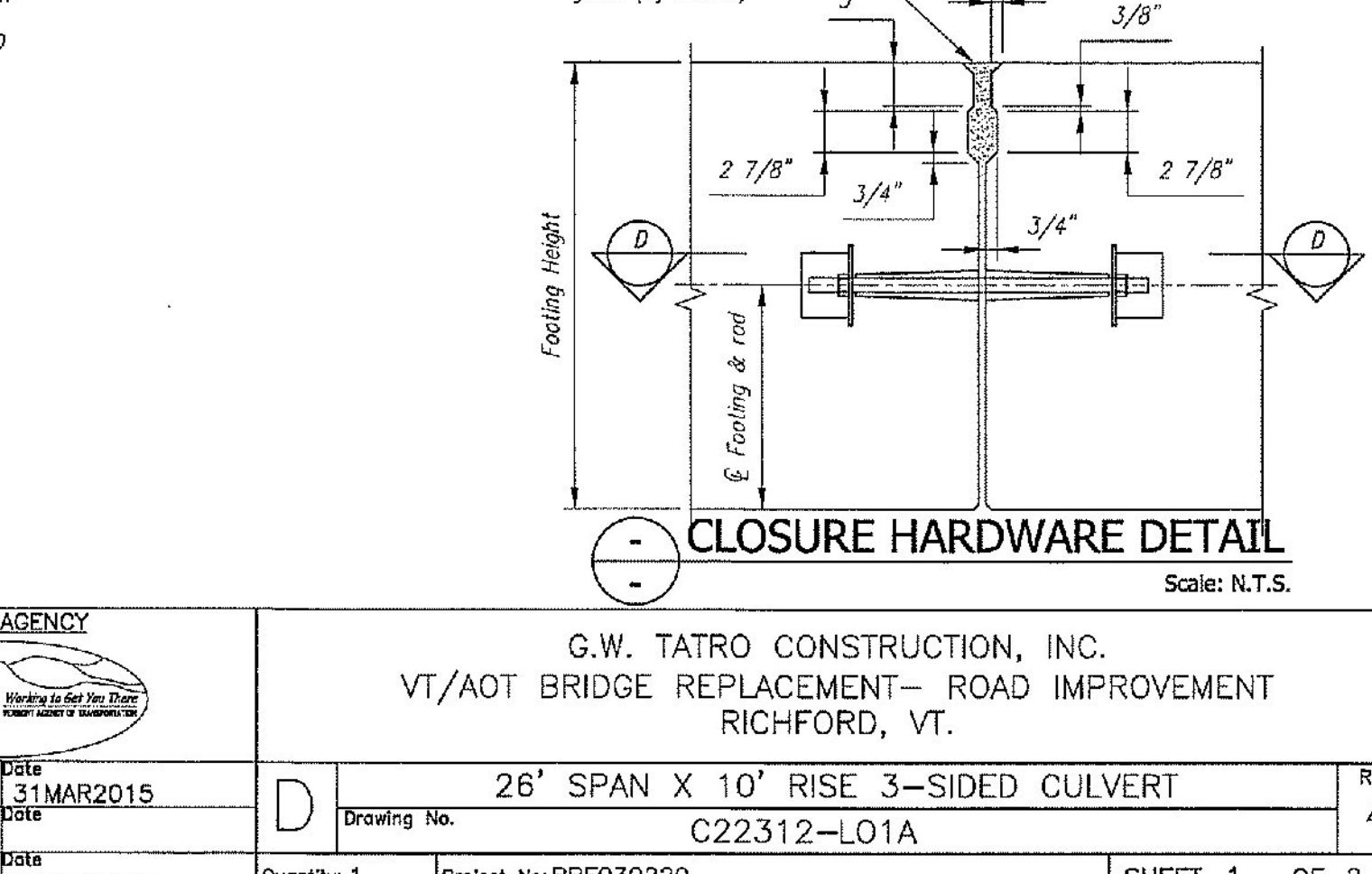
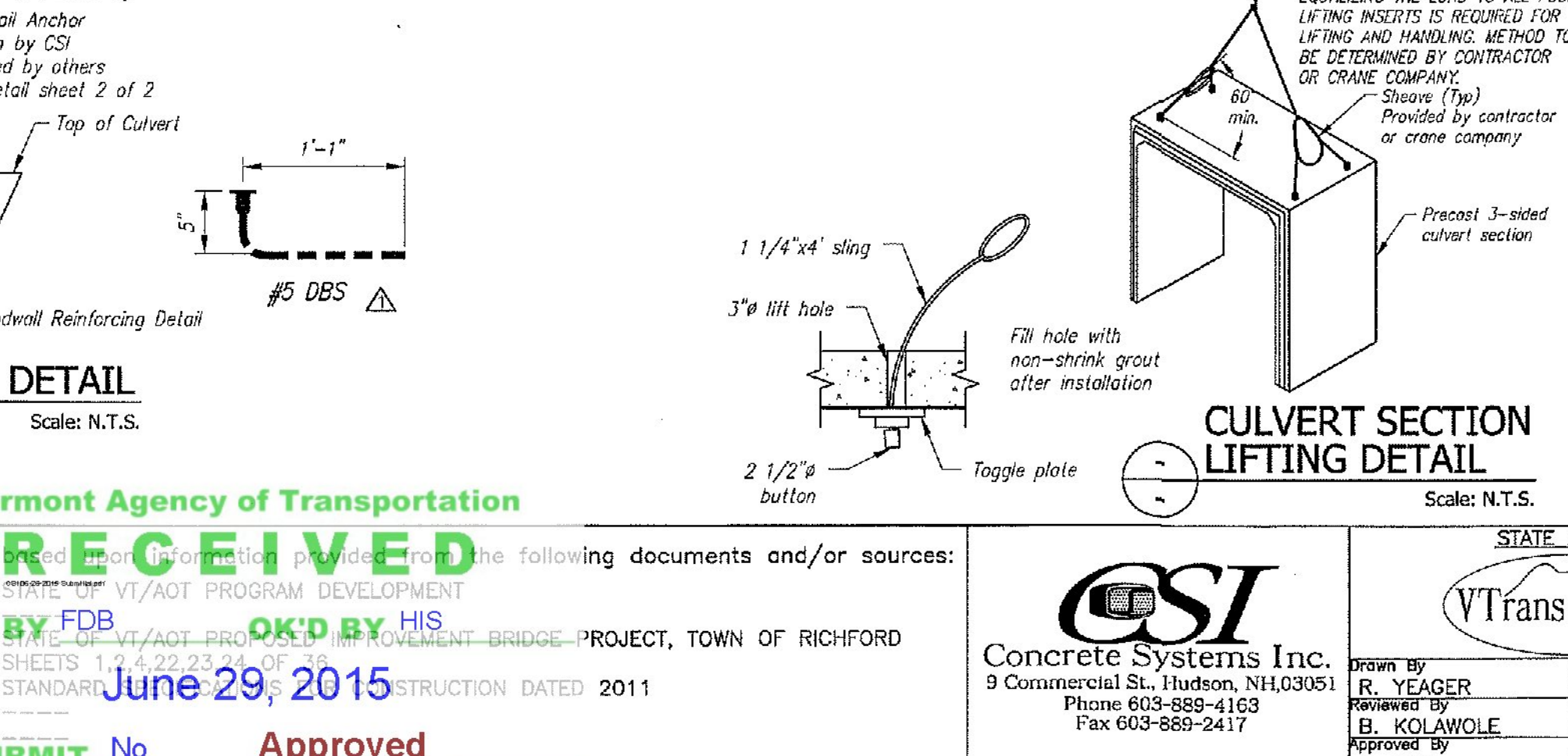
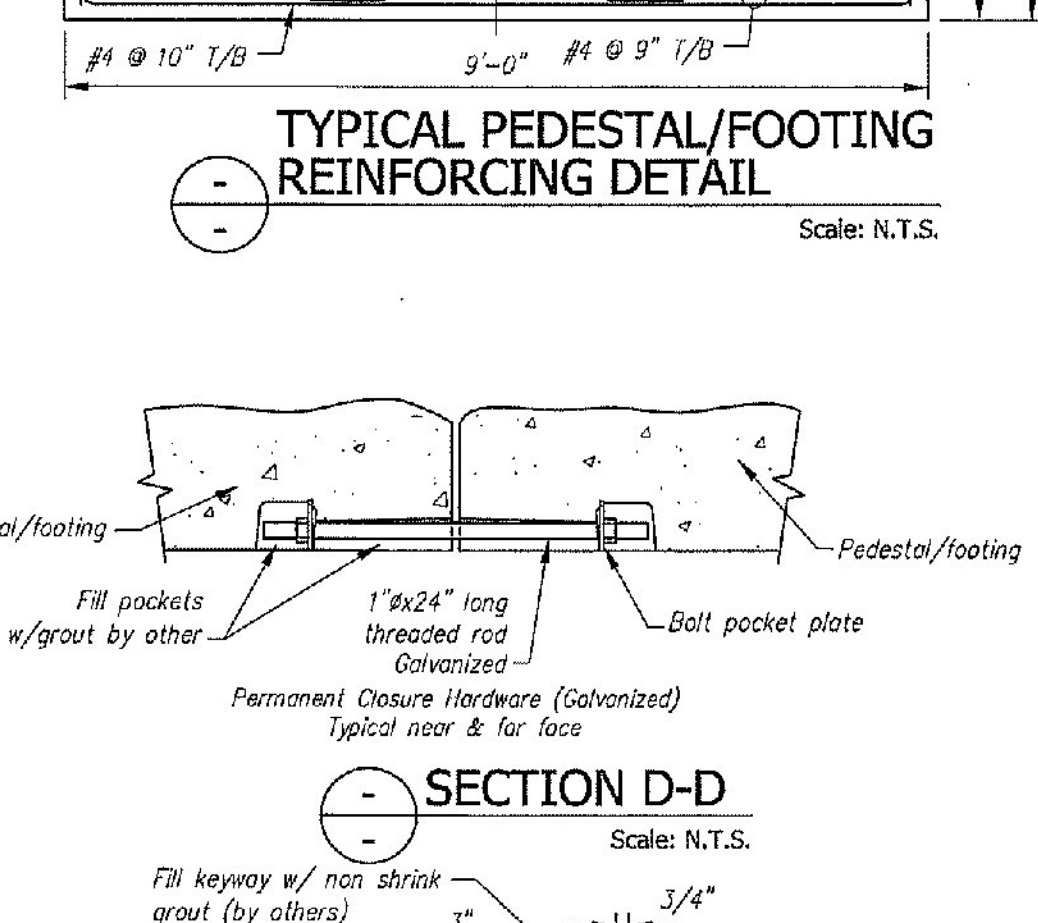
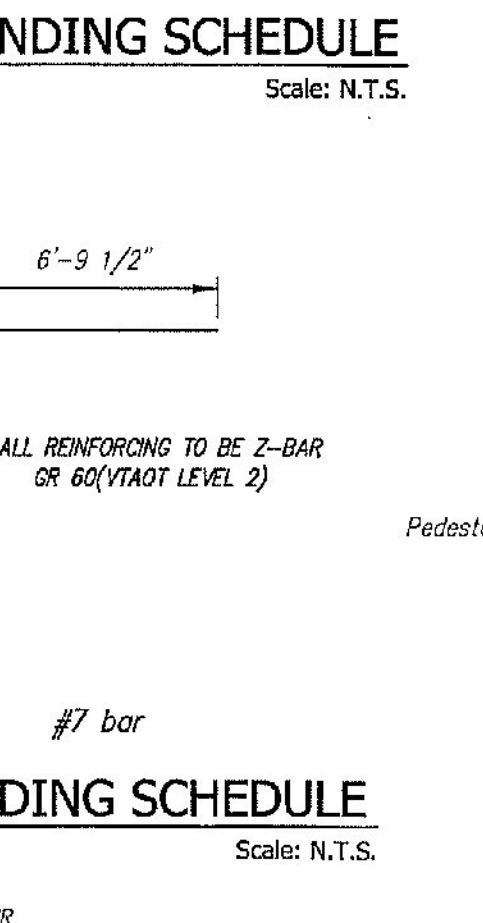
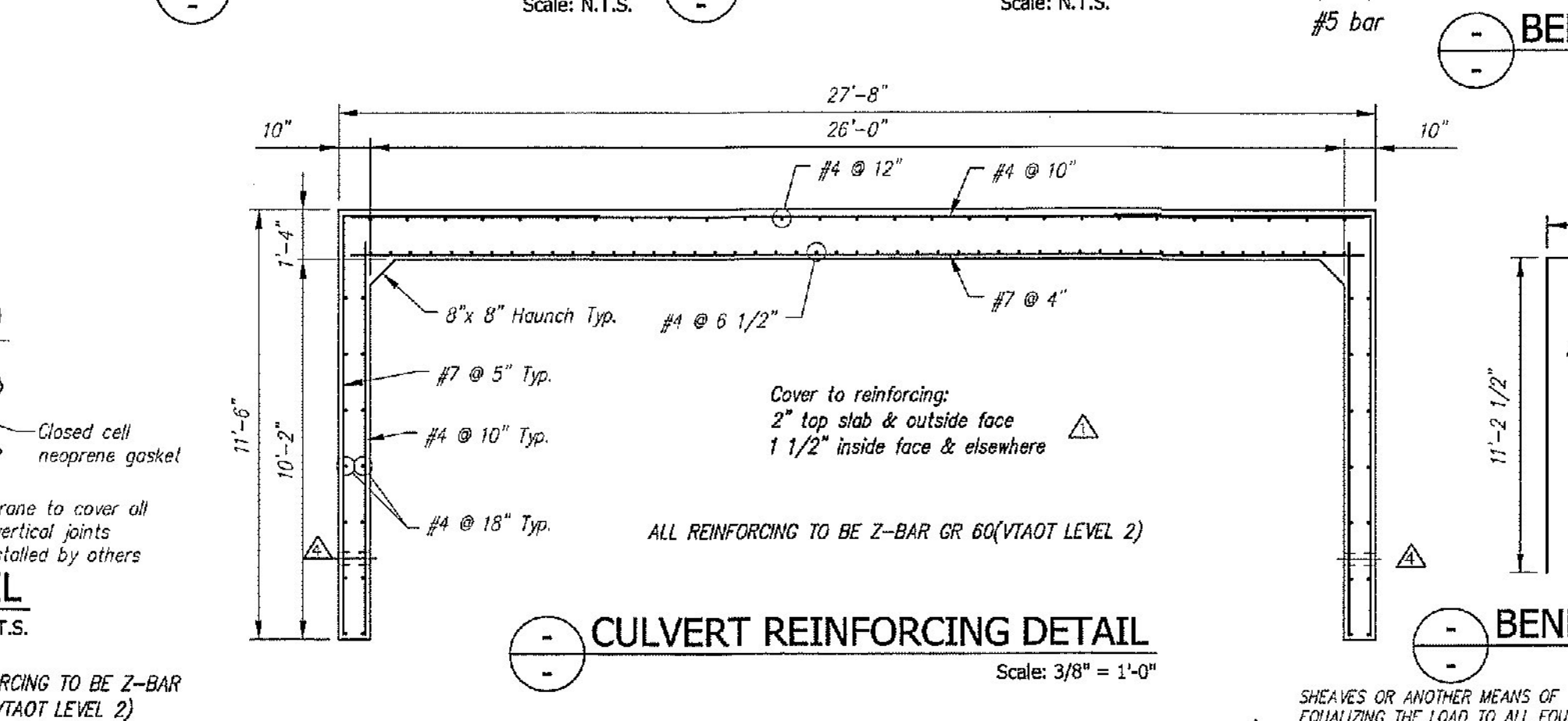
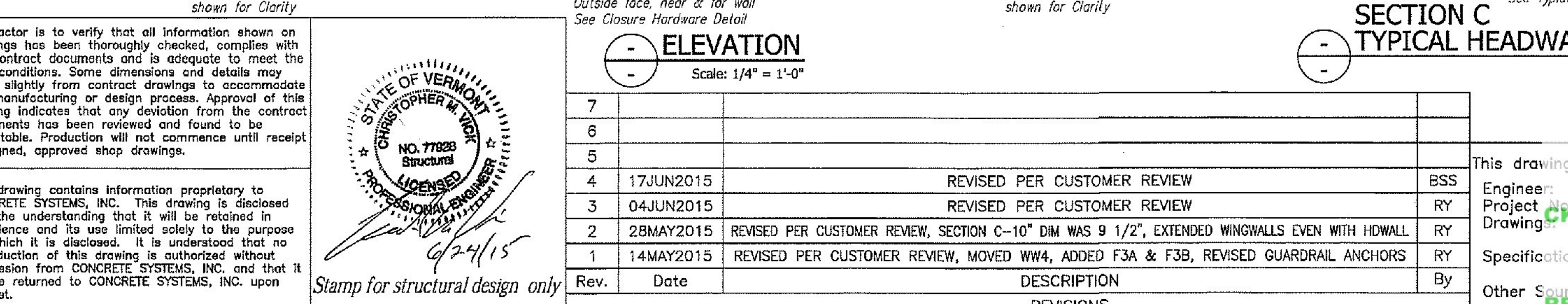
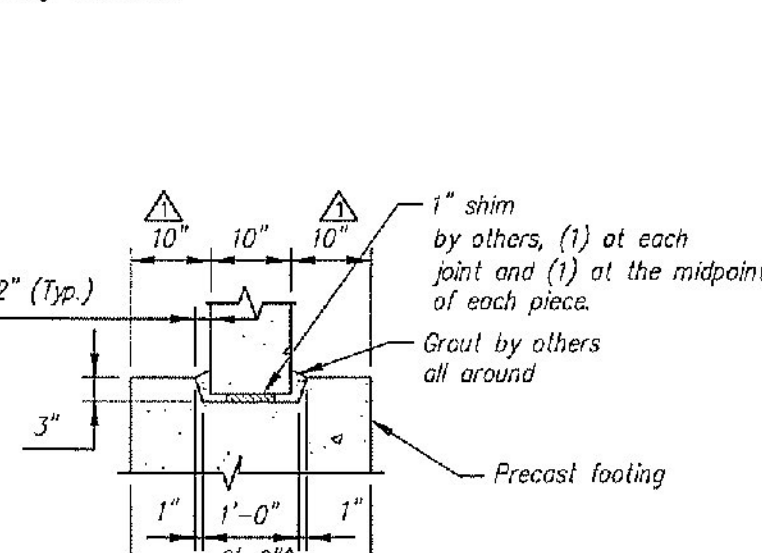


MARK	QTY	LENGTH	YDS	WEIGHT
C1	1	6.54	15.40	31.19 TONS
C2	2	7.50	15.20	30.78 TONS
C3	1	7.38	16.50	33.41 TONS
WW1	1	12.00	7.77	15.73 TONS
WW2	1	10.00	6.35	12.86 TONS
WW3A	1	9.00	6.03	12.21 TONS
WW3B	1	9.00	5.31	10.75 TONS
WW4	1	11.83	8.13	16.46 TONS
F1	1	18.58	11.37	23.02 TONS
F2	1	17.17	10.85	21.97 TONS
F3A	1	13.33	9.80	19.85 TONS
F3B	1	12.00	3.11	6.30 TONS
F4	1	16.17	11.70	23.69 TONS
F5	2	12.00	11.19	22.66 TONS



GENERAL NOTES:

- Reference Standards:
 - AASHTO "LRFD Bridge Design Specifications" ASTM C1577
- Design Parameters:
 - Live load: HL-93
 - Earth Cover: 0.5' to 1.0'
 - Concrete: Design strength $f_c = 5000$ psi
 - Unit weight = 150 pcf
 - Reinforcing: Pedestal/Footing - ASTM A615 (rebar) GR 60, plain (VTAOT Level 1)
 - Culvert/Headwall/Wingwall - Z-Bar(rebar), GR 60 (VTAOT Level II)
 - Soil: Minimum lateral pressure coefficient .25
 - Maximum lateral pressure coefficient .50
 - Cover to reinforcing: 2" Top of top slab & outside faces of walls
 - 1 1/2" elsewhere u.n.a.
- Dimensions include a joint gap. Actual culvert piece length is 1/2" shorter (i.e. C2 = 7'-6").
- DBS are Dowel Bar Splicers and DI are Dowel Ins. Both are supplied by CSI. DI's are to be installed and cut/bent in the field by others as required.
- Headwall design taken from contract drawing S-360A.
- Water repellent by CSI on all exposed faces of culvert to 1' in, headwalls and wingwalls. Water repellent to be Certi-Vex Penesol 244-40% (Silane-Siloxane in accordance with Virans 540.04).
- Provide engineer a minimum fourteen (14) days notice prior to the start of fabrication and a detailed casting schedule.

Stamp for structural design only

Rev.	Date	DESCRIPTION	BY
7			
6			
5			
4	17JUN2015	REVISED PER CUSTOMER REVIEW	BSS
3	04JUN2015	REVISED PER CUSTOMER REVIEW	RY
2	28MAY2015	REVISED PER CUSTOMER REVIEW, SECTION C-10" DIM WAS 9 1/2", EXTENDED WINGWALLS EVEN WITH HDWALL	RY
1	14MAY2015	REVISED PER CUSTOMER REVIEW, MOVED WW4, ADDED F3A & F3B, REVISED GUARDRAIL ANCHORS	RY

Vermont Agency of Transportation
 This drawing is provided under the following documents and/or sources:
 STATE VTAOT PROGRAM DEVELOPMENT
 CK'D BY FDB
 SHEETS 1, 2, 4, 22, 23, 24 OF 25
 JUNE 29, 2015
 RESUBMIT No Approved
 BY Carolyn Carlson DATE 06/29/15

Concrete Systems Inc. 9 Commercial St. Hudson, NH 03051
 Phone 603-889-4169 Fax 603-889-2417

STATE AGENCY
 VTTrans

G.W. TATRO CONSTRUCTION, INC.
 VT/AOT BRIDGE REPLACEMENT- ROAD IMPROVEMENT
 RICHFORD, VT.

Drawn by R. YEAGER Date 31MAR2015
 Checked by B. KOLAWOLE Date
 Approved by C. VICK Date 17JUN2015

Quantity: 1 Project No: BRFO30229 SHEET 1 OF 2