

# JOSEPH P. CARRARA & SONS, INC.

# LETTER OF TRANSMITTAL

2464 CASE STREET  
MIDDLEBURY, VERMONT 05753

TEL (802) 388-6363  
FAX (802) 388-9010

TO: **W.M. Schultz Construction, Inc.**

831 Route 67 PO Box 2620  
Ballston Spa, New York 12020

518-885-0060

DATE :	6/23/14	JOB NO. :	23419-013
ATTENTION :	Mr. Kevin Ture   Mr. Michael Garn KTure@wmschultz.com   MGarn@wmschultz.com		
RE :	Vermont Route 73 Rochester, Vermont Rochester BRF 0162 (16) Bridge No. 15 Rochester BRF 0162 (17) Bridge No. 16		
	Transmittal #9		Precast Concrete

WE ARE SENDING YOU  Attached  Under separate cover via Email the following items:

Shop Drawings  Prints  Plans  Samples  Specifications

Copy of Letter  Change Order  Other:

COPIES	DATE	NO.	DESCRIPTION
1	as noted	as noted	J. P. Carrara & Sons' Precast Framing and Individual Piece Detail Drawings, Bridge No. 15: "Approved" & "Furnish as Corrected" Drawings: C1, F1 - F5, NBI - NB11, ABI - AB5, AS1 - AS3, WW1, WW2, & MI - M3

THESE ARE TRANSMITTED as checked below :

For approval  Approved as submitted  Resubmit \_\_\_\_\_ copies for approval

For your use  Approved as noted  Submit \_\_\_\_\_ copies for distribution

As requested  Returned for corrections  Return \_\_\_\_\_ corrected prints

For review and comment  \_\_\_\_\_

FOR BIDS DUE \_\_\_\_\_ 20 \_\_\_\_\_  PRINTS RETURNED AFTER LOAN TO US

REMARKS **Mike, Kevin,**

Attached please find the precast framing drawings and individual piece details for Bridge 15 which include the 'approved' and 'furnish as corrected' drawings received by JPC from four separate submittals for the structure. The attached represent the most up-to-date drawings for Bridge 15 for the project and are submitted as requested for information/record.

Please contact us at 802-388-6363 with any questions.

COPY TO :

SIGNED :

  
Michael Weigand

If enclosures are not as noted, please notify us at once.

**RECEIVED**  
**ON: May 9, 2014**  
 and Checked for  
**CONFORMANCE**

BY: Jennifer Fitch DATE: 05/13/2014

**NEXT BEAM GENERAL NOTES**

- MIN. CONCRETE STRENGTH AT 28 DAYS SHALL BE 9,000 PSI.
- MIN. CONCRETE STRENGTH AT STRESS TRANSFER SHALL BE 7,000 PSI.
- REINFORCING STEEL SHALL BE GR-60, ASTM A-615 (AASHTO M31) AND SHALL ADHERE TO THE REQUIREMENTS OF LEVEL II (DUAL COATED) REINFORCING STEEL IN ACCORDANCE WITH VERMONT SPECIFICATION SECTION 507.
- PRESTRESSING STRANDS SHALL CONFORM TO ASTM A-416 (AASHTO M203) AND SHALL CONSIST OF 0.60" x 270 KSI 7-WIRE LOW RELAXATION STRANDS.
- PRESTRESSING STRANDS SHALL EACH BE PULLED TO HAVE A NET TENSION OF 44.0 K AFTER ACCOUNTING FOR CHUCK SLIPPAGE. TENSION SHALL BE VERIFIED BY MEASURING STRAND ELONGATION. (SEE EXAMPLE ELONGATION CALCULATION AND TENSIONING PROCEDURE, THIS SHEET.)
- ENDS OF PRESTRESSING STRANDS SHALL BE CUT FLUSH WITH END OF NEXT BEAM STEMS (UNLESS NOTED OTHERWISE) AND EPOXY PAINTED.
- ALL EXPOSED CORNERS SHALL BE CHAMFERED 3/4".
- THE TOP OF BEAMS SHALL RECEIVE A SMOOTH FLOAT FINISH (UNLESS NOTED OTHERWISE).
- SHEAR KEY SURFACES SHALL BE SAND BLASTED CLEAN.
- BEAMS SHALL BE HANDLED AND ERECTED USING THE LIFTING LOOPS ONLY. THE MINIMUM SLING ANGLE FROM THE HORIZONTAL SHALL BE 90° (VERTICAL PICK). RIGGING SHALL BE CONFIGURED SUCH THAT THE BEAMS REMAIN PLUMB AND LEVEL AT ALL TIMES. A SPREADER BEAM OR FRAME MAY BE REQUIRED. THE PINS OF THE SHACKLES SHALL BE PLACED THROUGH THE LIFTING LOOPS - SEE DETAIL, THIS SHEET. BEAMS SHALL BE STORED AND TRANSPORTED WITH TIMBER SUPPORTS WITHIN 3'-0" OF THE BEAM ENDS, UNLESS APPROVED BY J.P. CARRARA & SONS, INC.
- MATERIAL SPECIFICATION AND MIX DESIGN SHALL CONFORM TO VERMONT SPEC. P510.02 AND P510.05 RESPECTIVELY.  
 DESIGN MIX: J.P.C. BRIDGE MIX #430M (5 GAL./CY DCI)
- QUALITY CONTROL PROCEDURES ARE IN ACCORDANCE WITH PCI REQUIREMENTS. J.P. CARRARA & SONS, INC. IS A PCI CERTIFIED PLANT.
- CURING METHOD: AS SOON AS THE TOP OF BEAM IS FINISHED, A COVER OF INSULATED POLY. THE DESIRED CURING TEMPERATURE RANGE SHALL NOT DROP BELOW 70°F. THE TEMPERATURE SHALL BE RECORDED BY AUTOMATIC SENSOR INSTRUMENTS ON GRAPH CHARTS, SPACED NOT MORE THAN 100' APART AND WILL CONTINUE UNTIL RELEASE STRENGTH IS ACHIEVED. EACH CHART SHALL BE MARKED WITH THE CASTING DATED AND LOCATION OF THE RECORDER. IF NECESSARY TO MAINTAIN CASTING BED TEMPERATURE PRIOR TO CONCRETE PLACEMENT OR TO ACCELERATE EARLY AGE STRENGTH GAIN, EXTERNAL RADIANT HEAT MAY BE EMPLOYED VIA HOT WATER DUCTS BENEATH AND WITHIN THE PERIPHERY OF THE CASTING BED. MAXIMUM CURING TEMPERATURE SHALL NOT EXCEED PCI SPECIFIED LIMITS.
- OWNER SHALL PROVIDE APPROPRIATE WATERPROOFING TO GROUTED SHEAR KEYS. J.P. CARRARA & SONS, INC. SHALL NOT BE HELD LIABLE FOR PROBLEMS ASSOCIATED WITH MOISTURE INFILTRATING GROUTED SHEAR KEYS.
- PRECAST CONCRETE PARAPET SHALL HAVE A RUBBED FINISH IN ACCORDANCE WITH VERMONT SPECIFICATION SECTION 501.

**ABUTMENT, WING WALL, & APPROACH SLAB GENERAL NOTES**

- MIN. CONCRETE STRENGTH AT 28 DAYS SHALL BE 5,000 PSI.
- MIN. CONCRETE STRENGTH AT STRIPPING SHALL BE 3,500 PSI.
- REINFORCING STEEL IN THE ABUTMENTS & APPROACH SLABS SHALL BE GR-60, ASTM A-615 (AASHTO M31) AND SHALL ADHERE TO THE REQUIREMENTS OF LEVEL I REINFORCING STEEL IN ACCORDANCE WITH VERMONT SPECIFICATION SECTION 507 (UNLESS NOTED OTHERWISE).  
 REINFORCING STEEL IN THE WING WALLS SHALL BE GR-60, ASTM A-615 (AASHTO M31) AND SHALL ADHERE TO THE REQUIREMENTS OF LEVEL II (DUAL COATED) REINFORCING STEEL IN ACCORDANCE WITH VERMONT SPECIFICATION SECTION 507 (UNLESS NOTED OTHERWISE).
- THE TOP OF ABUTMENTS, APPROACH SLABS, & WING WALLS SHALL RECEIVE A SMOOTH FLOAT FINISH (UNLESS NOTED OTHERWISE).
- SHEAR KEY SURFACES SHALL BE SAND BLASTED CLEAN.
- PRECAST CONCRETE UNITS SHALL BE HANDLED AND ERECTED USING THE LIFTING INSERTS ONLY. THE MINIMUM SLING ANGLE FROM THE HORIZONTAL SHALL BE 60°. NON-PRESTRESSED UNITS SHALL BE STORED & TRANSPORTED WITH TIMBER SUPPORTS AT 5th POINTS, UNLESS APPROVED BY J.P. CARRARA & SONS, INC.
- MATERIAL SPECIFICATION AND MIX DESIGN SHALL CONFORM TO VERMONT SPECIFICATION SECTION 540.  
 DESIGN MIX:  
 WING WALLS: J.P.C. BRIDGE MIX #425M NO DCI  
 APPROACH SLABS: J.P.C. BRIDGE MIX #425M NO DCI  
 ABUTMENTS: J.P.C. BRIDGE MIX #445M
- QUALITY CONTROL PROCEDURES ARE IN ACCORDANCE WITH PCI REQUIREMENTS. J.P. CARRARA & SONS, INC. IS A PCI CERTIFIED PLANT.
- CURING METHOD: AS SOON AS THE TOP OF PRECAST CONCRETE UNITS ARE FINISHED, A COVER OF RIGID INSULATION AND POLY WILL BE PLACED OVER THE UNIT. NATURAL CURE WITH NO EXTERNAL HEAT APPLIED.
- ABUTMENT POST-TENSIONING SEQUENCE:  
 A. ERECT PRECAST CONCRETE ABUTMENTS. APPLY SIKADUR 32 HI-MOD EPOXY TO FIRST UNIT ERECTED AT MATCH CAST JOINT.  
 B. THREAD (2) 1/2" POLY STRAND TENDON THROUGH EACH DUCT IN ABUTMENTS, AND POST-TENSION ALL TENDONS TO APPROXIMATELY 3,000 LBS.  
 C. AFTER 12 HOURS, POST-TENSION ALL TENDONS TO 32,000 LBS.

**STRAND TENSIONING PROCEDURE:**

- PULL EACH STRAND INITIALLY TO 3,000\* LBS. AND MARK STRAND.
  - THEN PULL EACH STRAND TO A TOTAL TENSION OF 45,026\* LBS. AND MEASURE ELONGATION AFTER SEATING. IT MUST BE BETWEEN 19" AND 21".
- \* NOTE: FORCES READ ON STRESSING JACK GAUGES MUST BE MADE TO CORRESPOND TO ABOVE VALUES BASED ON CALIBRATION DATA FOR SPECIFIC JACK USED.

**EXAMPLE PRESTRESSING STRAND ELONGATION CALC. AND TENSIONING**

(NOT TO BE USED FOR CONSTRUCTION)

SIZE & GRADE: 0.60" x 270 KSI  
 AREA: 0.217 IN<sup>2</sup>  
 TENSION: 44,000 LB. EACH STRAND  
 GRIP-TO-GRIP: 252'-0" = 252.00'  
 Es = 28,600,000 PSI (ASSUMED FOR THESE CALCULATIONS; VALUE TO BE OBTAINED FOR STRAND SPOOL ACTUALLY USED)

EXAMPLE:  

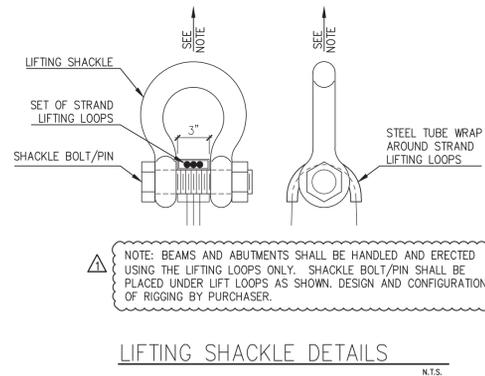
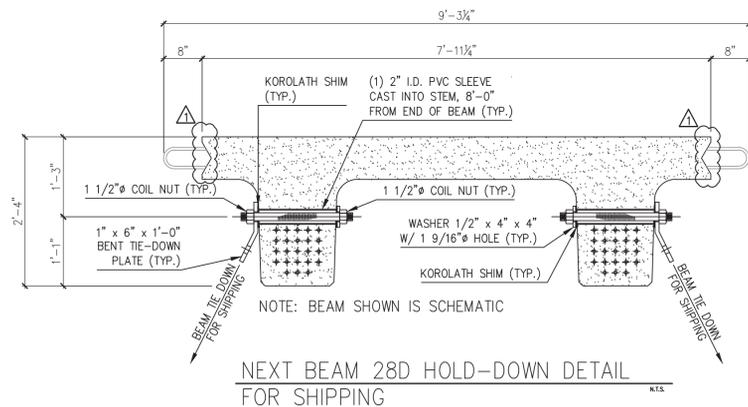
$$\Delta = \frac{PL}{AE} = \frac{(44,000 - 3,000) \times 252.00 \times 12}{0.217 \times 28,600,000} = 19.977"$$

THEREFORE: (TOLERANCES ± 5%)  
 $\Delta$  UPPER LIMIT = 1.05 x 19.977" = 20.98" = 21"  
 $\Delta$  LOWER LIMIT = 0.95 x 19.977" = 18.98" = 19"

EXTRA FORCE REQUIRED TO COMPENSATE FOR 1/2" CHUCK SLIPPAGE:  

$$\Delta P = \frac{0.5 \times 41,000}{19.977} = 1,026 \text{ LBS.}$$

TOTAL TENSIONING FORCE = 44,000 + 1,026 = 45,026 LBS.



**SHOP DRAWING REVIEW**

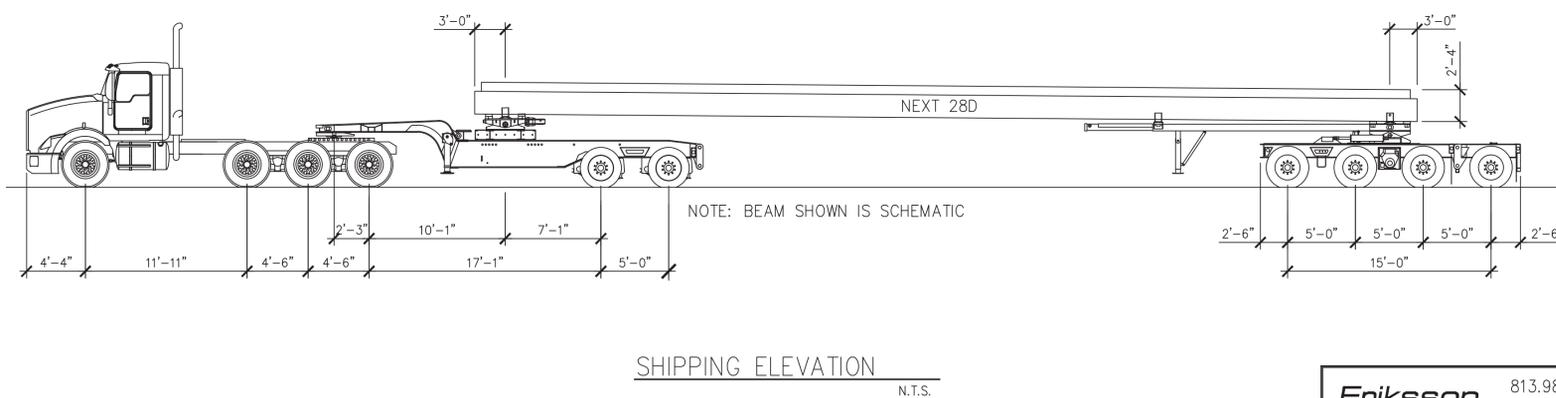
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REJECTED  REVISE AND RESUBMIT  FURNISH AS CORRECTED

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**VHB Vanasse Hangen Brustlin, Inc.**  
 7056 US Route 7  
 North Ferrisburgh, VT 05473  
 802-425-7788

Job Number: 57526  
 Reviewed By: J.L. WESTCOTT  
 Date: 5/13/2014

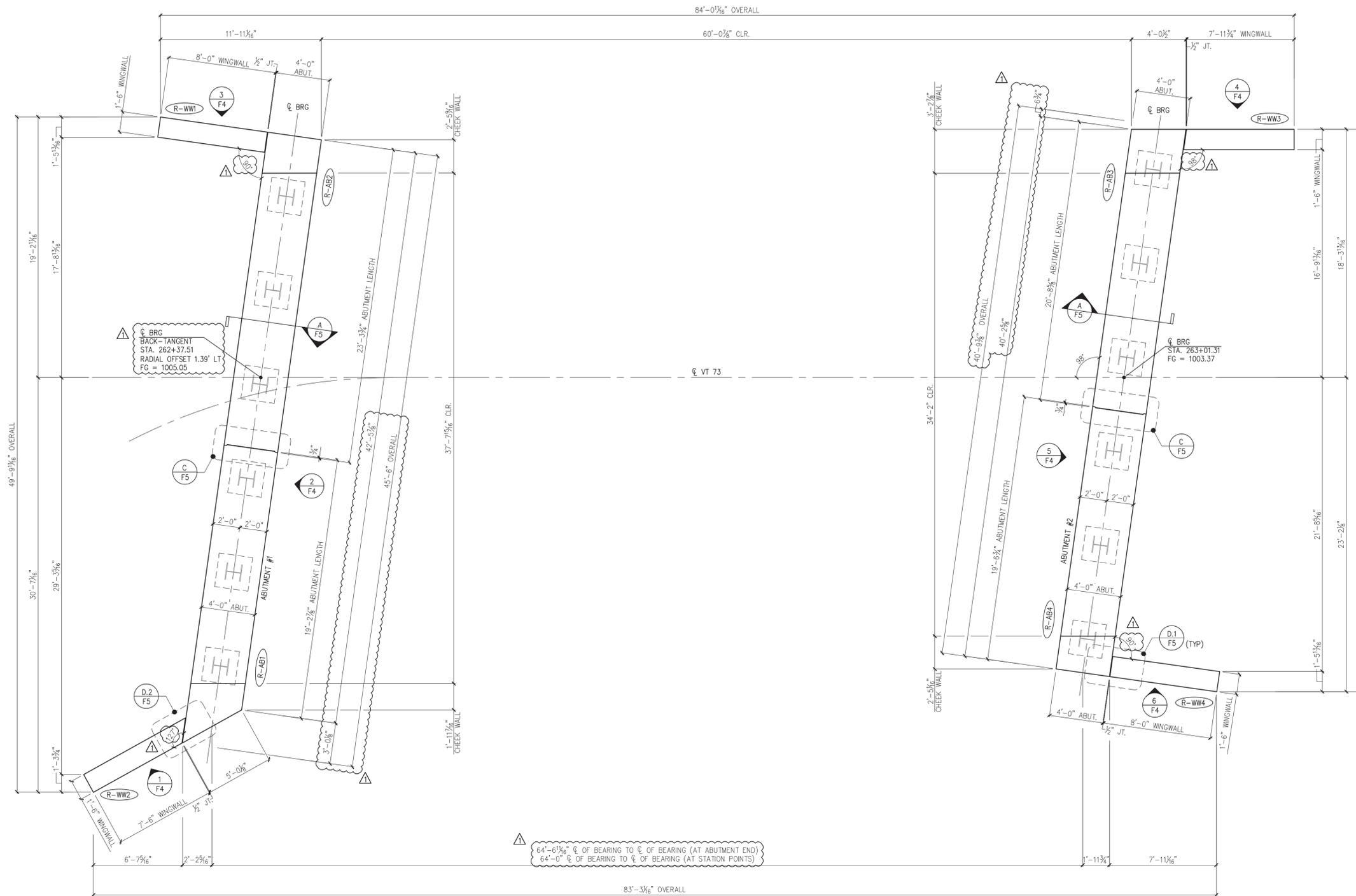


4/30/14 REVISE & RESUBMIT  
 4/11/14 REVISE & RESUBMIT

APPROVAL STAMP:	<b>J.P. CARRARA &amp; SONS INC.</b> Precast & Prestress Manufacturer 2464 CASE STR., MIDDLEBURY, VERMONT 05753 Phone: (802)388-6361 Fax: (802)388-9010	<b>W.M. SHULTZ CONSTRUCTION, INC.</b> PO BOX 2620 BALLSTON SPA, NY 12020
	STATE OF VERMONT AGENCY OF TRANSPORTATION COUNTY OF WINDSOR	DATE: MAR. 14, 2014 SCALE: NOTED
	TOWN OF ROCHESTER VT ROUTE 73 (RURAL MAJOR COLLECTOR) BRIDGE NO.: 15 PROJECT NO.: BRF 0162 (16)	CHKD: DFTM: AAT/RWS JJ/KLT JOB NO: 23419-013
	BRIDGE 15 COVER SHEET	DWG. NO: C1

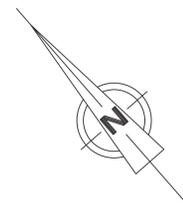
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64'-6 1/8"  $\phi$  OF BEARING TO  $\phi$  OF BEARING (AT ABUTMENT END)  
 64'-0"  $\phi$  OF BEARING TO  $\phi$  OF BEARING (AT STATION POINTS)

1 PRECAST CONCRETE ABUTMENT AND WINGWALL LAYOUT  
 F1 1/4" = 1'-0"



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<b>△ SUBSTRUCTURE PLANS</b>		DWG. NO: F1

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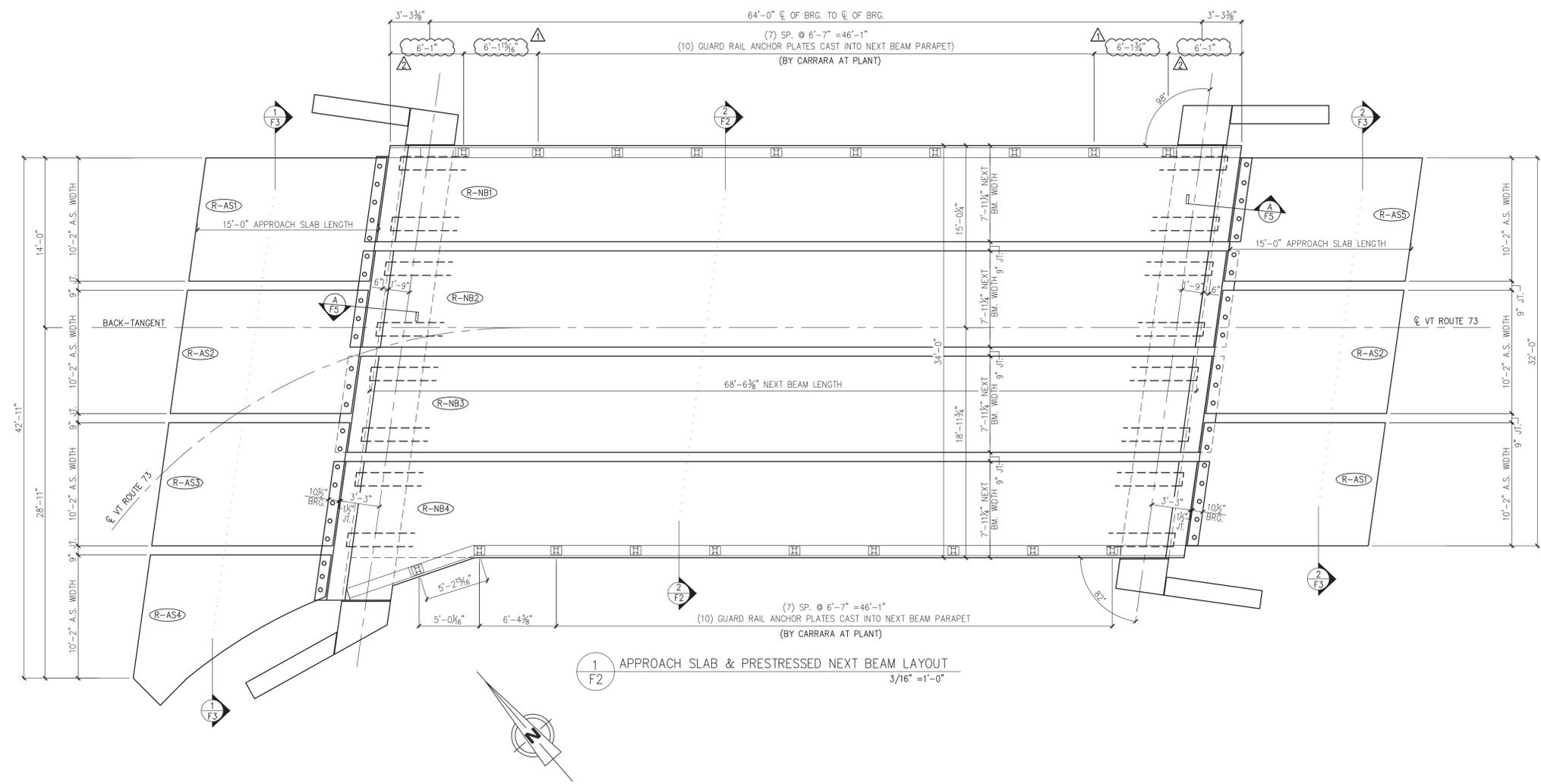
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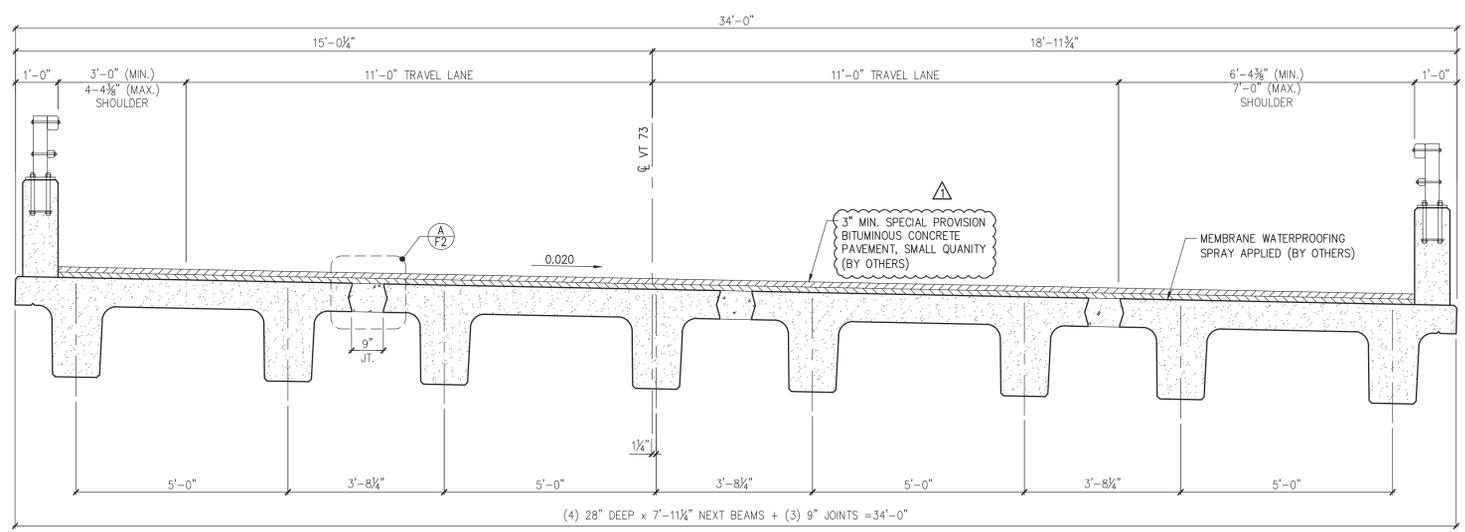
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BY: Jennifer Fitch DATE: 05/13/2014



1 APPROACH SLAB & PRESTRESSED NEXT BEAM LAYOUT  
3/16" = 1'-0"



2 NEXT BEAM TRANSVERSE SECTION  
1/2" = 1'-0"

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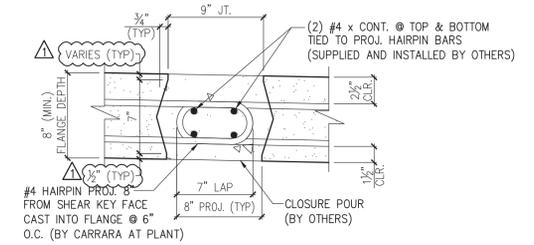
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A NEXT BEAM CLOSURE POUR  
1 1/2" = 1'-0"

- △ 4/30/14 REVISE & RESUBMIT
- △ 4/11/14 REVISE & RESUBMIT

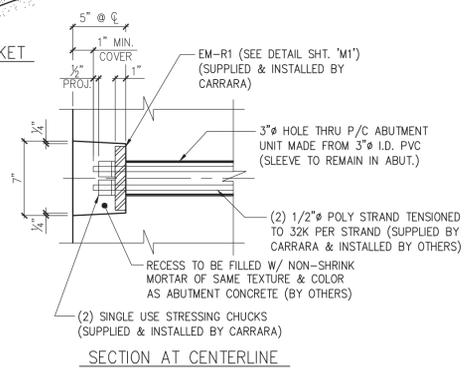
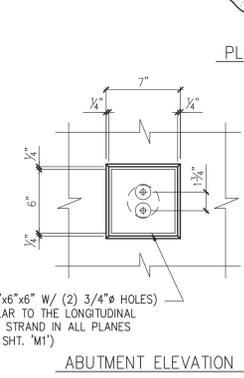
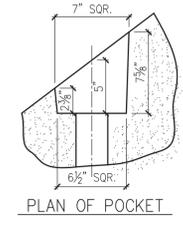
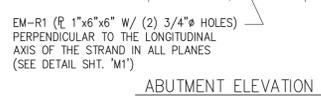
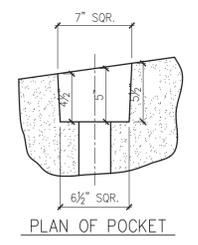
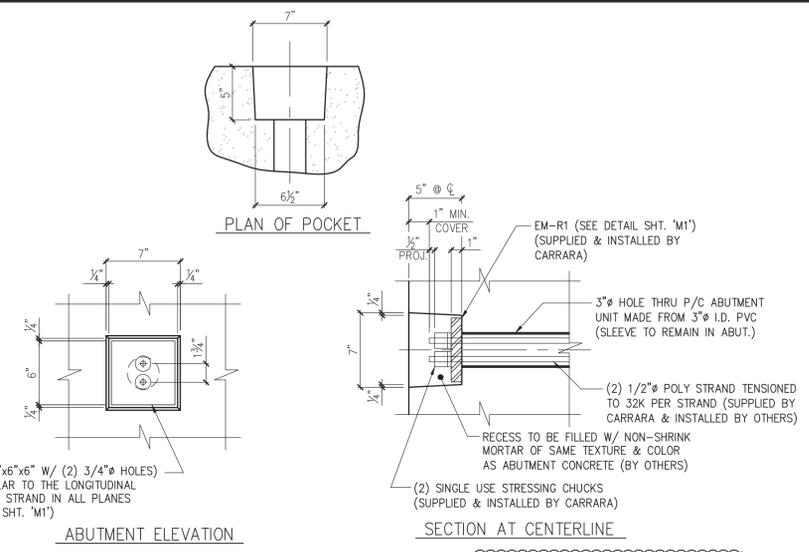
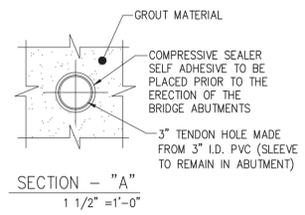
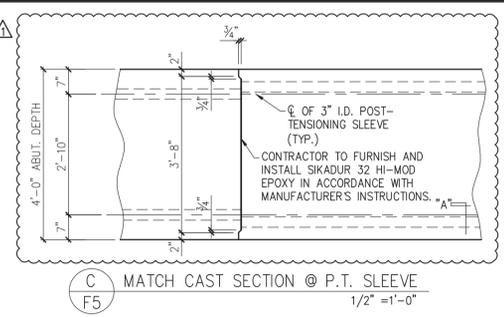
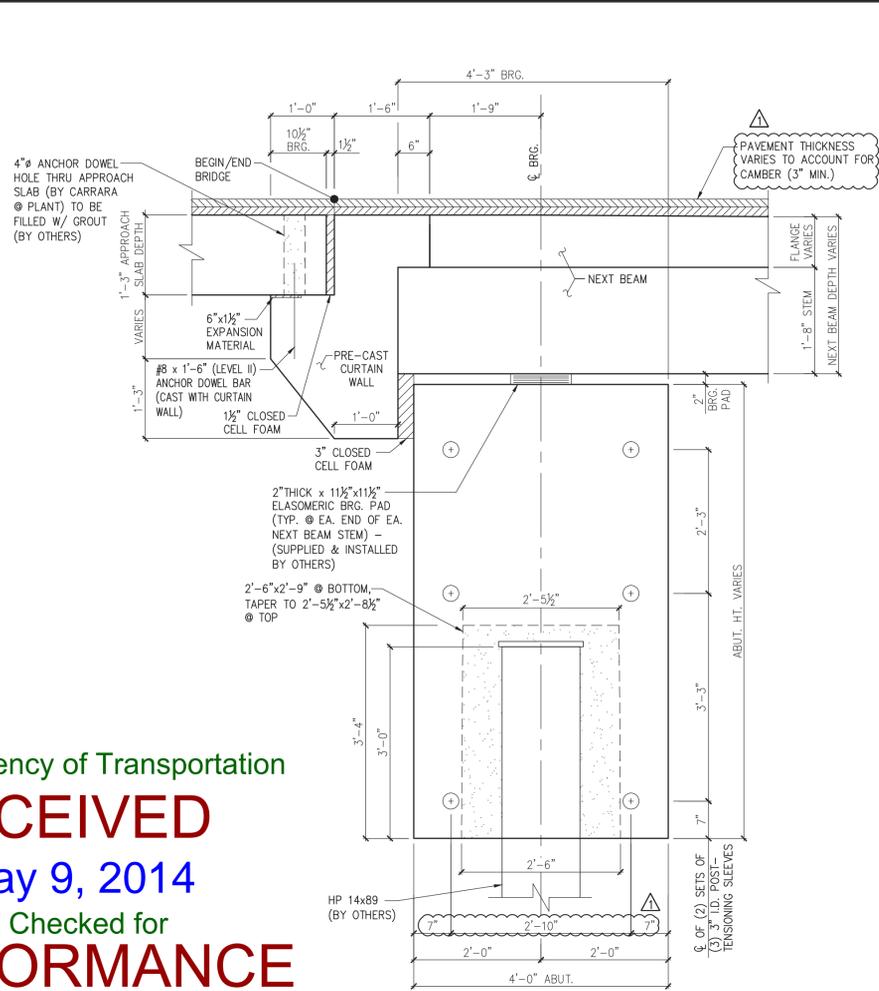
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SUPERSTRUCTURE PLANS & SECTIONS			DWG. NO: F2





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**SHOP DRAWING REVIEW**

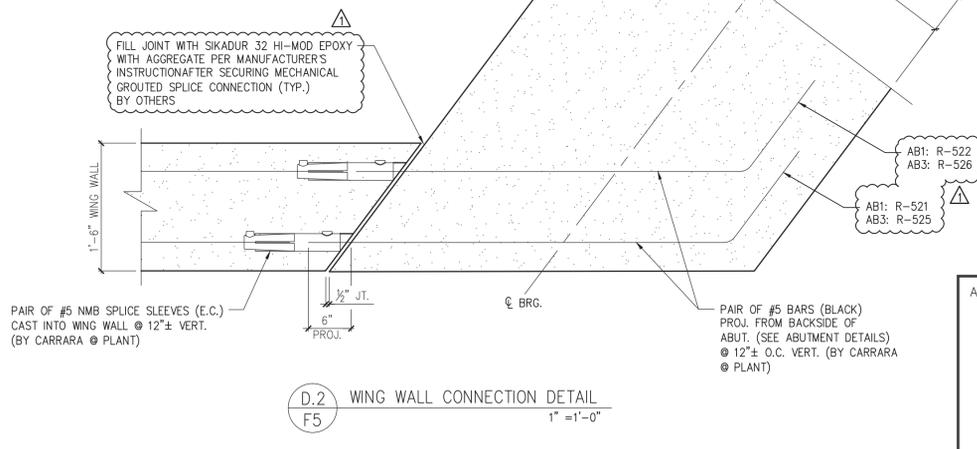
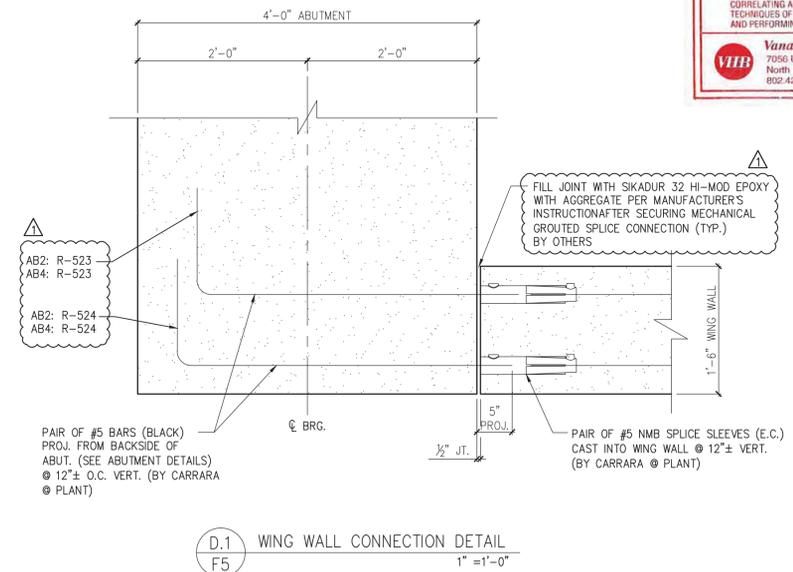
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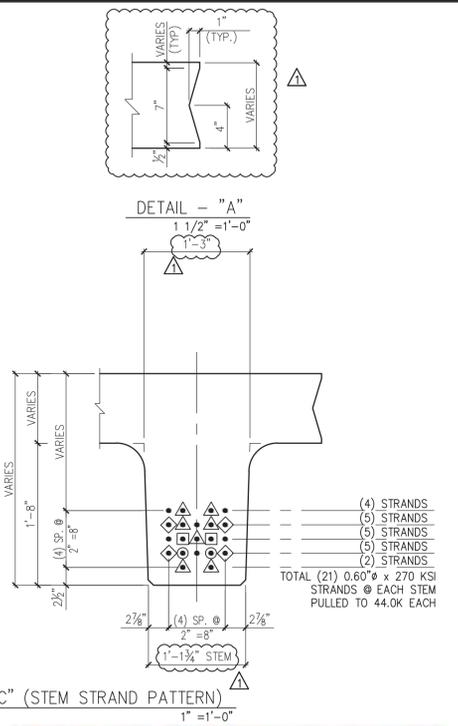
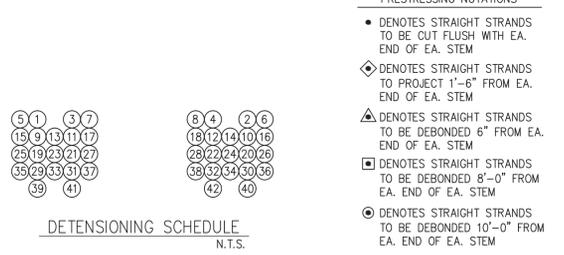
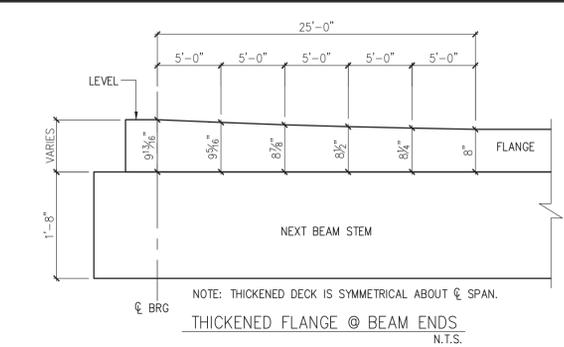
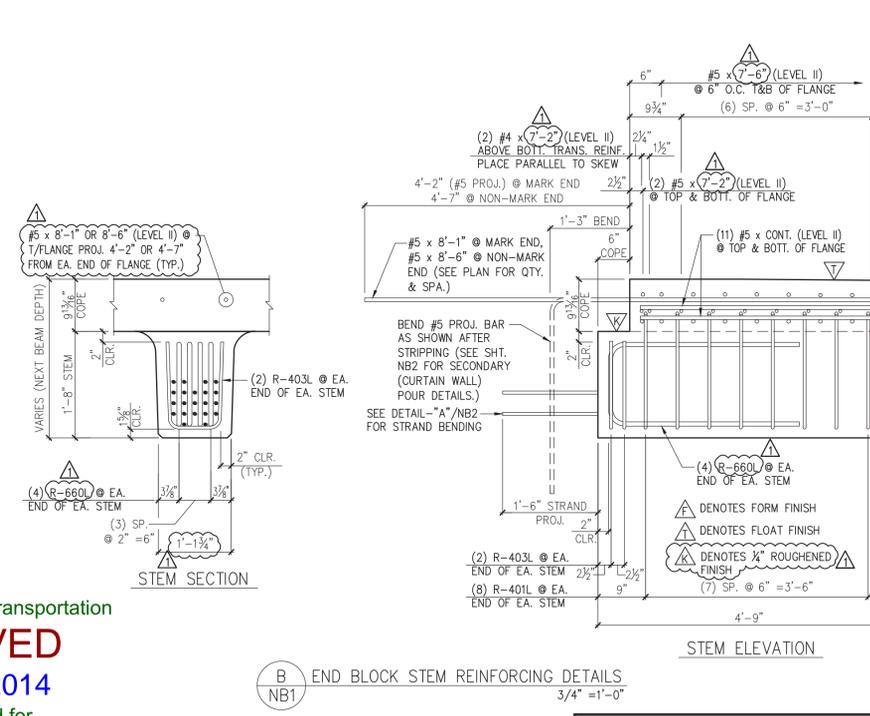
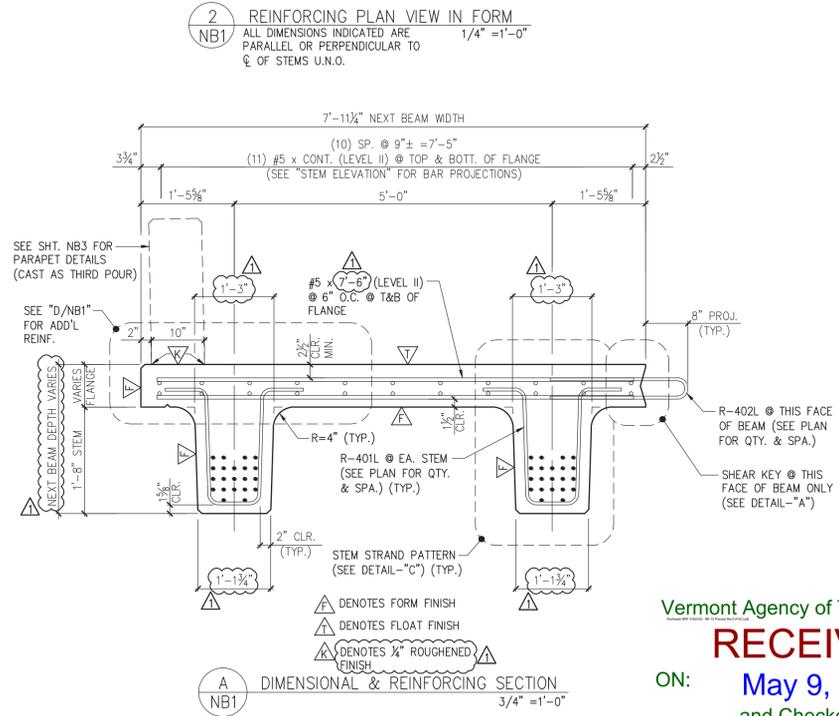
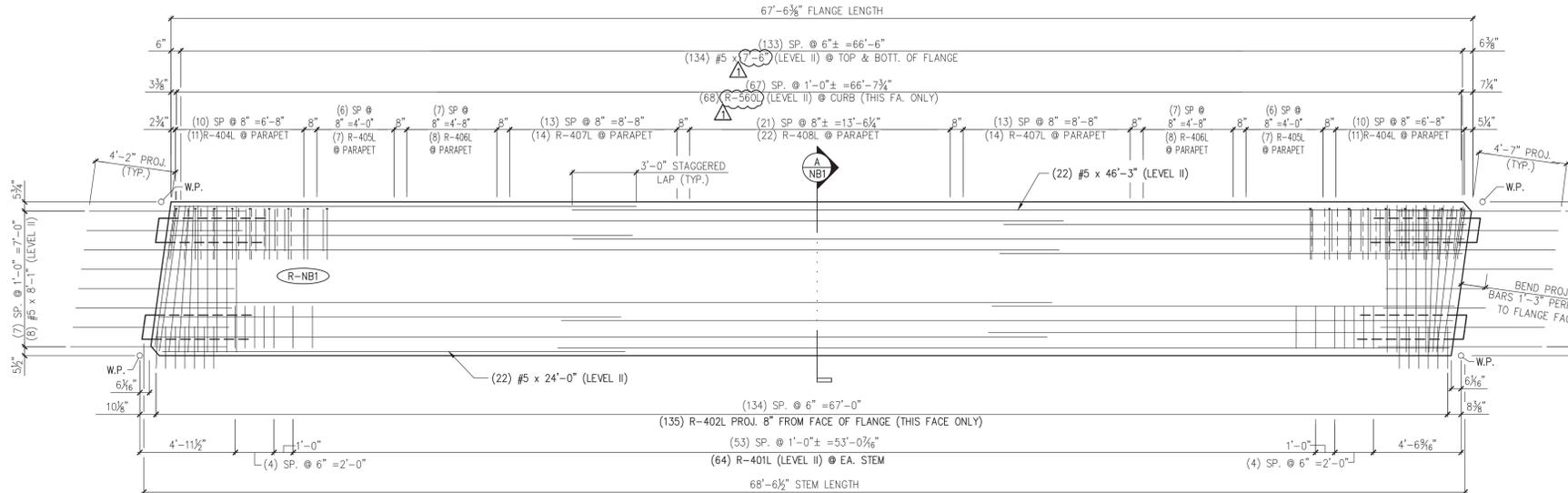
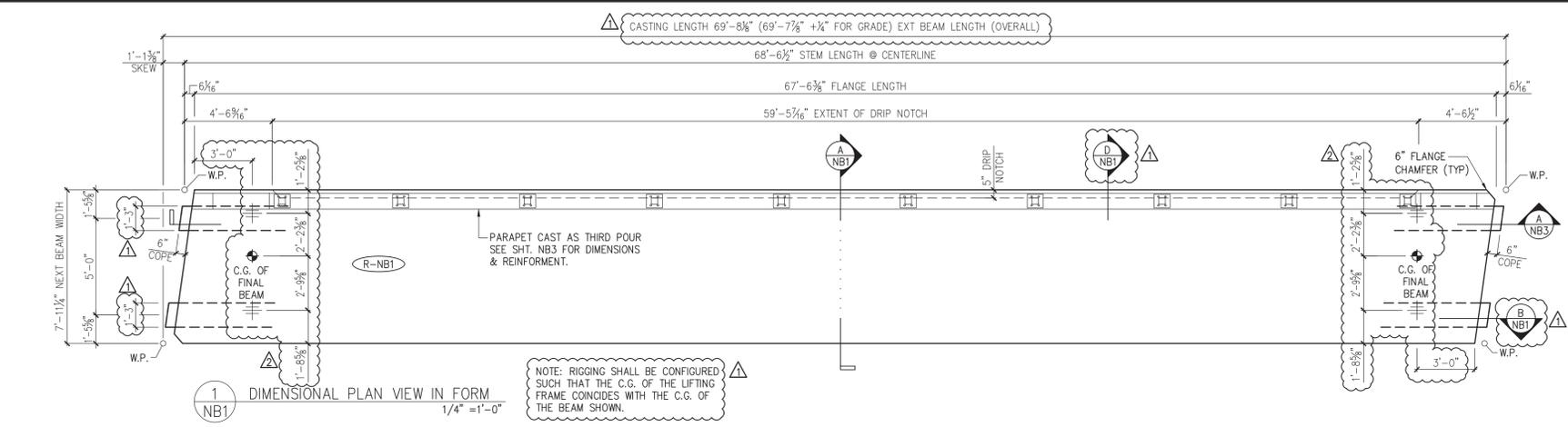


4/11/14 REVISE & RESUBMIT

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ABUTMENT DETAILS		

S:\Engineering Services\Carrara14002 Rochester BR 16 & 16\Production Drawings\AutoCAD Files\FR-1.dwg, 5/8/2014 5:03:40 PM

S:\Engineering Services\Carrara14002 Rochester BR 15 & 16\Production Drawings\AutoCAD Files\R-NB1.dwg, 5/8/2014 5:03:45 PM



SHOP DRAWING REVIEW

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REJECTED  REVISE AND RESUBMIT  FURNISH AS CORRECTED

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**Vanasse Hangen Brustlin, Inc.**  
 7056 US Route 7  
 North Ferrisburgh, VT 05473  
 802.425.7788

Job Number: 57526  
 Reviewed By: J.L. WESTCOTT  
 Date: 5/13/2014

MARK:	R-NB1	QTY.:	1	WT.:	49.7 T	VOL.:	24.12 cy
TOTAL WITH CURTAIN WALLS & PARAPET - WT.:		69.2 T		VOL.:		34.28 cy	
MATERIAL LIST / NEXT BEAM							
ITEM	MARK	DESCRIPTION				QTY.	
1	R-401L	#4 BENT BAR (LEVEL II, DUAL COATED)				160	
2	R-402L	#4 BENT BAR (LEVEL II, DUAL COATED)				135	
3	R-403L	#4 BENT BAR (LEVEL II, DUAL COATED)				8	
4	R-404L	#4 BENT BAR (LEVEL II, DUAL COATED)				22	
5	R-405L	#4 BENT BAR (LEVEL II, DUAL COATED)				14	
6	R-406L	#4 BENT BAR (LEVEL II, DUAL COATED)				16	
7	R-407L	#4 BENT BAR (LEVEL II, DUAL COATED)				28	
8	R-408L	#4 BENT BAR (LEVEL II, DUAL COATED)				22	
9	R-560L	#5 BENT BAR (LEVEL II, DUAL COATED)				68	
10		#4 x 7'-2" (LEVEL II, DUAL COATED)				4	
11		#4 x 7'-6" (LEVEL II, DUAL COATED)				14	
12		#5 x 7'-2" (LEVEL II, DUAL COATED)				4	
13		#5 x 7'-6" (LEVEL II, DUAL COATED)				268	
14		#5 x 8'-1" (LEVEL II, DUAL COATED)				8	
15		#5 x 8'-6" (LEVEL II, DUAL COATED)				8	
16		#5 x 24'-0" (LEVEL II, DUAL COATED)				22	
17		#5 x 46'-3" (LEVEL II, DUAL COATED)				22	
18	R-660L	#6 BENT BAR (LEVEL II, DUAL COATED)				16	

4/30/14 REVISE & RESUBMIT  
4/11/14 REVISE & RESUBMIT

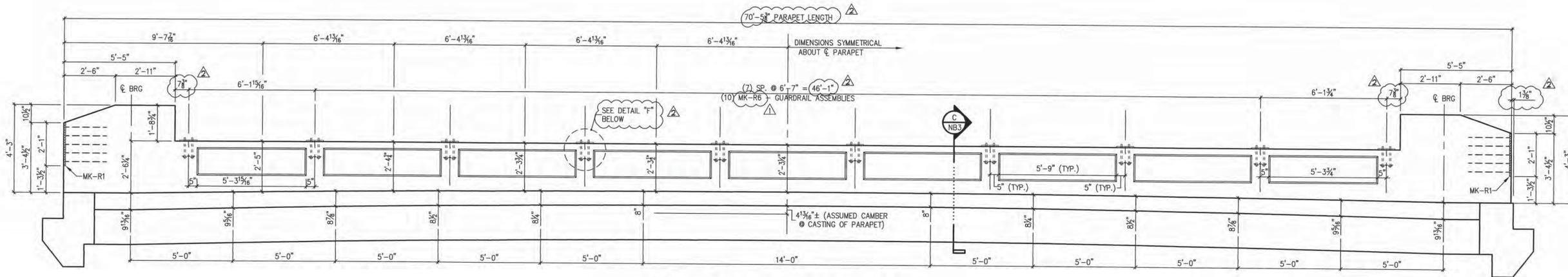
APPROVAL STAMP:

<b>J.P. CARRARA &amp; SONS INC.</b> Precast & Prestress Manufacturer 2464 CASE STR., MIDDLEBURY, VERMONT 05753 Phone: (802)388-6361 Fax: (802)388-9010		<b>W.M. SHULTZ CONSTRUCTION, INC.</b> P.O. BOX 2620 BALLSTON SPA, NY 12020	
STATE OF VERMONT AGENCY OF TRANSPORTATION COUNTY OF WINDSOR		DATE: MAR. 14, 2014 SCALE: NOTED	
TOWN OF ROCHESTER VT ROUTE 73 (RURAL MAJOR COLLECTOR) BRIDGE NO.: 15 PROJECT NO.: BRF 0162 (16)		CHKD: DFTM:AAT/RWS JJ/KLT JOB NO: 23419-013	
		DWG. NO: NB1	

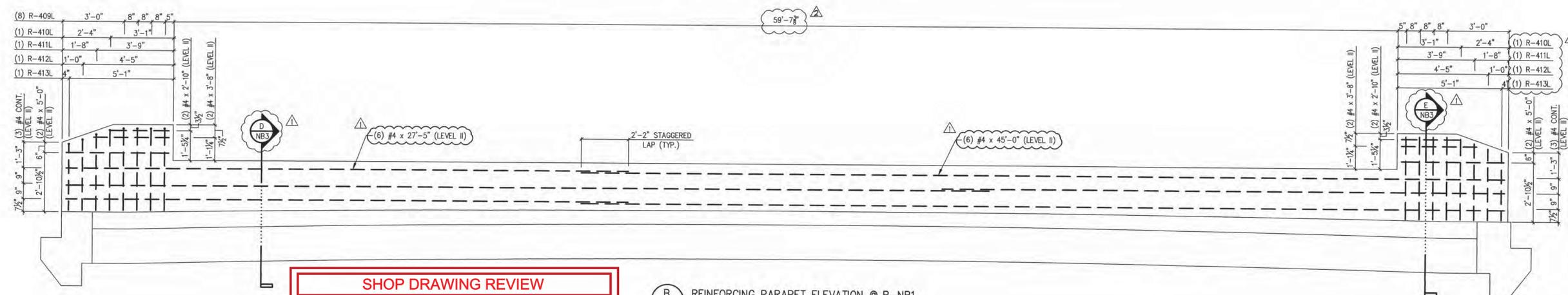
Vermont Agency of Transportation  
**RECEIVED**  
 ON: **May 9, 2014**  
 and Checked for  
**CONFORMANCE**  
 BY: Jennifer Fitch DATE: 05/13/2014

**Eriksson** technologies  
 813.989.3317  
 TAMPA, FL LRFD.COM  
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**A** DIMENSIONAL PARAPET ELEVATION @ R-NB1  
 NB3 (CAST AS THIRD POUR WITH R-NB1) 3/8" = 1'-0"



**B** REINFORCING PARAPET ELEVATION @ R-NB1  
 NB3 3/8" = 1'-0"

**SHOP DRAWING REVIEW**

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REJECTED     REVISE AND RESUBMIT     FURNISH AS CORRECTED

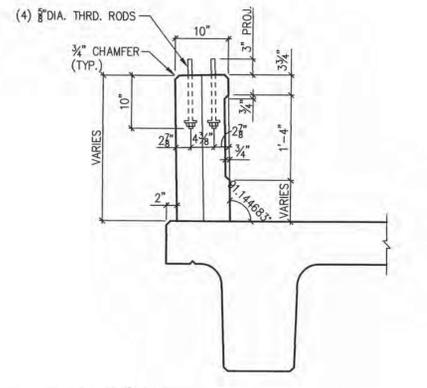
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**VHB** Job Number: 57926  
 Reviewed By: B. Masse  
 Date: 6-19-14

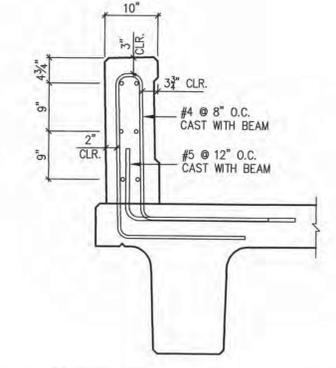
Vermont Agency of Transportation  
**RECEIVED**  
 ON: June 19, 2014  
 and Checked for  
**CONFORMANCE**  
 BY: Jennifer Fitch DATE: 06/20/2014

SUBMITTED  
 JUN 11 2014  
 J. P. CARRARA & SONS, INC.  
 MIDDLEBURY, VT 05753

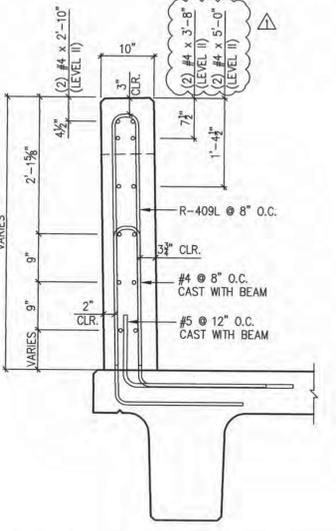
MATERIAL LIST / PARAPET			
ITEM	MARK	DESCRIPTION	QTY.
1	R-409L	#4 BENT BAR (LEVEL II, DUAL COATED)	8
2	R-410L	#4 BENT BAR (LEVEL II, DUAL COATED)	2
3	R-411L	#4 BENT BAR (LEVEL II, DUAL COATED)	2
4	R-412L	#4 BENT BAR (LEVEL II, DUAL COATED)	2
5	R-413L	#4 BENT BAR (LEVEL II, DUAL COATED)	2
6			
7		#4 x 2'-10" (LEVEL II, DUAL COATED)	4
8		#4 x 3'-8" (LEVEL II, DUAL COATED)	4
9		#4 x 5'-0" (LEVEL II, DUAL COATED)	4
10		#4 x 27'-5" (LEVEL II, DUAL COATED)	6
11		#4 x 45'-0" (LEVEL II, DUAL COATED)	6
12			
13	MK-R1	10" x 2" x 2'-1" LONG STEEL ANCHOR PLATE	2
14	MK-B6	GUARDRAIL ASSEMBLY (SUPPLIED BY CONTR. AND INSTALLED BY CARRERA)	10



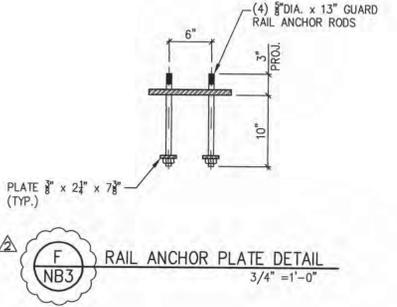
**C** DIMENSIONAL PARAPET SECTION  
 NB3 3/4" = 1'-0"



**D** REINFORCING @ PARAPET  
 NB3 3/4" = 1'-0"



**E** REINFORCING @ PARAPET  
 NB3 3/4" = 1'-0"



**F** RAIL ANCHOR PLATE DETAIL  
 NB3 3/4" = 1'-0"

6/10/14 REVISED AS NOTED  
 4/11/14 REVISE & RESUBMIT

APPROVAL STAMP:

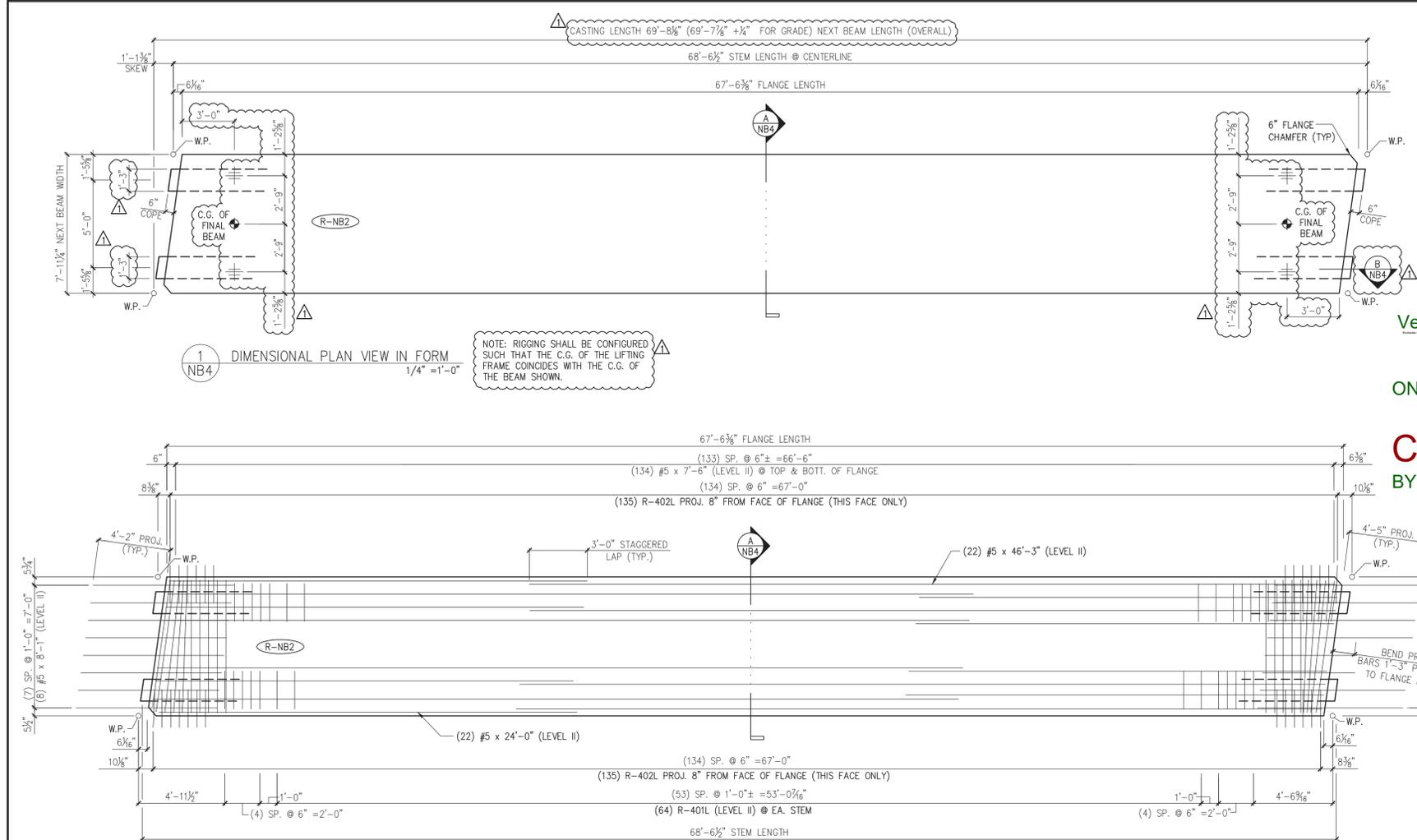
**Eriksson technologies** 813.989.3317  
 TAMPA, FL  
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**J.P. CARRARA & SONS INC.** W.M. SCHULTZ CONSTRUCTION, INC.  
 Precast & Prestress Manufacturer PO BOX 2620  
 2464 CARE ST., MIDDLEBURY, VERMONT 05753 Phone:(802)388-6361 Fax:(802)388-9010 BALLSTON SPA, NY 12020

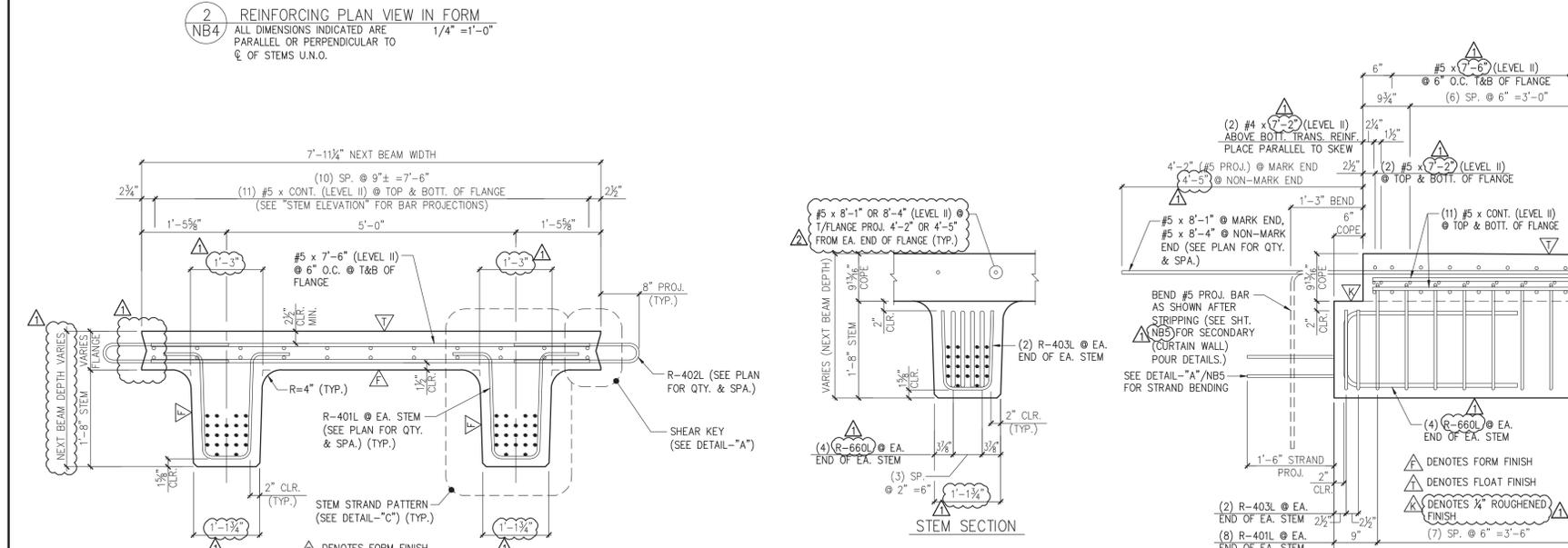
STATE OF VERMONT AGENCY OF TRANSPORTATION COUNTY OF WINDSOR  
 TOWN OF ROCHESTER VT ROUTE 73 (RURAL MAJOR COLLECTOR) BRIDGE NO.: 15 PROJECT NO.: BRF 0162(16)

DATE: MAR. 14, 2014  
 SCALE: NOTED  
 CHKD: DFTM, AAT/RWS  
 JOB NO: 23419-013  
 DWG. NO: NB3

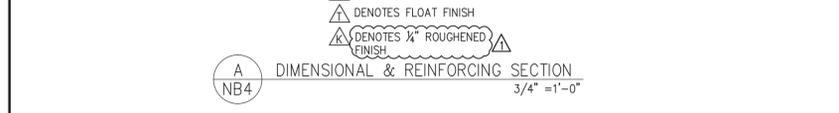
S:\Engineering Services\Carrara14002 Rochester BR 16 & 16\Production Drawings\AutoCAD Files\R-NB2.dwg, 5/8/2014 5:03:53 PM



1 NB4 DIMENSIONAL PLAN VIEW IN FORM  
1/4" = 1'-0"



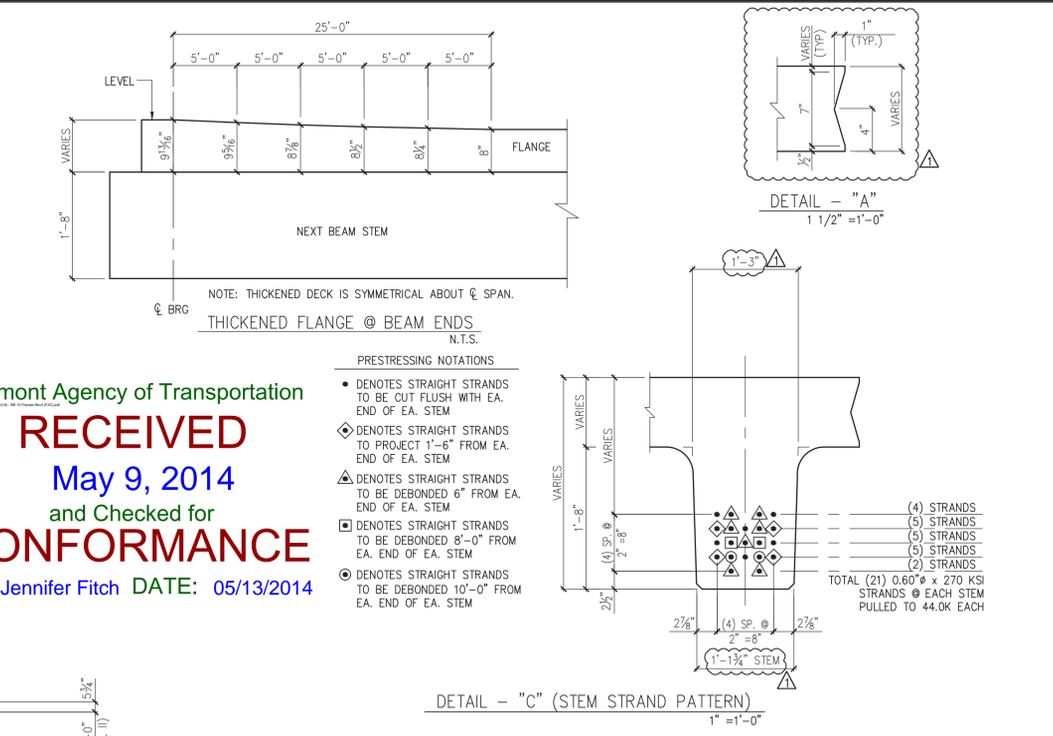
2 NB4 REINFORCING PLAN VIEW IN FORM  
1/4" = 1'-0"



A NB4 DIMENSIONAL & REINFORCING SECTION  
3/4" = 1'-0"



B NB4 END BLOCK STEM REINFORCING DETAILS  
3/4" = 1'-0"



Vermont Agency of Transportation  
**RECEIVED**  
ON: **May 9, 2014**  
and Checked for  
**CONFORMANCE**  
BY: Jennifer Fitch DATE: 05/13/2014

DETENSIONING SCHEDULE  
N.T.S.

5 1	3 7	8 4	2 6
15 9	13 11	18 12	14 10
25 19	23 21	28 22	24 20
35 29	33 31	38 32	34 30
39	41	42	40

**SHOP DRAWING REVIEW**

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**Vanasse Hangen Brustlin, Inc.** Job Number: 57526  
7056 US Route 7 North Ferrisburgh, VT 05473 Reviewed by: J.L. WESTCOTT  
802.425.7788 Date: 5/13/2014

MARK:	R-NB2	QTY.:	1	WT.:	49.7 T	VOL.:	24.12 cy
TOTAL WITH CURTAIN WALLS -		WT.:	57.7 T	VOL.:	32.48 cy		
MATERIAL LIST / NEXT BEAM							
ITEM	MARK	DESCRIPTION				QTY.	
1	R-401L	#4 BENT BAR (LEVEL II, DUAL COATED)			160		
2	R-402L	#4 BENT BAR (LEVEL II, DUAL COATED)			270		
3	R-403L	#4 BENT BAR (LEVEL II, DUAL COATED)			8		
4		#4 x 7'-2" (LEVEL II, DUAL COATED)			4		
5		#4 x 7'-6" (LEVEL II, DUAL COATED)			14		
6		#5 x 24'-0" (LEVEL II, DUAL COATED)			22		
7		#5 x 46'-3" (LEVEL II, DUAL COATED)			22		
8		#5 x 7'-2" (LEVEL II, DUAL COATED)			4		
9		#5 x 7'-6" (LEVEL II, DUAL COATED)			268		
10		#5 x 8'-1" (LEVEL II, DUAL COATED)			8		
11		#5 x 8'-4" (LEVEL II, DUAL COATED)			8		
12		#6 BENT BAR (LEVEL II, DUAL COATED)			16		

4/30/14 REVISE & RESUBMIT  
4/11/14 REVISE & RESUBMIT

APPROVAL STAMP:

**J.P. CARRARA & SONS INC.**  
Precast & Prestress Manufacturer  
284 CASE STR. MIDDLEBURY, VERMONT 05753 Phone: (802)388-6361 Fax: (802)388-9010

**W.M. SHULTZ CONSTRUCTION, INC.**  
PO BOX 2620  
BALLSTON SPA, NY 12020

STATE OF VERMONT AGENCY OF TRANSPORTATION  
COUNTY OF WINDSOR

TOWN OF ROCHESTER  
VT ROUTE 73 (RURAL MAJOR COLLECTOR)  
BRIDGE NO.: 15 PROJECT NO.: BRF 0162 (16)

DATE: MAR. 14, 2014  
SCALE: NOTED  
CHKD: DFTM: AAT/RWS JJ/KLT  
JOB NO: 23419-013  
DWG. NO: NB4

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TAMPA, FL LRFD.COM  
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**RECEIVED**  
 ON: **June 2, 2014**  
 and Checked for  
**CONFORMANCE**  
 BY: Jennifer Fitch DATE: 06/04/2014

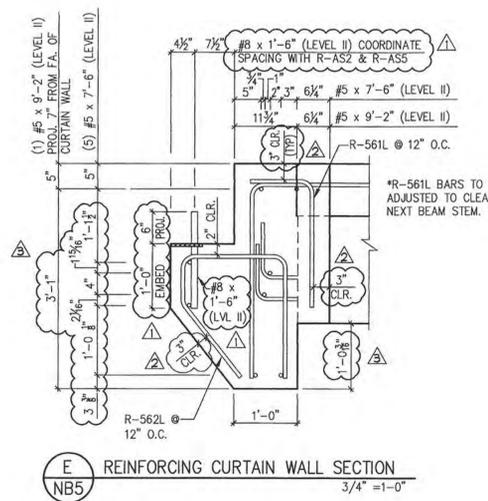
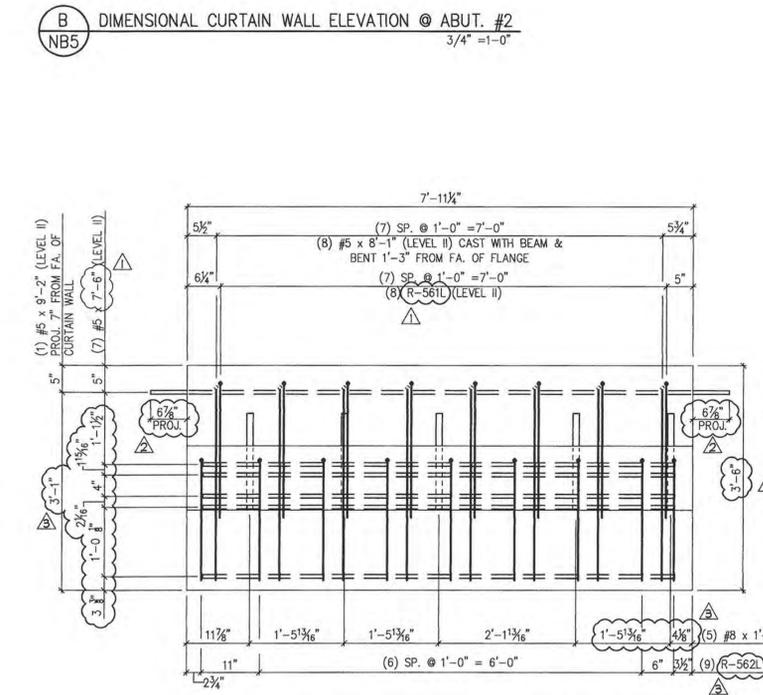
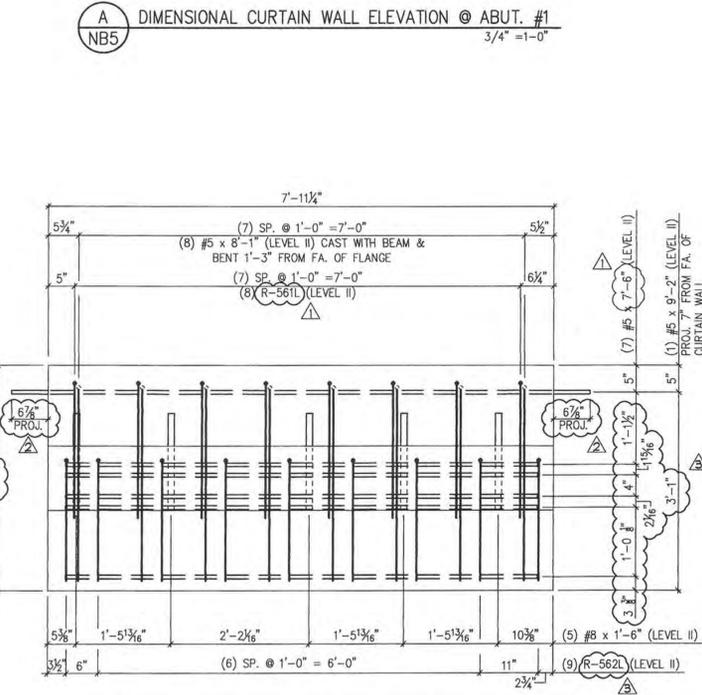
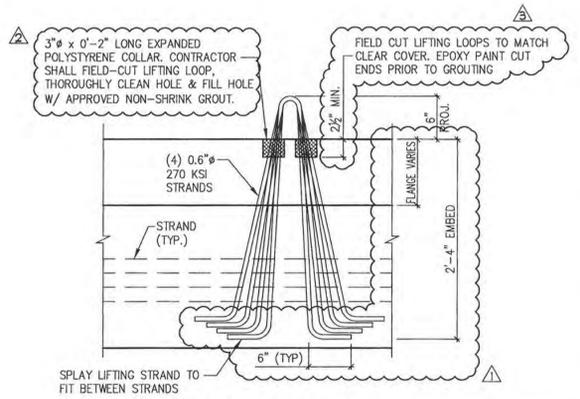
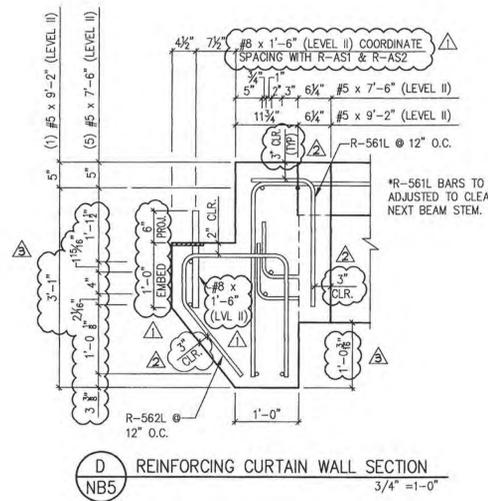
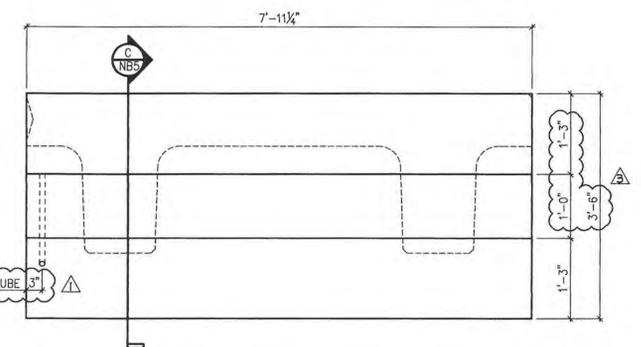
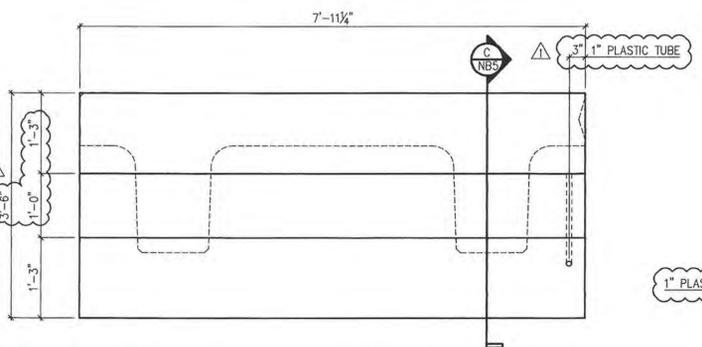
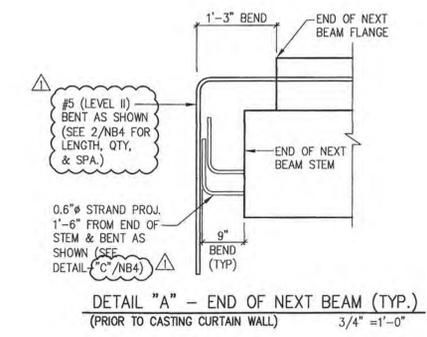
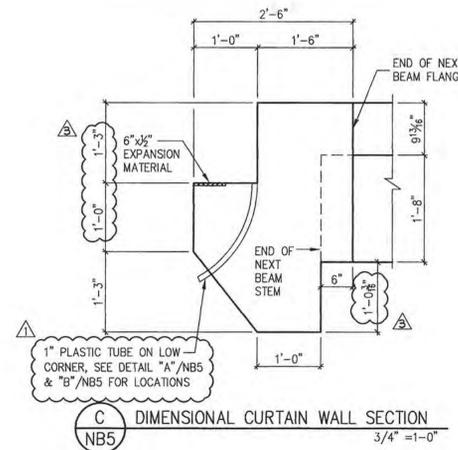
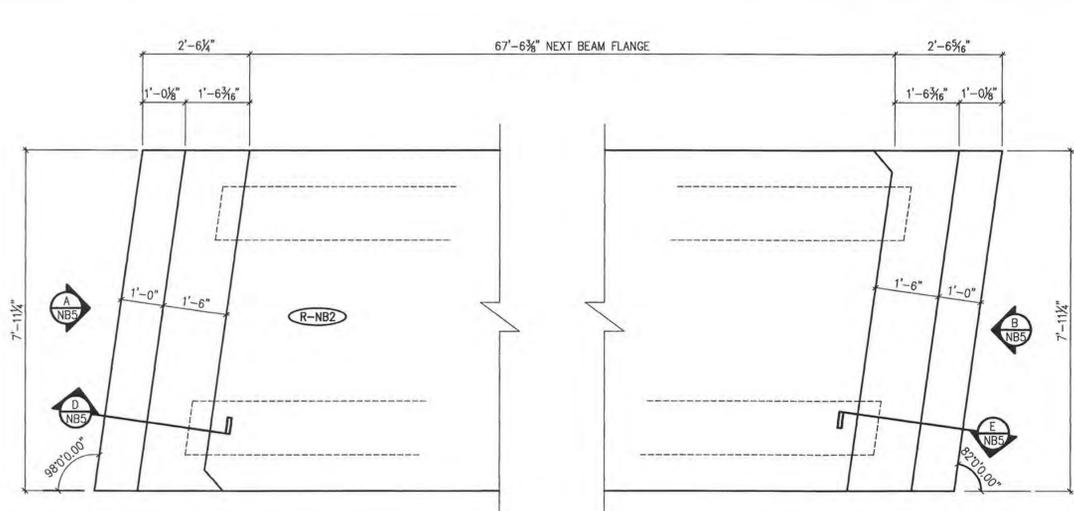
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**VHB** Vanasse Hangen Brustlin, Inc.  
 Job Number: 57526  
 Reviewed By: L. Charney  
 Date: 6-5-14



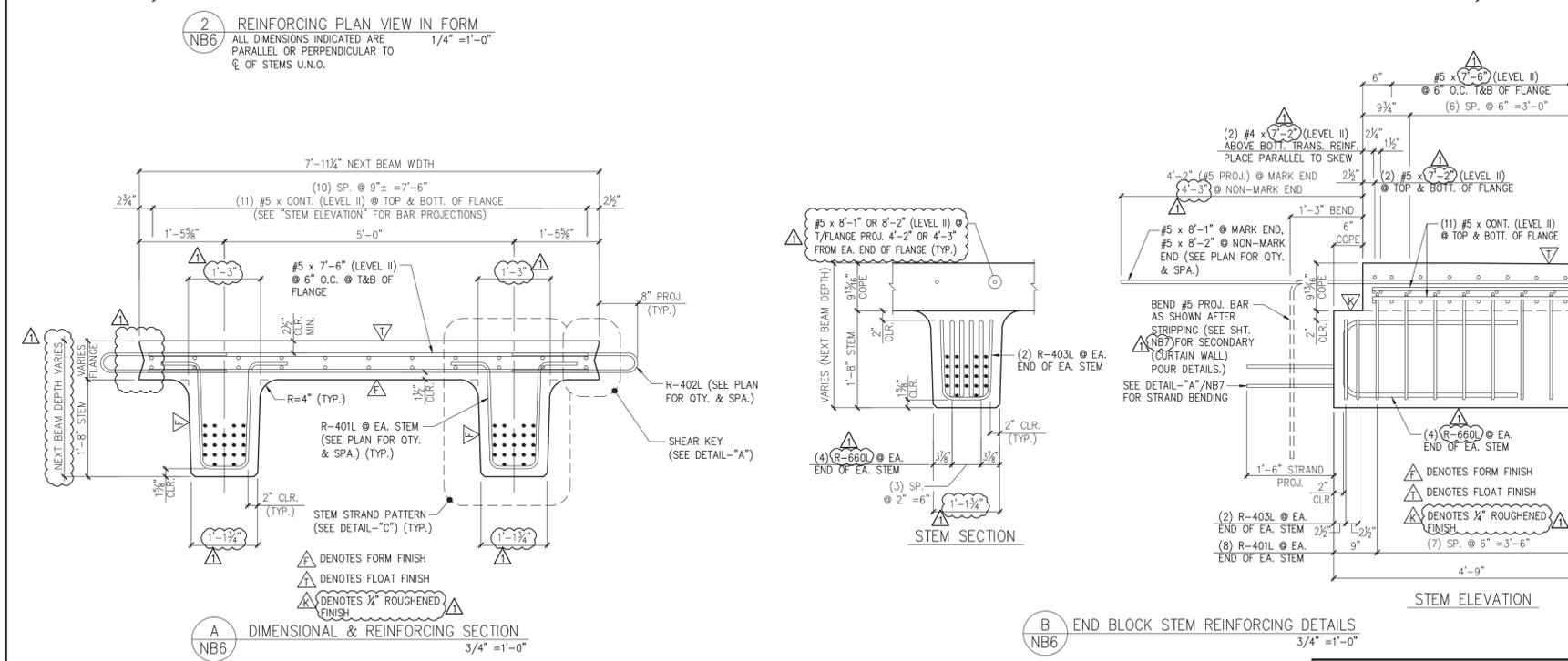
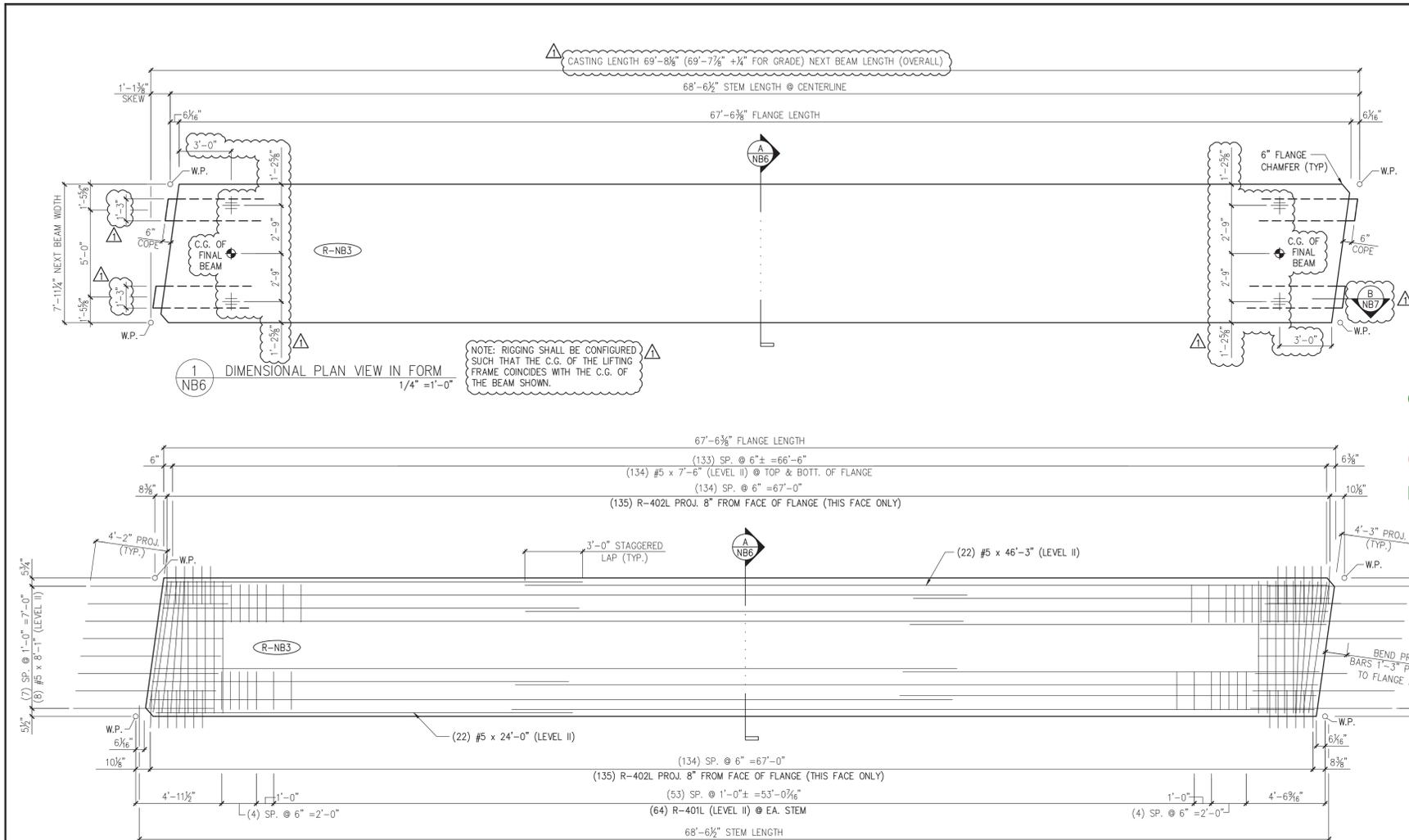
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<b>MATERIAL LIST / CURTAIN WALLS</b>							
ITEM	MARK	DESCRIPTION	QTY.				
1							
2							
3	R-561L	#5 BENT BAR (LEVEL II, DUAL COATED)	16				
4	R-562L	#5 BENT BAR (LEVEL II, DUAL COATED)	18				
5							
6							
7		#5 x 7'-6" (LEVEL II, DUAL COATED)	14				
8		#5 x 9'-2" (LEVEL II, DUAL COATED)	2				
9							
10		#8 x 1'-6" (LEVEL II, DUAL COATED)	10				
11							
12							
13		SET OF (4) 0.60" x 270 KSI STRAND LIFTING LOOPS	4				
14							
15		1" PLASTIC TUBE	2				

APPROVAL STAMP:  
 5/16/14 REVISE & RESUBMIT  
 4/30/14 REVISE & RESUBMIT  
 4/11/14 REVISE & RESUBMIT

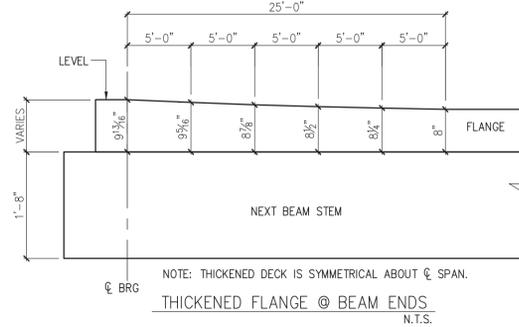
**J.P. CARRARA & SONS INC.** W.M. SCHULTZ CONSTRUCTION, INC.  
 Precast & Prestress Manufacturer PO BOX 2620  
 2484 CASE ST., MIDDLEBURY, VERMONT 05753 Phone: (802)388-6361 Fax: (802)388-9010 BALLSTON SPA, NY 12020

STATE OF VERMONT AGENCY OF TRANSPORTATION COUNTY OF WINDSOR DATE: MAR. 14, 2014  
 TOWN OF ROCHESTER VT ROUTE 73 (RURAL MAJOR COLLECTOR) CHKD: DFTM: AAT/RWS  
 BRIDGE NO.: 15 PROJECT NO.: BRF 0162(16) JOB NO: 23419-013  
 DWG. NO: NB5

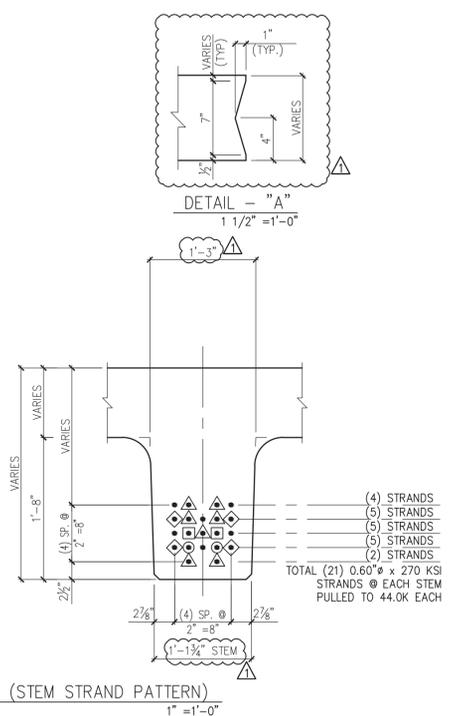
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 TAMPA, FL  
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Vermont Agency of Transportation  
**RECEIVED**  
 ON: **May 9, 2014**  
 and Checked for  
**CONFORMANCE**  
 BY: **Jennifer Fitch** DATE: **05/13/2014**



- PRESTRESSING NOTATIONS
- DENOTES STRAIGHT STRANDS TO BE CUT FLUSH WITH EA. END OF EA. STEM
  - ◊ DENOTES STRAIGHT STRANDS TO PROJECT 1'-6\"/>



DETENSIONING SCHEDULE N.T.S.

51	37	84	26
159	117	181	101
259	217	282	209
359	317	382	309
39	41	42	40

**SHOP DRAWING REVIEW**

REVIEWED AS REQUIRED BY THE CONSTRUCTION CONTRACT DOCUMENTS AND APPROVED, BUT ONLY FOR CONFORMANCE TO THE DESIGN CONCEPT OF THE WORK, AND SUBJECT TO FURTHER LIMITATIONS AND REQUIREMENTS CONTAINED IN THE CONSTRUCTION CONTRACT DOCUMENTS

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**Vanasse Hangen Brustlin, Inc.**  
 7056 US Route 7  
 North Ferrisburgh, VT 05473  
 802.425.7788

Job Number: 57526  
 Reviewed By: J.J. WESTCOTT  
 Date: 5/13/2014

MARK:	R-NB3	QTY.:	1	WT.:	49.7 T	VOL.:	24.12 cy
TOTAL WITH CURTAIN WALLS -		WT.:	57.7 T	VOL.:	32.48 cy		
MATERIAL LIST / NEXT BEAM							
ITEM	MARK	DESCRIPTION				QTY.	
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11		#5 x 8'-4" (LEVEL II, DUAL COATED)				8	
12		#5 x 8'-1" (LEVEL II, DUAL COATED)				8	
13		#5 x 8'-4" (LEVEL II, DUAL COATED)				8	
14							
15							
16	R-660L	#6 BENT BAR (LEVEL II, DUAL COATED)				16	

4/30/14 REVISE & RESUBMIT  
 4/11/14 REVISE & RESUBMIT

APPROVAL STAMP:  
 STATE OF VERMONT AGENCY OF TRANSPORTATION  
 COUNTY OF WINDSOR  
 TOWN OF ROCHESTER  
 VT ROUTE 73 (RURAL MAJOR COLLECTOR)  
 BRIDGE NO.: 15 PROJECT NO.: BRF 0162 (16)

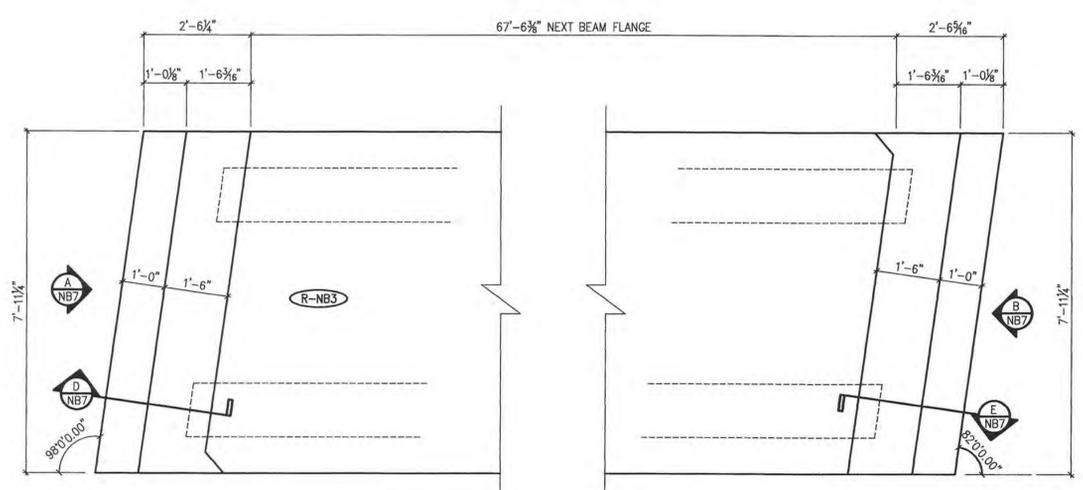
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 PO BOX 2620  
 BALLSTON SPA, NY 12020

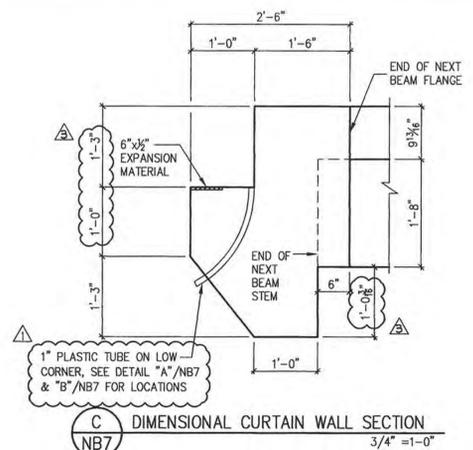
DATE: MAR. 14, 2014  
 SCALE: NOTED  
 CHKD: DFTM/AAT/RWS  
 JJ/KLT  
 JOB NO: 23419-013  
 DWG. NO: NB6

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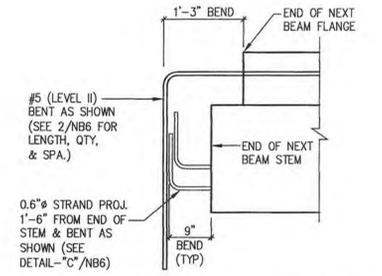
**RECEIVED**  
 ON: **June 2, 2014**  
 and Checked for  
**CONFORMANCE**  
 BY: **Jennifer Fitch** DATE: **06/04/2014**



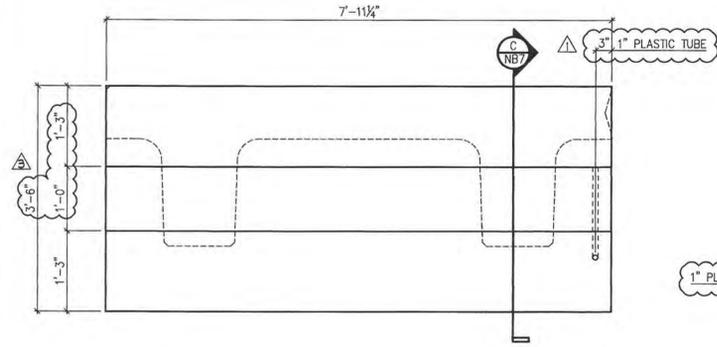
**1 CURTAIN WALL PLAN VIEW IN FORM**  
 NB7 (CAST AS SECONDARY POUR, AFTER DETENSIONING) 1/2" = 1'-0"



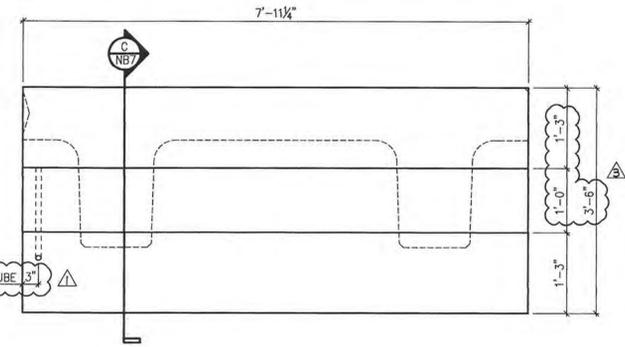
**C DIMENSIONAL CURTAIN WALL SECTION**  
 NB7 3/4" = 1'-0"



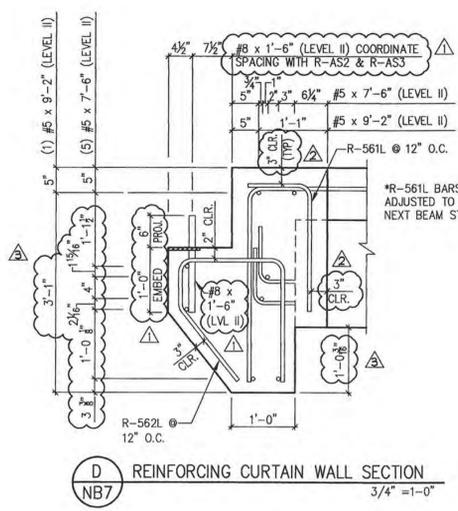
**DETAIL "A" - END OF NEXT BEAM (TYP.)**  
 (PRIOR TO CASTING CURTAIN WALL) 3/4" = 1'-0"



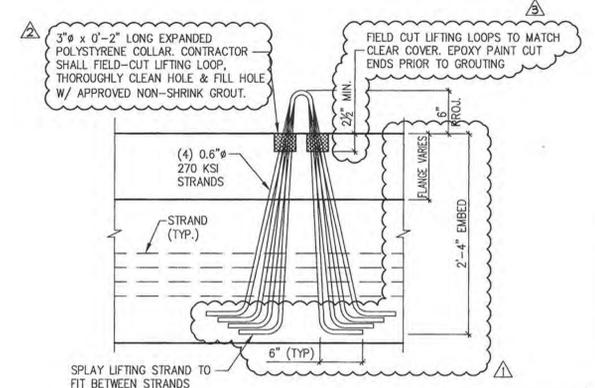
**A DIMENSIONAL CURTAIN WALL ELEVATION @ ABUT. #1**  
 NB7 3/4" = 1'-0"



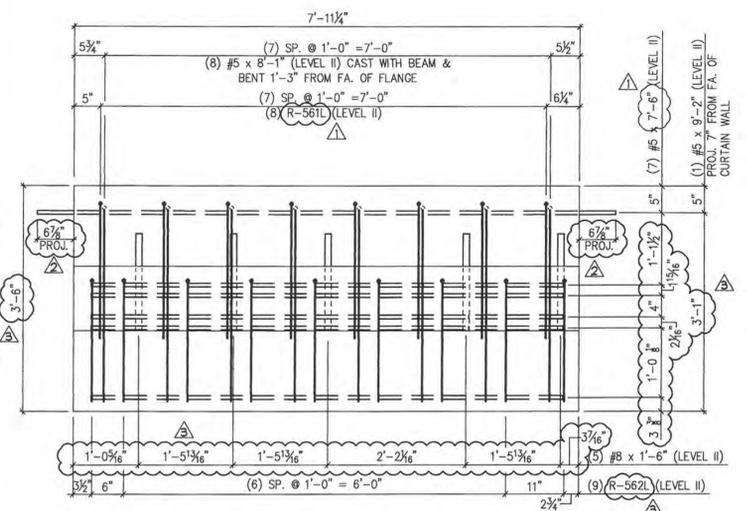
**B DIMENSIONAL CURTAIN WALL ELEVATION @ ABUT. #2**  
 NB7 3/4" = 1'-0"



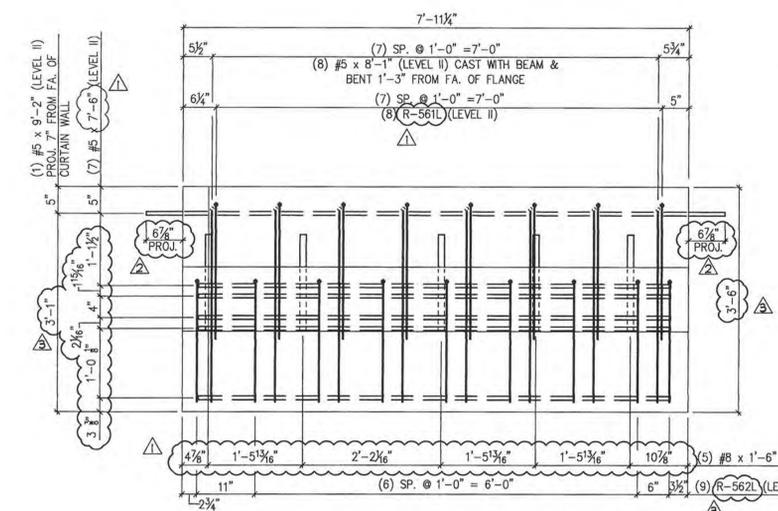
**D REINFORCING CURTAIN WALL SECTION**  
 NB7 3/4" = 1'-0"



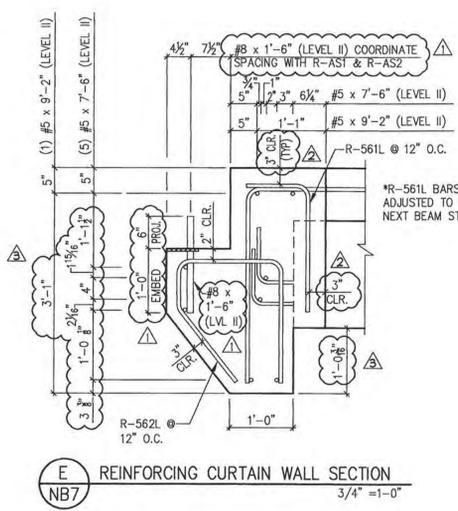
**TYPICAL LIFTING DETAIL**  
 SCALE: 1" = 1'-0"  
 NOTE: OTHER REINF. NOT SHOWN FOR CLARITY.



**A REINFORCING CURTAIN WALL ELEVATION @ ABUT. #1**  
 NB7 3/4" = 1'-0"



**B REINFORCING CURTAIN WALL ELEVATION @ ABUT. #2**  
 NB7 3/4" = 1'-0"



**E REINFORCING CURTAIN WALL SECTION**  
 NB7 3/4" = 1'-0"

MARK:	R-NB3	QTY.:	1	WT.:	7.9 T	VOL.:	3.88 cy
MATERIAL LIST / CURTAIN WALLS							
ITEM	MARK	DESCRIPTION	QTY.				
1							
2							
3	R-561L	#5 BENT BAR (LEVEL II, DUAL COATED)	16				
4	R-562L	#5 BENT BAR (LEVEL II, DUAL COATED)	18				
5							
6							
7		#5 x 7'-6" (LEVEL II, DUAL COATED)	14				
8		#5 x 9'-2" (LEVEL II, DUAL COATED)	2				
9							
10		#8 x 1'-6" (LEVEL II, DUAL COATED)	10				
11							
12							
13		SET OF (4) 0.60" x 270 KSI STRAND LIFTING LOOPS	4				
14							
15		1" PLASTIC TUBE	2				

APPROVAL STAMP:  
 5/16/14 REVISE & RESUBMIT  
 4/30/14 REVISE & RESUBMIT  
 4/11/14 REVISE & RESUBMIT

**J.P. CARRARA & SONS INC.** W.M. SCHULTZ CONSTRUCTION, INC.  
 Precast & Prestress Manufacturer PO BOX 2620  
 2664 CURE STR., MIDDLEBURY, VERMONT 05753 Phone: (802)388-6361 Fax: (802)388-9010 BALLSTON SPA, NY 12020

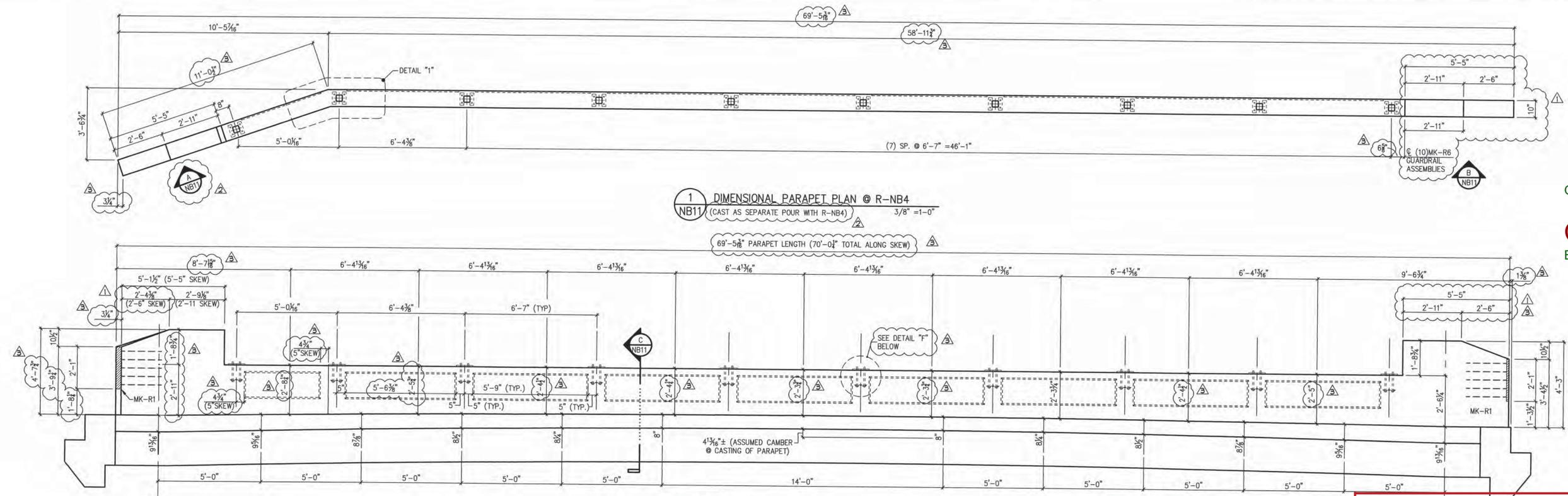
STATE OF VERMONT AGENCY OF TRANSPORTATION COUNTY OF WINDSOR DATE: MAR. 14, 2014  
 TOWN OF ROCHESTER VT ROUTE 73 (RURAL MAJOR COLLECTOR) CHKD: DFTM, AAT/RWS  
 BRIDGE NO.: 15 PROJECT NO.: BRF 0162(16) SCALE: NOTED  
 JOB NO: 23419-013  
 DWG. NO: NB7







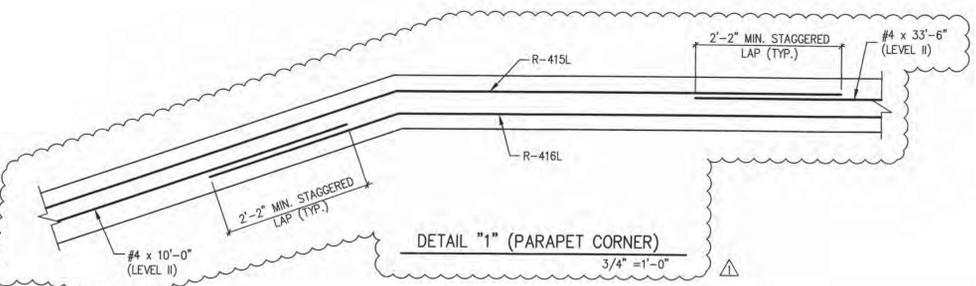
Vermont Agency of Transportation  
**RECEIVED**  
 ON: June 19, 2014  
 and Checked for  
**CONFORMANCE**  
 BY: Jennifer Fitch DATE: 06/20/2014



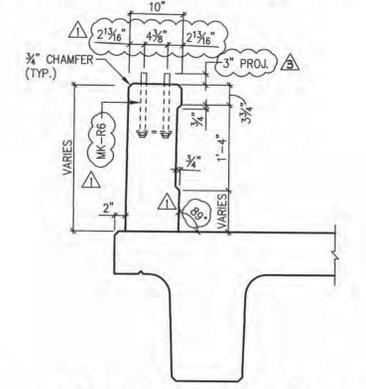
1 DIMENSIONAL PARAPET PLAN @ R-NB4  
 NB11 (CAST AS SEPARATE POUR WITH R-NB4) 3/8" = 1'-0"



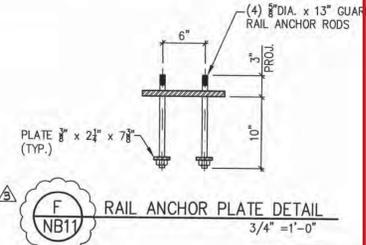
2 DIMENSIONAL PARAPET ELEVATION @ R-NB4  
 NB11 (CAST AS SEPARATE POUR WITH R-NB4) 3/8" = 1'-0"



DETAIL '1' (PARAPET CORNER)  
 3/4" = 1'-0"



C DIMENSIONAL PARAPET SECTION  
 3/4" = 1'-0"



F RAIL ANCHOR PLATE DETAIL  
 3/4" = 1'-0"

**SHOP DRAWING REVIEW**

REVIEWED AS REQUIRED BY THE CONSTRUCTION CONTRACT DOCUMENTS AND APPROVED, BUT ONLY FOR CONFORMANCE TO THE DESIGN CONCEPT OF THE WORK, AND SUBJECT TO FURTHER LIMITATIONS AND REQUIREMENTS CONTAINED IN THE CONSTRUCTION CONTRACT DOCUMENTS.

REJECTED  REVISE AND RESUBMIT  FURNISH AS CORRECTED

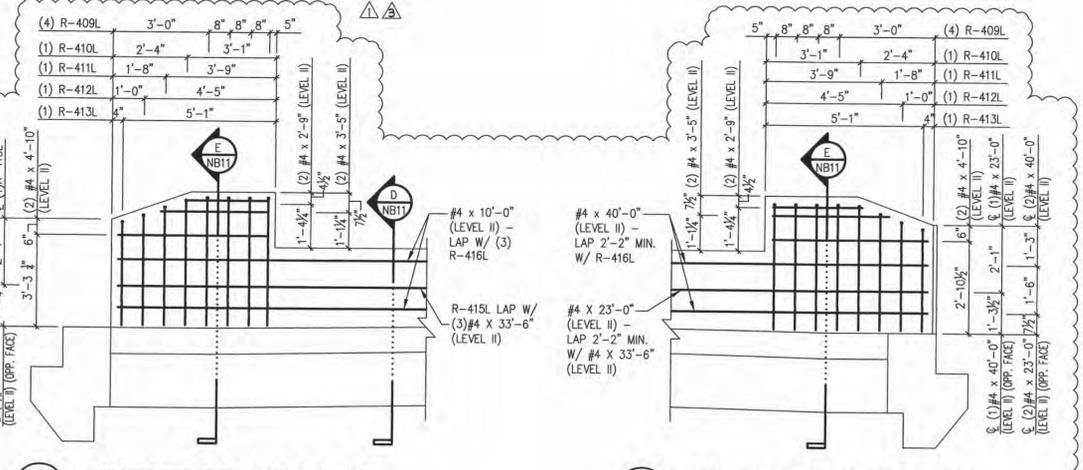
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JUN 11 2014

**VHB** Job Number: 57526  
 Reviewed By: B. Masse  
 Date: 6-19-14

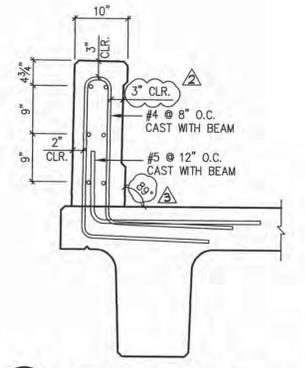
J.P. CARRARA & SONS, INC.  
 MIDDLEBURY, VT 05753

ITEM	MARK	DESCRIPTION	QTY.
1	R-409L	#4 BENT BAR (LEVEL II, DUAL COATED)	8
2	R-410L	#4 BENT BAR (LEVEL II, DUAL COATED)	2
3	R-411L	#4 BENT BAR (LEVEL II, DUAL COATED)	2
4	R-412L	#4 BENT BAR (LEVEL II, DUAL COATED)	2
5	R-413L	#4 BENT BAR (LEVEL II, DUAL COATED)	2
6	R-415L	#4 BENT BAR (LEVEL II, DUAL COATED)	3
7	R-416L	#4 BENT BAR (LEVEL II, DUAL COATED)	3
8			
9		#4 x 2'-9" (LEVEL II, DUAL COATED)	4
10		#4 x 3'-5" (LEVEL II, DUAL COATED)	4
11		#4 x 4'-10" (LEVEL II, DUAL COATED)	4
12		#4 x 10'-0" (LEVEL II, DUAL COATED)	3
13		#4 x 23'-0" (LEVEL II, DUAL COATED)	3
14		#4 x 33'-6" (LEVEL II, DUAL COATED)	3
15		#4 x 40'-0" (LEVEL II, DUAL COATED)	3
16			
17	MK-R1	R 10"x1/2"x2'-1" LONG STEEL ANCHOR PLATE	2
18	MK-R6	GUARDRAIL ASSEMBLY (SUPPLIED BY CONTR. AND INSTALLED BY CARRARA)	10

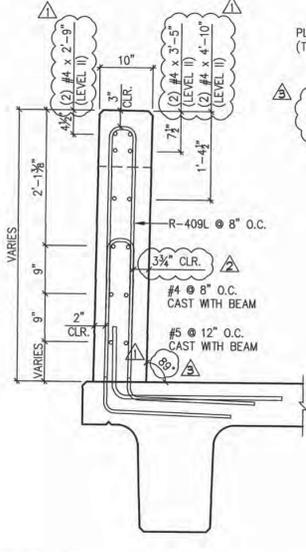


A PARAPET END ELEVATION @ R-NB4  
 NB11 3/8" = 1'-0"

B PARAPET END ELEVATION @ R-NB4  
 NB11 3/8" = 1'-0"



D REINFORCING @ PARAPET  
 NB11 3/4" = 1'-0"



E REINFORCING @ PARAPET  
 NB11 3/4" = 1'-0"

APPROVAL STAMP:  
 6/10/14 REVISED AS NOTED  
 4/30/14 REVISE & RESUBMIT  
 4/11/14 REVISE & RESUBMIT

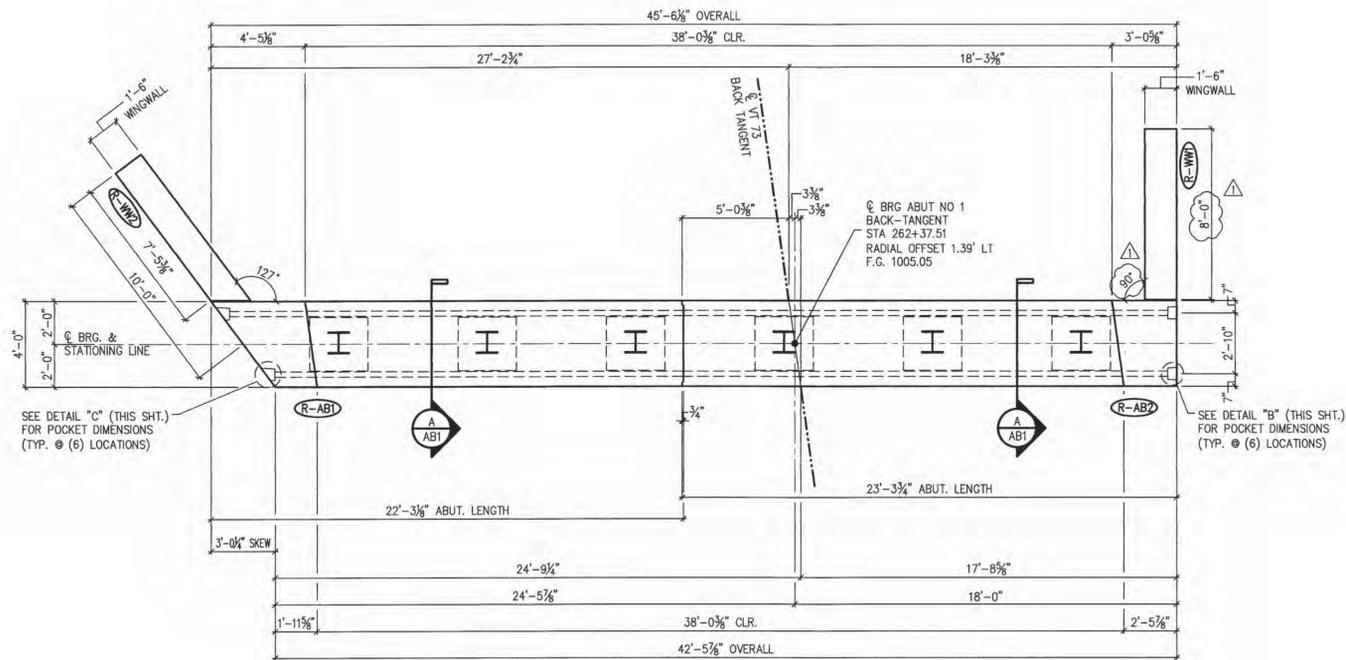
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 Precast & Prestress Manufacturer P.O. BOX 2620  
 2464 GEE ST., MIDDLEBURY, VERMONT 05753 Phone: (802)388-6361 Fax: (802)388-9010 BALLSTON SPA, NY 12020

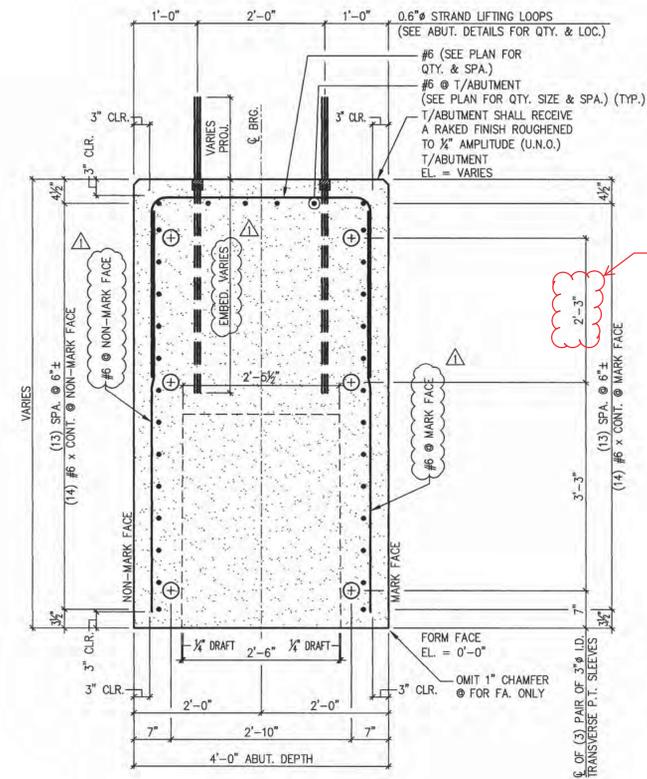
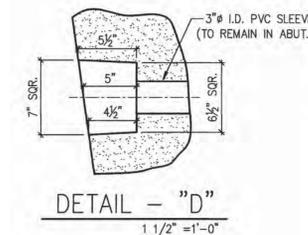
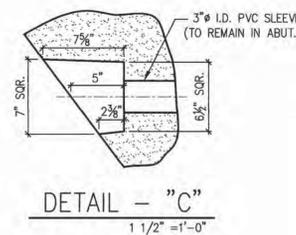
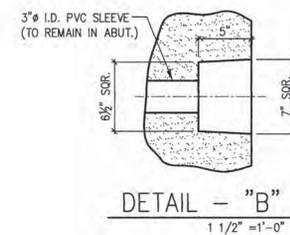
STATE OF VERMONT AGENCY OF TRANSPORTATION COUNTY OF WINDSOR DATE: MAR. 14, 2014  
 SCALE: NOTED

TOWN OF ROCHESTER VT ROUTE 73 (RURAL MAJOR COLLECTOR) CHKD: DFTM, AAT/RWS, JJJ/KLT  
 BRIDGE NO.: 15 PROJECT NO.: BRF 0162(16) JOB NO: 23419-013

DWG. NO: NB11



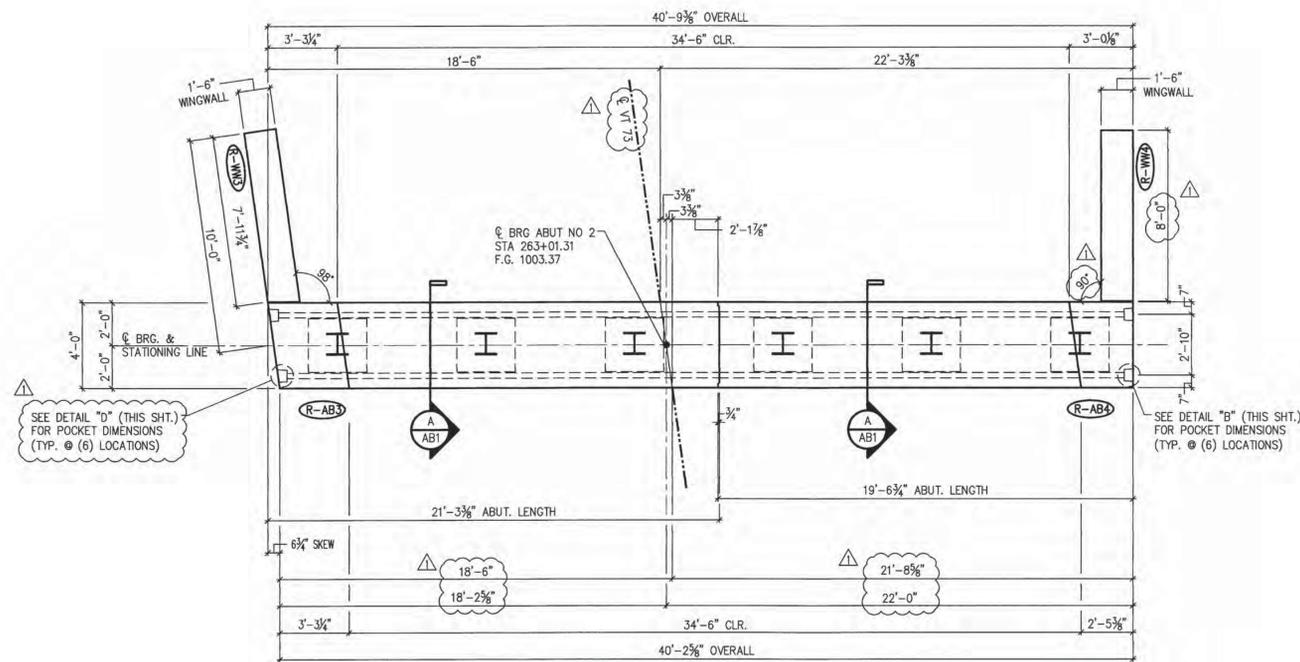
1 ABUTMENT ASSEMBLY PLAN  
1/4" = 1'-0"



A ABUTMENT SECTION  
3/4" = 1'-0"

SHOP NOTE:  
ALL EDGES OF ABUTMENT SHALL  
RECEIVE A 1" CHAMFER (U.N.O.)

2'-0" at Abut. 1  
2'-3" at Abut. 2



2 ABUTMENT ASSEMBLY PLAN  
1/4" = 1'-0"

Vermont Agency of Transportation

**RECEIVED**

ON: **June 3, 2014**

and Checked for

**CONFORMANCE**

BY: Jennifer Fitch DATE: 06/04/2014

**SHOP DRAWING REVIEW**

REVIEWED AS REQUIRED BY THE CONSTRUCTION CONTRACT DOCUMENTS AND APPROVED, BUT ONLY FOR CONFORMANCE TO THE DESIGN CONCEPT OF THE WORK, AND SUBJECT TO FURTHER LIMITATIONS AND REQUIREMENTS CONTAINED IN THE CONSTRUCTION CONTRACT DOCUMENTS.

REJECTED  REVISE AND RESUBMIT  FURNISH AS CORRECTED

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**VHB** Job Number: 57526  
Reviewed By: L. Chervinsky  
Date: 6-3-14

SUBMITTED

JUN 3 2014

J. P. CARRARA & SONS, INC.  
MIDDLEBURY, VT 05753

5/30/14 REVISED AS NOTED  
4/11/14 REVISE & RESUBMIT

APPROVAL STAMP:

**J.P. CARRARA & SONS INC.** W.M. SCHULTZ CONSTRUCTION, INC.  
Precast & Prestress Manufacturer PO BOX 2620  
2404 CASE STR., MIDDLEBURY, VERMONT 05753 Phone:(802)388-6361 Fax:(802)388-9010 BALLSTON SPA, NY 12020

STATE OF VERMONT AGENCY OF TRANSPORTATION  
COUNTY OF WINDSOR

DATE: MAR. 14, 2014

SCALE: NOTED

TOWN OF ROCHESTER  
VT ROUTE 73 (RURAL MAJOR COLLECTOR)  
BRIDGE NO.: 15 PROJECT NO.: BRF 0162(16)

CHKD: DFTM: AAT/RWS  
JJA/KLT

JOB NO: 23419-013

PRECAST ABUTMENT  
PLAN, SECTION & DETAILS

DWG. NO: AB1

**Eriksson**  
technologies

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TAMPA, FL

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**RECEIVED**

ON: **June 3, 2014**

and Checked for

**CONFORMANCE**

BY: **Jennifer Fitch** DATE: **06/04/2014**

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 REJECTED  REVISE AND RESUBMIT  FURNISH AS CORRECTED

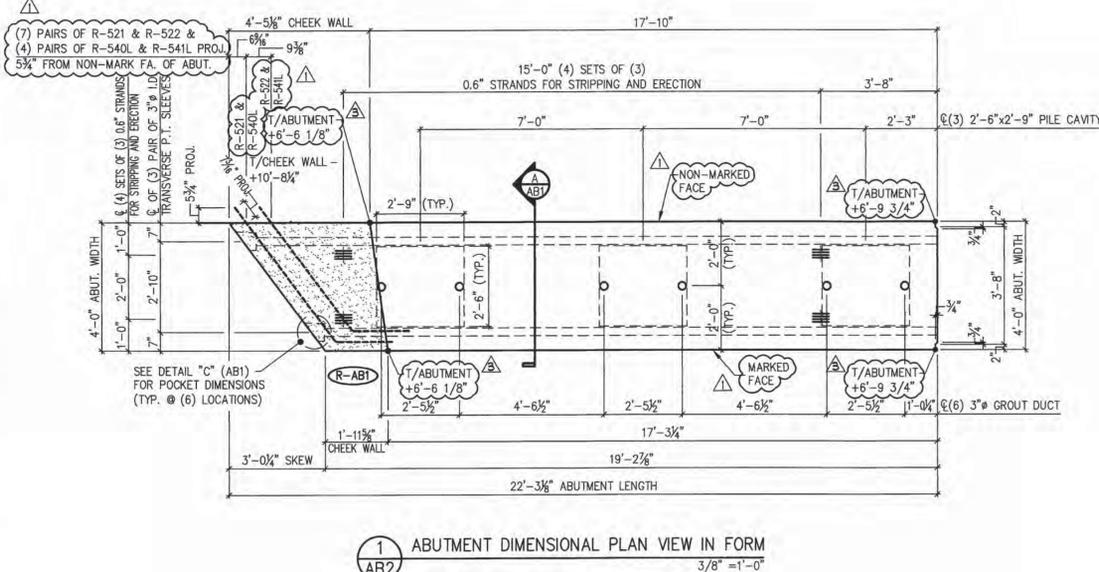
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**VHB** Job Number: 37926  
 Reviewed By: L. Chernivsky  
 Date: 6-3-14

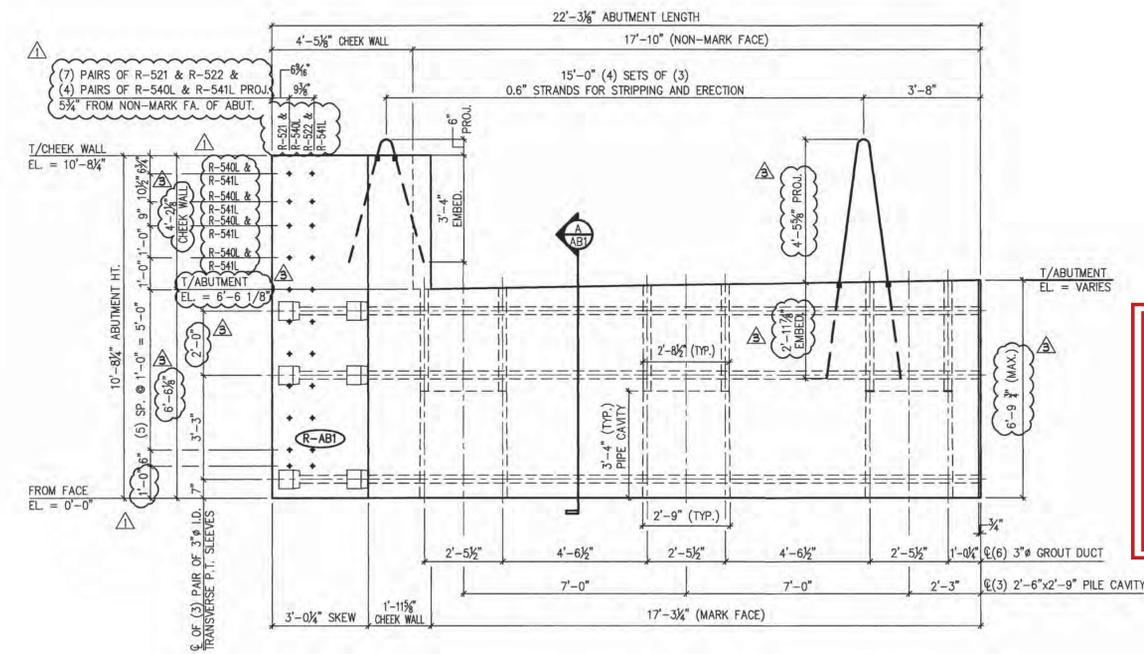
SUBMITTED

JUN 3 2014

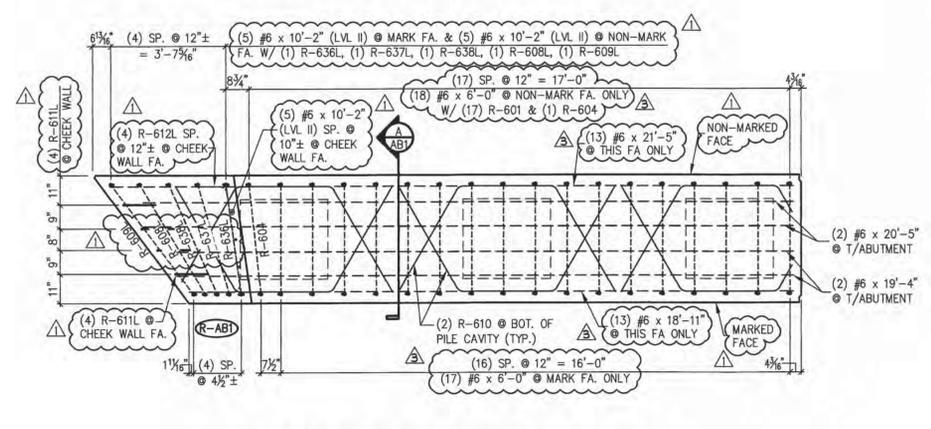
J. P. CARRARA & SONS, INC.  
 MIDDLEBURY, VT 05753



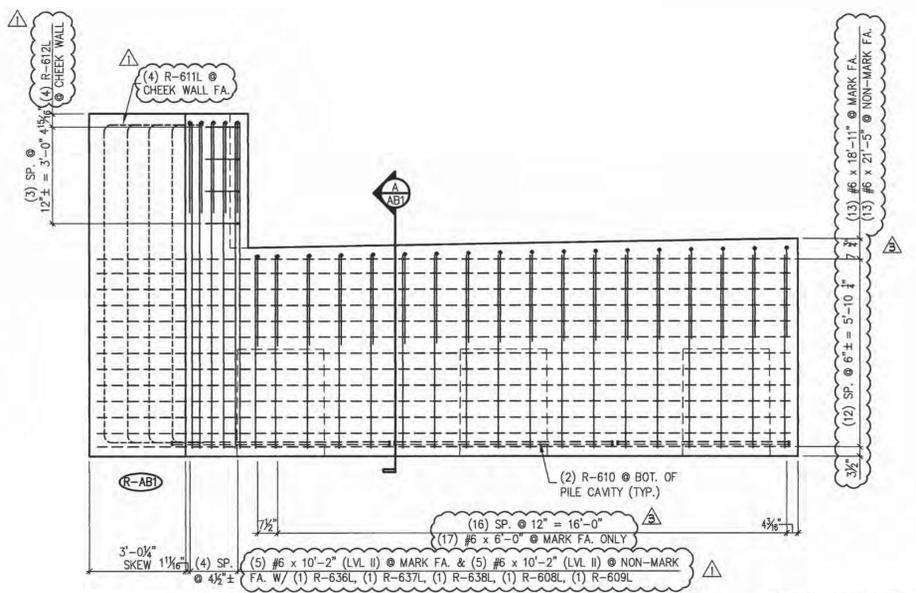
1 ABUTMENT DIMENSIONAL PLAN VIEW IN FORM  
 3/8" = 1'-0"



2 ABUTMENT DIMENSIONAL MARK FACE ELEVATION  
 3/8" = 1'-0"



3 ABUTMENT REINFORCING PLAN VIEW IN FORM  
 3/8" = 1'-0"



4 ABUTMENT REINFORCING MARK FACE ELEV.  
 3/8" = 1'-0"

- △ 5/30/14 REVISED AS NOTED
- △ 4/30/14 REVISE & RESUBMIT
- △ 4/11/14 REVISE & RESUBMIT

MARK:	R-ABI	QTY.:	1	WT.:	42.7 T	VOL.:	23.4 cy
<b>MATERIAL LIST / ABUTMENT</b>							
ITEM	MARK	DESCRIPTION	QTY.				
1	R-521	#5 BENT BAR (LEVEL I, BLACK REINFORCEMENT)	7				
2	R-522	#5 BENT BAR (LEVEL I, BLACK REINFORCEMENT)	7				
3	R-540L	#5 BENT BAR (LEVEL II, DUAL COATED)	4				
4	R-541L	#5 BENT BAR (LEVEL II, DUAL COATED)	4				
5							
6							
7							
8							
9							
10	R-601	#6 BENT BAR (LEVEL I, BLACK REINFORCEMENT)	17				
11	R-604	#6 BENT BAR (LEVEL I, BLACK REINFORCEMENT)	1				
12	R-608L	#6 BENT BAR (LEVEL II, DUAL COATED)	1				
13	R-609L	#6 BENT BAR (LEVEL II, DUAL COATED)	1				
14	R-610	#6 BENT BAR (LEVEL I, BLACK REINFORCEMENT)	6				
15	R-611L	#6 BENT BAR (LEVEL II, DUAL COATED)	2				
16	R-612L	#6 BENT BAR (LEVEL II, DUAL COATED)	4				
17	R-636L	#6 BENT BAR (LEVEL II, DUAL COATED)	1				
18	R-637L	#6 BENT BAR (LEVEL II, DUAL COATED)	1				
19	R-638L	#6 BENT BAR (LEVEL II, DUAL COATED)	1				
20							
21		#6 x 6'-0" (LEVEL I, BLACK REINFORCEMENT)	35				
22		#6 x 10'-2" (LEVEL II, DUAL COATED)	15				
23		#6 x 10'-11" (LEVEL I, BLACK REINFORCEMENT)	13				
24		#6 x 19'-4" (LEVEL I, BLACK REINFORCEMENT)	2				
25		#6 x 20'-5" (LEVEL I, BLACK REINFORCEMENT)	2				
26		#6 x 21'-5" (LEVEL I, BLACK REINFORCEMENT)	13				
27							
28		SET OF (4) 0.60" x 270 KSI STRAND LIFTING LOOPS	4				

APPROVAL STAMP:

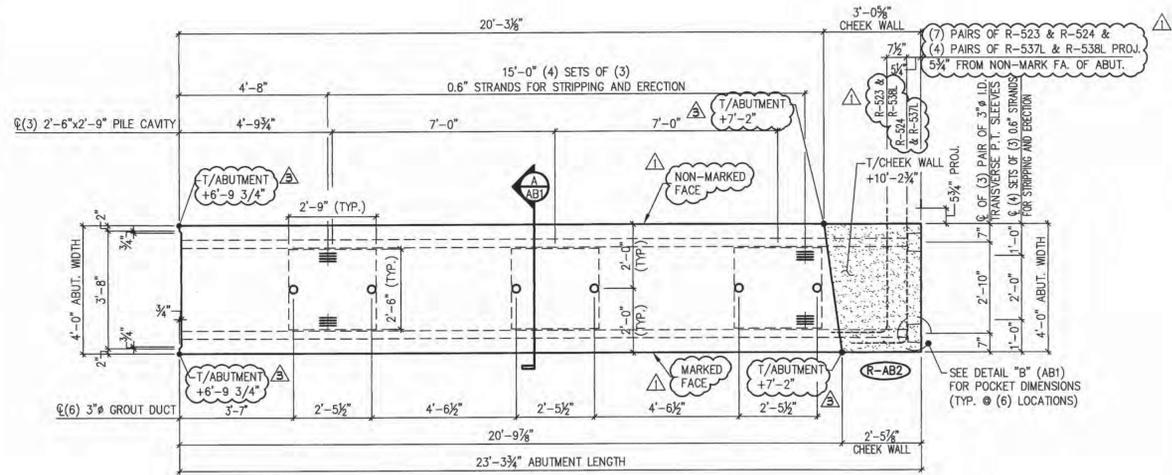
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 Precast & Prestress Manufacturer PO BOX 2620  
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STATE OF VERMONT AGENCY OF TRANSPORTATION COUNTY OF WINDSOR DATE: MAR. 14, 2014  
 SCALE: NOTED

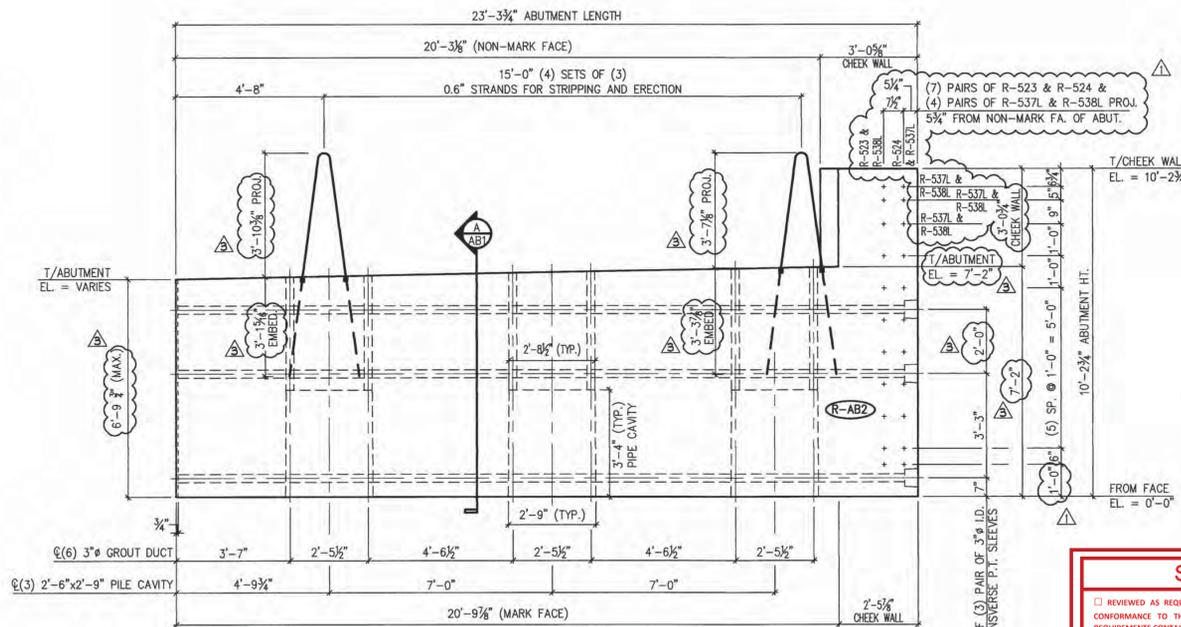
TOWN OF ROCHESTER VT ROUTE 73 (RURAL MAJOR COLLECTOR) CHKD: DFTM: AAT/RWS JJ/JLT  
 BRIDGE NO.: 15 PROJECT NO.: BRF 0162(16) JOB NO: 23419-013

PRECAST ABUTMENT DETAILS DWG. NO: AB2

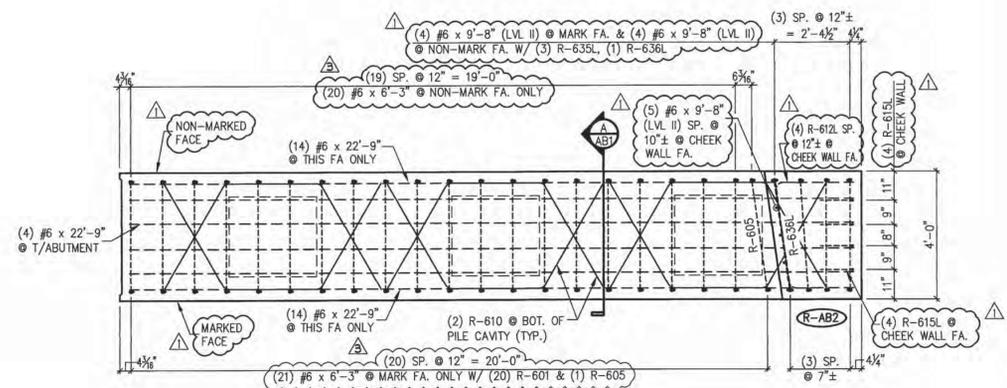
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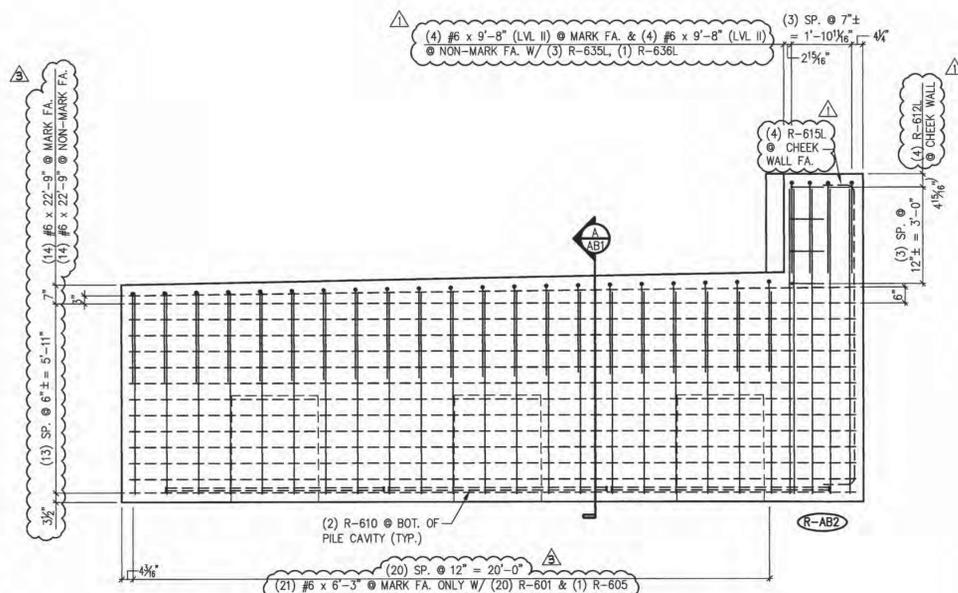
1 ABUTMENT DIMENSIONAL PLAN VIEW IN FORM  
3/8" = 1'-0"



2 ABUTMENT DIMENSIONAL MARK FACE ELEVATION  
3/8" = 1'-0"



3 ABUTMENT REINFORCING PLAN VIEW IN FORM  
3/8" = 1'-0"



4 ABUTMENT REINFORCING MARK FACE ELEV.  
3/8" = 1'-0"

- △ 5/30/14 REVISED AS NOTED
- △ 4/30/14 REVISE & RESUBMIT
- △ 4/11/14 REVISE & RESUBMIT

Vermont Agency of Transportation  
**RECEIVED**  
ON: **June 3, 2014**  
and Checked for  
**CONFORMANCE**  
BY: Jennifer Fitch DATE: 06/04/2014

SHOP DRAWING REVIEW

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**VHB** Job Number: 57526  
Reviewed By: L.Chervinsky  
Date: 6-3-14

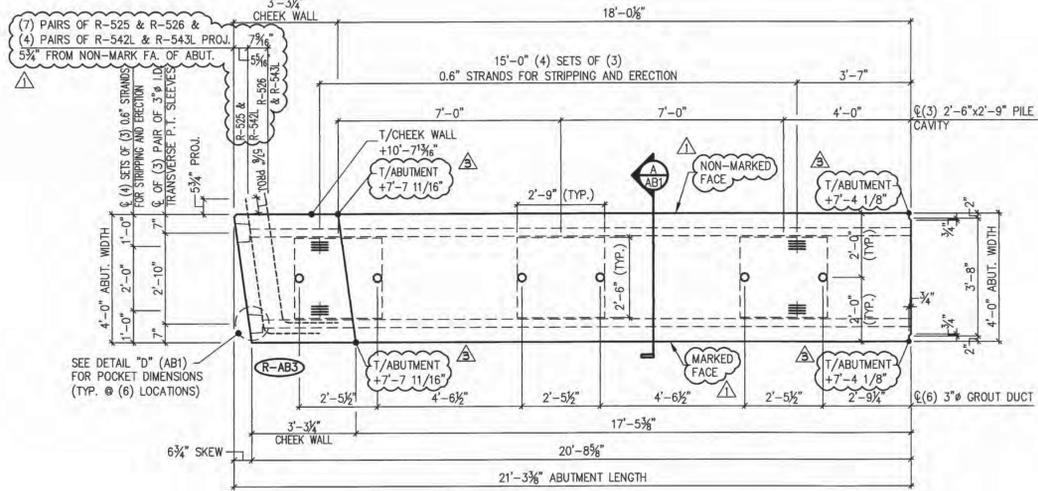
SUBMITTED  
JUN 3 2014  
J.P. CARRARA & SONS, INC.  
MIDDLEBURY, VT 05753

MARK:	R-AB2	QTY.:	1	WT.:	47.6 T	VOL.:	25.79 cy
MATERIAL LIST / ABUTMENT							
ITEM	MARK	DESCRIPTION	QTY.				
1	R-523	#5 BENT BAR (LEVEL I, BLACK REINFORCEMENT)	7				
2	R-524	#5 BENT BAR (LEVEL I, BLACK REINFORCEMENT)	7				
3	R-537L	#5 BENT BAR (LEVEL II, DUAL COATED)	4				
4	R-538L	#5 BENT BAR (LEVEL II, DUAL COATED)	4				
5							
6	R-601	#6 BENT BAR (LEVEL I, BLACK REINFORCEMENT)	20				
7	R-605	#6 BENT BAR (LEVEL I, BLACK REINFORCEMENT)	1				
8	R-610	#6 BENT BAR (LEVEL I, BLACK REINFORCEMENT)	6				
9	R-612L	#6 BENT BAR (LEVEL II, DUAL COATED)	4				
10	R-615L	#6 BENT BAR (LEVEL II, DUAL COATED)	4				
11	R-635L	#6 BENT BAR (LEVEL II, DUAL COATED)	3				
12	R-636L	#6 BENT BAR (LEVEL II, DUAL COATED)	1				
13							
14							
15							
16							
17		#6 x 6'-3" (LEVEL I, BLACK REINFORCEMENT)	42				
18		#6 x 9'-8" (LEVEL II, DUAL COATED)	15				
19		#6 x 22'-9" (LEVEL I, BLACK REINFORCEMENT)	20				
20							
21		SET OF (4) 0.60" x 270 KSI STRAND LIFTING LOOPS	3				
22							

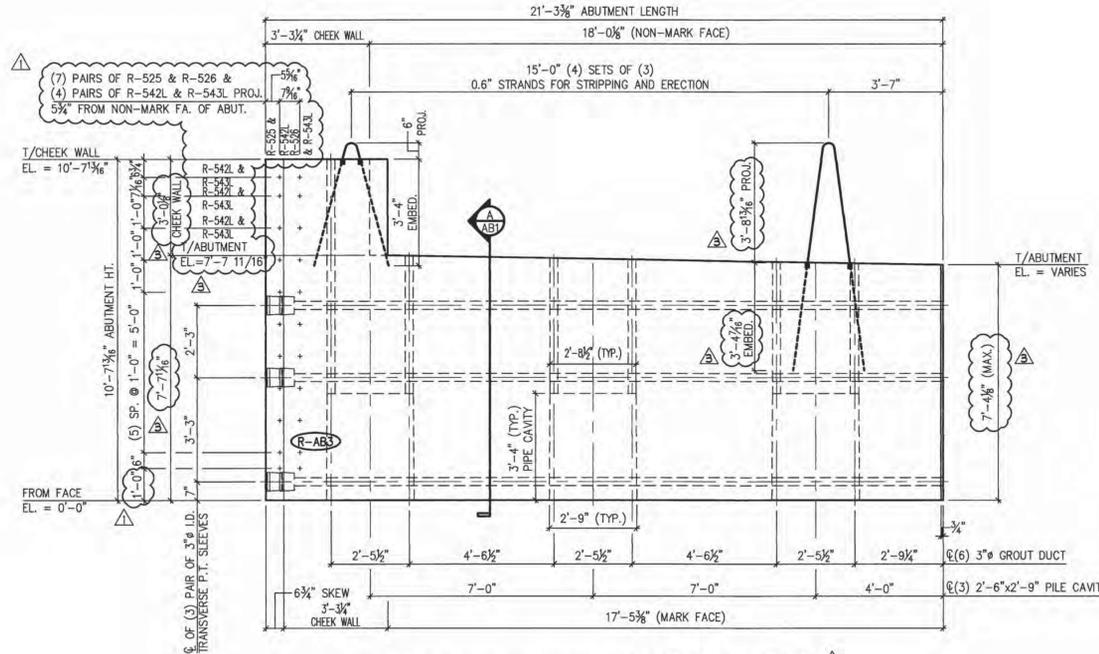
APPROVAL STAMP:

<b>J.P. CARRARA &amp; SONS INC.</b> Precast & Prestress Manufacturer 2444 GASE STR., MIDDLEBURY, VERMONT 05753 Phone: (802)388-6361 Fax: (802)388-9010		<b>W.M. SCHULTZ CONSTRUCTION, INC.</b> PO BOX 2620 BALLSTON SPA, NY 12020	
STATE OF VERMONT AGENCY OF TRANSPORTATION COUNTY OF WINDSOR		DATE:	MAR. 14, 2014
TOWN OF ROCHESTER VT ROUTE 73 (RURAL MAJOR COLLECTOR) BRIDGE NO.: 15 PROJECT NO.: BRF 0162(16)		SCALE:	NOTED
PRECAST ABUTMENT DETAILS		CHKD:	DFTM: AAT/RWS JLJ/MLT
		JOB NO:	23419-013
		DWG. NO.:	AB3

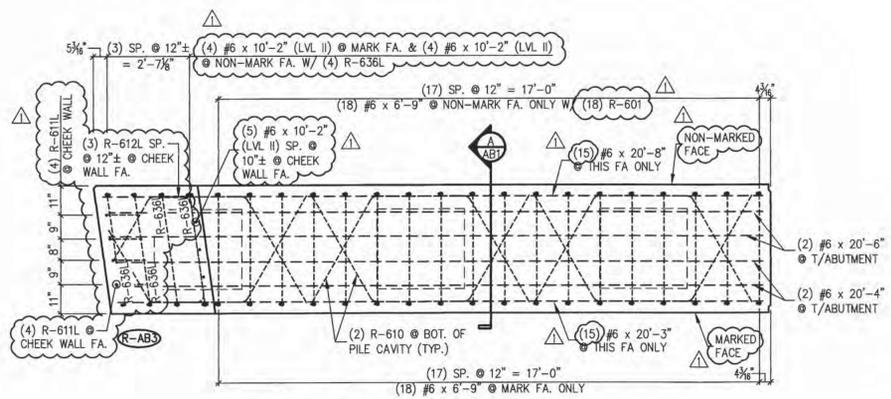
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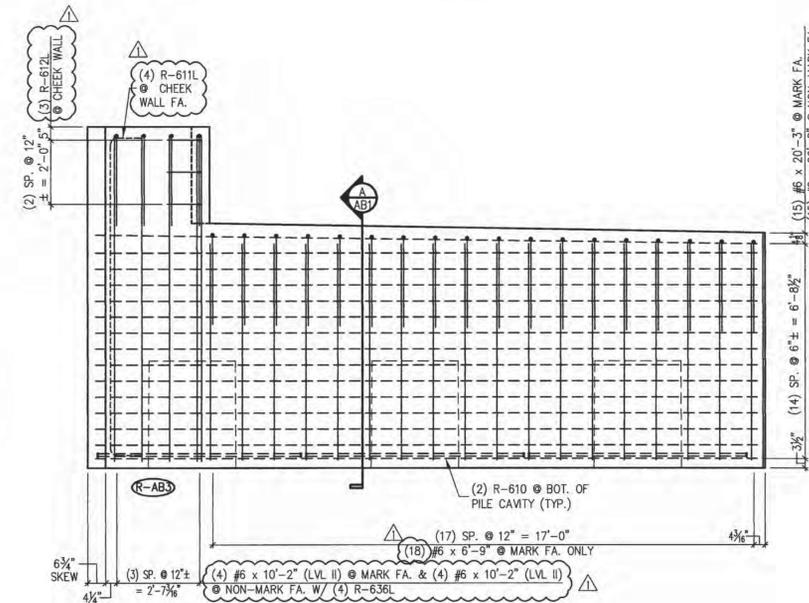
1 ABUTMENT DIMENSIONAL PLAN VIEW IN FORM  
AB4  
3/8" = 1'-0"



2 ABUTMENT DIMENSIONAL MARK FACE ELEVATION  
AB4  
3/8" = 1'-0"



3 ABUTMENT REINFORCING PLAN VIEW IN FORM  
AB4  
3/8" = 1'-0"



4 ABUTMENT REINFORCING MARK FACE ELEV.  
AB4  
3/8" = 1'-0"

- △ 5/30/14 REVISED AS NOTED
- △ 4/30/14 REVISE & RESUBMIT
- △ 4/11/14 REVISE & RESUBMIT

Vermont Agency of Transportation  
**RECEIVED**  
ON: **June 3, 2014**  
and Checked for  
**CONFORMANCE**  
BY: Jennifer Fitch DATE: 06/04/2014

**SHOP DRAWING REVIEW**

REVIEWED AS REQUIRED BY THE CONSTRUCTION CONTRACT DOCUMENTS AND APPROVED, BUT ONLY FOR CONFORMANCE TO THE DESIGN CONCEPT OF THE WORK, AND SUBJECT TO FURTHER LIMITATIONS AND REQUIREMENTS CONTAINED IN THE CONSTRUCTION CONTRACT DOCUMENTS.

REJECTED       REVISE AND RESUBMIT       FURNISH AS CORRECTED

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**VHB** Job Number: 57526  
Reviewed By: L. Chervinsky  
Date: 6-3-14

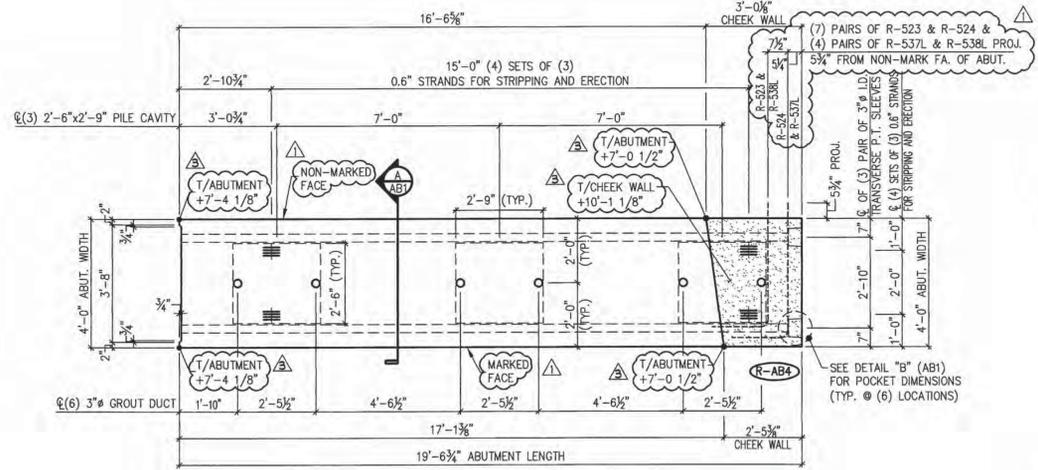
SUBMITTED  
JUN 3 2014  
J.P. CARRARA & SONS, INC.  
MIDDLEBURY, VT 05753

MARK:	R-AB3	QTY.:	1	WT.:	45.4 T	VOL.:	24.74 cy
MATERIAL LIST / ABUTMENT							
ITEM	MARK	DESCRIPTION	QTY.				
1	R-525	#5 BENT BAR (LEVEL I, BLACK REINFORCEMENT)	7				
2	R-526	#5 BENT BAR (LEVEL I, BLACK REINFORCEMENT)	7				
3	R-542L	#5 BENT BAR (LEVEL II, DUAL COATED)	4				
4	R-543L	#5 BENT BAR (LEVEL II, DUAL COATED)	4				
5							
6							
7	R-601	#6 BENT BAR (LEVEL I, BLACK REINFORCEMENT)	16				
8	R-610	#6 BENT BAR (LEVEL I, BLACK REINFORCEMENT)	6				
9	R-611L	#6 BENT BAR (LEVEL II, DUAL COATED)	4				
10	R-612L	#6 BENT BAR (LEVEL II, DUAL COATED)	3				
11	R-636L	#6 BENT BAR (LEVEL II, DUAL COATED)	4				
12							
13							
14							
15		#6 x 6'-9" (LEVEL I, BLACK REINFORCEMENT)	36				
16		#6 x 10'-2" (LEVEL II, DUAL COATED)	13				
17		#6 x 20'-3" (LEVEL I, BLACK REINFORCEMENT)	15				
18		#6 x 20'-4" (LEVEL I, BLACK REINFORCEMENT)	2				
19		#6 x 20'-6" (LEVEL I, BLACK REINFORCEMENT)	2				
20		#6 x 20'-8" (LEVEL I, BLACK REINFORCEMENT)	15				
		SET OF (4) 0.60" x 270 KSI STRAND LIFTING LOOPS	4				

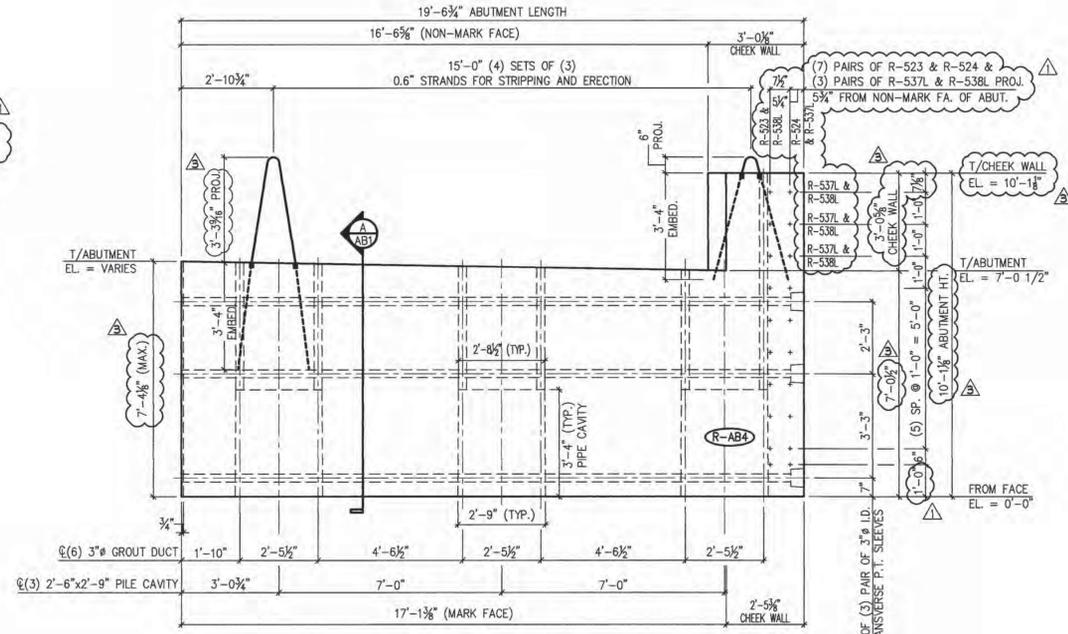
APPROVAL STAMP:

<b>J.P. CARRARA &amp; SONS, INC.</b> Precast & Prestress Manufacturer 2744 CASE STR., MIDDLEBURY, VERMONT 05753 Phone: (802)388-6361 Fax: (802)388-9010		<b>W.M. SCHULTZ CONSTRUCTION, INC.</b> PO BOX 2620 BALLSTON SPA, NY 12020	
STATE OF VERMONT AGENCY OF TRANSPORTATION COUNTY OF WINDSOR		DATE: MAR. 14, 2014	SCALE: NOTED
TOWN OF ROCHESTER VT ROUTE 73 (RURAL MAJOR COLLECTOR) BRIDGE NO.: 15 PROJECT NO.: BRF 0162(16)		CHKD: <input type="checkbox"/> DFTM: <input checked="" type="checkbox"/> AAT/RWS JA/RLT	JOB NO: 23419-013
PRECAST ABUTMENT DETAILS		DWG. NO: AB4	

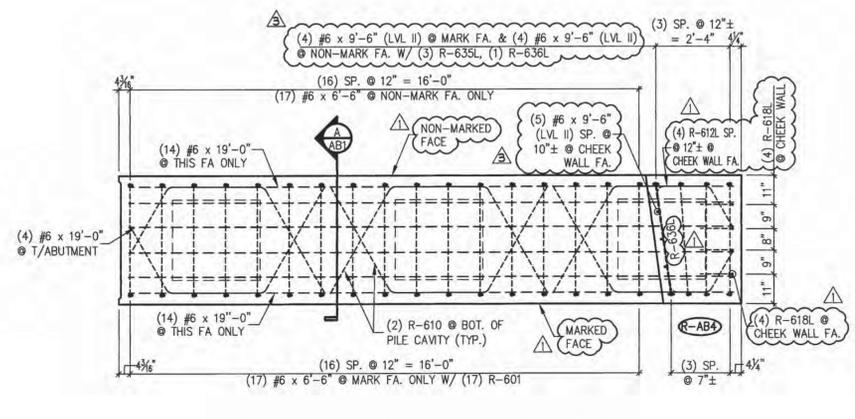
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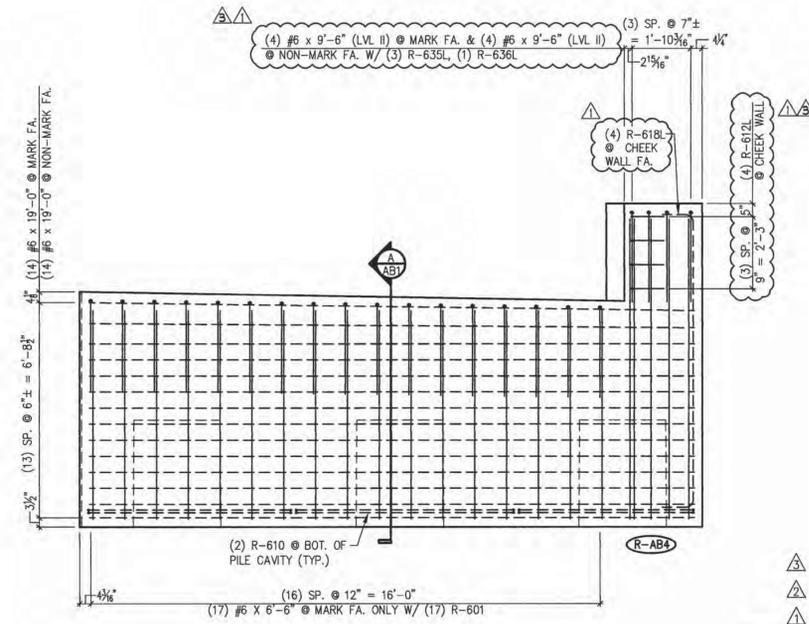
1 ABUTMENT DIMENSIONAL PLAN VIEW IN FORM  
3/8" = 1'-0"



2 ABUTMENT DIMENSIONAL MARK FACE ELEVATION  
3/8" = 1'-0"



3 ABUTMENT REINFORCING PLAN VIEW IN FORM  
3/8" = 1'-0"



4 ABUTMENT REINFORCING MARK FACE ELEV.  
3/8" = 1'-0"

Vermont Agency of Transportation  
**RECEIVED**  
ON: **June 3, 2014**  
and Checked for  
**CONFORMANCE**  
BY: Jennifer Fitch DATE: 06/04/2014

**SHOP DRAWING REVIEW**

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REJECTED  REVISE AND RESUBMIT  FURNISH AS CORRECTED

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**VHB** Job Number: 57926  
Reviewed By: L. Chervinsky  
Date: 6-3-14

SUBMITTED  
JUN 3 2014  
J. P. CARRARA & SONS, INC.  
MIDDLEBURY, VT 05753

MARK: R-AB4		QTY.: 1	WT.: 40.6 T	VOL.: 22.34 cy
MATERIAL LIST / ABUTMENT				
ITEM	MARK	DESCRIPTION	QTY.	
1	R-523	#5 BENT BAR (LEVEL I, BLACK REINFORCEMENT)	7	
2	R-524	#5 BENT BAR (LEVEL I, BLACK REINFORCEMENT)	7	
3	R-537L	#5 BENT BAR (LEVEL II, DUAL COATED)	3	
4	R-538L	#5 BENT BAR (LEVEL II, DUAL COATED)	3	
5				
6				
7	R-601	#6 BENT BAR (LEVEL I, BLACK REINFORCEMENT)	17	
8	R-610	#6 BENT BAR (LEVEL I, BLACK REINFORCEMENT)	6	
9	R-612L	#6 BENT BAR (LEVEL II, DUAL COATED)	4	
10	R-618L	#6 BENT BAR (LEVEL II, DUAL COATED)	4	
11	R-635L	#6 BENT BAR (LEVEL II, DUAL COATED)	3	
12	R-636L	#6 BENT BAR (LEVEL II, DUAL COATED)	3	
13				
14				
15		#6 x 6'-6" (LEVEL I, BLACK REINFORCEMENT)	34	
16		#6 x 9'-6" (LEVEL II, DUAL COATED)	13	
17		#6 x 19'-0" (LEVEL I, BLACK REINFORCEMENT)	32	
18				
19		SET OF (4) 0.60" x 270 KSI STRAND LIFTING LOOPS	3	
20				

APPROVAL STAMP:

5/13/14 FURNISH AS CORRECTED  
4/30/14 REVISE & RESUBMIT  
4/11/14 REVISE & RESUBMIT

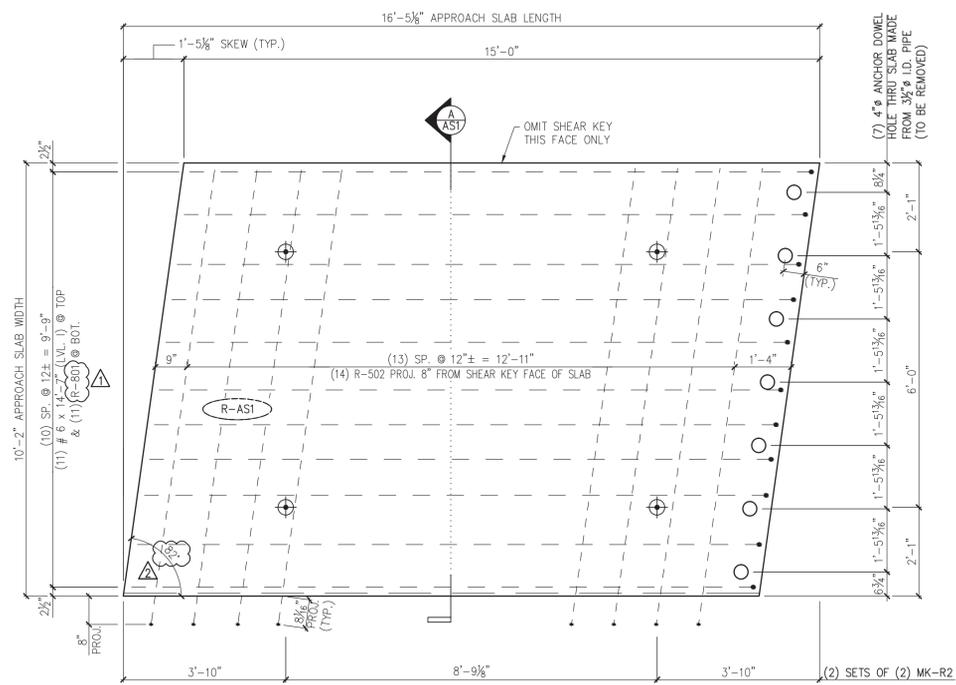
**J.P. CARRARA & SONS INC.** W.M. SCHULTZ CONSTRUCTION, INC.  
Precast & Prestress Manufacturer PO BOX 2620  
2464 CASE STR., MIDDLEBURY, VERMONT 05753 Phone: (802)388-6361 Fax: (802)388-9010 BALLSTON SPA, NY 12020

STATE OF VERMONT AGENCY OF TRANSPORTATION COUNTY OF WINDSOR DATE: MAR. 14, 2014  
SCALE: NOTED

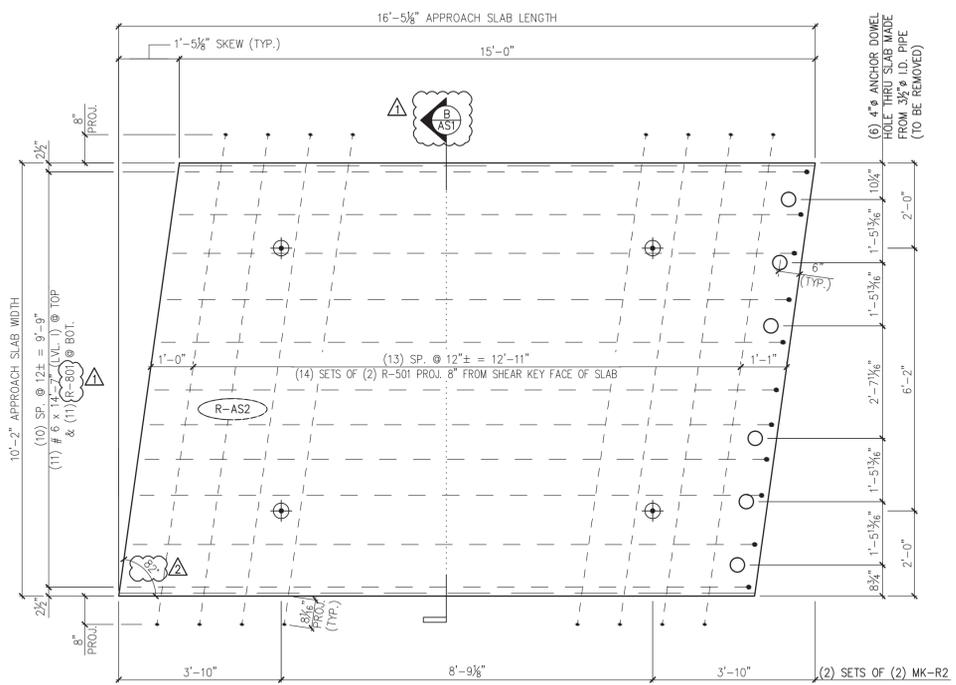
TOWN OF ROCHESTER VT ROUTE 73 (RURAL MAJOR COLLECTOR) CHKD: DFTM: AAT/RWS  
BRIDGE NO.: 15 PROJECT NO.: BRF 0162(16) JOB NO: 23419-013

PRECAST ABUTMENT DETAILS DWG. NO: AB5

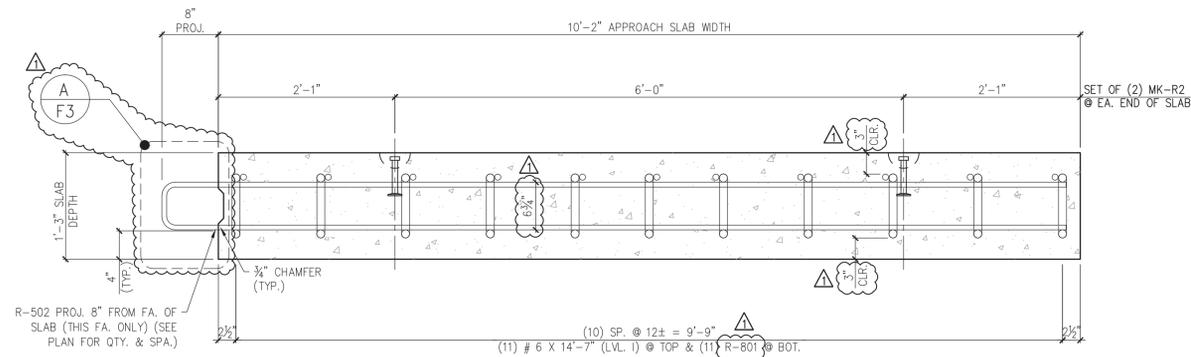
**Eriksson technologies** 813.989.3317  
TAMPA, FL  
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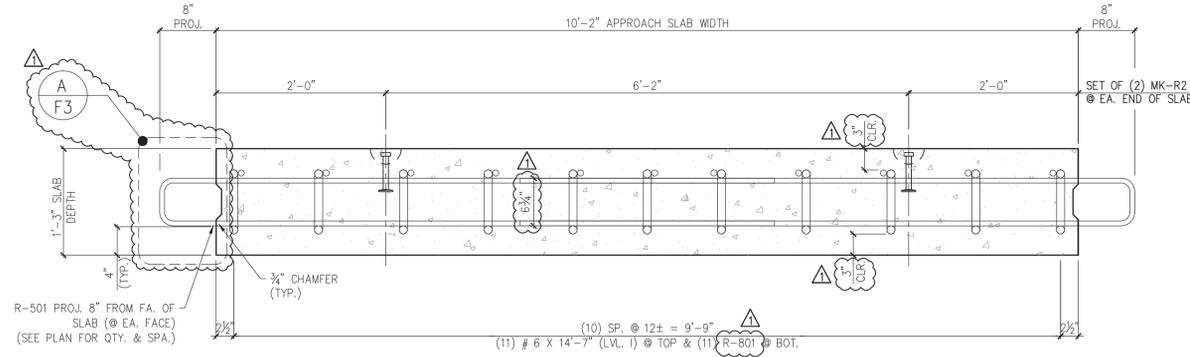
1 PLAN IN VIEW FORM  
AS1  
1/2" = 1'-0"



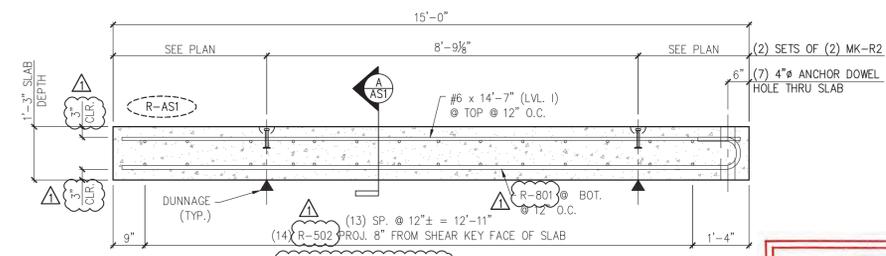
3 PLAN IN VIEW FORM  
AS2  
1/2" = 1'-0"



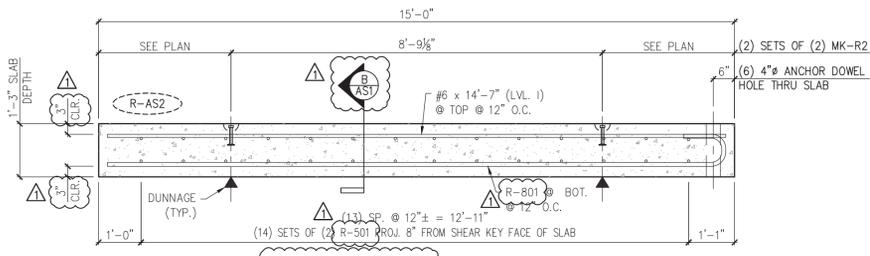
A APPROACH SLAB SECTION  
AS1  
1" = 1'-0"



B APPROACH SLAB SECTION  
AS1  
1" = 1'-0"



2 ELEVATION  
AS1  
1/2" = 1'-0"



4 ELEVATION  
AS1  
1/2" = 1'-0"

**SHOP DRAWING REVIEW**

REVIEWED AS REQUIRED BY THE CONSTRUCTION CONTRACT DOCUMENTS AND APPROVED, BUT ONLY FOR CONFORMANCE TO THE DESIGN CONCEPT OF THE WORK, AND SUBJECT TO FURTHER LIMITATIONS AND REQUIREMENTS CONTAINED IN THE CONSTRUCTION CONTRACT DOCUMENTS.

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**VHB Vanasse Hangen Brustlin, Inc.**  
7055 LIS Route 7  
North Ferrisburgh, VT 05473  
802-425-7798

Job Number: 57526  
Reviewed By: J.J. WESTCOTT  
Date: 5/13/2014

MARK:	R-AS1	QTY.:	2	WT.:	14.3 T	VOL.:	6.99 cy
MARK:	R-AS2	QTY.:	2	WT.:	14.3 T	VOL.:	7.04 cy
MATERIAL LIST / APPROACH SLAB							
ITEM	MARK	DESCRIPTION	QTY./WING WALL				
			R-AS1	R-AS2			
1	R-501	#5 BENT BAR (LEVEL I, BLACK REINFORCEMENT)	0	28			
2	R-502	#5 BENT BAR (LEVEL I, BLACK REINFORCEMENT)	14	0			
3							
4		#6 x 14'-7" (LEVEL I, BLACK REINFORCEMENT)	11	11			
5							
6	R-801	#8 BENT BAR (LEVEL I, BLACK REINFORCEMENT)	11	11			
7							
8	MK-R2	4T x 7 1/2" SWIFT LIFT LIFTER	4	4			

APPROVAL STAMP:  
4/30/14 REVISE & RESUBMIT  
4/11/14 REVISE & RESUBMIT

**J.P. CARRARA & SONS INC.**  
Precast & Prestress Manufacturer  
2464 CASE STR., MIDDLEBURY, VERMONT 05753 Phone:(802)388-6361 Fax:(802)388-9010

**W.M. SHULTZ CONSTRUCTION, INC.**  
PO BOX 2620  
BALLSTON SPA, NY 12020

STATE OF VERMONT AGENCY OF TRANSPORTATION  
COUNTY OF WINDSOR

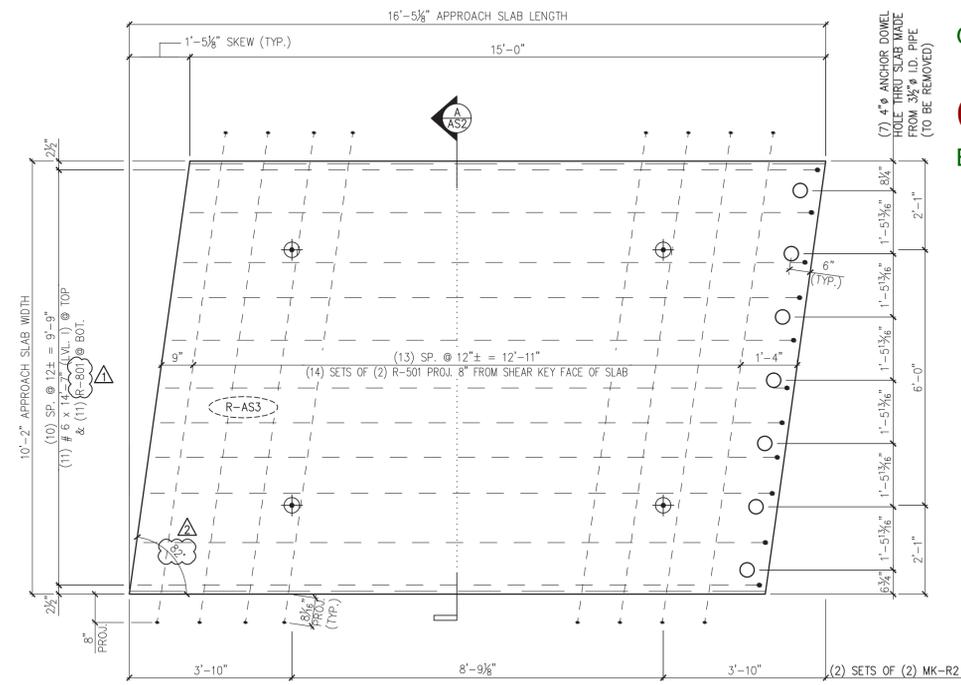
TOWN OF ROCHESTER  
VT ROUTE 73 (RURAL MAJOR COLLECTOR)  
BRIDGE NO.: 15 PROJECT NO.: BRF 0162 (16)

DATE: MAR. 14, 2014  
SCALE: NOTED  
CHKD: DFTM: AAT/RWS JJ/KLT  
JOB NO: 23419-013  
DWG. NO: AS1

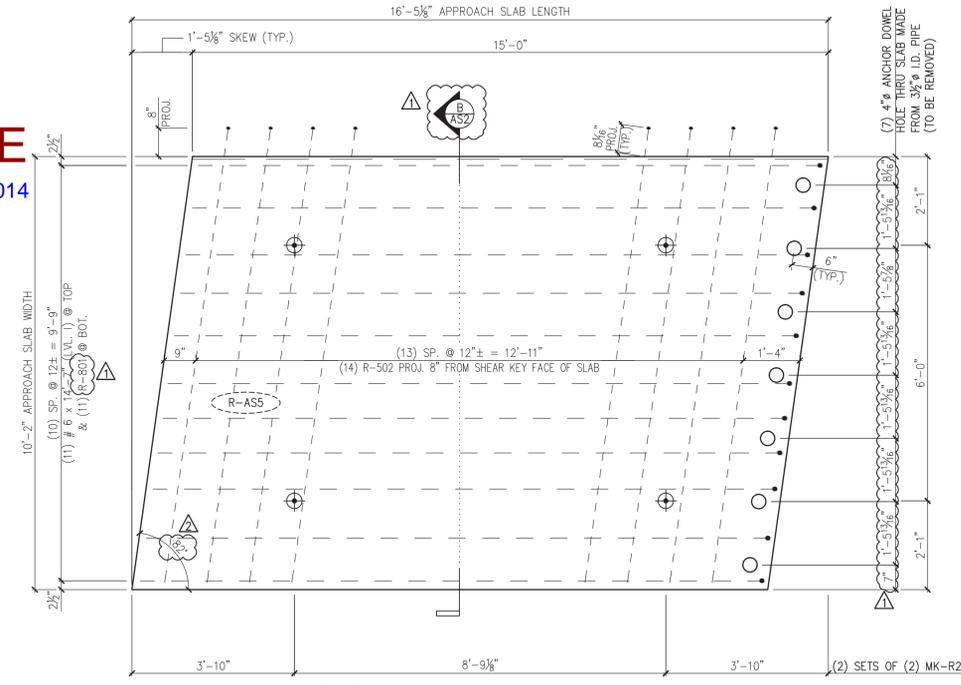
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Vermont Agency of Transportation  
**RECEIVED**  
ON: **May 9, 2014**  
and Checked for  
**CONFORMANCE**  
BY: Jennifer Fitch DATE: 05/13/2014

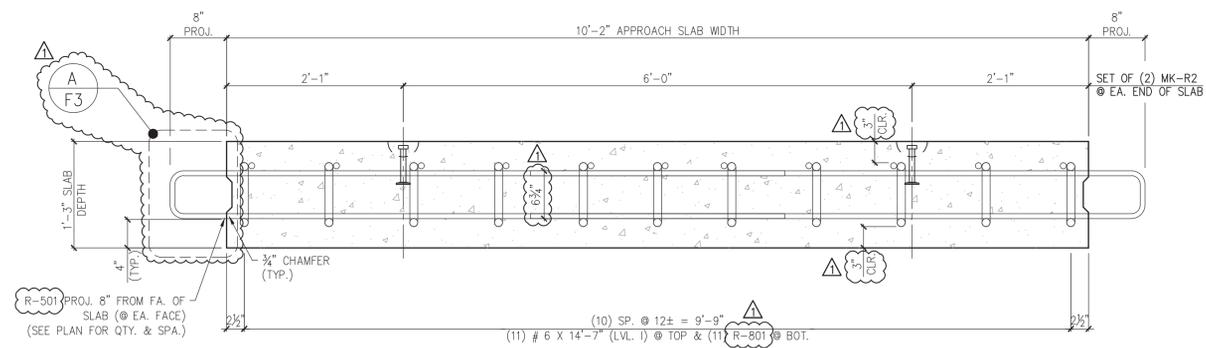
**RECEIVED**  
 ON: **May 9, 2014**  
 and Checked for  
**CONFORMANCE**  
 BY: Jennifer Fitch DATE: 05/13/2014



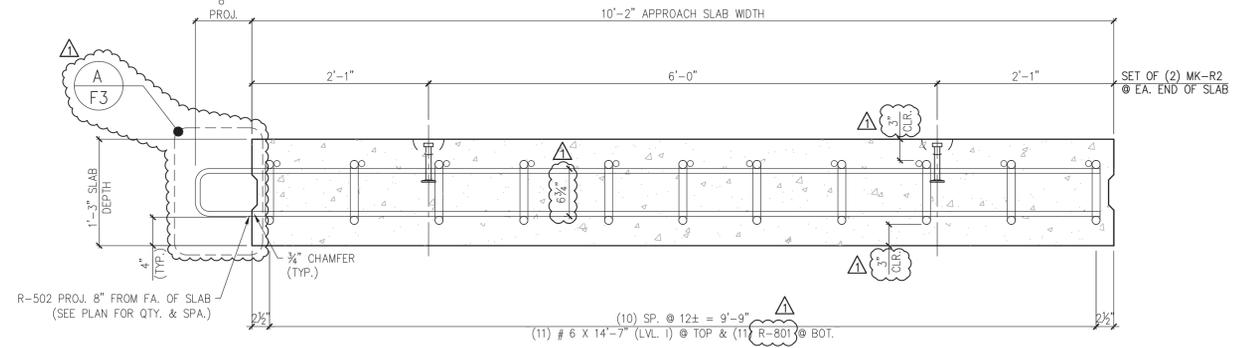
1 PLAN IN VIEW FORM  
 1/2" = 1'-0"



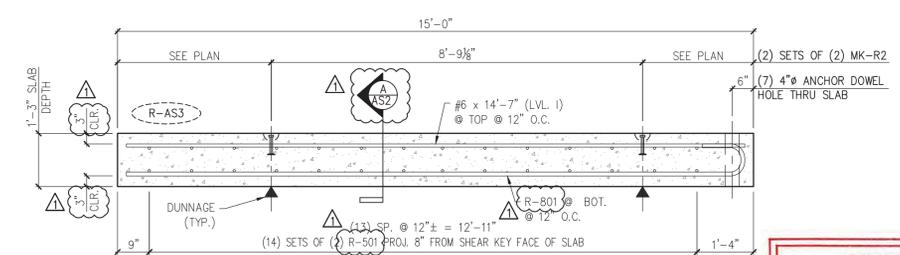
3 PLAN IN VIEW FORM  
 1/2" = 1'-0"



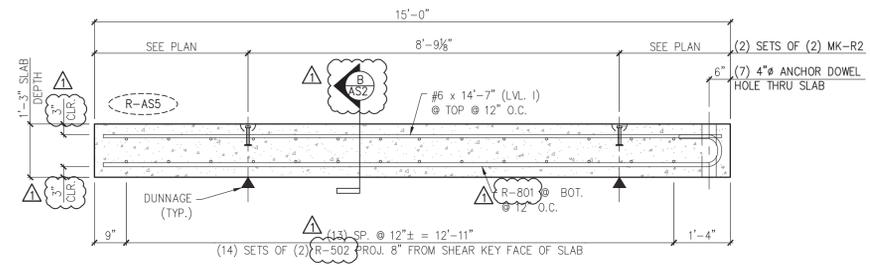
A APPROACH SLAB SECTION  
 1" = 1'-0"



B APPROACH SLAB SECTION  
 1" = 1'-0"



2 ELEVATION  
 1/2" = 1'-0"



4 ELEVATION  
 1/2" = 1'-0"

MARK: R-AS3	QTY.: 1	WT.: 14.3 T	VOL.: 6.99 cy
MARK: R-AS5	QTY.: 1	WT.: 14.3 T	VOL.: 6.99 cy

MATERIAL LIST / APPROACH SLAB				
ITEM	MARK	DESCRIPTION	QTY./WING WALL	
			R-AS3	R-AS5
1	R-501	#5 BENT BAR (LEVEL I, BLACK REINFORCEMENT)	28	0
2	R-502	#5 BENT BAR (LEVEL I, BLACK REINFORCEMENT)	0	14
3				
4		#6 x 14'-7" (LEVEL I, BLACK REINFORCEMENT)	11	11
5				
6	R-801	#8 BENT BAR (LEVEL I, BLACK REINFORCEMENT)	11	11
7				
8	MK-R2	4T x 7 1/2" SWIFT LIFT LIFTER	4	4

**SHOP DRAWING REVIEW**

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**Vanasse Hagen Brustlin, Inc.**  
 7050 US Route 7  
 North Ferrisburgh, VT 05473  
 802.425.7788

Job Number: 52526  
 Reviewed By: J.J. WESTCOTT  
 Date: 5/13/2014

4/30/14 REVISE & RESUBMIT  
 4/11/14 REVISE & RESUBMIT

APPROVAL STAMP:

**J.P. CARRARA & SONS INC.**  
 Precast & Prestress Manufacturer  
 2464 CASE ST., WOODLARK, VERMONT 05753 Phone:(802)388-6361 Fax:(802)388-9010

**W.M. SHULTZ CONSTRUCTION, INC.**  
 PO BOX 2620  
 BALLSTON SPA, NY 12020

STATE OF VERMONT AGENCY OF TRANSPORTATION  
 COUNTY OF WINDSOR

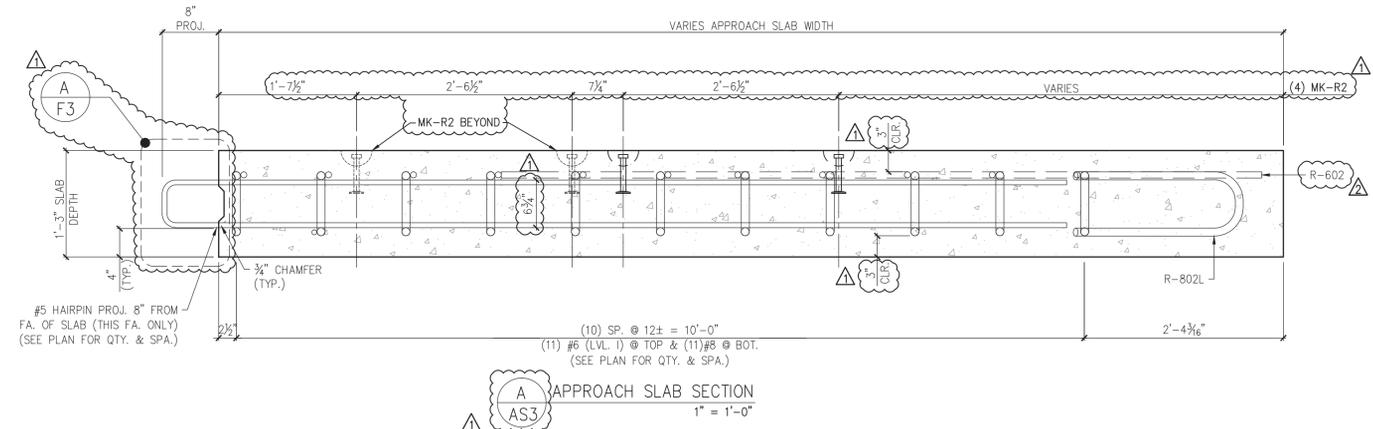
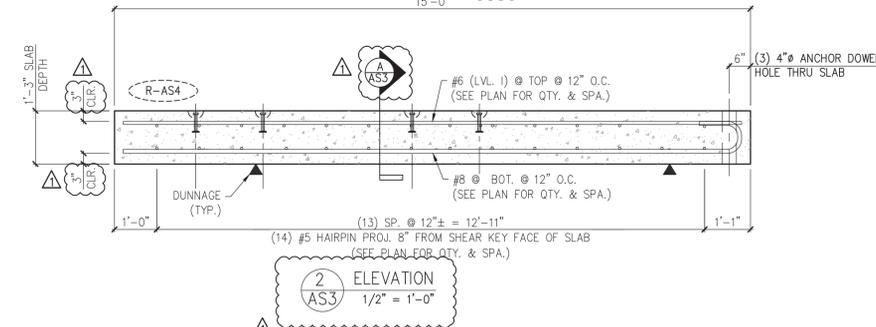
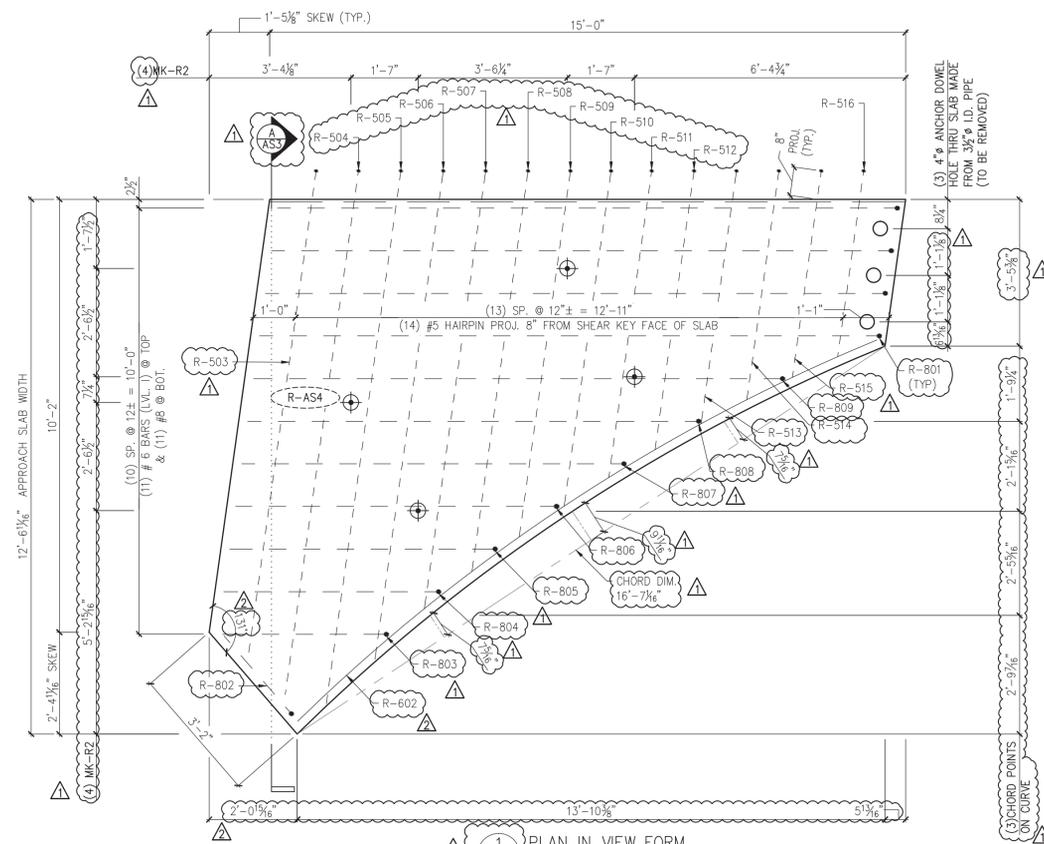
TOWN OF ROCHESTER  
 VT ROUTE 73 (RURAL MAJOR COLLECTOR)  
 BRIDGE NO.: 15 PROJECT NO.: BRF 0162 (16)

DATE: MAR. 14, 2014  
 SCALE: NOTED  
 CHKD: DFTM/AAT/RWS  
 JJ/KLT  
 JOB NO: 23419-013  
 DWG. NO: AS2

PRECAST APPROACH SLAB DETAILS

**Eriksson technologies**  
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 TAMPA, FL LRFD.COM  
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S:\Engineering Services\Carrara14002 Rochester BR 15 & 16\Production Drawings\AutoCAD Files\R-AS.dwg, 5/6/2014 5:04:36 PM



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**Vanasse Hangen Brustlin, Inc.**  
 7056 US Route 7  
 North Ferrisburgh, VT 05473  
 802.425.7788

Job Number: 57526  
 Reviewed By: L.J. WESTCOTT  
 Date: 5/13/2014

Vermont Agency of Transportation  
**RECEIVED**  
 ON: **May 9, 2014**  
 and Checked for  
**CONFORMANCE**  
 BY: Jennifer Fitch DATE: 05/13/2014

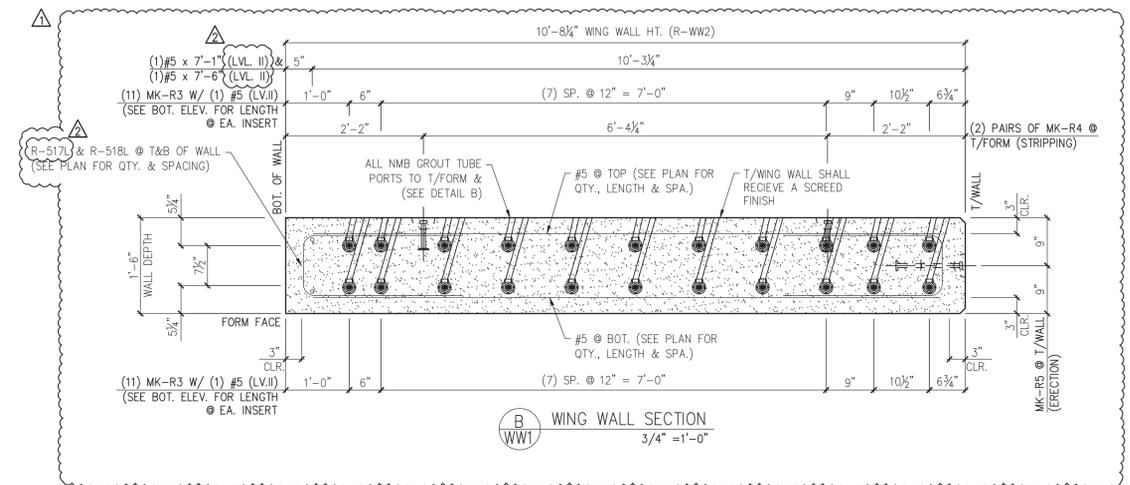
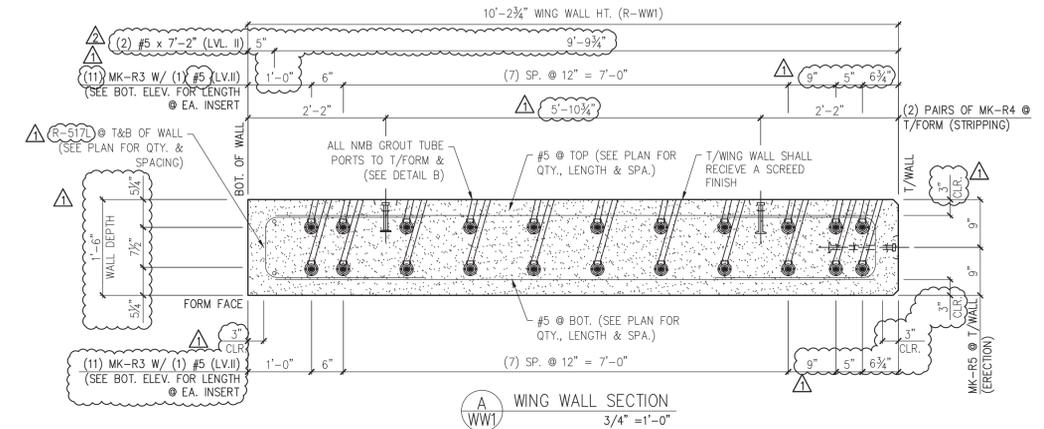
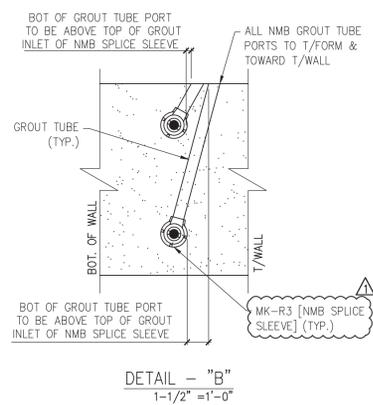
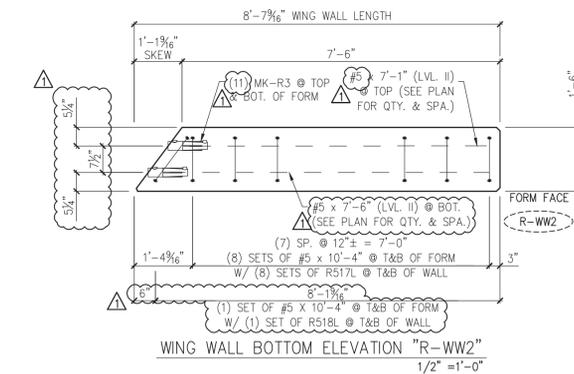
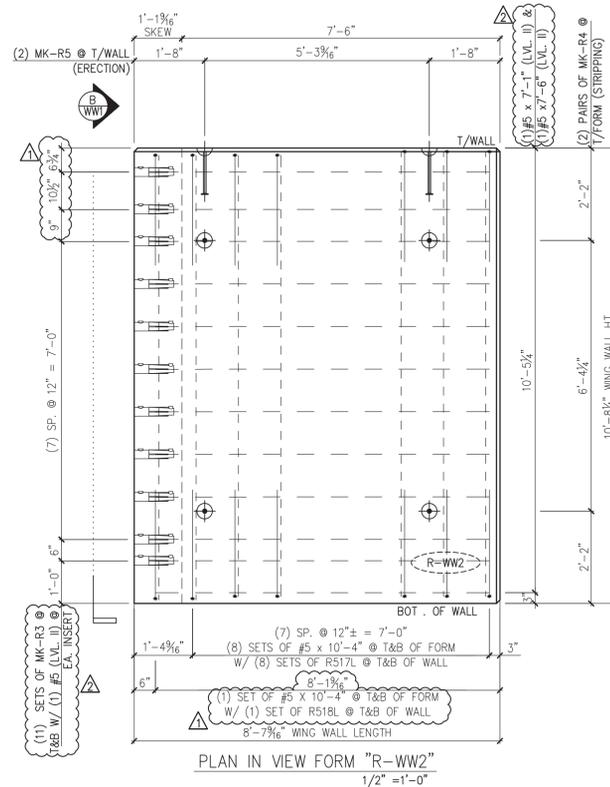
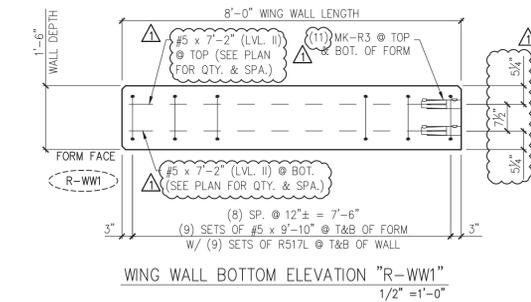
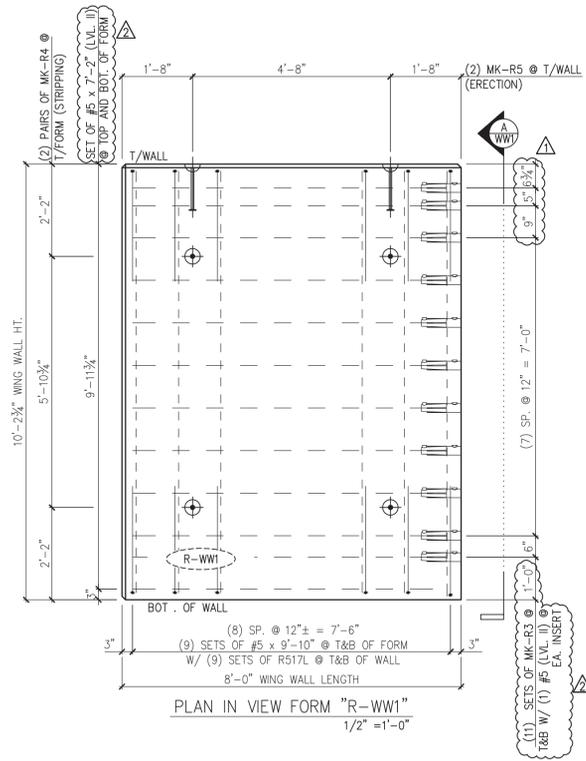
MATERIAL LIST / APPROACH SLAB			
ITEM	MARK	DESCRIPTION	QTY./WING WALL
1	R-503	#5 BENT BAR (LEVEL I, BLACK REINFORCEMENT)	1
2	R-504	#5 BENT BAR (LEVEL I, BLACK REINFORCEMENT)	1
3	R-505	#5 BENT BAR (LEVEL I, BLACK REINFORCEMENT)	1
4	R-506	#5 BENT BAR (LEVEL I, BLACK REINFORCEMENT)	1
5	R-507	#5 BENT BAR (LEVEL I, BLACK REINFORCEMENT)	1
6	R-508	#5 BENT BAR (LEVEL I, BLACK REINFORCEMENT)	1
7	R-509	#5 BENT BAR (LEVEL I, BLACK REINFORCEMENT)	1
8	R-510	#5 BENT BAR (LEVEL I, BLACK REINFORCEMENT)	1
9	R-511	#5 BENT BAR (LEVEL I, BLACK REINFORCEMENT)	1
10	R-512	#5 BENT BAR (LEVEL I, BLACK REINFORCEMENT)	1
11	R-513	#5 BENT BAR (LEVEL I, BLACK REINFORCEMENT)	1
12	R-514	#5 BENT BAR (LEVEL I, BLACK REINFORCEMENT)	1
13	R-515	#5 BENT BAR (LEVEL I, BLACK REINFORCEMENT)	1
14	R-516	#5 BENT BAR (LEVEL I, BLACK REINFORCEMENT)	1
15			
16	R-602	#6 BENT BAR (LEVEL I, BLACK REINFORCEMENT)	1
17			
18		#6 x 2'-5" (LEVEL I, BLACK REINFORCEMENT)	1
19		#6 x 3'-10" (LEVEL I, BLACK REINFORCEMENT)	1
20		#6 x 5'-0" (LEVEL I, BLACK REINFORCEMENT)	1
21		#6 x 6'-3" (LEVEL I, BLACK REINFORCEMENT)	1
22		#6 x 7'-6" (LEVEL I, BLACK REINFORCEMENT)	1
23		#6 x 9'-0" (LEVEL I, BLACK REINFORCEMENT)	1
24		#6 x 10'-7" (LEVEL I, BLACK REINFORCEMENT)	1
25		#6 x 12'-5" (LEVEL I, BLACK REINFORCEMENT)	1
26		#6 x 14'-6" (LEVEL I, BLACK REINFORCEMENT)	4
27			
28	R-801	#8 BENT BAR (LEVEL I, BLACK REINFORCEMENT)	4
29	R-802	#8 BENT BAR (LEVEL I, BLACK REINFORCEMENT)	1
30	R-803	#8 BENT BAR (LEVEL I, BLACK REINFORCEMENT)	1
31	R-804	#8 BENT BAR (LEVEL I, BLACK REINFORCEMENT)	1
32	R-805	#8 BENT BAR (LEVEL I, BLACK REINFORCEMENT)	1
33	R-806	#8 BENT BAR (LEVEL I, BLACK REINFORCEMENT)	1
34	R-807	#8 BENT BAR (LEVEL I, BLACK REINFORCEMENT)	1
35	R-808	#8 BENT BAR (LEVEL I, BLACK REINFORCEMENT)	1
36	R-809	#8 BENT BAR (LEVEL I, BLACK REINFORCEMENT)	1
37			
38	MK-R2	4T x 7 1/2" SWIFT LIFT LIFTER	4

4/30/14 REVISE & RESUBMIT  
 4/11/14 REVISE & RESUBMIT

APPROVAL STAMP:

<b>J.P. CARRARA &amp; SONS INC.</b> Precast & Prestress Manufacturer 2464 CASE ST., WOODBURY, VERMONT 05753 Phone:(802)388-6361 Fax:(802)388-9010		<b>W.M. SHULTZ CONSTRUCTION, INC.</b> PO BOX 2620 BALLSTON SPA, NY 12020	
STATE OF VERMONT AGENCY OF TRANSPORTATION COUNTY OF WINDSOR		DATE: MAR. 14, 2014 SCALE: NOTED	
TOWN OF ROCHESTER VT ROUTE 73 (RURAL MAJOR COLLECTOR) BRIDGE NO.: 15 PROJECT NO.: BRF 0162 (16)		CHKD: DFTM: AAT/RWS JJ/KLT JOB NO: 23419-013	
PRECAST APPROACH SLAB DETAILS		DWG. NO: AS3	

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MARK:	R-WW1	QTY.:	1	WT.:	9.2 T	VOL.:	4.54 cy
MARK:	R-WW2	QTY.:	1	WT.:	9.7 T	VOL.:	4.78 cy

MATERIAL LIST / WING WALL					
ITEM	MARK	DESCRIPTION	QTY./WING WALL		
			R-WW1	R-WW2	
1	R-517L	#5 BENT BAR (LEVEL II, DUAL COATED)	18	16	
2	(R-518L)	#5 BENT BAR (LEVEL II, DUAL COATED)	0	2	
3					
4		#5 x 9'-10" (LEVEL II, DUAL COATED)	18	0	
5		#5 x 10'-4" (LEVEL II, DUAL COATED)	0	18	
6					
7		#5 x 7'-1" (LEVEL II, DUAL COATED)	0	12	
8		#5 x 7'-2" (LEVEL II, DUAL COATED)	24	0	
9		#5 x 7'-6" (LEVEL II, DUAL COATED)	0	12	
10					
11					
12	MK-R3	NMB SPICE SLEEVE #5 U-Y(PG) (EPOXY COATED)	22	22	
13	MK-R4	4T x 9 1/2" SWIFT LIFT LIFTER	4	4	
14	MK-R5	20T x 19 3/4" SWIFT LIFT LIFTER	2	2	

Vermont Agency of Transportation  
**RECEIVED**  
 ON: **May 9, 2014**  
 and Checked for  
**CONFORMANCE**  
 BY: Jennifer Fitch DATE: 05/13/2014

**SHOP DRAWING REVIEW**

REVIEWED AS REQUIRED BY THE CONSTRUCTION CONTRACT DOCUMENTS AND APPROVED, BUT ONLY FOR CONFORMANCE TO THE DESIGN CONCEPT OF THE WORK, AND SUBJECT TO FURTHER LIMITATIONS AND REQUIREMENTS CONTAINED IN THE CONSTRUCTION CONTRACT DOCUMENTS.

REJECTED  REVISE AND RESUBMIT  FURNISH AS CORRECTED

4/30/14 REVISE & RESUBMIT  
 4/11/14 REVISE & RESUBMIT

**Vanasse Hangen Brustlin, Inc.**  
 7056 US Route 7  
 North Ferrisburgh, VT 05473  
 802.425.7706

Job Number: 32526  
 Reviewed By: L.J. WESTCOTT  
 Date: 5/13/2014

APPROVAL STAMP:

**J.P. CARRARA & SONS INC.**  
 Precast & Prestress Manufacturer  
 244 CASE STR., MOORESBURY, VERMONT 05753 Phone: (802)388-6361 Fax: (802)388-9010

**W.M. SHULTZ CONSTRUCTION, INC.**  
 PO BOX 2620  
 BALLSTON SPA, NY 12020

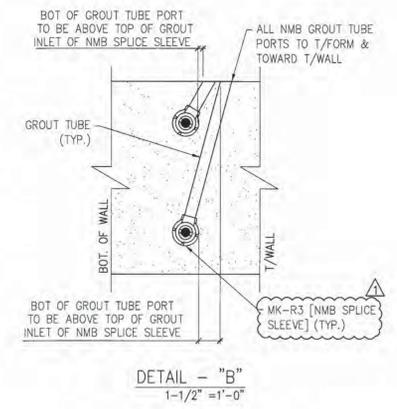
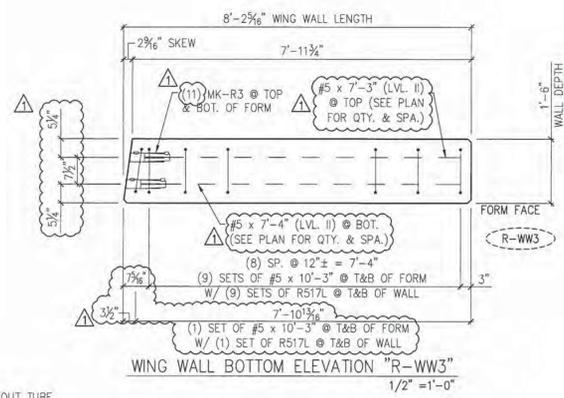
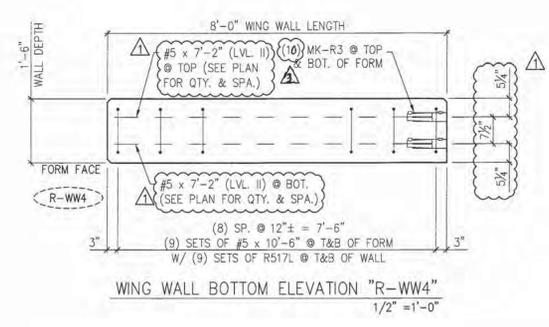
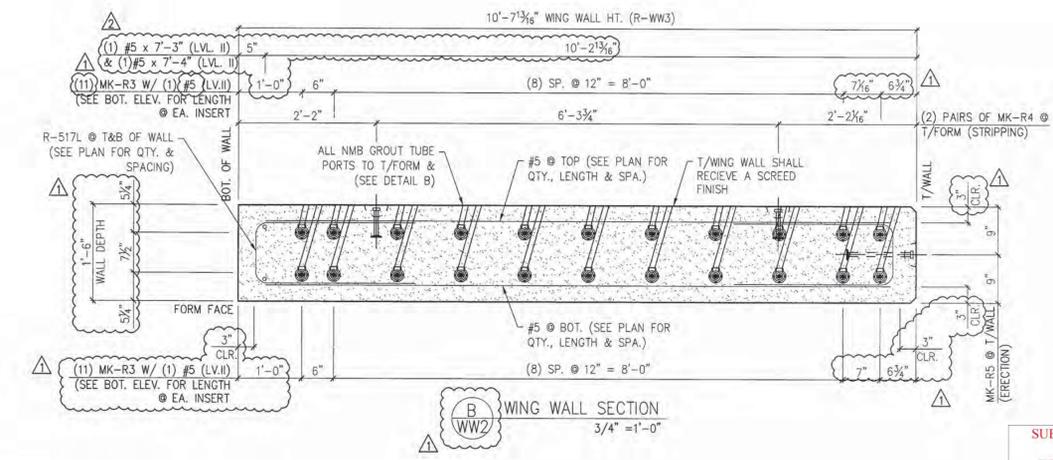
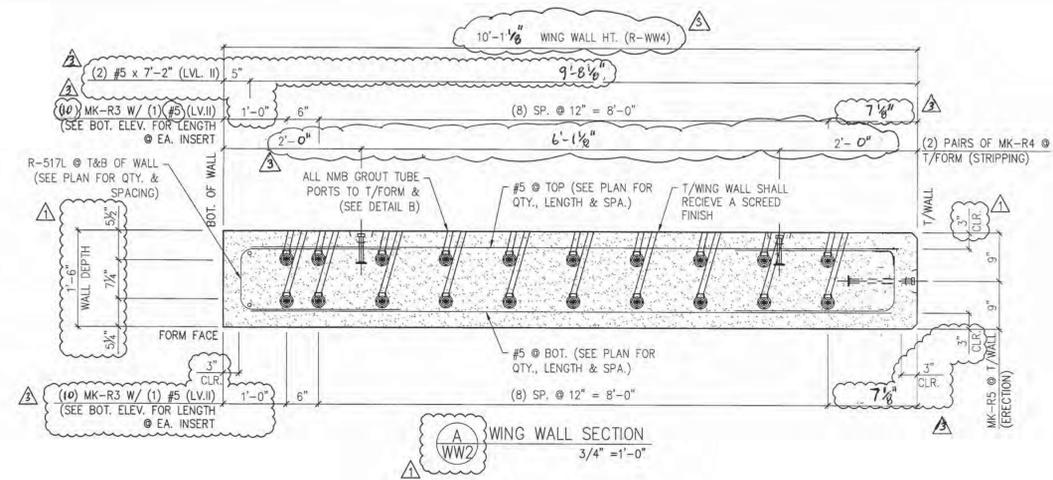
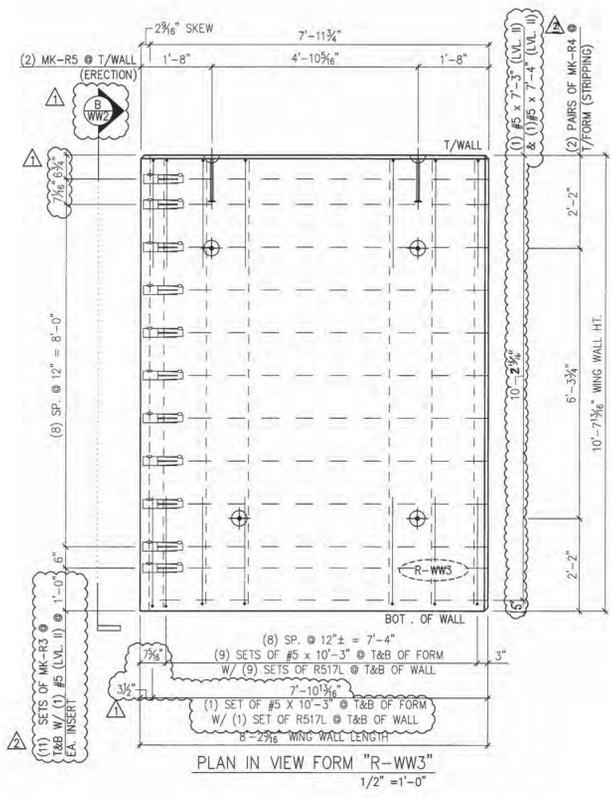
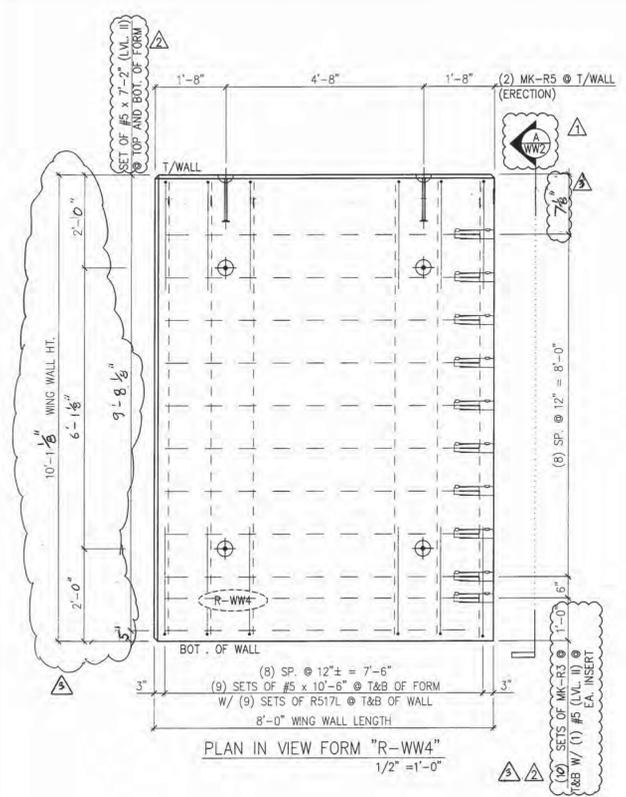
STATE OF VERMONT AGENCY OF TRANSPORTATION  
 COUNTY OF WINDSOR

TOWN OF ROCHESTER  
 VT ROUTE 73 (RURAL MAJOR COLLECTOR)  
 BRIDGE NO.: 15 PROJECT NO.: BRF 0162 (16)

DATE: MAR. 14, 2014  
 SCALE: NOTED  
 CHKD: DFTM/AAT/RWS  
 JJ/KLT  
 JOB NO: 23419-013  
 DWG. NO: WW1

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**SHOP DRAWING REVIEW**

REVIEWED AS REQUIRED BY THE CONSTRUCTION CONTRACT DOCUMENTS AND APPROVED, BUT ONLY FOR CONFORMANCE TO THE DESIGN CONCEPT OF THE WORK, AND SUBJECT TO FURTHER LIMITATIONS AND REQUIREMENTS CONTAINED IN THE CONSTRUCTION CONTRACT DOCUMENTS.

REJECTED  REVISE AND RESUBMIT  FURNISH AS CORRECTED

CORRECTIONS OR COMMENTS MADE ON THE SHOP DRAWINGS DURING THIS REVIEW DO NOT RELIEVE CONTRACTOR FROM COMPLIANCE WITH REQUIREMENTS OF THE DRAWINGS AND SPECIFICATIONS. THIS CHECK IS ONLY FOR REVIEW OF GENERAL CONFORMANCE WITH THE DESIGN CONCEPT OF THE PROJECT AND GENERAL COMPLIANCE WITH THE INFORMATION GIVEN IN THE CONTRACT DOCUMENTS. THE CONTRACTOR IS RESPONSIBLE FOR: CONFIRMING AND CORRELATING ALL QUANTITIES AND DIMENSIONS; SELECTING FABRICATION PROCESSES AND TECHNIQUES OF CONSTRUCTION; COORDINATING HIS WORK WITH THAT OF ALL OTHER TRADES; AND PERFORMING HIS WORK IN A SAFE AND SATISFACTORY MANNER.

**VHB** Job Number: 51526  
Reviewed By: L. Chervinsky  
Date: 6-3-14

SUBMITTED  
JUN 3 2014  
J.P. CARRARA & SONS, INC.  
MIDDLEBURY, VT 05753

MARK:	R-WW4	QTY.:	1	WT.:	9.9 T	VOL.:	4.84 cy
MARK:	R-WW3	QTY.:	1	WT.:	9.7 T	VOL.:	4.78 cy
MATERIAL LIST / WING WALL							
ITEM	MARK	DESCRIPTION	QTY./WING WALL				
			R-WW4	R-WW3			
1	R-517L	#5 BENT BAR (LEVEL II, DUAL COATED)	18	20			
2							
3		#5 x 10'-3" (LEVEL II, DUAL COATED)	0	20			
4		#5 x 10'-6" (LEVEL II, DUAL COATED)	18	0			
5							
6							
7		#5 x 7'-2" (LEVEL II, DUAL COATED)		22			
8		#5 x 7'-3" (LEVEL II, DUAL COATED)		12			
9		#5 x 7'-4" (LEVEL II, DUAL COATED)		12			
10							
11							
12	MK-R3	NMB SPICE SLEEVE #5 U-(Y)PG (EPOXY COATED)	20	22			
13	MK-R4	4T x 9 1/2" SWIFT LIFT LIFTER	4	4			
14	MK-R5	20T x 19 3/4" SWIFT LIFT LIFTER	2	2			

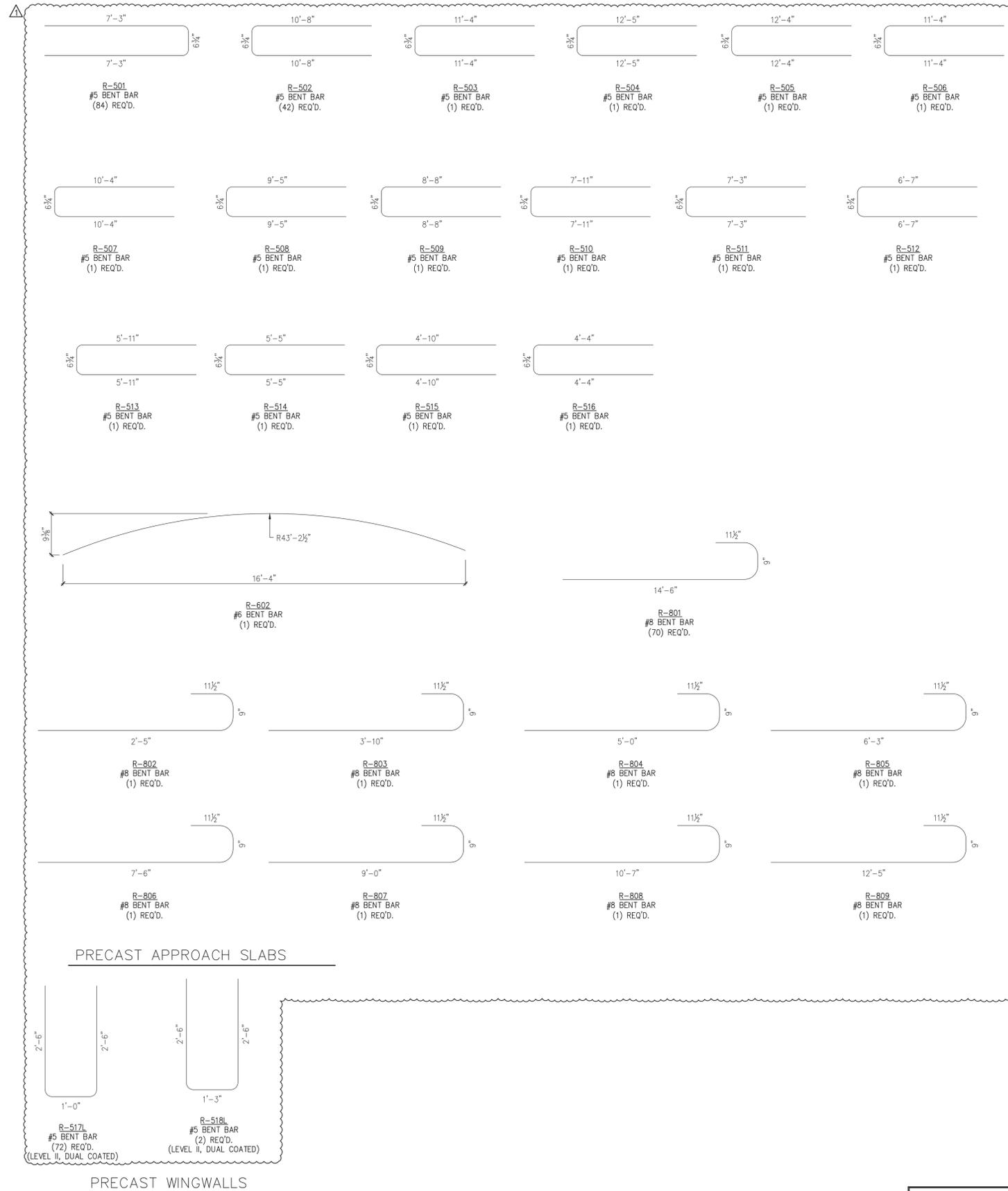
Vermont Agency of Transportation  
**RECEIVED**  
ON: **June 3, 2014**  
and Checked for  
**CONFORMANCE**  
BY: Jennifer Fitch DATE: 06/04/2014

- △ 5/30/14 REVISE & RESUBMIT
- △ 4/30/14 REVISE & RESUBMIT
- △ 4/11/14 REVISE & RESUBMIT

APPROVAL STAMP:

<b>J.P. CARRARA &amp; SONS INC.</b> Precast & Prestress Manufacturer 2464 OISE STR., MIDDLEBURY, VERMONT 05753 Phone: (802)388-6361 Fax: (802)388-9010		<b>W.M. SCHULTZ CONSTRUCTION, INC.</b> PO BOX 2620 BALLSTON SPA, NY 12020	
STATE OF VERMONT AGENCY OF TRANSPORTATION COUNTY OF WINDSOR		DATE:	MAR. 14, 2014
TOWN OF ROCHESTER VT ROUTE 73 (RURAL MAJOR COLLECTOR) BRIDGE NO.: 15 PROJECT NO.: BRF 0162 (16)		CHKD:	DFTM, AAT/RWS JU/KLT
PRECAST WING WALL DETAILS		JOB NO.:	23419-013
		DWG. NO.:	WW2

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PRECAST APPROACH SLABS

PRECAST WINGWALLS

MISCELLANEOUS MATERIALS				
ITEM	MARK	QTY.	DESCRIPTION	REMARKS
1		ONE	#6 x 2'-5" (LEVEL I, BLACK REINFORCEMENT)	
2		ONE	#6 x 3'-10" (LEVEL I, BLACK REINFORCEMENT)	
3		ONE	#6 x 5'-0" (LEVEL I, BLACK REINFORCEMENT)	
4		ONE	#6 x 6'-3" (LEVEL I, BLACK REINFORCEMENT)	
5		ONE	#6 x 7'-6" (LEVEL I, BLACK REINFORCEMENT)	
6		ONE	#6 x 9'-0" (LEVEL I, BLACK REINFORCEMENT)	
7		ONE	#6 x 10'-7" (LEVEL I, BLACK REINFORCEMENT)	
8		ONE	#6 x 12'-5" (LEVEL I, BLACK REINFORCEMENT)	
9		4	#6 x 14'-6" (LEVEL I, BLACK REINFORCEMENT)	
10		66	#6 x 14'-7" (LEVEL I, BLACK REINFORCEMENT)	
11				
12	MK-R2	28	4T x 7 1/2" SWIFT LIFT LIFTER	
13				
14				
15				
16				
17				
18				
19				
20				
21				
22		12	#5 x 7'-1" (LEVEL II, DUAL COATED)	
23		36	#5 x 7'-2" (LEVEL II, DUAL COATED)	
24		12	#5 x 7'-3" (LEVEL II, DUAL COATED)	
25		12	#5 x 7'-4" (LEVEL II, DUAL COATED)	
26		12	#5 x 7'-6" (LEVEL II, DUAL COATED)	
27		18	#5 x 9'-10" (LEVEL II, DUAL COATED)	
28		20	#5 x 10'-3" (LEVEL II, DUAL COATED)	
29		18	#5 x 10'-4" (LEVEL II, DUAL COATED)	
30		18	#5 x 10'-6" (LEVEL II, DUAL COATED)	
31				
32				
33				
34				
35				
36				
37				
38	MK-R3	88	NMB SPLICE SLEEVE, #5 U-X(P6) (EPOXY COATED)	
39	MK-R4	16	4T x 9 1/2" SWIFT LIFT LIFTER	
40	MK-R5	8	20T x 19 3/4" SWIFT LIFT LIFTER	
41				

PRECAST APPROACH SLABS  
PRECAST WING WALLS

Vermont Agency of Transportation  
**RECEIVED**  
 ON: **May 9, 2014**  
 and Checked for  
**CONFORMANCE**  
 BY: **Jennifer Fitch** DATE: **05/13/2014**

**SHOP DRAWING REVIEW**

REVIEWED AS REQUIRED BY THE CONSTRUCTION CONTRACT DOCUMENTS AND APPROVED, BUT ONLY FOR CONFORMANCE TO THE DESIGN CONCEPT OF THE WORK, AND SUBJECT TO FURTHER LIMITATIONS AND REQUIREMENTS CONTAINED IN THE CONSTRUCTION CONTRACT DOCUMENTS.

REJECTED  REVISE AND RESUBMIT  FURNISH AS CORRECTED

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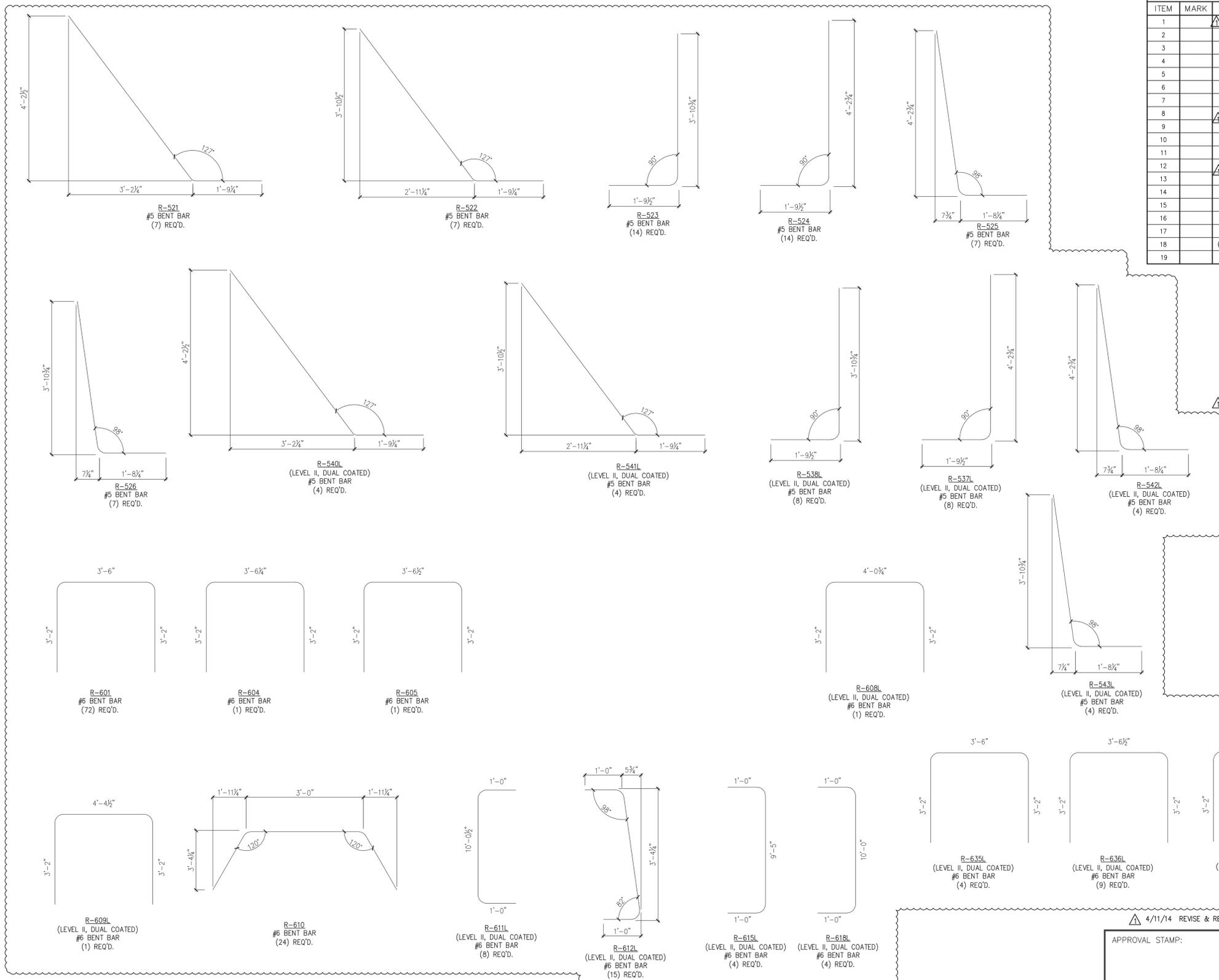
**VHB** *Vannase Hangen Brustlin, Inc.* Job Number: 57526  
 7050 US Route 7 North Ferrisburgh, VT 05473 Reviewed By: J.J. WESTCOTT  
 802.425.7798 Date: 5/13/2014

4/11/14 REVISE & RESUBMIT

APPROVAL STAMP:	<b>J.P. CARRARA &amp; SONS INC.</b> Precast & Prestress Manufacturer 2464 CSE STK., WOODLARK, VERMONT 05753 Phone: (802)388-6361 Fax: (802)388-9010	<b>W.M. SHULTZ CONSTRUCTION, INC.</b> PO BOX 2620 BALLSTON SPA, NY 12020
	STATE OF VERMONT AGENCY OF TRANSPORTATION COUNTY OF WINDSOR	DATE: MAR. 14, 2014 SCALE: NOTED
	TOWN OF ROCHESTER VT ROUTE 73 (RURAL MAJOR COLLECTOR) BRIDGE NO.: 15 PROJECT NO.: BRF 0162 (16)	CHKD: DFTM/AAT/RWS JJ/KLT JOB NO: 23419-013
MATERIALS LIST		DWG. NO: <b>M1</b>

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PRECAST ABUTMENT

MISCELLANEOUS MATERIALS				
ITEM	MARK	QTY.	DESCRIPTION	REMARKS
1		111	#6 x 6'-6" (LEVEL I, BLACK REINFORCEMENT)	
2		36	#6 x 6'-9" (LEVEL I, BLACK REINFORCEMENT)	
3		13	#6 x 9'-8" (LEVEL II, DUAL COATED)	
4		28	#6 x 10'-2" (LEVEL II, DUAL COATED)	
5		13	#6 x 10'-4" (LEVEL II, DUAL COATED)	
6		14	#6 x 18'-11" (LEVEL I, BLACK REINFORCEMENT)	
7		32	#6 x 19'-0" (LEVEL I, BLACK REINFORCEMENT)	
8		2	#6 x 19'-4" (LEVEL I, BLACK REINFORCEMENT)	
9		15	#6 x 20'-3" (LEVEL I, BLACK REINFORCEMENT)	
10		2	#6 x 20'-4" (LEVEL I, BLACK REINFORCEMENT)	
11		2	#6 x 20'-5" (LEVEL I, BLACK REINFORCEMENT)	
12		2	#6 x 20'-6" (LEVEL I, BLACK REINFORCEMENT)	
13		15	#6 x 20'-8" (LEVEL I, BLACK REINFORCEMENT)	
14		14	#6 x 21'-5" (LEVEL I, BLACK REINFORCEMENT)	
15		32	#6 x 22'-9" (LEVEL I, BLACK REINFORCEMENT)	
16				
17				
18		16	SET OF (4) 0.60" x 270 KSI STRAND LIFTING LOOPS	
19				

Vermont Agency of Transportation  
**RECEIVED**  
 ON: **May 9, 2014**  
 and Checked for  
**CONFORMANCE**  
 BY: Jennifer Fitch DATE: 05/13/2014

SHOP DRAWING REVIEW

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REJECTED       REVISE AND RESUBMIT       FURNISH AS CORRECTED

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**Vannase Hagen Bruslin, Inc.**      Job Number: 57526  
 7050 US Route 7      North Ferrisburgh, VT 05473      Reviewed By: J.J. WESTCOTT  
 802.425.7788      Date: 5/13/2014

4/11/14 REVISE & RESUBMIT

APPROVAL STAMP:	<b>J.P. CARRARA &amp; SONS INC.</b> Precast & Prestress Manufacturer 2464 CASE STR., MOULDERBURY, VERMONT 05753    Phone: (802)388-6361    Fax: (802)388-9010	<b>W.M. SHULTZ CONSTRUCTION, INC.</b> PO BOX 2620 BALLSTON SPA, NY 12020
	STATE OF VERMONT AGENCY OF TRANSPORTATION COUNTY OF WINDSOR	DATE: MAR. 14, 2014 SCALE: NOTED
	TOWN OF ROCHESTER VT ROUTE 73 (RURAL MAJOR COLLECTOR) BRIDGE NO.: 15    PROJECT NO.: BRF 0162 (16)	CHKD: DFTM/AAT/RWS JJ/KLT JOB NO: 23419-013
MATERIALS LIST		DWG. NO: M2

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PRECAST ABUTMENT

