

Appendix D

Drawing Exhibits

PROJECT NUMBER	
COST ELEMENT	
LINE ITEM	
CONTRACT DESCRIPTION	
PHYSICAL ELEMENT	

REV	DATE	DESCRIPTION
1	8/23/12	APP

DESIGNED BY	JES
DRAWN BY	ATH
CHECKED BY	JES
APPROVED BY	JES
DATE	

ATTORNEY
WILSON & WILSON, INC.
 275 TOWN & COUNTRY RD
 ORANGE, CA 92668

MODISKI-MASTERS
 Engineering and Architecture

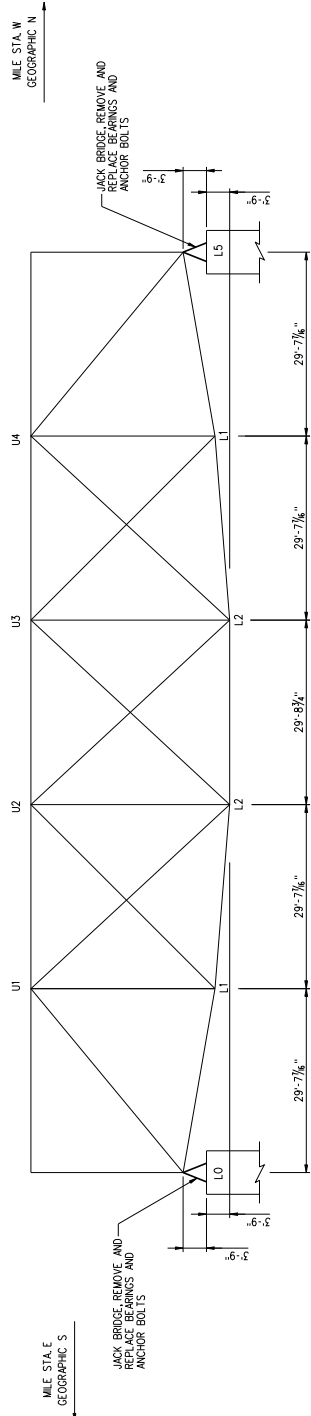


CAPITOLA CROSSING DECK TRUSS
 MILEPOST 15.89C
 GENERAL PLAN AND ELEVATION

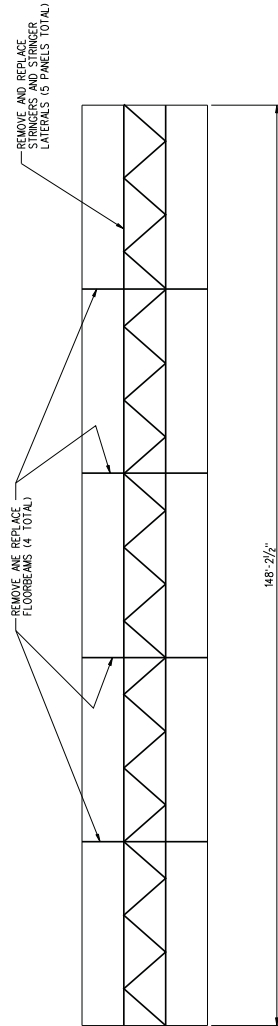
CADD FILENAME	MP15.89c-S01
CONTRACT NO.	RT14D19-01
SCALE	AS SHOWN
DRAWING NO.	MILEPOST
MP15.89c-S01	15.89c



JMS
 8/30/12



ELEVATION
 SCALE: 1"=10'-0"



PLAN
 SCALE: 1"=10'-0"

SCOPE OF WORK

THE BRIDGE AT MP 15.89c, ALSO KNOWN AS THE CAPITOLA CROSSING DECK TRUSS IS LOCATED ON THE SANTA CRUZ BRANCH LINE IN CAPITOLA, CALIFORNIA. THE REPAIRS TO THIS STRUCTURE INCLUDE THE FOLLOWING:

- 1) REPLACEMENT OF THE STRINGER AND FLOORBEAMS WILL CONSIST OF FABRICATION AND ERECTION OF THE STEEL STRINGER AND FLOORBEAMS PER THE BOLT SHOE DRAWINGS WHICH ARE ATTACHED TO THIS PLAN SET AS REFERENCE.

- 2) JACK BRIDGE, REMOVE AND REPLACE BEARINGS AND ANCHOR BOLTS.

GENERAL NOTES

ALL MATERIAL AND CONSTRUCTION SHALL CONFORM TO THE AMERICAN RAILWAY ENGINEERING AND MAINTENANCE OF WAY ASSOCIATION'S MANUAL FOR RAILWAY ENGINEERING (AREA MANUAL) DATED 2011 UNLESS OTHERWISE NOTED.

JACKING PROCEDURE SHALL BE DEVELOPED BY CONTRACTOR AND SUBMITTED TO ENGINEER FOR APPROVAL.

CONTRACTOR SHALL PROVIDE NEW TRUSS BEARINGS BY FIELD MEASURING ALL EXISTING COMPONENTS AND FABRICATING NEW BEARINGS TO SAME DIMENSIONS AND DETAILS. DETAILS TO BE SUBMITTED TO ENGINEER FOR APPROVAL.

TRUSS BEARING ANCHOR BOLTS SHALL BE REMOVED AND REPAIRED. CONTRACTOR SHALL SUBMIT DETAILS FOR DOING SO TO ENGINEER FOR APPROVAL.

ALL METALWORK SHALL CONFORM TO THE REQUIREMENTS OF ASTM A709 GRADE 50. ALL DIMENSIONS TO BE USED TO CONNECT REQUIRED METALWORK SHALL BE FIELD VERIFIED.

NO FLAME CUTTING SHALL BE ALLOWED FOR THE REMOVAL OF MATERIAL, EXCEPT FOR MATERIAL WHICH WILL BE DISPOSED.

NO FLAME CUTTING SHALL BE ALLOWED FOR REMOVAL OF EXISTING RIVETS ON PORTIONS OF THE EXISTING METALWORK THAT WILL BE RE-INSTALLED.

ALL NEW METALWORK TO BE LEFT PERMANENTLY IN THE STRUCTURE SHALL BE COATED. THE COATING SHALL BE A ZINC RICH INORGANIC LOW VOC SYSTEM. SURFACE PREPARATION AND COATING SYSTEMS TO BE SUBMITTED TO ENGINEER FOR REVIEW AND APPROVAL PRIOR TO ORDERING OF COATING MATERIAL.

PROJECT NUMBER	Z:\Project Files\3165\SCRTC Bridges\CAD\ATH\Capitola\3165s01.dgn
DATE	8/23/2012
TIME	10:50:33 AM
LINE ELEMENT	
CONTRACTOR	
PHYSICAL ELEMENT	
COST ELEMENT	
DESCRIPTION	

DESIGNED BY	JES
DRAWN BY	ATH
CHECKED BY	JES
APPROVED BY	JES
DATE	

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CAPITOLA CROSSING DECK TRUSS
 MILEPOST 15.89c
 GENERAL NOTES

CADD FILENAME	MP15.89c-S02.DGN
SCALE	AS SHOWN
CONTRACT NO.	RT14D19-01
DRAWING NO.	MILEPOST
MP15.89c-S02	15.89c



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SCOPE OF WORK

THE BRIDGE AT MP 9.09, ALSO KNOWN AS THE LA SELVA BRIDGE IS LOCATED ON THE SANTA CRUZ BRANCH LINE NEAR SANTA CRUZ, CALIFORNIA. THE REPAIRS TO THIS STRUCTURE INCLUDE THE FOLLOWING:

- 1) REMOVAL AND REPLACEMENT OF THE STEEL PEERS 2 - 8. REPLACEMENT OF THE PEERS WILL CONSIST OF FABRICATION AND ERECTION OF STEEL PEERS PER ORIGINAL AS-BUILT SHOP DRAWINGS WHICH ARE ATTACHED TO THIS PLAN SET AS REFERENCE.
- 2) REMOVAL, REPAIR AND RE-INSTALLATION OF ALL NINE GIRDER SPANS, TOTAL OF 18 DECK PLATE GIRDERS. REPAIRS WILL BE PER PLANS AND GENERALLY CONSIST OF REMOVAL AND REPLACEMENT OF THE END PORTIONS OF THE GIRDERS.
- 3) REPAIR OF THE CONCRETE PEDESTALS AND INSTALLATION OF NEW ANCHOR BOLTS AT PEERS 2 - 8.

GENERAL NOTES

ALL MATERIAL AND CONSTRUCTION SHALL CONFORM TO THE AMERICAN RAILWAY ENGINEERING AND MAINTENANCE OF WAY ASSOCIATION'S MANUAL FOR RAILWAY ENGINEERING (AREA) MANUAL DATED 2011 UNLESS OTHERWISE NOTED.

ALL METALWORK SHALL CONFORM TO THE REQUIREMENTS OF ASTM A709 GRADE 36. ALL DIMENSIONS TO BE USED TO CONNECT REQUIRED METALWORK SHALL BE FIELD VERIFIED.

NO FLAME CUTTING SHALL BE ALLOWED FOR THE REMOVAL OF MATERIAL EXCEPT FOR MATERIAL WHICH WILL BE DISPOSED. THE CUT SURFACE OF THE WEB PLATES AND FLANGE PLATES OF THE DECK PLATE GIRDERS SHALL BE GRIND TO 1000 MICRONS.

NO FLAME CUTTING SHALL BE ALLOWED FOR REMOVAL OF EXISTING RIVETS ON PORTIONS OF THE EXISTING METALWORK THAT WILL BE RE-INSTALLED.

ALL NEW METALWORK TO BE LEFT PERMANENTLY IN THE STRUCTURE SHALL BE COATED. THE COATING FOR TOWER MEMBERS SHALL BE COAL TAR EPOXY. THE COATING FOR ALL GIRDERS END REPAIRS AND BRACING MEMBERS SHALL BE A ZINC RICH INORGANIC LOW VOC SYSTEM. SURFACE PREPARATION AND COATING SYSTEMS TO BE SUBMITTED TO ENGINEER FOR REVIEW AND APPROVAL PRIOR TO ORDERING OF COATING MATERIAL.

FIELD WELDING

ALL FIELD WELDING OPERATIONS, INCLUDING CLEANING, INSPECTION AND NONDESTRUCTIVE TESTING, SHALL BE PERFORMED IN ACCORDANCE WITH THE WASH-DOWNS-BROOKS WELDING CODE (D 1.12-2010 (BMC) AND ADDITIONAL REQUIREMENTS AS SPECIFIED IN THESE NOTES.

EXISTING STEEL BASE MATERIALS TO BE WELDED HAVE BEEN TESTED AND ACCEPTED FOR WELDING. THE WELDING PROCESSES TO BE USED FOR THE GIRDER WEB ARE APPROXIMATELY G245 AND G246. THEREFORE, THE SPECIAL WELD PROCEDURE QUALIFICATION TESTING AND WELDABILITY INVESTIGATION REQUIRED BY CLAUSE 5.4.3 OF THE BMC ARE NOT REQUIRED TO BE PERFORMED BY THE CONTRACTOR.

ALL FIELD WELDING SHALL BE PERFORMED BY THE MANUAL SHIELDED METAL ARC WELDING (MMA) PROCESS. OTHER WELDING PROCESSES WILL NOT BE ACCEPTED FOR APPROVAL. ALL WELDING SHALL BE PERFORMED IN ACCORDANCE WITH THE WELDING CODE AND THE WELDING CODE CLASSIFICATION, WELDING ELECTRODE STORAGE AND HANDLING ON THE WORK SITE SHALL BE IN ACCORDANCE WITH CLAUSE 4.5 OF THE BMC.

PRIOR TO START OF THE WORK, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER FOR APPROVAL A PROPERLY PREPARED WELDING PROCEDURE STATEMENT (WPS) AND QUALIFICATION RECORDS FOR ALL WELDING. THE WPS SHALL INCLUDE ALL INFORMATION AS REQUIRED BY THE BMC.

WELDING - PREHEAT

PREHEATING OPERATIONS SHALL BE IN ACCORDANCE WITH CLAUSE 4 OF THE BMC EXCEPT THAT THE MINIMUM PREHEAT AND INTERPASS TEMPERATURE FOR ALL WELDING TO THE EXISTING WEB PLATE SHALL BE A MINIMUM OF 250 DEGREES F.

WELD QUALITY AND FINISHING

WELD QUALITY SHALL MEET THE REQUIREMENTS OF CLAUSE 6.26 OF THE BMC. C/P WELDS BETWEEN THE EXISTING WEB AND NEW PATCH MATERIAL SHALL BE GROUND FLUSH AS PER CLAUSE 3.6.3 OF THE BMC.

NON-DESTRUCTIVE TESTING OF WELDS

AFTER GRINDING AND VISUAL INSPECTION, THE C/P WELDS BETWEEN THE EXISTING WEB AND NEW PATCH MATERIAL SHALL BE TESTED IN ACCORDANCE WITH THE ACCEPTANCE CRITERIA SHALL BE AS TENSION MEMBERS. FILLET WELDS CONNECTING NEW SUBPLANGES TO WEBS AND ALL STIFFENERS WELDS SHALL BE 100% INSPECTED BY MAGNETIC PARTICLE TESTING UNIT COSTS FOR NOT SHALL BE INCLUDED IN THE CONTRACTOR AND INCLUDED IN THE VARIOUS ITEMS OF WORK. NO SEPARATE PAYMENT WILL BE MADE FOR NOT.

CONTRACTOR QUALITY CONTROL (CQC) INSPECTION

ALL PHASES OF THE WORK INCLUDING THERMAL CUTTING OF EXISTING MEMBERS, CLEANING, JOINT PREPARATION, WELDING, GRINDING, AND NON-DESTRUCTIVE TESTING SHALL BE WITNESSED, INSPECTED AND APPROVED BY AN INSPECTOR WHO IS QUALIFIED AS A CERTIFIED WELDING INSPECTOR (CWI) BY THE AMERICAN WELDING SOCIETY AS PER CLAUSE 6.1.3 OF THE BMC.

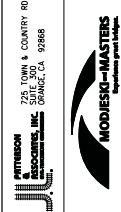
THE CWI SHALL BE EMPLOYED/ENGAGED BY THE CONTRACTOR AND COSTS WILL BE INCIDENTAL TO THE VARIOUS PHASES OF THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SCHEDULING OF CQC CWI INSPECTION IS THE CONTRACTOR'S RESPONSIBILITY.

THE CONTRACTOR'S CWI SHALL PREPARE DAILY REPORTS SUITABLE TO THE ENGINEER WHICH DOCUMENT THE WORK INSPECTED AND WELDS APPROVED.

PROJECT NUMBER	LINE ITEM	CONTRACT DESCRIPTION	PHYSICAL UNIT	ESTIMATE	REV	DATE	DESCRIPTION

DESIGNED BY	JES
DRAWN BY	ATH
CHECKED BY	JES
APPROVED BY	JES
DATE	

ATTENTION
PROGRESSIVE
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LA SELVA DECK PLATE GIRDER
 MILEPOST 9.09
 GENERAL NOTES

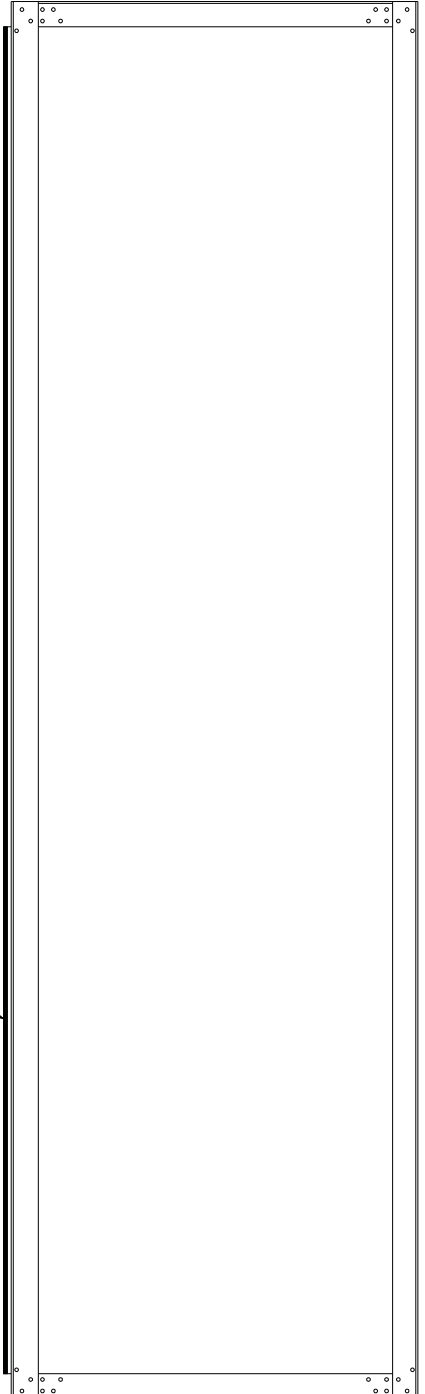
CADD FILENAME	MP9.09-S02.DGN
SCALE	AS SHOWN
CONTRACT NO.	RT14D19-01
DRAWING NO.	MILEPOST
	MP9.09-S02 9.09



8/30/12

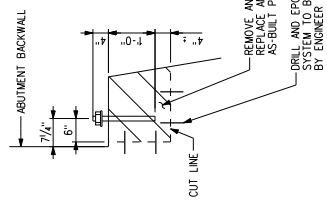
CLEAN EXISTING TOP FLANGE AND REINFORCEMENT PER PLATE 1" x 8" x 1' VARGES

CLEAN EXISTING TOP FLANGE AND REINFORCEMENT PER PLATE 1" x 8" x 1' VARGES

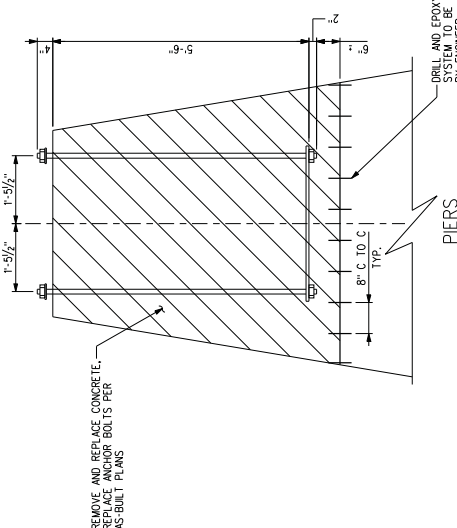


TYPICAL SECTION
SCALE: 3/4" = 1'

ELEVATION - GIRDER STRENGTHENING, SPANS 2 AND 4
SCALE: 3/4" = 1'



ABUTMENTS



PEDESTAL AND ANCHOR BOLT REPAIRS
SCALE: 3/4" = 1'

PROJECT	LINE	CONTRACT	PHYSICAL	ELEMENT	DESCRIPTION
MP9-09-S05	RT14D19-01	MP9-09-S05	RT14D19-01	MP9-09-S05	RT14D19-01

DESIGNED BY	JES
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CADD FILENAME	MP9-09-S05.DGN
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CONTRACT NO.	RT14D19-01
MILEPOST	9.09



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