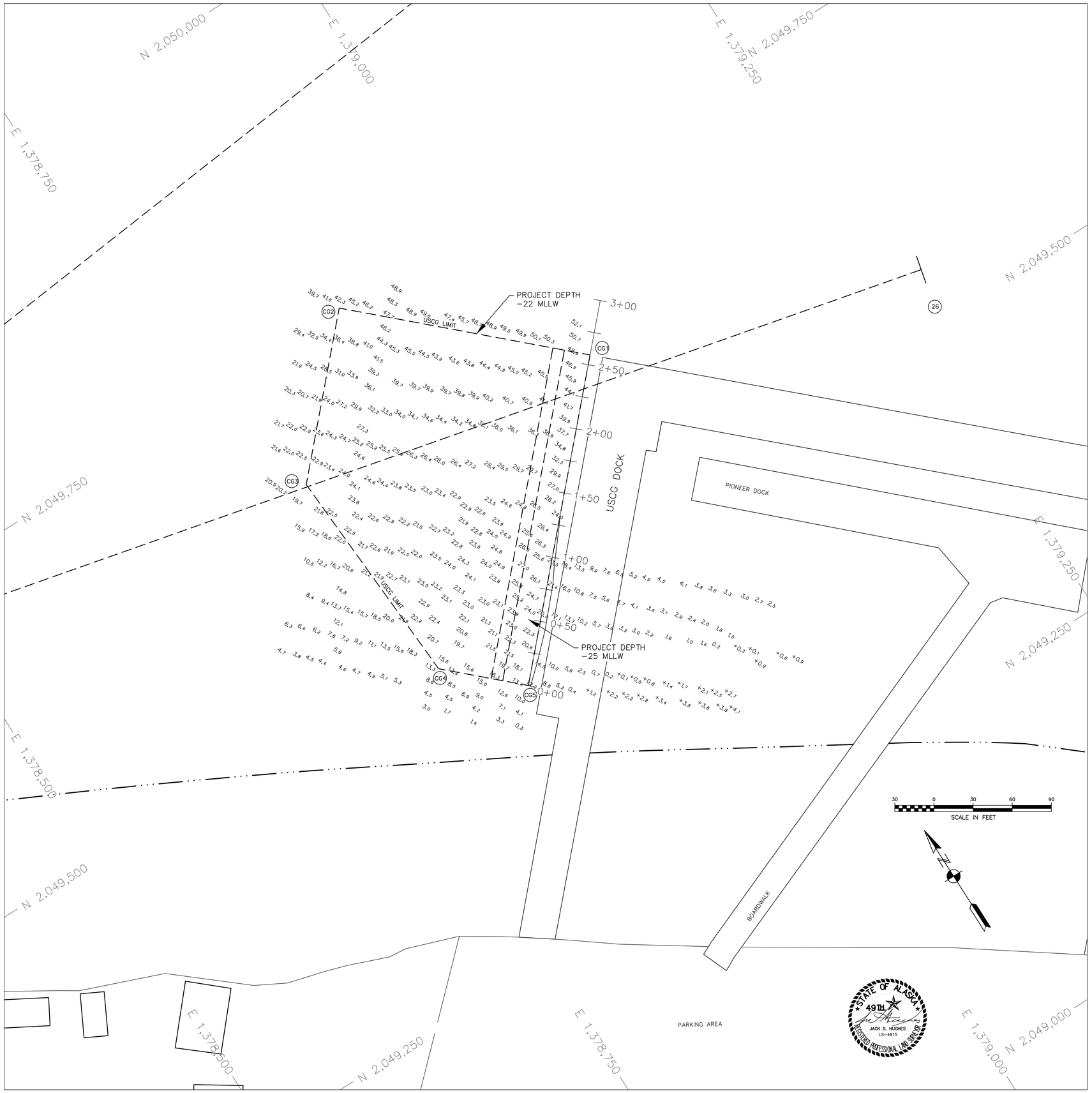
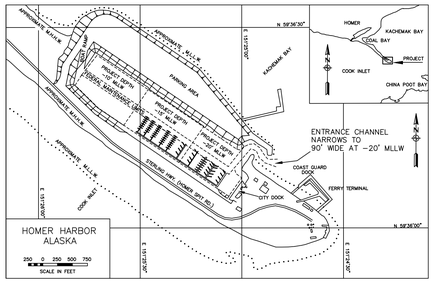
CORPS OF ENGINEERS





NOTES

1. HORIZONTAL CONTROL IS ALASKA STATE PLANE, ZONE 4, IN FEET, NAD 83, HOLDING USACE SBC "HOMER BASIN 7" AS N 2,049,712.22, E 1,377,964.36 AND USACE SBC "BL−2−A" AS N 2,049,793.81, E 1,378,015.52.
2. VERTICAL CONTROL IS IN FEET, REFERRING TO MEAN LOWER LOW WATER (MLLW=0.0'), HOLDING SBC "HOMER BASIN 7" AT 31.46'',
3. SOUNDINGS ARE IN FEET AND ARE NEGATIVE UNLESS OTHERWISE INDICATED.
4. THIS DRAWING IS INDICATIVE OF CONDITIONS AT THE TIME OF SURVEY.
5. THIS POST DREDGE SURVEY WAS CONDUCTED ON SEPTEMBER 13, 2011 BY HUGHES AND ASSOCIATES, WASILLA, AK. SOUNDINGS WERE COLLECTED USING AN INNERSPACE 448 DEPTH SOUNDER WITH A 200KHZ, 3−DEGREE BEAM−WIDTH TRANSDUCER. SOUNDER CALIBRATION WAS PERFORMED USING STANDARD BAR CHECK METHODS. POSITIONING AND TIDES WERE PROVIDED IN REAL TIME USING A TRIMBLE R8 RTK GPS RECIEVER OPERATING ON KINEMATIC CORRECTORS BROADCAST FROM A TRIMBLE 5700 RTK BASE RECEIVER SET AT CONTROL STATION, "HOMER BASIN 7". VESSEL NAVIGATION, DATA COLLECTION AND PROCESSING WERE PERFORMED USING HYPACK 2010 INTEGRATED SOFTWARE.
6. THE CONTROL VALUES SHOWN ON THIS PLAT WERE VERIFIED PRIOR TO THE PRE DREDGE SURVEY AND HELD AS PUBLISHED.
7. THERE WERE NO NEW PERMANENT CONTROL MONUMENTS SET DURING THIS SURVEY.

CONTROL DATA

STATION	NORTHING	EASTING	MLLW	NAVD88	DESCRIPTION
BL−2−A 1989	2,049,793.81	1,378,015.52	32.49'	27.66'	3−1/4" USACE SBC "SURVEY MARK"
HOMER BASIN 4 1965	2,050,038.11	1,378,340.09	31.28'	26.45'	3−1/4" USACE SBC "SURVEY MARK"
HOMER BASIN 5 1965	2,049,940.32	1,378,344.30	30.87'	26.04'	4" USACE SBC "TRAVERSE STATION"
HOMER BASIN 6 1965	2,049,887.28	1,378,073.96	31.21'	26.38'	3−1/4" USACE SBC "SURVEY MARK"
HOMER BASIN 7 1965	2,049,712.22	1,377,964.36	31.46'	26.63'	3−1/4" USACE SBC "SURVEY MARK"
AUDREY	2,051,507.88	1,375,406.60	33.31'	28.48'	1−1/2" ALUMINUM CAP
BOLL 1996	2,050,682.88	1,375,195.75	35.48'	30.65'	3−1/4" FLAT BRASS CAP
HB−08 2009	2,050,150.78	1,377,830.73	31.92'	27.09'	3−1/4" DOMED ALUMINUM CAP
HB−09 2009	2,051,199.61	1,375,120.24	32.01'	27.18'	3−1/4" DOMED ALUMINUM CAP
C 103 1965	−−	−−	26.95'	22.12'	3−1/4" USCGS SBC "BENCH MARK"
BM NO 6 1965	−−	−−	27.28'	22.45'	3−1/4" USCGS SBC "BENCH MARK"

PROJECT LIMITS − HOMER SMALL BOAT HARBOR

CORNER	NORTHING	EASTING	CORNER	NORTHING	EASTING
PC−1A	2,049,852.14	1,378,351.33	13	2,050,893.93	1,375,219.67
PT−1B	2,049,896.45	1,378,269.64	14	2,051,074.98	1,375,335.41
PC−2A	2,049,766.26	1,378,304.02	15	2,051,159.30	1,375,389.23
PT−2B	2,049,855.01	1,378,189.75	16	2,051,420.46	1,375,556.10
PC−3A	2,049,989.06	1,378,221.58	17	2,050,887.56	1,376,390.12
PRC−3B/5A	2,050,041.53	1,377,932.63	18	2,050,312.15	1,377,290.69
PT−5B	2,050,025.58	1,377,739.19	19	2,050,626.40	1,376,223.25
PC−6A	2,049,758.41	1,377,752.69	20	2,050,542.13	1,376,169.40
PT−6B	2,049,593.40	1,377,766.24	21	2,050,050.99	1,377,123.83
7	2,049,519.03	1,377,882.50	22	2,049,966.75	1,377,070.00
8	2,049,207.15	1,377,683.23	23	2,049,744.77	1,377,603.08
9	2,049,313.35	1,377,517.38	24	2,049,625.13	1,377,604.67
10	2,049,705.59	1,376,903.13	25	2,049,954.10	1,379,383.98
11	2,050,281.01	1,376,002.56	26	2,049,539.77	1,379,277.46
12	2,050,544.76	1,375,589.76			

CURVE DATA − HOMER SMALL BOAT HARBOR

CURVE NO.	RADIUS	ARC LENGTH	DELTA ANGLE	TANGENT
1	82.86'	98.65'	68−13−09	56.12'
2	172.86'	149.28'	49−28−56	79.66'
3	185.62'	338.80'	104−34−53	240.08'
4	95.62'	174.53'	104−34−53	123.67
5	160.19'	208.50'	74−34−41	121.98'
6	104.07'	191.43'	105−23−29	136.59'

PROJECT LIMITS − USCG BERTH (USCGC "HICKORY")

CORNER	NORTHING	EASTING	CORNER	NORTHING	EASTING
CG1	2,049,621.31	1,379,028.43	CG4	2,049,481.24	1,378,801.20
CG2	2,049,755.11	1,378,885.74	CG5	2,049,443.37	1,378,852.25
CG3	2,049,654.76	1,378,791.65			

☆ NAVIGATION AIDS ☆

USCG NO.	DESCRIPTION	NORTHING	EASTING
26210	HOMER BREAKWATER LIGHT 2	2,049,940.1	1,378,350.7
26216	SOUTH LIGHTED MOORING BUOY	2,049,932.5	1,378,484.4

VOLUME COMPUTATIONS FOR USCG BERTH

PRE DREDGE SURVEY VOLUMES AVAILABLE	
VOLUME AVAILABLE TO PROJECT DEPTH (VARIES −22' TO −25')	384 Cu. Yd.
VOLUME AVAILABLE BETWEEN PD AND MAX−PAY DEPTH (VARIES −23' TO −26')	246 Cu. Yd.
VOLUME AVAILABLE ALONG THE SIDE−SLOPES (3:1 @ 25' CUT−OFF)	510 Cu. Yd.
TOTAL VOLUME AVAILABLE	1,140 Cu. Yd.
POST DREDGE SURVEY VOLUMES AVAILABLE	
VOLUME AVAILABLE TO PROJECT DEPTH (VARIES −22' TO −25')	417 Cu. Yd.
VOLUME AVAILABLE BETWEEN PD AND MAX−PAY DEPTH (VARIES −23' TO −26')	276 Cu. Yd.
VOLUME AVAILABLE ALONG THE SIDE−SLOPES (3:1 @ 25' CUT−OFF)	548 Cu. Yd.
TOTAL VOLUME AVAILABLE	1,241 Cu. Yd.
POST DREDGE SURVEY VOLUMES REMOVED	
VOLUME AVAILABLE TO PROJECT DEPTH (VARIES −22' TO −25')	−33 Cu. Yd.
VOLUME AVAILABLE BETWEEN PD AND MAX−PAY DEPTH (VARIES −23' TO −26')	−30 Cu. Yd.
VOLUME AVAILABLE ALONG THE SIDE−SLOPES (3:1 @ 25' CUT−OFF)	−38 Cu. Yd.
TOTAL VOLUME AVAILABLE	−101 Cu. Yd.

SURVEY

US ARMY CORPS OF ENGINEERS
ALASKA DISTRICT

CONTRACT NO. W911KB−10−B−0004
CONTRACTOR NEHALEM RIVER DREDGING
CITY NEHALEM STATE OREGON
Recommended: Approved: Date:
PRIME CONTRACTOR RESIDENT ENGINEER

Sym	Action	Description	Date	Approv

Date: 9/13/11
Dwg Scale: 1"=30'
Plot Scale:
File:
Drawing #: 2940−11
Section
Branch
Designed:
Drawn: REH
Reviewed: CSH
Chief:
Submitted:
Chief:

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
ANCHORAGE, ALASKA

HOMER, ALASKA
HOMER USCG DOCK
POST−DREDGE SURVEY
SEPTEMBER 13, 2011

Reference number:

Sheet 1 of 2

CORPS OF ENGINEERS

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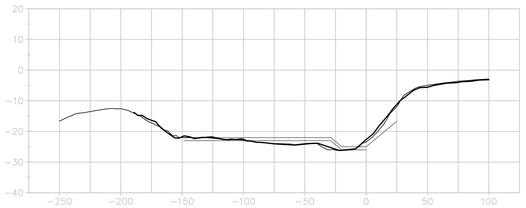

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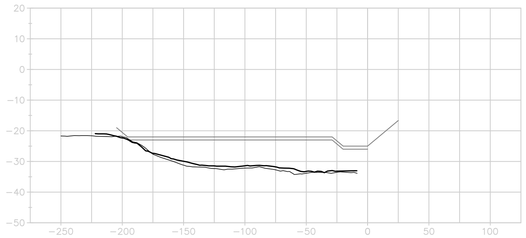

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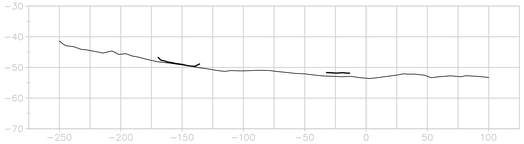

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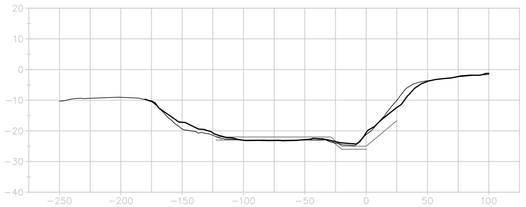

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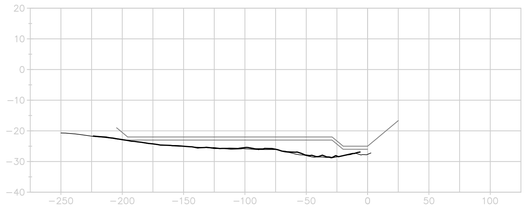

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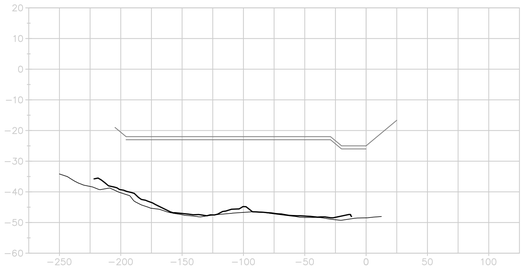

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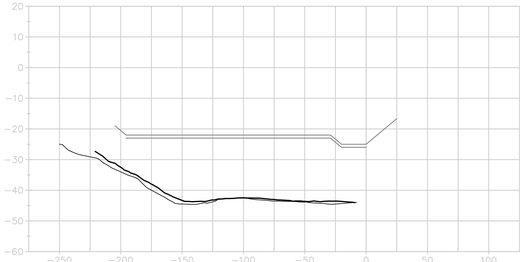

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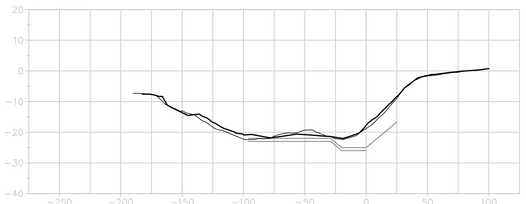

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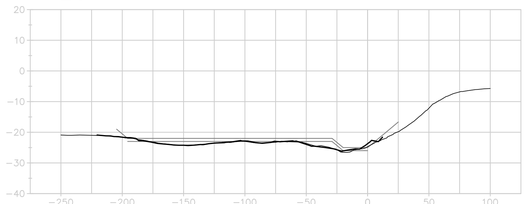

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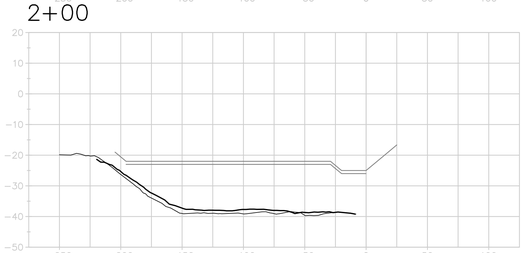

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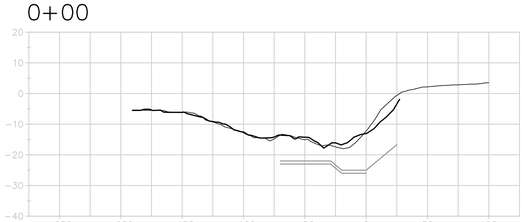

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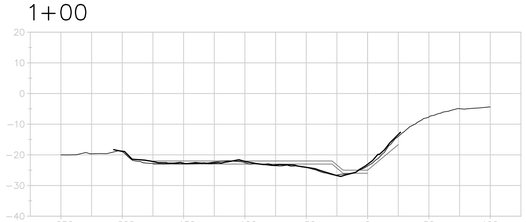

PRE-DREDGE SURVEY
SEPT. 7-8, 2011

POST-DREDGE SURVEY
SEPT. 13, 2011

SCALE
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 20'

STATE OF ALASKA
49TH
JACK S. HUGHES
LS-4915
REGISTERED PROFESSIONAL LAND SURVEYOR

SURVEY

US ARMY CORPS
OF ENGINEERS
ALASKA DISTRICT

CONTRACT NO. W911KB-10-B-0004
CONTRACTOR NEHALEM RIVER DREDGING
CITY NEHALEM STATE OREGON
Recommended: Approved: Date:
PRIME CONTRACTOR RESIDENT ENGINEER

Sym.	Action	Description	Date	Approv

Date 9/13/11
Dwg Scale:
Plot Scale:
File:
Drawing #: 2940-11

Designed:
Drawn: REH
Reviewed: CSH
Chief Section
Submitted:
Chief Branch

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
ANCHORAGE, ALASKA

HOMER, ALASKA
HOMER USCG DOCK
POST-DREDGE SURVEY
SEPTEMBER 13, 2011

Reference number:

Sheet 2 of 2