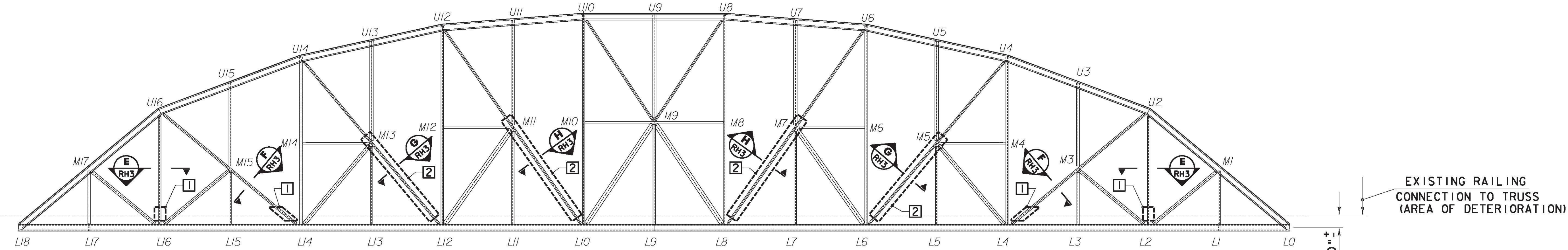


EXISTING NORTH TRUSS - ELEVATION
(LOOKING NORTH)



EXISTING SOUTH TRUSS - ELEVATION
(LOOKING SOUTH)

STRUCTURAL STEEL NOTES

1. ALL NEW STEEL SHALL BE AASHTO M270M/M270 GRADE 50 F2 PAINTED EXCEPT AS SHOWN OTHERWISE.
2. WHERE NEW STEEL IS TO BE CONNECTED TO EXISTING STEEL, THE SURFACE OF THE EXISTING STEEL SHALL BE CLEANED TO BARE METAL, REMOVING ALL RUST, AND PRIMED BEFORE ATTACHING NEW STEEL. ALL CLEANING OF EXISTING STEEL SHALL BE IN ACCORDANCE WITH ITEM 513.41, SURFACE PREPARATION (FIELD).
3. THE EXISTING STRUCTURAL STEEL IS PAINTED WITH A MATERIAL THAT CONTAINS LEAD. THE CONTRACTOR SHALL FOLLOW ALL APPLICABLE REGULATIONS WHEN HANDLING AND WORKING WITH THIS STEEL.
4. THE REPAIRS TO THE TRUSS MEMBERS INDICATED ON THE PLANS ARE A MINIMUM REQUIREMENT.
5. CONNECTIONS SHALL BE MADE WITH HIGH STRENGTH BOLTS CONFORMING TO AASHTO M164 M (AASHTO M164) TYPE 1, UNLESS OTHERWISE NOTED. BOLTS AND NUTS SHALL BE FURNISHED BY SAME SUPPLIER.
6. BOLTED CONNECTIONS SHALL BE ASSEMBLED WITH HARDENED STEEL WASHERS UNDER BOTH THE HEAD AND THE NUT.
7. FAYING SURFACES OF BOLTED CONNECTIONS SHALL BE PREPARED AND CONSTRUCTED IN CONFORMANCE WITH SECTION 513.
8. BOLT HOLES ARE SPECIFIED 1/6" INCH LARGER IN DIAMETER THEN THE BOLT.
9. CONNECTIONS SHALL BE IN ACCORDANCE WITH SECTION 506.
10. ALL RIVETS REMOVED FROM TRUSS SHALL BE REPLACED WITH EQUIVALENT DIAMETER BOLTS MEETING AASHTO M164 M (AASHTO M164) TYPE 1, UNLESS OTHERWISE NOTED.
11. FOR ADDITIONAL INFORMATION, SEE NO. 3, 12 & 18 IN THE 1929 STEEL FABRICATION DRAWINGS.

CONNECTION INSTALLATION METHODS

- FIELD DRILLING NEW STEEL:**
WHEN BOLT HOLES IN NEW REPAIR MATERIAL ARE REQUIRED TO MATCH EXISTING RIVET/BOLT PATTERN, THEY SHALL BE PREPARED USING ONE OF THE FOLLOWING METHODS.
1. THE CONTRACTOR SHALL BRING NEW REPAIR STEEL OUT TO THE FIELD BLANK (WITHOUT PRE-DRILLING HOLES). AFTER ASSEMBLY AND ALIGNMENT, HOLES IN THE EXISTING STEEL SHALL BE USED AS A ONE TIME TEMPLATE TO FIELD DRILL FULL SIZE HOLES IN THE NEW STEEL.
 2. THE CONTRACTOR SHALL CREATE AN APPROXIMATE PATTERN OF EXISTING RIVET HOLES USING FIELD MEASUREMENTS AND EXISTING CONTRACT PLANS. THIS PATTERN SHALL BE USED TO DRILL 1/4" SUBSIZE HOLES IN THE NEW STEEL IN THE SHOP. THEREAFTER, THESE HOLES SHALL BE (RTA) REAMED TO FULL SIZE IN THE FIELD, USING THE EXISTING STEEL COMPONENT AND ITS ASSOCIATED HOLES AS A ONE TIME TEMPLATE.
- FIELD DRILLING EXISTING STEEL:**
WHEN NEW BOLT HOLES ARE REQUIRED IN EXISTING MATERIAL, THEY SHALL BE PREPARED USING ONE OF THE FOLLOWING METHODS.
1. FULL SIZE HOLES SHALL BE DRILLED USING HOLES IN NEW MATERIAL AS A ONE TIME TEMPLATE. (CNC-MDT)
 2. FULL SIZE HOLES SHALL BE DRILLED USING A STEEL TEMPLATE WITH HARDENED BUSHINGS. (DT)
- FIELD REAMING AND DRIFTING OF HOLES:**
FIELD REAMING AND DRIFTING OF HOLES SHALL BE REQUIRED WHEN HOLES IN THE EXISTING PLIES DO NOT LINE UP.
- AFTER REAMING, HOLES SHALL BE PERPENDICULAR TO THE FAYING SURFACE AND 75% OF THE GROUP OF HOLES SHALL NOT BE ELONGATED GREATER THAN 1/32 INCH. THE REMAINING 25% OF THE GROUP SHALL NOT BE ELONGATED GREATER THAN 1/16 INCH. IF ANY BOLT HOLE, AFTER REAMING, IS MORE THAN 1/8 INCH LARGER THAN THE NOMINAL SIZE OF THE BOLT INDICATED ON THE DRAWINGS, THE NEXT SIZE BOLT SHALL BE USED.
- SHOULD OVERSIZE BOLTS BE REQUIRED, THE ENGINEER SHALL BE NOTIFIED FOR APPROVAL.

REPAIR LEGEND

- 1 - LOCALIZED REPAIR @ INBOARD FLANGE.
- 2 - FULL LENGTH MEMBER STRENGTHENING.

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DATE/TIME: 4/5/2012
USER: 3253

TRUSS REPAIR SCHEMATIC	PROJECT NAME: RICHMOND
	PROJECT NUMBER: STP-RS 0284(III)
	FILE NAME: z90c092 truss rehab 01.dgn
	DESIGNED BY: CTA
	PLOT DATE: 4/5/2012
	DRAWN BY: PKR
	CHECKED BY: VC/KM
	SHEET 2 OF 3