

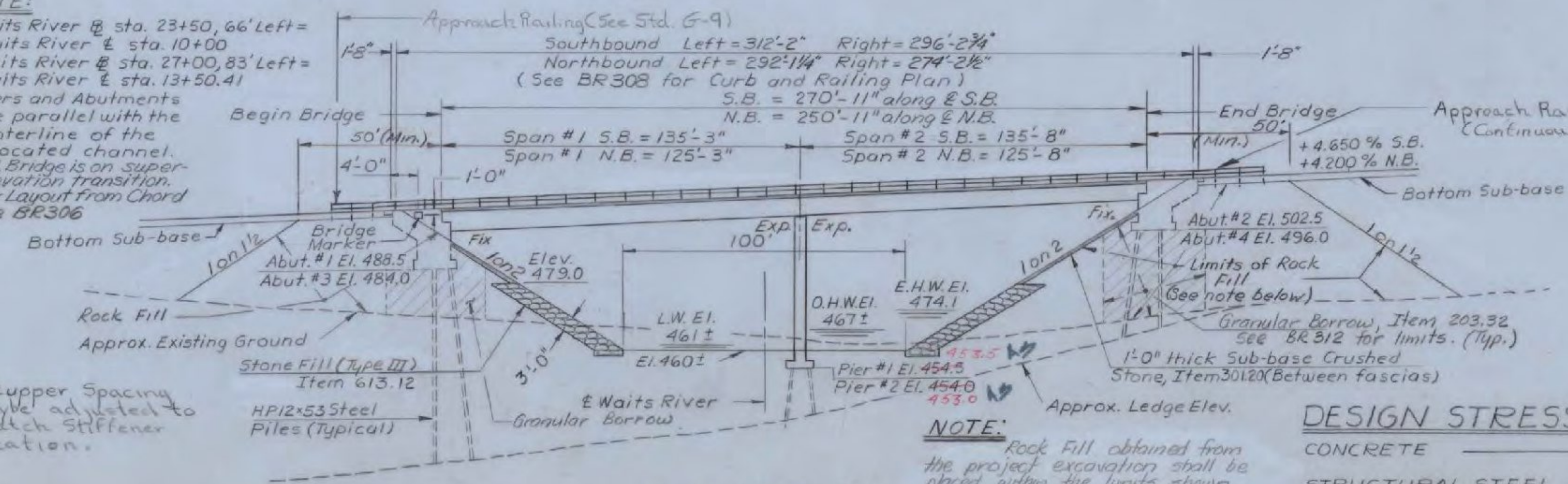
CURVE DATA - N.B. & S.B.

$\Delta = 65^\circ 56' 19''$
 $\Theta_s = 6^\circ 07' 30''$
 $L_s = 350'$
 $T_s = 1,238.77'$
 $E_s = 317.94'$
 $L.T. = 233.48'$
 $S.T. = 116.80'$
 $\Delta_c = 53^\circ 41' 19''$
 $D_c = 3^\circ 30' 00''$
 $L_c = 1,533.96'$
 $R_c = 1,637.02'$
 Bank $1\frac{1}{2}''$ per foot.

PLAN
Scale: 1" = 30'

NOTE:

1. Waits River @ sta. 23+50, 66' Left = Waits River @ sta. 10+00
2. Waits River @ sta. 27+00, 83' Left = Waits River @ sta. 13+50.41
3. Piers and Abutments are parallel with the centerline of the relocated channel.
4. S.B. Bridge is on super-elevation transition.
5. For Layout from Chord see BR306



ELEVATION
Scale: 1" = 30'

NOTE: Rock Fill obtained from the project excavation shall be placed within the limits shown as a minimum. See BR 312 for details of Granular Borrow Channels.

DESIGN STRESSES:

CONCRETE $f_c = 3,000$ p.s.i.
 $f_c = 1,200$ p.s.i.
STRUCTURAL STEEL — 20,000 p.s.i. (A36)
 (Other steels as per AASHTO Spec.)
REINFORCING STEEL — $f_s = 20,000$ p.s.i. (tens.)
 $f_s = 16,000$ p.s.i. (comp.)

GENERAL NOTES

SPECIFICATIONS:
All materials and construction shall conform to the State of Vermont, Department of Highways, Standard Specifications for Highway and Bridge Construction, dated January 1972 and the AASHTO Standard Specifications dated 1969.

LIVE LOAD:
Structure designed for HS20-44 loading modified for National System of Interstate Highways applied in accordance with the provisions of the AASHTO Standard Specifications Article 1.2.8.

CONCRETE:
All exposed edges of concrete shall be chamfered 1" x 1" unless otherwise noted. All construction joints to be made as shown on SCB-D6-71, Details B and C unless otherwise noted.

REINFORCEMENT:
All reinforcement to have a clear cover of 2", unless otherwise noted.

DIMENSIONS:
All dimensions given are measured horizontally or vertically unless otherwise noted. Dimensions given are for 68°F, unless otherwise noted. Elevation datum, sea level, based on nearest U.S. Government vertical control.

STRUCTURAL STEEL:
Item 506.91 shall include all structural steel, copper, wrought iron, and any other materials indicated or required in the completed structure which are not otherwise classified. All structural steel shall be structural carbon steel conforming to the requirements of the specifications for steel bridges and buildings A.S.T.M. Designation A-36-62T, except as otherwise noted. The contractor shall submit complete details of the structural steel to the State of Vermont, Department of Highways, and receive their written approval prior to start of fabrication. The steel details shall include provisions for cambering of beams for dead load deflection as well as erection diagrams and falsework details.

WATER REPELLENT:
The top surface of safety walks, fascia, and back to the fascia beam under the slab, on the sides and ends of all pier caps, and on exposed areas of abutments not otherwise treated shall be covered with Water Repellent (Item 514.10)

FIELD BOLTING:
Field bolted connections shall be made with 7/8" ϕ A325 High Strength Bolts. A490 bolts are not allowed.

ABUTMENTS & PIERS:
The top surfaces of all abutments and piers shall be sloped 1/4" per foot from the front edge of abutment curtainwalls or center lines of piers, except for bearing pads projecting 1" or more above the general area, which surfaces shall be level. Elevation of bridge seats given are for centerline of bearings. The entire exposed top surface of abutments shall be coated with Item 514.10. The entire exposed top surface of the piers shall be coated with Item 615.20. The application of this item shall be after all painting and incidental items are completed.

STEEL PILES:
Steel Bearing Piles shall be driven to ledge rock unless otherwise approved by the engineer. When piles are driven in fill the material shall be such as to have no stones large enough to interfere with the driving of the piles. Pile point reinforcement shall be provided.

GENERAL:
Cross slopes of approach slabs to conform to the cross slope of the bridge. All expansion material shall be premoistened cork containing no bitumen or asphalt.

BITUMINOUS CONCRETE PAVEMENT:
Bituminous Concrete Pavement Item 406.25, Type II, shall be applied in two courses.

PILE LOADING TESTS:
Pile loading tests, Item 505.40, shall be used and paid for only when directed by the engineer, if piling is not driven to ledge.

INDEX OF DRAWINGS

- BR301 PRELIMINARY INFORMATION SHEET
- BR302 QUANTITY SHEET
- BR303 PLAN & ELEVATION
- BR304 BORING LOG
- BR305 BORING LOG
- BR306 TYPICAL SECTION & GIRDER DETAILS
- BR307 FRAMING DETAILS
- BR308 BEARING DETAILS
- BR309 JOINT DETAILS
- BR310 ABUTMENT #1 & WINGWALLS
- BR311 ABUTMENT #2 & WINGWALLS
- BR312 ABUTMENT #2 FOOTING PLAN & TYPICAL SECTIONS
- BR313 ABUTMENT #2 FOOTING PLAN & TYPICAL SECTIONS
- BR314 ABUTMENT #3 & WINGWALLS
- BR315 ABUTMENT #4 & WINGWALLS
- BR316 ABUTMENTS #3 & #4 FOOTING PLANS
- BR317 PIER #1 DETAILS
- BR318 PIER #2 DETAILS
- BR319 APPROACH SLAB #1
- BR320 APPROACH SLAB #2
- BR321 APPROACH SLAB #3
- BR322 APPROACH SLAB #4
- BR323 REINFORCING DETAILS
- BR324 REINFORCING DETAILS
- BR325 REINFORCING DETAILS
- BR326 CHANNEL SECTIONS
- BR327 CHANNEL SECTIONS
- BR328 CHANNEL SECTIONS

STANDARD DRAWINGS

- SCB-D6-71 CURB, PILE SPLICE & CONST. JT. DET. (12-14-71)
- SCB-D2-71 BEAM HAUNCH (12-14-71)
- SCB-D1-71 BENCH MARK AND BRIDGE MARKER DETAILS & GENERAL NOTES (12-14-71)
- SB-R1-71 ALUMINUM RAILING DET. (8-24-71) (Sht 2 of 5-1971)

VERMONT
STATE HIGHWAY DEPARTMENT
TOWN OF BRADFORD
INTERSTATE ROUTE 91
INTERSTATE 91 OVER
WAITS RIVER **BR 59**

PLAN & ELEVATION

MSFARLAND - JOHNSON
CONSULTING ENGINEERS
BINGHAMTON, NEW YORK
DESIGNED B.R.K. CHECKED B.R.K. DATE 7-24-67
DRAWN R.M.G. IN CHARGE H.G.C. SCALE As Shown
PROJECT NO. I91-2(26) SH 386 OF 430

Revisions	
1	Rev'd Rev To 39'4" Safety Walk Rev'd To 2'-0" Item 511 Rev'd To Item 512 (light type) 9-15-69 R.Ridgely
2	Added Note #6 added and refusal to pile loading test note added (13) 10-12-69 G. Rogers

BRADFORD - NEWBURY
IM BPNT (14)
PROJECT BRIDGE 59
SHEET 19 OF 26
FOR INFORMATION ONLY