

INDEX OF SHEETS

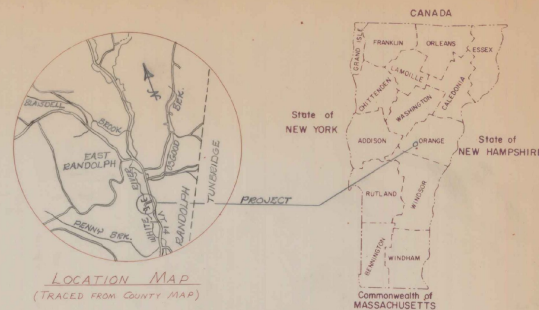
- SHT. 1 TITLE SHEET
- SHT. 2 PROFILE & MISC. DETAILS.
- SHT. 3 TYPICAL SECTION & PAVING PLAN.
- SHT. 4 SCB-DI-75 (4-26-76) R
- SHT. 5 E-3 (7-20-76) R

# STATE OF VERMONT DEPARTMENT OF HIGHWAYS



## PROPOSED IMPROVEMENT

BRIDGE PROJECT  
TOWN OF Randolph  
COUNTY OF Orange  
ROUTE No. T.H. 64 C.I. 3 BRIDGE No. 38



GENERAL NOTES:

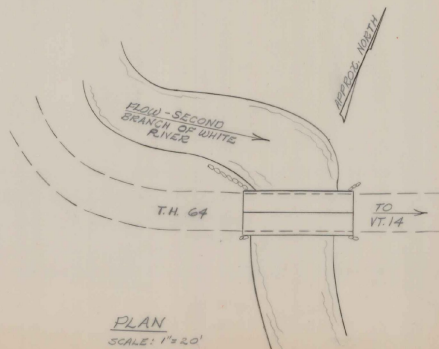
1. REFER TO STD. SHT. SCB-DI-75 FOR ADDITIONAL GENERAL NOTES.
2. THE STRUCTURE IS DESIGNED FOR H-20 LIVE LOAD.
3. ALL STRUCTURAL STEEL FURNISHED BY THE CONTRACTOR SHALL CONFORM TO AISC DESIGNATION A-588, OR A-36.
4. ITEM 502.10, SHORING SUPERSTRUCTURE INCLUDES JACKING AND SHORING OF EXISTING COVERED BRIDGE.
5. PARTIAL REMOVAL OF STRUCTURE, ITEM 502.30, INCLUDES REMOVAL & DISPOSAL OF EXISTING FLOOR SYSTEM.
6. THE CONTRACTOR WILL BE ALLOWED TO CLOSE THIS ROAD TO TRAFFIC. THE SELECTMEN SHALL BE GIVEN (7) DAYS NOTICE OF THE CONTRACTOR'S INTENT TO CLOSE THE ROAD.

PROJECT LOCATION: BEGINNING @ A POINT APPROXIMATELY 500' FROM THE INTERSECTION OF VT. 14 & T.H. 64 AND CONTINUING 97' WESTERLY ALONG T.H. 64

PROJECT DESCRIPTION: SHORING AND REPAIRING EXISTING COVERED BRIDGE, CONSTRUCTING NEW APPROACHES

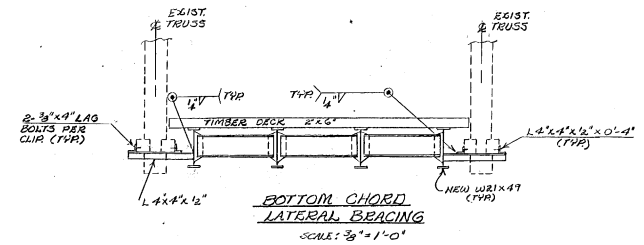
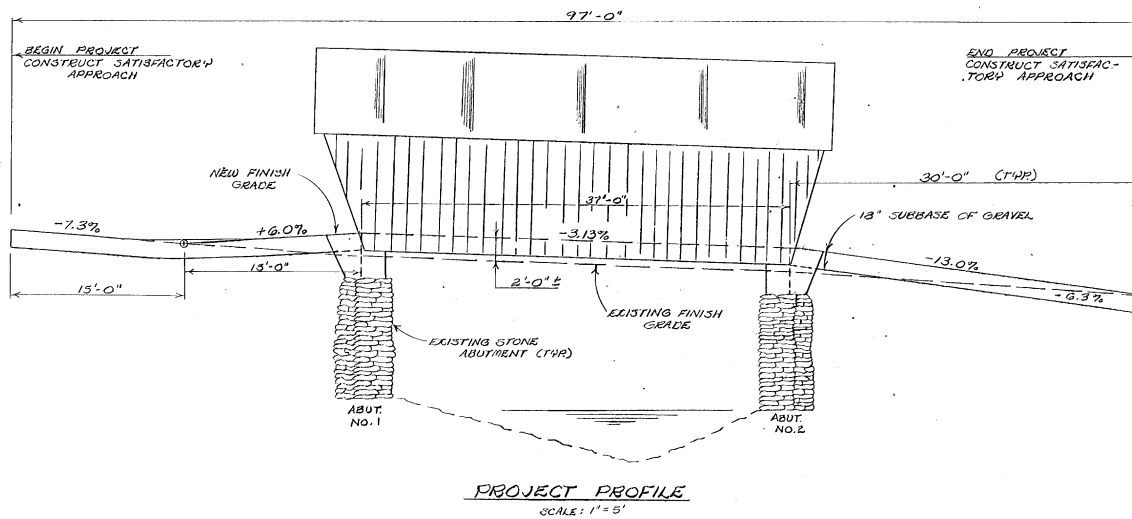
|                                      |     |      |
|--------------------------------------|-----|------|
| LENGTH OF STRUCTURE:                 | 37' | FEET |
| LENGTH OF PARTICIPATION ROADWAY:     | 60' | FEET |
| LENGTH OF NON-PARTICIPATION ROADWAY: | ~   | FEET |
| LENGTH OF PROJECT:                   | 97' | FEET |

- CONVENTIONAL SIGNS
- COUNTY LINE ————
  - TOWN LINE ————
  - LIMITS OF ACCESS ————
  - POINT OF ACCESS X
  - FENCE LINE ————
  - STONE WALL ————
  - TRAVELED WAY ————
  - GUARD RAIL ————
  - RAILROAD ————
  - SURVEY LINE ————
  - CULVERT ————
  - POWER POLE ○
  - TELEPHONE POLE ○
  - TREES ○
  - F.A. CONST. IDENTIFICATION SIGNS ▲
  - PROPERTY LINE ————
  - R.O.W. TAKING LINE ————
  - SLOPE RIGHTS ○ SR △
  - TOP OF CUT ————
  - TOE OF SLOPE ○ ————



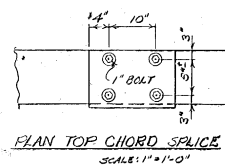
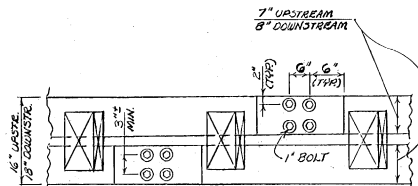
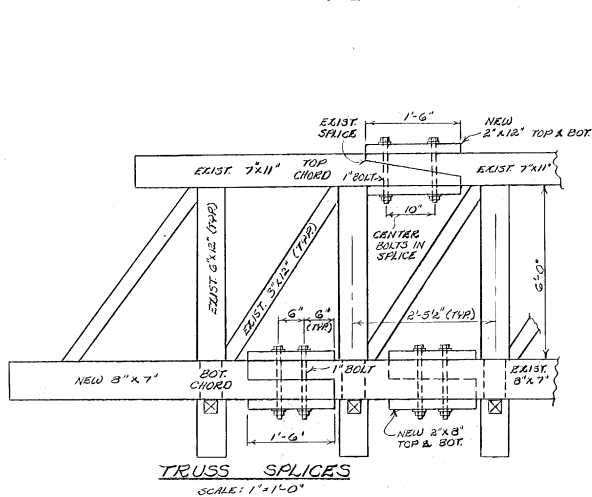
SUBMITTED BY: ENGINEER OF THE STATE HIGHWAY BOARD  
APPROVED: C. H. Stiehmey DATE: 8-20-76  
SHEET ENGINEER

PROJECT: RANDOLPH N° T.H. 64 BR. 38  
SHEET 1 OF 5 SHEETS



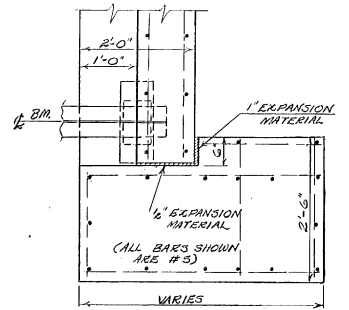
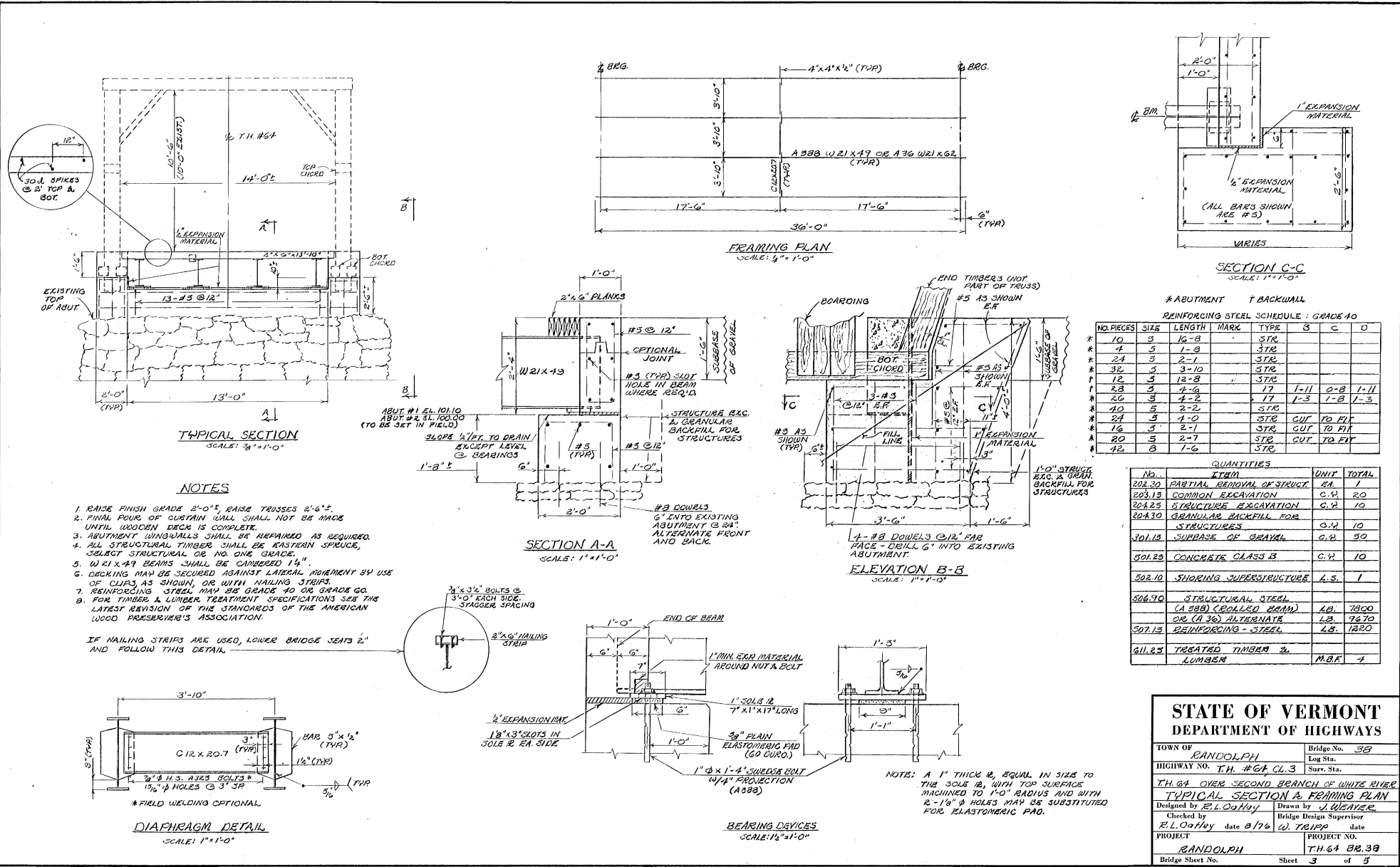
**NOTES**

1. NEW TIMBER SIZES ARE SHOWN BY NOMINAL DIMENSIONS.
2. SPLICES ARE DESIGNED IN ACCORDANCE WITH "NATIONAL DESIGN SPECIFICATION FOR STRESS-GRADE LUMBER AND ITS FASTENINGS," PUBLISHED BY NATIONAL FOREST PRODUCTS ASSOC., 1973.
3. WHEN TRUSS IS JACKED SAG SHALL BE REMOVED FROM TRUSS AND 2" MIN. CAMBER ATTAINED. AS MUCH SIDING AS NECESSARY SHALL BE REMOVED AND REPLACED TO FACILITATE JACKING AND CAMBERING OF TRUSS. ALL DAMAGED SIDING SHALL BE REPLACED BY THE CONTRACTOR WITH SIMILAR KIND.
4. THE COST OF ALL BOLTS, WASHERS, NUTS AND CONNECTORS SHALL BE INCLUDED UNDER ITEM G11.25, TREATED LUMBER AND TIMBER.
5. PORTAL FRAMING AND BOARDING SHALL BE REPAIRED AS REQUIRED.
6. ALL TRUSS REPAIRS, BOARDING, AND FRAMING SHALL BE PAID FOR AS ITEM G11.25.
7. ALL BOLTS SHALL BE A-307 STEEL UNLESS NOTED.
8. ANY NEW BOARDING SHALL BE PAINTED WITH RED MILK PAINT OR STAINED TO MATCH EXISTING COLOR OF BOARDING. PAINTING SHALL BE SUBSIDIARY ITEM G11.25.



**STATE OF VERMONT  
DEPARTMENT OF HIGHWAYS**

|   |  |
|---|--|
| TOWN OF <b>RANDOLPH</b>   | Bridge No. <b>32</b>                                   |
| HIGHWAY NO. <b>T.H. 64 CL. 3</b>  | Log Sta. _____   |
|   | Surr. Sta. _____                                       |
| <b>T.H. 64 OVER SECOND BRANCH WHITE RIVER<br/>PROFILE &amp; MISC. DETAILS</b> |  |
| Designed by <b>E. L. O'Hay</b>  | Drawn by <b>J. WEAVER</b>                              |
| Checked by <b>E. L. O'Hay</b> date <b>8/76</b>                                | Bridge Design Supervisor <b>W. T. P. P.</b> date _____ |
| PROJECT <b>RANDOLPH</b>   | PROJECT NO. <b>T.H. 64 BR. 32</b>                      |
| Bridge Sheet No. _____  | Sheet <b>2</b> of <b>5</b>                             |



SECTION C-C  
SCALE: 1"=1'-0"

# ABUTMENT + BACKWALL  
REINFORCING STEEL SCHEDULE: GRADE 40

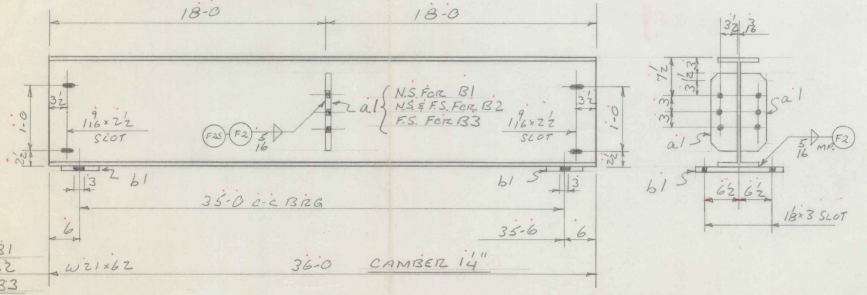
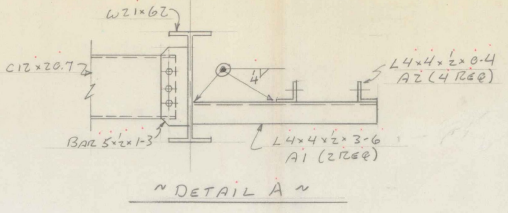
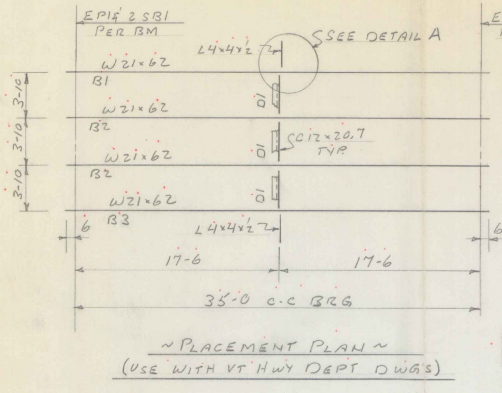
| NO. PIECES | SIZE | LENGTH | MARK | TYPE | B          | C   | D    |
|------------|------|--------|------|------|------------|-----|------|
| 10         | 5    | 16-8   |      | STR  |            |     |      |
| 4          | 5    | 1-8    |      | STR  |            |     |      |
| 24         | 5    | 2-1    |      | STR  |            |     |      |
| 32         | 5    | 3-10   |      | STR  |            |     |      |
| 12         | 5    | 12-8   |      | STR  |            |     |      |
| 28         | 5    | 4-6    |      | STR  | 1-11       | 0-8 | 1-11 |
| 26         | 5    | 4-2    |      | STR  | 1-3        | 1-8 | 1-3  |
| 40         | 5    | 2-2    |      | STR  |            |     |      |
| 24         | 5    | 4-0    |      | STR  | CUT TO FIT |     |      |
| 16         | 5    | 2-1    |      | STR  | CUT TO FIT |     |      |
| 20         | 5    | 2-7    |      | STR  | CUT TO FIT |     |      |
| 42         | 5    | 1-6    |      | STR  |            |     |      |

QUANTITIES

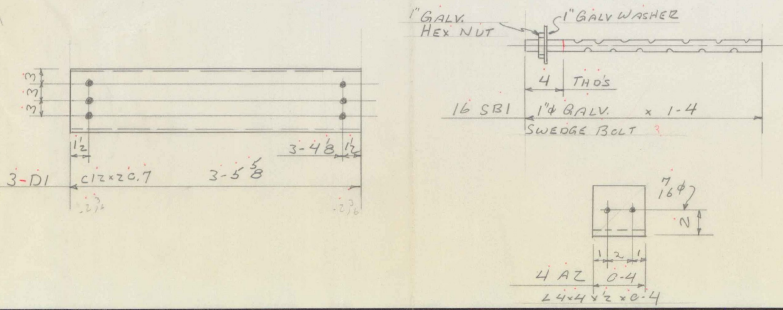
| NO.    | ITEM                                  | UNIT   | TOTAL |
|--------|---------------------------------------|--------|-------|
| 202.30 | PARTIAL REMOVAL OF STRUCT.            | EA.    | 1     |
| 203.15 | COMMON EXCAVATION                     | C.Y.   | 20    |
| 204.25 | STRUCTURE EXCAVATION                  | C.Y.   | 10    |
| 204.30 | GRANULAR BACKFILL FOR STRUCTURES      | C.Y.   | 10    |
| 301.15 | SURFACE OF GRAVEL                     | C.Y.   | 30    |
| 501.25 | CONCRETE CLASS B                      | C.Y.   | 10    |
| 502.10 | SHORING SUPERSTRUCTURE                | L.S.   | 1     |
| 506.70 | STRUCTURAL STEEL (A 36) (ROLLED BEAM) | LB.    | 7800  |
|        | OR (A 36) ALTERNATE                   | LB.    | 7670  |
| 507.15 | REINFORCING STEEL                     | LB.    | 1220  |
| 611.25 | TREATED TIMBER 2" LUMBER              | M.B.F. | 4     |

STATE OF VERMONT  
DEPARTMENT OF HIGHWAYS

|  |                           |
|--|---------------------------|
| TOWN OF RANDOLPH                         | Bridge No. 38             |
| Log Sta.                                 |                           |
| HIGHWAY NO. TH. #64 CL.3                 | Surv. Sta.                |
| TH. 64 OVER SECOND BRANCH OF WHITE RIVER |                           |
| TYPICAL SECTION & FRAMING PLAN           |                           |
| Designed by E.L. O'Neil                  | Drawn by J. RIZARD        |
| Checked by E.L. O'Neil                   | Bridge Design Supervisor  |
| PROJECT RANDOLPH                         | PROJECT NO. TH. 64 BR. 38 |
| Bridge Sheet No.                         | Sheet 3 of 5              |



ONE B1  
2 B2  
ONE B3



**MAGNETIC PARTICLE TESTING**  
In accordance with Sheets 1 & 2 of Welding Procedures.

3MP-1--  
Test length in feet (not shown if weld is less than one foot).

Number of tests on weld (if no number shown - one test).

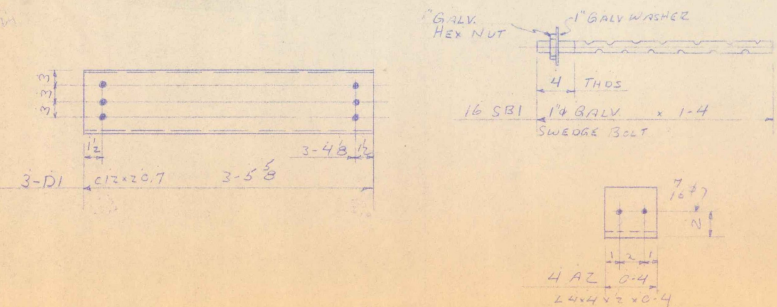
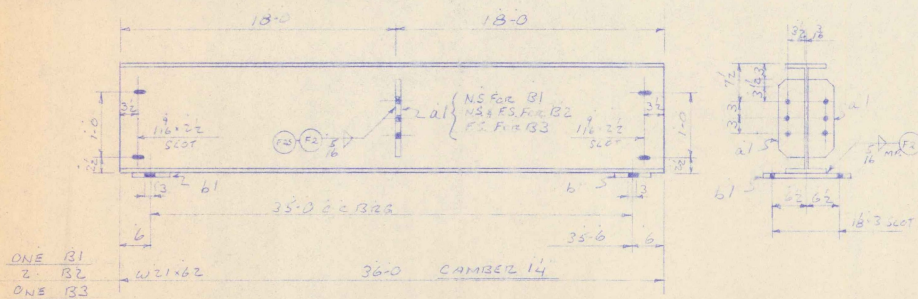
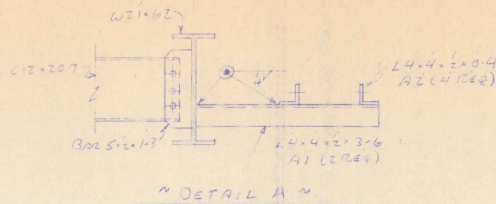
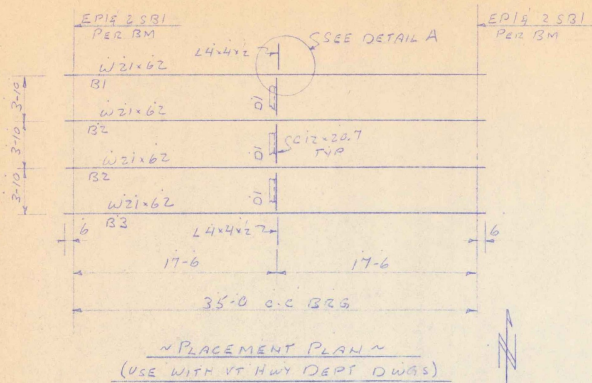
**SHOP NOTES:**  
1) Structural Steel to be fabricated in accordance with the State of Vermont Department of Highways "Standard Specifications for Highway and Bridge Construction" dated March 1976 and its latest revisions and the AASHTO Standard Specs for Highway Bridges dated 1973 and its latest revisions.  
2) Paint Note: All finished surfaces to receive one coat of basic lead silico chromate. Steel to be painted one shop coat basic lead silico chromate.

| BILL OF MATERIAL |      |  |        |     |        |                |
|------------------|------|--|--------|-----|--------|----------------|
| NO. PIECES       | MARK | DESCRIPTION                              | LENGTH |     | WEIGHT | CLASSIFICATION |
|                  |      |  | FT.    | IN. |        |                |
| FIELD MATERIAL   |      |  |        |     |        |                |
| 20               |      | 1/2" A325 BOLTS                          | 0      | 24  |        |                |
| 20               |      | 1/2" HARD WASHERS                        |        |     |        |                |
| CONT. 77-2971-50 |      |  |        |     |        |                |
| 60               |      | GALV STANLEY CLIPS FOR 4 1/2" x 1/2" BRG |        |     |        | 1000           |

| BILL OF MATERIAL         |      |                                       |        |       |                  |                |
|--------------------------|------|---------------------------------------|--------|-------|------------------|----------------|
| NO. PIECES               | MARK | DESCRIPTION                           | LENGTH |       | WEIGHT           | CLASSIFICATION |
|                          |      |                                       | FT.    | IN.   |                  |                |
| 1                        | B1   | W21x62                                | 14     |       | 360              |                |
| 2                        | B2   | "                                     |        |       | 360              | 1345694        |
| 1                        | B3   | "                                     |        |       | 360              | 8928           |
| 6                        | B1   | BAR 5x2                               |        |       | 13               | STK 64         |
| 8                        | B1   | BAR 7x1                               |        |       | 15               | STK 270        |
| 3                        | D1   | C12x20.7                              | 3      | 5 1/2 | STK              | 215 215        |
| 16                       | SBI  | 1" GALV BOLT                          | 1      | 4     | (SWEDGE)         | 57             |
| 16                       |      | 1" GALV WASHERS                       |        |       | 2000 AMER        | 3              |
| 16                       |      | 1" GALV Hex NUTS                      |        |       | BOLT 47231       | 7              |
| 8                        | EPI  | ELASTOMERIC PAD 6x3/8" (60 DUREMETER) |        |       | ORD HARRIS 47231 |                |
| PLAIN MATERIAL (PAINTED) |      |                                       |        |       |                  |                |
| 2                        | A1   | L4x4x1/2                              | 3      | 6     | STK              | 107            |
| 4                        | A2   | "                                     | 0      | 4     |                  | 107            |

| PRINT AND REVISION RECORD |     |     |    | REVISION |    |
|---------------------------|-----|-----|----|----------|----|
| DATE                      | FOR | NO. | BY | NO.      | BY |
| 4-21-77                   | APP | 5   |    |          |    |
| 5-13-77                   | APP | 6   |    |          |    |
| 5-13-77                   | APP | 7   |    |          |    |
| 5-13-77                   | APP | 8   |    |          |    |

|                 |                         |
|-----------------|-------------------------|
| PROJECT         | BRIDGE 38               |
| LOCATION        | RANDOLPH, VT            |
| CUSTOMER        | BRIDGES INC.            |
| ARCHITECT       | VT DEPT HWYS.           |
| HOLES           | 1549 AS NOTED           |
| BOLTS           | 3/8 A325                |
| CHECKED BY      | HP                      |
| PAIN            | BASIC LEAD DATE 4/21/77 |
| SILICO CHROMATE |                         |
| JOB NO.         | 77-2971-50              |
| SHEET NO.       | 1/6                     |



**MAGNETIC PARTICLE TESTING**

In accordance with Sheets 1 & 2 of Welding Procedures.

MPT-1--  
Test length in feet (not shown if weld is less than one foot).  
Number of tests on weld (if no number shown - one test).

**SHOP NOTES:**

1) Structural Steel to be fabricated in accordance with the State of Vermont Department of Highways "Standard Specifications for Highway and Bridge Construction" dated March 1978 and its latest revisions and the AASHTO Standard Specs for Highway Bridges dated 1973 and its latest revisions.

2) Paint Note: ~~All Structural Steel to be painted one shop coat Basic Lead Silice Chromate.~~

MAY 16 1977

RECEIVED \_\_\_\_\_ OK'D BY \_\_\_\_\_  
 RESUBMIT \_\_\_\_\_ A-PROVED \_\_\_\_\_  
 BY \_\_\_\_\_ DATE \_\_\_\_\_

BILL OF MATERIAL

| NO              | MARK | DESCRIPTION                      | LENGTH |    | WEIGHT | CLASSIFICATION |       |
|-----------------|------|----------------------------------|--------|----|--------|----------------|-------|
|                 |      |                                  | FT     | IN |        | WT             | MOLES |
| FIELD MATERIAL  |      |                                  |        |    |        |                |       |
| 20              |      | 1/4" A325 BOLTS                  | 0      | 24 |        |                |       |
| 20              |      | 6 HARD WASHERS                   |        |    |        |                |       |
| CONT 77-2971-50 |      |                                  |        |    |        |                |       |
| 60              |      | GALV STAINLY CLIP FOR 4.31x6.9ms |        |    |        |                |       |

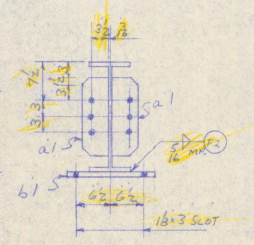
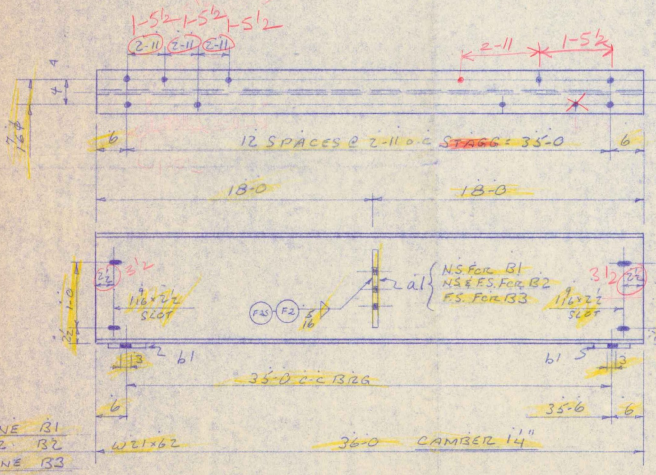
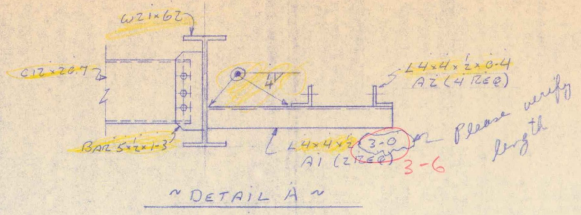
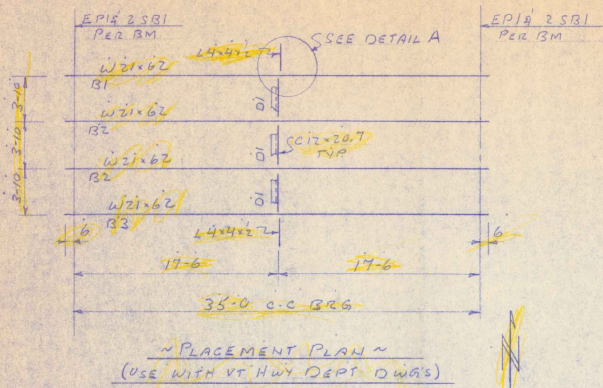
JOB NO. 77-2971 SHEET NO. 1/6

BILL OF MATERIAL ASTM A36

| NO                       | MARK | DESCRIPTION                        | LENGTH |       | WEIGHT     | CLASSIFICATION |       |
|--------------------------|------|------------------------------------|--------|-------|------------|----------------|-------|
|                          |      |                                    | FT     | IN    |            | WT             | MOLES |
| 1                        | B1   | W21x62                             | 36     | 0     |            |                |       |
| 2                        | B2   | do                                 | 36     | 0     | 145694     |                |       |
| 1                        | B3   | do                                 | 36     | 0     | 2922       |                |       |
| 6                        | A1   | BAR 5x2                            |        | 12    | 24         |                |       |
| 8                        | B1   | BAR 7x1                            |        | 15    | 240        |                |       |
| 3                        | D1   | C12x20.7                           | 3      | 5 1/2 | 115        | 2415           |       |
| 16                       | SBI  | 1" GALV BOLT                       | 1      | 4     | 59         |                |       |
| 16                       |      | 1" GALV WASHERS                    |        | 1000  | AMSE       | 3              |       |
| 16                       |      | 1" GALV Hex NUTS                   |        | 3     | Bolt 47232 | 7              |       |
| 2                        | EPI  | ELASTOMERIC PAD 6x2 (62 DUREMETER) |        | 0     | 0          | 47231          |       |
| PLAIN MATERIAL (PAINTED) |      |                                    |        |       |            |                |       |
| 2                        | A1   | L4x4x2                             | 3      | 6     | 24         |                |       |
| 4                        | AZ   | do                                 | 0      | 4     | 107        | 107            |       |

VERMONT STRUCTURAL STEEL CORPORATION BURLINGTON, VERMONT PROJECT No TH64823

| PRINT AND REVISION RECORD |                 | PROJECT    | BRIDGE 38               |
|---------------------------|-----------------|------------|-------------------------|
| DATE                      | FOR NO. REV. BY |            |                         |
|                           |                 | CUSTOMER   | BRIDGES INC.            |
|                           |                 | ARCHITECT  | VT DEPT HWYS.           |
|                           |                 | HOLDS      | 16 1/2 AS NOTED         |
|                           |                 | BOLTS      | 3/4 A325                |
|                           |                 | CHECKED BY | JP                      |
|                           |                 | PAIN       | BASIC LEAD DATE 4/21/77 |
|                           |                 | JOB NO.    | 77-2971 SHEET NO. 1/6   |



**MAGNETIC PARTICLE TESTING**

In accordance with Sheets 1 & 2 of Welding Procedures.

MP-1-

Test length in feet (not shown if weld is less than one foot).

Number of tests on weld (if no number shown - one test).

**SHOP NOTES:**

1) Structural Steel to be fabricated in accordance with the State of Vermont Department of Highways "Standard Specifications for Highway and Bridge Construction" dated March 1976 and its latest revisions and the AASHTO Standard Specs for Highway Bridges dated 1973 and its latest revisions.

2) Paint Note: Steel to be painted one shop coat Basic Lead Silico Chromate.

BILL OF MATERIAL

| NO. PIECES     | MARK | DESCRIPTION      | LENGTH FT. IN. | WEIGHT | CLASSIFICATION |
|----------------|------|------------------|----------------|--------|----------------|
| FIELD MATERIAL |      |                  |                |        |                |
| 20             |      | 1/4 2 SBI BOLTS  | 0.24           |        |                |
| 20             |      | 1/4 HARD WASHERS |                |        |                |

JOB NO. 77-2971 SHEET NO. 1/6

BILL OF MATERIAL ASTM A36

| NO. PIECES               | MARK | DESCRIPTION       | LENGTH FT. IN. | WEIGHT        | CLASSIFICATION |
|--------------------------|------|-------------------|----------------|---------------|----------------|
| 1                        | B1   | W21x62            | 35'-0"         | 345694        |                |
| 2                        | B2   | "                 | 36'-0"         |               |                |
| 1                        | B3   | "                 | 36'-0"         |               |                |
| 6                        | A1   | BAR 5x4           | 1'-3"          | STK           |                |
| 8                        | B1   | BAR 7x1           | 1'-5"          | STK           |                |
| 3                        | D1   | CR 20x7           | 3'-5"          | STK           |                |
| 16                       | SBI  | 1/4 GALV BOLT     | 1'-4"          | (SWEDGE)      |                |
| 16                       |      | 1/4 GALV WASHERS  | 1'-00"         | AMER          |                |
| 16                       |      | 1/4 GALV HEX NUTS | 1'-00"         | 1 BOLT 4 7/32 |                |
| 8                        | EP   | Elastomeric Pad   | 0'-9"          | and HARDEN    |                |
|                          |      | (60 DIAMETER)     |                | 4 7/32        |                |
| PLAIN MATERIAL (PAINTED) |      |                   |                |               |                |
| 3                        | A1   | 1/4 2 SBI         | 3'-0"          | STK           |                |
| 4                        | A2   | "                 | 0'-4"          |               |                |

VERMONT STRUCTURAL STEEL CORPORATION  
BURLINGTON, VERMONT

PROJECT No TH64208

BRIDGE 38

LOCATION: RANDOLPH, VT

CUSTOMER: BRIDGES INC.

ARCHITECT: VT DEPT HWY'S.

HOLE 15/16 1/4 NOTED DRAWN BY: WJL

BOLTS: B4 A325 CHECKED BY: HP

PAINT: BASIC LEAD DATE: 4/21/77

SILICO CHROMATE

JOB NO. 77-2971 SHEET NO. 1/6

RECEIVED BY: WJL OK'D BY: WJL

RESUBMIT APPROVED: WJL

BY: WJL DATE: 4-22-77

Vermont Agency of  
Transportation  
PHASE 2-INTERSTATE  
#122302-01



INITIALS

Box 3222



DONE

Bridge  
1976

Randolph  
Class 3, Th 64, B 3P

1976

# RANDOLPH

Class 3, TH64, B38 over 2nd Branch

New Bridge within  
& repair of Covered Bridge

1976