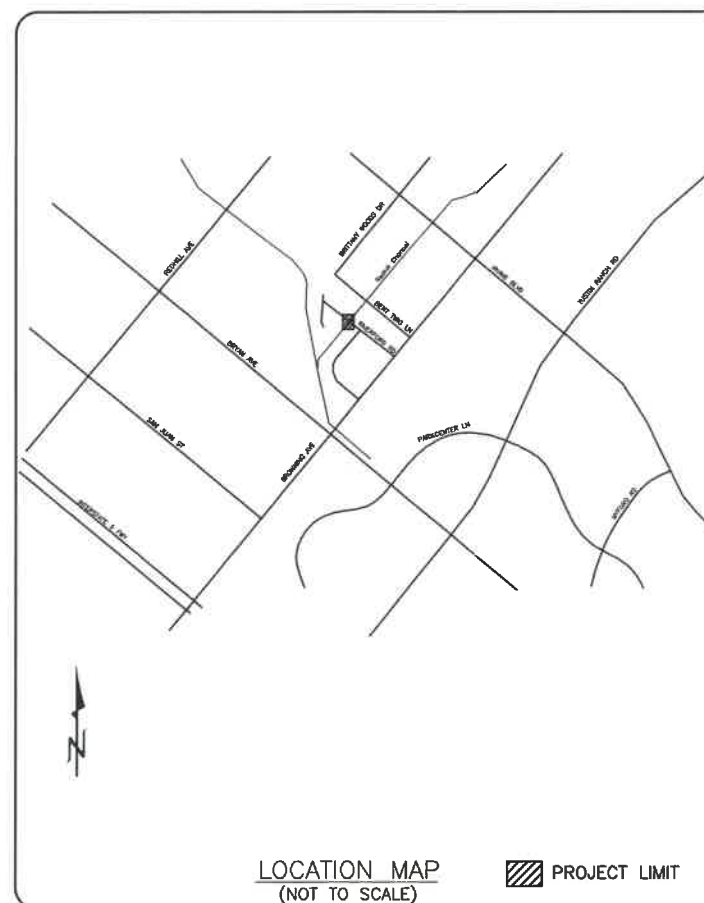
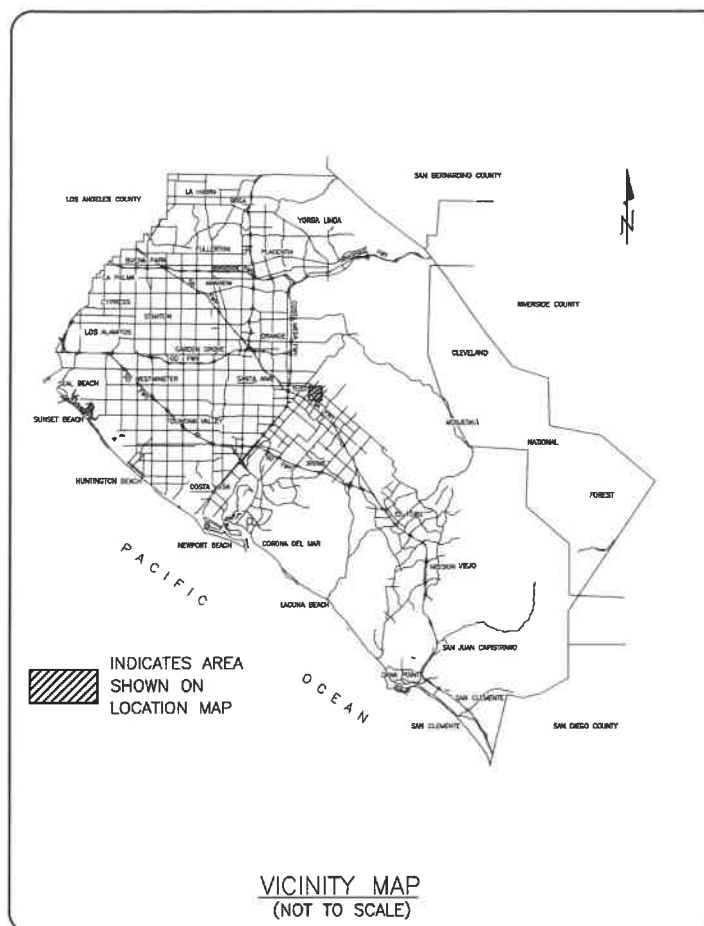




County of Orange

SANTA ANA, CALIFORNIA

PLANS FOR CONSTRUCTION OF

BR. No. 55C0573

FUNDED BY: SENATE BILL 1(SB-1)
MAINTAINED BY: COUNTY OF ORANGE

GENERAL NOTES:

ALL NATIVE BIRDS ARE PROTECTED FROM DISTURBANCE WHILE NESTING. AS FAR AS POSSIBLE, CONSTRUCTION ACTIVITIES SHOULD TAKE PLACE OUTSIDE OF THE BIRD NESTING SEASON (FEBRUARY 1ST THROUGH SEPTEMBER 15TH). HOWEVER, IF OTHER RESTRICTIONS MAKE IT IMPOSSIBLE TO AVOID THE NESTING SEASON, THE REGULATORY PERMITTING TEAM AT OCPW MUST BE CONTACTED AT (714) 647-3933 TO ARRANGE FOR PRE-CONSTRUCTION NESTING BIRD SURVEYS OF THE CONSTRUCTION AREAS AT LEAST 7 DAYS BEFORE THE START OF WORK. DISTURBANCE TO ANY ACTIVE NESTS MUST BE AVOIDED. CONSTRUCTION ACTIVITY WITHIN 300 FEET OF AN ACTIVE NEST [500 FEET FOR RAPTORS] SHOULD BE DELAYED UNTIL THE NEST IS NO LONGER ACTIVE, OR OTHERWISE APPROVED BY THE REGULATORY PERMITTING TEAM OR THEIR REPRESENTATIVE.

COUNTY OF ORANGE PUBLIC WORKS DEPARTMENT

RECOMMENDED:  DATE 8/29/13
PAUL JEFFREY ERNST, P.E.
MANAGER
OC INFRASTRUCTURE PROGRAMS
ENGINEERING DIVISION

RECOMMENDED: Nardy Khan DATE _____
NARDY KHAN, P.E.
DEPUTY DIRECTOR
OC INFRASTRUCTURE PROGRAMS

APPROVED:  DATE _____
KHALID BAZMI, P.E.
ASSISTANT PUBLIC WORKS DIRECTOR
COUNTY ENGINEER

RECORD DRAWING

PREPARED BY

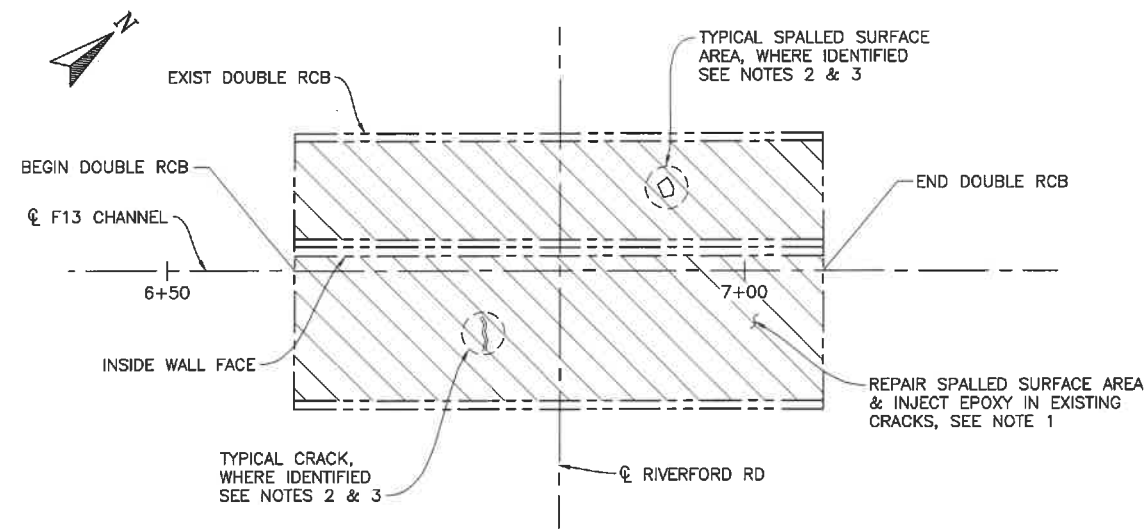

MARK STILLER, P.E. 8/21/19
DATE

INDEX OF SHEETS

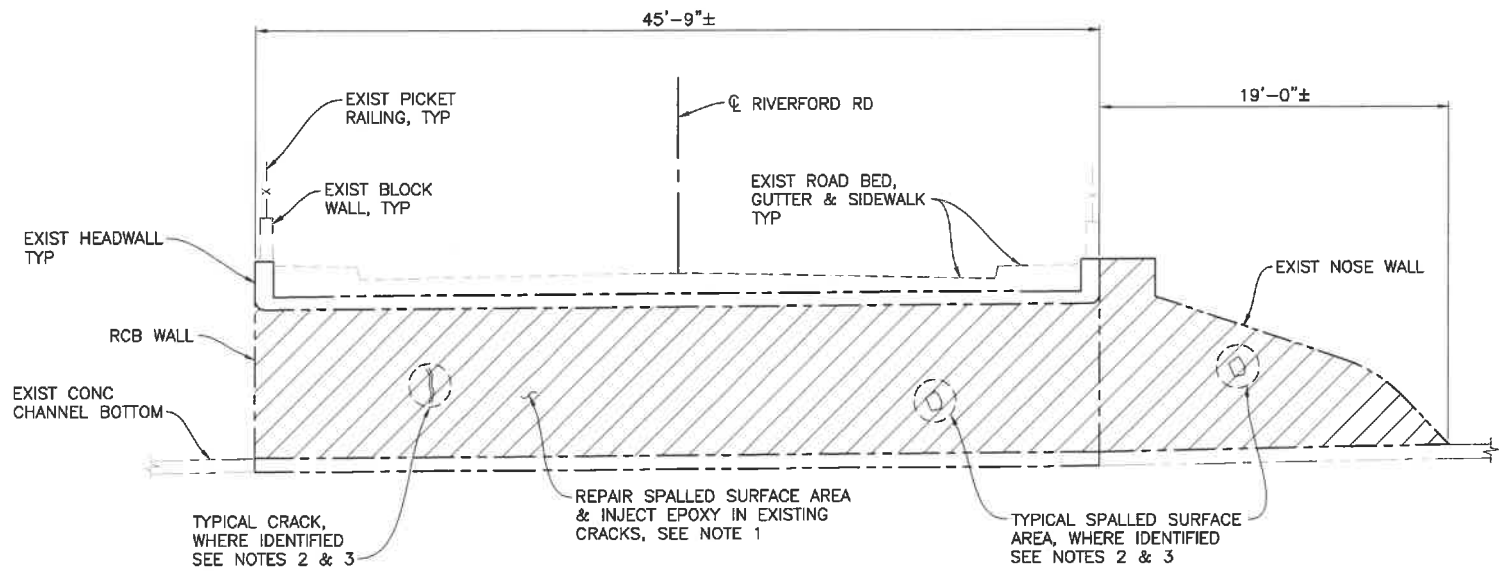
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REVISIONS

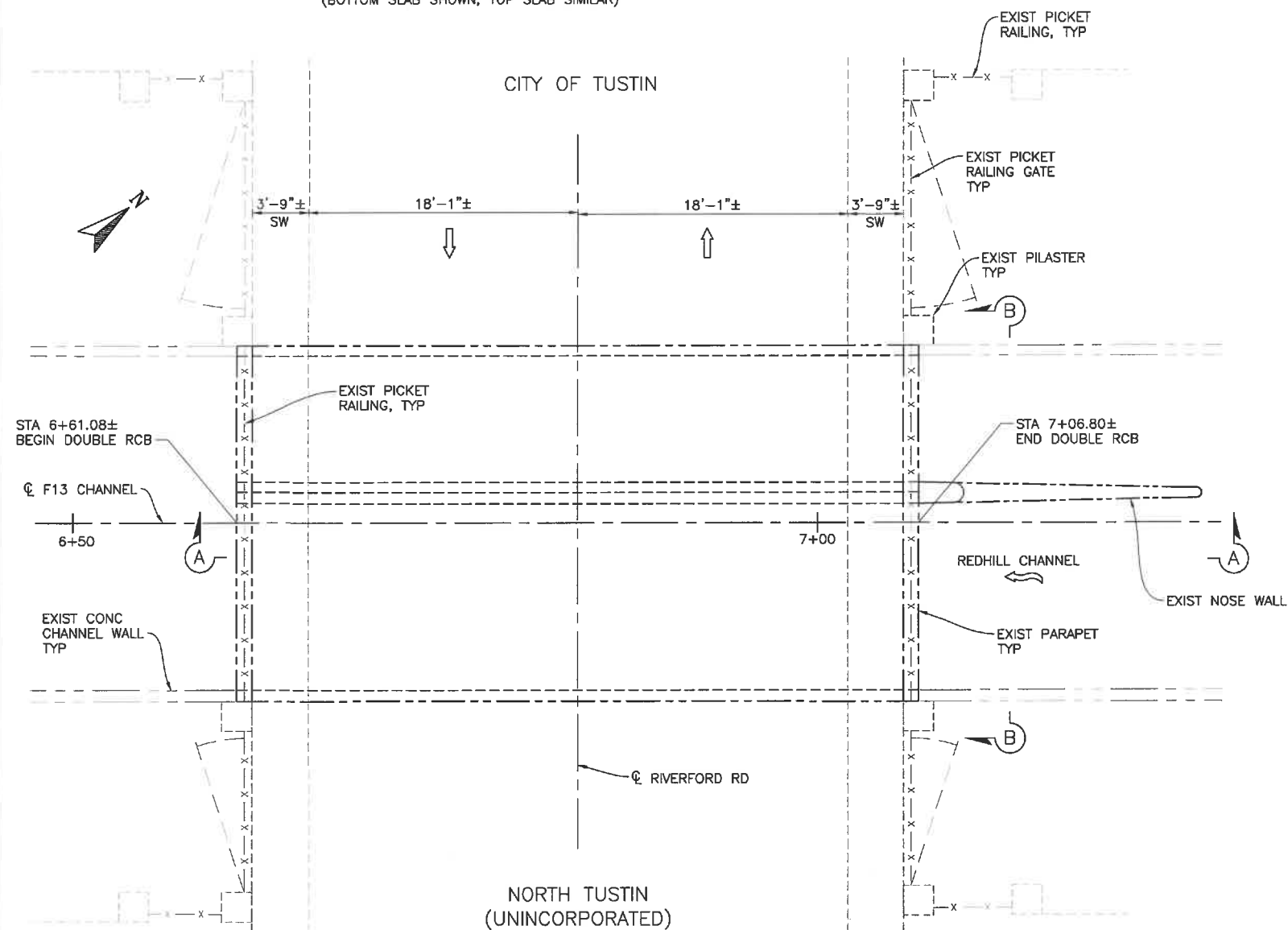
W. O. NO. ER 20566
DWG. NO. T1



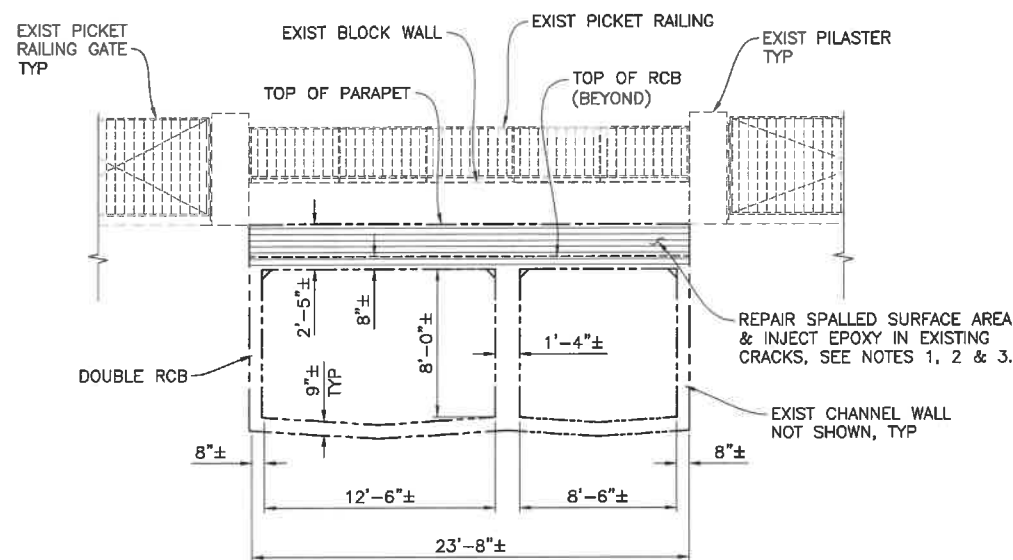
PLAN - RCB TOP & BOTTOM SLAB
SCALE: 1/8"=1'-0"
(BOTTOM SLAB SHOWN, TOP SLAB SIMILAR)



SECTION A-A
SCALE: 1"=5'



PLAN
SCALE: 1"=5'



VIEW B-B
SCALE: 1"=5'
(UPSTREAM END SHOWN, DOWNSTREAM END SIMILAR)

- NOTES:**
1. REPAIR SPALLED SURFACE AREAS AND INJECT EPOXY IN EXISTING CRACKS WITHIN THE LIMITS OF EXISTING BOX CULVERT TOP AND BOTTOM INSIDE FACE, WALL FACE AND PARAPETS.
 2. FINAL LIMITS OF REPAIR SPALLED SURFACE AREA AND INJECT CRACK (EPOXY) TO BE ESTABLISHED DURING CONSTRUCTION.
 3. FOR SPALL REPAIR DETAILS AND CRACK INJECTION DETAILS, SEE SHEET S3.
 4. PROVIDE TRAFFIC CONTROL PER SPECIFICATION F-3.
 5. CLEAN AND PAINT PICKET RAILING, SEE SHEET S2.
 6. PREPARE AND EXECUTE THE REQUIREMENTS OF AN EROSION, SEDIMENT AND CHEMICAL CONTROL PLAN (ESCCP) PER SPECIFICATION ON F-4.

- LEGEND**
- [Hatched Box] LIMITS OF EXISTING CONCRETE BOX CULVERT TOP & BOTTOM INSIDE FACE
 - [Hatched Wall] LIMITS OF EXISTING CONCRETE BOX CULVERT WALL FACE
 - [Hatched Parapet] LIMITS OF EXISTING CONCRETE BOX CULVERT PARAPET
 - [Dashed Line] INDICATES EXISTING
 - [Arrow] DIRECTION OF FLOW
 - [Double Arrow] DIRECTION OF TRAFFIC

QUANTITIES

ITEM	QUANTITY
INJECT CRACK (EPOXY)	180 LF
REPAIR SPALLED SURFACE AREA	20 SQFT
CLEAN AND PAINT PICKET RAILING	1 LS

THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.



MARK	DESCRIPTION	DATE	APPR.

PREPARED UNDER THE RESPONSIBLE CHARGE OF:

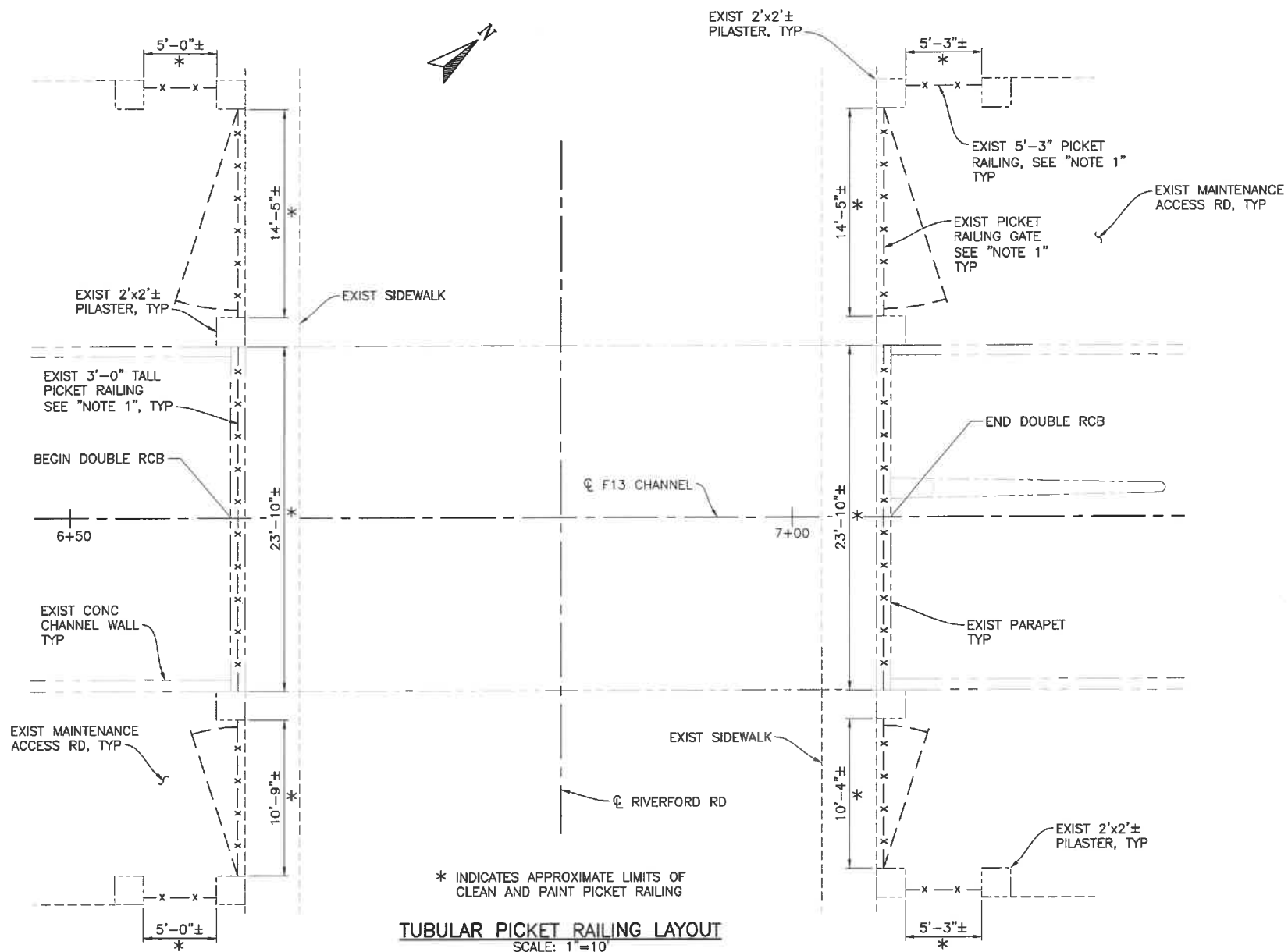
CIVIL ENGINEER & ARCHITECT
MARK STILLER
C 78335
No. 40328
STATE OF CALIFORNIA

8/21/19 DATE

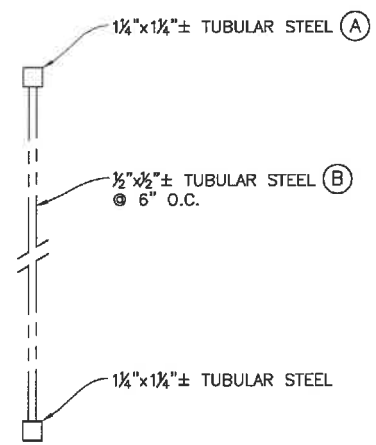
DESIGNED BY: M. STILLER
DRAWN BY: R. ANDRASEK
CHECKED BY: R. ANDRASEK
DRAWING CODE: 02 RIVERFORD RD.DWG
FILE NAME: 22362 GILBERTO RANCHO SANTA MARGARITA CALIFORNIA 92688
PLOT DATE: 8/21/19
SCALE: AS SHOWN

RIVERFORD ROAD BRIDGE OVER REDHILL CHANNEL
PREVENTATIVE MAINTENANCE
Br. No. 55C0573
GENERAL PLAN

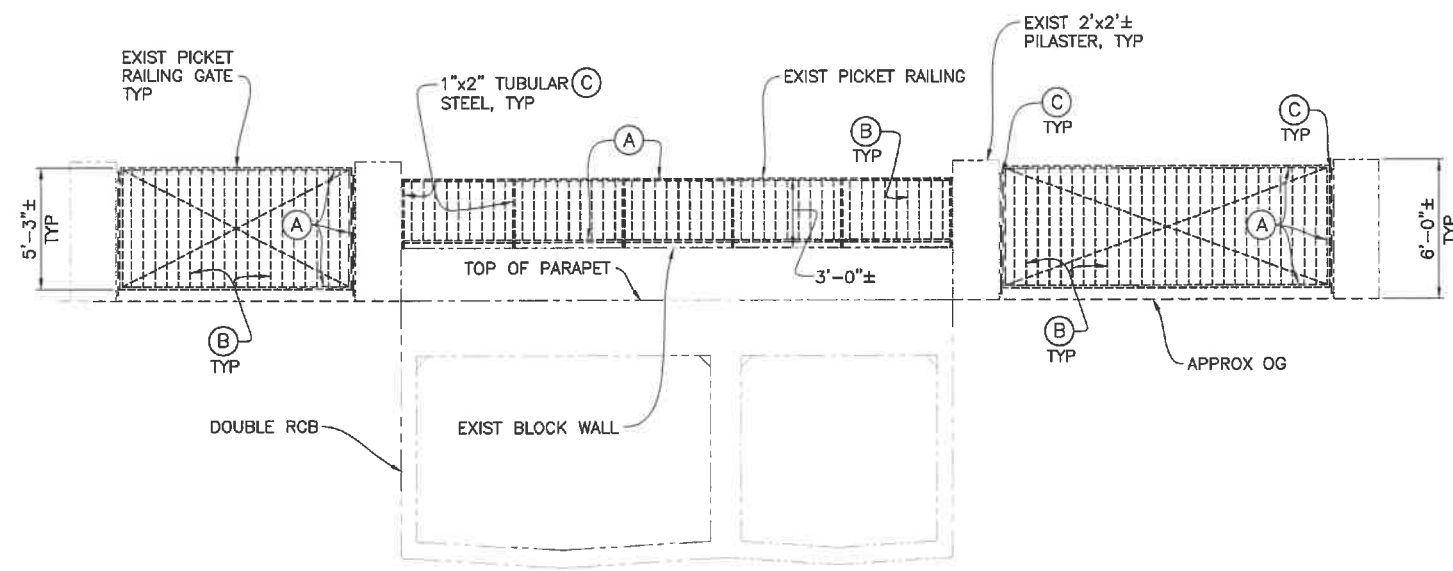
Sheet Reference Number
S1
Sheet 2 of 4



TYPICAL PICKET SECTION
SCALE: 2"=1'-0"



- NOTES:**
1. CLEAN AND PAINT EXISTING PICKET RAILING & GATES. SEE SPECIFICATION F-47.



THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.



COUNTY OF ORANGE
CALIFORNIA

MARK	DESCRIPTION	DATE	APPR.

PREPARED UNDER THE RESPONSIBLE CHARGE OF:



MARK STILLER
CIVIL ENGINEER
No. C-72855
Exp. 06/2020
STATE OF CALIF.

DATE: 8/21/19

DESIGNED BY: M. STILLER	CHECKED BY: R. ANDRASEK	DRAWING CODE: 03 RIVERFORD RD.DWG
COUNTY OF ORANGE OC PUBLIC WORKS	NCM ENGINEERING CORP. 22362 GILBERTO RANCHO SANTA MARGARITA CALIFORNIA 92688	FILE NAME: 03 RIVERFORD RD.DWG PLOT DATE: 8/21/19 SCALE: AS SHOWN

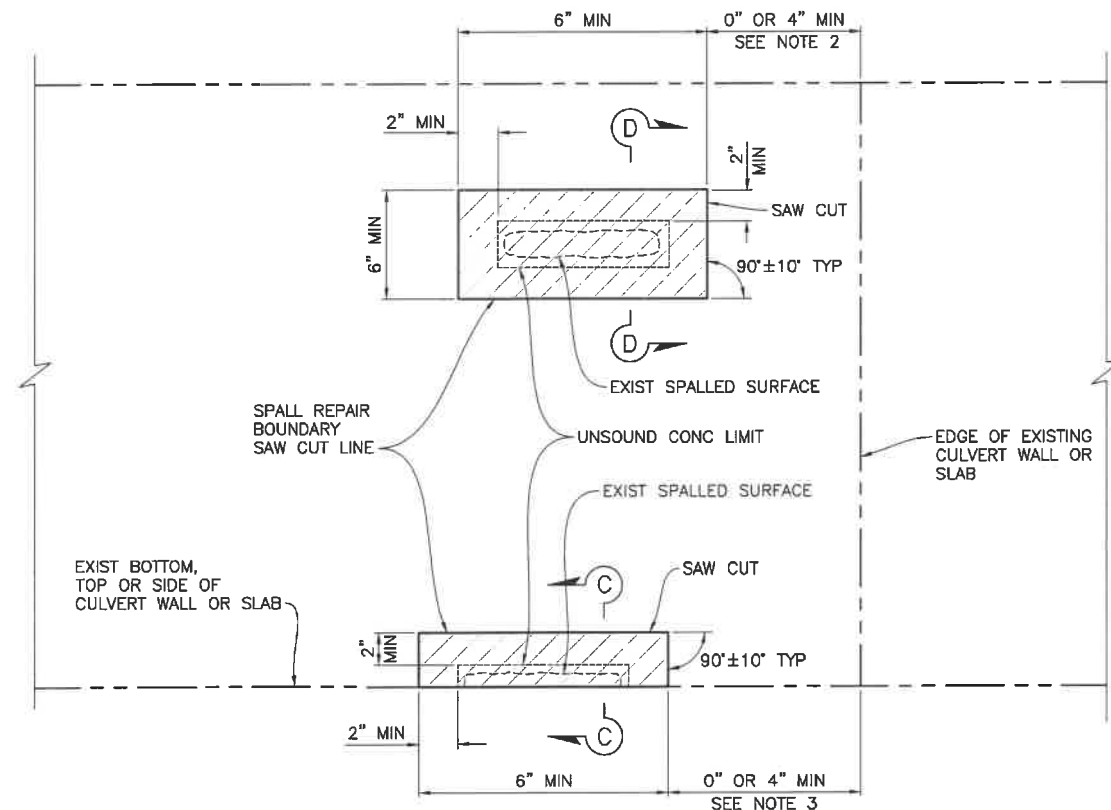
RIVERFORD ROAD BRIDGE OVER REDHILL CHANNEL
PREVENTATIVE MAINTENANCE
Br. No. 55C0573

PICKET RAILING DETAILS

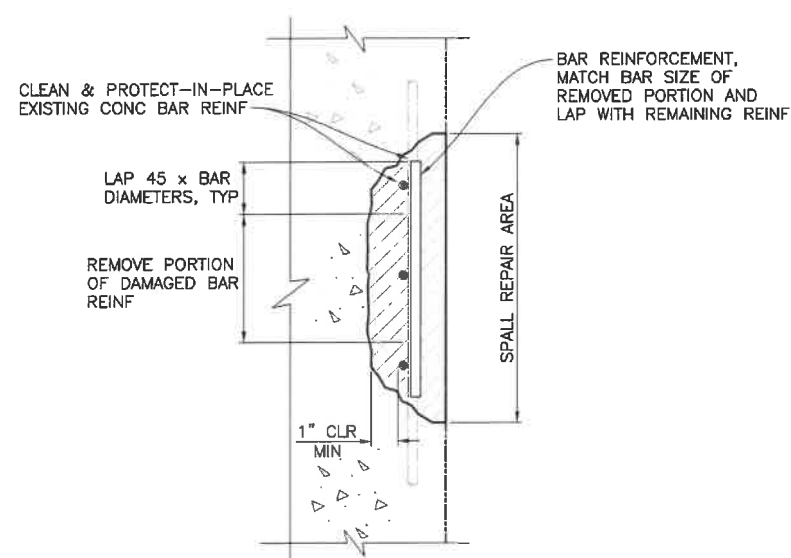
Sheet Reference Number

S2

Sheet 3 of 4



ELEVATION
NO SCALE



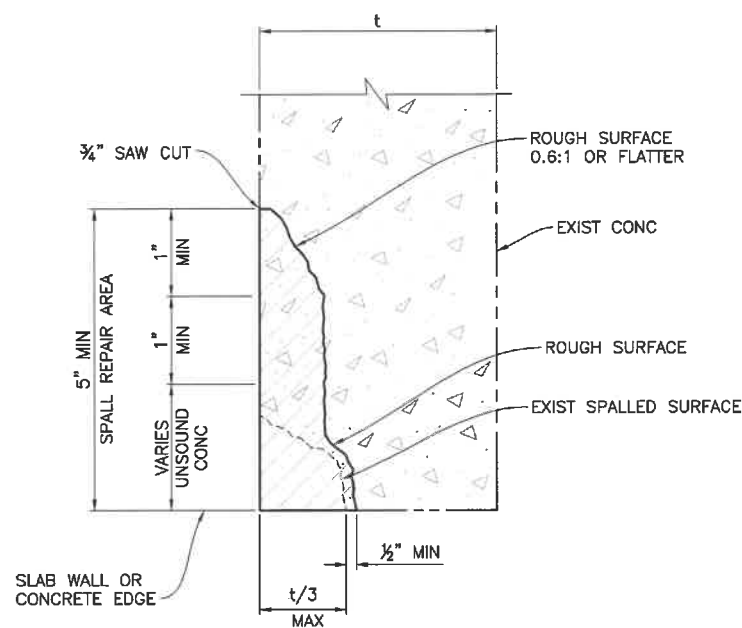
**TYPICAL SPALL REPAIR WITH
BAR REINFORCEMENT REPLACEMENT**
NO SCALE
FOR INFORMATION NOT SHOWN,
SEE SECTION B-B

LEGEND

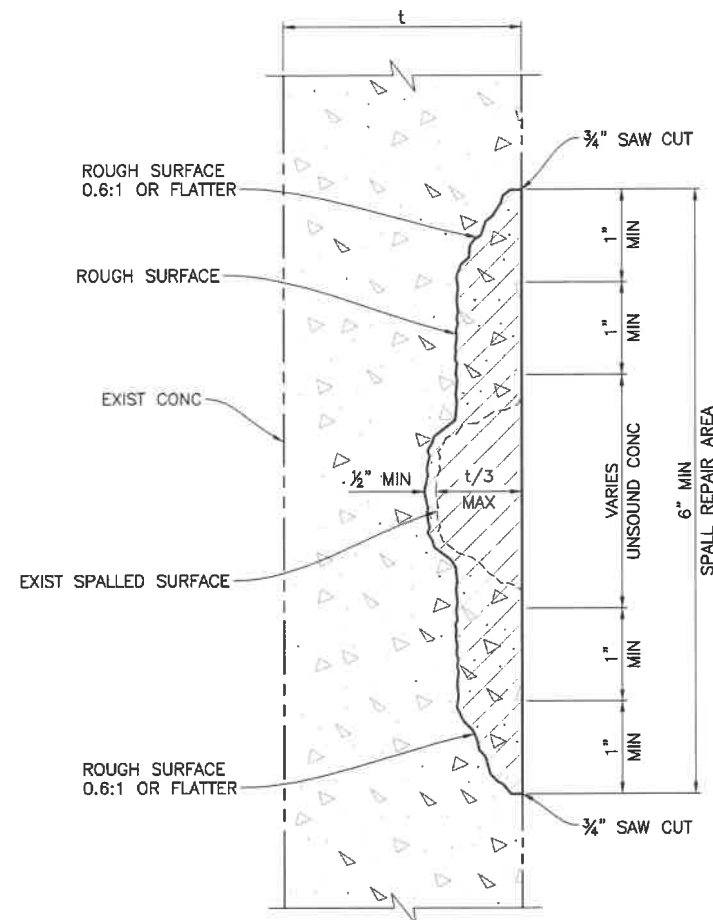
- MORTAR SPALL REPAIR
- INDICATES EXISTING

NOTES:

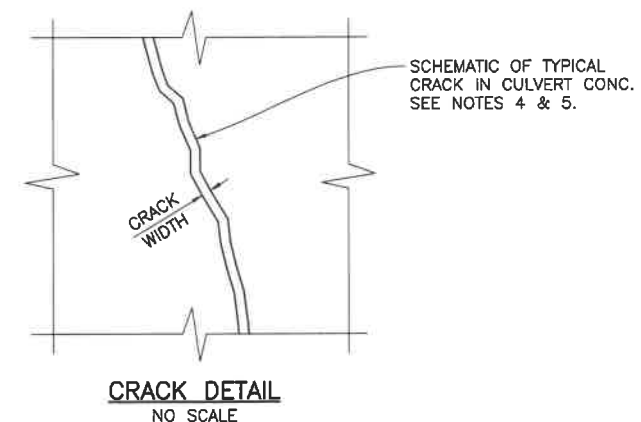
- SEE "GENERAL PLAN" SHEET FOR SPALL REPAIR LOCATIONS. SEE SPECIFICATION F-46.
- IF SPALL REPAIR AREA IS LESS THAN 4" FROM AN EDGE, EXTEND THE REPAIR TO THE JOINT.
- PROTECT EXISTING REINFORCING IN-PLACE. WHERE DAMAGED REINFORCEMENT IS FOUND, REPLACE AS SHOWN IN "TYPICAL SPALL REPAIR WITH BAR REINFORCEMENT REPLACEMENT" DETAIL.
- INJECT EPOXY INTO CRACKS HAVING A CRACK WIDTH OF 0.050" OR GREATER. IF CRACKS HAVE A CRACK WIDTH 0.050" OR GREATER AND ALSO HAVE PORTIONS LESS THAN 0.050" IN WIDTH, INJECT EPOXY IN ALL PORTIONS OF THE CRACK DOWN TO 0.010" IN WIDTH. SEE SPECIFICATION F-45.
- FOR CRACKS GREATER THAN 0.250" IN WIDTH, CONSIDER AS A SPALL AND REPAIR PER DETAILS HEREON. SEE SPECIFICATION F-46.



SECTION C-C
JOINT, CRACK OR EDGE OF CONCRETE REPAIR
NO SCALE



SECTION D-D
MISCELLANEOUS SPALL REPAIR
NO SCALE



CRACK DETAIL
NO SCALE

SCHEMATIC OF TYPICAL
CRACK IN CULVERT CONC.
SEE NOTES 4 & 5.



MARK	DESCRIPTION	DATE	APPR.

DESIGNED BY: M. STILLER	CHECKED BY: R. ANDRASEK	DRAWING CODE: FILE NAME: 23362 GILBERTO RANCHO SANTA MARGARITA CALIFORNIA, 92688	DATE: 8/21/19
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COUNTY OF ORANGE OC PUBLIC WORKS	DESIGNED BY: M. STILLER	CHECKED BY: R. ANDRASEK	DRAWING CODE: FILE NAME: 23362 GILBERTO RANCHO SANTA MARGARITA CALIFORNIA, 92688
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RIVERFORD ROAD BRIDGE OVER REDHILL CHANNEL PREVENTATIVE MAINTENANCE Br. No. 58C0573	SPALL & CRACK REPAIR DETAILS
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Sheet Reference Number S3	Sheet 4 of 4
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