



McNears Beach County Park Fishing Pier Restoration: Final Programmatic Report (Amended)

Recipient Organization/Agency: County of Marin

Date Submitted: February 27, 2015

Project Period: 5/1/2013 to 3/31/2015

Award Amount: \$76,941.00

Matching Contributions: \$6,687.92

Total Disbursement: \$73,844.52

Project Number: #8006.12.033364

1. Summary of Accomplishments

The grant project produced the engineering plans and specifications for maintenance repairs on the McNears Beach County Park public fishing pier. The deliverables included:

- One set of complete drawings, engineer certified, in pdf format
- AutoCAD files of the drawings for use in final construction
- One set of specifications in pdf and Word format
- One set of Engineer's construction cost estimates in .pdf and Excel format, for use in budgeting

In addition, a preliminary permitting summary was included to guide the applications for regulatory agency permits and decisions regarding the application of the California Environmental Quality Act process to construction.

2. Project Activities & Outcomes

Activities

I. PROJECT ANALYSIS AND PRELIMINARY DESIGN

- A. Site investigation of pier conditions.
- B. Met County staff to discuss field observation findings, preliminary design recommendations and possible repair methodologies.
- C. Deliverables include letter summary of field observation findings, possible repair methodologies and other meeting notes, plus any draft sketches/plans helping to explain design concepts.

II. DESIGN DEVELOPMENT

- A. Prepared 60% submittal of plans and specifications - included detailed repair designs and procedures for specific damage.
- B. Investigated and provided written report on permitting requirements for pier repairs.
- C. Incorporated temporary contractor access and performance requirements in the plans and specifications. Provided concept sketches, design considerations or both to assist in cost estimating and for the contractor to develop their access means and methods.

- D. Provided preliminary cost estimates for construction of repairs and access means and methods including expected permitting requirement's costs.
- E. Provided 95% submittal of plans and specifications for review and comment.
- F. Met with county staff to discuss 60% and 95% design submittals, preliminary cost estimates and permitting report.

III. FINAL PLANS AND SPECIFICATIONS

- A. Prepared final submittal of complete biddable construction plans, specifications and other documents.
- B. Prepared 'pre-qualification' specifications and evaluation process for use with potential contractors during the bidding process.
- C. Prepared cost estimates for final submittal, including:
 - Construction of repairs, temporary contractor access and performance requirements and other items to serve as the "Engineer's Estimate" for the bid documents;
 - Inspection and testing services during construction;
 - Construction management;
 - Permitting requirement's costs, including long-term monitoring and mitigation if needed.
- D. Prepared final plans and specifications.
- E. Final and approved drawings stamped by a licensed professional of record.
- F. Met with County staff to discuss findings and recommendations.
- G. Deliverables include:
 - Design professional stamped hardcopy plan set in 24 x 36, County title block format.
 - Plan set copies in Adobe .pdf and CAD DWG format.
 - Final cost estimates in MS Excel format.
 - Specifications and other documents in MS Word format.

The only discrepancy was the final cost for the engineering contract was slightly less than the original budget estimate.

Benefits

Funding the plans and specifications for the pier maintenance repairs provides the data necessary for building a budget for construction (\pm \$1.2 million), documents to be submitted for final CEQA and permitting, and development of the contract bid packet to be used in the public bidding process.

From this necessary prelude to permits and bidding, Marin County Parks can proceed to the construction project that will ensure this popular public fishing pier is stable and sustainable for many years to come.

As stated above, the only discrepancy was the minor savings in costs for production of the plans, specifications and reports. This was partially achieved by careful design of the time use during the design development process.

Using the same engineering firm that had been involved with work on this public fishing pier in the past, along with their extensive experience in marine and shoreline facilities, provided a much better cost estimate to be used for budgeting the final construction work in the future.

3. The Future

Marin County Parks has submitted a proposal to fund the construction work on the pier in fiscal year 2015/16. The funding will be considered by the Marin County Board of Supervisors during the coming budget hearings over the next several months. If successful, construction could take place in summer 2015 or 2016.

4. Lessons Learned

Plans and specifications for construction were straightforward, excepting a few detail options. More challenging was cost estimating that includes possible techniques of construction at a restricted marine site. Imagining

access methods under a pier during varying tides without restricting creativity for the future bidding contractors proved to be complex.

In addition, permitting requirements were suggested, but final requirements will not be known until applications are submitted and reviewed by the regulatory agencies.

Both challenges can impact bid submissions later on.

5. Project Documents

- Photos and selected plan pages are attached.

POSTING OF FINAL REPORT: *This report and attached project documents may be shared by the Foundation and any Funding Source for the Project via their respective websites. In the event that the Recipient intends to claim that its final report or project documents contains material that does not have to be posted on such websites because it is protected from disclosure by statutory or regulatory provisions, the Recipient shall clearly mark all such potentially protected materials as “PROTECTED” and provide an explanation and complete citation to the statutory or regulatory source for such protection.*



Image 1: View of existing pier



COUNTY OF MARIN
MARIN COUNTY PARKS
PLANS FOR CONSTRUCTION OF
MCNEARS BEACH PARK
PIER REPAIR



LOCATION MAP

DRAWING INDEX

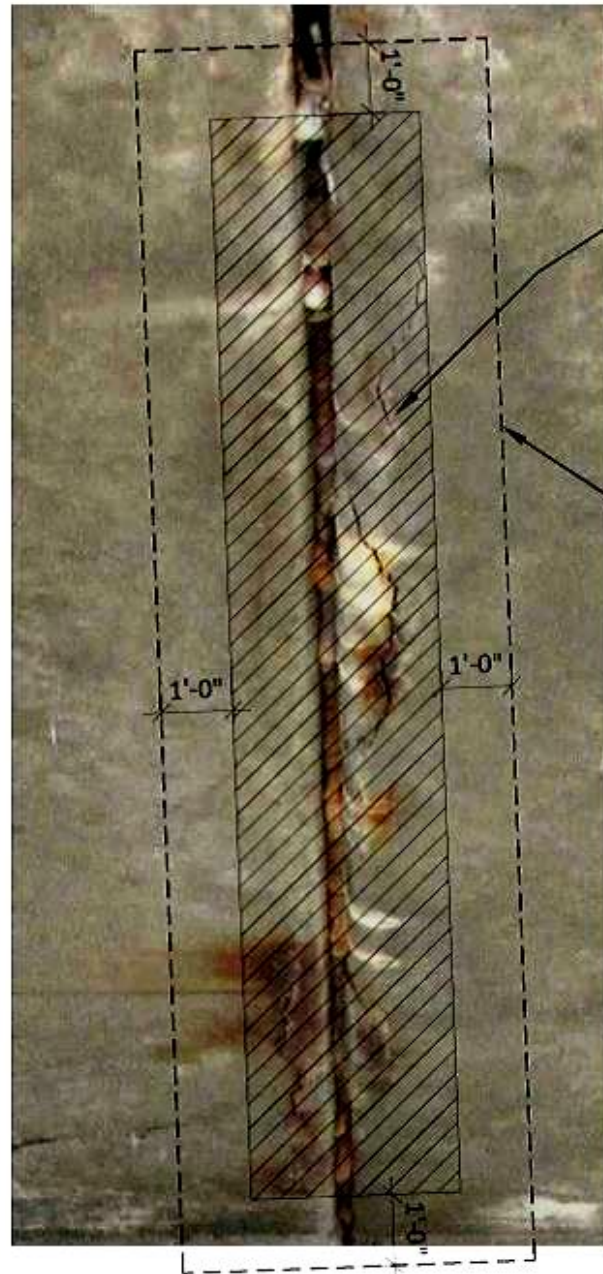
Drawing Number	Drawing Title
General	
G1	TITLE SHEET AND DRAWING INDEX
G2	PROJECT NOTES AND GENERAL NOTES - 1
G3	PROJECT NOTES AND GENERAL NOTES - 2
G4	SITE PLAN
Structural	
S1	OVERALL PIER PLAN
S2	PIER REPAIR PLAN - 1
S3	PIER REPAIR PLAN - 2
S4	PIER REPAIR PLAN - 3
S5	TEE REPAIR DETAILS - 1
S6	TEE REPAIR DETAILS - 2
S7	TEE REPAIR DETAILS - 3
S8	TEE DIAPHRAGM REPAIRS
S9	TEE JOINT, CURB, AND MISC. REPAIRS
S10	PILE AND PILE CAP REPAIRS

CALL USA (UNDERGROUND SERVICE
ALERT) AT LEAST 24HRS IN ADVANCE
OF WORK - 1-(800)-542-2444.

PRINTED
1/28/2015

BID/ PERMIT SET

PROJECT NO.	13-037
DATE	1/28/15
CAP 13-037	
COUNTY PROJECT NUMBER	
RECEIVED NUMBER	
ROAD NO.	
FILE NO.	
ESTIMATE NO.	
PROJECT DESCRIPTION MCNEARS BEACH PARK PIER REPAIR	
SHEET NO. TITLE SHEET AND DRAWING INDEX	
1 14 SHEET NO. TOTAL (SHEETS)	
SHEET NO. G1	



SURFACE DAMAGED
CONCRETE AREA W/ HAIR
LINE CRACKS

12" MIN BEYOND VISIBLE
SIGNS OF CORROSION.
REFER TO CLEAN AND
COAT ON SHEET G3.

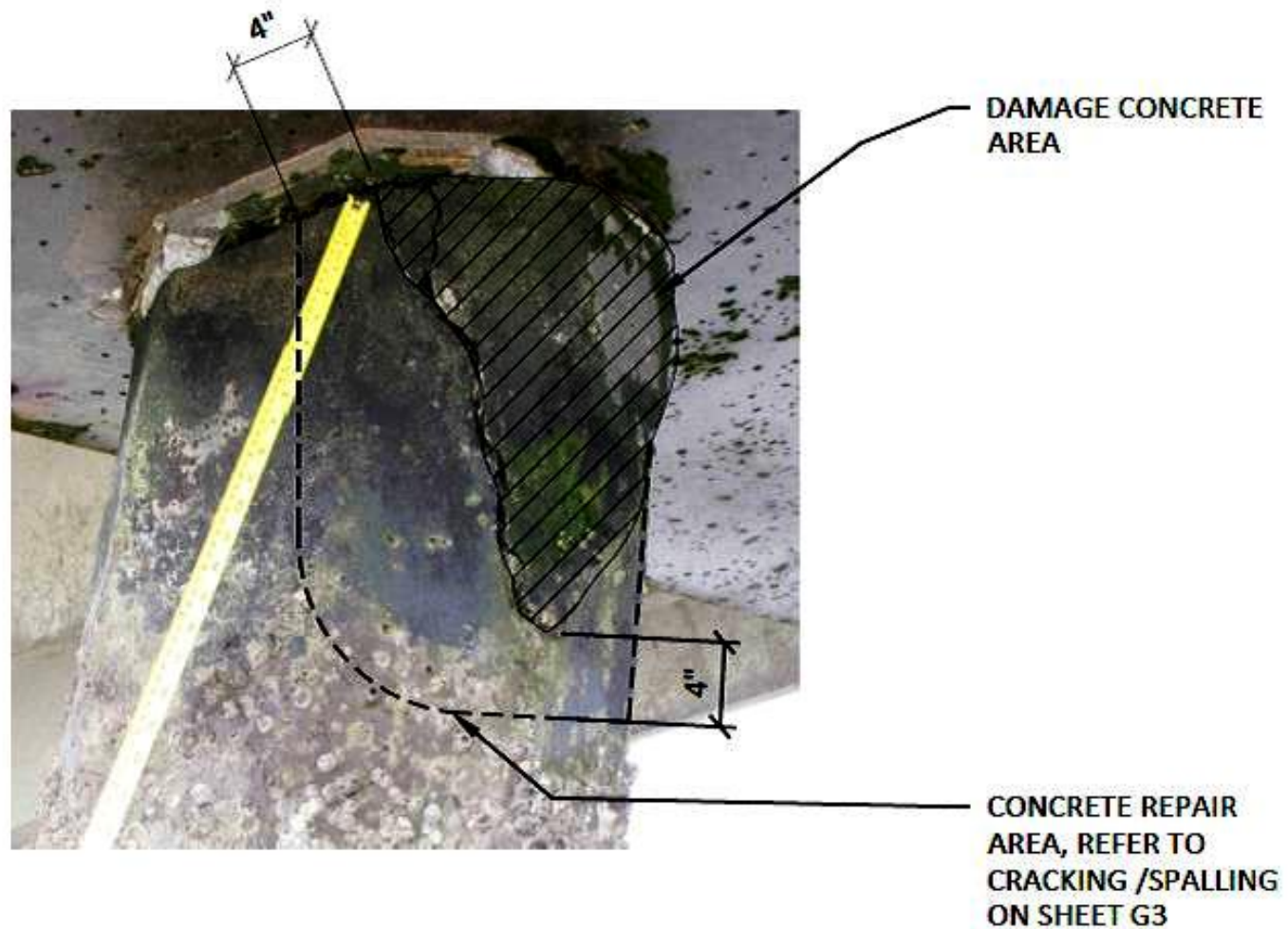
TEE CRACKING AT DECK JOINT

NOTE:
THIS REPAIR ASSUMES THAT THE
CONCRETE IS SOUND, IF NOT
NOTIFY ENGINEER.

DECK JOINT REPAIR



Image 3: Example specification in plans for repair of pier decking joint



SPALLING AT TOP OF PILE

PILE REPAIR 

Image 4: Example repair specification of pier pile spalling



TEE SPALLING AT SPAN 1

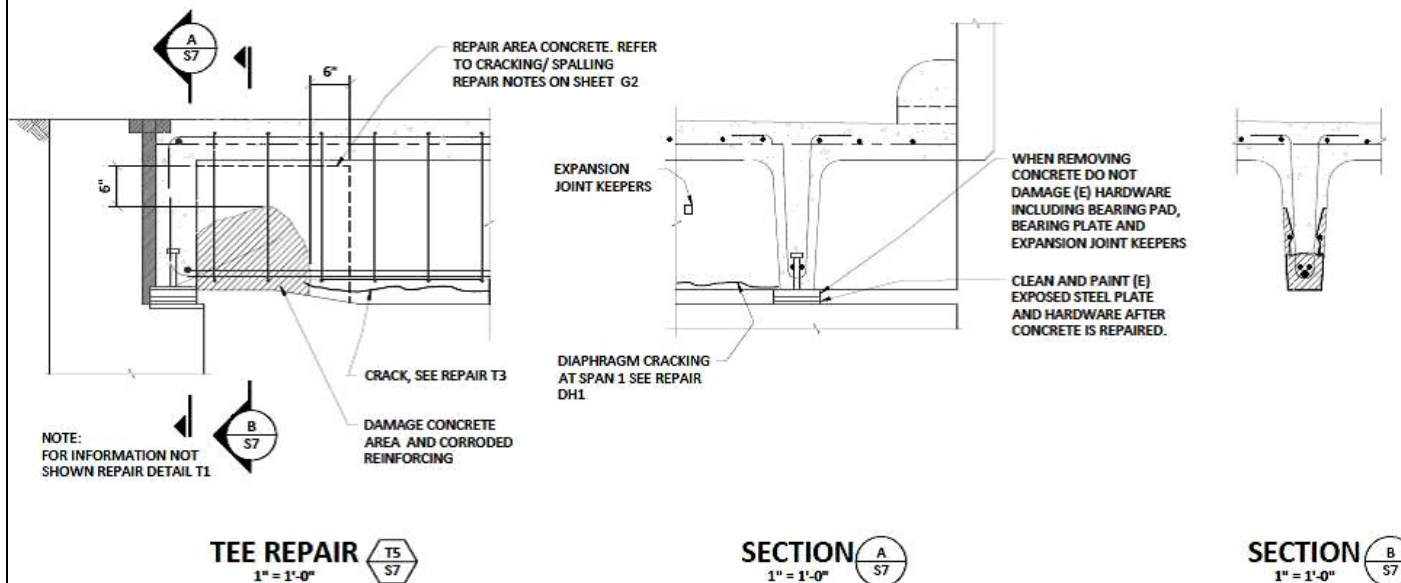


Image 5: Example repairs to span length and connection to tee



Image 6: Engineers during site visit for pier conditions. Inspection prelude to 60% plans/specifications.



Image 7: Pier conditions during high water. Shows limited access for repair construction.



Image 8: Example of repair techniques on other piers (1 of 3). Presented to assist with cost estimating discussions.



Image 9: Example of repair techniques on other piers (2 of 3). Presented to assist with cost estimating discussions.



Image 10: Example of repair techniques on other piers (3 of 3). Presented to assist with cost estimating discussions.