

# STATE OF MAINE DEPARTMENT OF TRANSPORTATION



### SPECIFICATIONS

Design: Load and Resistance Factor Design per AASHTO LRFD Bridge Design Specifications, Fifth Edition 2010 and interim specifications through 2011.

### TRAFFIC DATA

Current (2011) AADT ..... 18,610

### MATERIALS

Concrete (unless noted otherwise) ..... Class "A"  
 Reinforcing steel ..... ASTM A 615/A 615M, Grade 60  
 Structural steel:  
   All material ..... AASHTO M270, GR. 50  
 Anchor rods ..... ASTM F1554, GR. 105  
 High strength bolts ..... ASTM A325

### BASIC DESIGN STRESSES

Concrete .....  $F'_c = 4,350$  psi  
 Reinforcing steel .....  $F_y = 60,000$  psi  
 Structural steel:  
   AASHTO M270, Gr. 50 .....  $F_y = 50,000$  psi  
 Anchor rods .....  $F_u = 125,000$  psi  
 High strength bolts .....  $F_y = 120,000$  psi

## PORTSMOUTH, NH TO KITTERY, ME YORK COUNTY SARAH MILDRED LONG BRIDGE OVER PISCATAQUA RIVER U.S. ROUTE 1 BYPASS STATE PROJECT NO. 16710.10 PROJECT LENGTH 0.55 mi. BRIDGE BARRIER SYSTEM INSTALLATION BRIDGE NO. 3641

### LIST OF DRAWINGS

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### UTILITIES

See Special Provision 104 for listing of utilities.

### MAINTENANCE OF TRAFFIC

Bridge shall be closed to traffic for night time construction. Maintain two 12-ft minimum width lanes of traffic during daytime hours. See General Notes and Special Provisions 105, 107, and 652.

|                          |   |
|--------------------------|---|
| <b>PROJECT LOCATION:</b> | Sarah Long Mildred Bridge (#3641) over the Piscataqua River between Kittery, Maine and Portsmouth, New Hampshire<br>Lat./Long.: 43°5'10.8" N, 70°45'39.1" W |
| <b>PROGRAM AREA:</b>     | Bridge Program  |
| <b>OUTLINE OF WORK:</b>  | Bridge barrier system installation  |

|  |                                     |                                       |
|--|-------------------------------------|---------------------------------------|
| STATE OF MAINE<br>DEPARTMENT OF TRANSPORTATION | APPROVED                            | DATE                                  |
|  | COMMISSIONER:<br><i>[Signature]</i> | 4/26/12                               |
|  |                                     | CHIEF ENGINEER:<br><i>[Signature]</i> |

STATE OF MAINE  
REGISTRATION  
NO. 6452  
PROFESSIONAL  
ENGINEER

SIGNATURE: *[Signature]*  
P.E. NUMBER: 6452  
DATE: 4/26/12

|                         |                   |
|-------------------------|-------------------|
| PROJECT INFORMATION     |                   |
| PROGRAM                 | BRIDGE            |
| PROJECT MANAGER         | LEANNE TIMBERLAKE |
| DESIGNER                | DON ETINGER       |
| CONSULTANT              | HNFB              |
| PROJECT RESIDENT        |                   |
| CONTRACTOR              |                   |
| PROJECT COMPLETION DATE |                   |

16710.10  
SARAH MILDRED LONG BRIDGE  
PISCATAQUA RIVER  
KITTERY, ME PORTSMOUTH, NH

SHEET NUMBER  
**1**  
OF 8

Date: 4/26/2012

Username: mcundiff

Division: BRIDGE

Filename: 001\_Title.dgn

Date: 4/27/2012

Username: kbroyley

Division: BRIDGE

Filename: 002\_GeneralNotes.dgn

ESTIMATED QUANTITIES

| ITEM NO. | DESCRIPTION   | QUANTITY | UNIT |
|----------|---|----------|------|
| 202.141  | REMOVING EXISTING RUB RAILING - PROPERTY OF CONTRACTOR                | 462      | LF   |
| 507.861  | PREFABRICATED BRIDGE BARRIER SYSTEM (5263 LF)                         | 1        | LS   |
| 518.50   | REPAIR OF UPWARD FACING SURFACES - TO REINF STEEL                     | 19       | SF   |
| 518.51   | REPAIR OF UPWARD FACING SURFACES - BELOW REINF STEEL                  | 6        | SF   |
| 518.52   | REPAIR OF UPWARD FACING SURFACES > 7 IN.                              | 1        | CY   |
| 606.731  | GUARDRAIL THRIE BEAM - SINGLE RAIL BRIDGE MOUNTED, LIFT SPAN (450 LF) | 1        | LS   |
| * 629.05 | HAND LABOR, STRAIGHT TIME   | 40       | HR   |
| * 631.10 | AIR COMPRESSOR (INCLUDING OPERATOR)                                   | 20       | HR   |
| * 631.11 | AIR TOOL (INCLUDING OPERATOR)   | 20       | HR   |
| 631.21   | ROAD BROOM (INC OPER & HAULER)  | 16       | HR   |
| 652.30   | FLASHING ARROW BOARD  | 2        | EA   |
| 652.312  | TYPE III BARRICADES   | 8        | EA   |
| 652.33   | DRUM  | 160      | EA   |
| 652.34   | CONE  | 50       | EA   |
| 652.35   | CONSTRUCTION SIGNS  | 715      | SF   |
| 652.36   | MAINTENANCE OF TRAFFIC CONTROL DEVICES                                | 56       | CD   |
| 652.38   | FLAGGERS  | 384      | HR   |
| 652.41   | PORTABLE CHANGEABLE MESSAGE SIGN                                      | 2        | EA   |
| 659.10   | MOBILIZATION  | 1        | LS   |
| 880.02   | BRIDGE BALANCING  | 1        | LS   |
| 880.03   | BALANCE BLOCKS  | 85       | EA   |

\* UNDETERMINED LOCATION

GENERAL CONSTRUCTION NOTES

- BIDDERS AND CONTRACTORS SHALL NOTE THAT EXISTING BRIDGE PLANS MAY BE ACCESSED AT THE WEB ADDRESS BELOW. THE PLANS ARE REPRODUCTIONS OF THE ORIGINAL DRAWINGS AS PREPARED FOR THE CONSTRUCTION OF THE BRIDGES. IT IS VERY UNLIKELY THAT THE PLANS WILL SHOW ANY CONSTRUCTION FIELD CHANGES OR ANY ALTERATIONS WHICH MAY HAVE BEEN MADE TO THE BRIDGE. [HTTP://WWW.MAINE.GOV/MDOT/COMPREHENSIVE-LIST-PROJECTS/PROJECT-INFORMATION.PHP](http://www.maine.gov/dot/comprehensive-list-projects/project-information.php)
- THE EXISTING PLANS WERE DEVELOPED FROM AERIAL AND GROUND SURVEY, SUPPLEMENTED BY LIMITED FIELD MEASUREMENTS AND ARE NOT GUARANTEED TO BE CORRECT. ALL EXISTING BRIDGE INFORMATION SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO COMMENCING ANY WORK.
- UTILITIES IN THIS CONTRACT ARE LISTED IN SPECIAL PROVISION SECTION 104, UTILITIES.
- ALL UTILITY FACILITIES SHALL BE ADJUSTED BY THE RESPECTIVE UTILITIES UNLESS OTHERWISE NOTED. NO UTILITY ADJUSTMENT IS ANTICIPATED.
- THE LOCATIONS OF THE EXISTING UTILITIES, BRIDGE WIRING AND MONITORING INSTRUMENTS ARE NOT SHOWN ON THESE PLANS. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UTILITIES AND SPECIAL EQUIPMENT PRIOR TO STARTING WORK. THE CONTRACTOR SHALL PROTECT EXISTING UTILITIES AND SPECIAL EQUIPMENT DURING CONSTRUCTION AND SHALL PROVIDE TEMPORARY SUPPORTS WHERE REQUIRED BY HIS OPERATIONS. TEMPORARY SUPPORTS SHALL BE APPROVED BY THE UTILITY OR SPECIAL EQUIPMENT OWNER PRIOR TO THEIR INSTALLATION AND USE. THE COST OF THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE WORK REQUIRED UNDER ITEM 659.10 MOBILIZATION.
- ALL WORK SHALL CONFORM TO MAINE DOT STANDARD SPECIFICATIONS AND STANDARD DETAILS FOR HIGHWAYS AND BRIDGES, UNLESS OTHERWISE NOTED HERE-IN.
- ALL EXISTING MATERIALS WHICH ARE REMOVED FROM THE WORK AREA SHALL BE REMOVED FROM THE SITE AND PROPERLY DISPOSED OF BY THE CONTRACTOR IN A MANNER APPROVED BY THE RESIDENT. THESE EXISTING MATERIALS INCLUDE, BUT ARE NOT LIMITED TO, CONCRETE, STEEL, SILT AND OTHER DEBRIS ON OR ATTACHED TO THE STRUCTURE WITHIN THE WORK AREAS. THE COST OF REMOVAL AND DISPOSAL SHALL BE INCIDENTAL TO THE COST OF THE WORK ITEMS FOR WHICH THESE REMOVALS ARE REQUIRED.
- CONTRACTOR SHALL CLEAN EXISTING SHOULDERS PRIOR TO INSTALLATION OF THE THRIE RAIL AND BARRIER SYSTEMS. PAYMENT FOR WORK SHALL BE MADE UNDER PAY ITEM 631.21.
- ALL EXISTING BRIDGE SCUPPERS SHALL BE CLEANED PRIOR TO INSTALLATION OF THE THRIE RAIL AND BARRIER SYSTEMS. PAYMENT FOR WORK SHALL BE CONSIDERED INCIDENTAL TO PAY ITEM 631.21.
- PROPOSED BARRIER SYSTEM LAYOUT AND DESIGN SHALL NOT RESTRICT SURFACE DRAINAGE OR IMPEDE BRIDGE DRAIN FUNCTION.
- BARRIER END TREATMENTS SHALL BE INSTALLED CONCURRENTLY WITH THE PLACEMENT OF BARRIER. BARRIER END TREATMENT SYSTEMS SHALL MEET REQUIREMENTS OF THE 606 SPECIAL PROVISION.
- THE RUB RAIL REMOVED FROM THE LIFT SPAN SHALL REMAIN THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF PROPERLY. CARE SHALL BE TAKEN NOT TO DAMAGE THE EXISTING RAILING DURING RUB RAIL REMOVAL COORDINATE WORK WITH RESIDENT.
- ANY DAMAGE TO THE CONCRETE DECK OR OTHER EXISTING BRIDGE COMPONENTS RESULTING FROM THE WORK PERFORMED, ASIDE FROM REQUIRED DRILLING AND ANCHORING, SHALL BE REPAIRED OR REPLACED BY A METHOD APPROVED BY THE RESIDENT AT NO COST TO THE DEPARTMENT.
- ALL HARDWARE, MATERIALS AND LABOR ASSOCIATED WITH CONNECTIONS OF THE BARRIER SYSTEM INCLUDING EXPANSION DEVICES, TRANSITION BARRIER AND END TREATMENTS SHALL BE CONSIDERED INCIDENTAL TO THE 507 ITEMS.
- ALL HARDWARE, MATERIALS AND LABOR ASSOCIATED WITH CONNECTIONS OF THE THRIE RAIL SYSTEM INCLUDING TAPERS AND END UNITS SHALL BE CONSIDERED INCIDENTAL TO ITEM 606.731.
- THE CONTRACTOR IS RESPONSIBLE FOR THE LAYOUT OF THE CONSTRUCTION BASELINE AS NECESSARY TO COMPLETE THE WORK. FOUR BASELINE LAYOUT POINTS ARE PROVIDED ON THE BARRIER PLANS. ALL BASELINE LAYOUT INFORMATION SHALL BE CHECKED AND APPROVED BY THE RESIDENT PRIOR TO STARTING INSTALLATION WORK. PAYMENT FOR WORK IS CONSIDERED INCIDENTAL TO THE CONTRACT.
- NO SEPARATE PAYMENT FOR SUPERINTENDENT OR FOREMAN WILL BE MADE FOR THE SUPERVISION OF THE EQUIPMENT BEING PAID FOR UNDER THE EQUIPMENT RENTAL ITEMS.
- STATIONS REFERENCED ARE APPROXIMATE.
- CONTRACTOR SHALL ATTACH THE BARRIER AND THRIE RAIL SYSTEMS INTO SOUND CONCRETE. IF DETERIORATED DECK CONCRETE IS PRESENT AT ANCHORING LOCATIONS, CONTRACTOR SHALL REPAIR CONCRETE DECK AREAS PRIOR TO ANCHORING WORK. PAYMENT FOR WORK SHALL BE UNDER ASSOCIATED 518 PAY ITEMS.
- IF THE DEPTH OF THE DETERIORATED CONCRETE, IN AREAS WHERE ANCHORING IS PROPOSED, IS BELOW THE REINFORCING STEEL THEN THE CONCRETE SHALL BE REMOVED TO A MINIMUM DEPTH OF 1 INCH BELOW THE BARS PRIOR TO PATCHING.

- QUANTITIES INCLUDED FOR PAY ITEMS MEASURED AND PAID FOR BY LUMP SUM ARE ESTIMATED QUANTITIES AND ARE PROVIDED BY MAINE DOT FOR INFORMATIONAL PURPOSES ONLY. LUMP SUM PAY ITEMS WILL BE PAID FOR AT THE CONTRACT BID AMOUNT, WITH NO ADDITION OR REDUCTION IN PAYMENT TO THE CONTRACTOR IF THE ACTUAL FINAL QUANTITIES ARE DIFFERENT FROM THE MAINE DOT PROVIDED ESTIMATED QUANTITIES, EXCEPT AS FOLLOWS:
  - IF A LUMP SUM PAY ITEM IS ELIMINATED, THE REQUIREMENTS OF STANDARD SPECIFICATIONS SECTION 109.2, ELIMINATION OF ITEMS, WILL TAKE PRECEDENCE.
  - IF OTHER CONTRACT DOCUMENTS SPECIFICALLY ALLOW A CHANGE IN PAYMENT FOR A LUMP SUM PAY ITEM, THOSE REQUIREMENTS WILL BE FOLLOWED.
  - IF A DESIGN CHANGE RESULTS IN CHANGES TO THE ESTIMATED QUANTITIES FOR LUMP SUM PAY ITEMS, PRICE ADJUSTMENTS WILL BE MADE IN ACCORDANCE WITH STANDARD SPECIFICATIONS SECTION 109.7, EQUITABLE ADJUSTMENTS TO COMPENSATION.

- THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN (TCP) IN ACCORDANCE WITH THE STANDARD SPECIFICATION, SECTION 652.
- ALL TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, USDOT, FHWA, LATEST EDITION
- CONTRACTOR SHALL NOTE THAT CONSTRUCTION TIME RESTRICTIONS EXIST. SEE SPECIAL PROVISIONS 105 AND 107 FOR SPECIFIC TIME RESTRICTIONS AND LIMITATIONS OF OPERATIONS.
- TWO LANES OF TRAFFIC SHALL BE MAINTAINED DURING THE FOLLOWING TIMES:
 

|          |                     |
|----------|---------------------|
| WEEKDAYS | 5:00 AM TO 10:00 PM |
| SATURDAY | 8:00 AM TO 8:00 PM  |
| SUNDAY   | 9:00 AM TO 8:00 PM  |

NO CONSTRUCTION SHALL OCCUR DURING THESE ABOVE TIMES. CONSTRUCTION SHALL OCCUR DURING THE NIGHT WITH NIGHTLY BRIDGE CLOSURES. THE CONTRACTOR SHALL PLAN THE WORK ACCORDINGLY AND COORDINATE DIRECTLY WITH THE RESIDENT.

- PRIOR TO PROCURING THE SELECTED BARRIER SYSTEM, THRIE RAIL AND END TREATMENTS, THE CONTRACTOR SHALL SUBMIT WORKING DRAWINGS OF THE PROPOSED SYSTEMS IN ACCORDANCE WITH SPECIAL PROVISIONS 507 AND 606. THE WORKING DRAWINGS SHALL INCLUDE DETAILED LAYOUT AND ANCHORING INFORMATION FOR THE SYSTEM. WHERE THROUGH BOLTING OF THE DECK IS REQUIRED, THE WORKING DRAWINGS SHALL IDENTIFY AND ADDRESS POTENTIAL CONFLICTS BETWEEN THE PROPOSED ANCHORAGES AND EXISTING BRIDGE FRAMING MEMBERS SUCH AS FLOORBEAMS AND STRINGERS.

- WORK ON THE LIFT SPAN SHALL BE COMPLETED WITH CONSIDERATION GIVEN TO HOW THE WORK WILL AFFECT THE BALANCE OF THE LIFT SPAN. RUB RAIL REMOVAL, THRIE RAIL INSTALLATION, AND BALANCE BLOCK REMOVAL/INSTALLATION ACTIVITIES WILL NEED TO OCCUR SEQUENTIALLY. SEE SPECIAL PROVISION 880, BRIDGE BALANCING, FOR ADDITIONAL INFORMATION.

- THE CONTRACTOR SHALL NOTE THAT THE SARAH MILDRED LONG BRIDGE IS POSTED FOR LOAD AT 20 TONS. VEHICLE AND EQUIPMENT RESTRICTIONS APPLY. SEE SPECIAL PROVISION 105 FOR ADDITIONAL INFORMATION.

- NO PERSONNEL, VEHICLES OR EQUIPMENT WILL BE PERMITTED TO OPERATE ON THE RAILROAD DECK LOCATED ON THE LOWER LEVEL OF THE TRUSS WITHOUT PROPER COORDINATION AND APPROVAL BY PANAM RAILROAD. SEE SPECIAL PROVISION 105.

- THE BRIDGE IS REQUIRED TO OPERATE FOR MARINE TRAFFIC THROUGHOUT THE DURATION OF THE CONTRACT REGARDLESS OF WHETHER THE BRIDGE IS CLOSED TO HIGHWAY TRAFFIC. THE CONTRACTOR SHALL PLAN THE WORK ACCORDINGLY. SEE SPECIAL PROVISION 105, LIMITATIONS OF OPERATIONS, FOR ADDITIONAL INFORMATION.

- THE CONTRACTOR IS NOT ALLOWED TO STOCKPILE OR STORE MATERIALS AND EQUIPMENT NOT REQUIRED FOR EACH NIGHTS WORK ON THE BRIDGE DECK. SEE SPECIAL PROVISION 105, LIMITATIONS OF OPERATIONS, FOR ADDITIONAL INFORMATION.

- THE THRIE RAIL ON THE LIFT SPAN SHALL BE INSTALLED WITH THE FACE OF RAIL ALIGNED WITH THE FACE OF BARRIER ON THE ADJACENT BRIDGE SPANS. THE FIRST AND LAST 25 FEET OF THE THRIE RAIL RUNS SHALL BE TAPERED AT A 15:1 RATE OR FLATTER SUCH THAT THE TERMINAL ENDS OF THE RAIL FLARE AWAY FROM THE SHOULDER LINE. THE RAIL SHALL BE FLARED AS MUCH AS POSSIBLE WITHOUT REQUIRING DEMOLITION OF THE BRIDGE CURB OR MODIFICATION OF THE THRIE RAIL POST ASSEMBLIES.

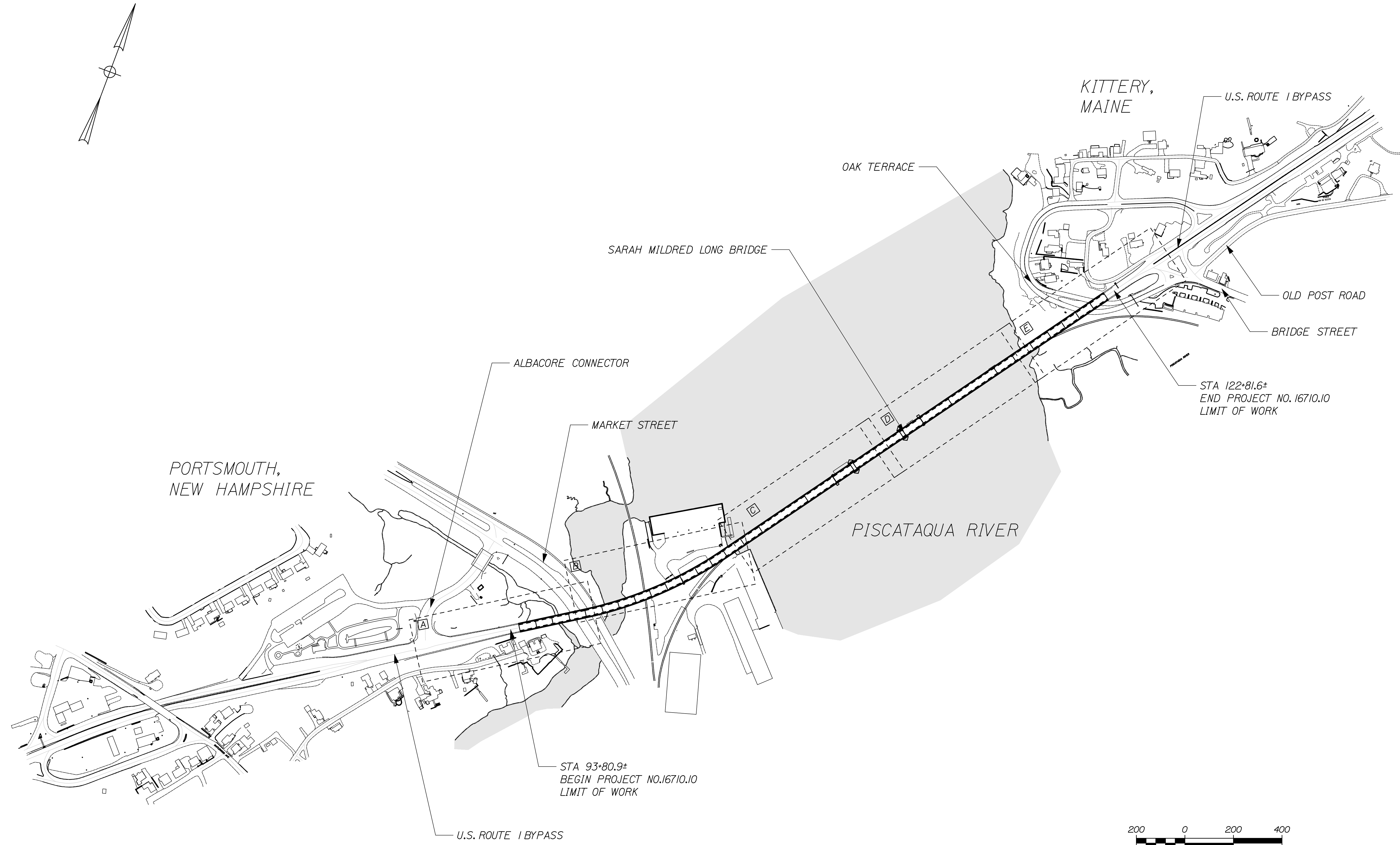
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| STATE OF MAINE<br>DEPARTMENT OF TRANSPORTATION<br><b>16710.10</b><br>WIN<br>BRIDGE NO. 3641<br>BRIDGE PLANS | <b>HNTB</b>          |
| SARAH MILDRED LONG BRIDGE<br>PISCATAQUA RIVER<br>PORTSMOUTH, NH<br>KITTERY, ME                              | QUANTITIES AND NOTES |
| SHEET NUMBER<br><b>2</b><br>OF 8  | FIELD CHANGES        |

Date: 4/26/2012

Username: mcurdfff

Division: BRIDGE

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STATE OF MAINE  
 DEPARTMENT OF TRANSPORTATION  
 16710.10  
 WIN  
 16710.10  
 BRIDGE NO. 3641  
 BRIDGE PLANS

**HNTB**

| PROJ. MANAGER    | L. TIMBERLAKE | BY  | DATE  |
|------------------|---------------|-----|-------|
| DESIGN-DETAILED  | KEB           |     | 04/12 |
| CHECKED-REVIEWED | TRC           | DGE | 04/12 |
| DESIGN-DETAILED  |               |     |       |
| REVISIONS 1      |               |     |       |
| REVISIONS 2      |               |     |       |
| REVISIONS 3      |               |     |       |
| REVISIONS 4      |               |     |       |
| FIELD CHANGES    |               |     |       |

SARAH MILDRED LONG BRIDGE  
 PISCATAQUA RIVER  
 PORTSMOUTH, NH  
 KITTERY, ME  
 LOCATION MAP

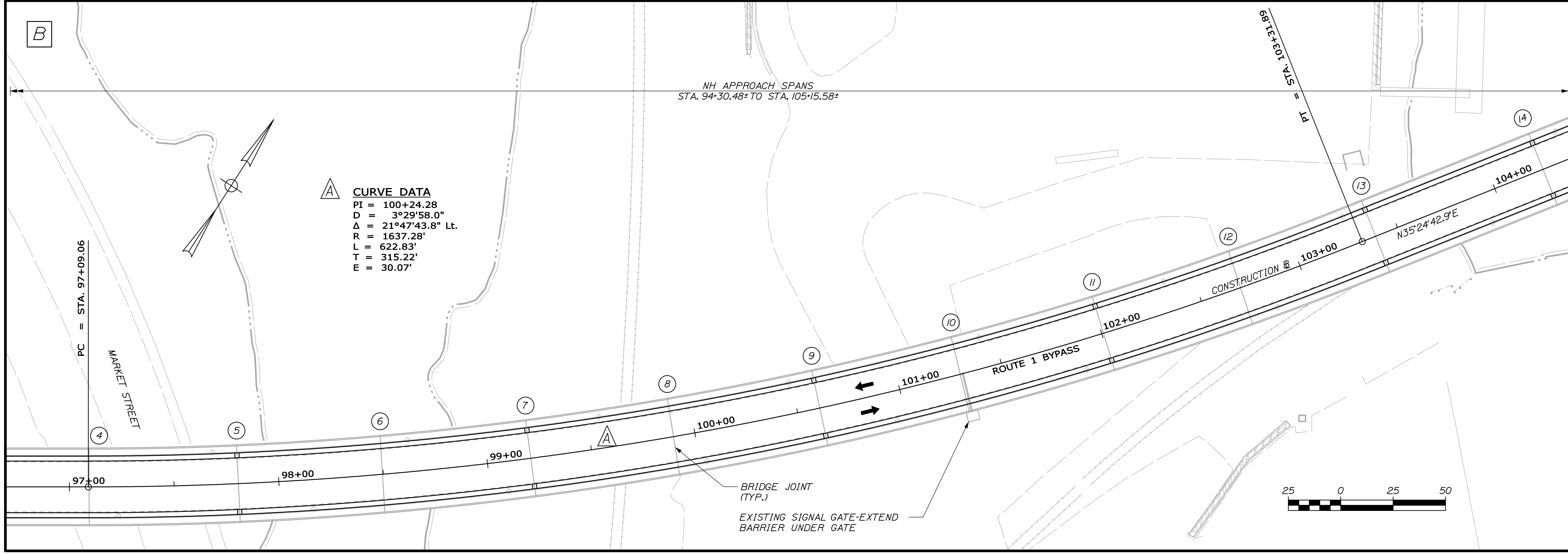
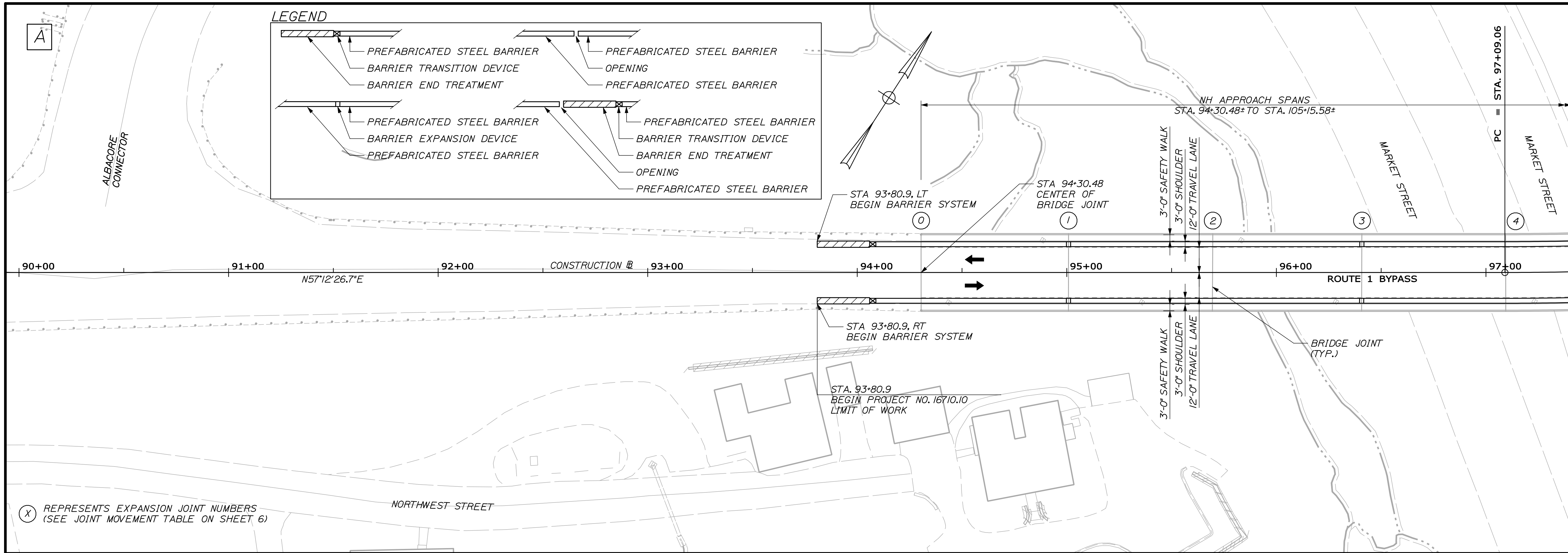
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**3**  
 OF 8

Date: 4/26/2012

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Division: BRIDGE

Filename: 004\_BarrierPlan.dgn



STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
16710.10  
WIN  
16710.10  
BRIDGE NO. 3641  
BRIDGE PLANS

**HNTB**

| PROJ. MANAGER    | L. TIME/BLAKE | BY  | DATE  |
|------------------|---------------|-----|-------|
| DESIGN-DETAILED  | KEB           |     | 04/12 |
| CHECKED-REVIEWED | TRC           | DGE | 04/12 |
| DESIGN-DETAILED  |               |     |       |
| REVISIONS 1      |               |     |       |
| REVISIONS 2      |               |     |       |
| REVISIONS 3      |               |     |       |
| REVISIONS 4      |               |     |       |
| FIELD CHANGES    |               |     |       |

SARAH MILDRED LONG BRIDGE  
PISCATAQUA RIVER  
PORTSMOUTH, NH  
KITTEERY, ME  
BARRIER PLANS

SHEET NUMBER  
**4**  
OF 8

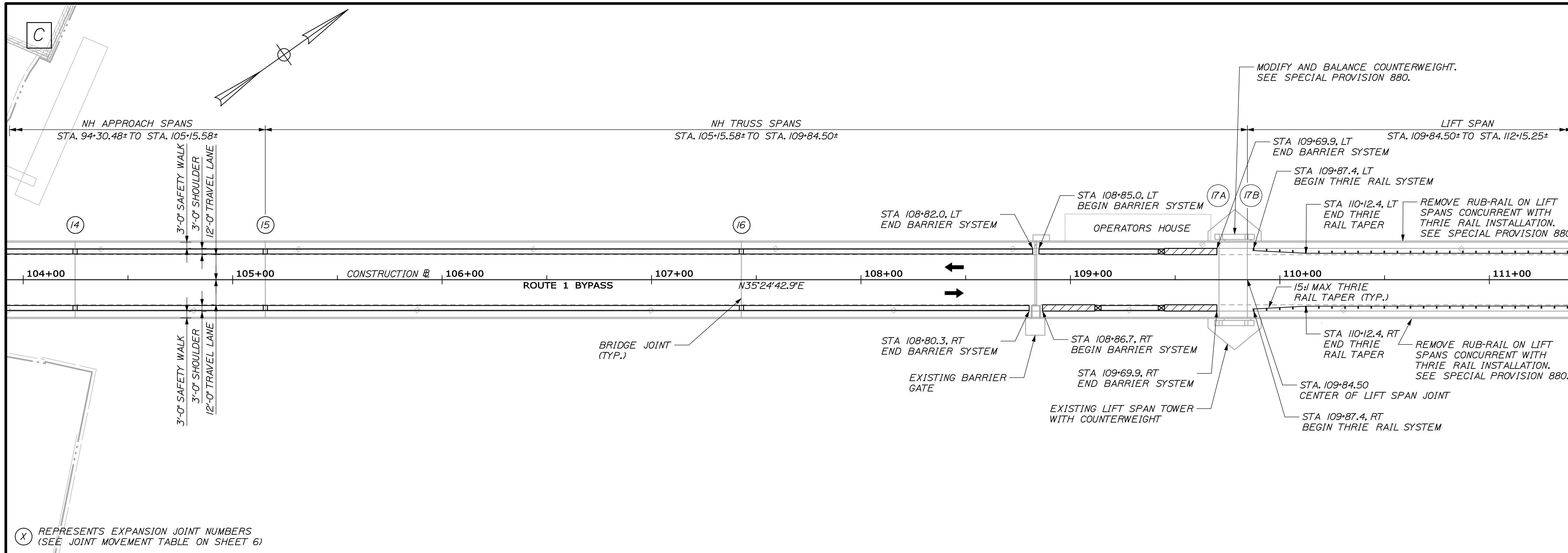


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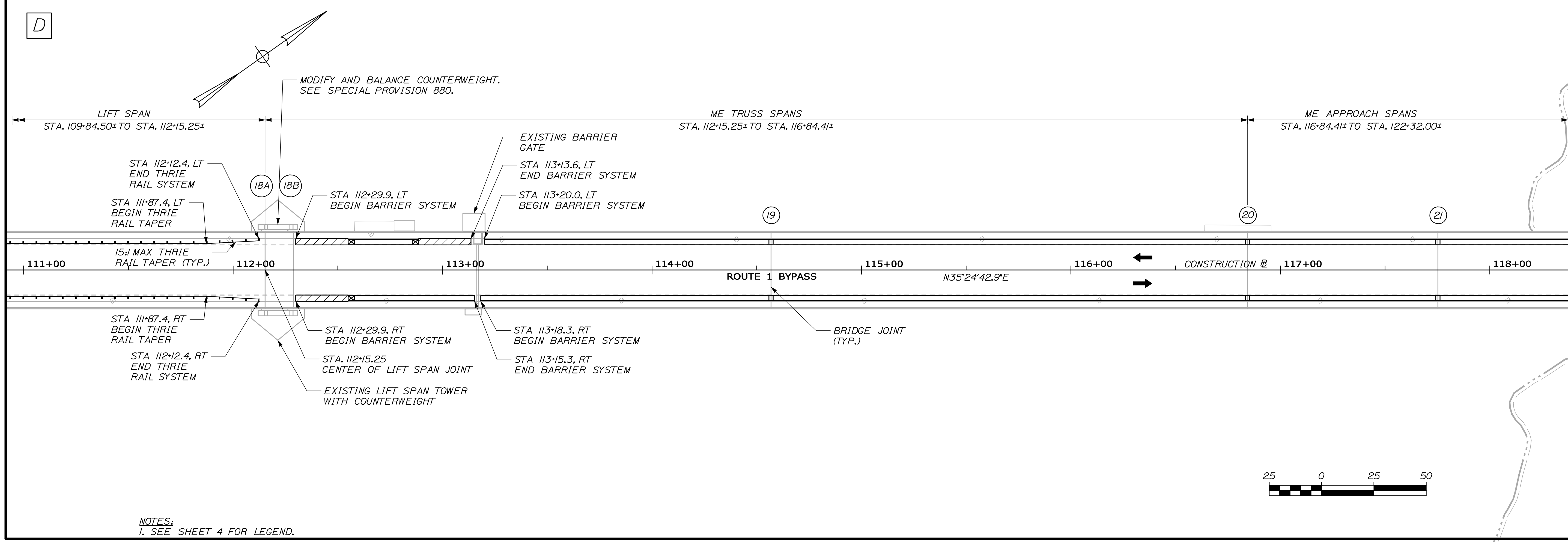
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(X) REPRESENTS EXPANSION JOINT NUMBERS  
(SEE JOINT MOVEMENT TABLE ON SHEET 6)



NOTES:  
1. SEE SHEET 4 FOR LEGEND.



STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
16710.10  
BRIDGE NO. 3641  
WIN 16710.10  
BRIDGE PLANS

|             |  |                  |               |       |       |
|-------------|--|------------------|---------------|-------|-------|
| <b>HNTB</b> |  | PROJ. MANAGER    | L. TIMBERLAKE | BY    | DATE  |
|             |  | DESIGN-DETAILED  | KEB           | 04/12 |       |
|             |  | CHECKED-REVIEWED | TRC           | DGE   | 04/12 |
|             |  | DESIGN-DETAILED  |               |       |       |
|             |  | REVISIONS 1      |               |       |       |
|             |  | REVISIONS 2      |               |       |       |
|             |  | REVISIONS 3      |               |       |       |
|             |  | REVISIONS 4      |               |       |       |
|             |  | FIELD CHANGES    |               |       |       |

SARAH MILDRED LONG BRIDGE  
PISCATAQUA RIVER  
PORTSMOUTH, NH  
KITTERY, ME  
BARRIER PLANS

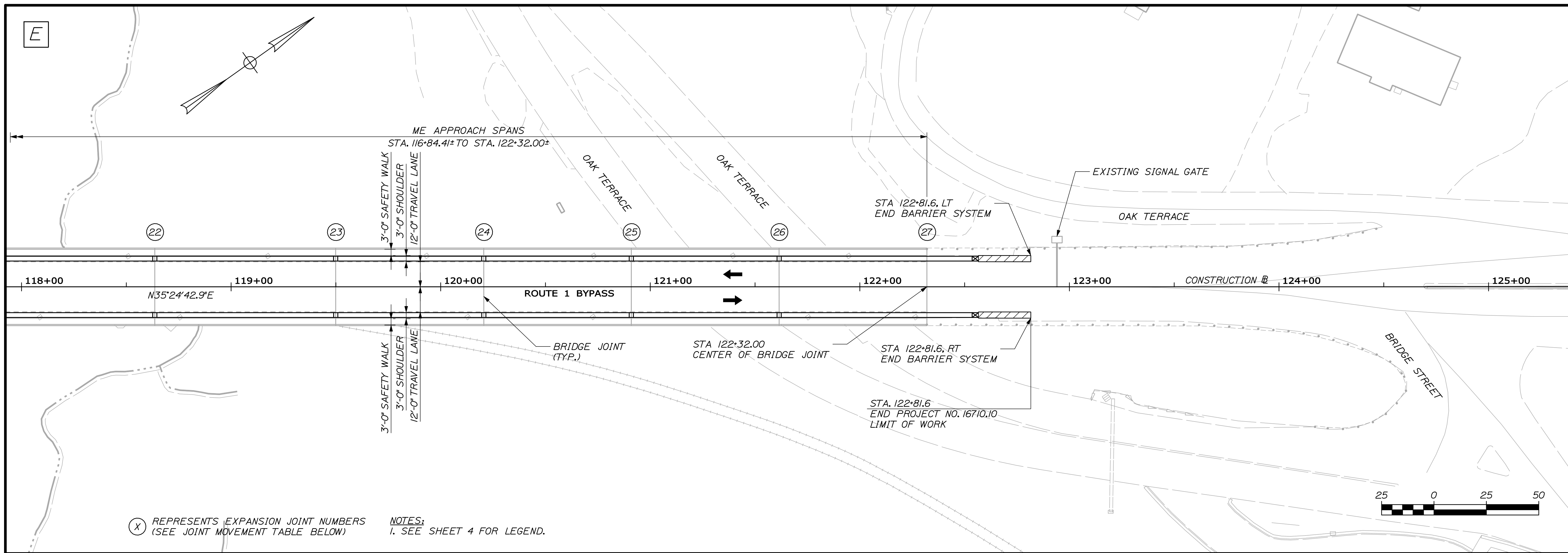
SHEET NUMBER  
**5**  
OF 8

Date: 4/26/2012

Username: mcurdiff

Division: BRIDGE

Filename: 006\_BarrierPlan3.dgn



(X) REPRESENTS EXPANSION JOINT NUMBERS (SEE JOINT MOVEMENT TABLE BELOW) NOTES: 1. SEE SHEET 4 FOR LEGEND.

| JOINT NUMBER | STATION  | EXPANSION LENGTH (FT) | MOVEMENT RATING (IN) |
|--------------|----------|-----------------------|----------------------|
| 0            | 94+30.5  | 0                     | 0.00                 |
| 1            | 95+00.8  | 139                   | 1.74                 |
| 2            | 95+69.6  | 0                     | 0.00                 |
| 3            | 96+40.8  | 140                   | 1.75                 |
| 4            | 97+09.5  | 0                     | 0.00                 |
| 5            | 97+80.7  | 140                   | 1.75                 |
| 6            | 98+49.7  | 0                     | 0.00                 |
| 7            | 99+20.8  | 140                   | 1.75                 |
| 8            | 99+89.7  | 0                     | 0.00                 |
| 9            | 100+60.8 | 140                   | 1.75                 |
| 10           | 101+29.9 | 0                     | 0.00                 |
| 11           | 102+00.9 | 140                   | 1.75                 |
| 12           | 102+69.9 | 0                     | 0.00                 |
| 13           | 103+38.8 | 69                    | 0.86                 |
| 14           | 104+24.8 | 86                    | 1.08                 |

| JOINT NUMBER | STATION  | EXPANSION LENGTH (FT) | MOVEMENT RATING (IN) |
|--------------|----------|-----------------------|----------------------|
| 15           | 105+15.6 | 90                    | 1.12                 |
| 16           | 107+42.9 | 453                   | 5.66                 |
| 17A          | 109+70.9 | 0                     | 0.00                 |
| 17B          | 109+84.5 | 0                     | 0.00                 |
| 18A          | 112+15.3 | 224                   | 2.80                 |
| 18B          | 112+28.9 | 0                     | 0.00                 |
| 19           | 114+56.8 | 453                   | 5.66                 |
| 20           | 116+84.4 | 90                    | 1.12                 |
| 21           | 117+75.3 | 89                    | 1.11                 |
| 22           | 118+63.6 | 86                    | 1.08                 |
| 23           | 119+49.9 | 71                    | 0.88                 |
| 24           | 120+20.5 | 71                    | 0.88                 |
| 25           | 120+91.0 | 71                    | 0.88                 |
| 26           | 121+61.5 | 71                    | 0.88                 |
| 27           | 122+32.0 | 0.00                  | 0.00                 |

JOINT MOVEMENT RATING TABLE

NOTES:  
 1. STATIONING INFORMATION SHOWN ASSUMES BRIDGE JOINTS ARE PERPENDICULAR TO THE ROADWAY BASELINE. ALL STATIONING IS APPROXIMATE.  
 2. MOVEMENT RATINGS WERE CALCULATED USING ARTICLE 4.8.1 IN MEDOT BRIDGE DESIGN GUIDE.

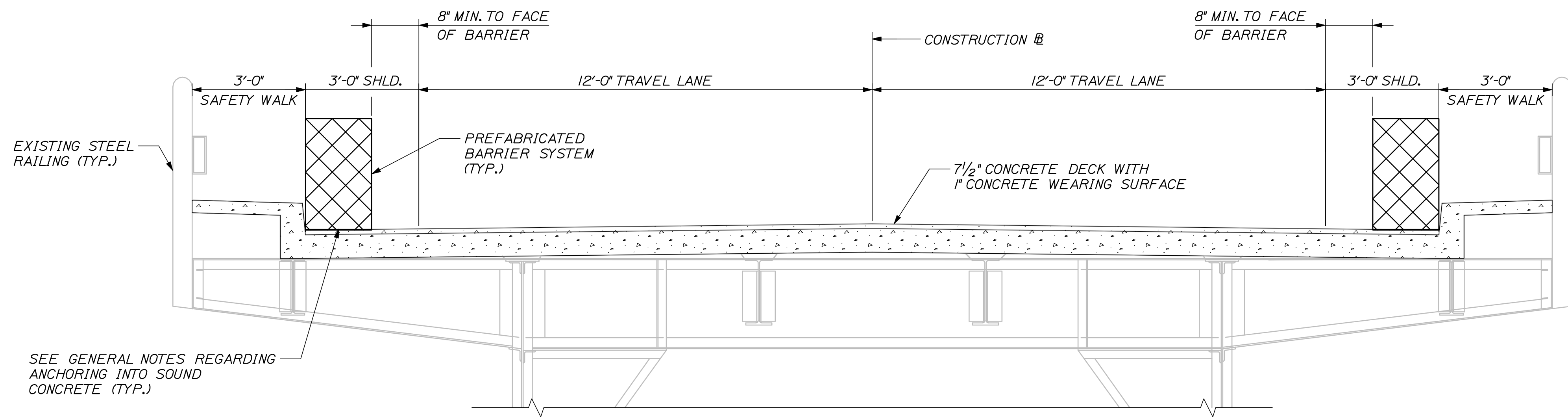
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| STATE OF MAINE<br>DEPARTMENT OF TRANSPORTATION   |               | 16710.10     |       |
| BRIDGE NO. 3641  |               | WIN 16710.10 |       |
| BRIDGE PLANS   |               |              |       |
| <b>HNTB</b>  |               |              |       |
| PROJ. MANAGER  | L. TIMBERLAKE | BY           | DATE  |
| DESIGN-DETAILED  | KEB           |              | 04/12 |
| CHECKED-REVIEWED   | TRC           | DGE          | 04/12 |
| DESIGN-DETAILED  |               |              |       |
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| FIELD CHANGES  |               |              |       |
| SARAH MILDRED LONG BRIDGE<br>PISCATAQUA RIVER<br>PORTSMOUTH, NH<br>KITTEERY, ME<br>BARRIER PLANS |               |              |       |
| SHEET NUMBER   |               |              |       |
| 6  |               |              |       |
| OF 8   |               |              |       |

Date: 4/26/2012

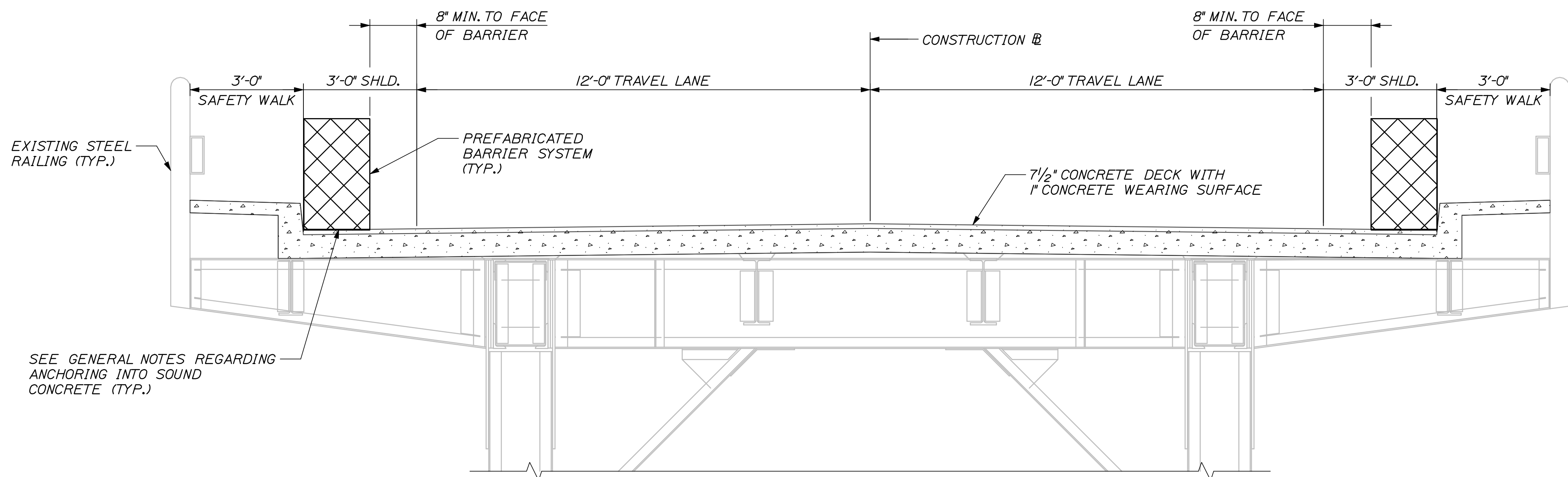
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Division: BRIDGE

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TYPICAL SECTION - APPROACH SPAN  
NTS



TYPICAL SECTION - TRUSS SPAN  
NTS

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
16710.10  
WIN  
16710.10  
BRIDGE NO. 3641  
BRIDGE PLANS

**HNTB**

|              |       |             |  |
|--------------|-------|-------------|--|
| DESIGN-DATE  | 04/12 | SIGNATURE   |  |
| CHECKED-DATE | 04/12 | P.E. NUMBER |  |
| DESIGN-DATE  |       | DATE        |  |

| PROJ. MANAGER | L. TIMBERLAKE | BY  | DATE  |
|---------------|---------------|-----|-------|
| DESIGN-DATE   | KEB           |     | 04/12 |
| CHECKED-DATE  | TRC           | DGE | 04/12 |
| DESIGN-DATE   |               |     |       |
| DESIGN-DATE   |               |     |       |
| REVISIONS 1   |               |     |       |
| REVISIONS 2   |               |     |       |
| REVISIONS 3   |               |     |       |
| REVISIONS 4   |               |     |       |
| FIELD CHANGES |               |     |       |

SARAH MILDRED LONG BRIDGE  
PISCATAQUA RIVER  
PORTSMOUTH, NH  
KITTEERY, ME  
TYPICAL SECTIONS

SHEET NUMBER  
**7**  
OF 8

