Appendix A

65% Design Plans for the Proposed Project

(Part 1)
BUTANO CREEK CHANNEL RECONNECTION
AND RESILIENCE PROJECT
SAN MATEO COUNTY, CALIFORNIA
SAN MATEO RESOURCE CONSERVATION DISTRICT AND
CALIFORNIA DEPARTMENT OF PARKS AND RECREATION

CONTOURS AND ELEVATIONS SHOWN ON PLANS PROVIDED BY CBEC. SITE SURVEY OF BUTANO MARSH AND CREEK TIED INTO NATIONAL GEODETIC SURVEY FIRST ORDER, CLASS 1, VERTICAL CONTROL POINT HT1506 LOCATED AT LAT:37°15'34.4", LONG:122°24'46.9" WITH A PUBLISHED ELEVATION OF 50.31 FT (NAVD88, GEOID 09). SURROUNDING TOPOGRAPHY IS FROM THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION 2009-2011 LIDAR DATASET.

PRELIMINARY DESIGN
NOT FOR CONSTRUCTION

Sheet List Table
<table>
<thead>
<tr>
<th>Sheet Number</th>
<th>Sheet Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1</td>
<td>COVER SHEET</td>
</tr>
<tr>
<td>C2</td>
<td>EXISTING CONDITIONS</td>
</tr>
<tr>
<td>C3</td>
<td>STAGING AND ACCESS PLAN</td>
</tr>
<tr>
<td>C4</td>
<td>SHEET LAYOUT PLAN</td>
</tr>
<tr>
<td>C5</td>
<td>PLAN VIEW (1 OF 7)</td>
</tr>
<tr>
<td>C6</td>
<td>PLAN VIEW (2 OF 7)</td>
</tr>
<tr>
<td>C7</td>
<td>PLAN VIEW (3 OF 7)</td>
</tr>
<tr>
<td>C8</td>
<td>PLAN VIEW (4 OF 7)</td>
</tr>
<tr>
<td>C9</td>
<td>PLAN VIEW (5 OF 7)</td>
</tr>
<tr>
<td>C10</td>
<td>PLAN VIEW (6 OF 7)</td>
</tr>
<tr>
<td>C11</td>
<td>PLAN VIEW (7 OF 7)</td>
</tr>
<tr>
<td>C12</td>
<td>CHANNEL PROFILE (1 OF 2)</td>
</tr>
<tr>
<td>C13</td>
<td>CHANNEL PROFILE (2 OF 2)</td>
</tr>
<tr>
<td>C14</td>
<td>CHANNEL PROFILE</td>
</tr>
<tr>
<td>C15</td>
<td>ALIGNED HORIZON TABLE</td>
</tr>
<tr>
<td>C16</td>
<td>MARSH CONTROL STRUCTURE</td>
</tr>
<tr>
<td>C17</td>
<td>WATER QUALITY BERM ENHANCEMENT</td>
</tr>
<tr>
<td>C18</td>
<td>PESCADERO LAGOON WATER SURFACE ELEVATION CONTROL</td>
</tr>
</tbody>
</table>
PRELIMINARY DESIGN
NOT FOR CONSTRUCTION
NOTES:

1. BUTANO CREEK CHANNEL ACCESS CAN ACCOMMODATE EQUIPMENT INCLUDING DREDGE, TUGS, BARGES, EXCAVATORS, AND LOW GROUND PRESSURE DUMP TRUCKS WITHIN THE DISTURBED AREA.
2. ACCESS ROUTE TO SUPPORTING EASEMENTS AND TERRITORIES SUBJECT TO APPROVAL BY OWNER'S REPRESENTATIVE. SMALL LOW GROUND PRESSURE VEHICLES AND RANDOMIZED PATHS WILL BE REQUIRED.
3. ACCESS POINTS #6 AND #7 WILL BE ALLOWS TO AVOID TREES. PROJECT BIOLOGIST APPROVAL OF ALIGNMENT IS REQUIRED PRIOR TO CLEARING ACCESS ROUTE.
4. ACCESS POINTS #6 AND #7 REQUIRE PROTECTIVE MEASURES TO PRESERVE THE EXISTING GROUND BETWEEN THE LIMITS OF THE EXCAVATED CHANNEL AND THE FILL AREAS IN THE MARSH. MINIMAL MOVEMENT OF SOILS IS REQUIRED.
5. ACCESS POINTS #6 AND #7 REQUIRE TRAVEL ON SLOPES DOWN INTO THE MARSH. ACCESS ROUTES SHALL BE RETURNED TO ORIGINAL CONDITION AFTER CONSTRUCTION TO PRESERVE THE EXISTING VEGETATION.
6. ACCESS POINTS #6 AND #7 REQUIRE TRAVEL ON SLOPES DOWN INTO THE MARSH. ACCESS ROUTES SHALL BE RETURNED TO ORIGINAL CONDITION AFTER CONSTRUCTION TO PRESERVE THE EXISTING VEGETATION.
7. LOWER BUTANO MARSH ACCESS IS LIMITED TO SMALLER EQUIPMENT THAT CAN OPERATE FROM THE TOP OF THE NARROW BERM SUCH AS MARSHMASTER, SKID STEER, OR LOW GROUND PRESSURE DUMP TRUCKS AND MINI EXCAVATOR. THE BERM MAY BE MOVED TO PROVIDE ACCESS. CUTTING OR LEVELING OF THE BERM IS NOT PERMITTED. PROVIDE A BERM ACCESS PLAN INCLUDING EQUIPMENT THAT WILL BE USED, FREQUENCY OF TRAVEL, AND INTENDED BERM AUGMENTATION TO OWNER'S REPRESENTATIVE PRIOR TO CLEARING.
8. SOIL STOCKPILING AREAS ON APN 086 090 010 (LEVEL LEA FARM) ARE PRELIMINARY AND SUBJECT TO REVISION BASED ON FURTHER CONVERSATION WITH THE LANDOWNER.
9. ACCESS TO THE LOWER BUTANO MARSH BERM MAY REQUIRE AUGMENTATION OF THE BERM TO SUPPORT EQUIPMENT. NO CUT OR LEVELING ON THE BERM IS ALLOWED. PROVIDE A BERM AUGMENTATION PLAN TO OWNER'S REPRESENTATIVE PRIOR TO ANY AUGMENTATION.
10. DREDGE WATER RECIRCULATION CONTAINMENT DAMS SHOWN ON PLANS INDICATE AREAS WHERE IT IS ANTICIPATED THAT THEY MAY BE USED TO IMPOUND DREDGE EFFLUENT RUNOFF TO HELP FACILITATE RETURN OF WATER TO BUTANO CREEK CHANNEL TO SUPPORT DREDGING OPERATIONS.
11. ACCESS TO THE LOWER BUTANO MARSH BERM MAY REQUIRE AUGMENTATION OF THE BERM TO SUPPORT EQUIPMENT. NO CUT OR LEVELING ON THE BERM IS ALLOWED. PROVIDE A BERM AUGMENTATION PLAN TO OWNER'S REPRESENTATIVE PRIOR TO ANY AUGMENTATION.
12. PRELIMINARY DESIGN NOT FOR CONSTRUCTION.
C18

C5

C6

C7

C8

C9

C10

C11

LEGEND

□□□□□ TYPE 1 MARSH FILL
□□□□□ TYPE 2 MARSH FILL
□□□□□ TYPE 3 MARSH FILL
□□□□□ TYPE 4 MARSH FILL

PRELIMINARY DESIGN
NOT FOR CONSTRUCTION

PARAMETERS:
1" = 400'

0 800 1200 FT

SHEET LAYOUT PLAN

USE OF DOCUMENTS
THIS DOCUMENT, INCLUDING
THE INCORPORATED
DESIGNS, IS AN INSTRUMENT
OF SERVICE FOR THIS
PROJECT AND SHALL NOT BE
USED FOR ANY OTHER
PROJECT WITHOUT THE
WRITTEN AUTHORIZATION
OF cbec, inc.

PESCADERO CREEK ROAD BRIDGE

PESCADERO CREEK ROAD

UPPER BUTANO MARSH –
NATURAL化CT ANALYSIS

WATER QUALITY BASIN
ENHANCEMENTS

MARSH CONTINGENCY STRUCTURE

FEB 2018
16-1027-3
PESCADERO
SHEET LAYOUT PLAN

CLIENT: PREPARED BY:

A

B

C

D

E
MATCHLINE SEE SHEET C6

NOTES:
1. TYPE 1 MARSH FILL - ADD DREDGE SPOILS TO FILL EXISTING CHANNEL TO ADJACENT BANK ELEVATIONS.
2. TYPE 2 MARSH FILL - ADD DREDGE SPOILS TO FILL EXISTING CHANNEL TO 1' BELOW ADJACENT BANK ELEVATIONS.
3. TYPE 3 MARSH FILL - ADD DREDGE MATERIAL TO ENHANCE NATURAL LEVEE ANALOG ALONG BUTANO CREEK ACCORDING TO ELEVATIONS AND DIMENSIONS SHOWN.
4. TYPE 4 MARSH FILL - OPPORTUNISTIC FILL - ADD DREDGE MATERIAL TO MIDDLE MARSH TO MEET OR EXCEED ELEVATIONS OF LOWER MARSH.
5. CUTTING OR LEVELING OF THE ACCESS ROUTE TO ACCESS POINT #2 IS NOT ALLOWED. FILL MATERIAL MAY BE PLACED. RESTORE TO ORIGINAL CONDITION IMMEDIATELY FOLLOWING CONSTRUCTION.
6. INSTALL CONSTRUCTION MATS OR SIMILAR MEANS TO PROTECT EXISTING SURFACES. PROVIDE PLAN FOR PROTECTING EXISTING SURFACES TO OWNERS REPRESENTATIVE FOR APPROVAL PRIOR TO ANY IMPROVEMENTS.
7. CONTRACTOR SHALL PROVIDE SECONDARY CONTAINMENT TO KEEP PUMP AND AERATOR FUELS AND LUBRICANTS FROM ENTERING THE MARSH.

LEGEND:
- TYPE 1 MARSH FILL
- TYPE 2 MARSH FILL
- TYPE 3 MARSH FILL
- TYPE 4 MARSH FILL

POTENTIAL EXCAVATION OPERATING LOCATION B

FORTIFY MARSH CONTROL STRUCTURES AND SEE PLAN, SHEET C18

POTENTIAL ACCESS IMPROVEMENT MATERIAL MAY BE ADDED TO IMPROVE SITE, BUT NO REDUCTION IN RISING INTO THE EXISTING EROSION ZONE IS ALLOWED. RESTORATION AREA SHALL BE RESTORED TO ORIGINAL CONDITION IMMEDIATELY FOLLOWING CONSTRUCTION.

MATCH LINE SEE SHEET C6

NOTES:
1. INSTALL SILT CURTAIN ALONG RIGHT BANK OF BUTANO CREEK FROM STATION 2+00 TO STATION 2+35 WHILE WATER CONTROL SAM IS IN PLACE TO CONTROL TURBIDITY FROM DELTA MARSH.
2. INSTALL SILT CURTAIN ACROSS BUTANO CREEK CHANNEL AT APPROXIMATE STATION 2+75 DURING CONSTRUCTION TO REDUCE TURBIDITY INPUTS TO REGASCADRO LOCATION WITH OWNERS REPRESENTATIVE.
3. INSTALL WATER CONTROL DAM #1 ACROSS CHANNEL. COMMENCEMENT OF DREDGING LIMITS ELIMINATES TURBIDITY INPUTS TO REGASCADRO LOCATION WITH OWNERS REPRESENTATIVE.
4. INSTALL SILT CURTAIN DOWNSTREAM OF THE WATER CONTROL DAM AT COORDINATE LOCATION WITH OWNERS REPRESENTATIVE.

NOTES:
1. TYPE 1 MARSH FILL - ADD DREDGE SPOILS TO FILL EXISTING CHANNEL TO ADJACENT BANK ELEVATIONS.
2. TYPE 2 MARSH FILL - ADD DREDGE SPOILS TO FILL EXISTING CHANNEL TO 1' BELOW ADJACENT BANK ELEVATIONS.
NOTES:
1. ANTICIPATED LOCATION OF WATER CONTROL DAM IS BETWEEN STATIONS 60+00 AND 75+00. CONDITIONS AT TIME OF CONSTRUCTION WILL DETERMINE LOCATION OF WATER CONTROL STRUCTURE. FIELD VERIFY CONDITIONS AND OBTAIN APPROVAL OF OWNERS REPRESENTATIVE PRIOR TO INSTALLATION.
2. TEMPORARY MATERIAL PLACEMENT AREA. THIS AREA MAY BE USED FOR TEMPORARY STORAGE OF VEGETATION AND ROOT/SOIL MATERIAL. CLEANED FROM BUTANO CREEK TO FACILITATE TRANSFER TO BUTANO MARSH. MATERIALS MAY NOT BE STORED FOR LONGER THAN ONE DAY. COORDINATE WITH OWNERS REPRESENTATIVE FOR APPROVAL OF CONSTRUCTION SEQUENCING PRIOR TO STORING ANY MATERIAL IN THIS AREA.
3. SEED COMPLETED NATIVE LEVEE ANALOG SURFACE WITH NATIVE HERBACEOUS VEGETATION SEED MIX APPROVED BY OWNERS REPRESENTATIVE.
4. TYPE 1 MARSH FILL - ADD DREDGE SPOILS TO FILL EXISTING CHANNEL TO ADJACENT BANK ELEVATIONS.
5. TYPE 2 MARSH FILL - ADD DREDGE SPOILS TO FILL EXISTING CHANNEL TO 1' BELOW ADJACENT BANK ELEVATIONS.
6. TYPE 3 MARSH FILL - ADD DREDGE MATERIAL TO ENHANCE NATURAL LEVEE ANALOG ALONG BUTANO CREEK ACCORDING TO ELEVATIONS AND DIMENSIONS SHOWN.
7. TYPE 4 MARSH FILL - OPPORTUNISTIC FILL - ADD DREDGE MATERIAL TO MIDDLE MARSH TO MEET OR EXCEED ELEVATIONS OF LOWER MARSH.

MATCHLINE SEE SHEET C5, C8

LEGEND:
- TYPE 1 MARSH FILL
- TYPE 2 MARSH FILL
- TYPE 3 MARSH FILL
- TYPE 4 MARSH FILL

PRELIMINARY DESIGN
NOT FOR CONSTRUCTION
NOTES:

1. TEMPORARY DREDGE WATER RECIRCULATION CONTAINMENT DAM SHALL BE CONSTRUCTED OF EXCAVATED MATERIAL FROM BUTANO CREEK, STRAW BALES, SANDBAGS, OR SIMILAR TO CREATE TEMPORARY APPROPRIATION OF DREDGE EFFLUENT FOR RETURN PUMPING TO BUTANO CREEK. DAM SHALL BE DECONSTRUCTED AFTER USE. AREAS BENEATH THE DAM SHALL BE RESTORED TO EXISTING CONDITION OR THEIR RESPECTIVE PROJECT FILL CONDITION. PROVIDE DAM PLAN TO OWNER'S REPRESENTATIVE FOR APPROVAL PRIOR TO INSTALLATION.

2. SEED COMPLETED NATURAL LEVEE ANALOG SURFACE WITH NATIVE HERBACEOUS VEGETATION SEED MIX APPROVED BY OWNER'S REPRESENTATIVE.

3. TYPE 1 MARSH FILL - ADD DREDGE SPOILS TO FILL EXISTING CHANNEL TO ADJACENT BANK ELEVATIONS.

4. TYPE 2 MARSH FILL - ADD DREDGE SPOILS TO FILL EXISTING CHANNEL TO 1' BELOW ADJACENT BANK ELEVATIONS.

5. TYPE 3 MARSH FILL - ADD DREDGE MATERIAL TO ENHANCE NATURAL LEVEE ANALOG ALONG BUTANO CREEK ACCORDING TO ELEVATIONS AND DIMENSIONS SHOWN.

6. TYPE 4 MARSH FILL - OPPORTUNISTIC FILL - ADD DREDGE MATERIAL TO MIDDLE MARSH TO MEET OR EXCEED ELEVATIONS OF LOWER MARSH.
NOTES:

1. TEMPORARY DREDGE WATER RECYCLATION CONTAINMENT DAM SHALL BE CONSTRUCTED OF MARSH FILL, STRAW BALES, SACKS, OR SIMILAR TO CREATE TEMPORARY IMPOUNDMENT FOR STORM SEWER TO BUTANO CREEK. DAM SHALL BE DECONSTRUCTED AFTER USE. AREAS BEHIND THE DAM SHALL BE RESTORED TO EXISTING CONDITION OR THEIR RESPECTIVE PROJECT FILL CONDITION. PROVIDE DAM PLAN TO OWNER'S REPRESENTATIVE FOR APPROVAL PRIOR TO INSTALLATION.

2. TEMPERARY MATERIAL PLACEMENT AREA. THIS AREA MAY BE USED FOR TEMPORARY STORAGE OF VEGETATION AND ROOT/SOIL MATERIAL CLEARED FROM BUTANO CREEK TO FACILATE TRANSFER TO BUTANO MARSH. MATERIALS MAY BE STORED FOR LONGER THAN ONE DAY. COORDINATE WITH OWNER'S REPRESENTATIVE FOR APPROVAL OF CONSTRUCTION SEQUENCING PRIOR TO STORING ANY MATERIAL IN THIS AREA.

3. SEED COMPLETED NATURAL LEVEE ANALOG SURFACE WITH NATIVE HERBACEOUS VEGETATION SEED MIX APPROVED BY OWNER'S REPRESENTATIVE.

4. TYPE 1 MARSH FILL - ADD DREDGE SPOILS TO FILL EXISTING CHANNELS TO ADJACENT BANK ELEVATIONS.

5. TYPE 2 MARSH FILL - ADD DREDGE SPOILS TO FILL EXISTING CHANNELS TO 1' BELOW ALREADY BANK ELEVATIONS.

6. TYPE 3 MARSH FILL - ADD DREDGE MATERIAL TO ENHANCE NATURAL LEVEE ANALOG ALONG BUTANO CREEK ACCORDING TO ELEVATIONS AND DIMENSIONS SHOWN.

7. TYPE 4 MARSH FILL - OPPORTUNISTIC FILL. ADD DREDGE MATERIAL TO MIDDLE MARSH TO MEET OR EXCEED ELEVATIONS OF LOWER MARSH.

LEGEND:

- TYPE 1 MARSH FILL
- TYPE 2 MARSH FILL
- TYPE 3 MARSH FILL
- TYPE 4 MARSH FILL

MATCHLINE SEE SHEET C6
MATCHLINE SEE SHEET C7
MATCHLINE SEE SHEET C8