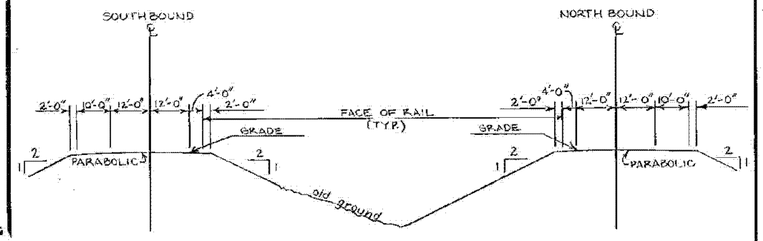
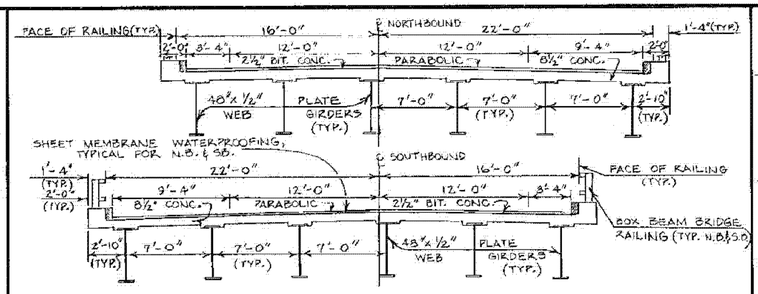
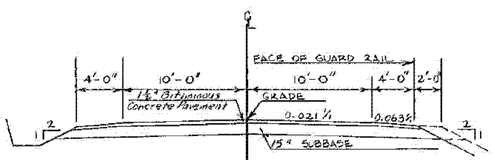


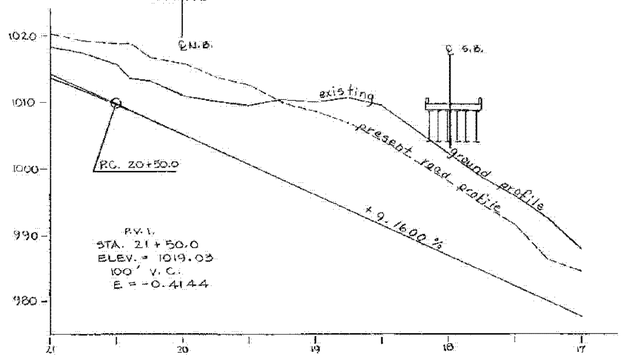
NEW HIGHWAY SECTION — BRIDGE APPROACHES
SCALE: 1" = 20'-0"



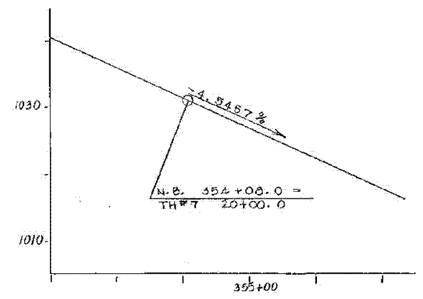
BRIDGE TYPICAL SECTION
SCALE: 3/16" = 1'-0"



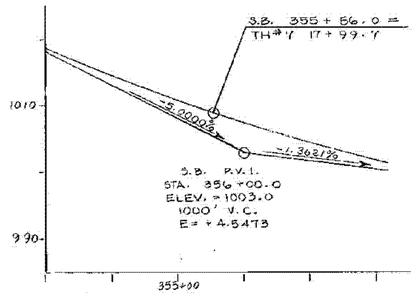
TYPICAL NORMAL SECTION OF TH#7
SCALE: 3/16" = 1'-0"



TOWN HIGHWAY #7 PROFILE
SCALE: 1" = 10' VERTICAL ; 1" = 50' HORIZONTAL



I-93 NORTHBOUND PROFILE
SCALE: 1" = 10' VERTICAL ; 1" = 100' HORIZONTAL



I-93 SOUTHBOUND PROFILE
SCALE: 1" = 10' VERTICAL ; 1" = 100' HORIZONTAL

LIST OF SHEETS

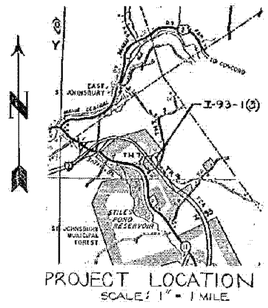
BR 700	PRELIMINARY INFORMATION SHEET
BR 701	BRIDGE QUANTITY SHEET
BR 702	PLAN & ELEVATION SHEET - (NORTHBOUND)
BR 703	PLAN & ELEVATION SHEET - (SOUTHBOUND)
BR 704	BORING LOGS - NORTHBOUND
BR 705	BORING LOGS - SOUTHBOUND
BR 706	SUPERSTRUCTURE DETAILS
BR 707	SOLE PLATE, BEARING & CROSS FRAME DETAILS
BR 708	BRIDGE APPROACH RAIL DETAILS
BR 709	APPROACH SLAB & DECK REINFORCING PLAN
BR 710	ABUTMENT NO. 1 DETAILS
BR 711	ABUTMENT NO. 2 DETAILS
BR 712	ABUTMENT NO. 3 DETAILS
BR 713	ABUTMENT NO. 4 DETAILS
BR 714	WINGWALL DETAILS - (NORTHBOUND)
BR 715	WINGWALL DETAILS - (SOUTHBOUND)
BR 716-BR 718	REINFORCING STEEL SCHEDULES

STANDARD SHEETS

SCB-01-75	APRIL 3, 1978(R)
SCB-04-76	JANUARY 8, 1976(R)
SCB-05-73	JANUARY 3, 1979(R)
SCB-07-71 (Detail C)	DECEMBER 15, 1976(R)
SCB-08-71	JANUARY 27, 1975(R)
SB-R4- 73	NOVEMBER 21, 1979(R)

REFERENCE SHEETS

193, NBSSB PLAN, STA. 339+0 - 371+0 (2 SHEETS)
193, NBSSB PROFILE, STA. 339+0 - 371+0 (2 SHEETS)
TH #7 RELOCATION PLAN, STA. 6+0 - 24+0 (1 SHEET)
TH #7 RELOCATION PROFILE, STA. 6+0 - 22+0 (2 SHEETS)
193, NB X-SECTIONS, STA. 352+0 - 358+50 (2 SHEETS)
193, SB X-SECTIONS, STA. 352+0 - 359+50 (2 SHEETS)
TH #7 RELOCATION X-SECTIONS, STA. 16+0 - 21+0 (4 SHEETS)



PROJECT LOCATION
SCALE: 1" = 1 MILE

EXISTING STRUCTURE

1. STRUCTURE TYPE _____ OVERALL LENGTH _____ INVENTORY RATING _____
2. SPAN LENGTH(S) ~~CENTER~~ TO CENTER OF BEARINGS _____
3. CLEAR SPAN LENGTH(S) ~~NORMAL~~ TO STREAM _____
4. WATERWAY AREA OF FULL OPENING (~~NORMAL TO STREAM~~) _____ VERTICAL ~~CLEARANCE~~ ABOVE STREAMBED _____
5. WATER SURFACE ELEVATION @ Q 2.33 _____ WATER SURFACE ELEVATION @ Q _____
6. WATER SURFACE ELEVATION AT FLOOD OF RECORD _____ YEAR _____ ESTIMATED DISCHARGE _____
7. DOES ALL WATER PASS THROUGH EXISTING ~~STRUCTURE~~? _____ IF NOT, AT WHAT FREQUENCY AND ELEVATION DOES RELIEF OCCUR? _____
   ADDITIONAL WATERWAY AREA ~~PROVIDED~~ BY RELIEF _____
8. TYPE OF ~~SUBSTRUCTURE~~ FOUNDATION MATERIAL _____
9. DISPOSITION OF STRUCTURE _____

NEW STRUCTURE

STRUCTURE GEOMETRY:
1. STRUCTURE TYPE PLATE GIRDER BRIDGE OVERALL LENGTH N.B. = 109.16' S.B. = 108.96'
2. SPAN LENGTH(S) CENTER TO CENTER OF BEARINGS 104'
3. VERTICAL CLEARANCE ABOVE ~~SERVED~~ ROAD UNDER N.B. 18'-6" MIN. S.B. 18'-3" MIN.
4. CLEAR SPAN LENGTH(S) NORMAL TO STREAM N/A
5. WATERWAY AREA OF FULL OPENING (NORMAL TO STREAM) N/A
6. ARE PROVISIONS TO BE MADE FOR PUBLIC UTILITIES? NO

HYDRAULIC DATA:
1. Q 2.33 _____ WATER ELEVATION _____ VELOCITY _____
   Q 10 _____ WATER ELEVATION _____ VELOCITY _____
   Q 25 _____ WATER ELEVATION _____ VELOCITY _____
   Q 50 _____ WATER ELEVATION _____ VELOCITY _____
   Q 100 _____ WATER ELEVATION _____ VELOCITY _____
2. DRAINAGE AREA _____ CHARACTER OF TERRAIN _____
3. ARE THERE OBJECTIONS TO A PIER IN THE STREAM? _____
4. DOES STREAM REACH ITS MAXIMUM HIGH WATER ELEVATION RAPIDLY? _____ IS ORDINARY RISE RAPID? _____
5. NATURE OF NATURAL STREAMBED _____
6. ESTIMATED SCOUR DEPTH _____ COMMENT ON: DRIFT _____ ICE _____
7. WILL ALL WATER PASS THROUGH NEW STRUCTURE? _____ IF NOT, WHAT FREQUENCY AND ELEVATION WILL RELIEF OCCUR? _____
   ADDITIONAL WATERWAY AREA PROVIDED BY RELIEF _____
8. VERTICAL CLEARANCE ABOVE Q _____
9. ALLOWABLE WATER SURFACE ELEVATION _____ LIMITED BY _____
10. IS DESIGN STAGE AFFECTED BY UPSTREAM OR DOWNSTREAM CONDITIONS? _____ IF YES, DESCRIBE _____
11. AVERAGE DAILY LOW FLOW _____ DEPTH _____ AVERAGE DAILY HIGH FLOW _____ DEPTH _____
12. STREAMBANK OR CHANNEL PROTECTION REQUIRED _____
13. DISTANCE TO EXISTING UPSTREAM STRUCTURE _____ SPAN _____ WATERWAY AREA OF FULL OPENING _____ Q _____
14. DISTANCE TO EXISTING DOWNSTREAM STRUCTURE _____ SPAN _____ WATERWAY AREA OF FULL OPENING _____ Q _____

ALLOWABLE STRESSES:
1. DESIGN LIVE LOAD AASHTO H S 25 - 44
2. ALLOWABLE LOAD FOR SPREAD FOOTINGS ON SOIL 4.0 KSF ON LEDGE 10.0 KSF
3. ALLOWABLE LOAD FOR PILING _____ TYPE _____ ESTIMATED LENGTH _____
4. ALLOWABLE STRESS FOR STRUCTURAL STEEL ASTM A 588 TENSION 27,000 psi
5. ALLOWABLE STRESS FOR REINFORCING STEEL GRADE 60 TENSION 24,000 psi COMPRESSION 20,000 psi
6. ALLOWABLE STRESS FOR CONCRETE CLASS A f'_c 3,500 psi f_c 1400 psi
   CLASS B f'_c 3,500 psi f_c 1400 psi

TRAFFIC MAINTENANCE:
1. IS TRAFFIC TO BE MAINTAINED? N/A IF YES, ON EXISTING STRUCTURE N/A OR ON TEMPORARY BRIDGE N/A
2. TEMPORARY BRIDGE REQUIREMENTS: ONE OR TWO WAY _____ TRAFFIC CONTROL SIGNALS REQUIRED _____
   MINIMUM CLEAR SPAN _____ MINIMUM CLEAR HEIGHT _____ MINIMUM WATERWAY AREA _____
   ARE SIDEWALKS REQUIRED? _____ IF SO, ON WHAT SIDE? _____

ADDITIONAL DESIGN CONSIDERATIONS

LOAD RATING (TONS)

STRESS LEVELS	TRUCK H	HS	3S2	6 AXLE	3A. STR.	4A. STR.	5A. SEMI
INVENTORY 0.55 Fy = 27.0	49	44					
POSTED 0.67 Fy = 33.5		69	88		12	13	82
OPERATING 0.75 Fy = 37.5			107	125			

I-93 BRIDGES 5N&S
WATERFORD
IM MEMB(31)
SHEET 34 OF 48
FOR REFERENCE ONLY

RECOMMENDED FOR APPROVAL W. M. Smith STRUCTURES ENGINEER 1-30-80 DATE
RECOMMENDED FOR APPROVAL Arthur J. Gove CHIEF OF DESIGN 1-30-80 DATE
APPROVED BY J. V. Clague DIRECTOR OF ENGINEERING & CONSTRUCTION 1-30-80 DATE

REVISIONS

NO.	DESCRIPTION	BY & DATE

STATE OF VERMONT
AGENCY OF TRANSPORTATION

TOWN OF WATERFORD	Bridge No. 67 / Log Sta.
HIGHWAY NO. I-93	Surv. Sta. 354+83
I-93 N.B. & S.B. OVER TH #7	
PRELIMINARY INFORMATION SHEET	
Designed by G. S. ROGERS	Drawn by G. L. DAVIS
Checked by R. W. JENSEN date 1/15/80	Bridge Design Supervisor F. W. Bolkum date 1/80
PROJECT WATERFORD	PROJECT NO. I-93-1(3)CONTR.2
Bridge Sheet No. BR700	Sheet 151 of 531

189 of 290

DRAWING 44-131 (4/75)