

CONCRETE NOTES:

CONTRACTOR-FABRICATED PRECAST CONCRETE STRUCTURES, ABUTMENTS

1. ABUTMENTS CONCRETE-5000 PSI LW
2. CONCRETE WILL BE SUPPLIED BY CARROLL CONCRETE-CHARLESTOWN, NH PLANT
3. MIX DESIGN (VTRANS MIX DESIGN # 061) FOR LIGHT WEIGHT CONCRETE 5000 PSI HAS BEEN APPROVED
4. TOP OF PRE-CAST (CRB1-CRB8) TO HAVE A MAG FINISH IN ALL AREAS
5. CURE IS BASED ON TABLE 501.17A "CURING CONCRETE COMPONENTS" 7 DAYS OF CURING.
6. ALL EXPOSED CONCRETE EDGES SHALL BE CHAMFERED 1"
7. ALL LIFTING DEVICES ARE GALVANIZED
8. 2' DIA CSP GALVANIZED PIPE TO MEET REQUIREMENTS OF SECTION 711.01
9. FORM STRIPPING STRENGTH=1800PSI BASED ON AVERAGE OF 2 CYLINDERS
10. LIFTING AND HANDLING DESIGN STRENGTH OF 3500 PSI MUST BE ACHIEVED BEFORE HANDLING OF PRE-CAST. (AVG OF 2 CYLINDERS)
11. WATER REPELLENT WILL BE APPLIED TO ALL EXPOSED SURFACES AT 14 DAYS

ABUTMENT POST-TENSIONING NOTES:

1. Epoxy Bonding compound from the Vermont approved Products list shall be applied to all vertical match cast joints.
2. PT Design Values
 - a. Concrete design Strength=5000 psi
 - b. PT strands: .5 inch dia, 270 ksi low relaxation 7 wire strands.
 - c. Assumed mod of elasticity 28,500 ksi
 - d. 2 strands per conduit
 - e. Jacking force per strand= 32 Kips
 - f. Post tensioning shall be done prior to the grouting of the pile caps.

PRE-CAST WING WALL POST-TENSIONING NOTES:

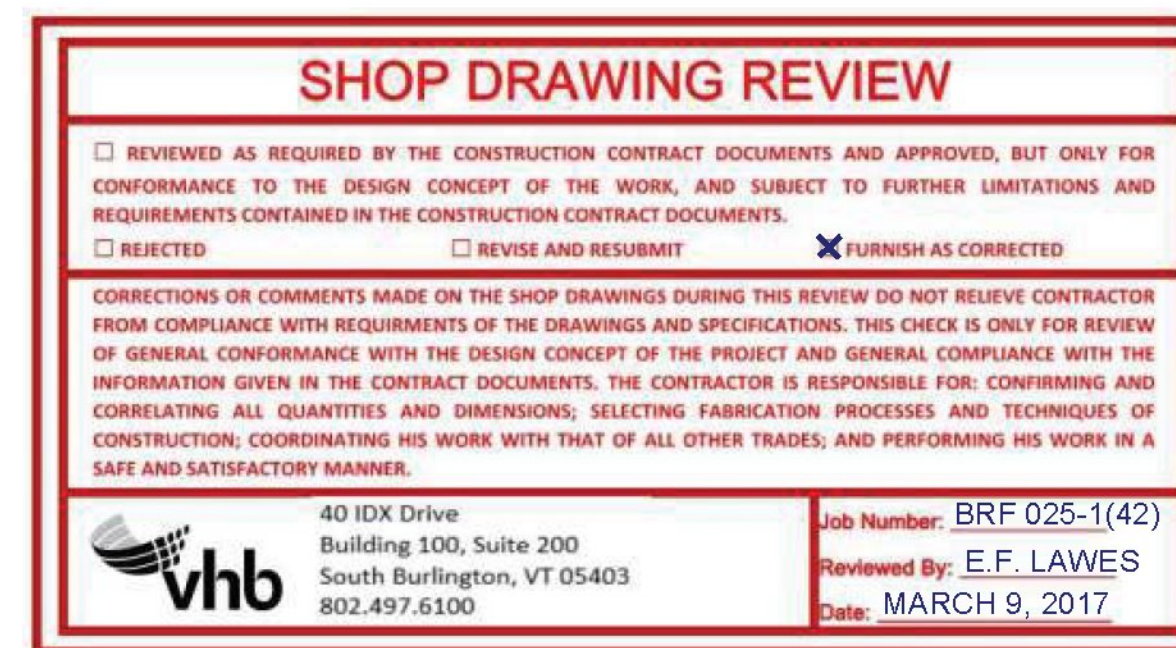
1. Epoxy Bonding compound from the Vermont approved Products list shall be applied to all horizontal match cast joints.
2. PT Design Values
 - a. Concrete design Strength=5000 psi
 - b. PT Rods: 1.25" dia 150 ksi galvanized stress bar with (2) 5"x8"x1-1/2" galvanized plates.
 - c. Fu 150 ksi
 - d. Jacking force per bar max 120ksi 105 ksi min lock off
 - e. Post tensioning block-outs to be filled with non-shrink grout from the VTRANS approved products list.
 - f. Bars will be cut after casting to insure proper clearance.

BEARING NOTES:

1. BEARINGS WILL BE CAST IN PLACE.
2. ALL BEARING MATERIALS TO BE HD GALV .
3. ANCHOR BOLTS GRADE F1554

REINFORCING STEEL NOTES:

1. PRE-CAST SUBSTRUCTURE UNITS GRADE 60 EPOXY COATED REINFORCING STEEL.
2. ONE TEST BARS OF EACH SIZE AND MATERIAL WILL BE SUPPLIED AT A MIN 60" LONG SECTION



BILL OF MATERIALS: WW POST TENSIONING

- 1.25" 150 KSI HDGALV THREAD BAR
- BAR LENGTH
- 8'6"-4 EACH
- 7'6"-4 EACH
- 7'0"-6 EACH
- 5'0"-2 EACH

- 5"X8"X1.5" A36 HDGALV PLATE-32 EACH
- 1.25" HDGALV DWYIDAG NUTS-32 EACH

COLD RIVER BRIDGES, LLC	
10 LANBRO LANE WALPOLE, NH	
TEL 603-756-9300	FAX 603-756-9303
LUDLOW BRF 0251(42)	
GENERAL NOTES	SHEET NUMBER
DATE: 11/18/16	1