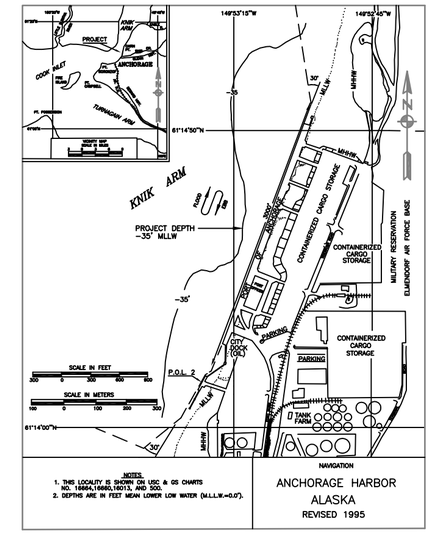
CORPS OF ENGINEERS

U. S. ARMY



NOTES

1. HORIZONTAL CONTROL IS ALASKA STATE PLANE, NAD 83, ZONE 4, IN FEET, HOLDING USACE SBC "N. END, 1978" AS N 2,646,652.19, E 1,660,582.43 AND USACE SBC "S. END, 1978" AS N 2,644,298.25 E 1,659,725.47.
2. VERTICAL CONTROL IS IN FEET, REFERING TO MEAN LOWER LOW WATER (MLLW=0.0'), HOLDING NOAA/NOS TIDAL BENCH MARK LIST DATED 03 NOVEMBER 1999, WITH "BM-16, 1966" GIVEN AS 40.49', "BM-15, 1966" GIVEN AS 37.10', AND "BM-B-75" GIVEN AS 36.78'.
3. SOUNDINGS WERE CONDUCTED ON MAY 16, 2008 USING AN INNERSPACE 448 SINGLE BEAM ECHO SOUNDER WITH A 200KHZ, 3 DEGREE BEAM-WIDTH TRANSDUCER. SOUND VELOCITY THROUGH THE WATER COLUMN WAS DETERMINDED USING AN ODEM DIGIBAR PRO AND A CONVENTIONAL 60' BAR CHECK. TIDE CORRECTION WERE PROVIDED BY A TRIMBLE 5700 RTK RECEIVER AND CHECKED BY CONVENTIONAL LEVELING METHODS.
4. HORIZONTAL POSITIONING WAS PROVIDED USING A TRIMBLE 5700 RECEIVER OPERATING WITH RTK CORRECTIONS BEING BROADCASTED FROM A TRIMBLE 5700 BASE STATION AT USACE SBC "S. END, 1978".
5. SOUNDINGS ARE IN FEET AND ARE MINUS UNLESS OTHERWISE INDICATED.
6. THIS DRAWING INDICATES GENERAL CONDITIONS AT THE TIME OF SURVEY.

CONTROL DATA

STATION	NORTHING	EASTING	ELEV.	DESCRIPTION
N. END	2,646,652.19	1,660,582.43	41.39	USACE SBC 1978 (STA 58+92.73)
S. END	2,644,298.25	1,659,725.47	40.47	USACE SBC 1978 (STA 33+87.33)
DJ-1	2,650,309.04	1,661,821.57	181.47	--
NEW	2,652,477.41	1,653,265.13	46.47	--
EQ-1	2,629,995.41	1,643,787.75	83.07	--
SP-1	2,632,165.12	1,650,395.14	36.47	--
SANDBAG	2,646,634.30	1,662,476.29	206.82	USC & GS SBC
CLIFF	2,648,978.03	1,662,106.44	250.99	--
C 1/4 COR	2,642,005.73	1,660,981.81	128.25	--
ZZ-1	2,644,301.39	1,660,846.61	38.70	--

PROJECT LIMITS

CORNER	NORTHING	EASTING	CORNER	NORTHING	EASTING
1	2,642,361.74	1,657,313.54	10	2,644,277.40	1,659,732.10
2	2,643,360.52	1,659,049.08	11	2,644,283.94	1,659,714.10
3	2,643,480.14	1,659,255.86	12	2,644,324.91	1,659,601.31
4	2,643,951.00	1,659,525.48	13	2,643,271.50	1,658,894.40
5	2,644,082.00	1,659,723.60	14	2,644,363.44	1,659,519.66
6	2,644,318.05	1,659,620.20	~~15~~	~~2,647,261.99~~	~~1,660,574.84~~
7	2,646,848.26	1,660,647.78	16	2,646,867.23	1,660,431.20
8	2,647,045.24	1,660,613.05	17	2,648,493.85	1,660,144.35
~~9~~	~~2,650,000.90~~	~~1,660,980.70~~	18	2,649,177.10	1,659,789.38
			19	2,647,872.49	1,660,467.17

CONTRACT NO. ########

CONTRACTOR HUGHES & ASSOCIATES

CITY WASILLA STATE ALASKA

ALASKA DISTRICT
CORPS OF ENGINEERS
ANCHORAGE, ALASKA

SURVEYED: JSH/CSH
DRAWN: CSH
CHECKED: JSH
SUBMITTED:

ANCHORAGE, ALASKA
PORT OF ANCHORAGE
2008 MAINTENANCE DREDGING
PHASE I PRE DREDGE SURVEY
MAY 16, 2008

RECOMMENDED: PROJECT MANAGER | APPROVED: CHIEF OPERATIONS-READINESS BRANCH | DATE:

SURVEY NO. **2489-08**

SCALE: 1" = 100'

SHEET 1 OF 4

W911KB-09-R-0001

EXHIBIT 1