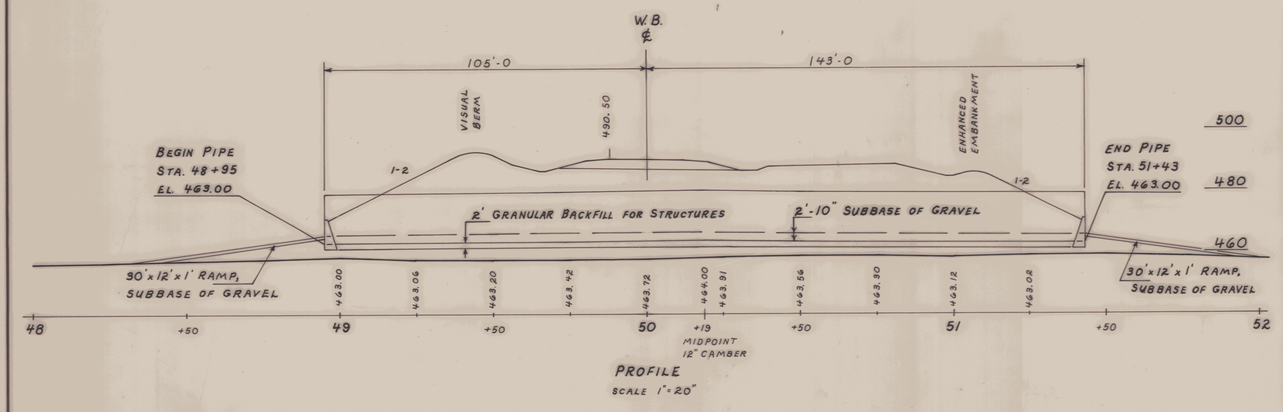
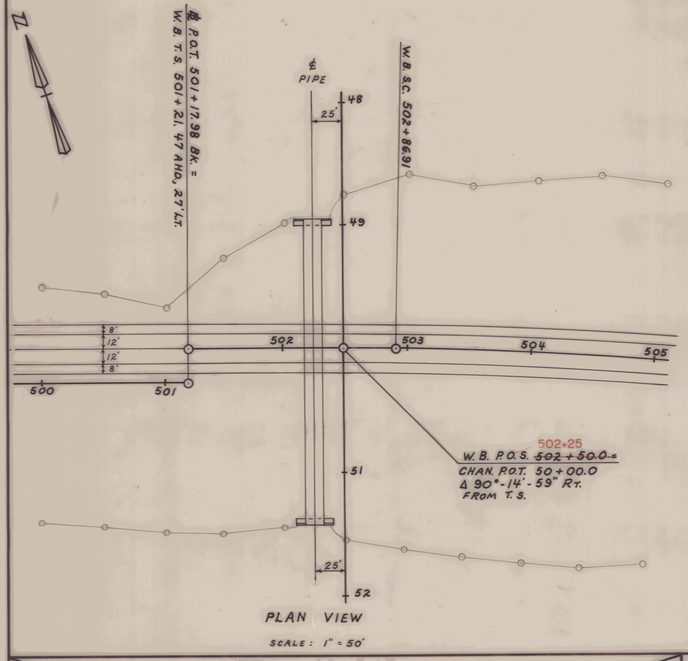


PROFILE

SCALE 1"=20'



PLAN VIEW

SCALE: 1" = 50'

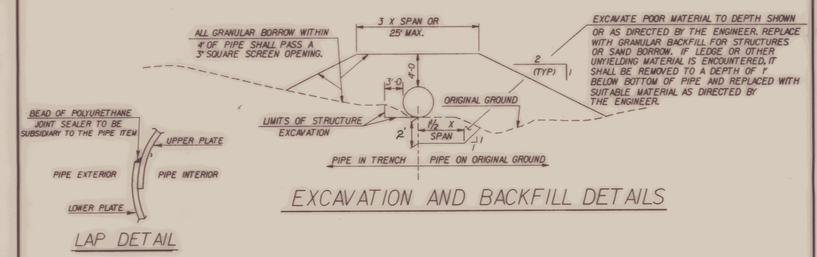
SUBBASE OF GRAVEL DETAIL

SCALE: 1" = 10'

REVISED 6-25-91 RJR

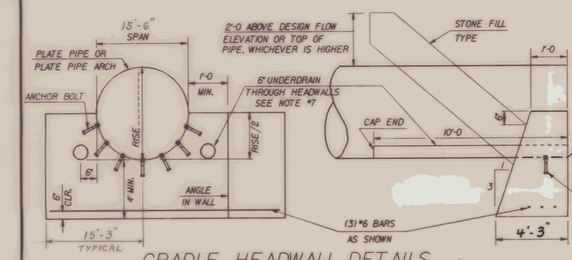
~ NOTES ~

1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 1990, AND THE LATEST A.A.S.H.T.O. STANDARD SPECIFICATIONS FOR HIGWAY BRIDGES. DESIGN IS FOR HS-25 LIVE LOAD.
2. UNLESS OTHERWISE INDICATED 4 BOLTS PER LINEAR FOOT FOR STEEL PLATES AND 5 1/3 BOLTS FOR ALUMINUM PLATES ARE REQUIRED ALONG THE LOGITUDINAL SEAMS. ALL CONNECTIONS FOR STRUCTURAL PLATE SECTIONS SHALL BE MADE WITH BOLTS MEETING ASTM A-449 (GALVANIZED AFTER FABRICATION).
3. IN LONGITUDINAL JOINTS LOCATED AT THE SPRING LINE OF PLATE PIPE ARCHES OR WITHIN 20° OF HORIZONTAL ON PIPES, THE BOLT NEAREST THE VISIBLE EDGE OF LAPPED JOINTS, AS VIEWED FROM INSIDE THE PIPE, SHALL BE PLACED IN THE VALLEY OF THE CORRUGATIONS.
4. WHEN NORMAL CONSTRUCTION OR REGULAR TRAFFIC IS MAINTAINED OVER THE PIPE THE CONTRACTOR SHALL MAINTAIN A MINIMUM COVER OF FIVE 5 FEET OF COMPACTED MATERIAL.
5. ALUMINUM PIPE WHICH IS TO BE IN CONTACT WITH CONCRETE SHALL HAVE CONTACT SURFACES THOROUGHLY COATED WITH ZINC CHROMATE OR BITUMINOUS OR ASPHALTIC PAINT.
6. PIPES SHALL BE FACTORY ELONGATED 5% (PIPE ARCHES SHALL NOT BE ELONGATED).
7. THE ENDS OF THE PIPE SHALL BE CUT SQUARE.
8. THE CONTRTACTOR SHALL INCLUDE AT THE OUTLET END, A 10 FOOT PIECE OF 6" UNDERDRAIN EACH SIDE ON SAME GRADIENT AS CULVERT CONFORMING TO SUBSECTIONS 711.01. THE COST SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE CULVERT PIPE.

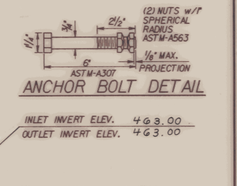


EXCAVATION AND BACKFILL DETAILS

LAP DETAIL



CRADLE HEADWALL DETAILS



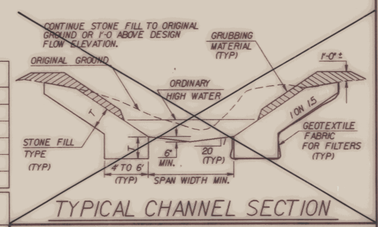
ANCHOR BOLT DETAIL

INLET INVERT ELEV. 463.00
OUTLET INVERT ELEV. 463.00

(1) ROW GALVANIZED ANCHOR BOLTS SPACED IN ALTERNATE CIRCUMFERENTIAL SEAM HOLES (18.2" C-C) TO BE FURNISHED WITH AND INCLUDED IN COST OF PIPE.

REINFORCING STEEL SCHEDULE

NO. PCS.	SIZE	LENGTH	MARK	TYPE
6	6	30'-0"	CHG01	STR.



TYPICAL CHANNEL SECTION

ESTIMATED QUANTITIES

NO.	ITEM	UNIT	TOTAL	FINAL
203.32	GRANULAR BORROW	C.Y.	11,690	3386
204.25	STRUCTURE EXCAVATION	C.Y.	350	377
204.30	GRANULAR BACKFILL FOR STRUCTURES	C.Y.	530	224
301.15	SUBBASE OF GRAVEL	C.Y.	400	
301.35C	SUBASE OF CRUSHED STONE	C.Y.		246
501.25	CONCRETE, CLASS B	C.Y.	42	55,220
507.15	REINFORCING STEEL	Lb.	280	271
511.15	CORRUGATED GALVANIZED METAL PLATE PIPE, 186" DIA. x 0.138", (100,688 Lb.) STA. 502+25	EA.	1	1

~ HYDRAULIC DATA ~

DRAINAGE AREA	DESIGN FLOW Q	DESIGN OUTLET VELOCITY
DESIGN TAILWATER DEPTH	ELEVATION	
ORDINARY HIGH WATER DEPTH		
Q 10 FLOW	HEADWATER ELEVATION	
Q 25 FLOW	HEADWATER ELEVATION	
Q 50 FLOW	HEADWATER ELEVATION	
Q 100 FLOW	HEADWATER ELEVATION	
COMMENTS		

DETAILS OF STRUCTURAL PLATE PIPE CULVERTS

	STEEL	STEEL	ALUMINUM
CORRUGATIONS	6"x2"		
SIZE OF PIPE OR PIPE ARCH	15'-6" DIA.		
WATERWAY AREA	N.A.		
PLATE THICKNESS (COATED)	0.138"		
BOLT SIZE	3/4"		
WEIGHT PER LINEAR FOOT	406#/ft.		
TOTAL WEIGHT	100.7 KIPS		

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of ESSEX	Bridge No. 14-3
Highway No. VT. RTE. 289	Log Sta. / Surv. Sta. 502+25
VT. RTE. 289 OVER SNOWMOBILE TRAIL CULVERT	
AS BUILT 6/9/94 DG	
Designed By DZG	Drawn By DZG
Checked By RJR Date 6/91	Bridge Design Supervisor Date
PROJECT WILLISTON-COLCHESTER	PROJECT NO. PB 033-1(2)
I.G.C. Info. ZHI:[30,51]PIPEFORM.DGN	PRF:PIPESHEET
Bridge Sheet No. 701	Sheet 222 of 400

Revised