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STATE OF VERMONT DEPARTMENT OF HIGHWAYS



PROPOSED IMPROVEMENT

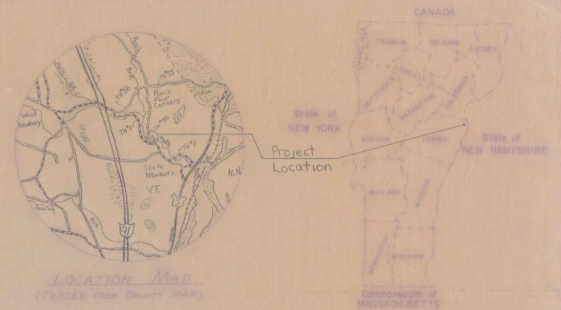
BRIDGE PROJECT
TOWN OF NEWBURY
COUNTY OF ORANGE

ROUTE NO. CL 3 TH#50 BRIDGE NO. 16

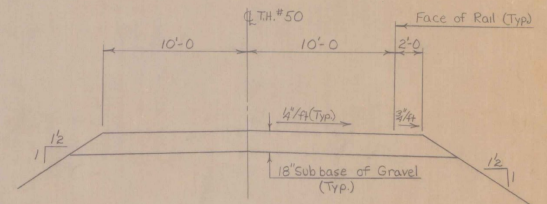
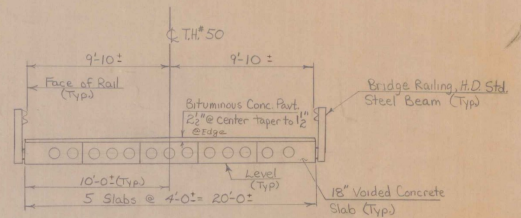
PROJECT LOCATION: Newbury TH#50 over Halls Brook beginning at a point 40 ft North of the intersection of TH#1 and TH#50 and extending northerly 165 feet.

PROJECT DESCRIPTION: The project shall consist of removal of existing superstructure, capping of stone abutments, construction of wingwalls and new prestressed concrete voided slabs and necessary roadway and channel work.

LENGTH OF STRUCTURE:	42	FEET
LENGTH OF PARTICIPATION ROADWAY:	123	FEET
LENGTH OF NON PARTICIPATION ROADWAY:	0	FEET
LENGTH OF PROJECT:	165	FEET

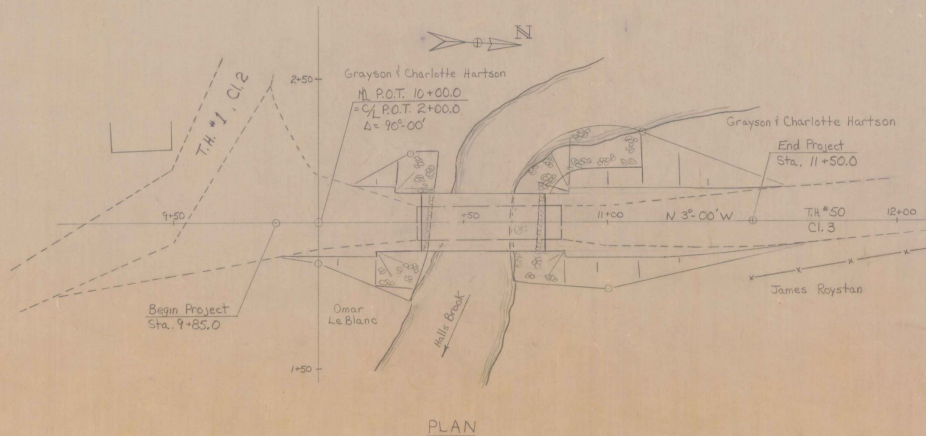


- GENERAL NOTES:**
- See SCB-DI-75 for additional General Notes.
 - Existing superstructure (Bailey Bridge) shall be removed, disassembled, and loaded onto State of Vermont trucks at the project site. District Engineer (District 7) shall be notified seven (7) days prior to the removal of the superstructure.
 - Water repellent shall be applied to all exposed surfaces of new concrete on abutments and fascia and bottom of slab to drip notch on new deck.



CONVENTIONAL SIGNS

COUNTY LINE	---
TOWN LINE	---
LIMITS OF ACCESS	---
POINT OF ACCESS	---
FENCE LIST	---
STONE WALL	---
TRAVELLED ROAD	---
UNTRAVELLED ROAD	---
WALDOPE	---
SURVEY LINE	---
CULVERT	---
POWER POLE	---
TELEPHONE POLE	---
TREES	---
PA CORNER IDENTIFICATION SIGNS	---
PROPERTY LINE	---
RIVER TAKING LINE	---
SLOPE HEIGHTS	---
TOP OF CUT	---
TOE OF SLOPE	---



DESIGNED BY ORDER OF THE STATE HIGHWAY BOARD
E. H. Stickney 1/21/76

Newbury TH 3606
13 SHEETS

EARTHWORK

V.C.	% GRD	STATION	GRADES		CORR. V.C.	DIST.	AREA	CU. YDS.	AREA	CU. YDS.	AREA	CU. YDS.	AREA	CU. YDS.
			ELEVATION ON TAN.	ELEVATION ON V.C.										
		9+50	501.83											
		10+0	503.58											
		10+38.10	506.12											
		10+50												
		10+78.10	506.75											
		11+0	507.08											
		11+50	507.83											

BRIDGE QUANTITY SHEET

STATE OF VERMONT
DEPARTMENT OF HIGHWAYS
BRIDGE DIVISION

NO.	ITEM	UNIT	QUANTITY BREAKDOWN										TOTAL	FINAL		
			ABUT. 1 + 2	SUPER-STRUCTURE	ROADWAY											
202.20	REMOVAL OF EXISTING SUPERSTRUCTURE	EA		1											1	
203.15	COMMON EXCAVATION	C.Y.			200										200	
203.27	UNCLASSIFIED CHANNEL EXCAVATION	C.Y.	120												120	
203.38	GRANULAR BACKFILL FOR STRUCTURES (BST)	C.Y.			100										100	
204.25	STRUCTURE EXCAVATION	C.Y.	120												120	
301.15	SUBBASE OF GRAVEL	C.Y.			150										150	
406.25	BITUMINOUS CONC. PAVEMENT	TON		12											12	
501.25	CONCRETE CLASS B	C.Y.	30												30	
507.10	REINFORCING STEEL	LB	3290												3290	
510.20	PRESTRESSED CONCRETE MEMBERS (18" x 24" x 42'-0" VOIDED SLABS)	EA		5											5	
514.10	WATER REPELLENT	GAL	3	2											5	
602.30	REPOINTING MASONRY (EST)	S.Y.	20												20	
613.11	STONE FILL TYPE II	C.Y.	150												150	
617.35	BRIDGE RAILING H.D. STEEL BEAM	LF		124											124	
621.25	GUARD RAIL H.D. STEEL BEAM WITH STEEL POSTS TYPE I	LF			181										181	

BRIDGE (S) AT STATION (S) 10+57
LOCATION (S) TH 50, CLASS 3, OVER HALL'S BROOK

Prepared by: S. Achilles Checked by: S.R. Gylmette
SUPERVISOR: W. Tripp

NEWBURY
BR OF

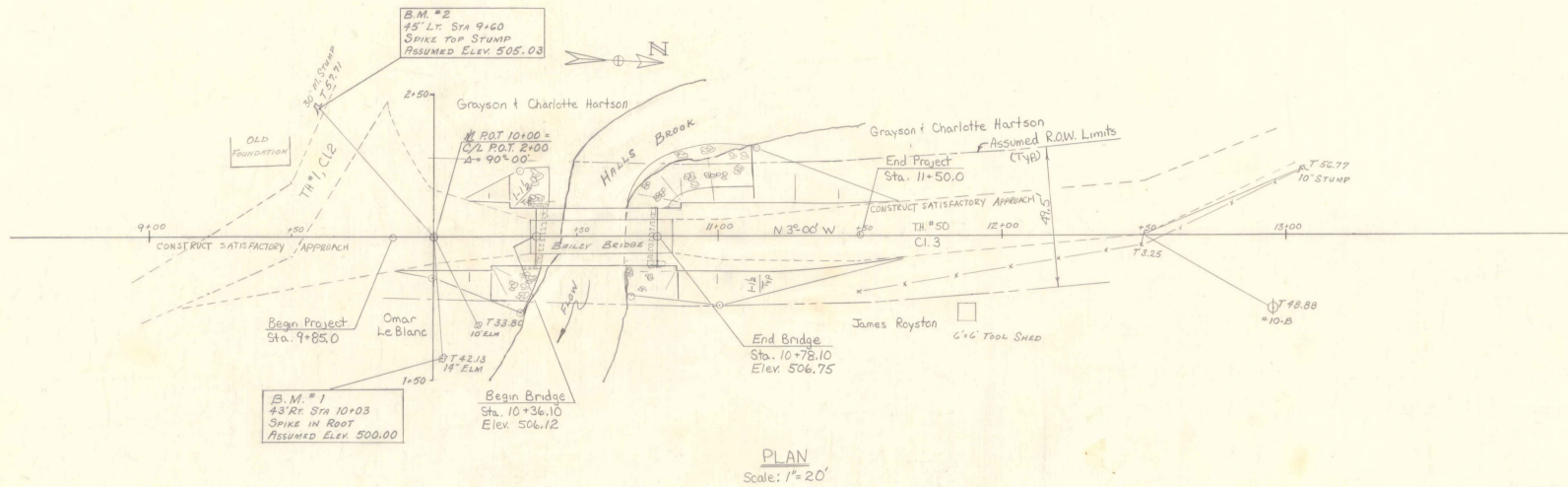
PROJECT NO. TH 3606
SHEET NO. 2 OF 13

PLAN	DATE
PROJECT	
DESIGNER	
CHECKER	
APPROVER	

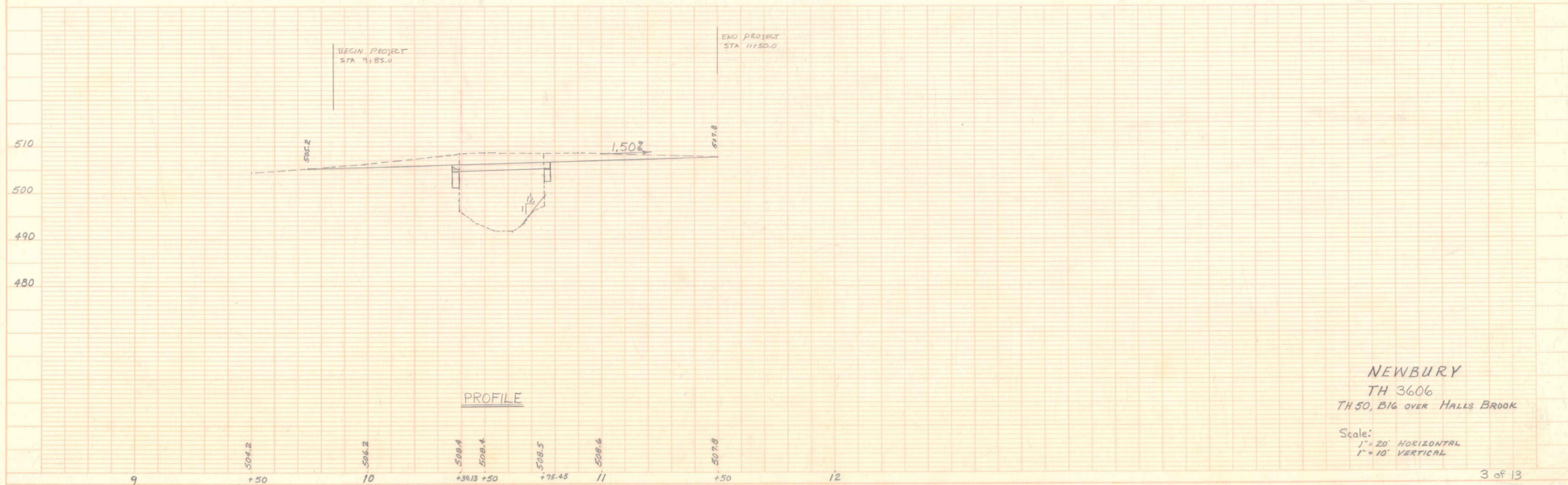
PROFILE	DATE
PROJECT	
DESIGNER	
CHECKER	
APPROVER	

Guard Rail, Heavy Duty Steel Beam w Steel Posts, Type I
 Rt 10+00 - 10+20.5 10+84.5 - 11+15.5
 Lt 10+06 - 10+26 10+86 - 11+57

Bridge Railing, Heavy Duty Steel Beam
 Rt 10+20.5 - 10+84.5
 Lt 10+26 - 10+86



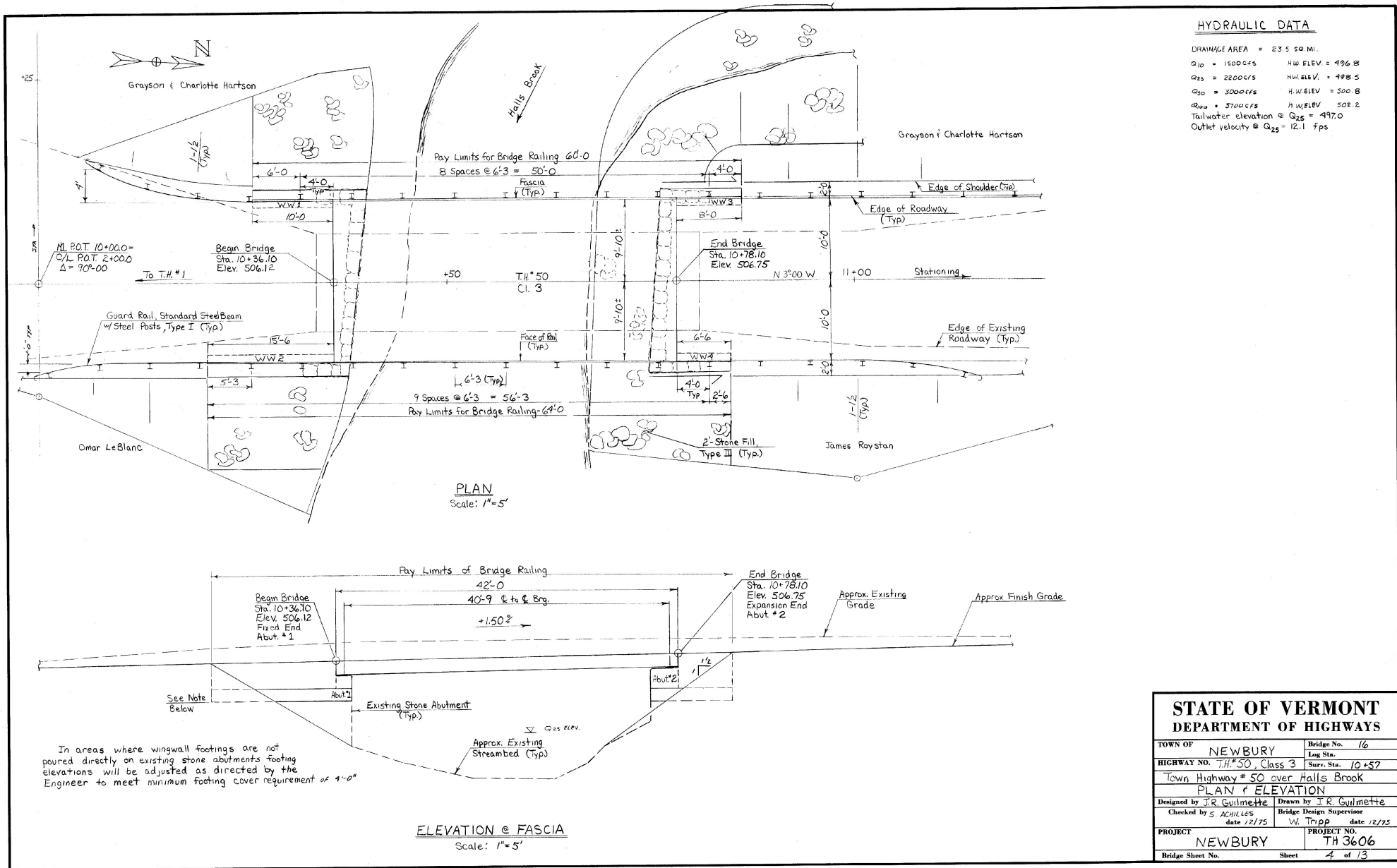
PLAN
 Scale: 1" = 20'



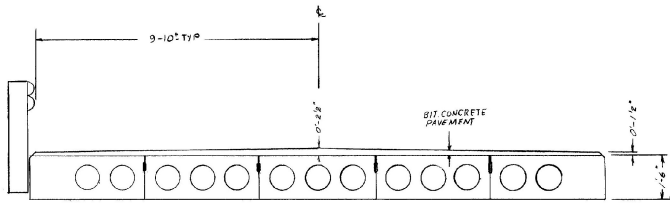
PROFILE

NEWBURY
 TH 3606
 TH 50, B16 OVER HALLS BROOK

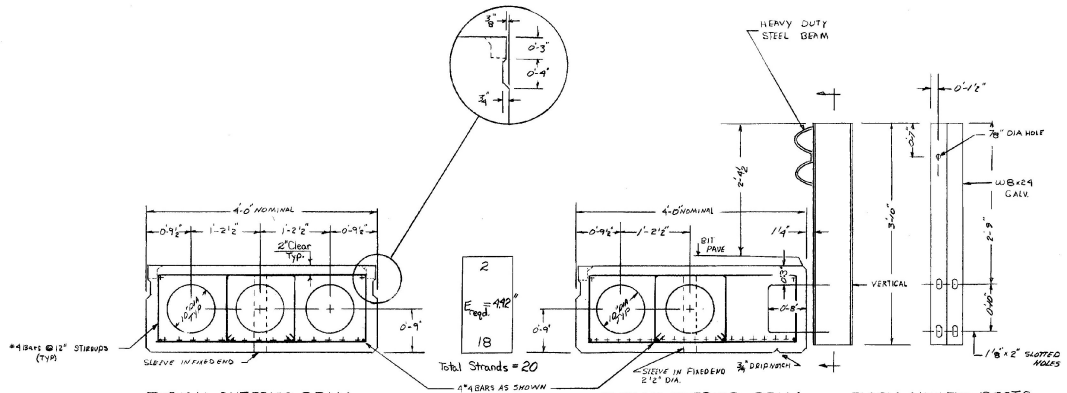
Scale:
 1" = 20' HORIZONTAL
 1" = 10' VERTICAL



STATE OF VERMONT DEPARTMENT OF HIGHWAYS	
TOWN OF	NEWBURY
BRIDGE NO.	16
HIGHWAY NO.	TH #50, Class 3
LOG STA.	10+57
Town Highway #	50 over Halls Brook
PLAN & ELEVATION	
Designed by	J.R. Guilmette
Drawn by	J.R. Guilmette
Checked by	S. Achilles
Bridge Design Supervisor	W. Tripp
date	12/75
date	12/75
PROJECT	NEWBURY
PROJECT NO.	TH 3606
Bridge Sheet No.	Sheet 4 of 13



TYPICAL DECK SECTION
SCALE 1/2" = 1'

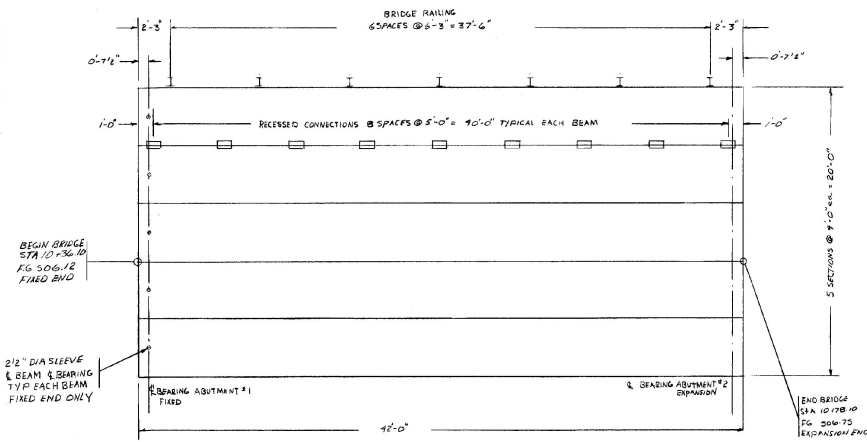


TYPICAL INTERIOR BEAM
SCALE 1/2" = 1'

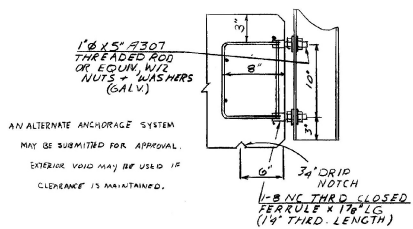
TYPICAL EXTERIOR BEAM WITH FASCIA MOUNTED POSTS
SCALE 1/2" = 1'

ASHO S III 9B SECTION
PROVIDE FOR ADEQUATE VENTING OF VOIDS
DESIGN DATA
LL+I MOMENT = 143.9 K-FT
LL+I REACTION = 16.1 KIIPS
SDL MOMENT = 25.0 K-FT

DESIGN DATA
LL+I MOMENT = 143.9 K-FT
LL+I REACTION = 16.1 KIIPS
SDL MOMENT = 25.0 K-FT



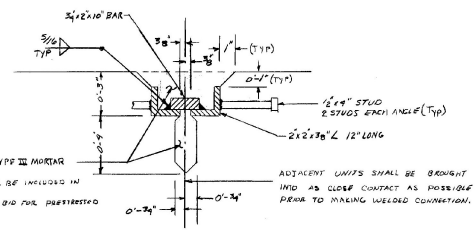
PLAN
SCALE 1/4" = 1'



AN ALTERNATE ANCHORAGE SYSTEM
MAY BE SUBMITTED FOR APPROVAL.
EXTERIOR VOID MAY BE USED IF
CLEARANCE IS MAINTAINED.

PRESET GALVANIZED ANCHOR
MINIMUM STRENGTH REQUIREMENTS:
40,000 * TENSION ON 2 BOLTS
40,000 * SHEAR ON 4 BOLTS

ANCHORAGE FOR FASCIA MOUNTED POSTS
NTS



FILL WITH TYPE III MORTAR
COST SHALL BE INCLUDED IN
UNIT PRICE BID FOR PRESTRESSED
MEMBERS

ADJACENT UNITS SHALL BE BROUGHT
INTO AS CLOSE CONTACT AS POSSIBLE
PRIOR TO MAKING WELDED CONNECTION.

AN ALTERNATE ANCHORAGE SYSTEM
MAY BE SUBMITTED FOR APPROVAL.

SECTION RECESSED CONNECTION
SCALE 3/4" = 1'

PRESTRESSED BEAM DATA

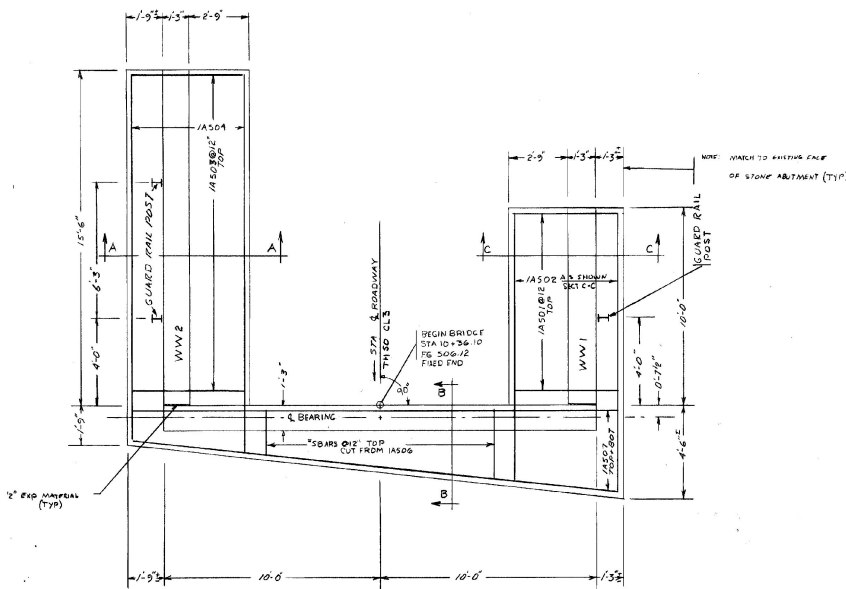
MINIMUM CONCRETE STRENGTH 5000 PSI
CONCRETE STRENGTH @ STRIPS TRANSFER 4000 PSI
OVERALL LENGTH 42'-0"
SQUARE ENDS
THE FABRICATOR MAY, AT HIS OPTION, ALTER THIS
SUGGESTED DESIGN TO MEET HIS PRESTRESSING
OPERATION AND MATERIAL AVAILABILITY. ALL DESIGN
COMPUTATIONS MUST BE FURNISHED TO THE DEPARTMENT
IN ACCORDANCE WITH ITEM SIZES, PRESTRESSED
CONCRETE MEMBERS.

NOTES

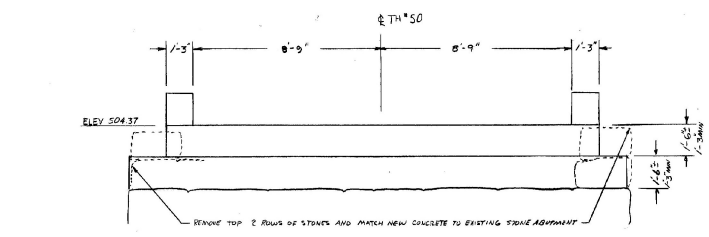
- FOR GENERAL NOTES SEE SHEET 1.
- THE STRAND SYSTEM SHOWN IS DESIGNED FOR 1/2" SPAN WIRE UNGRADED STRESS
RELIEVED HIGH STRENGTH STRANDS CONFORMING TO 270K SPECIFICATIONS. INITIAL TENSION
28,135 * PER STRAND. FINAL TENSION 22,280 * PER STRAND.
- ENDS OF STRANDS SHALL BE RECESSED AND GRouted AS PER STANDARD PRACTICE.
- THE TOP OF PRESTRESSED BEAMS SHALL BE SMOOTH FINISHED.
- REINFORCING CIRC IN PRESTRESSED UNITS SHALL BE GRADE 40.
- 12" x 6" x 10" BRACING PADS SHALL MEET REQUIREMENTS FOR FORM 731.01 OR 731.02
- THE COST OF PRECURED JOINT FILLER, CURE, SHALL BE INCLUDED IN THE
UNIT PRICE BID FOR CONCRETE CLASS B.

STATE OF VERMONT
DEPARTMENT OF HIGHWAYS

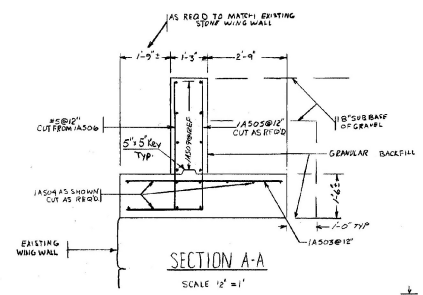
TOWN OF NEWBURY	Bridge No. 16
HIGHWAY NO. TH30 CLASS 3	Log Sta.
TOWN HIGHWAY #50 OVER HILLS BROOK	Surv. Sta. 10+57
SUPERSTRUCTURE DETAILS	
Designed by S. ACHILLES	Drawn by S. ACHILLES
Checked by J.R. Guilmette date 12/75	Bridge Design Supervisor
PROJECT NEWBURY TH3606	W. Throp date 12/25
Bridge Sheet No.	Sheet 5 of 13



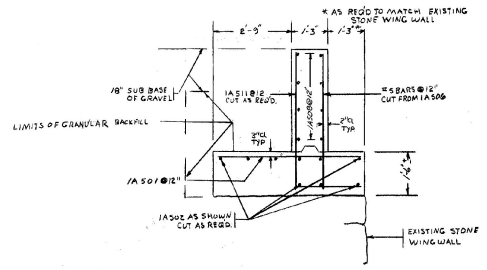
ABUT #1 PLAN
SCALE 3/8" = 1'



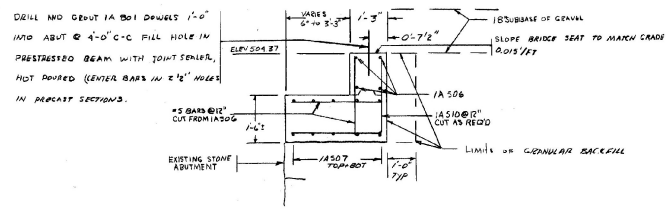
ABUT #1 ELEVATION
SCALE 3/8" = 1'



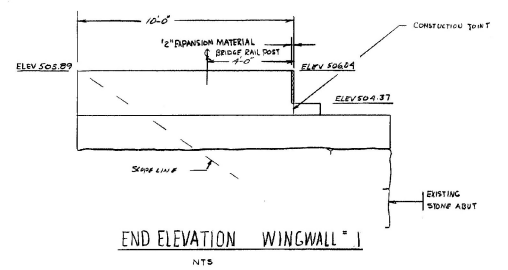
SECTION A-A
SCALE 1/2" = 1'



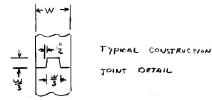
SECTION C-C
SCALE 1/2" = 1'



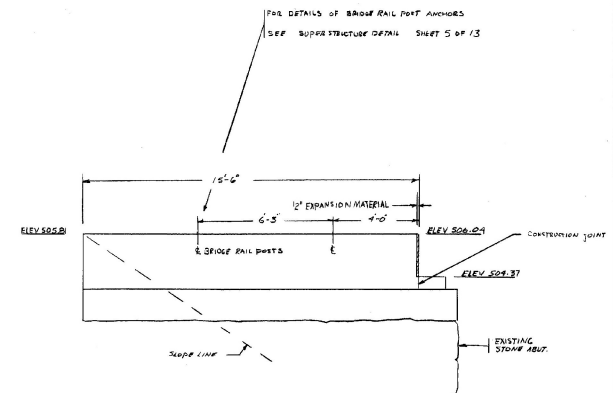
SECTION B-B
SCALE 1/2" = 1'



END ELEVATION WINGWALL #1
NTS



TYPICAL CONSTRUCTION JOINT DETAIL

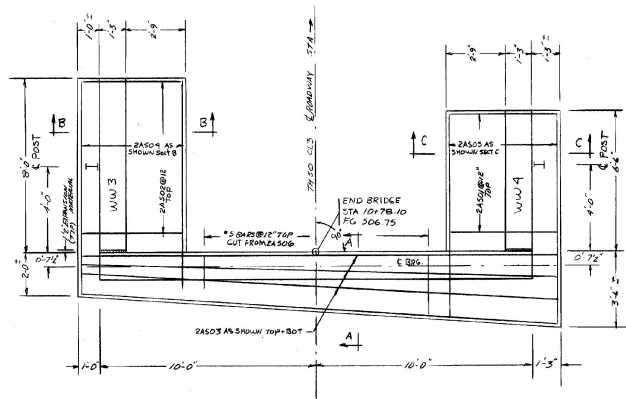


END ELEVATION WINGWALL #2
NTS

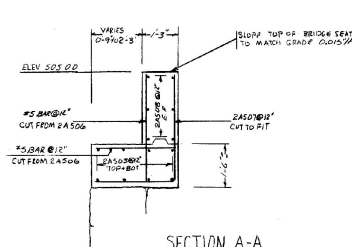
SEE SH.7 FOR ABUT. NOTES

**STATE OF VERMONT
DEPARTMENT OF HIGHWAYS**

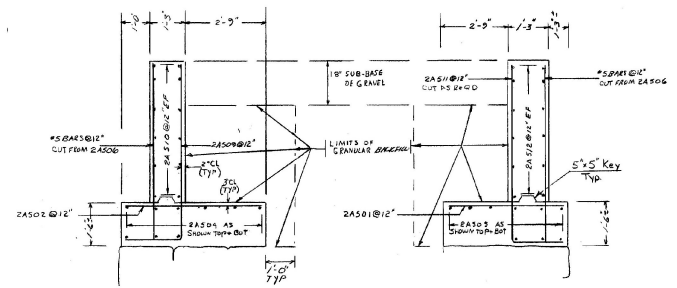
TOWN OF NEWBURY	Bridge No. 16
HIGHWAY NO. TH50 CL3	Log Sta. 10+57
TOWN HIGHWAY #50 OVER HALLS BROOK	
ABUTMENT #1 DETAILS	
Designed by S. ACHILLES	S. ACHILLES
Checked by J.R. Guilmette date 12/75	Bridge Design Supervisor IN TRIPD date
PROJECT NEWBURY TH3606	PROJECT NO. TH3606
Bridge Sheet No.	Sheet 6 of 13



ABUT #2 PLAN
SCALE 3/8" = 1'

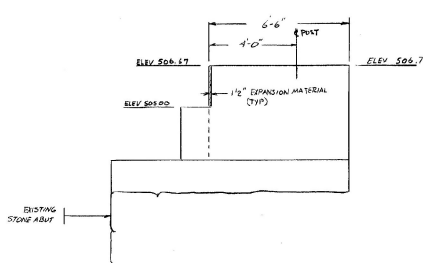


SECTION A-A
SCALE 1/2" = 1'

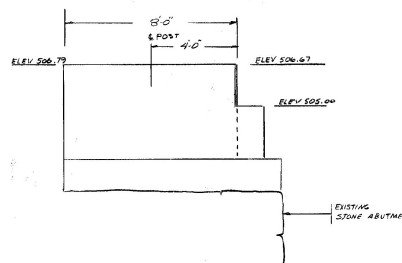


SECTION B-B
SCALE 1/2" = 1'

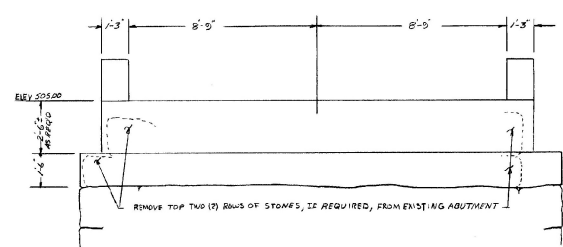
SECTION C-C
SCALE 1/2" = 1'



END ELEVATION WING WALL #4
SCALE 3/8" = 1'



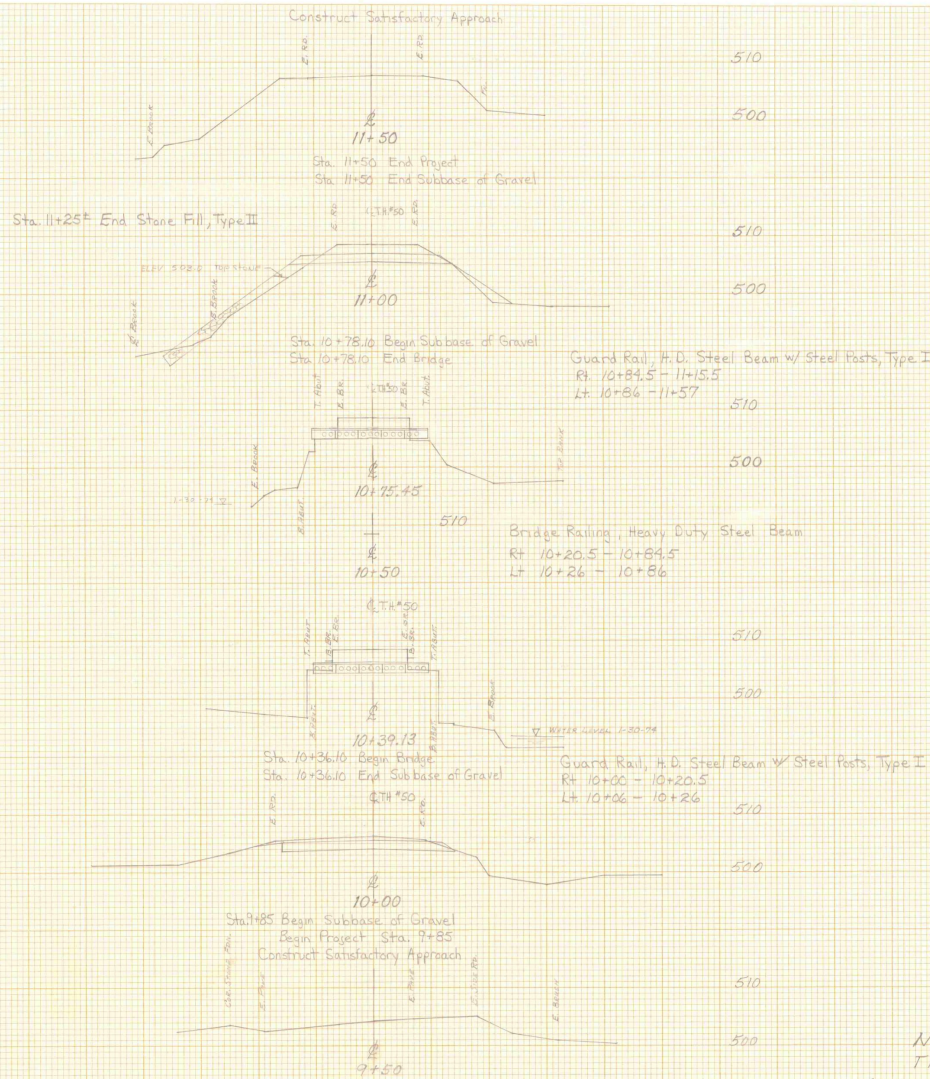
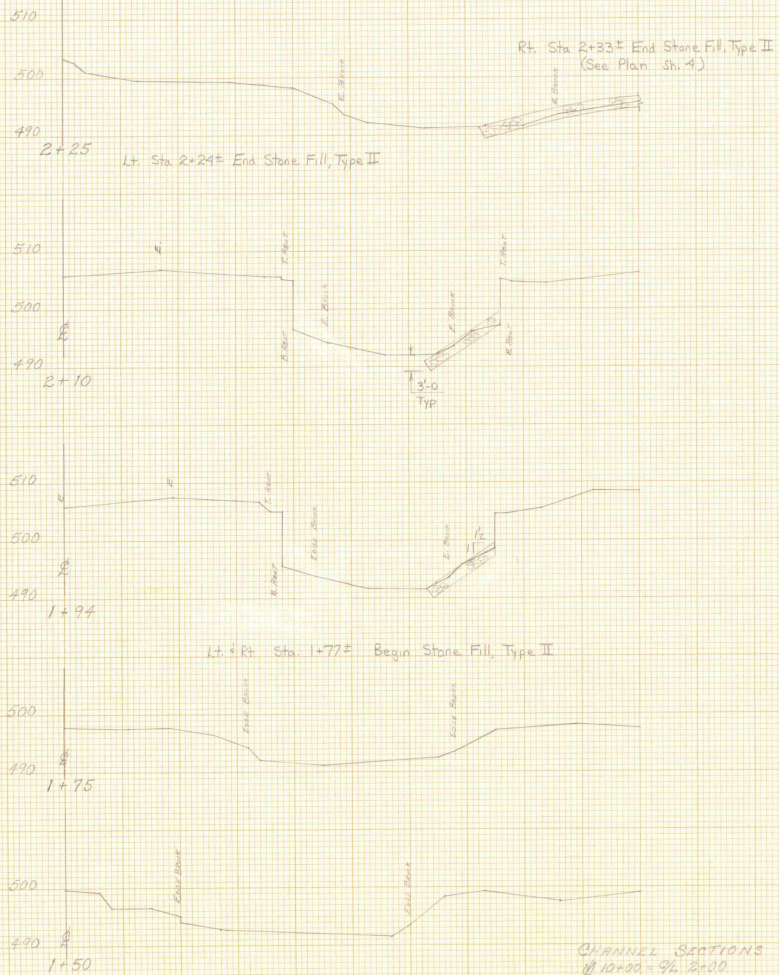
END ELEVATION WING WALL #3
SCALE 3/8" = 1'



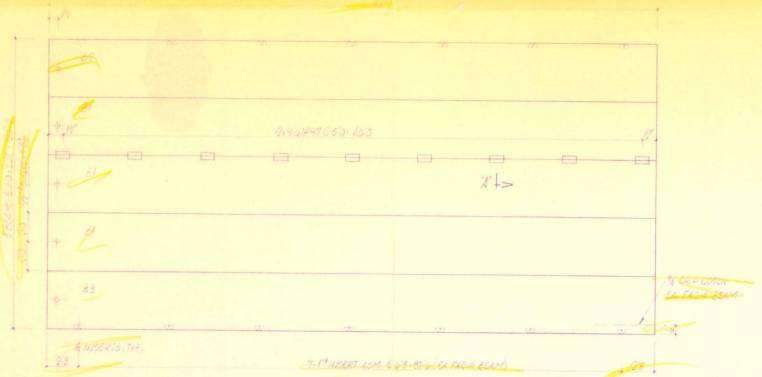
ABUT #2 ELEVATION
SCALE 3/8" = 1'

- ABUT #2 NOTES
1. MINIMUM COVER FOR REINFORCING STEEL SHALL BE 2" CLEAR EXCEPT IN FOOTING WHERE IT SHALL BE 3" CLEAR.
 2. ABUTMENT FOOTINGS ARE DESIGNED FOR A MINIMUM SOIL BEARING OF 2 TONS/SQ FT.
 3. WING WALL TO BE PLACED AFTER COMPRESSED UNIT ARE SET IN PLACE.
- * TOP SURFACE OF EXISTING ABUTMENT SHALL BE CLEANED AS DIRECTED BY ENGINEER BEFORE CONCRETE IS POURED.

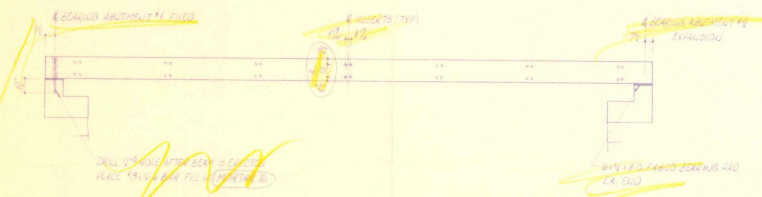
STATE OF VERMONT DEPARTMENT OF HIGHWAYS	
TOWN OF NEWBURY	Bridge No. 10
HIGHWAY NO. 750 CL3	Log Sta. 10-57
TOWN HIGHWAY #50 OVER HALLS BROOK	Surv. Sta. 10-57
ABUTMENT #2 DETAILS	
Designed by S. ACHILES	Drawn by S. ACHILES
Checked by J.R. Guilmette date 12/75	Bridge Design Supervisor W. TRIPP date
PROJECT NEWBURY	PROJECT NO. TH3606
Bridge Sheet No.	Sheet 7 of 13



ROADWAY SECTIONS
 TH 50 - 9+50 TO 11+50
 SCALE 1" = 10' VERT. 1" = 10' HORIZ.



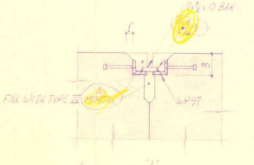
FRAMING PLAN



ELEVATION



SHEAR KEY DETAIL



SECTION 2

6/720
6005

STATE COPY

RECEIVED APR 16 1976
 CR'D BY JWC OK'D BY WWT
 RESUBMIT APPROVED
 BY J. WOOD DATE 4-19-76

GENERAL NOTES:

- UNISTRESS WILL NOT BE RESPONSIBLE FOR BEARING DIMENSIONS AFTER SHOP DRAWINGS HAVE BEEN APPROVED. DIMENSIONS SHOWN ARE PRESUMED TO BE CORRECT.
- CUSTOMER WILL PROVIDE DIMENSIONS AND LOCATION OF OPENINGS LARGER THAN 8 INCHES TO BE CAST IN UNITS. OPENINGS NOT SHOWN WILL BE CUT BY OTHERS.
- UNISTRESS WILL NOT SUPPLY INSERTS OR MISCELLANEOUS HARDWARE CONTAINED IN CAST IN PLACE WORK UNLESS SPECIFICALLY NOTED.
- CUSTOMER WILL PROVIDE ADEQUATE CLEAR AREA TO AND WITHIN THE STRUCTURE FOR UNRESTRICTED OPERATION OF CRANES AND TRUCKS BY THE ERECTOR.
- ERECTOR WILL REMOVE AND PATCH LIFTING EYES PROVIDED FOR ERECTION.

DESIGN LOADINGS:		MATERIAL SPECIFICATIONS:	
CONCRETE:		CONCRETE:	
STRAND:		STRAND:	
REBAR:		REBAR:	
HARDWARE:		HARDWARE:	
FINISH:		FINISH:	
NO.	DATE	NO.	DATE

unistress

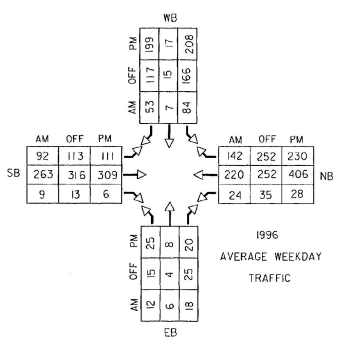
P.O. BOX 1145, PITTSFIELD, MASSACHUSETTS, 01201 (413) 499-1441
 PRECAST STRUCTURAL CONCRETE — MEMBER PRESTRESSED CONCRETE INSTITUTE

UNISTRESS ENGINE	DATE: 7/19/76
STATE OF VERMONT, DEPT OF HIGHWAYS	SCALE:
	CHKD: [] DFM:
	JOB NO: 1902
	DWG. NO: F1

TIMING AND PHASING

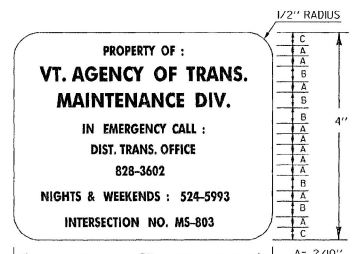
	PHASE 1 & 5		PHASE 1 & 6		PHASE 2 & 6		PHASE 4 & 8		AM OR AS LATER DETERMINED
	%	CLEAR TO	%	CLEAR TO	%	CLEAR TO	%	CLEAR TO	
VEHICLE MINIMUM									OR AS LATER DETERMINED
VEHICLE MAX I									
VEHICLE MINIMUM									
VEHICLE MAX I									
FACE 1	G	G	G	Y	R	R	R	R	
FACE 2	R	R	R	R	R	R	R	R	
FACE 4A	R	R	R	R	R	R	R	R	
FACE 4B	R	R	R	R	R	R	R	R	
FACE 5	C	Y	R	R	R	R	R	R	
FACE 6	R	R	R	G	G	G	R	R	
FACE 8	R	R	R	R	R	R	G	Y	

VEHICLE DETECTOR LOOPS									
LOOP NO.	LANE	CALL #	SIZE	TYPE & NO. TURNS	DELAY OR PRESENCE	INDUCTANCE CALC. ACT.	RESISTANCE CALC. ACT.	LEAKAGE TO GROUND	LOCKING MEMORY
1									
4 A									
4 B									
5									
B A									
B B									



PHOTOMETRIC DATA TO BE INCLUDED IN CONTRACT PLANS

CONTROLLER IDENTIFICATION PLAQUE



LEGEND: - BLACK (NON-REFL.) - STAMPED PRIOR TO PAINTING BACKGROUND; NATURAL ALUMINUM OR BRASS SURFACE

- NOTES:
- 1) THE PLAQUE SHALL BE MOUNTED ON ALL TRAFFIC SIGNAL CONTROLLER CABINETS; IT SHALL BE FASTENED TO THE CONTROLLER CABINET IN SUCH A MANNER AS TO BE NOT EASILY REMOVED, SUCH AS WELDED, RIVETED OR BOLTED WITH VANDAL PROOF BOLTS.
 - 2) THE LETTERS SHALL BE PUNCHED OR STAMPED, SUCH STAMPING SHALL PENETRATE AT LEAST 1/2 THE BASE MATERIAL THICKNESS.
 - 3) THE BASE MATERIAL FOR THE PLAQUE SHALL BE BRASS OR ALUMINUM WITH A MINIMUM THICKNESS OF 0.000 INCHES.

LIST OF MAJOR EQUIPMENT

EQUIPMENT ITEM - 678.15	QUANTITY
STRAIN POLES	2
POWER DROP STANCHION	1
NEW 12" TRAFFIC SIGNAL HEADS	
W/ TUNNEL VISORS, DISCONNECT	
HANGERS & MOUNTING HARDWARE	
A. ONE-WAY 3-SEC.	1
B. TWO-WAY 3-SEC.	4
C. ONE-WAY 5-SEC.	1
CONTROLLER/CABINET	1
LUMINAIRES	2

SIGNAL TIMING SEQUENCES & MISC. DETAILS

PREPARED BY ABK DATE 3/95
 CHECKED BY LEA DATE 6/95
 DESIGN SUPERVISOR DLP DATE 6/95
 PROJ. ST. ALBANS STPG SGNL(7)

SHEET 7 OF 41 SHEETS

Sheet Number:

Bridge
1976

Newbury
TH 3606

Vermont Agency of DOONE INITIALS
Transportation
PHASE 2-INTERSTATE
#122302-01
Hanger 2766 DOONE INITIALS

1976

NEWBURY

TH 3606

M

C1.3, TH 50, B16 over Halls Brook

New Prestressed Voiled Slab

1976

NEWBURY
TH 3606