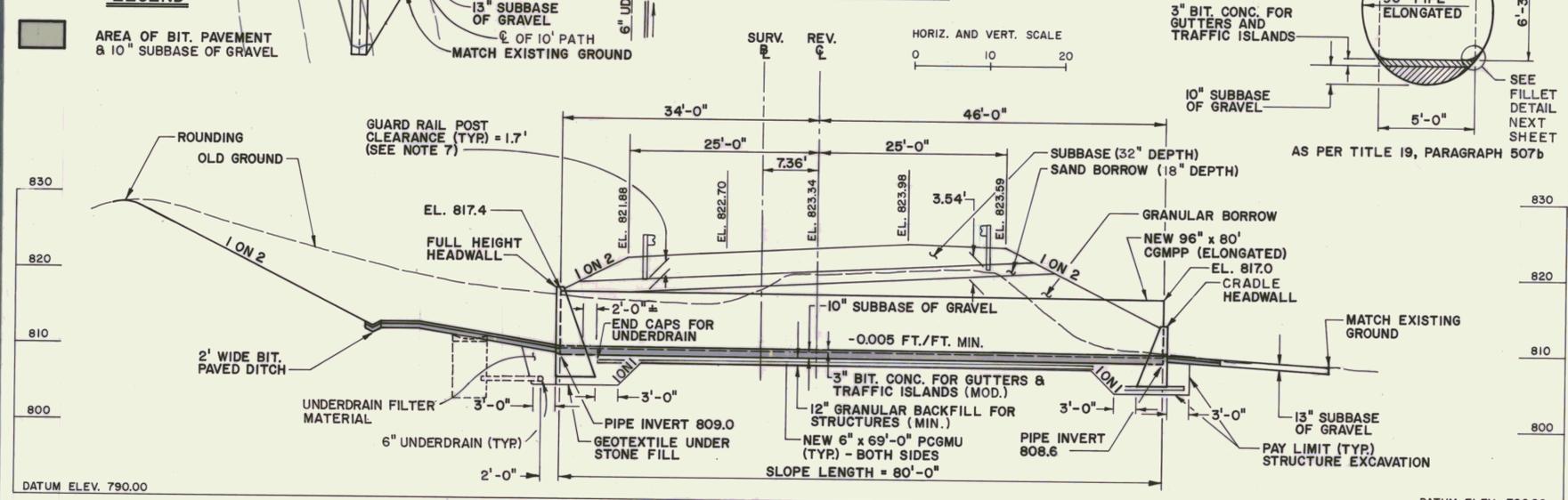
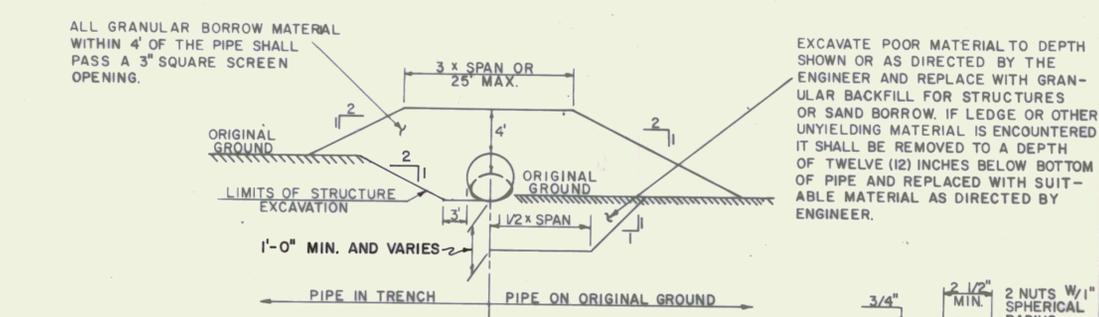


PLAN @ REV. STA. 204+75

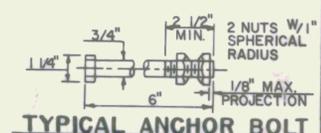


SECTION @ REV. STA. 204+75

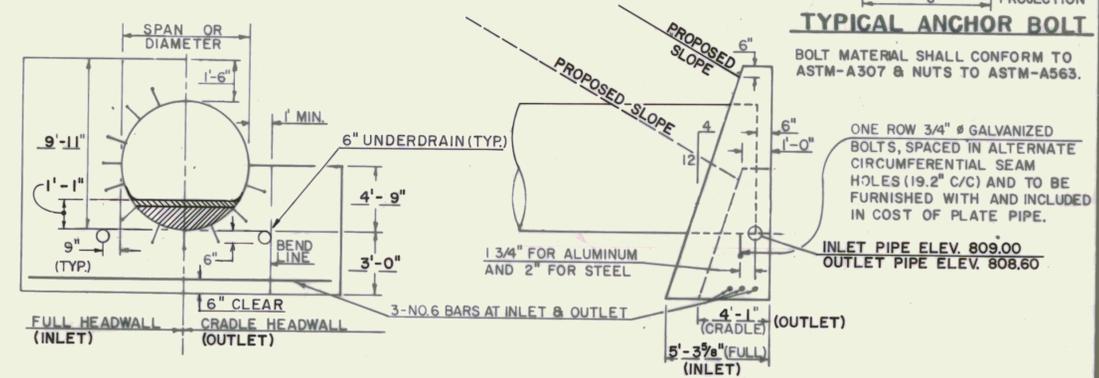
- ### NOTES
- ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE VERMONT AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 1986, AND THE LATEST A.A.S.H.T.O. STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES. DESIGN IS FOR HS-20 LIVE LOADING.
  - UNLESS OTHERWISE INDICATED FOUR (4) BOLTS PER LINEAR FOOT FOR STEEL PLATES AND FIVE AND ONE THIRD (5 1/3) BOLTS FOR ALUMINUM PLATES ARE REQUIRED ALONG THE LONGITUDINAL SEAMS. ALL CONNECTIONS FOR STRUCTURAL PLATE SECTIONS SHALL BE MADE WITH GALVANIZED ASTM A-449 BOLTS.
  - WHEN NORMAL CONSTRUCTION OR REGULAR ROADWAY TRAFFIC IS MAINTAINED OVER THE PIPE THE CONTRACTOR SHALL MAINTAIN A MINIMUM COVER OF 3 FEET OF COMPACTED MATERIAL.
  - ALUMINUM PIPE THAT IS TO BE IN CONTACT WITH CONCRETE SHALL HAVE CONTACT SURFACES THOROUGHLY COATED WITH ZINC CHROMATE, OR BITUMINOUS, OR ASPHALTIC PAINT.
  - PIPES SHALL BE FACTORY ELONGATED 5% (PIPE ARCHES SHALL NOT BE ELONGATED).
  - THE ENDS OF THE PIPE SHALL BE CUT SQUARE (NOT BEVELED TO MATCH SLOPES).
  - ATTENTION SHOULD BE PAID BY THE CONTRACTOR IN INSTALLING (DRIVING) GUARD RAIL POSTS WITHIN LIMITS OF PROPOSED CULVERT. ADEQUATE POST CLEARANCE HAS BEEN SUPPLIED FOR THE MAX. DEPTH. FOR POST DETAILS, SEE V.A.O.T. STANDARD SHEET 6-1.
  - PIPE IS TO BE BACKFILLED WITH 10" SUBBASE OF GRAVEL AND 3" OF BIT. CONCRETE FOR GUTTERS AND TRAFFIC ISLANDS.



TYPICAL BACKFILL SECTION



TYPICAL ANCHOR BOLT



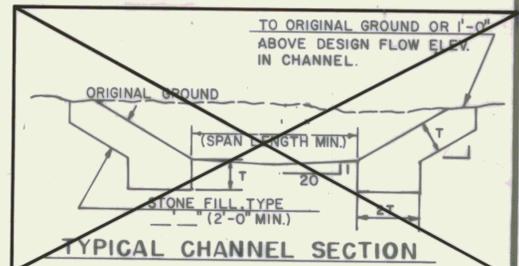
HEADWALL DETAILS

### REINFORCING STEEL SCHEDULE

NO.	PIECES	SIZE	LENGTH	MARK	TYPE
203.32	6	6	30'-4"	7 W 601	STR.

### ESTIMATED QUANTITIES

NO.	ITEM	UNIT	TOTAL	FINAL
203.32	GRANULAR BORROW (EST.)	CY.	695	
204.25	STRUCTURE EXCAVATION	CY.	1135	
204.30	GRANULAR BACKFILL FOR STRUCTURES	CY.	550	
301.15	SUBBASE OF GRAVEL	CY.	35	
501.25	CONCRETE, CLASS B	CY.	70	
507.15	REINFORCING STEEL	LBS.	280	
511.501	96" CGMPP(109)-80LF.	EA.	1	
605.10	6 INCH UNDERDRAIN	LF.	152	
613.10	STONE FILL, TYPE I	CY.	6	
616.47	BITUMINOUS CONCRETE GUTTERS & TRAFFIC ISLANDS (MOD.)	TON	20	
649.31	GEOTEXTILE UNDER STONE FILL	SY.	250	
651.26	HAYBALES FOR EROSION CONTROL	EA.	50	



TYPICAL CHANNEL SECTION

LEGEND  
 AREA OF BIT. PAVEMENT & 10" SUBBASE OF GRAVEL

### HYDRAULIC DATA

DRAINAGE AREA = \_\_\_\_\_ SQ. MI. DESIGN FLOW Q \_\_\_\_\_

Q<sub>10</sub> = \_\_\_\_\_ C.F.S. N.I.C. HEADWATER ELEVATION \_\_\_\_\_

Q<sub>25</sub> = \_\_\_\_\_ C.F.S. HEADWATER ELEVATION \_\_\_\_\_

Q<sub>50</sub> = \_\_\_\_\_ C.F.S. HEADWATER ELEVATION \_\_\_\_\_

Q<sub>100</sub> = \_\_\_\_\_ C.F.S. HEADWATER ELEVATION \_\_\_\_\_

TAILWATER DEPTH AT Q \_\_\_\_\_ FEET, ELEVATION \_\_\_\_\_

OUTLET VELOCITY \_\_\_\_\_ FEET PER SECOND

ORDINARY HIGHWATER DEPTH \_\_\_\_\_ FEET

COMMENTS:

### DETAILS OF STRUCTURAL PLATE PIPE CULVERTS

	STEEL	STEEL	ALUMINUM
CORRUGATIONS	6" x 2"		9" x 2-1/2"
SIZE OF PIPE OR PIPE ARCH	96" DIA.		96" DIA.
WATERWAY AREA (S.F.)	N/A		N/A
PLATE THICKNESS (COATED)	(0.109)		(0.125)
BOLT SIZE	3/4" DIA.		3/4" DIA.
WEIGHT PER LINEAR FOOT	165		58.5
TOTAL WEIGHT	13,200		4,520

## STATE OF VERMONT AGENCY OF TRANSPORTATION

TOWN OF **MARSHFIELD** Bridge No. \_\_\_\_\_

HIGHWAY NO. **U.S. ROUTE 2** Log Sta. \_\_\_\_\_

**CATTLE PASS - BR - 110** Surv. Sta. **REV. 204+75**

Designed by **SMB** Drawn by **CDJ**

Checked by **TWB** date \_\_\_\_\_ Bridge Design Supervisor \_\_\_\_\_

PROJECT PROJECT NO. **FECC F028 - 3(28)**

Bridge Sheet No. \_\_\_\_\_ Sheet **337** of **352**

REV. 3/24/87