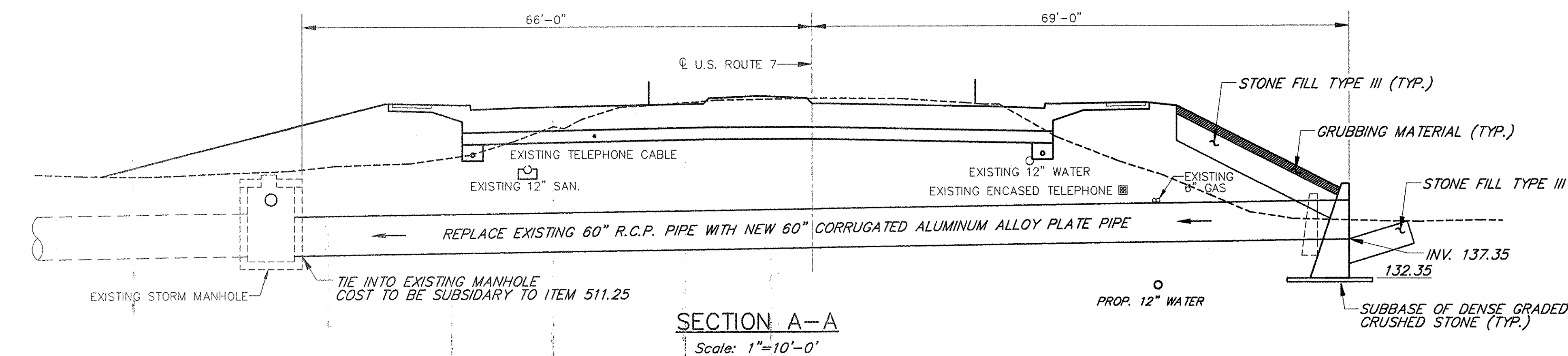


PROPOSED HIGHWAY PLAN AT UNNAMED BROOK  
Scale: 1"=20'-0"



SECTION A-A  
Scale: 1"=10'-0"

~ HYDRAULIC DATA ~

DRAINAGE AREA 404 Acres 362.0 cfs DESIGN OUTLET VELOCITY 11.50 ft/sec	
ORDINARY HIGH WATER DEPTH - DESIGN FLOW Q	
Q 10 FLOW 259.6 cfs	Q 10 HEADWATER ELEVATION 146.95
Q 25 FLOW -	Q 25 HEADWATER ELEVATION -
Q 50 FLOW 362.0 cfs	Q 50 HEADWATER ELEVATION 154.40
Q 100 FLOW -	Q 100 HEADWATER ELEVATION -
COMMENTS -	

DETAILS OF PIPE CULVERT

CORRUGATIONS	9" x 2 1/2"
SIZE OF PIPE	60" Dia.
WATERWAY AREA	20 SF
PLATE THICKNESS (COATED)	0.125"
BOLT SIZE	3/4"
WEIGHT PER LINEAR FOOT	46 LBS/LF
TOTAL WEIGHT	6,210 LBS

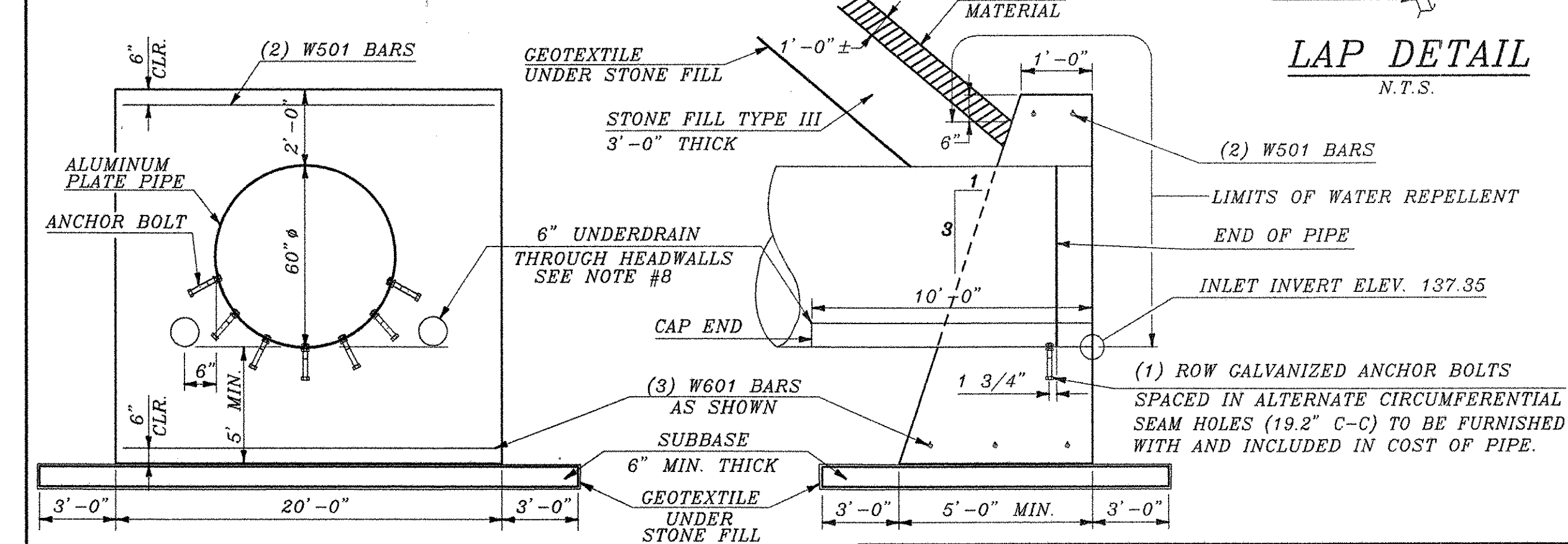
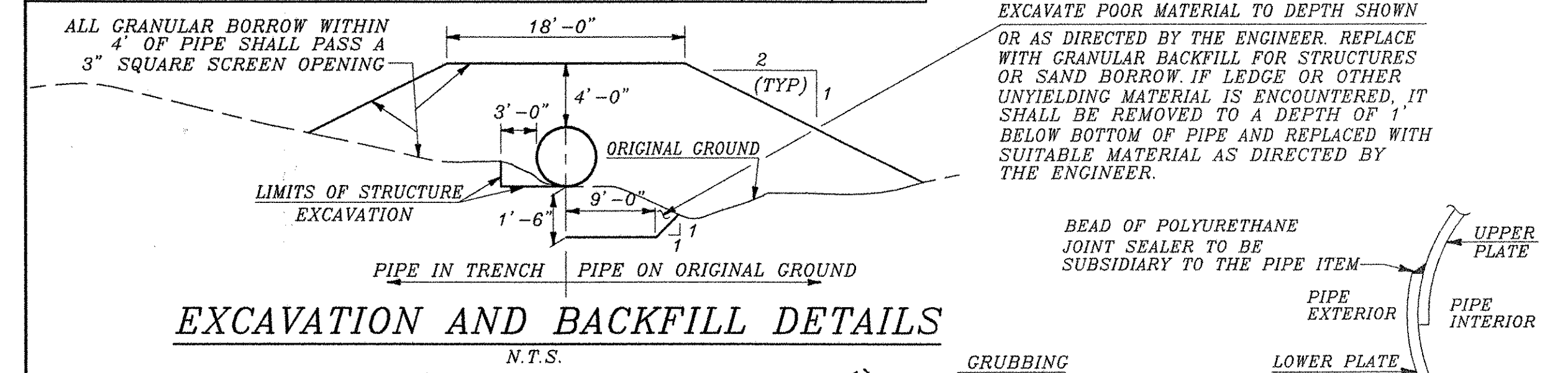
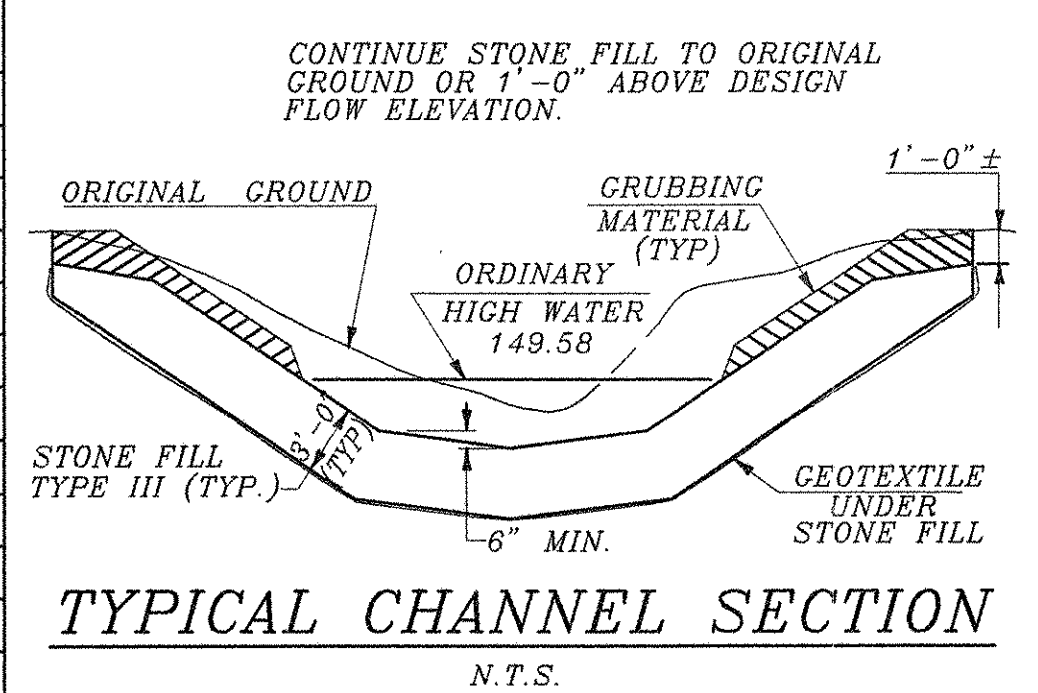
REINFORCING STEEL SCHEDULE

NO.	PCS.	SIZE	LENGTH	MARK	TYPE
2	5	19-6	W501	STR	
3	6	19-6	W601	STR	

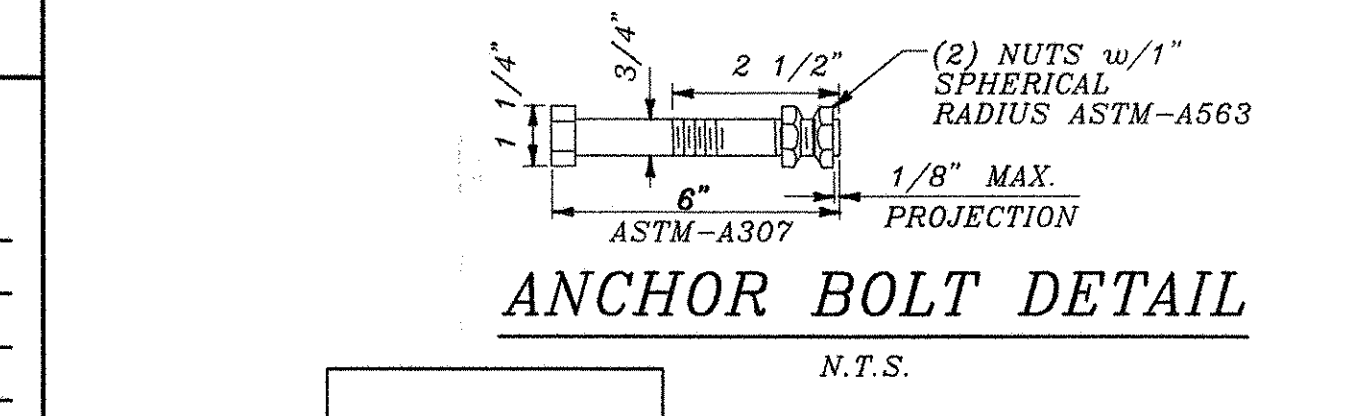
- ~ NOTES ~
- ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2001, AND THE LATEST A. A. S. H. T. O. STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES. DESIGN IS FOR HS-25 LIVE LOAD.
  - UNLESS OTHERWISE INDICATED, 5 1/3 BOLTS PER LINEAR FOOT ARE REQUIRED ALONG THE LONGITUDINAL SEAMS. ALL CONNECTIONS FOR STRUCTURAL PLATE SECTIONS SHALL BE MADE WITH BOLTS MEETING ASTM A-449 (GALVANIZED AFTER FABRICATION).
  - IN LONGITUDINAL JOINTS LOCATED WITHIN 20 DEGREES OF HORIZONTAL ON PIPE, THE BOLT NEAREST THE VISIBLE EDGE OF LAPPED JOINTS, AS VIEWED FROM INSIDE THE PIPE, SHALL BE PLACED IN THE VALLEY OF THE CORRUGATIONS.
  - WHEN NORMAL CONSTRUCTION OR REGULAR TRAFFIC IS MAINTAINED OVER THE PIPE, THE CONTRACTOR SHALL MAINTAIN A MINIMUM COVER OF THREE (3) FEET OF COMPACTED MATERIAL.
  - ALUMINUM PIPE WHICH 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% VERTICALLY.
  - THE ENDS OF THE PIPE SHALL BE CUT SQUARE.
  - THE CONTRACTOR 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.
  - ALL WORK MUST BE DONE IN THE DRY AND THE ENTIRE PIPE SHALL BE INSTALLED BEFORE THE STREAM IS ALLOWED TO FLOW THROUGH IT. A TEMPORARY STREAM DIVERSION SYSTEM IS NECESSARY TO CARRY UNNAMED BROOK DURING CONSTRUCTION. THE CONTRACTOR SHALL PREPARE AND SUBMIT A TEMPORARY STREAM DIVERSION PLAN WHICH DEPICTS MEASURES PROPOSED TO PREVENT EROSION AND SEDIMENTATION AND MAINTAIN STREAM WATER QUALITY. AFTER WORK IS COMPLETED, ANY TEMPORARY PIPES LOCATED OUTSIDE THE LIMITS OF THE NEW CULVERT SHALL EITHER BE REMOVED OR FILLED WITH FLOWABLE FILL AND CAPPED. THE COST OF STREAM DIVERSION, INCLUDING ANY TEMPORARY PIPES OR DEWATERING, SHALL BE SUBSIDIARY TO ALL OTHER ITEMS.

ESTIMATED QUANTITIES

NO.	ITEM	UNIT	TOTAL	FINAL
203.20	MUCK EXCAVATION	CY	163	
203.27	UNCLASSIFIED CHANNEL EXCAVATION	CY	41	
203.32	GRANULAR BORROW	CY	400	
204.25	STRUCTURE EXCAVATION	CY	810	
204.30	GRANULAR BACKFILL FOR STRUCTURES	CY	163	
301.35	SUBBASE OF DENSE GRADED CRUSHED STONE	CY	6	
501.25	CONCRETE, CLASS B	CY	25	
507.15	REINFORCING STEEL	LB	130	
514.10	WATER REPELLENT	GAL	2	
511.25	C. A. A. P. P. [60" Ø, 135', 0.125" GAGE]	EA	1	
613.12	STONE FILL, TYPE III	CY	105	
649.31	GEOTEXTILE UNDER STONE FILL	SY	240	
651.40	GRUBBING MATERIAL	SY	110	



NOTE: PIPE CORRUGATIONS NOT SHOWN.  
FULL HEADWALL DETAILS  
N.T.S.



ANCHOR BOLT DETAIL  
N.T.S.

**ERDMAN ANTHONY**  
CONSULTING ENGINEERS  
Rochester, New York    Camp Hill, Pennsylvania  
Boston, Massachusetts

STATE OF VERMONT  
AGENCY OF TRANSPORTATION

City Of SOUTH BURLINGTON	Bridge No.
Highway No. U.S. ROUTE 7	Log Sta.
	Surv. Sta.
U.S. ROUTE 7 OVER UNNAMED BROOK PLAN, ELEVATION, AND DETAILS	
Designed By L.Janik	Drawn By H.Ridge
Checked By Date	Bridge Design Supervisor
W.Windus Jan. 2003	W.Windus Date Jan. 2003
PROJECT SHELBURNE-BURLINGTON	PROJECT NO. F-EGC-019-4(28)
I.G.C. Info.	
Bridge Sheet No. CPC1	Sheet 241 of 283