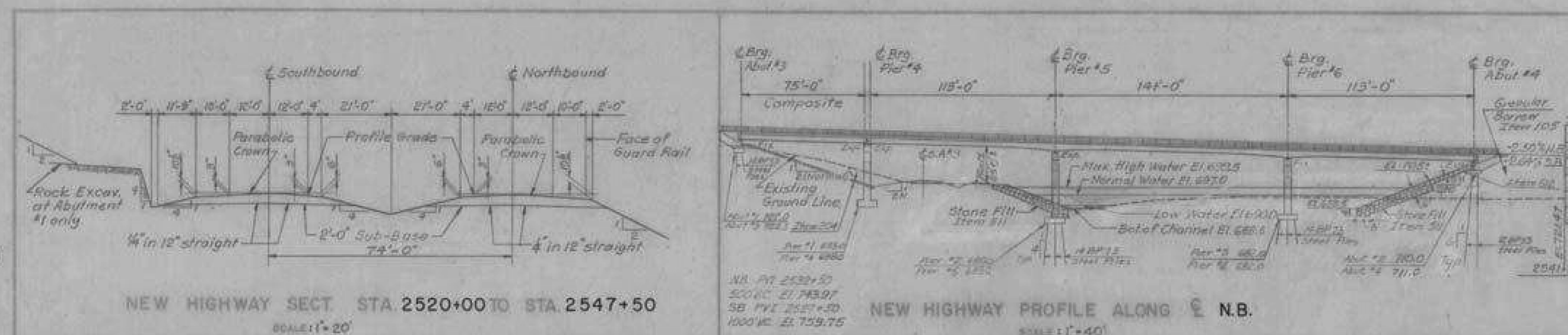
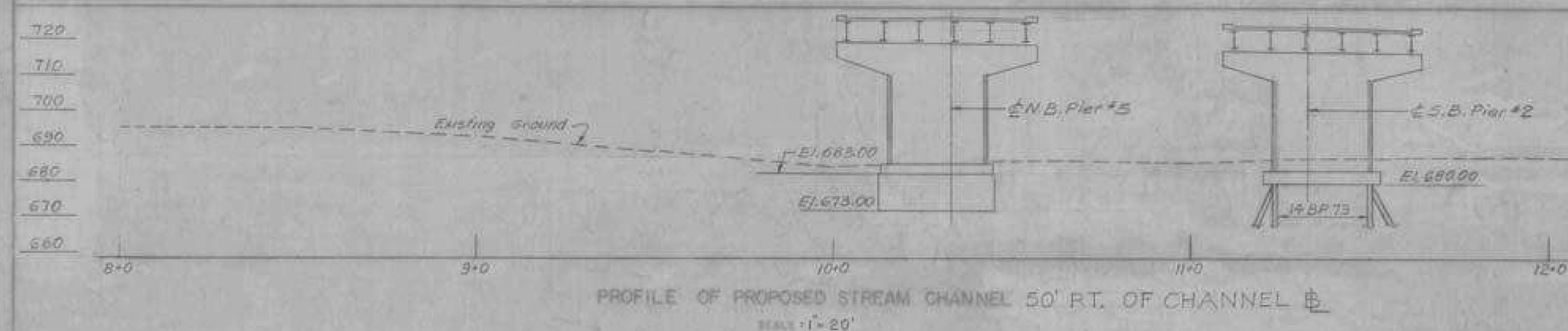
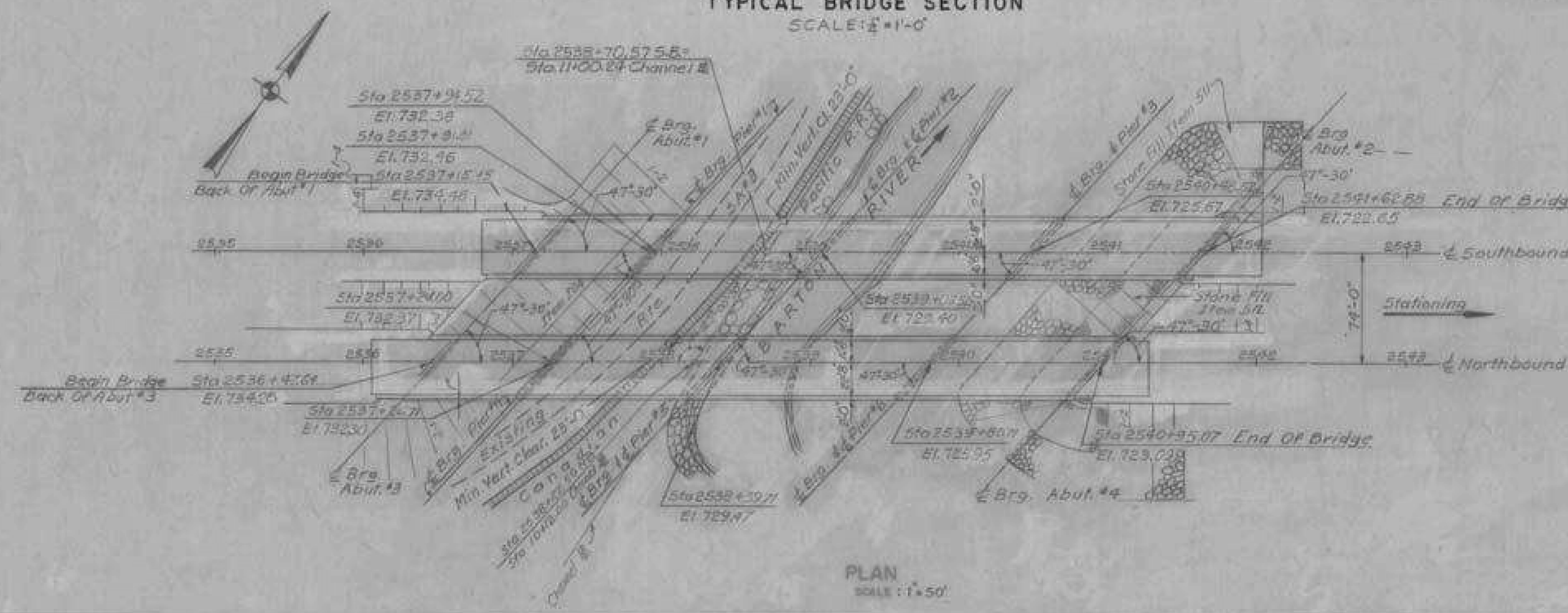
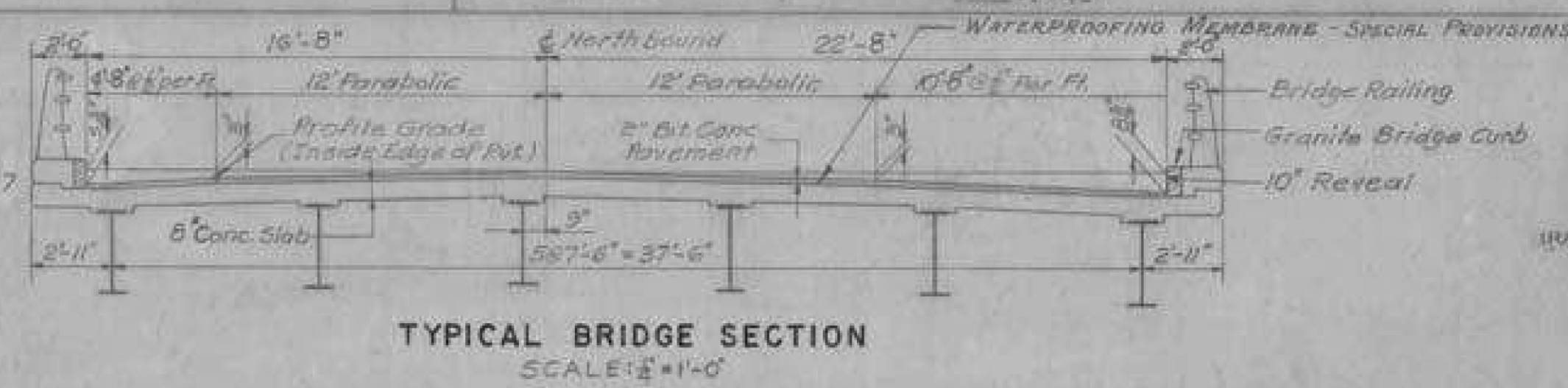




Note: For Details of Deck Construction see BR 109
For Railing Details see SB-R1-64 and SB-R2-65
For Curb Details see SCB-06-67



Highway No. **I-91** NAME OF HIGHWAY **INTERSTATE**
STRUCTURE NO. **107N** COUNTY **ORLEANS** TOWN **IRASBURG**
PROJECT NO. **I-91-3(B)** LOCATION **191' OVER BARTON RIVER, C.P.R.R. and Irasburg SA 3**

EXISTING STRUCTURE
1. RATED LOADING OF EXISTING STRUCTURE **N.A.**
2. TYPE OF EXISTING STRUCTURE **N.A.**
3. UNDERCLEARANCE ELEVATION OF EXISTING STRUCTURE **N.A.**
4. WHAT DISPOSITION SHOULD BE MADE OF EXISTING STRUCTURE? **N.A.** COST OF REMOVAL **N.A.**
5. SHOULD EXISTING STRUCTURE BE USED TO MAINTAIN TRAFFIC DURING CONSTRUCTION OF NEW STRUCTURE? **N.A.**
6. SHOULD NEW TEMPORARY STRUCTURE BE BUILT? **N.A.**
7. ORDINARY HIGH WATER SURFACE ELEV. AT EXISTING STRUCTURE **N.A.** WATERWAY TO ORDINARY H.W. **N.A.**
8. EXTREME HIGH WATER AT EXISTING STRUCTURE **N.A.** WATERWAY TO EXTREME H.W. **N.A.**
9. SPAN OF EXISTING BRIDGE DOWNSTREAM **210'-0"** WATERWAY TO EXTREME H.W. **210'-0"**
10. TYPE OF FOUNDATION UNDER EXISTING ABUTMENTS **N.A.**
11. DOES ALL WATER AT FLOOD ELEVATION PASS THROUGH EXISTING STRUCTURE? **N.A.**
12. IF NOT AT WHAT ELEVATION IS RELIEF AFFORDED? **N.A.**
13. ADDITIONAL WATERWAY AREA PROVIDED **N.A.**

NEW STRUCTURE
1. RECOMMENDED TYPE OF STRUCTURE **ONE SINGLE SPAN (CONCRETE) WITH 2 SIDERS (CONTINUOUS-SPAN)**
2. OVERLOOKED CLEAR SPAN OR SPANS **75'-0"-113'-0"-143'-0"**
3. MEASURED PARALLEL TO E. HIGHWAY **75'-0"-113'-0"-143'-0"**
4. MEASURED AT RIGHT ANGLES TO E. STREAM **55'-0"-84'-0"-104'-0"-24'-0"**
5. ARE THERE OBSTRUCTIONS TO A PIEN IN THE STREAM? ANSWER YES OR NO **No**
6. ORDINARY HIGH WATER ELEVATION AT NEW STRUCTURE **637.0**
7. EXTREME HIGH WATER ELEVATION AT NEW STRUCTURE **637.0** SOURCE OF INFORMATION **COMPILED**
8. IS ALL WATER INTENDED TO PASS THROUGH NEW STRUCTURE? **Yes**
9. DOES STREAM REACH ITS MAXIMUM HIGH WATER ELEVATION PROMPTLY? **No** IS ORDINARY FIVE RATED? **No**
10. LOW WATER ELEVATION AT NEW STRUCTURE **630.0**
11. DRAINAGE AREA IN ACRES ABOVE STRUCTURE **33.3/2** CHARACTER OF TERRAIN **ROLLING**
12. IS STREAM EVER DRY? **No**
13. VELOCITY OF STREAM AT HIGH WATER STAGE **6.31 C.F.S.** ESTIMATED DISCHARGE **1000 C.F.S.**
14. AREA FULL OPENING **1250.3 S.F.** AREA BELOW OVERHUNG H.W. **1200.3 S.F.**
15. CHARACTER OF SOIL **None** DRIFT **None** IS **MEDIUM**
16. ESTIMATED DRAINAGE AREA ABOVE NATURAL OR ARTIFICIAL OBSTACLE **125.8 SQ. MI.**
17. RECOMMENDED TYPE OF PAVEMENT **2. BITUMINOUS CONCRETE, 8" CONCRETE**
18. TRAFFIC TO BE MAINTAINED UNDER PIER NO. **N.A.** ONE OR TWO WAYS **PROBABLE COST**
19. PROBABLE COST OF CLEANING AND GRUBBING STREAM CHANNEL AT STRUCTURE SITE **\$1000.**
20. SHOULD PROVISIONS BE MADE FOR PUBLIC UTILITIES? **No**
21. ESTIMATED ALLOWABLE LOAD ON FOUNDATIONS **See Below**

FOUNDATION INFORMATION
OBTAINED FOR DESIGN PURPOSES ONLY, AND THE STATE ASSUMES NO RESPONSIBILITY FOR THE SUFFICIENCY OR ACCURACY OF THE INFORMATION WORK. BUILDERS MAY BE ENCOUNTERED AT ANY PIER OR ABUTMENT LOCATION.
Pier No. 4 & 5 - 5 Tons / 5 F.
Abutment No. 2 - 12 BP 53 110' Long
Abutment No. 1 & 3 - 12 BP 53 80' Long 58 Tons / Pile Max.
Abutment No. 4 - 12 BP 53 100' Long
Pier No. 1 - 14 BP 73 20' Long
Pier No. 2 - 14 BP 73 30' Long
Pier No. 3 - 14 BP 73 25' Long
Pier No. 6 - 14 BP 73 45' Long 20 Tons / Pile Max.

Design Stresses:
Concrete $f_c = 3000$ p.s.i. $f_t = 1200$ p.s.i.
Structural Steel $f_s = 20,000$ p.s.i. (A-36) others per AASHTO Specs
Reinforcing Steel $f_s = 20,000$ p.s.i. Tension
 $f_c = 16,000$ p.s.i. Compression
Welding per A.W.S. Specs.
Design Loading: HS 20-44

Stage 2 Construction
Br 103 of 129
STATE OF VERMONT
DEPARTMENT OF HIGHWAYS
PROJECT **BARTON - DERBY**
ROUTE NO **I-91** STA. **2539'**
191' OVER BARTON RIVER, C.P.R.R. & IRASBURG SA 3
PRELIMINARY INFORMATION SHEET
DESIGNED BY **AKN** CHECKED BY **AKN** DATE **7/15/69**
PROJECT **EMPD 91-3(20)** SHEET **110** OF **175**
RECOMMENDED FOR APPROVAL **20-10-10-12 7-15-69** DATE
CONSTRUCTION ENGINEER
RECOMMENDED FOR APPROVAL **7-15-69** DATE
SUPERVISOR
RECOMMENDED FOR APPROVAL **7-15-69** DATE
DESIGNER
APPROVED BY **R.H. Cund** DATE **7/15/69**
CHIEF ENGINEER
Changed Roadway width from 38'-0" to 39'-4"
Changed Curb width from 2'-6" to 2'-0"
2-7-69 JWS/69

IRASBURG
IM DECK(46)
BRIDGE NO. 107N
SHEET 35 OF 49
FOR REFERENCE ONLY