



- NOTES**
1. HORIZONTAL CONTROL IS ALASKA ZONE 1, NAD83, IN U.S. SURVEY FEET. HOLDING USACE SEC. HH-D-1999, AS N. 2362493.339, E. 2539749.144, HH-E, 2002, AS N. 2362493.339, E. 2539749.144.
 2. VERTICAL CONTROL IS IN FEET BASED ON MEAN LOWER LOW WATER (MLLW) = 0.07, HOLDING 'HH-D, 1999' AT 26.44'.
 3. SOUNDINGS ARE IN FEET AND ARE MINUS UNLESS OTHERWISE INDICATED.
 4. THE EXISTING PROJECT CONSISTS OF HARRIS HARBOR AND THE SURROUNDING BASIN LOCATED IN JUNEAU, ALASKA.
 5. BATHYMETRY WAS COLLECTED JUNE 2-4, 2005. SOUNDINGS WERE COLLECTED USING VELOCITY THROUGH-SOUNDING COLUMN WAS DETERMINED WITH A DOPD DOPDIAR PDS SOUND VELOCITY PROBE, AND VERIFIED WITH A MANUAL BAR CHECK AT 10' INTERVALS. PROJECT BEATH POSITIONING AND ELEVATION WERE DETERMINED BY RTK CORRECTIONS WERE BROADCAST FROM A LOCAL BASE STATION OCCUPYING 'HH-D', DATA WAS COLLECTED AND FIELD PROCESSED USING 'HYPERACK' HAS VERSION 02.04. RTK CORRECTIONS WERE BROADCAST FROM A LOCAL BASE STATION OCCUPYING 'HH-D', AND VERIFIED THROUGH CONVENTIONAL DIFFERENTIAL LEVELING TECHNIQUES.
 6. THIS DRAWING INDICATES GENERAL CONDITIONS AT THE TIME OF THE SURVEY.

VOLUME COMPUTATIONS

Project Depth -12' MLLW 7,286 (cubic yards)

VOLUME AVAILABLE TO PROJECT DEPTH AND OVERDEPTH (-12' MLLW) 6,186 (cubic yards)

VOLUME AVAILABLE along the side slope (3:1; H:V) 4,046 (cubic yards)

TOTAL 17,521 (cubic yards)

CONTROL DATA

STATION	NORTHING	EASTING	ELEV.	DESCRIPTION
JA-1	2,362,831.81	2,539,658.22	23.93	USACE SBC
OUT 1975	2,362,990.77	2,539,166.77	26.44	AK DOT SBC
HH-1 1972	2,362,686.06	2,539,631.13	29.39	USACE SBC
HH-A 1998	2,363,905.66	2,539,338.68	22.01	3 1/4" DOMED BC
HH-B 1998	2,363,311.06	2,539,705.50	25.92	3 1/4" DOMED BC
HH-C 1998	2,363,488.24	2,539,650.09	26.44	3 1/4" DOMED BC
HH-D 1999	2,362,493.99	2,539,491.44	23.63	3 1/4" DOMED BC
HH-E 2002	2,363,846.59	2,539,464.92	25.78	3 1/4" DOMED BC
HH-G 2005	2,363,409.53	2,539,700.93	26.52	SET 3.5" FLAT B.C. IN CONCRETE
HH-H 2005	2,362,955.35	2,540,005.51	28.52	SET 3.5" B.C. IN CONCRETE

PROJECT LIMITS

CORNER	NORTHING	EASTING	CORNER	NORTHING	EASTING
1	2,362,974.7	2,539,881.6	4	2,362,852.7	2,539,306.6
2	2,363,727.7	2,539,377.6	5	2,362,861.7	2,539,179.6
3	2,363,454.7	2,539,970.6	6	2,362,803.7	2,539,364.6

NAVIGATION AIDS

DESCRIPTION	USCG NO.	NORTHING	EASTING
HARRIS HARBOR LIGHT TH	23705	2,362,956.7	2,539,202.6

CONTRACTOR: HIGGINS & ASSOCIATES
CITY: PALMER STATE: ALASKA
CONTRACT NO.: W818B-04-D-0007

SUBMITTED: JUNE 2-4, 2005
APPROVED: [Signature]

DATE: [Blank]

SCALE: 1" = 50'
SHEET 1 OF 1

2244-05