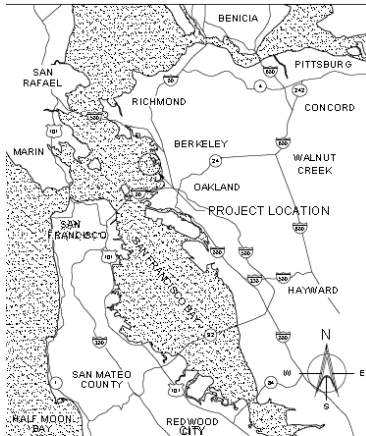


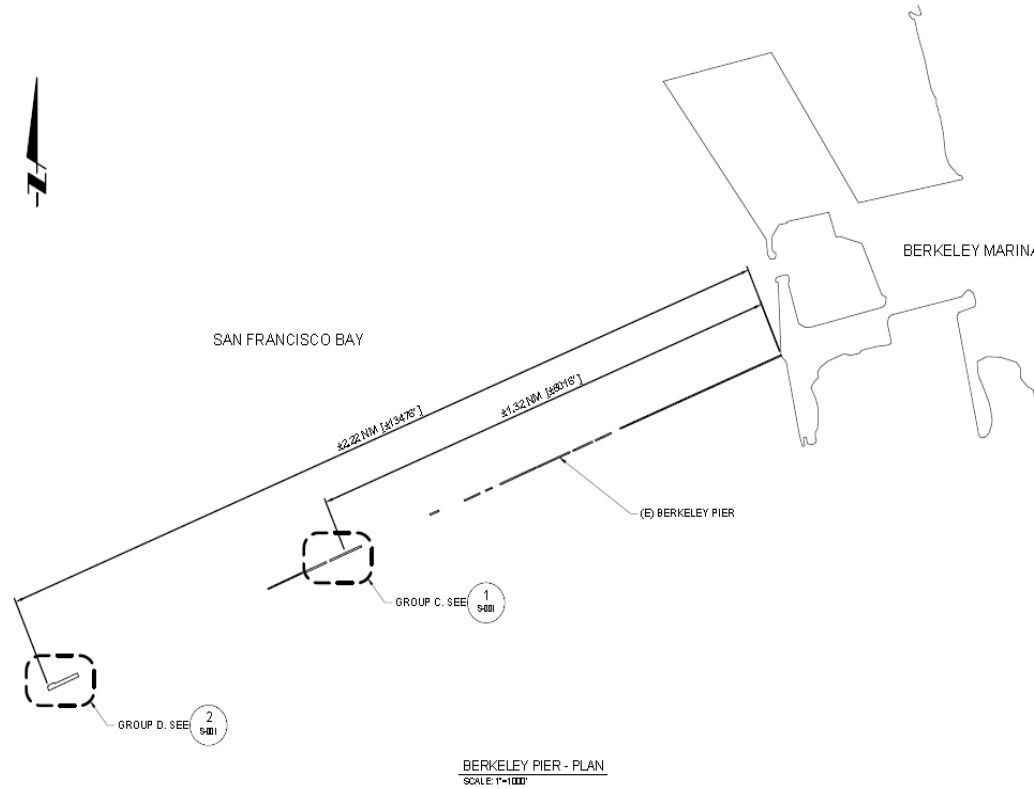
STATE OF CALIFORNIA  
THE NATURAL RESOURCES AGENCY  
DEPARTMENT OF FISH AND WILDLIFE  
ENGINEERING UNIT



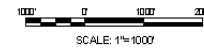
VICINITY MAP  
SCALE: N.T.S.



LOCATION MAP  
SCALE: N.T.S.



BERKELEY PIER - PLAN  
SCALE: 1"=100'



SHEET INDEX

1. TITLE SHEET
2. GENERAL NOTES
3. SITE PLAN AND SECTION
4. SECTIONS AND DETAILS

PROJECT DESCRIPTION

THE PROJECT CONSISTS OF SITE EVALUATION, AND THE INSTALLATION OF A BIRD HABITAT ON THE ABANDONED PORTION OF THE EXISTING BERKELEY PIER. THE BIRD HABITAT WILL PROVIDE INCREASED NESTING AND ROOSTING OPPORTUNITIES FOR CORMORANTS, PELICANS, GULLS, AND SHOREBIRDS.

THE PROJECT SHALL CONFORM TO THE APPLICABLE STATE AND FEDERAL CODES AS SHOWN BELOW:

1. 2016 CALIFORNIA BUILDING CODE, VOLUMES 1, AND 2, TITLE 24, PART 2, (CBC) (2015 INTERNATIONAL BUILDING CODE WITH 2016 CALIFORNIA AMENDMENTS).

ABBREVIATIONS

ACI	AMERICAN CONCRETE INSTITUTE	NO	VERTICAL DATUM NUMBER
ASC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION	NTS	NOT TO SCALE
APPROX	APPROXIMATE	OC	ON CENTER
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS	OD	OUTSIDE DIAMETER
BOT	BOTTOM	OPP	OPPOSITE
CLR	CLEAR	OW	OIL/WASTE
CONC	CONCRETE	PCF	POUND PER CUBIC FOOT
DIAM	DIAMETER	PL	PLATE
EA	EACH	PSF	POUNDS PER SQUARE FOOT
EL	ELEVATION	PSI	POUNDS PER SQUARE INCH
ELEV	ELEVATION	R	RADIUS
EXIST	EXISTING	REIN	REINFORCING
FT	FOOT or FEET	REQD	REQUIRED
GALV	GALVANIZED	SCH	SCHEDULE
H	HEIGHT	SF	SQUARE FOOT or FEET
HORIZ	HORIZONTAL	SIM	SIMILAR
ID	INSIDE DIAMETER	SS	STAINLESS STEEL
L	LENGTH	STA	STATION
LB	POUND	STD	STANDARD
LINEAR	LINEAR or LINEAL	SYM	SYMMETRICAL
FEET	FEET	THD	THREAD
MAX	MAXIMUM	THRU	THROUGH
MIN	MINIMUM	TOT	TOTAL
MLLW	MEAN LOWER LOW WATER	TYP	TYPICAL
N	NORTH	UNL	UNLESS OTHERWISE NOTED
NAVD	NORTH AMERICAN	VAR	VARIES
		VERT	VERTICAL

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<p>CALIFORNIA STATE FIRE MARSHAL APPROVAL OF THIS PLAN DOES NOT CONSTITUTE OR APPROVE ANY COMMITTEE OR EXAMINER FROM APPLICABLE REGULATIONS. FOR ALL APPROVALS IN RELATION TO THIS PROJECT, DRAWINGS OF APPROVAL SHALL BE AVAILABLE ON THE PROJECT SITE AT ALL TIMES.</p> <p>SF 140: _____</p> <p>DATE: _____</p>	<p>REGISTRATION NUMBER</p> <p>_____</p>	<p>DATE</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>NO.</th> <th>DATE</th> <th>APPROVED BY</th> <th>REVISION</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>	NO.	DATE	APPROVED BY	REVISION																									<p>STATE OF CALIFORNIA THE NATURAL RESOURCES AGENCY California Department of Fish and Wildlife ENGINEERING BRANCH</p>	<p>BERKELEY, CALIFORNIA BERKELEY PIER BIRD HABITAT TITLE SHEET REG. NO. 3</p>	<p>Sheet 1 of 4</p> <p>DRAWING NUMBER: G-001</p>
NO.	DATE	APPROVED BY	REVISION																														

**GENERAL NOTES**

1. THE PROJECT REQUIRES THE IMPLEMENTATION OF A BEST MANAGEMENT PRACTICES PLAN (BMP) DURING ALL CONSTRUCTION TO PREVENT/MINIMIZE CONSTRUCTION RELATED MATERIALS AND DEBRIS FROM ENTERING THE WATER.

a. NO DEBRIS SHALL BE ALLOWED TO ENTER THE WATER, THE CONTRACTOR SHALL PROVIDE A SUITABLE POSITIVE MEANS OF CAPTURING DEBRIS FROM CONSTRUCTION.

b. UPON COMPLETION OF THE WORK, THE CONTRACTOR SHALL COORDINATE WITH THE OWNER TO COMPLETE A VISUAL SITE INSPECTION TO ENSURE NO TRASH, DEBRIS, OR CONSTRUCTION MATERIALS ARE IN THE WATER, SHORE, OR BAY FLOOR. IF ANY TRASH, DEBRIS, OR CONSTRUCTION MATERIALS ARE FOUND IN SUCH LOCATIONS, THE CONTRACTOR SHALL IMMEDIATELY REMOVE AND PROPERLY DISPOSE THE MATERIALS.

2. ELEVATIONS ARE IN FEET REFERENCED TO MLLW, BASED ON STATION 9414750, ALAMEDA, CA.

WATER LEVEL	ELEVATION (FT)
MEAN HIGHER HIGH WATER (MHHW)	6.60
MEAN HIGH WATER (MHW)	5.98
MEAN TIDE LEVEL (MTL)	3.56
MEAN LOW WATER (MLW)	1.14
MEAN LOWER LOW WATER (MLLW)	0.00

3. SITE PLAN AND CONDITIONS ARE BASED UPON DRAWINGS BY FRANK G. WHITE DATED AUGUST 1938 AND BY FIELD INSPECTIONS CONDUCTED IN SEPTEMBER OF 2019 AND JULY OF 2020.

4. PROTECT ALL EXISTING SITE FEATURES NOT CALLED OUT TO BE DEMOLISHED. CONTRACTOR TO REPAIR ANY DAMAGE DONE TO EXISTING FEATURES TO REMAIN.

5. DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR JOBSITE SAFETY.

6. VERIFY ALL LEVELS, DIMENSIONS, AND EXISTING CONDITIONS IN THE FIELD BEFORE PROCEEDING. NOTIFY OWNER OF ANY DISCREPANCIES OR FIELD CHANGES PRIOR TO INSTALLATION OF FABRICATION. IN CASE OF DISCREPANCIES BETWEEN THE EXISTING CONDITIONS AND THE DRAWINGS THE CONTRACTOR SHALL OBTAIN WRITTEN DIRECTION FROM OWNER BEFORE PROCEEDING.

7. NOTED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS.

**CODES AND STANDARDS**

- 2016 CALIFORNIA BUILDING CODE (CBC).
- AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC), STEEL CONSTRUCTION MANUAL, 14TH EDITION.
- AMERICAN SOCIETY OF CIVIL ENGINEERS, MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES, ASCE 7-10.
- AMERICAN CONCRETE INSTITUTE (ACI), BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE AND COMMENTARY, ACI 318-14.

**DESIGN CRITERIA**

**A. VERTICAL DEAD LOAD**

- A.1. DEAD LOAD = ACTUAL WEIGHT OF STRUCTURAL ELEMENTS
- A.2. ALLOWANCE FOR FUTURE DL = 15 PSF

**B. VERTICAL LIVE LOAD**

- B.1. UNIFORM LIVE LOAD = 40 PSF
- B.2. POINT LOAD = 300 LBS

**C. WIND LOAD**

- DESIGN WIND SPEED = 100 MPH
- RISK CATEGORY = I
- EXPOSURE CATEGORY = D

**STRUCTURAL STEEL**

**1. SHAPES, PLATES AND HARDWARE**

- 1.1. ANGLES: ASTM A36, GRADE 36
- 1.2. HSS SHAPES: ASTM A500 GRADE B
- 1.3. STEEL PLATE: ASTM A36, GRADE 36
- 1.4. BOLTS: ASTM A307 GRADE A
- 1.5. U-BOLTS: ASTM A307 GRADE A

2. ALL STEEL ITEMS SHALL BE HOT-DIPPED GALVANIZED.

3. ALL STEEL SHAPES, PLATES AND ASSEMBLIES SHALL BE GALVANIZED AFTER FABRICATION UON.

3. BOLTS SHALL HAVE FLAT WASHERS AT THE NUT AND HEAD.

4. SEAL WELD ALL EXPOSED STEEL-TO-STEEL INTERFACES.

5. STEEL FABRICATIONS SHALL BE FABRICATED BY AN AISC CERTIFIED FABRICATOR.

**WELDING**

- 1. WELDING SHALL CONFORM TO AWS D1.1. WELD CONSUMABLES SHALL BE E70XX.
- 2. CONTRACTOR SHALL SUBMIT ALL WELDING PROCEDURES TO THE ENGINEER FOR PRE-APPROVAL.

**FIBER REINFORCED POLYMER GRATING (FRP)**

- 1. ALL FRP PANELS SHALL BE PROGrid MOLDED GRATING OR ENGINEER APPROVAL EQUAL.
- 2. TOP SURFACE SHALL BE MENISCUS FINISH.
- 3. COLOR SHALL BE GRAY.

**NEOPRENE BEARING PADS**

- 1. NEOPRENE BEARING PADS SHALL BE 60 SHORE A HARDNESS.
- 2. MULTIPLE THICKNESSES SHALL BE AVAILABLE DURING CONSTRUCTION TO ACCOMMODATE BENT TO BENT TOP OF BENT ELEVATION VARIATIONS .

**REMOVAL NOTES**

- 1. THE SITE SHALL BE CLEANED OF DEBRIS AT THE END OF EACH DAY.

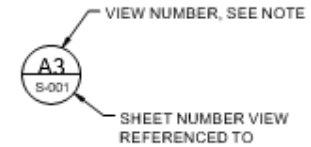
**SURFACE PREPARATION**

- 1. TRIM REINFORCING STEEL AND TIES PROTRUDING FROM THE SURFACE OF THE EXISTING PILE OR BENT CAP TO PROVIDE AN EVEN SURFACE TO INSTALL BEARING PADS AND BEAMS.

**PERMITS**

- 1. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE REGULATORY WORK WINDOW AND PERMIT CONDITIONS PER PERMITS FROM THE FOLLOWING AGENCIES:
  - US ARMY CORPS OF ENGINEERS
  - REGIONAL WATER QUALITY CONTROL BOARD
  - BAY CONSERVATION AND DEVELOPMENT COMMISSION (BCDC)

**CROSS-REFERENCE LEGEND**



NOTE: VIEW NUMBER IS BASED ON THE LOCATION OF THE LOWER-LEFT EXTENTS OF THE VIEW ON THE REFERENCED SHEET. WHERE THERE IS NO REFERENCE SHEET INDICATED, THE VIEW IS LOCATED ON THE SAME SHEET.

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CALIFORNIA STATE FIRE MARSHAL APPROVED <small>Approval of this plan does not authorize or approve any revision or deviation from applicable regulations. Final approval is subject to field inspection. One set of approved plans shall be available on the project site at all times.</small> SPM#: _____ Reviewed by: _____	AGC/SB COMPLIANCE _____	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2">REVISIONS</th> <th>DESCRIPTION</th> <th>SHEET NUMBER</th> </tr> <tr> <th>NO.</th> <th>DATE</th> <th>DESCRIPTION</th> <th>SHEET NUMBER</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>	REVISIONS		DESCRIPTION	SHEET NUMBER	NO.	DATE	DESCRIPTION	SHEET NUMBER																					DESIGNED & DRAWN:  SH/CD APPROVED:  _____ CHIEF ENGINEER      DATE	State of California The Natural Resources Agency <b>California Department of Fish and Wildlife</b> Engineering Branch	BERKELEY, CALIFORNIA <b>BERKELEY PIER BIRD HABITAT</b> <b>GENERAL NOTES</b> Region 3	_____ Sheet 2 of 4 Drawing Number: G-002
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