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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

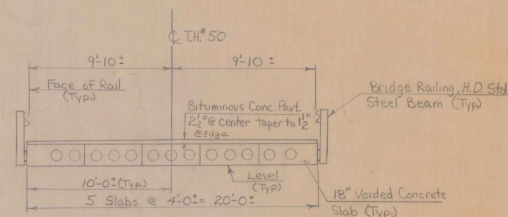
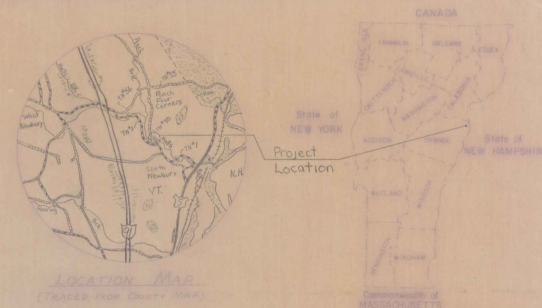
PROJECT LOCATION: Newbury TH#50 over Halls Brook, beginning at a point 40 ft North of the intersection of TH#1 and TH#50 and extending northerly 165 feet.

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.

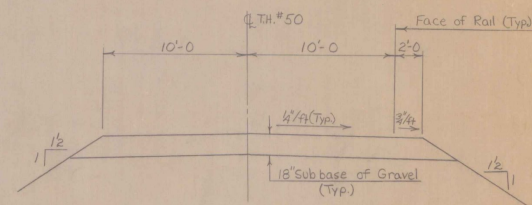
LENGTH OF STRUCTURE:	42	FEET
LENGTH OF PARTICIPATION ROADWAY:	123	FEET
LENGTH OF NEW PARTICIPATION ROADWAY:	0	FEET
LENGTH OF PROJECT:	165	FEET

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.



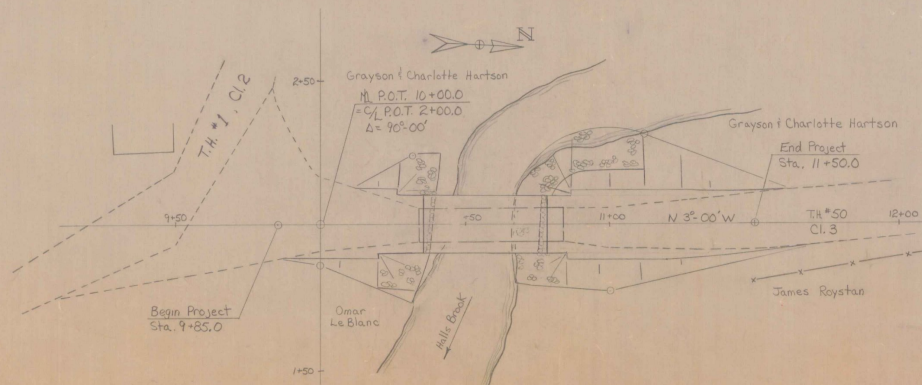
TYPICAL BRIDGE SECTION
Scale: 4"=1'-0"



TYPICAL ROADWAY SECTION
Scale: 4"=1'-0"

CONVENTIONAL SIGNS

COUNTY LINE	---
TOWN LINE	---
LIMITS OF ACCESS	---
PRIVACY OF ACCESS	---
FENCE LINE	---
STONE WALL	---
GRAVEL ROAD	---
RAILROAD	---
SURVEY LINE	---
CULVERT	---
POWER POLE	---
TELEPHONE POLE	---
TREE	---
P.A. DIST. IDENTIFICATION SIGN	---
PROPERTY LINE	---
ROAD TAKING LINE	---
SURV. RIGHTS	---
TOP OF CUT	---
TOP OF SLOPE	---



PLAN

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

Newbury TH 3606
13 SHEETS

STATE OF VERMONT
DEPARTMENT OF HIGHWAYS
BRIDGE DIVISION

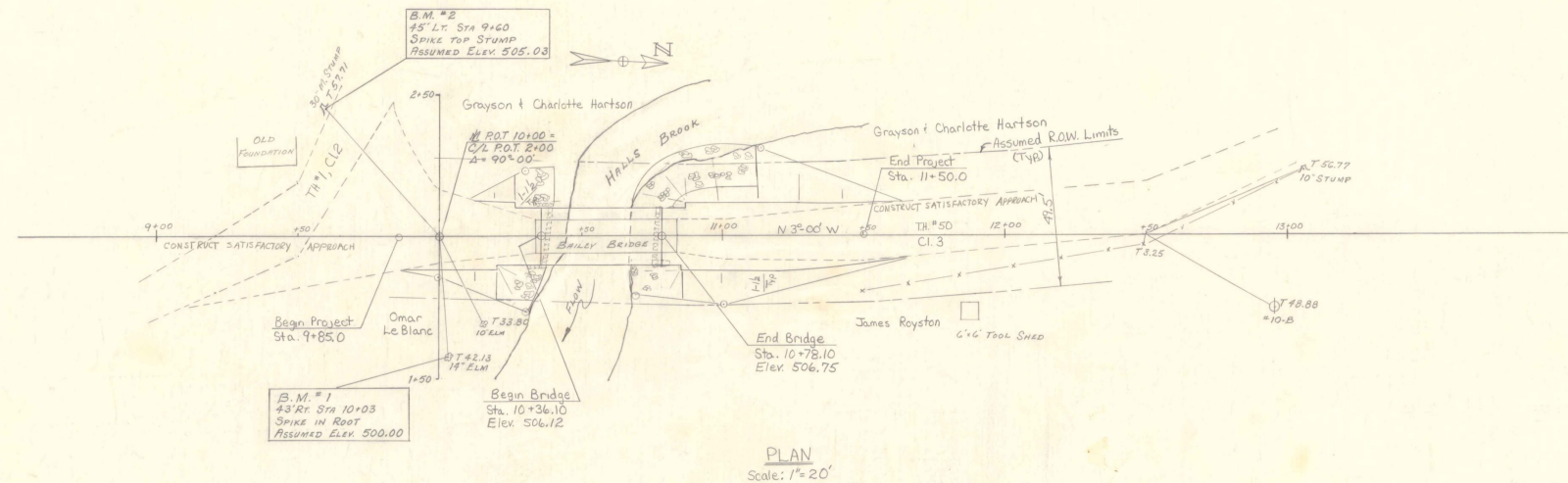
BRIDGE (S) AT STATION (S) 10157
LOCATION (S) TH 50, CLASS 3, OVER HALL'S BROOK

Prepared by: S. ACHILLES	Checked by: J. R. Guilmette
SUPERVISOR:	W. Tripp

NEW BURY
BR ____ OF ____

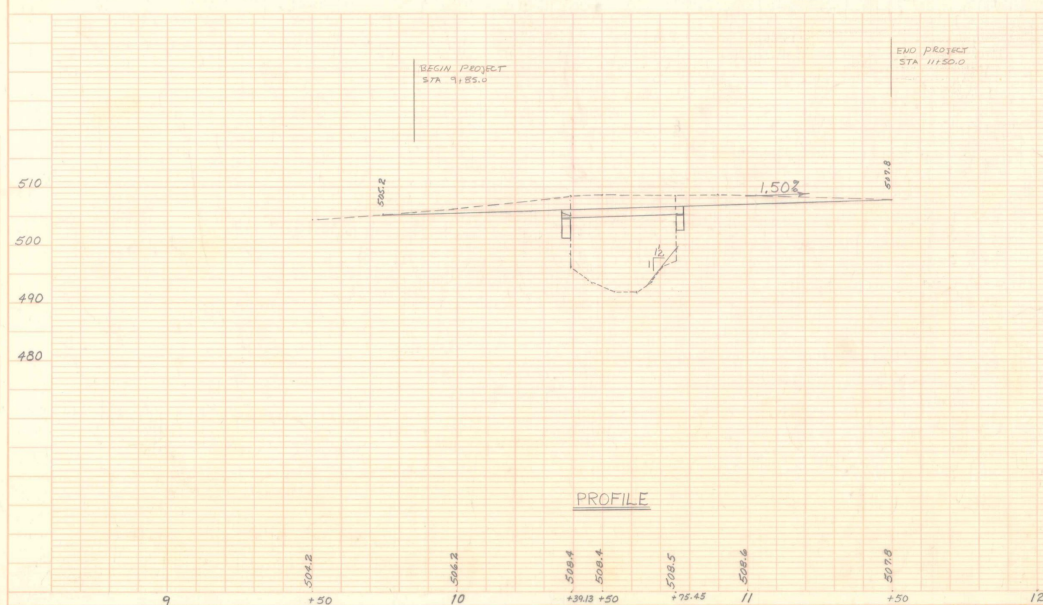
PROJECT NO. TH 3606
SHEET NO. 2 OF 13

PLAN	DATE	BY	CHECKED
	APPROVED	DESIGNED	IN CHARGE



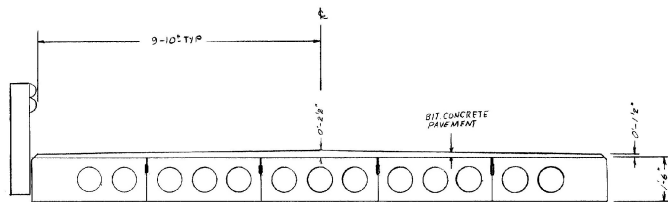
Guard Rail, Heavy Duty Steel Beam w Steel Posts, Type I
 Rt. 10+00 - 10+20.5 10+84.5 - 11+15.5
 Lt. 10+06 - 10+26 10+86 - 11+57
 Bridge Railing, Heavy Duty Steel Beam
 Rt. 10+20.5 - 10+84.5
 Lt. 10+26 - 10+86

PROFILE	DATE	BY	CHECKED
	APPROVED	DESIGNED	IN CHARGE

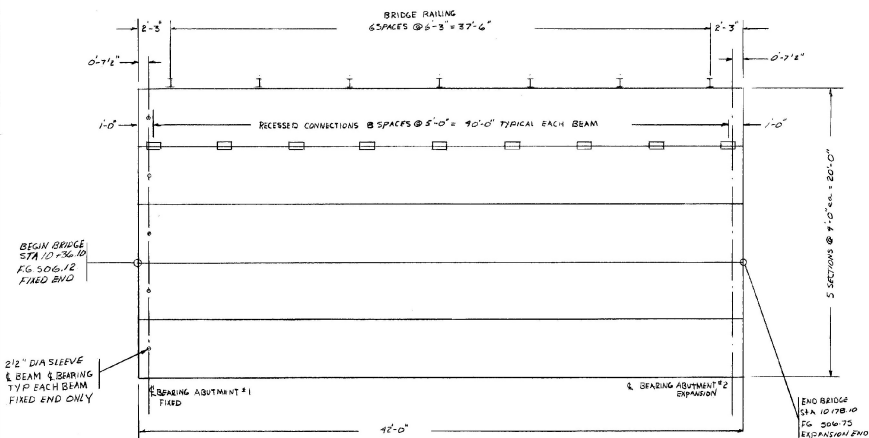


NEWBURY
 TH 3606
 TH 50, BIG OVER HALLS BROOK

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



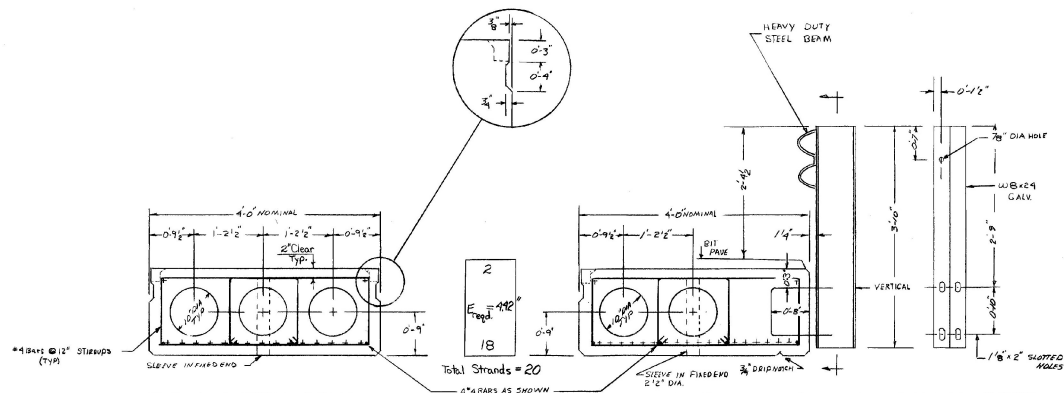
TYPICAL DECK SECTION
SCALE 1/2" = 1'



PLAN
SCALE 1/4" = 1'

PRESTRESSED BEAM DATA

MINIMUM CONCRETE STRENGTH 5000 PSI
CONCRETE STRENGTH @ STRESS 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 ITAM 510.02, PRESTRESSED CONCRETE MEMBERS.



TYPICAL INTERIOR BEAM

SCALE 1/2" = 1'

AASHTO S 12.48 SECTION

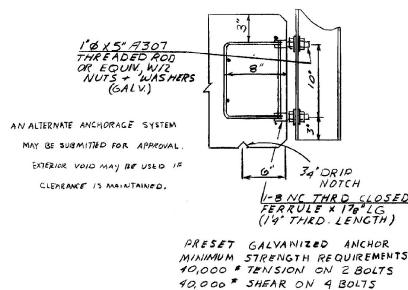
PROVIDE FOR ADEQUATE VENTING OF VOIDS

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

TYPICAL EXTERIOR BEAM WITH FASCIA MOUNTED POSTS

SCALE 1/2" = 1'

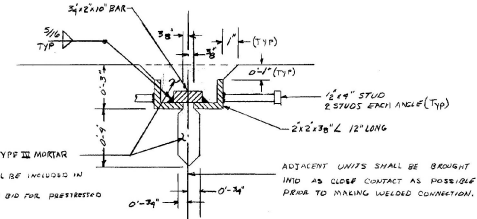
DESIGN DATA
LL+I MOMENT = 143.9 K-FT
LL+I REACTION = 16.1 KIPS
SDL MOMENT = 25.0 K-FT



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

ANCHOR FOR FASCIA MOUNTED POSTS

NTS



SECTION RECESSED CONNECTION

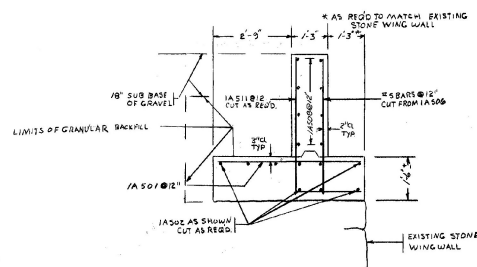
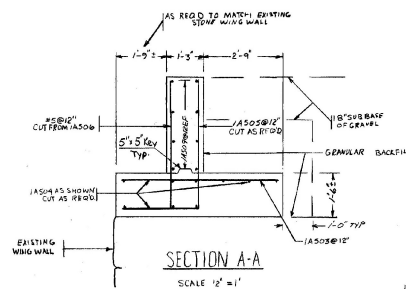
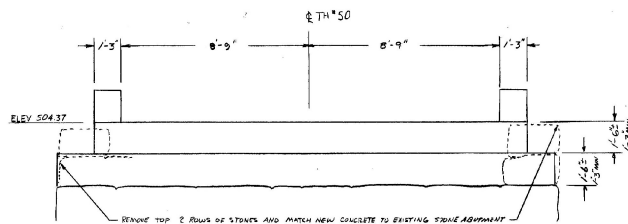
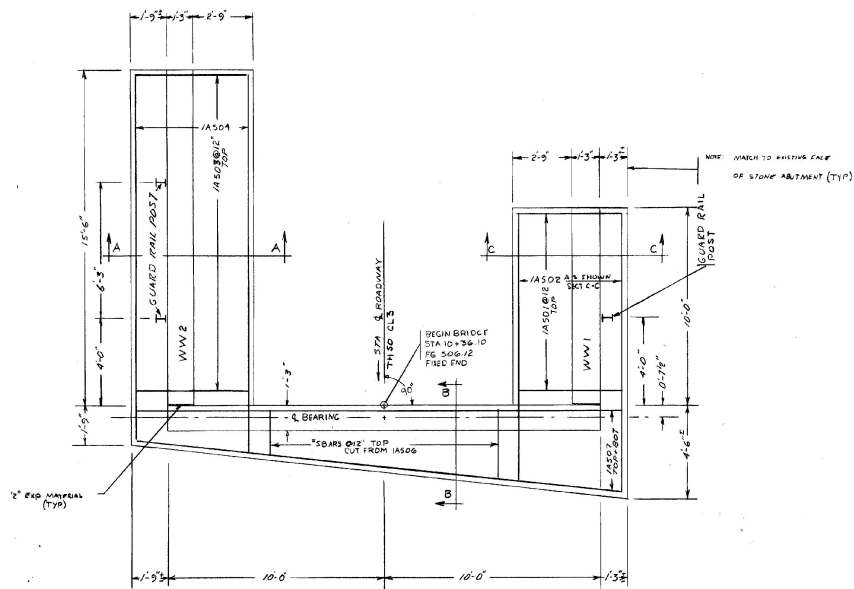
SCALE 3/4" = 1'

NOTES

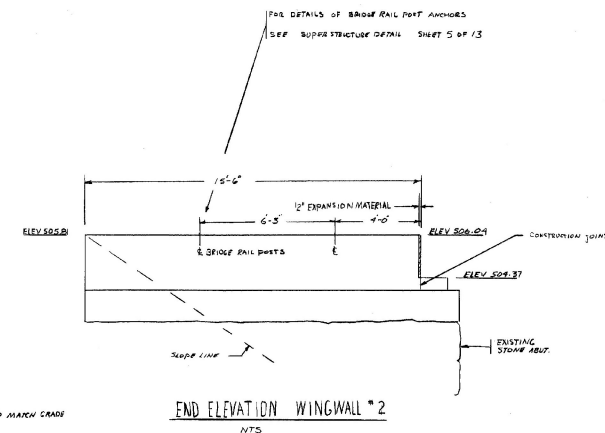
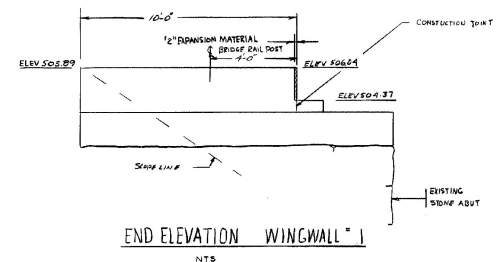
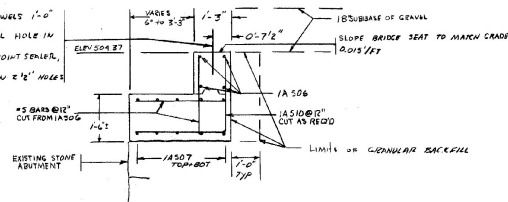
- FOR GENERAL NOTES SEE SHEET 1.
- THE STRAND SYSTEM SHOWN IS DETAIL FOR 1/2" SQUARE WIRE COATED STRANDS. RELIEVED HIGH STRENGTH STRANDS CONFORMING TO 270K SPECIFICATIONS. INITIAL TENSION 28,135 * PER STRAND. FINAL TENSION 28,280 * PER STRAND.
- ENDS OF STRANDS SHALL BE RECESSED AND GRIPPED AS PER STANDARD PRACTICE.
- THE TOP OF PRESTRESSED BEAMS SHALL BE SLOPED PARABOLIC.
- REINFORCING WIRE IN PRESTRESSED UNITS SHALL BE GRADE 40.
- 1/2" x 6" x 1/2" BRACING PADS SHALL MEET REQUIREMENTS FOR 270K 731.01 OR 731.02.
- THE COST OF PRESTRESSED JOINT FILLER, CURB, 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. 10+57
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	Bridge Design Supervisor
Project No. TH3606	W. Thopp date 12/25
Bridge Sheet No.	Sheet 5 of 13



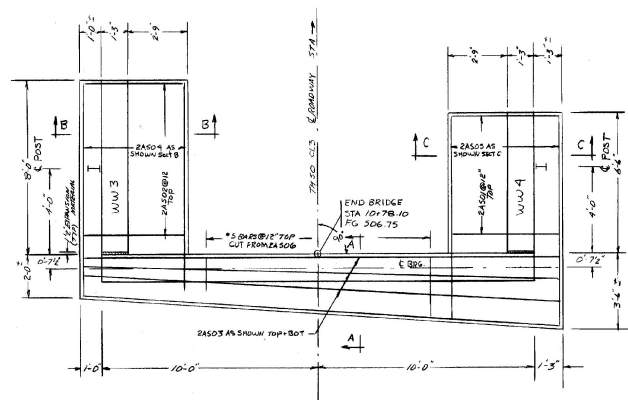
DRILL AND DEBUR 1A BOT DOWNERS 1'-0"
INTO ABUT @ 4'-0" C-C FILL HOLE IN
PRESTRESSED BEAM WITH JOINT FENDER,
HOT ROLLED (CENTER BARS IN 2'x2' HOLES
IN REPEAT SECTIONS.



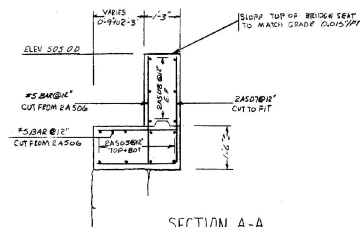
SEE SH. 7 FOR ABUT. NOTES

STATE OF VERMONT DEPARTMENT OF HIGHWAYS

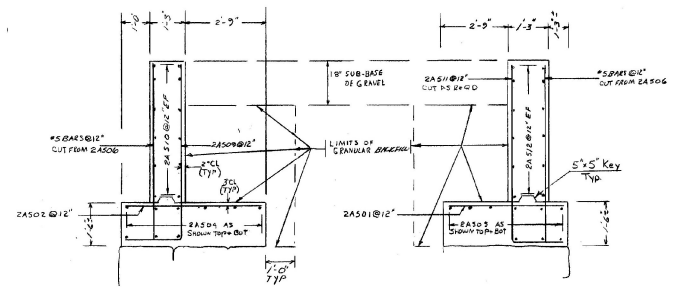
TOWN OF NEWBURY	Bridge No. 16
HIGHWAY NO. TH50 CL3	Log Sta. 10+57
TOWN HIGHWAY #50 OVER HALLS BROOK	Shut. Sta. 10+57
ABUTMENT #1 DETAILS	
Designed by S. ACHILLES	S. ACHILLES
Checked by J.R. Guilmette	Bridge Design Supervisor
date 12/75	IN TRIP
PROJECT NEWBURY	PROJECT NO. TH3606
Bridge Sheet No.	Sheet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



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

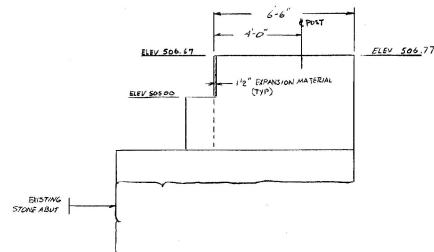


SECTION A-A
SCALE 1/2" = 1'

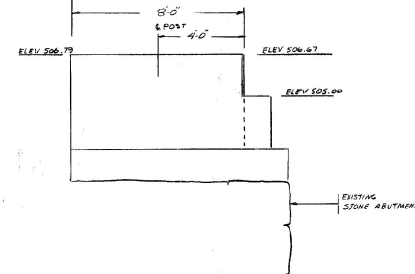


SECTION B-B
SCALE 1/2" = 1'

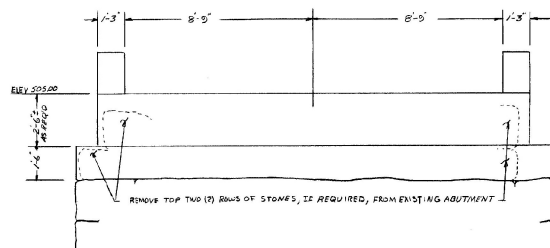
SECTION C-C
SCALE 1/2" = 1'



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 MAXIMUM SOIL BEARING OF 2 TONS/SQ FT.
3. WING WALL TO BE PLACED AFTER PRESSURELESS UNIT ARE SET IN PLACE.

4. 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.	
TOWN HIGHWAY	*50 OVER HALLS BROOK	Surv. Sta.	10+57
ABUTMENT #2 DETAILS			
Designed by	S. ACHILLE	Drawn by	S. ACHILLE
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

BR 6TYPICAL BAR BENDS

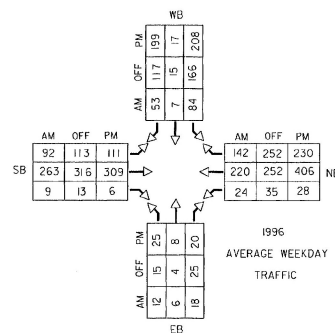
- * DENOTES ONE EXTRA BAR ADDED FOR TESTING PURPOSES

REV. NO.	MADE BY	DATE	DESCRIPTION
I	J. WOOD	8/11/75	AASHO CHANGED TO AASHTO AND GRADE 40 CHANGED TO GRADE 60.

STATE OF VERMONT DEPARTMENT OF HIGHWAYS	
TOWN OF <u>NEWBURY</u>	BRIDGE NO. <u>16</u>
HIGHWAY NO. <u>7H 50 CL3</u>	LOC. STA. <u>10+57</u>
TOWN HIGHWAY *50 OVER HALL BARR	
REINFORCING STEEL SCHEDULE	
DESIGNED BY <u>S. ACHILLES</u>	DRAWN BY <u>S. ACHILLES</u>
CHECKED BY <u>J.R. Guilmette</u> date <u>12/75</u>	BRIDGE DESIGN SUPERVISOR <u>W. Tripp</u> DATE
PROJECT <u>NEWBURY</u>	PROJECT NO. <u>TH 3606</u>
BRIDGE SHEET NO.	SHEET <u>8</u> OF <u>13</u>

RECEIVED APR 16 1976
CK'D BY JGC OK'D BY WOT
RESUBMIT APPROVED ✓
BY J. WOOD DATE 4-19-76

PHOTOMETRIC
DATA TO BE
INCLUDED IN
CONTRACT
PLANS

[illegible]

PROPERTY OF :
VT. AGENCY OF TRANS.
MAINTENANCE DIV.
 IN EMERGENCY CALL :
 DIST. TRANS. OFFICE
 828-3602
 NIGHTS & WEEKENDS : 524-5993
 INTERSECTION NO. MS-803

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 0.010 INCHES.

EQUIPMENT ITEM - 678J5	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

PREPARED BY ABK DATE 3/95
CHECKED BY LKA DATE 6/95
DESIGN SUPERVISOR DLP DATE 6/95
PROJ.
ST. ALBANS STPG SGNL(7)
SHEET 7 OF 41 SHEETS

Bridge
1976

Newbury
TH 3606

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

1976

NEWBURY

TH 3606

M

C1.3, TH 50, B16 over Halls Brook

New Prestressed Voiled Slab

1976

NEWBURY
TH 3606