

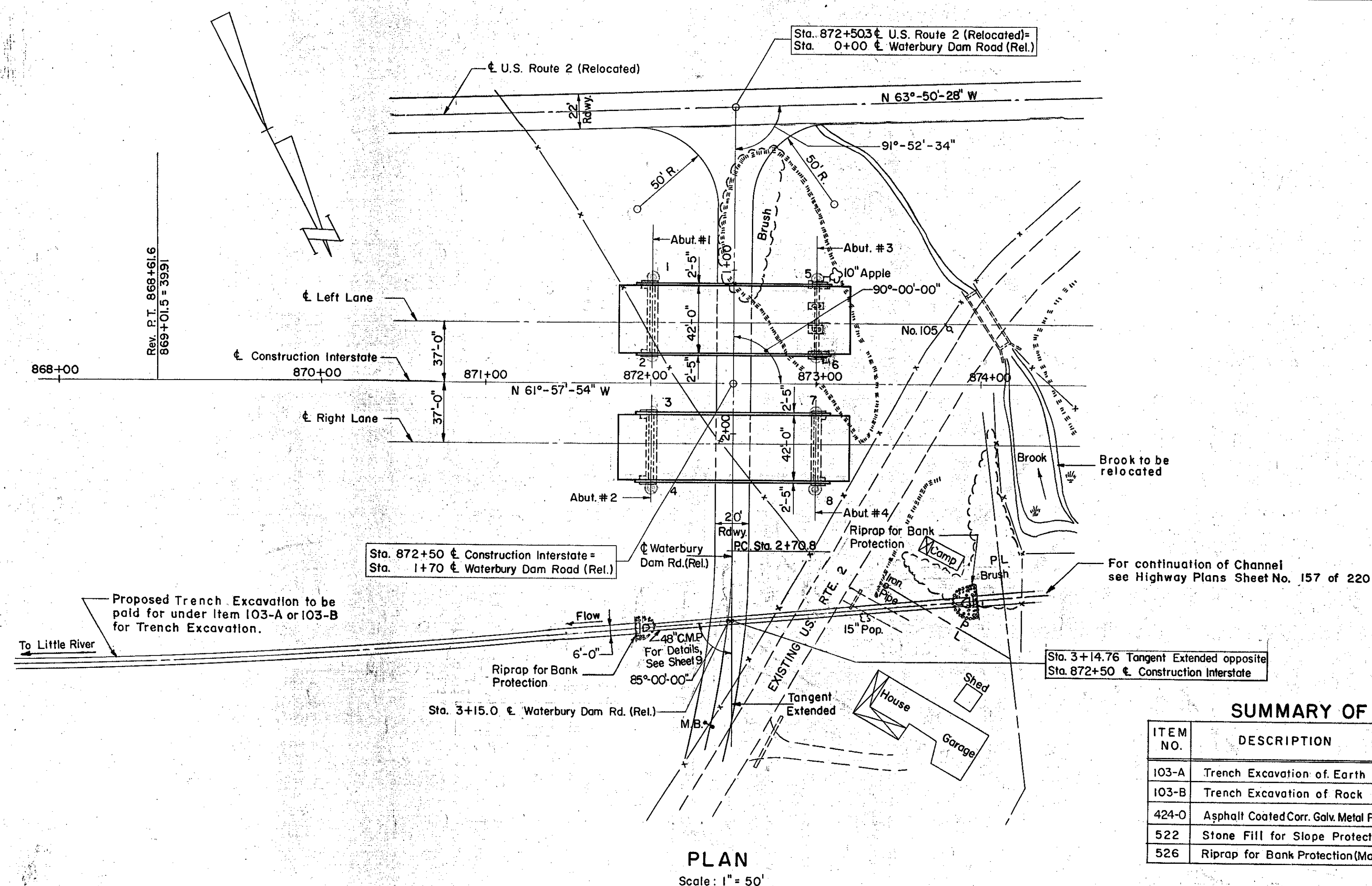
HIGHWAY NO.	I-89	NAME OF HIGHWAY	Interstate	B. P. R. DIV. NO.	STATE	PROJECT NO.	I-89-2(7)	SHEET NO.	237	TOTAL SHEETS	307
STRUCTURE NO.	17	COUNTY	Washington	TOWN	Waterbury						
PROJECT NO.	I-89-2(7)	LOCATION	Sta. 872+50								

- ### EXISTING STRUCTURE
1. RATED LOADING OF EXISTING STRUCTURE _____
 2. TYPE OF EXISTING STRUCTURE Under Existing Route 2 6.3 x 5' Concrete Box Bridge
 3. UNDERCLEARANCE ELEVATION OF EXISTING STRUCTURE _____
 4. WHAT DISPOSITION SHOULD BE MADE OF EXISTING STRUCTURE _____ COST OF REMOVAL _____
 5. SHOULD EXISTING STRUCTURE BE USED TO MAINTAIN TRAFFIC DURING CONSTRUCTION OF NEW STRUCTURE _____
 6. SHOULD NEW TEMPORARY STRUCTURE BE BUILT _____
 7. ORDINARY HIGH WATER SURFACE ELEV. AT EXISTING STRUCTURE 428.0 WATERWAY TO ORDINARY H.W. _____
 8. EXTREME HIGH WATER AT EXISTING STRUCTURE 429.0 WATERWAY TO EXTREME H.W. _____
 9. SPAN OF EXISTING BRIDGE UPSTREAM 6.3 WATERWAY TO EXTREME H.W. _____
 10. SPAN OF EXISTING BRIDGE DOWNSTREAM _____ WATERWAY TO EXTREME H.W. _____
 11. TYPE OF FOUNDATION UNDER EXISTING ABUTMENTS _____
 12. DOES ALL WATER AT FLOOD ELEVATION PASS THROUGH EXISTING STRUCTURE _____
 13. IF NOT AT WHAT ELEVATION IS RELIEF AFFORDED _____
 14. ADDITIONAL WATERWAY AREA PROVIDED _____
- ### NEW STRUCTURE
1. RECOMMENDED TYPE OF STRUCTURE 1 Span Composite Steel Stringer Bridge & 1-48" C.M.P.
 2. RECOMMENDED CLEAR SPAN OR SPANS 97' (Both Lanes)
MEASURED PARALLEL TO NEW HIGHWAY _____
MEASURED AT RIGHT ANGLES TO STREAM _____
 3. ARE THERE OBJECTIONS TO A PIER IN THE STREAM ANSWER YES OR NO _____
 4. ORDINARY HIGH WATER ELEVATION AT NEW STRUCTURE 415.0
 5. EXTREME HIGH WATER ELEVATION AT NEW STRUCTURE 429.0 SOURCE OF INFORMATION _____
 6. IS ALL WATER INTENDED TO PASS THROUGH NEW STRUCTURE _____
 7. DOES STREAM REACH ITS MAXIMUM HIGHWATER ELEVATION RAPIDLY Yes IS ORDINARY RISE RAPID Yes
 8. LOW WATER ELEVATION AT NEW STRUCTURE 414.0
 9. DRAINAGE AREA IN ACRES ABOVE STRUCTURE 77 CHARACTER OF TERRAIN Mountainous
 10. IS STREAM EVER DRY Yes
 11. VELOCITY OF STREAM AT HIGH WATER STAGE Varies 7 to 18 f.p.s. ESTIMATED DISCHARGE _____
 12. AREA FULL OPENING _____ AREA BELOW ORDINARY H.W. _____
 13. CHARACTER OF SCOUR _____ DRIFT _____ ICE _____
 14. ESTIMATED DRAINAGE AREA ABOVE NATURAL OR ARTIFICIAL STORAGE _____
 15. VERTICAL CLEARANCE ABOVE FLOOD ELEVATION _____
 16. ARE SIDEWALKS REQUIRED IF SO ON WHAT SIDE _____ BOTH SIDES _____
 17. RECOMMENDED TYPE OF PAVEMENT Bituminous Concrete Pavement
 18. TRAFFIC TO BE MAINTAINED UNDER ITEM NO. _____ ONE OR TWO WAYS _____ PROBABLE COST _____
 19. PROBABLE COST OF CLEARING AND GRUBBING STREAM CHANNEL AT STRUCTURE SITE _____
 20. SHOULD PROVISIONS BE MADE FOR PUBLIC UTILITIES _____
 21. ESTIMATED ALLOWABLE LOAD ON FOUNDATIONS _____ SHOULD PILES BE USED _____ EST. LGTH. _____

FOUNDATION INFORMATION

OBTAINED FOR DESIGN PURPOSES ONLY, AND THE STATE ASSUMES NO RESPONSIBILITY WHATSOEVER FOR THE SUFFICIENCY OR ACCURACY OF THE INFORMATION SHOWN. BOULDERS MAY BE ENCOUNTERED AT ANY PIER OR ABUTMENT LOCATION. FOR BORING LOGS, SEE SHEET NO. 2.

- ### GENERAL NOTES
- DESIGN SPECIFICATIONS: AASHTO 1957 Edition and as modified by Vermont Dept. of Highways
- LIVE LOAD: H20-S16-44 and Military Loading
- DESIGN STRESSES:
Structural Steel $f_s = 18,000$ p.s.i.
Reinforcing Steel $f_s = 20,000$ p.s.i.
Concrete $f_c = 1,200$ p.s.i. $f_c = 3,000$ p.s.i.
- CLEARANCE:
Horizontal: as shown on drawings.
Vertical: 15'-5"
- SUPERSTRUCTURE:
Separate structure for each lane.
42" Roadway, 1'-6" Safety Walks, as per SCB-42-56
1 Simple span, rolled beams, composite design, as per SCB-42-56 (97' Span)
Aluminum bridge railing, or galvanized bridge railing, and granite bridge curb as per SB-56-57 (1 & 2).
- BEARING AND DIAPHRAGM CONNECTIONS AS PER SB-20-56.
Approach slabs as per SB-AS-Square-57.
- SUBSTRUCTURE:
Stub abutments
- FOUNDATIONS:
Stub abutments # 1, 2 & 4 Steel Piles.
Open abutment # 3 Footing to ledge.

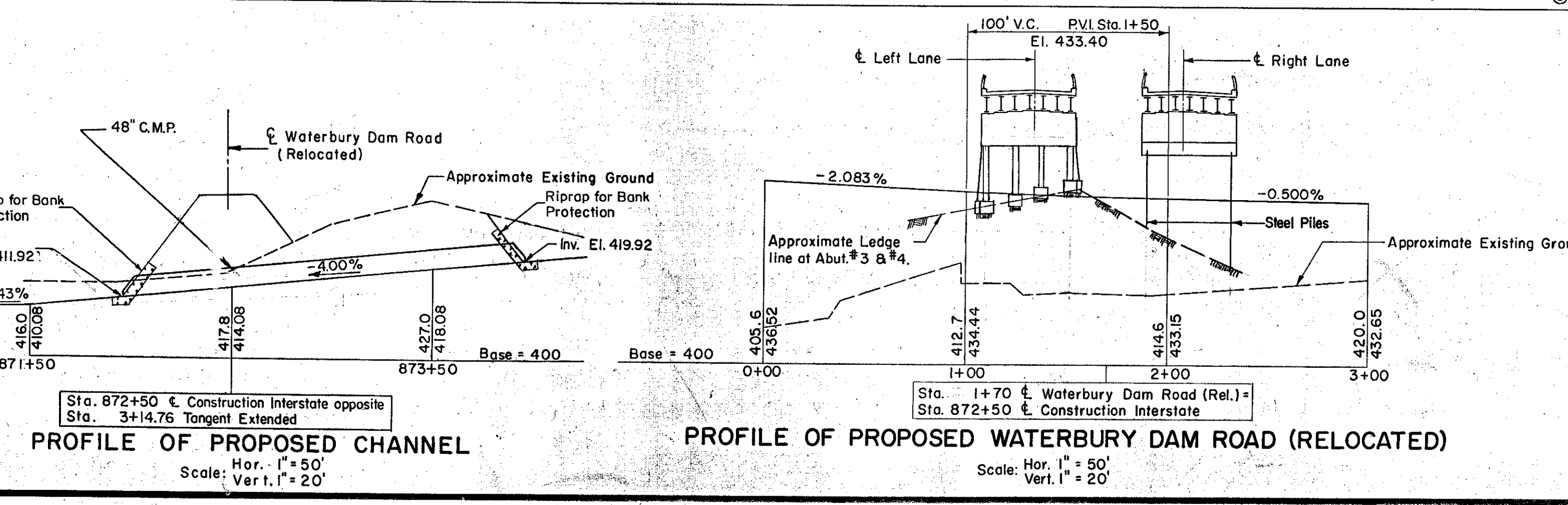


SUMMARY OF QUANTITIES FOR PIPE

ITEM NO.	DESCRIPTION	UNIT	NET	OVER-RUN	TOTAL	FINAL
103-A	Trench Excavation of Earth	C.Y.	1910	190	2100	
103-B	Trench Excavation of Rock	C.Y.	73	7	80	
424-O	Asphalt Coated Corr. Galv. Metal Pipe	L.F.	200	-	200	
522	Stone Fill for Slope Protection	C.Y.	20	3	23	
526	Riprap for Bank Protection (Mod.)	C.Y.	46	6	52	

SUMMARY OF QUANTITIES FOR BRIDGE

ITEM NO.	DESCRIPTION	UNIT	NET	OVER-RUN	TOTAL	FINAL
102	Borrow	C.Y.	10,500	-1,050	9,450	10,500
107	Structure Excavation	C.Y.	113	11	124	131
204	Sub-base of Crushed Rock (Mod.)	C.Y.	264	40	304	240
222	Gravel Backfill	C.Y.	130	35	165	130
361-B	Bit. Conc. Pavement	TONS	146	-	146	181
401-B	Concrete Class B (Mod.)	C.Y.	705	40	745	845
402	Reinforcing Steel	LBS.	101,280	-	101,280	101,280
403-c	Spiral Reinforcement (5,100 LBS)	L.S.	1	-	1	1
404-A	Structural Steel	LBS.	228,484	10,590	239,074	526,310
407	Asphaltic-Asbestos Coating	S.Y.	20	-	20	40
504	Steel Piling	L.F.	3000	-	3000	3,308
556-C	Granite Bridge Curb (Type 1)	L.F.	500	-	500	500
572	Bridge Railing (Sup. Apr. 11-3-60)	L.F.	378	-	378	378
501	Furnishing Equipment for Driving Piles	Required	-	-	-	1/3 L.S.
503	Splices for Steel Piling	Each	14	-	14	-
310	For Emulsion for Bridge Floors (Sup. Apr. 6-1-61)	TONS	-	-	-	25.4
372	Joint Sealer, Hot Poured Elastic Type (Sup. Apr. 6-22-61)	TONS	-	-	-	108
	Epoxy Resin Sealer for Concrete Joints (Sup. Apr. 8-22-61 Non-Cov.)	TONS	-	-	-	306



LIST OF SHEETS

IM 089-2(26)
This sheet for information only

SHEET NO.	DESCRIPTION
101	GENERAL PLAN
102	BORINGS
103	PLAN AND ELEVATION
104	ABUTMENTS, NO. 1, 2, & 4
105	ABUTMENT, NO. 3
106	APPROACH SLABS
107	STRUCTURAL STEEL PLAN & DETAILS
108	REINFORCING SCHEDULE
109	48" PIPE PLAN, ELEV. & LONG. SEC.
30	HIGHWAY'S PLANS & PROFILES
154	INTERSTATE CROSS SECTIONS
205-206	WATERBURY DAM RD. CROSS SEC.
71-72	SCB-42-56 (1 & 2)
73-74	SB-56-57 (1 & 2)
77	SB-20-56
79	SB-22-58
75	SB-AS-Square-57

GENERAL PLAN

STATE OF VERMONT

DEPARTMENT OF HIGHWAYS

INTERSTATE PROJECT in the town of

WATERBURY

INTERSTATE OVER Sta. 872+50

WATERBURY DAM RD. (REL.) Sta. 1+70

APPROVED BY *H. A. Anderson* DATE 12-16-58

THE CLARKESON ENGINEERING CO., INC.

BOSTON MASSACHUSETTS
CONSULTING ENGINEERS

SURVEYED BY A.L. CHECKED BY G.B. B.S. SCALE AS NOTED
DRAWN BY A.L. IN CHARGE J.V.B. DATE 6-19-58

PROJECT NO. I-89-2(7) SHEET 237 OF 307