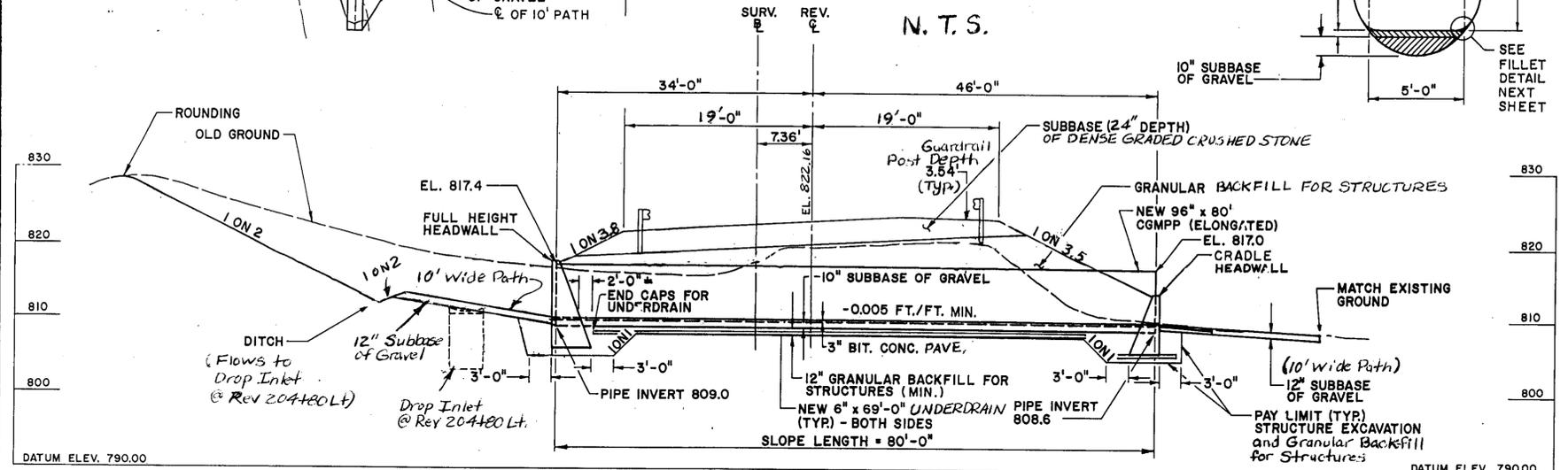


PLAN @ REV. & STA. 204+75



SECTION @ REV. & STA. 204+75

HYDRAULIC DATA

DESIGN FLOW Q = N.I.C. SQ. MI.

Q₁₀ = _____ C.F.S. Q₁₀ HEADWATER ELEVATION = _____

Q₂₅ = _____ C.F.S. Q₂₅ HEADWATER ELEVATION = _____

Q₅₀ = _____ C.F.S. Q₅₀ HEADWATER ELEVATION = _____

Q₁₀₀ = _____ C.F.S. Q₁₀₀ HEADWATER ELEVATION = _____

TAILWATER DEPTH AT Q = _____ FEET, ELEVATION _____

OUTLET VELOCITY @ Q = _____ FEET PER SECOND

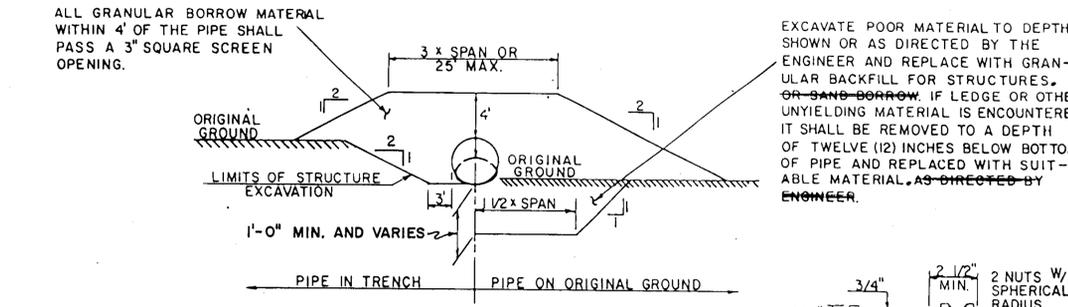
ORDINARY HIGHWATER DEPTH = _____ FEET

COMMENTS:

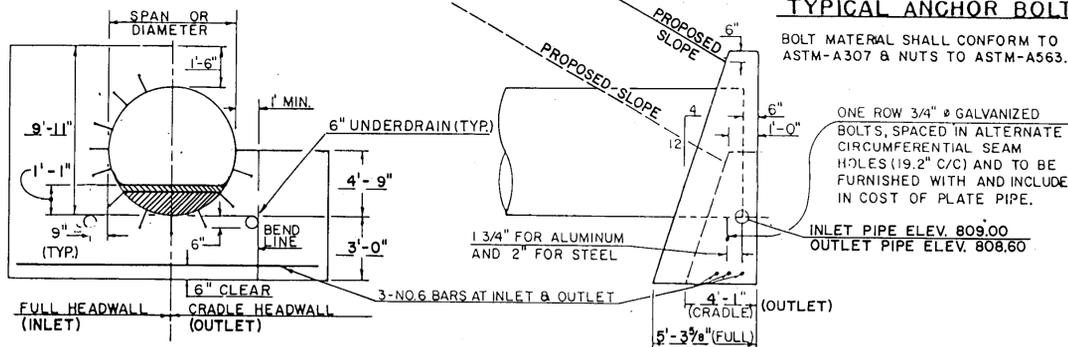
DETAILS OF STRUCTURAL PLATE PIPE CULVERTS

	STEEL	STEEL	ALUMINUM
CORRUGATIONS	6" x 2"		3" x 2 1/2"
SIZE OF PIPE OR PIPE ARCH	96" DIA.		36" DIA.
WATERWAY AREA (S.F.)	N/A		N/A
PLATE THICKNESS (COATED)	(0.109)		(0.105)
BOLT SIZE	3/4" DIA.		7/8" DIA.
WEIGHT PER LINEAR FOOT	165		58.5
TOTAL WEIGHT	13,200		4,520

- NOTES**
- ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE VERMONT AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 1990, 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 G-1.
 - PIPE IS TO BE BACKFILLED WITH 10" SUBBASE OF GRAVEL AND 3" OF BIT. CONCRETE PAVEMENT.



TYPICAL BACKFILL SECTION



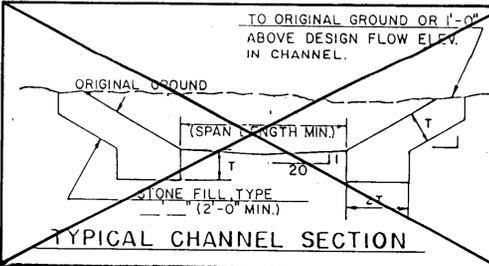
HEADWALL DETAILS

REINFORCING STEEL SCHEDULE

NO.	PIECES	SIZE	LENGTH	MARK	TYPE
203.30	6	6	30'-4"	7 W 601	STR.

ESTIMATED QUANTITIES

NO.	ITEM	UNIT	TOTAL	FINAL
203.30	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" COMPT. (0.9) BOLF.	EA.	1	
605.10	6 INCH UNDERDRAIN	L.F.	152	
615.10	STONE FILL, TYPE I	CY.	6	
616.47	BITUMINOUS CONCRETE SURFERS & TRAF. ISLANDS (MOD.)	TON	20	
549.31	GEOTEXTILE UNDER STONE FILL	SQ.	250	
651.20	HAYBALES FOR EROSION CONTROL	EA.	50	



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

PROJECT 3.16.2007 Cattle Pass P.I. Sheet 1 of 2 Bridge Design Supervisor

PROJECT NO. FEGC F028 - 3(28) date _____

Bridge Sheet No. 9 of 22