PILES SHALL BE GALVANIZED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS AND THE SPECIAL PROVISION FOR THERMAL SPRAYED COATINGS

(METALLIZATION).

H 039 *** 7.2.7 END BENT WITH WALLS ***

L 040 SHEET PILES SHALL BE METALLIZED IN ACCORDANCE WITH THE SPECIAL
PROVISION FOR THERMAL SPRAYED COATINGS (METALLIZATION) AND STEEL SHEET PILES.

H 040 *** ***