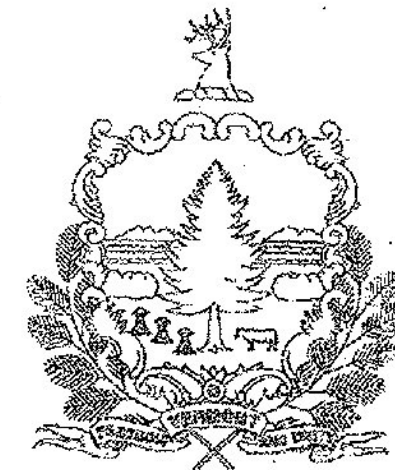


STATE OF VERMONT AGENCY OF TRANSPORTATION

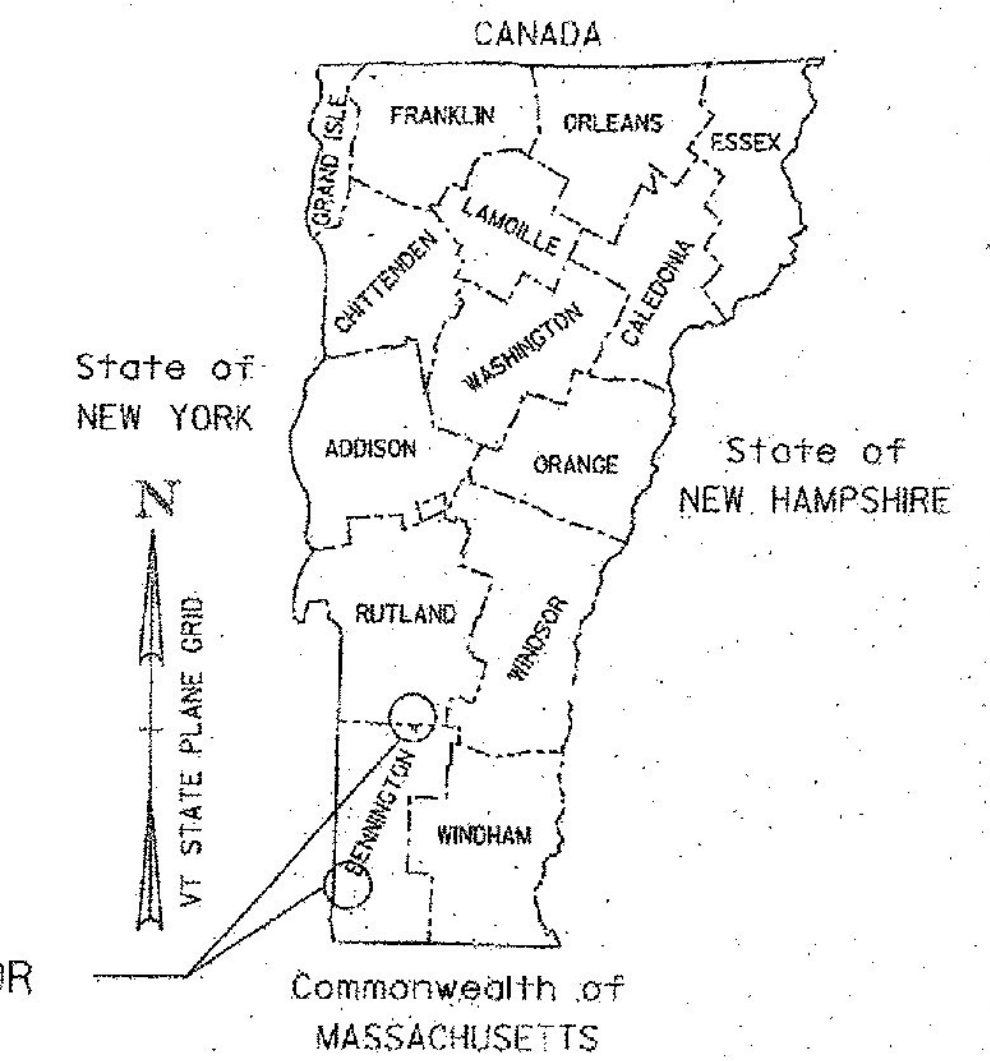


PROPOSED IMPROVEMENT BRIDGE PROJECT

BENNINGTON-MOUNT TABOR
COUNTIES OF BENNINGTON & RUTLAND
FIVE BRIDGES ON OR OVER US ROUTE 7

PROJECT LOCATION: BENNINGTON BR 11 (US ROUTE 7 OVER ROARING BRANCH) (MM 4.03)
 BENNINGTON BR D15 (TH NO 14 OVER US ROUTE 7) (MM 5.77)
 BENNINGTON BR 16N (US ROUTE 7 OVER BENN NORTH SH) (MM 6.41)
 BENNINGTON BR 16S (US ROUTE 7 OVER BENN NORTH SH) (MM 6.41)
 MT TABOR BR 56C (US ROUTE 7 OVER MILL BROOK) (MM 3.00)

PROJECT DESCRIPTION: THIS PROJECT INVOLVES CLEANING, LEAD PAINT REMOVAL AND REPAINTING THE EXISTING STEEL SUPERSTRUCTURE MEMBERS AND ASSOCIATED WORK.



BENNINGTON - MT TABOR
BF BPNT (16)

LOCATION MAP
NOT TO SCALE

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- 10-12 REFERENCE SHEETS BRIDGE 11
- 13-14 REFERENCE SHEETS BRIDGE D15
- 15-17 REFERENCE SHEETS BRIDGES 16N & 16S
- 18-23 REFERENCE SHEETS BRIDGE 56C

STANDARD SHEETS

- T-1 TRAFFIC CONTROL GENERAL NOTES 08-06-2012
- T-10 CONVENTIONAL ROADS, CONSTRUCTION APPROACH SIGNING 08-06-2012
- T-11 CONSTRUCTION APPROACH SIGNING DIVIDED HIGHWAY, ONE LANE CLOSED 08-06-2012
- T-12 TRAFFIC CONTROL DIVIDED HIGHWAY ONE LANE CLOSED 08-06-2012
- T-13 TRAFFIC CONTROL DIVIDED HIGHWAY ONE LANE CLOSED 08-06-2012

RECORD PLANS

CONTRACTOR: MONOKO, LLC - TARPON SPRINGS, FL
 RESIDENT ENGINEER: TIM POCKETT
 CONSTRUCTION BEGAN: APRIL 15, 2016
 CONSTRUCTION COMPLETE: JULY 20, 2016
 RECORD PLANS BY: TIM POCKETT & KEVIN KING

I HEREBY CERTIFY THAT ALL THE CONSTRUCTION REQUIRED BY THIS SET OF DRAWINGS HAS BEEN ACCOMPLISHED AS INDICATED HEREIN.

BY Tim Pockett RESIDENT ENGINEER
 DATE 08-06-2017

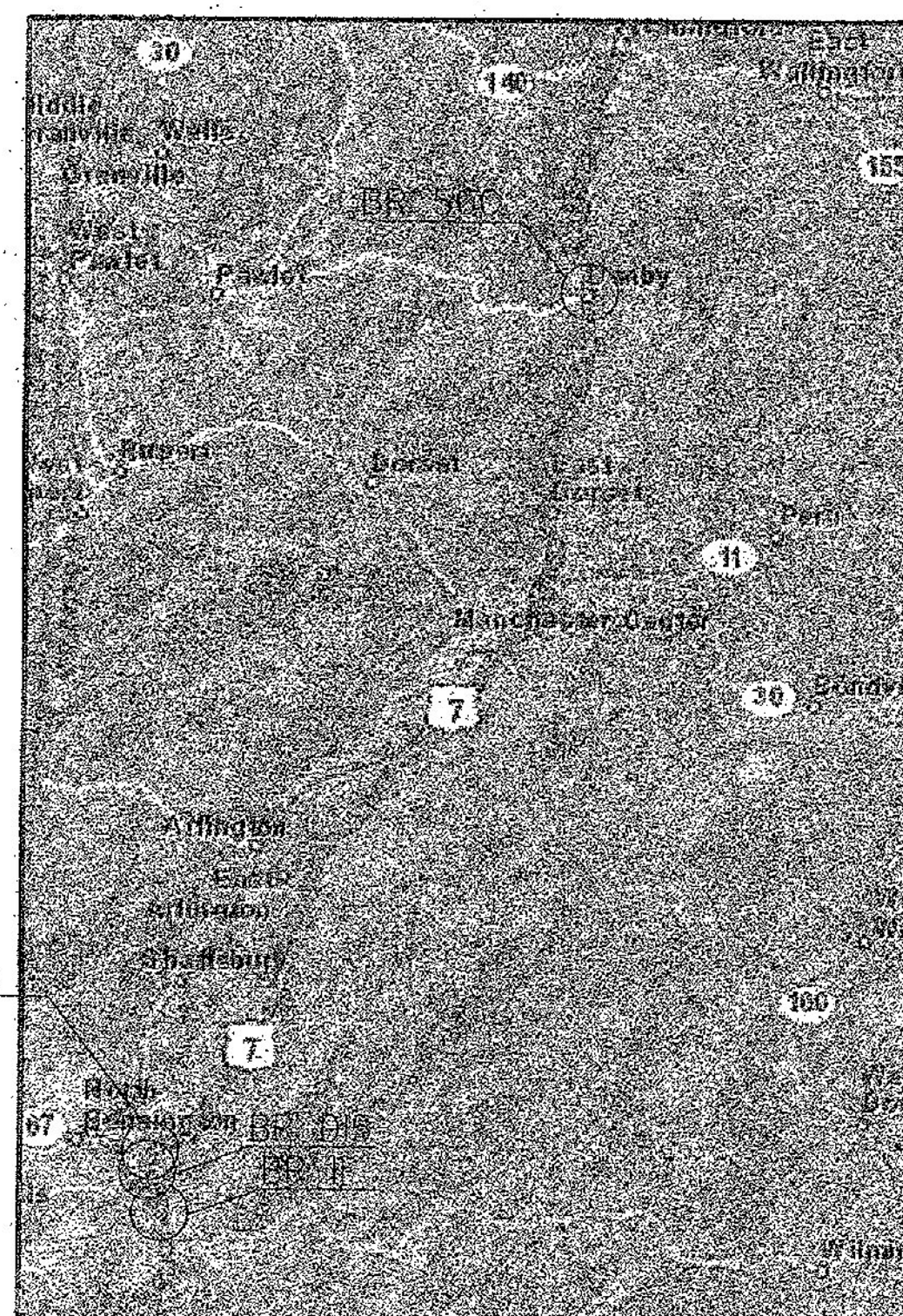
NOTE: Any further information concerning final quantities, amounts or other details relative to this project may be found at Central Files in the electronic archives.

CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THESE PLANS AND THE STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2011, AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION ON JULY 20, 2011 FOR USE ON THIS PROJECT, INCLUDING ALL SUBSEQUENT REVISIONS AND SUCH REVISED SPECIFICATIONS AND SPECIAL PROVISIONS AS ARE INCORPORATED IN THESE PLANS.

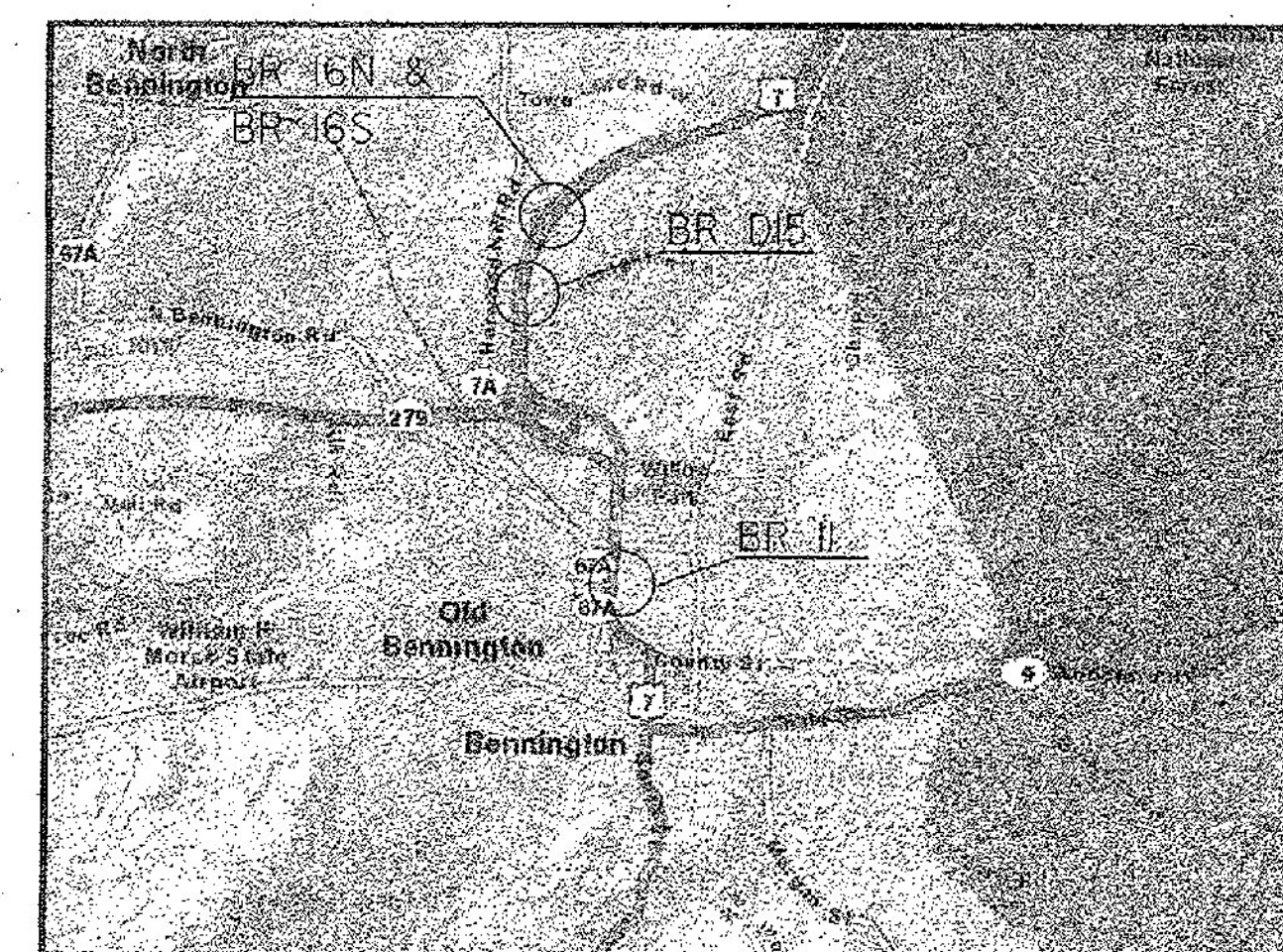
QUALITY ASSURANCE PROGRAM : LEVEL 3

SURVEYED BY : N/A
 SURVEYED DATE : N/A

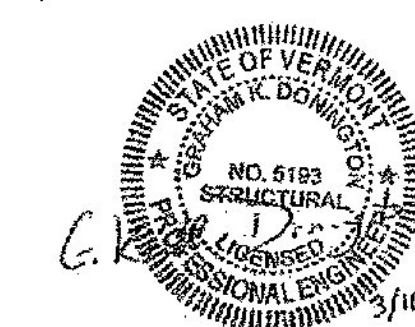
DATUM
 VERTICAL N/A
 HORIZONTAL N/A



PROJECT LOCATION PLAN
NOT TO SCALE



BENNINGTON LOCATION PLAN
NOT TO SCALE



DIRECTOR OF PROJECT DELIVERY
 APPROVED Mark Sargent DATE 3/17/2015

PROJECT MANAGER : MARK SARGENT

PROJECT NAME : BENNINGTON-MT TABOR
 PROJECT NUMBER : BF BPNT (16)

SHEET 1 OF 23 SHEETS

(RE-ADVERTISED)
PB PARBONS BRINCKERHOFF
 800 ELM STREET
 MANCHESTER, NH 03101

PROJECT NOTES:

- ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE STATE OF VERMONT AGENCY OF TRANSPORTATION 2011 STANDARD SPECIFICATIONS FOR CONSTRUCTION AND ITS LATEST REVISIONS, AND THE CONTRACT SPECIAL PROVISIONS.
- ALL WORK AND ANY ASSOCIATED ACTIVITY ON THIS PROJECT SHALL BE PERFORMED WITHIN THE EXISTING RIGHT-OF-WAY LIMITS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING RIGHT-OF-WAY LIMITS ALONG US ROUTE 7. THE RIGHT-OF-WAY FOR ALL OTHER HIGHWAYS SHALL BE ASSUMED TO BE A MINIMUM OF 3 RODS UNLESS SHOWN OTHERWISE ON REFERENCE PLANS.
- VTRANS WILL REVIEW CONSTRUCTION STAGING AREAS FOR ADEQUACY AND EXISTING CONDITIONS. THESE STAGING AREAS SHALL BE RESTORED TO ORIGINAL CONDITION. EROSION CONTROL MEASURES SHALL BE INCORPORATED FOR ALL DISTURBED AREAS AND WILL BE PAID FOR UNDER THE APPROPRIATE CONTRACT ITEMS.
- ALL COSTS ASSOCIATED WITH EXTENDING OR FILLING THE DRAIN TUBES SHALL BE INCIDENTAL TO ITEM 900.645, SPECIAL PROVISION (QC/QA CLEAN AND PAINT EXISTING STEEL STRUCTURES, BARE STEEL).
- STAGING AND CONTAINMENT STRUCTURES SHALL NOT BE ANCHORED INTO PIERS. ANCHORING INTO THE ABUTMENTS IS ALLOWED AS APPROVED BY THE ENGINEER. CONTRACTOR SHALL PROVIDE A DETAILED PLAN FOR CLEANING AND PAINTING BEARING DEVICES IF ANCHOR CABLES ARE PLACED AROUND BEARING PLATES. PAYMENT WILL BE CONSIDERED INCLUDED IN CONTRACT ITEM 900.645, SPECIAL PROVISION (CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES).
- UTILITIES THAT ARE PRESENT ON THE STRUCTURES SHALL NOT BE BLASTED OR PAINTED. THESE UTILITIES MUST BE PROTECTED. SEE THE UTILITY SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
- THE CONTRACTOR SHALL VERIFY, THROUGH LOAD CALCULATIONS, THE CAPACITY OF THE EXISTING BRIDGE IF ANY EQUIPMENT, MATERIALS OR CONTAINMENT SYSTEM IS PLACED ON THE BRIDGE STRUCTURE. THIS IS TO INCLUDE WIND LOADING CONDITIONS, GRIT BUILD UP, EQUIPMENT, AND PERSONNEL LOADING PER SQUARE FOOT OF THE CONTAINMENT. CALCULATIONS SHALL BE PROVIDED TO THE ENGINEER PRIOR TO START OF WORK.
- THE CONTRACTOR SHALL NOT IMPEDE THE TOWN CONTROLLED PORTION OF THE RIGHT OF WAY WITH EQUIPMENT OR ANY STAGING MATERIALS FOR STRUCTURES CARRYING TOWN HIGHWAYS OVER US ROUTE 7.
- WORK OUTSIDE THE SEASONAL LIMITATIONS WILL NOT BE ALLOWED UNLESS BY SPECIAL PERMISSION GRANTED BY THE PROJECT MANAGER. WORK OUTSIDE THE SEASONAL LIMITATIONS WILL ONLY BE ALLOWED FOR A SHORT PERIOD OF TIME IF GIVEN, TO FINALIZE TOUCHUPS OR OTHER REPAIRS. NO LONG TERM OUT OF SEASON WORK WILL BE ALLOWED OR CONSIDERED.
- EXISTING GREASE PROTECTION APPLIED TO STEEL MEMBERS FOR CORROSION PROTECTION MAY NOT BE LIMITED TO TOP SURFACE, AS GREASE MAY HAVE PERMEATED INTO MULTIPLE LAYERS OF PAINT. THIS MAY RESULT IN PAINT LAYER REMOVAL DURING THE GREASE REMOVAL PROCESS. GREASE REMOVAL ACTIVITIES SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CONTRACT ITEM 900.645, SPECIAL PROVISION (REMOVAL OF EXISTING GREASE COATING). THE CONTRACTOR IS INVITED TO PERFORM THE NECESSARY TESTS FOR ADHESION TO THE UNDERLYING PAINT LAYERS PRIOR TO SUBMISSION OF FINAL BID DOCUMENTS.
- ALL DIMENSIONS ON PLANS FOR DOWNSPOUT AND DRAINAGE SYSTEM ARE APPROXIMATE AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR. CONTRACTOR TO SUBMIT FABRICATION DRAWINGS FOR ALL REPAIR ACTIVITIES.
- THE CONTRACTOR SHALL GRIND ALL EDGES OF EXISTING STEEL TO A RADIUS OF 1/16" - 1/8" PRIOR TO BLASTING THE STEEL IN PREPARATION FOR COATING.

TRAFFIC CONTROL:

- THE CONTRACTOR SHALL SUBMIT SITE SPECIFIC TRAFFIC CONTROL PLANS DEPICTING EACH PHASE OF THE PLANNED WORK FOR ANY WORK ON US ROUTE 7 AND OTHER ROADWAYS. THE DESIGN SHALL ENSURE STATE-REGULATED WIDE LOADS CAN BE ACCOMMODATED DURING THE LANE CLOSURES. PLANS SHALL BE SUBMITTED IN ACCORDANCE WITH SECTION 641 AND SUBSECTION 105.03 AND SHALL BE STAMPED BY A PROFESSIONAL ENGINEER LICENSED IN AN APPROPRIATE DISCIPLINE IN THE STATE OF VERMONT.
- THE CONTRACTOR SHALL VERIFY THE MOST CURRENT TRAFFIC VOLUMES FOR US ROUTE 7 AND CROSS ROADS FOR USE IN THE SPECIFIC TRAFFIC CONTROL PLANS.

TOWN	BRIDGE No.	US ROUTE 7 2012 AADT		CROSSROAD	CROSSROAD 2012 AADT
		NORTHBOUND	SOUTHBOUND		SUM OF BOTH DIRECTIONS
BENNINGTON	II	6500	6500	ROARING BRANCH	N/A
BENNINGTON	D15	4500	4500	TH NO 14	NOT AVAILABLE
BENNINGTON	16N	3000	3000	BENN N SH	3800
BENNINGTON	16S	3000	3000	BENN N SH	3800
MT TABOR	56C	1750	1750	MILL BROOK	N/A

- THE TRAFFIC CONTROL PLANS SHALL SHOW ALL RAMPS AND US ROUTE 7 ACCELERATION LANES AND DECELERATION LANES.
- UNIFORMED TRAFFIC OFFICERS ARE REQUIRED FOR THE TRAFFIC CONTROL ON US ROUTE 7, AND MAY BE REQUIRED ON BENNINGTON NORTH STATE HIGHWAY AS DIRECTED BY THE ENGINEER.

BRIDGE NOTES:

BENNINGTON, BRIDGE 11 - US ROUTE 7 OVER ROARING BRANCH

- REMOVE GREASE COATING ON ENDS OF STEEL BEAMS, END CROSS MEMBERS, BEARINGS, AND ALONG FULL LENGTH OF EXTERIOR BEAMS.
- CLEAN AND PAINT EXISTING STEEL, APPLYING AN ADDITIONAL INTERMEDIATE COAT OF PAINT ON ALL EXPOSED STEEL WITHIN 20' OF ABUTMENTS AND PIERS. NO GREASE PAINTING OF BEAMS IS REQUIRED.
- EXTEND BRIDGE DRAIN WEEPERS (APPROX. 6).
- REPAIR OR REPLACE BRIDGE SCUPPERS (APPROX. 12).
- CONTRACTOR SHALL NOT MAKE USE OF EXISTING CABLES LOCATED UNDER STRUCTURE.

BENNINGTON, BRIDGE D15 - TH NO. 14 OVER US ROUTE 7

- REMOVE GREASE COATING ON ENDS OF STEEL BEAMS, END CROSS MEMBERS, AND BEARINGS.
- CLEAN AND PAINT EXISTING STEEL, APPLYING AN ADDITIONAL INTERMEDIATE COAT OF PAINT ON ALL EXPOSED STEEL WITHIN 20' OF ABUTMENTS AND PIERS. NO GREASE PAINTING OF BEAMS IS REQUIRED.
- EXTEND BRIDGE DRAIN WEEPERS (APPROX. 30).
- SNOW FENCE PRESENT ON BOTH SIDES OF STRUCTURE.
- AT CONTRACTOR'S DISCRETION, FILL MAY BE PLACED TEMPORARILY FOR STAGING PURPOSES AT STRUCTURE. CONTRACTOR SHALL REMOVE ALL FILL PRIOR TO PROJECT COMPLETION.

BENNINGTON, BRIDGE 16N - US ROUTE 7 OVER BENN SH N

- REMOVE GREASE COATING ON ENDS OF STEEL BEAMS, END CROSS MEMBERS, AND BEARINGS.
- CLEAN AND PAINT EXISTING STEEL, APPLYING AN ADDITIONAL INTERMEDIATE COAT OF PAINT ON ALL EXPOSED STEEL WITHIN 20' OF ABUTMENTS AND PIERS. NO GREASE PAINTING OF BEAMS IS REQUIRED..
- EXTEND BRIDGE DRAIN WEEPERS (APPROX. 6).
- SNOW FENCE PRESENT ON BOTH SIDES OF STRUCTURE.
- AT CONTRACTOR'S DISCRETION, FILL MAY BE PLACED TEMPORARILY FOR STAGING PURPOSES AT STRUCTURE. CONTRACTOR SHALL REMOVE ALL FILL PRIOR TO PROJECT COMPLETION.

BENNINGTON, BRIDGE 16S - US ROUTE 7 OVER BENN SH N

- REMOVE GREASE COATING ON ENDS OF STEEL BEAMS, END CROSS MEMBERS, AND BEARINGS.
- CLEAN AND PAINT EXISTING STEEL, APPLYING AN ADDITIONAL INTERMEDIATE COAT OF PAINT ON ALL EXPOSED STEEL WITHIN 20' OF ABUTMENTS AND PIERS. NO GREASE PAINTING OF BEAMS IS REQUIRED.
- SNOW FENCE PRESENT ON EAST SIDE OF STRUCTURE.
- AT CONTRACTOR'S DISCRETION, FILL MAY BE PLACED TEMPORARILY FOR STAGING PURPOSES AT STRUCTURE. CONTRACTOR SHALL REMOVE ALL FILL PRIOR TO PROJECT COMPLETION.

MT TABOR, BRIDGE 56C - US ROUTE 7 OVER MILL BROOK

- REMOVE GREASE COATING ON ENDS OF STEEL BEAMS, END CROSS MEMBERS, AND BEARINGS.
- CLEAN AND PAINT EXISTING STEEL, APPLYING AN ADDITIONAL INTERMEDIATE COAT OF PAINT ON ALL EXPOSED STEEL WITHIN 20' OF ABUTMENTS AND PIERS. NO GREASE PAINTING OF BEAMS IS REQUIRED.
- REPAIR OR REPLACE BRIDGE SCUPPERS (APPROX. 8).
- CONTRACTOR SHALL PROTECT UTILITY AND HANGER SYSTEM ON WEST SIDE OF STRUCTURE FROM DAMAGE.
- CONTRACTOR SHALL BE COGNIZANT OF LOW CLEARANCE BETWEEN BOTTOM OF STRUCTURE AND MILL BROOK.

BRIDGE 11
ALL SCUPPERS WERE REPAIRED,
EXCEPT THE SOUTHEAST SCUPPER WHICH
WAS REPLACED.

BRIDGE 56 C
ALL SCUPPERS WERE REPLACED.

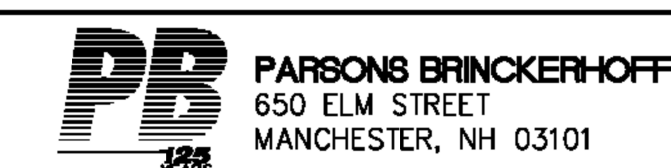
TRAFFIC CONTROL (CONTINUED):

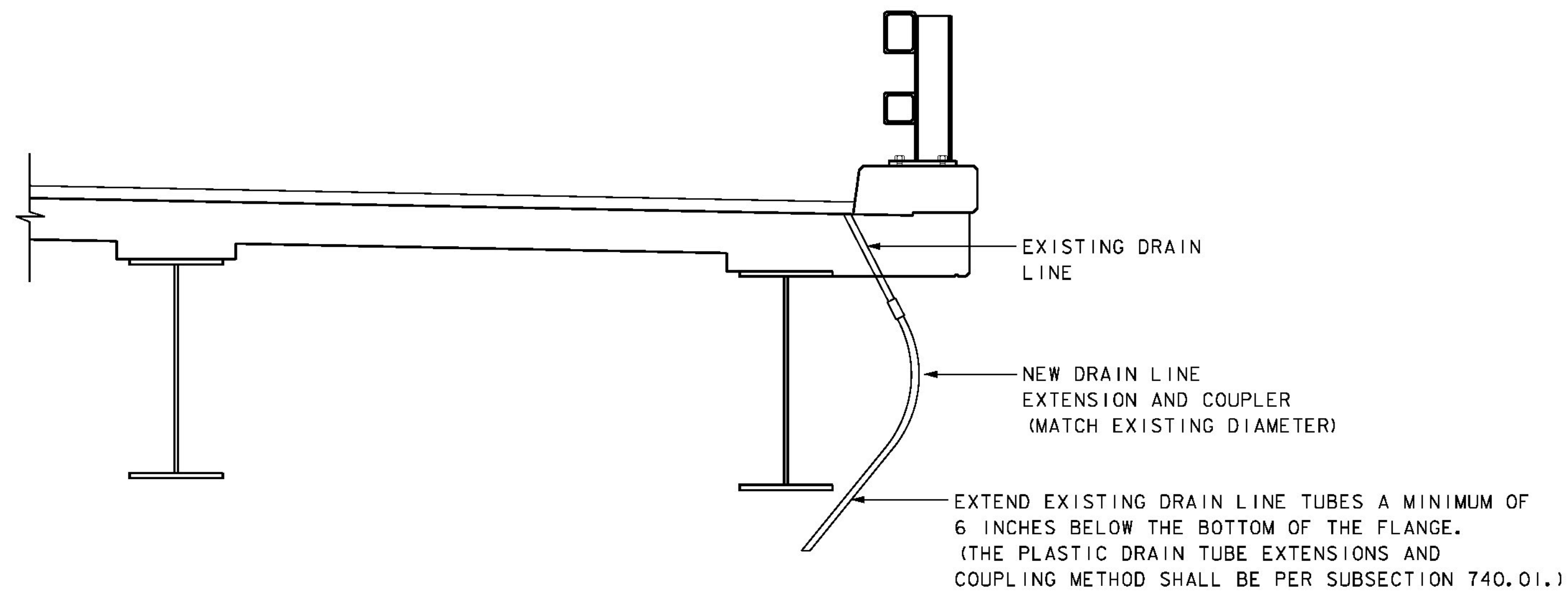
- THE TRAFFIC CONTROL DEVICES SHOWN ON THESE PLANS ARE FOR ILLUSTRATIVE PURPOSES AND DO NOT RELIEVE THE CONTRACTOR FROM ADHERING TO ALL VTRANS TRAFFIC CONTROL STANDARDS, REQUIREMENTS AND SPECIFICATIONS. ALL TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH THE 2009 MUTCD AND ITS LATEST REVISIONS. WHERE CONFLICTS EXIST BETWEEN AOT STANDARDS AND MUTCD, THE MUTCD SHALL GOVERN.
- UNLESS COVERED UNDER INDIVIDUAL PAY ITEMS, ALL COSTS FOR TEMPORARY TRAFFIC CONTROL DEVICES SHALL BE INCLUDED IN THE CONTRACT LUMP SUM PRICE FOR ITEM 641.10 TRAFFIC CONTROL.
- THE PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) AND PRINT MEDIA SHALL BE IMPLEMENTED 2 WEEKS IN ADVANCE OF LANE CLOSURES AS DIRECTED BY THE ENGINEER.
- TRAFFIC BARRELS ARE FOR TEMPORARY CLOSURES ONLY, UP TO A MAXIMUM OF 3 DAYS. ALL CLOSURES LONGER THAN 3 DAYS SHALL USE APPROVED TRAFFIC BARRIERS, WHICH SHALL BE PAID UNDER ITEM 621.90 TEMPORARY TRAFFIC BARRIER.
- RIGHT-OF-WAY FENCE MAY HAVE TO BE REMOVED AND RESET IN ACCORDANCE WITH SECTION 620 FOR EGRESS AND INGRESS. THIS WORK SHALL BE PAID UNDER ITEM 620.50 REMOVING AND RESETTNG FENCE.

PROJECT NOTES

PROJECT NAME: BENNINGTON - MT TABOR	PLOT DATE: 16-MARCH-2015
PROJECT NUMBER: BF BPNT (16)	DRAWN BY: R.GAUDREAU
FILE NAME: z5254510def.dgn	CHECKED BY: S.BROWN
PROJECT LEADER: G.K.DONINGTON	SHEET 2 OF 23
DESIGNED BY: R.GAUDREAU	
det.dgn	

(RE-ADVERTISED)





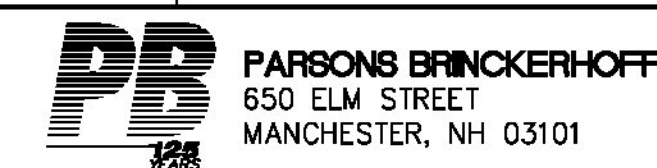
DRAIN TUBE EXTENSION DETAIL
NOT TO SCALE

DRAIN TUBE EXTENSION NOTE:

IF EXISTING DRAIN TUBE IS TOO SHORT TO PROVIDE ADEQUATE CONNECTION, THE CONTRACTOR SHALL COMPLETELY FILL THE TUBE WITH POLYURETHANE SEALANT CONFORMING TO SUBSECTION 707.05. TUBES TO BE FILLED WITH POLYURETHANE SEALANT SHALL BE APPROVED BY THE ENGINEER PRIOR TO BEING FILLED.

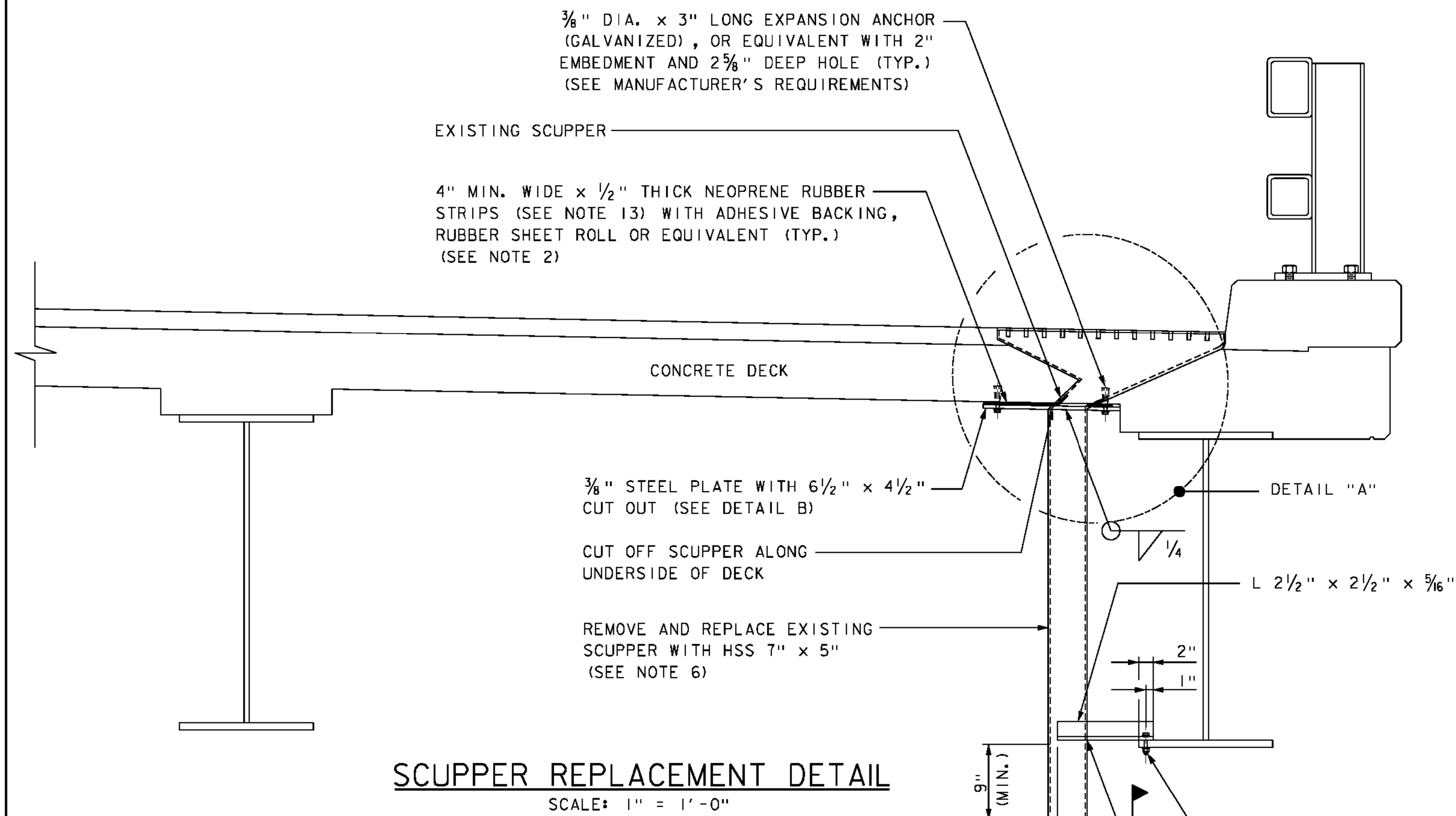
**PROJECT STANDARD
DETAILS (1)**

(RE-ADVERTISED)

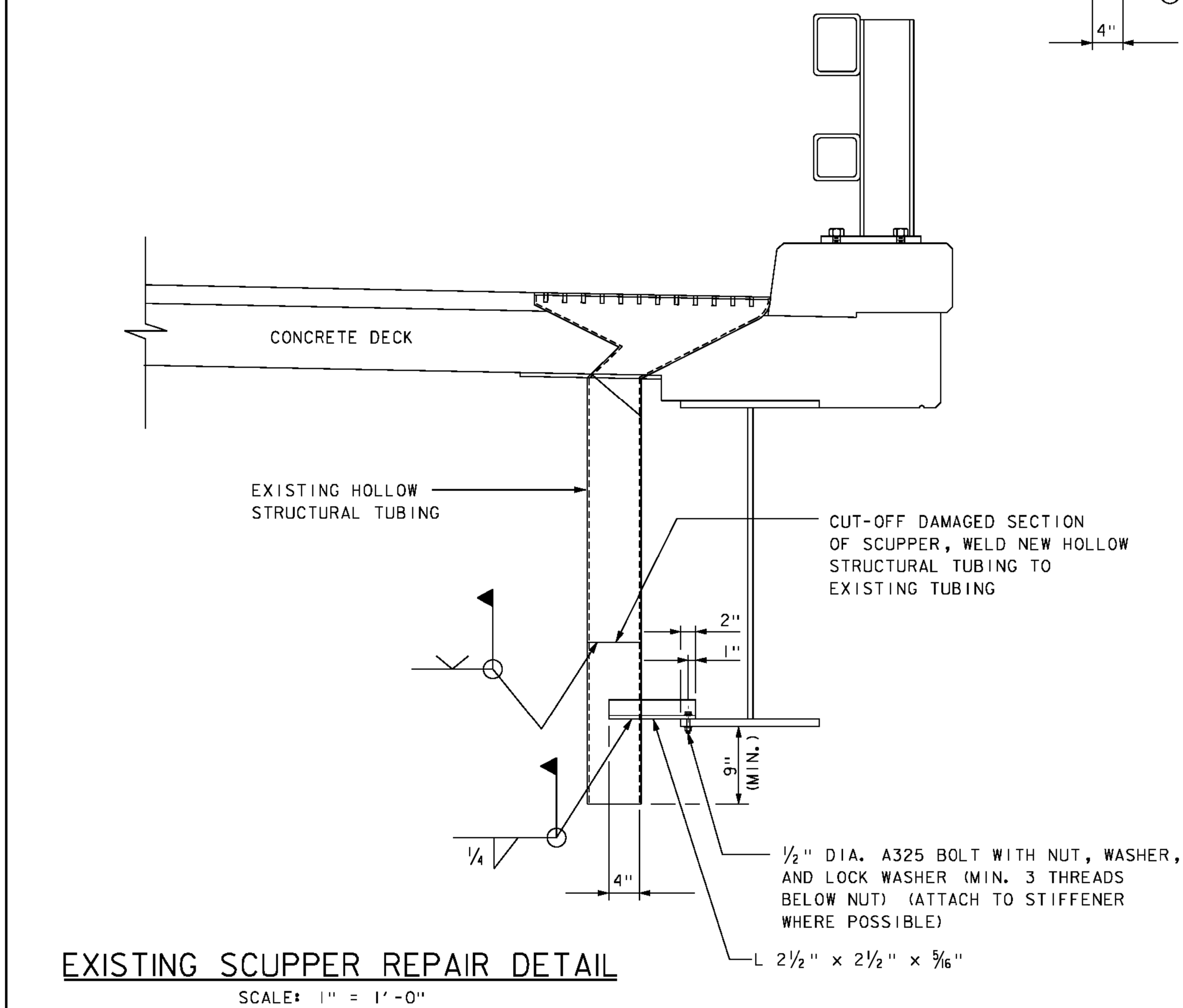


PARSONS BRINCKERHOFF
650 ELM STREET
MANCHESTER, NH 03101

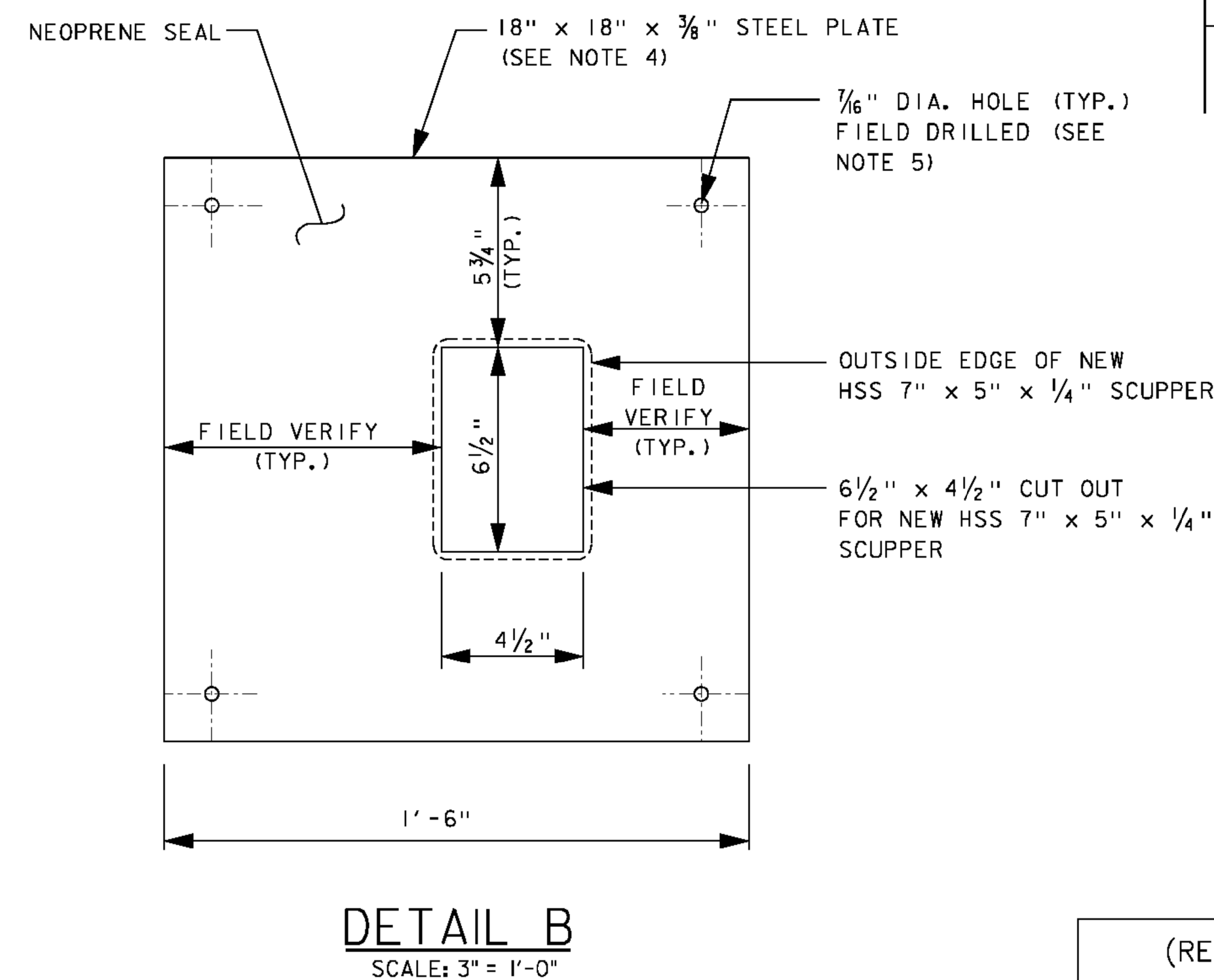
PROJECT NAME: BENNINGTON - MT TABOR	PLOT DATE: 16-MARCH2015
PROJECT NUMBER: BF BPNT (I6)	DRAWN BY: R.GAUDREAU
FILE NAME: z5254510det_2.dgn	CHECKED BY: S.BROWN
PROJECT LEADER: G.K.DONINGTON	SHEET 3 OF 23
DESIGNED BY: R.GAUDREAU	
de+2.dgn	



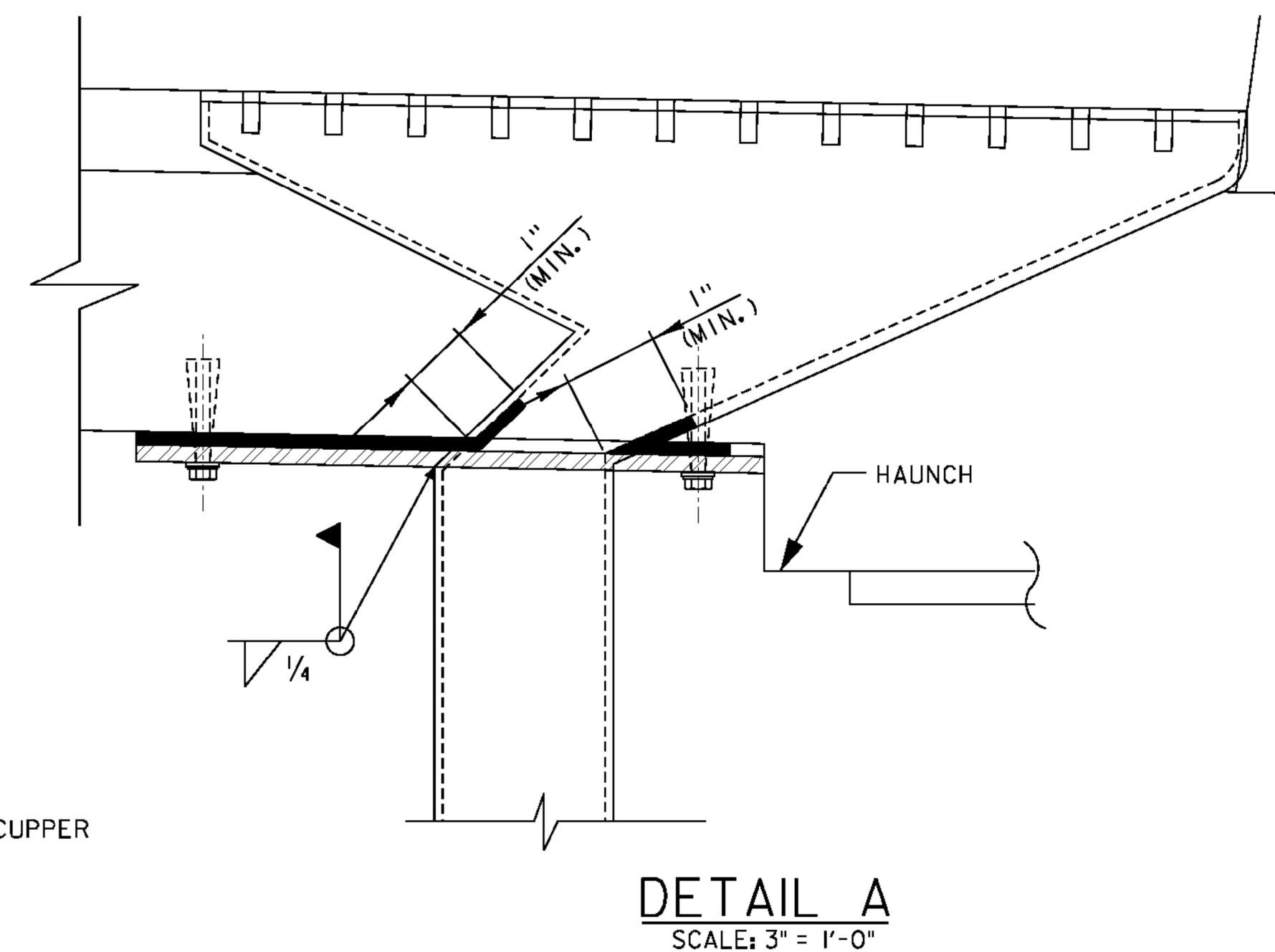
SCUPPER REPLACEMENT DETAIL
SCALE: 1" = 1'-0"



EXISTING SCUPPER REPAIR DETAIL
SCALE: 1" = 1'-0"



DETAIL B
SCALE: 3" = 1'-0"



DETAIL A
SCALE: 3" = 1'-0"

NOTES:

1. ALL THE DETERIORATED SCUPPERS WITH SIGNIFICANT LOSS OF SECTION SHALL BE CUT OFF ABOVE THE DETERIORATION AREA. IF THE DETERIORATION EXTENDS TO THE UNDERSIDE OF THE DECK, THE SCUPPER SHALL BE CUT OFF AND REPLACED. THE ENGINEER SHALL APPROVE THE EXTENT OF THE REPAIR FOR EACH DETERIORATED SCUPPER IDENTIFIED BY THE CONTRACTOR PRIOR TO BEING REPAIRED OR REPLACED.
2. ADHESIVE SIDE OF NEOPRENE SHALL BE PLACED ON THE UNDERSIDE OF CONCRETE DECK AND INTERIOR OF EXISTING SCUPPER AROUND PERIMETER OF DRAIN. NEOPRENE SHALL COVER ENTIRE SURFACE OF THE STEEL PLATE AND SHALL EXTEND CONTINUOUSLY FOR A MINIMUM OF 1" UP INTO THE INTERIOR OF THE EXISTING SCUPPER DRAIN.
3. ALL EXISTING DIMENSIONS AND SCUPPER SIZES SHALL BE FIELD VERIFIED.
4. PLATE SHALL BE CUT IN THE FIELD TO ACCOMMODATE HAUNCH.
5. BOLT HOLES SHALL BE FIELD DRILLED AND SHALL HAVE A MINIMUM EDGE DISTANCE OF 1 1/2" EXCEPT WHERE NOTED OTHERWISE.
6. ALL NEW STEEL SHALL BE ZINC PRIMED AND COATED WITH THE SAME NEPCOAT SYSTEM AND COLOR AS THE MAIN MEMBERS. COATING IS ONLY REQUIRED ON THE EXTERNAL SURFACE OF THE SCUPPER DOWNSPOUT.
7. ALL WELDING SHALL CONFORM WITH THE PROVISIONS OF SUBSECTION 506.10.
8. HOLLOW STRUCTURAL STEEL TUBING SHALL CONFORM TO ASTM A-500 GRADE C.
9. STEEL PLATES AND ANGLES SHALL CONFORM TO AASHTO M270, GRADE 50 (ASTM A709, GRADE 50).
10. HIGH STRENGTH BOLTS, NUTS AND CIRCULAR WASHERS SHALL CONFORM TO SUBSECTION 714.05.
11. ALL WORK TO BE PAID UNDER ITEM 506.75, STRUCTURAL STEEL.
12. THESE DETAILS ARE ILLUSTRATED AS AN EXAMPLE. CONTRACTOR TO SUBMIT FABRICATION DRAWINGS FOR APPROVAL.
13. NEOPRENE RUBBER GASKET SHALL BE CLOSED CELL, DUROMETER HARDNESS SHORE A OF 40 TO 60, TYPE EA-WATER RESISTANT, AND EF-FUEL RESISTANT.

BRIDGES 11 & 56C
PROJECT STANDARD
DETAILS (2)

(RE-ADVERTISED)



PROJECT NAME: BENNINGTON - MT TABOR	PLOT DATE: 16-MARCH-2015
PROJECT NUMBER: BF BPNT (16)	DRAWN BY: R.GAUDREAU
FILE NAME: z5254510det_3.dgn	CHECKED BY: S.BROWN
PROJECT LEADER: G.K.DONINGTON	SHEET 4 OF 23
DESIGNED BY: R.GAUDREAU	
det+3.dgn	

QUANTITY SHEET 1

SUMMARY OF ESTIMATED QUANTITIES										TOTALS		DESCRIPTIONS				DETAILED SUMMARY OF QUANTITIES		
ROADWAY	TRAINING	EROSION CONTROL	BRIDGE NO. 11	BRIDGE NO. D15	BRIDGE NO. 16N	BRIDGE NO. 56C	FULL C.E. ITEMS	BRIDGE NO. 16S		GRAND TOTAL	FINAL	UNIT	ITEMS	ITEM NUMBER	ROUND	QUANTITIES	UNIT	ITEMS
				27	93			93		213		CY	COMMON EXCAVATION	203.15				
				27	93			93		213		CY	EARTH BORROW	203.30				
			1	1	1	1		1		5		CY	TRENCH EXCAVATION OF EARTH, EXPLORATORY (N.A.B.I.)	204.22				
				1						1		LS	STRUCTURAL STEEL (TH 14 OVER US 7 - BRIDGE NO. D15)	506.75				
			1							1		LS	STRUCTURAL STEEL (US 7 - BRIDGE NO. 11)	506.75				
												LS	STRUCTURAL STEEL (US 7 - BRIDGE NO. 16N)	506.75				
												LS	STRUCTURAL STEEL (US 7 - BRIDGE NO. 56C)	506.75				
												LS	STRUCTURAL STEEL (US 7 - BRIDGE NO.16S)	506.75				
			120	120	120	120		120		600		HR	TRUCK-MOUNTED ATTENUATOR	608.45				
			40							40		LF	REMOVING AND RESETING FENCE	620.50				
			520	1060	2704	655		2704		7643		LF	TEMPORARY TRAFFIC BARRIER	621.90				
			300	300	300	300		300		1500		HR	UNIFORMED TRAFFIC OFFICERS	630.10				
			300	300	300	300		300		1500		HR	FLAGGERS	630.15				
												LS	FIELD OFFICE, ENGINEERS	631.10				
												LS	TESTING EQUIPMENT, PROTECTIVE COATINGS	631.18				
												DL	FIELD OFFICE TELEPHONE (N.A.B.I.)	631.26				
												HR	EMPLOYEE TRAINEESHIP	634.10				
												LS	MOBILIZATION/DEMobilIZATION	635.11				
				1						1		LS	TRAFFIC CONTROL (TH 14 OVER US 7 - BRIDGE NO. D15)	641.10				
			1							1		LS	TRAFFIC CONTROL (US 7 - BRIDGE NO. 11)	641.10				
					1					1		LS	TRAFFIC CONTROL (US 7 - BRIDGE NO. 16N)	641.10				
						1				1		LS	TRAFFIC CONTROL (US 7 - BRIDGE NO. 56C)	641.10				
												LS	TRAFFIC CONTROL (US 7 - BRIDGE NO.16S)	641.10				
			30	30	30	30		30		150		DAY	PORTABLE CHANGEABLE MESSAGE SIGN RENTAL	641.17				
			725	1420	3079	655		3079		8958		LF	6 INCH WHITE LINE	646.214				
			1450	2840	6158	1310		6158		17916		LF	TEMPORARY 6 INCH WHITE LINE, TEMPORARY PAVEMENT MARKING TAPE	646.6211				
			1450	2840	6158	1310		6158		17916		LF	TEMPORARY 6 IN YELLOW LINE, TEMPORARY PAVEMENT MARKING TAPE	646.6311				
												LF	TEMPORARY 12 IN WHITE LINE, TEMPORARY PAVEMENT MARKING TAPE	646.6611				
												LF	TEMPORARY 24 INCH STOP BAR, TEMPORARY PAVEMENT MARKING TAPE	646.6811				
			200	200	1200	200		1200		3000		SF	PAVEMENT MARKING MASK	646.86				
			1100							1100		SY	GEOTEXTILE FOR SILT FENCE	649.51				
				10	30			30		70		LB	SEED	651.15				
				10	10			10		30		LB	FERTILIZER	651.18				
				0.6	0.6			0.6		1.8		TON	AGRICULTURAL LIMESTONE	651.20				
				0.2	0.6			0.6		1.4		TON	HAY MULCH	651.25				
			2200							2200		SY	TEMPORARY EROSION MATTING	653.20				
				1						1		LS	SPECIAL PROVISION (CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES) (TH 14-BR. NO. D15)	900.645				
			1							1		LS	SPECIAL PROVISION (CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES) (US 7 - BR. NO. 11)	900.645				
										1		LS	SPECIAL PROVISION (CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES) (US 7 - BR. NO. 16S)	900.645				

(RE-ADVERTISED)



PROJECT NAME: BENNINGTON - MT TABOR

PROJECT NUMBER: BF BPNT (16)

FILE NAME: z5254510qs.dgn

PROJECT LEADER: G.K.DONINGTON

DESIGNED BY: S.BROWN

qs_l.dgn

PLOT DATE: 16-MARCH-2015

DRAWN BY: S.BROWN

CHECKED BY: A.STOCKIN

SHEET 5 OF 23

QUANTITY SHEET 2

SUMMARY OF ESTIMATED QUANTITIES										TOTALS		DESCRIPTIONS				DETAILED SUMMARY OF QUANTITIES		
ROADWAY	TRAINING	EROSION CONTROL	BRIDGE NO. 11	BRIDGE NO. D15	BRIDGE NO. 16N	BRIDGE NO. 56C	FULL C.E. ITEMS	BRIDGE NO. 16S		GRAND TOTAL	FINAL	UNIT	ITEMS	ITEM NUMBER	ROUND	QUANTITIES	UNIT	ITEMS
					1					1		LS	SPECIAL PROVISION (CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES)(US 7 - BR. NO. 16N)	900.645				
										1		LS	SPECIAL PROVISION (CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES)(US 7 - BR. NO. 56C)	900.645				
			1							1		LS	SPECIAL PROVISION (QC/QA CLEAN AND PAINT EXISTING STEEL STRUCTURES, BARE STEEL) (US 7-BR NO. 11)	900.645				
										1		LS	SPECIAL PROVISION (QC/QA CLEAN AND PAINT EXISTING STEEL STRUCTURES, BARE STEEL) (US 7-BR NO. 56C)	900.645				
										1		LS	SPECIAL PROVISION (QC/QA CLEAN AND PAINT EXISTING STEEL STRUCTURES, BARE STEEL) (US7-BR. NO. 16S)	900.645				
				1						1		LS	SPECIAL PROVISION (QC/QA CLEAN AND PAINT EXISTING STEEL STRUCTURES, BARE STEEL)(TH 14-BR. NO. D15)	900.645				
						1				1		LS	SPECIAL PROVISION (QC/QA CLEAN AND PAINT EXISTING STEEL STRUCTURES, BARE STEEL)(US 7-BR NO. 16N)	900.645				
					1					1		LS	SPECIAL PROVISION (REMOVAL OF EXISTING GREASE COATING) (TH 14 - BR. NO. D15)	900.645				
			1							1		LS	SPECIAL PROVISION (REMOVAL OF EXISTING GREASE COATING) (US 7 - BR. NO. 11)	900.645				
						1				1		LS	SPECIAL PROVISION (REMOVAL OF EXISTING GREASE COATING) (US 7 - BR. NO. 16N)	900.645				
										1		LS	SPECIAL PROVISION (REMOVAL OF EXISTING GREASE COATING) (US 7 - BR. NO. 16S)	900.645				
										1		LS	SPECIAL PROVISION (REMOVAL OF EXISTING GREASE COATING) (US 7 - BR. NO. 56C)	900.645				

PROJECT NAME: BENNINGTON - MT TABOR
 PROJECT NUMBER: BF BPNT (I6)
 FILE NAME: z52545i0qs.dgn
 PROJECT LEADER: G.K.DONINGTON
 DESIGNED BY: S.BROWN
 qs_2.dgn
 PLOT DATE: 16-MARCH-2015
 DRAWN BY: S.BROWN
 CHECKED BY: A.STOCKIN
 SHEET 6 OF 23

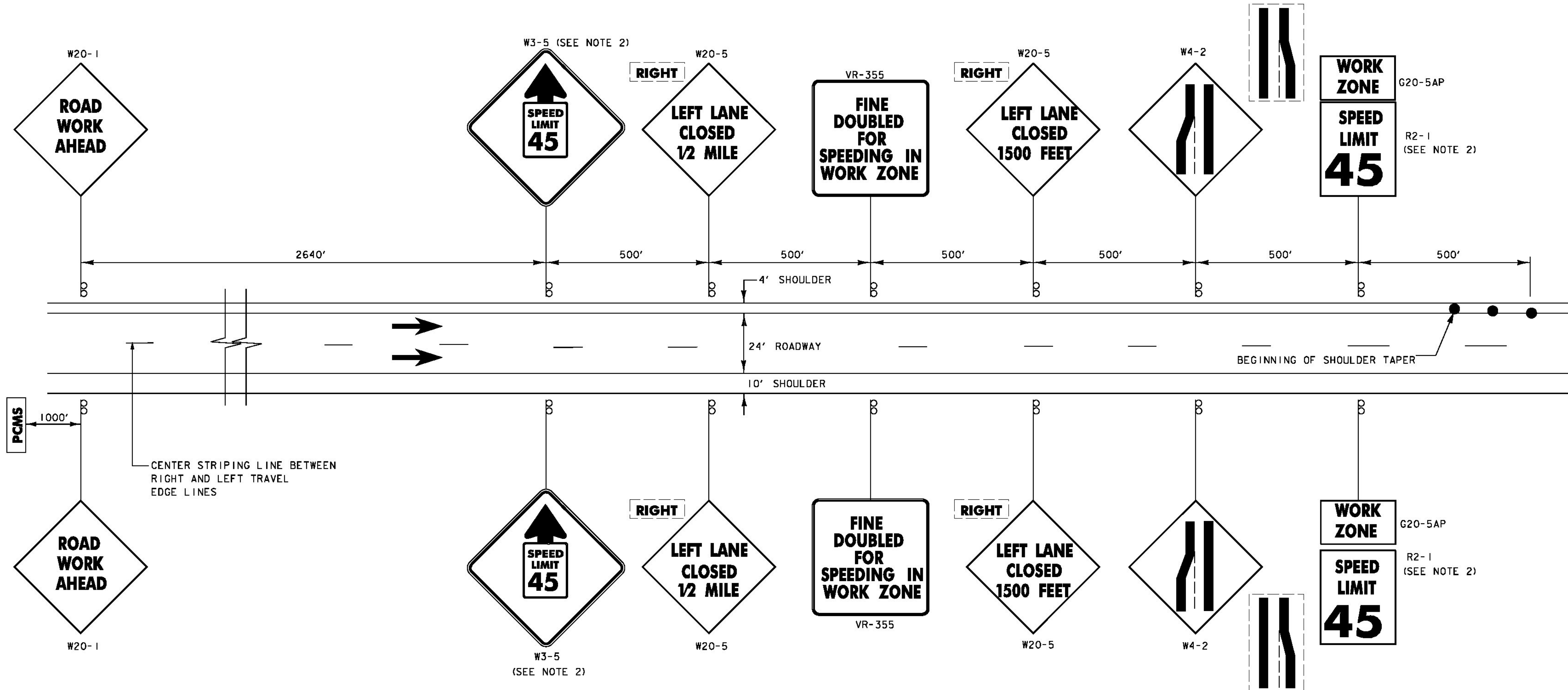
(RE-ADVERTISED)



TRAFFIC CONTROL NOTES - US ROUTE 7:

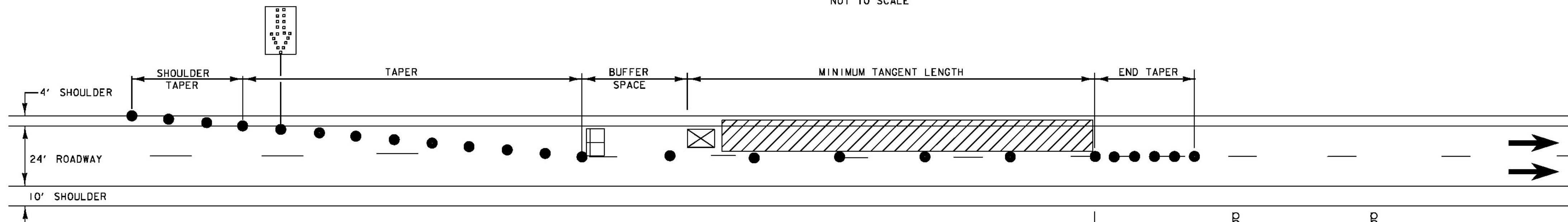
1. THE TRAFFIC CONTROL PLAN SHOWN IS A SCHEMATIC ONLY AND SHOULD BE USED AS A REFERENCE. THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN FOR BRIDGES 11, D15, 16N, 16S, AND 56C TO VTRANS FOR APPROVAL. PAYMENT FOR PREPARING AND SUBMITTING THE TRAFFIC CONTROL PLAN, AND MAKING NECESSARY REVISIONS TO THE PLAN, WILL BE INCLUDED IN THE UNIT PRICE BID FOR CONTRACT ITEM 641.10 - TRAFFIC CONTROL. THE CONTRACTOR SHALL ALLOW TWO WEEKS FOR APPROVAL OF THE TRAFFIC CONTROL PLAN. NO WORK SHALL COMMENCE UNTIL THE CONTRACTOR HAS AN APPROVED TRAFFIC CONTROL PLAN.
2. THE SPEED LIMIT WILL BE REDUCED TO TEN MPH BELOW THE POSTED SPEED LIMIT IN THE WORK ZONE FOR THIS PROJECT. ANY EXISTING SPEED LIMIT SIGNS WITHIN THE SPEED REDUCTION AREA SHALL BE COMPLETELY COVERED.
3. CONSTRUCTION SIGNS SHALL BE INSTALLED SO AS NOT TO OBSTRUCT EXISTING SIGNS.
4. TRAFFIC CONTROL DEVICES NOT DETAILED IN THE VERMONT AGENCY OF TRANSPORTATION (VAOT) "STANDARD DRAWINGS" OR THE PROJECT PLANS SHALL BE IN ACCORDANCE WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) AND THE "STANDARD HIGHWAY SIGNS AND MARKINGS" BOOK (SHSM) PUBLISHED BY THE FEDERAL HIGHWAY ADMINISTRATION, OR AS DIRECTED BY THE ENGINEER.
5. SOLID SUBSTRATE CONSTRUCTION SIGNS SHALL HAVE RETROREFLECTIVE SHEETING EQUAL TO OR EXCEEDING THE "AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS" (AASHTO) M 268 "AMERICAN SOCIETY FOR TESTING AND MATERIALS" (ASTM) D 4956J TYPE VIII OR IX UNLESS OTHERWISE NOTED.
6. ROLL UP SIGNS SHALL HAVE RETROREFLECTIVE SHEETING EQUAL TO OR EXCEEDING THE "AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS" (AASHTO) M 268 "AMERICAN SOCIETY FOR TESTING AND MATERIALS" (ASTM) D 4956J TYPE VI UNLESS OTHERWISE NOTED.
7. CONSTRUCTION SIGNS SHALL BE ERECTED BEFORE THE START OF ANY WORK AND SHALL BE COVERED UNTIL WORK COMMENCES, DURING PERIODS OF INACTIVITY OR UPON COMPLETION OF THE WORK. EACH SIGN SHALL BE ERECTED IN A NEAT AND WORKMANLIKE MANNER.
8. CONSTRUCTION SIGN COVERS SHALL CONSIST OF A PANEL, PAINTED FLAT BLACK, THE SAME SIZE AS THE SIGN IT COVERS. THE PANEL SHALL BE MADE OF WOOD, PLYWOOD, HARDBOARD OR ANY MATERIAL SATISFACTORY TO THE ENGINEER. NO MATERIAL WILL BE APPROVED THAT WILL DETERIORATE BY EXPOSURE TO THE WEATHER DURING THE PROJECT. MOUNTING OF THE PANEL SHALL BE DONE IN SUCH A WAY AS NOT TO DAMAGE THE SIGN FACE MATERIAL.
9. SIGNS SHALL BE MAINTAINED IN A CLEAN AND LEGIBLE CONDITION SATISFACTORY TO THE ENGINEER. THEY SHALL BE KEPT PLUMB AND LEVEL, AND ALWAYS PRESENT A NEAT APPEARANCE. DAMAGED, DEFACED OR DIRTY SIGNS SHALL BE REPAIRED, CLEANED OR REPLACED AS ORDERED BY THE ENGINEER.
10. NO CROSS-BRACING OR BACK-BRACING TO KEEP POSTS PLUMB WILL BE ALLOWED. CONCRETE FOUNDATIONS, COLLARS OR SOIL BEARING PLATES ARE NOT PERMITTED. CONSTRUCTION SIGNS SHALL BE PLACED ON TWO POSTS.
11. CONSTRUCTION SIGNS INSTALLED ON POSTS SHALL BE SET SECURELY IN THE GROUND. THE BOTTOM OF A SIGN SHALL BE AT LEAST FIVE FEET ABOVE THE EDGE OF PAVEMENT AND THE NEAREST EDGE OF A SIGN SHALL BE A LEAST SIX FEET OUTSIDE THE SHOULDER POINT, FOUR FEET OUTSIDE THE GUARDRAIL, OR TWO FEET OUTSIDE THE CURBING OR SIDEWALK. THE INSTALLATION OF SIGNS SHALL BE SUBJECT TO APPROVAL OF THE ENGINEER. IN URBAN AREAS, THE BOTTOM OF THE SIGN SHALL BE AT LEAST SEVEN FEET ABOVE THE SIDEWALK OR EDGE OF PAVEMENT, WHICHEVER IS HIGHER.
12. PORTABLE SIGNS SHALL BE PLACED ON THE EDGE OF ROADWAY AND A MINIMUM OF ONE FOOT ABOVE THE TRAVELED WAY. ALL VEGETATION THAT INTERFERES WITH VISIBILITY OF THE SIGNS SHALL BE REMOVED. WHEN PLACED BEHIND THE GUARDRAIL, THE BOTTOM OF THE SIGN FACE SHALL BE ABOVE THE TOP OF THE GUARDRAIL.
13. SIGNS SHALL BE REMOVED UPON COMPLETION OF THE WORK AT THE DISCRETION OF THE ENGINEER.
14. WHERE CONSTRUCTION SIGN INSTALLATIONS ARE NOT PROTECTED BY GUARDRAIL OR OTHER APPROVED TRAFFIC BARRIERS, ALL SIGN STANDS AND POST INSTALLATIONS SHALL MEET "NATIONAL COOPERATIVE HIGHWAY RESEARCH PROGRAM" (NCHRP) REPORT 350 OR THE AASHTO "MANUAL FOR ASSESSING SAFETY HARDWARE" (MASH). THE APPROPRIATE RESOURCE SHALL BE DETERMINED AS DESCRIBED IN THE MASH PUBLICATION. NO SIGN POSTS SHALL EXTEND OVER THE TOP OF THE SIGN INSTALLED ON SAID POSTS. WHEN ANCHORS ARE INSTALLED, STUBS SHALL NOT BE GREATER THAN FOUR INCHES ABOVE EXISTING GROUND.

NOTES CONTINUED ON TRAFFIC CONTROL SHEET (2).



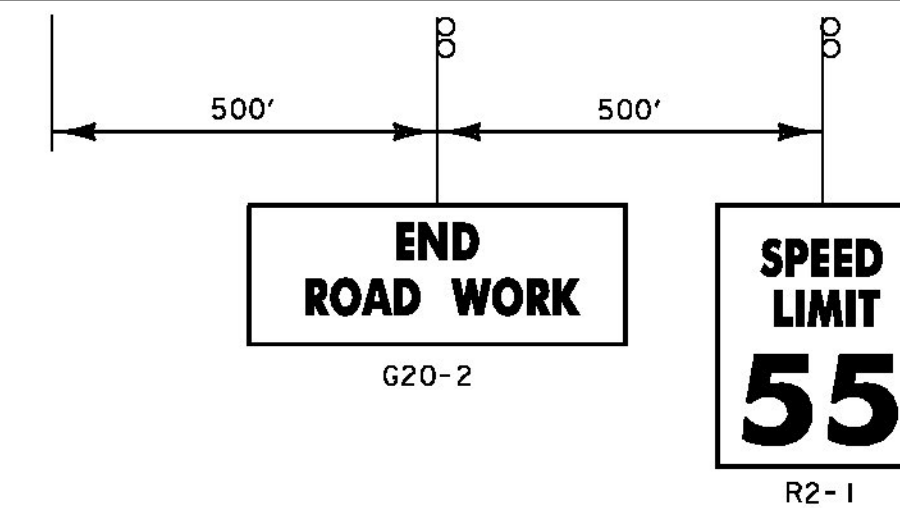
CONSTRUCTION APPROACH SIGNING ON US ROUTE 7, LEFT LANE CLOSED

NOT TO SCALE



TRAFFIC CONTROL ON US ROUTE 7, LEFT LANE CLOSED

NOT TO SCALE



LEGEND

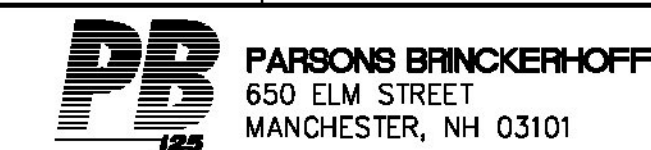
- FLOW OF TRAFFIC
- WORK AREA
- FLAGGER
- REFLECTORIZED PLASTIC DRUM
- TYPE III BARRICADE
- TRUCK/TRAILER MOUNTED ATTENUATOR (ATTENUATOR OPTIONAL)
- FLASHING ARROW PANEL
- PORTABLE CHANGEABLE MESSAGE SIGN

POSTED SPEED LIMIT	TAPER LENGTHS (FT)		TANGENT W=12 FT (L/2)	MINIMUM BUFFER SPACE LENGTH (FT)	MAXIMUM CHANNELIZING DEVICE SPACING (FT)	
	SHOULDER W=10 FT	MERGING 12 FT LANE			TAPER	TANGENT
40	90	320	160	305	40	80
45	150	540	270	360	45	90
50	170	600	300	425	50	100
55	185	660	330	495	55	110
60	200	720	360	570	60	120
65	215	780	390	645	65	130

TAPER RATES ARE DETERMINED USING THE FOLLOWING EQUATIONS:
 $L = WS$ FOR POSTED SPEEDS OF 45 MPH OR GREATER
 $L = WS^2/60$ FOR POSTED SPEEDS OF 40 MPH OR LESS

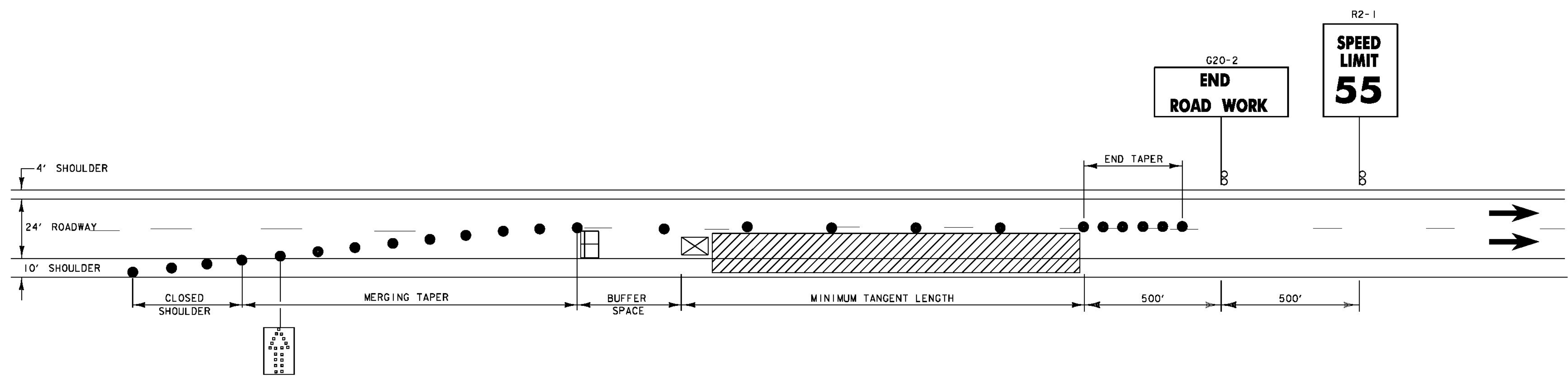
L = MINIMUM LENGTH OF TAPER
 W = WIDTH OF OFFSET IN FEET
 S = POSTED SPEED IN MPH

(RE-ADVERTISED)



TRAFFIC CONTROL SHEET (1)

PROJECT NAME: BENNINGTON - MT TABOR	FILE NAME: z5254510tc_1.dgn	PLOT DATE: 16-MARCH-2015
PROJECT NUMBER: BF BPNT (16)	PROJECT LEADER: G.K.DONINGTON	DRAWN BY: S.BROWN
	DESIGNED BY: J.KHERA	CHECKED BY: J.KHERA
	tc1.dgn	SHEET 7 OF 23



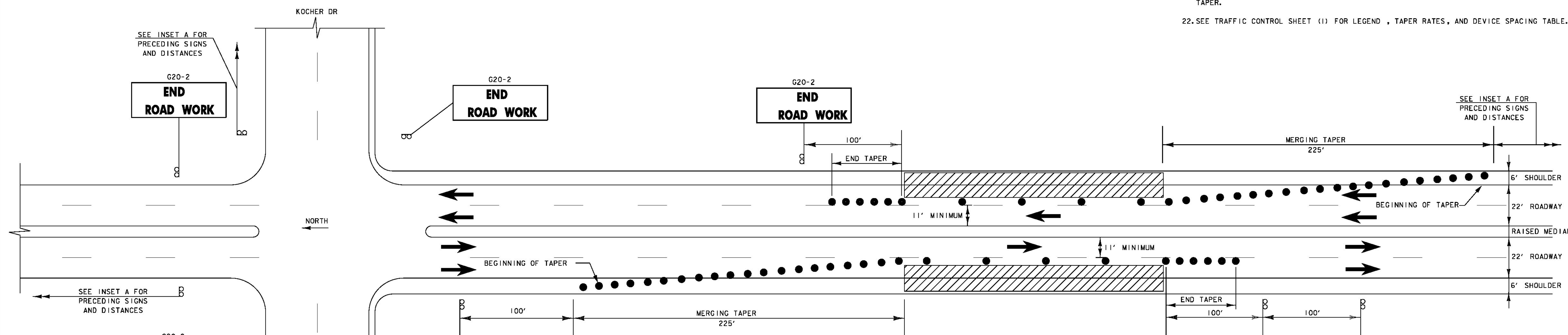
TRAFFIC CONTROL ON US ROUTE 7, RIGHT LANE CLOSED

NOT TO SCALE
SEE TRAFFIC CONTROL SHEET (1) FOR SIGNING

TRAFFIC CONTROL NOTES - US ROUTE 7:

NOTES CONTINUED FROM TRAFFIC CONTROL SHEET (1):

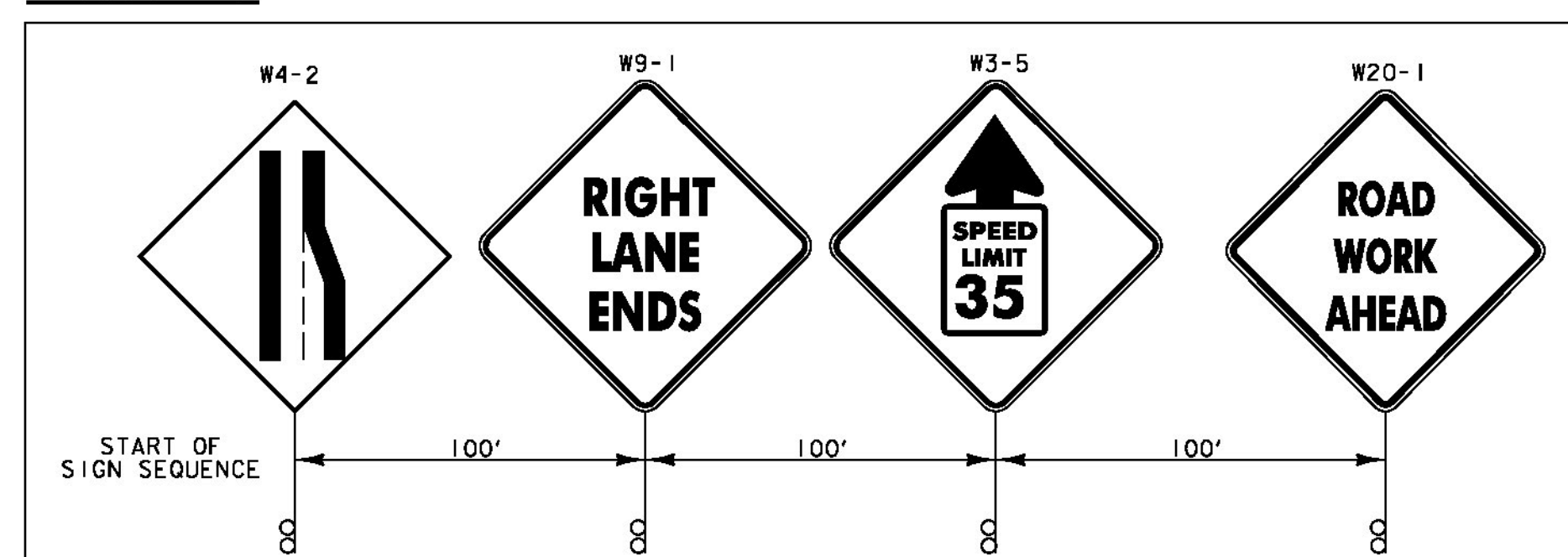
15. THE CONTRACTOR SHALL HAVE SIGNS FOR CLOSURE OF LEFT OR RIGHT LANES INSTALLED BEFORE WORK COMMENCES.
16. THE NUMBER OF CHANNELIZING DEVICES, TYPE III BARRICADES AND OTHER TRAFFIC CONTROL DEVICES SHOWN ARE FOR ILLUSTRATIVE PURPOSES ONLY. THE ACTUAL NUMBER REQUIRED IS TO BE DETERMINED BASED ON INDIVIDUAL DETOUR CONDITIONS (TAPERS, SPEED LIMITS, LENGTH OF DETOUR, CURVE ETC.). WARNING LIGHTS SHALL NOT BE USED ON CHANNELIZING DEVICES.
17. PLACE LAST CHANNELIZING DEVICE 100 FEET BEYOND THE ANTICIPATED WORK ZONE TERMINAL POINT EACH DAY AND START THE END TAPER. THE END TAPER SHALL BE CONSTRUCTED OF 5 ADDITIONAL RETROREFLECTIVE DRUMS SPACED AT 10 FEET ON CENTER.
18. THE PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) SHALL BE USED FOR US ROUTE 7 LANE CLOSURES AND AT THE DISCRETION OF THE ENGINEER FOR LANE CLOSURES ON OTHER ROADWAYS.
19. TRAVEL LANES SHALL BE A MINIMUM OF 12 FEET WIDE ON US ROUTE 7, UNLESS OTHERWISE NOTED.
20. AT NO TIME WILL THE CONTRACTOR BE ALLOWED TO HAVE WORKERS' VEHICLES, CONSTRUCTION EQUIPMENT OR STOCKPILED MATERIALS WITHIN THE CLEAR ZONE OF US ROUTE 7 WITHOUT POSITIVE PROTECTION. POSITIVE PROTECTION SHALL BE AS DIRECTED BY THE ENGINEER.
THE CLEAR ZONE IS DEFINED AS FOLLOWS:
US ROUTE 7: BR 11 - 18 FEET FROM THE EDGE OF TRAVELED WAY
US ROUTE 7: BR D15 - 30 FEET FROM THE EDGE OF TRAVELED WAY
US ROUTE 7: BR 16N - 30 FEET FROM THE EDGE OF TRAVELED WAY
US ROUTE 7: BR 16S - 30 FEET FROM THE EDGE OF TRAVELED WAY
US ROUTE 7: BR 56C - 30 FEET FROM THE EDGE OF TRAVELED WAY
21. ARROW BOARDS SHALL BE PLACED ON THE SHOULDER OF THE ROADWAY, OR IF PRACTICAL, FURTHER FROM THE TRAVELED LANE AT THE END OF THE SHOULDER TAPER.
22. SEE TRAFFIC CONTROL SHEET (1) FOR LEGEND, TAPER RATES, AND DEVICE SPACING TABLE.



**TRAFFIC CONTROL ON US ROUTE 7 SOUTHBOUND, RIGHT LANE CLOSED
BRIDGE 11**

NOT TO SCALE

INSET A



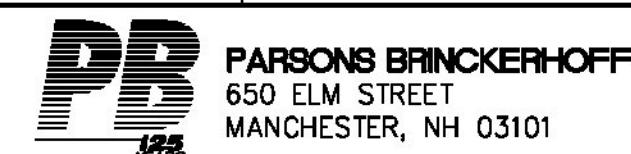
TRAFFIC CONTROL SHEET (2)

PROJECT NAME: BENNINGTON - MT TABOR
PROJECT NUMBER: BF BPNT (16)

FILE NAME: z5254510tc_2.dgn
PROJECT LEADER: G.K.DONINGTON
DESIGNED BY: J.KHERA
tc2.dgn

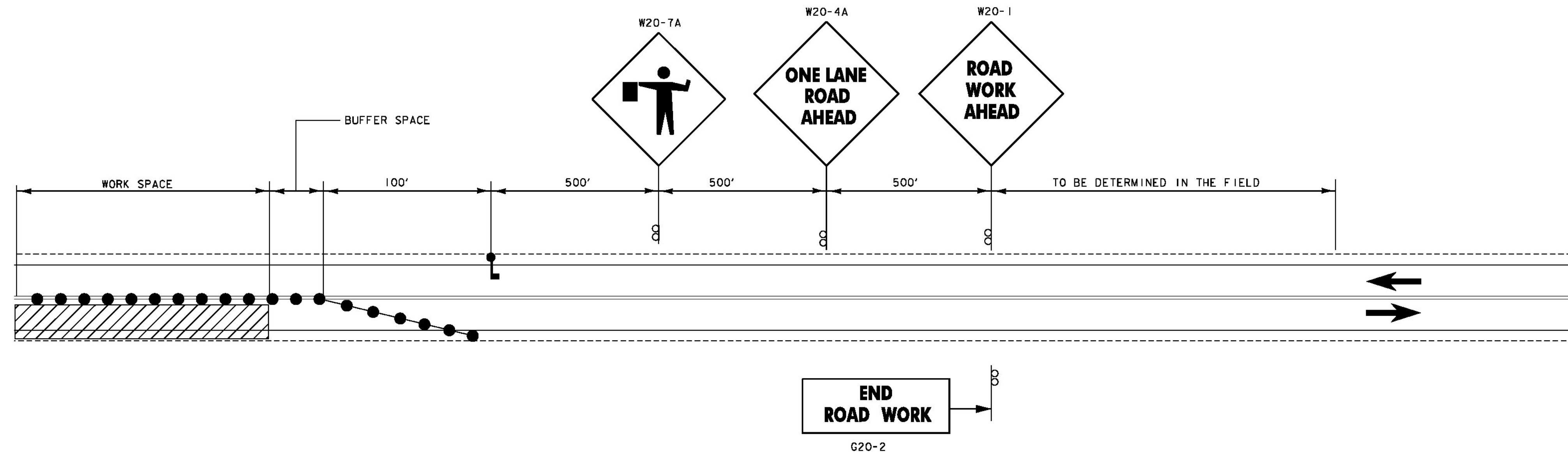
PLOT DATE: 16-MARCH-2015
DRAWN BY: S.BROWN
CHECKED BY: J.KHERA
SHEET 8 OF 23

(RE-ADVERTISED)



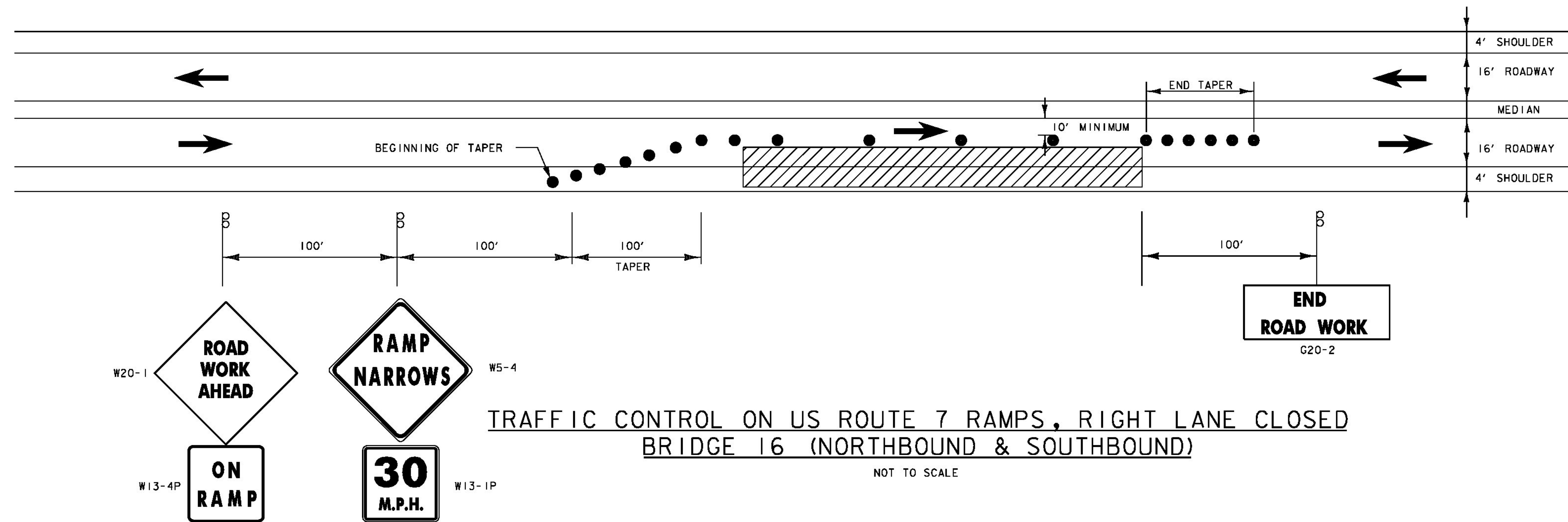
TRAFFIC CONTROL NOTES - US ROUTE 7:

SEE NOTES ON TRAFFIC CONTROL SHEETS (1) AND (2):



**TRAFFIC CONTROL ON US ROUTE 7, ONE LANE CLOSED
BRIDGE 56C**

NOT TO SCALE
SEE TRAFFIC CONTROL SHEET (1) FOR SIGNING AND BUFFER SPACE TABLE



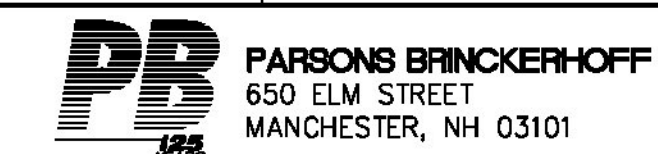
**TRAFFIC CONTROL ON US ROUTE 7 RAMPs, RIGHT LANE CLOSED
BRIDGE 16 (NORTHBOUND & SOUTHBOUND)**

NOT TO SCALE

**TRAFFIC CONTROL
SHEET (3)**

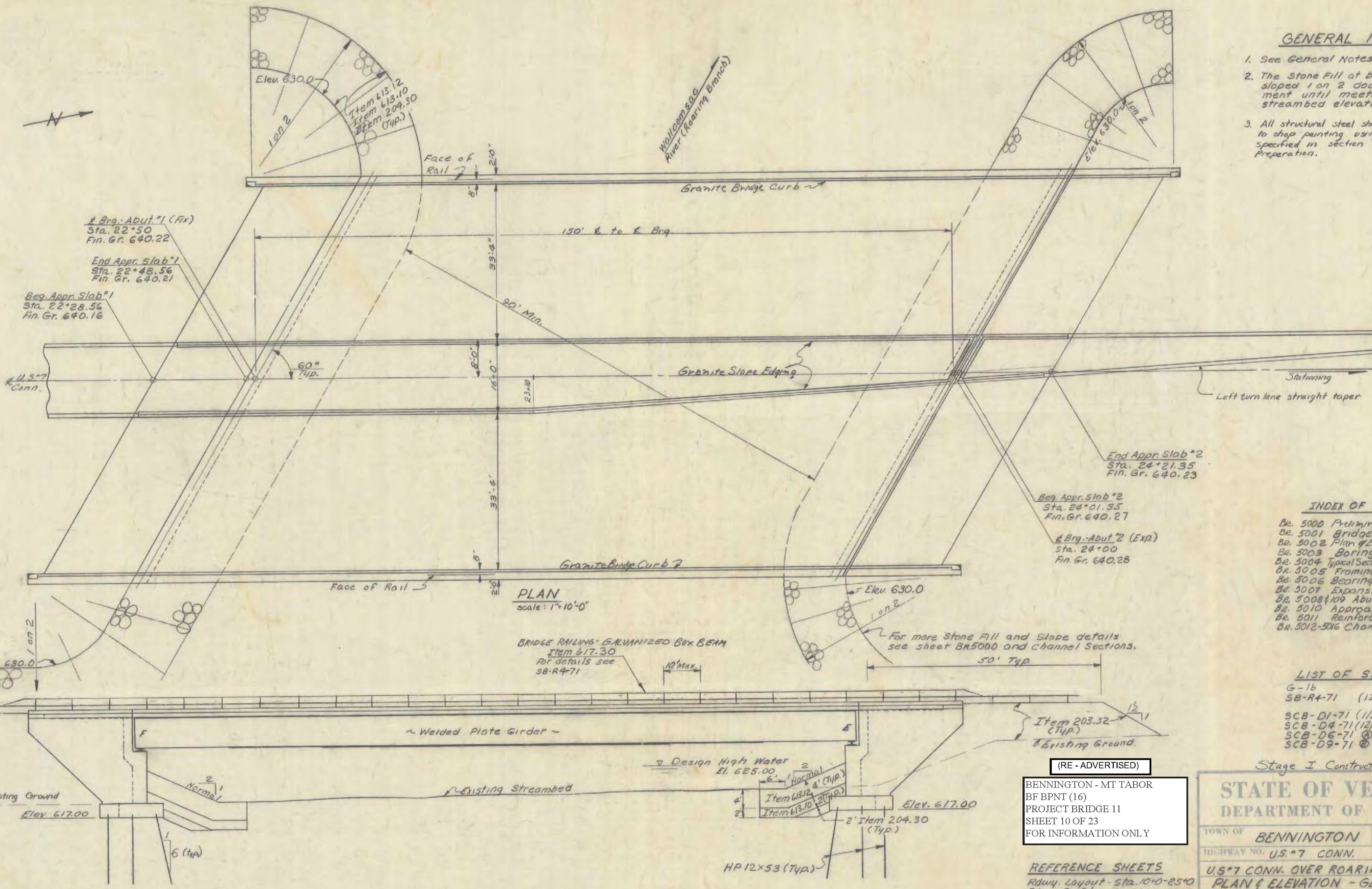
PROJECT NAME: BENNINGTON - MT TABOR
PROJECT NUMBER: BF BPNT (16)

(RE-ADVERTISED)



FILE NAME: z5254510tc_3.dgn
PROJECT LEADER: G.K.DONINGTON
DESIGNED BY: J.KHERA
tc3.dgn

PLOT DATE: 16-MARCH-2015
DRAWN BY: S.BROWN
CHECKED BY: J.KHERA
SHEET 9 OF 23



GENERAL NOTES

1. See General Notes on SCB-D1-71.
2. The Stone Fill at bridge shall be sloped 1 on 2 down from abutment until meeting existing streambed elevation.
3. All structural steel shall be cleaned prior to shop painting using any method specified in section 513.03, Surface Preparation.

INDEX OF SHEETS

- Bc. 5000 Preliminary Information
- Bc. 5001 Bridge Quantity Sheet
- Bc. 5002 Plan & Elevation - General Notes
- Bc. 5003 Boring Log
- Bc. 5004 Typical Section of Curbs and Rail Details
- Bc. 5005 Framing Plan & Girder Details
- Bc. 5006 Bearing Device Details
- Bc. 5007 Expansion Dam Details
- Bc. 5008/109 Abutment 1 & 2 Details
- Bc. 5010 Approach Slab 1 & 2 Details
- Bc. 5011 Reinforcing Details
- Bc. 5012-5016 Channel Sections

LIST OF STANDARDS

- G-16
- SB-R4-71 (12/14/71)
- SCB-D1-71 (1/24/72 R)
- SCB-D4-71 (12/14/71 A)
- SCB-D6-71 (12/14/71 A)
- SCB-D9-71 (12/14/71 A)

Stage I Construction

**STATE OF VERMONT
DEPARTMENT OF HIGHWAYS**

TOWN OF BENNINGTON	Bridge No. _____
HIGHWAY NO. U.S.*7 CONN.	Leg Sta. _____
U.S.*7 CONN. OVER ROARING BRANCH PLAN & ELEVATION - GENERAL NOTES	Surv. Sta. 23+25
Designed by A. COUCH	Drawn by C.O. BRYAN
Checked by A. COUCH	Bridge Design Supervisor
PROJECT BENNINGTON	PROJECT NO. DP-U-F 219-1(7)
Bridge Sheet No. 5002	Sheet 89 of 156

(RE-ADVERTISED)
 BENNINGTON - MT TABOR
 BF BPNT (16)
 PROJECT BRIDGE 11
 SHEET 10 OF 23
 FOR INFORMATION ONLY

REFERENCE SHEETS
 Rdwy. Layout - Sta. 10+0-25+0
 Rdwy. Profile - Sta. 10+0-25+0
 Rdwy. Cross Sections - Sta. 22+0-25+0

PLAN
 scale: 1"=10'-0"

ELEVATION
 scale: 1"=10'-0"

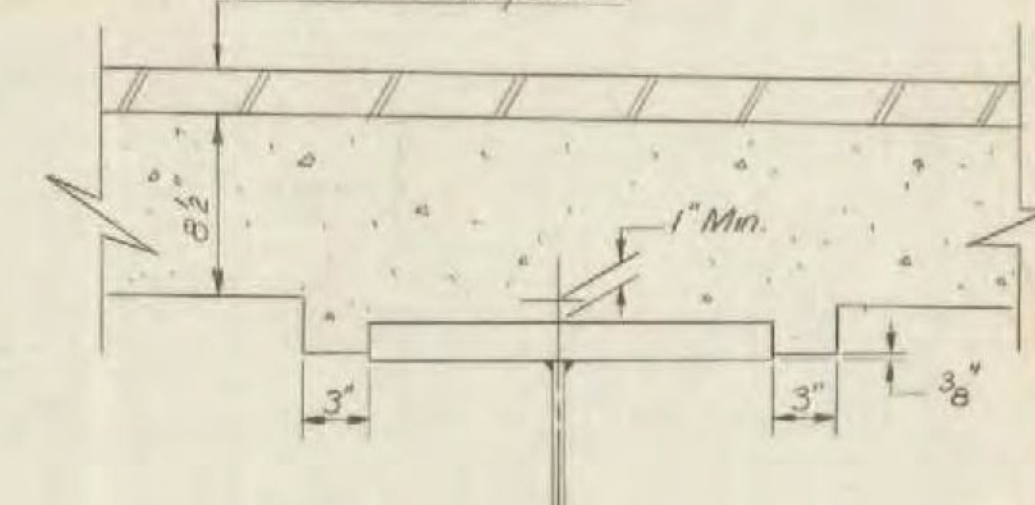
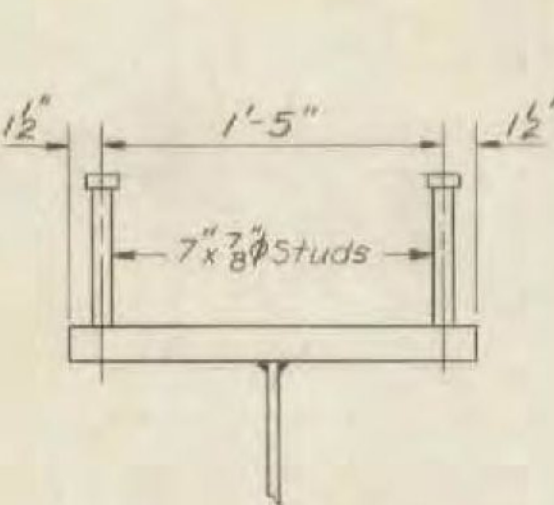
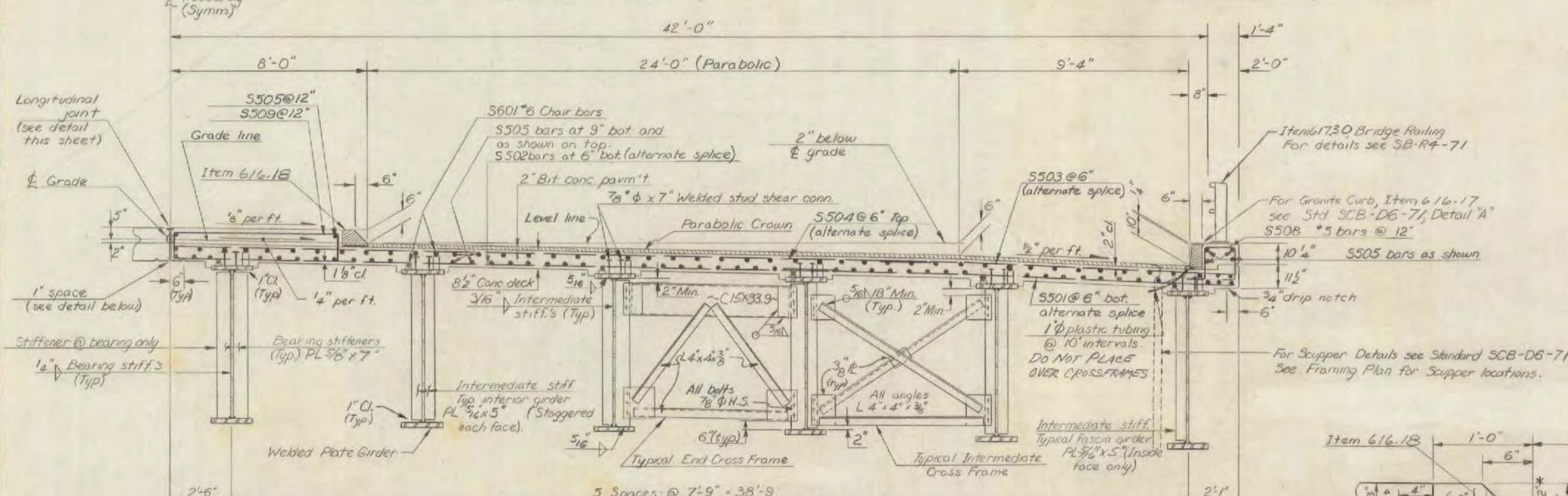
Guard Rail,
 Box Beam with
 Steel Posts
 For details
 see std. G16
 & SB-R4-71.

BRIDGE RAILING - GALVANIZED BOX BEAM
 Item 617.30
 For details see
 SB-R4-71

(RE-ADVERTISED)

Floor slab shall be Concrete Class A. Surface shall be machine finished and dragged. (See sect. 501.14b)

See standard SCB-D4-71 for reinforcement layout @ abutments.



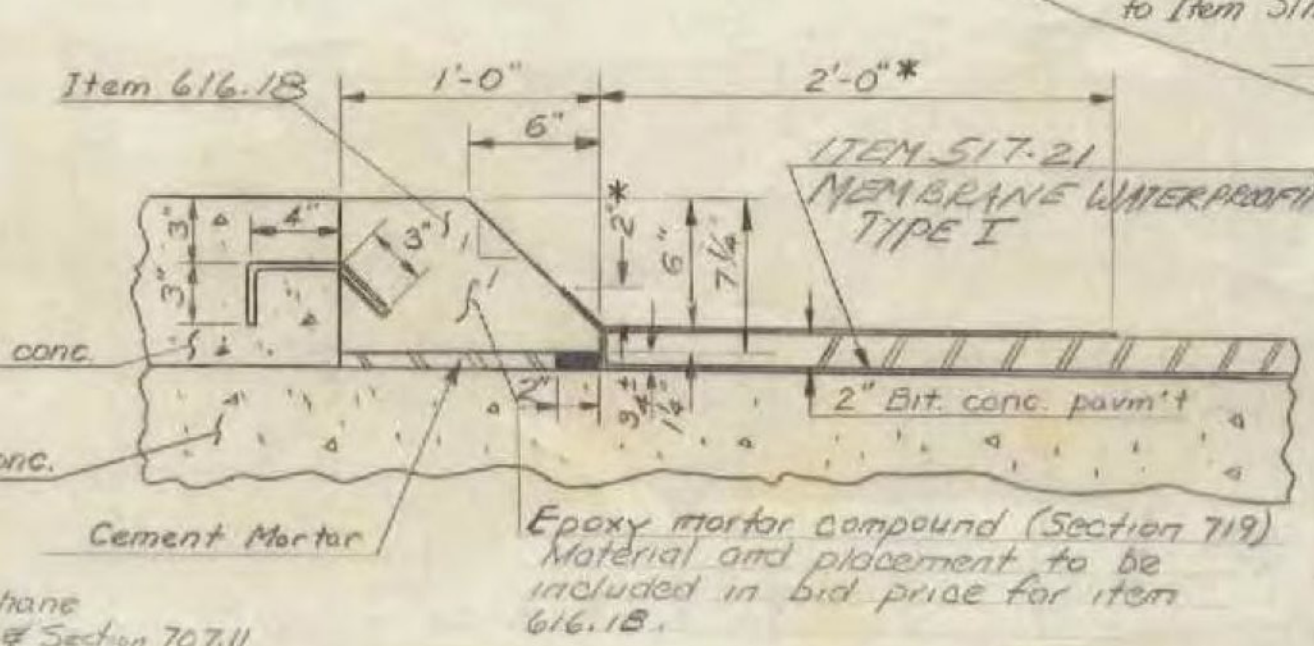
SHEAR CONNECTOR DETAIL
Scale: N.T.S.

GIRDER HAUNCH DETAIL
Scale: 1/2" = 1'-0"

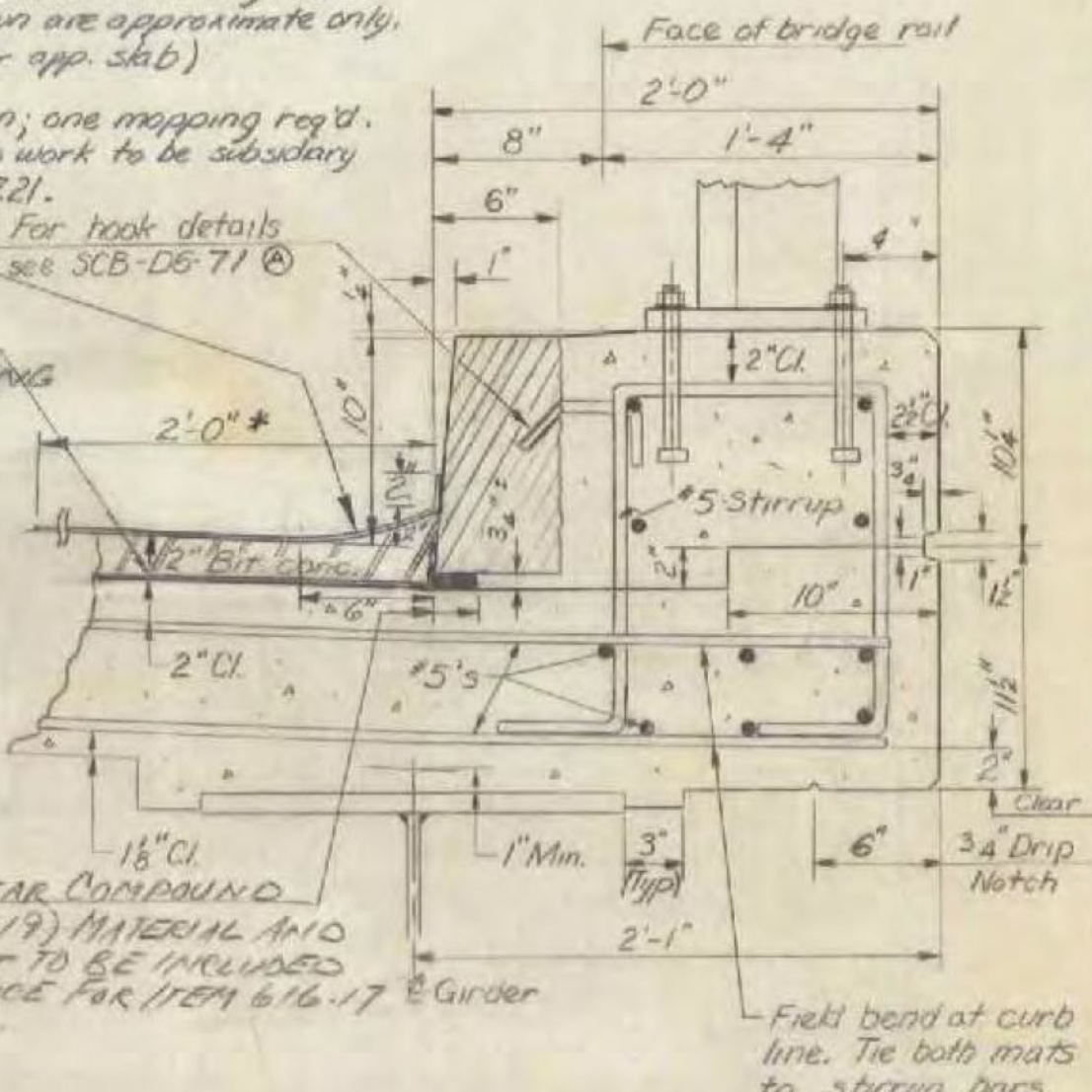
Bituminous Concrete Fillet
Surface is to be shaped and compacted to meet the approval of the Engineer. Dimensions shown are approximate only. (Same detail for app. slab)

* Tar Emulsion; one mopping req'd. Cost for this work to be subsidiary to Item 517.21.

For hook details see SCB-D6-71 (C)



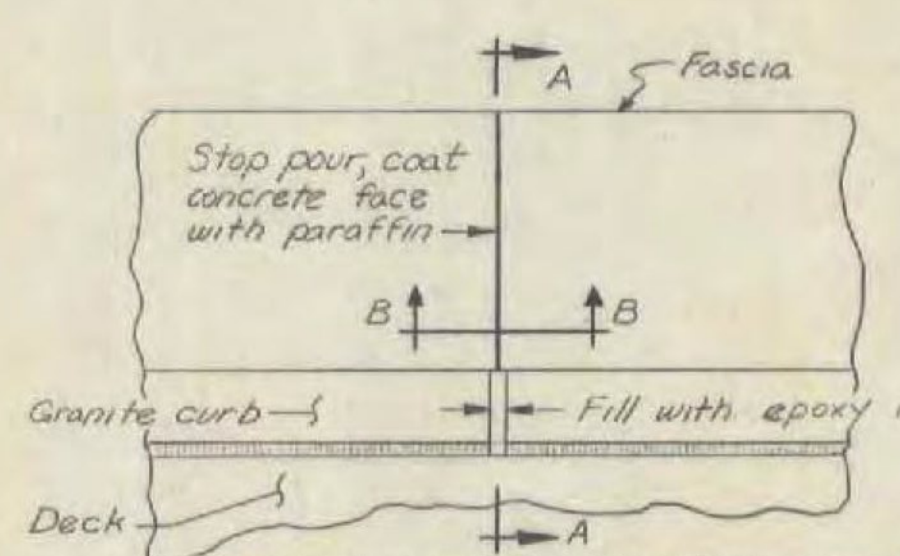
GRANITE SLOPE EDGING
Scale: 1/2" = 1'-0"



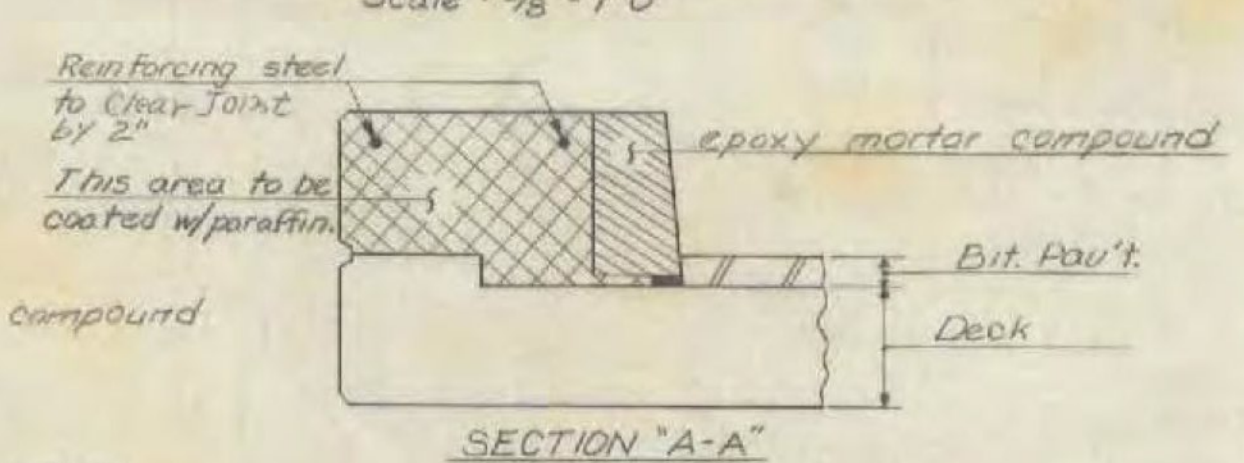
CURB DETAIL
Scale: 1/2" = 1'-0"

- NOTES
- All straight sections of Granite Curb shall be furnished in random lengths from 4 to 10 feet.
 - Detailed drawings for the layout of the Granite Bridge Curb, Item 616.17, shall be submitted in triplicate to the State for approval prior to fabrication or shipment.
 - All bolts to be 3/8" ϕ H.S. A-325 in 1/2" ϕ holes.

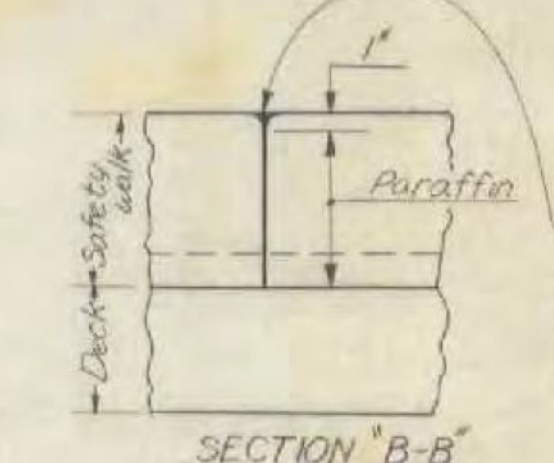
TYPICAL HALF SECTION
Scale: 3/8" = 1'-0"



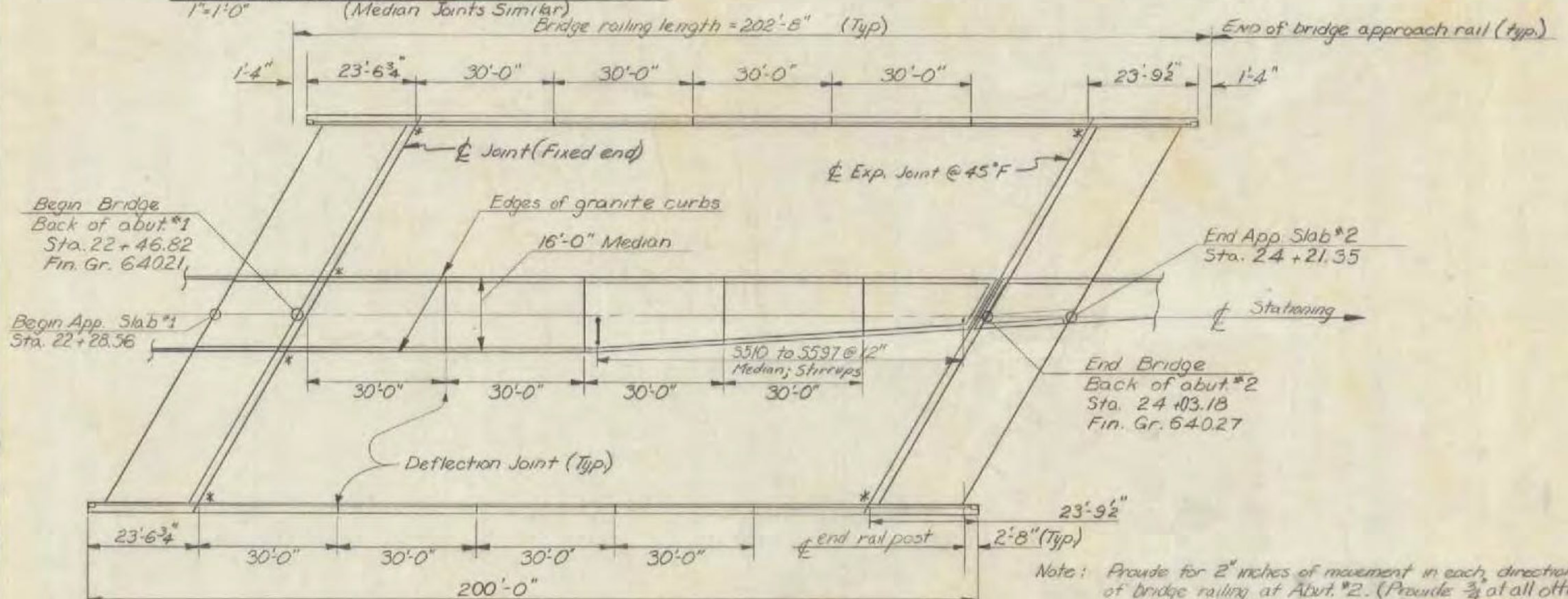
PLAN OF DEFLECTION JOINT AT SAFETY WALKS
Scale: 1" = 1'-0"



SECTION A-A
Scale: 1" = 1'-0"



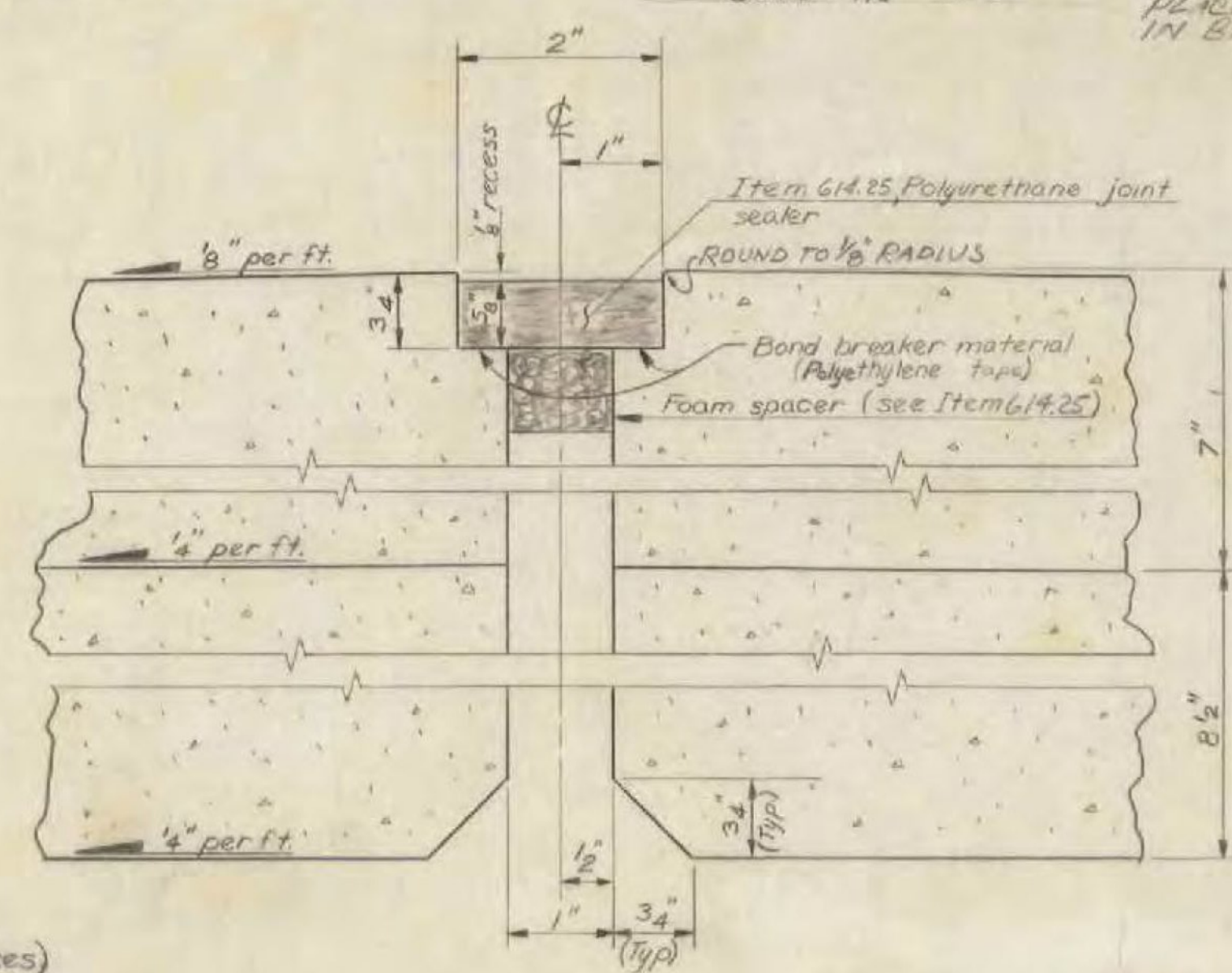
SECTION B-B
Scale: 1" = 1'-0"



CURB and RAIL PLAN
Scale: N.T.S.

Note: Provide for 2" inches of movement in each direction of bridge railing at Abut. #2. (Provide 3/4" of all other splices)
* Curb shall be sawed on a skew at indicated joints.
For detail of median curb at fixed end see Br-5010 & Br-5010.

Concrete safety walks and median island shall be placed in alternate sections, allowing a minimum of 48 hours between the placing of alternate sections.



LONGITUDINAL JOINT DETAIL
Scale: 3/4" = 1'

(RE - ADVERTISED)
BENNINGTON - MT TABOR
BF BPNT (16)
PROJECT BRIDGE 11
SHEET 11 OF 23
FOR INFORMATION ONLY

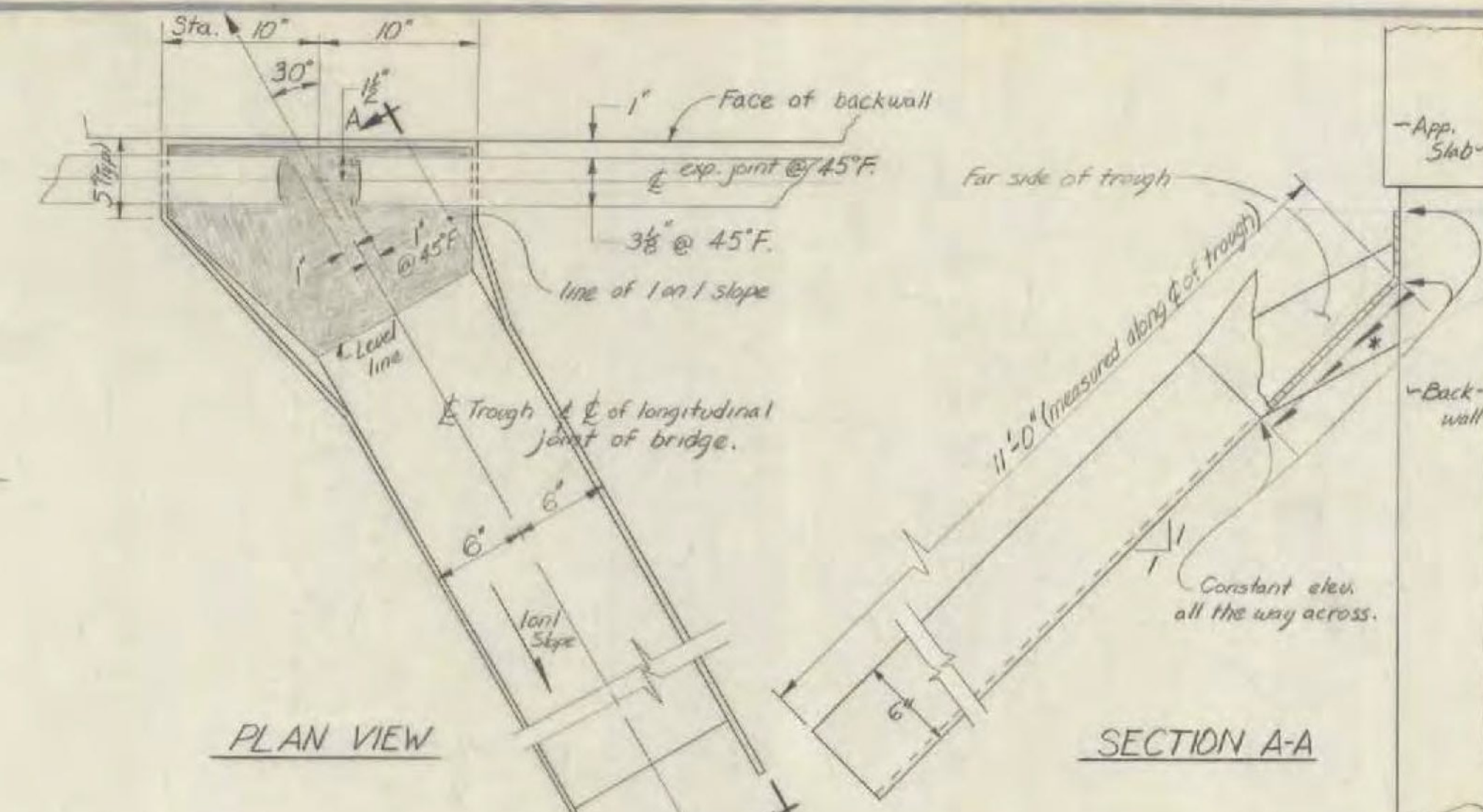
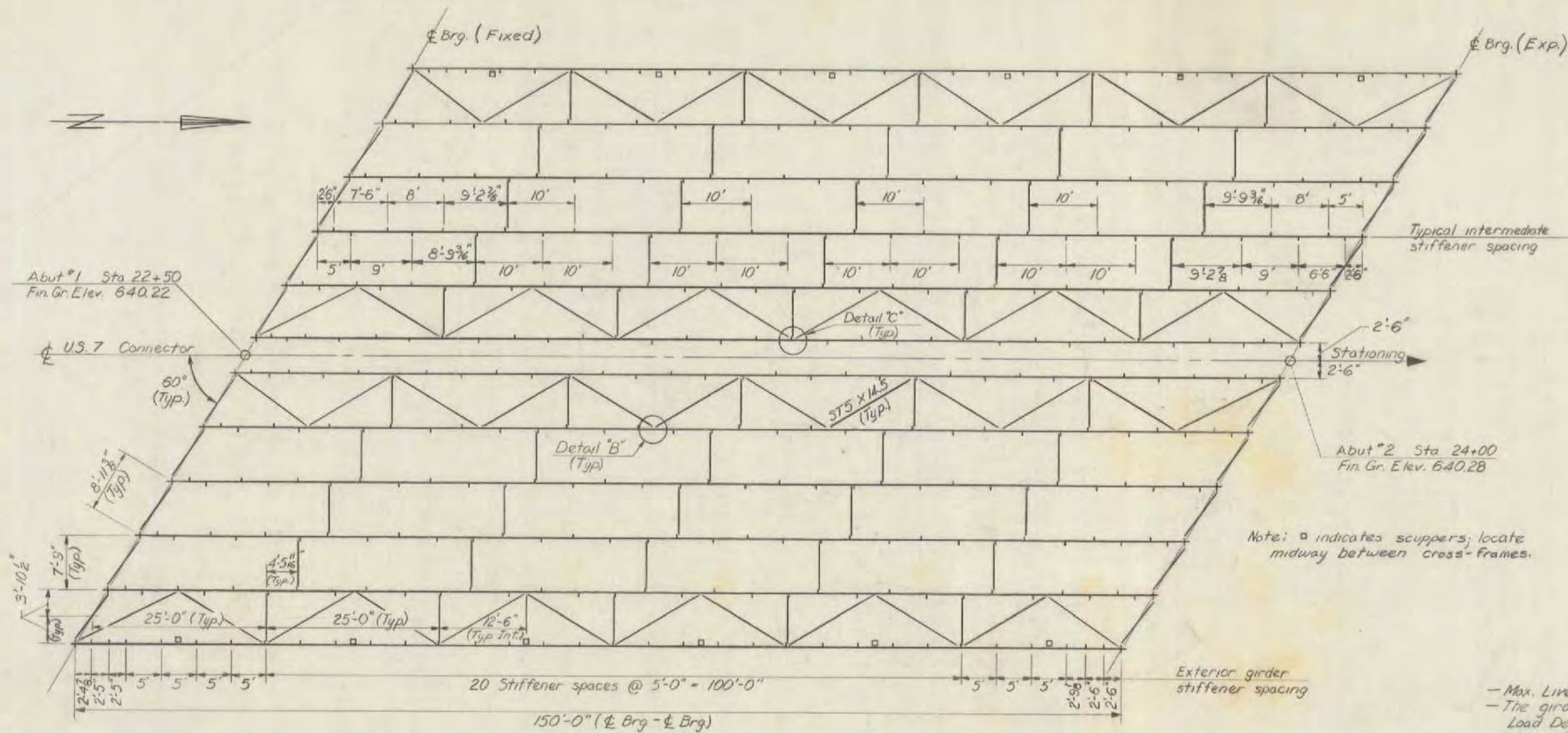
STATE OF VERMONT
DEPARTMENT OF HIGHWAYS

TOWN OF Bennington

ROUTE No. US 7 Conn. STATION 23+25
US 7 Connector over Hoaring Branch

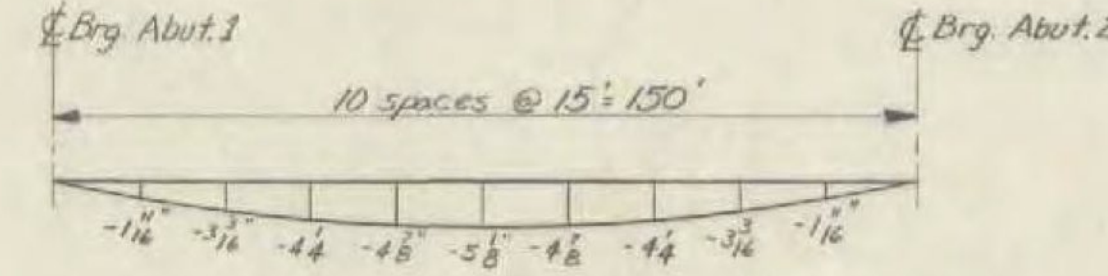
TYPICAL SECTION & CURB AND RAIL DETAILS
SCALE As noted

SECTION SUPERVISOR A. BUCHANAN 2-7-72
DRAWN BY Armstrong CHECKED BY COUCH
PROJECT No. DP-U-F 219-10
SHEET 21 OF 156



Max. Live Load Deflection at mid-span = -2"
The girders shall be cambered for Dead Load Deflection plus 1/8" Permanent Camber at mid-span, plus 3/8" vertical curve camber.

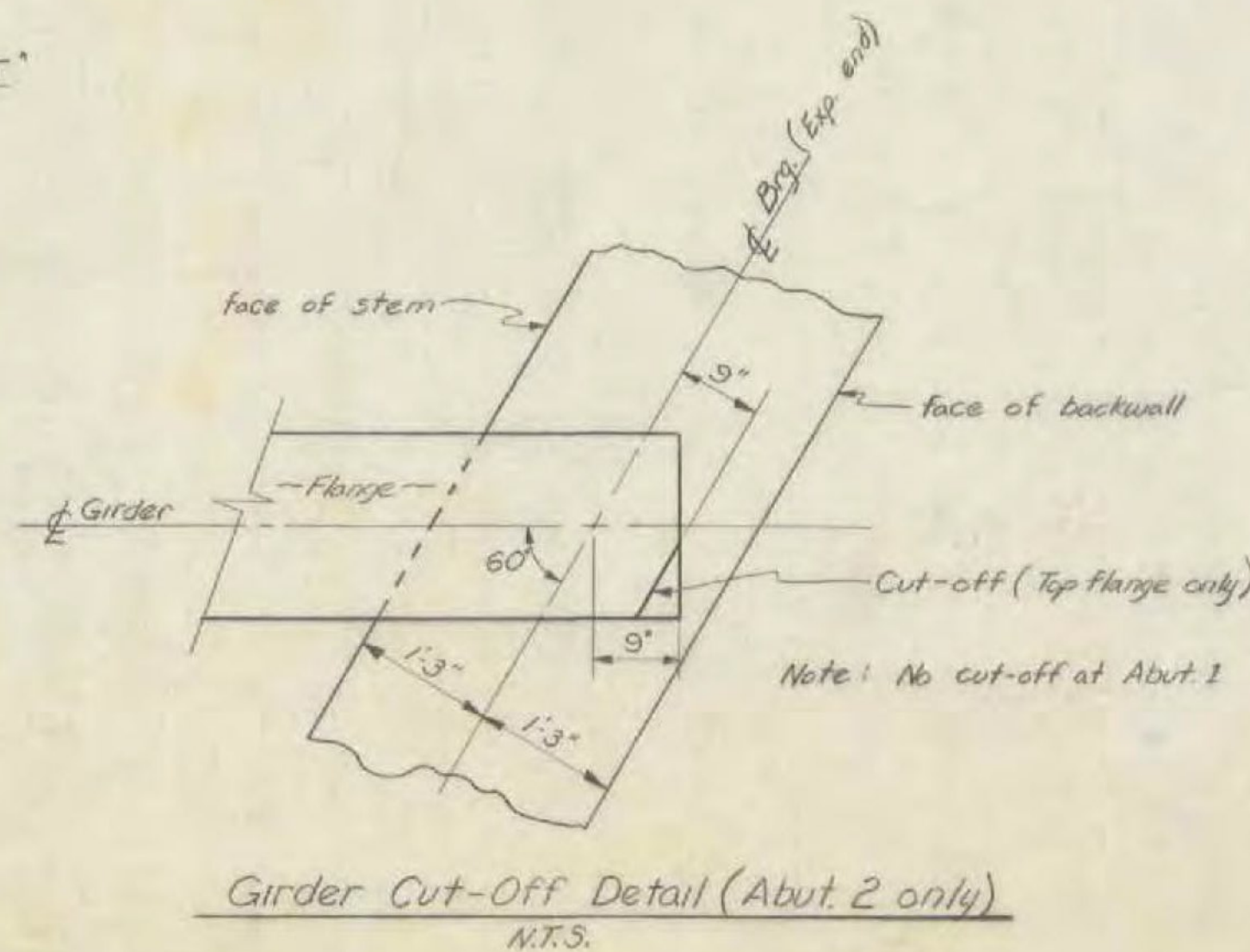
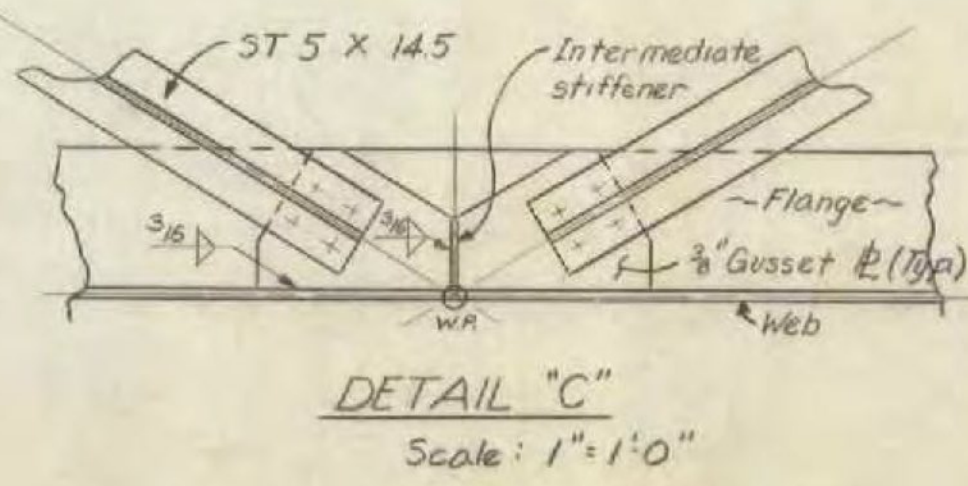
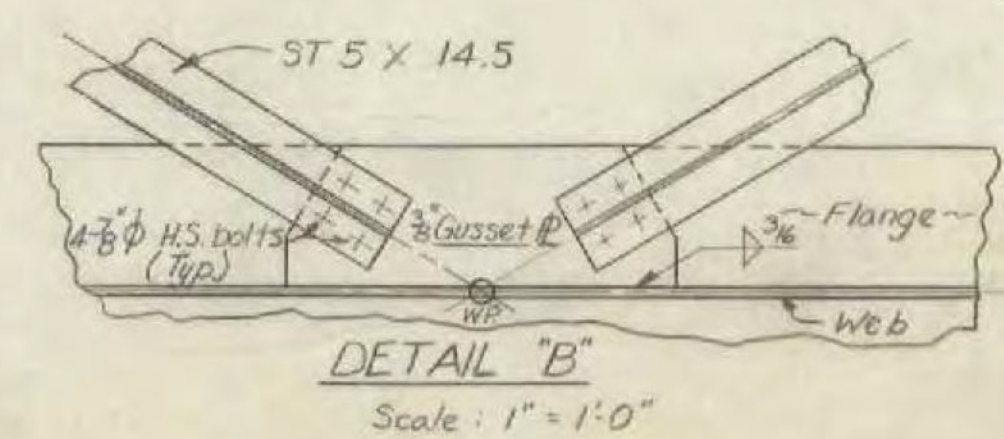
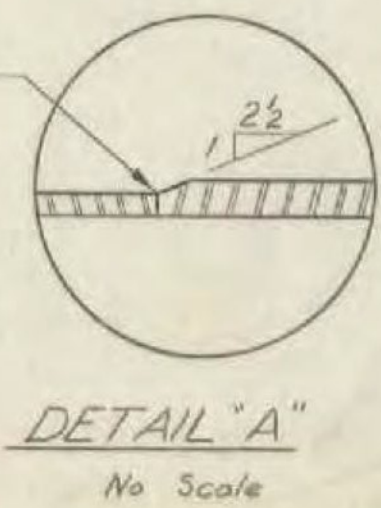
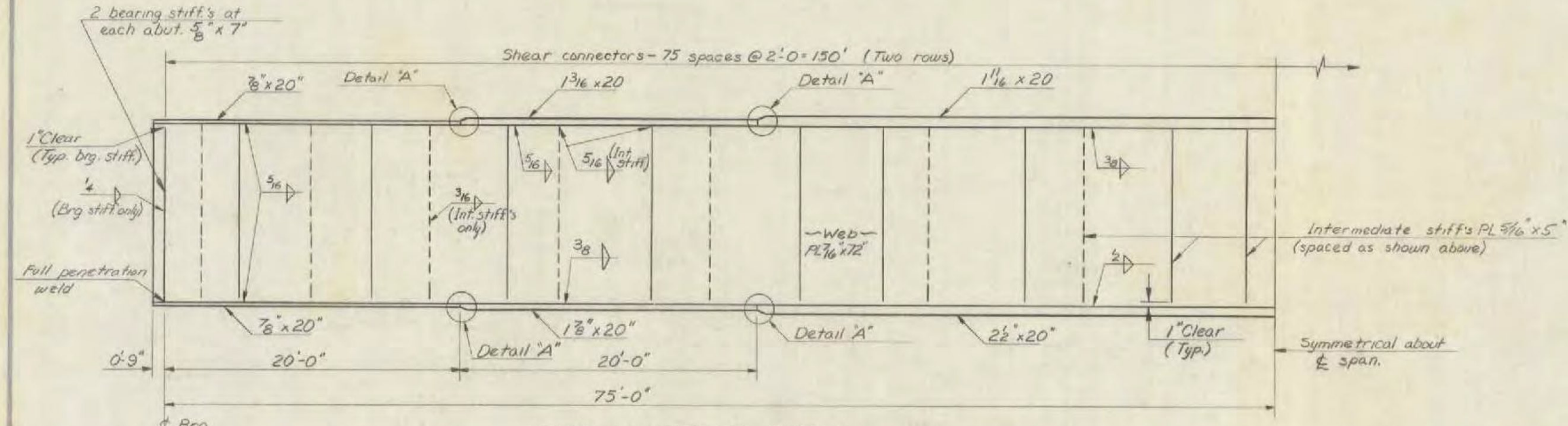
Trough Notes:
1) See Br. 5007 for additional trough details.
2) The shaded area indicates the area where the slope of the trough is warped. All the rest of the trough is sloped 45° from the vertical.
3) * The slope of the trough between the limits shown shall be warped to fit. In the exact plane of section A-A it is a 1 on 1 slope.



GENERAL NOTES

- For GENERAL NOTES see Br. 5002
- All Structural Steel shall conform to ASTM designation A-36, unless otherwise noted. All field connections shall be made with 7/8" φ ASTM A-325 bolts in 5/16" φ holes.
- Bearing stiffeners may be ground to bear on the bottom flange in lieu of welding if desired.

(RE - ADVERTISED) BENNINGTON - MTTABOR
BF BPNT (16)
PROJECT BRIDGE 11
SHEET 12 OF 23
FOR INFORMATION ONLY



Stage I Construction

STATE OF VERMONT
DEPARTMENT OF HIGHWAYS

TOWN OF Bennington

ROUTE No. US 7 Conn. Sta. 23+25
US 7 Conn. Over Roaring Branch

Framing Plan & Girder Details

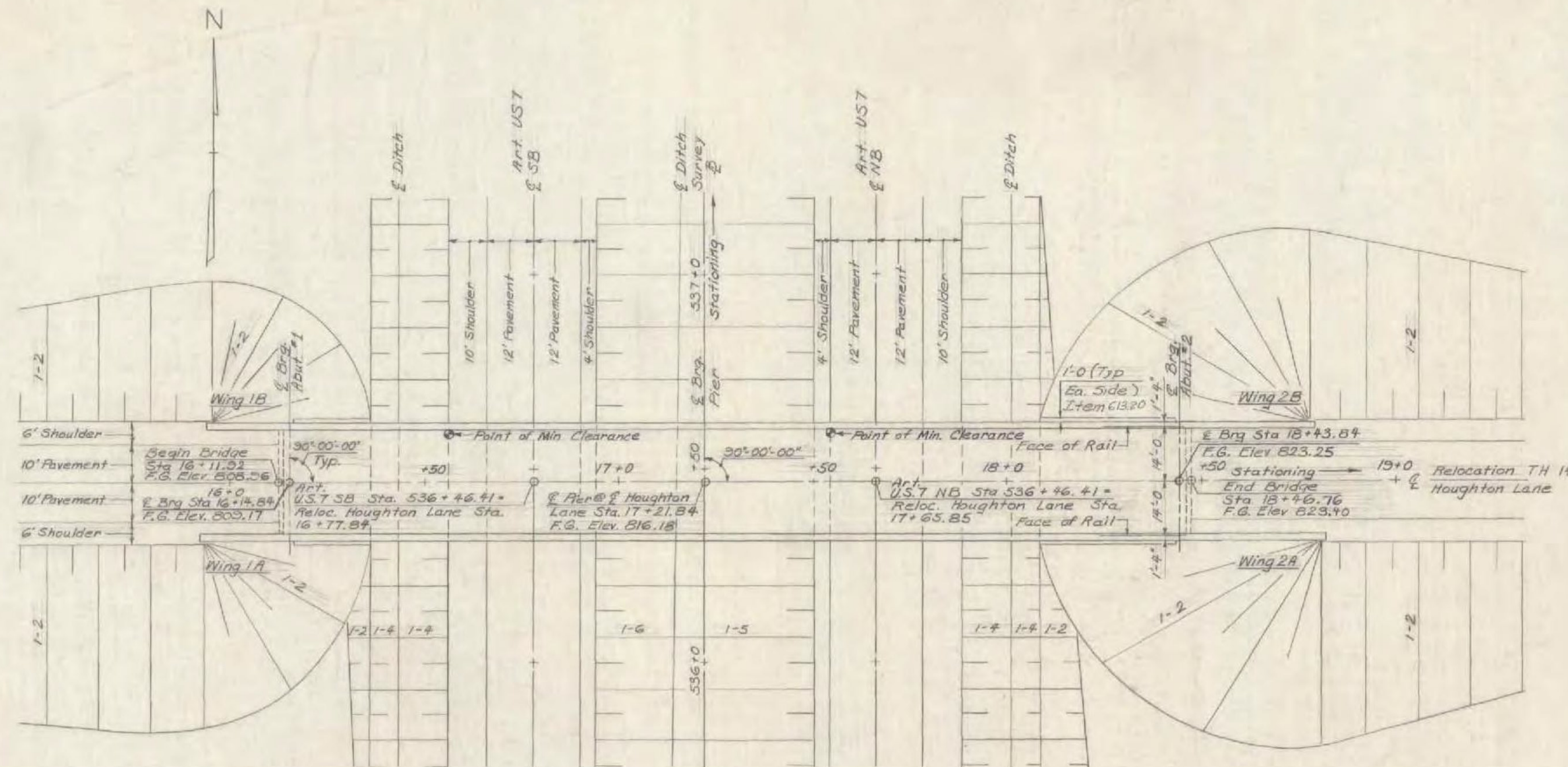
SCALE As Noted

SECTION SUPERVISOR A. BUSHANAN

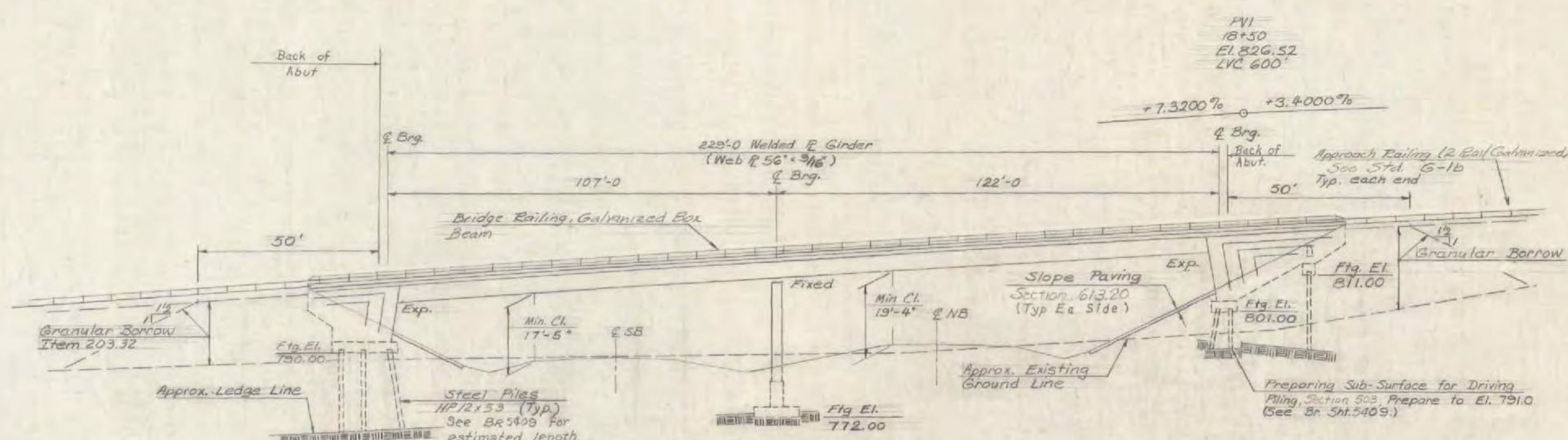
DRAWN BY Armstrong, CHECKED BY Couch

PROJECT No. DE-U-F 212-1(7)

Br. 5005 SHEET 22 OF 156



PLAN
Scale 1"=20'



ELEVATION
Scale 1"=20'

GENERAL NOTES

1. FOR ADDITIONAL GENERAL NOTES, SEE STD. SHT. SCB-DI-71.
2. ELEVATION DATUM IS SEA LEVEL BASED ON THE NEAREST US GOVERNMENT VERTICAL CONTROL.
3. STRUCTURAL STEEL SHALL CONFORM TO THE ASTM DESIGNATIONS INDICATED ON THE PLANS. GIRDERS SHALL BE CHAMBERED FOR VERTICAL CURVE ORDINATES PLUS ANTICIPATED DEAD LOAD DEFLECTION. (BRIDGE SHEET 5404)
4. SUPERSTRUCTURE AND PIER CAP CONCRETE SHALL BE CONCRETE CLASS A. ALL OTHER CONCRETE SHALL BE CONCRETE CLASS B. ALL EXPOSED EDGES OF CONCRETE IN THE ABUTMENTS AND SUPERSTRUCTURE SHALL BE CHAMFERED 1"x1". ALL EXPOSED EDGES OF PIER COLUMNS AND CAP SHALL BE CHAMFERED 3"x3". ALL CONSTRUCTION JOINTS TO BE MADE AS SHOWN ON SCB-DG-71 DETAIL B UNLESS OTHERWISE NOTED.
5. SLAB CONCRETE SHALL BE PLACED ACCORDING TO THE PLACING SEQUENCE SHOWN ON BR SHT. 5405 UNLESS OTHERWISE APPROVED BY THE ENGINEER.
6. MINIMUM COVER FOR REINFORCING STEEL SHALL BE AS INDICATED ON THE PLANS. SPLICES WHICH ARE PERMITTED SHALL HAVE A LENGTH NOT LESS THAN 30 TIMES THE NOMINAL DIAMETER OF THE REINFORCEMENT BUT NOT LESS THAN (2) FEET.
7. NO CONCRETE SHALL BE PLACED ABOVE ADJACENT BRIDGE SEAT ELEVATION UNTIL GIRDERS HAVE BEEN PROFILED AND FINAL GRADE ESTABLISHED BY THE ENGINEER.
8. ABUTMENT BRIDGE SEATS WILL BE COATED WITH ITEM 615.20, EPOXY COATING COMPOUND. FRONT FACE OF BACKWALLS WILL BE COATED WITH ITEM 512.25 PAINT WATERPROOFING.
9. SEE NOTE 14 ON SHEET SCB-DI-71 FOR FINISH ON BRIDGE SEATS

INDEX OF SHEETS

- BR 5400 PRELIMINARY INFORMATION SHEET
- BR 5401 BRIDGE QUANTITY SHEET
- BR 5402 PLAN AND ELEVATION
- BR 5403 BORINGS
- BR 5404 FRAMING PLAN
- BR 5405 SUPERSTRUCTURE DETAILS
- BR 5406 EXPANSION JOINT DETAILS
- BR 5407 CURB AND RAIL LAYOUT PLAN
- BR 5408 ABUTMENT #1 LAYOUT
- BR 5409 ABUTMENT #2 LAYOUT
- BR 5410 ABUTMENT REINFORCING DETAILS
- BR 5411 PIER DETAILS
- BR 5412 REINFORCING SCHEDULE
- BR 5413 REINFORCING SCHEDULE

STANDARD SHEETS REQUIRED

SCB-DI-71	1-24-72R
SCB-D6-71	12-14-71
SB-24-71	12-14-71
G-1b	10-1-71

REFERENCE SHEETS

PLAN:
ART US 7 @ STA. 528+50 TO STA. 543+75

PROFILE:
ART US 7 @ STA. 528+50 TO STA. 543+75
RELOC. HOUGHTON LANE STA. 10+00 TO STA. 22+50

CROSS SECTIONS:
ART US 7 @ STA. 535+50 TO STA. 537+00
RELOC. HOUGHTON LANE STA. 14+00 TO STA. 17+50
AND STA. 18+00 TO STA. 21+00

(RE - ADVERTISED)
BENNINGTON - MT TABOR
BF BPNT (16)
PROJECT BRIDGE 15D
SHEET 13 OF 23
FOR INFORMATION ONLY

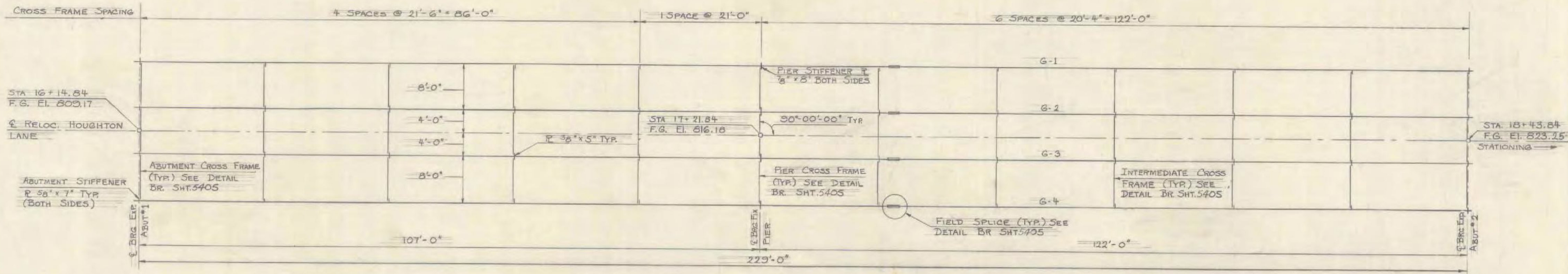
STATE OF VERMONT
DEPARTMENT OF HIGHWAYS

PROJECT BENNINGTON
TOWN OF BENNINGTON

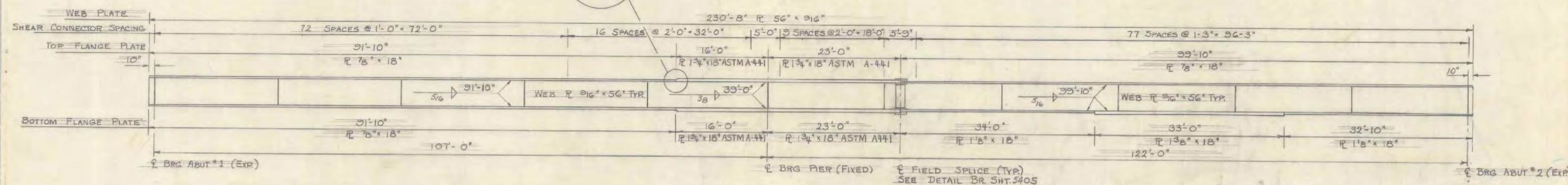
ROUTE No. ART US 7 @ STA. 536+50±
T.H. 14 (HOUGHTON LANE) OVER ART US 7

PLAN AND ELEVATION
SCALE AS NOTED

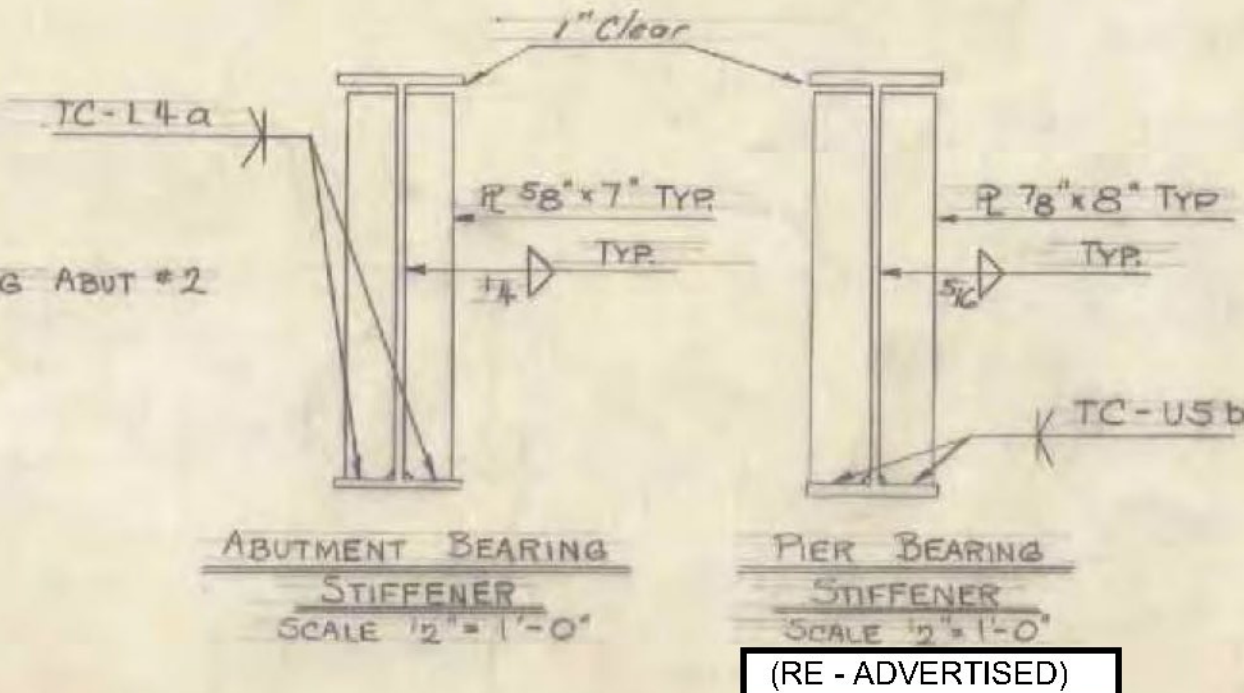
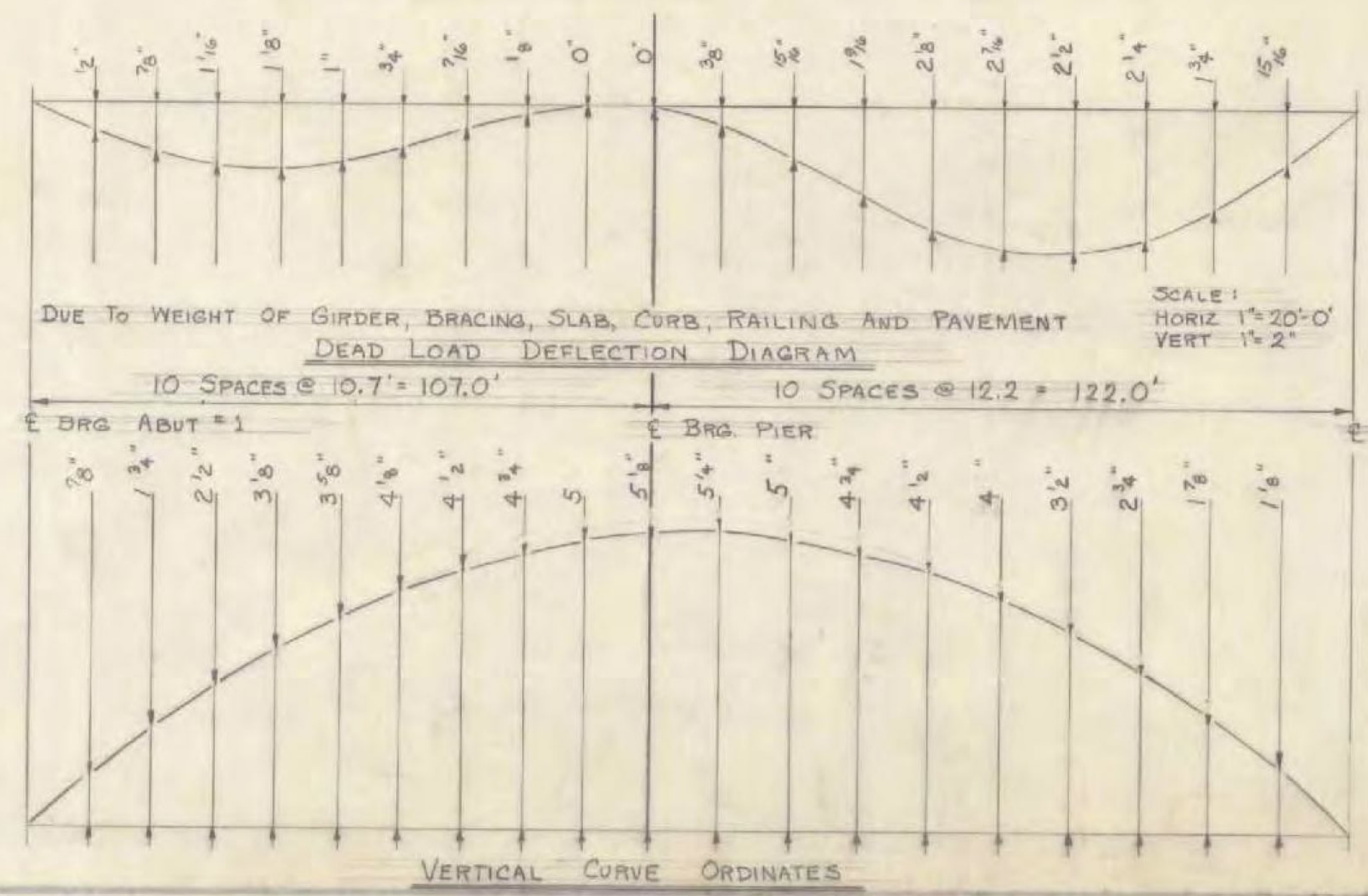
SECTION SUPERVISOR J. WOOD 6-71
DRAWN BY E. WAIBEL CHECKED BY SHATTUCK 6-70
PROJECT No. DP-85019-1(2)
SHEET 171 of 430 - BR 5402



FRAMING PLAN
SCALE: 1/8" = 1'-0"



ELEVATION G2 (TYP)
SCALE: 1/8" = 1'-0"



ABUTMENT BEARING STIFFENER SCALE: 1/2" = 1'-0"
PIER BEARING STIFFENER SCALE: 1/2" = 1'-0"

(RE-ADVERTISED)
BENNINGTON - MT TABOR
BF BPNT (16)
PROJECT BRIDGE 15D
SHEET 14 OF 23
FOR INFORMATION ONLY

- NOTES:**
- GIRDERS SHALL BE CAMBERED FOR VERTICAL CURVE PLUS ANTICIPATED DEAD LOAD DEFLECTION.
 - ALL STRUCTURAL STEEL SHALL BE ASTM A36 UNLESS OTHERWISE NOTED ON THE PLANS.
 - BEARING STIFFENERS SHALL BE VERTICAL IN THE ERECTED POSITION; INTERMEDIATE CROSS-FRAMES SHALL BE PERPENDICULAR TO THE FLANGES.
 - ENDS OF GIRDERS SHALL BE CUT TO BE VERTICAL IN THE ERECTED POSITION.
 - Intermediate cross-frame connection plates shall have 1 inch clear of the tension flange, as shown for the pier stiffeners, and shall be welded all around with a 1/4 inch fillet weld. The tension flange is the top flange for each plate adjacent to the pier and is the bottom flange for the rest of the plates.
 - All Structural Steel shall be cleaned prior to shop painting using any method specified in Section 513.03, Surface Preparation.
 - If Fleming type brackets are used to support bridge deck overhang, their maximum spacing shall be 4'-0".
 - ROCKERS OF EXPANSION BEARING DEVICES SHALL BE SET TO BE VERTICAL AT 45°F. THE ROCKERS SHALL BE TILTED TOWARD THE BACKWALL 1/8" FOR EVERY 15° CHANGE IN TEMPERATURE ABOVE 45°F AND TILTED AWAY FROM THE BACKWALL 1/8" FOR EVERY 15° CHANGE IN TEMPERATURE BELOW 45°F.

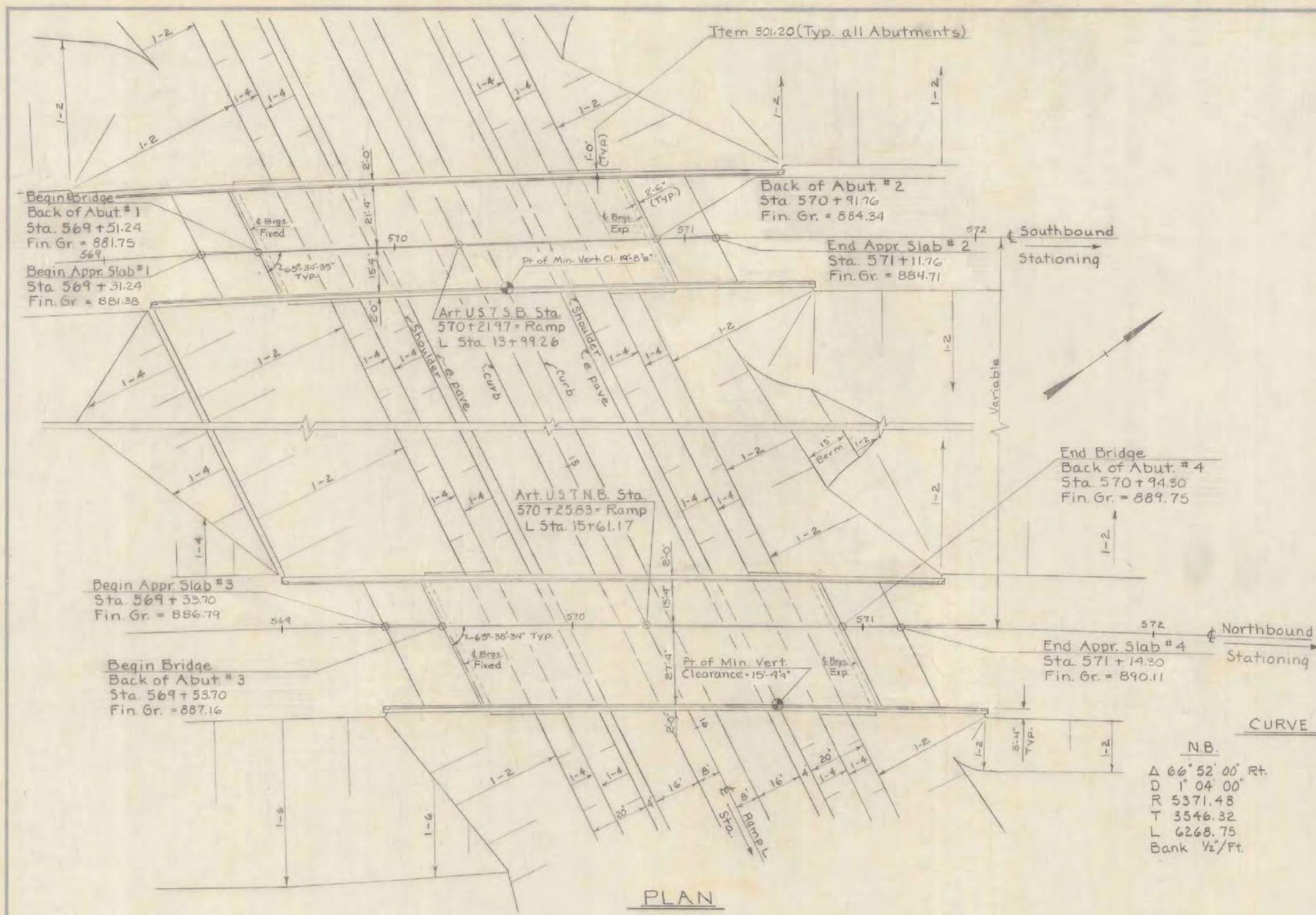
- CONTACT SURFACES OF ROCKERS SHALL BE GIVEN A SHOP COAT OF WHITE LEAD AND TALLOW. THE REMAINDER OF THE BEARING SHALL BE PAINTED IN ACCORDANCE WITH SECTIONS 506 & 513.
- ANCHOR BOLTS SHALL BE 1 1/2" Ø x 1'-8" LONG SWEDGE BOLTS W/ HEX NUT + 3/8" WASHER. THE SWEDGE BOLTS SHALL BE THREADED 3/4" AND HAVE A PROJECTION OF 1/4" ABOVE BRIDGE SEAT ELEVATIONS.
- BOLT HEADS TO BE PLACED ON EXTERIOR SIDE OF FASCIA BEAMS AT ALL SPICE POINTS.

**STATE OF VERMONT
DEPARTMENT OF HIGHWAYS**

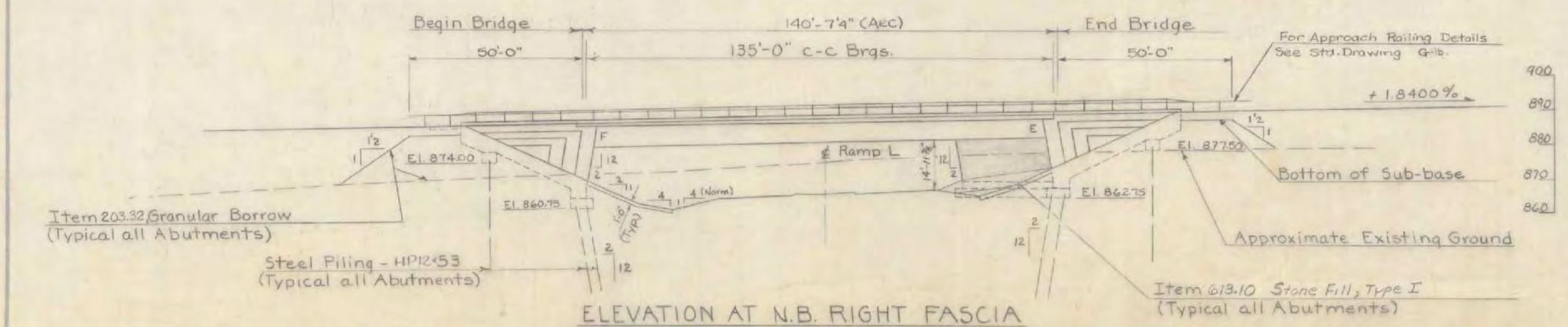
TOWN OF BENNINGTON Bridge No. 54
HIGHWAY NO. ART. U.S. 7 Log Sta. Sta. 536+50 ±
TH 14 (HOUGHTON LANE) OVER ART. U.S. 7

Designed by E. WAIBEL Drawn by LADD
Drawing Ckd By E. WAIBEL Bridge Design Supervisor
Design Ckd By LADD 2-71 J. WOOD date 4-71

PROJECT BENNINGTON PROJECT NO. DP-BFO19-112
Bridge Sheet No. 5404 Sheet 193 of 480



PLAN



ELEVATION AT N.B. RIGHT FASCIA

INDEX OF SHEETS

- BR-5500 PRELIMINARY INFORMATION SHEET
- 5501 BRIDGE QUANTITY SHEET
- 5502 PLAN AND ELEVATION
- 5503-04 BORING LOGS
- 5505 FRAMING PLAN
- 5506 SUPERSTRUCTURE DETAILS
- 5507 BEARING AND FIXED END JOINT DETAILS
- 5508 EXPANSION JOINT DETAILS
- 5509 CURB AND RAIL PLAN
- 5510 ABUTMENT NO. 1
- 5511 ABUTMENT NO. 2
- 5512 ABUTMENT NO. 3
- 5513 ABUTMENT NO. 4
- 5514 APPROACH SLABS
- 5515-17 REINFORCING SCHEDULES

BRIDGE STANDARDS

- SCB-DI-71 ALL DETAILS USED 1-24-72 R.
- SCB-D6-71 DETAIL B 12-14-71 A.
- SB-R4-71 12-14-71
- G-1b

REFERENCE SHEETS

- US7 PLAN STA. 559+00 TO STA. 589+00
- US7 PROFILE STA. 559+00 TO STA. 589+00
- US7 CROSS-SECTIONS STA. 567+50 TO STA. 572+00
- RAMP L CROSS-SECTIONS STA. 11+50 TO STA. 17+50

GENERAL NOTES

1. FOR SPECIFICATIONS, ALLOWABLE DESIGN STRESSES, AND GENERAL NOTES, NOT OTHERWISE SHOWN OR MODIFIED ON THESE PLANS, SEE STD. SHT. SCB-DI-71. ALL NOTES APPLY EXCEPT 10.11.
2. STEEL PILES (HP12x53) IN THE ABUTMENTS ARE DESIGNED FOR 45 TONS PER PILE. ITEM 503.10 "PREPARING SUB-SURFACE FOR DRIVING PILING" SHALL BE REQUIRED AT ALL ABUTMENTS FOR A MINIMUM OF TEN (10) FEET BELOW BOTTOM OF FOOTING ELEVATION. ALL PILE TIPS SHALL BE REINFORCED.
3. DESIGN, SPECIFICATIONS, AND MATERIALS, ARE IN ACCORDANCE WITH AASHO 1969 AND ITS LATEST REVISIONS.

GENERAL NOTES CONTINUED ON BR-5508

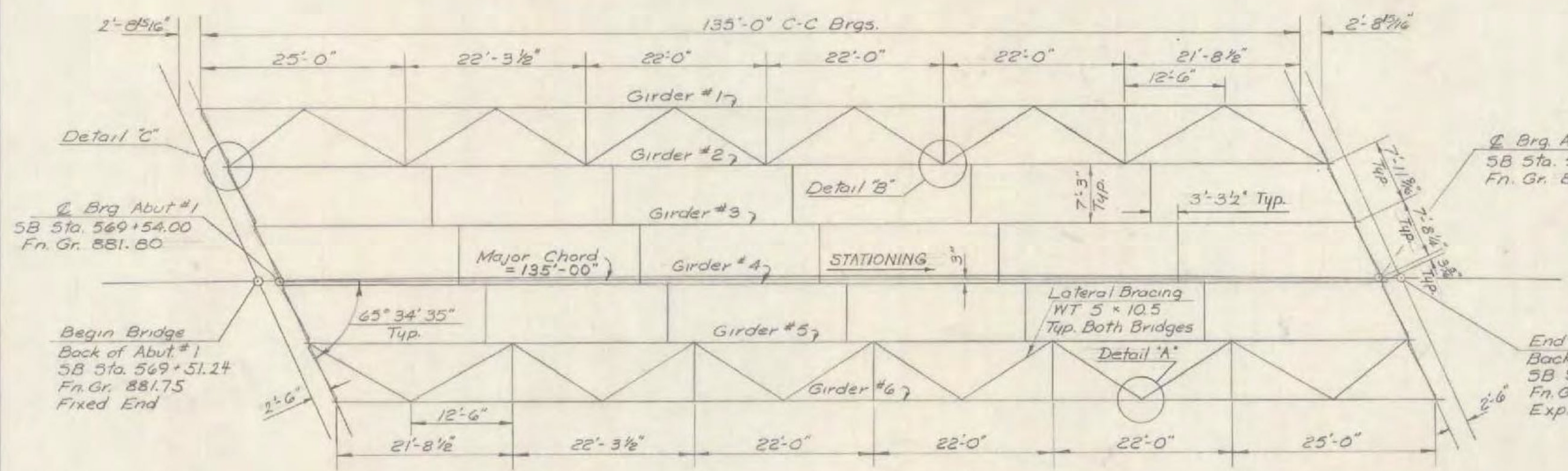
CURVE DATA

N.B.	S.B.
Δ 66° 52' 00" Rt.	Δ 63° 39' 00" Rt.
D 1' 04' 00"	D 1' 02' 00"
R 5371.48	R 5544.75
T 3546.32	T 3441.25
L 6268.75	L 6159.68
Bank 1/2'/Ft.	Bank 1/2'/Ft.

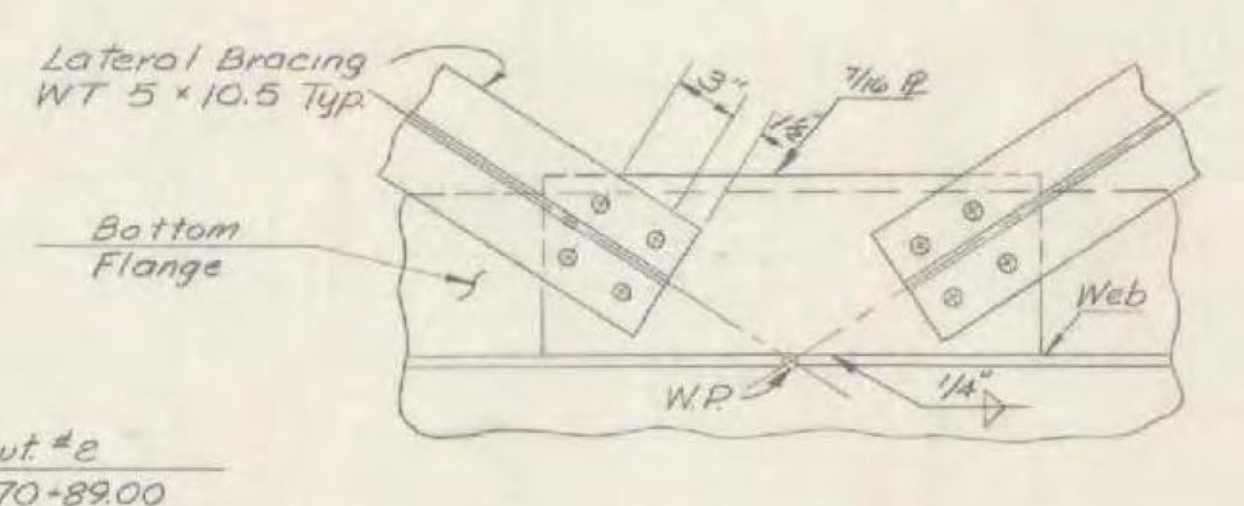
STATE OF VERMONT
DEPARTMENT OF HIGHWAYS

PROJECT BENNINGTON
TOWN OF BENNINGTON
ROUTE NO. ART. U.S. 7 STA. 570+23
ARTERIAL U.S. 7 OVER RAMP L
PLAN AND ELEVATION
SCALE 1" = 20'
SECTION SUPERVISOR L.F.W. Bolken-9/70
DRAWN BY WELLETTE CHECKED BY B.E.I.E. 9/70
PROJECT No. DP-6F 019-1112
SHEET 205 OF 420 BR-5502

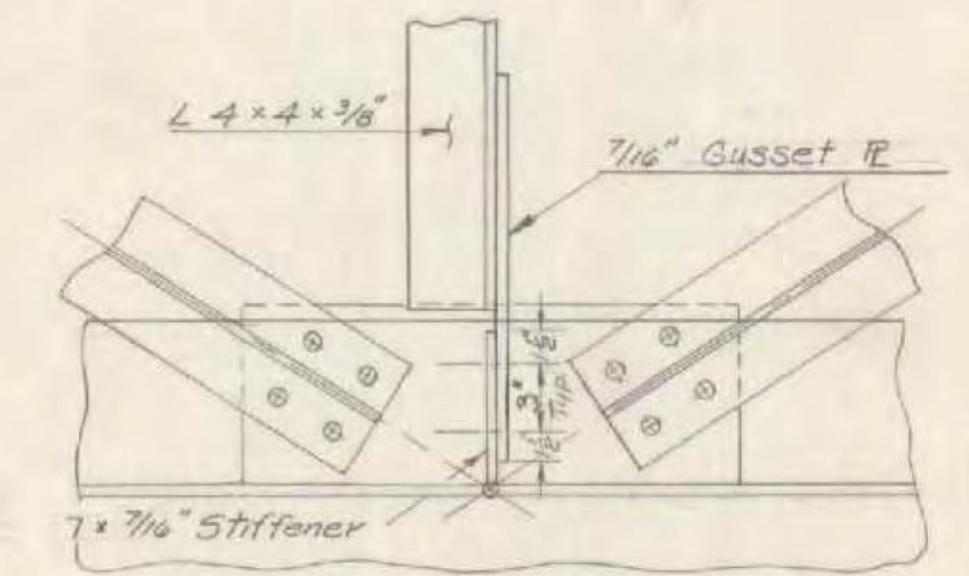
(RE-ADVERTISED)
BENNINGTON - MT TABOR
BF BPNT (16)
PROJECT BRIDGE 16N&S
SHEET 15 OF 23
FOR INFORMATION ONLY



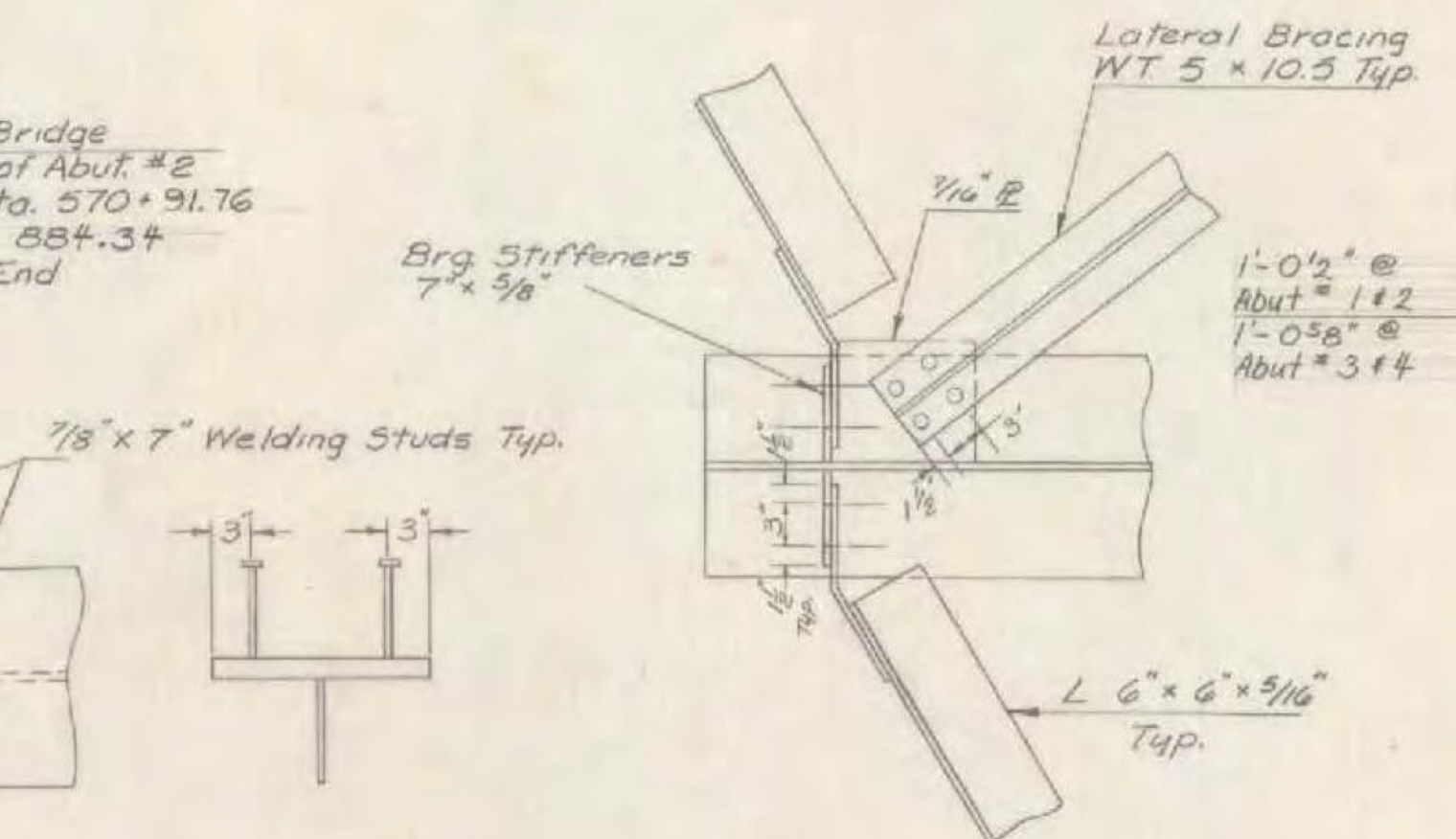
SOUTHBOUND FRAMING PLAN
Scale 1"=10'



DETAIL A
Scale 1 1/2"=1'-0"



DETAIL B
Scale 1 1/2"=1'-0"

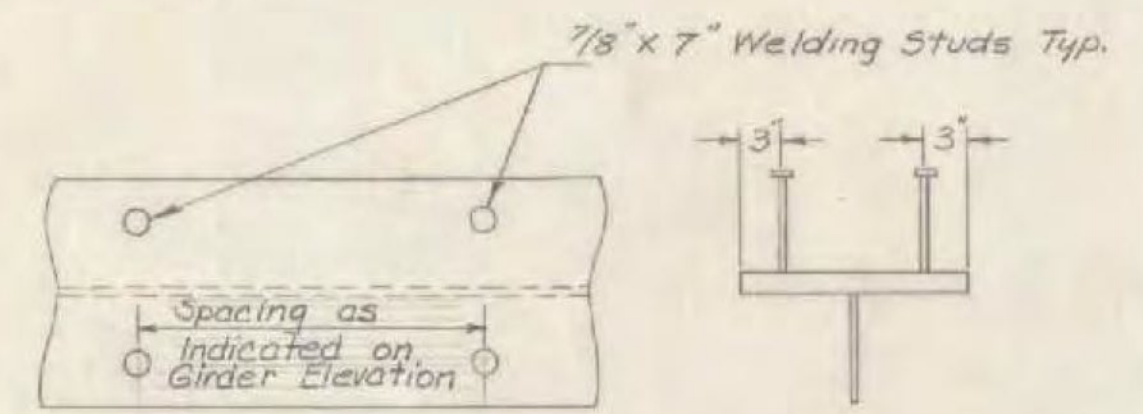


DETAIL C
Scale 1"=1'-0"

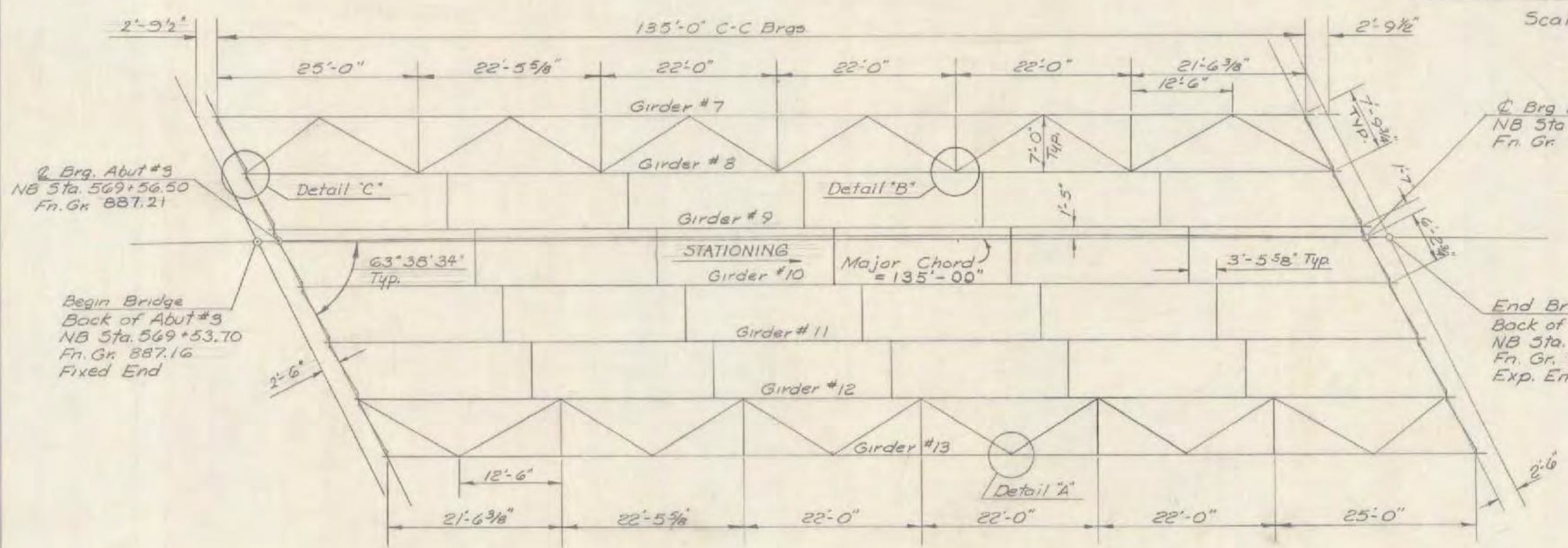
GIRDER HAUNCH DETAILS
Scale 1"=1'-0"

Notes

- All welding shall conform to the Specifications for Welded Highway and Railway Bridges, AWS D20-69 and its latest revisions.
- The superstructure shall be painted in accordance with Section 513 - Painting of the 1972 State of Vermont, Department of Highways, Standard Specifications for Highway and Bridge Construction. Payment for painting will be included in the lump sum bid for Item 513.20, Painting New Structure. All structural steel shall be cleaned prior to shop painting using any method specified in Section 513.03, Surface Preparation.



SHEAR CONNECTOR DETAILS
Scale 1"=1'-0"



NORTHBOUND FRAMING PLAN
Scale 1"=10'

Q Brg Abut #4
NB Sta. 570+91.50
Fn. Gr. 885.69

End Bridge
Back of Abut. #4
NB Sta. 570+94.30
Fn. Gr. 885.75
Exp. End

Q Brg Abut #3
NB Sta. 569+56.50
Fn. Gr. 887.21

Begin Bridge
Back of Abut. #3
NB Sta. 569+53.70
Fn. Gr. 887.16
Fixed End

(RE - ADVERTISED)

BENNINGTON - MT TABOR
BF BPNT (16)
PROJECT BRIDGE 16N&S
SHEET 16 OF 23
FOR INFORMATION ONLY

STATE OF VERMONT
DEPARTMENT OF HIGHWAYS

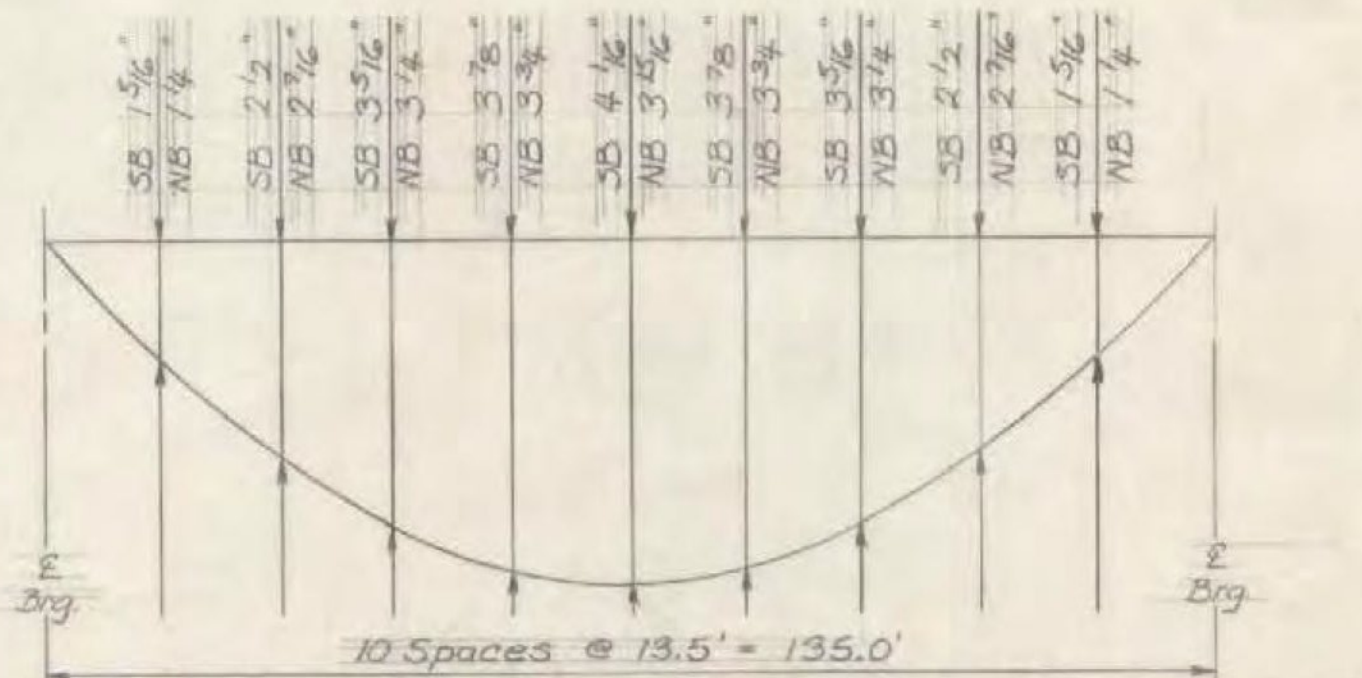
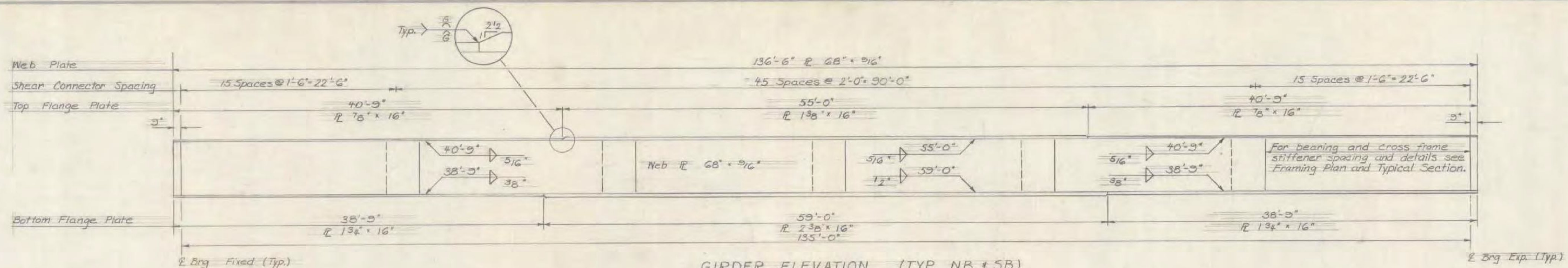
PROJECT BENNINGTON
TOWN OF BENNINGTON

ROAD NO. ART US 7 STA. 570+23
ARTERIAL US 7 OVER RAMP L

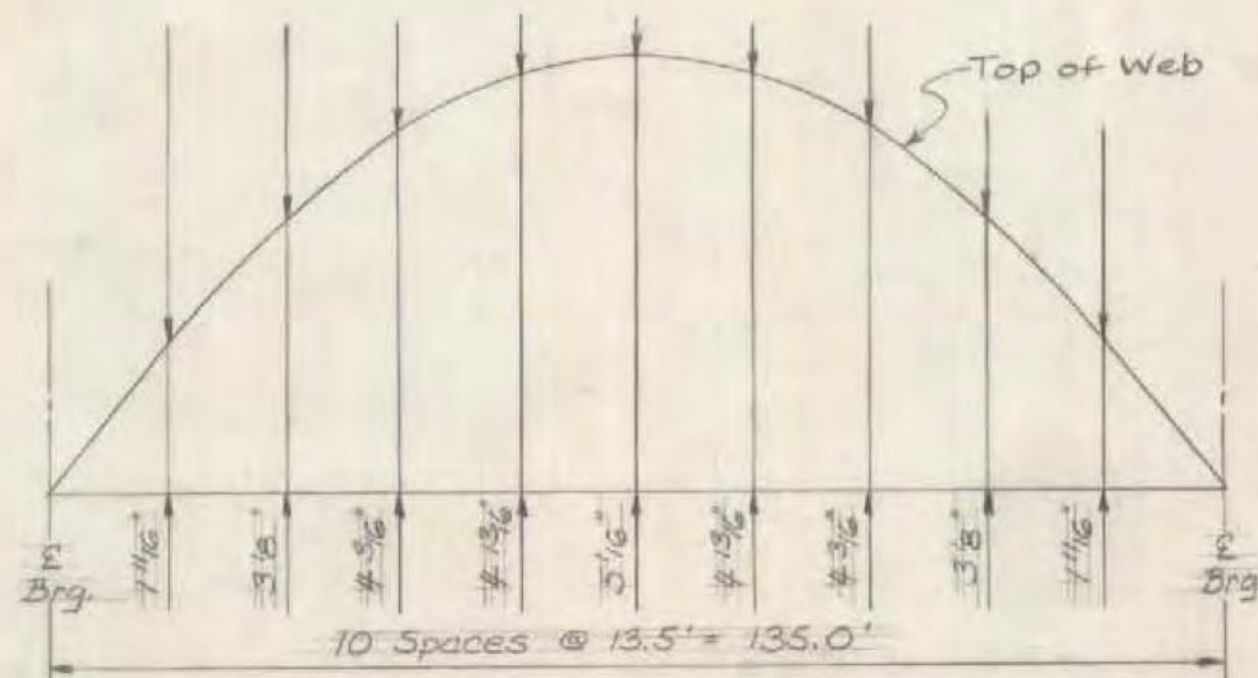
FRAMING PLAN

SCALE AS SHOWN

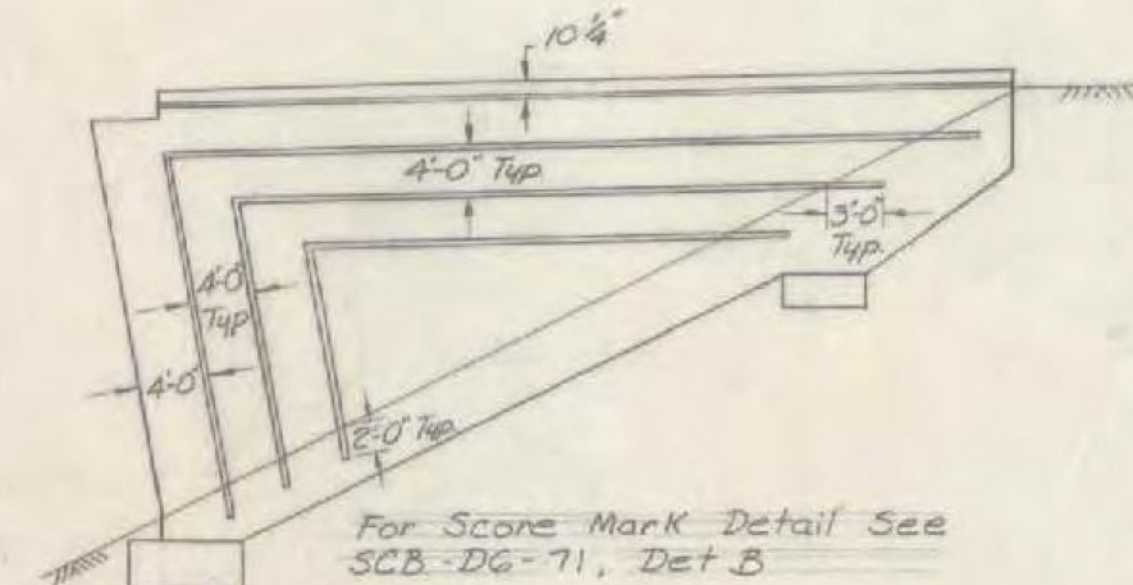
SECTION SUPERVISOR: E. W. Bolkow BETA
E. WAIBEL, OUELLETTE
DRAWN BY: GARCIA CHECKED BY: E. WAIBEL
PROJECT No. DP-BE 019-1(12)
SHEET 202 OF 480 BR-5505



Due to weight of Girder, Bracing, Slab, Curb, Railing and Pavement
DEAD LOAD DEFLECTION DIAGRAM
 SCALE: Horizontal 1"=20'; Vertical 1"=2"

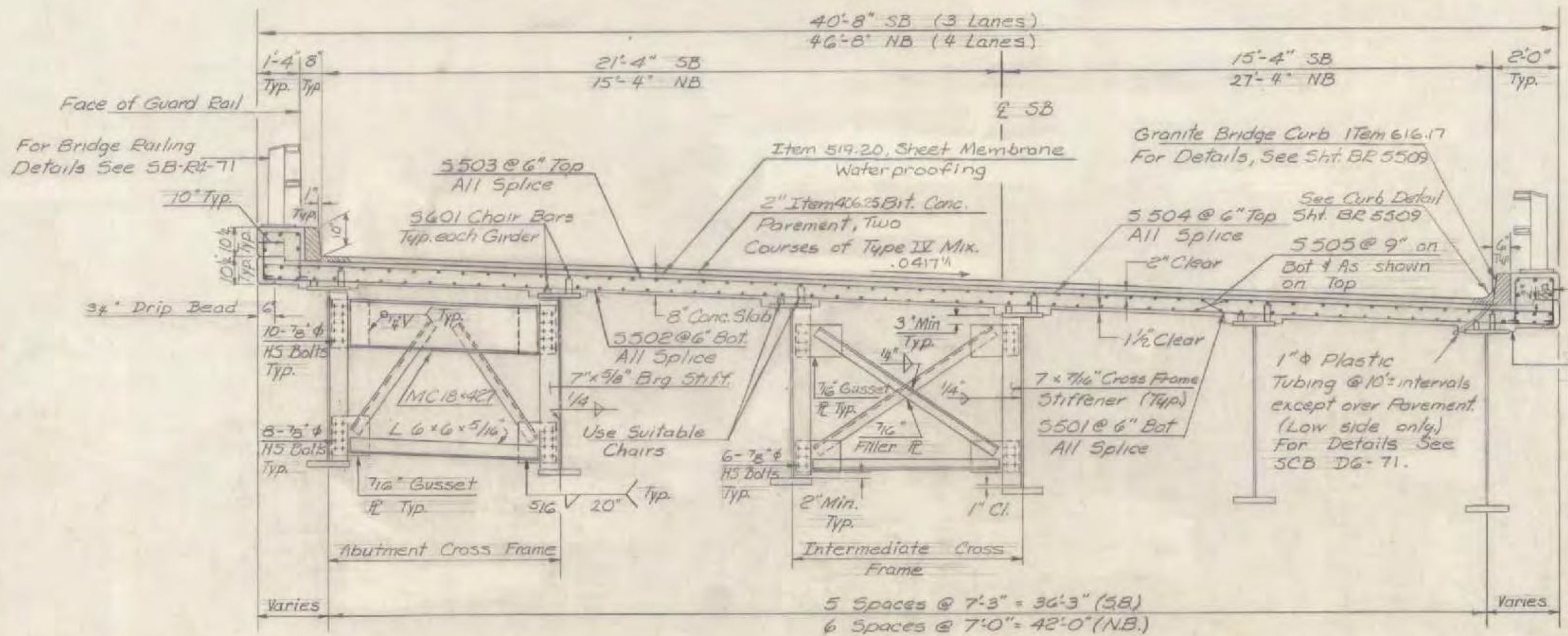


CAMBER DIAGRAM (TYP)
 SCALE: Horizontal 1"=20'; Vertical 1"=2"



SCORE MARK DETAIL 3
 Not to Scale
 Typical all Wingwalls

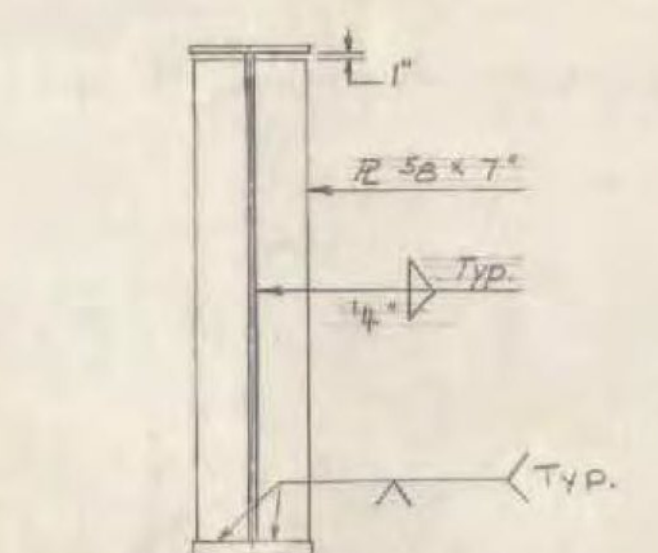
(RE - ADVERTISED)
 BENNINGTON - MT TABOR
 BF BPNT (16)
 PROJECT BRIDGE 16N&S
 SHEET 17 OF 23
 FOR INFORMATION ONLY



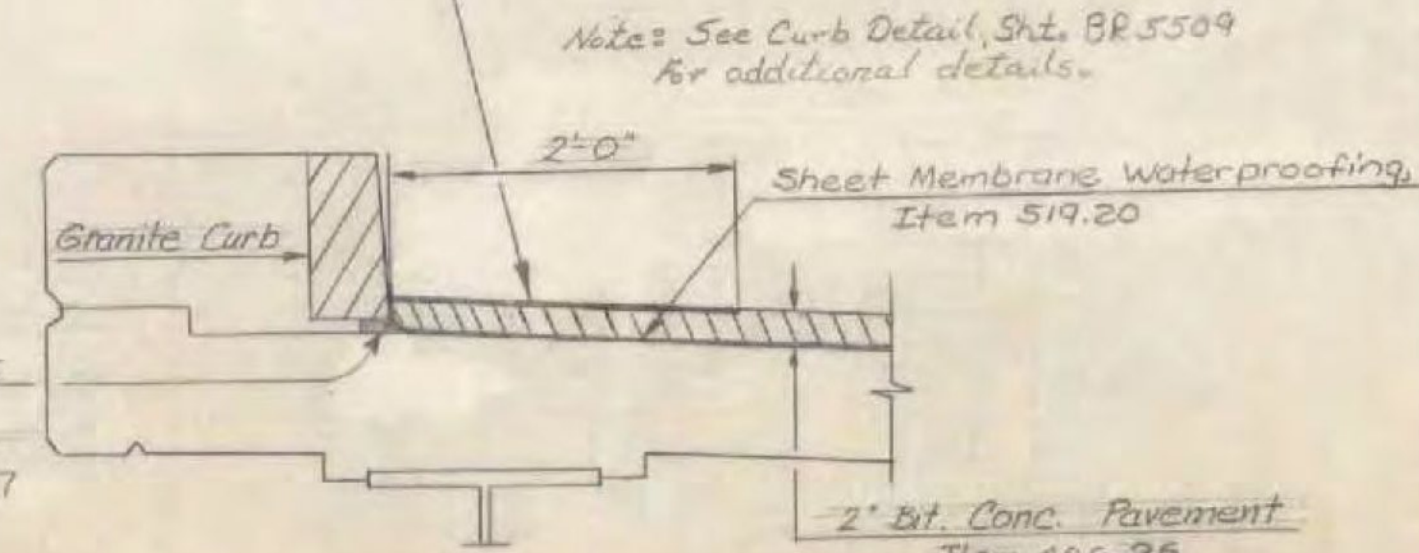
TYPICAL SECTION
 Scale 3/8" = 1'-0" SB
 Not to Scale NB

REVISION: REPLACED TAR EMULSION ON 2' STRIP NEXT TO THE CURB WITH EMULSIFIED ASPHALT.
 Rev. By: GSR
 Chd. By: DCW
 DATE 8-4-78

Revised Stage III curb details.
 Rev. By: EOB
 Chd. By: GSR
 Date 9-73



ABUTMENT BEARING STIFFENER
 Scale 1/2" = 1'-0"

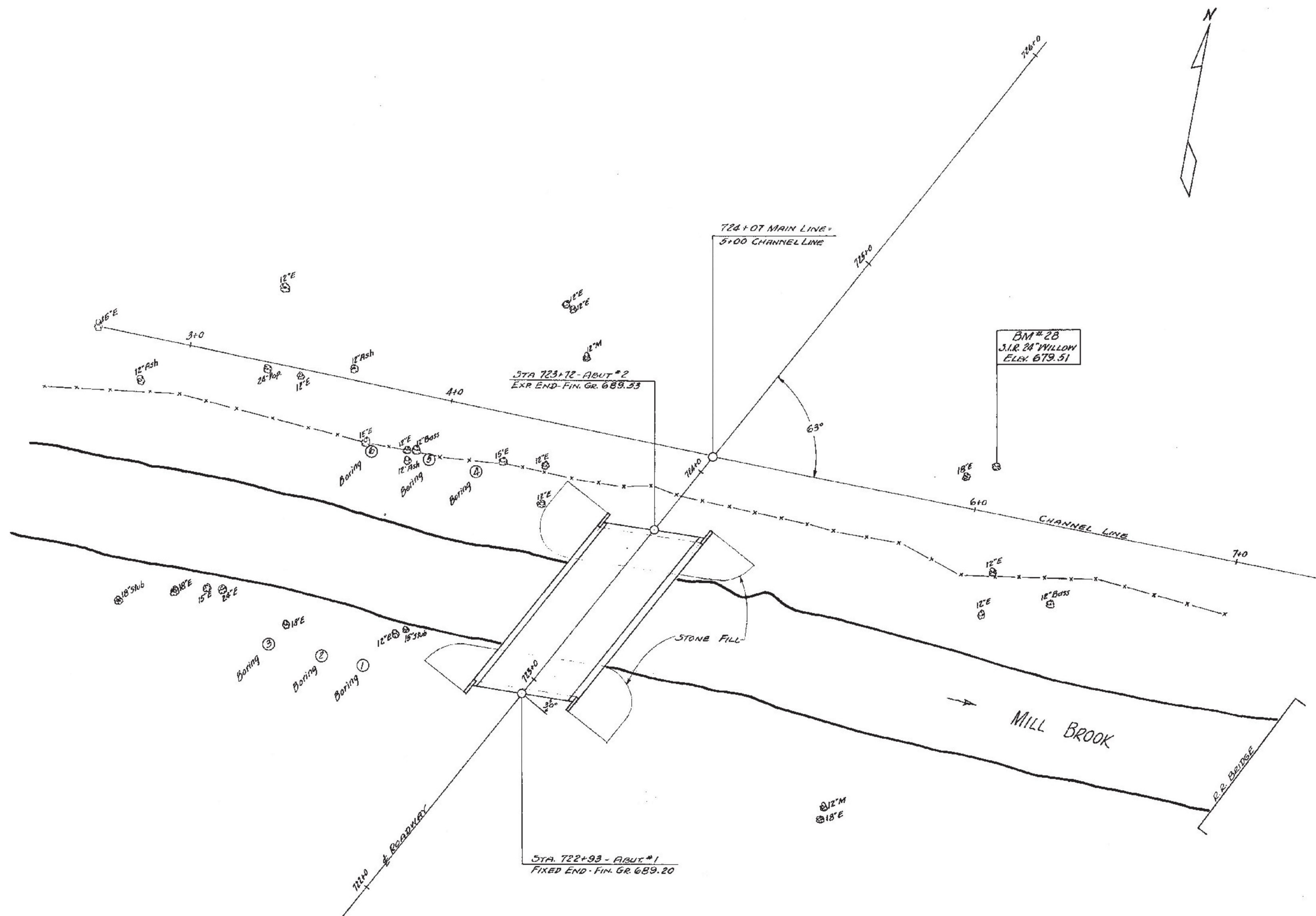


MEMBRANE WATERPROOFING DETAIL
 Scale: 1" = 1'-0"

NOTES:

- Girders shall be cambered as shown in the Camber Diagram.
- All structural Steel shall be ASTM A36.
- Bearing stiffeners shall be vertical in the erected position; intermediate cross-frames shall be perpendicular to the flanges.
- Ends of girders shall be vertical in the erected position.
- Clip 1"x1" on inside corners of all stiffeners.
- All cross frame angles are L 4"x4"x3/8 except as noted. All angles shall be welded to their connections with 1/8 inches of 1/4 inch fillet weld at each end except as noted.
- Field bend transverse bars at curb line, as necessary, to maintain minimum vertical clearance in curb area.

STATE OF VERMONT
 DEPARTMENT OF HIGHWAYS
 PROJECT BENNINGTON
 TOWN OF BENNINGTON
 ROAD No. ART US 7 STA. 570+23
 ARTERIAL US 7 OVER RAMP L
 TYPICAL SECTION, GIRDER ELEVATION,
 SCORE MARK DET.
 SCALE AS SHOWN
 SECTION SUPERVISOR: E.W. Balkom Betz +
 E. WAIBEL / OUELLETTE
 DRAWN BY: / GARCIA CHECKED BY: E. WAIBEL
 PROJECT No. DP-BF 019-1(12)
 SHEET 209 OF 480 BR-5506

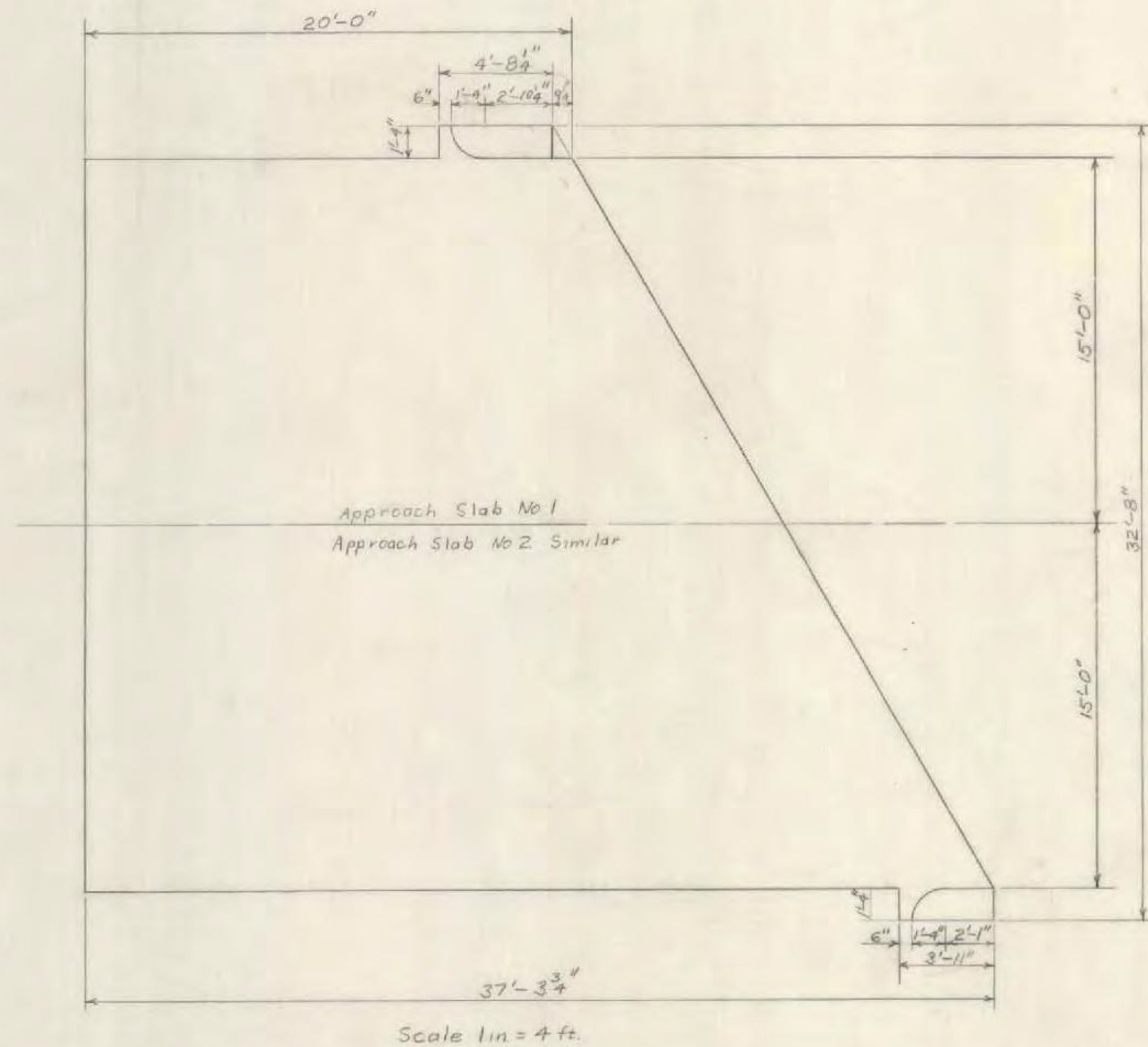


(RE - ADVERTISED)

BENNINGTON - MT TABOR
 BF BPNT (16)
 PROJECT BRIDGE 56C
 SHEET 18 OF 23
 FOR INFORMATION ONLY

PLAN
 MOUNT TABOR - DANBY F-019-2(1)
 SCALE: 1"=20.0'

SHEET 33 OF 188



FOR SUPERSTRUCTURE DETAILS
SEE STANDARD SHEETS
SCB-30-60
SCB-D-60
SB-56-60
SB-20-60
SB-22-60

SUPERSTRUCTURE QUANTITIES

Item No.	Item	Unit	Net	Overrun	Total	Final
31B	Tar Emulsion For Bridge Floors	Gal	105		105	105
361-B	Bituminous Concrete Pavement	Tons	22	22	44	* 0
401-B	Concrete Class B Mod.	C.Y.	22	22	44	98
402	Reinforcing Steel	lb	See Reinf. Steel Schedule			
403	Spiral Reinforcing (2320*)	LS	1		1	1
404-A	Structural Steel	lb	2000	2000	4000	97,896
556C	Granite Bridge Curb	LF	158		158	158
572	Bridge Railing	LF	148		148	148

Note: For Approach Slab details see Standard Sheet SB-AS-30-stew 57
Approach Slab Crown and Curb to Conform with Bridge Std. SCB-30-60.
Use 2" Bic. Conc. Pav. Item 361-B

Item No.	Item	Unit	Approach Slab No. 1				Approach Slab No. 2			
			Net	Overrun	Total	Final	Net	Overrun	Total	Final
31B	Tar Emulsion for Bridge Floors	Gal	38		38	38		38	38	
361-B	Bituminous Concrete Pavement	Tons	22	22	44	* 0	22	22	* 0	
401-B	Concrete Class B Mod.	C.Y.	22	22	44	34	22	44	34	
402	Reinforcing Steel	lb	See Reinf. Steel Schedule							
556C	Granite Bridge Curb	LF	8		8	8		8	8	

* Included in Roadway Quantity

SUMMARY OF BRIDGE QUANTITIES

Item No.	Item	Unit	Net	Overrun	Total	Final
106-A	CHAN. EXCAV. OF EARTH	C.Y.				
106-B	CHAN. EXCAV. OF ROCK	C.Y.				
106-C	UNCLASS. CHAN. EXCAV.	C.Y.	22	22	44	574
107	STRUCT. EXCAV.	C.Y.	22	22	44	104
401-B	CONC. CLASS B (MOD.)	C.Y.	22	22	44	234
402	REINF. STEEL	LBS	See Reinf. Steel Schedule			
407	ASPHALTIC-ASB. COATING	S.Y.	8		8	8
502-B	TREATED TIMBER PILING	LF	22	22	44	1,461
503	SPICES FOR STEEL PILING	EA				
504	STEEL PILING	LF				
502-A	UNTREATED TIMBER PILING	LF				
31B	Tar Emulsion For Bridge Floors	Gal	181		181	181
361-B	Bituminous Concrete Pavement	Tons	22	22	44	* 0
403	Spiral Reinforcement (2320*)	LS	1		1	1
404-A	Structural Steel	lb	2000	2000	4000	97,896
501	Furnishing Equip. For Driving Piles	LS	1		1	1
521	Stone Fill (Heavy Type)	CY	22	22	44	557

(RE-ADVERTISED)

BENNINGTON - MT TABOR
BF BPNT (16)
PROJECT BRIDGE 56C
SHEET 19 OF 23
FOR INFORMATION ONLY

STATE OF VERMONT
DEPARTMENT OF HIGHWAYS

TOWN OF MOUNT TABOR - DANBY

ROUTE No. U.S. 7 LOG STA.

APPROACH SLAB

SUPERSTRUCTURE

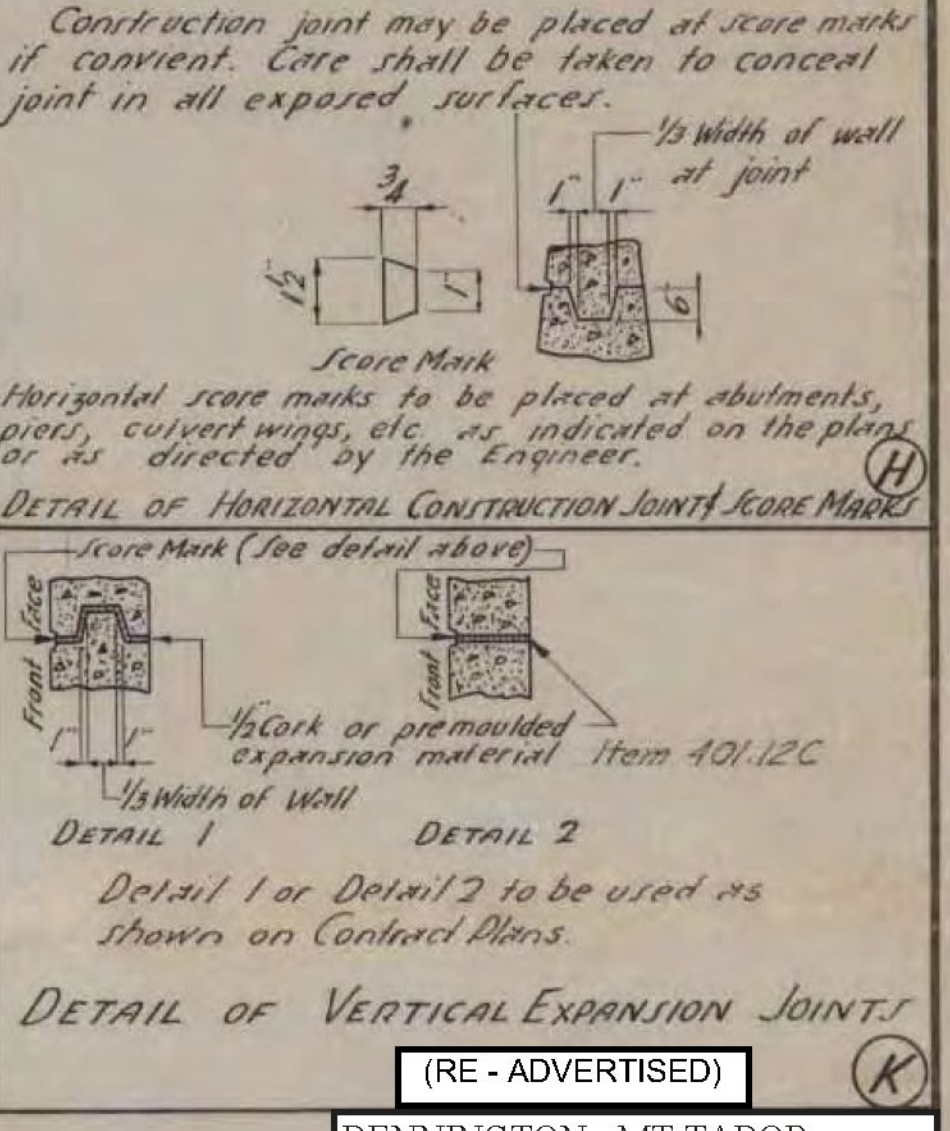
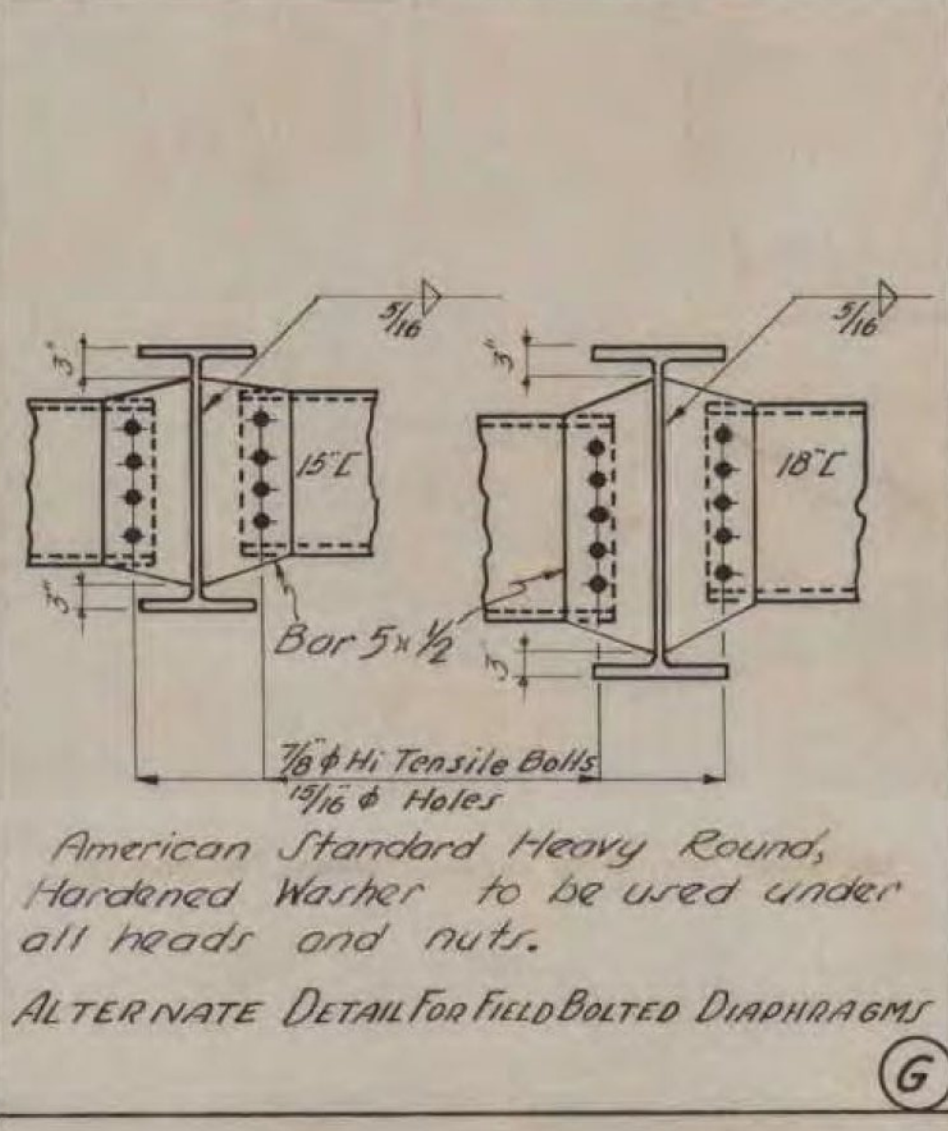
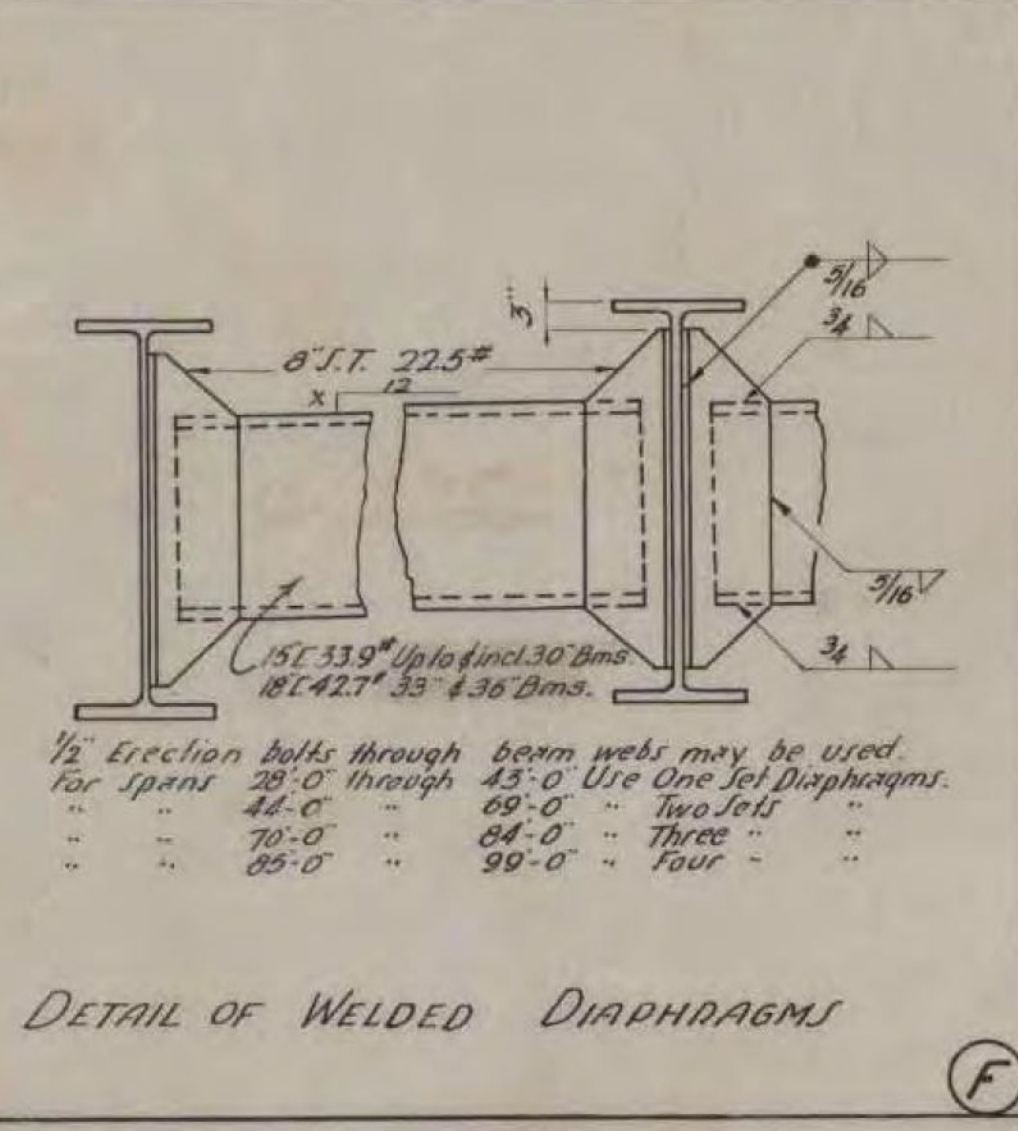
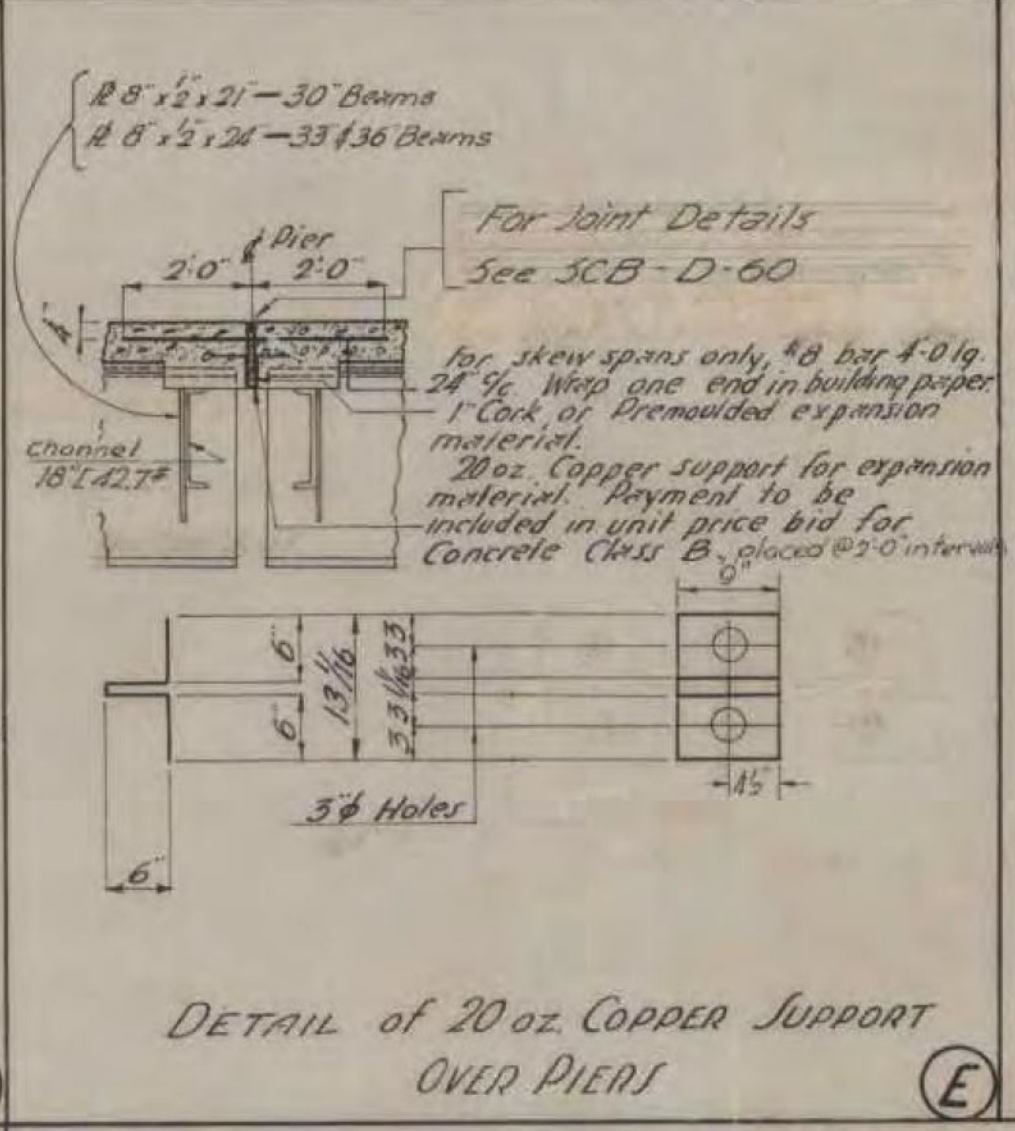
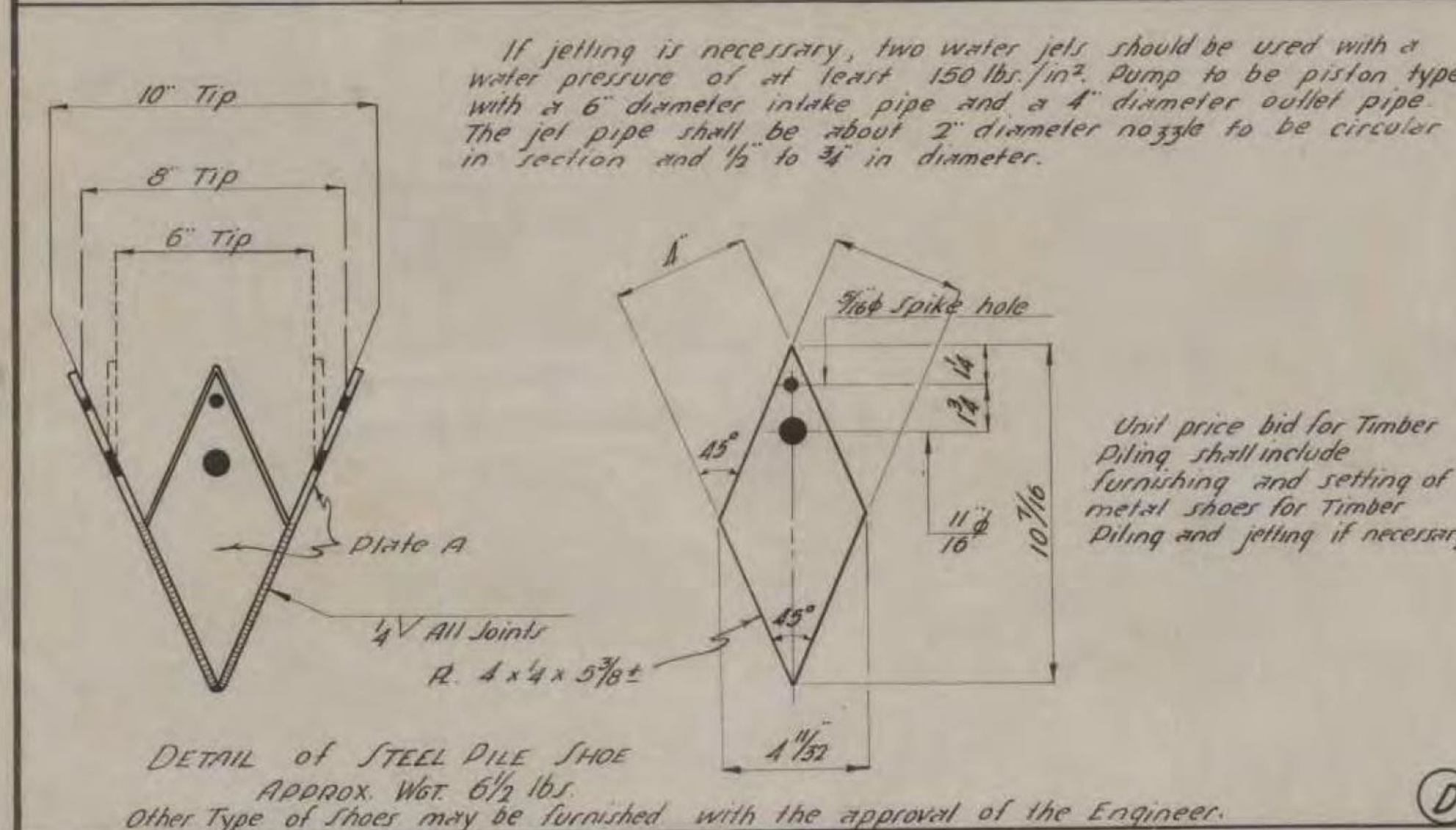
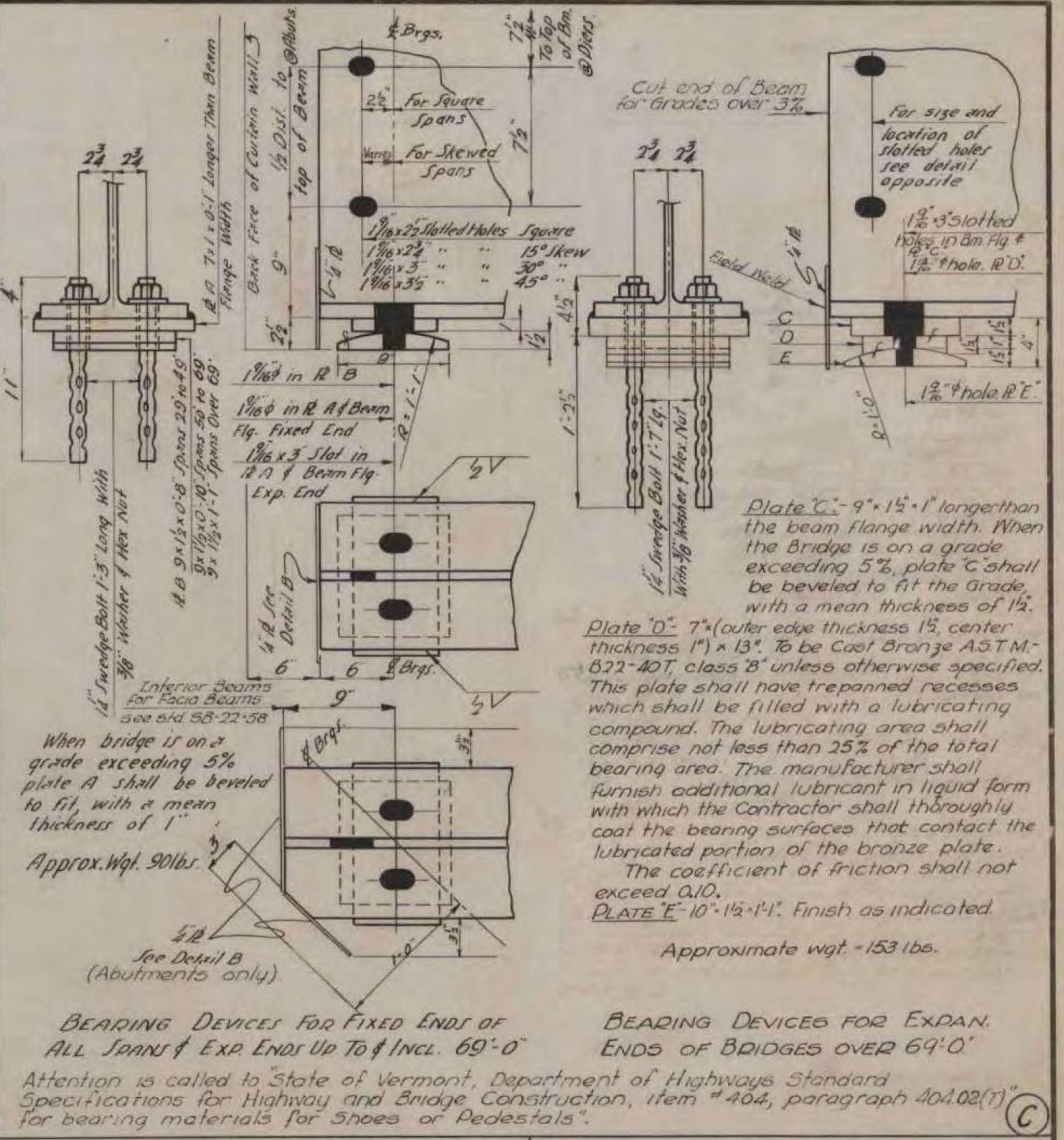
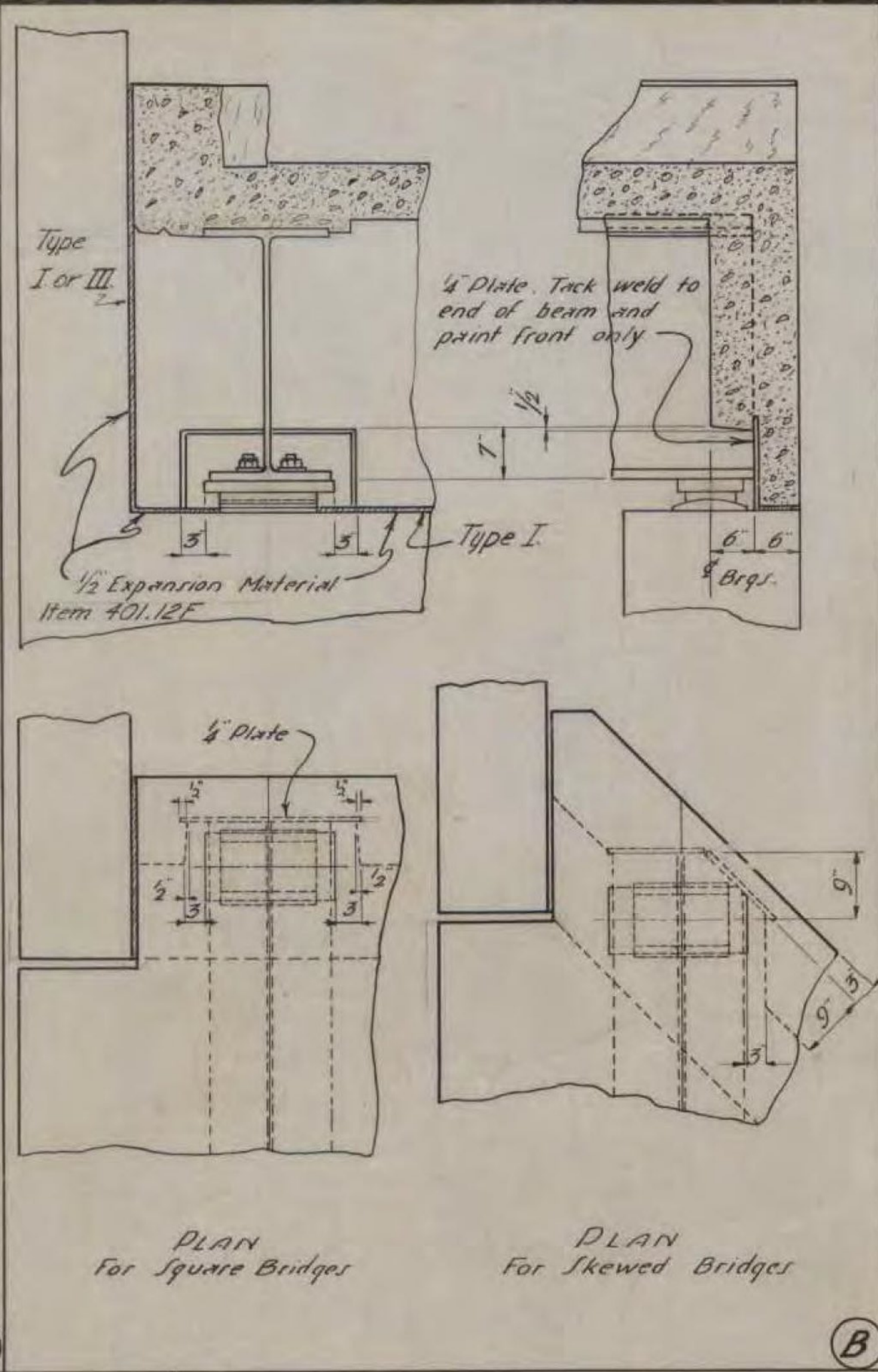
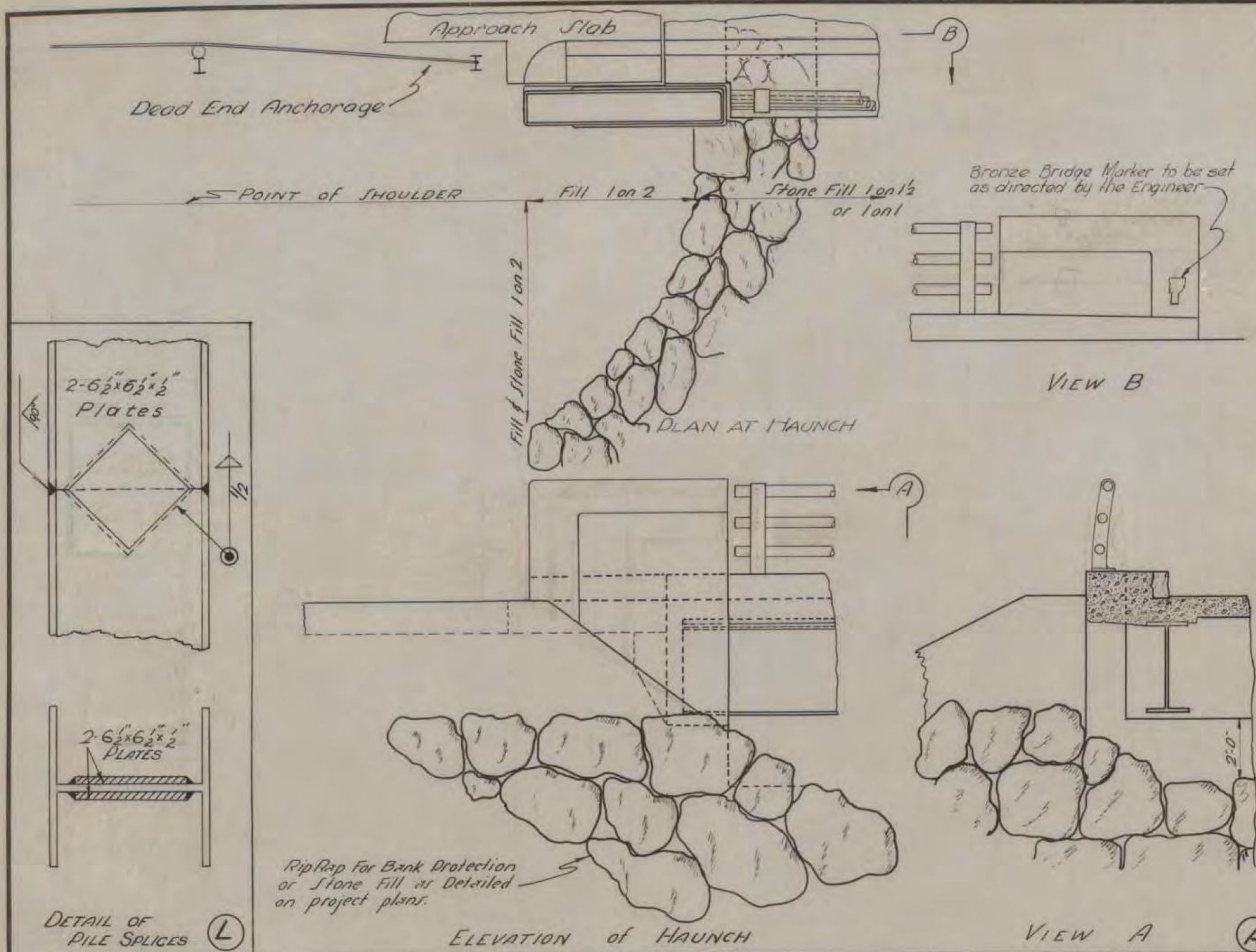
SCALE As Noted

SURVEYED BY

DRAWN BY AGC CHECKED BY FWB 11/1/60

PROJECT No. F-019-2(1)

SHEET 34 OF 188



CONSTRUCTION DETAILS FOR W F BEAM BRIDGES

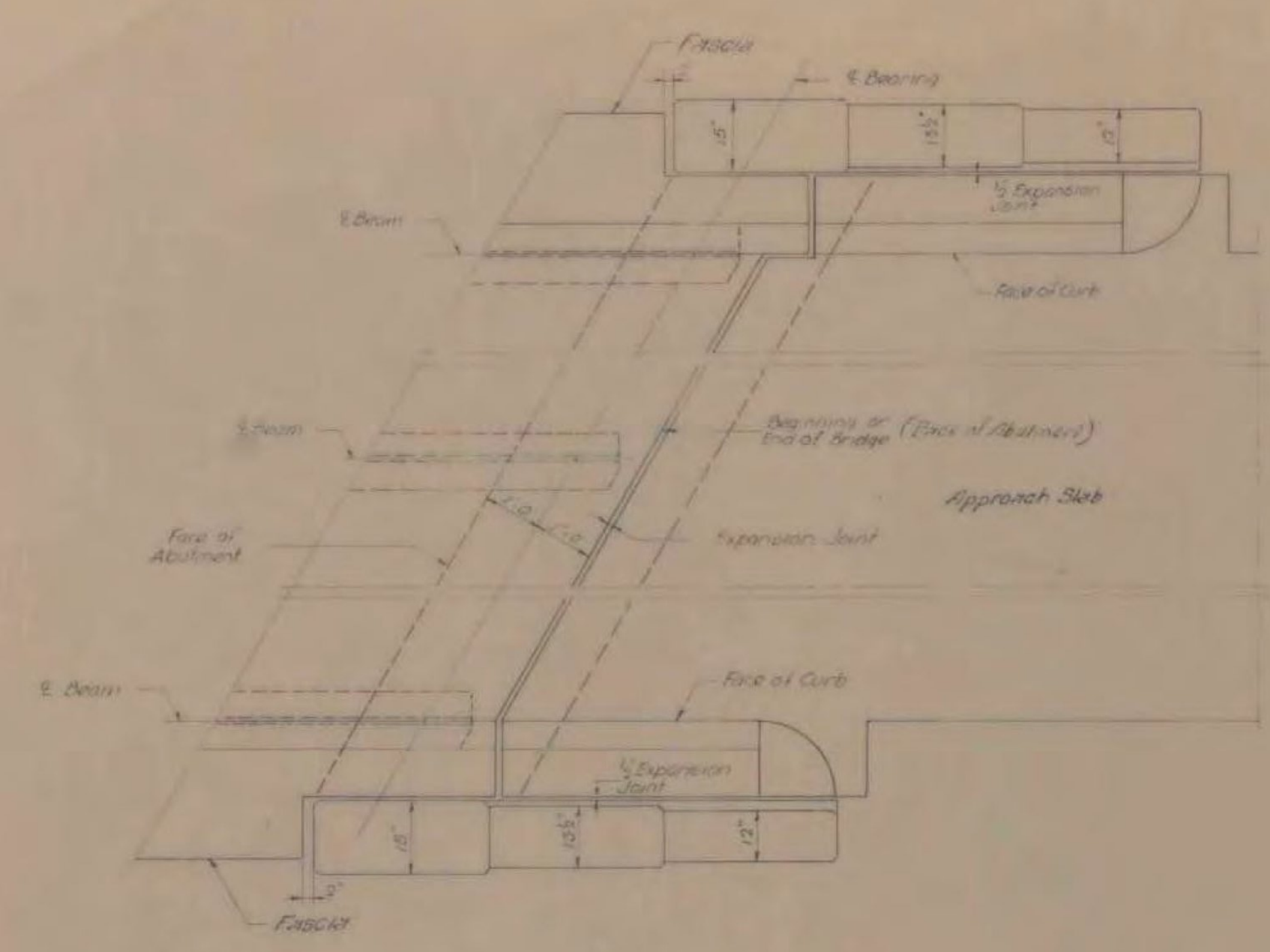
DEPARTMENT OF HIGHWAYS
STANDARD STRUCTURES

SB-20-60

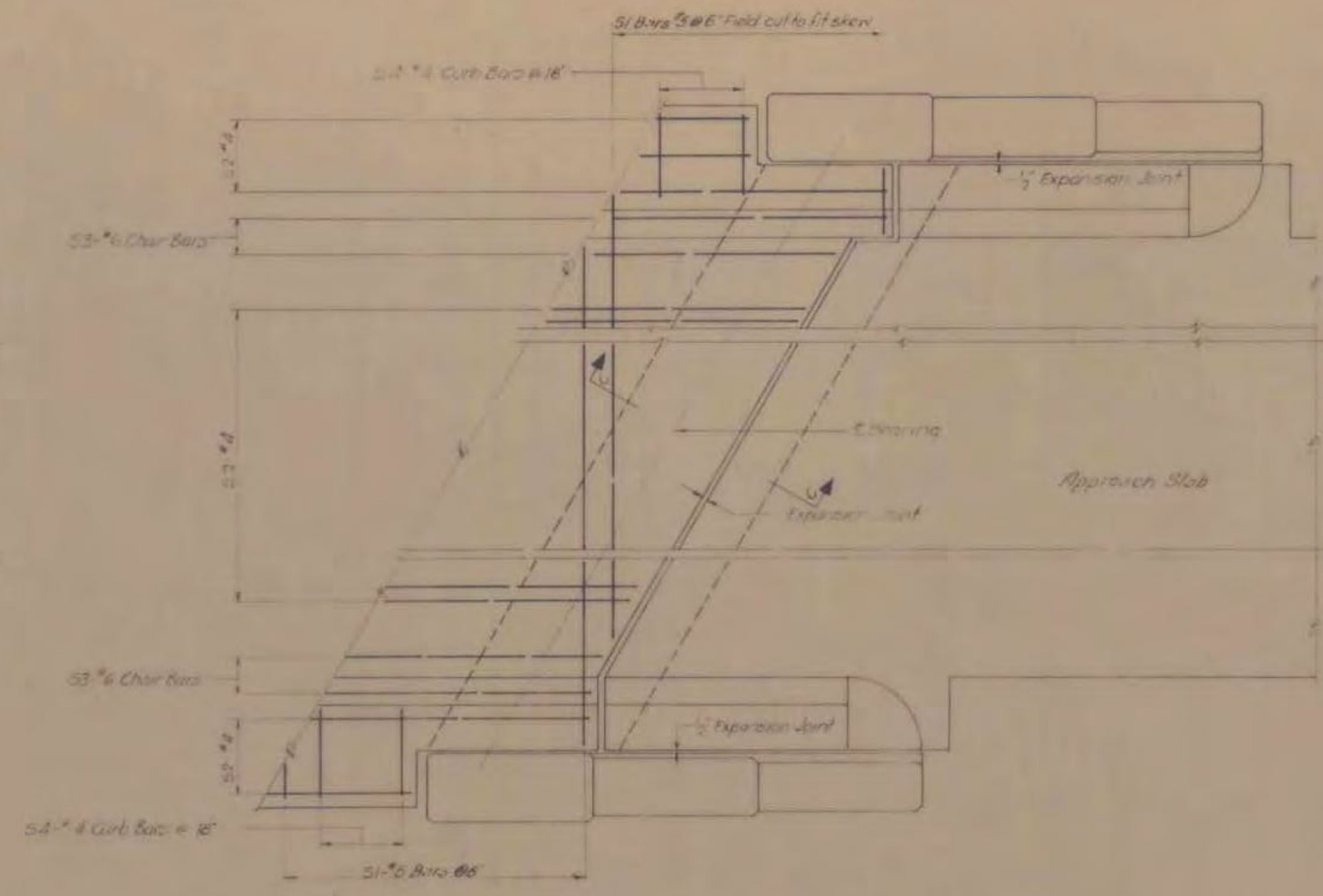
(RE - ADVERTISED)

BENNINGTON - MT TABOR
BF BPNT (16)
PROJECT BRIDGE 56C
SHEET 20 OF 23
FOR INFORMATION ONLY

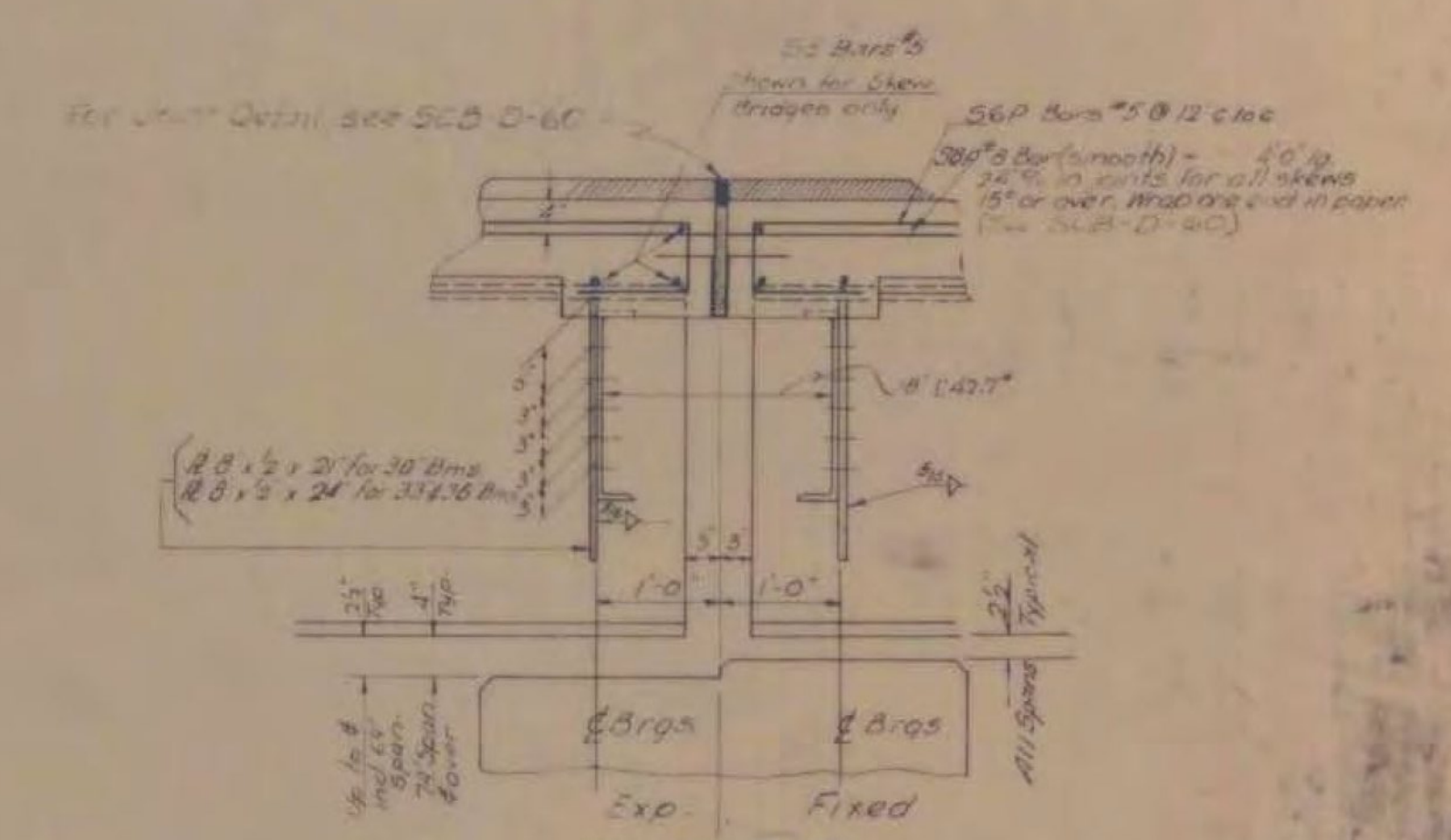
GENERAL NOTES



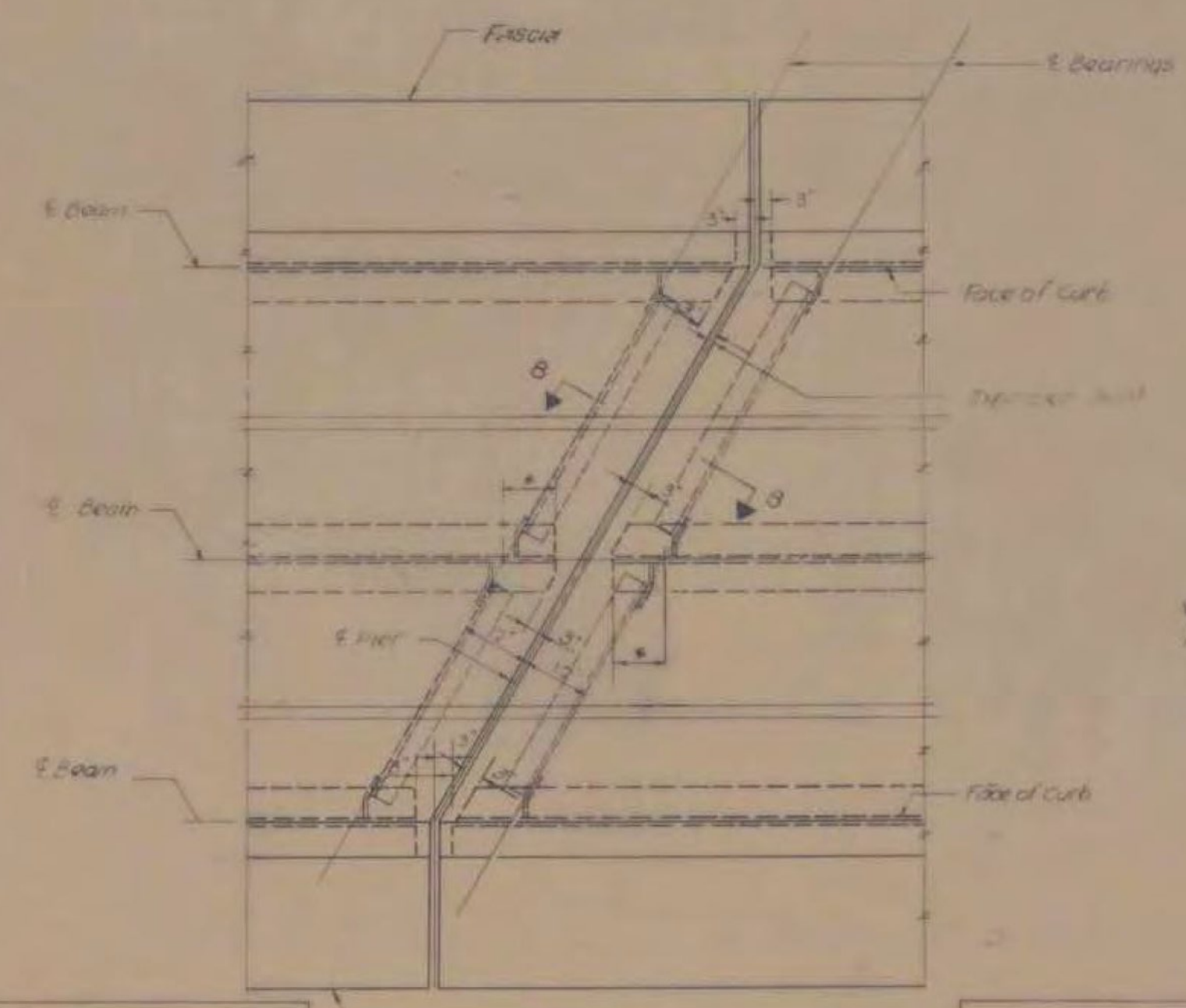
PLAN AT ABUTMENT
Scale 1/2" = 1'-0"



REINFORCEMENT LAYOUT AT ABUTMENT
Scale 1/2" = 1'-0"

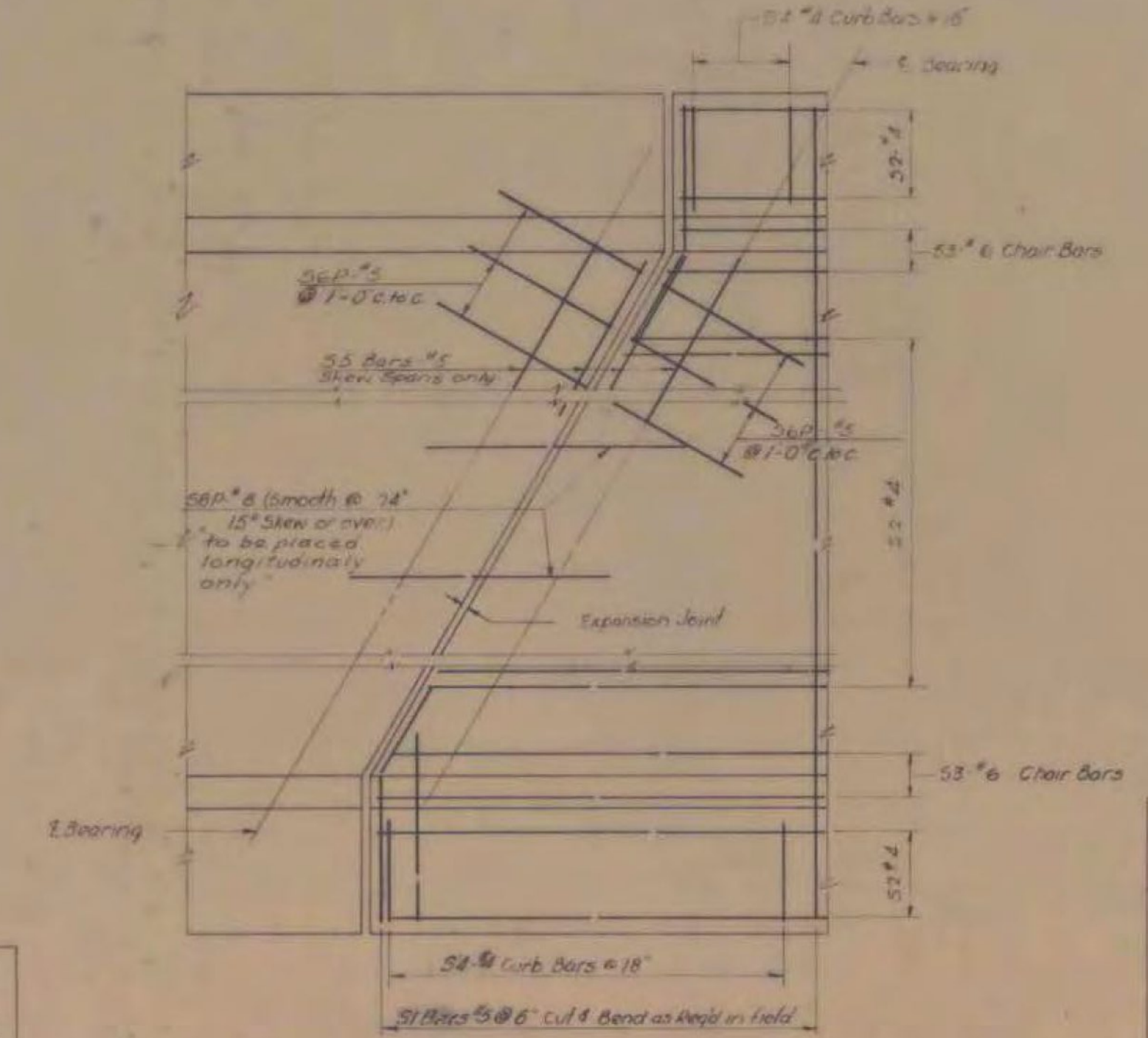


SECTION B-B
Scale 1/2" = 1'-0"

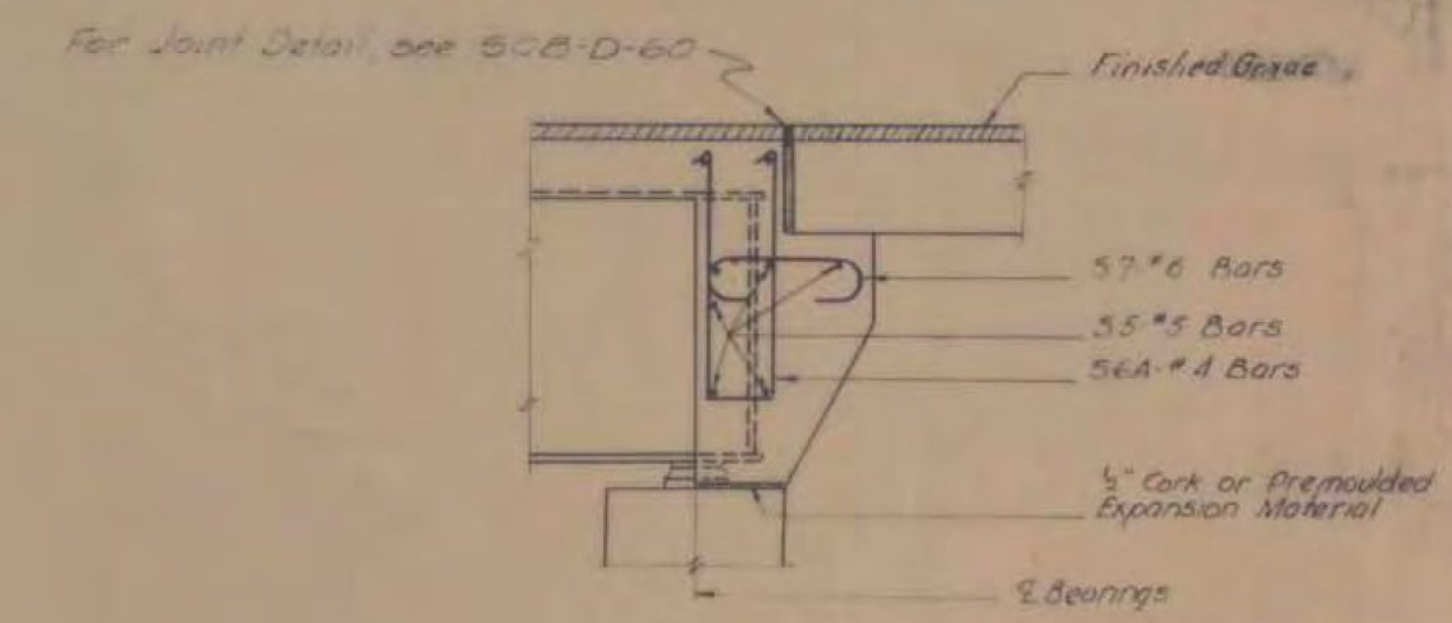


PLAN AT PIER
Scale 1/2" = 1'-0"

* This dimension varies according to the skew See Standards SCB-D-60



REINFORCEMENT LAYOUT AT PIER
Scale 1/2" = 1'-0"



SECTION C-C
Scale 1/2" = 1'-0"

Revisions & Corrections:
Remove #4 Bar Sec BB 7/26/60
Added General Note 10/6/60
Corrected Joint Detail 1-2-60
Added note to 58 bars 3-2-61

Drawn by: H.W.S. June 1960
Traced by: H.W.S. June 1960
Checked by: R.S.H. & R.T.B. June 1960
Corrected: 13 July 1960
Approved: 13 July 1960
Chief Engineer

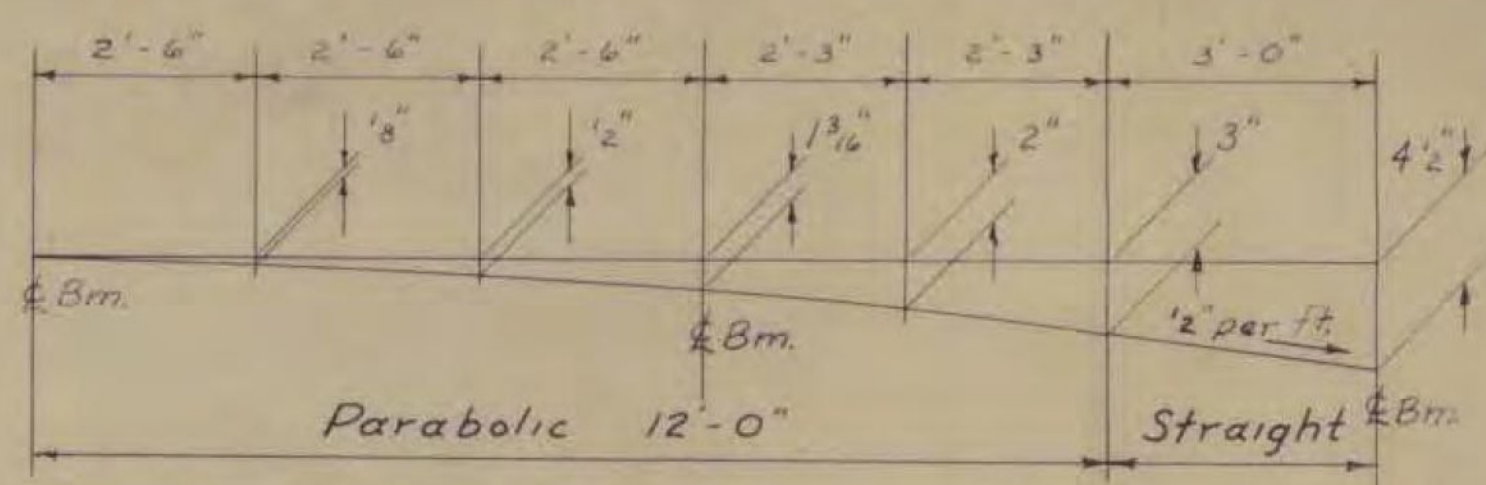
DETAIL OF EXPANSION JOINT OVER PIERS AND AT ABUTMENTS

DEPARTMENT OF HIGHWAYS
STANDARD STRUCTURES

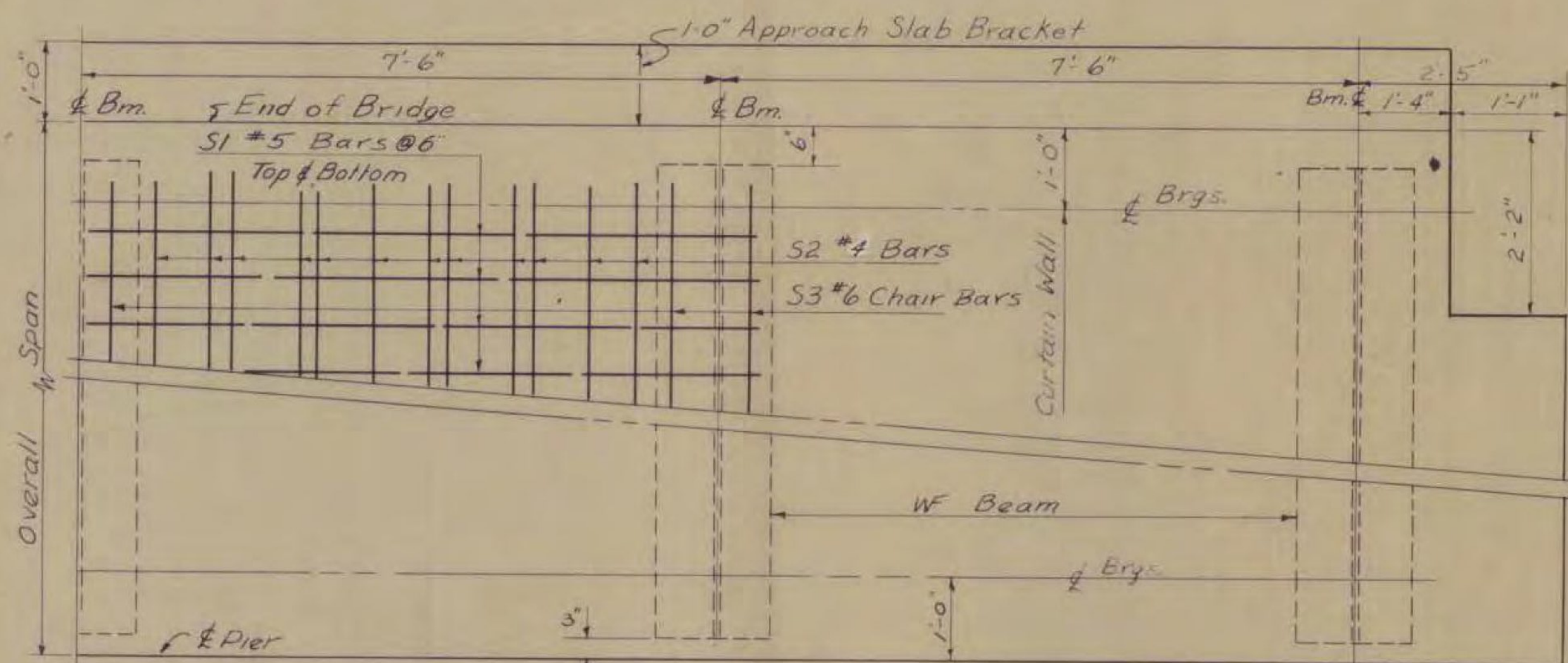
BENNINGTON - MT TABOR
BF BPNT (16)
PROJECT BRIDGE 56C
SHEET 21 OF 23
FOR INFORMATION ONLY

SB-22-60

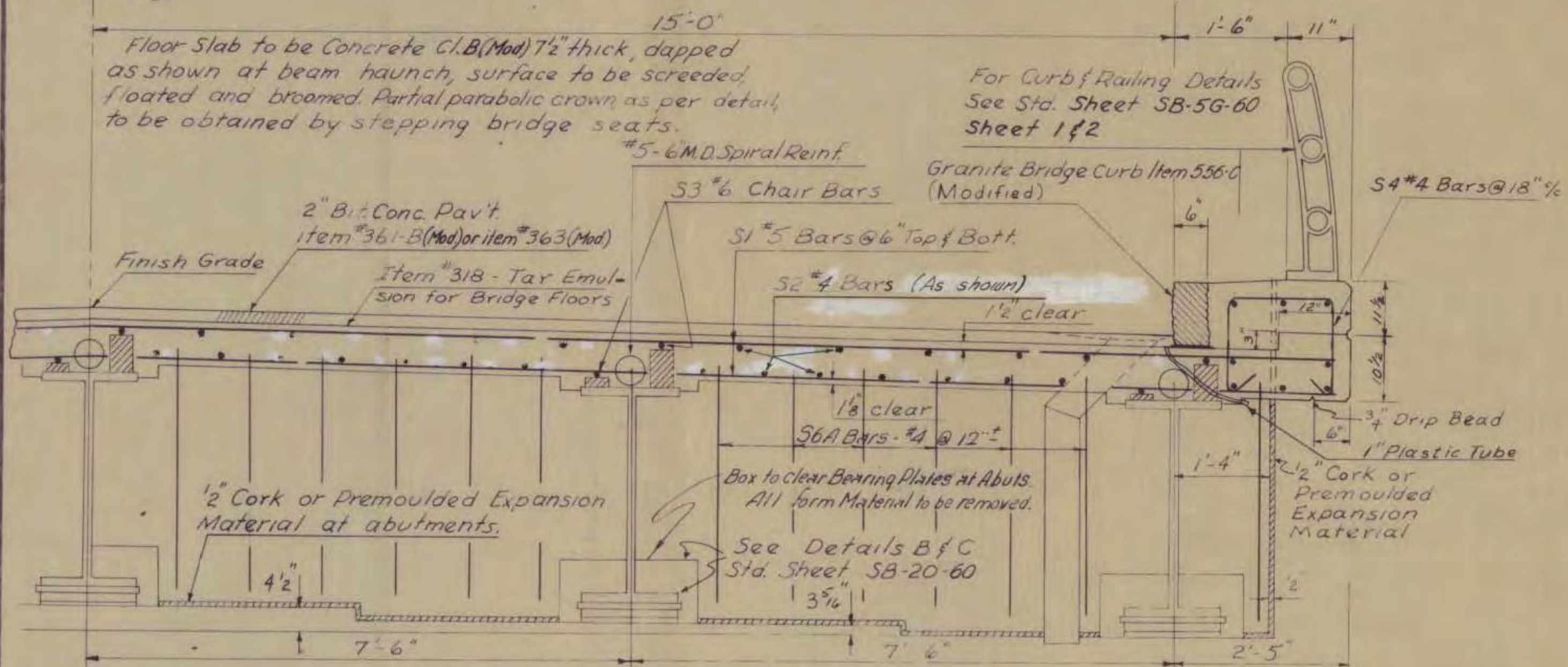
(RE - ADVERTISED)



DETAIL OF PARTIAL PARABOLIC CROWN OF SLAB



HALF PLAN



TYPICAL HALF SECTION

TABLE OF QUANTITIES FOR SINGLE (SQUARE) SPAN

Span, Out to Out	99-0	94-0	89-0	84-0	79-0	74-0	69-0	64-0	59-0	54-0	49-0	44-0	39-0	34-0
Span, $\frac{1}{2}$ to $\frac{1}{2}$ Brngs.	97-0	92-0	87-0	82-0	77-0	72-0	67-0	62-0	57-0	52-0	47-0	42-0	37-0	32-0
Length of Bms.	98-0	93-0	88-0	83-0	78-0	73-0	68-0	63-0	58-0	53-0	48-0	43-0	38-0	33-0
Size W Beam	36WF300	36WF300	36WF300	36WF245	36WF194	36WF170	36WF160	36WF150	36WF150	36WF150	36WF150	36WF150	33WF130	30WF116
Lgth. of Size Bot. Cover $\frac{1}{2}$	66'-9" ¹⁹ 18'-15" ₁₂	59'-8" ¹⁹ 18'-11" ₁₂	52'-8" ¹⁹ 14'-11" ₁₂	51'-10" ¹⁹ 14'-11" ₁₂	54'-0" ¹⁹ 14'-11" ₁₂	51'-9" ¹⁹ 14'-11" ₁₂	46'-3" ¹⁹ 13'-7" ₁₂	39'-6" ¹⁹ 10'-7" ₁₂	32'-6" ¹⁹ 10'-7" ₁₂	23'-0" ¹⁹ 9'-4" ₁₂				
" " " Top " "	63'-6" ¹⁹ 12'-12" ₁₂													
Dead Load Deflection	3"	2 3/4"	2 3/8"	2 1/4"	1 7/8"	1 1/2"	1 1/4"	1"	7/8"	5/8"	1/2"	3/8"	1/4"	1/4"
Mean Dia. of Spiral							5 1/8"	6"					Non Composite	
Spiral Pitch 0'-10' from Brng.	Double @ 5 1/2"	Double @ 5 1/2"	Double @ 6"	Double @ 5 1/2"	Double @ 5"	Double @ 5"	Double @ 5"	Double @ 5"	Double @ 5 1/2"	Double @ 5 1/2"	Double @ 5 1/2"	Double @ 5 1/2"	Double @ 5 1/2"	Double @ 5 1/2"
" " 10'-20' or $\frac{1}{2}$ Span	Double @ 6 1/2"	Double @ 6 1/2"	Double @ 7"	Double @ 6 1/2"	Double @ 6"	Double @ 6"	Double @ 6 1/2"	Double @ 6 1/2"	Double @ 6 1/2"	Double @ 7"	Double @ 7 1/2"	Double @ 7 1/2"	Double @ 8"	
" " 30'-40' or $\frac{1}{2}$ Span	5 1/2"	5 1/2"	5 1/2"	5 1/2"	6"	6"	7"	7 1/2"						
" " 40'- $\frac{1}{2}$ Span	7"	7"	8"	8"										
Length of $\frac{3}{4}$ " ϕ Studs (Alternate to Spirals)	(2 studs required per pitch, 6 1/2" long unless otherwise specified on the plans)													Non Composite
Tot. Struct. Steel (1 span) (lbs)	192,860	169,900	156,410	123,370	99,000	82,950	69,500	59,080	52,070	46,560	41,610	37,780	28,150	22,190
Reinforcing Bars - S1	376	376	356	336	316	296	276	256	236	216	196	176	156	136
" " - S2	192	192	192	192	192	192	192	128	128	128	128	128	128	64
" " - S3	30	30	30	30	30	30	30	20	20	20	20	20	20	10
" " - S4	128	120	114	108	100	94	88	80	74	68	60	54	48	40
" " - S5	16	16	16	16	16	16	16	16	16	16	16	16	16	16
" " - S6A	52	52	52	52	52	52	52	52	52	52	52	52	52	52
" " - S7	44	44	44	44	44	44	44	44	44	44	44	44	44	44
Tot. Weight - Reinf. Bars (lbs)	21,570	20,530	19,520	18,480	17,450	16,440	15,420	14,220	13,190	12,170	11,140	10,120	9,070	7,900
Approx. Wt. Spiral Reinf. (lbs)	2,550	2,520	2,280	2,370	2,320	2,190	2,090	1,960	1,690	1,550	1,430	1,300	1,170	1,040
Tot. Cu Yds. Conc. Class B (Mod) (6 yrs)	116	111	106	101	95	90	85	79	73	68	63	58	51	45
Tot. Wt. Bitum. Conc. Pavt (Mod) (Tons)	42	40	38	36	34	32	29	27	25	23	21	19	17	15
Tar Emulsion for Bridge Floors (Gals)	132	125	119	112	105	99	92	85	79	72	65	59	52	45
Approx. Quantity $\frac{3}{4}$ " ϕ Studs	3000	2900	2600	2700	2700	2500	2400	2250	1990	1810	1660	1510	1360	1210

REINFORCING STEEL SCHEDULE

Span	S1-#5 34'-4" Straight	S2-#4 33'-6" Str.	S3-#6 33'-6" Str.	S6A-#4 B & D Total Length	S4-#4 T.L. = 5'-3" B = 1'-6" D = 1'-6" C = 1'-5"	S6A-#4 T.L. Varies A=5" G=5" H=3" B D C=8" D=1'-0"
34				6'-6"		
39				7'-0"		
44				7'-6"		
49				7'-6"		
54				7'-6"		
59				7'-6"		
64				7'-6"		
69				7'-10"		
74				7'-10"		
79				8'-0"		
84				8'-0"		
89				8'-0"		
94				8'-2"		
99				8'-2"		

(RE - ADVERTISED)
 BENNINGTON - MT TABOR
 BF BPNT (16)
 PROJECT BRIDGE 56C
 SHEET 22 OF 23
 FOR INFORMATION ONLY

Revisions & Corrections
 Revised July 1962

Drawn By: R.S.H. June 1960
 Traced By: R.S.H. June 1960
 Checked By: R.T.B. & R.S.H. July 1960
 Correct: 13 July 1960
 Bridge Engineer
 Approved: 13 July 1960
 Chief Engineer

TYPICAL SECTION, PLAN VIEW, & QUANTITIES
 30 FOOT ROADWAY W F BEAM BRIDGES
 34-44 NON COMPOSITE, 49-99 COMPOSITE
 FOR ADDITIONAL DETAILS SEE STANDARD SCB-D-60

DEPARTMENT OF HIGHWAYS
 STANDARD STRUCTURES
SCB-30-60
 267

GENERAL NOTES

The final cost of field joint shall be green, unless otherwise directed by the Engineer. Quantities given in accompanying standards are for a single span, square bridge. These are net quantities.

For skewed bridges: transverse bars shall be furnished as for square spans; bars shall be cut in the field to fit skewed end and cut-off bars used at opposite end of span; the 55 bars shall be lengthened and the number of 56A and 57 bars increased; the 56P bars are to be used at piers only; increase the beam lengths as indicated on this sheet and 5.B-22-60; for variation in treatment of cut-off for interior and exterior beams see details on this sheet and standard 5.B-22-60.

All materials and construction shall conform to the State of Vermont, Department of Highways, Standard Specifications for Highway & Bridge Construction, dated January 1956, and the A.A.S.H.O. specifications date 1961. Design is for A20-516-44 Standard Specifications Article 1.2.8.

For location of fixed and expansion bearings, see the Contract Plans. In general the fixed end bearing device is on the down grade end of the span. For details of bearing devices, see standard 5.B-20-60 detail C.

Intermediate diaphragms shall be 15" C 33.9* for 30' beams and 18" C 42.7* for 33' and 36' beams. On skewed spans, the diaphragms shall be spaced at equal intervals between adjacent beams. For details of diaphragms, see standard 5.B-20-60 detail F or G.

The welding of cover plates shall be done in such a manner that no internal stresses are introduced into the beam flanges. When a cover plate is wider than a beam flange, the weld is to be omitted one inch (1") either side of the intersection of the cover plate and the edge of the beam flange. All welds on cover plates shall be continuous fillets of size noted.

Scuppers are to be omitted over roadways and sidewalks under a bridge; place the scuppers a minimum of 2'-0" outside of shoulder or back of sidewalk, but not within 4'-0" of face of Abutment or Pier. On Super-elevated bridges, scuppers are placed on the low side only. Payment for scuppers shall be under item #404-51eal.

All exposed edges of concrete shall be chamfered 1" unless otherwise indicated on the plans.

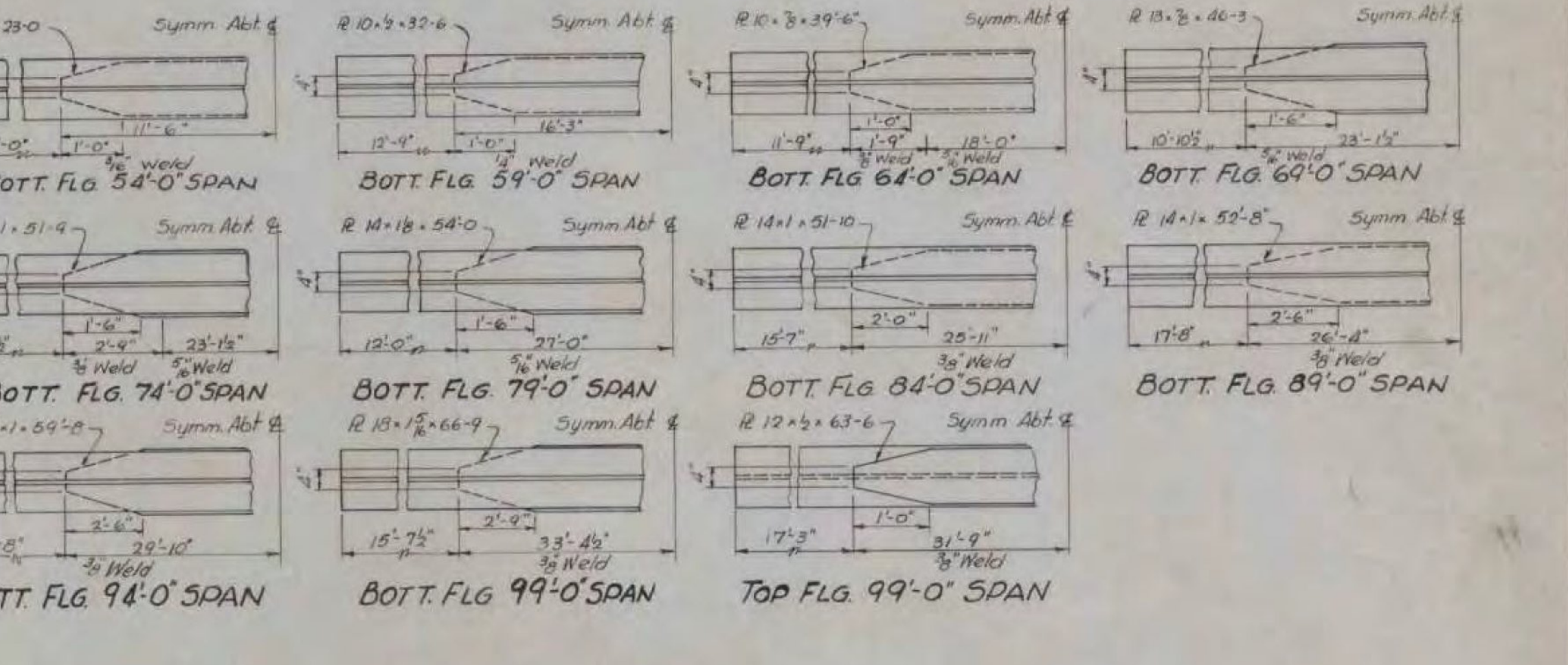
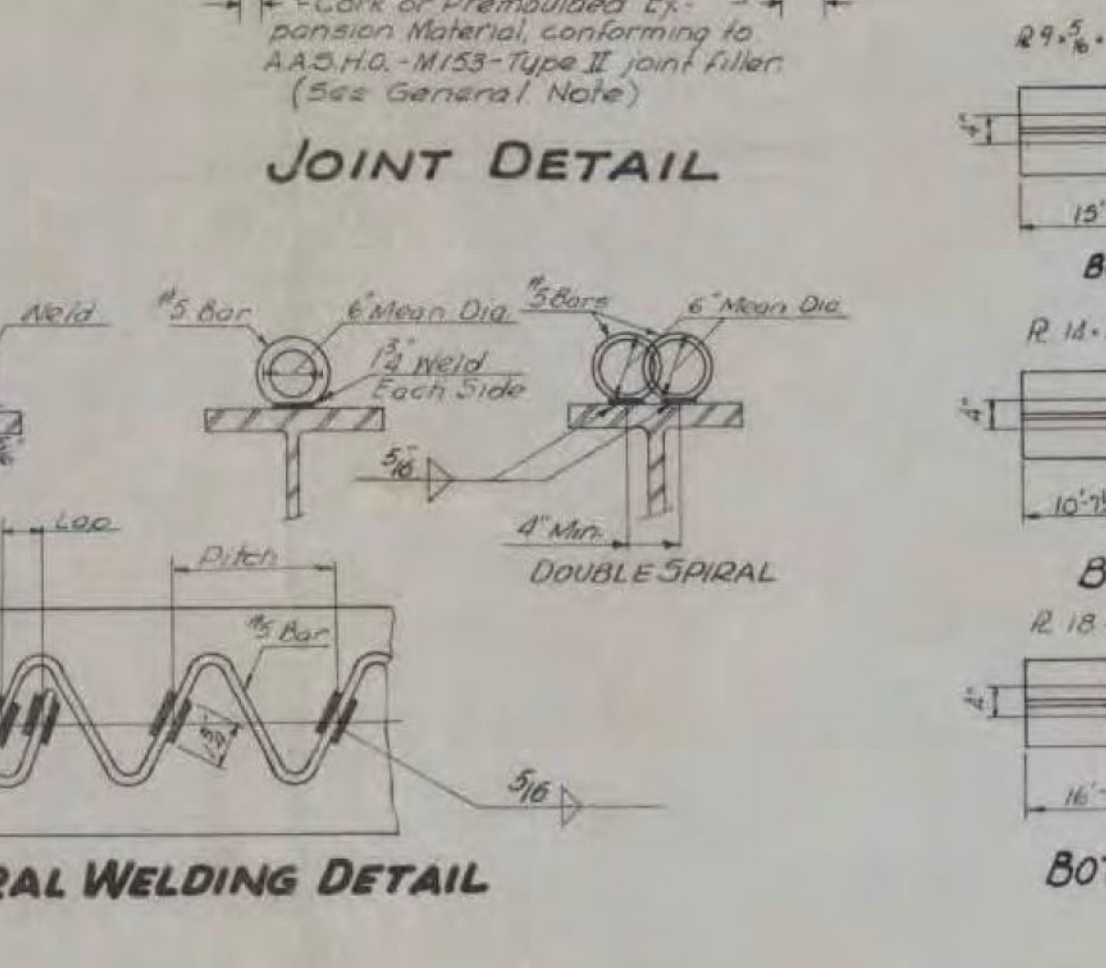
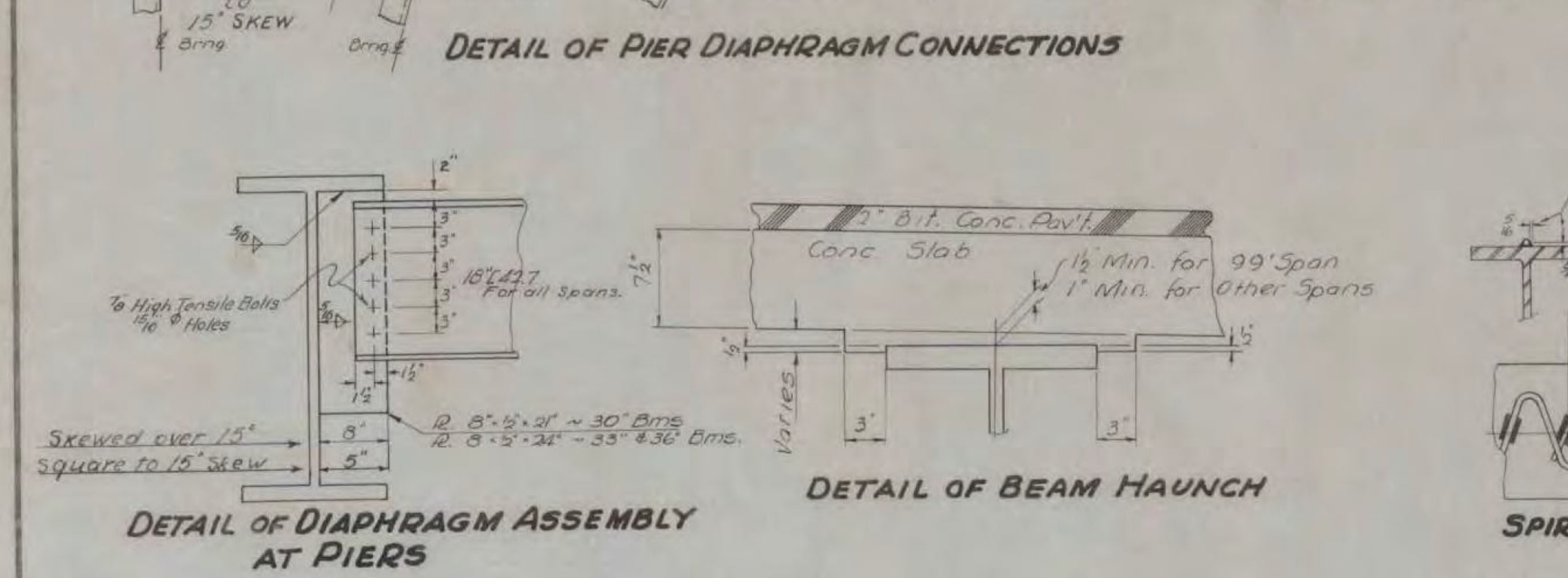
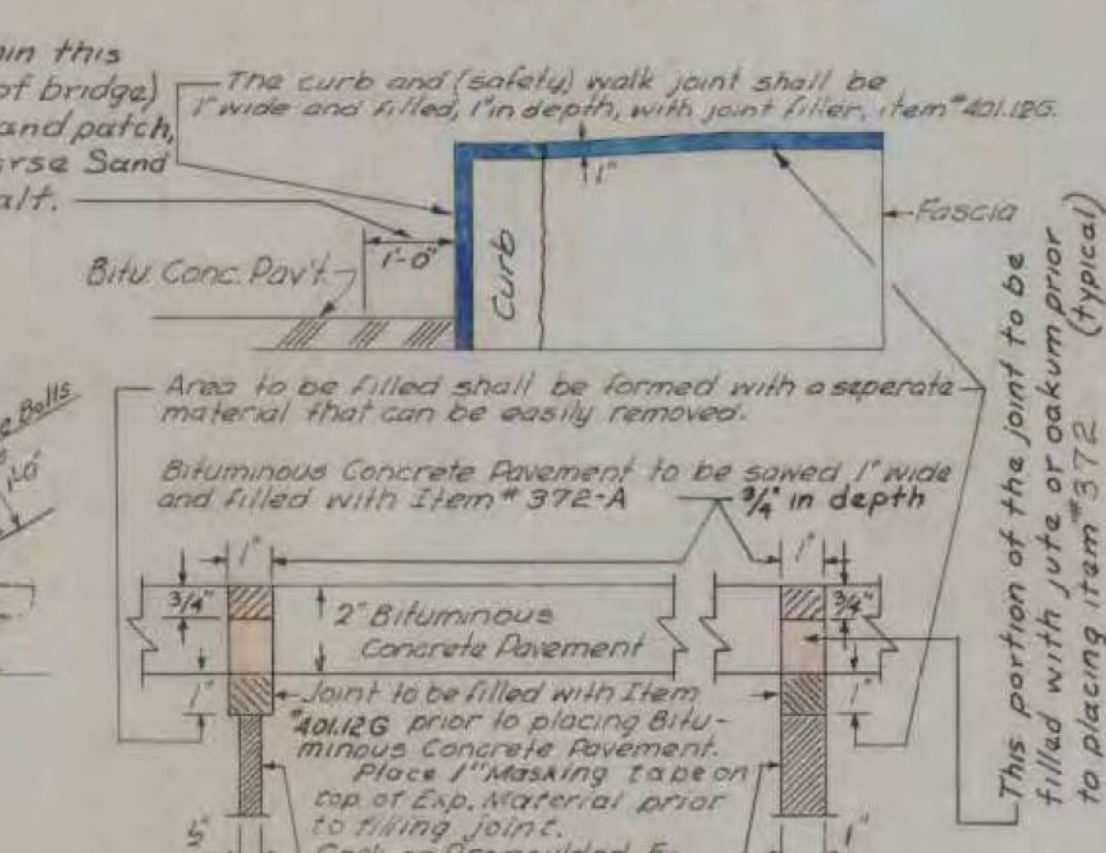
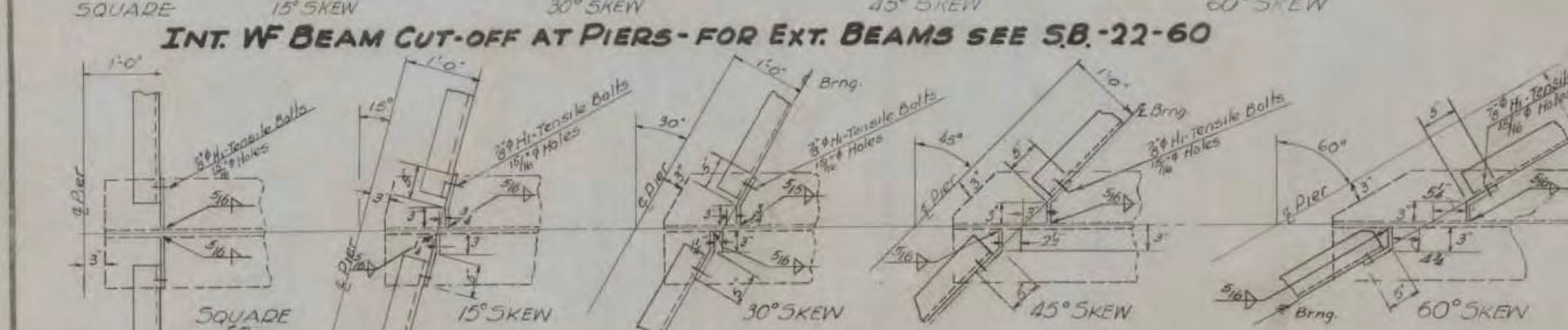
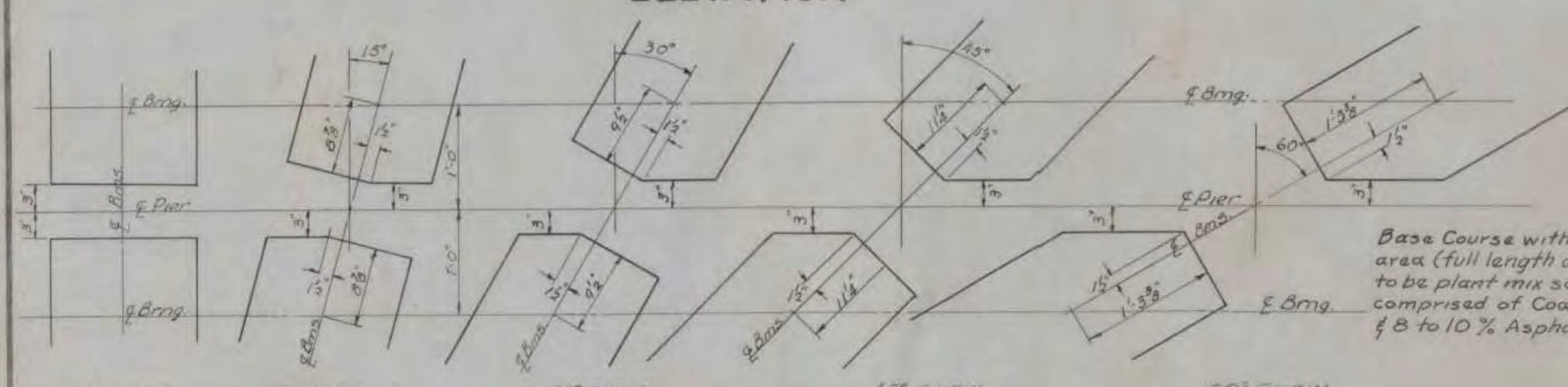
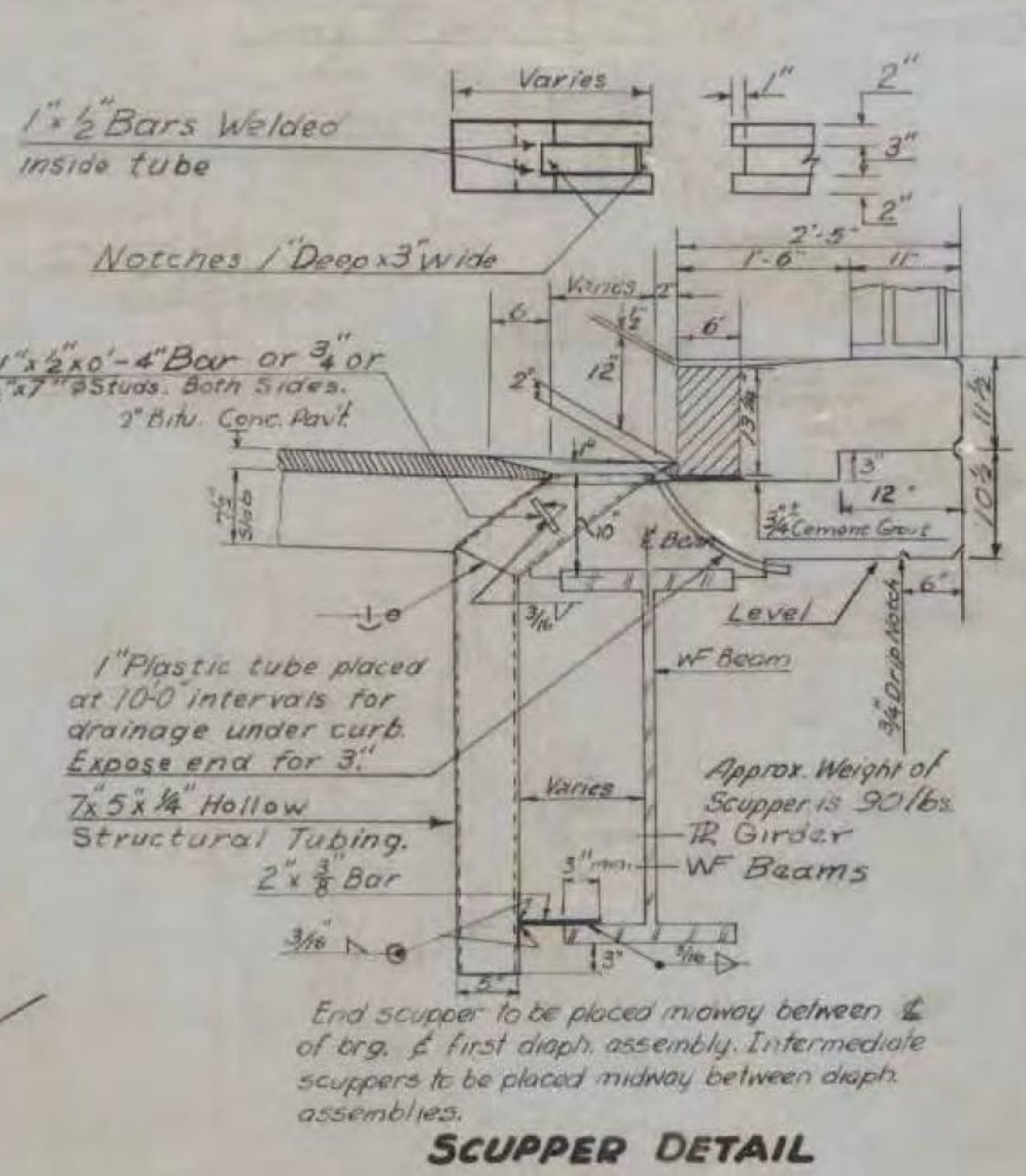
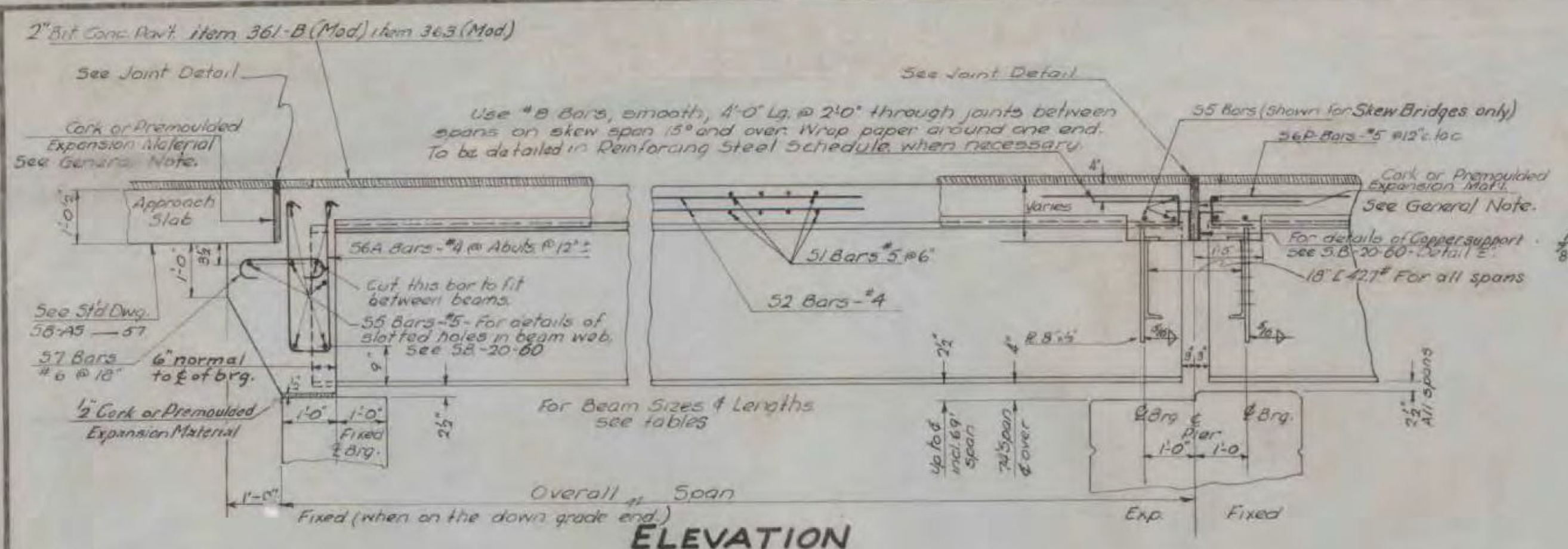
All construction joints to be made as indicated on standard 5.B-20-60, details H* & K* unless otherwise noted. Details of shear connectors shall be submitted to the State for approval. Either channel or stud connectors may be substituted for the designed spiral steel. The studs shall be substituted on the basis of two (2) 3/4" studs for each pitch of a 3/8" spiral, or on the basis of two (2) 3/8" studs to 1 1/2" times the pitch of a 3/8" spiral.

Abutments (fixed end) use 1/2" expansion material. Abutments (expansion end) & piers, for temperatures less than 60°F, use 1" thick expansion material, & for temperatures over 60°F, use 1/2" thick expansion material. Expansion material to be as noted on this sheet or as indicated on 5B-20-60.

After the superstructure steel has been erected, beam profiles shall be taken under the direction of the engineer to determine the final grade.

Unless otherwise called for, beams shall be cambered to the minimum camber likely to remain permanent as indicated in the AISC Handbook. The camber shall approximate a simple regular curve from end to end of beam. Tolerances in camber shall be as indicated in the AISC Handbook.

All Structural Steel shall meet ASTM Designation: A36-60T unless specified otherwise.



Revisions & Corrections
Corrected for latest details April 1962

Drawn By: H.W.S. June 1960
Traced By: H.W.S. June 1960
Checked By: R.T.B. & R.S.H. June 1960
Correct: 13 July 1960
S. M. B. Jr.
Bridge Engineer
Approved: 13 July 1960
A. O. T. Smith
Chief Engineer

DETAILS OF WF BEAM BRIDGES
34' TO 44' NON COMPOSITE ~ 49' TO 99' COMPOSITE

(RE - ADVERTISED)

BENNINGTON - MT TABOR
BF BPNT (16)
PROJECT BRIDGE 56C
SHEET 23 OF 23
FOR INFORMATION ONLY

DEPARTMENT OF HIGHWAYS
STANDARD STRUCTURES
SCB-D-60

MONOKO, LLC

1037 Peninsula Avenue
Tarpon Springs, FL 34689-2125
E-mail Address: MonokoLLC@aol.com

(727) 940-3244
(727) 279-8795 Fax

Submittal No.: 04c: Containment Plans Rev 2, Pages C8A & C11A

Date: May 6, 2016

Vermont Department of Transportation
Southwest Regional Construction Office
Attn: Mr. Mark H. Mackintosh, P.E., Regional Construction Engineer
61 Valley View
Mendon, VT 05701
(Phone) (802) 773-1384; (Fax) (802) 786-5894
Mark.Mackintosh@Vermont.gov

Description: Proposal/Contract Number: Bennington-Mt Tabor BF BPNT (16)
Letting Date: 06/05/15; Award Date: 07/01/15
Project Description: Bridge Painting of Five Bridges
In the Towns of Bennington & Mt. Tabor, VT
Contract Amount: \$2,122,323.00; Completion Date: 09/02/16

Contractor: MONOKO, LLC

Reviewed & Approved By: Keri Monokandilos

Keri Monokandilos, Manager

Date: 05/06/2016

Engineer: Tim Pockette, P.E., Resident Engineer
61 Valley View
Mendon, VT 05701
802-773-1384
802-793-4027 cell
Tim.Pockette@vermont.gov

Revision:

We have added the use of fence platform in conjunction with the corrugated platform for bridges 15 and 16N & S. These pages are shown on C8A & C11A. Note that only corrugated platform will be used over live lanes.

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: Sebastian
DATE: 5/9/16

Vermont Agency of Transportation

RECEIVED

ON: May 10, 2016

and Checked for

CONFORMANCE

BY: Mark Sargent DATE: 05/13/2016

INDEX OF SHEETS:

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- C-2 GENERAL NOTES (1 OF 2)
- C-3 GENERAL NOTES (2 OF 2)
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PLAN & ELEVATION
- C-5 CONTAINMENT SECTION DETAILS
- C-6 BRIDGE NO. D15 (BENNINGTON COUNTY) TH NO. 14 OVER US ROUTE 7
PLAN & ELEVATION
- C-7 CONTAINMENT SECTION DETAILS (1 OF 3)
- C-8 CONTAINMENT SECTION DETAILS (2 OF 3)
- C-8A CONTAINMENT SECTION DETAILS (3 OF 3)
- C-9 BRIDGE NO. 16N (BENNINGTON COUNTY) US ROUTE 7 OVER BENN SH N
BRIDGE NO. 16S (BENNINGTON COUNTY) US ROUTE 7 OVER BENN SH N
PLAN & ELEVATION
- C-10 CONTAINMENT SECTION DETAILS (1 OF 3)
- C-11 CONTAINMENT SECTION DETAILS (2 OF 3)
- C-11A CONTAINMENT SECTION DETAILS (3 OF 3)
- C-12 BRIDGE NO. 56C (RUTLAND COUNTY) US ROUTE 7 OVER MILL BROOK
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- C-13 CONTAINMENT SECTION DETAILS
- C-14 CONTAINMENT MISCELLANEOUS DETAILS (1 OF 4)
- C-15 CONTAINMENT MISCELLANEOUS DETAILS (2 OF 4)
- C-16 CONTAINMENT MISCELLANEOUS DETAILS (3 OF 4)
- C-17 CONTAINMENT MISCELLANEOUS DETAILS (4 OF 4)

VERMONT
DEPARTMENT OF TRANSPORTATION

PROJECT NO. BF BPNT (16)
FIVE BRIDGES ON OR OVER US ROUTE 7
BRIDGE NOS. 11, D15, 16N, 16S, 56C
BENNINGTON AND RUTLAND COUNTY, VERMONT

ABRASIVE BLASTING
CONTAINMENT PLANS, REV. 3

PREPARED FOR:
MONOKO, LLC.
1037 PENINSULA AVENUE
TARPON SPRINGS, FL 34689
PHONE (727) 940-324
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, PE
VERMONT P.E. LICENSE NUMBER 107795

Vermont Agency of Transportation
RECEIVED
ON: **May 10, 2016**
and Checked for
CONFORMANCE
BY: Mark Sargent DATE: 05/13/2016



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.	
<input type="checkbox"/> NO EXCEPTIONS TAKEN <input checked="" type="checkbox"/> MAKE CORRECTIONS NOTED <input type="checkbox"/> RESUBMITTAL NOT REQUIRED <input type="checkbox"/> AMEND AND RESUBMIT <input type="checkbox"/> REJECTED - SEE REMARKS	<p style="text-align: center;">PB AMERICAS, INC.</p> <p>BY: <i>SL Baigund</i> DATE: <i>5/9/16</i></p>

SPECIFICATIONS:

VERMONT AGENCY OF TRANSPORTATION (VTRANS) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2014 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

ALL BOLTS SHALL BE ANCHOR BOLTS: RED HEAD TRUBOLT WEDGE TYPE ANCHORS OR EQUIVALENT.

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" AVERAGE DEPTH OF STEEL SHOT, 1.5" MINERAL SLAG ABRASIVE OR 1.5" SAND ABRASIVE, PLUS THE UNIFORM WORKER LOADING) WITH 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 (SIXTEENTH 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 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 TARPULINS 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". 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 FOR LOAD GIRDERS 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 RESULT 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 BENNINGTON AND RUTLAND COUNTIES, VERMONT FOR THE FOLLOWING BRIDGES:

- BRIDGE NO. 11 (BENNINGTON COUNTY) US ROUTE 7 OVER ROARING BRANCH
- BRIDGE NO. D15 (BENNINGTON COUNTY) TH NO. 14 OVER US ROUTE 7
- BRIDGE NO. 16N (BENNINGTON COUNTY) US ROUTE 7 OVER BENN SH N
- BRIDGE NO. 16S (BENNINGTON COUNTY) US ROUTE 7 OVER BENN SH N
- BRIDGE NO. 56C (RUTLAND COUNTY) US ROUTE 7 OVER MILL BROOK

THE CONTRACTOR SHALL PROVIDE A MULTI-STAGE DECONTAMINATION TRAILER AND WATER WASH FACILITY FOR THE DURATION OF THE PROJECT, LOCATED AT AN APPROPRIATE SITE DETERMINED BY THE CONTRACTOR.

WORKERS WILL ACCESS THE BELOW-DECK CONTAINMENTS AT THE ABUTMENTS, FROM THE BRIDGE DECK ABOVE USING 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.

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 techniques of construction.

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

BY: PA AMERICAS, INC.

DATE: 5/9/16

Vermont Agency of Transportation

RECEIVED

ON: **May 10, 2016**

and Checked for

CONFORMANCE

BY: Mark Sargent DATE: 05/13/2016



Bridge Nos. All

GENERAL NOTES (1 OF 2)

FIVE BRIDGES ON OR OVER US ROUTE 7

REVISIONS		DESCRIPTION	DATE	BY	DRAWN BY	CHECKED BY	DESIGNED BY	EFFECTED BY	VERMONT AGENCY OF TRANSPORTATION			PROJECT ID	SHEET NO.
NO.	DATE								NO.	DATE	NO.		
01	05/13/16	REVISION			BDN 11/15				040110	COPY		16-0116	1
02	05/13/16	REVISION			PDR 11/15								2
03	05/13/16	REVISION			MAT 11/15								3
04	05/13/16	REVISION			PRS 11/15								4

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 11/15
 CHECKED BY: PDR 11/15
 DESIGNED BY: MAT 11/15
 EFFECTED BY: PRS 11/15

VERMONT AGENCY OF TRANSPORTATION
 PROJECT ID: 16-0116
 COUNTY: BENNINGTON
 PROJECT: BF 8PWT (16)

REF ENG LOG

SHEET NO.

C-2

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 WORKDAY, ALL PLUGGED 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/PERSONNEL 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 WORKERS/PERSONNEL SHALL BE CLEANED WITH A HANDHELD HEPA VACUUM PRIOR TO LEAVING THE CONTAINMENT.

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 SYSTEMS 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	40,000	24,000
MAX. CONTAINMENT AREA, SQ. FT. (V=100 FT/MIN.)	480.0	450.0	400.0	240.0
MIN. CONTAINMENT AREA, SQ. FT. (V=300 FT/MIN.)	160.0	150.0	133.3	80.0
MAX. INLET AREA, SQ. FT. (V=700 FT/MIN.)	68.6	64.3	57.1	34.3
MIN. INLET AREA, SQ. FT. (V=1000 FT/MIN.)	48.0	45.0	40.0	24.0

SUBMITTAL REVIEW

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NO EXCEPTIONS TAKEN

MAKE CORRECTIONS NOTED

RESUBMITTAL NOT REQUIRED

AMEND AND RESUBMIT

REJECTED - SEE REMARKS

PB AMERICAS, INC.

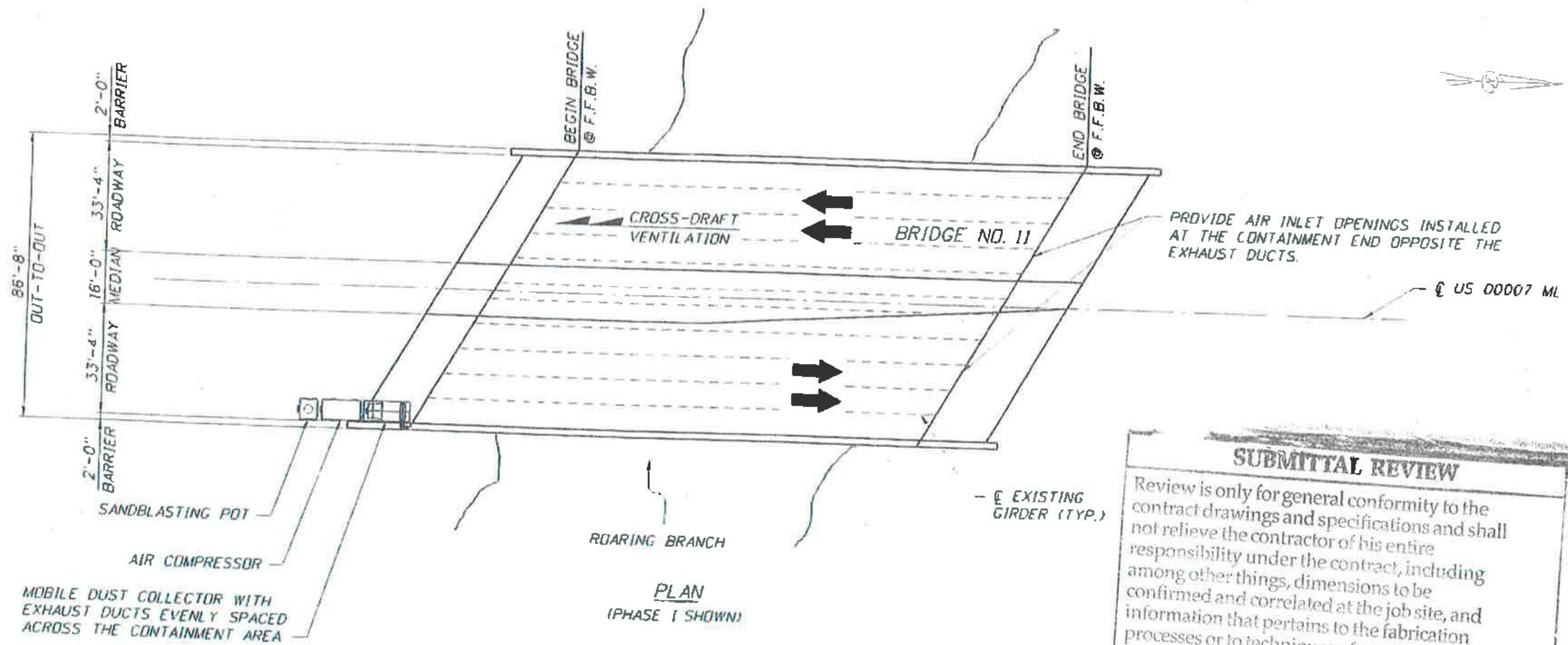
BY: *Mark Sargent*

DATE: *5/17/16*

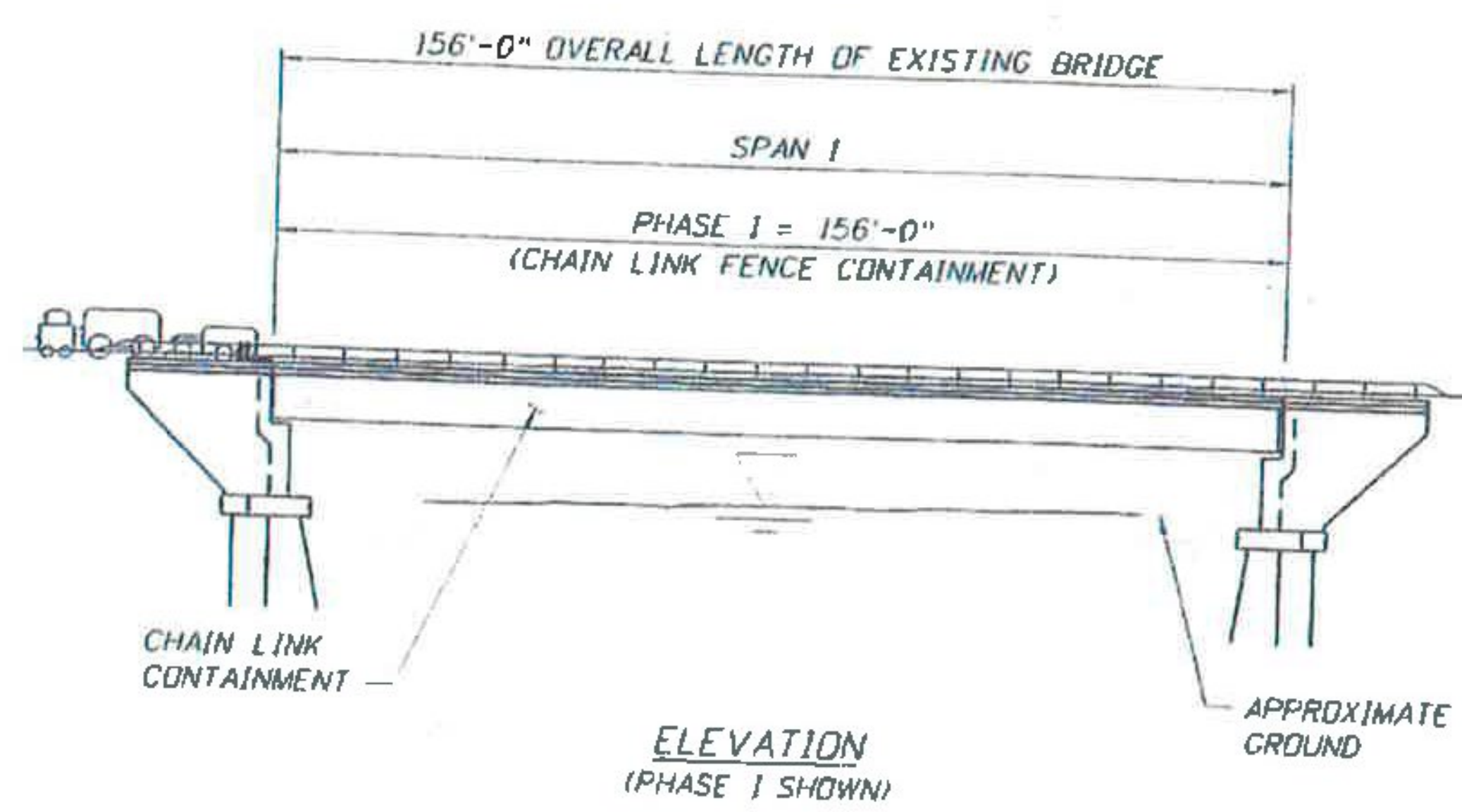
Vermont Agency of Transportation
RECEIVED
 ON: **May 10, 2016**
 and Checked for
CONFORMANCE
 BY: Mark Sargent DATE: 05/13/2016



REVISIONS		DESCRIPTION	DATE	BY	PROJECT NO.	PROJECT NAME	SHEET NO.
02/21/16	LRS						
MONOKO, LLC. 1037 PENINSULA AVENUE TARPON SPRINGS, FL 34689 PHONE (727) 940-3244 FAX (727) 279-8795		PAUL STEULEN P.E. P.E. LICENSE NUMBER 107795 A2B ENGINEERING, LLC. 5406 N. HOOVER BLVD., SUITE 12 TAMPA, FL 33634	DRAWN BY: BDN 11/15 CHECKED BY: PDB 11/15 DESIGNED BY: MAT 11/15 CHECKED BY: PRS 11/15	COUNTY: BERNINGTON PROJECT ID: BF BPNT 1161	BRIDGE NOS. ALL FIVE BRIDGES ON OR OVER US ROUTE 7		SHEET NO. C-3



- 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 I SHOWN SCHEMATICALLY. REFERENCE MOT PLANS FOR LIMITS OF WORK PHASES.
 3. WORK PHASE I 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 WALLS.
 5. FOR ADDITIONAL DETAILS, SEE CONTAINMENT MISCELLANEOUS DETAILS SHEETS.



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.

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 RESUBMITTAL NOT REQUIRED
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 REJECTED - SEE REMARKS

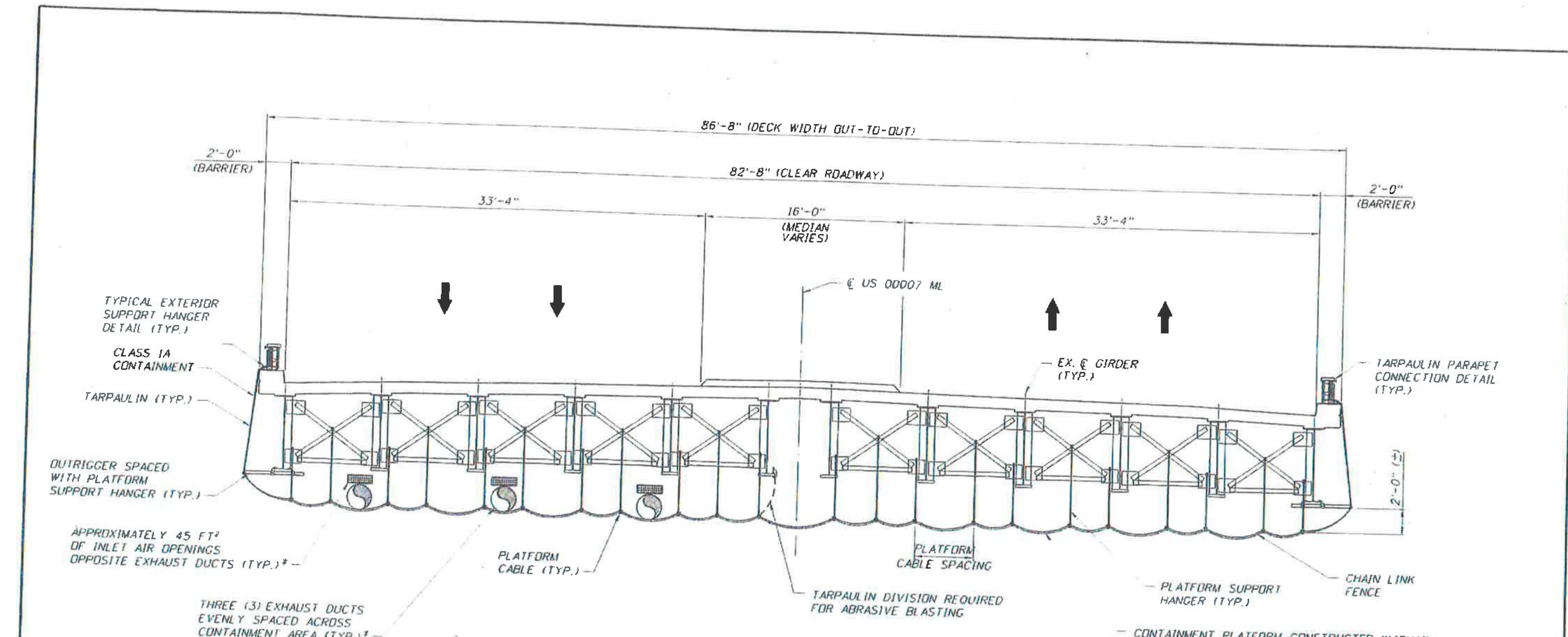
BY: **PB AMERICAS, INC.**
Byington
 DATE: **5/9/16**

Vermont Agency of Transportation
RECEIVED
 ON: **May 10, 2016**
 and Checked for
CONFORMANCE
 BY: Mark Sargent DATE: 05/13/2016



REVISIONS			PAUL STEJLLE P.E. P.E. LICENSE NUMBER 10795 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		VERMONT AGENCY OF TRANSPORTATION		SHEET TITLE PLAN & ELEVATION		Bridge No. 11	
DATE	BY	DESCRIPTION	DRAWN BY	CHECKED BY	DESIGNED BY	CHECKED BY	ROAD NO.	COUNTY	PROJECT ID	PROJECT NAME	REF. DATE NO.	SHEET NO.
			BDN 11/15	PDB 11/15	MAT 11/15	PRS 11/15		BENNINGTON	BF BPNT (116)	FIVE BRIDGES ON OR OVER US ROUTE 7		C-4

© 2015 Monoko, LLC 17 Bennington, VT Tabular Containment Plans/CDs/01Plan/Rev.dgn



* BASED ON MAXIMUM CONTAINMENT AREA OF 450 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.

TYPICAL SECTION
(MOBILE DUST COLLECTOR NOT SHOWN FOR CLARITY)

Vermont Agency of Transportation
RECEIVED
 ON: **May 10, 2016**
 and Checked for
CONFORMANCE
 BY: Mark Sargent DATE: 05/13/2016

SUBMITTAL REVIEW

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

BY: *Mark Sargent*
 DATE: *5/9/16*

PB AMERICAS, INC.

CONTAINMENT PLATFORM CONSTRUCTED W/CHAIN LINK FENCE HAVING A 2" MESH & 9 GAUGE WIRE. SECURE FENCE TO CABLE WITH 1/2"Ø ROPE TIES OR CABLE CLIPS. SEE CHAIN LINK FENCE LAYOUT DETAIL.



DATE	BY	DESCRIPTION

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

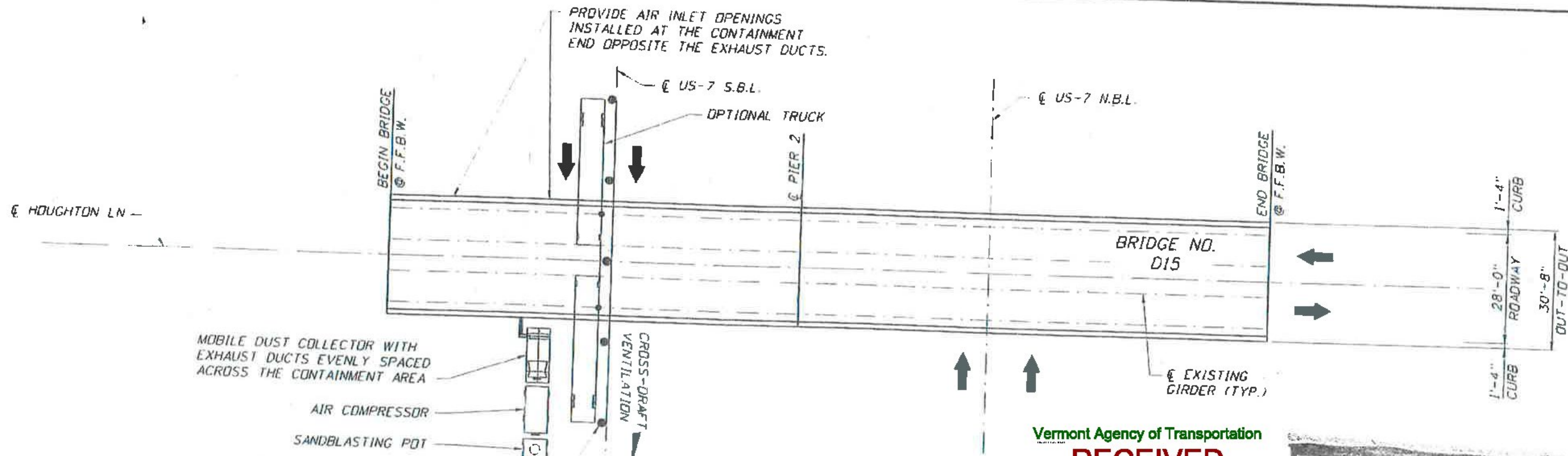
MONOKO, LLC.
 1037 PENINSULA AVENUE
 TARPON SPRINGS, FL 34689
 PHONE (727) 940-3244
 FAX (727) 279-8795

DRAWN BY: BDN 11/15
 CHECKED BY: POB 11/15
 DESIGNED BY: MAT 11/15
 CHECKED BY: PRS 11/15

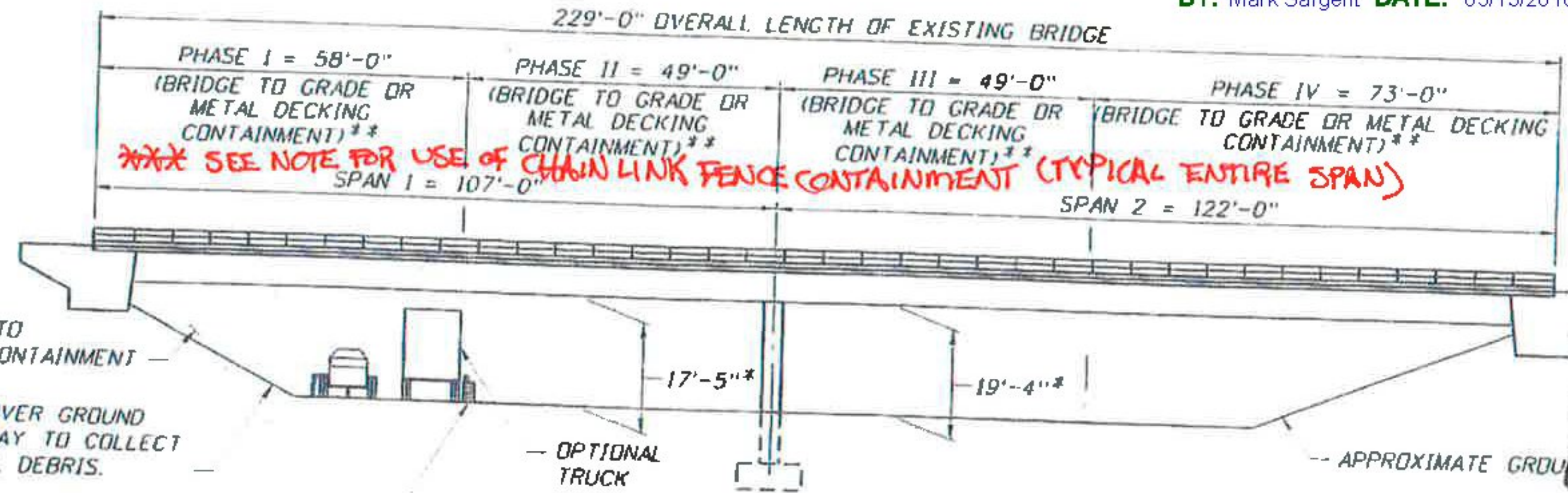
VERMONT AGENCY OF TRANSPORTATION		
ROAD NO.	COUNTY	PROJECT #
BEWINGTON	BF	BPNT 1161

SHEET TITLE: CONTAINMENT SECTION DETAILS
 PROJECT NAME: FIVE BRIDGES ON OR OVER US ROUTE 7

Bridge No. 11
 REF. DWG. NO.
 SHEET NO.
 C-5



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



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

Vermont Agency of Transportation
RECEIVED
ON: May 10, 2016
and Checked for
CONFORMANCE
BY: Mark Sargent DATE: 05/13/2016

SUBMITTAL REVIEW

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 MAKE CORRECTIONS NOTED
 RESUBMITTAL NOT REQUIRED
 AMEND AND RESUBMIT
 REJECTED - SEE REMARKS

BY: *Mark Sargent* **PB AMERICAS, INC.**
DATE: *5/19/16*

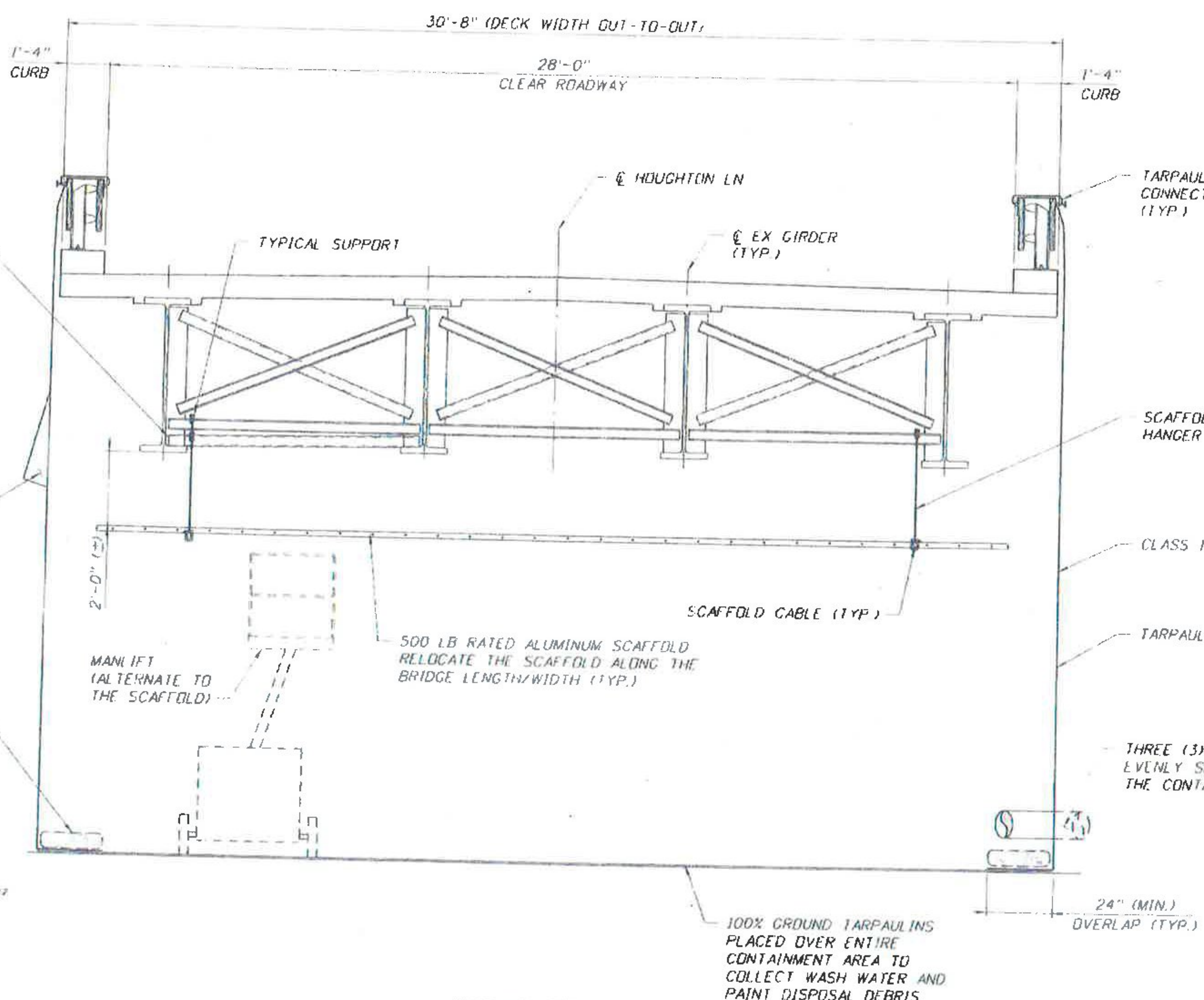
- NOTES:
1. THESE PLANS WERE PREPARED WITHOUT THE BENEFIT OF AS-BUILT BRIDGE PLANS. THE CONTRACTOR SHALL MAKE ALLOWANCE FOR BRIDGE ELEMENTS AND MODIFICATIONS NOT SHOWN ON THESE PLANS.
 2. WORK PHASES I-IV SHOWN SCHEMATICALLY. REFERENCE NOT PLANS FOR LIMITS OF WORK PHASES.
 3. WORK PHASES I-IV MAY BE 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.

***** USE OF CHAIN LINK FENCE CONTAINMENT IS NOT ALLOWED IN AREAS OVER LIVE TRAFFIC, BUT MAY BE USED ELSEWHERE.**

- * EXISTING MINIMUM VERTICAL CLEARANCE BASED ON EXISTING BRIDGE PLANS. CONTRACTOR SHALL OBTAIN APPROVAL FOR REDUCTION OF EXISTING VERTICAL CLEARANCE AND RAISE CABLES AS NEEDED OVER ACTIVE ROADWAY.
- ** CONTRACTOR MAY USE BRIDGE-TO-GRADE OPTION FOR PRESSURE WASHING OPERATIONS AND METAL DECKING CONTAINMENT FOR ABRASIVE BLASTING OPERATIONS.



REVISIONS		DATE	BY	DESCRIPTION	DRAWN BY: BDN 11/15	CHECKED BY: PDB 11/15	DESIGNED BY: MAT 11/15	CHECKED BY: PRS 11/15	VERMONT AGENCY OF TRANSPORTATION			SHEET TITLE: PLAN & ELEVATION	REF. DIV. NO.
DATE	BY								ROAD NO.	COUNTY	PROJECT NO.		
									BENNINGTON	BF BPNT (16)		FIVE BRIDGES ON OR OVER US ROUTE 7	
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								

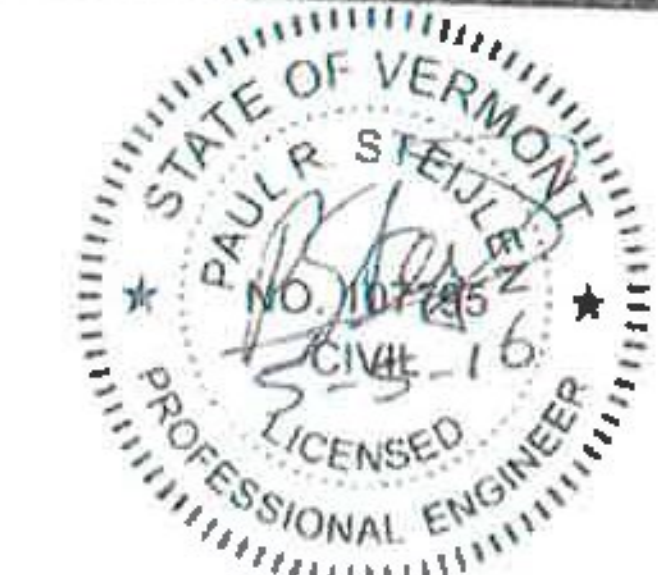


TYPICAL SECTION
(PHASES I THRU IV)
(MOBILE DUST COLLECTOR NOT SHOWN FOR CLARITY)

- 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. TARPULINS SHALL BE REMOVED AND ROLLED UP DURING NON-WORKING HOURS.

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 of components or techniques of construction.	
<input checked="" type="checkbox"/> NO EXCEPTIONS TAKEN	
<input type="checkbox"/> MAKE CORRECTIONS NOTED	
<input type="checkbox"/> RESUBMITTAL NOT REQUIRED	
<input type="checkbox"/> AMEND AND RESUBMIT	
<input type="checkbox"/> REJECTED - SEE REMARKS	
BY: <u>Sebastian</u>	
DATE: <u>5/9/16</u>	
PB AMERICAS, INC.	

Vermont Agency of Transportation
RECEIVED
ON: **May 10, 2016**
and Checked for
CONFORMANCE
BY: Mark Sargent DATE: 05/13/2016



DATE	BY	DESCRIPTION
05/05/16	FRS	GENERAL REVISION

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 11/15
CHECKED BY: POB 11/15
DESIGNED BY: MAT 11/15
CHECKED BY: FRS 11/15

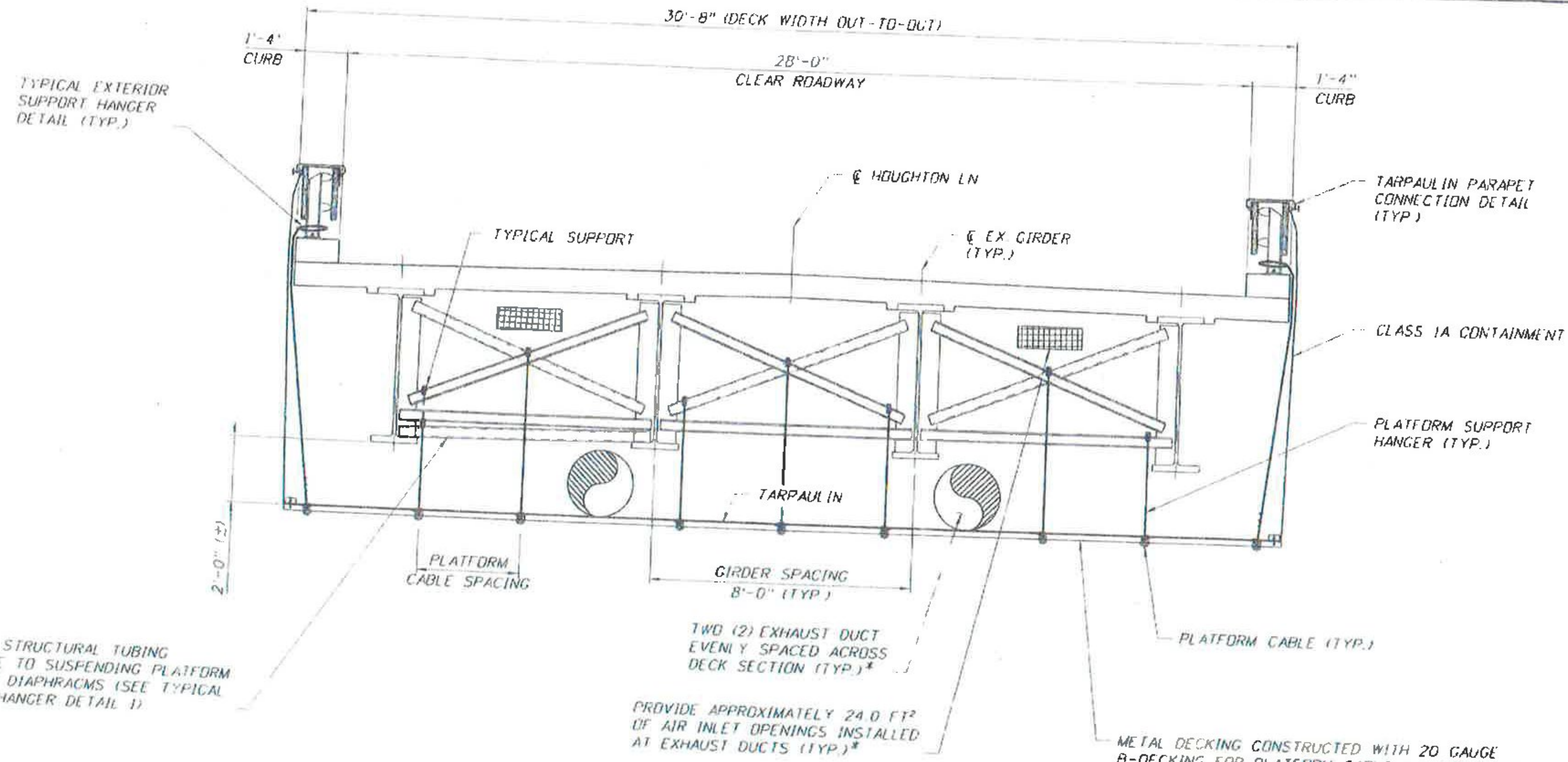
VERMONT AGENCY OF TRANSPORTATION		
ROADWAY	COUNTY	PROJECT #
	BENNINGTON	BF BPNT (116)

CONTAINMENT SECTION DETAILS (1 OF 3)

FIVE BRIDGES ON OR OVER US ROUTE 7

Bridge No. D15

REV. DWG. NO.	
REV. NO.	
C-7	



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

METAL DECKING CONSTRUCTED WITH 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". METAL DECKING SHALL MEET ASTM SPECIFICATION.

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

BY: *St. Byington*
 DATE: *5/1/16*



TYPICAL SECTION
 (PHASES I THRU IV)
 (MOBILE DUST COLLECTOR NOT SHOWN FOR CLARITY)

Vermont Agency of Transportation
RECEIVED
 ON: **May 10, 2016**
 and Checked for
CONFORMANCE
 BY: Mark Sargent DATE: 05/13/2016

* BASED ON MAXIMUM CONTAINMENT AREA OF 240 FT² AS MEASURED PERPENDICULAR TO THE DIRECTION OF CROSS-DRAFT (SEE VENTILATION SYSTEM TABLE ON GENERAL NOTES SHEETS)

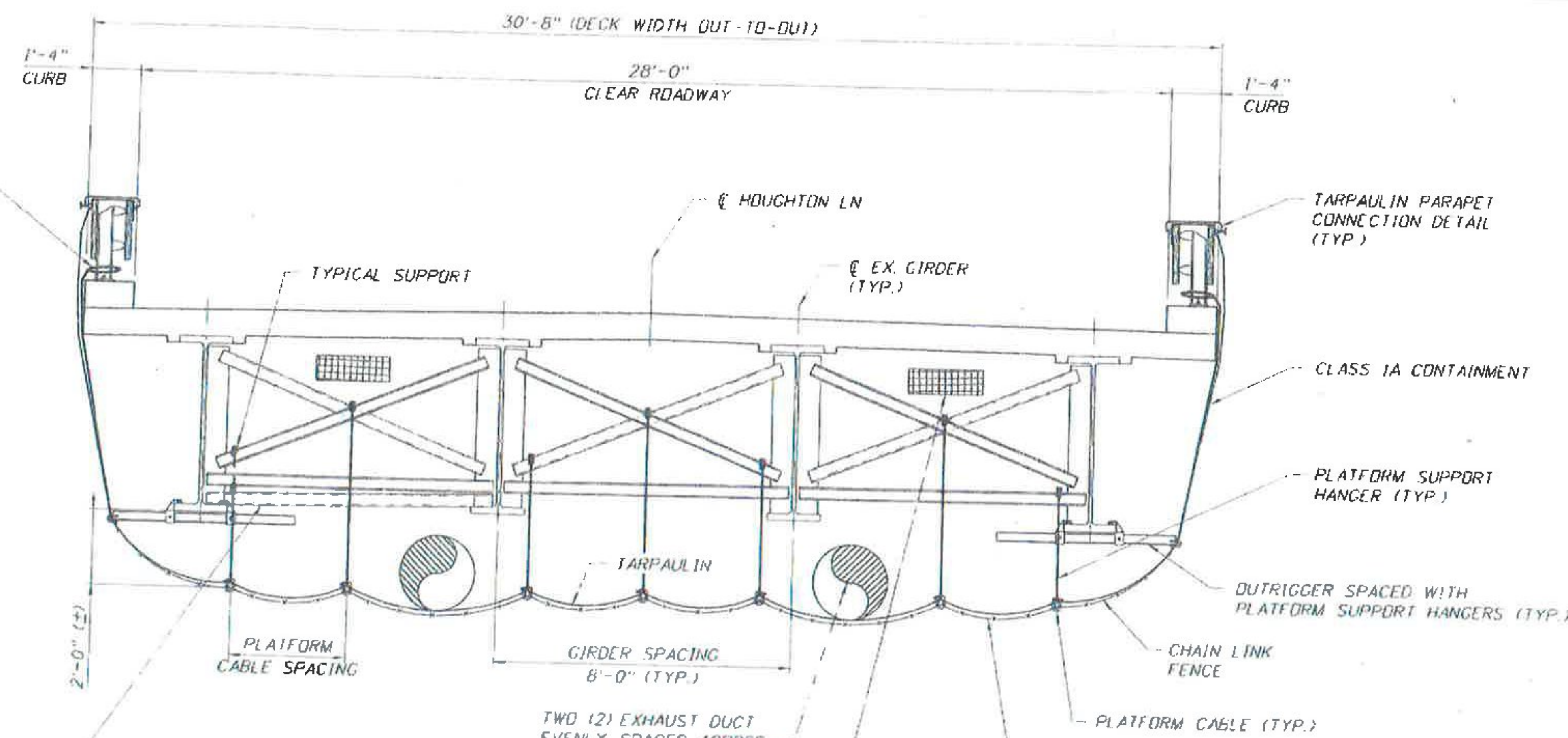
- NOTES:
1. THESE PLANS WERE PREPARED WITHOUT THE BENEFIT OF AS-BUILT BRIDGE PLANS THE CONTRACTOR SHALL MAKE ALLOWANCE FOR BRIDGE ELEMENTS AND MODIFICATIONS NOT SHOWN ON THESE PLANS
 2. THE CONTRACTOR SHALL AVOID ATTACHING/CONNECTING TO BRIDGE ELEMENTS EXHIBITING SIGNIFICANT SECTION LOSS
 3. FOR ADDITIONAL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

REVISIONS		DESCRIPTION	DATE	BY
05/05/16	1.5.3			

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	ORDERED BY: BDN 11/15 CHECKED BY: PDB 11/15 DESIGNED BY: MAT 11/15 CHECKED BY: PRS 11/15	VERMONT AGENCY OF TRANSPORTATION ROAD NO: BEHNINGTON COLONY: BEHNINGTON PROJECT ID: BF BPH1 (16)	BRIDGE No. D15
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CONTAINMENT SECTION DETAILS 12 OF 31	REF. DWG. NO.
FIVE BRIDGES ON OR OVER US ROUTE 7	DRAWN BY: C-B

TYPICAL EXTERIOR SUPPORT HANGER DETAIL (TYP.)



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

TWO (2) EXHAUST DUCT EVENLY SPACED ACROSS DECK SECTION (TYP.)
 PROVIDE APPROXIMATELY ~~24.0~~ 24.0 FT² OF AIR INLET OPENINGS INSTALLED AT EXHAUST DUCTS (TYP.)

CONTAINMENT PLATFORM CONSTRUCTED W/ 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 240 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.

TYPICAL SECTION
 (PHASES I THRU IV)
 (MOBILE DUST COLLECTOR NOT SHOWN FOR CLARITY)

Vermont Agency of Transportation
RECEIVED
 ON: May 10, 2016
 and Checked for
CONFORMANCE
 BY: Mark Sargent DATE: 05/13/2016

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.	
<input type="checkbox"/>	NO EXCEPTIONS TAKEN
<input checked="" type="checkbox"/>	MAKE CORRECTIONS NOTED RESUBMITTAL NOT REQUIRED
<input type="checkbox"/>	AMEND AND RESUBMIT
<input type="checkbox"/>	REJECTED - SEE REMARKS
BY: <i>SB</i> PB AMERICAS, INC.	
DATE: <i>5/11/16</i>	



REVISIONS		DATE	BY	DESCRIPTION	DRAWN BY	CHECKED BY	DESIGNED BY	DATE	PROJECT NO.	SHEET NO.	REF. DWG NO.
		05/05/16	PR	GENERAL REVISION							

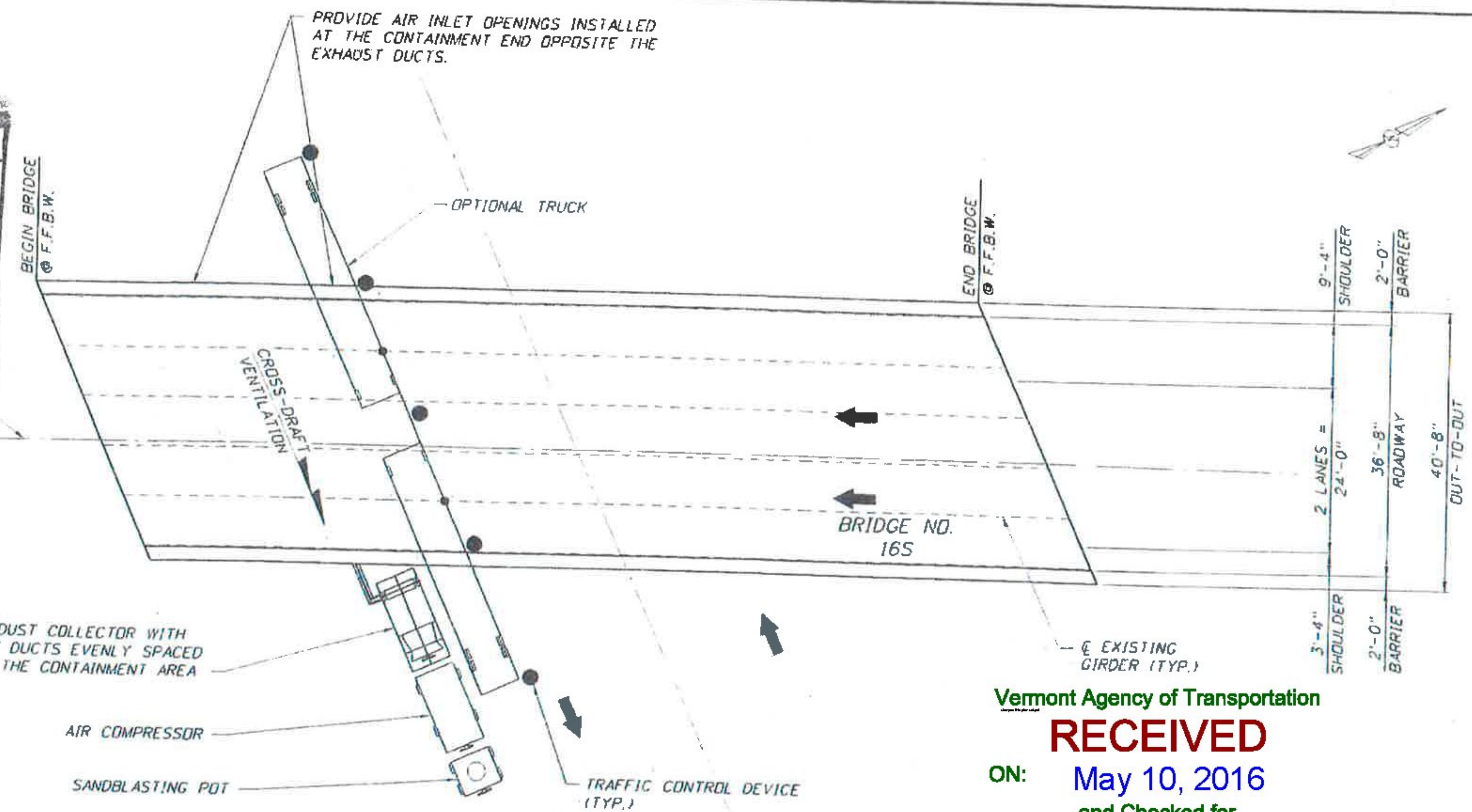
PAUL STEILEN P.E. P.E. LICENSE NUMBER 107795 A2B ENGINEERING, LLC. 5406 N. HOOVER BLVD., SUITE 12 TAMPA, FL 33634	MONOKO, LLC. 1037 PENINSULA AVENUE TARPON SPRINGS, FL 34689 PHONE (727) 940-3244 FAX (727) 279-8795	DRAWN BY: <i>BON 11/15</i> CHECKED BY: <i>PDB 11/15</i> DESIGNED BY: <i>MAI 11/15</i> DATE: <i>11/15</i>	VERMONT AGENCY OF TRANSPORTATION ROAD NO: BENNINGTON COUNTY: PROJECT ID: BF BPRT 116	SHEET TITLE: CONTAINMENT SECTION DETAILS (3 OF 3) PROJECT NAME: FIVE BRIDGES ON OR OVER US ROUTE ?	DATE: 05/13/2016 TIME: 2:08:12 PM
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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 US 7 - RESUBMITTAL NOT REQUIRED
- AMEND AND RESUBMIT
- REJECTED - SEE REMARKS

BY: PB AMERICAS, INC.
St. Bayington
 DATE: 5/9/16



- NOTES:
- 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.
 - WORK PHASES I-III SHOWN SCHEMATICALLY. REFERENCE MOT PLANS FOR LIMITS OF WORK PHASES.
 - WORK PHASES I-III 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.
 - THE CONTRACTOR HAS THE OPTION TO USE ADDITIONAL MOBILE DUST COLLECTORS, OR PLACE LONGITUDINAL OR TRANSVERSE INTERMEDIATE TARPULIN WALL.
 - FOR ADDITIONAL DETAILS, SEE CONTAINMENT MISCELLANEOUS DETAILS SHEETS.

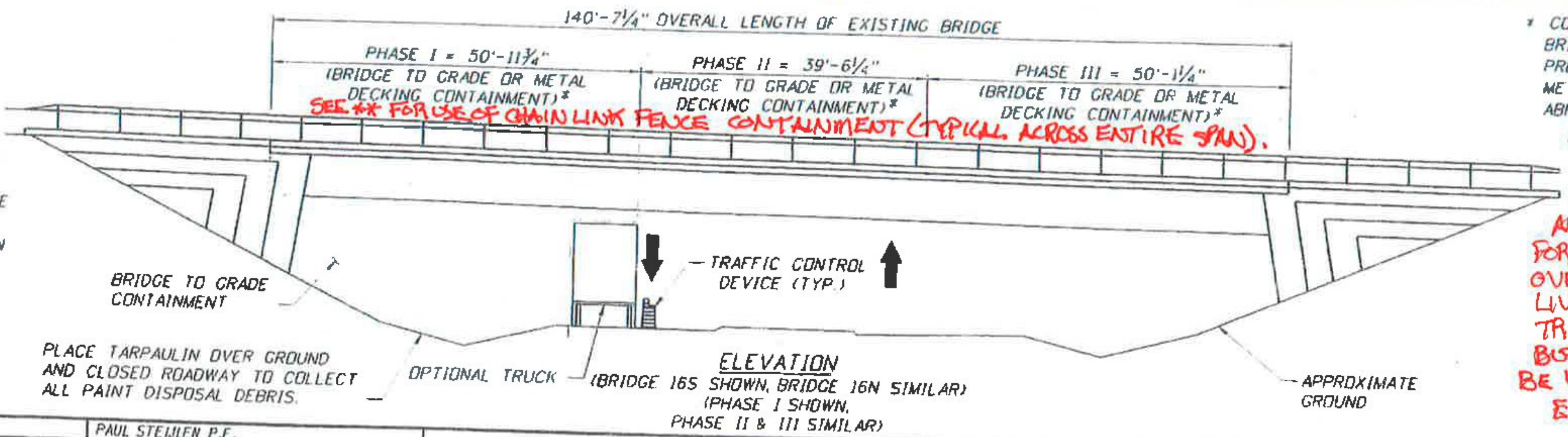
MOBILE DUST COLLECTOR WITH EXHAUST DUCTS EVENLY SPACED ACROSS THE CONTAINMENT AREA

AIR COMPRESSOR

SANDBLASTING POT

TRAFFIC CONTROL DEVICE (TYP.)

PLAN
 (BRIDGE 165 SHOWN, BRIDGE 16N SIMILAR)
 (PHASE I SHOWN, PHASE II & III SIMILAR)



ELEVATION
 (BRIDGE 165 SHOWN, BRIDGE 16N SIMILAR)
 (PHASE I SHOWN, PHASE II & III SIMILAR)

Vermont Agency of Transportation
RECEIVED
 ON: **May 10, 2016**
 and Checked for
CONFORMANCE
 BY: Mark Sargent DATE: 05/13/2016

* CONTRACTOR MAY USE BRIDGE-TO-GRADE OPTION FOR PRESSURE WASHING OPERATIONS AND METAL DECKING CONTAINMENT FOR ABRASIVE BLASTING OPERATIONS.

**** USE OF CHAIN LINK FENCE CONTAINMENT IS NOT ALLOWED FOR AREAS OVER LIVE TRAFFIC, BUT MAY BE USED ELSEWHERE.**



Bridge No. 16N & 16S

DATE	BY	DESCRIPTION

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

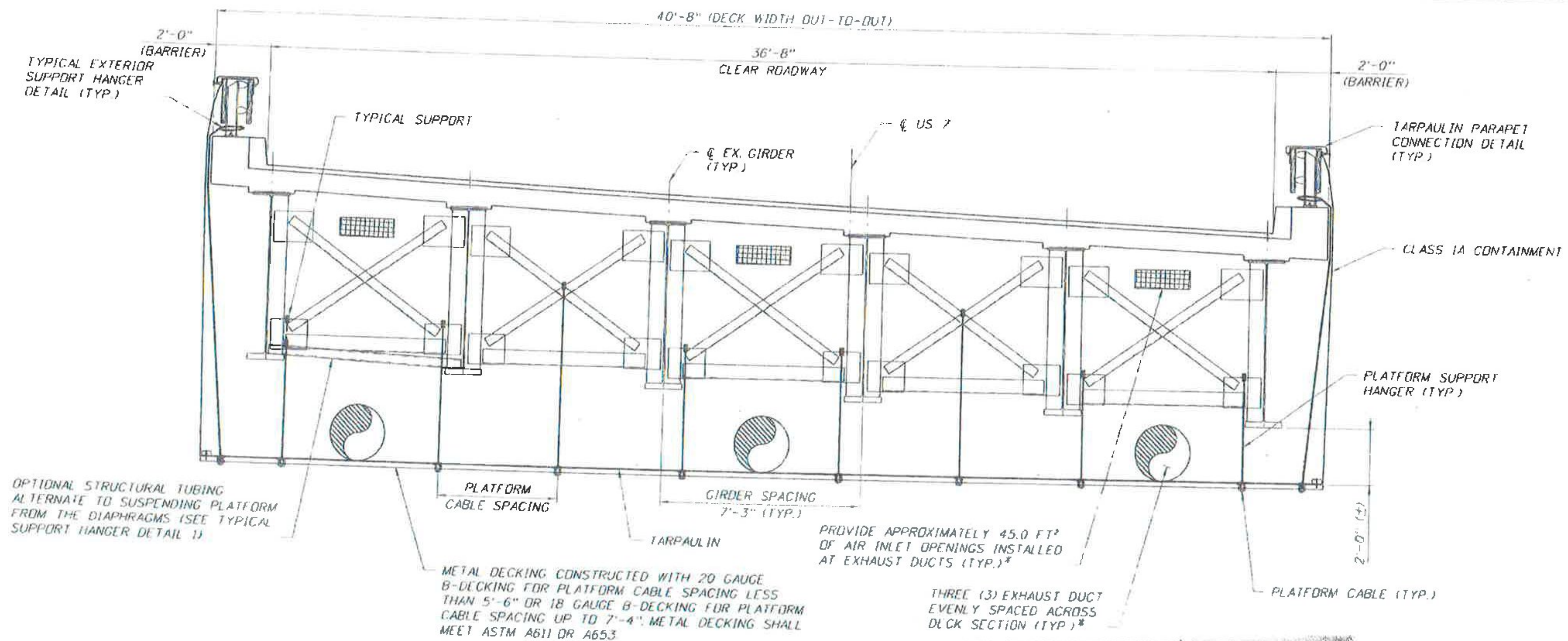
MONOKO, LLC.
 1037 PENINSULA AVENUE
 TARPON SPRINGS, FL 34689
 PHONE (727) 940-3244
 FAX (727) 279-8785

DESIGNED BY: BON 11/15
 CHECKED BY: PDB 11/15
 DESIGNED BY: MAT 11/15
 CHECKED BY: PRS 11/15

VERMONT AGENCY OF TRANSPORTATION
 ROAD NO. COUNTY PROJECT #
 BENNINGTON BF BPNT (16)

SHEET TITLE: **PLAN & ELEVATION**
 PROJECT NAME: **FIVE BRIDGES ON OR OVER US ROUTE 7**

REF. DWG. NO.
 SHEET NO.
 C-9



* BASED ON MAXIMUM CONTAINMENT AREA OF 350 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.

TYPICAL SECTION
(PHASES I THRU III)
(MOBILE DUST COLLECTOR NOT SHOWN FOR CLARITY)

Vermont Agency of Transportation
RECEIVED
ON: May 10, 2016
and Checked for
CONFORMANCE
BY: Mark Sargent DATE: 05/13/2016

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.	
<input checked="" type="checkbox"/>	NO EXCEPTIONS TAKEN
<input type="checkbox"/>	MAKE CORRECTIONS NOTED
<input type="checkbox"/>	RESUBMITTAL NOT REQUIRED
<input type="checkbox"/>	AMEND AND RESUBMIT
<input type="checkbox"/>	REJECTED - SEE REMARKS
PB AMERICAS, INC.	
BY:	<i>[Signature]</i>
DATE:	5/7/16



DATE	BY	DESCRIPTION
02/23/16	FRS	GENERAL REVISION
05/13/16	FRS	GENERAL REVISION

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

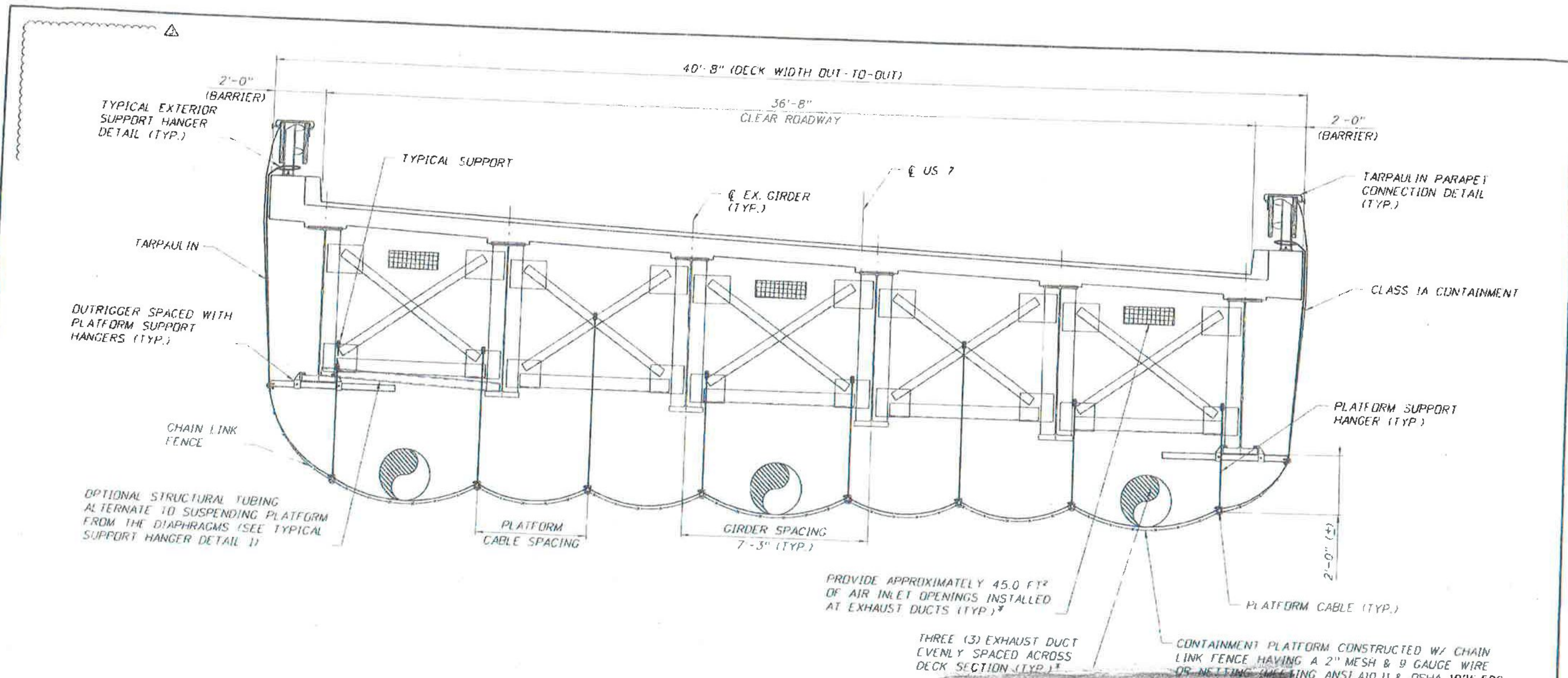
MONOKO, LLC.
1037 PENINSULA AVENUE
TARPON SPRINGS, FL 34689
PHONE (727) 940-3244
FAX (727) 279-8795

DRAWN BY: BDN 11/15
CHECKED BY: PDB 11/15
DESIGNED BY: MAT 11/15
CHECKED BY: FRS 11/15

VERMONT AGENCY OF TRANSPORTATION
ROAD NO: COUNTY: PROJECT ID:
BENNINGTON BF BPNT 1161

CONTAINMENT SECTION DETAILS (2 OF 3)
FIVE BRIDGES ON OR OVER US ROUTE 7

REF DWG. NO.
SHEET NO.
C-11



* BASED ON MAXIMUM CONTAINMENT AREA OF 350 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.

TYPICAL SECTION
(PHASES I THRU III)
(MOBILE DUST COLLECTOR NOT SHOWN FOR CLARITY)

Vermont Agency of Transportation
RECEIVED
ON: **May 10, 2016**
and Checked for
CONFORMANCE
BY: Mark Sargent DATE: 05/13/2016

THREE (3) EXHAUST DUCT EVENLY SPACED ACROSS DECK SECTION (TYP.)*

CONTAINMENT PLATFORM CONSTRUCTED W/ CHAIN LINK FENCE HAVING A 2" MESH & 9 GAUGE WIRE OR NETTING MEETING ANSI A10.11 & OSHA 1926.500 (PART 10) SECURE FENCE TO CABLE WITH 1/4" Ø TIES OR CABLE CLIPS. SEE CHAIN LINK FENCE LAYOUT DETAIL.

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.	
<input checked="" type="checkbox"/>	NO EXCEPTIONS TAKEN
<input type="checkbox"/>	MAKE CORRECTIONS NOTED RESUBMITTAL NOT REQUIRED
<input type="checkbox"/>	AMEND AND RESUBMIT
<input type="checkbox"/>	REJECTED - SEE REMARKS
PB AMERICAS, INC.	
BY: <i>S. Bajaj</i>	DATE: <i>5/9/16</i>



DATE	BY	DESCRIPTION
02/24/16	PPS	GENERAL REVISION
05/05/16	PPS	GENERAL REVISION

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

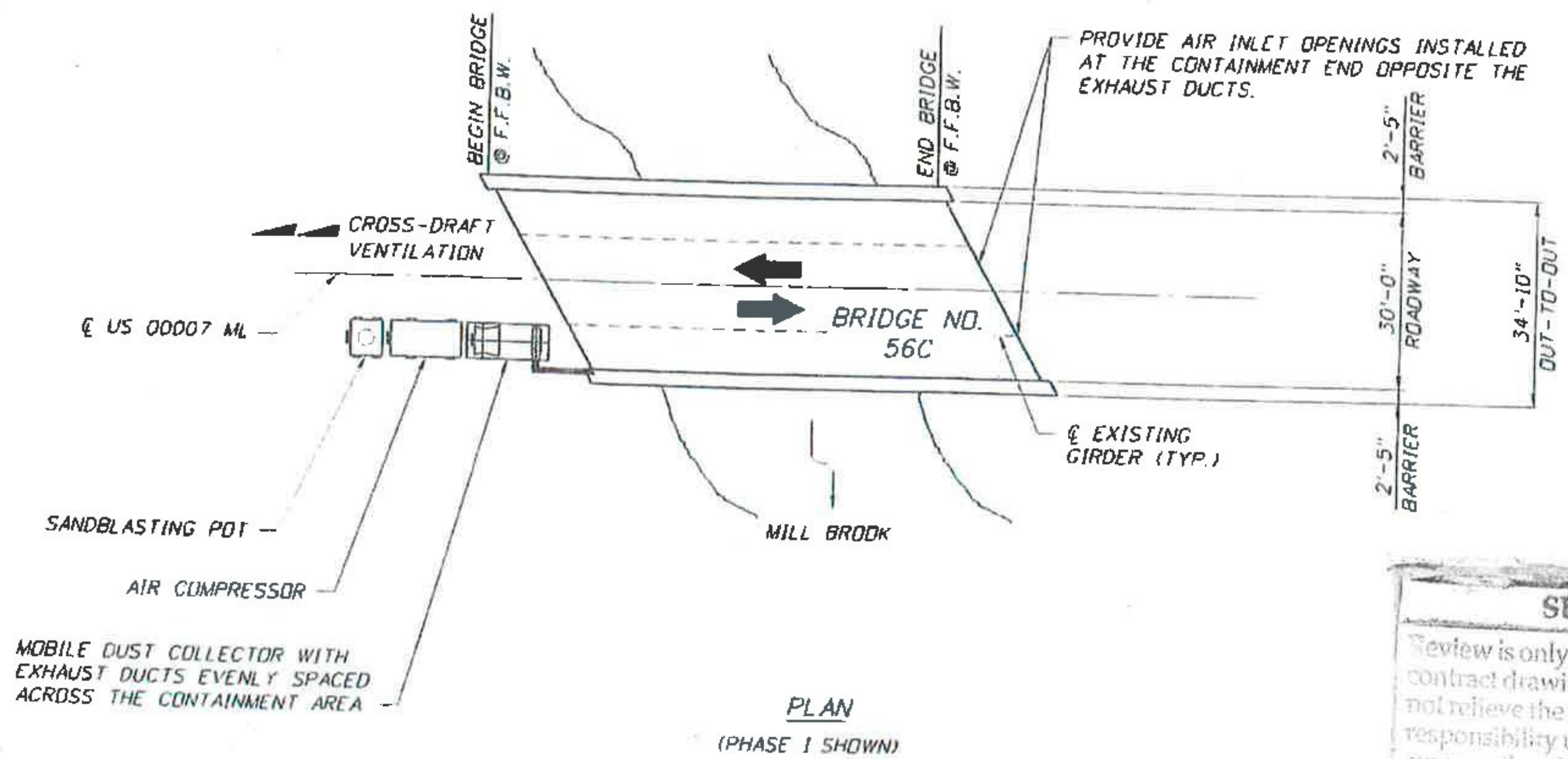
MONOKO, LLC.
1037 PENINSULA AVENUE
TARPOON SPRINGS, FL 34689
PHONE (727) 940-3244
FAX (727) 279-8795

DESIGNED BY BON 11/15	CHECKED BY PDB 11/15
DESIGNED BY MAT 11/15	CHECKED BY PRS 11/15

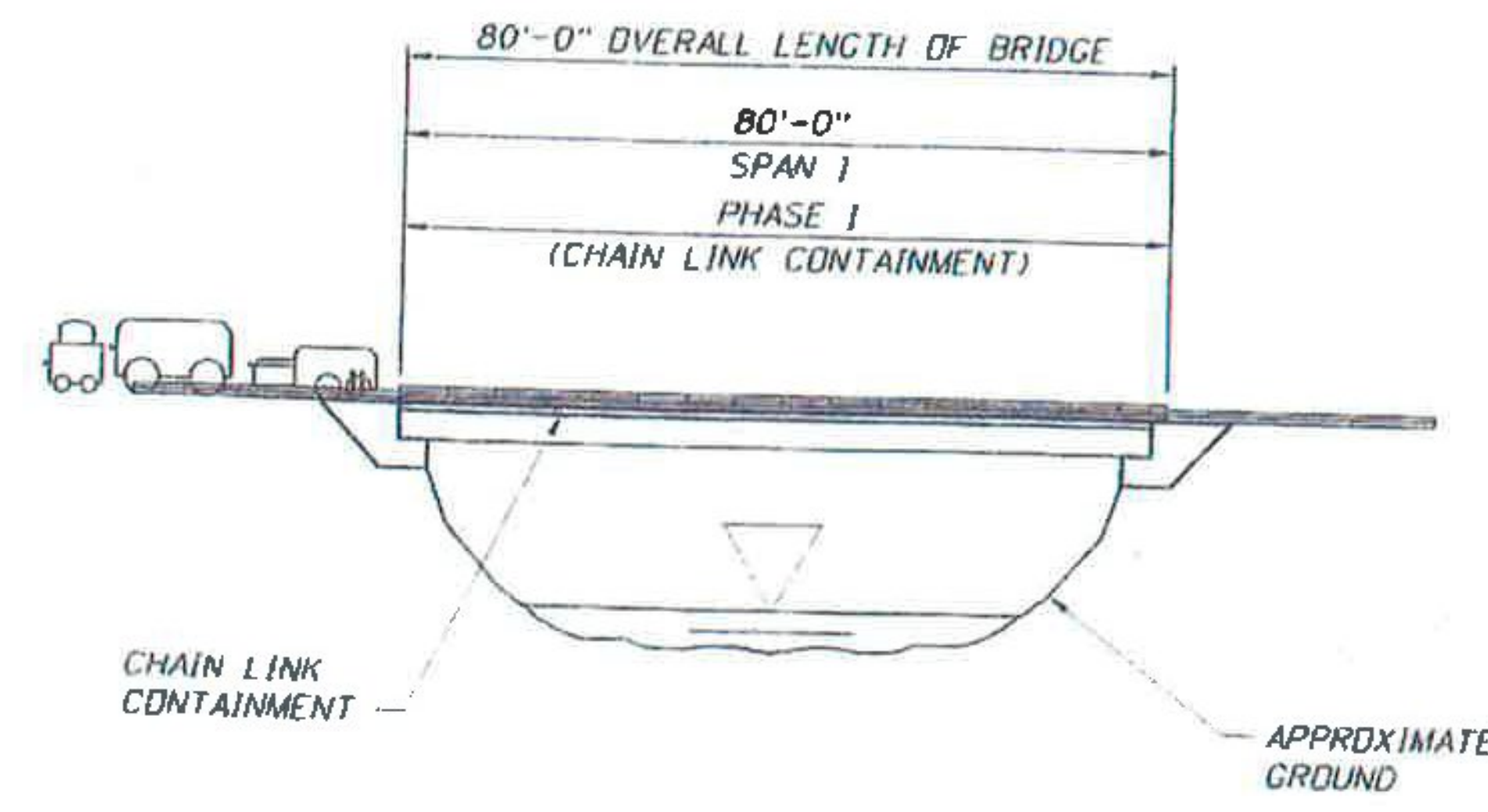
VERMONT AGENCY OF TRANSPORTATION	
ROAD NO.	EDRITY
BENNINGTON	BF BPH 116

CONTAINMENT SECTION DETAILS (3 OF 3)	
FIVE BRIDGES ON OR OVER US ROUTE 7	

REF. DWG. NO.
SHEET NO.
C-11A



PLAN
(PHASE I SHOWN)



ELEVATION
(PHASE I SHOWN)

- 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 I SHOWN SCHEMATICALLY. REFERENCE MDT PLANS FOR LIMITS OF WORK PHASES.
 3. WORK PHASE I 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 WALLS.
 5. FOR ADDITIONAL DETAILS, SEE CONTAINMENT MISCELLANEOUS DETAILS SHEETS.

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.	
<input checked="" type="checkbox"/>	NO EXCEPTIONS TAKEN
<input type="checkbox"/>	MAKE CORRECTIONS NOTED
<input type="checkbox"/>	RESUBMITTAL NOT REQUIRED
<input type="checkbox"/>	AMEND AND RESUBMIT
<input type="checkbox"/>	REJECTED - SEE REMARKS
BY: PB AMERICAS, INC.	
DATE:	<i>5/9/16</i>

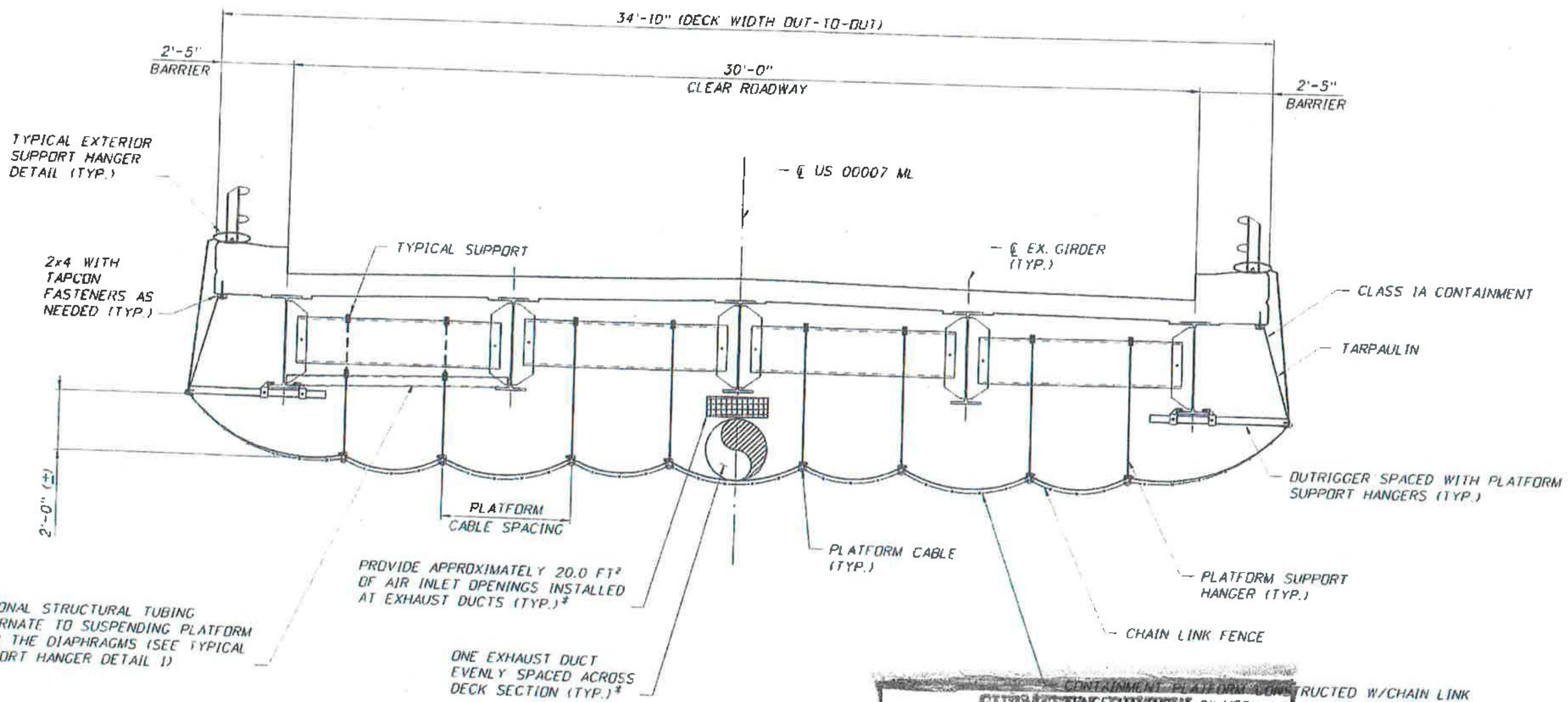
Vermont Agency of Transportation
RECEIVED
 ON: **May 10, 2016**
 and Checked for
CONFORMANCE
 BY: Mark Sargent DATE: 05/13/2016



REVISIONS		DATE	BY	DESCRIPTION	DRAWING NO.	PROJECT NO.	SHEET NO.

PAUL STEJLEN P.E. P.E. LICENSE NUMBER 07795 A2B ENGINEERING, LLC. 5406 N. HOOVER BLVD., SUITE 12 TAMPA, FL 33634		MONOKO, LLC. 1037 PENINSULA AVENUE TARPON SPRINGS, FL 34689 PHONE (727) 840-3244 FAX (727) 279-0795		DRAWING BY: BDN 11/15 CHECKED BY: PDB 11/15 DESIGNED BY: MAT 11/15 CHECKED BY: PRS 11/15	VERMONT AGENCY OF TRANSPORTATION ROAD NO. COUNTY PROJECT ID RUTLAND BF BPNT 116	BRIDGE NO. 56C PLAN & ELEVATION FIVE BRIDGES ON OR OVER US ROUTE 7	SHEET NO. C-12
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P:\167 Monoko, LLC\17 Berrington-Bl Tabors\1 Containment Plans\Cadd\BSP10101.dwg



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

PROVIDE APPROXIMATELY 20.0 FT² OF AIR INLET OPENINGS INSTALLED AT EXHAUST DUCTS (TYP.)[‡]

ONE EXHAUST DUCT EVENLY SPACED ACROSS DECK SECTION (TYP.)[‡]

TYPICAL SECTION
(MOBILE DUST COLLECTOR NOT SHOWN FOR CLARITY)

[‡] BASED ON MAXIMUM CONTAINMENT AREA OF 180 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.

SUBMITTAL REVIEW

Review is only for general conformance 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

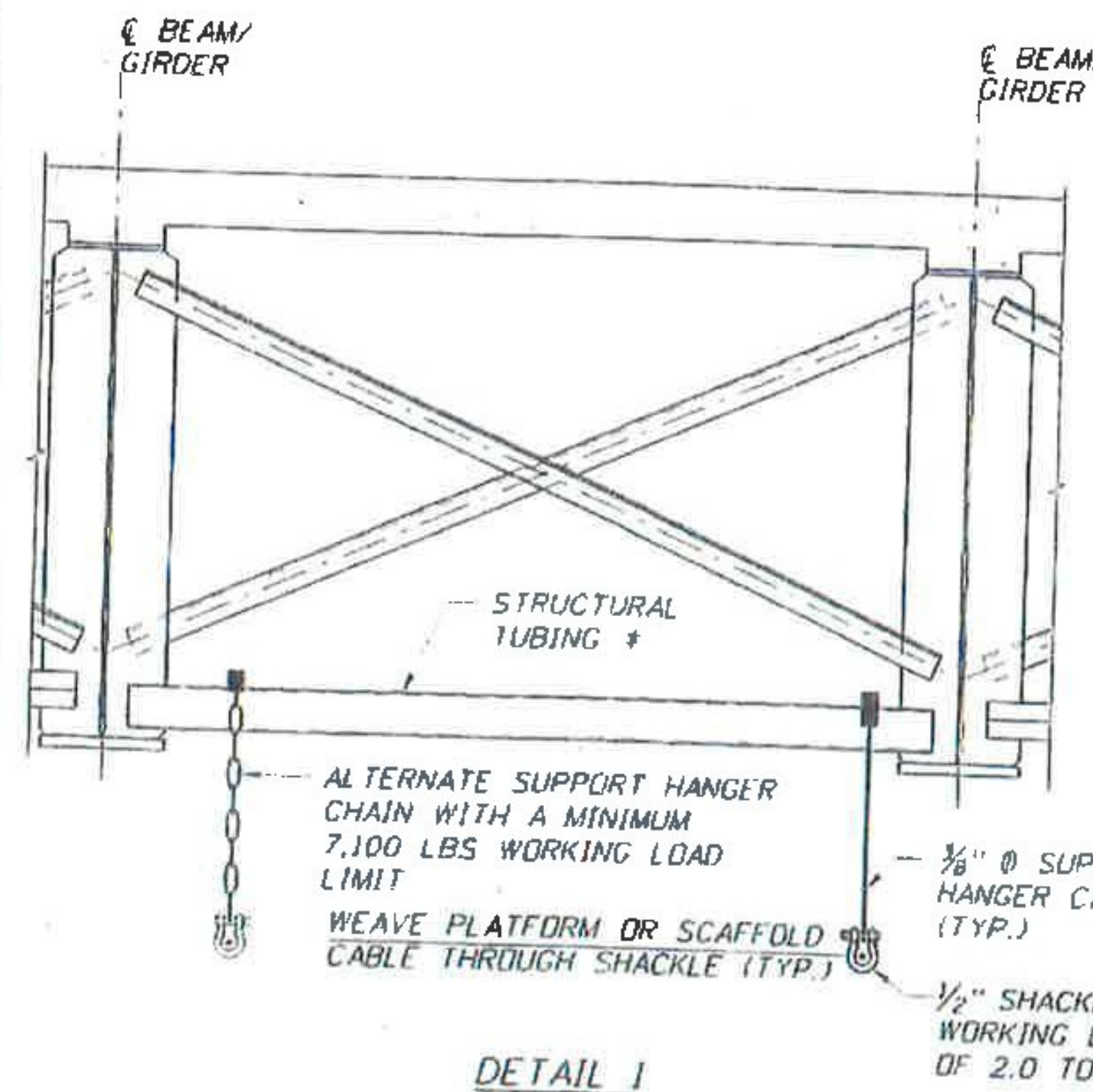
BY: *St. Boyington*
 DATE: *5/9/16*



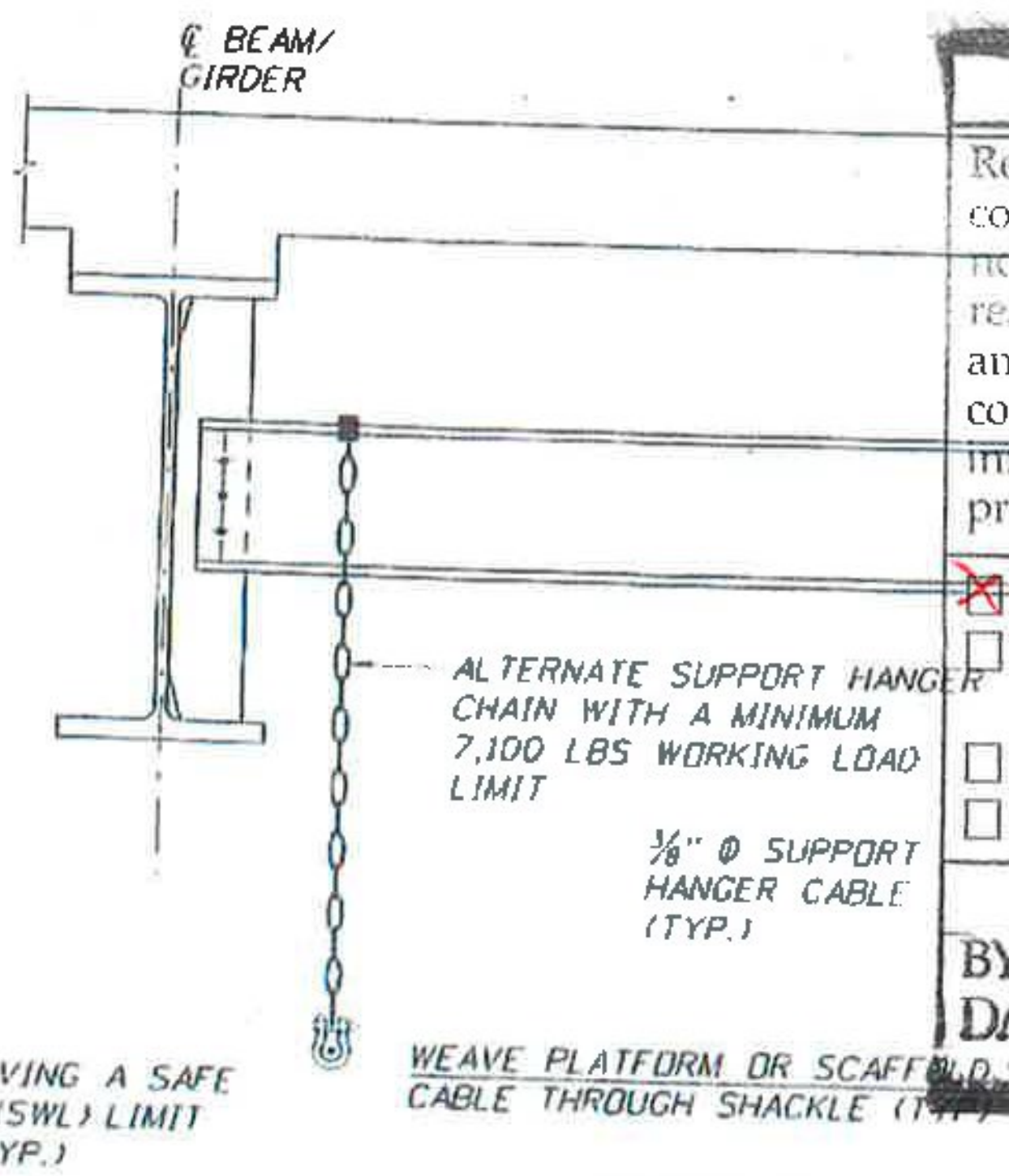
Vermont Agency of Transportation
RECEIVED
 ON: **May 10, 2016**
 and Checked for
CONFORMANCE
 BY: Mark Sargent DATE: 05/13/2016

REVISIONS		DESCRIPTION	DATE	BY
DATE	BY			
		PAUL STEJLEN P.E. P.E. LICENSE NUMBER 10795 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: <i>BON 11/15</i> CHECKED BY: <i>PDB 11/15</i> DESIGNED BY: <i>MAT 11/15</i> CHECKED BY: <i>PRS 11/15</i>	VERMONT AGENCY OF TRANSPORTATION ROAD ID: <i>56</i> COUNTY: <i>RUTLAND</i> PROJECT ID: <i>BF BPHT 116</i>	CONTAINMENT SECTION DETAILS FIVE BRIDGES ON OR OVER US ROUTE 7	REF. DWD 110 D18E110 C-13
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DETAIL 1



DETAIL 2

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, materials, information that pertains to the construction processes or techniques of construction.

NO EXCEPTIONS

MAKE CORRECTIONS NOTED

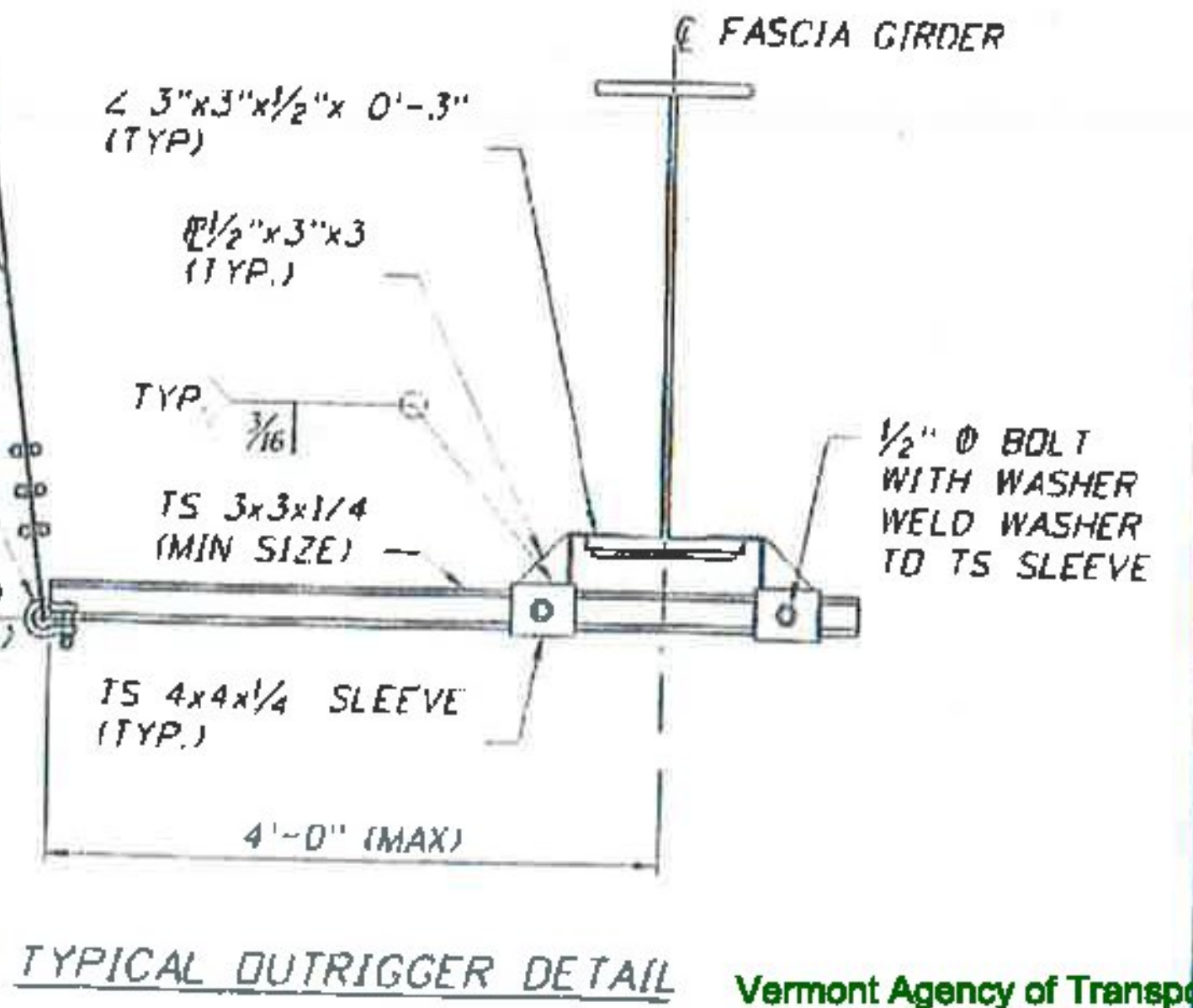
AMEND AND RESUBMIT

REJECTED - SEE REMARKS

PB AMERICAS, INC.

BY: *Submittal*

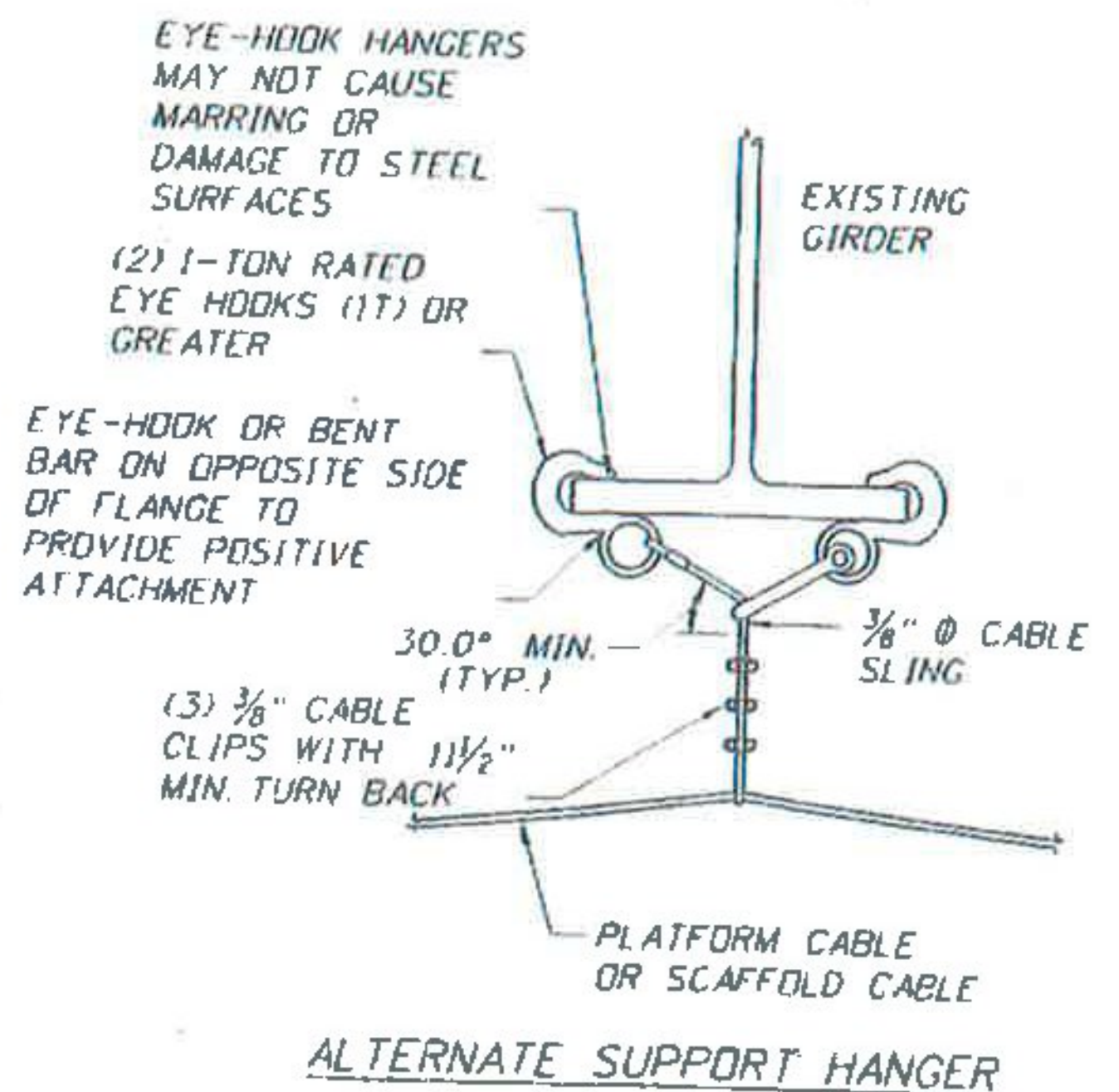
DATE: *5/9/16*



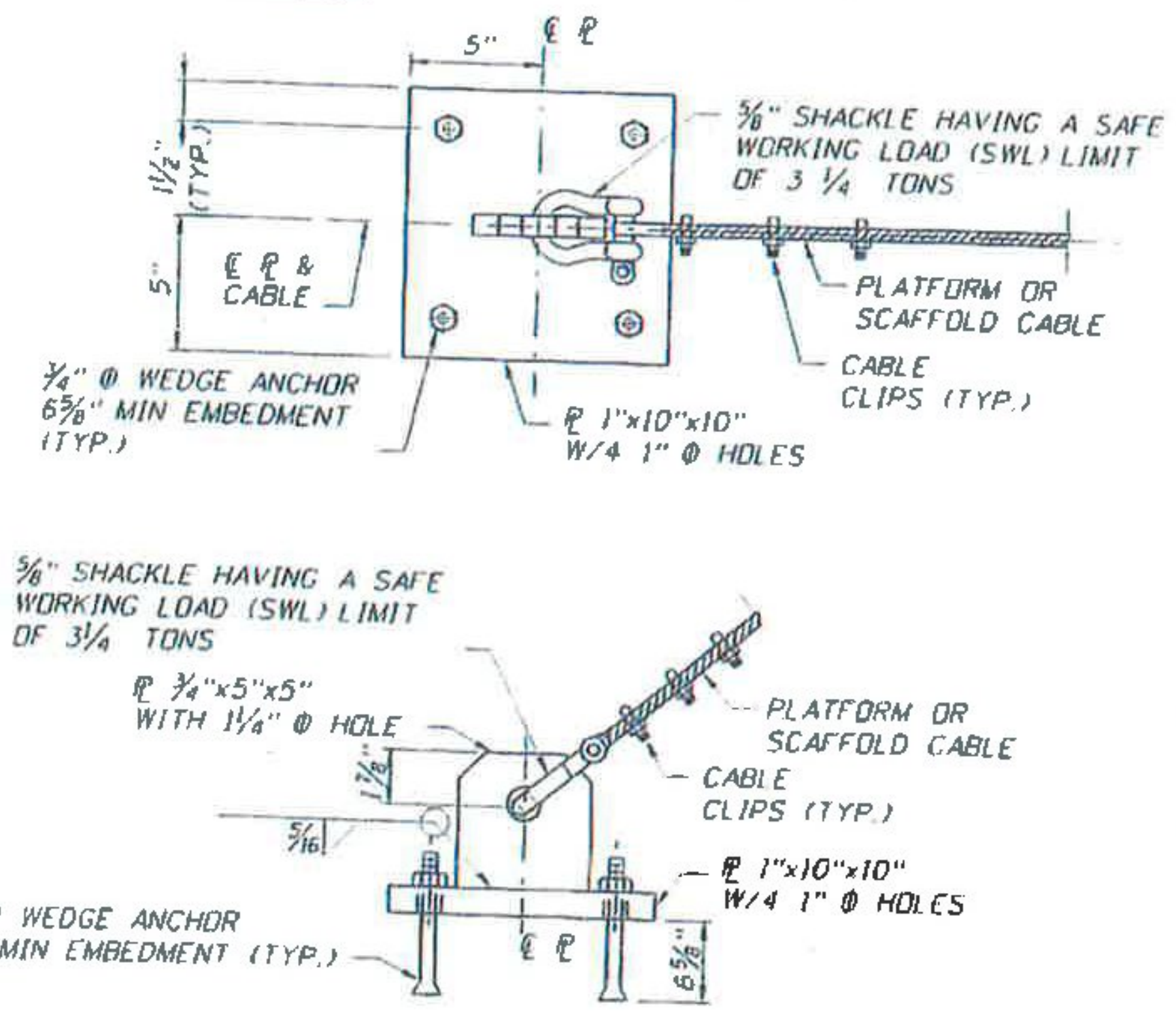
TYPICAL OUTRIGGER DETAIL

Vermont Agency of Transportation
RECEIVED
 ON: May 10, 2016
 and Checked for
CONFORMANCE
 BY: Mark Sargent DATE: 05/13/2016

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



ALTERNATE SUPPORT HANGER



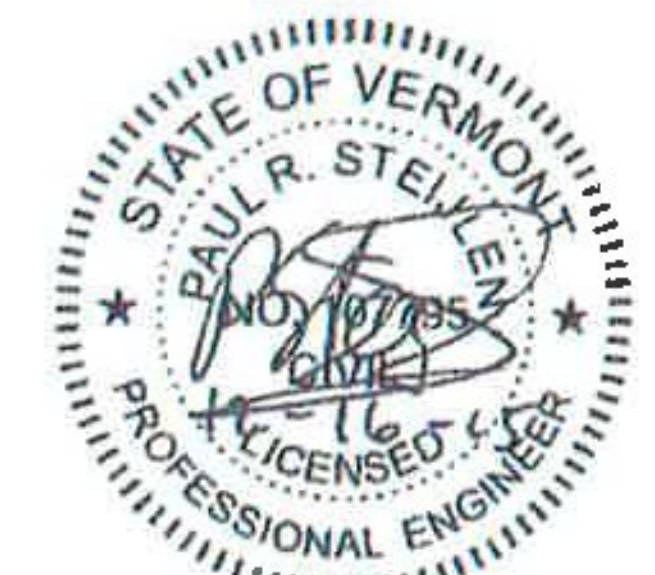
OPTIONAL ANCHOR PLATE ATTACHMENT

GENERAL NOTES:

- 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.
- STRUCTURAL STEEL SHALL CONFORM TO ASTM A36.
- WELD ELECTRODES SHALL BE E70XX.
- TO RESTORE CONCRETE:
 - REMOVE ANCHORS COMPLETELY WITHOUT DAMAGING THE CONCRETE ELEMENT.
 - FINISH SURFACE WITH DDT APPROVED METHODS AND NON-SHRINK GROUT.
- MINIMUM 8" EDGE DISTANCE AND 6" CENTER TO CENTER OF BOLTS IS REQUIRED.
- 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.
- ANCHOR PLATE SHALL NOT BE ATTACHED TO PRESTRESSED PILES OR BEAMS.

INSTALLATION NOTES:

- 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.)
- INSTALL ANCHOR BOLTS PER MANUFACTURER'S INSTRUCTIONS.
- INSTALL 5/8" SHACKLE (OR GREATER) ONTO THE ANCHOR PLATE.
- INSTALL MAIN CABLE ONTO SHACKLE.



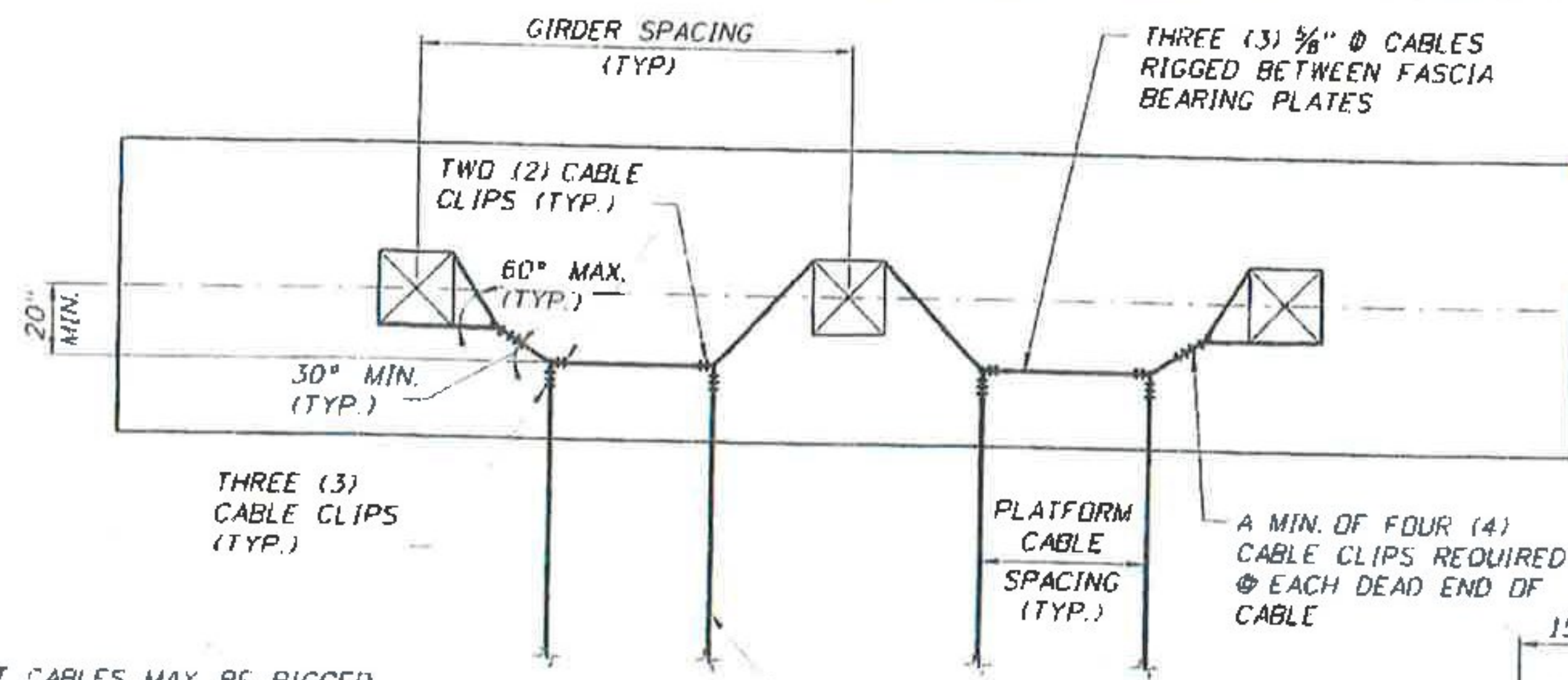
DATE	BY	DESCRIPTION

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) 278-8795

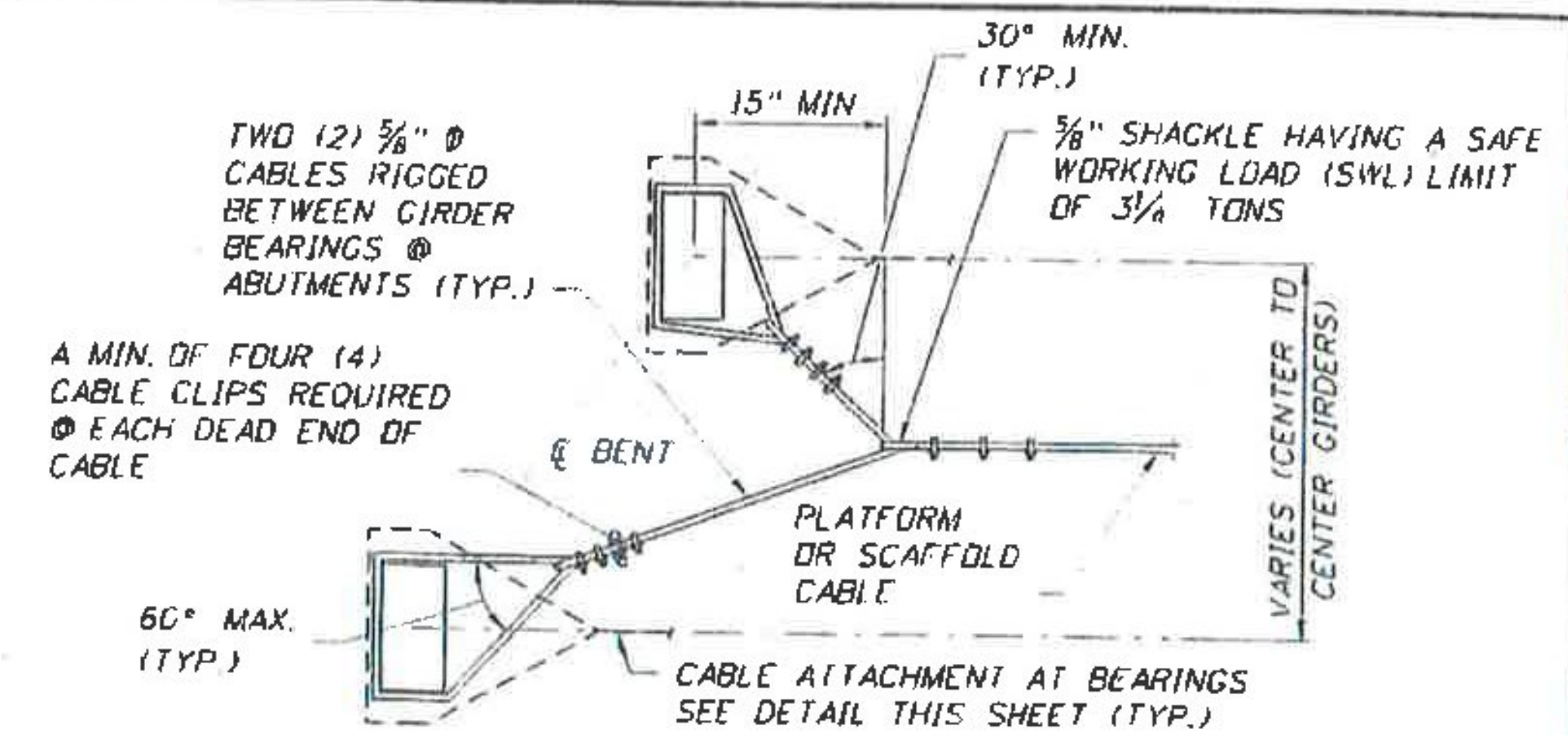
DATE: 11/15	BY: BDN	STATE: VERMONT
DATE: 11/15	BY: PDB	AGENCY: AGENCY OF TRANSPORTATION
DATE: 11/15	BY: MAT	ROAD NO.: ROAD 102
DATE: 11/15	BY: PRS	COUNTY: BENNINGTON
		PROJECT: BF BPRT (116)
		COUNTY: RUTLAND

PROJECT TITLE: CONTAINMENT MISCELLANEOUS DETAILS (1 OF 4)	REF. DATE: 10
PROJECT NAME: FIVE BRIDGES ON OR OVER US ROUTE 7	DATE: 10
	C-14

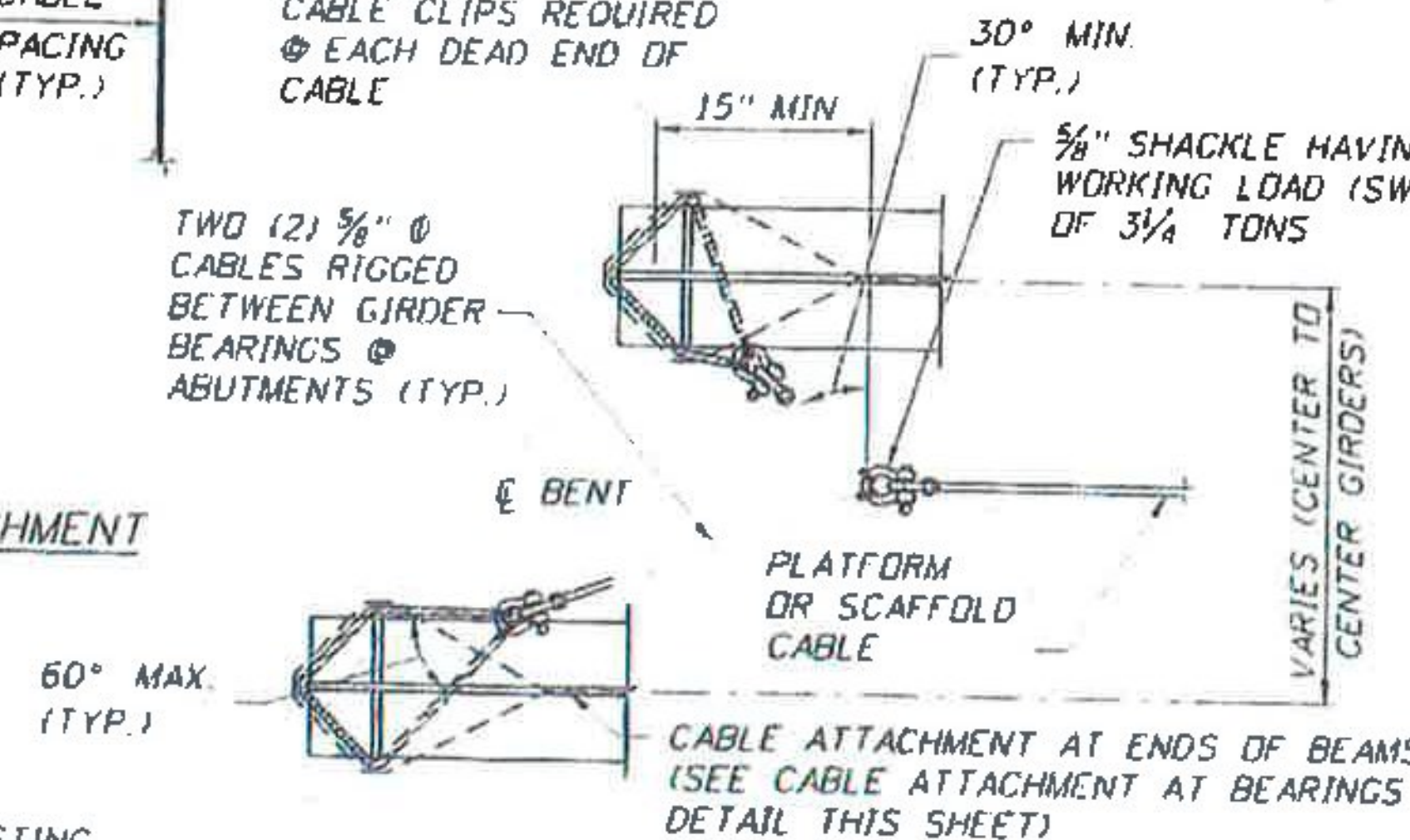


NOTE:
ATTACHMENT CABLES MAY BE RIGGED ACROSS ENTIRE WIDTH OF BRIDGE, BETWEEN FASCIA GIRDER BEARINGS AND/OR BETWEEN INDIVIDUAL PAIRS OF BEARINGS.

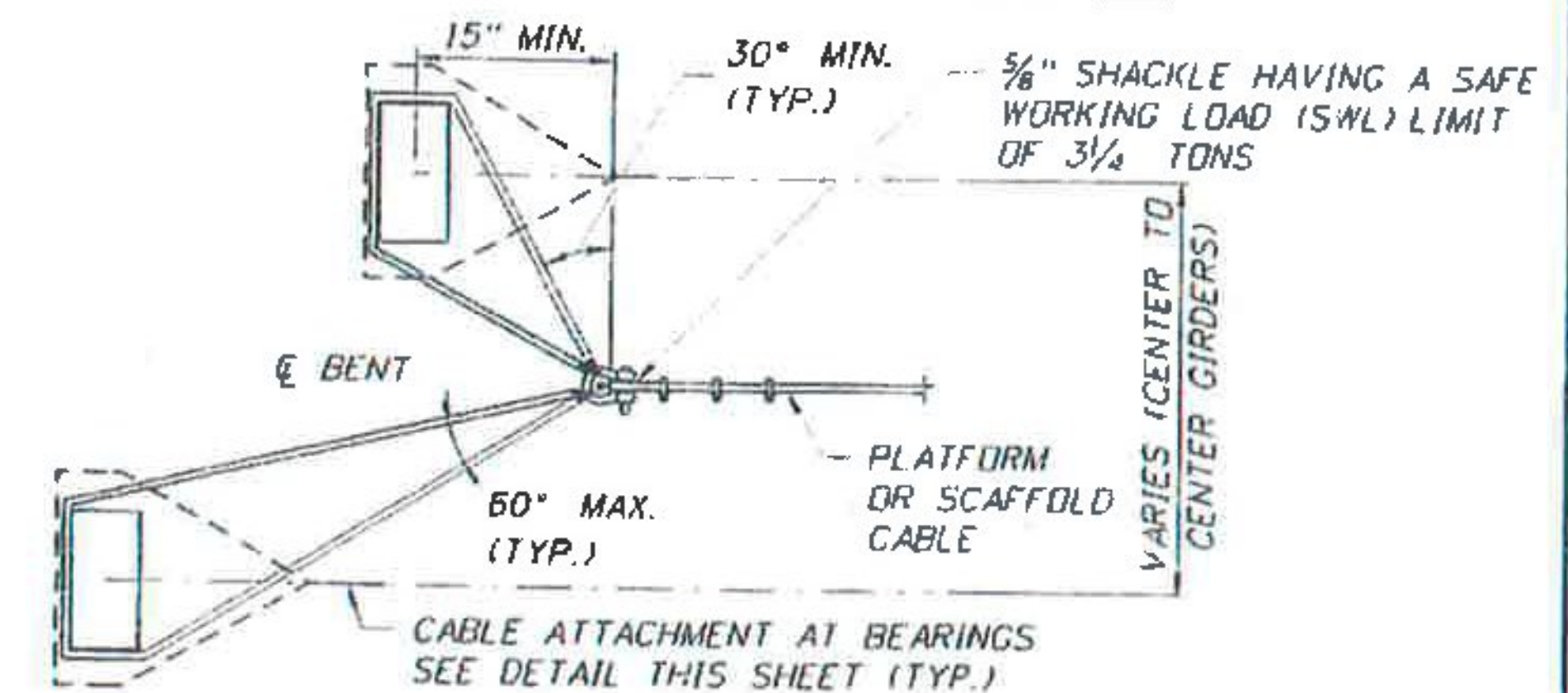
TRANSVERSE CABLE ATTACHMENT



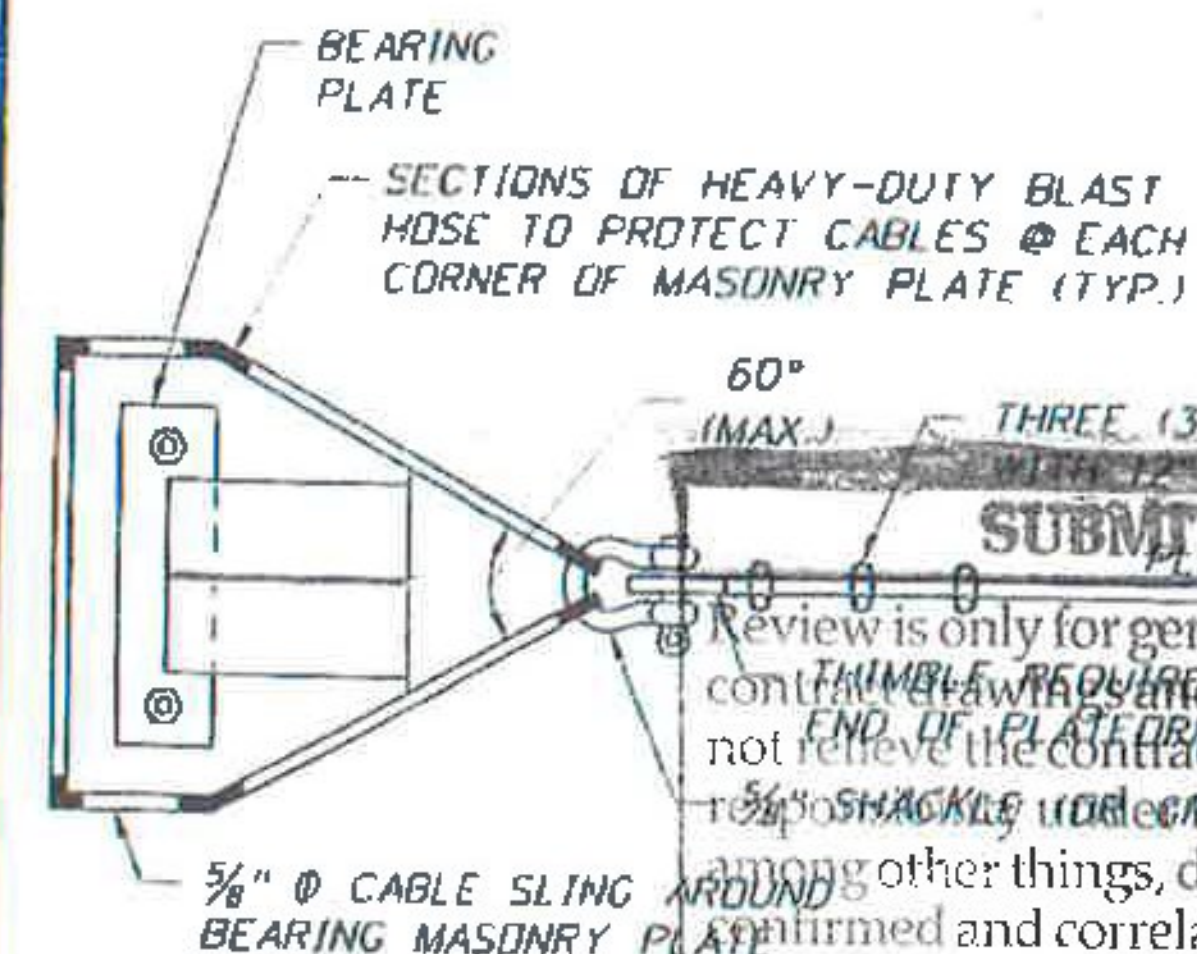
MID BAY CABLE ATTACHMENTS



MID BAY CABLE ATTACHMENTS



MID BAY CABLE ATTACHMENTS ALTERNATE



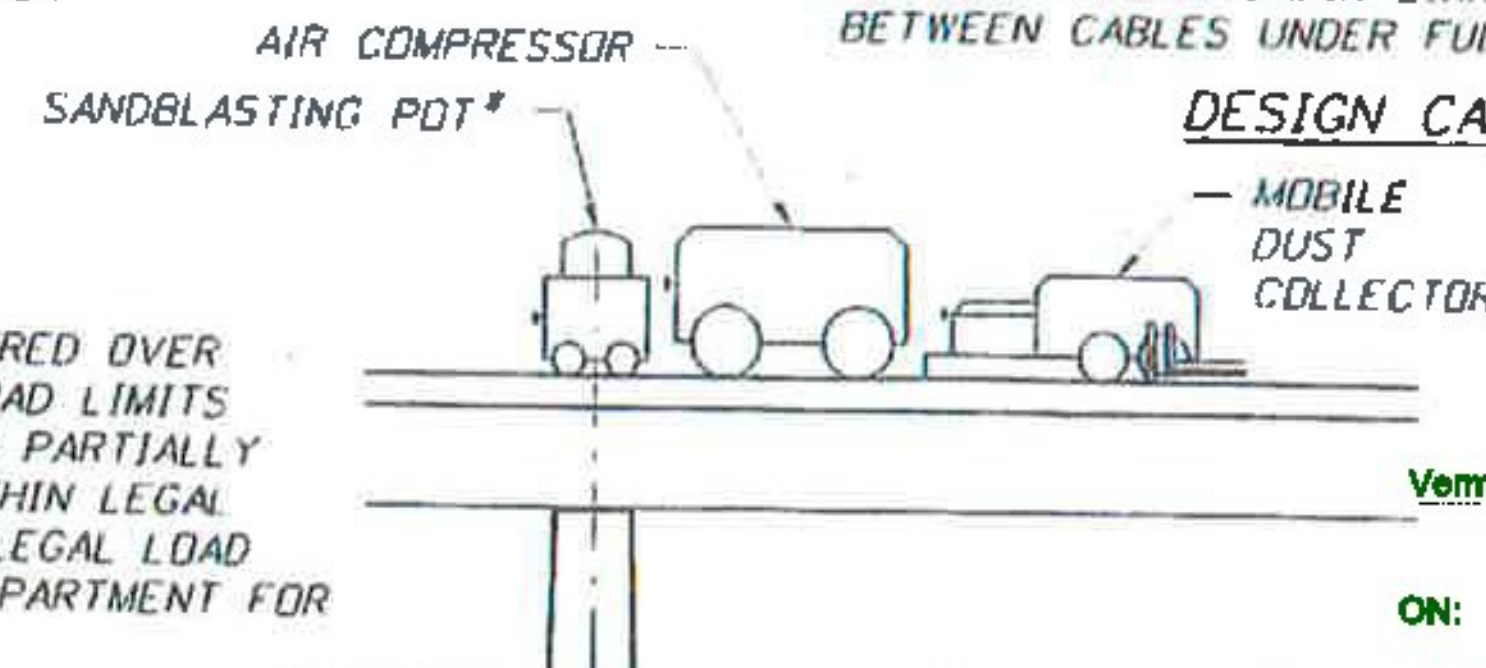
Review is only for general conformity to the contract documents and shall not relieve the contractor of his entire responsibility under the contract, including among other things, dimensions to be confirmed and correlated at the job site, and information that pertains to the fabrication processes or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

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

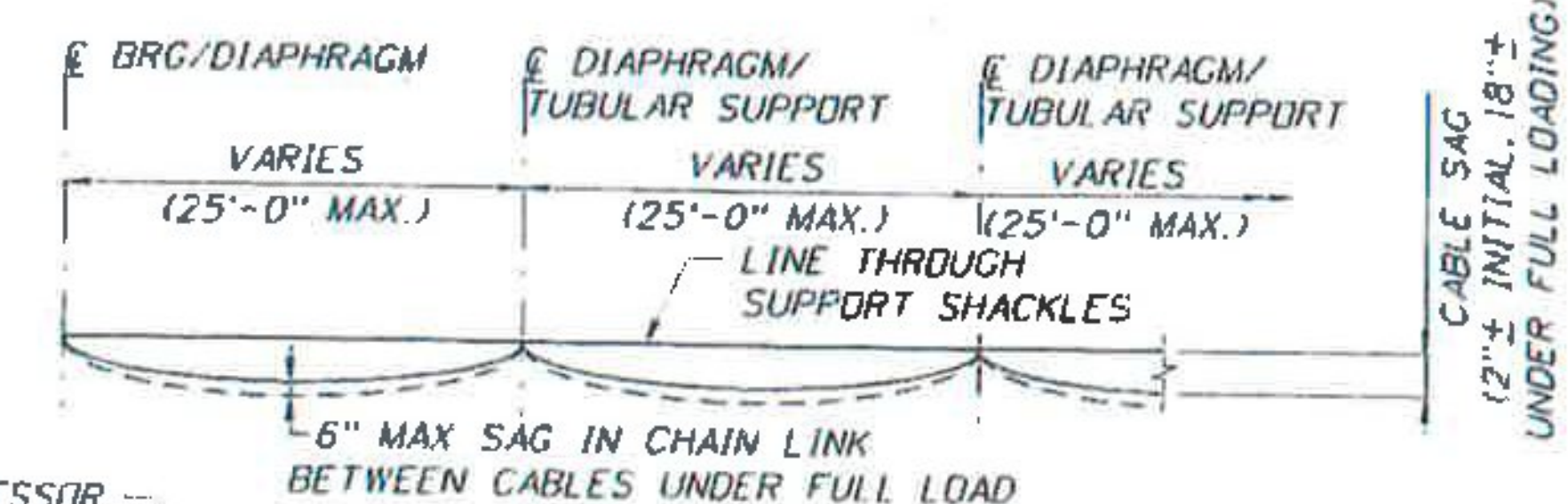
BY: *82 [Signature]*
DATE: *5/9/16*

PB AMERICAS, INC.

* SANDBLASTING POT SHALL BE CENTERED OVER PIER. IF EQUIPMENT EXCEEDS LEGAL LOAD LIMITS WHEN FULL, EQUIPMENT SHALL BE USED PARTIALLY FULL ONLY AS REQUIRED TO STAY WITHIN LEGAL LOAD LIMITS. ANY LOAD THAT EXCEEDS LEGAL LOAD LIMIT SHALL BE SUBMITTED TO THE DEPARTMENT FOR REVIEW AND APPROVAL.



CONTRACTOR EQUIPMENT ON BRIDGE (SCHEMATIC)

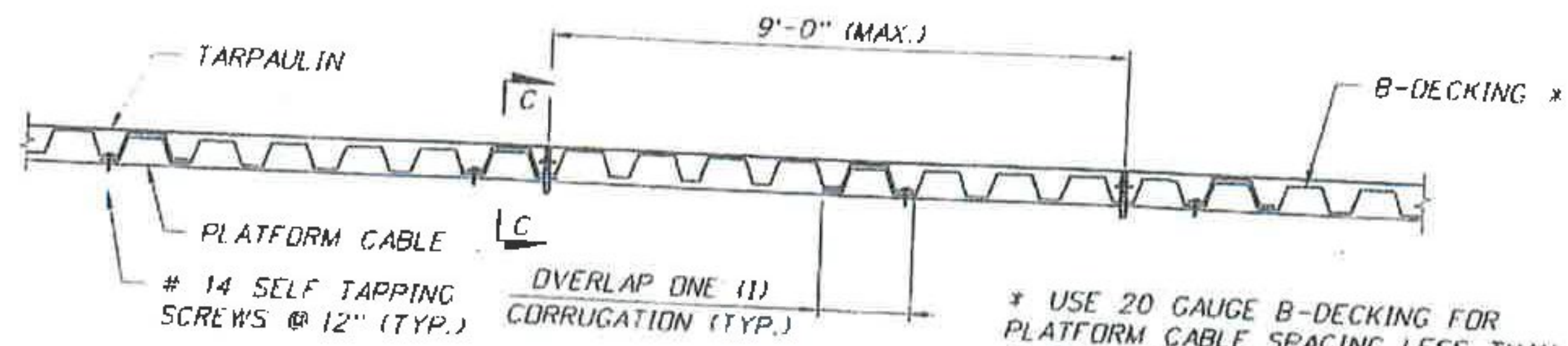


DESIGN CABLE SAG

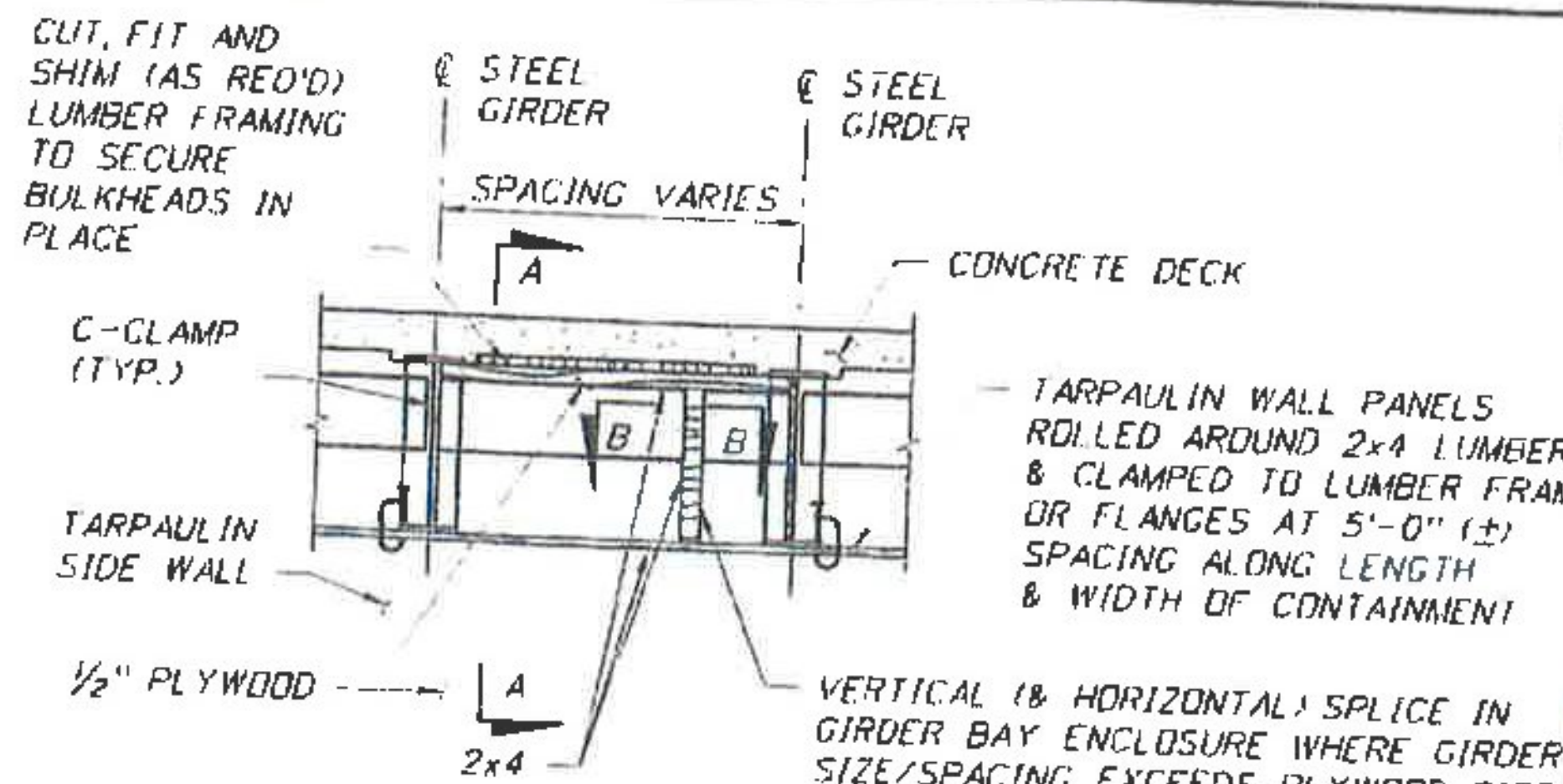


Vermont Agency of Transportation
RECEIVED
ON: May 10, 2016
and Checked for
CONFORMANCE
BY: Mark Sargent DATE: 05/13/2016

REVISIONS		DESCRIPTION	DATE	BY	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 11/15 CHECKED BY: PDS 11/15 DESIGNED BY: MAT 11/15 CHECKED BY: PRS 11/15	VERMONT AGENCY OF TRANSPORTATION			SHEET TITLE: CONTAINMENT MISCELLANEOUS DETAILS (2 OF 4)	REF. DWG. NO.
NO.	DATE							ROAD NO.	COUNTY	PROJECT ID		
								BENNINGTON		BF BPNT (116)		
											PROJECT NAME: FIVE BRIDGES ON OR OVER US ROUTE 7	SHEET NO. C-15

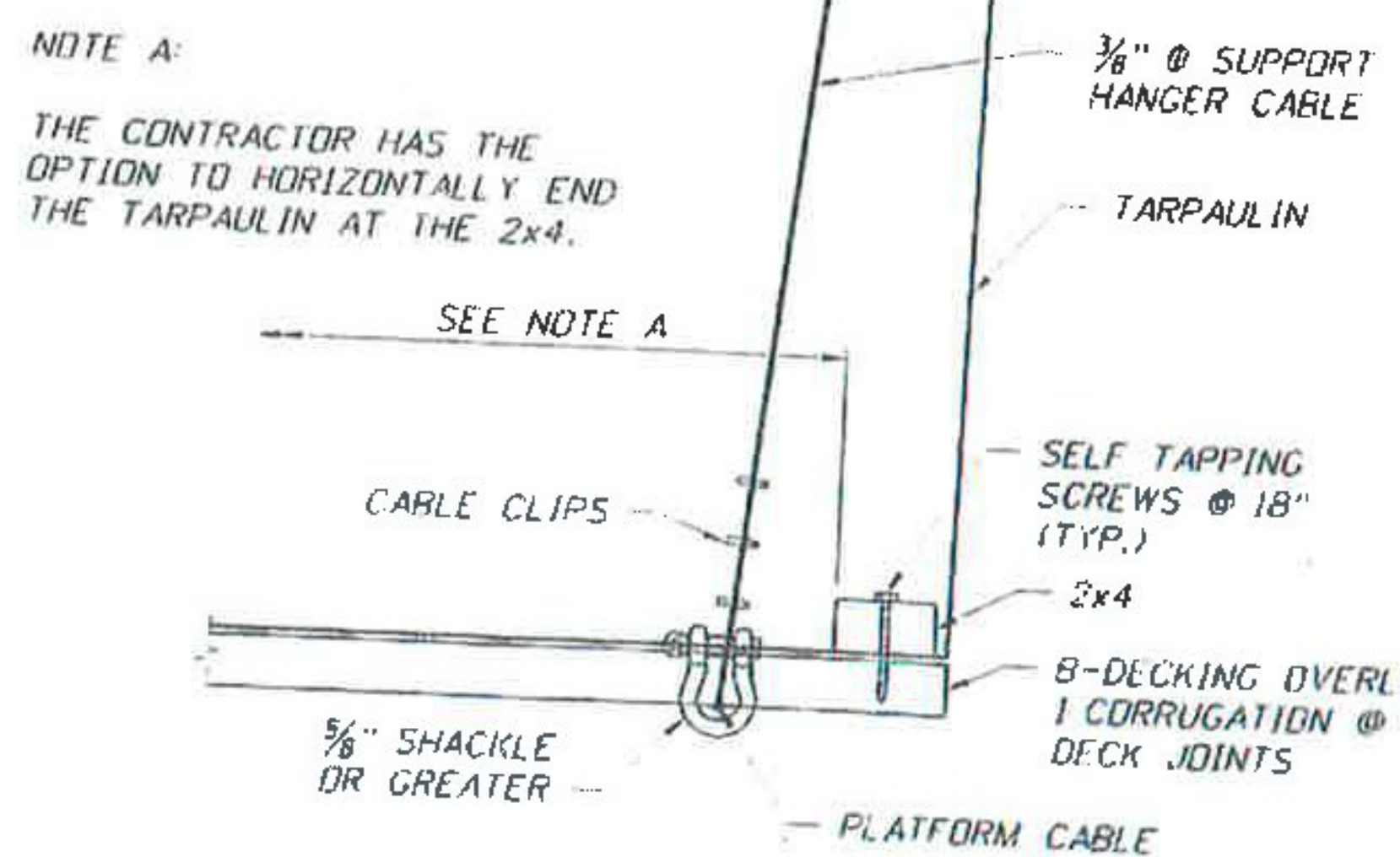


METAL DECKING DETAIL
(100% TIE-OFF PER OSHA REQUIRED AT ENDS OF METAL DECKING)

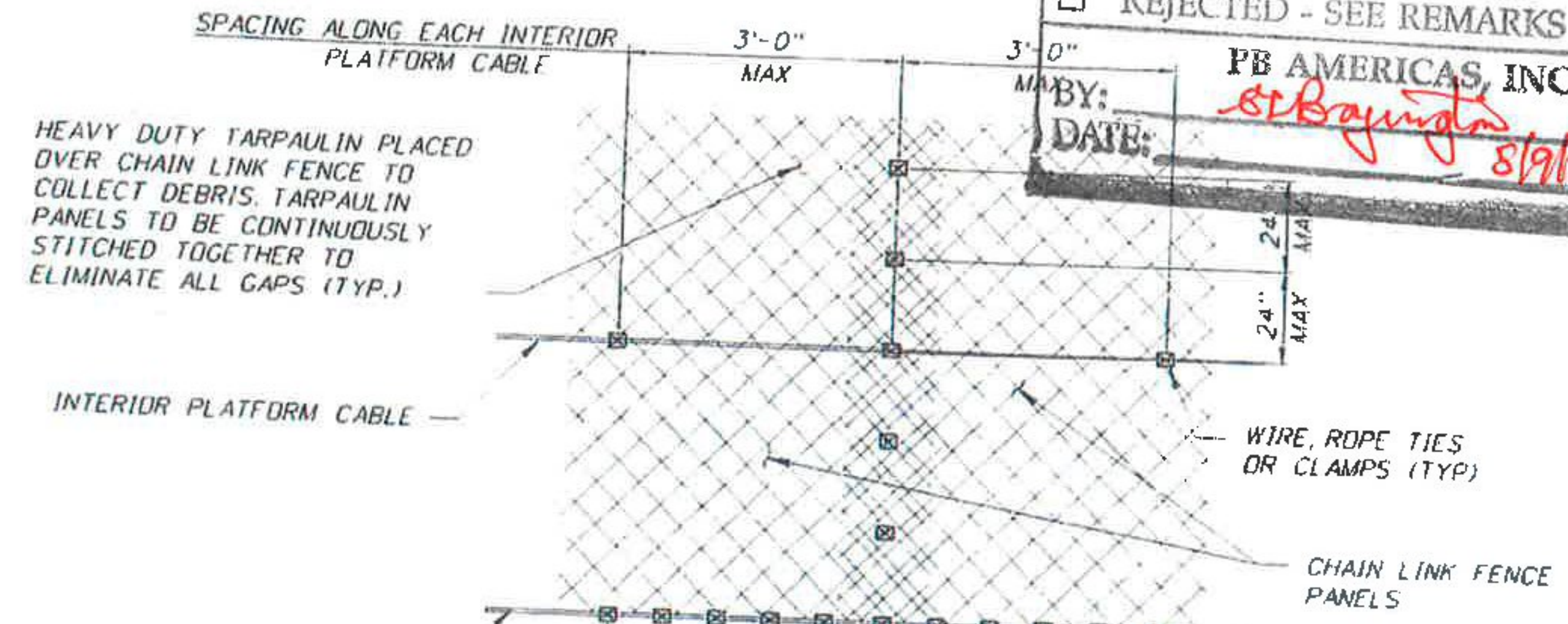


GIRDER BAY ENCLOSURE

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 jobsite, and information that pertains to the fabrication processes or to techniques of construction.	
<input checked="" type="checkbox"/>	NO EXCEPTIONS TAKEN
<input type="checkbox"/>	MAKE CORRECTIONS NOTED
<input type="checkbox"/>	RESUBMITTAL NOT REQUIRED
<input type="checkbox"/>	AMEND AND RESUBMIT
<input type="checkbox"/>	REJECTED - SEE REMARKS
PB AMERICAS, INC. BY: <i>SP Brayton</i> DATE: <i>8/9/16</i>	



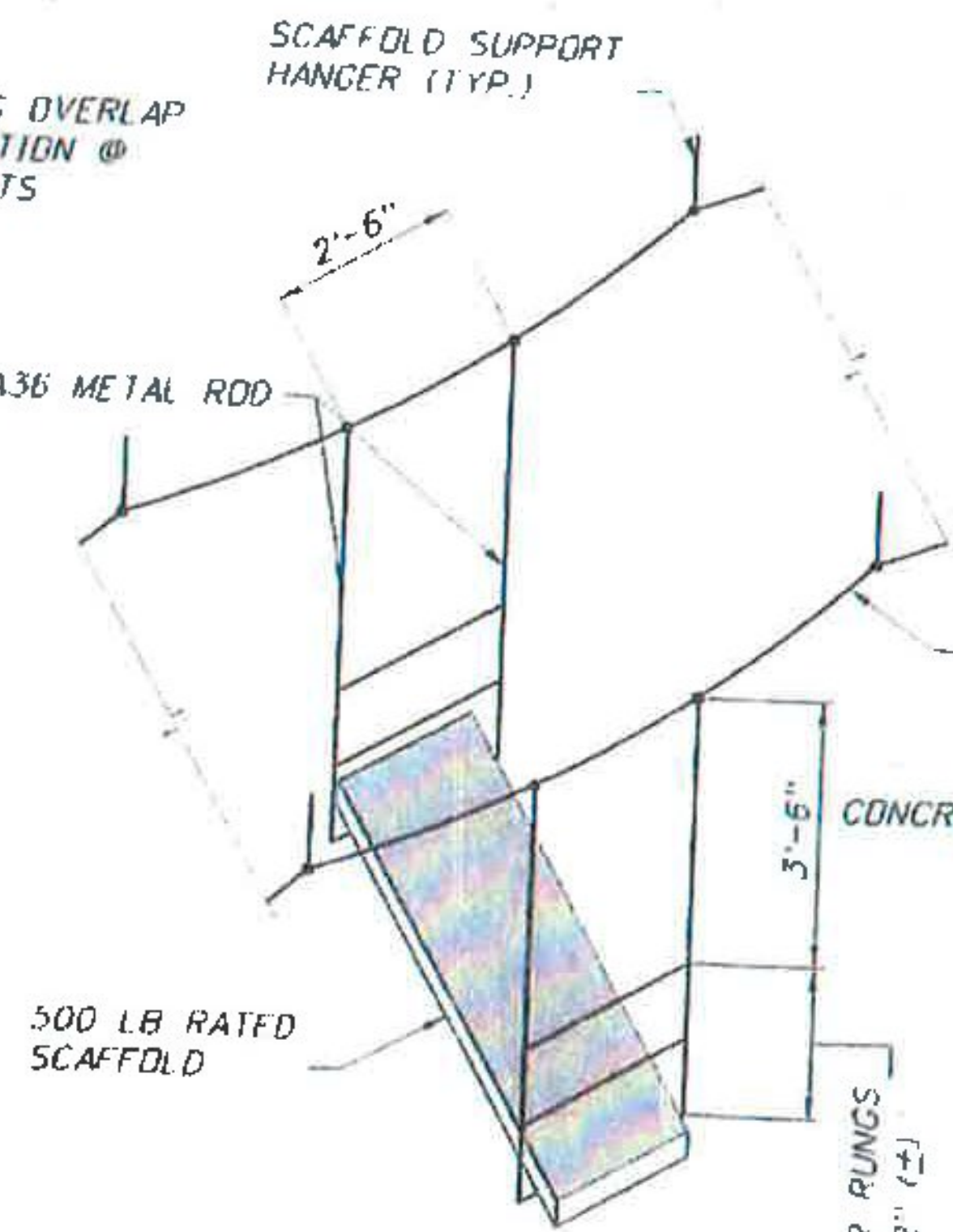
METAL DECKING END DETAIL



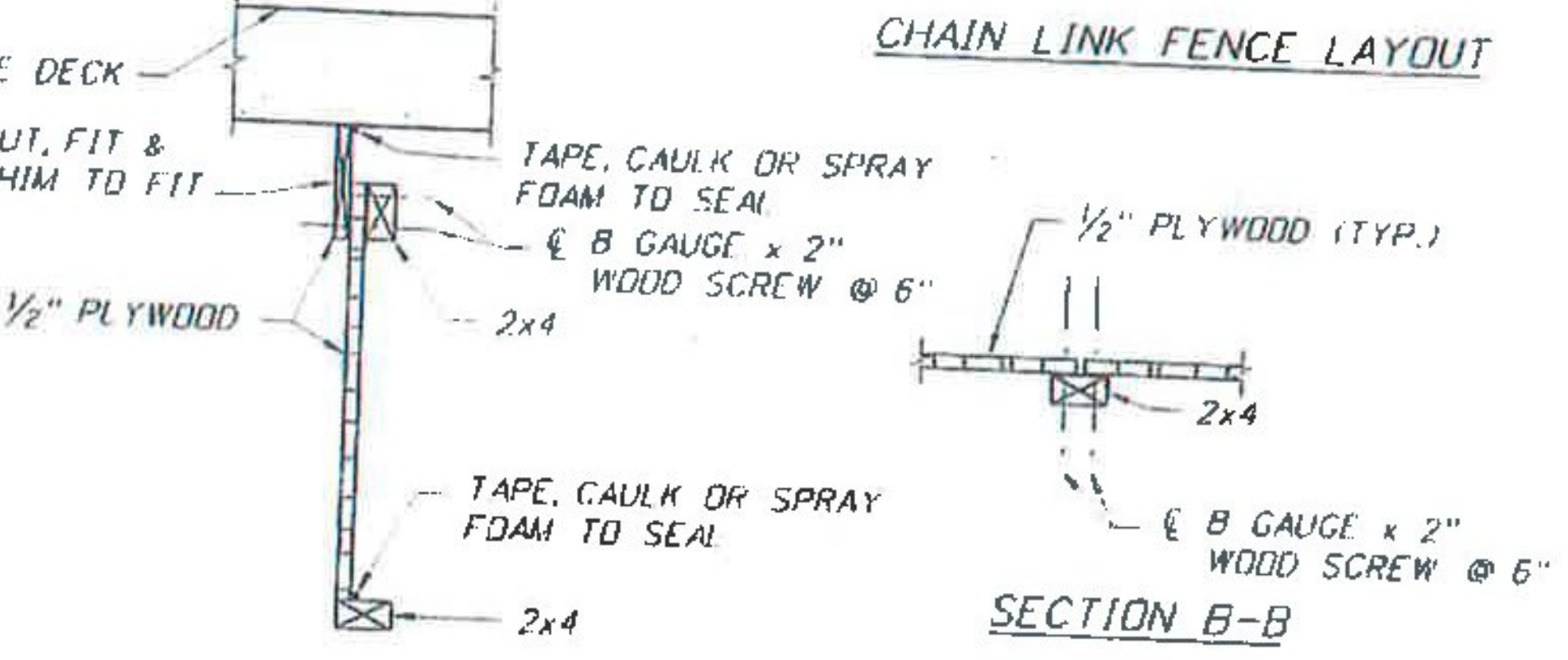
CHAIN LINK FENCE LAYOUT

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

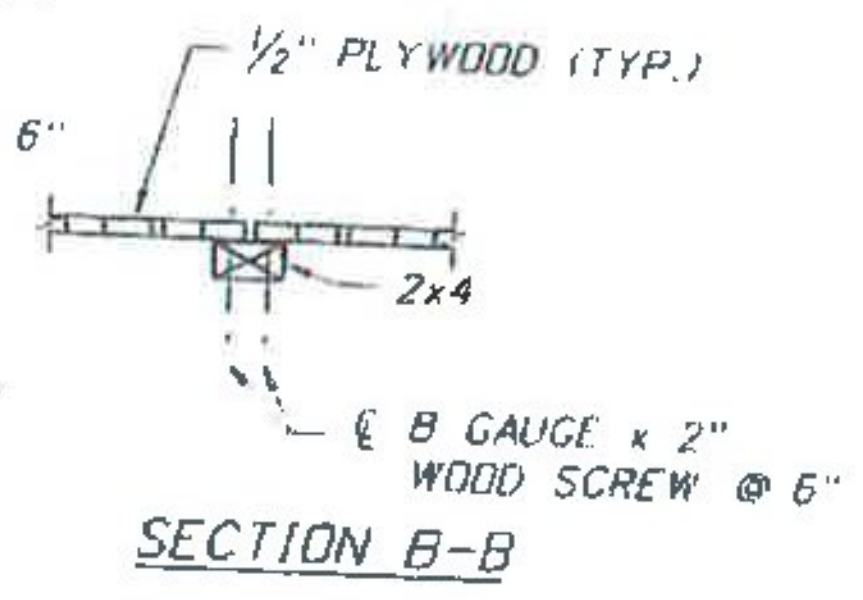
NOTE:
ALL CABLES & CLIPS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDED PROCEDURES. IF CABLES SEPARATE AT 60° MAX. ANGLE, ADD ONE ADDITIONAL CLIP.



SCAFFOLD ISOMETRIC
(OPTIONAL SUSPENDED SCAFFOLD)



SECTION A-A



SECTION B-B

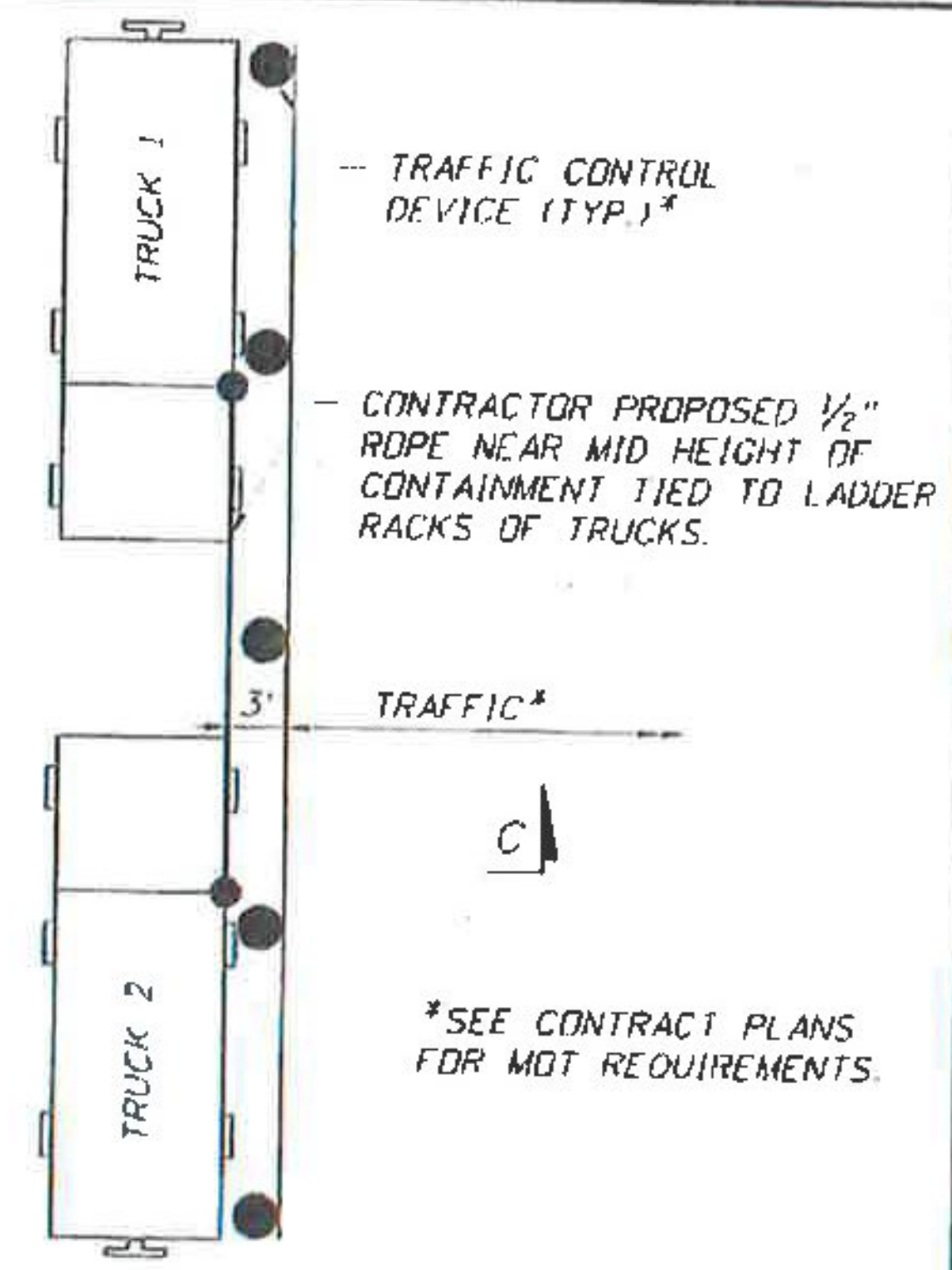
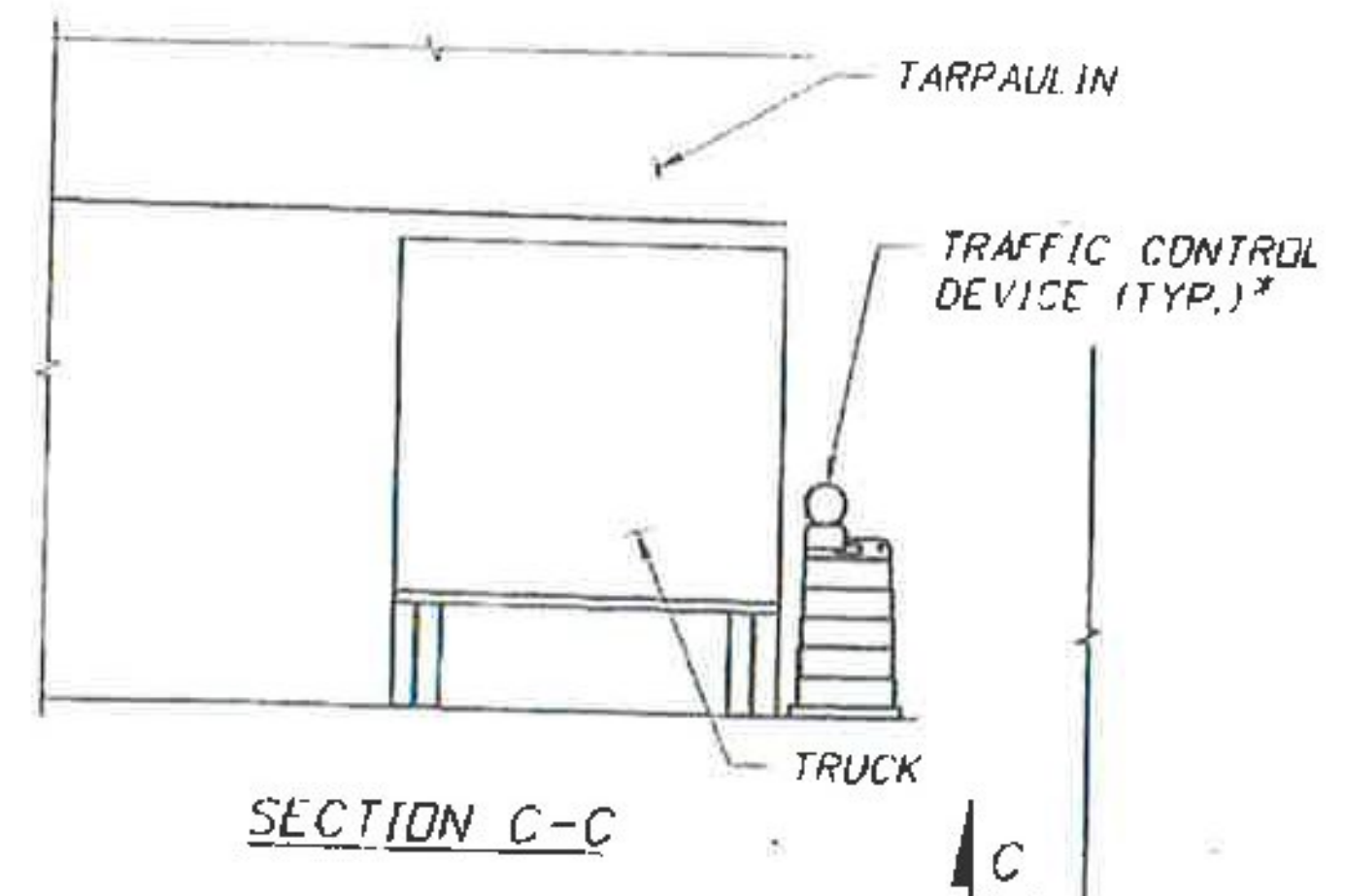
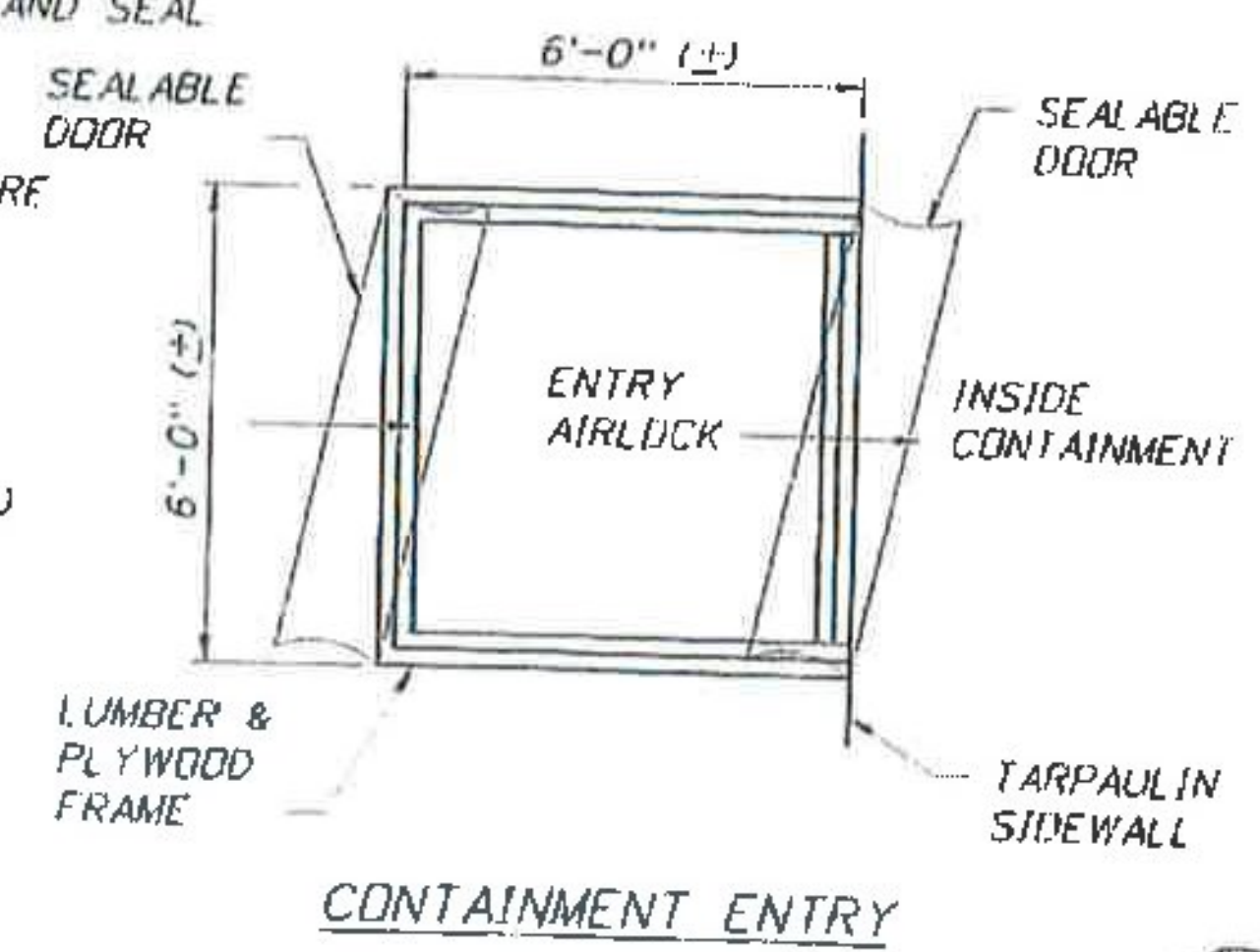
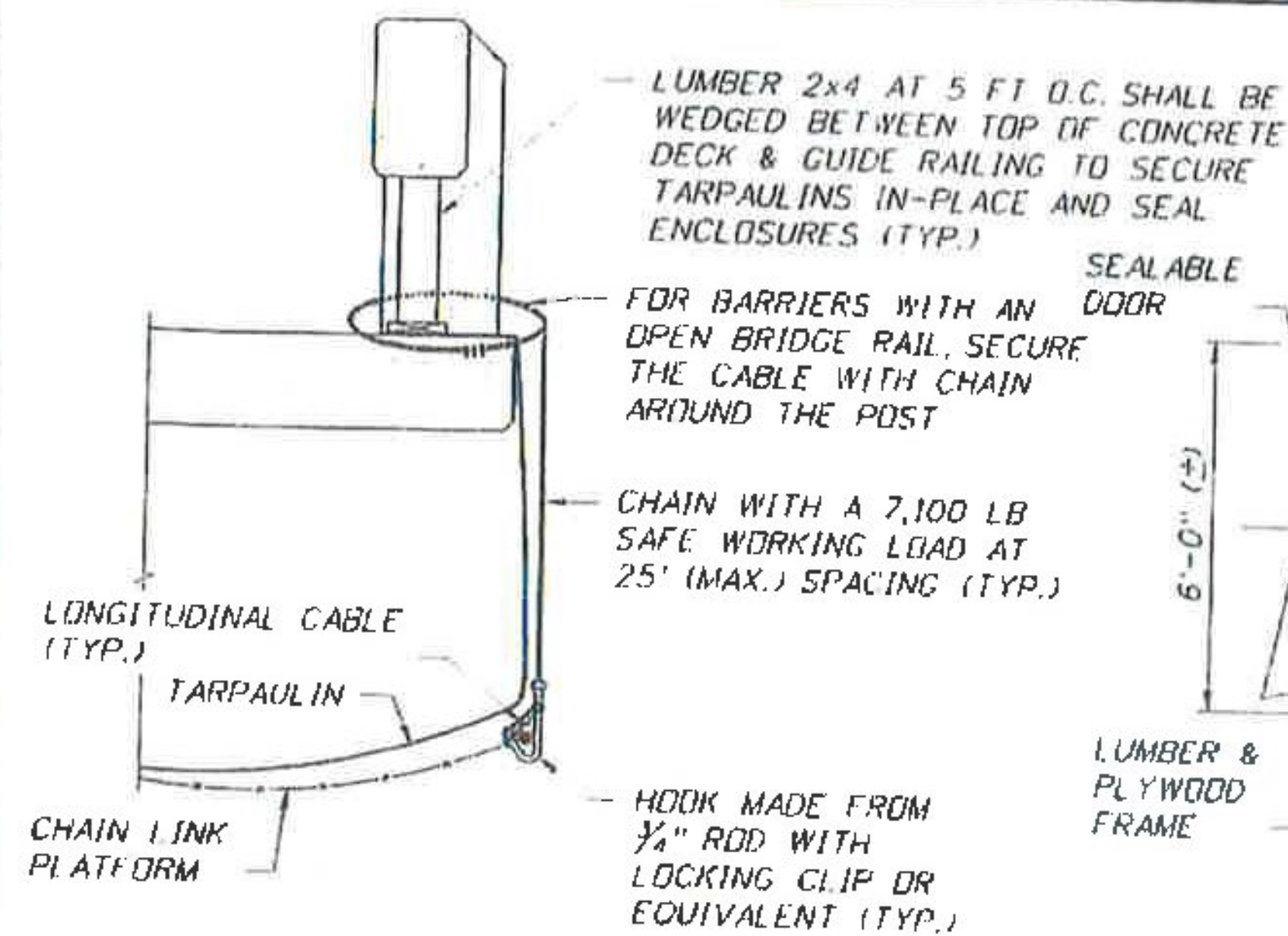
Vermont Agency of Transportation
RECEIVED
 ON: **May 10, 2016**
 and Checked for
CONFORMANCE
 BY: Mark Sargent DATE: 05/13/2016



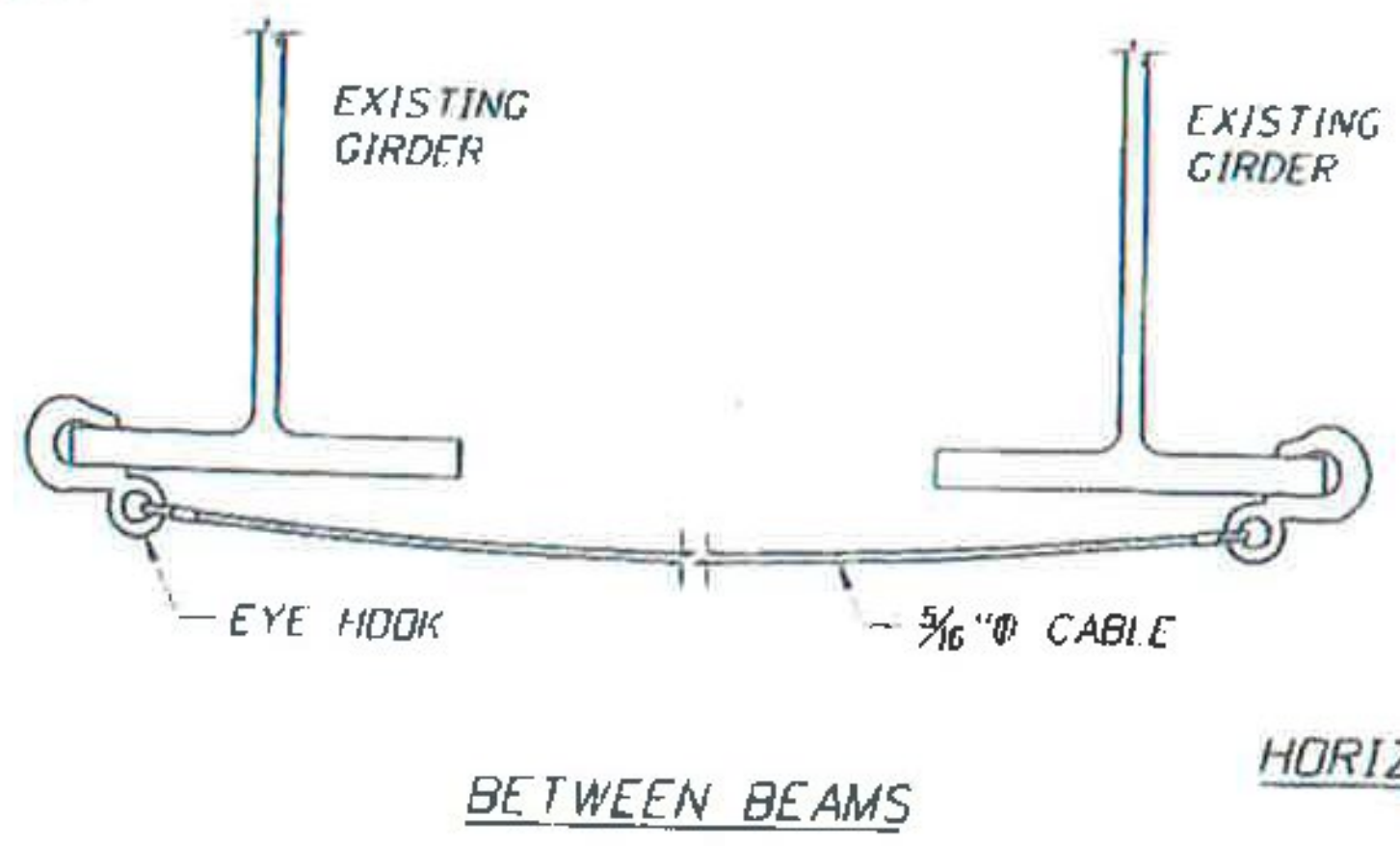
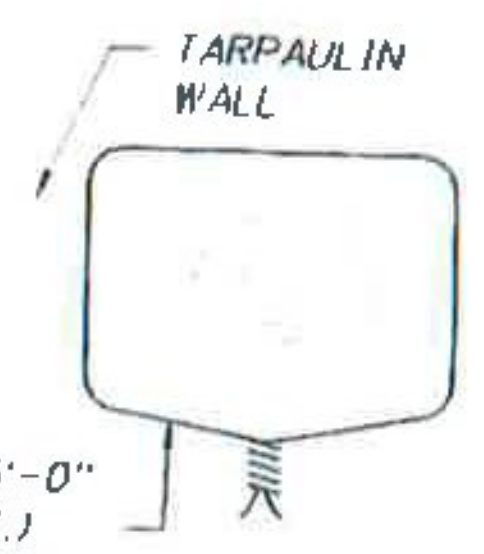
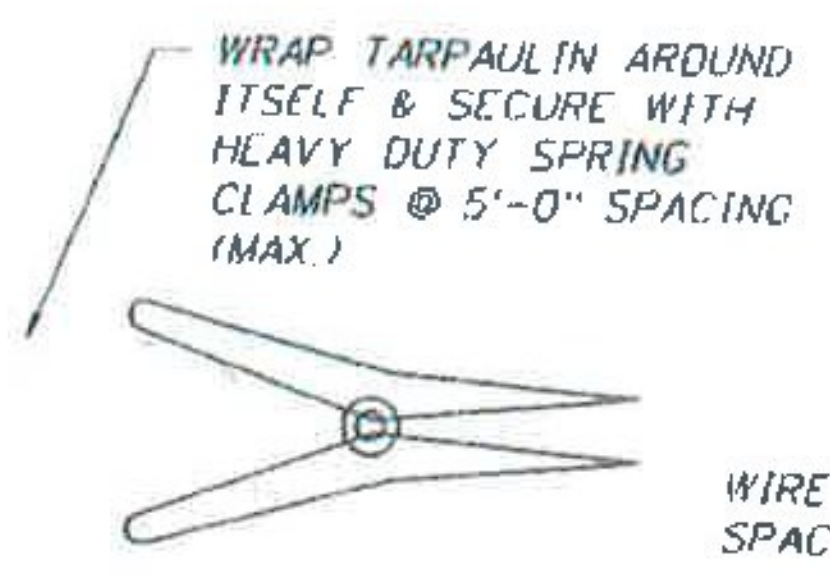
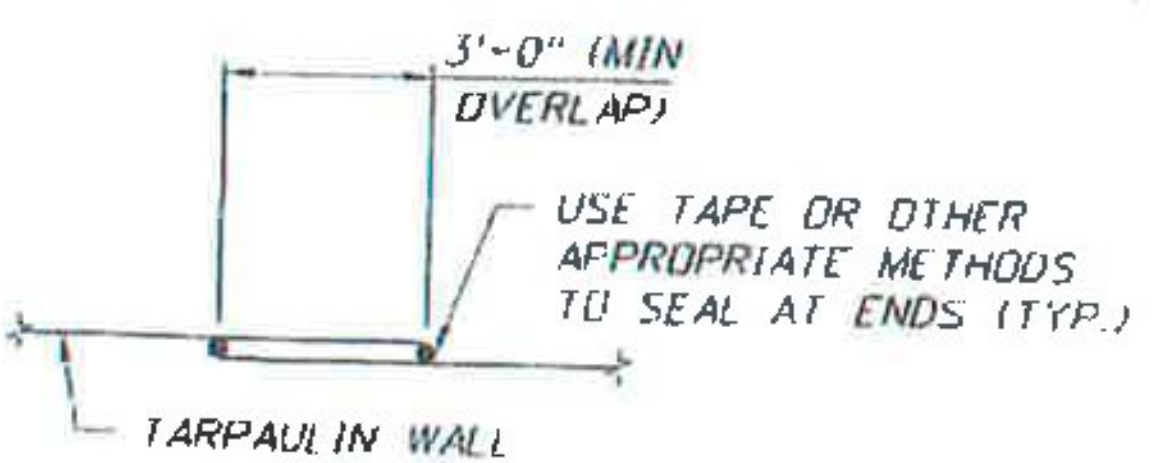
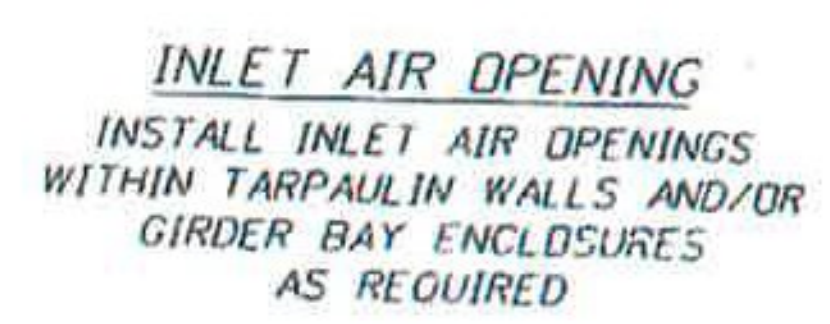
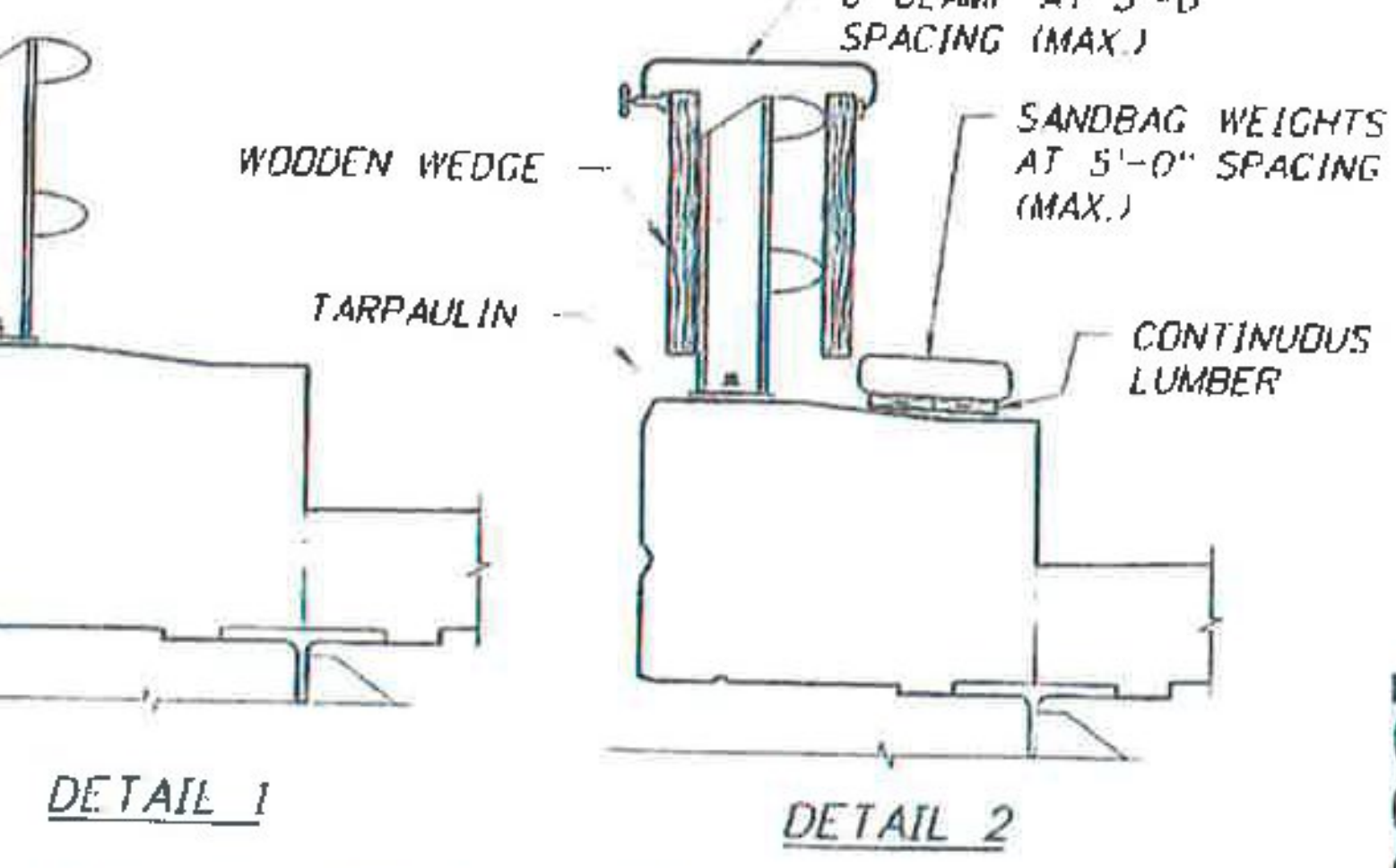
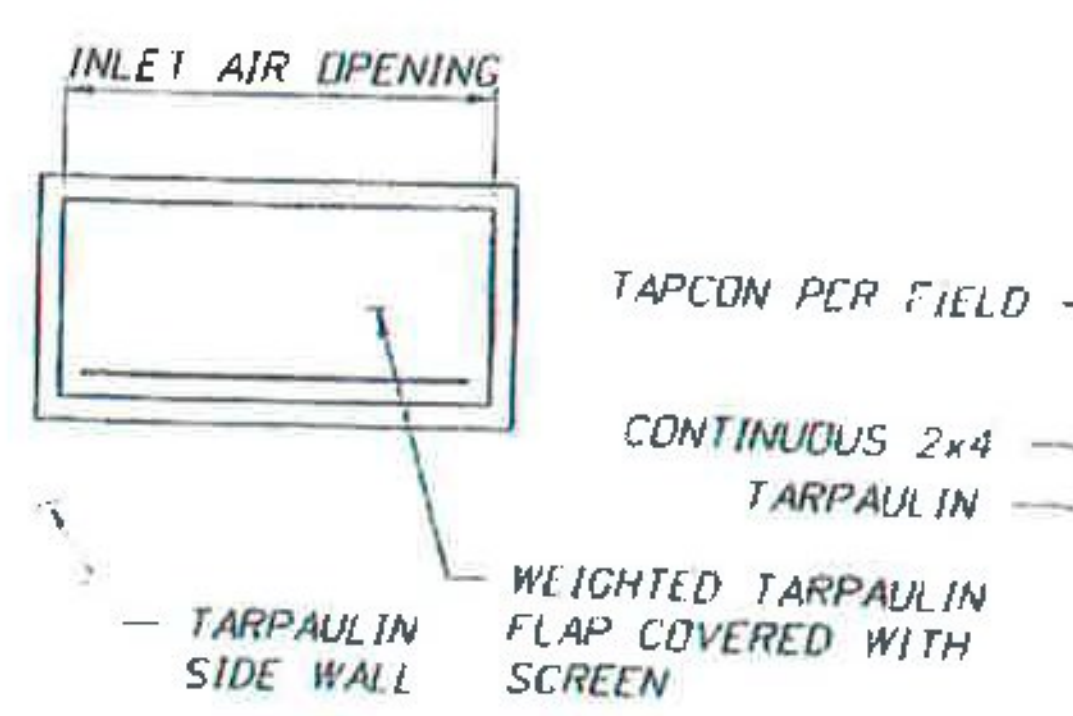
REVISIONS		DESCRIPTION	DATE	BY

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 11/15 CHECKED BY: PDB 11/15 DESIGNED BY: MAT 11/15 CHECKED BY: PRS 11/15	VERMONT AGENCY OF TRANSPORTATION ROAD NO: COUNTY: PROJECT #: BENNINGTON RUTLAND BF BPNT (16)	SHEET TITLE: CONTAINMENT MISCELLANEOUS DETAILS (3 OF 4) PROJECT NAME: FIVE BRIDGES ON OR OVER US ROUTE 7	REF. DWG. NO. RIBBING C-16
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12/16/2015 9:27:02 AM



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



SUBMITTAL REVIEW

This review is only for general conformity to the contract drawing and specifications and shall not constitute an approval of the contractor's work. The contractor shall be responsible for his entire work, including among other things, dimensions to be confirmed and completed at the job site, and information that pertains to the fabrication processes or techniques of construction.

1/2" SHACKLE AT END OF OUTRIGGER FOR EXTERIOR CHAIN INSTALLATION

OUTRIGGER (SEE OUTRIGGER DETAIL)

RESUBMITTAL NOT REQUIRED

AMEND AND RESUBMIT

REJECTED - SEE REMARKS

PB AMERICAS, INC.

BY: *sebyingda*

DATE: *5/9/16*

Vermont Agency of Transportation
RECEIVED
ON: **May 10, 2016**
and Checked for
CONFORMANCE
BY: **Mark Sargent** DATE: **05/13/2016**



ADJACENT TARPULIN CONNECTION ALTERNATIVES

REVISIONS		DESCRIPTION	DATE	BY

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) 279-8785		DRAWN BY: <i>BON 11/15</i> CHECKED BY: <i>PDB 11/15</i> DESIGNED BY: <i>MAT 11/15</i> CHECKED BY: <i>PRS 11/15</i>	VERMONT AGENCY OF TRANSPORTATION ROAD NO. COUNTY PROJECT ID BENNINGTON RUTLAND BF BPNT 1161	SHEET TITLE: CONTAINMENT MISCELLANEOUS DETAILS (4 OF 4) PROJECT NAME: FIVE BRIDGES ON OR OVER US ROUTE 7	BRIDGE NOS. ALL REF. DRAW. NO. SHEET NO. C-17
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P:\107 Monoko, LLC\17 Bennington\17 Tabu\1 Containment Plans\Cable-RUD-111501.dgn

Date: April 08, 2015

Vermont Department of Transportation
Southwest Regional Construction Office
Attn: Mr. Mark H. Mackintosh, P.E., Regional Construction Engineer
61 Valley View
Mendon, VT 05701
(Phone) (802) 773-1384; (Fax) (802) 786-5894
Mark.Mackintosh@Vermont.gov

Description: Proposal/Contract Number: Bennington-Mt Tabor BF BPNT (16)
Letting Date: 06/05/15; Award Date: 07/01/15
Project Description: Bridge Painting of Five Bridges
In the Towns of Bennington & Mt. Tabor, VT
Contract Amount: \$2,122,323.00; Completion Date: 09/02/16

Contractor: **MONOKO, LLC**

Reviewed & Approved By: Keri Monokandilos
Keri Monokandilos, Manager

Date: 04/08/2015

Engineer: Tim Pockette, P.E., Resident Engineer
61 Valley View
Mendon, VT 05701
802-773-1384
802-786-3811 office
802-793-4027 cell
Tim.Pockette@vermont.gov

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.	
<input checked="" type="checkbox"/>	NO EXCEPTIONS TAKEN
<input type="checkbox"/>	MAKE CORRECTIONS NOTED
<input type="checkbox"/>	RESUBMITTAL NOT REQUIRED
<input type="checkbox"/>	AMEND AND RESUBMIT
<input type="checkbox"/>	REJECTED - SEE REMARKS
BY:	<i>[Signature]</i>
DATE:	4/20/15

Vermont Agency of Transportation
RECEIVED
ON: **April 8, 2016**
and Checked for
CONFORMANCE
BY: ABC DATE:

