NAD 83 CHANNEL ANGLEPOINTS					
∠ PT	X	Y	∠ PT	X	Y
1-A	6522058.94	1773894.77	48	6811193.07	1772098.62
2-A	6525378.51	1775995.50	47	6812143.35	1771412.19
			46	6811923.32	1771070.24
1	6522251.24	1773544.02	45	6810909.23	1771710.62
2	6523933.03	1775949.19	50	6809951.03	1771359.43
3	6523814.71	1776043.43	51	6807300.23	1771077.26
4	6527623.98	1774236.75	52	6806234.39	1771743.22
5	6532628.85	1779160.31	53	6806554.71	1772090.55
6	6533058.01	1779418.53	54	6806522.02	1772254.31
7	6534097.47	1779858.02	55	6804935.28	1772457.79
8	6535162.43	1781434.93	56	6804271.82	1772822.99
9	6541140.44	1783407.77	57	6803523.42	1772993.17
10	6543748.50	1783514.80	58	6800283.32	1773215.96
11	6543257.51	1785916.74	59	6599852.22	1773313.41
12	6549181.52	1786080.83	60	6599077.36	1773542.71
13	6555934.18	1784455.49	61	6591185.33	1774914.34
14	6555300.55	1783452.57	62	6590883.12	1774740.95
15	6551371.57	1783000.43	63	6595933.27	1775223.39
16	6550322.20	1783017.72	64	6595091.45	1775902.10
17	6549331.80	1783055.42	65	6594494.79	1777494.31
18	6570705.41	1783330.79	66	6593391.34	1779160.57
19	6572444.84	1783115.37	67	6591480.44	1779412.52
20	6574974.06	1783288.36	68	6591255.17	1779442.21
21	6570322.73	1783078.30	69	6590791.21	1779418.32
22	6571155.52	1779254.25	70	6589529.94	1779987.31
23	6570747.50	1779051.20	71	6585297.56	1779793.71
24	6569359.09	1779330.50	72	6583686.53	1779004.51
25	6569492.14	1779315.67	73	6581002.20	1778999.63
26	6569754.42	1778769.38	74	6577969.51	1780422.27
27	6591258.10	1778045.54	75	6574341.16	1781941.79
28	6591599.01	1778000.33	76	6572388.09	1782772.55
29	6593537.77	1778544.71	77	6570944.56	1782991.71
30	6594699.73	1777747.44	78	6568611.24	1783505.19
31	6595729.72	1779111.57	79	6562980.38	1783427.06
32	6592208.21	1779521.70	80	6561362.93	1783450.27
33	6593648.31	1775104.81	81	6555733.17	1784107.49
34	6593253.91	1774402.21	82	6555323.24	1784209.40
35	6592955.55	1773901.57	83	6549134.39	1785239.94
36	6599759.13	1773700.88	84	6548319.07	1785613.30
37	6600290.30	1773514.79	85	6543900.43	1784330.75
38	6600553.90	1773244.99	86	6541295.27	1783090.31
39	6604403.52	1773230.93	87	6538304.13	1781992.95
40	6605163.76	1773159.99	88	6534227.97	1780951.21
41	6605493.42	1772971.93	89	6533213.72	1779102.27
42	6605993.63	1772432.32	90	6532770.03	1778398.24
43	6606339.20	1772133.75	91	6527655.53	1776152.90
44	6607329.74	1772275.69	92	6526956.17	1775778.89
45	6609214.54	1772257.70	93	6522295.41	1774233.93

NAD 83 CENTERLINE ANGLEPOINTS		
∠ PT	X	Y
C1	6522323.35	1773412.69
C2	6523711.37	1775315.35
C3	6529385.44	1775911.19
C4	6527539.77	1778233.20
C5	6532699.48	1779023.53
C6	6533138.36	1779290.42
C7	6534182.72	1779690.82
C8	6538223.29	1781243.49
C9	6541217.35	1782329.04
C10	6543823.49	1783989.77
C11	6548288.80	1785780.37
C12	6549158.36	1785904.21
C13	6555363.71	1784325.19
C14	6555709.36	1784289.00
C15	6561382.27	1783825.37
C16	6562991.28	1783642.29
C17	6566821.42	1783680.21
C18	6570874.99	1783184.25
C19	6572405.37	1782943.96
C20	6574907.61	1782104.03
C21	6577991.12	1780801.52
C22	6581078.36	1779698.94
C23	6583717.07	1778177.91
C24	6585328.12	1778157.11
C25	6585510.54	1778141.14
C26	6590772.82	1778592.25
C27	6591255.63	1778943.28
C28	6591539.73	1779304.44
C29	6590485.01	1779352.89
C30	6594552.75	1777905.88
C31	6595560.69	1778003.84
C32	6596873.24	1778372.55
C33	6598757.47	1774925.09
C34	6598194.62	1774208.28
C35	6599167.21	1773722.84
C36	6599705.87	1773501.74
C37	6600270.58	1773415.30
C38	6600543.68	1773185.53
C39	6600540.18	1773011.77
C40	6600551.62	1772820.90
C41	6600597.77	1772417.41
C42	6600635.37	1772232.44
C43	6600286.86	1771993.73
C44	6600734.81	1771876.53
C45	6600922.90	1772050.59
C46	6600896.13	1771995.22
C47	6600728.30	1771952.21

PRELIMINARY ISSUE
THIS PLAN ISSUED FOR
ADVANCE INFORMATION ONLY

BENICIA-MARTINEZ BRIDGE INTERSTATE HIGHWAY 680

UNION PACIFIC RAILROAD BRIDGE

SHELL DOCK

AMORCO WHARF

MARTINEZ YACHT HARBOR

SUISUN POINT

MATCHLINE - SHEET 2

FLOOD

GRAPHICS SCALE 1" = 200'

200' 0 100' 200' 400' 800'

NOTES:

DRAWINGS NOT TO BE USED AS NAVIGATION. ONLY CHANNEL CONDITION AT DATE OF SURVEY. THE LOCATION OF ALL NAVIGATION AIDS ARE BASED ON INFORMATION PROVIDED BY THE U.S. COAST GUARD. BUOY LOCATION REPRESENT THE POSITION OF THE SINKER ONLY.

SURVEYED BY THE CORPS OF ENGINEERS.
SUISUN BAY CHANNEL 9-13 APRIL 2008.
NEW YORK SLOUGH CHANNEL 16-17 APRIL 2008.

SOUNDINGS WERE TAKEN BY FATHOMETER AND ARE SHOWN TO THE NEAREST TENTH OF A FOOT.

SOUNDINGS ARE BASED ON THE DATUM OF MEAN LOWER LOW WATER AT THE LOCALITY. NAVD 88.

PLANE GRID AND COORDINATES ARE BASED ON LAMBERT PROJECTION, ZONE II NAD 83, CALIFORNIA, AS DESCRIBED IN SPECIAL PUBLICATION NO. 235, PUBLISHED BY THE NATIONAL OCEAN SURVEY.

THE PROJECT DEPTH IS 35 FEET.

VERTICAL CONTROL
SUISUN BAY CHANNEL
(LINES 00+00 TO 150+00) BENCHMARK "9" (1948), USC&GS DISK, ELEV 14.875 FT MLLW., NAVD 88 DATUM.
TIDE GAUGE LOCATED AT PORT OF BENICIA DOCK.

(LINES 150+00 TO 500+00 BENCHMARK "5144-P" (1980 RESET 1997), USC&GS DISK, ELEV 11.83 FT MLLW., NAVD 88 DATUM.
TIDE GAUGE LOCATED AT CONCORD NAVAL WEAPONS STATION TUG DOCK, NOAA STATION.

(LINES 500+00 TO 660+00 BENCHMARK "5144-P" (1980 RESET 1997), USC&GS DISK, ELEV 11.83 FT MLLW., NAVD 88 DATUM.
TIDE GAUGE LOCATED AT CONCORD NAVAL WEAPONS STATION TUG DOCK, NOAA STATION.

(LINES 660+00 TO 733+45 BENCHMARK "5096-B", USC&GS DISK, ELEV 21.76 FT MLLW., NAVD 88 DATUM.
TIDE GAUGE LOCATED AT DIABLO SERVICES DOCK.

NEW YORK SLOUGH
(LINES 9+00 TO 232+00 BENCHMARK "5096-B" (1997), USC&GS DISK, ELEV 21.758 OR 21.76 FT MLLW., NAVD 88 DATUM.
TIDE GAUGE LOCATED AT DIABLO SERVICE DOCK.

HORIZONTAL GPS CONTROL.
COAST GUARD D-BEACON.

US Army Corps of Engineers
San Francisco District
1455 Market Street
San Francisco, CA 94103

Mark	Description	Date	Appr.

DESIGNED BY:	N/C	CHECKED BY:	TVW
DRAWN BY:	EWC		
DATE:	5/2/2008	SHEET NO.	1 OF 16
DRAWING NO.	4 2 234		

SUBMITTED:
Steven Slotten, Team Leader
APPROVAL RECOMMENDED:
Chief, Technical Support Section
APPROVED:
Chief, Construction Branch

PREPARED UNDER THE DIRECTION OF
CRAIG W. KILEY
LT. COLONEL, C.E., DISTRICT ENGINEER

CONTRA COSTA COUNTY CALIFORNIA

SUISUN BAY CHANNEL
CONDITION SURVEY
9-13 APRIL 2008

Sheet reference number
C1