

STATE OF VERMONT AGENCY OF TRANSPORTATION



PROPOSED IMPROVEMENT BRIDGE PROJECT

TOWN OF BRADFORD
COUNTY OF ORANGE

CONTRACTOR - BLOW & COTE INC.
CONTRACT DATED - APRIL 27, 1982
CONSTRUCTION BEGAN - APRIL 27, 1982
CONST. COMPLETED - DEC. 2, 1982
CONST. ACCEPTED - DEC. 3, 1982
RESIDENT ENG. - L. R. TESSIER
RECORD PLANS - D. F. MAHONEY

ROUTE NO: VT. 25 BRIDGE NO: 5
PROJECT LOCATION: ON VT. RTE. 25, 2.1 MILES NORTH OF THE
JUNCTION OF VT. RTE. 25 AND VT. RTE. 25 B.

PROJECT DESCRIPTION: REMOVAL OF EXISTING SUPERSTRUCTURE
CONSTRUCTION OF A NEW PLATE GIRDER BRIDGE ON EXISTING
SUBSTRUCTURE, REPAIR OF CONCRETE IN ABUTMENTS AND
PIER, AND NECESSARY APPROACH WORK.

LENGTH OF STRUCTURE: 207.34 FEET
LENGTH OF PARTICIPATION ROADWAY: 392.66 FEET
LENGTH OF NON-PARTICIPATION ROADWAY: 000 FEET
LENGTH OF PROJECT: 600.00 FEET

MATERIALS - SHEET 2

NOTE: ANY FURTHER INFORMATION CONCERNING
FINAL QUANTITIES, AMOUNTS OR OTHER DETAILS
RELATIVE TO THIS PROJECT MAY BE FOUND IN
EITHER THE FIELD BOOKS OR THE ESTIMATE
FILE.

HYDRAULIC DATA

DRAINAGE AREA = 131.88 SQ. MI.
Q₁₀ = 6500 CFS; HW. ELEV. = 517.6;
VELOCITY = 10.2 FPS
Q₂₅ = 9000 CFS; HW. ELEV. = 518.9;
VELOCITY = 11.9 FPS
Q₅₀ = 11,000 CFS; HW. ELEV. = 519.9;
VELOCITY = 12.3 FPS
Q₁₀₀ = 14,000 CFS; HW. ELEV. = 521.2;
VELOCITY = 13.5 FPS
TAILWATER ELEV. @ Q₅₀ = 519.3

1980 ADT = 2120
1980 DHV = 245 D = 58% (WB)
1990 ADT = 2570 T = 10% (DHV)
1990 DHV = 265
DESIGN SPEED = 40 MPH

TRAFFIC DATA

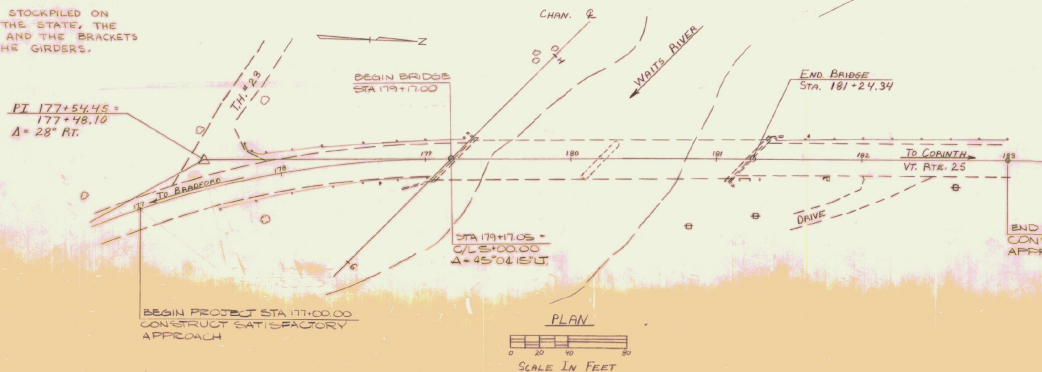
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	7-26-81
	5-15-78R
	6-25-81R
	12-16-80R
	1-19-81R
	12-25-81
	12-28-81
	4-3-75R
	1-3-79R
	1-15-76R
	1-27-75R

GENERAL NOTES

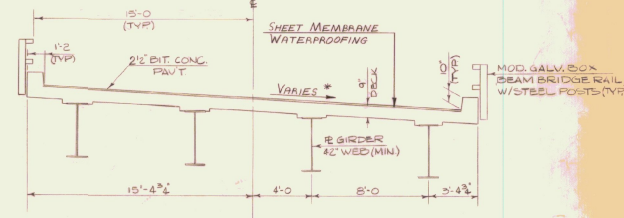
- SEE STD SHT SOB-D1-75 FOR ADDITIONAL GENERAL NOTES.
- DESIGN LOADINGS IS HS-20.
- ALL LOOSE OR SPALLED CONCRETE AREAS ON PIER AND ABUTMENTS SHALL BE REMOVED TO EXISTING SOUND CONCRETE, AND REPAIRED AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
- STONE FILL, TYPE II SHALL BE PLACED AS SHOWN ON THE PLANS, EXCEPT WHERE LEDGE IS ENCOUNTERED, AS DIRECTED BY THE ENGINEER.
- THE EXISTING PAVEMENT SHALL BE REMOVED FROM STATION 177+00 TO STATION 183+00. THIS WORK TO BE PAID FOR AT THE CONTRACT BID PRICE FOR THE ITEM "COMMON EXCAVATION".
- WATER REPELLENT SHALL BE APPLIED TO ALL EXPOSED CONCRETE SURFACES OF ABUTMENTS, PIER, AND SUPERSTRUCTURE, EXCEPT THE UNDERSIDE OF THE DECK BETWEEN THE FASCIA GUARDERS.
- SEEDING, MULCHING, AND OTHER EROSION CONTROL SHALL BE SUBSIDIARY TO ALL OTHER CONTRACT ITEMS.
- ONE-WAY TRAFFIC SHALL BE MAINTAINED AS DIRECTED ON SHEET 17.
- THE ONE-WAY TEMPORARY BRIDGE SHALL HAVE A CLEAR SPAN OF AT LEAST 50 FEET NORMAL TO THE STREAM, AT THE STREAM BED, AND A MINIMUM WATERWAY AREA OF 450 SQUARE FEET. ANY STATE OR LOCAL ENVIRONMENTAL PERMITS NECESSARY FOR THE CONSTRUCTION OF THE ONE-WAY TEMPORARY BRIDGE SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- IF MORE THAN 10% C.Y. OF MATERIALS PLACED IN THE RIVER CHANNEL BELOW ELEVATION 517.00 DURING THE CONSTRUCTION OF THE ONE-WAY TEMPORARY BRIDGE, A CORPS OF ENGINEERS PERMIT WILL BE REQUIRED. OBTAINING THE CORPS OF ENGINEERS PERMIT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- THE EXISTING GIRDERS AND GUARD RAIL SHALL BE STOCKPILED ON THE PROJECT SITE AND REMAIN THE PROPERTY OF THE STATE. THE FLOOR BEAMS SHALL BE REMOVED AT THE BRACKET, AND THE BRACKETS CONVENTIONAL SIGNS SHALL REMAIN ATTACHED TO THE GIRDERS.

COUNTY LINE	---
TOWN LINE	---
LIMITS OF ACCESS	---
POINT OF ACCESS	X
FENCE LINE	-----
STONE WALL	-----
TRAVELED WAY	-----
GUARD RAIL	-----
RAILROAD	-----
SURVEY LINE	-----
CULVERT	-----
POWER POLE	○
TELEPHONE POLE	○
TREES	○*
CONTROL OF ACCESS	///
PROPERTY LINE	---
ROW TAKING LINE	---
SLOPE RIGHTS	○-SR-○
TOP OF CUT	○-○
TOE OF SLOPE	○-○

DATUM	VERTICAL	HORIZONTAL
	ASSUMED	N.A.



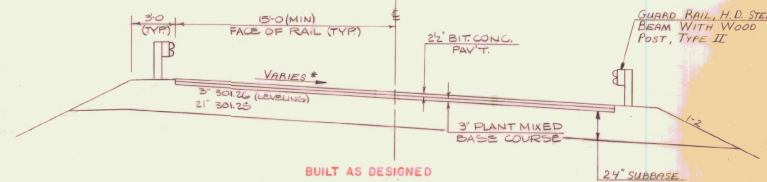
LOCATION MAP
(TRACED FROM COUNTY MAP)



TYPICAL BRIDGE SECTION

SCALE: 1/4"=1'-0"

*SEE SUPERELEVATION DIAGRAM ON SHEET 18.



TYPICAL ROADWAY SECTION

SCALE: 1/4"=1'-0"

NOTE: TYPICAL ROADWAY SECTION APPLIES TO STA. 177+425 TO 179+117 AND STA. 181+25 TO 182+25. SEE ROADWAY CROSS SECTIONS FOR DETAILS ON BOX CUTS.

SUBMITTED BY ORDER OF THE STATE TRANSPORTATION BOARD
APPROVED: *SJA* DATE: JAN 14 1982
DIR. OF ENGINEERING AND CONSTRUCTION

PROJECT NO. BRADFORD BRIDGE 031-1(5)
SHEET 1 OF 42 SHEETS

STATE OF VERMONT
AGENCY OF TRANSPORTATION
RIGHT-OF-WAY PLANS
DETAIL SHEET

TABLE OF PROJECT PROPERTY ACQUISITION

PARCEL NO.	GRANTOR	SHEET NO.	BEGINNING STATION	ENDING STATION	TAKING	REM.	RIGHTS	TITLE TAKEN	DATE	TOWN OR CITY RECORDED	BK.	PG.	REMARKS
1	KENTON, CHARLES A. & FANNIE E.	3	178+00 LT. 178+25 LT.	180+38 LT. 178+70 LT.			CONST. EASE. (T) (0.14 A±) SLOPE (T) (50 SF±)	AGREE.					
2	CORTI, LENA	3	181+00 LT. 181+50 LT. 181+63 LT.	183+00 LT. 181+63 LT. 181+77 LT.			CONST. EASE. (T) (0.10 A±) CHANNEL (P) (40 SF±) SLOPE (T) (15 SF±)	WDOE					
3	TOWN OF BRADFORD	3	177+15 LT.	178+25 LT.			CONST. APPROACH (T)	AGREE.					T.H. 23

TABLE OF REVISIONS

REVISION NO.	SHEET NO.	DESCRIPTION OF REVISION	DATE	MADE BY	APPROVED BY

MADE BY: B. A. MELVIN DATE 10-6-81
CHECKED BY: J. D. PATERSON DATE 10-6-81

DR RT - DRAINAGE RIGHT
DIT RT - DITCHING RIGHT
CH RT - CHANNEL RIGHT
DRIVE RT - DRIVE RIGHT
CL. RT - CULVERT RIGHT
Ⓣ - DEMOLITION OR REMOVAL
W - WATER SOURCES

PRESENT R.O.W.
--- --- TAKING WITHOUT ACCESS
--- P --- TAKING WITHOUT ACCESS ALONG PROPERTY LINES
--- --- TAKING WITH ACCESS
(P) PERMANENT EASEMENT
(T) TEMPORARY EASEMENT

LEGEND
--- CONST. EASE. --- CONST. EASEMENT
--- SR --- SR SLOPE RIGHTS
--- P --- P PROPERTY LINE
--- Δ --- Δ TOP OF CUT
--- ○ --- ○ TOE OF SLOPE

APPROVED Thomas R. Mann DATE 10-2-81
CHIEF OF PLANS & TITLES

PROJECT BRADFORD
NO. BRF 031-1 (5)S
SHEET 2 OF 42

CONSTRUCT T.H.#23 APPROACH
Sta. 177+50 LT.

BRIDGE RAILING BOX BEAM: C17.30
LT. 179+32 ~ 181+40 RT. 179+02 ~ 181+10

CONSTRUCT DRIVE
STA 182+20 RT

HEAVY DUTY STEEL BEAM G.R.W./WOOD POSTS TYPE II: G21.28

BOX BEAM GUARD RAIL: G21.45

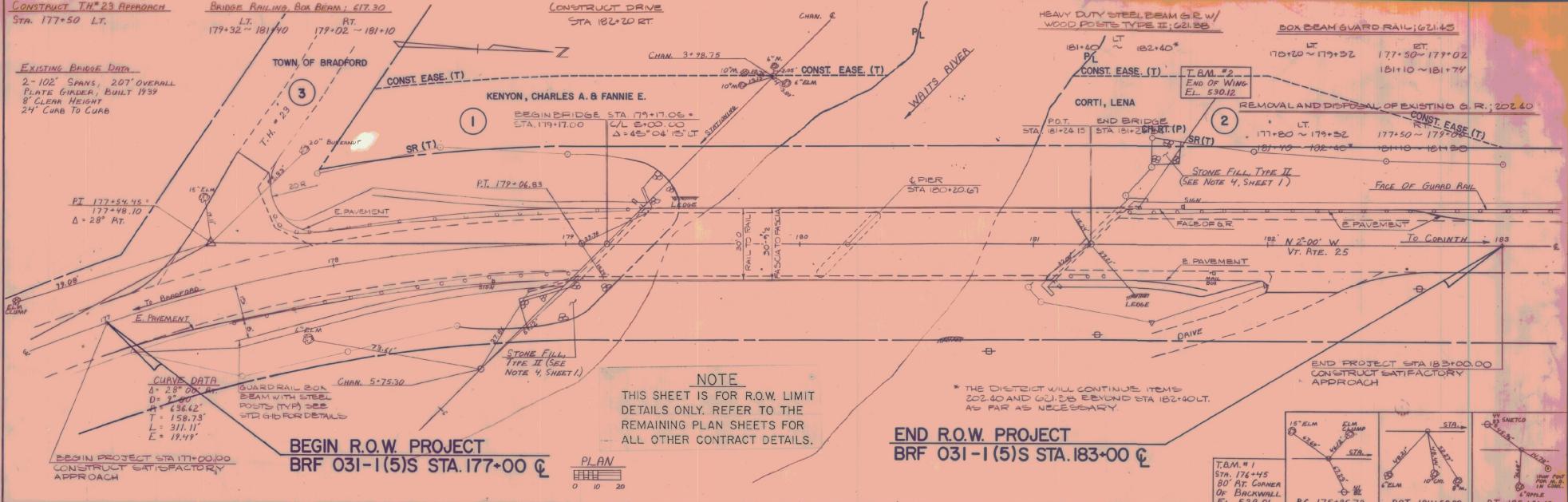
EXISTING BRIDGE DATA
2 - 102' SPANS, 207' OVERALL
PLATE GIRDER, BUILT 1939
8' CLEAR HEIGHT
24" CURB TO CURB

TOWN OF BRADFORD

KENYON, CHARLES A. & FANNIE E.

CORTI, LENA

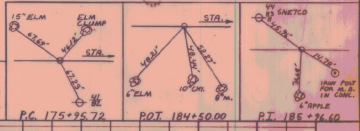
REMOVAL AND DISPOSAL OF EXISTING G.R.; 202.40



NOTE
THIS SHEET IS FOR R.O.W. LIMIT
DETAILS ONLY. REFER TO THE
REMAINING PLAN SHEETS FOR
ALL OTHER CONTRACT DETAILS.

* THE DISTRICT WILL CONTINUE ITEMS
202.40 AND G.U. 28 BEYOND STA 182+40 LT.
AS FAR AS NECESSARY.

**END R.O.W. PROJECT
BRF 031-1(5)S STA. 183+00 Q**

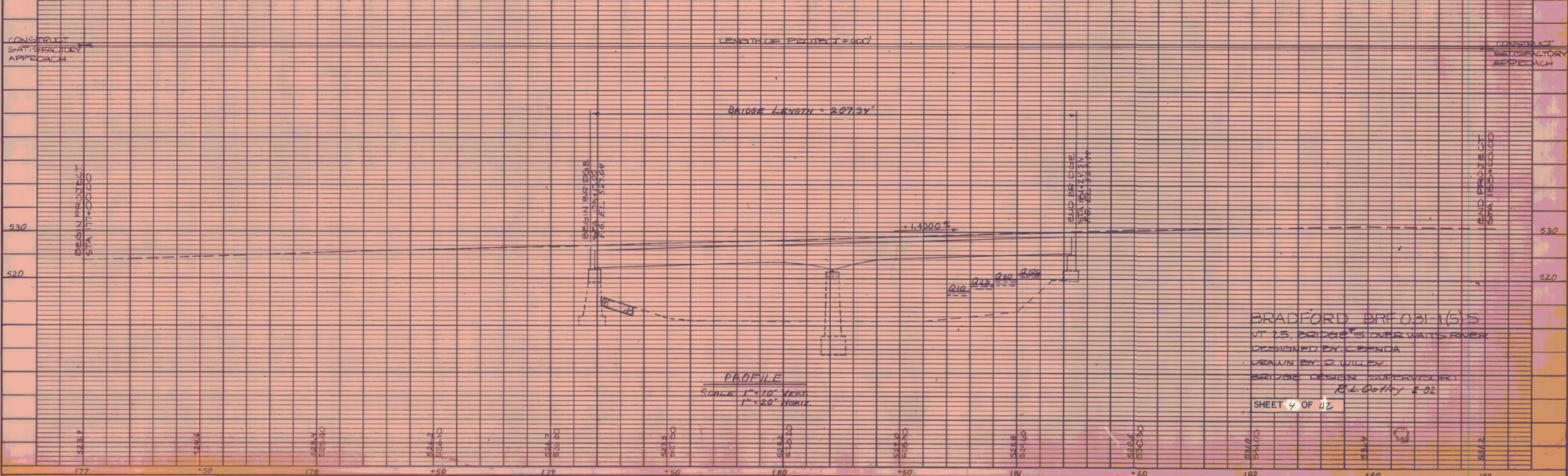


**T.B.M. #1
STA. 176+45
80' AT CORNER
OF BIRKSWELL
FL. 528.01**

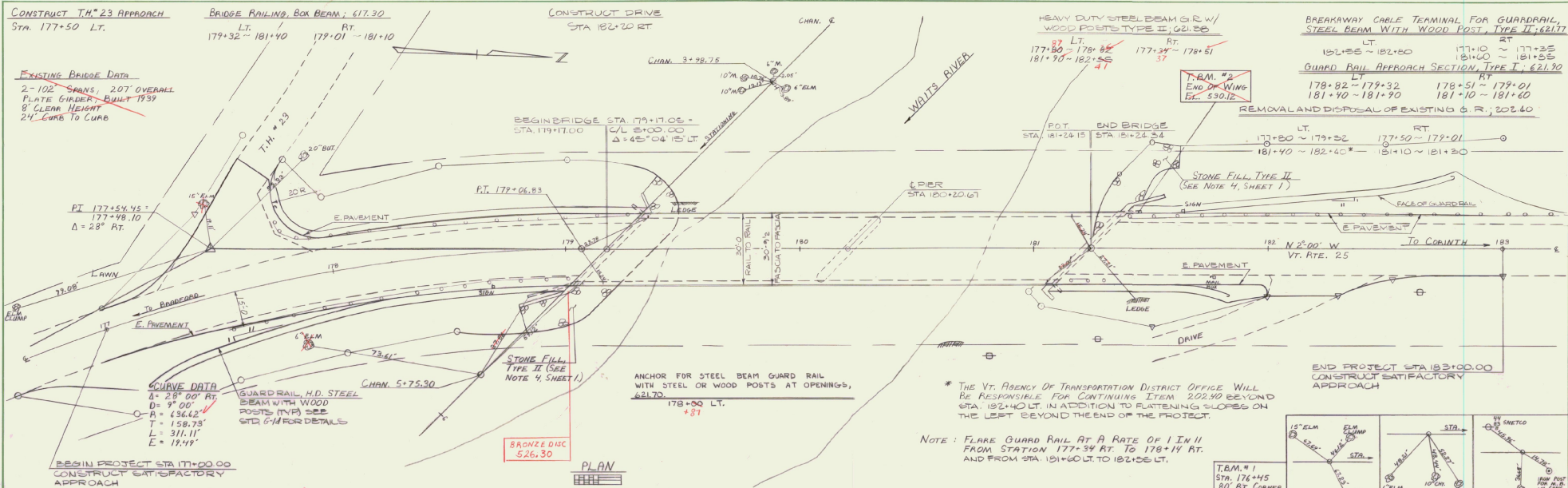
P.G. 175+95.72

POT 184+50.00

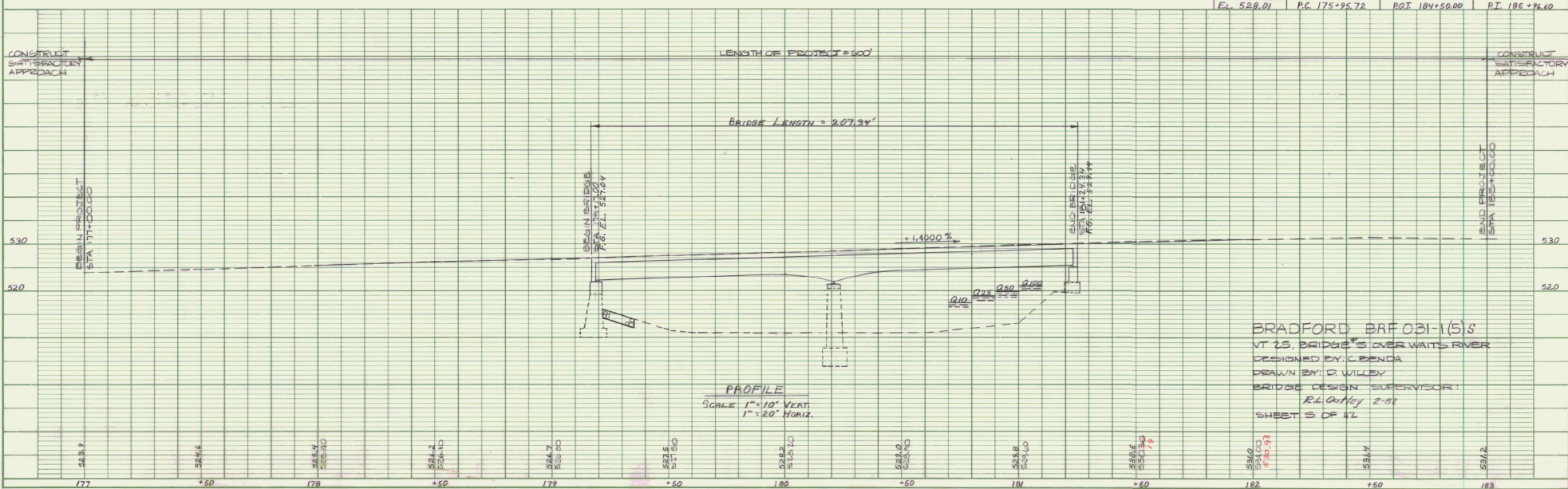
P.T. 185+36.40

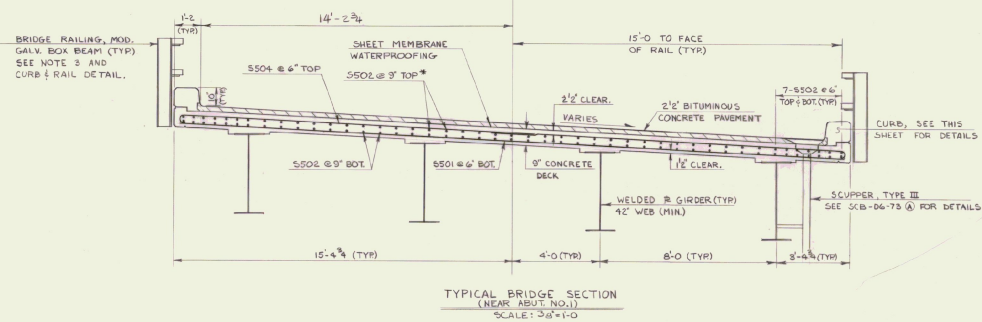


PLAN
 DATE: 1/25/53
 DRAWN BY: D. WILLEY
 CHECKED BY: R. L. GATNEY
 PROJECT NO.: 175-31
 SHEET NO.: 153



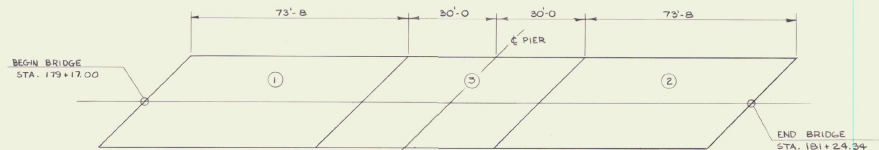
PROFILE
 DATE: 1/25/53
 DRAWN BY: D. WILLEY
 CHECKED BY: R. L. GATNEY
 PROJECT NO.: 175-31
 SHEET NO.: 153





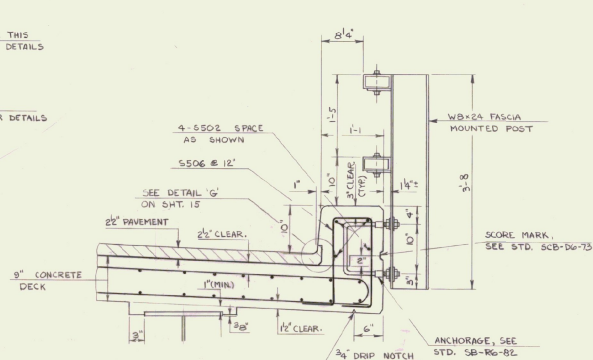
TYPICAL BRIDGE SECTION
(NEAR ABUT. NO. 1)
SCALE: 3/8"=1'-0"

* AT 21'-6" FROM & PIER CHANGE
SS02 @ 9" TOP & BOT TO 5701 @ 3"
TOP AND SS02 @ 3" BOT. SEE
ALSO DECK REINFORCING PLAN.

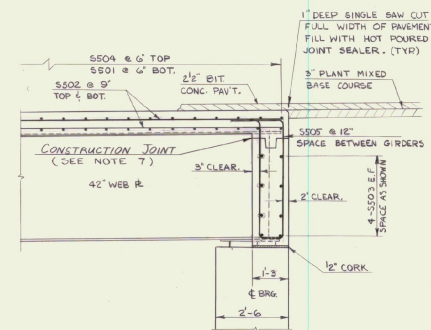


POUR SEQUENCE
SCALE: 1"=20'

NOTE: A 5 DAY CURING PERIOD IS
REQUIRED BETWEEN POURS.



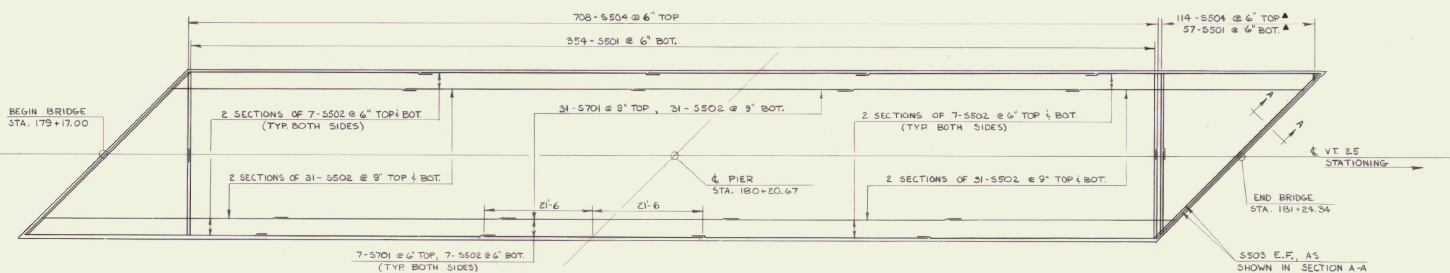
CURB & RAIL DETAIL
SCALE: 1"=1'-0"



SECTION A-A
SCALE: 1/2"=1'-0"

NOTES

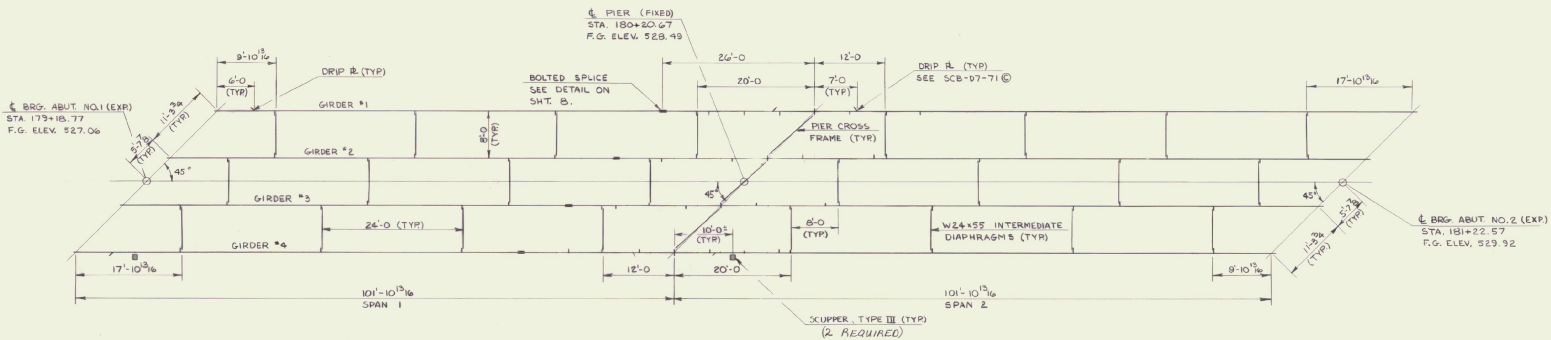
- SEE SHT. 7 FOR LOCATIONS OF SCUPPERS.
- FOR ADDITIONAL CURB DETAILS, SEE SHT. 15.
- FOR FURTHER RAIL DETAILS, SEE STD. SB-R6-82 AND SB-R4-82.
- SEE SHT. 18 FOR SUPERELEVATION DETAILS.
- PAYMENT FOR ALL MATERIALS AND LABOR FOR HOT Poured JOINT SEALER, AS DETAILED ABOVE, SHALL BE SUBSIDIARY TO ITEM 406.25, BITUMINOUS CONCRETE PAVEMENT.
- FOR CURTAIN WALL BOX OUT AT BEARING DEVICE DETAILS, SEE SHT. 9 AND SCB-D9-71.
- THE CURTAIN WALL SHALL BE ALLOWED TO CURE FOR A PERIOD OF 5 DAYS BEFORE THE ADJACENT SECTION OF DECK IS Poured.



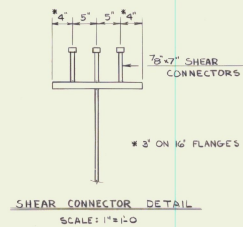
DECK REINFORCING PLAN
SCALE: 3/32"=1'-0"

▲ CUT TO FIT. USE CUTOFFS
ON OPPOSITE END.

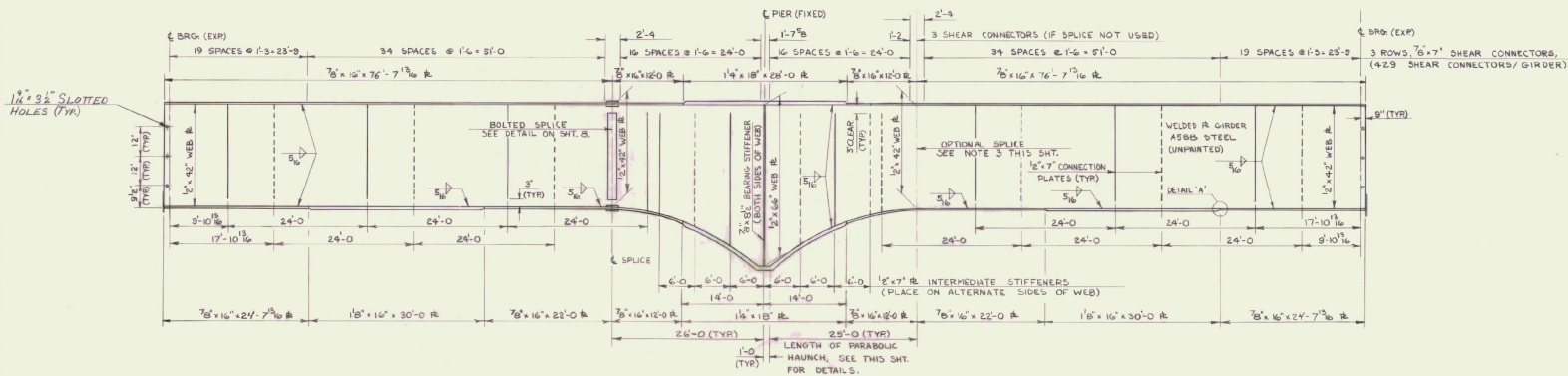
STATE OF VERMONT AGENCY OF TRANSPORTATION	
TOWN OF BRADFORD	Bridge No. 5
Highway No. VT 25	Log Sta.
VT. 25 OVER WAITS RIVER	
SUPERSTRUCTURE DETAILS	
Checked by C. BENDA date 12/81	Drawn by G. SCHELLEY Bridge Design Supervisor date 2/82
PROJECT BRADFORD	PROJECT NO. BRF 03-1(5)S
Bridge Sheet No.	Sheet 6 of 12



FRAMING PLAN
SCALE: 1"=10'



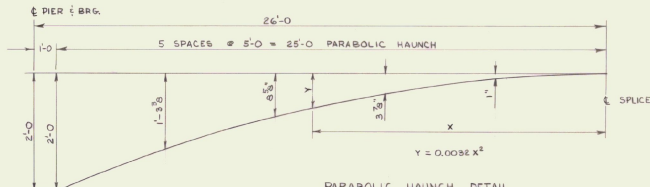
SHEAR CONNECTOR DETAIL
SCALE: 1"=10'



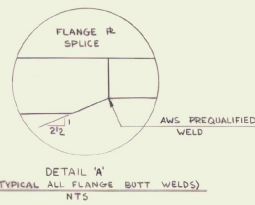
TYPICAL INTERIOR GIRDER ELEVATION
SCALE: HORIZ. 3/8"=1'-0"
VERT. 1"=2'

NOTES

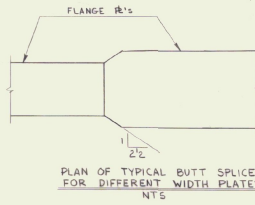
- FOR DIAPHRAGM AND CROSS FRAME DETAILS, SEE SHT. B.
- ALL FLANGE AND WEB PLATES REQUIRE CHARPY V NOTCH TEST, AS SPECIFIED IN SUBSECTION 714.03.
- AN OPTIONAL GIRDER SPLICE, IDENTICAL TO THAT DETAILED ON THESE PLANS, MAY BE USED AT THE LOCATION SHOWN ON THE TYPICAL GIRDER ELEVATION. NO PAYMENT FOR MATERIAL OR LABOR WILL BE ALLOWED FOR THE OPTIONAL SPLICE.
- SEE SHT. B FOR PLAN OF PIER CROSS-FRAME.
- SEE SHT. F FOR CAMBER AND DEAD LOAD DEFLECTION DIAGRAMS.



PARABOLIC HAUNCH DETAIL
SCALE: HORIZ. 3/8"=1'-0"
VERT. 1"=1'-0"

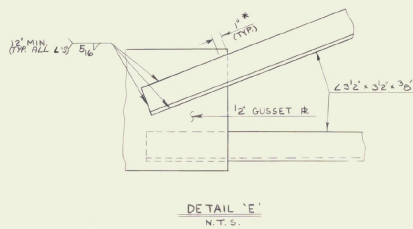
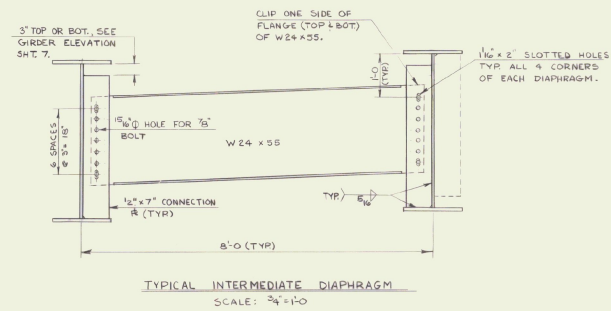
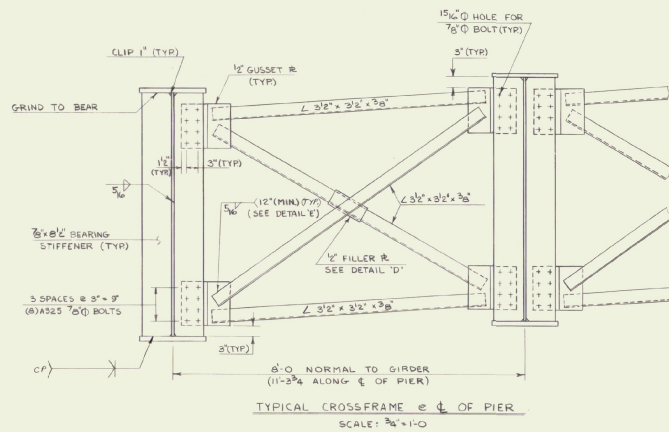
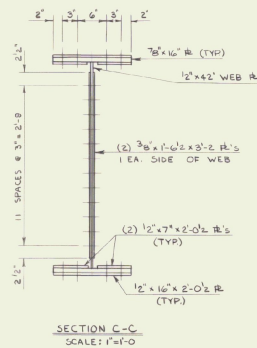
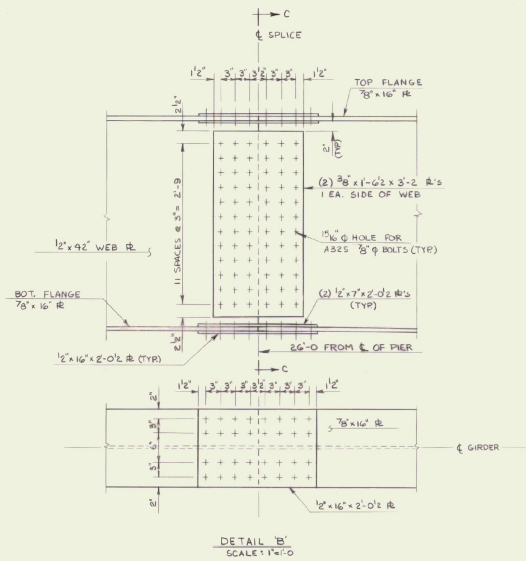


DETAIL 'A'
(TYPICAL ALL FLANGE BUTT WELDS)
NTS

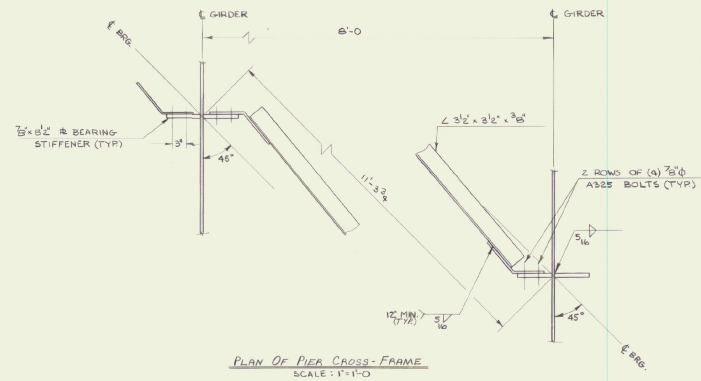
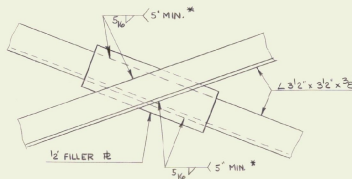


PLAN OF TYPICAL BUTT SPLICE
FOR DIFFERENT WIDTH PLATES
NTS

STATE OF VERMONT AGENCY OF TRANSPORTATION	
TOWN OF BRADFORD	Bridge No. 5
Log Sta.	
HIGHWAY NO. VT. RT. 25	Surv. Sta. 150+20.67
VT. RT. 25 OVER WAITS RIVER	
FRAMING PLAN & GIRDER DETAIL	
Designed by C. BENDA	Drawn by G. SCHELLEY
Checked by C. BENDA date 12/01	Bridge Design Supervisor Z.L. Ostry date 2-88
PROJECT BRADFORD	PROJECT NO. BRF-031-1(S)S
Bridge Sheet No.	Sheet 7 of 42



* END WELD AT ONE (1) INCH FROM EDGE OF GUSSET FILLER PLATE OR ANGLE.

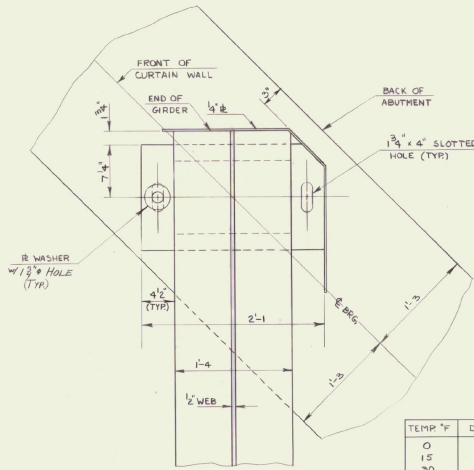


NOTES

1. ALL DIAPHRAGMS SHALL BE CONNECTED FINGER TIGHT WITH (A) A325 7/8" BOLTS THROUGH SLOTTED HOLES BEFORE THE DECK IS POURED. AFTER THE CONCRETE HAS BEEN PLACED, THE REMAINING BOLTS SHALL BE INSTALLED AND ALL BOLTS TIGHTENED. HARDENED WASHERS SHALL BE USED OVER SLOTTED HOLES.
2. FOR THE LOCATION OF DETAIL 'F', SEE SHT. 7.

STATE OF VERMONT
AGENCY OF TRANSPORTATION

TOWN OF BRADFORD	Bridge No. 5
HIGHWAY NO. VT 25	Log Sta.
	Surv. Sta. 190+20.67
VT. 25 OVER WAITS RIVER	
SUPERSTRUCTURE DETAILS	
Designed by C. BENDA	Drawn by G. SCHELLEY
Checked by C. BENDA date 12/61	Bridge Design Supervisor E.L. O'Leary date 2/82
PROJECT BRADFORD	PROJECT NO. BRF 031-11(5)S
Bridge Sheet No.	Sheet 3 of 42

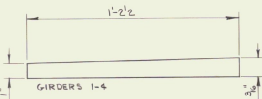


TEMP °F	DISTANCE 'A'
0	3"
15	2 3/4"
30	2 3/4"
45	2 5/8"
60	2 1/2"
75	2 5/8"
90	2 1/4"

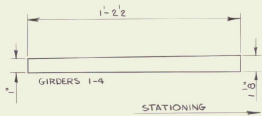
TEMPERATURE CHART
(EXPANSION BEARING)

ABUT 1 & 2 (EXP.)
LIVE LOAD REACTION = 71.0 k
DEAD LOAD REACTION = 52.5 k
TOTAL REQ. MOVEMENT = 1 3/16"
DEAD LOAD ELONGATION
OF BOTTOM FLANGE = 3/8"

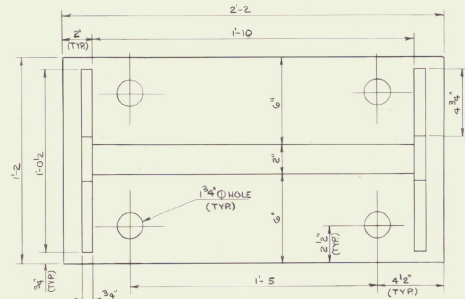
PLAN
SCALE: 1/2"=1'-0"



SOLE PLATE AT ABUTMENT NO. 1
SCALE: 3/4"=1'-0"

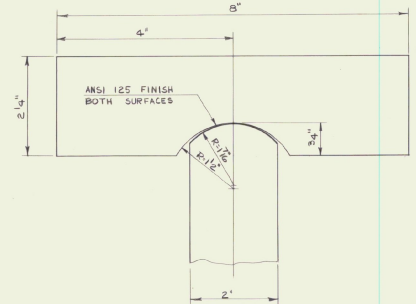


SOLE PLATE AT ABUTMENT NO. 2
SCALE: 3/4"=1'-0"

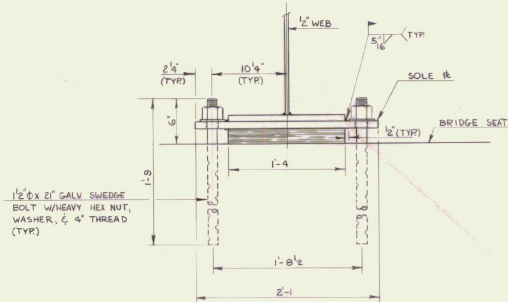


SECTION B-B
SCALE: 3/4"=1'-0"

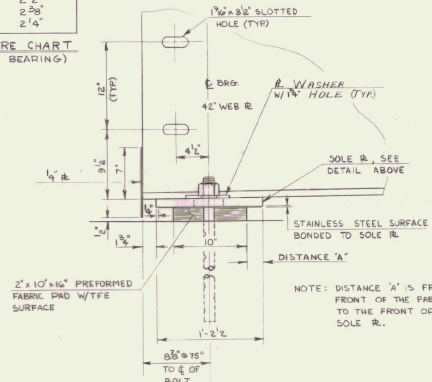
PIER (FIXED)
LIVE LOAD REACTION = 118.5 k
DEAD LOAD REACTION = 192.3 k



DETAIL 'A'
SCALE: 3/4"=1'

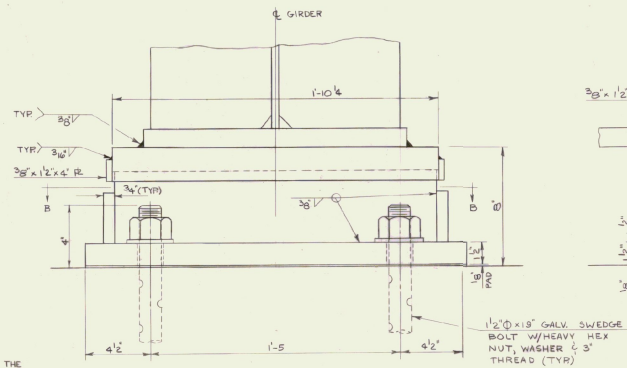


FRONT ELEVATION
SCALE: 1 1/2"=1'-0"

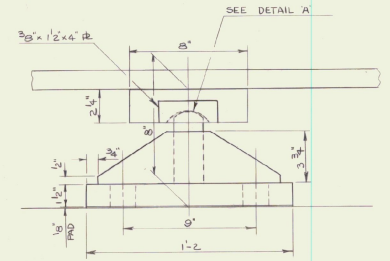


SIDE ELEVATION
SCALE: 1/2"=1'-0"

EXPANSION BEARING
(EIGHT REQUIRED)



FRONT ELEVATION
SCALE: 3/4"=1'-0"

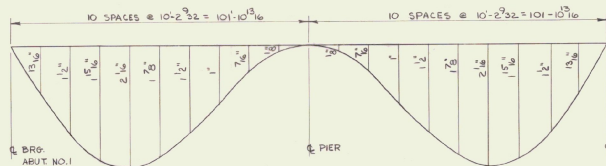


SIDE ELEVATION
SCALE: 3/4"=1'-0"

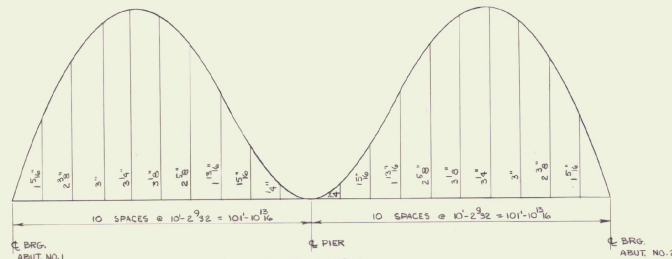
NOTES

FIXED BEARING
(FOUR REQUIRED)

- PAYMENT FOR EXPANSION BEARINGS SHALL BE AT THE UNIT BID PRICE FOR BEARING DEVICE ASSEMBLY.
- PAYMENT FOR FIXED BEARINGS WITH ANCHOR BOLTS SHALL BE AT THE UNIT BID PRICE FOR STRUCTURAL STEEL.
- EXPANSION BEARINGS SHALL CONFORM TO SUBSECTION 731.05.
- CONCRETE SURFACES UNDER BEARING SHALL BE LEVEL.
- ALL STEEL IN THE BEARING DEVICES SHALL BE A588 UNPAINTED, EXCEPT AS NOTED.



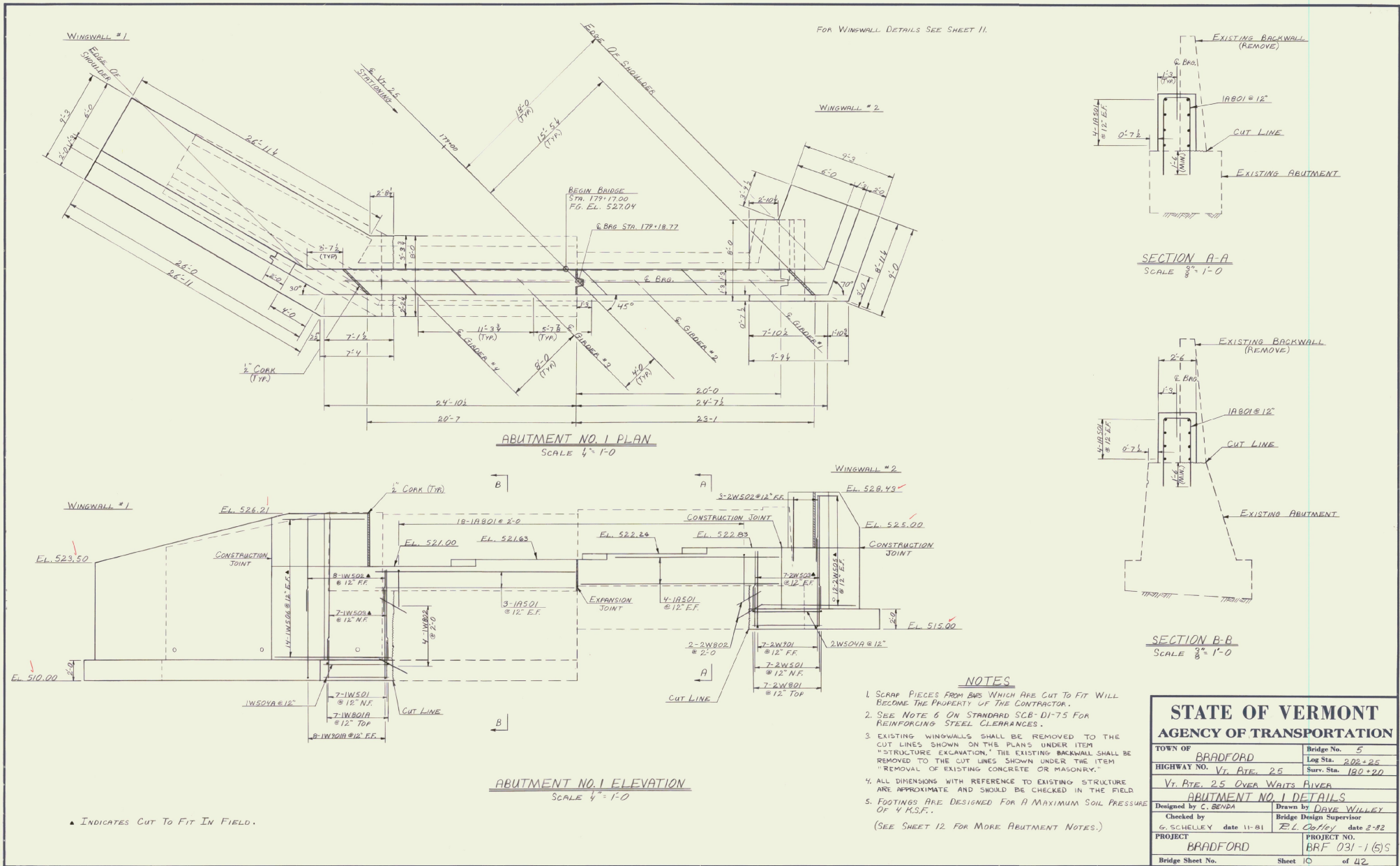
DEAD LOAD DEFLECTIONS
SCALE: HORIZ. 1"=10'
VERT. 1"=1'



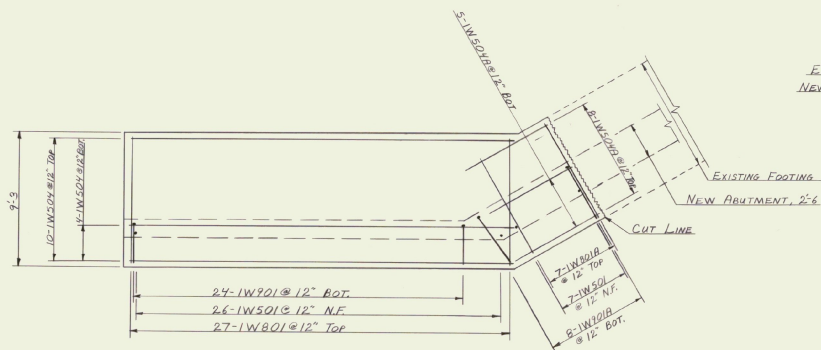
CAMBER DIAGRAM
SCALE: HORIZ. 1 1/2\"/>

STATE OF VERMONT
AGENCY OF TRANSPORTATION

TOWN OF BRADFORD	Bridge No. 5
HIGHWAY NO. VT RT 25	Log Sta. 21.00/104
VT RT 25 OVER WAITS RIVER	
BEARING DETAILS	
Designed by C. BENDA	Drawn by G. SCHELLEY
Checked by C. BENDA	Bridge Design Supervisor
date 12/1/11	date 2/2/12
PROJECT BRADFORD	PROJECT NO. BRP-031-1(5) 5
Bridge Sheet No.	Sheet 9 of 42

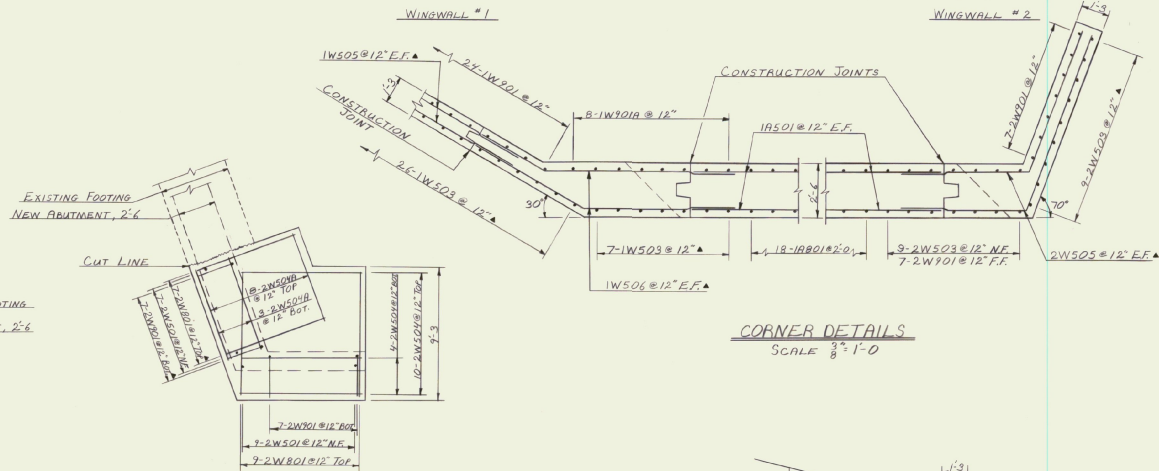


STATE OF VERMONT	
AGENCY OF TRANSPORTATION	
TOWN OF BRADFORD	Bridge No. 5
HIGHWAY NO. Vt. RTE. 25	Log Sta. 202+25
	Surv. Sta. 180+20
Vt. RTE. 25 OVER WAITS RIVER	
ABUTMENT NO. 1 DETAILS	
Designed by C. SENDA	Drawn by DAVE WILLEY
Checked by G. SCHELLEY date 11-81	Bridge Design Supervisor F.L. O'NEILL date 2-82
PROJECT BRADFORD	PROJECT NO. BRF 031-1(5)S
Bridge Sheet No.	Sheet 10 of 42



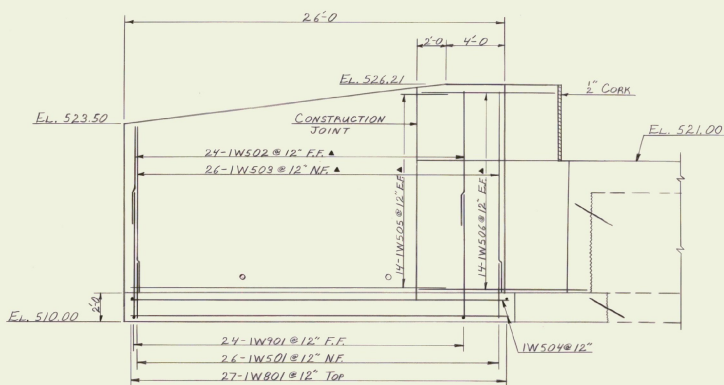
WINGWALL NO. 1

FOOTING REINFORCING PLANS
SCALE 1/4" = 1'-0"

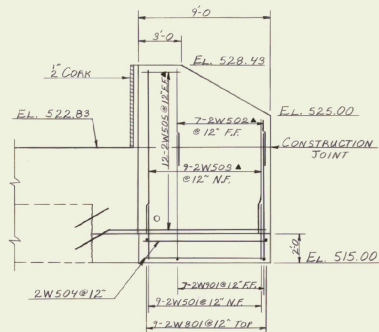


WINGWALL NO. 2

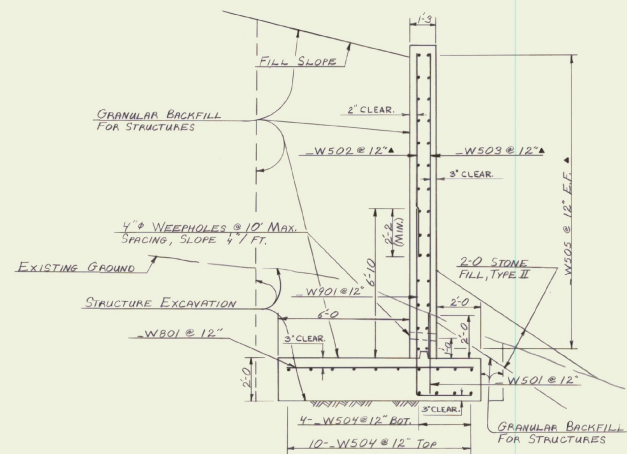
CORNER DETAILS
SCALE 3/8" = 1'-0"



WINGWALL NO. 1 ELEVATION
SCALE 1/4" = 1'-0"



WINGWALL NO. 2 ELEVATION
SCALE 1/4" = 1'-0"

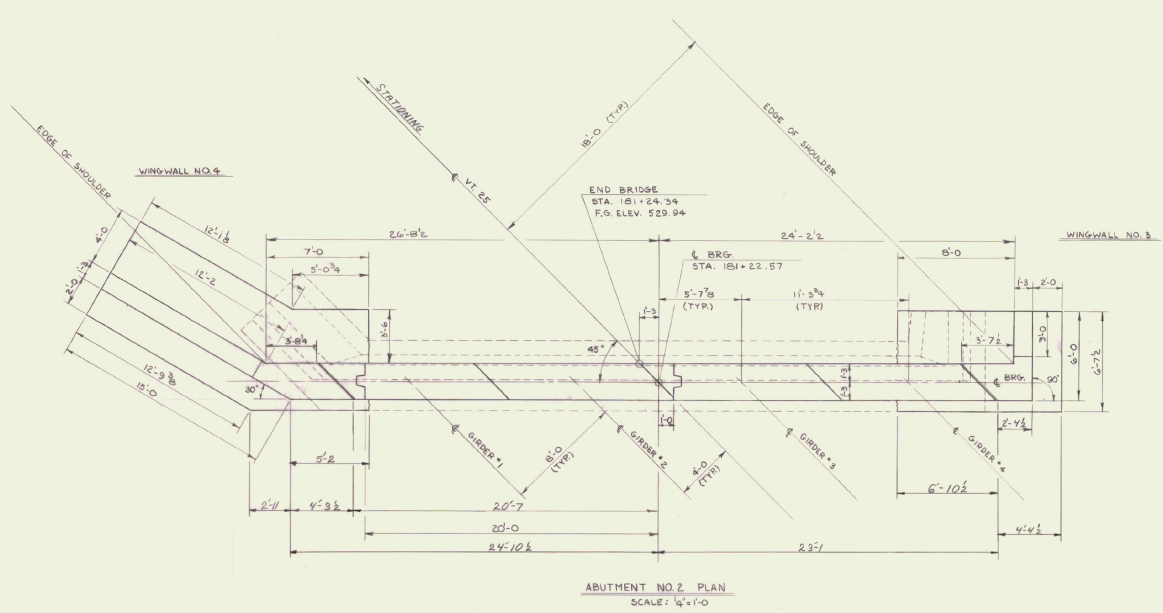


TYPICAL WINGWALL SECTION
SCALE 3/8" = 1'-0"

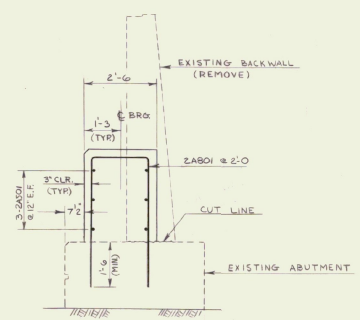
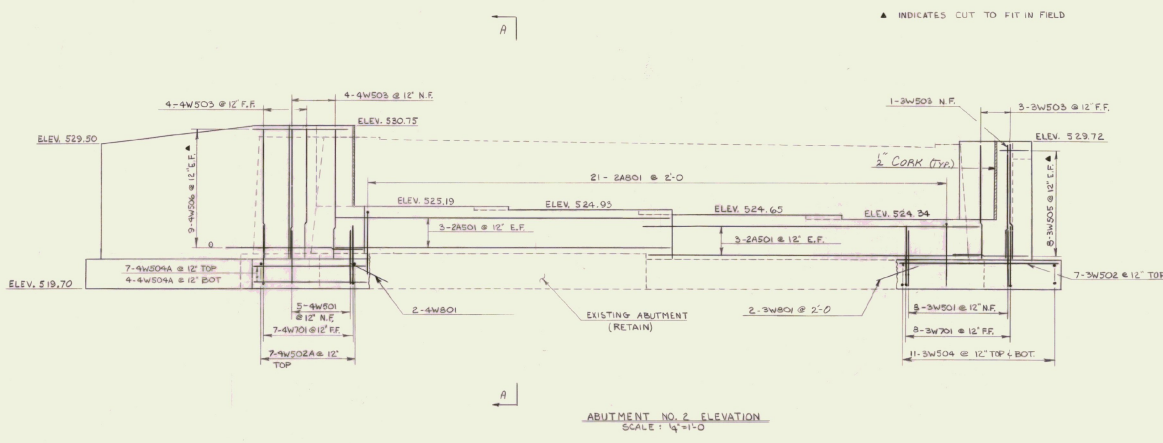
**STATE OF VERMONT
AGENCY OF TRANSPORTATION**

TOWN OF	BRADFORD	Bridge No.	5
HIGHWAY NO.	VT. RTE. 25	Log Sta.	202+25
		Surv. Sta.	180+20
VT. RTE. 25 OVER WAITS RIVER			
WINGWALLS NO. 1 & 2 DETAILS			
Designed by	C. BENDA	Drawn by	DAVE WILLEY
Checked by		Bridge Design Supervisor	
		date	11-91
PROJECT	BRADFORD	PROJECT NO.	BAF 031-1(S)S
Bridge Sheet No.		Sheet	11 of 42

▲ INDICATES CUT TO FIT IN FIELD.



- NOTES**
1. IN AREAS WHERE A FOOTING WOULD BE PARTIALLY ON LEDGE AND PARTIALLY ON SOIL, THE LEDGE SHALL BE EXCAVATED TO A DEPTH OF ONE FOOT BELOW THE BOTTOM OF FOOTING ELEVATION. GRANULAR BACKFILL FOR STRUCTURES SHALL BE PLACED ON THE LEDGE UP TO BOTTOM OF FOOTING ELEVATION. SEE SHEET 22, SECTION 3+25.
 2. NO LEDGE SHALL PROJECT ABOVE THE INDICATED BOTTOM OF EXCAVATION LIMITS. IF A FOOTING IS COMPLETELY ON LEDGE, ALL OVERBREAKAGE BELOW THE BOTTOM OF EXCAVATION LIMITS SHALL BE REPLACED WITH CONCRETE, CLASS B, WHERE A NEW FOOTING IS PARTIALLY ON LEDGE AND PARTIALLY ON SOIL, AS DESCRIBED IN NOTE #1, ALL OVERBREAKAGE SHALL BE REPLACED WITH GRANULAR BACKFILL FOR STRUCTURES. A MAXIMUM OF 6" AVERAGE DEPTH OF OVERBREAKAGE SHALL BE PAID FOR AS STRUCTURE EXCAVATION, AND CONCRETE, CLASS B OR GRANULAR BACKFILL FOR STRUCTURES SHALL BE PLACED AT THE CONTRACTOR'S EXPENSE.
 3. A QUANTITY OF 3 C.Y. OF STRUCTURE EXCAVATION AND CONCRETE, CLASS B HAS BEEN INCLUDED FOR POSSIBLE OVERBREAKAGE.

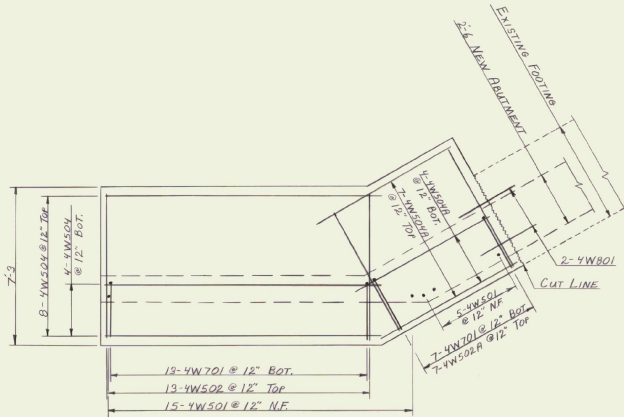


NOTE

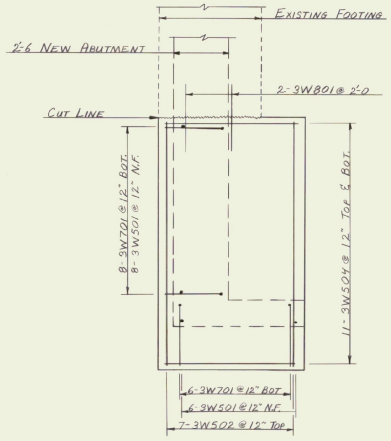
EXISTING WINGWALLS SHALL BE REMOVED TO THE CUT LINES SHOWN ON THE PLANS UNDER THE ITEM "STRUCTURE EXCAVATION." THE EXISTING BACKWALL SHALL BE REMOVED TO THE LINES SHOWN UNDER THE ITEM "REMOVAL OF EXISTING CONCRETE OR MASONRY."

STATE OF VERMONT AGENCY OF TRANSPORTATION	
TOWN OF BRADFORD	Bridge No. 5
HIGHWAY NO. VT. RT. 25	Log Sta. 180+20.67
VT. RT. 25 OVER WAITS RIVER	
ABUTMENT NO. 2 DETAILS	
Designed by C. BENDA	Drawn by G. SCHELLEY
Checked by C. BENDA date 12/5/51	Bridge Division Supervisor R. L. O'NEIL date 2-82
PROJECT BRADFORD	PROJECT NO. BRF 031-1(5)S
Bridge Sheet No.	Sheet 12 of 42

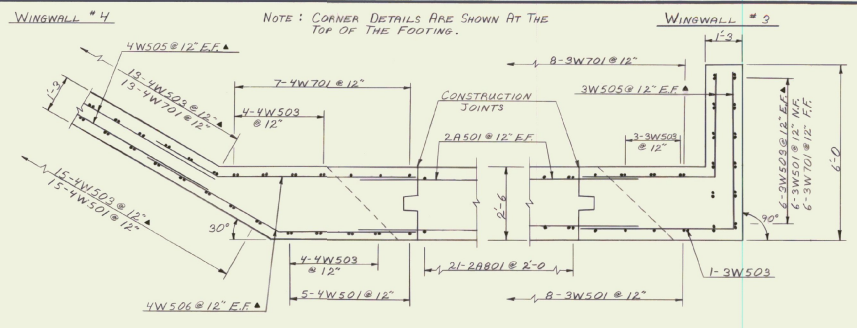
BRUNNEN 44.131.60131



WINGWALL NO. 4



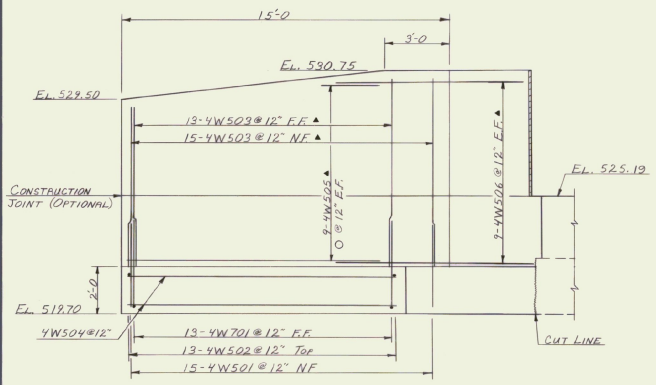
WINGWALL NO. 3



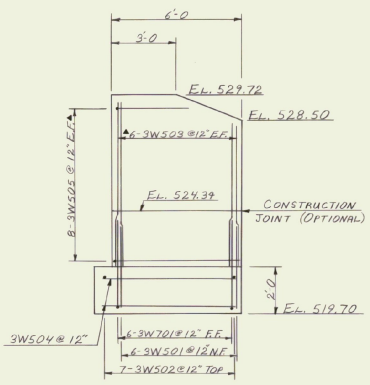
CORNER DETAILS
SCALE 1/2" = 1'-0"

FOOTING REINFORCING PLANS
SCALE 3/8" = 1'-0"

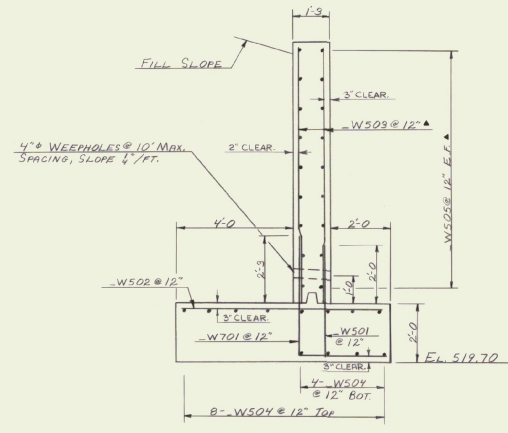
▲ INDICATES CUT TO FIT IN FIELD.



WINGWALL NO. 4 ELEVATION
SCALE 3/8" = 1'-0"

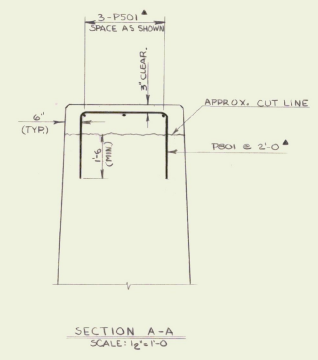
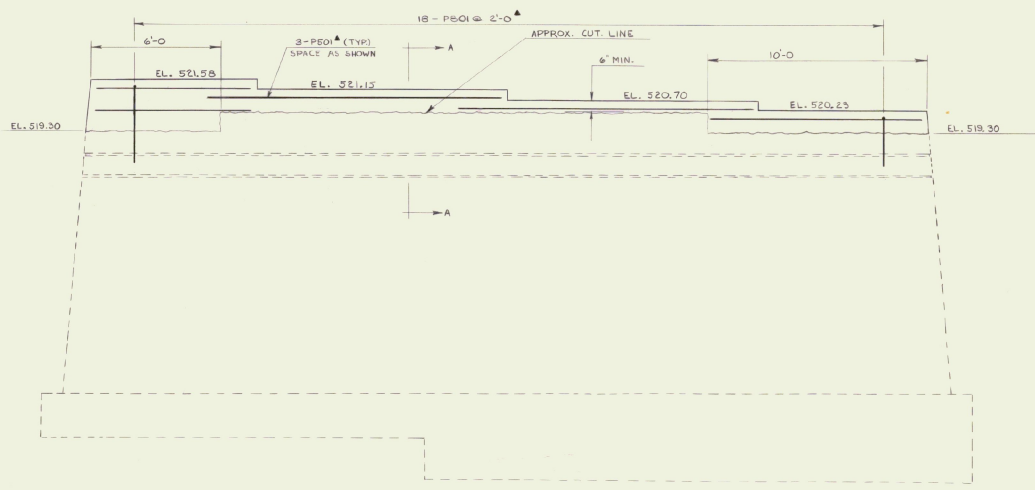
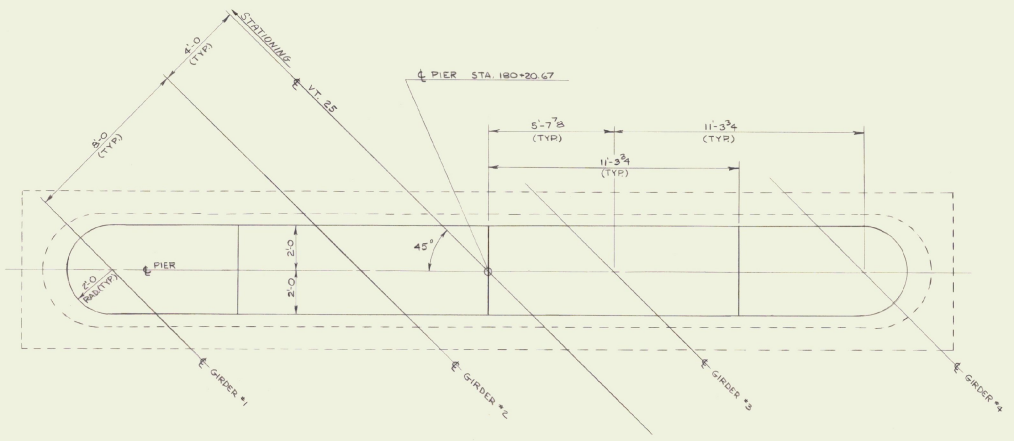


WINGWALL NO. 3 ELEVATION
SCALE 3/8" = 1'-0"



TYPICAL WINGWALL SECTION
SCALE 1/2" = 1'-0"

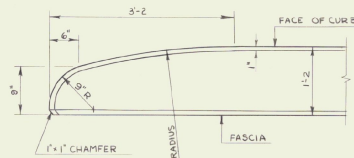
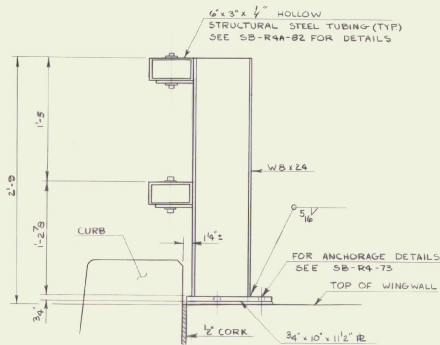
STATE OF VERMONT AGENCY OF TRANSPORTATION	
TOWN OF BRADFORD	Bridge No. 5
HIGHWAY NO. VT. RTE. 25	Log Sta.
Surr. Sta. 	
VT. RTE. 25 OVER WAITS RIVER	
WINGWALLS No. 3 & 4 DETAILS	
Designed by C. BENDA	Drawn by DAVE WILLEY
Checked by G. SCHELLEY date 11-81	Bridge Design Supervisor F. L. O'NEIL date 2-82
PROJECT BRADFORD	PROJECT NO. BRF 031-(1)S
Bridge Sheet No. 	Sheet 13 of 42



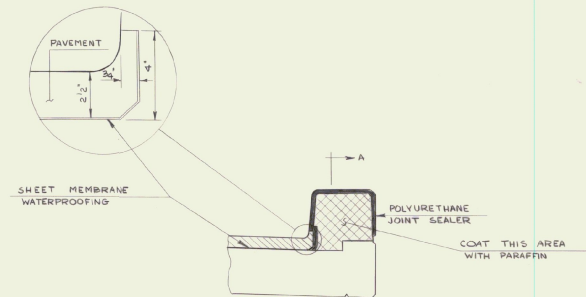
NOTES

1. ALL LOOSE OR SPALLED CONCRETE AREAS ON THE PIER SHALL BE REMOVED TO EXISTING SOUND CONCRETE AND REPAIRED AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
2. EXISTING CONCRETE SHALL BE REMOVED TO THE CUT LINES SHOWN OR AS DIRECTED BY THE ENGINEER, PAYMENT TO BE UNDER THE ITEM REMOVAL OF EXISTING CONCRETE OR MASONRY.

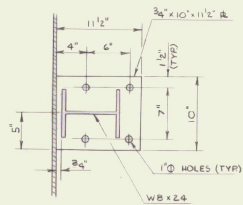
STATE OF VERMONT	
AGENCY OF TRANSPORTATION	
TOWN OF BRADFORD	Bridge No. 5
HIGHWAY NO. VT. RT. 25	Log Sta.
	Surv. Sta.
VT. RT. 25 OVER WAITS RIVER	
PIER DETAILS	
Designed by C. BENDA	Drawn by G. SCHELLEY
Checked by C. BENDA	Bridge Design Supervisor
date 12/15/1	date 2-22
PROJECT BRADFORD	PROJECT NO. BRF 031-1(5)S
Bridge Sheet No.	Sheet 4 of 42



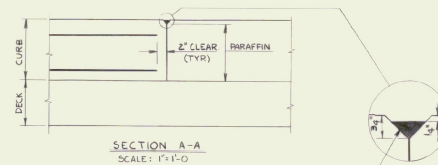
CURB END DETAIL
SCALE: 1 1/4"=1'-0"



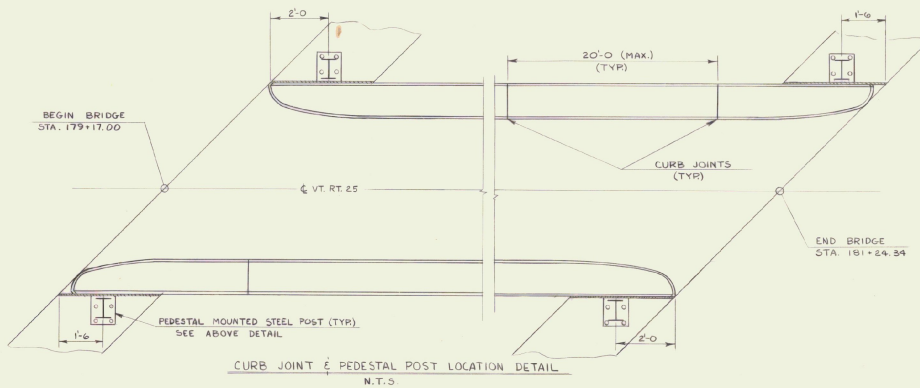
DETAIL 'G'
SCALE: 2"=1'-0"



PEDESTAL MOUNTED STEEL POST DETAIL
SCALE: 1 1/2"=1'-0"



FORM SLOT IN CURB JOINTS AND SEAL WITH POLYURETHANE JOINT SEALER AS SPECIFIED IN SECTION 707.11. (COLOR TO MATCH CONCRETE)

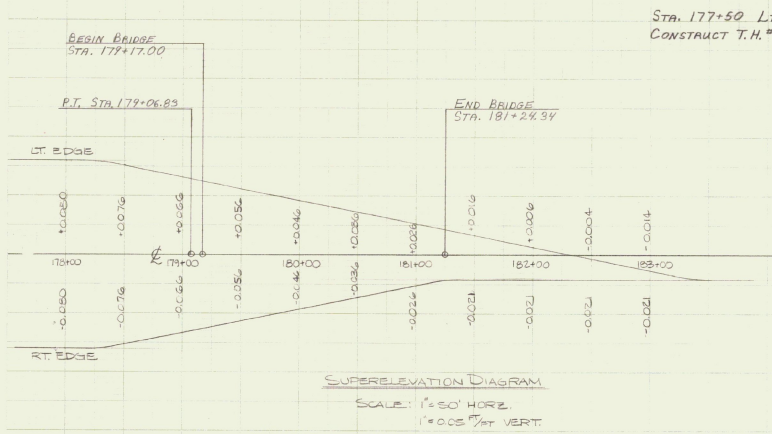


NOTES

1. PAYMENT FOR POLYURETHANE JOINT SEALER AND PARAFFIN SHALL BE INCLUDED IN THE UNIT BID PRICE OF THE ADJACENT CONCRETE.
2. FOR THE LOCATION OF DETAIL 'G', SEE SHIT. 6.
3. BRIDGE CURB SECTIONS ARE TO BE A MAXIMUM OF 20'-0", CURB JOINTS SHALL BE SPACED 1'-0" MINIMUM FROM ADJACENT RAIL POSTS. CONCRETE SHALL BE PLACED IN ALTERNATE SECTIONS WITH A MINIMUM OF 48 HOURS BETWEEN POURS.
4. PAYMENT FOR PEDESTAL MOUNTED STEEL POST SHALL BE INCLUDED IN THE UNIT BID PRICE FOR THE ITEM, "BRIDGE RAILING-GALVANIZED BOX BEAM (MOD)."

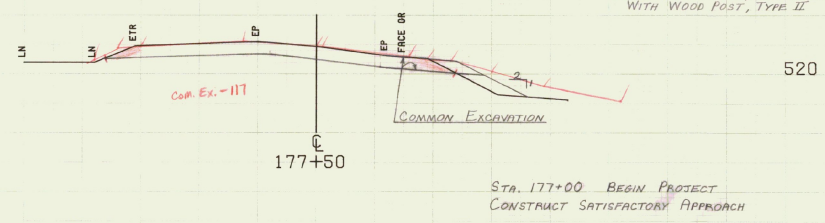
STATE OF VERMONT
AGENCY OF TRANSPORTATION

TOWN OF BRADFORD	Bridge No. 5
HIGHWAY NO. VT. RT. 25	Log Sta.
	Surv. Sta. 180+20.67
VT. RT. 25 OVER WAITS RIVER	
CURB AND RAILING DETAILS	
Designed by C. BENDA	Drawn by G. SCHELLEY
Checked by C. BENCA date 12/01	Bridge Design Supervisor R.L. Oatley date 2-02
PROJECT BRADFORD	PROJECT NO. BRF 031-1(5)S
Bridge Sheet No.	Sheet 15 of 42

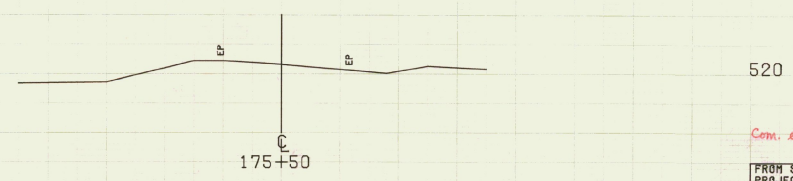
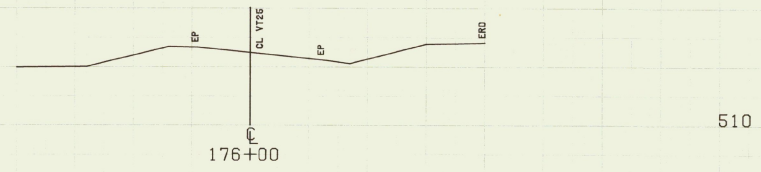
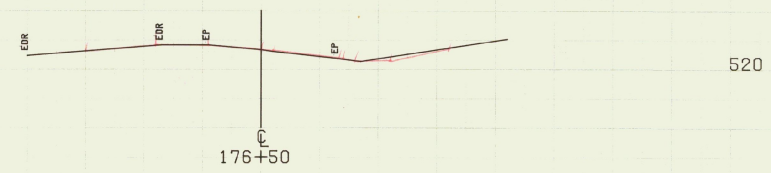
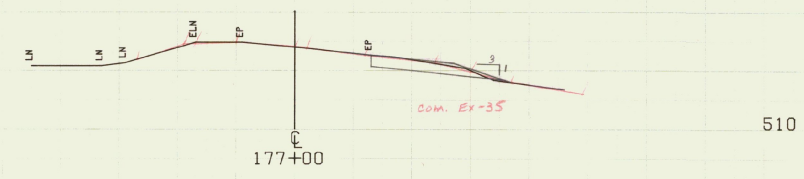


Sta. 177+50 LT.
CONSTRUCT T.H. # 23 APPROACH

Sta. 177+10 RT.
BEGIN GUARD RAIL, H.D. STEEL BEAM
WITH WOOD POST, TYPE II



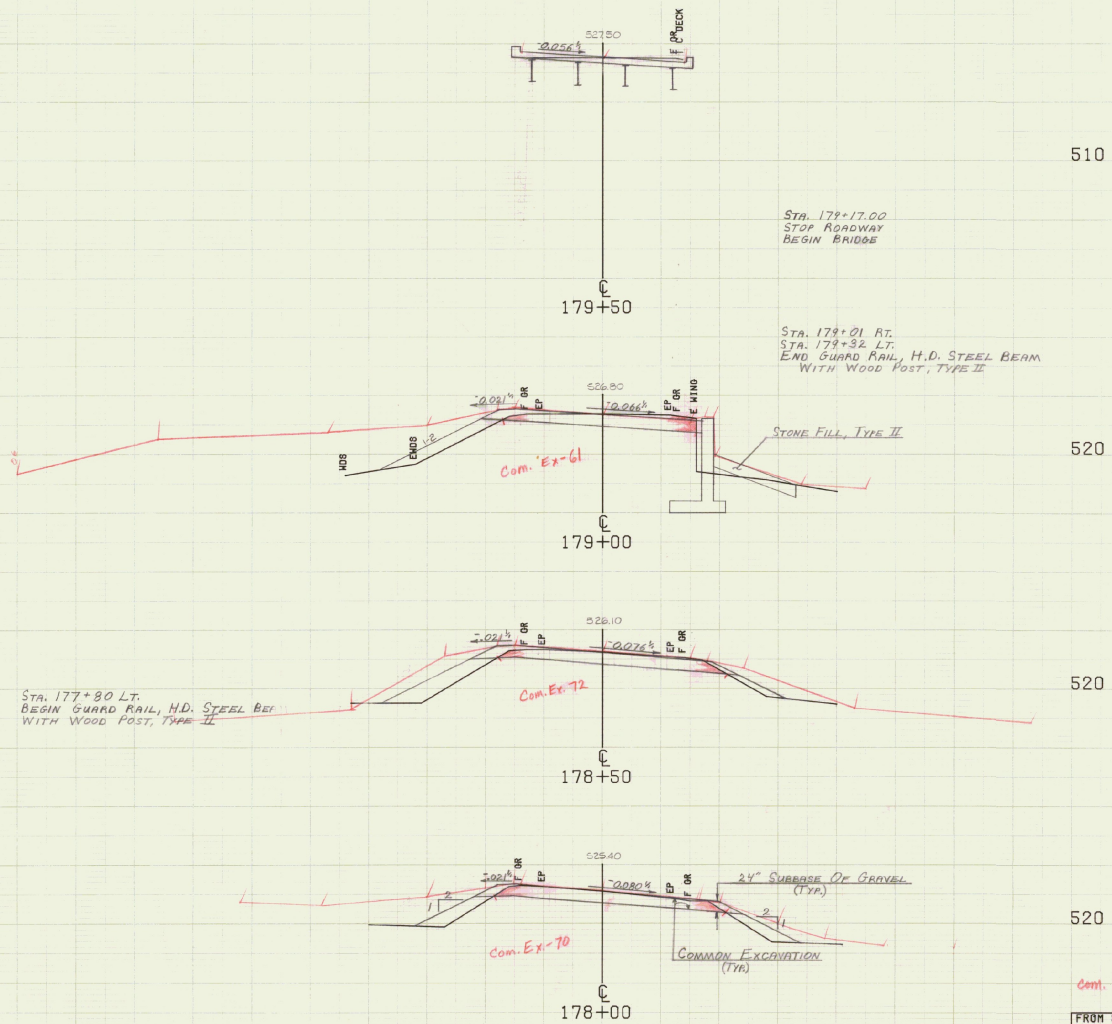
Sta. 177+00 BEGIN PROJECT
CONSTRUCT SATISFACTORY APPROACH



*Com. ex. planimeted by M.W. Houghton
12/17/82*

FROM STA. 175+50	TO STA. 177+50
PROJECT NAME	BRADFORD VT25
NO.	BRF091-1(5)
SURVEYED BY	TESSIER
SHEET 10 OF 42 SHEETS	PLOTTED 12/07/79
	11/15/79

SCALE 1"=10 FEET



510

STA. 179+17.00
STOP ROADWAY
BEGIN BRIDGE

179+50

STA. 179+01 RT.
STA. 179+32 LT.
END GUARD RAIL, H.D. STEEL BEAM
WITH WOOD POST, TYPE II

520

179+00

STA. 177+80 LT.
BEGIN GUARD RAIL, H.D. STEEL BEAM
WITH WOOD POST, TYPE II

520

178+50

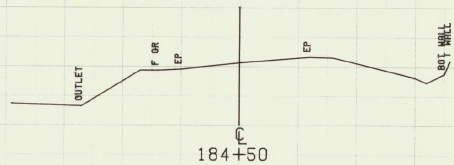
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178+00

com. ex. planimeted by M.W.H. 12/17/82

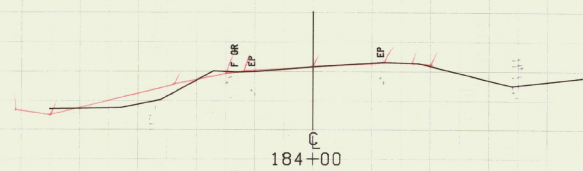
FROM STA. 178+00	TO STA. 179+50
PROJECT NAME BRADFORD VT25	NO. BRADFORD-1(S)
SURVEYED BY TESSIER	PLOTTED 12/07/79
SHEET 19 OF 42 SHEETS	11/15/79

SCALE 1" = 10 FEET



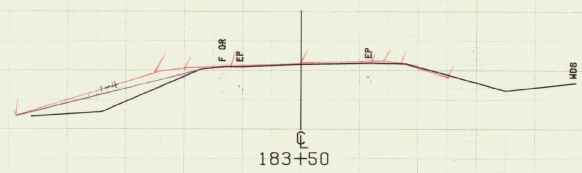
520

184+50



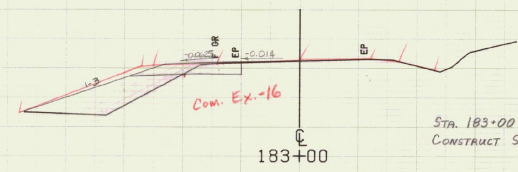
520

184+00



520

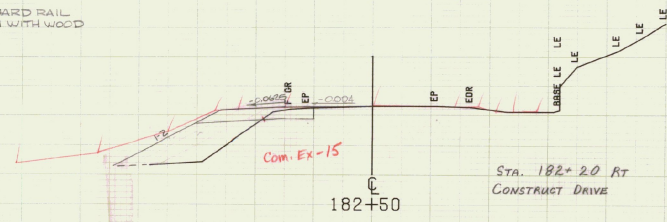
183+50



530

183+00

STA. 182+50 LT. END GUARD RAIL
HEAVY DUTY STEEL BEAM WITH WOOD
POLES, TYPE II.



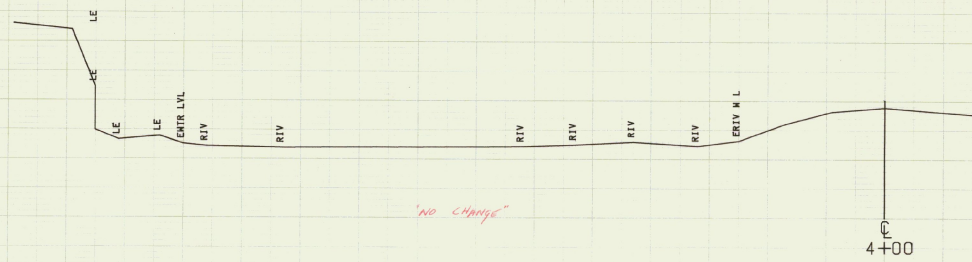
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182+50

Com. Ex. planimetered by M.W.H. 12/17/82

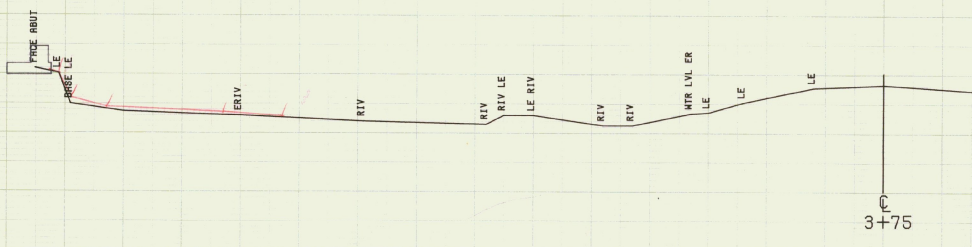
FROM STA. 182+50	TO STA. 184+50
PROJECT NAME BRADFORD VT25	
NO. BR031-1(5)	PLOTTED 12/07/79
SURVEYED BY TESSIER	11/15/79
SHEET 21 OF 42 SHEETS	

SCALE 1" = 10 FEET



510

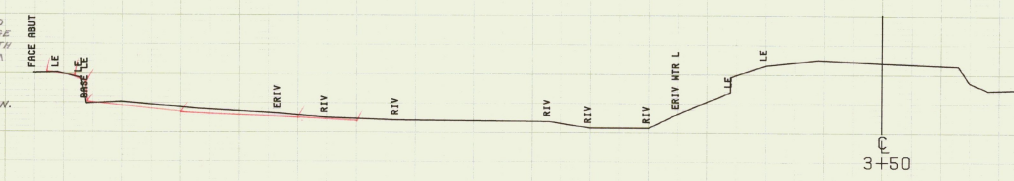
4+00



510

3+75

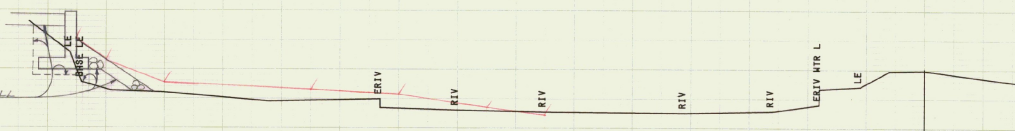
NOTE
 IN AREAS WHERE A FOOTING
 WOULD BE PARTIALLY ON SOIL AND
 PARTIALLY ON LEDGE THE LEDGE
 SHALL BE EXCAVATED TO A DEPTH
 OF ONE FOOT BELOW THE BOTTOM
 OF FOOTING ELEVATION. GRANULAR
 BACKFILL FOR STRUCTURES SHALL
 BE PLACED ON THE LEDGE UP TO
 THE BOTTOM OF FOOTING ELEVATION.



510

3+50

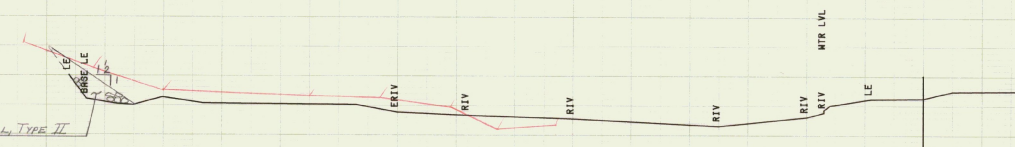
GRANULAR BACKFILL
 FOR STRUCTURES



510

3+25

STONE FILL TYPE II

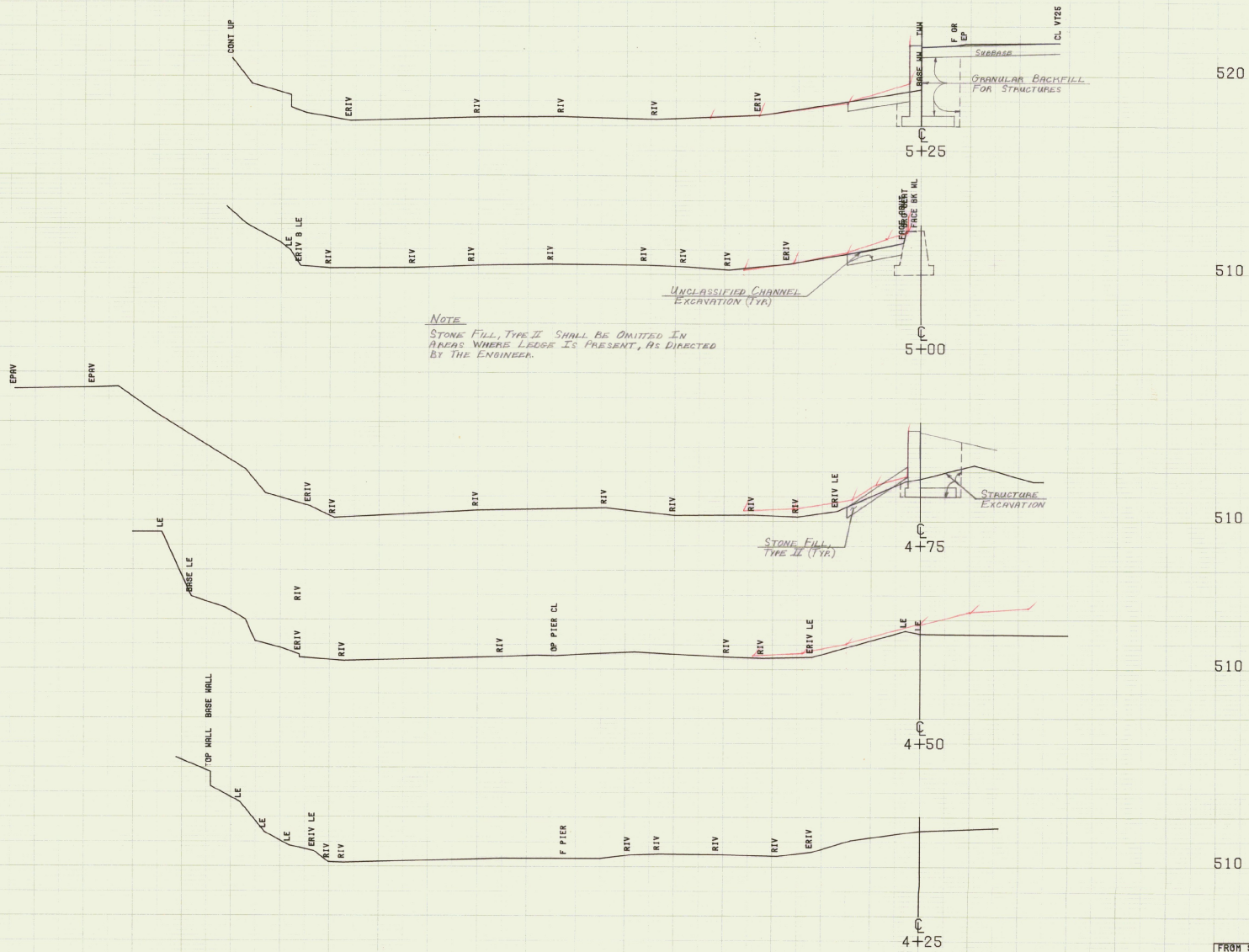


510

3+00

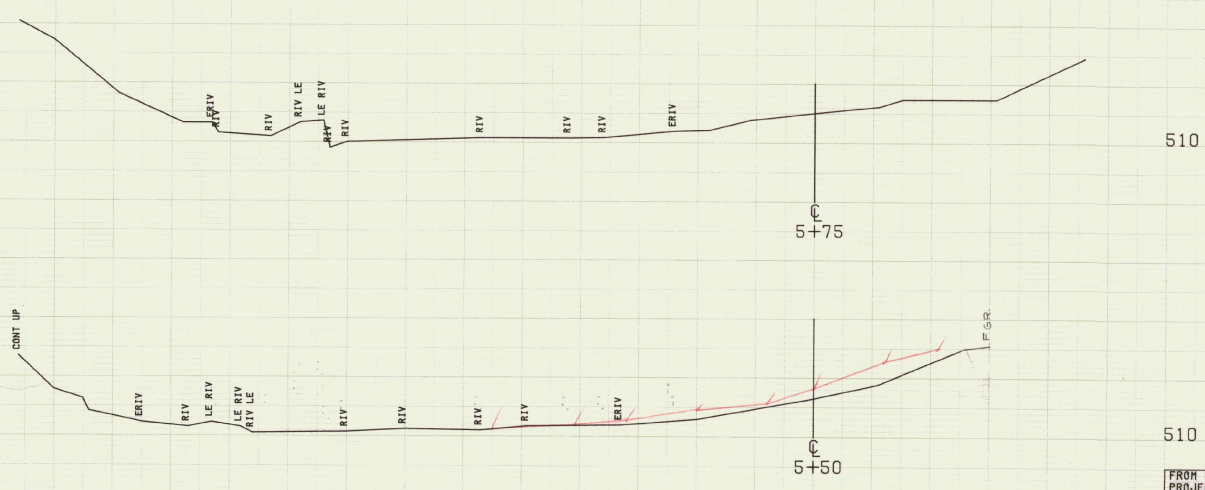
FROM STA. 3+00	TO STA. 4+00
PROJECT NAME	BRADFORD CHAN
NO.	BAF031-1(6)
SURVEYED BY	TESSIER
SHEET 2 OF 42	PLOTTED 12/07/79
	11/15/79

SCALE 1" = 10 FEET



FROM STA. 4+25 TO STA. 5+25
 PROJECT NAME BRADFORD BRIDGE HALL
 NO. BRD03-146 CHAN
 SURVEYED BY TESSIER PLOTTED 12/07/79
 SHEET 23 OF 42 SHEETS 11/15/79

SCALE 1" = 10 FEET



510

5+75

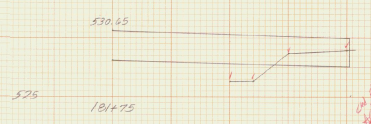
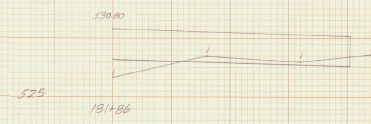
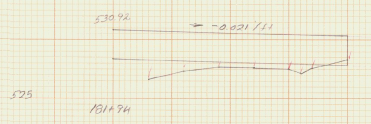
510

5+50

FROM STA. 5+50	TO STA. 5+75
PROJECT NAME	BRADFORD CHAN
NO.	BAF031-1(5)
SURVEYED BY	TESSIER
SHEET 24 OF 42 SHEETS	PLOTTED 12/07/79
	11/15/79

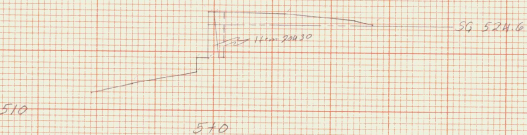
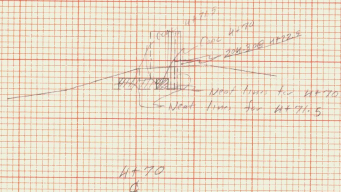
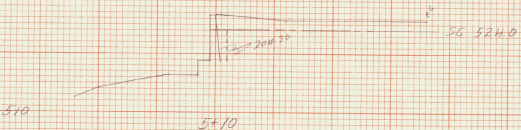
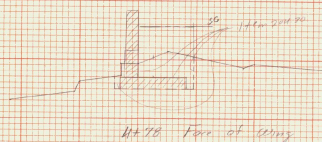
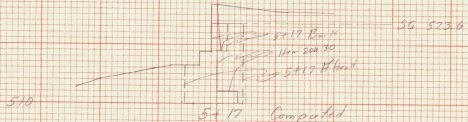
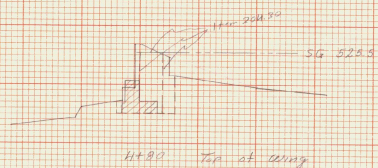
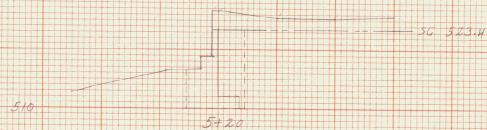
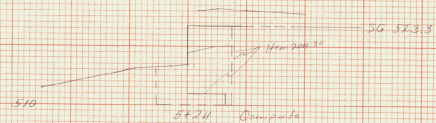
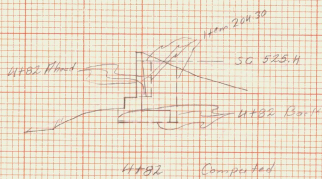
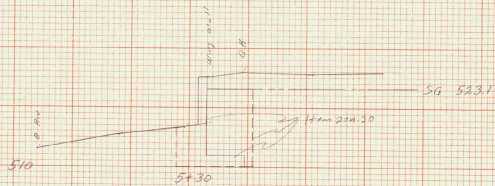
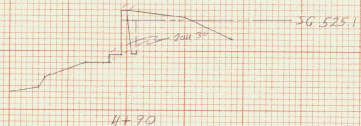
SCALE 1" = 10 FEET

Station	Item	203.16 Men	Solid F ³⁰ M.	Back 1811 ¹⁰	Excav BT
181+70	0		3.42	5	19.1
181+75	6.84		2.45	11	12.4
181+86	2.15		1.28	8	10.2
181+94 B-H	0.42				
Σ					64.35
					76.36
					2.27
					BT
					78+182



25

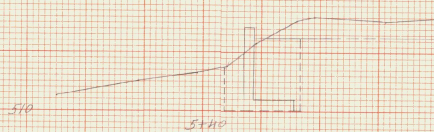
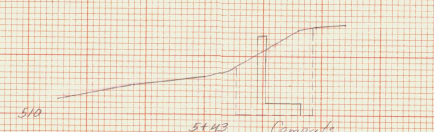
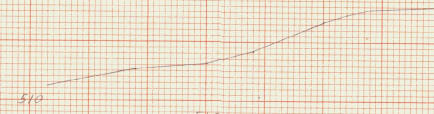
Bradford
 B9F 031-1(5)S
 Lodge Sections
 Item 203.16
 Scale 1" = 5'



Sta	Flow	Area	Length	Vol
4+68	0	0	0	0
4+70	2.0	10	2	2.0
4+71.5	3.6	18	2	3.6
4+78	6.5	32.5	2	6.5
4+80	9.5	47.5	2	9.5
4+82 B.M. B1	15.6	78	2	15.6
4+82 H.M. 15.6	15.6	78	2	15.6
4+90	15.3	76.5	2	15.3
5+0	14.6	73	2	14.6
5+10	14.0	70	2	14.0
5+17 B.M. 12.4	12.4	62	2	12.4
5+17 H.M. 12.4	12.4	62	2	12.4
5+19	10.8	54	2	10.8
5+24	10.0	50	2	10.0
5+24	13.0	65	2	13.0
5+30	14.2	71	2	14.2
5+40	14.3	71.5	2	14.3
5+43	13.3	66.5	2	13.3
5+43.5	0	0	0	0
Total				512.65 C.F.

Sta	Flow	Area	Length	Vol
4+72.5 B.M. 10	10	50	2	10
4+78	83.7	418.5	2	83.7
4+80	35.6	178	2	35.6
4+82 B.M. 53.0	53.0	265	2	53.0
4+82 H.M. 20	20	100	2	20
4+90	9.25	46.25	2	9.25
5+0	9.25	46.25	2	9.25
5+10	10.0	50	2	10.0
5+17 B.M. 8.75	8.75	43.75	2	8.75
5+17 H.M. 53.25	53.25	266.25	2	53.25
5+19	52.4	262	2	52.4
5+24	88.25	441.25	2	88.25
5+30	26.0	130	2	26.0
5+40	86.0	430	2	86.0
5+43	89	445	2	89
5+43.5 B.M. 90	90	450	2	90
Total				3060.75 C.F.

H.M. Sta 22.24
 H.M. to 5+17 to Subgrade only
 (15.3 H.M. height) (15.0 m.d.) (30' long) = 289.75 C.F.
 Net Vol 4837.5 C.F. 17978 by HPT
 3 Jun 1982



H.M. #1
 Bradford
 B.H.P. 0.31-1(57.5)
 H.M. 204.35
 Structure Sects
 3 Jan 1982 I.P. Tait
 Scale 1" = 10'

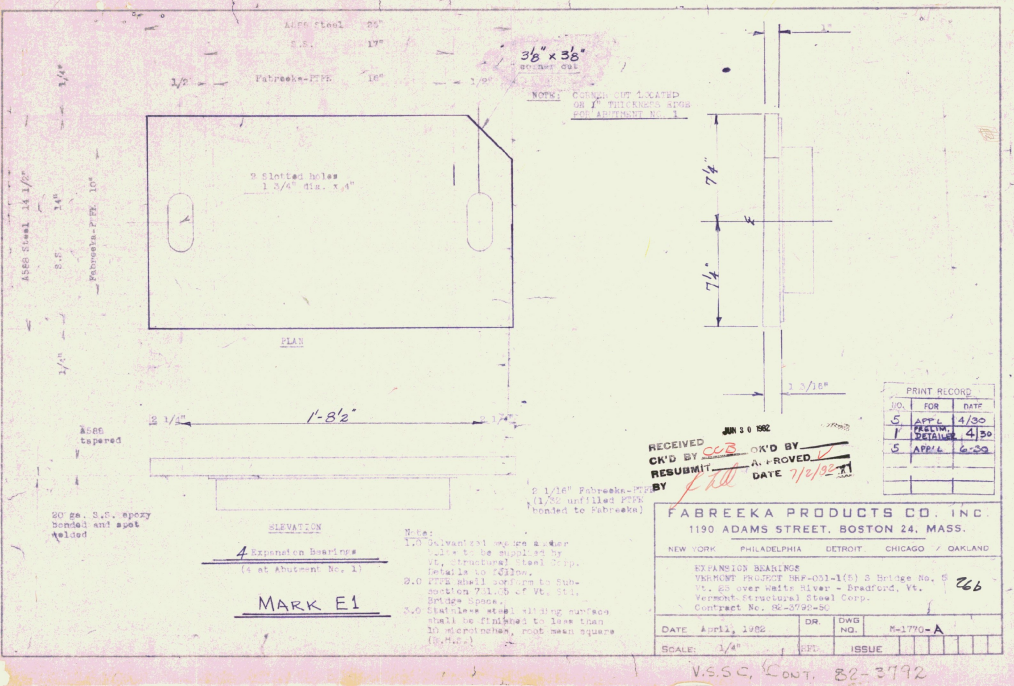


Item	204.25 Sta	From	Hub #	2.00	Vol	204.30 Sta	From	Hub #	2.00	Vol
3+14.75	0	21.75	5.25	11.19	3+20	40.8	33.62	10	37.62	2.5
3+20	43.5	38.35	10	383.50	3+20	26.25	30.05	3	90.15	10
3+30 Down	33.2				3+33 H. Head	8.25	8.25	7	57.75	10
3+30 H. Head	43.4				3+40	7.5	7.88	10	78.78	10
3+33 B. H.	43.4				3+40	8.25	8.25	10	92.50	10
3+33 H. Head	43.4				3+40	8.25	8.25	3	24.75	10
3+40	12.8				3+43 B. H.	8.25	8.25	6	178.50	10
3+50	12.8				3+77 B. H.	31.5	29.25	6	178.50	10
3+60	12.8									
3+70	12.8									
3+70	12.8									
3+70	12.8									
3+70 H. Head	43.5									
3+76 B. H.	43.9									
3+76 H. Head	43.9									
3+82.5 B. H.	44.3									

From Item 204.25
 3+33 to 3+73 to Subroad into
 (5.2 ft)(12.8 ft) (H. Head) = 31.6
 Net Vol 1301.37 yd
 1301.37 yd @ 118.20 cy per ft = 11000 yd
 1982

Brookfield
 BAF 88-1(5)S
 Item 204.25 Structure Section
 2 Jan 1982 L.P. Turner
 Scale 1"=10'

26a



PRINT RECORD		
NO.	FOR	DATE
6	APPR.	4/30
7	REVIEW	4/30
8	APPR.	6-29

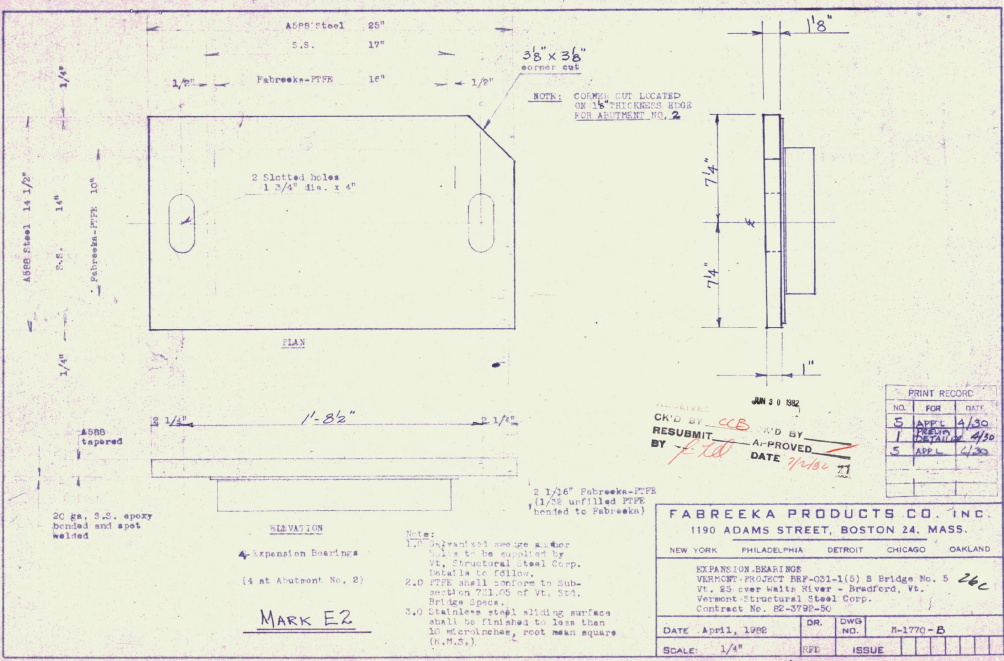
FABREEKA PRODUCTS CO., INC.
 1190 ADAMS STREET, BOSTON 24, MASS.

NEW YORK PHILADELPHIA DETROIT CHICAGO OAKLAND

EXPANSION BEARING
 VEHICULE PROJECT BRP-031-1(1) 3 Bridge No. 5
 75.00 over water span - Bradford, Vt.
 Vermont (Vermont) Steel Corp.
 Contract No. 86-3790-80

DATE April, 1982 OR DWG NO. R-1770-A
 SCALE: 1/4" = 1'-0" EPI. ISSUE

V.S.S.C. Cont. 82-3792



RECEIVED JAN 20 1982
 CK'D BY CCB
 RESUBMIT BY *F. K. W.* A-PROVED DATE 4/28/82

PRINT RECORD		
NO.	FOR	DATE
5	APP'L	4/30
7	DET'D	4/30
6	APP'L	4/30

FABREEKA PRODUCTS CO., INC.
 1190 ADAMS STREET, BOSTON 24, MASS.

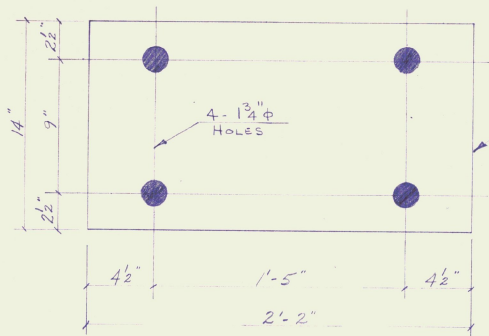
NEW YORK PHILADELPHIA DETROIT CHICAGO OAKLAND

EXPANSION BEARING
 VERMONT PROJECT REF-021-1(s) S Bridge No. 5
 Vt. 83 over Wells River - Bradford, Vt.
 Vermont Structural Steel Corp.
 Contract No. 82-3792-SU

DATE April, 1982 DR. DWG. NO. M-1770-B
 SCALE: 1/4" RFD ISSUE

MARK E2

V.S.S.C. CONT. 82-3792



4 - FABRIC BEARING PADS 14" X 18" X 2'-2"

NOTE: 1.0 Galvanized sledge anchor bolts to be supplied by Vermont Structural Steel Corp. Details to follow.
 2.0 Prefabricated Fabric Bearing Pads shall conform to sub-section 731.01 of Vt. Std. Bridge Specs.
 "731.01 PREFABRICATED FABRIC BEARING PADS. Prefabricated fabric bearing pads shall be composed of multiple layers of 5-ounce cotton duck impregnated and bound with high-quality natural rubber or of equivalent and equally suitable materials compressed into resilient pads of uniform thickness. The number of plies shall be such as to produce the specified thickness, after compression and vulcanizing. The finished pads shall withstand compression loads perpendicular to the plane of the laminations of not less than 10,000 pounds per square inch without detrimental reduction in thickness or extrusion."

4 - FIXED BEARING PADS
 (4 AT PIER)

MARK FPI

RECEIVED JUN 3 1962
 CK'D BY CLB OK'D BY _____
 RESUBMIT BY File A-PROVED _____
 DATE 7/1/62

5	APR 11 4 30
1	MAY 14 4 30
5	APR 11 6 30

FABREEKA PRODUCTS CO. INC.
 1190 ADAMS STREET, BOSTON 24, MASS.

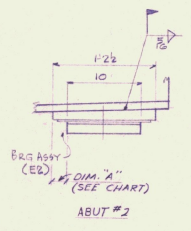
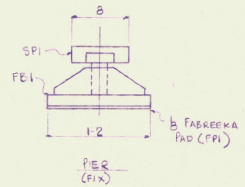
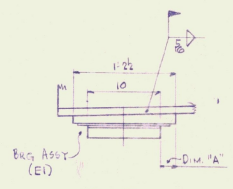
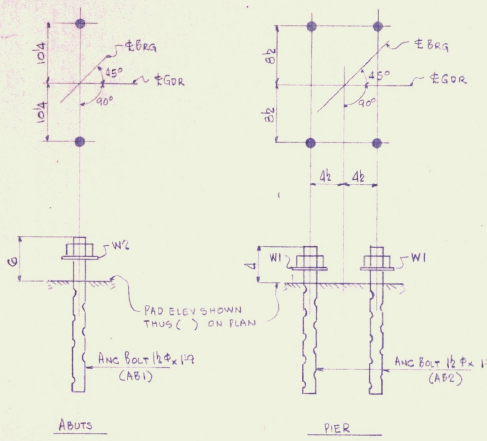
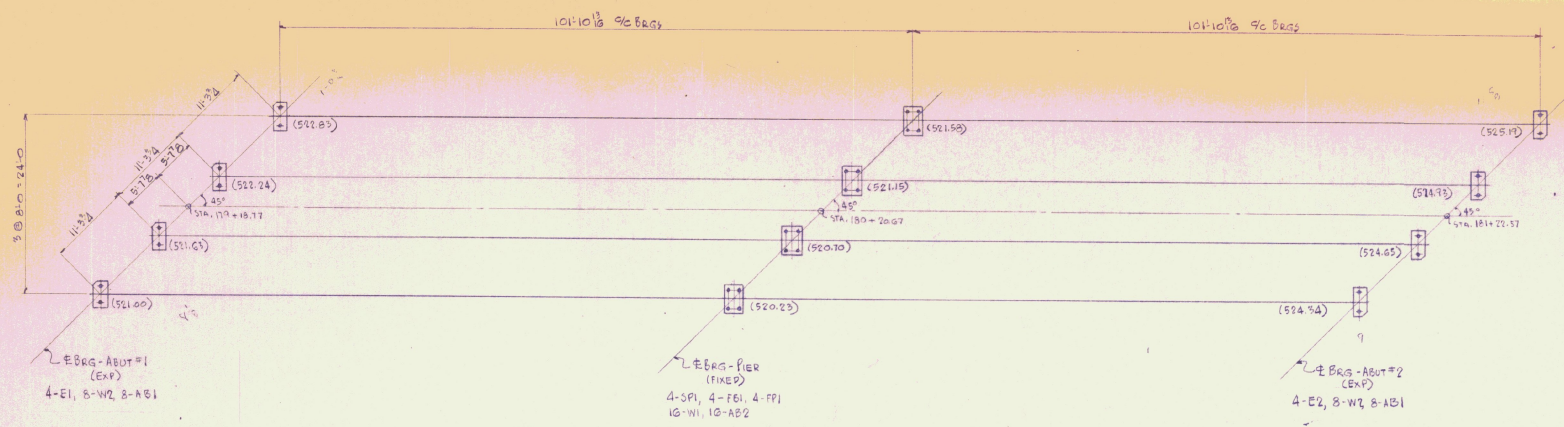
NEW YORK PHILADELPHIA DETROIT CHICAGO OAKLAND

EXPANDED BEARINGS
 VERMONT PROJECT BRP-031-1(5) S Bridge No. 5
 Vt. 23 over White River - Bradford, Vt. /
 Vermont Structural Steel Corp.
 Contract No. 82-3792-30

DATE April, 1962	DR. DWB	NO. 1-1770-C
SCALE: 1/4"	SPT	ISSUE

26d

REAR SET OF DRAWING



TEMPERATURE CHART

TEMP	D.W. A
0	3
15	2 1/2
30	2 1/4
45	2 1/8
60	2 1/8
75	2 1/8
90	2 1/4

TEMPERATURE CHART
 ABUT #1 (EXP)
 ABUT #2

MAGNETIC PARTICLE TESTING:
 In accordance with Sheets 1 & 2 of Welding Procedures:
 3MPI
 * Test length 1/2 feet (not shown if weld is less than one foot)
 Number of tests on weld (if no number shown - one test).

PAINT NOTES:
 1. Surface Protection - Blast clean per Vermont State Spec. 506.47(b).2.
 2. All finished surfaces to receive one coat of graphite and grease.

SHOP NOTES:
 L. Structural steel to be fabricated in accordance with the State of Vermont Department of Highways "Standard Specifications for Highway and Bridge Construction" dated March 1976 and its latest revisions and the AASHTO Standard Specs for Highway Bridges dated 1977 and its latest revisions.

RECEIVED
 CK'D BY CLB OK'D BY _____
 RESUBMIT BY FLD APPROVED FLD
 DATE 1/19/82

JAN 30 1982

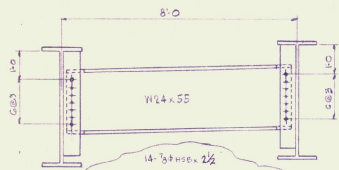
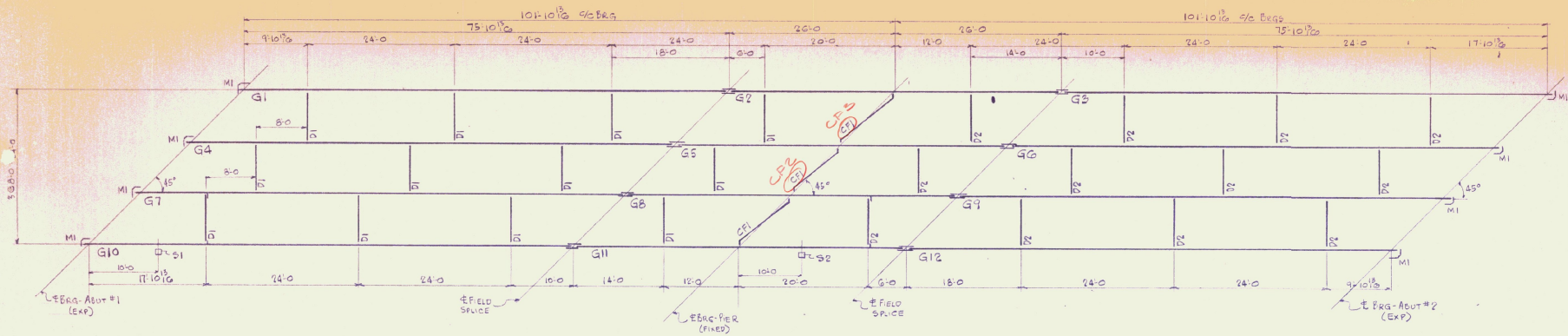
REVISION RECORD			
DATE	REV #	BY	REVISION
6-16-82	1	LLB	PER APPL DWG.

VERMONT STRUCTURAL STEEL CORPORATION
 BURLINGTON, VERMONT

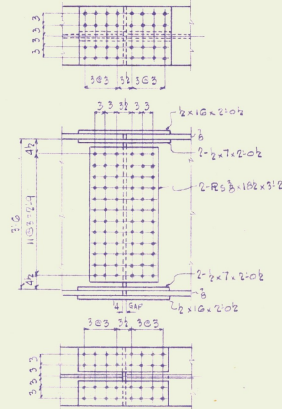
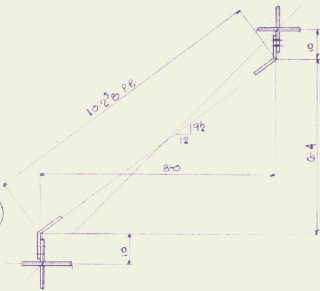
Proj. No. BRP-031-(5)A

DESIGNED BY	DATE	PROJECT	PRINT RECORD
S.	5-10-82	BRIDGE No. 5 Rte-VT 95	NO. FOR DATE
CHECKED BY	T.	LOCATION ORANGE CO. BRADFORD, VT	3 FOR 6-2
		CUSTOMER	1 FOR 6-2
			3 FOR 6-16
			5 APP' 6-30

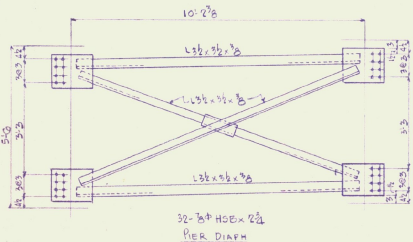
ARCHITECT: _____
 JOB NO. 82-3732 **47** SHEET NO. E1



14-3/8 HSB 2 1/2
NORM. DIAPH.
ALL DIAPHS SHALL BE CONNECTED FINGER TIGHT WITH (A) 3/8 X 3/8 HSB 0 & COVER WASH BEFORE THE DECK IS POURED. AFTER CONCRETE HAS BEEN PLACED THE REMAINING BOLTS SHALL BE INSTALLED & ALL BOLTS TIGHTENED. 2 HARDENED WASHERS @ OVERSIZED HOLES



FIELD SPICE DETAIL
32-3/8 HSB X 3/4
72-3/8 HSB X 3/2
32-3/8 HSB X 3/4



32-3/8 HSB 2 1/2
PIER DETAIL

JUN 30 1982

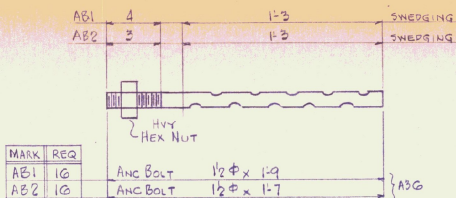
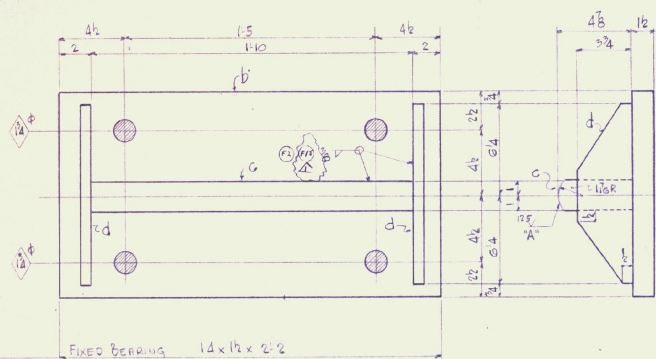
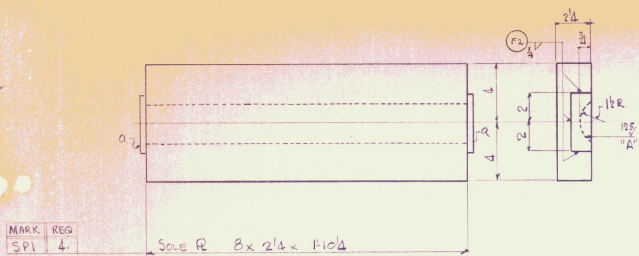
RECEIVED
CHK'D BY OK'D BY
RESUBMIT A-PROVED
BY DATE

SN'T NO	DESCRIPTION	REQ	PIA	GRIP	LENTH
E1	ARC BOLT PLAN	530	78#	18	2 1/4
E2	ERECTION PLAN	200	78#	14	2 1/2
I	BEARING DETAILS	350	78#	3	2 1/2
2-10	GIRDER DETAILS				
11	DIAPH DETAILS				
12	SCUPPER DETAILS	1940	80	RD. HARD. WASHERS	

REVISION RECORD			
DATE	REV. #	BY	REVISION
6-18-82	1	LLB	NORM. DIAPH. INSTALLATION NOTE & QTY HARD WASH. 2 1/2 BOLT TO 2 1/2

VERMONT STRUCTURAL STEEL CORPORATION BURLINGTON, VERMONT			
PROJ. NO. BRP-021-1(5)S			
PROJECT	BRIDGE NO. 5	RTE. 4725	PRINT RECORD
LOCATION	ORANGE CO.	BRADFORD, VT.	NO. FOR DATE
CUSTOMER			1 11/82 6-2
			2 3/82 6-2
			3 5/82 6-2
			4 7/82 6-2
			5 9/82 6-2
			6 11/82 6-2
DATE	5-24-82		
BY			
CHECKED			
APPROVED			
DATE			
PROJECT	82-3792		
SHEET NO.	E2		

18



MARK	REQ	DESCRIPTION	UNIT
W1	10	GALV. WSHR. 3/8 x 3 x 3	
W2	10	GALV. WSHR. 3/8 x 4 x 4	

NO. REQ'D	MARK	DESCRIPTION	LENGTH		WEIGHT
			FT.	IN.	
4	SP1	SOLE PLATES 8 1/4 x 8	1	10 1/2	45.54
8	a	3/8 x 1 1/2	0	4	5
4	FB1	FIXED BEARING			
4	d	1/2 x 14	2	2	43.0
4	g	2 x 4 1/2	1	10	43.0
8	d	3/4 x 3 1/4	1	0 1/2	43.0
ANCHOR BOLTS					
10	AB1	1/2 Φ	1	9	STK
10	AB2	1/2 Φ	1	7	STK
32		HVY HEX NUT 1 1/2 Φ			GALV. PO # 63,659
WASHERS					
10	W1	3/8 x 3	0	3	STK
10	W2	3/8 x 4	0	4	STK

JUN 3 0 1961

JOB NO. 82-3792 SHEET NO. 1 1/6

NO. REQ'D	MARK	DESCRIPTION	LENGTH		WEIGHT
			FT.	IN.	

RECEIVED
CK'D BY OK'D BY
RESUBMIT APPROVED
BY DATE

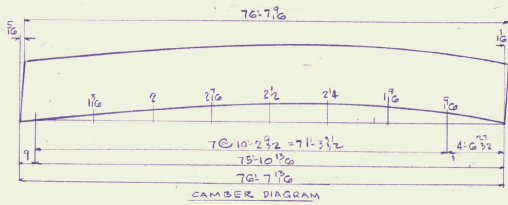
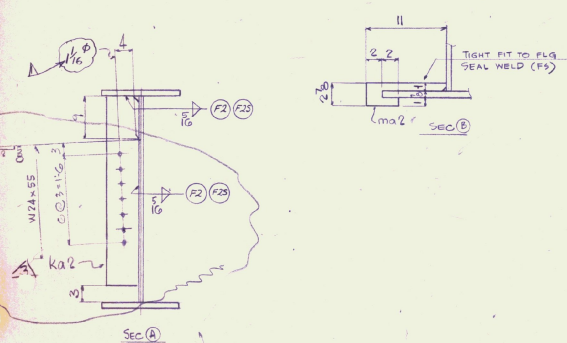
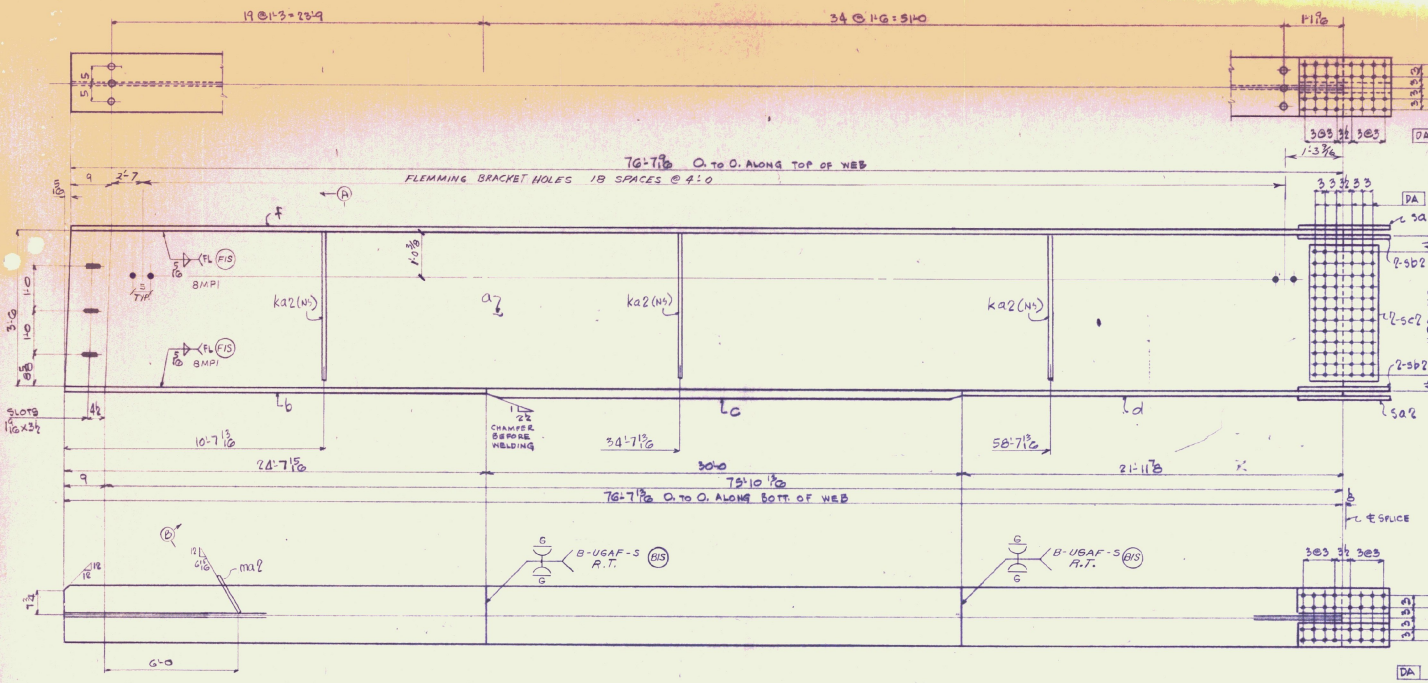
EXP BRGS - E1 DETAILED ON DWG. M1770-A
EXP BRGS - E2 " " " M1770-B
FIX BRG PAD - FPI " " " M1770-C

MATERIAL - A588 (UN)
OPEN HOLES - AS NOTED
SHOP PAINT - NONE
AB, NUTS & WSHRS GALVANIZED
'A' SURFACES NOTED TO BE COATED WITH APPROVED LUBRICANT.

DATE	REV #	BY	REVISION
6-28	1		REVISED PROCEEDING REV.

VERMONT STRUCTURAL STEEL CORPORATION			
BURLINGTON, VERMONT			
PROJ. NO.	DATE	PROJECT	PRINT RECORD
BRF-031-1(5)		BRIDGE No. 5 RTE VT 25	
DESIGNED BY <u>S. </u>		LOCATION <u>ORANGE CO. BRADFORD, VT.</u>	NO. FOR DATE
CHECKED BY <u>T. 510-82</u>		CUSTOMER <u> </u>	5 6-23
			1 6-23
			5 6-23
			1 6-23
			5 6-23
			5 6-23
			5 6-23
			5 6-23
			5 6-23
			5 6-23

29



FABRICATION NOTES
 MATERIAL - A588
 OPEN HOLES - 1 1/2\"/>

FOR ASSEMBLY DIAGRAM - SEE SHT. #10

W 24x15 FT LBS @ 40°F
 AASHTO M222
 BILL OF MATERIAL
 A588

NO	PIECES	MARK	DESCRIPTION	LENGTH		WEIGHT
				FT.	IN.	
ONE - G1 GIRDER						
262261						
*	1	a	12x 4476	76	7 1/8	1.442 x 800 5799 ✓
*	1	b	78x16	24	7 1/8	2x16x24x10 1174 ✓
*	1	c	18x16	30	0	1 1/2x16x30x4 1335 ✓
*	1	d	78x16	21	11 3/8	2x16x21x4 1077 ✓
*	1	f	78x16	76	7 1/8	1 1/2x16x76x11 3634 ✓
*	2	sa2	1/2x16	2	0 1/2	3/8x4x28x0 111 ✓
*	4	sb2	1/2x7	2	0 1/2	1/2x7x28x0 97 ✓
*	2	sc2	3/8x18 1/2	3	2	3/8x18 1/2x28x0 149 ✓
*	3	ka2	1 1/2x7 (w/2ka2)	3	3	6x1 1/2x7x28x0 131 ✓
*	1	ma2	1/4x2 1/8	0	11	1/4x2 1/8x11x28x0 2 ✓
CONTRACT 82-3792-51						
WELD STUDS 7/8\"/>						

JOB NO. 82-3792 SHEET NO. 2 b/c

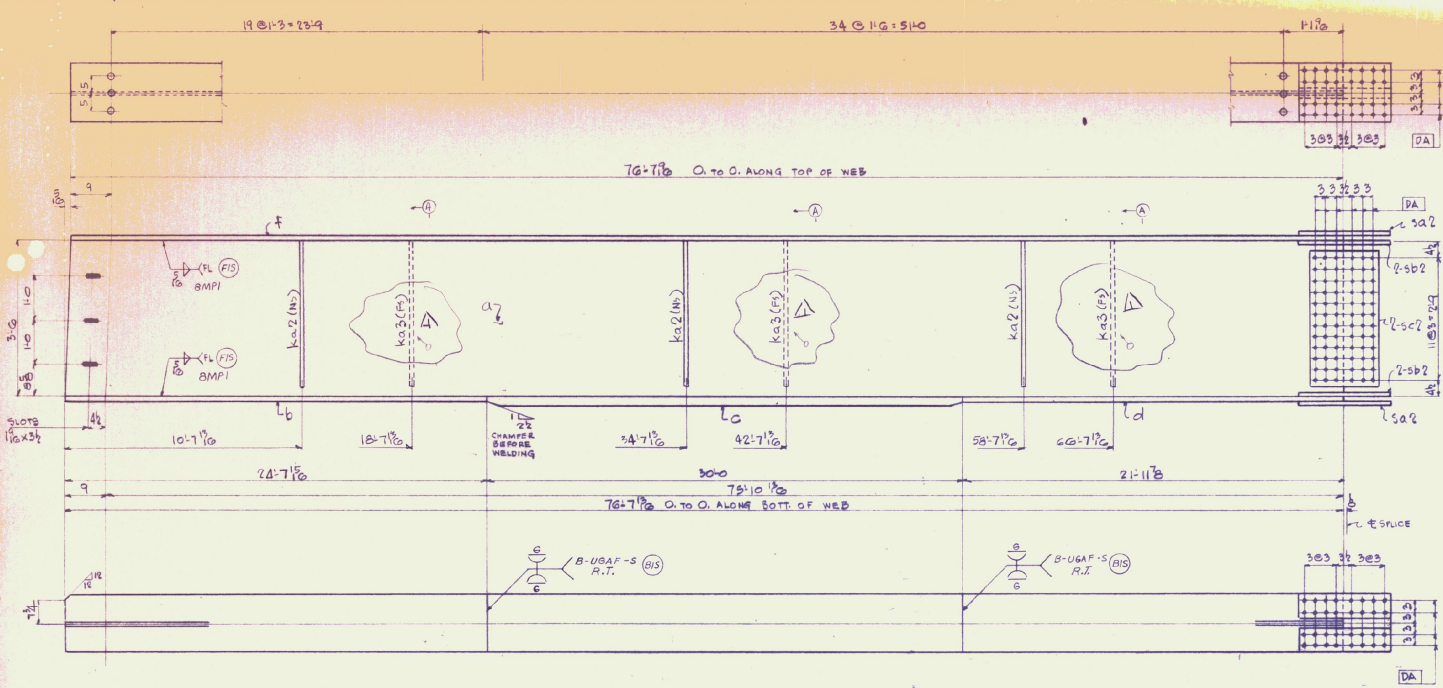
BILL OF MATERIAL

NO	PIECES	MARK	DESCRIPTION	LENGTH	WEIGHT

RECEIVED JUN 28 1982
 CHK'D BY LCB
 RESUBMIT BY DATE 4/2/82

DATE	REV. #	BY	REVISION
6-16-82	1	LLB	PER APP'L DWG & FLEM. BRKT HOLES
6-18-82	2	LLB	CHANGED ALL HOLES IN ka2 TO 1 1/2\"/>
6-29	3	HD	DRAW. REV.

VERMONT STRUCTURAL STEEL CORPORATION
 BURLINGTON, VERMONT
 Proj. No. BRF-091-1(5)5
 PROJECT: BRIDGE No. 5 RTE-Vt 25
 LOCATION: ORANGE CO - BRADFORD, VT.
 DRAWN BY: S. J. 5/25/82
 CHECKED BY: 1/2\"/>



MAX. CVN 15 FT LBS @ 40°F
AA SNTS M222

BILL OF MATERIAL						
NO.	PIECES	MARK	DESCRIPTION	LENGTH		WEIGHT
				FT.	IN.	
ONE	G 4		GIRDER			
ONE	G 7		GIRDER			
*	2	a	1/2 x 44TG	76	7 1/2	1159.8 ✓
	2	b	7/8 x 16	24	7 1/2	33.48 ✓
	2	c	1 1/8 x 16	30	0	31.72 ✓
	2	d	7/8 x 16	21	11 1/2	20.93 ✓
	2	f	7/8 x 16	76	7 1/2	72.96 ✓
*	4	5a2	1/2 x 16	2	0 1/2	1.22 ✓
	8	5b2	1/2 x 7	2	0 1/2	1.94 ✓
	4	5c2	3/8 x 18 1/2	3	2	3.99 ✓
Δ	6	Ka2	1/2 x 7 (505 1/2 x 7)	3	3	5.23 ✓
Δ	6	Ka3	1/2 x 7 (505 1/2 x 7)	3	3	5.23 ✓
						33.25 ✓

CONTRACT 82-5792-51
WELD STUDS 7/8" φ

JOB NO. 82-3772 SHEET NO. 3 1/2

BILL OF MATERIAL						
NO.	PIECES	MARK	DESCRIPTION	LENGTH		WEIGHT
				FT.	IN.	

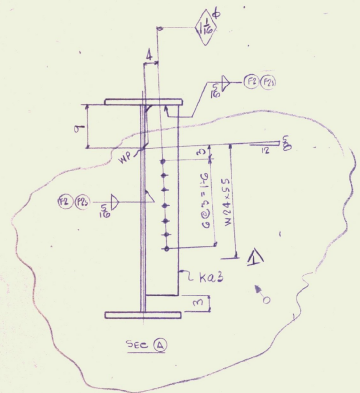
REVISION RECORD					
DATE	REV. #	BY	REVISION		
C-25	Δ	IP	DIAG. REV.		

VERMONT STRUCTURAL STEEL CORPORATION
BURLINGTON, VERMONT

Proj. No. BRF-031-1(5)5

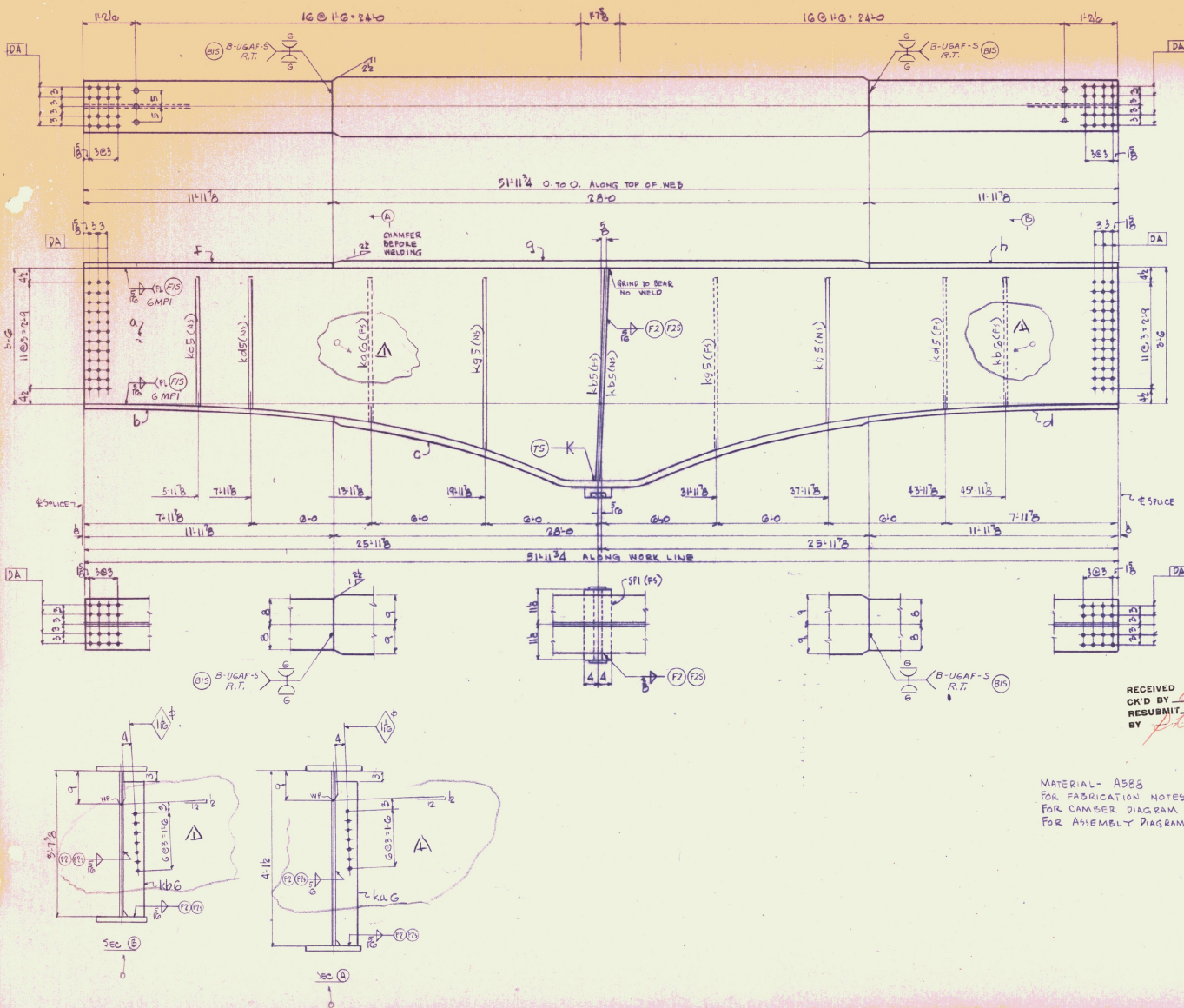
DESIGNED BY	S	DATE	PROJECT	BRIDGE No. 5 RTE-YT25	PRINT RECORD
CHECKED BY	J. S-25-B2		LOCATION	ORANGE CO - BRADFORD, V.T.	NO.
ISSUED BY	IP or DA		CUSTOMER		FOR
SCALE					DATE
DATE					
APPROVED					
APPROVED					
DATE					

JOB NO. 82-3792 SHEET NO. 3 1/2



JUN 24 1982
RECEIVED CK'D BY *CSB* OK'D BY *CSB*
RESUBMIT APPROVED BY *P.L.H.* DATE 7/1/82

MATERIAL - A588
FOR FABRICATION NOTES SEE #2
FOR CAMBER DIAGRAM SEE #2
FOR ASSEMBLY DIAGRAM SEE #10



BILL OF MATERIAL
AASHTO M222

NO. OF PEECS	NAME	DESCRIPTION	LENGTH FT.	WT.	WEIGHT
ONE	G5	GIRDER			
ONE	G6	GIRDER			
2	a	2x 67 ³ / ₈	51 11 ³ / ₄	2x 67 ³ / ₈ x 60	4497
2	b	2x 10	11 11 ³ / ₄	2x 10 x 24	1141
2	c	2x 10	28 2 ³ / ₄	2x 10 x 24	4319
2	d	2x 10	11 11 ³ / ₄	2x 10 x 24	1141
2	f	2x 16	11 11 ³ / ₄	2x 16 x 24	1141
2	g	2x 16	28 2 ³ / ₄	2x 16 x 24	4319
2	h	2x 16	11 11 ³ / ₄	2x 16 x 24	1141
4	kb5	8x 8 ¹ / ₂	5 6	8x 8 ¹ / ₂ x 9	557
2	kc5	8x 7 (sub part)	3 4 ³ / ₈	8x 7 x 9	417
4	kd5	8x 7	3 5 ³ / ₈	8x 7 x 9	437
2	ke5	8x 7	3 10 ³ / ₈	8x 7 x 9	437
2	ke6	8x 7	3 10 ³ / ₈	8x 7 x 9	437
2	ke7	8x 7	3 10 ³ / ₈	8x 7 x 9	437
2	sp1	SOLE PLATE #1			377
					19730

CONTRACT 82-3792-51
WELD STUD #6

704

JOE NO. 82-3792 SHEET NO. 6/6

REVISION RECORD

DATE	REV. #	BY	REVISION
6-27	1	JP	DR. REV.

VERMONT STRUCTURAL STEEL CORPORATION
BURLINGTON, VERMONT

Proj No. BRP-031-1(5)5

DATE: 5-25-87

PROJECT: BRIDGE No. 5 Re-Vt 25

LOCATION: ORANGE CO. BRADFORD, VT.

DESIGNED BY: S

CHECKED BY: T

APPROVED BY: W.P. CRADA

ARCHITECT: NONE

JOB NO: 82-3792

PERMIT RECORD

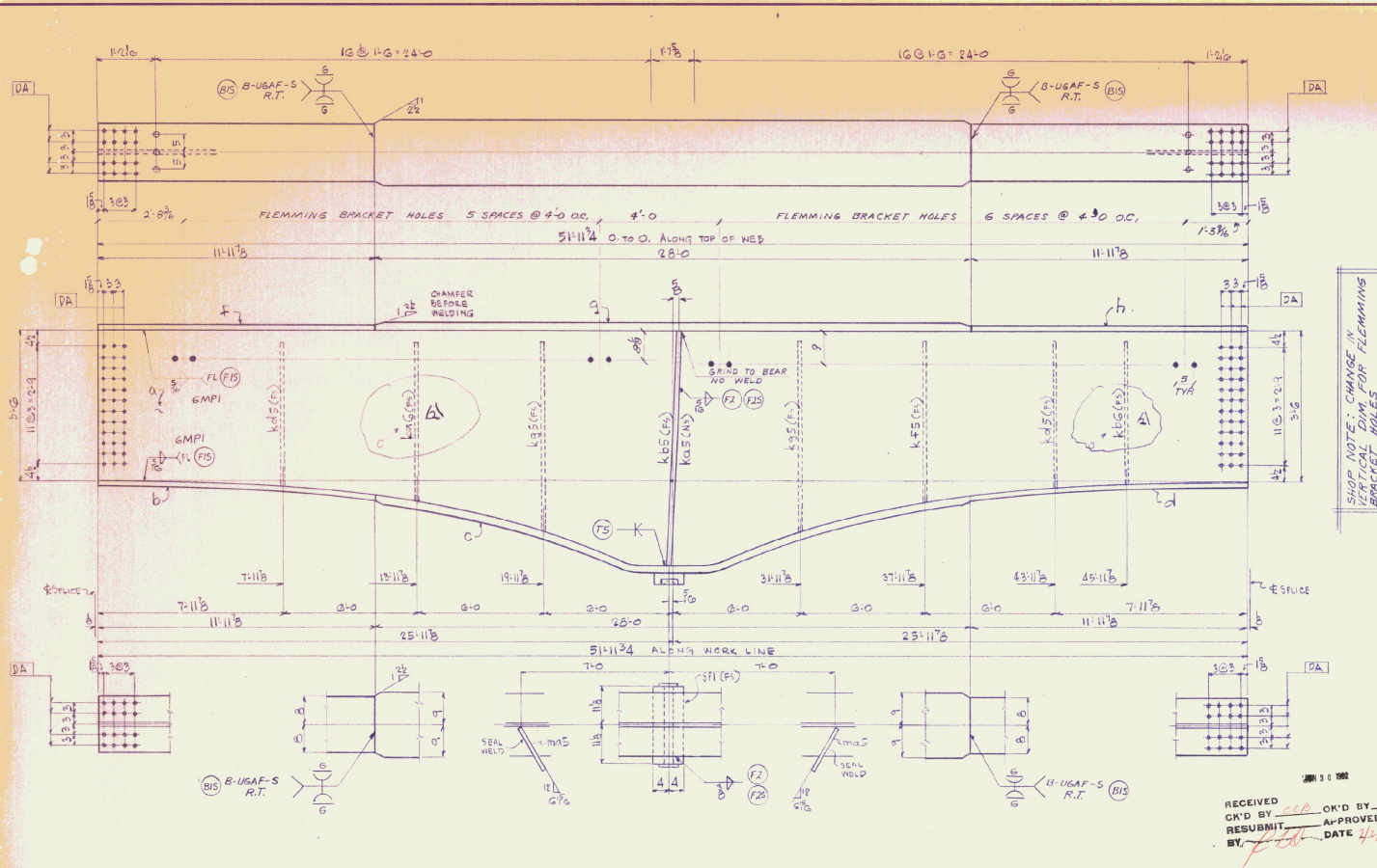
NO.	FOR	DATE
5	APP	6-2
1	REV	6-2
3	APP	6-16
6	APP	6-20

34

3

MATERIAL - A588
FOR FABRICATION NOTES SEE #2
FOR CAMBER DIAGRAM SEE #5
FOR ASSEMBLY DIAGRAM SEE #10

RECEIVED
CHK'D BY: [Signature]
RESUBMIT BY: [Signature]
DATE: 7/27



SHOP NOTE: CHANGE IN VERTICAL DIM FOR FLEMING BRACKET HOLES

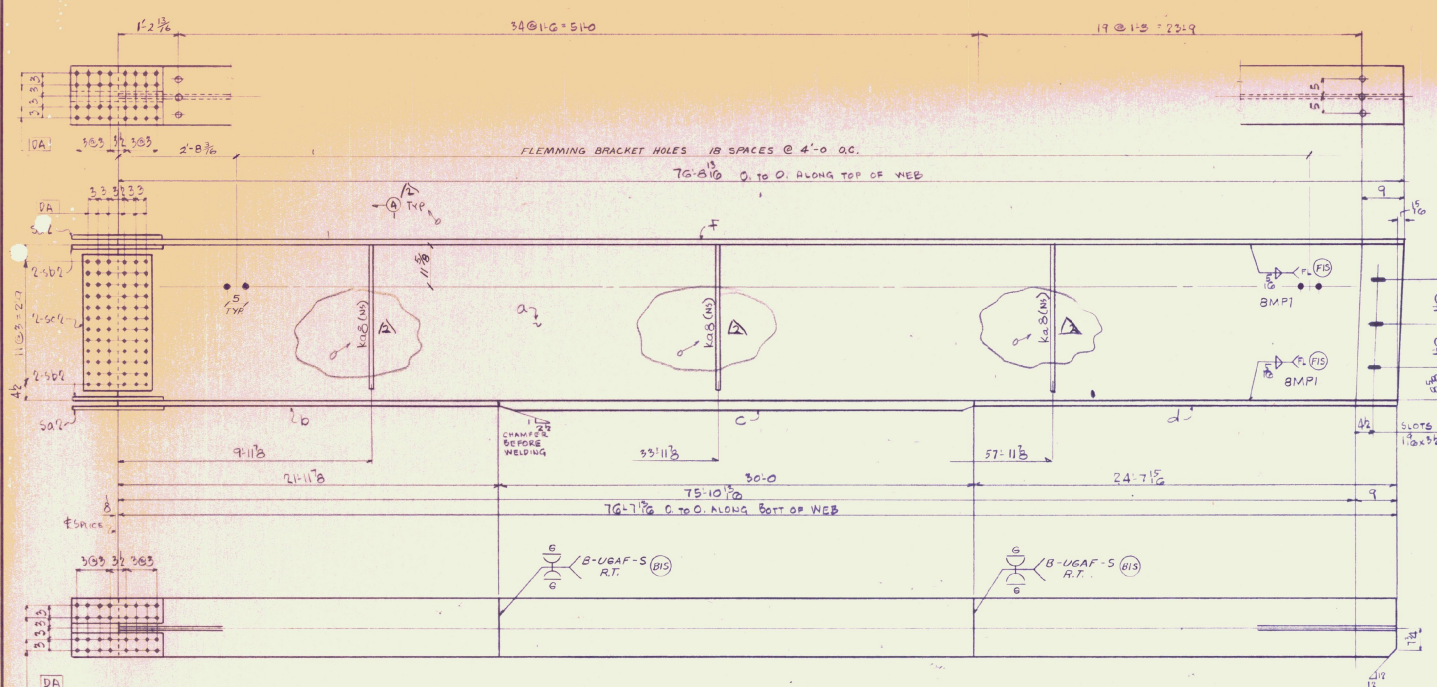
RECEIVED
 CHK'D BY CCP OK'D BY _____
 RESUBMIT _____ APPROVED _____
 BY CCP DATE 4/1/82

MATERIAL - ASB8
 FOR FABRICATION NOTES SEE #2
 FOR CAMBER DIAGRAM SEE #5
 FOR ASSEMBLY DIAGRAM SEE #10

NO. OF PIECES		MARK	DESCRIPTION	LENGTH FT. IN.	WEIGHT
ONE	G11	GIRDER			
* 1	a	2 x 67 3/8	51	11 3/4	4497#
1	b	7 1/2 x 10	11	11 3/4	RES IN # 200 x 104 3571 ✓
1	c	1 1/2 x 10	28	2 3/4	RES IN # 200 x 104 1110 ✓
1	d	3 x 10	11	11 3/4	RES IN # 200 x 104 3571 ✓
1	f	7 1/2 x 10	11	11 3/4	RES IN # 200 x 104 3571 ✓
1	g	1 1/2 x 10	28	2 3/4	RES IN # 200 x 104 1110 ✓
1	h	7 1/2 x 10	11	11 3/4	RES IN # 200 x 104 3571 ✓
1	ka5	7 1/2 x 8 1/2	5	5	RES IN # 200 x 104 #1402 604 ✓
1	kb5	7 1/2 x 8 1/2	5	5	RES IN # 200 x 104 278 ✓
2	ka2	10 x 7 (508 FOR 42)	2	4	RES IN # 200 x 104 3571 ✓
2	kb2	10 x 7 (508 FOR 42)	2	4	RES IN # 200 x 104 3571 ✓
1	ka5	7 1/2 x 8 1/2	4	4	RES IN # 200 x 104 3571 ✓
2	ka2	10 x 7 (508 FOR 42)	3	6	RES IN # 200 x 104 3571 ✓
1	SP1	SOLE PL-DET ON #1			115 ✓
2	ma5	1 1/2 x 5 1/4	1	2	S&K b ✓
		CONTRACT 82-3792-51			
		WELD STUD 7/8"	0	7	RES IN # 200 x 104 1374 ✓
JOB NO. 82-3792				SHEET NO. 7 1/6	

NO. OF PIECES		MARK	DESCRIPTION	LENGTH FT. IN.	WEIGHT
BILL OF MATERIAL					
REVISION RECORD					
DATE	REV. #	BY	REVISION		
6-16-82	1	LLB	PER APPL & FLEM. BRK'T HOLES		
6-29	2	CCP	DIM. REV.		

PROJECT		CUSTOMER		PERM RECORD		
PROJ. NO.	BRF-031-1(5)S	BRIDGE NO.	5 RT-VT 25	NO.	FOR	DATE
DATE	5-25-82	LOCATION	ORANGE CO. BRADFORD, VT.	1	5/25/82	6-72
DESIGNER	CCP	CUSTOMER		3	5/25/82	6-72
CHECKED	CCP	APPROVED		1	5/25/82	6-72
DATE	5/25/82	DATE		2	5/25/82	6-72
				1	5/25/82	6-72
				1	5/25/82	6-72
				1	5/25/82	6-72
				1	5/25/82	6-72



RCVN 15 FT LBS @ 20° F
AASHTO M 222

NO. OF PICES	MARK	DESCRIPTION	LENGTH FT. IN.	WEIGHT
ONE GIB GIRDER				
* 1	a	1/2 x 4 1/2	76'-8 1/2" 2x4x 80'0"	5705 ✓
* 1	b	7/8 x 10	81'-11 1/8" 8x10x 22'-2"	1047 ✓
1	c	1 1/2 x 10	30'-0" 1 1/2x10x 30'-0"	1321 ✓
1	d	3/4 x 10	24'-7 1/2" 3/4x10x 24'-0"	1171 ✓
1	f	7/8 x 10	76'-8 1/2" 7/8x10x 76'-11"	3053 ✓
* 2	sa2	1/2 x 16	2'-0 1/2" 1/2x16x 80'-0"	111 ✓
4	sb2	1/2 x 7	2'-0 1/2" 1/2x7x 60"	97 ✓
2	sc2	3/8 x 18 1/2	3'-2 1/2" 3/8x18 1/2x 75'-0"	149 ✓
3	kaB	3/8 x 7 (5/8 x 7)	3'-3" 3/8x7x 75'-0"	181 ✓
7	A10B	5/16 x 7	76'-0" 5/16x7x 76'-0"	1402 ✓
102		CONTRACT BR-3792-51 WELD STUDS 7/8 φ	0'-7" A10B 5/16	214 ✓

JOB NO. 82-3792 SHEET NO. 8 5/16

NO. OF PICES	MARK	DESCRIPTION	LENGTH FT. IN.	WEIGHT
BILL OF MATERIAL				
JUN 20 1982				
RECEIVED	CK'D BY	APPROVED	DATE	
BY	DATE	DATE		

DATE	REV #	BY	REVISION
6-16-82	1	LLB	PER APPL & FLEM. BRKT HOLES
6-29	2	MD	DRW M.V.

VERMONT STRUCTURAL STEEL CORPORATION
BURLINGTON, VERMONT

Proj. No. BRF-031-1(5)3

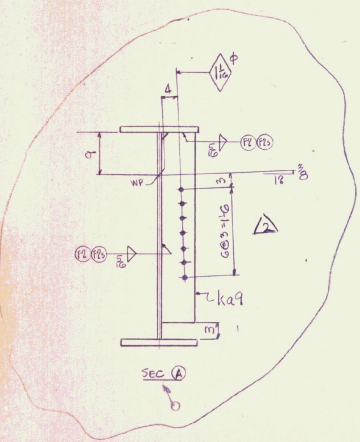
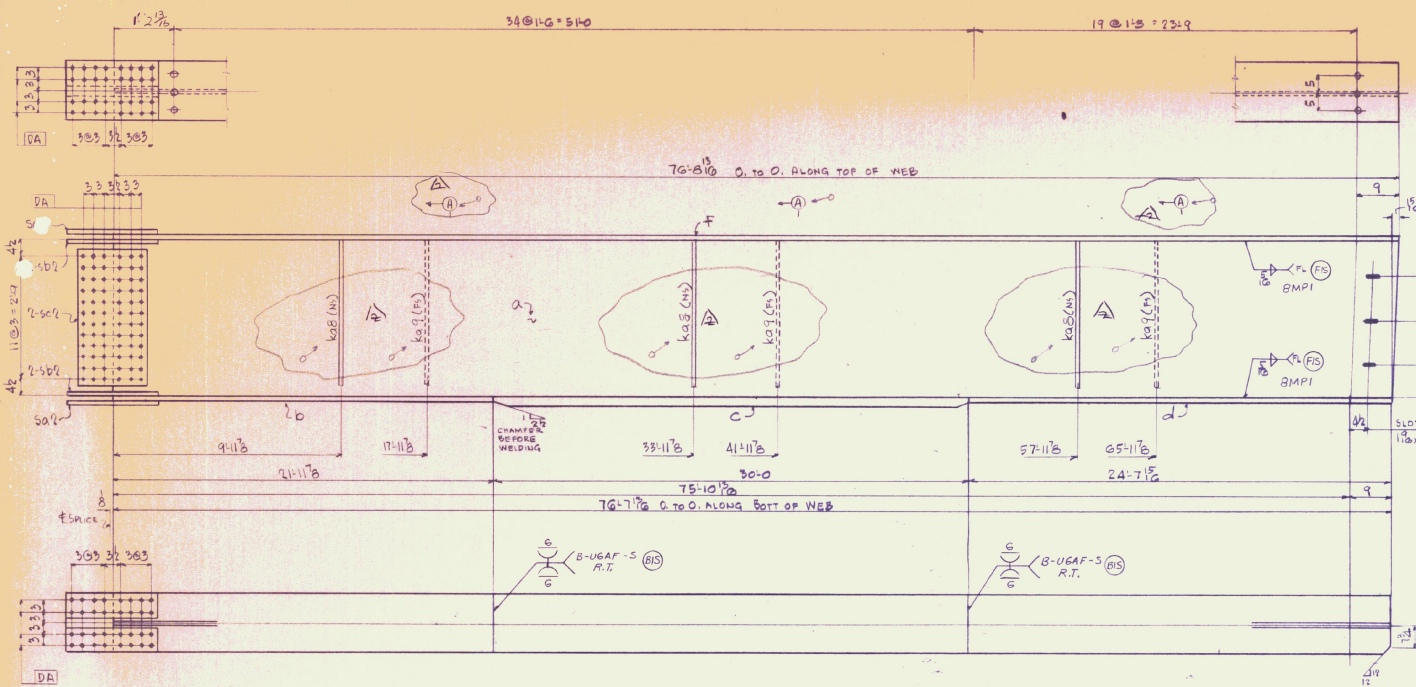
PROJECT: BRIDGE No. 5 RTE-VT 25
LOCATION: ORANGE Co. BRADFORD VT.

NO.	FOR	DATE
5	APP'D	6-22
1	ISS'D	6-22
3	SHOP	6-16
15	APP'D	6-20

DESIGNED BY: S
CHECKED BY: T. 5-15-82
DATE: 5-15-82
ARCHITECT: NONE
JOB NO. 82-3792
SHEET NO. 8 5/16

MATERIAL - A588
FOR FABRICATION NOTES SEE #2
FOR ASSEMBLY DIAGRAM SEE #10

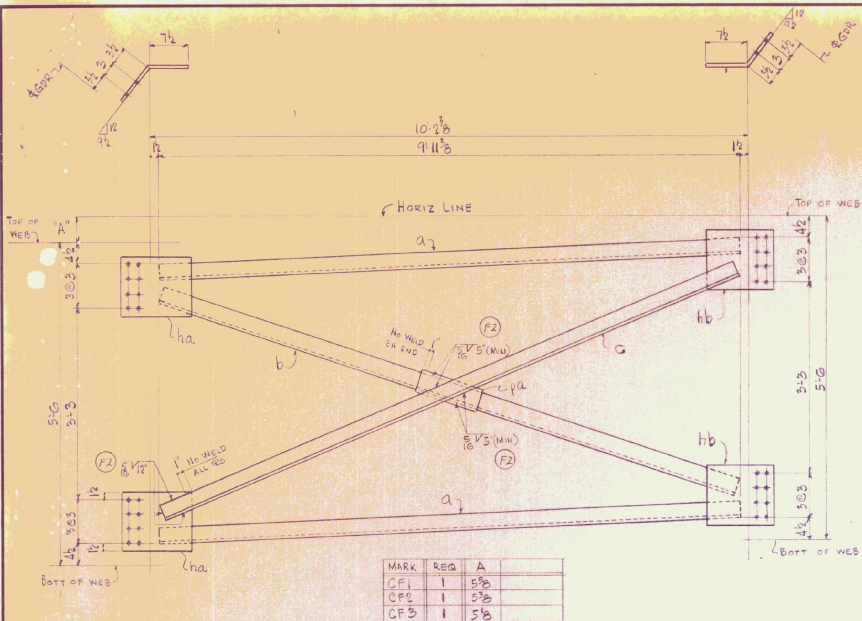
36



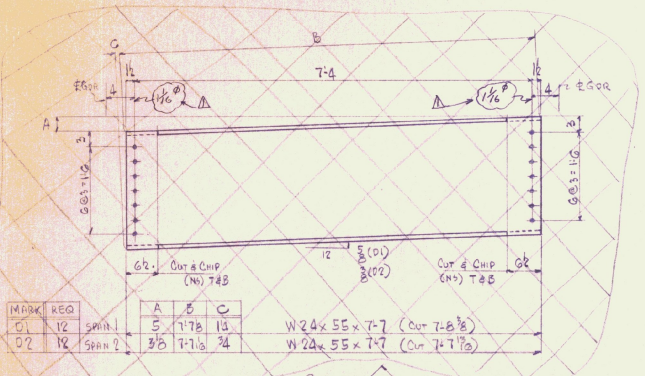
RECEIVED
 CK'D BY AKB OK'D BY AKB
 RESUBMIT AKB APPROVED AKB
 BY AKB DATE 7/1/82

MATERIAL - A588
 FOR FABRICATION NOTES SEE #2
 FOR CAMBER DIAGRAM SEE #3
 FOR ASSEMBLY DIAGRAM SEE #10

NO. OF PIECES		MARK	DESCRIPTION	LENGTH FT. IN.	WEIGHT
ONE	GG		GIRDER		
ONE	GA		GIRDER		
* 2 a 1/2 x 44 1/8 76 0 3/8 1/2 x 44 1/8 80-0 11611 ✓					
* 2 b 7/8 x 16 21 11/16 7/8 x 16 22-2 2034 ✓					
2 c 1 1/2 x 16 30 0 1 1/2 x 16 30-4 3277 ✓					
2 d 7/8 x 16 24 7/8 7/8 x 16 24-10 3249 ✓					
2 f 7/8 x 16 76 0 3/8 7/8 x 16 76-11 7306 ✓					
* 4 sa2 1/2 x 16 2 02 1/2 x 16 80-0 222 ✓					
8 sb2 1/2 x 7 2 02 1/2 x 7 80-0 194 ✓					
4 sc2 7/8 x 16 3 2 7/8 x 16 75-6 299 ✓					
* 3 ka8 9/16 x 7 (SUB 1/2 x 7) 3 3 9/16 x 7 80-0 513 ✓					
* 3 ka9 9/16 x 7 (SUB 1/2 x 7) 3 3 9/16 x 7 80-0 513 ✓					
324 CONTRACT 82-3792-51 WELD STUDS 7/8 φ 0 7 A108 57K 42.7 ✓					
JOB NO. 82-3792 SHEET NO. 9 1/4					
NO. OF PIECES		MARK	DESCRIPTION	LENGTH FT. IN.	WEIGHT
REVISION RECORD					
DATE	REV. #	BY	REVISION		
6-16-82	1	LLD	FOR APPL DWG		
6-29	2	HO	DRW CORRECT		
VERMONT STRUCTURAL STEEL CORPORATION BURLINGTON, VERMONT					
PROJ. NO.	DATE	PROJECT	BRIDGE No. 5 Rte-Vt 25	PRINT RECORD	
5	5-25-82	LOCATION	ORANGE Co. BRADFORD Vt.	NO.	FOR DATE
CUSTOMER				5	7/1/82
				1	8/10/82
				3	5/10/82
				5	7/1/82
ARCHITECT				87	
ENGINEER				9 1/4	
BY				SHEET NO.	
DATE					

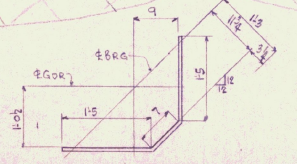


MARK	REQ	A
CF1	1	5/8"
CF2	1	5/8"
CF3	1	5/8"



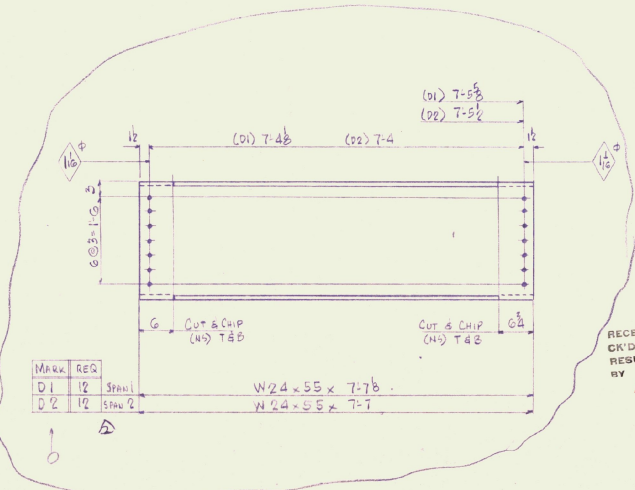
MARK	REQ	A	B	C
D1	12	5	7-7/8	13
D2	12	3/8	7-1/8	3/4

W 24 x 55 x 7-7 (Cut 7-8 3/8)
W 24 x 55 x 7-7 (Cut 7-7 3/8)



MARK	REQ	A
MI	5	ASBTS 1, 2

FIELD WELD AS SHOWN ON DES. SMT 9 OF 42



MARK	REQ	A
D1	12	Span 1
D2	12	Span 2

W 24 x 55 x 7-7 3/8
W 24 x 55 x 7-7

RECEIVED
OK'D BY
APPROVED
RESUBMIT
DATE

ASB8 BILL OF MATERIAL

NO	PIECES	MARK	DESCRIPTION	LENGTH		WEIGHT
				FT	IN	
ONE	CF1		Cross FRAME			
ONE	CF2					
ONE	CF3					
G	A		5/8 x 3/4 x 8	9	11 1/2	48
B	D			10	4	888 @ 10-0
B	C			10	7	853 @ 10-0
G	ha		1/2 x 12	1	3 1/2	14 @ 12-0
G	hb		1/2 x 12	1	3 1/2	14 @ 12-0
B	pa		1/2 x 5	1	0	2 @ 10-0
G	MI		ST. R. 1/4 x 9/2	3	5	5 @ 10-0
D1			W 24 x 55	7	7 1/2	1 @ 10-0
D2			W 24 x 55	7	7	1 @ 10-0
						1813.4
						137.1
						1173.1

JOB NO. 82-3792 SHEET NO. 11/6

FIELD MATERIAL

NO	PIECES	MARK	DESCRIPTION	LENGTH	WEIGHT
BOLTS					
530			3/8" A325 TYPE III 1/2" UNF	0	3/4
100			do	0	2 3/4
990			do	2	2 3/4
210			3/8" A325 TYPE III 1/2" UNF	2	SHK
1940			3/8" HARD WASHERS		SHK

REVISION RECORD

DATE	REV #	BY	REVISION
6-18-82	1	LLB	CHANGED HOLES IN D1 & D2 TO 1/8" & 3/4" HARD WASHERS
6-24-82	2	LLB	C.I.P. REV

VERMONT STRUCTURAL STEEL CORPORATION
BURLINGTON, VERMONT

PROJECT: BRIDGE No. 5 RTE-Vt 25
LOCATION: ORANGE CO., BRADFORD, VT.

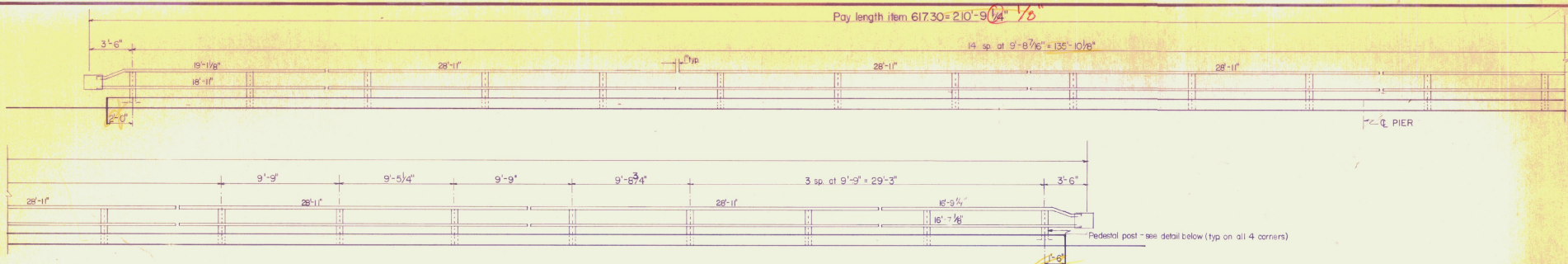
ARCHITECT: G & A.N.
JOB NO.: 82-3792

DATE: 5-15-82
CUSTOMER: T. F. 82-82

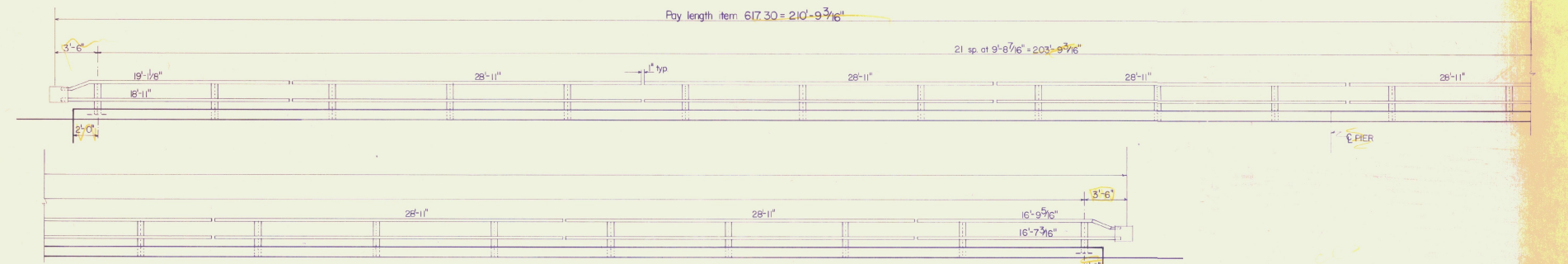
REV. 5
ARCHITECT: G & A.N.
JOB NO.: 82-3792

PERMIT NO. 5
DATE: 6-1-82

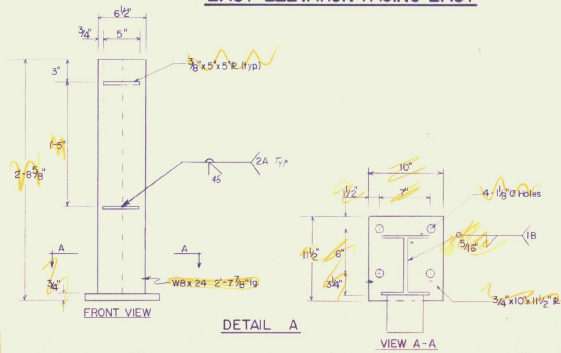
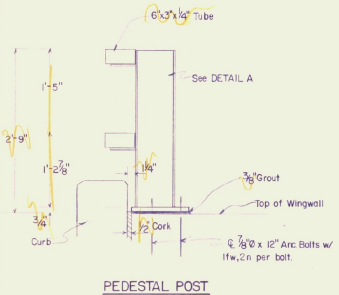
39



WEST ELEVATION FACING WEST



EAST ELEVATION FACING EAST



*Weld 110 ft
Reinforces?*

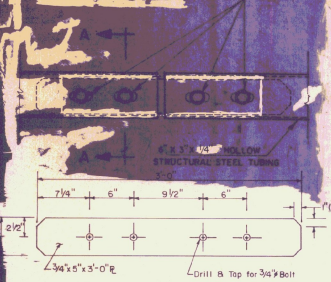
SEP 28 1982

RECEIVED
 OK'D BY *ccs* OK'D BY _____
 RESUBMIT _____ APPROVED *ccs*
 BY *W. J. J. J.* DATE *7/14/82*

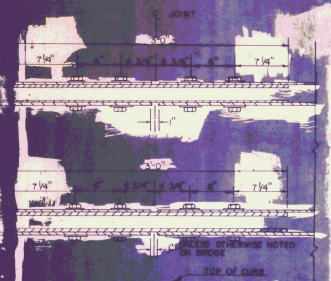
TOTAL PAY LENGTH ITEM 61730 = 421'-6 7/16"			
DRAWN BY: M J Z	DATE: 9/17/82	CHECKED BY: <i>J.H.H.</i>	SHEET NO: 1 OF 3
BRIDGE RAILING LAYOUT			
VT RT 25 over WAITS RIVER			
Town of Bradford Orange County			
Proj. No BRF 031-1 (5)			
CUSTOMER LAFAYETTE - SHELDON INC			
O.W. HUBBELL & SONS, INC.			
NEW HARTFORD,	NEW YORK	DS-3233	

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WELDED JOINTS IN TUBING (Top & Bottom)

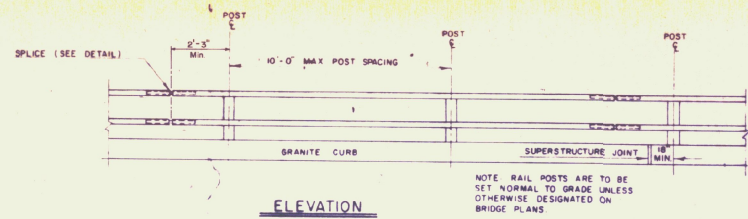


SPLICE PLATE (ON BRIDGE)



SPLICE DETAILS

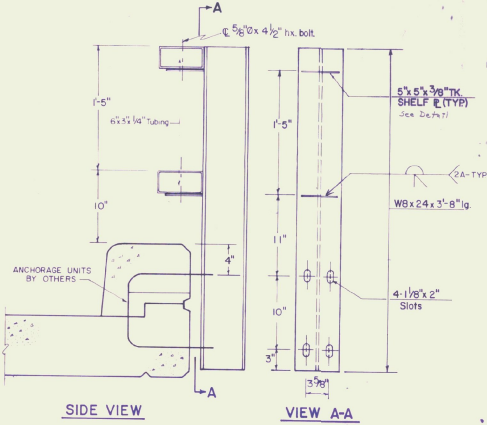
		End Sections 6 rails per rail																
		8'x11" (top & bot)	8'x7 1/2" (top & bot)	8'x7 1/2" (top & bot)	8'x7 1/2" (top & bot)	8'x7 1/2" (top & bot)	8'x7 1/2" (top & bot)	8'x7 1/2" (top & bot)	8'x7 1/2" (top & bot)	8'x7 1/2" (top & bot)	8'x7 1/2" (top & bot)	8'x7 1/2" (top & bot)	8'x7 1/2" (top & bot)	8'x7 1/2" (top & bot)	8'x7 1/2" (top & bot)			
		POST	POST	POST	POST	POST	POST	POST	POST	POST	POST	POST	POST	POST	POST	POST		
EAST	1	1	12	2	20	26	2	2	8	112	8	40	2	12				
WEST	1	1	12	2	20	26	2	2	8	112	8	40	2	12				
TOTAL	2	1	1	24	4	40	56	4	4	16	224	16	80	4	24			



ELEVATION

GENERAL NOTES

- RAILING IS DESIGNED IN ACCORDANCE WITH 1981 AASHTO SPECIFICATIONS AND ITS LATEST REVISIONS.
- ALL PLATES, ANGLES & SHAPES SHALL BE ASTM A 36 STEEL. ALL BOLTS SHALL BE ASTM A 307 STEEL UNLESS OTHERWISE SPECIFIED. ALL HOLLOW STRUCTURAL STEEL TUBING SHALL BE NON-FERROUS UNLESS OTHERWISE SPECIFIED. ALL WELDS SHALL BE CONFORMING TO AASHTO OR AISC WELDING SPECIFICATIONS. ALL WELDS SHALL BE WELDED OR COLD-FORMED STEEL STRUCTURAL TUBING CONFORMING TO ASTM A 500 COLD-FORMED WELDED AND SEAMLESS CARBON STEEL STRUCTURAL TUBING IN SQUARE AND ROUND. GRADE OVER 5.
- PRIOR TO FABRICATION OF THE RAILING, SIX COPIES OF SHOP DRAWINGS SHALL BE SUBMITTED TO THE DEPARTMENT OF HIGHWAYS FOR APPROVAL.
- ALL BOX BEAM BRIDGE RAILING COMPONENTS, INCLUDING TUBING, PLATES, ANGLES, ANCHOR BOLTS, AND ALL HARDWARE, SHALL BE GALVANNEZED ACCORDING TO ASTM A 123 OR ASTM A 153 AFTER FABRICATION.
- THE RAILING SYSTEM SHALL BE CONTINUOUS, WITH EACH TUBING SECTION ATTACHED TO A MINIMUM OF TWO POSTS. ALL JOINTS SHALL BE SPLICED AS DETAILED, WITH TOP AND BOTTOM RAILING SPLICES LOCATED IN THE SAME RAISELS.
- POSTS ARE TO BE ALIGNED AS NECESSARY WITH HEAVY STEEL HEX NUTS TO BRING TO TRUE LINE, AND GRADE. AFTER POSTS ARE ALIGNED TO FINAL POSITION ALL JOINTS BETWEEN BASE PLATE CONTACT SURFACE AND CONCRETE SURFACE SHALL BE GROUTED WITH NON-SHRINK GROUT CONFORMING WITH SUBSECTION 707.04 MORTAR TYPE IV.
- ANCHOR BOLTS ARE TO BE PRESET IN CONCRETE, (BY OTHERS).
- RAILING IS TO BE PAID FOR PER LINEAR FOOT AND THE COST SHALL INCLUDE ALL TUBING, MATERIALS, ANGLES, BOLTS, TEMPLATES, SHIM PLATES, AND ALL OTHER MATERIALS AND LABOR NECESSARY TO ERECT COMPLETE RAILING.
- COMPLETE SPLICE INCLUDES ALL BOLTS AND WASHERS TO BE FURNISHED WITH THE BRIDGE RAILING, EXCEPT AS NOTED.
- THE BOX BEAM SHALL BE SHOP BENT TO FIT THE HORIZONTAL CURVE WHEN THE RADIUS IS LESS THAN 500'.
- RAILING JOINT SPLICES SHALL BE LOCATED AT ALL SUPERSTRUCTURE JOINTS THE BRIDGE RAILING JOINT OPENING SHALL BE A MINIMUM OF 1" OR CAPABLE OF PROVIDING THE MOVEMENT SPECIFIED. SPLICE PLATES TO BE LENGTHENED AS REQUIRED.
- WELDS SHALL BE PERFORMED IN ACCORDANCE WITH THE 1977 AISC STRUCTURAL WELDING CODE, AND O.W. HUBBELL APPROVED WELDING PROCEDURES FOR BOX BEAM BRIDGE RAILING.



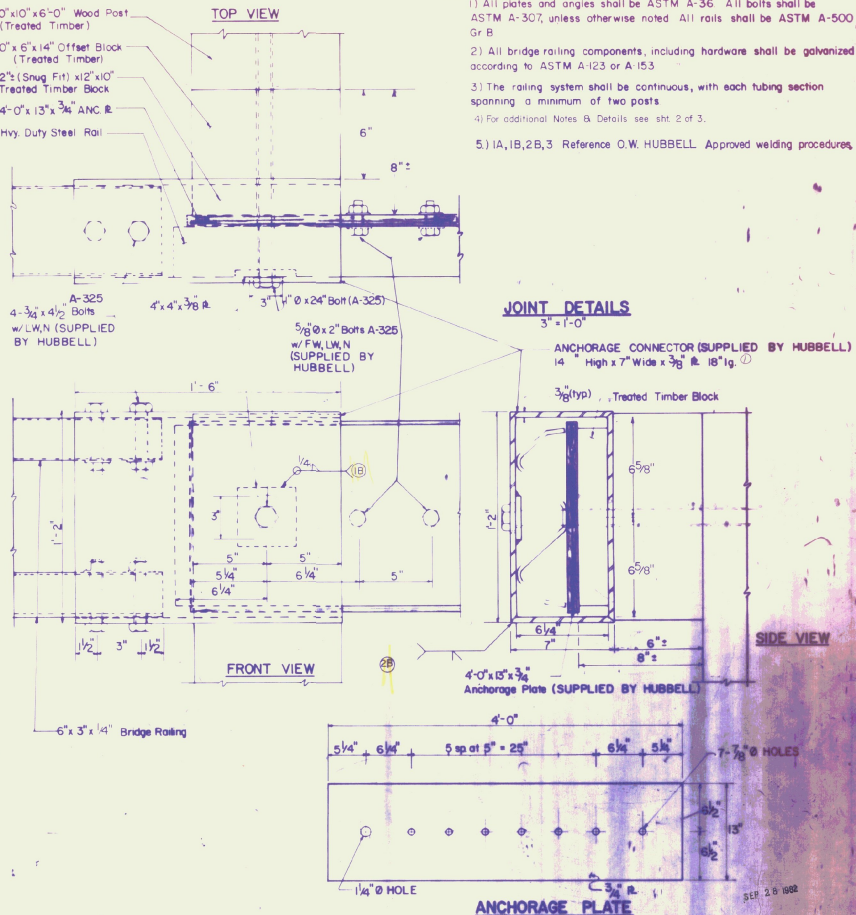
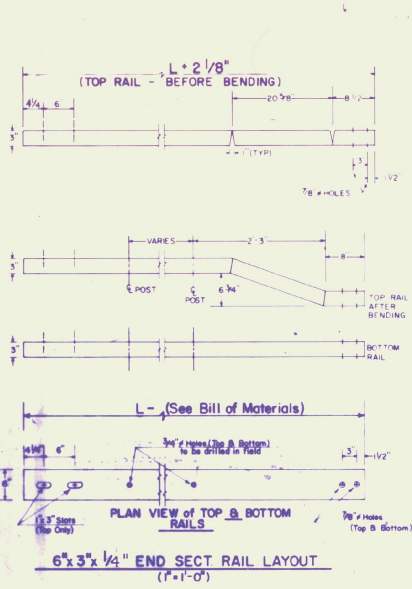
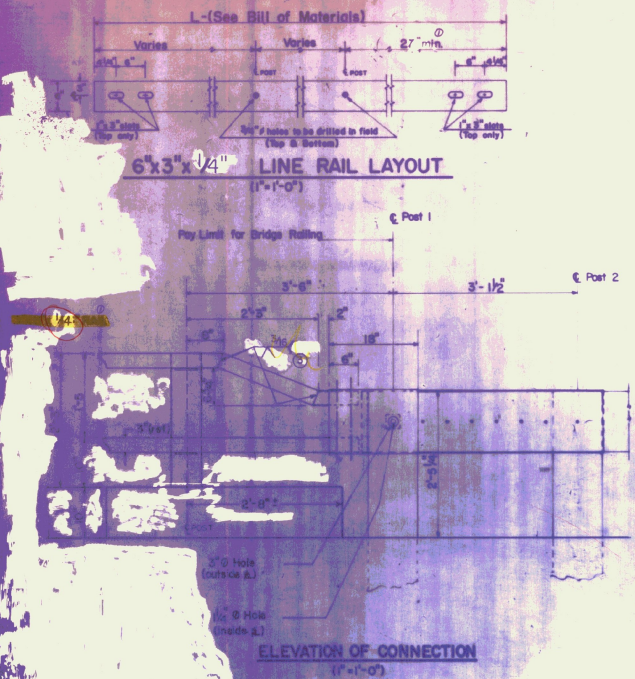
TYPICAL SECTION OF BOX BEAM BRIDGE RAIL

SEP 28 1982

RECEIVED
 CK'D BY *CCB* OK'D BY *WJH*
 RESUBMIT APPROVED *WJH*
 BY *WJH* DATE 10/9/82

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DRAWN BY M J Z	DATE 9/17/82	CHECKED BY <i>WJH</i>	SHEET NO. 2 OF 3
BRIDGE RAILING DETAILS			
TOWN OF BRADFORD COUNTY OF ORANGE BRIDGE NO. 5 over WAITS RIVER			
Proj. No. BRF-031-1(5) GENERAL CONTRACTOR LAFAYETTE-SHELDON INC. O.W. HUBBELL & SONS INC. NEW HARTFORD, NEW YORK			
			IDS-3233



- NOTES**
- 1) All plates and angles shall be ASTM A-36. All bolts shall be ASTM A-307, unless otherwise noted. All rails shall be ASTM A-500, Gr. B.
 - 2) All bridge railing components, including hardware shall be galvanized according to ASTM A123 or A-153.
 - 3) The railing system shall be continuous, with each tubing section spanning a minimum of two posts.
 - 4) For additional Notes & Details see sht. 2 of 3.
 - 5) 1A, 1B, 2B, 3 Reference O.W. HUBBELL Approved welding procedures.

ANCHORAGE PLATE
(1/2"=1'-0")

RECEIVED *CCB* OR'D BY *CCB*
CK'D BY *CCB* APPROVED BY *CCB*
RESUBMIT DATE *11/17/82*
BY *WAS* DATE *11/17/82*

SER. 28 1982

Public Contr. approved 11/16/82, W. Smith	DRAWN BY	DATE	CHECKED BY	SHEET NO.
	MJZ	9/17/82	JCH	3 of 3
	APPROACH RAILING DETAILS			
	TOWN OF BRADFORD COUNTY OF ORANGE BRIDGE NO 5 over WAITS RIVER			
Proj. No. BR-031-1(S)				
GENERAL CONTRACTOR LAFAYETTE-SHELDON INC.				
O.W. HUBBELL and SONS INC.				
NEW HARTFORD, NEW YORK DS-3233				

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- INDEX OF SHEETS
1. TITLE SHEET
 2. QUANTITY SHEET
 3. ROW DETAIL SHEET
 4. ROW PLAN SHEET
 5. PLAN & PROFILE

STATE OF VERMONT AGENCY OF TRANSPORTATION



PROPOSED IMPROVEMENT BRIDGE PROJECT

TOWN OF BRADFORD
COUNTY OF ORANGE

ROUTE NO: VT. 25 BRIDGE NO: 5

PROJECT LOCATION: ON VT. RTE. 25, 2.1 MILES NORTH OF THE
JUNCTION OF VT. RTE. 25 AND VT. RTE. 25 B.

PROJECT DESCRIPTION: REMOVAL OF EXISTING SUPERSTRUCTURE,
CONSTRUCTION OF A NEW PLATE GIRDER BRIDGE ON EXISTING
SUBSTRUCTURE, REPAIR OF CONCRETE IN ABUTMENTS AND
PIERS AND NECESSARY APPROACH WORK.

LENGTH OF STRUCTURE: 207.34 FEET
LENGTH OF PARTICIPATION ROADWAY: 392.66 FEET
LENGTH OF NON-PARTICIPATION ROADWAY: 0.00 FEET
LENGTH OF PROJECT: 600.00 FEET
LENGTH OF R.O.W. PROJECT: 600.00 FEET

TRAFFIC DATA

1980 ADT = 2120
1980 DHV = 295 D = 56% (WB)
1990 ADT = 2570 T = 10% (DHV)
1990 DHV = 365

DESIGN SPEED = 40 MPH

HYDRAULIC DATA

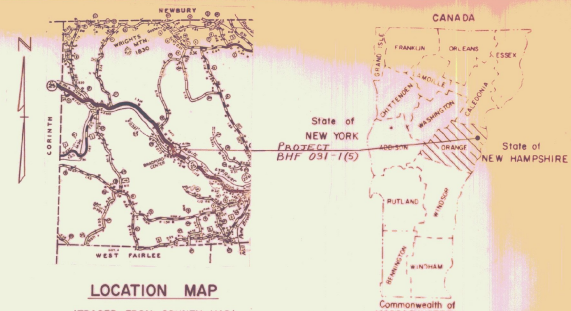
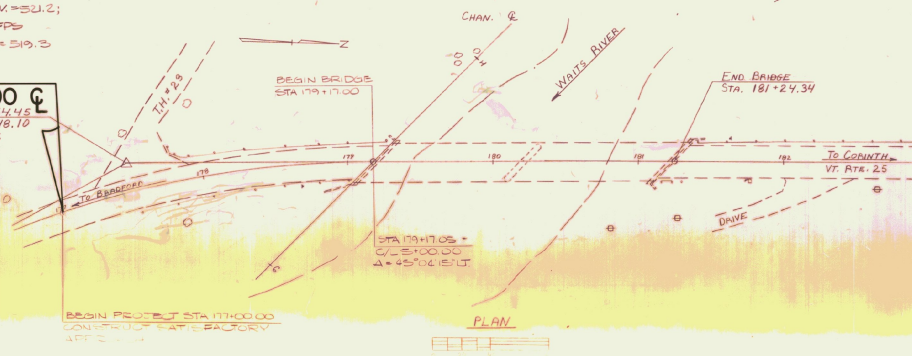
DRAINAGE AREA = 121.88 SQ. MI.
Q₁₀ = 6500 CFS; HW ELEV. = 517.6;
VELOCITY = 10.2 FPS
Q₁₅ = 9000 CFS; HW ELEV. = 518.9;
VELOCITY = 11.4 FPS
Q₅₀ = 11,000 CFS; HW ELEV. = 519.9;
VELOCITY = 12.3 FPS
Q₁₀₀ = 14,000 CFS; HW ELEV. = 521.2;
VELOCITY = 13.5 FPS
TAILWATER ELEV. @ Q₅₀ = 519.3

CONVENTIONAL SIGNS

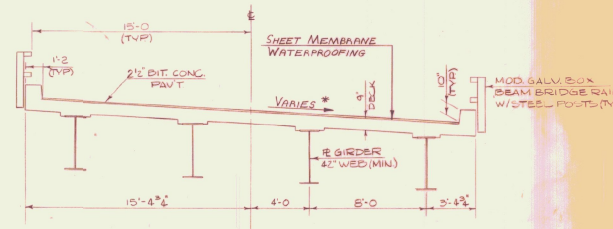
- COUNTY LINE
- TOWN LINE
- LIMITS OF ACCESS
- POINT OF ACCESS
- FENCE LINE
- STONE WALL
- TRAVELED WAY
- GUARD RAIL
- RAIL ROAD
- SURVEY LINE
- CULVERT
- POWER POLE
- TELEPHONE POLE
- TREES
- CONTROL OF ACCESS
- PROPERTY LINE
- ROW TAKING LINE
- SLOPE RIGHTS
- TOP OF CUT
- TO

BEGIN R.O.W. PROJECT
BRF 031-1(5)S STA. 177+00
PT 177+51.45
177+48.10
A = 28° RT.

DATUM
VERTICAL ASSUMED
HORIZONTAL N.A.

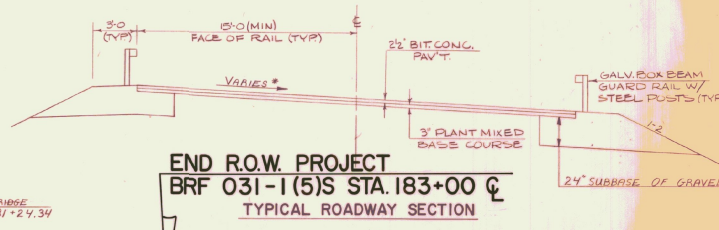


LOCATION MAP
(TRACED FROM COUNTY MAP)



TYPICAL BRIDGE SECTION
SCALE: 1/4" = 1'-0"

* SEE SUPERELEVATION DIAGRAM ON SHEET ...



END R.O.W. PROJECT
BRF 031-1(5)S STA. 183+00
TYPICAL ROADWAY SECTION
SCALE: 1/4" = 1'-0"

END PROJECT STA 183+00.00
CONSTRUCT SATISFACTORY
APPROACH

PROJECT PROCESSED UNDER SECONDARY ROAD PLAN

SUBMITTED BY USER OF THE STATE TRANSPORTATION BOARD
APPROVED BY J. J. [Signature] DATE OCT 7 1991
DIR. OF ENGINEERING AND CONSTRUCTION

APPROVED [Signature] DATE 11-7-91
CHIEF, PROPERTY ADMINISTRATION

PROJECT BRADFORD NO BRF 031-1(5)S
SHEET 1 OF 3

STATE OF VERMONT
AGENCY OF TRANSPORTATION
RIGHT-OF-WAY PLANS
DETAIL SHEET

TABLE OF PROJECT PROPERTY ACQUISITION

PARCEL NO.	GRANTOR	SHEET NO.	BEGINNING STATION	ENDING STATION	TAKING	REM.	RIGHTS	TITLE TAKEN	DATE	TOWN OR CITY RECORDED	BK.	PG.	REMARKS
1	KENYON, CHARLES A. & FANNIE E.	3	178+00 LT. 178+25 LT.	180+38 LT. 178+70 LT.			CONST. EASE. (T) (0.14 A.S.) SLOPE (T) (50 SF.)	AGREE.					
2	CORTI, LENA	3	181+00 LT. 181+50 LT. 181+63 LT.	183+00 LT. 181+63 LT. 181+77 LT.			CONST. EASE. (T) (0.10 A.S.) CHANNEL (P) (40 SF.) SLOPE (T) (15 SF.)	WDOE	12-3-81	BRADFORD	54	29,30	
3	TOWN OF BRADFORD	3	177+15 LT.	178+25 LT.			CONST. APPROACH (T)	AGREE.					T.H. 23

TABLE OF REVISIONS

REVISION NO.	SHEET NO.	DESCRIPTION OF REVISION	DATE	MADE BY	APPROVED BY

MADE BY: B. A. MELVIN DATE 10-6-81
CHECKED BY: J. D. PATERSUN DATE 10-6-81

DR. RT. — DRAINAGE RIGHT
DIT. RT. — DITCHING RIGHT
CH. RT. — CHANNEL RIGHT
DRIVE RT. — DRIVE RIGHT
CUL. RT. — CULVERT RIGHT
D — DEMOLITION OR REMOVAL
W — WATER SOURCES

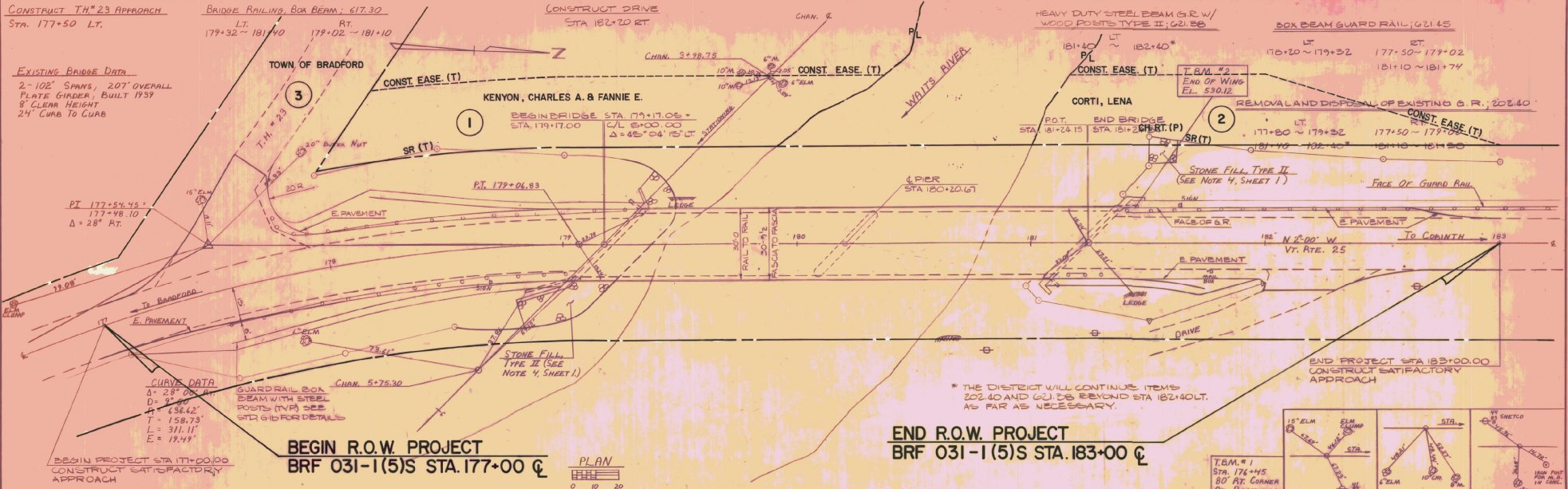
— — — — — PRESENT R.O.W.
- - - - - TAKING WITHOUT ACCESS
- - - - - TAKING WITHOUT ACCESS ALONG PROPERTY LINES
- - - - - TAKING WITH ACCESS
(P) — PERMANENT EASEMENT
(T) — TEMPORARY EASEMENT

LEGEND
--- CONST. EASE. --- CONST. EASEMENT
SR — SR — SLOPE RIGHTS
P — P — PROPERTY LINE
— Δ — Δ — TOP OF CUT
— O — O — TOE OF SLOPE

APPROVED Thomas P. May DATE 12-7-81
CHIEF OF PLANS & TITLES

PROJECT BRADFORD
NO. BRF 031-1 (5)S
SHEET 2 OF 3

PLAN
 DATE: 12/23/13
 DRAWN BY: J. WILSON
 CHECKED BY: J. WILSON
 PROJECT: BRADFORD BRIDGE
 SHEET: 3 OF 3



PROFILE
 DATE: 12/23/13
 DRAWN BY: J. WILSON
 CHECKED BY: J. WILSON
 PROJECT: BRADFORD BRIDGE
 SHEET: 3 OF 3

