

MONOKO, LLC

1037 Peninsula Avenue
Tarpon Springs, FL 34689-2125
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Submittal No.: 03c1: Containment Plans, Rev., Pgs. C-1, C-20 & C-21

Date: September 04, 2015

**Vermont Department of Transportation
Northeast Regional Construction Office**

Attn: Mr. Ron Gray

347 Emerson Falls Road, Suite 5

St. Johnsbury, VT 05819

(Phone) (802) 751-3295; (Cell) (802) 793-3161

(Fax) (802) 751-3297; Ron.Gray@state.vt.us

Vermont Agency of Transportation

RECEIVED

ON: September 4, 2015

and Checked for

CONFORMANCE

BY: ABC DATE:

Description: Proposal/Contract Number: Bradford-Newbury IM BPNT (14)
Letting Date: 10/10/14; Award Date: 11/03/14
Project Description: Bridge Painting of Five Bridges
In the Towns of Bradford & Newbury, VT
Contract Amount: \$4,327,785.00; Completion Date: 08/26/16

Contractor: MONOKO, LLC

Reviewed & Approved By: Keri Monokandilos

Keri Monokandilos, Manager

Date: 09/04/2015

Engineer: Peter Hodgson, Resident Engineer
347 Emerson Falls Road, Suite 5
St. Johnsbury, VT 05819
802-748-2447; 802-793-1878 cell
pete.hodgson@state.vt.us
Mark.Sargent@state.vt.us

Revision:

SUBMITTAL REVIEW

Review is only for general conformity to the contract drawings and specifications and shall not relieve the contractor of his entire responsibility under the contract, including among other things, dimensions to be confirmed and correlated at the job site, and information that pertains to the fabrication processes or to techniques of construction.

- NO EXCEPTIONS TAKEN
- MAKE CORRECTIONS NOTED
RESUBMITTAL NOT REQUIRED
- AMEND AND RESUBMIT
- REJECTED - SEE REMARKS

PB AMERICAS, INC.

BY: John Kin

DATE: 9/18/15

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VERMONT DEPARTMENT OF TRANSPORTATION

PROJECT NO. IM BPNT (14)
 TEN BRIDGES ON OR OVER
 I-91 IMPROVEMENTS PLANS
 BRIDGE NOS. 58N, 58S, 59N, 59S,
 D62N, D62S, 63N, 63S, 67N, & 67S
 ORANGE COUNTY, VERMONT

ABRASIVE BLASTING CONTAINMENT PLANS, REV. 1

PREPARED FOR:
MONOKO, LLC.
 1037 PENINSULA AVENUE
 TARPON SPRINGS, FL 34689
 PHONE (727) 940-3244
 FAX (727) 279-8795

PREPARED BY:
A2B ENGINEERING, LLC.
 5406 N. HOOVER BLVD., SUITE 12
 TAMPA, FL 33634
 PHONE (813) 249-2220
 FAX (813) 793-4692
 ENGINEER OF RECORD, PAUL R. STEIJLEN, P.E.
 VT P.E. LICENSE NUMBER 107795



SPECIFICATIONS:

VERMONT DEPARTMENT OF TRANSPORTATION (VT DOT) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2012 EDITION, AND SUPPLEMENTS THERETO.

DESIGN CRITERIA:

DEAD LOAD (PLATFORM): 3 PSF
 DEAD LOAD (SCAFFOLD): 220 LBS. (32"x28" MAX. 500 LBS. RATED)
 LIVE LOAD (UNIFORM PLATFORM): 12 PSF (WEIGHT OF 1/2" STEEL SHOT)
 LIVE LOAD (UNIFORM SCAFFOLD): 6 PSF (WEIGHT OF 1/4" STEEL SHOT)
 LIVE LOAD (CONCENTRATED): 500 LBS. (TWO WORKERS MAX.)

MATERIAL PROPERTIES:

STRUCTURAL SHAPES, PLATES & BARS: ASTM A36, Fy = 36,000 PSI
 STRUCTURAL TUBING: ASTM A500, GRADE B, Fy = 46,000 PSI
 STRUCTURAL BOLTS: ASTM A325
 TIMBER: SOUTHERN PINE NO. 2 (OR BETTER)
 CABLES: 6x19 IWRC EIP
 CHAIN LINK: 9-GAUGE GALVANIZED
 METAL DECKING: ASTM A611 OR A653, Fy = 33,000 PSI

CLIPS, SHACKLES, AND EYE HOOKS SHALL BE MANUFACTURED BY CROSBY.

REQUIRED PLATFORM CABLE SIZES (3/8" Ø MIN. SUPPORT HANGER SPACING = 25'-0" MAX.)		
OPTION #	PLATFORM CABLE	PLATFORM CABLE SPACING
1	1/2" Ø	3'-9" (MAX.)
2	3/8" Ø	5'-3" (MAX.)

USE 1/2" Ø MIN. SCAFFOLD CABLE WITH 3/8" Ø MIN. SUPPORT HANGERS SPACED AT 25'-0" MAXIMUM.

NO MORE THAN 2 WORKERS SHALL BE ALLOWED PER PLATFORM CABLE OR SCAFFOLD CABLE. LIMIT 500 LB TOTAL WEIGHT OF WORKERS AND ABRASIVE BLASTING ON 500 LB RATED SCAFFOLD.

STRUCTURAL IMPACT:

THE PLATFORM CONTAINMENT STRUCTURE HAS BEEN ANALYZED FOR AN AVERAGE LIVE LOAD ALLOWANCE OF 16 PSF (APPROXIMATELY 1/2" DEPTH OF STEEL SHOT, 1.5" MINERAL SLAG ABRASIVE OR 1.5" SAND ABRASIVE, PLUS THE UNIFORM WORKER LOADING) WITH A MAXIMUM OF 1" DEPTH OF STEEL SHOT (3" MINERAL SLAG ABRASIVE OR 3" SAND ABRASIVE) FOR THE CHAIN LINK. WHEN THE DEPTH OF SPENT ABRASIVES NEARS THE DEPTHS SPECIFIED, THE CONTRACTOR WILL CEASE ABRASIVE BLASTING OPERATIONS AND VACUUM THE SPENT ABRASIVES.

DEAD, LIVE AND WIND LOADS IMPOSED ON THE BRIDGE DUE TO INSTALLATION OF THE PROPOSED PLATFORM & CONTAINMENT SYSTEMS WILL HAVE NO ADVERSE EFFECT ON THE BRIDGE STRUCTURE, AS DEFINED IN (A) AASHTO STANDARDS SPECIFICATIONS FOR HIGHWAY BRIDGES (SIXTEEN EDITION), FIGURE 3.7.6B AND (B) AASHTO MANUAL FOR CONDITION EVALUATION OF BRIDGES (SECOND EDITION), CHAPTER 6.6. THE BRIDGE HAS NOT BEEN ANALYZED FOR LOADS IMPOSED BY THE GRIT RECYCLING MACHINE (IF APPLICABLE). AS A RESULT, THE CONTRACTOR SHALL OBTAIN APPROVAL FROM THE OWNER FOR PLACEMENT OF ALL EQUIPMENT ALONG THE BRIDGE. THE GRIT RECYCLING MACHINE REAR AXLES SHALL BE CENTERED OVER THE PIERS.

THE CONTAINMENT STRUCTURE HAS BEEN ANALYZED FOR A MAXIMUM WIND VELOCITY OF 40 MPH. IF WINDS NEARING OR EXCEEDING 40 MPH (OR A LESSER WIND IS SPECIFIED IN THE CONTRACT SPECIFICATIONS) ARE

PREDICTED, BLASTING AND PAINTING OPERATIONS SHALL CEASE, THE CONTRACTOR SHALL THOROUGHLY COLLECT AND REMOVE ALL SPENT ABRASIVE MATERIAL AND DEBRIS GENERATED FROM THE BLASTING AND PAINTING ACTIVITIES USING A VACUUM TRUCK AND/OR PUMP, AND THE PAINT CONTAINMENT TARPAULINS SHALL BE ROLLED AND SECURED IN PLACE.

BASED ON THE MAXIMUM WIND VELOCITY OF 40 MPH (8 PSF WIND LOAD PER AASHTO), THE RESULTING LOAD TRANSFERRED TO A BRIDGE STRUCTURE IS 175 PLF, BASED ON A CONTAINMENT HEIGHT OF 50'-0" FROM THE TOP OF THE BRIDGE PARAPETS TO GRADE (ONE-HALF OF THE CONTAINMENT HEIGHT APPLIED TO THE BRIDGE). SINCE AASHTO SPECIFIES A LATERAL LOADING OF 300 PLF FOR DESIGN OF GIRDER BRIDGES, THE MAXIMUM ANTICIPATED WIND LOAD OF 175 PLF IS ACCEPTABLE. WIND LOADING ON GIRDER BRIDGES DOES NOT GOVERN.

FOR PROJECTS INVOLVING THE INSTALLATION OF SUSPENDED PLATFORM, AASHTO ALLOWS A 36% INCREASE IN STRESS FOR TEMPORARY LOADS (18 KSI INVENTORY RATING VERSUS 24.5 KSI OPERATING RATING). THE UNIFORM DESIGN LOAD FOR GIRDER BRIDGES IS 64 PSF, AND THUS, THE ANTICIPATED WEIGHT OF THE PLATFORM CONTAINMENT (APPROX. 19 PSF) ADDED TO THIS ORIGINAL DESIGN LOADING RESULTS IN A MAXIMUM D+L LOADING OF 83 PSF ON THE GIRDERS (19 PSF + 64 PSF EQUIVALENT LIVE LOADING). TEMPORARY LOADING APPLIED TO THE BRIDGE MEMBERS RESULTS IN A MAXIMUM 30% INCREASE, WHICH IS BELOW THE 36% INCREASE ALLOWED BY AASHTO. SINCE THE METHOD ASSUMES THAT THE EXISTING BRIDGE MEMBERS ARE 100% STRESSED PRIOR TO LOADING, THIS GENERAL COMPARISON IS CONSIDERED VERY CONSERVATIVE.

GENERAL:

THESE DRAWINGS DEPICT THE PAINT CONTAINMENT DESIGNS TO BE UTILIZED BY MONOKO, LLC., FOR ORANGE COUNTY, VERMONT FOR THE FOLLOWING BRIDGES:

- BRIDGE NO. 58N (ORANGE) I-91 OVER VT 25 (BRADFORD)
- BRIDGE NO. 58S (ORANGE) I-91 OVER VT 25 (BRADFORD)
- BRIDGE NO. 59N (ORANGE) I-91 OVER WAITS RIVER (BRADFORD)
- BRIDGE NO. 59S (ORANGE) I-91 OVER WAITS RIVER (BRADFORD)
- BRIDGE NO. D62N (ORANGE) TH NO. 3 OVER I-91 (BRADFORD)
- BRIDGE NO. D62S (ORANGE) TH NO. 3 OVER I-91 (BRADFORD)
- BRIDGE NO. 63N (ORANGE) I-91 OVER TH NO. 1 (NEWBURY)
- BRIDGE NO. 63S (ORANGE) I-91 OVER TH NO. 1 (NEWBURY)
- BRIDGE NO. 67N (ORANGE) I-91 OVER WELLS RIVER (NEWBURY)
- BRIDGE NO. 67S (ORANGE) I-91 OVER WELLS RIVER (NEWBURY)

WORKERS WILL ACCESS THE BELOW-DECK CONTAINMENTS AT THE ABUTMENTS, FROM THE BRIDGE DECK ABOVE USING OSHA-APPROVED LADDERS. THE LADDERS WILL BE SECURED TO THE BRIDGE RAILINGS AND/OR TRUSS STEEL AT THE TOP AND TO THE PLATFORM SYSTEMS AT THE BOTTOM.

FOR WORK PERFORMED FROM 500 LBS RATED ALUMINUM SCAFFOLDS SUPPORTED BY 1/2" Ø CABLES RIGGED ALONG THE ENTIRE LENGTH OF THE BRIDGE, WORKER SAFETY TIE-OFF CABLES AND WORKER HARNESSSES WILL BE UTILIZED DURING ALL WORK, INCLUDING INSTALLATION & REMOVAL OF THE PLATFORM SYSTEMS & DURING TRAVEL UP & DOWN THE LADDERS, IN ACCORDANCE WITH OSHA GUIDELINES.

THE ABRASIVE BLASTING CONTAINMENT AND/OR SUSPENDED PLATFORM DESIGNS, DETAILS AND INSTALLATION SPECIFICATIONS INCLUDED IN THIS PACKAGE WERE PREPARED UNDER THE DIRECTION OF THE CONTRACTOR. BY ACCEPTING THESE PLANS FOR SUBMITTAL, THE CONTRACTOR CONFIRMS THAT THE PLANS HAVE BEEN REVIEWED FOR CORRECTNESS, AND THAT THE SYSTEMS WILL BE INSTALLED IN ACCORDANCE WITH THE PLANS.

THE CONTRACTOR FULLY UNDERSTANDS & AGREES THAT A2B ENGINEERING, LLC. AND THEIR CERTIFYING ENGINEER(S) ARE NOT RESPONSIBLE FOR THE ULTIMATE TECHNIQUES AND/OR METHODS OF CONSTRUCTION USED ON THIS PROJECT, OR THE SAFETY PRECAUTIONS & PROGRAMS INCIDENT THERETO, OR FOR ANY LOSS OR DAMAGES RESULTING FROM THE CONTRACTOR'S FAILURE TO COMPLY WITH LAWS AND REGULATIONS (PRIMARILY OSHA) APPLICABLE TO THE FURNISHING, INSTALLING AND/OR PERFORMANCE OF WORK.

THE CONTRACTOR FULLY UNDERSTANDS & AGREES THAT A2B ENGINEERING, LLC. HAS PREPARED THESE SUBMITTALS WITH THE UNDERSTANDING THAT THE CONTRACTOR AND THEIR EMPLOYEES HAVE THE KNOWLEDGE & EXPERTISE IN THE PROPER RIGGING OF THE CATENARY CONTAINMENT & WORKER ACCESS SYSTEMS PRESENTED ON THESE DRAWINGS, INCLUDING ALL OSHA REQUIREMENTS, AND IS NOT IN NEED OF DETAILED INSTALLATION AND/OR DISMANTLING PROCEDURES FOR SUCH INSTALLATIONS.

THE CONTRACTOR FULLY UNDERSTANDS & AGREES THAT BY ACCEPTING THESE DRAWINGS FOR SUBMITTAL, THEY ARE FULLY RESPONSIBLE FOR COMPLYING WITH ALL FEDERAL, STATE & LOCAL CODES & REGULATIONS (PRIMARILY OSHA) AND HERE-BY HOLDS A2B ENGINEERING, LLC. AND THEIR CERTIFYING ENGINEER(S) HARMLESS, AND INDEMNIFIES THEM FOR ANY LOSS OR DAMAGES RESULTING FROM THE CONTRACTOR'S FAILURE TO COMPLY WITH ANY/ALL APPLICABLE CODES, REGULATIONS AND/OR ANY MANUFACTURER'S INSTALLATION REQUIREMENTS, REGARDLESS OF WHETHER SAID INFORMATION IS OR IS NOT INCLUDED AS PART OF THESE SUBMITTALS.

THESE DRAWINGS & CALCULATIONS (IF APPLICABLE) HAVE BEEN PREPARED FOR THIS PROJECT ONLY. A2B ENGINEERING, LLC. AND THEIR CERTIFYING ENGINEER(S) HAVE NO LIABILITY SHOULD ANY PORTIONS OF THESE DRAWINGS AND/OR CALCULATIONS BE USED FOR DIFFERENT PROJECT.

THESE PLANS WERE PREPARED WITHOUT THE BENEFIT OF AS-BUILT BRIDGE PLANS. DUE TO UNCERTAINTIES OF THE EXISTING STRUCTURE, THE CONTRACTOR MAY MAKE MINOR MODIFICATIONS TO THE PAINT CONTAINMENT STRUCTURE DETAILED IN THESE PLANS. A2B ENGINEERING, LLC. SHALL BE NOTIFIED OF ANY MODIFICATIONS TO ENSURE THAT THE STRUCTURAL INTEGRITY OF THE PAINT CONTAINMENT STRUCTURE IS NOT COMPROMISED.

RECEIVED
 ON September 4, 2015
 and Certified for
CONFORMANCE
 BY: JBC DATE



Bridge Nos. ALL

REVISIONS			DESCRIPTION	DRAWN BY: BDN 02/15	CHECKED BY: PDB 02/15	DESIGNED BY: MAT 02/15	CHECKED BY: PRS 02/15	VERMONT DEPARTMENT OF TRANSPORTATION			SHEET TITLE: GENERAL NOTES (1 OF 2)	REF. DWG. NO.
DATE	BY	DESCRIPTION						ROAD NO.	COUNTY	PROJECT ID		
			PAUL STEJLEN P.E. P.E. LICENSE NUMBER 107795 A2B ENGINEERING, LLC. 5406 N. HOOVER BLVD., SUITE 12 TAMPA, FL 33634					1-91	ORANGE	IM BPNT (14)	TEN BRIDGES ON OR OVER I-91 IMPROVEMENT PLANS	C-2

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CONTAINMENT ENCLOSURE:

THE ABRASIVE BLASTING CONTAINMENT SYSTEM SHALL CONFORM TO THE REQUIREMENTS OF OSHA 1926 SUBPART L, OSHA 29 CFR 1910.28, ANSI A10.8 AND SSPC GUIDE 6.

ALL ABRASIVE BLAST CLEANING CONTAINMENTS, INCLUDING GROUND COVER, SIDEWALLS AND ENDWALLS, SHALL BE CONSTRUCTED OF 100% AIR IMPERMEABLE FIRE RESISTANT TARPULINS. ADJACENT TARPULIN PANELS SHALL BE FASTENED TOGETHER BY ROLLING AND CLAMPING OR BY CLAMPING TO LUMBER TO CREATE A CONTINUOUS IMPENETRABLE SEAL. THE CONTRACTOR MAY USE ANY APPROPRIATE METHOD AVAILABLE (TAPE, SPRAY FOAM, ETC) TO PROVIDE A CONTINUOUS SEAL TO CONTAIN DUST EMISSIONS (ABRASIVE BLASTING) AND/OR SOLVENT CLEANING/WATER WASHING OPERATIONS. SEE MISCELLANEOUS CONTAINMENT DETAILS SHEETS.

FOR BRIDGE TO GRADE CONTAINMENTS, THE TARPULIN BASE SHALL BE SEALED WITH SANDBAGS OR SIMILAR WEIGHTS. FOR SSPC CLASS 1A CONTAINMENTS, LUMBER PLANKS OR ALUMINUM SCAFFOLDS SHALL BE PLACED BELOW THE SANDBAGS TO PROVIDE A "CONTINUOUS" SEAL. FOR CLASS 2A CONTAINMENTS (OR LESSER), USE SANDBAGS OR SIMILAR WEIGHTED MATERIAL AT 5 FT (±) INTERVALS. FOR VERTICAL CONTAINMENTS, THE CONTRACTOR MAY UTILIZE CABLES ANCHORED WITH WEIGHTS OR ANCHORED TO THE GROUND TO SUPPORT THE VERTICAL TARPULIN WALLS.

FOR PLATFORM AND CABLE SUPPORTED CONTAINMENTS, TARPULIN WALLS SHALL BE SECURED TO APPROPRIATE BRIDGE ELEMENTS TO SEAL THE ENCLOSURE.

EXISTING BRIDGE DRAINS ENCLOSED WITHIN THE PAINT CONTAINMENT STRUCTURE SHALL BE TEMPORARILY PLUGGED OR WATER RUNOFF DIRECTED AWAY FROM THE CONTAINMENT ENCLOSURE AS SPECIFIED OR PERMITTED IN THE CONTRACT SPECIFICATIONS. AT THE CONCLUSION OF EACH WORK DAY, ALL PLUGGED DECK DRAINS SHALL BE UNPLUGGED TO RESTORE DECK DRAINAGE. AT THE CONCLUSION OF THE BRIDGE CLEANING AND PAINTING OPERATIONS RESTORE BRIDGE DRAINAGE TO THE SATISFACTION OF THE ENGINEER.

WHEN ABRASIVE BLASTING IS PERFORMED NEAR THE TARPULIN WALL, THE ABRASIVE BLAST SHALL BE DIRECTED AWAY FROM THE TARPULIN WALL. WHEN WORK IS PERFORMED NEAR AN INLET OPENING, THE OPENING SHALL BE TEMPORARILY SEALED TO MINIMIZE LOSS OF EMISSIONS.

TARPULINS SHALL BE 100% AIR/WATER IMPERMEABLE TO CONTAIN THE WASTE WATER AND BLASTING DEBRIS AND ALLOW FOR VACUUMING.

FOR SSPC TYPE 1A CONTAINMENTS, WORKERS SHALL ACCESS EACH CONTAINMENT THROUGH DOUBLE DOOR AIRLOCK ENTRANCE WHICH ALLOWS THE WORKERS TO SEAL ONE DOOR PRIOR TO ENTERING/EXITING THE CONTAINMENT THROUGH THE OTHER DOOR. TARPULIN DOORS SHALL BE CLOSED AND SEALED DURING BLASTING OPERATIONS TO PREVENT LOSS OF EMISSIONS. MINIMIZE PASSAGE IN AND OUT OF CONTAINMENT STRUCTURES DURING BLASTING OPERATIONS. DURING SANDBLASTING OPERATIONS, ALL WORKERS/PERSONAL SHALL BE CLEANED WITH A HEPA VACUUM PRIOR TO LEAVING THE CONTAINMENT.

FOR SSPC TYPE 2A CONTAINMENTS (OR LESSER), WORKERS SHALL ACCESS EACH CONTAINMENT THROUGH OVERLAPPING TARPULIN DOORS. TARPULIN DOORS SHALL BE CLOSED AND SEALED DURING BLASTING OPERATIONS TO PREVENT LOSS OF EMISSIONS. MINIMIZE PASSAGE IN AND OUT OF CONTAINMENT STRUCTURES DURING BLASTING OPERATIONS, SEE MISCELLANEOUS CONTAINMENT DETAILS SHEETS.

AT THE CONCLUSION OF EACH WORK DAY, THE CONTRACTOR SHALL THOROUGHLY COLLECT AND REMOVE ALL SPENT ABRASIVE MATERIAL AND DEBRIS GENERATED FROM THE BLASTING AND PAINTING ACTIVITIES USING A VACUUM TRUCK AND/OR PUMP. DURING SANDBLASTING OPERATIONS, ALL WORKER/PERSONNEL SHALL BE CLEANED WITH A HANDHELD HEPA VACUUM

PRIOR TO LEAVING THE CONTAINMENT.

PRIOR TO DISSEMBLING THE PAINT CONTAINMENT STRUCTURE, ALL SURFACES WITHIN THE CONTAINMENT, INCLUDING SIDEWALLS, ENDWALLS AND GROUND COVER, SHALL BE BLOWN DOWN TO ACHIEVE THE CLEANLINESS SPECIFIED IN THE CONTRACT, OR GENERALLY ACCEPTED PAINTING PRACTICES.

ALL WASTE DEBRIS SHALL BE SEALED AND STORED IN ACCORDANCE WITH THE CONTRACTOR'S APPROVED WASTE HANDLING PLANS. COLLECTED AND SEALED WASTE MATERIAL SHALL BE APPROPRIATELY LABELED AS HAZARDOUS WASTE. THE STORAGE SITE AREA SHALL PROVIDE FOR DRAINAGE TO PREVENT WATER RUN-OFF FROM PONDING AROUND THE SEALED CONTAINERS. THE WASTE STORAGE SITE SHALL BE SECURED TO PREVENT UNAUTHORIZED ACCESS.

IF THE ENGINEER DETERMINES THAT THE PAINT CONTAINMENT SYSTEM IS NOT EFFECTIVE IN RESTRICTING BLASTING AND PAINTING EMISSIONS, OR IN COLLECTING BLASTING DEBRIS, BLASTING AND PAINTING OPERATIONS SHALL CEASE AND DEFICIENCIES CORRECTED PRIOR TO RESUMING WORK.

CONTAINMENT NOTES:

ALL WORK SHALL BE ASSEMBLED IN ACCORDANCE WITH THESE DRAWINGS, THE MANUFACTURER'S INSTRUCTIONS AND CRITERIA, INDUSTRY GUIDELINES AND THE MOST CURRENT EDITION OF ALL FEDERAL, STATE AND LOCAL REGULATIONS, STATUTES ORDINANCES, AND THE PROJECT SPECIFICATIONS. A2B ENGINEERING, LLC SHALL BE NOTIFIED WHERE DISCREPANCIES EXIST BETWEEN THESE DRAWINGS AND THE MANUFACTURER'S INSTRUCTIONS TO VERIFY THE APPROPRIATE CRITERIA.

THE CONTRACTOR IS SOLELY RESPONSIBLE TO ENSURE THAT ALL FALL PROTECTION IS INSTALLED PER OSHA AND PROJECT SPECIFICATIONS.

PRIOR TO CONSTRUCTION OF THE PAINT CONTAINMENT STRUCTURE ALL MATERIAL SHALL BE THOROUGHLY INSPECTED TO ENSURE THAT THEY CONTAIN NO DEFICIENCIES THAT WILL COMPROMISE THE STRUCTURAL INTEGRITY OF THE PAINT CONTAINMENT STRUCTURE. THE CONTRACTOR SHALL PERFORM PERIODIC INSPECTIONS OF THE PAINT CONTAINMENT STRUCTURE TO ENSURE THE STRUCTURAL INTEGRITY OF THE STRUCTURE REMAINS SECURE.

VENTILATION SYSTEM:

THE CONTRACTOR SHALL PROVIDE MECHANICAL EXHAUST VENTILATION FOR THE ABRASIVE BLASTING CONTAINMENT STRUCTURES USING ONE OR MORE MOBILE DUST COLLECTORS. THE CONTRACTOR PROPOSES TO USE ONE (1) 45,000 AT 13" W.G. CFM MOBILE DUST COLLECTOR MANUFACTURED BY ADVANCED RECYCLING SYSTEMS, INC. THE DUST COLLECTOR HAS AN ASSUMED DUST EXHAUST CAPACITY BASED ON THE NUMBER OF DUCTS PROVIDED AS:

- EXHAUST CAPACITY WITH 4 - 20 INCH DIAMETER DUCTS: 48,000 CFM
- EXHAUST CAPACITY WITH 3 - 20 INCH DIAMETER DUCTS: 45,000 CFM
- EXHAUST CAPACITY WITH 2 - 20 INCH DIAMETER DUCTS: 40,000 CFM
- EXHAUST CAPACITY WITH 1 - 20 INCH DIAMETER DUCT: 24,000 CFM

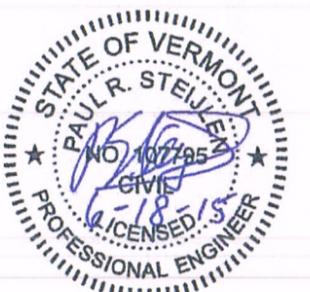
REFER TO PLAN SHEETS FOR NUMBER OF EXHAUST DUCTS AND INLET AREA REQUIREMENTS.

THE MAIN OBJECTIVE FOR USING THE NEGATIVE AIR EXHAUST VENTILATION SYSTEM IS TO CONTAIN AIRBORNE PARTICULATE WITHIN THE CONTAINMENT STRUCTURE AND PROVIDE AIR FLOW THROUGH THE CONTAINMENT STRUCTURE. CONTAINMENT SIDEWALLS, ENDWALLS AND GROUND COVERS SHALL BE CONSTRUCTED AND SEALED TO PREVENT EXCESSIVE LEAKS BETWEEN THE PANELS AND ALONG THE GROUND. A PRELIMINARY VENTILATION SYSTEM TEST OF EACH CONTAINMENT SHALL BE PERFORMED PRIOR TO STARTING ABRASIVE BLASTING OPERATIONS. AIR FLOW THROUGH THE CONTAINMENT SHALL BE VERIFIED AT MULTIPLE LOCATIONS THROUGHOUT THE CONTAINMENT USING A HAND-HELD MANOMETER. IF THE EXHAUST VENTILATION SYSTEM IS UNABLE TO ACHIEVE THE SPECIFIED AIR FLOW THROUGH THE CONTAINMENT STRUCTURE OR ADEQUATELY REMOVE AIRBORNE PARTICULATE MATTER, THE CONTRACTOR

SHALL PROVIDE ADDITIONAL DUST COLLECTORS AND EXHAUST DUCTS, OR REDUCE THE SIZE OF THE ACTIVE PAINT CONTAINMENT ENCLOSURE BY INSTALLING INTERNAL TARPULIN WALLS. THE EXHAUST VENTILATION SYSTEM SHALL REMAIN IN OPERATION DURING CLEANING AND VACUUMING OPERATIONS.

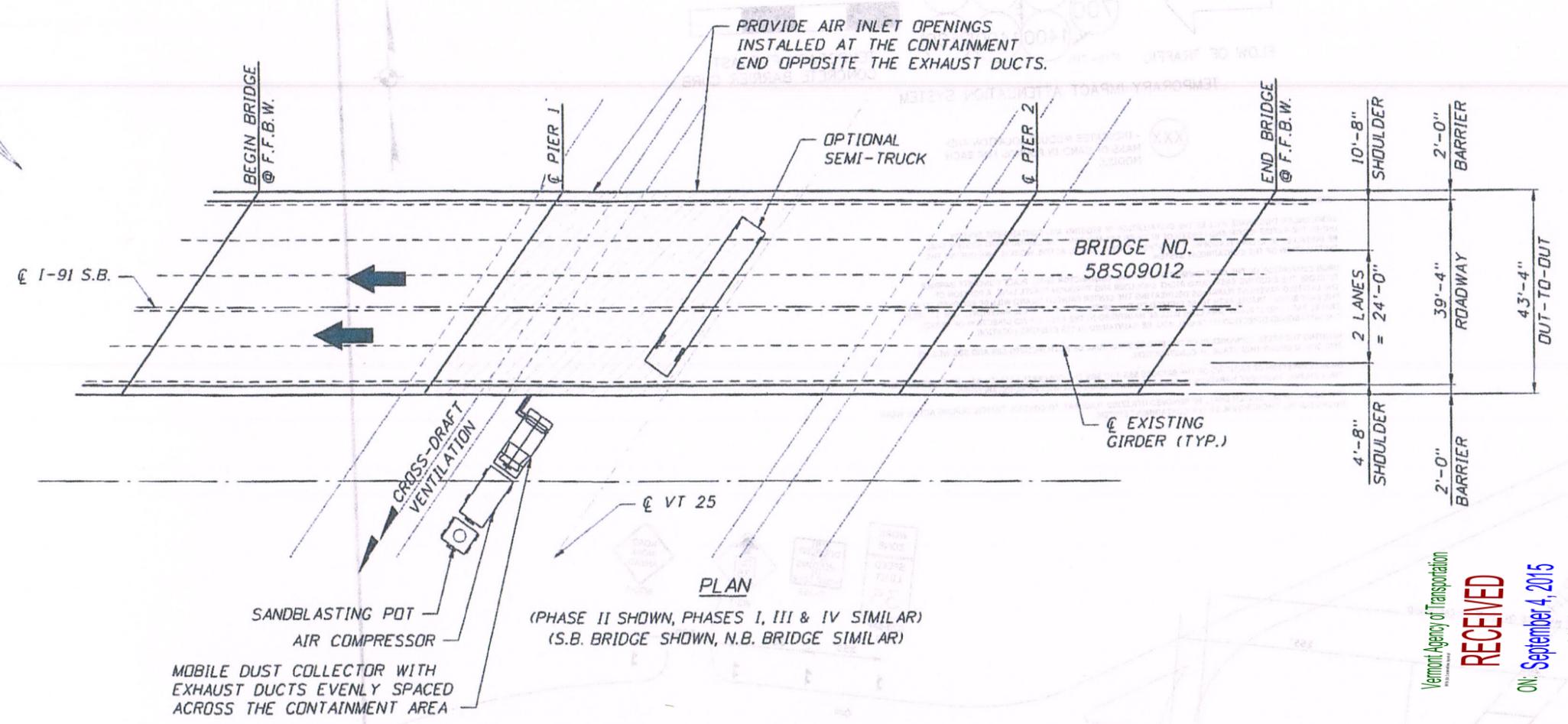
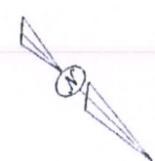
NO. OF 20" Ø DUCTS PROVIDED	4	3	2	1
VOLUME Q, CFM	48,000	45,000	24,000	20,000
MAX. CONTAINMENT AREA, SQ. FT. (V=100 FT/MIN.)	480.0	450.0	240.0	200.0
MIN. CONTAINMENT AREA, SQ. FT. (V=300 FT/MIN.)	160.0	150.0	80.0	66.7
MAX. INLET AREA, SQ. FT. (V=700 FT/MIN)	68.6	64.3	34.3	28.6
MIN. INLET AREA, SQ. FT. (V=1000 FT/MIN)	48.0	45.0	24.0	20.0

Vermont Agency of Transportation
RECEIVED
 ON: September 4, 2015
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 BY: ABC DATE:



Bridge Nos. ALL

REVISIONS			DATE	BY	DESCRIPTION	DRAWN BY: BDN 02/15	CHECKED BY: PDB 02/15	DESIGNED BY: MAT 02/15	CHECKED BY: PRS 02/15	VERMONT DEPARTMENT OF TRANSPORTATION			SHEET TITLE: GENERAL NOTES (2 OF 2)	PROJECT NAME: TEN BRIDGES ON OR OVER I-91 IMPROVEMENT PLANS	REF. DWG. NO.
ROAD NO.	COUNTY	PROJECT ID													
1-91	ORANGE	111 BPNT (14)													



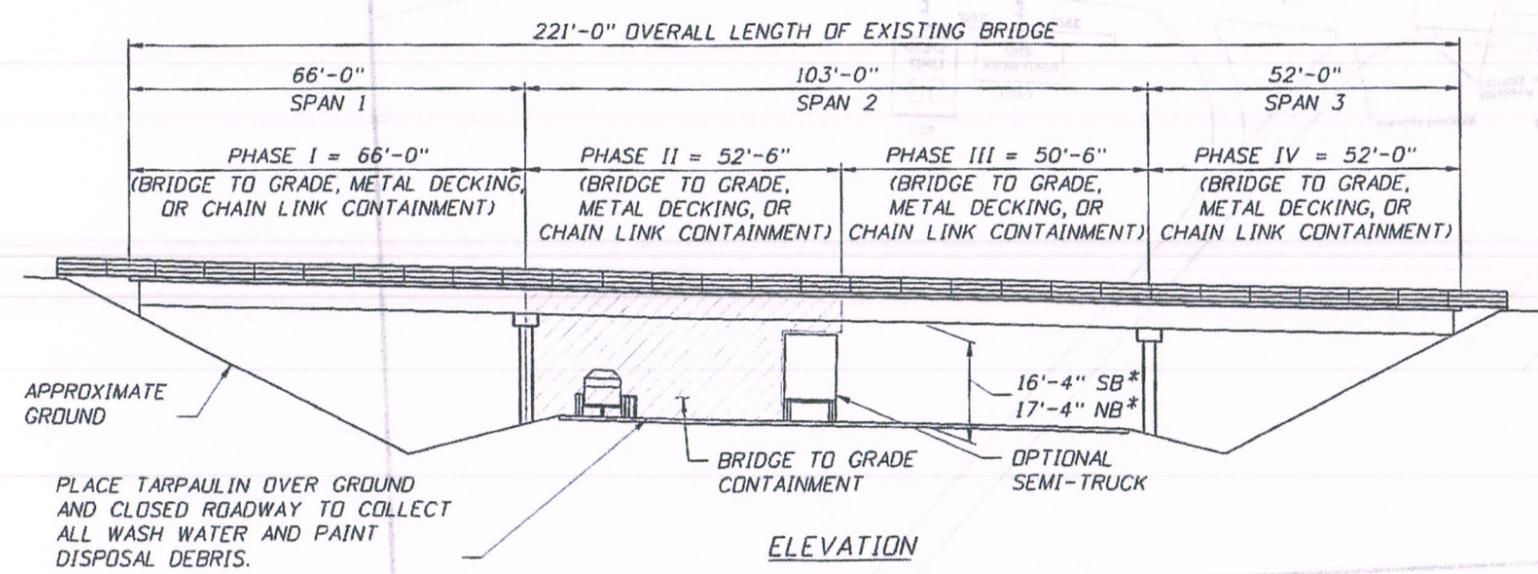
PLAN

(PHASE II SHOWN, PHASES I, III & IV SIMILAR)
(S.B. BRIDGE SHOWN, N.B. BRIDGE SIMILAR)

Vermont Agency of Transportation
RECEIVED
ON: September 4, 2015
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NOTES:

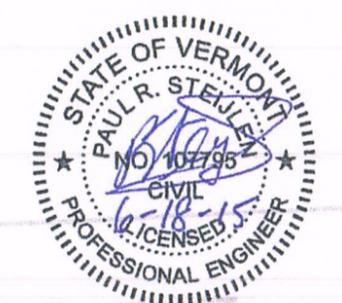
1. THESE PLANS WERE PREPARED WITHOUT THE BENEFIT OF AS-BUILT BRIDGE PLANS. THE CONTRACTOR SHALL MAKE ALLOWANCE FOR BRIDGE ELEMENTS AND MODIFICATIONS NOT SHOWN ON THESE PLANS.
2. WORK PHASES I-IV SHOWN SCHEMATICALLY. REFERENCE MOT PLANS FOR LIMITS OF WORK PHASES.
3. WORK PHASES I-IV MAY BE WORKED IN ANY ORDER AT THE CONVENIENCE OF THE CONTRACTOR'S MEANS AND METHODS, TRAFFIC PATTERNS AND DENSITY, OR OTHER SITE CHARACTERISTICS THAT INFLUENCE A PREFERRED WORK AREA.
4. THE CONTRACTOR HAS THE OPTION TO USE ADDITIONAL MOBILE DUST COLLECTORS, OR PLACE LONGITUDINAL OR TRANSVERSE INTERMEDIATE TARPULIN WALL.
5. FOR ADDITIONAL DETAILS, SEE CONTAINMENT MISCELLANEOUS DETAILS SHEETS.



ELEVATION

(PHASE II SHOWN, PHASES I, III & IV SIMILAR)
(S.B. BRIDGE SHOWN, N.B. BRIDGE SIMILAR)

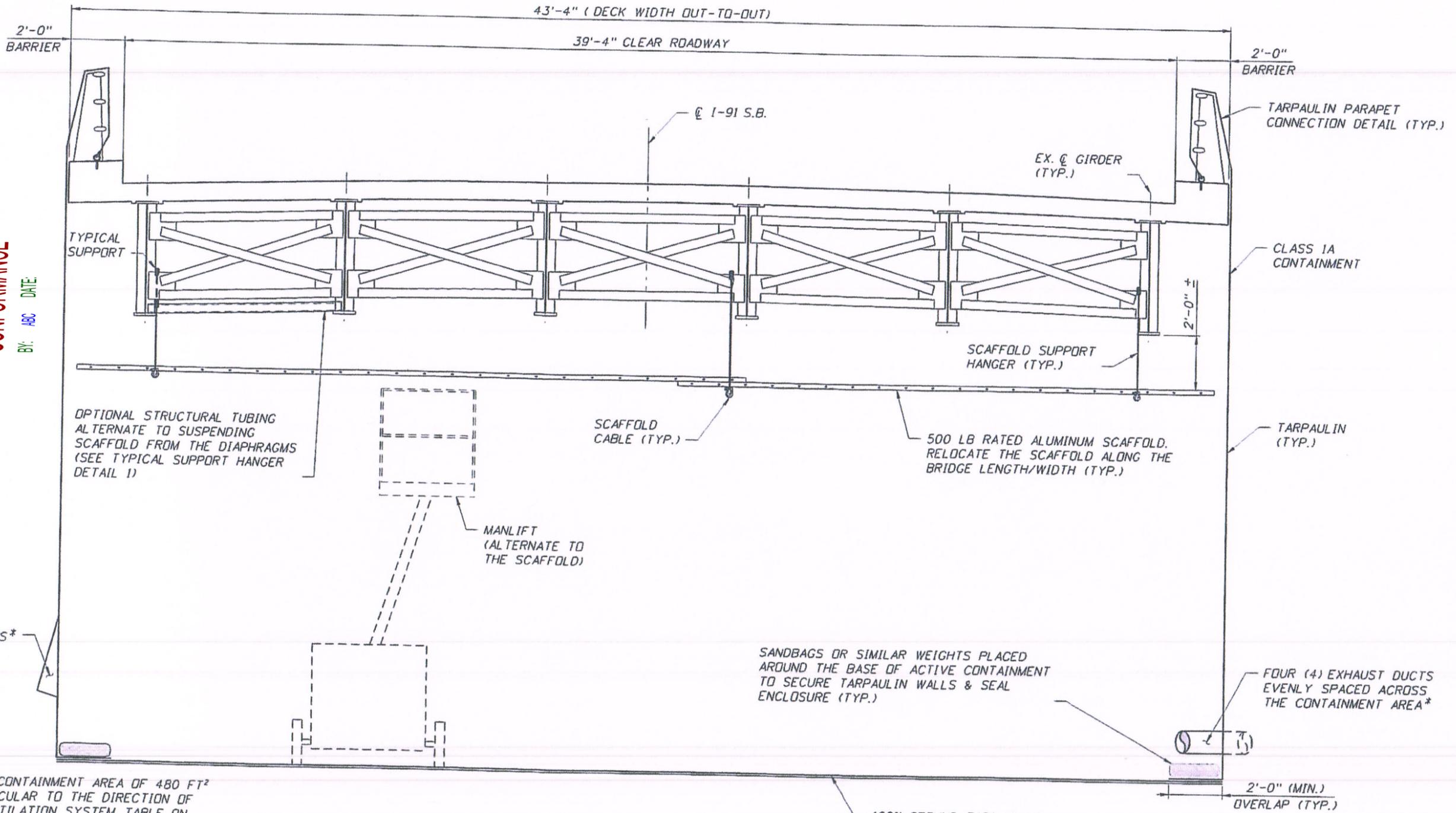
* EXISTING MINIMUM VERTICAL CLEARANCE BASED ON EXISTING BRIDGE PLANS. CONTRACTOR SHALL OBTAIN APPROVAL FOR REDUCTION OF EXISTING VERTICAL CLEARANCE AND RAISE CABLE AS NEEDED OVER ACTIVE ROADWAY.



Bridge Nos. 58N & 58S (BRADFORD)

REVISIONS			DATE	BY	DESCRIPTION	DRAWN BY: BDN 02/15	CHECKED BY: PDB 02/15	DESIGNED BY: MAT 02/15	CHECKED BY: PRS 02/15	VERMONT DEPARTMENT OF TRANSPORTATION			SHEET TITLE: PLAN & ELEVATION	REF. DWG. NO.
ROAD NO.	COUNTY	PROJECT ID								PROJECT NAME:	SHEET NO.			
1-91	ORANGE	1M BPNT (14)	TEN BRIDGES ON OR OVER 1-91 IMPROVEMENT PLANS	C-4										

Vermont Agency of Transportation
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 BY: ABC DATE:



APPROXIMATELY 48 FT²
 OF AIR INLET OPENINGS
 OPPOSITE EXHAUST DUCTS*

SANDBAGS OR SIMILAR WEIGHTS PLACED
 AROUND THE BASE OF ACTIVE CONTAINMENT
 TO SECURE TARPULIN WALLS & SEAL
 ENCLOSURE (TYP.)

FOUR (4) EXHAUST DUCTS
 EVENLY SPACED ACROSS
 THE CONTAINMENT AREA*

100% GROUND TARPULINS
 PLACED OVER ENTIRE
 CONTAINMENT AREA TO
 COLLECT ALL WASH WATER
 AND PAINT DISPOSAL
 DEBRIS.

* BASED ON MAXIMUM CONTAINMENT AREA OF 480 FT²
 AS MEASURED PERPENDICULAR TO THE DIRECTION OF
 CROSS-DRAFT (SEE VENTILATION SYSTEM TABLE ON
 GENERAL NOTES SHEETS)

NOTES:

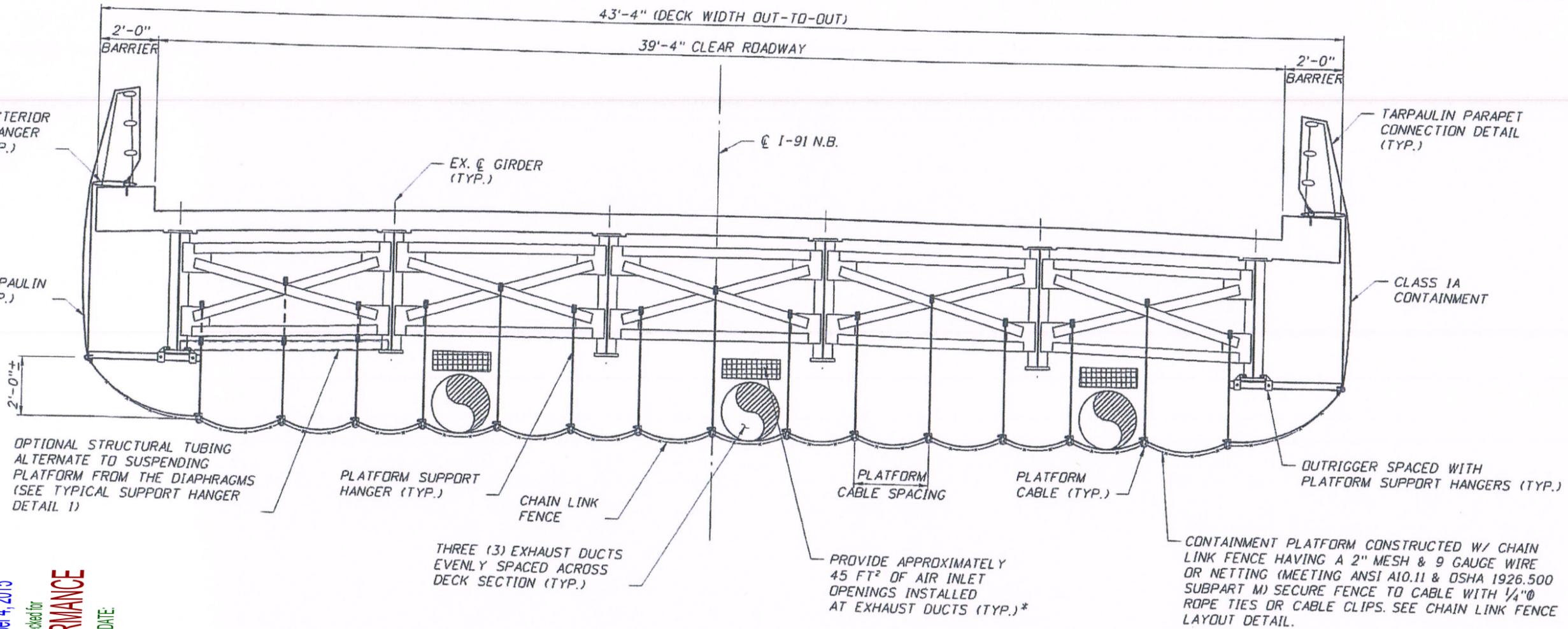
1. THESE PLANS WERE PREPARED WITHOUT THE BENEFIT OF AS-BUILT BRIDGE PLANS. THE CONTRACTOR SHALL MAKE ALLOWANCE FOR BRIDGE ELEMENTS AND MODIFICATIONS NOT SHOWN ON THESE PLANS.
2. THE CONTRACTOR SHALL AVOID ATTACHING/CONNECTING TO BRIDGE ELEMENTS EXHIBITING SIGNIFICANT SECTION LOSS.
3. FOR ADDITIONAL DETAILS, SEE CONTAINMENT MISCELLANEOUS DETAILS SHEETS.
4. INSPECTIONS SHALL BE PERFORMED FROM MANLIFT.
5. CONTRACTOR TO PROVIDE LIFE LINES MEETING OSHA 1910.66 APPENDIX C AS REQUIRED.

TYPICAL SECTION
 (PHASES I-IV)
 (MOBILE DUST COLLECTOR
 NOT SHOWN FOR CLARITY)
 (S.B. BRIDGE SHOWN, N.B. BRIDGE SIMILAR)



Bridge Nos. 58N & 58S (BRADFORD)

REVISIONS			DATE	BY	DESCRIPTION	DRAWN BY: BON 02/15	CHECKED BY: PDB 02/15	DESIGNED BY: MAT 02/15	CHECKED BY: PRS 02/15	VERMONT DEPARTMENT OF TRANSPORTATION			SHEET TITLE: CONTAINMENT SECTION DETAILS (1 OF 3)	REF. DWG. NO.
DATE	BY	DESCRIPTION								ROAD NO.	COUNTY	PROJECT ID		
										1-91	ORANGE	1M BPWT (14)	TEN BRIDGES ON OR OVER 1-91 IMPROVEMENT PLANS	C-5

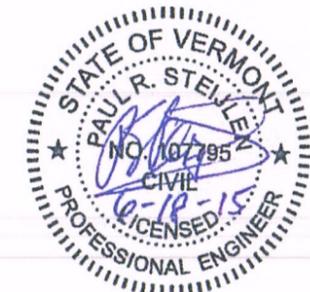


Vermont Agency of Transportation
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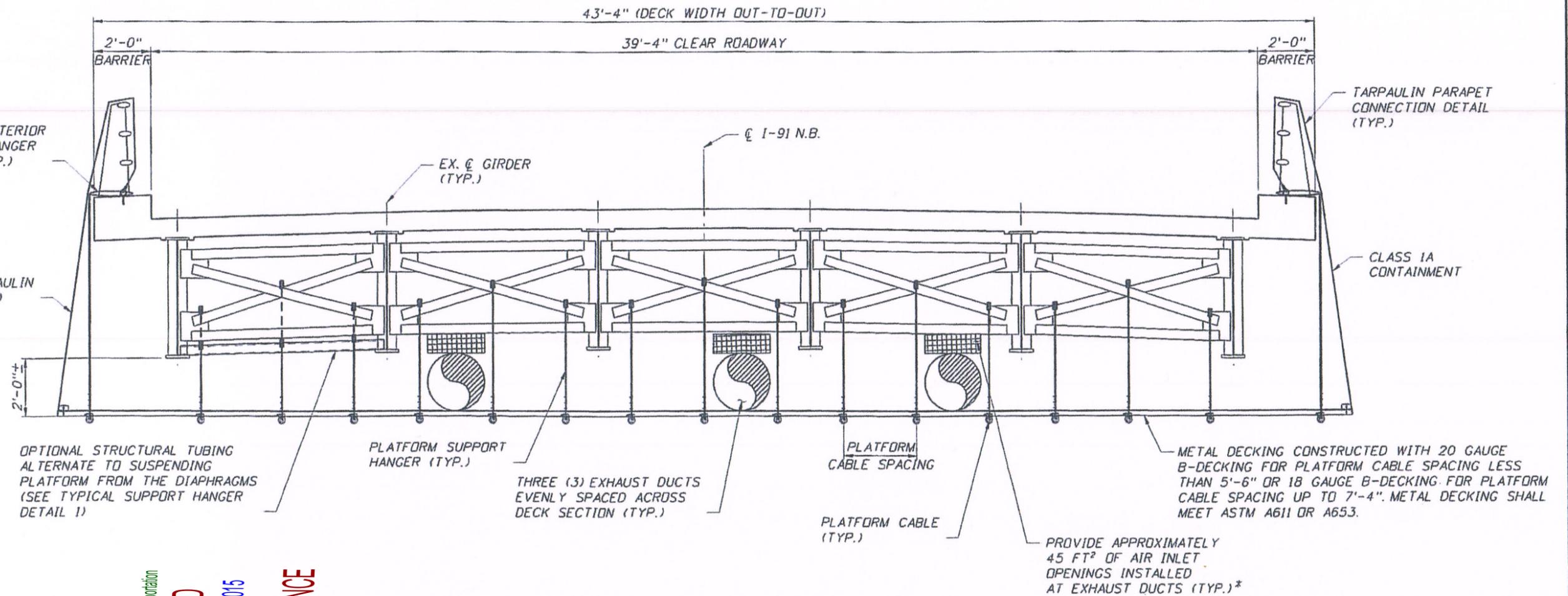
* BASED ON MAXIMUM CONTAINMENT AREA OF 290 FT² AS MEASURED PERPENDICULAR TO THE DIRECTION OF CROSS-DRAFT (SEE VENTILATION SYSTEM TABLE ON GENERAL NOTES SHEETS)

- NOTES:
1. THESE PLANS WERE PREPARED WITHOUT THE BENEFIT OF AS-BUILT BRIDGE PLANS. THE CONTRACTOR SHALL MAKE ALLOWANCE FOR BRIDGE ELEMENTS AND MODIFICATIONS NOT SHOWN ON THESE PLANS.
 2. THE CONTRACTOR SHALL AVOID ATTACHING/CONNECTING TO BRIDGE ELEMENTS EXHIBITING SIGNIFICANT SECTION LOSS.
 3. FOR ADDITIONAL DETAILS, SEE CONTAINMENT MISCELLANEOUS DETAILS SHEETS.
 4. INSPECTIONS SHALL BE PERFORMED FROM MANLIFT.
 5. CONTRACTOR TO PROVIDE LIFE LINES MEETING OSHA 1910.66 APPENDIX C AS REQUIRED.

TYPICAL SECTION
 (PHASES I-IV)
 (MOBILE DUST COLLECTOR NOT SHOWN FOR CLARITY)
 (S.B. BRIDGE SHOWN, N.B. BRIDGE SIMILAR)
 (3'-9" CABLE SPACING SHOWN, 5'-3" CABLE SPACING SIMILAR)



REVISIONS			DATE	BY	DESCRIPTION	DRAWN BY: BDN 02/15	CHECKED BY: FDB 02/15	DESIGNED BY: MAT 02/15	CHECKED BY: PRS 02/15	VERMONT DEPARTMENT OF TRANSPORTATION			SHEET TITLE: CONTAINMENT SECTION DETAILS (2 OF 3)	REF. DWG. NO.
DATE	BY	DESCRIPTION								ROAD NO.	COUNTY	PROJECT ID		
										1-91	ORANGE	1M BPNT (14)	TEN BRIDGES ON OR OVER 1-91 IMPROVEMENT PLANS	C-6



Vermont Agency of Transportation
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 BY: ABC DATE:

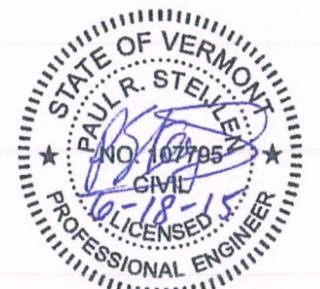
* BASED ON MAXIMUM CONTAINMENT AREA OF 290 FT² AS MEASURED PERPENDICULAR TO THE DIRECTION OF CROSS-DRAFT (SEE VENTILATION SYSTEM TABLE ON GENERAL NOTES SHEETS)

NOTES:

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3. FOR ADDITIONAL DETAILS, SEE CONTAINMENT MISCELLANEOUS DETAILS SHEETS.
4. INSPECTIONS SHALL BE PERFORMED FROM MANLIFT.
5. CONTRACTOR TO PROVIDE LIFE LINES MEETING OSHA 1910.66 APPENDIX C AS REQUIRED.

TYPICAL SECTION

(PHASES I-IV)
 (MOBILE DUST COLLECTOR
 NOT SHOWN FOR CLARITY)
 (S.B. BRIDGE SHOWN, N.B. BRIDGE SIMILAR)
 (3'-9" CABLE SPACING SHOWN,
 5'-3" CABLE SPACING SIMILAR)



Bridge Nos. 58N & 58S (BRADFORD)

REVISIONS			PAUL STEIJLEN P.E. P.E. LICENSE NUMBER 107795 A2B ENGINEERING, LLC. 5406 N. HOOVER BLVD., SUITE 12 TAMPA, FL 33634	MONOKO, LLC. 1037 PENINSULA AVENUE TARPON SPRINGS, FL 34689 PHONE (727) 940-3244 FAX (727) 279-8795	DRAWN BY: BDN 02/15 CHECKED BY: FDB 02/15 DESIGNED BY: MAT 02/15 CHECKED BY: PRS 02/15	VERMONT DEPARTMENT OF TRANSPORTATION			SHEET TITLE: CONTAINMENT SECTION DETAILS (3 OF 3)	REF. DWG. NO.
DATE	BY	DESCRIPTION				ROAD NO.	COUNTY	PROJECT ID		
						1-91	ORANGE	1M BPNT (14)	TEN BRIDGES ON OR OVER I-91 IMPROVEMENT PLANS	C-7

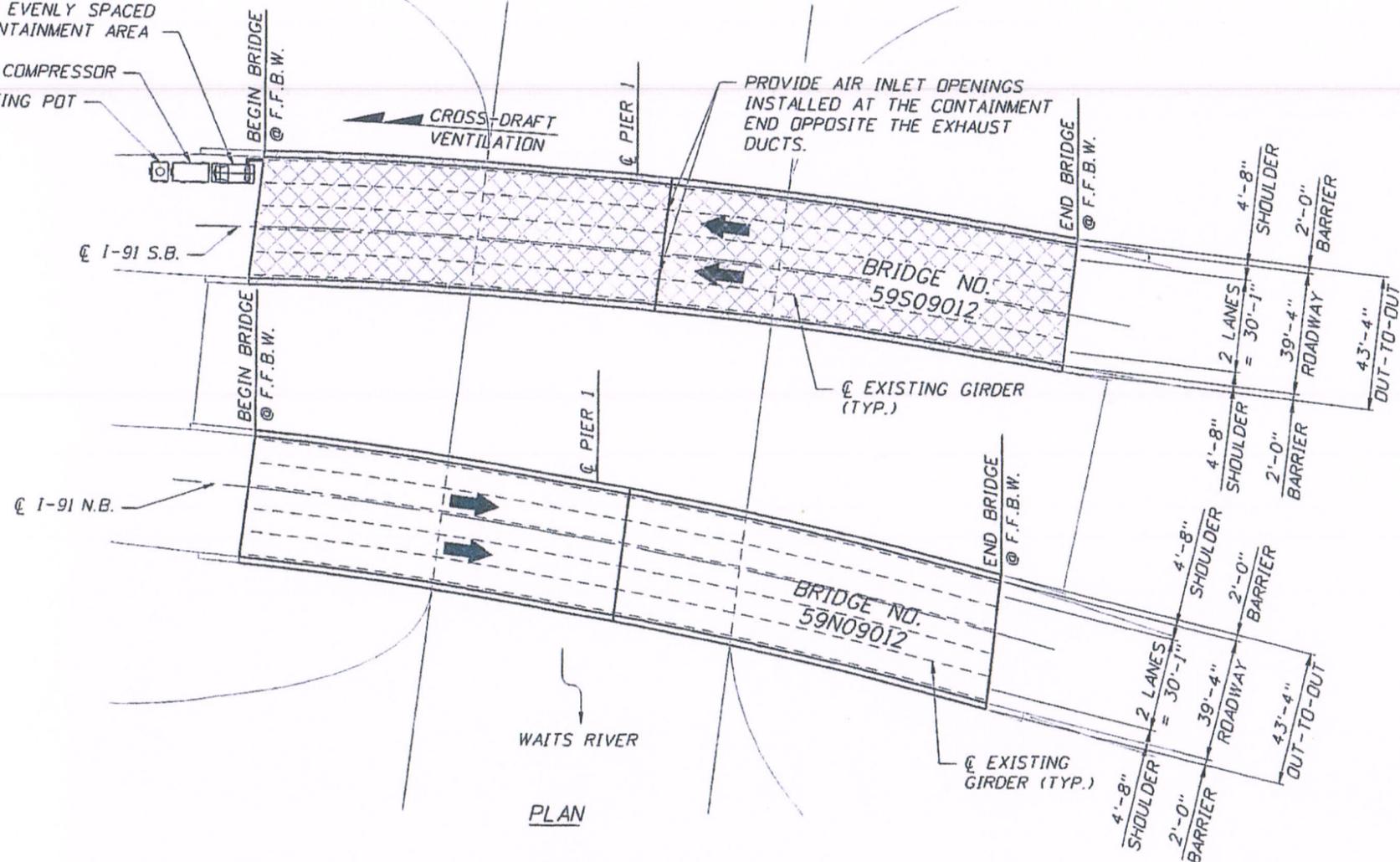
Vermont Agency of Transportation
RECEIVED
 ON: September 4, 2015
 and Checked for
CONFORMANCE
 BY: ABC DATE

MOBILE DUST COLLECTOR WITH EXHAUST DUCTS EVENLY SPACED ACROSS THE CONTAINMENT AREA

AIR COMPRESSOR
 SANDBLASTING POT

CROSS-DRAFT VENTILATION

PROVIDE AIR INLET OPENINGS INSTALLED AT THE CONTAINMENT END OPPOSITE THE EXHAUST DUCTS.

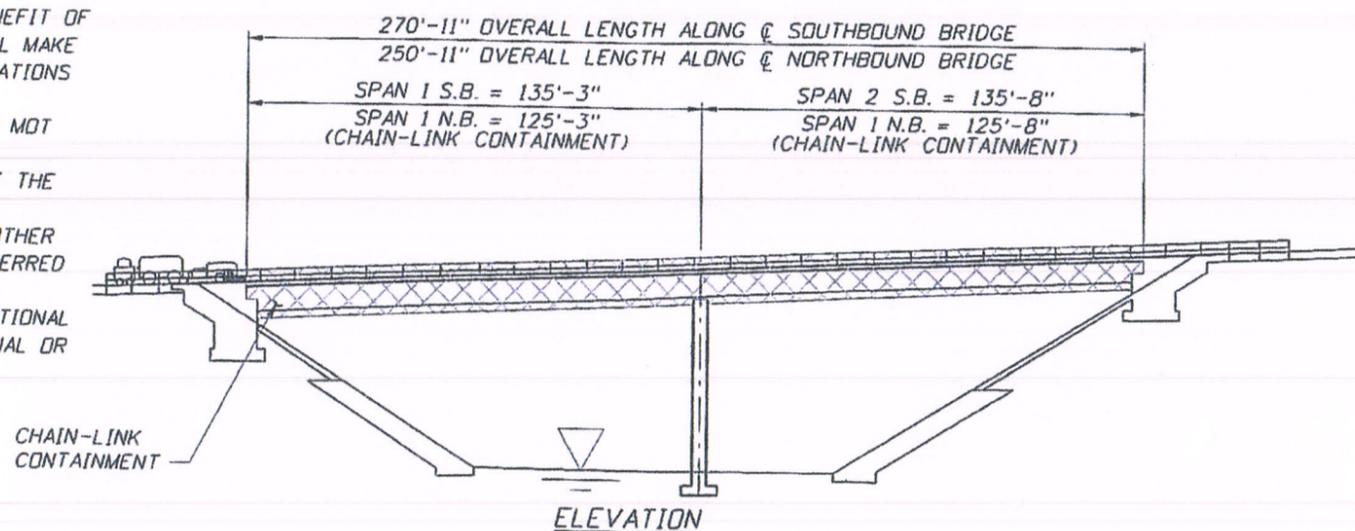


WAITS RIVER

PLAN

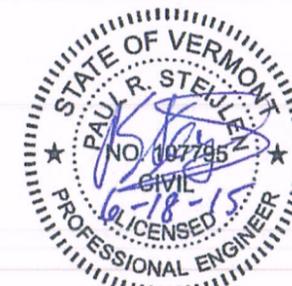
NOTES:

1. THESE PLANS WERE PREPARED WITHOUT THE BENEFIT OF AS-BUILT BRIDGE PLANS. THE CONTRACTOR SHALL MAKE ALLOWANCE FOR BRIDGE ELEMENTS AND MODIFICATIONS NOT SHOWN ON THESE PLANS.
2. WORK PHASE SHOWN SCHEMATICALLY. REFERENCE MOT PLANS FOR LIMITS OF WORK PHASES.
3. WORK PHASE MAY BE WORKED IN ANY ORDER AT THE CONVENIENCE OF THE CONTRACTOR'S MEANS AND METHODS, TRAFFIC PATTERNS AND DENSITY, OR OTHER SITE CHARACTERISTICS THAT INFLUENCE A PREFERRED WORK AREA.
4. THE CONTRACTOR HAS THE OPTION TO USE ADDITIONAL MOBILE DUST COLLECTORS, OR PLACE LONGITUDINAL OR TRANSVERSE INTERMEDIATE TARPULIN WALL.
5. FOR ADDITIONAL DETAILS, SEE CONTAINMENT MISCELLANEOUS DETAILS SHEETS.



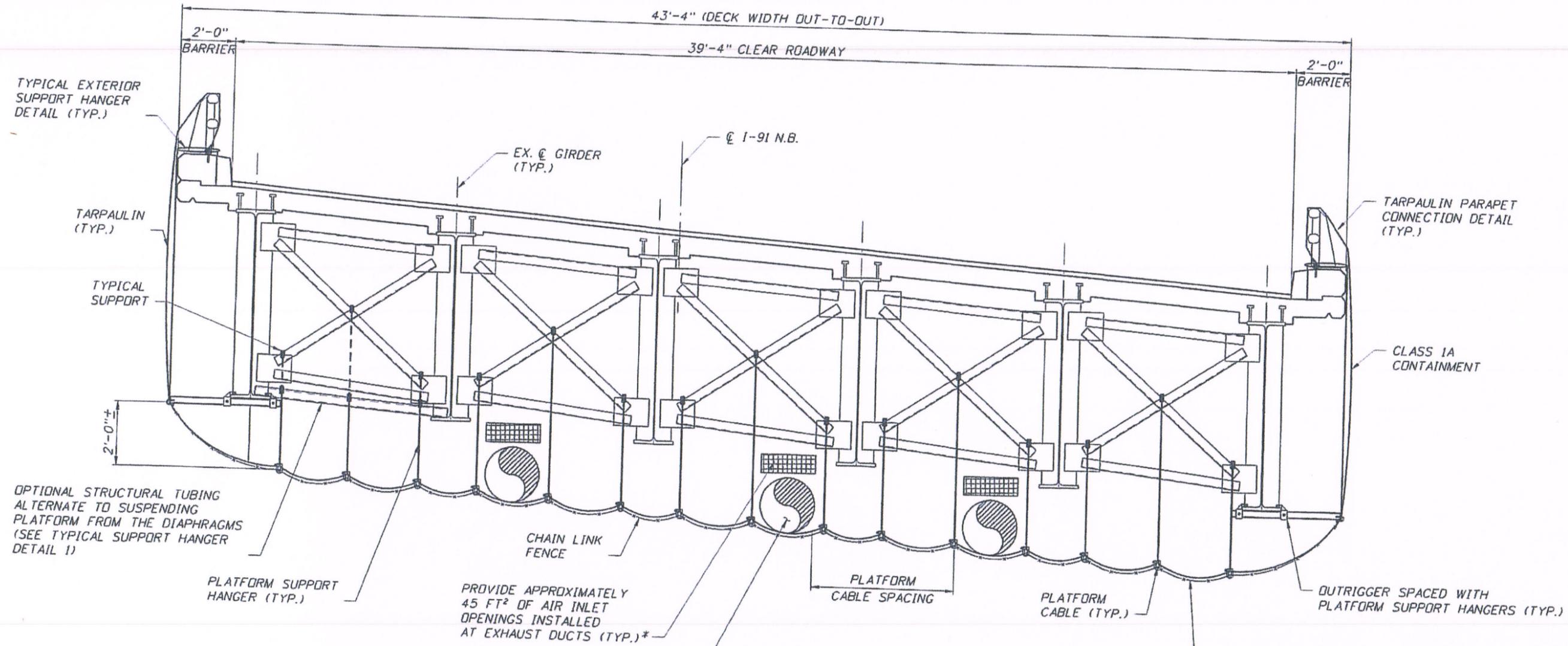
CHAIN-LINK CONTAINMENT

ELEVATION



Bridge Nos. 59N & 59S (BRADFORD)

REVISIONS		PAUL STEJLE P.E. P.E. LICENSE NUMBER 107795 A2B ENGINEERING, LLC. 5406 N. HOOVER BLVD., SUITE 12 TAMPA, FL 33634	MONOKO, LLC. 1037 PENINSULA AVENUE TARPON SPRINGS, FL 34689 PHONE (727) 940-3244 FAX (727) 279-8795	DRAWN BY: BDN 02/15 CHECKED BY: PDB 02/15 DESIGNED BY: MAT 02/15 CHECKED BY: PRS 02/15	VERMONT DEPARTMENT OF TRANSPORTATION			SHEET TITLE: PLAN & ELEVATION	REF. DWG. NO.
DATE	BY				DESCRIPTION	ROAD NO.	COUNTY		
					1-91	ORANGE	1M BPNT (14)	TEN BRIDGES ON OR OVER 1-91 IMPROVEMENT PLANS	SHEET NO. C-8

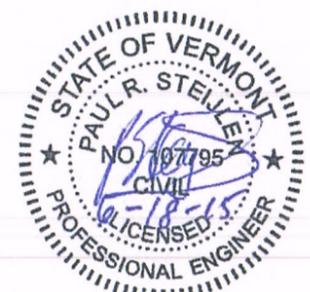


TYPICAL SECTION
 (MOBILE DUST COLLECTOR NOT SHOWN FOR CLARITY)
 (N.B. BRIDGE SHOWN, S.B. BRIDGE SIMILAR)
 (3'-9" CABLE SPACING SHOWN, 5'-3" CABLE SPACING SIMILAR)

* BASED ON MAXIMUM CONTAINMENT AREA OF 405 FT² AS MEASURED PERPENDICULAR TO THE DIRECTION OF CROSS-DRAFT (SEE VENTILATION SYSTEM TABLE ON GENERAL NOTES SHEETS)

- NOTES:
1. THESE PLANS WERE PREPARED WITHOUT THE BENEFIT OF AS-BUILT BRIDGE PLANS. THE CONTRACTOR SHALL MAKE ALLOWANCE FOR BRIDGE ELEMENTS AND MODIFICATIONS NOT SHOWN ON THESE PLANS.
 2. THE CONTRACTOR SHALL AVOID ATTACHING/CONNECTING TO BRIDGE ELEMENTS EXHIBITING SIGNIFICANT SECTION LOSS.
 3. FOR ADDITIONAL DETAILS, SEE CONTAINMENT MISCELLANEOUS DETAILS SHEETS.
 4. CONTRACTOR TO PROVIDE LIFE LINES MEETING OSHA 1910.66 APPENDIX C AS REQUIRED.

Vermont Agency of Transportation
RECEIVED
 ON: September 4, 2015
 and Checked for
CONFORMANCE
 BY: ABC DATE



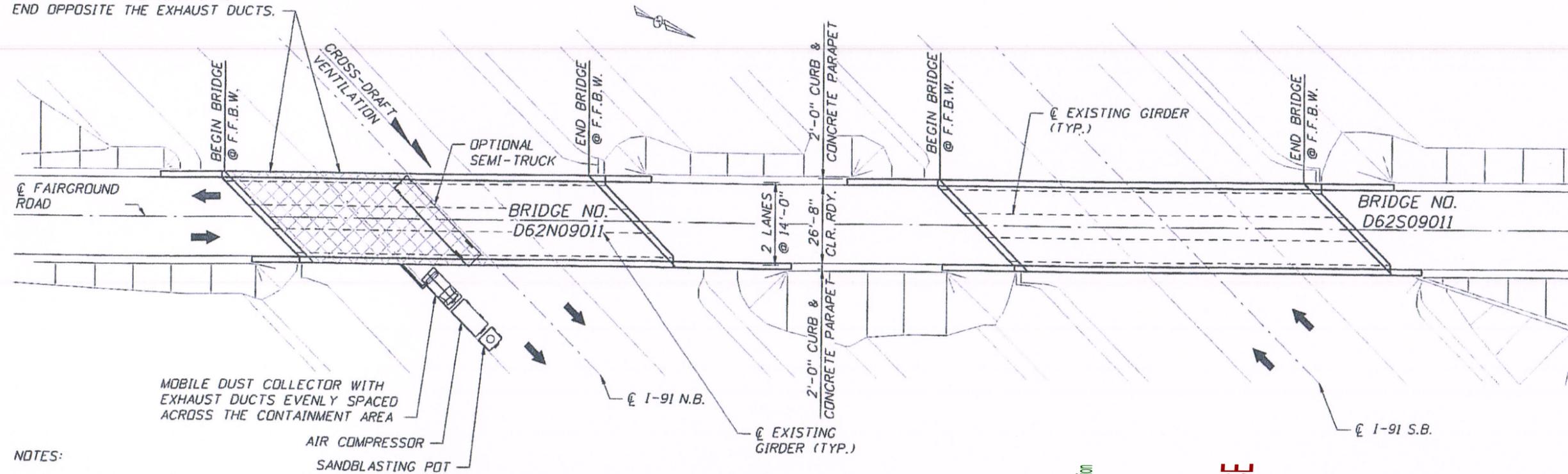
REVISIONS			DATE	BY	DESCRIPTION

PAUL STEJLE P.E. P.E. LICENSE NUMBER 107795 A2B ENGINEERING, LLC. 5406 N. HOOVER BLVD., SUITE 12 TAMPA, FL 33634		MONOKO, LLC. 1037 PENINSULA AVENUE TARPON SPRINGS, FL 34689 PHONE (727) 940-3244 FAX (727) 279-8795		DRAWN BY: BDN 02/15 CHECKED BY: PDB 02/15 DESIGNED BY: MAT 02/15 CHECKED BY: PRS 02/15	VERMONT DEPARTMENT OF TRANSPORTATION ROAD NO. COUNTY PROJECT ID 1-91 ORANGE 1M BPNT (14)	SHEET TITLE: CONTAINMENT SECTION DETAILS PROJECT NAME: TEN BRIDGES ON OR OVER 1-91 IMPROVEMENT PLANS	REF. DWG. NO. SHEET NO. C-9
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p3187 monoko, l1c14 bradford-norbury lm bpm11 containment plans/cadd/BS97Typical.dgn

Bridge Nos. 59N & 59S (BRADFORD)

PROVIDE AIR INLET OPENINGS
INSTALLED AT THE CONTAINMENT
END OPPOSITE THE EXHAUST DUCTS.



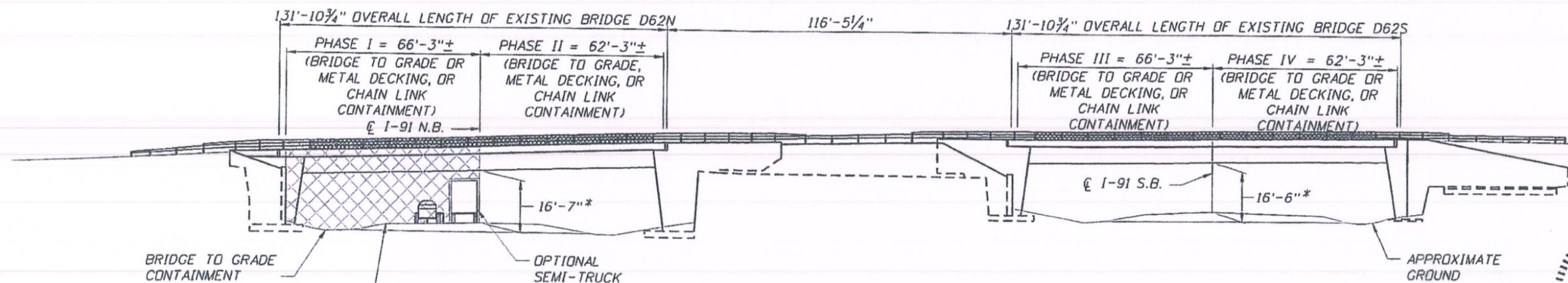
NOTES:

1. THESE PLANS WERE PREPARED WITHOUT THE BENEFIT OF AS-BUILT BRIDGE PLANS. THE CONTRACTOR SHALL MAKE ALLOWANCE FOR BRIDGE ELEMENTS AND MODIFICATIONS NOT SHOWN ON THESE PLANS.
2. WORK PHASES I-IV SHOWN SCHEMATICALLY. REFERENCE MOT PLANS FOR LIMITS OF WORK PHASES.
3. WORK PHASES I-IV MAY BE WORKED IN ANY ORDER AT THE CONVENIENCE OF THE CONTRACTOR'S MEANS AND METHODS, TRAFFIC PATTERNS AND DENSITY, OR OTHER SITE CHARACTERISTICS THAT INFLUENCE A PREFERRED WORK AREA.
4. THE CONTRACTOR HAS THE OPTION TO USE ADDITIONAL MOBILE DUST COLLECTORS, OR PLACE LONGITUDINAL OR TRANSVERSE INTERMEDIATE TARPULIN WALL.
5. FOR ADDITIONAL DETAILS, SEE CONTAINMENT MISCELLANEOUS DETAILS SHEETS.

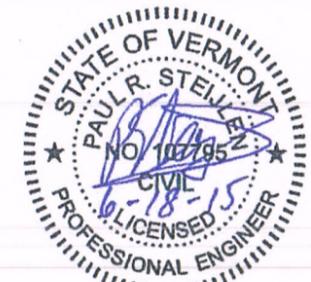
PLAN
(PHASE I SHOWN,
PHASES II-IV SIMILAR)

Vermont Agency of Transportation
RECEIVED
ON: September 4, 2015
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CONFORMANCE
BY: ABC DATE:

* EXISTING MINIMUM VERTICAL CLEARANCE
BASED ON EXISTING BRIDGE PLANS. CONTRACTOR
SHALL OBTAIN APPROVAL FOR REDUCTION OF
EXISTING VERTICAL CLEARANCE AND RAISE
CABLE AS NEEDED OVER ACTIVE ROADWAY.



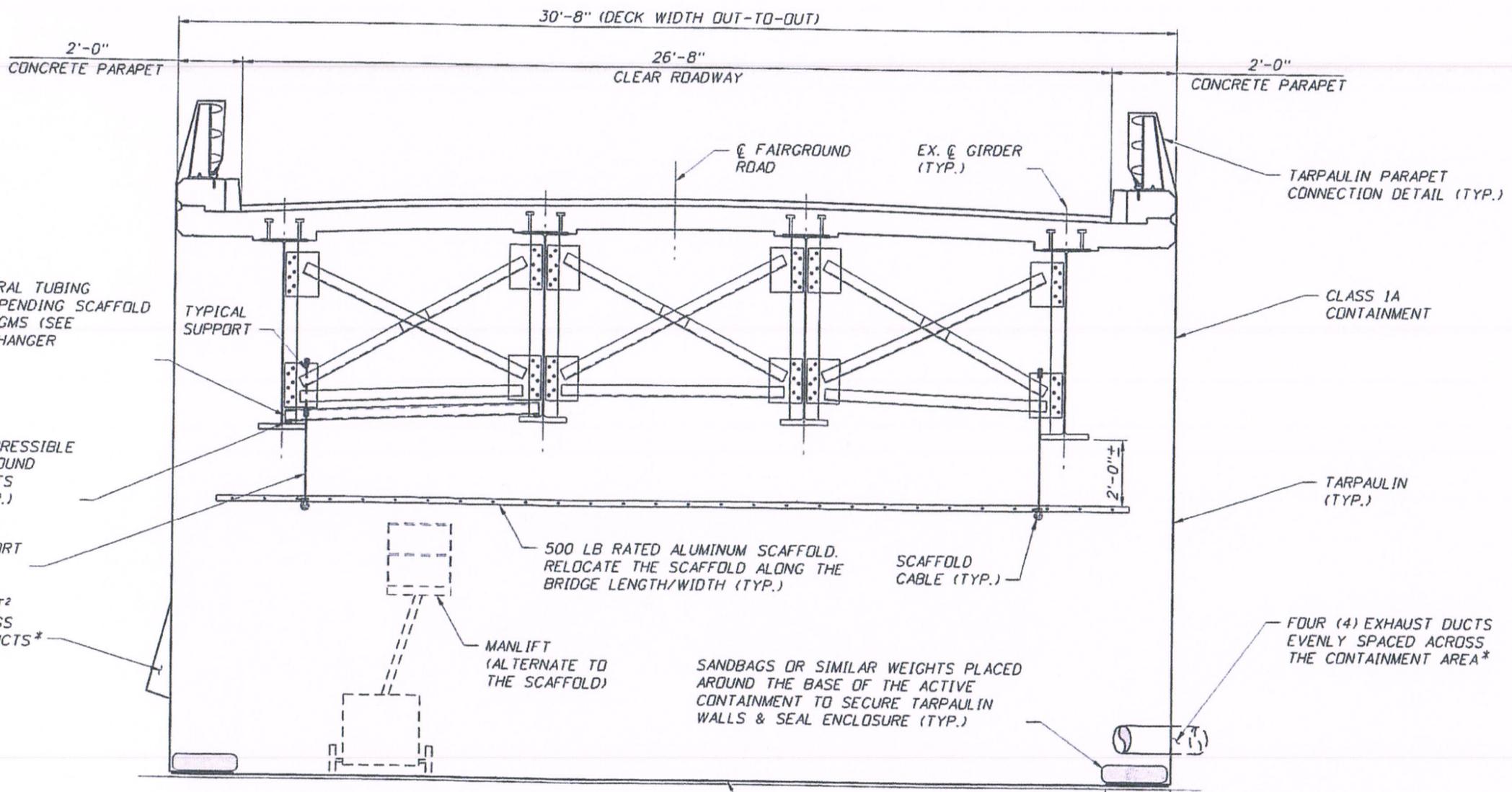
ELEVATION
(PHASE I SHOWN,
PHASES II-IV SIMILAR)



Bridge Nos. D62N & D62S (BRADFORD)

REVISIONS		DATE	BY	DESCRIPTION	DRAWN BY: BDN 02/15	CHECKED BY: PDB 02/15	DESIGNED BY: MAT 02/15	CHECKED BY: PRS 02/15	VERMONT DEPARTMENT OF TRANSPORTATION			SHEET TITLE: PLAN AND ELEVATION	REF. DWG. NO.
DATE	BY								ROAD NO.	COUNTY	PROJECT ID		
									1-91	ORANGE	1M BPNT (14)	TEN BRIDGES ON OR OVER I-91 IMPROVEMENT PLANS	C-10

Vermont Agency of Transportation
RECEIVED
 ON: September 4, 2015
 and Checked for
CONFORMANCE
 BY: ABC DATE:



OPTIONAL STRUCTURAL TUBING ALTERNATE TO SUSPENDING SCAFFOLD FROM THE DIAPHRAGMS (SEE TYPICAL SUPPORT HANGER DETAIL 1)

PLACE SECTIONS OF COMPRESSIBLE PROTECTIVE MATERIAL AROUND EXISTING BRIDGE ELEMENTS TO PREVENT DAMAGE (TYP.)

SCAFFOLD SUPPORT HANGER (TYP.)

APPROXIMATELY 48 FT² OF AIR INLET OPENINGS OPPOSITE EXHAUST DUCTS*

500 LB RATED ALUMINUM SCAFFOLD. RELOCATE THE SCAFFOLD ALONG THE BRIDGE LENGTH/WIDTH (TYP.)

MANLIFT (ALTERNATE TO THE SCAFFOLD)

SANDBAGS OR SIMILAR WEIGHTS PLACED AROUND THE BASE OF THE ACTIVE CONTAINMENT TO SECURE TARPULIN WALLS & SEAL ENCLOSURE (TYP.)

100% GROUND TARPULINS PLACED OVER ENTIRE CONTAINMENT AREA TO COLLECT ALL WASH WATER AND PAINT DISPOSAL DEBRIS.

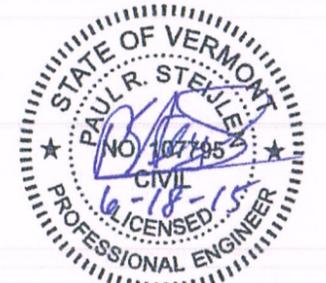
FOUR (4) EXHAUST DUCTS EVENLY SPACED ACROSS THE CONTAINMENT AREA*

* BASED ON MAXIMUM CONTAINMENT AREA OF 480 FT² AS MEASURED PERPENDICULAR TO THE DIRECTION OF CROSS-DRAFT (SEE VENTILATION SYSTEM TABLE ON GENERAL NOTES SHEETS)

NOTES:

1. THESE PLANS WERE PREPARED WITHOUT THE BENEFIT OF AS-BUILT BRIDGE PLANS. THE CONTRACTOR SHALL MAKE ALLOWANCE FOR BRIDGE ELEMENTS AND MODIFICATIONS NOT SHOWN ON THESE PLANS.
2. THE CONTRACTOR SHALL AVOID ATTACHING/CONNECTING TO BRIDGE ELEMENTS EXHIBITING SIGNIFICANT SECTION LOSS.
3. FOR ADDITIONAL DETAILS, SEE CONTAINMENT MISCELLANEOUS DETAILS SHEETS.
4. CONTRACTOR TO PROVIDE LIFE LINES MEETING OSHA 1910.66 APPENDIX C AS REQUIRED.
5. INSPECTIONS SHALL BE PERFORMED FROM MANLIFT.

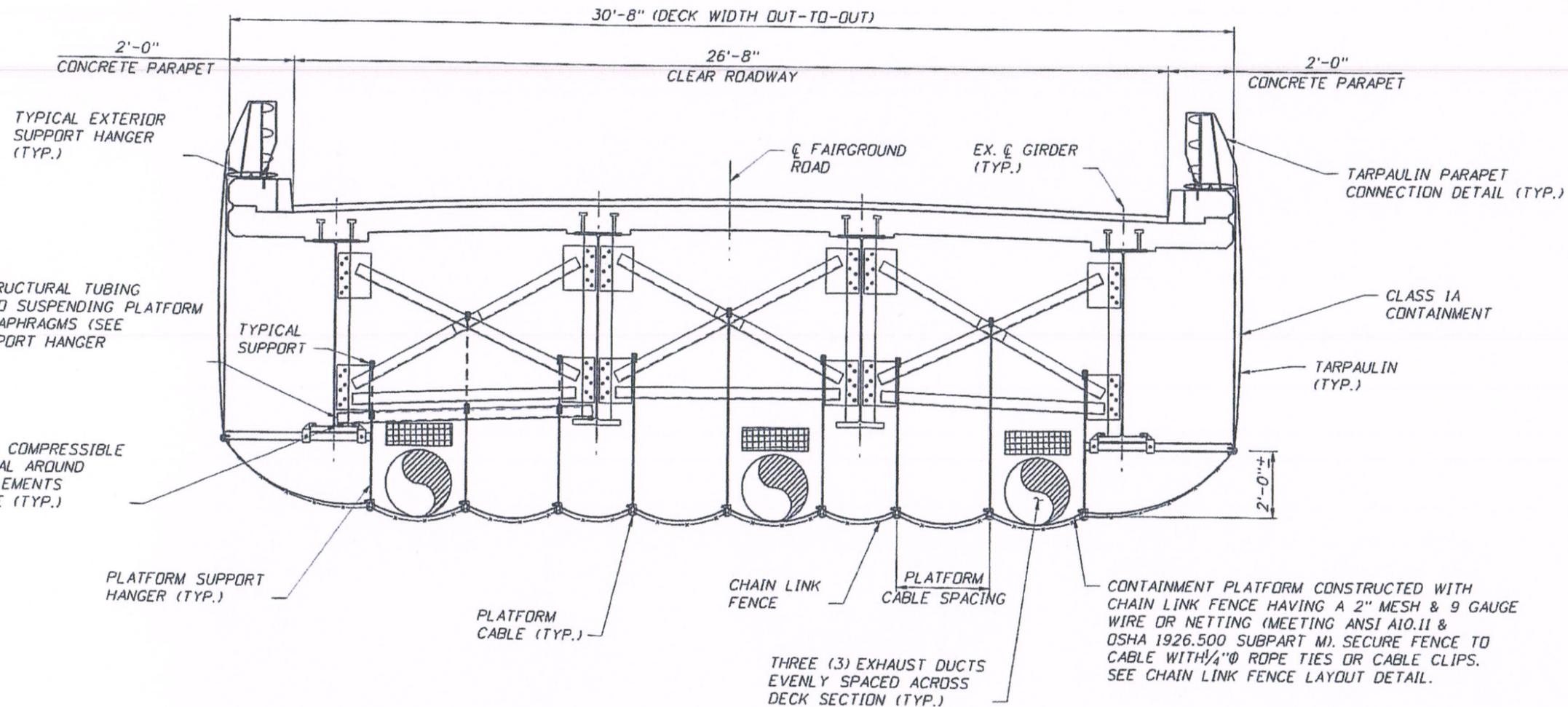
TYPICAL SECTION
 (MOBILE DUST COLLECTOR NOT SHOWN FOR CLARITY)



Bridge Nos. D62N & D62S (BRADFORD)

REVISIONS			DATE	BY	DESCRIPTION	DRAWN BY: BDN 02/15	CHECKED BY: PDR 02/15	DESIGNED BY: MAT 02/15	CHECKED BY: PRS 02/15	VERMONT DEPARTMENT OF TRANSPORTATION			SHEET TITLE: CONTAINMENT SECTION DETAILS (1 OF 3)	REF. DWG. NO.
DATE	BY	DESCRIPTION								ROAD NO.	COUNTY	PROJECT ID		
										1-91	ORANGE	1M BPNT (14)	TEN BRIDGES ON OR OVER 1-91 IMPROVEMENT PLANS	C-11

RECEIVED
 ON: September 4, 2015
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CONFORMANCE
 BY: ABC DATE:



OPTIONAL STRUCTURAL TUBING ALTERNATE TO SUSPENDING PLATFORM FROM THE DIAPHRAGMS (SEE TYPICAL SUPPORT HANGER DETAIL 1)

PLACE SECTIONS OF COMPRESSIBLE PROTECTIVE MATERIAL AROUND EXISTING BRIDGE ELEMENTS TO PREVENT DAMAGE (TYP.)

CONTAINMENT PLATFORM CONSTRUCTED WITH CHAIN LINK FENCE HAVING A 2" MESH & 9 GAUGE WIRE OR NETTING (MEETING ANSI A10.11 & OSHA 1926.500 SUBPART M). SECURE FENCE TO CABLE WITH 1/4" Ø ROPE TIES OR CABLE CLIPS. SEE CHAIN LINK FENCE LAYOUT DETAIL.

* BASED ON MAXIMUM CONTAINMENT AREA OF 265 FT² AS MEASURED PERPENDICULAR TO THE DIRECTION OF CROSS-DRAFT (SEE VENTILATION SYSTEM TABLE ON GENERAL NOTES SHEETS)

- NOTES:
1. THESE PLANS WERE PREPARED WITHOUT THE BENEFIT OF AS-BUILT BRIDGE PLANS. THE CONTRACTOR SHALL MAKE ALLOWANCE FOR BRIDGE ELEMENTS AND MODIFICATIONS NOT SHOWN ON THESE PLANS.
 2. THE CONTRACTOR SHALL AVOID ATTACHING/CONNECTING TO BRIDGE ELEMENTS EXHIBITING SIGNIFICANT SECTION LOSS.
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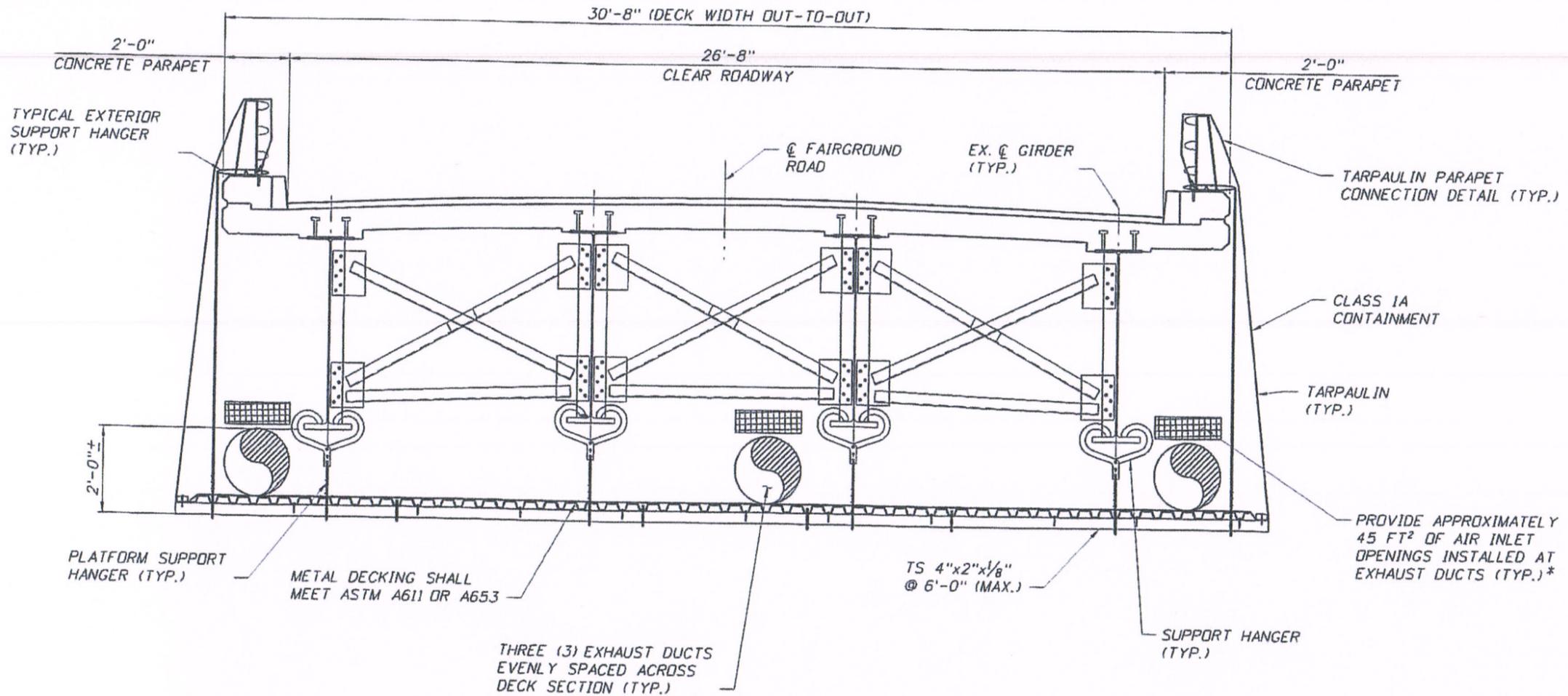
TYPICAL SECTION
 (MOBILE DUST COLLECTOR NOT SHOWN FOR CLARITY)
 (3'-9" CABLE SPACING SHOWN, 5'-3" CABLE SPACING SIMILAR)



Bridge Nos. D62N & D62S (BRADFORD)

REVISIONS		PAUL STEJLEN P.E. P.E. LICENSE NUMBER 107795 A2B ENGINEERING, LLC. 5406 N. HOOVER BLVD., SUITE 12 TAMPA, FL 33634	MONOKO, LLC. 1037 PENINSULA AVENUE TARPON SPRINGS, FL 34689 PHONE (727) 940-3244 FAX (727) 279-8795	DRAWN BY: BDN 02/15 CHECKED BY: PDB 02/15 DESIGNED BY: MAT 02/15 CHECKED BY: PRS 02/15	VERMONT DEPARTMENT OF TRANSPORTATION			SHEET TITLE: CONTAINMENT SECTION DETAILS (2 OF 3)	REF. DWG. NO.
DATE	BY				DESCRIPTION	ROAD NO.	COUNTY		
					1-91	ORANGE	111 BPNT (14)	TEN BRIDGES ON OR OVER 1-91 IMPROVEMENT PLANS	C-12

Vermont Agency of Transportation
RECEIVED
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 and Checked for
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 BY: ABC DATE:

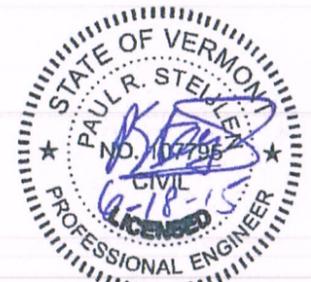


* BASED ON MAXIMUM CONTAINMENT AREA OF 265 FT² AS MEASURED PERPENDICULAR TO THE DIRECTION OF CROSS-DRAFT (SEE VENTILATION SYSTEM TABLE ON GENERAL NOTES SHEETS)

NOTES:

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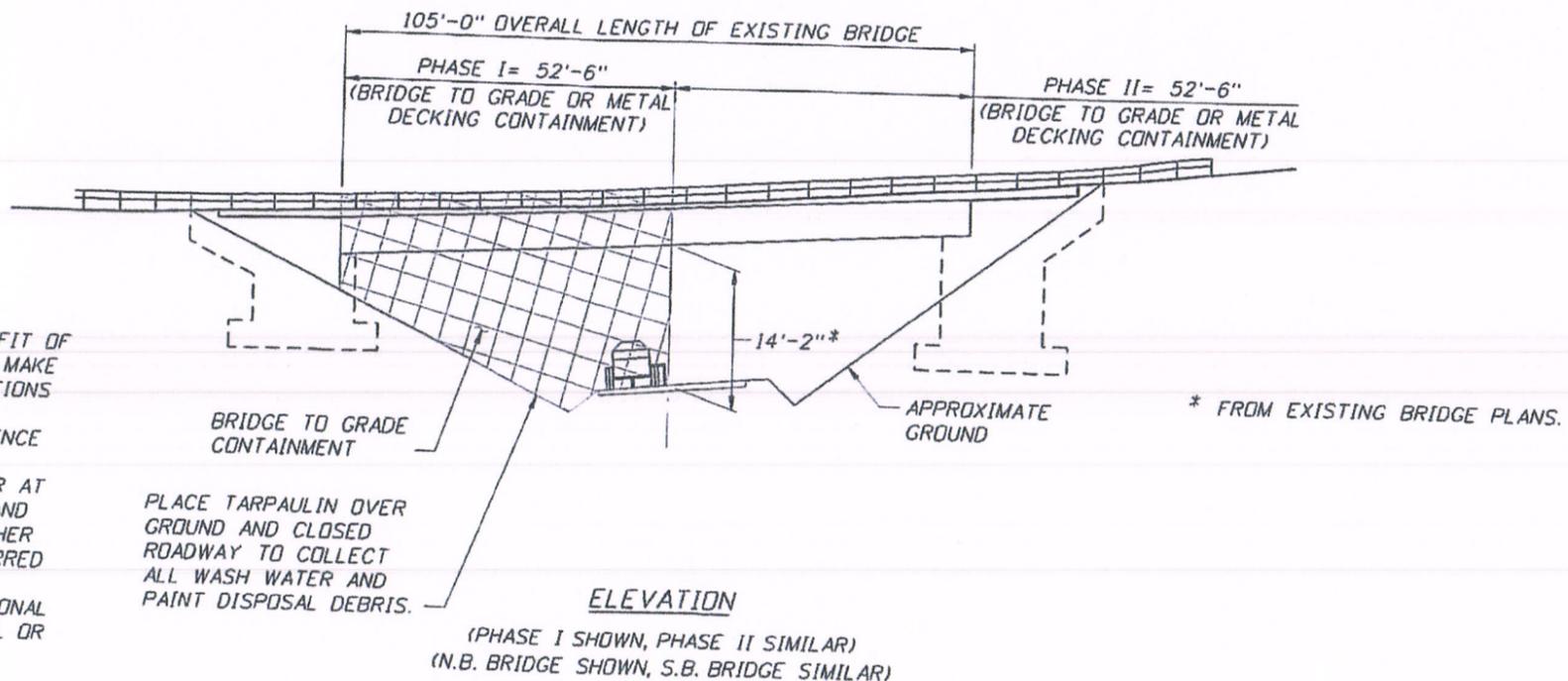
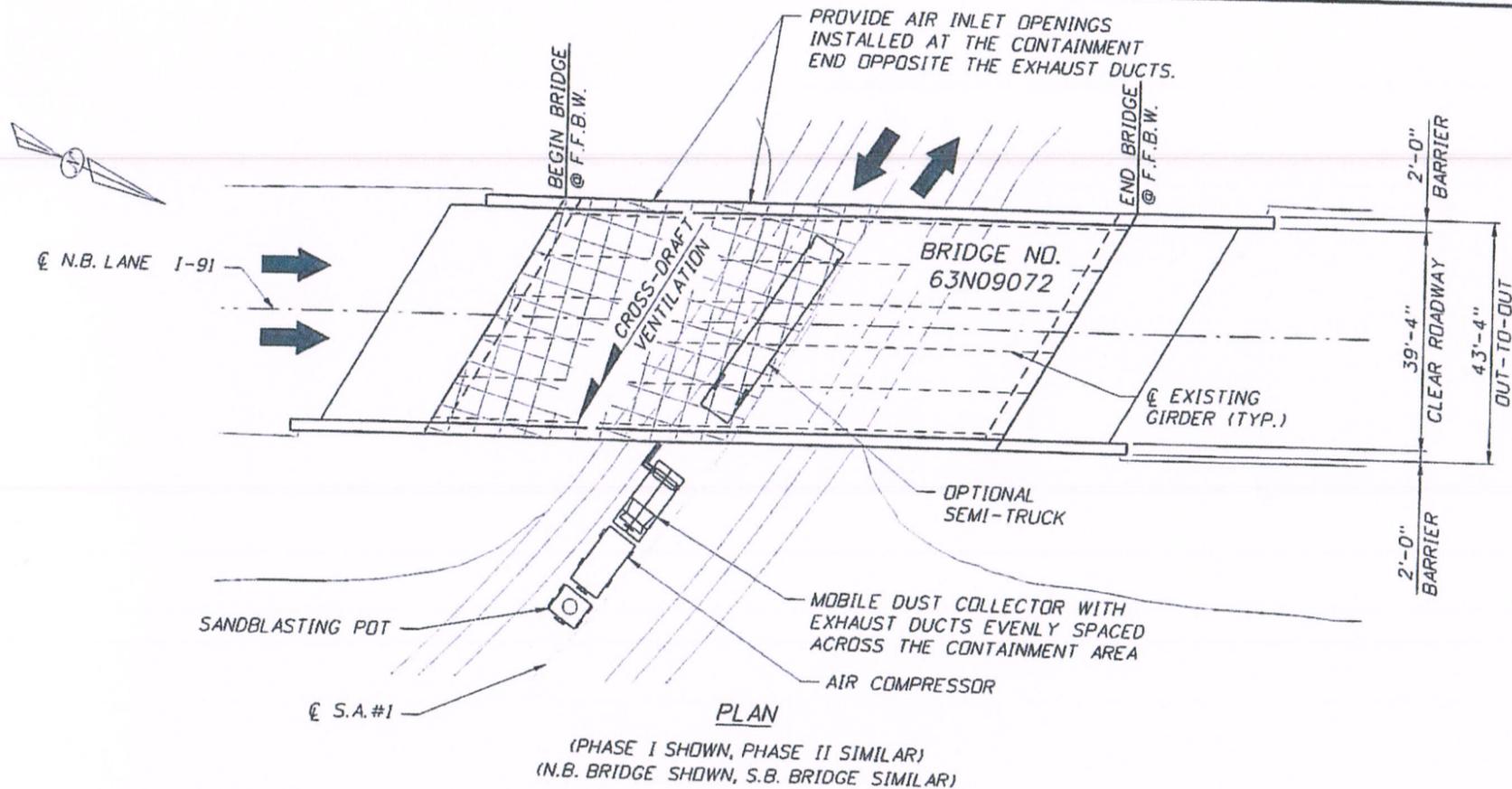
TYPICAL SECTION
 (MOBILE DUST COLLECTOR
 NOT SHOWN FOR CLARITY)



Bridge Nos. D62N & D62S (BRADFORD)

REVISIONS			DATE	BY	DESCRIPTION	DRAWN BY: BDN 02/15	CHECKED BY: PDB 02/15	DESIGNED BY: MAT 02/15	CHECKED BY: PRS 02/15	VERMONT DEPARTMENT OF TRANSPORTATION			SHEET TITLE: CONTAINMENT SECTION DETAILS (3 OF 3)	REF. DWG. NO.
ROAD NO.	COUNTY	PROJECT ID												
1-91	ORANGE	1M BPWT (14)										TEN BRIDGES ON OR OVER 1-91 IMPROVEMENT PLANS		
													SHEET NO. C-13	

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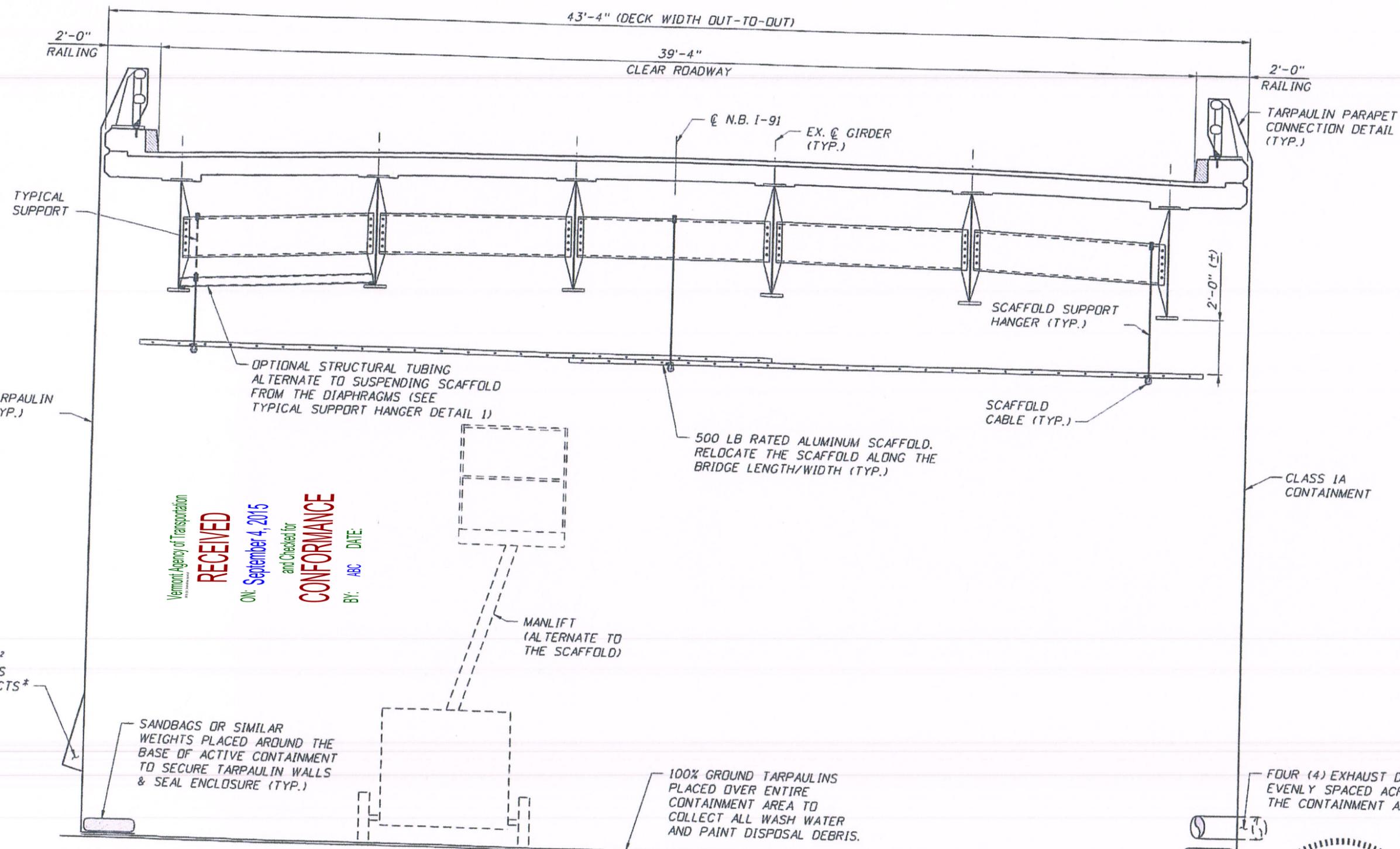
NOTES:

1. THESE PLANS WERE PREPARED WITHOUT THE BENEFIT OF AS-BUILT BRIDGE PLANS. THE CONTRACTOR SHALL MAKE ALLOWANCE FOR BRIDGE ELEMENTS AND MODIFICATIONS NOT SHOWN ON THESE PLANS.
2. WORK PHASES I-II SHOWN SCHEMATICALLY. REFERENCE MOT PLANS FOR LIMITS OF WORK PHASES.
3. WORK PHASES I-II MAY BE WORKED IN ANY ORDER AT THE CONVENIENCE OF THE CONTRACTOR'S MEANS AND METHODS, TRAFFIC PATTERNS AND DENSITY, OR OTHER SITE CHARACTERISTICS THAT INFLUENCE A PREFERRED WORK AREA.
4. THE CONTRACTOR HAS THE OPTION TO USE ADDITIONAL MOBILE DUST COLLECTORS, OR PLACE LONGITUDINAL OR TRANSVERSE INTERMEDIATE TARPULIN WALL.
5. FOR ADDITIONAL DETAILS, SEE CONTAINMENT MISCELLANEOUS DETAILS SHEETS.



REVISIONS			DATE	BY	DESCRIPTION	DRAWN BY: BDN 02/15	CHECKED BY: PDB 02/15	DESIGNED BY: MAT 02/15	CHECKED BY: PRS 02/15	VERMONT DEPARTMENT OF TRANSPORTATION			SHEET TITLE:		REF. DWG. NO.
DATE	BY	DESCRIPTION								ROAD NO.	COUNTY	PROJECT ID	PROJECT NAME	SHEET NO.	
										1-91	ORANGE	1M BPNT (14)	TEN BRIDGES ON OR OVER 1-91 IMPROVEMENT PLANS	C-14	

Bridge Nos. 63N & 63S (NEWBURY)



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APPROXIMATELY 48 FT² OF AIR INLET OPENINGS OPPOSITE EXHAUST DUCTS*

SANDBAGS OR SIMILAR WEIGHTS PLACED AROUND THE BASE OF ACTIVE CONTAINMENT TO SECURE TARPULIN WALLS & SEAL ENCLOSURE (TYP.)

100% GROUND TARPULINS PLACED OVER ENTIRE CONTAINMENT AREA TO COLLECT ALL WASH WATER AND PAINT DISPOSAL DEBRIS.

FOUR (4) EXHAUST DUCTS EVENLY SPACED ACROSS THE CONTAINMENT AREA*

NOTES:

1. THESE PLANS WERE PREPARED WITHOUT THE BENEFIT OF AS-BUILT BRIDGE PLANS. THE CONTRACTOR SHALL MAKE ALLOWANCE FOR BRIDGE ELEMENTS AND MODIFICATIONS NOT SHOWN ON THESE PLANS.
2. THE CONTRACTOR SHALL AVOID ATTACHING/CONNECTING TO BRIDGE ELEMENTS EXHIBITING SIGNIFICANT SECTION LOSS.
3. FOR ADDITIONAL DETAILS, SEE CONTAINMENT MISCELLANEOUS DETAILS SHEETS.
4. CONTRACTOR TO PROVIDE LIFE LINES MEETING OSHA 1910.66 APPENDIX C AS REQUIRED.
5. INSPECTIONS SHALL BE PERFORMED FROM MANLIFT.

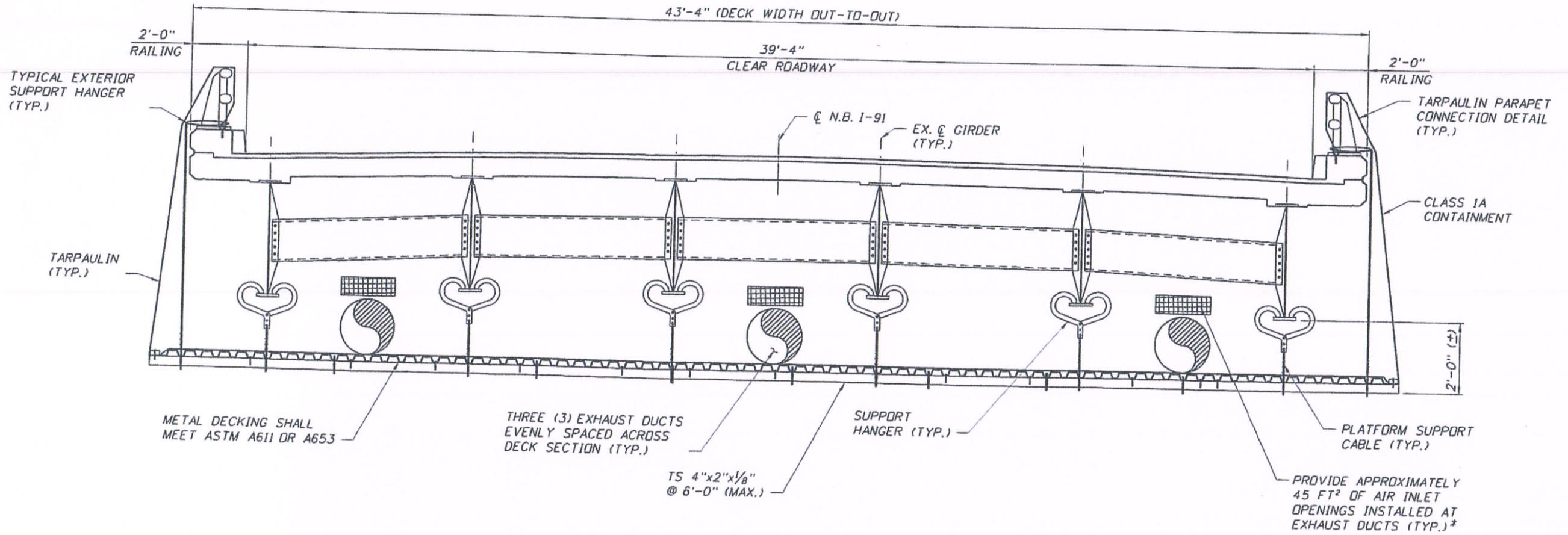
TYPICAL SECTION
 (MOBILE DUST COLLECTOR NOT SHOWN FOR CLARITY)
 (N.B. BRIDGE SHOWN, S.B. BRIDGE SIMILAR)

* BASED ON MAXIMUM CONTAINMENT AREA OF 480 FT² AS MEASURED PERPENDICULAR TO THE DIRECTION OF CROSS-DRAFT (SEE VENTILATION SYSTEM TABLE ON GENERAL NOTES SHEETS)



Bridge Nos. 63N & 63S (NEWBURY)

REVISIONS			DATE	BY	DESCRIPTION	DRAWN BY: BDN 02/15	CHECKED BY: PDB 02/15	DESIGNED BY: MAT 02/15	CHECKED BY: PRS 02/15	VERMONT DEPARTMENT OF TRANSPORTATION			SHEET TITLE:		REF. DWG. NO.
DATE	BY	DESCRIPTION								ROAD NO.	COUNTY	PROJECT ID	PROJECT NAME:	SHEET NO.	
										1-91	ORANGE	1M BPNT (14)	CONTAINMENT SECTION DETAILS (1 OF 2)		
													TEN BRIDGES ON OR OVER 1-91 IMPROVEMENT PLANS	C-15	



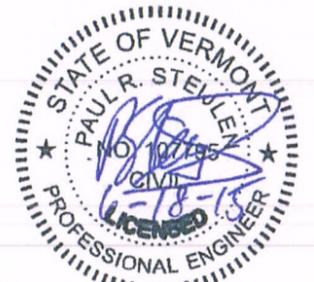
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* BASED ON MAXIMUM CONTAINMENT AREA OF 295 FT² AS MEASURED PERPENDICULAR TO THE DIRECTION OF CROSS-DRAFT (SEE VENTILATION SYSTEM TABLE ON GENERAL NOTES SHEETS)

NOTES:

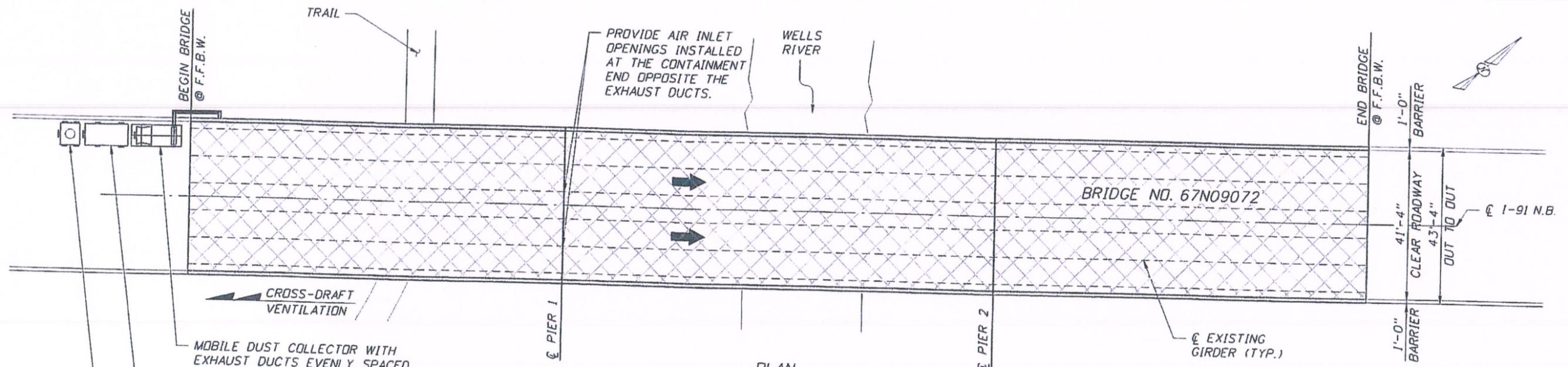
1. THESE PLANS WERE PREPARED WITHOUT THE BENEFIT OF AS-BUILT BRIDGE PLANS. THE CONTRACTOR SHALL MAKE ALLOWANCE FOR BRIDGE ELEMENTS AND MODIFICATIONS NOT SHOWN ON THESE PLANS.
2. THE CONTRACTOR SHALL AVOID ATTACHING/CONNECTING TO BRIDGE ELEMENTS EXHIBITING SIGNIFICANT SECTION LOSS.
3. FOR ADDITIONAL DETAILS, SEE CONTAINMENT MISCELLANEOUS DETAILS SHEETS.
4. CONTRACTOR TO PROVIDE LIFE LINES MEETING OSHA 1910.66 APPENDIX C AS REQUIRED.
5. INSPECTIONS SHALL BE PERFORMED FROM MANLIFT.

TYPICAL SECTION
 (MOBILE DUST COLLECTOR
 NOT SHOWN FOR CLARITY)
 (N.B. BRIDGE SHOWN, S.B. BRIDGE SIMILAR)



Bridge Nos. 63N & 63S (NEWBURY)

REVISIONS			DATE	BY	DESCRIPTION	DRAWN BY: BDN 02/15	CHECKED BY: PDB 02/15	DESIGNED BY: MAT 02/15	CHECKED BY: PRS 02/15	VERMONT DEPARTMENT OF TRANSPORTATION			SHEET TITLE		REF. DWG. NO.
DATE	BY	DESCRIPTION								ROAD NO.	COUNTY	PROJECT ID	PROJECT NAME	SHEET NO.	
										1-91	ORANGE	1M BPNT (14)	CONTAINMENT SECTION DETAILS (2 OF 2)		
										TEN BRIDGES ON OR OVER 1-91 IMPROVEMENT PLANS				C-16	

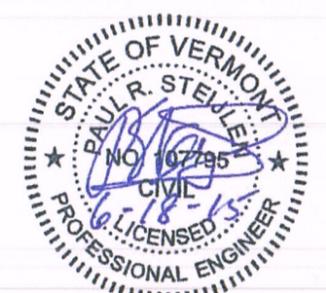
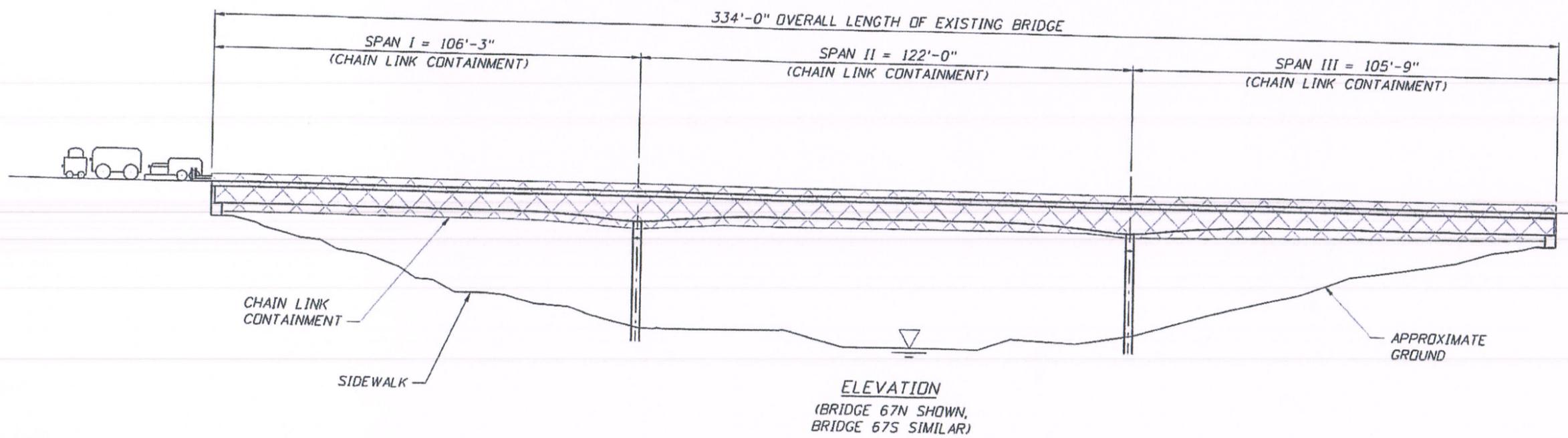


PLAN
(BRIDGE 67N SHOWN, BRIDGE 67S SIMILAR)

NOTES:

1. THESE PLANS WERE PREPARED WITHOUT THE BENEFIT OF AS-BUILT BRIDGE PLANS. THE CONTRACTOR SHALL MAKE ALLOWANCE FOR BRIDGE ELEMENTS AND MODIFICATIONS NOT SHOWN ON THESE PLANS.
2. WORK PHASE SHOWN SCHEMATICALLY. REFERENCE MOT PLANS FOR LIMITS OF WORK PHASES.
3. WORK PHASE MAY BE WORKED IN ANY ORDER AT THE CONVENIENCE OF THE CONTRACTOR'S MEANS AND METHODS, TRAFFIC PATTERNS AND DENSITY, OR OTHER SITE CHARACTERISTICS THAT INFLUENCE A PREFERRED WORK AREA.
4. THE CONTRACTOR HAS THE OPTION TO USE ADDITIONAL MOBILE DUST COLLECTORS, OR PLACE LONGITUDINAL OR TRANSVERSE INTERMEDIATE TARPAULIN WALL.
5. FOR ADDITIONAL DETAILS, SEE CONTAINMENT MISCELLANEOUS DETAILS SHEETS.

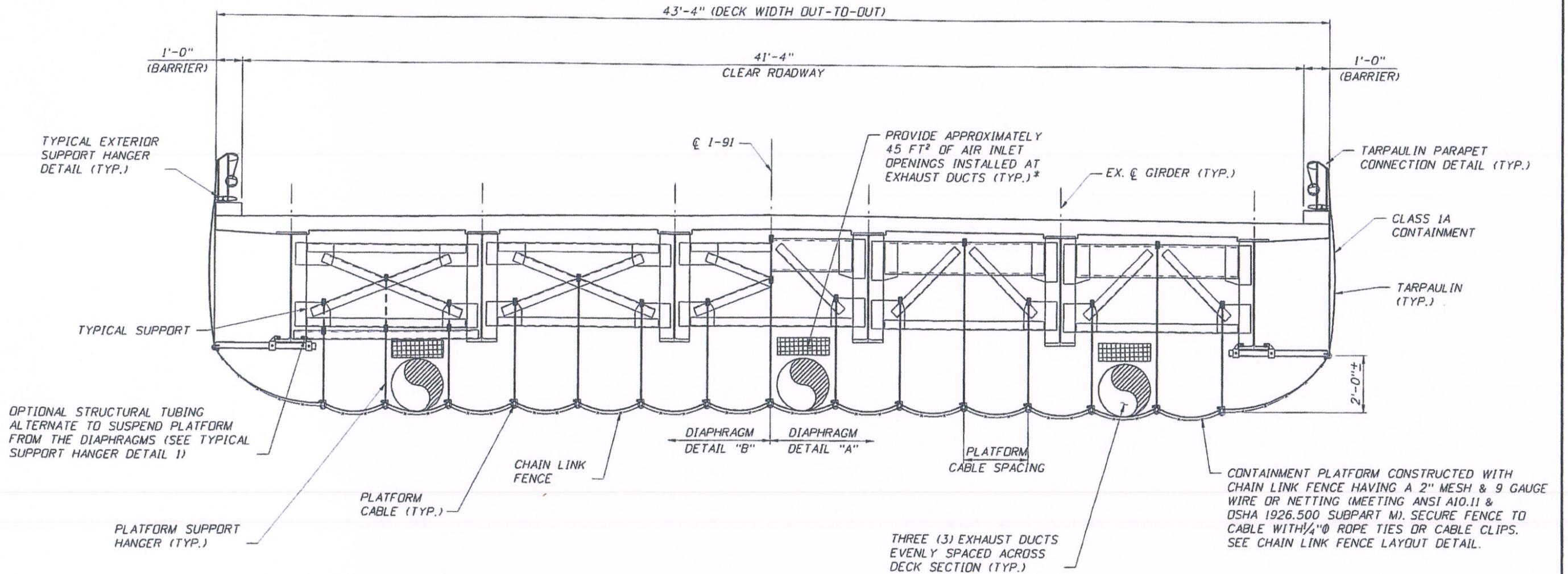
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REVISIONS			PAUL STEIJLEN P.E. P.E. LICENSE NUMBER 107795 A2B ENGINEERING, LLC. 5406 N. HOOVER BLVD., SUITE 12 TAMPA, FL 33634	MONOKO, LLC. 1037 PENINSULA AVENUE TARPON SPRINGS, FL 34689 PHONE (727) 940-3244 FAX (727) 279-8795	DRAWN BY: BDN 02/15 CHECKED BY: PDB 02/15 DESIGNED BY: MAT 02/15 CHECKED BY: PRS 02/15	VERMONT DEPARTMENT OF TRANSPORTATION			SHEET TITLE: PLAN AND ELEVATION		REF. DWG. NO.
DATE	BY	DESCRIPTION			ROAD NO.	COUNTY	PROJECT ID	PROJECT NAME:		TEN BRIDGES ON OR OVER I-91 IMPROVEMENT PLANS	
			1-91	ORANGE	1M BPNT (14)					C-17	

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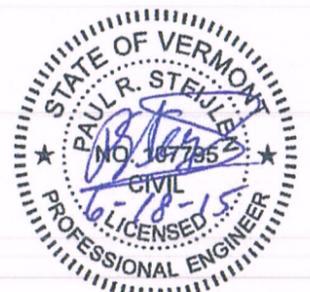


* BASED ON MAXIMUM CONTAINMENT AREA OF 300 FT² AS MEASURED PERPENDICULAR TO THE DIRECTION OF CROSS-DRAFT (SEE VENTILATION SYSTEM TABLE ON GENERAL NOTES SHEET)

NOTES:

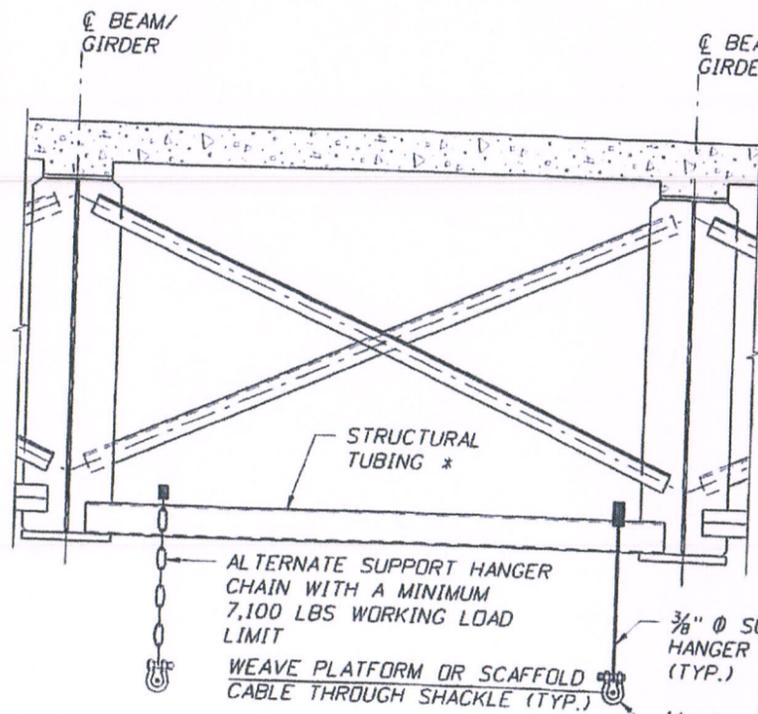
1. THESE PLANS WERE PREPARED WITHOUT THE BENEFIT OF AS-BUILT BRIDGE PLANS. THE CONTRACTOR SHALL MAKE ALLOWANCE FOR BRIDGE ELEMENTS AND MODIFICATIONS NOT SHOWN ON THESE PLANS.
2. THE CONTRACTOR SHALL AVOID ATTACHING/CONNECTING TO BRIDGE ELEMENTS EXHIBITING SIGNIFICANT SECTION LOSS.
3. FOR ADDITIONAL DETAILS, SEE CONTAINMENT MISCELLANEOUS DETAILS SHEETS.
4. CONTRACTOR TO PROVIDE LIFE LINES MEETING OSHA 1910.66 APPENDIX C AS REQUIRED.

TYPICAL SECTION
 (MOBILE DUST COLLECTOR NOT SHOWN FOR CLARITY)
 (3'-9" CABLE SPACING SHOWN, 5'-3" CABLE SPACING SIMILAR)

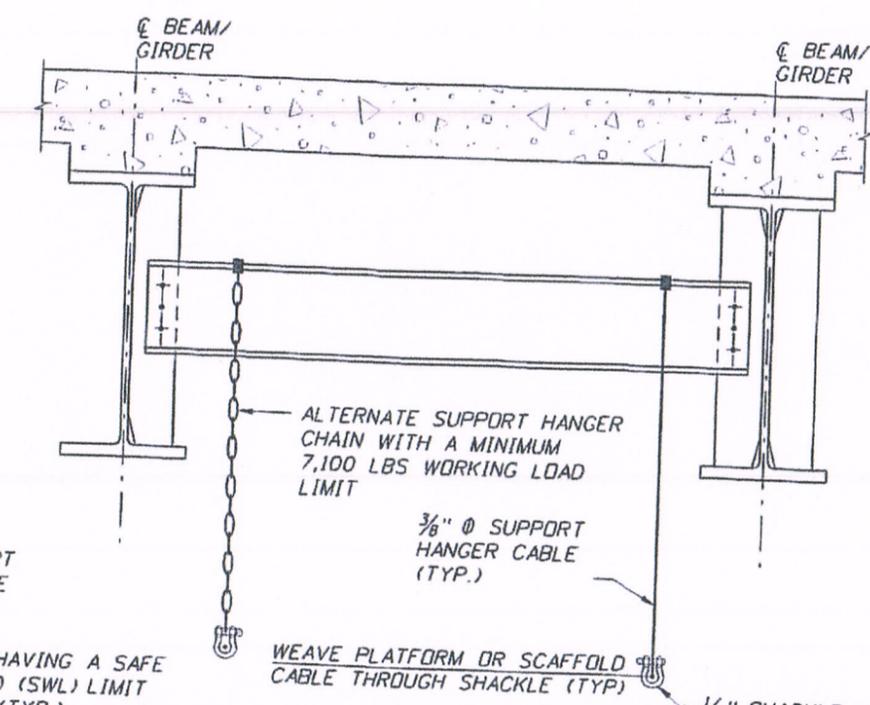


Bridge Nos. 67N & 67S (NEWBURY)

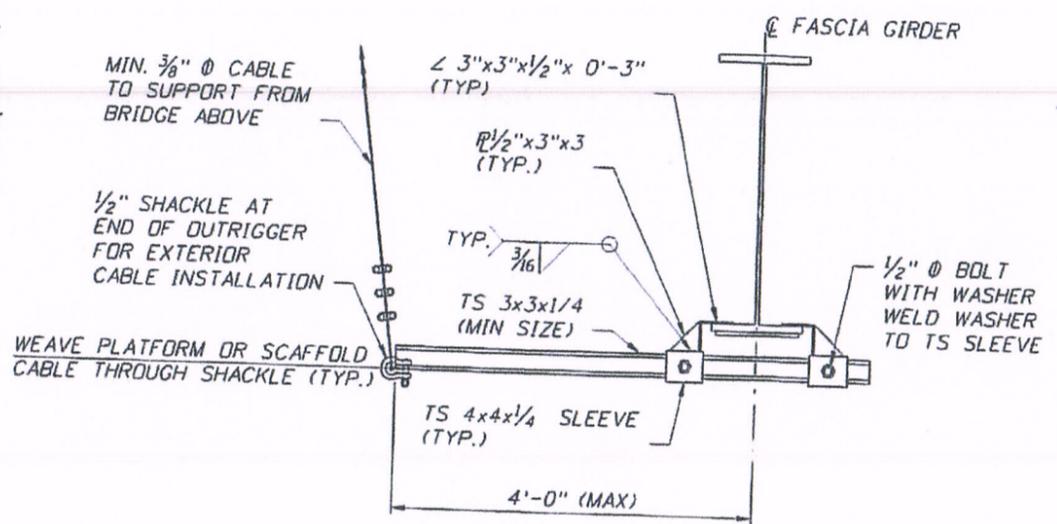
REVISIONS			DATE	BY	DESCRIPTION	DRAWN BY: BDN 02/15	CHECKED BY: PDB 02/15	VERMONT DEPARTMENT OF TRANSPORTATION			SHEET TITLE: CONTAINMENT SECTION DETAILS	REF. DWG. NO.
DATE	BY	DESCRIPTION						ROAD NO.	COUNTY	PROJECT ID		
PAUL STEJLEN P.E. P.E. LICENSE NUMBER 107795 A2B ENGINEERING, LLC. 5406 N. HOOVER BLVD., SUITE 12 TAMPA, FL 33634						MONOKO, LLC. 1037 PENINSULA AVENUE TARPON SPRINGS, FL 34689 PHONE (727) 940-3244 FAX (727) 279-8795			ROAD NO.: 1-91 COUNTY: ORANGE PROJECT ID: 1M BPNT (14)	PROJECT NAME: TEN BRIDGES ON OR OVER 1-91 IMPROVEMENT PLANS	SHEET NO. C-18	



DETAIL 1

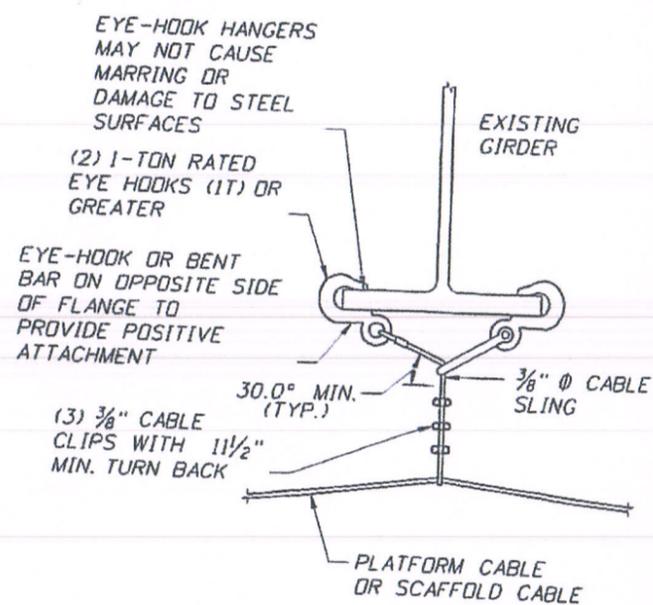


TYPICAL SUPPORT HANGER

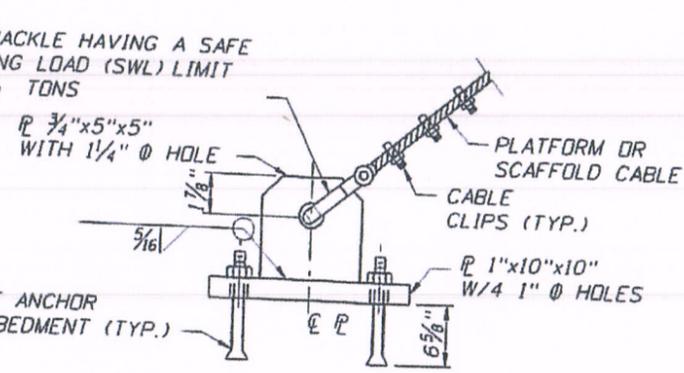
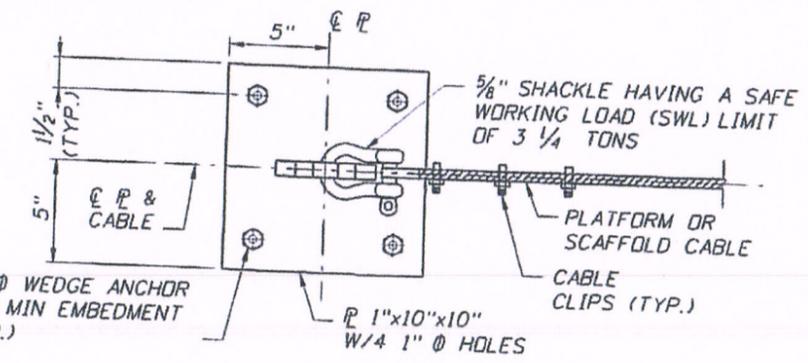


TYPICAL OUTRIGGER DETAIL

* USE TS 4X4X1/4 FOR SPACING UP TO 9'-6" OR TS 4X4X3/8 FOR SPACING UP TO 11'-0"



ALTERNATE SUPPORT HANGER



OPTIONAL ANCHOR PLATE ATTACHMENT

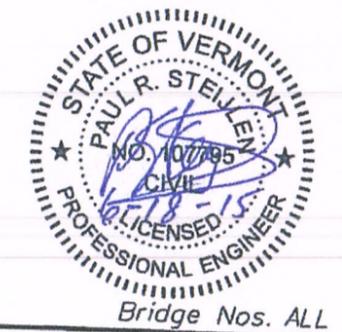
GENERAL NOTES:

1. OBTAIN APPROVAL FROM OWNER OR THE RESIDENT ENGINEER PRIOR TO INSTALLATION OF THE ANCHOR PLATE. CONSULT WITH RESIDENT ENGINEER REGARDING ANY ENCASED CONDUITS, PIPES, OR ANY OTHER KNOWN OBSTRUCTIONS PRIOR TO DRILLING.
2. STRUCTURAL STEEL SHALL CONFORM TO ASTM A36.
3. WELD ELECTRODES SHALL BE E70XX.
4. TO RESTORE CONCRETE:
 - REMOVE ANCHORS COMPLETELY WITHOUT DAMAGING THE CONCRETE ELEMENT.
 - FINISH SURFACE WITH DOT APPROVED METHODS AND NON-SHRINK GROUT.
5. MINIMUM 8" EDGE DISTANCE AND 6" CENTER TO CENTER OF BOLTS IS REQUIRED.
6. CONTRACTOR SHALL ATTACH THE ANCHOR PLATES TO SOUND CONCRETE. CONCRETE THAT IS SPALLED SHALL NOT BE CONSIDERED AS SOUND. CONCRETE WITH MAP CRACKS AND EFFLORESCENCE SHOULD HAVE PULL OUT TESTS CONDUCTED ON ALL ANCHOR BOLTS TO ENSURE THAT THE PROPER CAPACITY CAN BE ACHIEVED.
7. ANCHOR PLATE SHALL NOT BE ATTACHED TO PRESTRESSED PILES OR BEAMS.

INSTALLATION NOTES:

1. DRILL (4) HOLES, USING THE MANUFACTURER'S RECOMMENDED DRILL BIT SIZE, INTO CONCRETE USING ANCHOR PLATE AS A TEMPLATE. (HOLES FOR ANCHOR BOLTS SHALL BE DRILLED 1/4" MINIMUM DEEPER THAN THE MINIMUM EMBEDMENT LENGTH FOR ALL ANCHOR BOLTS.)
2. INSTALL ANCHOR BOLTS PER MANUFACTURER'S INSTRUCTIONS.
3. INSTALL 5/8" SHACKLE (OR GREATER) ONTO THE ANCHOR PLATE.
4. INSTALL MAIN CABLE ONTO SHACKLE.

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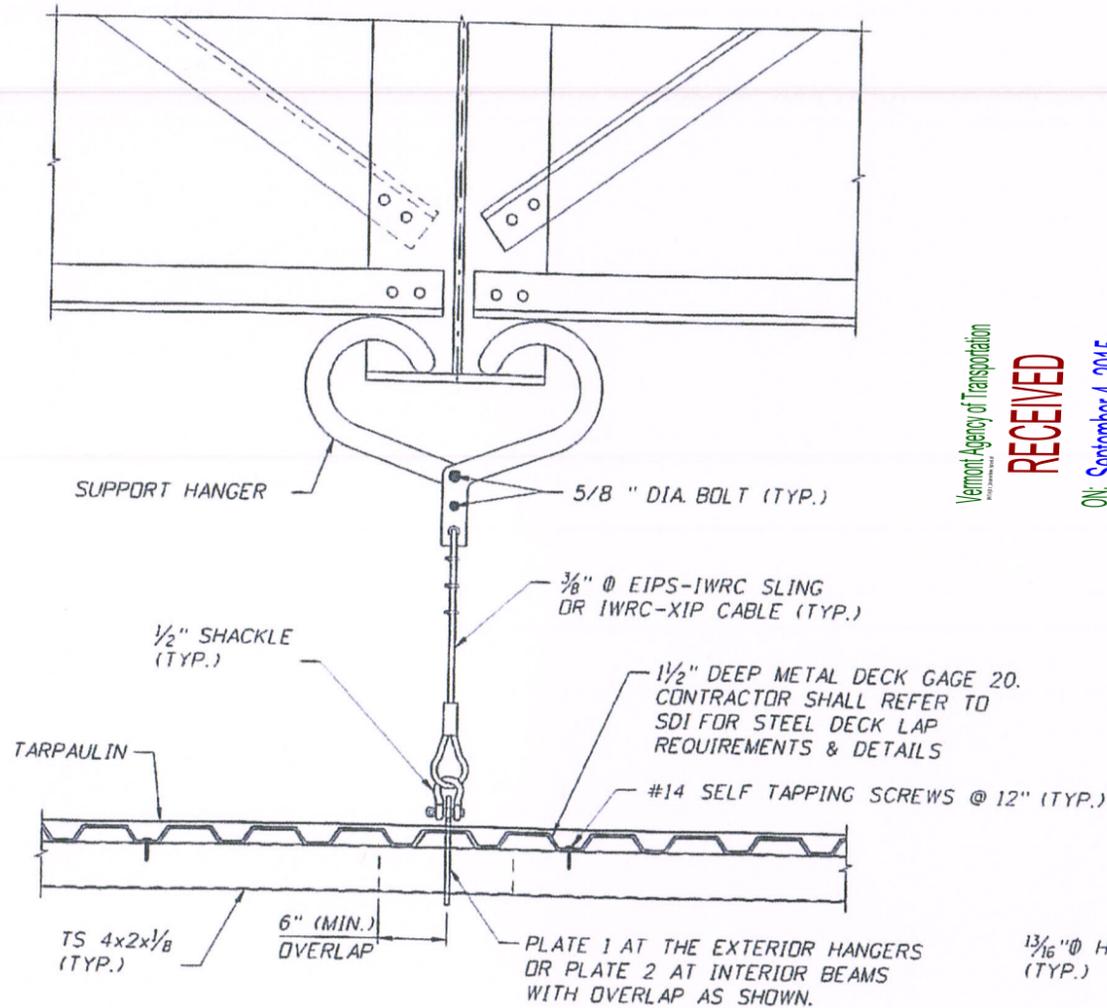
REVISIONS		
DATE	BY	DESCRIPTION

PAUL STEJLEN P.E.
 P.E. LICENSE NUMBER 107795
 A2B ENGINEERING, LLC.
 5405 N. HOOVER BLVD., SUITE 12
 TAMPA, FL 33634

MONOKO, LLC.
 1037 PENINSULA AVENUE
 TARPON SPRINGS, FL 34689
 PHONE (727) 940-3244
 FAX (727) 279-8795

DRAWN BY: BDN 02/15	VERMONT DEPARTMENT OF TRANSPORTATION		CHEET TITLE:
CHECKED BY: PDB 02/15	ROAD NO.	COUNTY	PROJECT ID
DESIGNED BY: MAT 02/15	1-91	ORANGE	1M BPNT (14)
CHECKED BY: PRS 02/15	PROJECT NAME:		

CONTAINMENT MISCELLANEOUS DETAILS (1 OF 7)		REF. DWG. NO.
TEN BRIDGES ON OR OVER I-91 IMPROVEMENT PLANS		SHEET NO.
		C-19



SUPPORT HANGER

Vermont Agency of Transportation

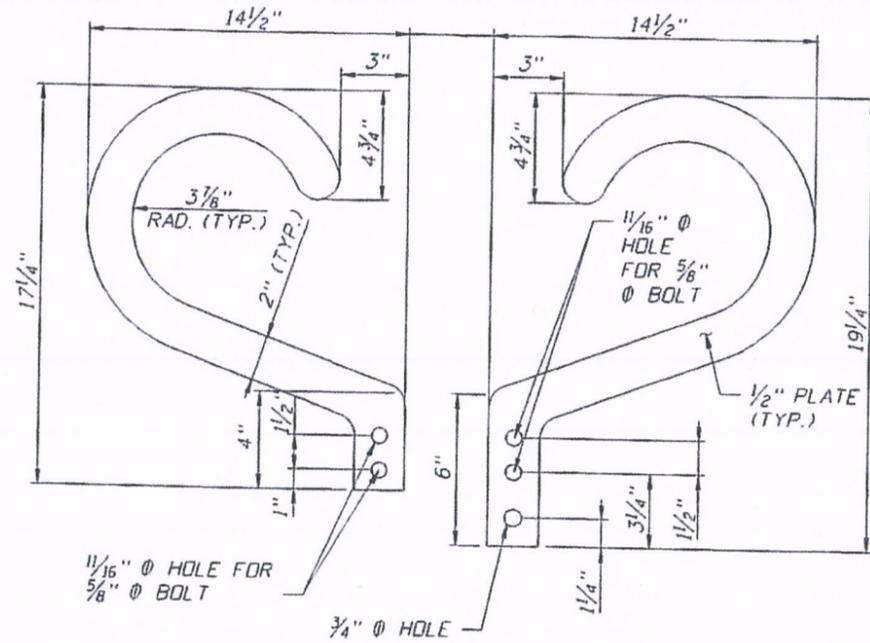
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SUPPORT HANGER DETAIL

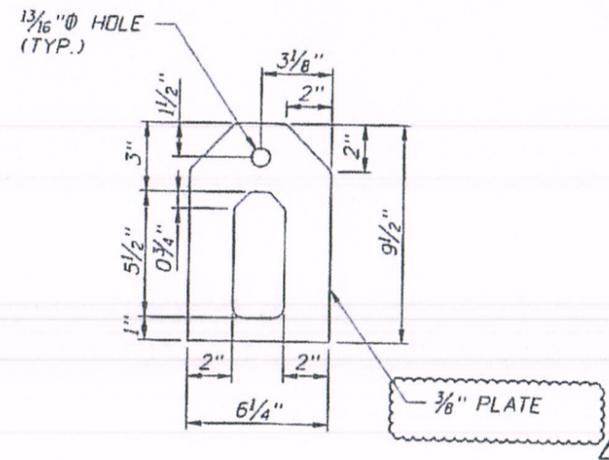


PLATE 1 DETAIL

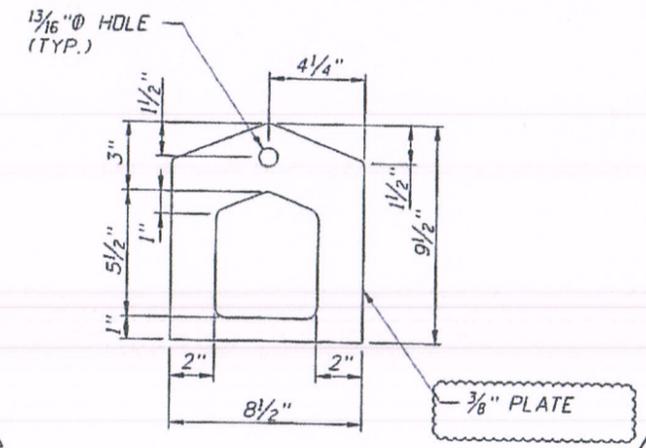


PLATE 2 DETAIL



Bridge Nos. ALL

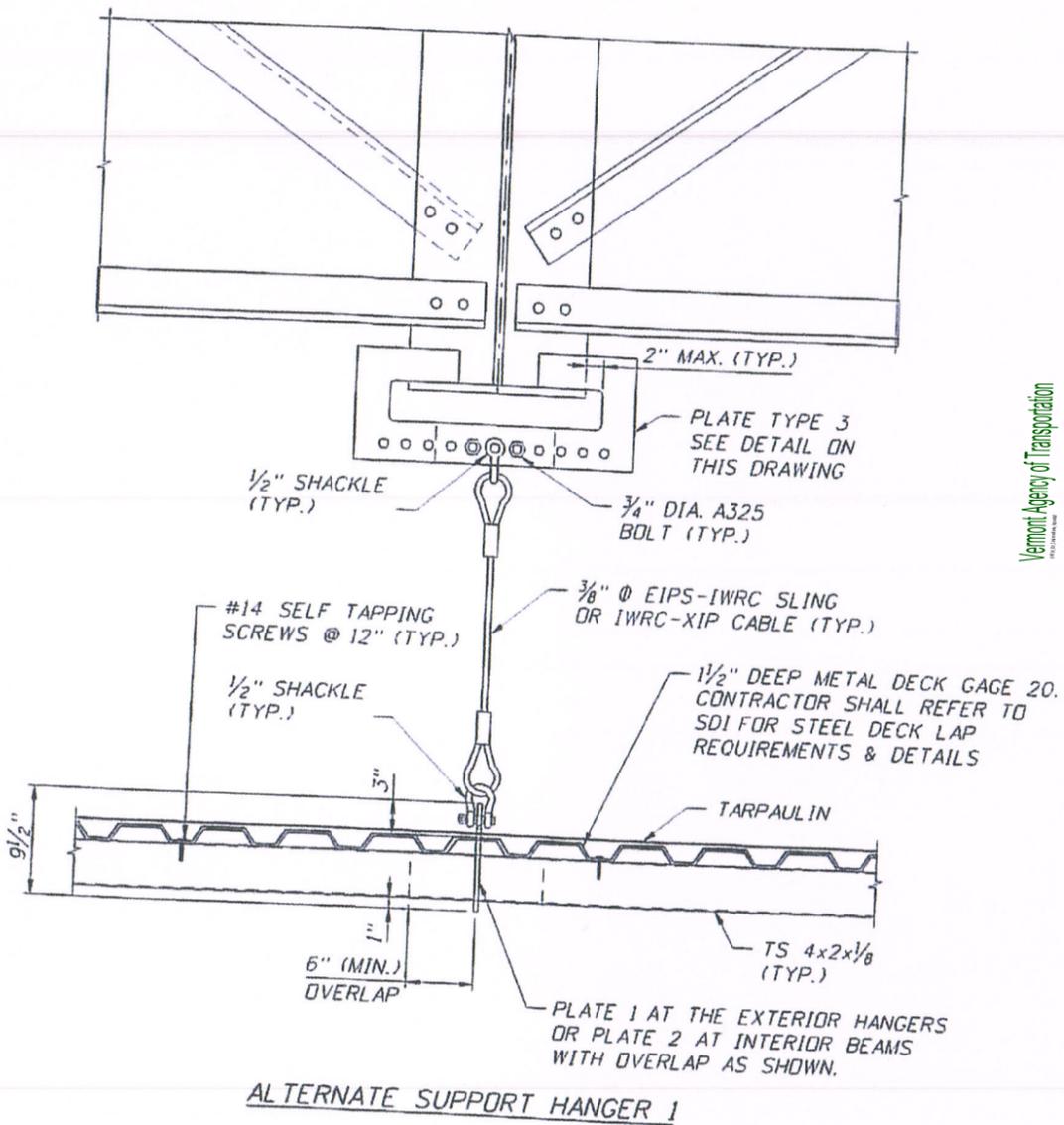
REVISIONS		
DATE	BY	DESCRIPTION
09/02/15	PRS	REVIEW COMMENT

PAUL STEIJLEN P.E.
P.E. LICENSE NUMBER 107795
A2B ENGINEERING, LLC.
5406 N. HOOVER BLVD., SUITE 12
TAMPA, FL 33634

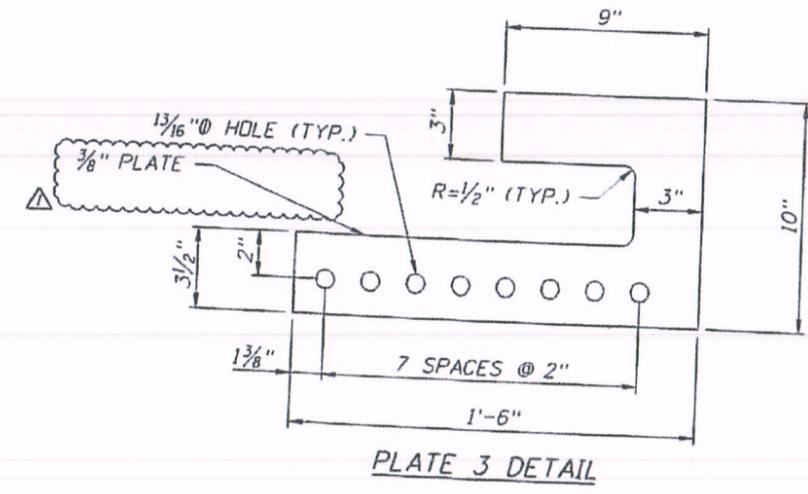
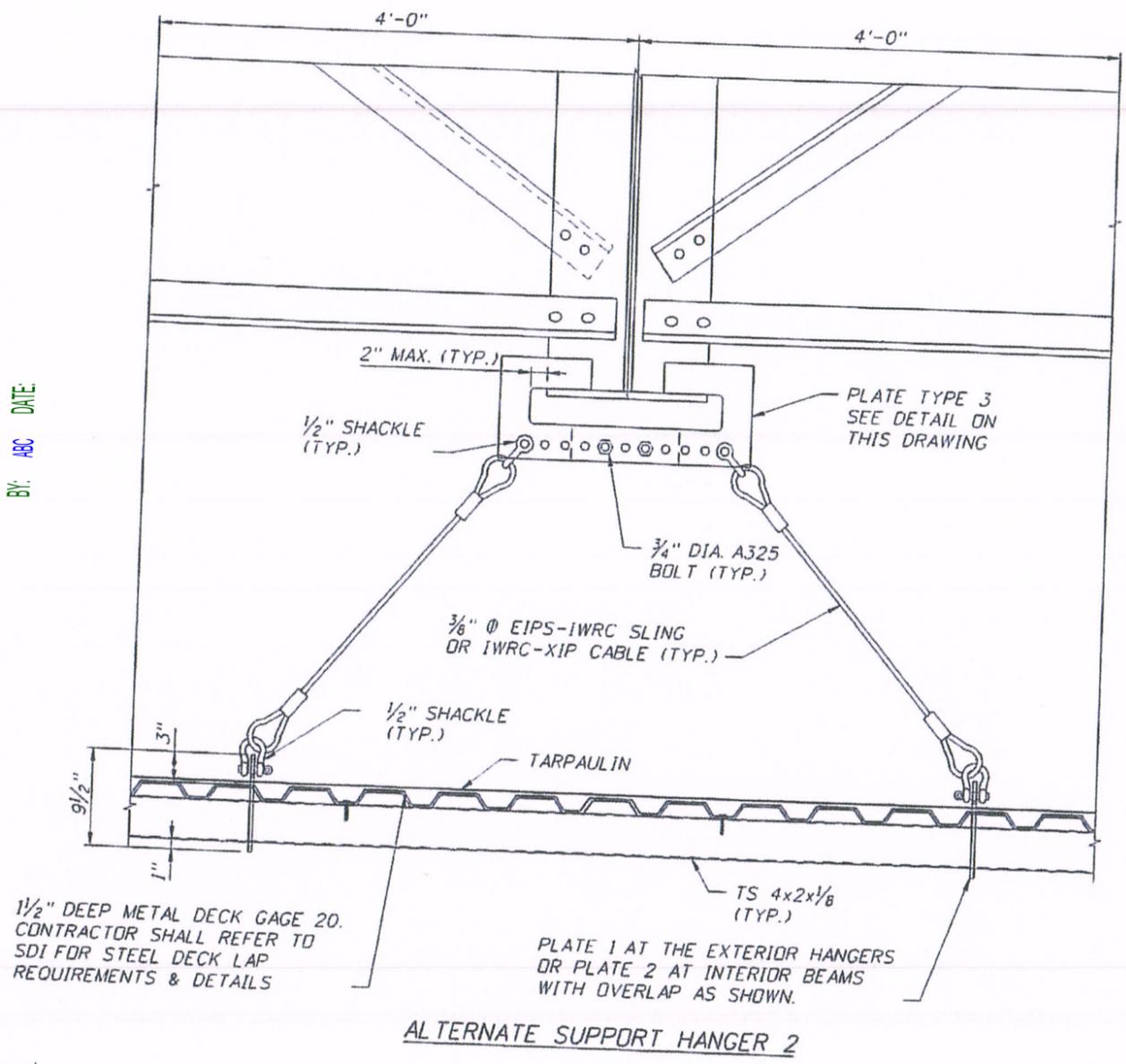
MONOKO, LLC.
1037 PENINSULA AVENUE
TARPOON SPRINGS, FL 34689
PHONE (727) 940-3244
FAX (727) 279-8795

VERMONT DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	PROJECT ID
1-91	ORANGE	1M BPNT (14)

SHEET TITLE: CONTAINMENT MISCELLANEOUS DETAILS (2 OF 7)		REF. DWG. NO.
PROJECT NAME: TEN BRIDGES ON OR OVER I-91 IMPROVEMENT PLANS		SHEET NO. C-20



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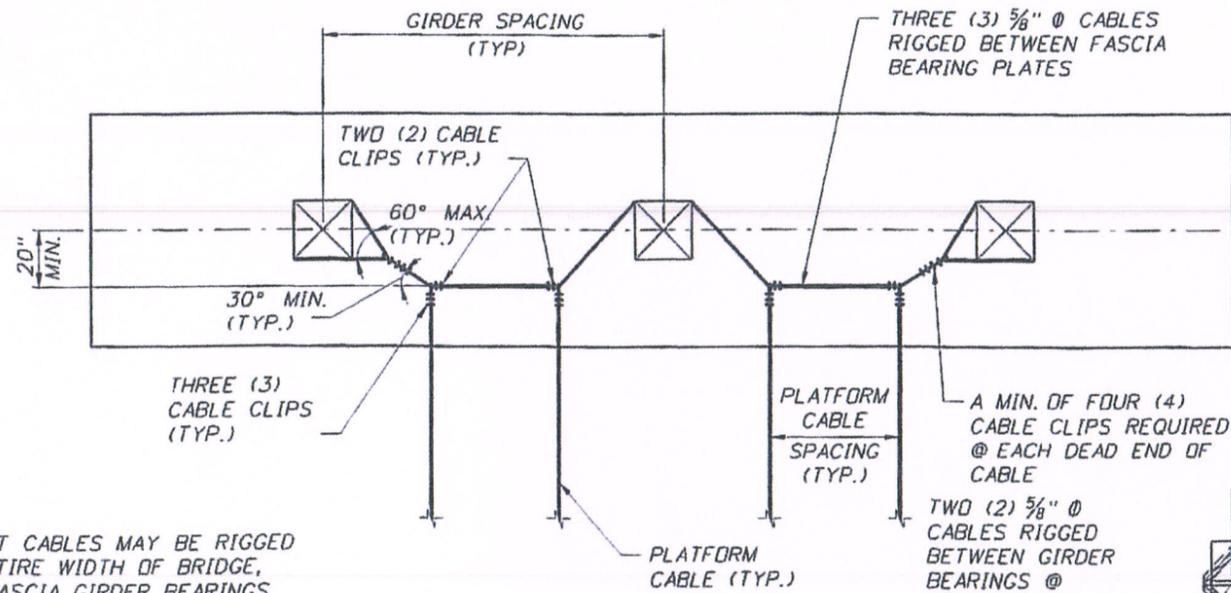
REVISIONS		
DATE	BY	DESCRIPTION
09/02/15	PRS	REVIEW COMMENT

PAUL STEIJLEN P.E.
 P.E. LICENSE NUMBER 107795
 A2B ENGINEERING, LLC.
 5406 N. HOOVER BLVD., SUITE 12
 TAMPA, FL 33634

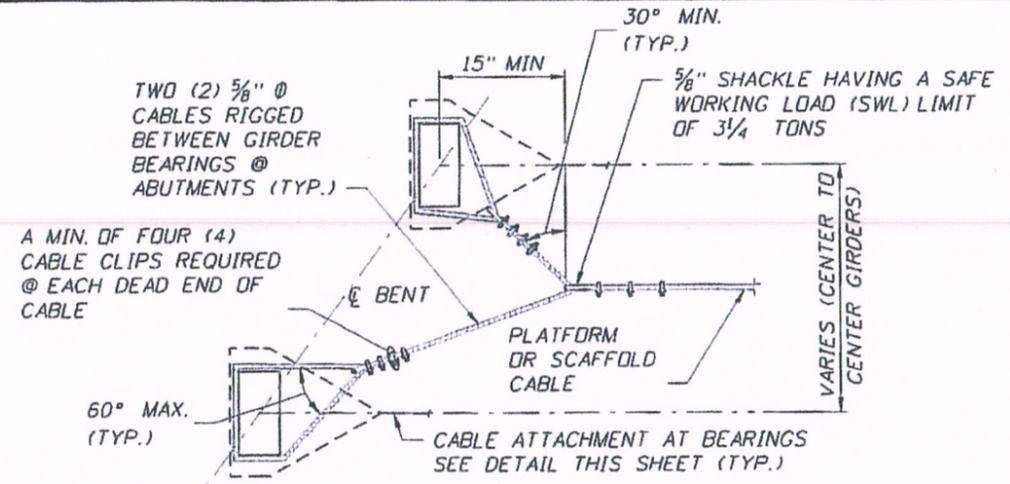
MONOKO, LLC.
 1037 PENINSULA AVENUE
 TARPON SPRINGS, FL 34689
 PHONE (727) 940-3244
 FAX (727) 279-8795

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CHECKED BY: PDB 02/15	ROAD NO. 1-91	COUNTY ORANGE	PROJECT ID 1M BPNT (141)
DESIGNED BY: MAT 02/15	PROJECT NAME: TEN BRIDGES ON OR OVER 1-91 IMPROVEMENT PLANS		
CHECKED BY: PRS 02/15	REF. DWG. NO. C-21		

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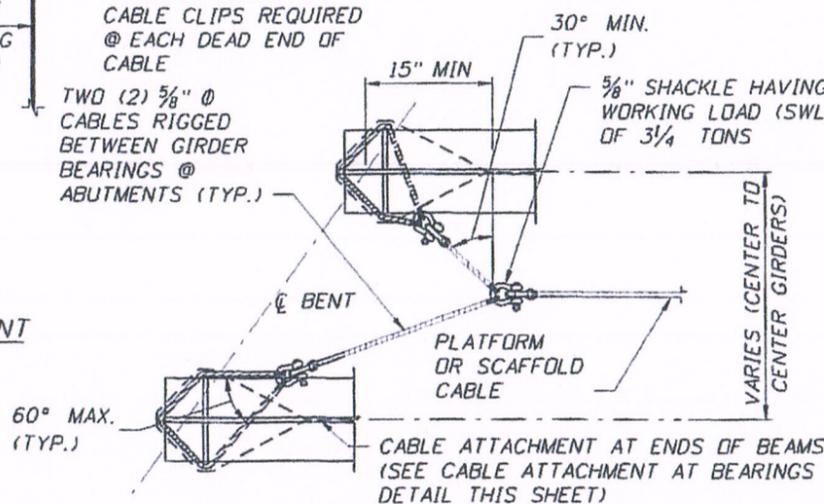


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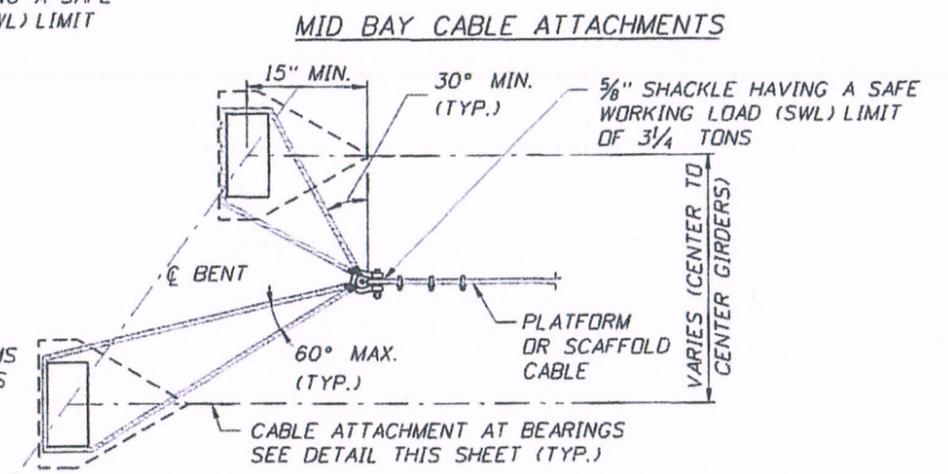


NOTE:
 ATTACHMENT CABLES MAY BE RIGGED ACROSS ENTIRE WIDTH OF BRIDGE, BETWEEN FASCIA GIRDER BEARINGS AND/OR BETWEEN INDIVIDUAL PAIRS OF BEARINGS.

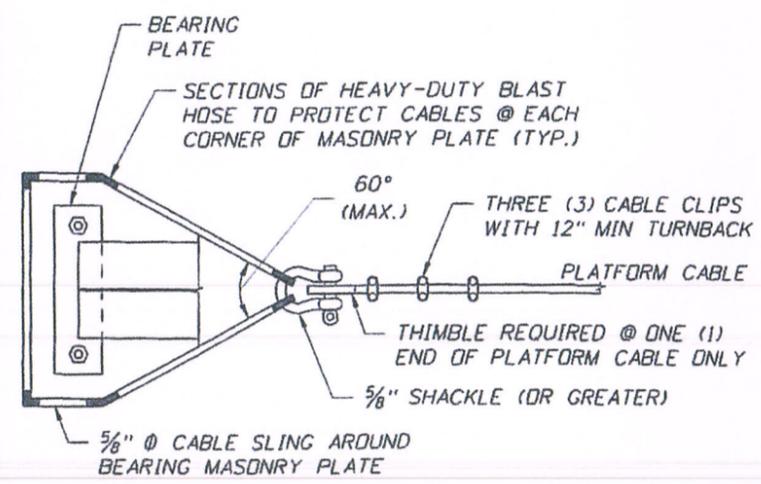
TRANSVERSE CABLE ATTACHMENT



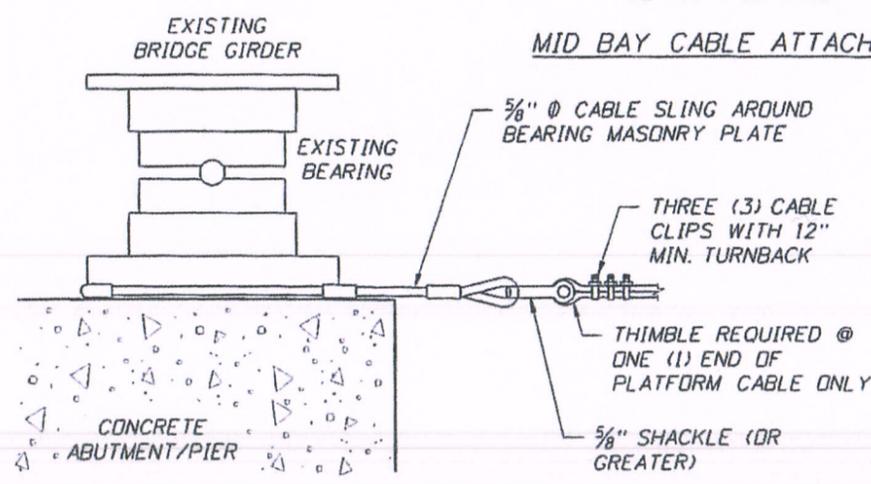
MID BAY CABLE ATTACHMENTS



MID BAY CABLE ATTACHMENTS

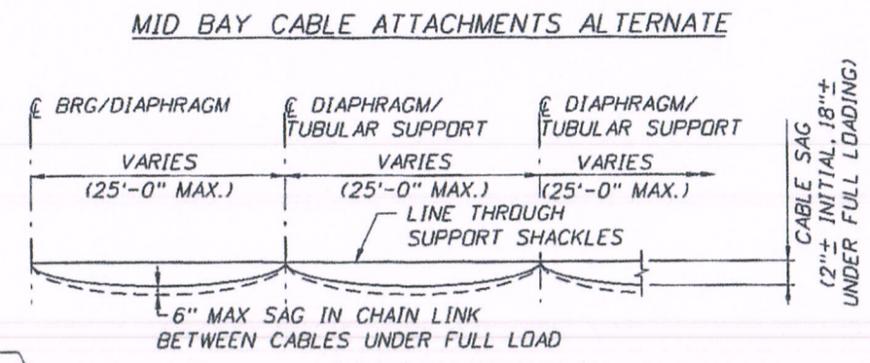


PLAN VIEW



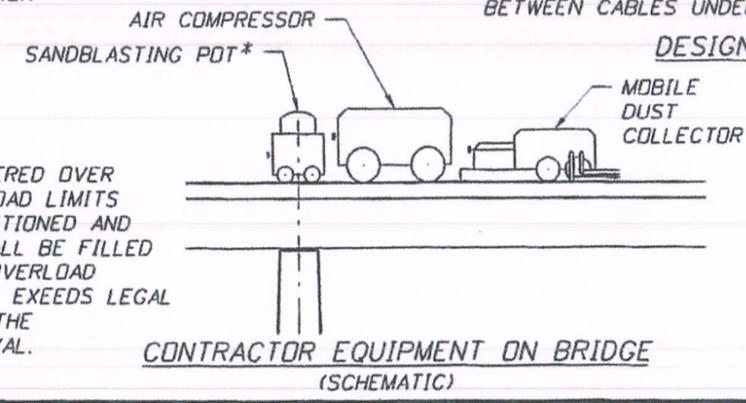
ELEVATION

CABLE ATTACHMENT AT BEARINGS



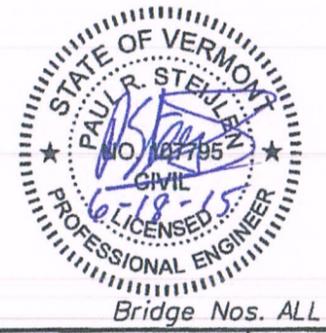
MID BAY CABLE ATTACHMENTS ALTERNATE

DESIGN CABLE SAG

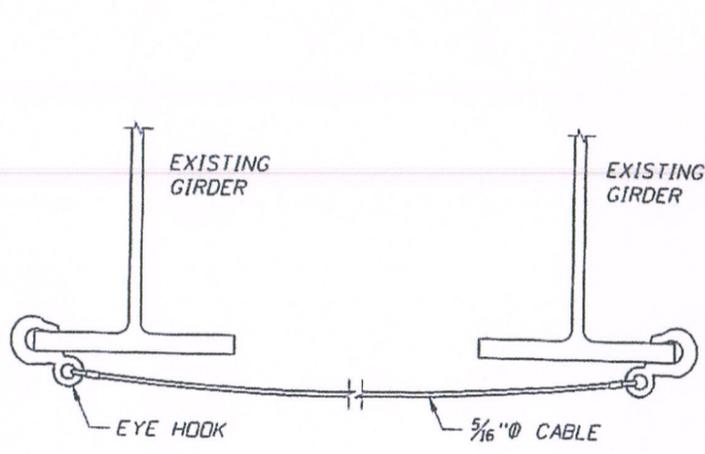


CONTRACTOR EQUIPMENT ON BRIDGE (SCHEMATIC)

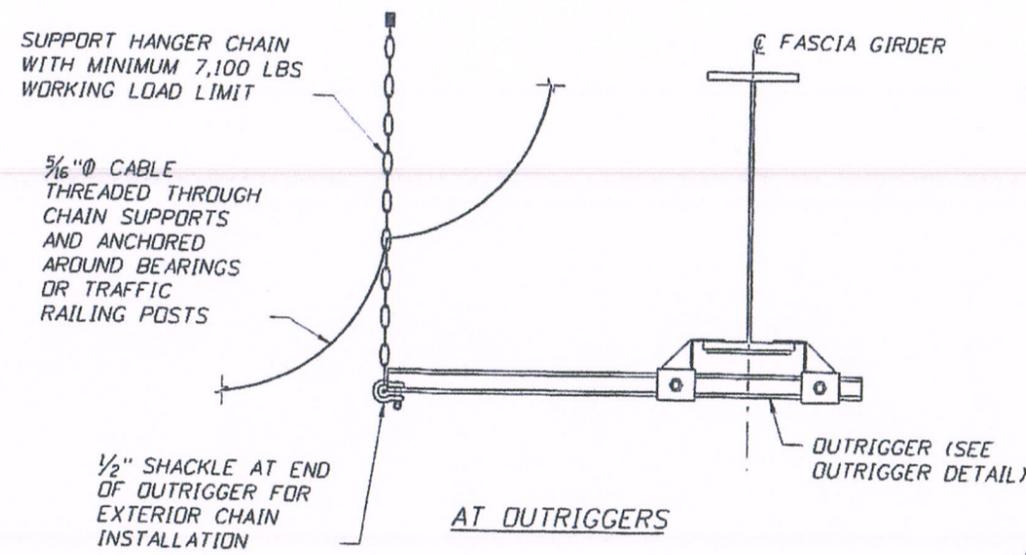
* SANDBLASTING POT SHALL BE CENTERED OVER PIER. IF EQUIPMENT EXCEEDS LEGAL LOAD LIMITS WHEN FULL, EQUIPMENT SHALL BE POSITIONED AND REMOVED ONLY WHILE EMPTY AND SHALL BE FILLED IN PLACE AS REQUIRED TO PREVENT OVERLOAD CONDITION ON BRIDGE. ANY LOAD THAT EXCEEDS LEGAL LOAD LIMIT SHALL BE SUBMITTED TO THE DEPARTMENT FOR REVIEW AND APPROVAL.



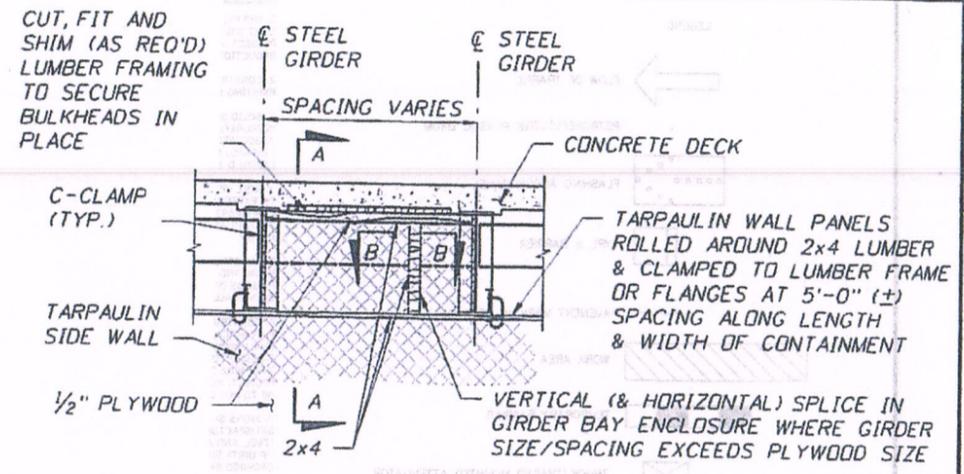
REVISIONS			PAUL STEJLEN P.E. P.E. LICENSE NUMBER 107795 A2B ENGINEERING, LLC. 5406 N. HOOVER BLVD., SUITE 12 TAMPA, FL 33634	MONOKO, LLC. 1037 PENINSULA AVENUE TARPOON SPRINGS, FL 34689 PHONE (727) 940-3244 FAX (727) 279-8795	DRAWN BY: BDN 02/15 CHECKED BY: POB 02/15 DESIGNED BY: MAT 02/15 CHECKED BY: PRS 02/15	VERMONT DEPARTMENT OF TRANSPORTATION			SHEET TITLE: CONTAINMENT MISCELLANEOUS DETAILS (4 OF 7)	REF. DWG. NO.
DATE	BY	DESCRIPTION				ROAD NO.	COUNTY	PROJECT ID		
						1-91	ORANGE	111 BPNT (14)		



BETWEEN BEAMS

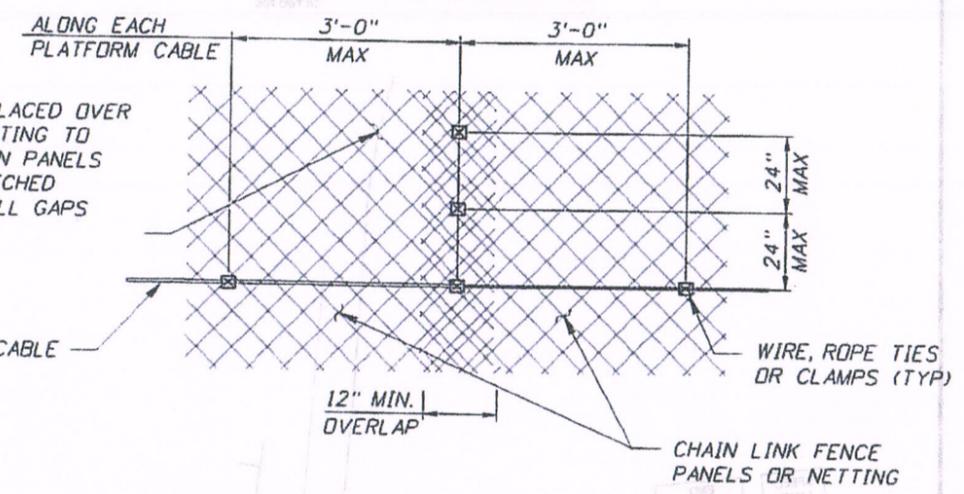


AT OUTRIGGERS



GIRDER BAY ENCLOSURE

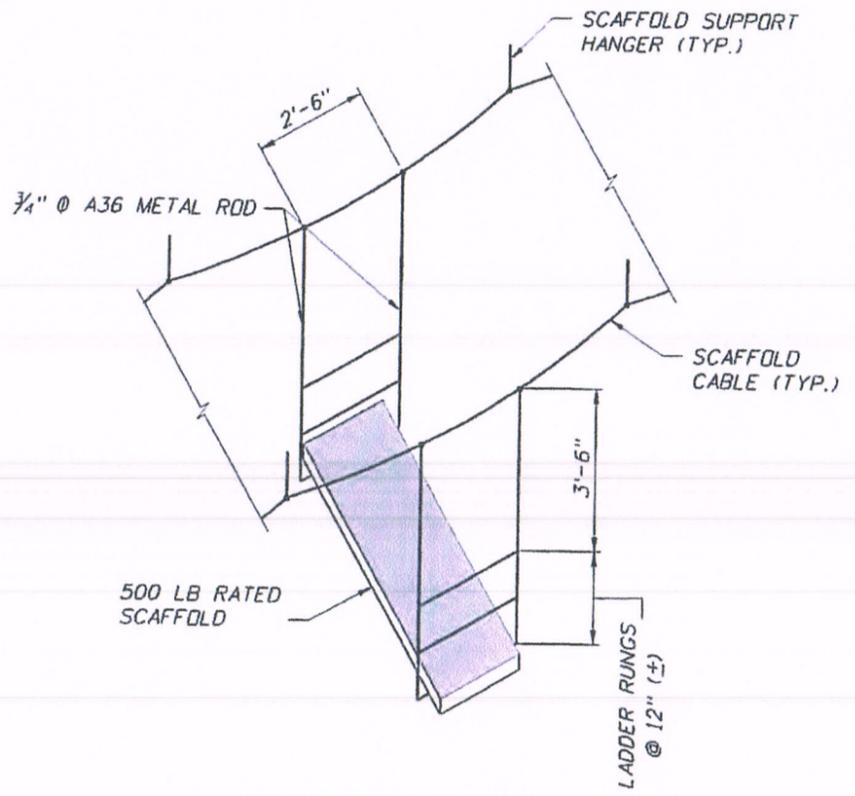
HEAVY DUTY TARPULIN PLACED OVER CHAIN LINK FENCE OR NETTING TO COLLECT DEBRIS. TARPULIN PANELS TO BE CONTINUOUSLY STITCHED TOGETHER TO ELIMINATE ALL GAPS (TYP.)



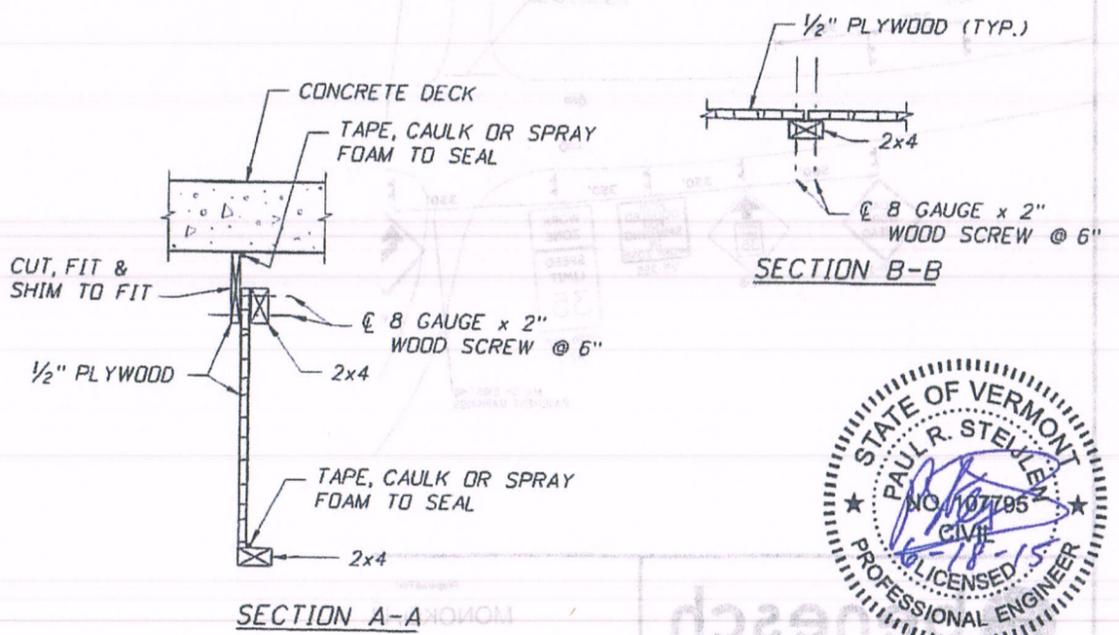
CHAIN LINK FENCE OR NETTING LAYOUT

HORIZONTAL LIFE LINE DETAIL

Vermont Agency of Transportation
RECEIVED
 ON: September 4, 2015
 and Checked for
CONFORMANCE
 BY: ABC DATE:

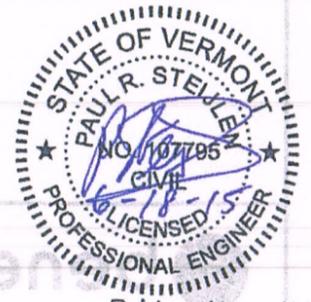


SCAFFOLD ISOMETRIC (OPTIONAL SUSPENDED SCAFFOLD)



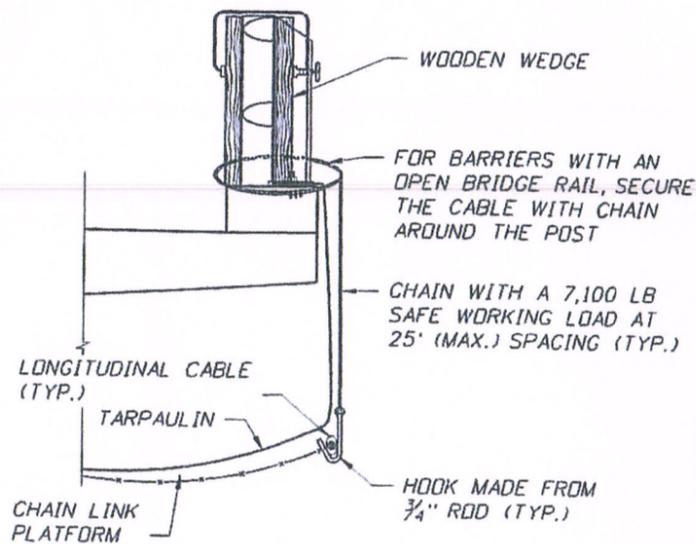
CABLE CLIP INSTALLATION			
CABLE DIA	MIN. CABLE TURNBACK, IN.	MIN. TORQUE FT-LBS	NO. OF CLIPS
3/8"	11"	45	3
1/2"	11.5"	65	3
5/8"	12"	95	3
3/4"	12"	95	3

NOTE:
 ALL CABLES & CLIPS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDED PROCEDURES. IF CABLES SEPARATE AT 60° MAX. ANGLE, ADD ONE ADDITIONAL CLIP.

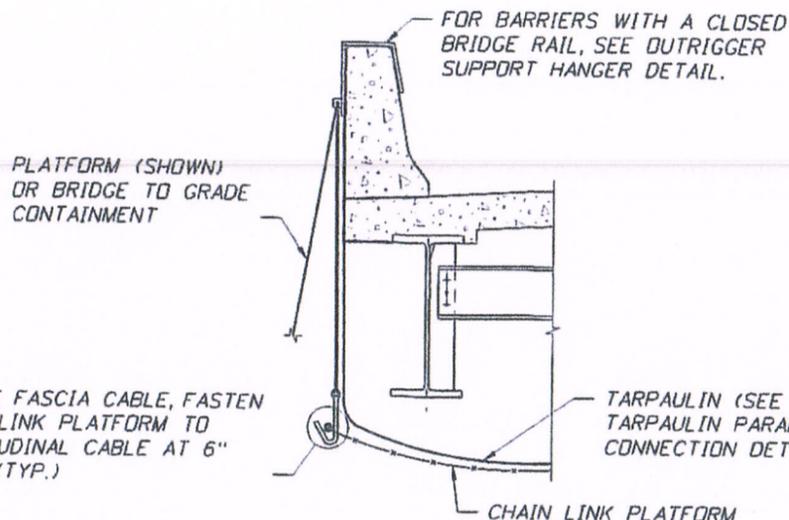


Bridge Nos. ALL

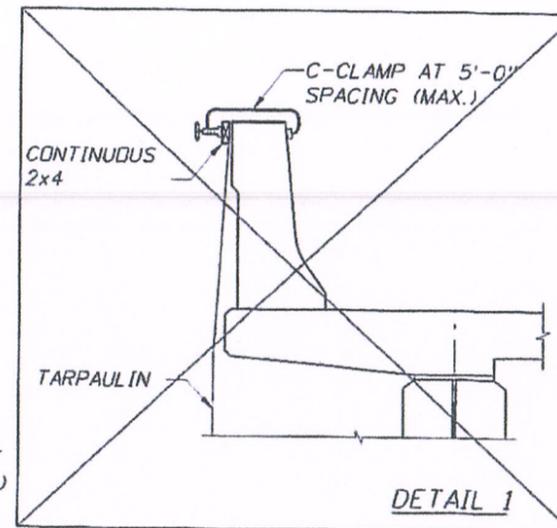
REVISIONS			DATE	BY	DESCRIPTION	DRAWN BY: BDN 02/15	CHECKED BY: PDB 02/15	DESIGNED BY: MAT 02/15	CHECKED BY: PRS 02/15	VERMONT DEPARTMENT OF TRANSPORTATION			SHEET TITLE: CONTAINMENT MISCELLANEOUS DETAILS (5 OF 7)	REF. DWG. NO.
DATE	BY	DESCRIPTION								ROAD NO.	COUNTY	PROJECT ID		
										1-91	ORANGE	IM BPNT (14)		



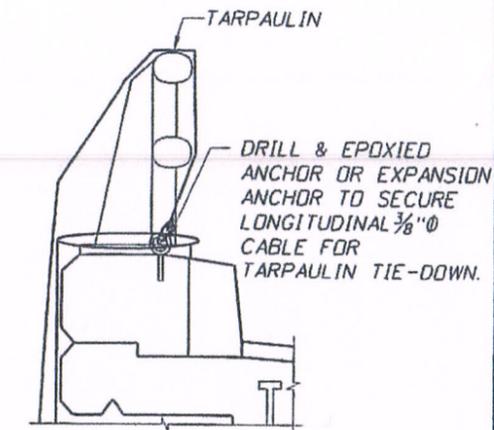
DETAIL 1



DETAIL 2

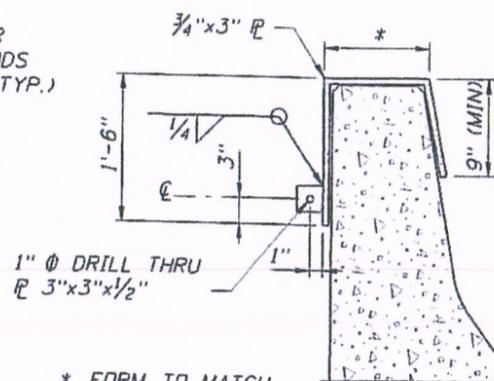
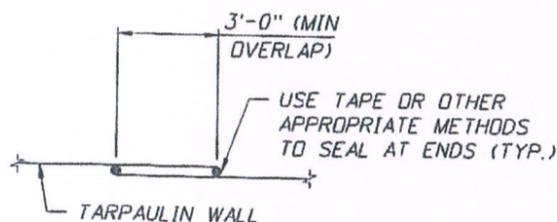
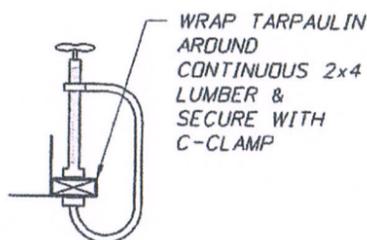


DETAIL 1

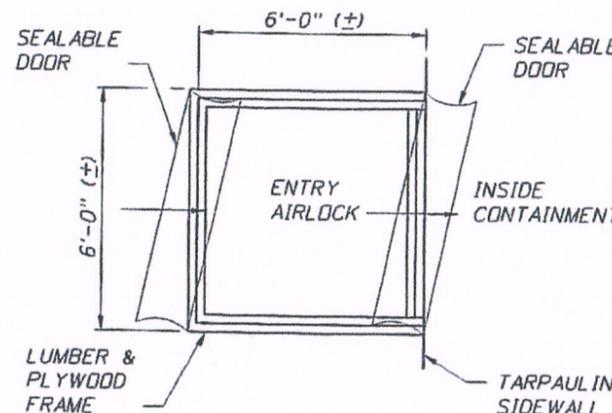


DETAIL 2

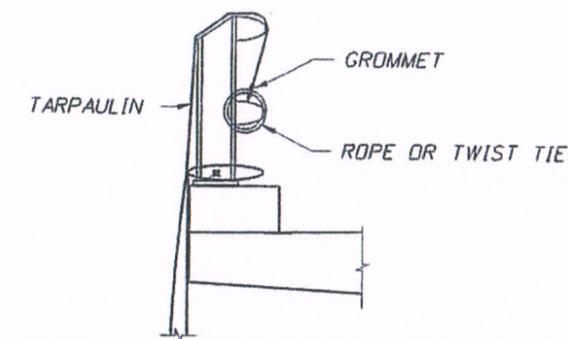
EXTERIOR SUPPORT HANGER
(CHAIN LINK PLATFORM SHOWN, NETTING OR METAL DECKING IS SIMILAR)



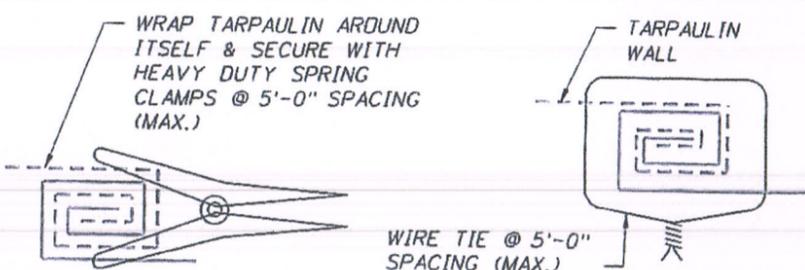
OUTRIGGER SUPPORT HANGER
DETAIL



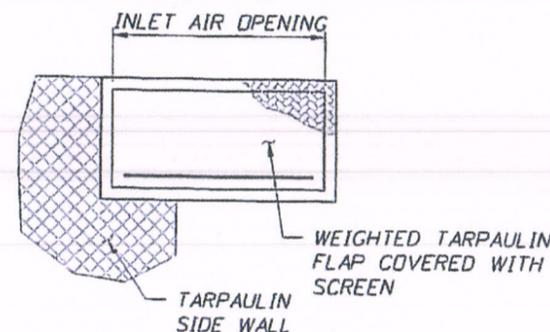
CONTAINMENT ENTRY



TARPAULIN PARAPET CONNECTION
DETAIL 3

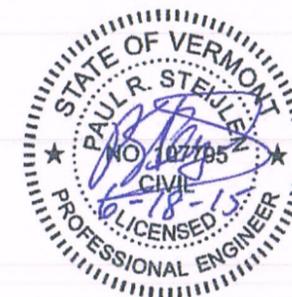


ADJACENT TARPAULIN CONNECTION ALTERNATIVES



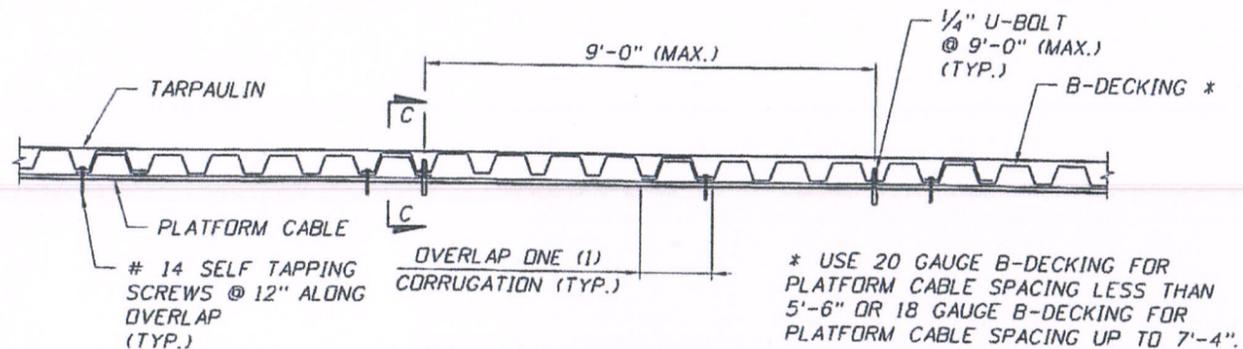
INLET AIR OPENING
INSTALL INLET AIR OPENINGS
WITHIN TARPAULIN WALLS AND/OR
GIRDER BAY ENCLOSURES
AS REQUIRED

Vermont Agency of Transportation
RECEIVED
ON: September 4, 2015
and Checker for
CONFORMANCE
BY: ABC DATE:

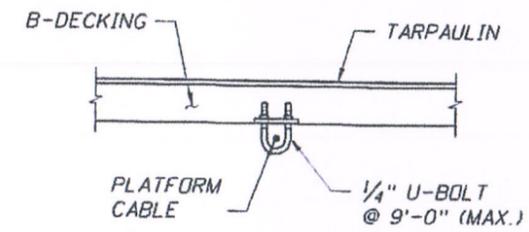


Bridge Nos. ALL

REVISIONS			PAUL STEULEN P.E. P.E. LICENSE NUMBER 107795 A2B ENGINEERING, LLC. 5406 N. HOOVER BLVD., SUITE 12 TAMPA, FL 33634	MONOKO, LLC. 1037 PENINSULA AVENUE TARPOON SPRINGS, FL 34689 PHONE (727) 940-3244 FAX (727) 279-8795	DRAWN BY: BDN 02/15 CHECKED BY: PDB 02/15 DESIGNED BY: MAT 02/15 CHECKED BY: PRS 02/15	VERMONT DEPARTMENT OF TRANSPORTATION			SHEET TITLE: CONTAINMENT MISCELLANEOUS DETAILS (6 OF 7)	REF. DWG. NO.
DATE	BY	DESCRIPTION				ROAD NO.	COUNTY	PROJECT ID		
						1-91	ORANGE	1M BPNT (14)	TEN BRIDGES ON OR OVER 1-91 IMPROVEMENT PLANS	C-24



METAL DECKING DETAIL
 (100% TIE-OFF PER OSHA REQUIRED AT ENDS OF METAL DECKING PLATFORM)
 (BRIDGE NO. 58N & 58S)

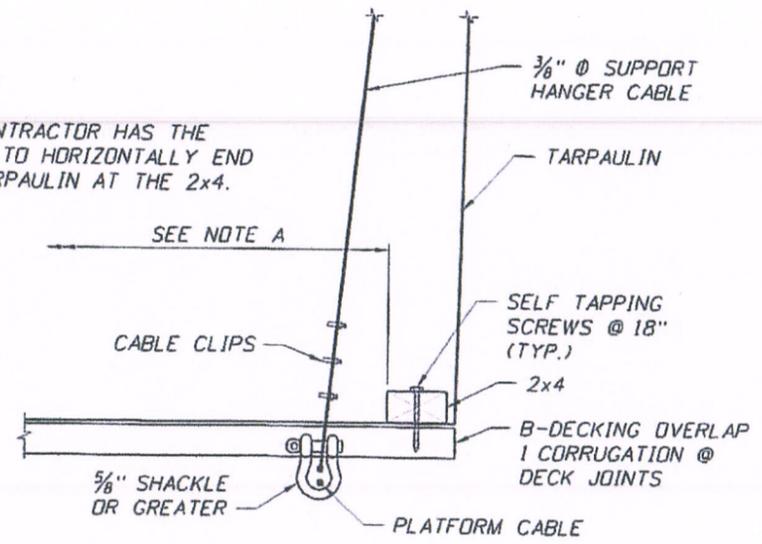


SECTION C-C

* USE 20 GAUGE B-DECKING FOR PLATFORM CABLE SPACING LESS THAN 5'-6" OR 18 GAUGE B-DECKING FOR PLATFORM CABLE SPACING UP TO 7'-4".

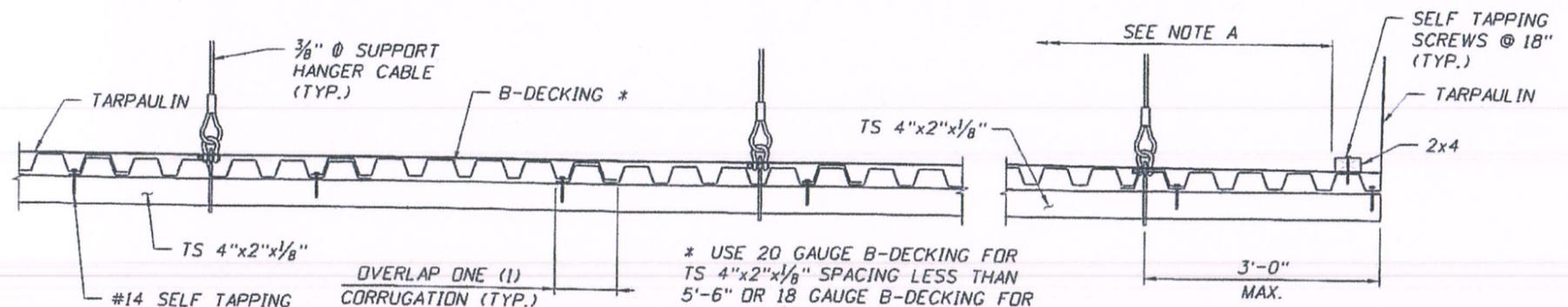
NOTE A:

THE CONTRACTOR HAS THE OPTION TO HORIZONTALLY END THE TARPULIN AT THE 2x4.

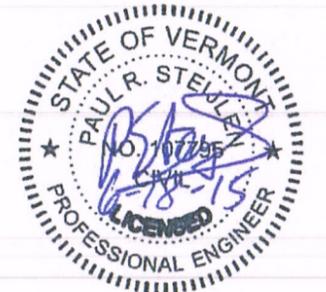


METAL DECKING END DETAIL
 (100% TIE-OFF PER OSHA REQUIRED AT ENDS OF METAL DECKING PLATFORM)
 (BRIDGE NO. 58N & 58S)

Vermont Agency of Transportation
RECEIVED
 ON: September 4, 2015
 and Checked for
CONFORMANCE
 BY: ABC DATE:



METAL DECKING DETAIL
 (100% TIE-OFF PER OSHA REQUIRED AT ENDS OF METAL DECKING PLATFORM)
 (BRIDGE NO. 62N, 62S, 63N, & 63S)



Bridge Nos. ALL

REVISIONS			DATE	BY	DESCRIPTION	DRAWN BY: BDN 02/15	CHECKED BY: PDB 02/15	DESIGNED BY: MAT 02/15	CHECKED BY: PRS 02/15	VERMONT DEPARTMENT OF TRANSPORTATION			SHEET TITLE: CONTAINMENT MISCELLANEOUS DETAILS (7 OF 7)	REF. DWG. NO.
DATE	BY	DESCRIPTION								ROAD NO.	COUNTY	PROJECT ID		
										1-91	ORANGE	1M BPNT (14)	TEN BRIDGES ON OR OVER 1-91 IMPROVEMENT PLANS	
PAUL STEIJLEN P.E. P.E. LICENSE NUMBER 107795 A2B ENGINEERING, LLC. 5406 N. HOOVER BLVD., SUITE 12 TAMPA, FL 33634						MONOKO, LLC. 1037 PENINSULA AVENUE TARPON SPRINGS, FL 34689 PHONE (727) 940-3244 FAX (727) 279-8795						PROJECT NAME: TEN BRIDGES ON OR OVER 1-91 IMPROVEMENT PLANS		SHEET NO. C-25