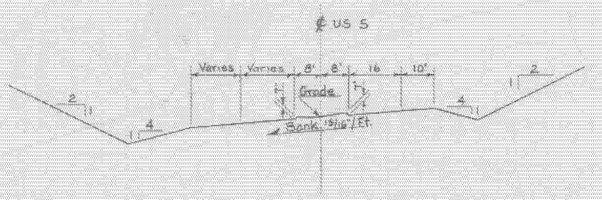
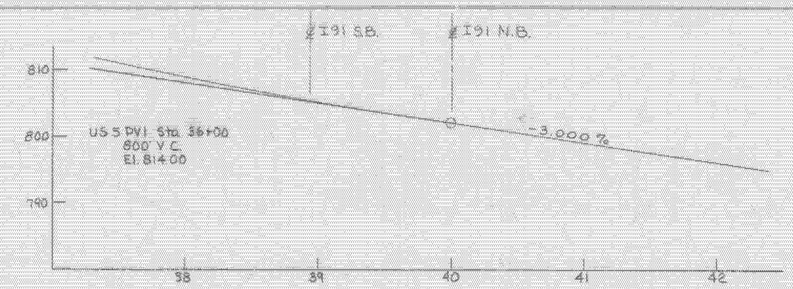



US 5 - NEW HIGHWAY SECT. STA. 38+00 TO STA. 41+00

SCALE: 1" = 20'




NEW HIGHWAY PROFILE ALONG ℄ US 5

SCALE: 1" = 50' Horiz., 1" = 10' Vert.

HIGHWAY NO. I91 NAME OF HIGHWAY INTERSTATE

STRUCTURE NO. S4-B7 COUNTY ORLEANS TOWN BARTON

PROJECT NO. I91-3(26) LOCATION BARTON - IRASBURG

I91 Over US 5

EXISTING STRUCTURE

1 RATED LOADING OF EXISTING STRUCTURE

2 TYPE OF EXISTING STRUCTURE — NONE —

3 OVERCLEARANCE 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 WATERWAY TO ORDINARY H.W.

8 EXTREME HIGH WATER AT EXISTING STRUCTURE

9 SPAN OF EXISTING BRIDGE UPSTREAM WATERWAY TO EXTREME H.W.

SPAN OF EXISTING BRIDGE DOWNSTREAM WATERWAY TO EXTREME H.W.

10 TYPE OF FOUNDATION UNDER EXISTING ABUTMENTS

11 DOES ALL WATER AT FLOOD ELEVATION PASS THROUGH EXISTING STRUCTURE?

12 IF NOT, AT WHAT ELEVATION IS RELIEF AFFORDED?

13 ADDITIONAL WATERWAY AREA PROVIDED

NEW STRUCTURE

1 RECOMMENDED TYPE OF STRUCTURE CANTILEVERED END SPAN STEEL PLATE GIRDER (TWO SUPPORTS)

2 RECOMMENDED OVERALL BRIDGE LENGTH SB - 200.00' N.B. - 200.00'

SPAN LENGTHS SB & NB 34'-132'-34'

MEASURED AT RIGHT ANGLES TO ℄ STREAM

3 ARE THERE OBJECTIONS TO A PIER IN THE STREAM? ANSWER YES OR NO N/A

4 ORDINARY HIGH WATER ELEVATION AT NEW STRUCTURE

5 EXTREME HIGH WATER ELEVATION AT NEW STRUCTURE SOURCE OF INFORMATION

6 IS ALL WATER INTENDED TO PASS THROUGH NEW STRUCTURE?

7 DOES STREAM REACH ITS MAXIMUM FLOOD WATER ELEVATION SUDDENLY? IS ORDINARY RISE RAPID?

8 LOW WATER ELEVATION AT NEW STRUCTURE

9 DRAINAGE AREA IN ACRES ABOVE STRUCTURE CHARACTER OF TERRAIN

10 IS STREAM EVER DRY

11 VELOCITY OF STREAM AT HIGH WATER STAGE ESTIMATED RESOURCE

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? NONE BOTH SIDES

17 RECOMMENDED TYPE OF PAVEMENT 2" BITUMINOUS CONCRETE

18 TRAFFIC TO BE MAINTAINED UNDER ITEM NO. ONE OR TWO WAYS PROBABLE COST

19 PROBABLE COST OF CLEARING AND SNAGGING STREAM CHANNEL AT STRUCTURE SITE

20 SHOULD PROVISIONS BE MADE FOR PUBLIC UTILITIES?

21 ESTIMATED ALLOWABLE LOAD ON FOUNDATIONS 40 tons SHOULD PILES BE USED? YES * SEE TABLE

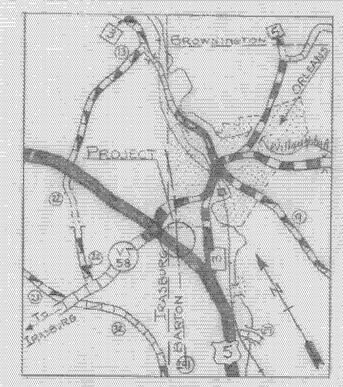
CAST-IN-PLACE CONCRETE

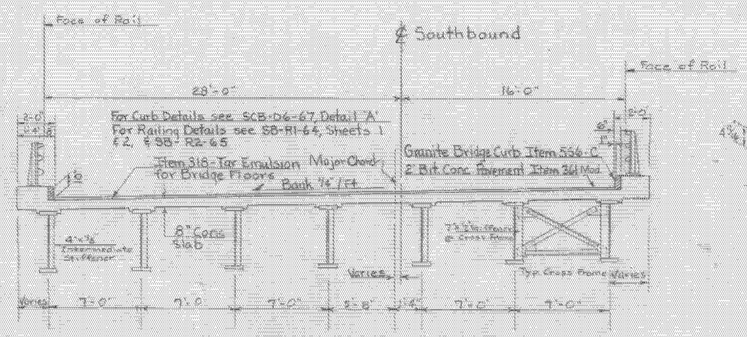
FOUNDATION INFORMATION

INTENDED 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 SHEETS BR-103, 104 & 105

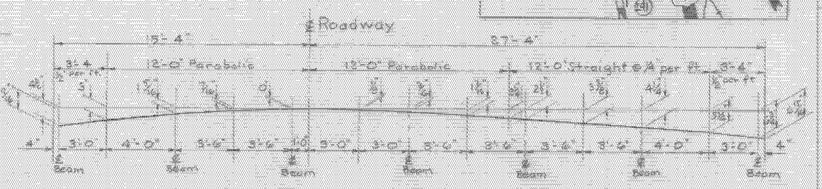
| MAX. STEEL SECTION POSITIVE MOMENT | MAX. STEEL SECTION NEGATIVE MOMENT | MIN. STEEL SECTION @ GIRDER END |
|---|---|---|
| TOP FLANGE 1¼" x 16" | TOP FLANGE 2½" x 16" | TOP FLANGE 1¼" x 16" |
| WEB ½" x 50" | WEB ½" x 50" | WEB ½" x 24" |
| BOT. FLANGE 2" x 16" | BOT. FLANGE 2½" x 16" | BOT. FLANGE 1¼" x 16" |




Typical Bridge Section - Southbound

Scale: N.T.S.




CROWN DETAIL NORTHBOUND BRIDGE

N.T.S.

NOTES:

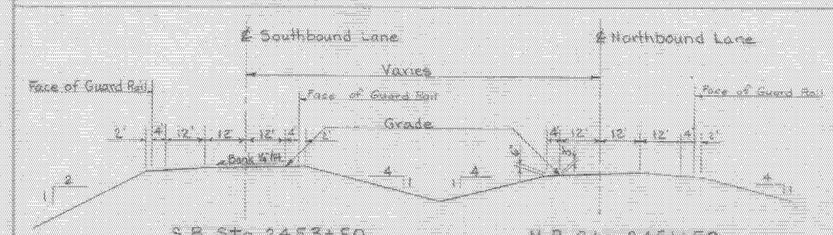
1. Northbound Typical Bridge Section is similar to the Southbound except for the crown shown above. See B2.107
2. General Notes, Specifications, and Allowable Design Stresses pertaining to Design and Construction not otherwise shown or modified on these plans are on Standard Drawing SCB-D1-67.

* TABLE OF ESTIMATED PILE LENGTHS

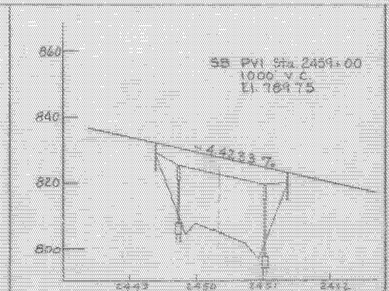
| LOCATION | FOOTING ELEV. | PILE LENGTH |
|---|---|---|
| PIER No. 1 | 798.00 | 35' |
| PIER No. 2 | 792.00 | 35' |
| PIER No. 3 | 794.50 | 40' |
| PIER No. 4 | 789.50 | 45' |

BARTON-COVENTRY
IM BPNT (11)
SHEET 48 OF 84
BRIDGES 106N&S
FOR REFERENCE ONLY

Stage 1 Construction

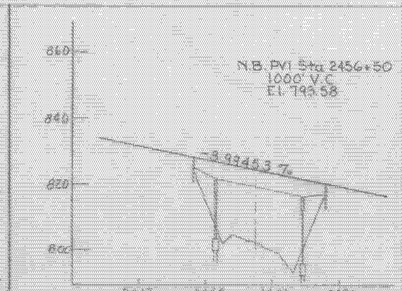



Scale: 1" = 20'




Southbound Profile

Scale: 1" = 100' Horiz., 1" = 20' Vert.




Northbound Profile

Scale: 1" = 100' Horiz., 1" = 20' Vert.

RECOMMENDED FOR APPROVAL — CONSTRUCTION ENGINEER — DATE 1-27-69

RECOMMENDED FOR APPROVAL — BRIDGE ENGINEER — DATE 1-15-69

RECOMMENDED FOR APPROVAL — ASST. CHIEF ENGINEER — DATE 1-21-69

APPROVED BY — CHIEF ENGINEER — DATE 1/27/69

PROJECT: BARTON-IRASBURG

STATE OF VERMONT
DEPARTMENT OF HIGHWAYS

INTERSTATE IN THE TOWN OF BARTON BR #106

ROUTE NO. I91 I91 STA. 2450 ±

I91 OVER U.S. 5

PRELIMINARY INFORMATION

TYPE OF STRUCTURE: STEEL PLATE GIRDER — DESIGNED: A.S. GRAHAM — DATE: 1/24 — CHECKED: R.C. CUSHING — DATE: 1/24 — DRAWN: R.W. BUTLER — DATE: 1/24

PROJECT NO. I91-3(26) SHEET 33 OF 115

Rev. A.S.G. C.R.D. E.R.L. '69

BR 100