

INDEX OF SHEETS		
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1	PLAN AND PROFILE	
2	SUPERSTRUCTURE DETAILS	
3-4	ABUTMENT DETAILS	
5	PIER DETAILS	

STATE OF VERMONT
STATE HIGHWAY DEPARTMENT

PLAN AND PROFILE OF PROPOSED
STATE HIGHWAY

FEDERAL AID PROJECT

MIDDLESEX-MORETOWN

VILLAGE BRIDGE OVER WINOOSKI RIVER-NO.167

LOCATED IN VILLAGE OF MIDDLESEX
LENGTH 229.08 FEET 0.043 MILES

SCALES
Plan 1"=20' feet
Vertical 1"=20'
Horizontal 1"=20' feet
Sections 1"=5' "

THIS PROJECT TO BE CONSTRUCTED IN ACCORDANCE
WITH STANDARD SPECIFICATIONS ON FILE WITH
THE U.S. BUREAU OF PUBLIC ROADS. APPROVED TYPE.

STRUCTURES ON THIS PROJECT TO BE CONSTRUCTED
IN ACCORDANCE WITH DETAILS GIVEN ON STANDARD
STRUCTURE SHEETS, SERIES 317-19-19.

DIST. NO. 9
BRIDGE NO. 167
MIDDLESEX-MORETOWN

APPROVED: APRIL 7 1929
H. E. Sargent
CHIEF ENGINEER
SUBMITTED BY ORDER OF THE STATE HIGHWAY BOARD
S. B. Bates
COMMISSIONER OF HIGHWAYS

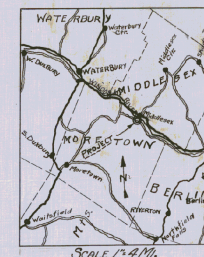
CONVENTIONAL SIGNS

COUNTY LINE
TOWN LINE
FENCE LINE
STONE WALL
UNFENCED PROPERTY
GUARD RAIL
TRAVELED WAY
RAILROAD
RETAINING WALL
CENTER LINE
SURVEY LINE
CULVERT
DROP INLET
TROLLEY POLE
POWER POLE
TELEPHONE POLE
TREES
HEDGE

GROUND ELEVATION
GRADE ELEVATION

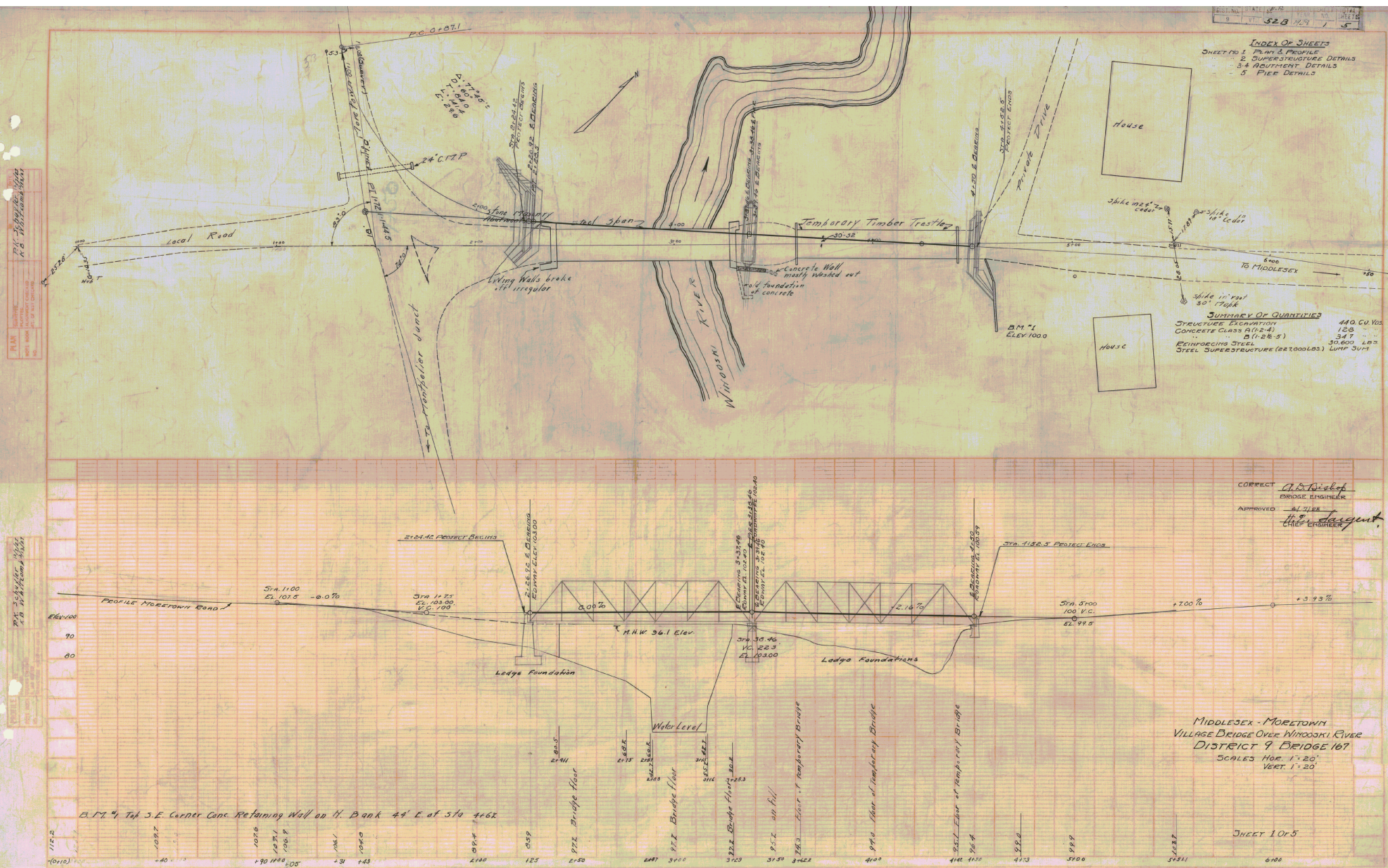
CURVE DATA

DEFLECTION ANGLE
DEGREE OF CURVE
RADIUS OF CURVE
TANGENT DISTANCE
LENGTH OF CURVE
EXTERNAL DISTANCE
POINT OF INTERSECTION
POINT OF CURVE
POINT OF TANGENT
POINT ON TANGENT

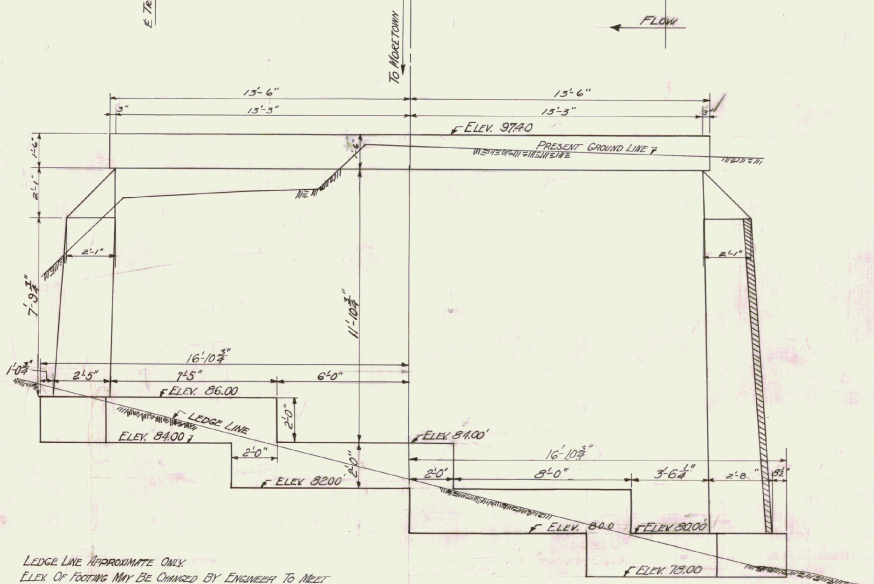
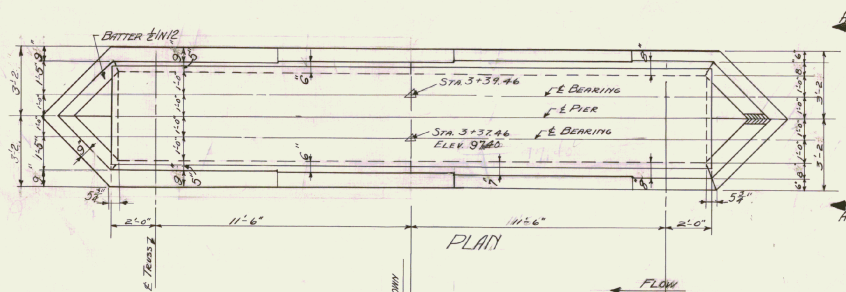


RECOMMENDED
DISTRICT ENGINEER
BUREAU OF PUBLIC ROADS
RECOMMENDED FOR APPROVAL
CHIEF ENGINEER
BUREAU OF PUBLIC ROADS
APPROVED
DIRECTOR : BUREAU OF PUBLIC ROADS

SERIES F. 17, NO. 52, 3 FILED
SHEET 1 OF



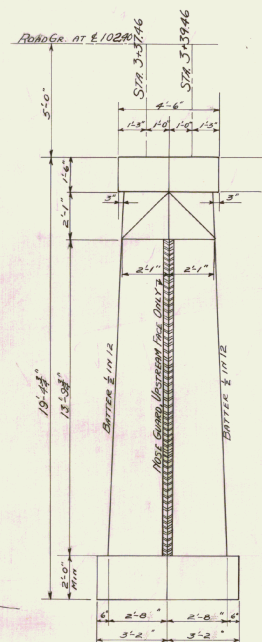
Surveyed by *PK SCHUYLER*
Designed by *DW*
Drawn by *DW*
Traced by *DW*
Checked by *M.W.D.* *4-6-28*
Series *9* No. *167* Filed *203*
Sheet *4* of *5* Sheets



LEDGE LINE APPROXIMATE ONLY.
ELEV. OF FOOTING MAY BE CHANGED BY ENGINEER TO MEET
CONDITIONS FOUND IN THE FIELD.

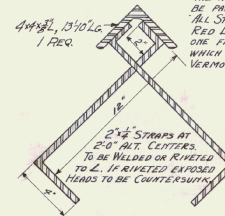
ALL CONCRETE CLASS "B" (1-2-5)

ELEVATION

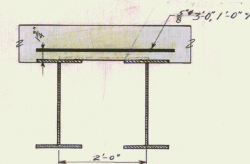


END ELEV
"A-A"

DETAIL NOSE ANGLE
SCALE 3/4"=1'-0"



THE WORK AND MATERIAL FOR FURNISHING THE NOSE GUARDS SHALL
BE PAID FOR AT THE UNIT PRICE BID FOR REINFORCING STEEL.
ALL STRUCTURAL NOSE GUARDS SHALL BE GIVEN ONE SHOP COAT OF
RED LEAD AND OIL, ONE FIELD COAT OF RED LEAD AND OIL, AND
ONE FIELD COAT OF GRANITE PAINT; WORK AND MATERIALS FOR
WHICH SHALL MEET THE STANDARD ROAD AND BRIDGE SPECIFICATIONS,
VERMONT DEPARTMENT OF HIGHWAYS, 1926.



FIXED END DETAIL OVER PIER
SCALE 3/4"=1'-0"

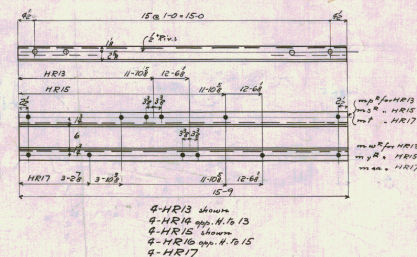
GENERAL NOTES:

THE WORK AND MATERIALS FOR FURNISHING DRAIN PIPES AND WEIR HOLES
IN PRICE SHALL BE INCLUDED IN UNIT PRICE BID FOR CLASS "A" CONCRETE.
ALL WORK AND MATERIAL SHALL CONFORM TO THE STANDARD ROAD AND BRIDGE
SPECIFICATIONS OF THE VERMONT DEPARTMENT OF HIGHWAYS, 1926.
ALL STEEL TO BE DEFORMED BARS (EXCEPT AS NOTED). REINFORCING STEEL TO
CONFORM TO STANDARD SPECIFICATION FOR CILLEY STEEL CONCRETE REINFORCING
BARS OF THE AMERICAN SOCIETY FOR TESTING MATERIALS, SERIAL DESIGNATION
A15-14. STRUCTURAL INTERMEDIATE GRADE.
ANY SUITABLE STRUCTURE EXCAVATION USED BY THE CONTRACTOR FOR ANY
OTHER PURPOSE OTHER THAN FOR BACK FILL OR APPROACH FILL SHALL BE REPLACED
BY AN EQUIVALENT QUANTITY OF BORROW BY THE CONTRACTOR AT HIS OWN
EXPENSE UNLESS SAME IS ORDERED WASTED BY THE ENGINEER.
ALL EXPOSED EDGES, EXCEPT TOP OF RAIL CAPS TO BE CHAMFERED, FACE
DIMENSION OF CHAMFER TO BE (1") ONE INCH.

PIER AT STA. 3+38.46
BRIDGE NO. 167 DISTRICT 9.
MORERTOWN-MIDDLESEX, VT.
SCALE 3/4"=1'-0" EXCEPT AS NOTED

ESTIMATED QUANTITIES
STRUCTURE EXCAVATION 1000.00
1-2-5 CONCRETE 13.00 cu yds
STEEL (INCLUDING STEEL 1500 LBS
CALLED FOR IN SUPERSTRUCTURE DETAIL
SHOWN ON TWO SHEETS)

Surveyed by
Designed by H.B. ZACHARSON 4-3-28
Drawn by H.B. ZACHARSON 4-3-28
Traced by E.G. NORTON 4-9-28
Checked by H.B. ZACHARSON Apr. 5, 1928
Series 9 No. 167 Filed 203
Sheet 5 of 5 Sheets



BILL OF MATERIAL AND W.					
No.	Description	Mark	AMOUNT	TEMP.	1 / 1
1	3 1/2 x 3 7/8	H62	6	15	0
2	"	H63	10 3/8		
3	"	H64	10 3/8		
4	"	H65	15 7		
5	"	H66	15 7		
6	"	H67	15 7		
7	"	H68	4 1/2	1	1
8	H 3 1/2 x 7/8	H 6	11 1/2	14	5
9	L 5 x 3 1/2 7/8	imp R	6	15	0
10	L 3 1/2 x 7/8	imp R	3 9/16		
11	"	imp R	5		
12	"	imp R	6 10		
13	"	imp R	8		
14	L 6 x 1 1/2	H 17	5 7	10	5
15	"	H 18	5 7		
16	"	H 19	9 8		
17	"	H 20	9 8		
18	L 3 1/2 x 7/8	H 21	11 23 1/2	15	0
19	"	H 22	10 15		
20	L 2 x 3 1/2 7/8	imp R	1 3		5
21	"	imp R	1 3		
22	L 3 1/2 x 3 7/8	imp R	15 9	15	0
23	"	imp R	15 9		
24	"	imp R	15 9		
25	"	imp R	15 9		
26	"	imp R	15 9		
27	"	imp R	15 9		
28	L 6 x 1 1/2	H 23	15 9	10	5
29	"	H 24	15 9		
30	"	H 25	15 9		
31	"	H 26	15 9		
32	"	H 27	15 9		
33	"	H 28	12 13 1/2		
34	"	H 29	12 13 1/2		

4	Base Plates	CB8	}
8	Saddles	CB11	
4	Pedestals	CB12	
4	Rockers	CB13	

Field Rivers and Bolt:				
180	Rivers	$\frac{1}{2}$ in. $\times$ 2	298	(Cylinder 1/2 in. 200 lbs)
350	"	$\frac{1}{2}$ in. $\times$ 2 1/2	391/2	(Cyl. 1/2 in. 220 lbs)
770	"	$\frac{1}{2}$ in. $\times$ 2 1/2	504	
950	"	$\frac{1}{2}$ in. $\times$ 2 1/2	412	
730	"	$\frac{1}{2}$ in. $\times$ 2 1/2	612	

64	$\frac{3}{4}$ "	Sharp Riv.
836	$\frac{1}{2}$ "	" "

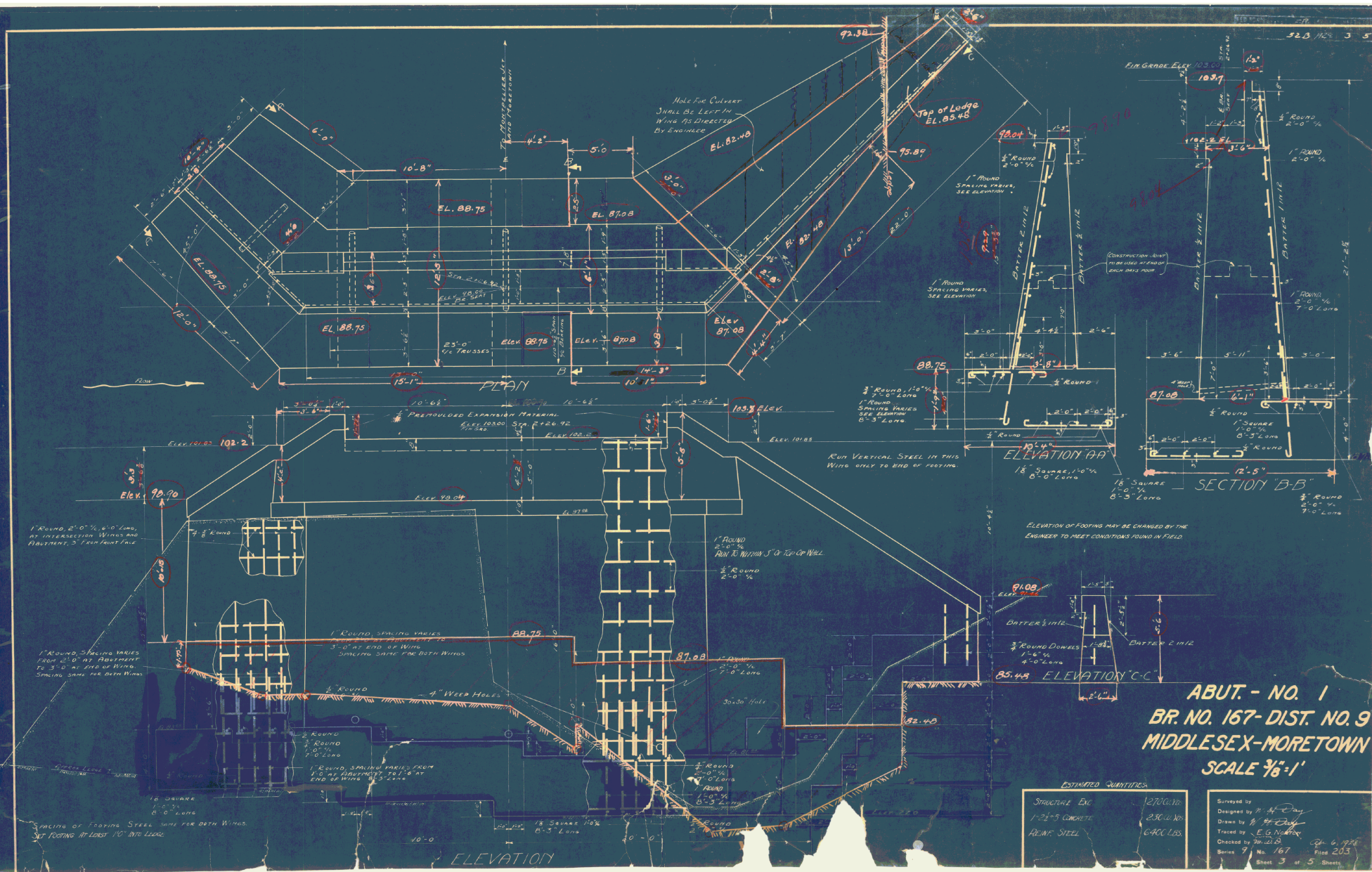
615
9A0 RA THE PALMER STEEL

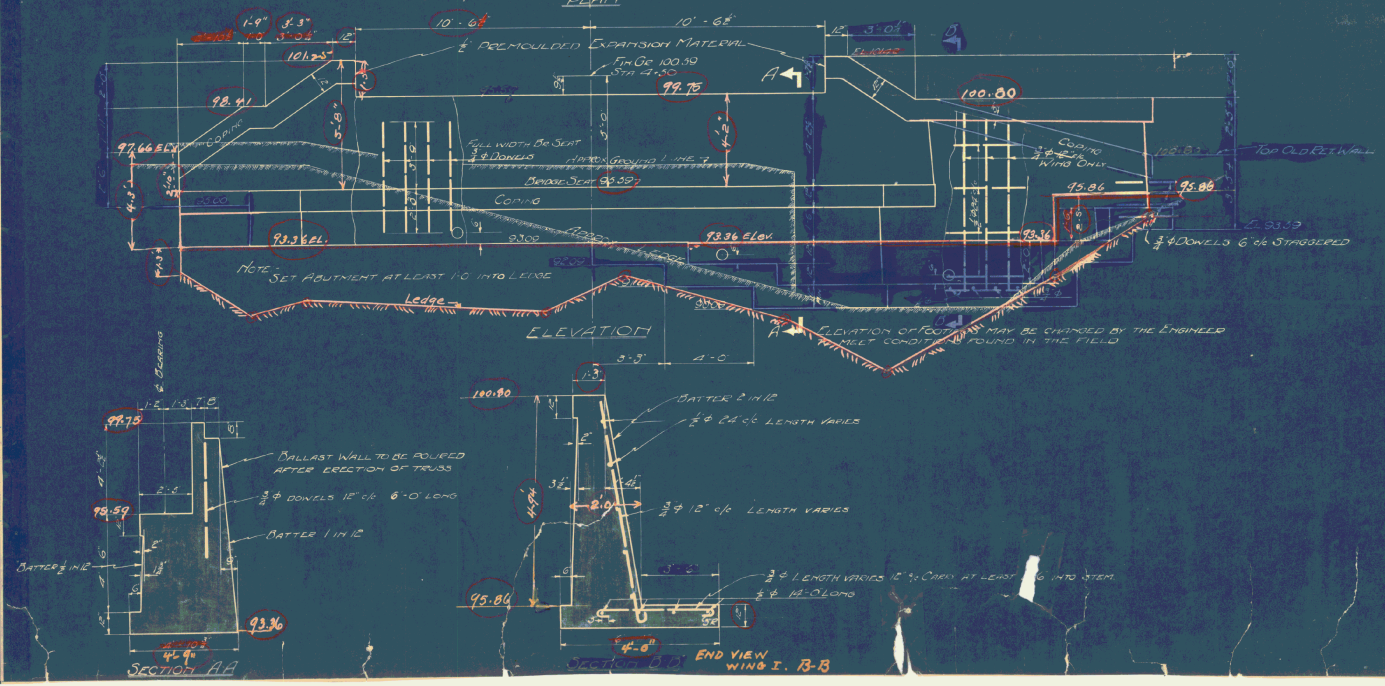
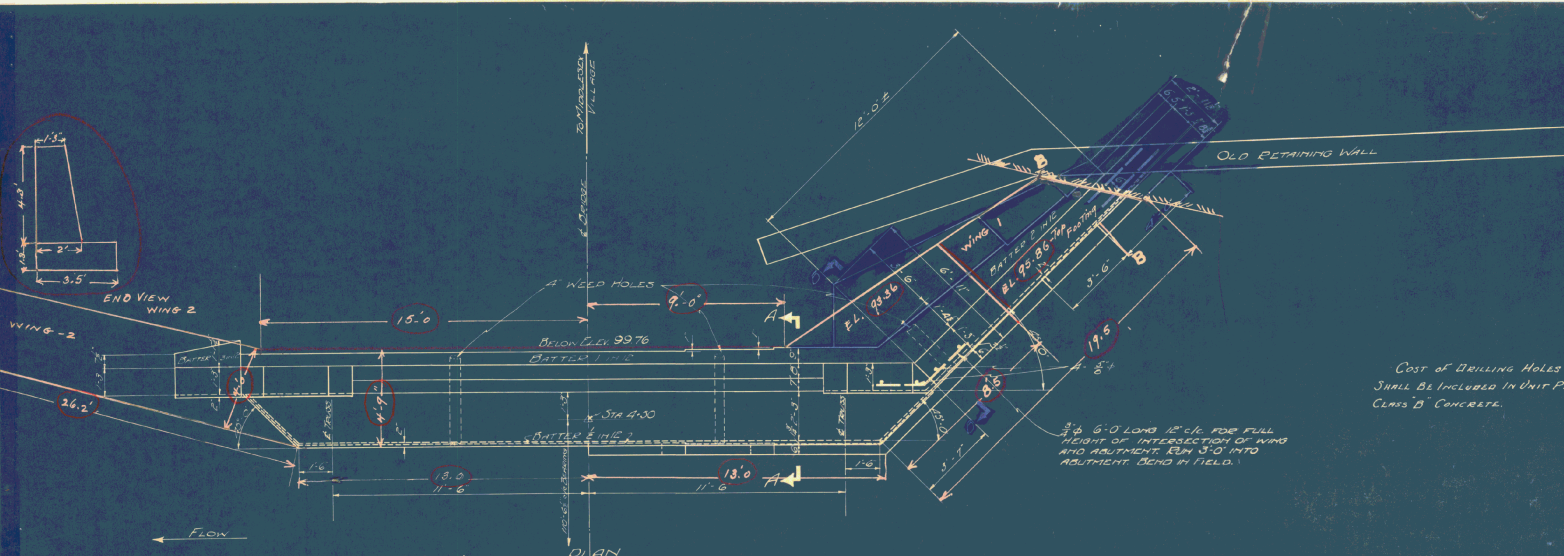
Q/N	Field Rivets - 80 Hrs. & 60 lbs.			
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TITLE *Erection Diagram, Collision Rail* CONT
JOB NAME *Bridge 167 - Dist. 9* Locality *Mic*

OPEN HOLES $\frac{1}{16}$ DIAM. UNLESS MARKED
RIVETS $\frac{3}{8}$ PAINT ONT COAT Red L

147.5

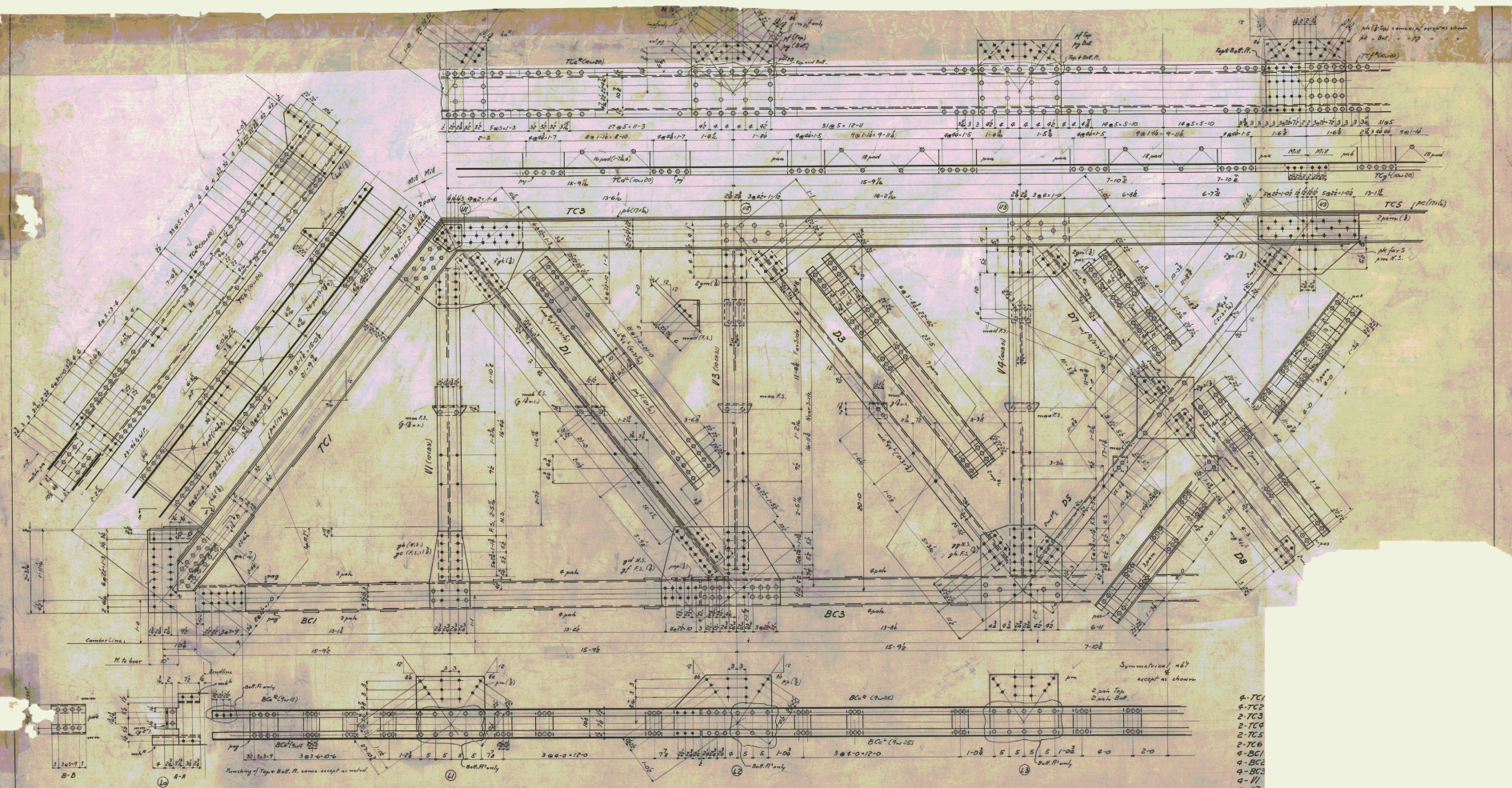




ABUTMENT NO. 2
BRIDGE 167-203 DISTRICT 9
MIDDLESEX - MORETOWN
SCALE 3/8" = 1'-0"

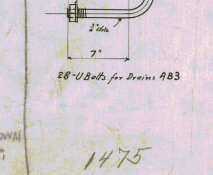
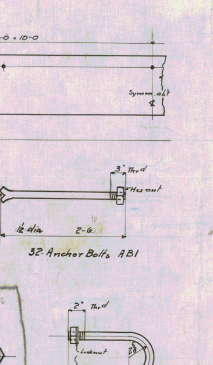
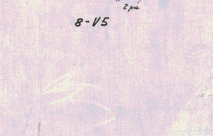
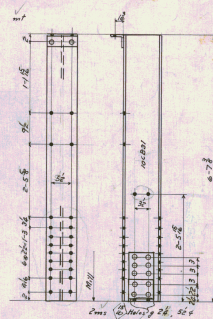
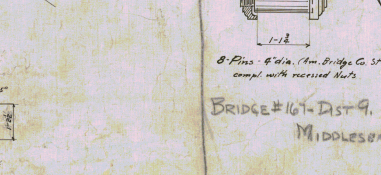
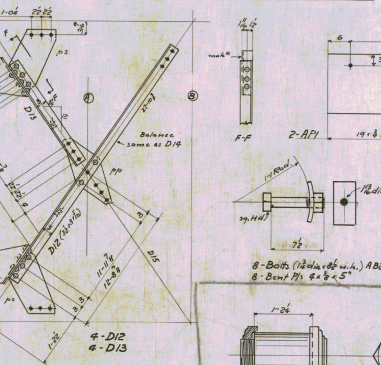
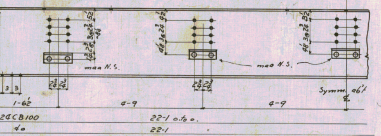
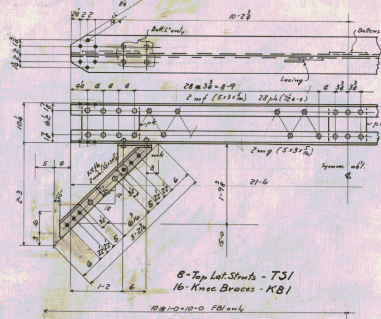
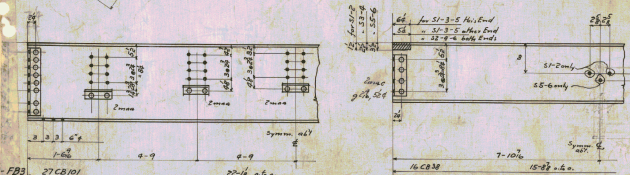
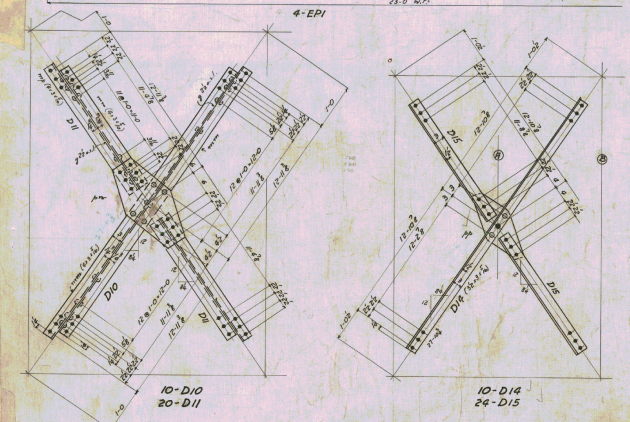
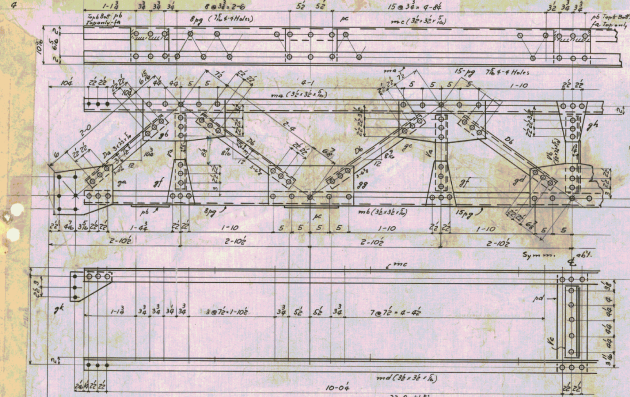
ESTIMATED QUANTITIES	
STEEL EXCAV	30 CU YD
12" B-S CONCRETE	32
REIN. STEEL	700 LBS

Surveyed by J.C. SCHULTE
Designed by J.C.
Drawn by J.C.
Traced by J.C.
Checked by J.C.
Series 9 No. 167 Filed 203
Sheet 4 of 5 Sheets



- 2-TC1
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- 2-TC99
- 2-TC100

SA	RA	THE
Temp.	Struct.	Notes
Notes	Notes	Notes



No.	Description	Unit	Quantity	Weight	Remarks
1	1/2" x 12" x 12"	sq ft	21.6	111	
2	1/2" x 12" x 12"	sq ft	21.6	111	
3	1/2" x 12" x 12"	sq ft	21.6	111	
4	1/2" x 12" x 12"	sq ft	21.6	111	
5	1/2" x 12" x 12"	sq ft	21.6	111	
6	1/2" x 12" x 12"	sq ft	21.6	111	
7	1/2" x 12" x 12"	sq ft	21.6	111	
8	1/2" x 12" x 12"	sq ft	21.6	111	
9	1/2" x 12" x 12"	sq ft	21.6	111	
10	1/2" x 12" x 12"	sq ft	21.6	111	
11	1/2" x 12" x 12"	sq ft	21.6	111	
12	1/2" x 12" x 12"	sq ft	21.6	111	
13	1/2" x 12" x 12"	sq ft	21.6	111	
14	1/2" x 12" x 12"	sq ft	21.6	111	
15	1/2" x 12" x 12"	sq ft	21.6	111	
16	1/2" x 12" x 12"	sq ft	21.6	111	
17	1/2" x 12" x 12"	sq ft	21.6	111	
18	1/2" x 12" x 12"	sq ft	21.6	111	
19	1/2" x 12" x 12"	sq ft	21.6	111	
20	1/2" x 12" x 12"	sq ft	21.6	111	
21	1/2" x 12" x 12"	sq ft	21.6	111	
22	1/2" x 12" x 12"	sq ft	21.6	111	
23	1/2" x 12" x 12"	sq ft	21.6	111	
24	1/2" x 12" x 12"	sq ft	21.6	111	
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29	1/2" x 12" x 12"	sq ft	21.6	111	
30	1/2" x 12" x 12"	sq ft	21.6	111	
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36	1/2" x 12" x 12"	sq ft	21.6	111	
37	1/2" x 12" x 12"	sq ft	21.6	111	
38	1/2" x 12" x 12"	sq ft	21.6	111	
39	1/2" x 12" x 12"	sq ft	21.6	111	
40	1/2" x 12" x 12"	sq ft	21.6	111	
41	1/2" x 12" x 12"	sq ft	21.6	111	
42	1/2" x 12" x 12"	sq ft	21.6	111	
43	1/2" x 12" x 12"	sq ft	21.6	111	
44	1/2" x 12" x 12"	sq ft	21.6	111	
45	1/2" x 12" x 12"	sq ft	21.6	111	
46	1/2" x 12" x 12"	sq ft	21.6	111	
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53	1/2" x 12" x 12"	sq ft	21.6	111	
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55	1/2" x 12" x 12"	sq ft	21.6	111	
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60	1/2" x 12" x 12"	sq ft	21.6	111	
61	1/2" x 12" x 12"	sq ft	21.6	111	
62	1/2" x 12" x 12"	sq ft	21.6	111	
63	1/2" x 12" x 12"	sq ft	21.6	111	
64	1/2" x 12" x 12"	sq ft	21.6	111	
65	1/2" x 12" x 12"	sq ft	21.6	111	
66	1/2" x 12" x 12"	sq ft	21.6	111	
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81	1/2" x 12" x 12"	sq ft	21.6	111	
82	1/2" x 12" x 12"	sq ft	21.6	111	
83	1/2" x 12" x 12"	sq ft	21.6	111	
84	1/2" x 12" x 12"	sq ft	21.6	111	
85	1/2" x 12" x 12"	sq ft	21.6	111	
86	1/2" x 12" x 12"	sq ft	21.6	111	
87	1/2" x 12" x 12"	sq ft	21.6	111	
88	1/2" x 12" x 12"	sq ft	21.6	111	
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91	1/2" x 12" x 12"	sq ft	21.6	111	
92	1/2" x 12" x 12"	sq ft	21.6	111	
93	1/2" x 12" x 12"	sq ft	21.6	111	
94	1/2" x 12" x 12"	sq ft	21.6	111	
95	1/2" x 12" x 12"	sq ft	21.6	111	
96	1/2" x 12" x 12"	sq ft	21.6	111	
97	1/2" x 12" x 12"	sq ft	21.6	111	
98	1/2" x 12" x 12"	sq ft	21.6	111	
99	1/2" x 12" x 12"	sq ft	21.6	111	
100	1/2" x 12" x 12"	sq ft	21.6	111	

BRIDGE #167-DIST 9.

MIDDLESEX-MORETOWN

VT.

C1475

Sh #4

CONT. # 1475

1475

SA. PA.		THE PALMER STEEL COMPANY		194973	
Title		BRIDGE #167-DIST 9		194973	
Drawing		BRIDGE #167-DIST 9		194973	
Scale		1" = 10'		194973	
Date		194973		194973	
By		194973		194973	
Check		194973		194973	
Approved		194973		194973	
Title		BRIDGE #167-DIST 9		194973	
Job Name		BRIDGE #167-DIST 9		194973	
Drawn By		194973		194973	
Check By		194973		194973	
Approved		194973		194973	