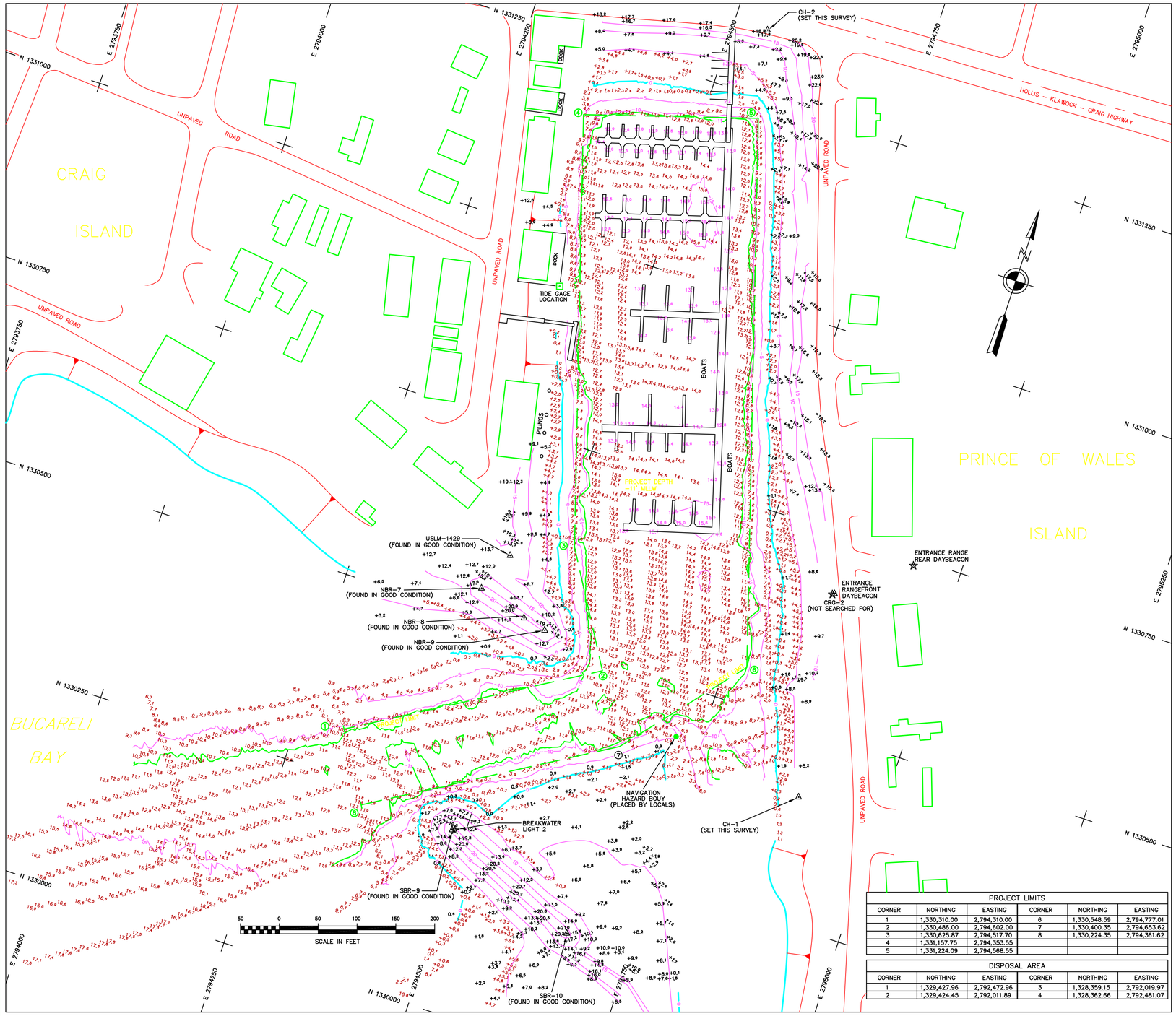
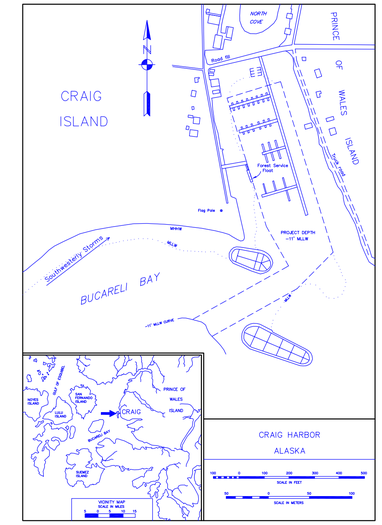
CORPS OF ENGINEERS U. S. ARMY





NOTES

1. HORIZONTAL CONTROL IS ALASKA STATE PLANE, ZONE 1, NAD27, IN FEET, HOLDING USCGS "FISH, 1907" AS N 1,334,330.54, E 2,785,251.69 AND USCGS "PARIDA, 1907" AS N 1,346,767.26, E 2,774,255.26.
2. VERTICAL CONTROL IS IN FEET, REFERRING TO MEAN LOWER LOW WATER (MLLW=0.0'), HOLDING USCGS TIDAL BENCH MARKS "BM 1, 1972" AS 15.86' AND "BM 3, 1972" AS 16.55' ABOVE MLLW. THIS IS PRELIMINARY BENCH MARK INFORMATION FROM NOAA, BASED ON THE 1960–1978 TIDAL EPOCH.
3. SOUNDINGS ARE IN FEET AND ARE MINUS UNLESS OTHERWISE INDICATED.
4. THIS DRAWING IS INDICATIVE OF CONDITIONS AT THE TIME OF SURVEY.
5. DATA AQUISITION WAS CONDUCTED ON APRIL 2–4, 1999. SOUNDINGS WERE OBTAINED WITH AN ODOM ECHOTRAC DF3200 MKII DEPTH SOUNDER. POSITIONING WAS PROVIDED BY A TRIMBLE 4000SSI RECEIVER OPERATING IN DGPS MODE ON CORRECTIONS BROADCAST FROM A TRIMBLE 4000SSE LOCAL BASE STATION SET ON "CH–1, 1999". DEPTHS WERE CORRECTED FOR TIDE USING AN ENDECO 1150 TIDE LEVEL RECORDER INSTALLED BY TERRA SURVEYS, LLC. NAVIGATION AND DATA COLLECTION WERE PERFORMED USING HYPACK INTEGRATED SOFTWARE. HORIZONTAL CONTROL WAS SURVEYED UTILIZING KINEMATIC GPS METHODS AND VERTICAL CONTROL SURVEYED USING DIFFERENTIAL LEVELING TECHNIQUES.
6. THIS SURVEY WAS PERFORMED UNDER CONTRACT NO. DACW85–98–D–0004 BY TERRA SURVEYS, LLC.

VOLUME COMPUTATIONS

Project Depth –11' MLLW

MINIMUM PAY LINE	(–11' MLLW)	731 (cubic yards)
Between MINIMUM PAY LINE and MAXIMUM PAY LINE	(–12' MLLW)	621 (cubic yards)
TOTAL		1,352 (cubic yards)

* Volumes are within Project Limits and do not include SIDE SLOPES.

CONTROL DATA

STATION	NORTHING	EASTING	ELEV.	DESCRIPTION
NBR–7, 1981	1,330,537.95	2,794,420.95	20.26	USACE SBC
NBR–8, 1981	1,330,518.82	2,794,484.92	20.03	USACE SBC
NBR–9, 1981	1,330,512.04	2,794,515.23	20.28	USACE SBC
SBR–9, 1981	1,330,230.81	2,794,483.09	20.82	USACE SBC
SBR–10, 1981	1,330,150.91	2,794,665.07	21.09	USACE SBC
CAR	1,329,948.04	2,794,767.35	11.82	–
CRG–2	1,330,674.17	2,794,854.44	12.97	–
FISH, 1907	1,334,330.54	2,785,251.69	14.07	USC & GS (COPPER BOLT IN ROCK)
PARIDA, 1907	1,346,767.26	2,774,255.26	–	USC & GS (COPPER BOLT IN ROCK)
USLM–1429	1,330,589.44	2,794,442.71	15.63	1930 GLO MONUMENT
VAC	1,328,658.42	2,794,908.79	11.94	–
CRG–5	1,331,184.12	2,794,654.66	17.34	USACE S.A.C.
CH–1, 1999	1,330,411.19	2,794,892.95	19.31	DOMED BC
CH–2, 1999	1,331,335.66	2,794,544.18	18.92	DOMED BC

☆ NAVIGATION AIDS ☆

USCG No.	DESCRIPTION	NORTHING	EASTING
24485	BREAKWATER LIGHT 2	1,330,231	2,794,486
24490	ENTRANCE RANGE FRONT DAYBEACON	1,330,673	2,794,852
24495	ENTRANCE RANGE REAR DAYBEACON	1,330,740	2,794,939

PROJECT LIMITS

CORNER	NORTHING	EASTING	CORNER	NORTHING	EASTING
1	1,330,310.00	2,794,310.00	6	1,330,548.59	2,794,777.01
2	1,330,486.00	2,794,602.00	7	1,330,400.35	2,794,653.62
3	1,330,625.87	2,794,517.70	8	1,330,224.35	2,794,361.62
4	1,331,157.75	2,794,353.55			
5	1,331,224.09	2,794,568.55			

DISPOSAL AREA

CORNER	NORTHING	EASTING	CORNER	NORTHING	EASTING
1	1,329,427.96	2,792,472.96	3	1,328,359.15	2,792,019.97
2	1,329,424.45	2,792,011.89	4	1,328,362.66	2,792,481.07

CONTRACT NO. DACW85–98–D–0004
CONTRACTOR TERRA SURVEYS, LLC
CITY PALMER STATE ALASKA

ALASKA DISTRICT
CORPS OF ENGINEERS
ANCHORAGE, ALASKA

SURVEYED: KDW
DRAWN: DJB
CHECKED: TSN
SUBMITTED:

CRAIG, ALASKA
CRAIG HARBOR
PROJECT CONDITION SURVEY
APRIL 2–4, 1999

RECOMMENDED: PROJECT MANAGER
APPROVED: CHIEF OPERATIONS–READINESS BRANCH
DATE:

SURVEY NO. 1808–99
SCALE: 1" = 50'
SHEET 1 OF 1