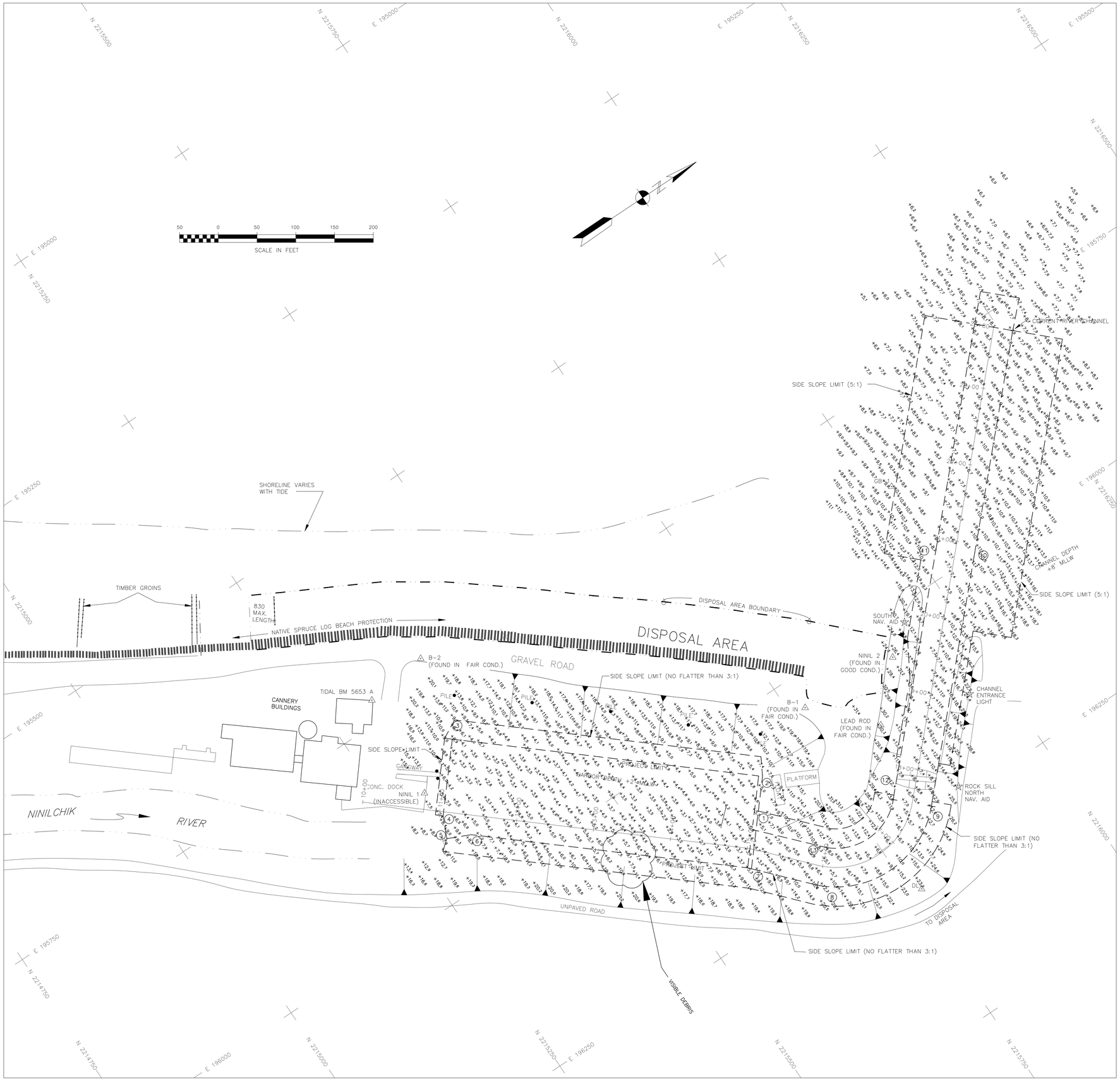

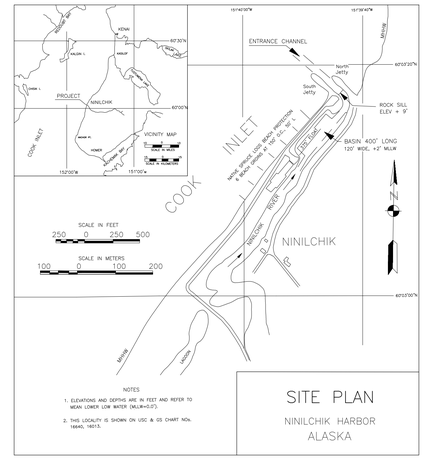

NOTES

1. ELEVATIONS AND DEPTHS ARE IN FEET AND REFER TO MEAN LOWER LOW WATER (MLLW=0.0').
2. THIS LOCALITY IS SHOWN ON USC & GS CHART NOs. 16640, 16013.

NOTES

1. HORIZONTAL CONTROL IS ALASKA STATE PLANE, ZONE 4, IN FEET, NAD 27, HOLDING SBC "NINIL 2" AS N 2,215,900.33, E 196,050.77 AND USACE SBC "B-2" AS N 2,215,393.19, E 195,713.32.
2. VERTICAL CONTROL IS IN FEET, REFERRING TO MEAN LOWER LOW WATER (MLLW=0.0'), HOLDING NOAA BENCHMARK "945 5653 E" (LEAD ROD) AT 29.45'.
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 PRE DREDGE SURVEY WAS CONDUCTED ON APRIL 25, 2014 BY HUGHES AND ASSOCIATES, WASILLA, AK. SOUNDINGS WERE COLLECTED USING AN RESON NAVISOUND 210 PRECISION DEPTH SOUNDER WITH A 200KHZ, 3-DEGREE BEAM-WIDTH TRANSDUCER. SOUNDER CALIBRATION WAS PERFORMED USING A DIGIBAR PRO SOUND VELOCITY PROBE. POSITIONING AND TIDES WERE PROVIDED IN REAL TIME USING A TRIMBLE R8 RTK GPS RECEIVER OPERATING ON KINEMATIC CORRECTIONS BROADCAST FROM A TRIMBLE R8 RTK BASE RECEIVER SET AT CONTROL STATION, "NINIL 2". VESSEL NAVIGATION, DATA COLLECTION AND PROCESSING WERE PERFORMED USING HYPACK 2013A INTEGRATED SOFTWARE.
6. TOPOGRAPHIC DATA WAS COLLECTED ON APRIL 25, 2014 USING A TRIMBLE R8 RTK GPS RECEIVER OPERATING ON KINEMATIC CORRECTIONS BROADCAST FROM A TRIMBLE R8 RTK BASE RECEIVER SET AT "NINIL 2".

PROJECT LIMITS

CORNER	NORTHING	EASTING	CORNER	NORTHING	EASTING
1	2,215,626.07	196,134.54	9	2,215,835	196,238
2	2,215,671.45	196,081.67	10	2,216,061	196,000
3	2,215,369.31	195,822.37	11	2,216,025	195,966
4	2,215,304.48	195,897.91	12	2,215,799	196,204
5	2,215,292.03	195,925.05	13	2,215,693	196,207
6	2,215,321.04	195,938.36			
7	2,215,593.66	196,172.31			
8	2,215,656	196,241			

CONTROL DATA

STATION	NORTHING	EASTING	ELEV.	DESCRIPTION
B-1	2,215,770.21	196,041.98	32.23	USACE SBC 1979
B-2	2,215,393.19	195,713.32	32.33	USACE SBC 1979
DEEP	2,203,353.41	188,093.31	–	USC & GS SBC 1964
GB-1	2,216,021.69	195,866.98	8.17	–
HAYNES	2,209,664.61	191,151.17	199.29	USC & GS SBC 1979
N. END	2,216,807.77	196,909.70	26.11	1980
S. END	2,211,878.85	193,593.93	25.83	1980
NINIL 1	2,215,300.78	195,860.20	26.29	3" SBC IN CONC. DECK OF DOCK
EL-1	2,214,856.65	195,349.30	29.57	USACE SBC IN HOR. CONC. SHELF
DL	2,215,765.15	196,319.88	–	REBAR W/ ALCAP "DL 1998"
LEAD ROD	2,215,838.87	196,114.88	29.45	LEAD/STEEL ROD IN ROCK
NINIL 2	2,215,900.33	196,050.77	28.28	2" SBC IN ROCK

HARBOR VOLUME COMPUTATIONS

VOLUME AVAILABLE TO PROJECT DEPTH (+2')	3,629 cy
VOLUME AVAILABLE BETWEEN P.D. (+2') AND MAX-PAY DEPTH (+1')	1,765 cy
VOLUME AVAILABLE TO SIDE-SLOPES	808 cy
TOTAL VOLUME AVAILABLE IN HARBOR	6,201 cy

ENTRANCE CHANNEL VOLUME COMPUTATIONS

VOLUME AVAILABLE TO PROJECT DEPTH (+8')	1,051 cy
VOLUME AVAILABLE BETWEEN P.D. (+8') AND MAX-PAY DEPTH (+7')	939 cy
VOLUME AVAILABLE TO SIDE-SLOPES	1,961 cy
TOTAL AVAILABLE IN ENTRANCE CHANNEL	3,951 cy

STATE OF ALASKA 49TH
CORY S. HUGHES
LS-13809
REGISTERED PROFESSIONAL LAND SURVEYOR

SURVEY

US ARMY CORPS OF ENGINEERS
ALASKA DISTRICT

CONTRACT NO. W911KB-12-C-0005
CONTRACTOR ALASKA MARINE EXCAVATION
CITY ANCHOR POINT STATE ALASKA
Recommended: PRIME CONTRACTOR
Approved: RESIDENT ENGINEER
Date:

Sym.	Action	Description	Date	Appvd

Date: 4-25-2014
Dwg Scale: 1" = 50'
Plot Scale:
File:
Drawing #:
Section:
Branch: 3177-14

Designed:
Drawn: BTH
Reviewed: CSH
Chief:
Submitted:
Chief:

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

NINILCHIK, ALASKA
NINILCHIK HARBOR
PRE DREDGE SURVEY
APRIL 25, 2014

Reference number:

Sheet 1 of 4

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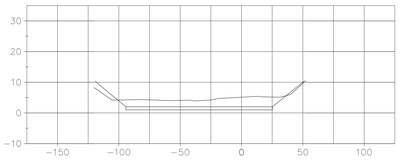

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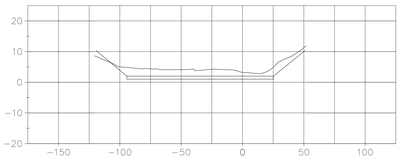

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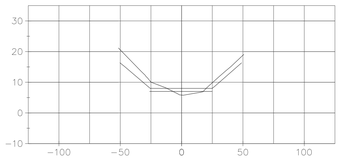

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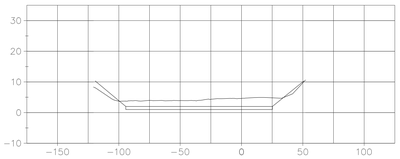

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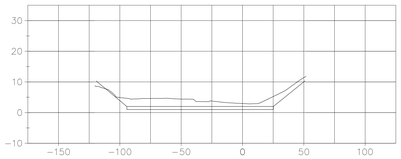

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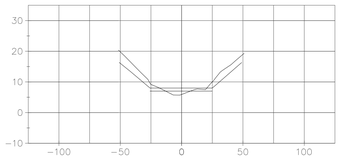

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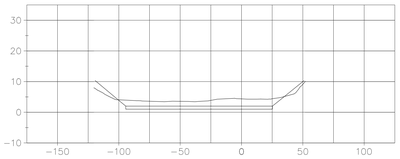

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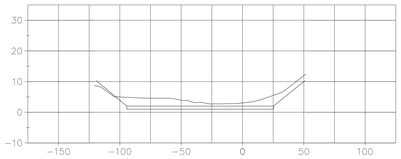

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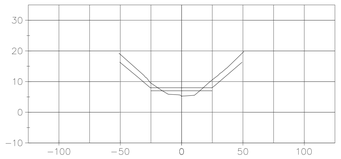

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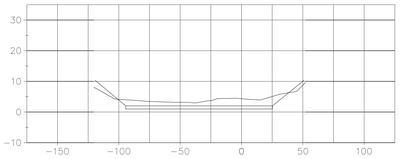

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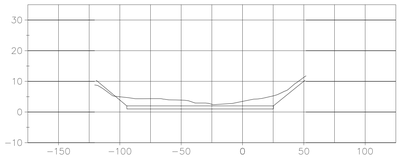

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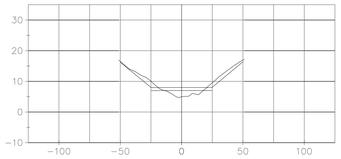

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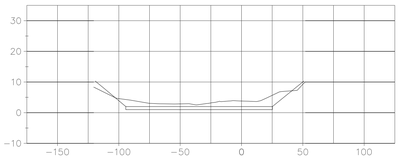

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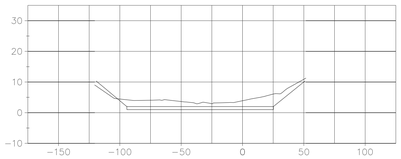

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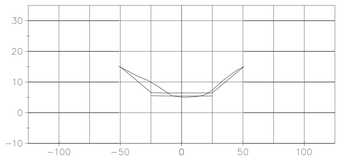

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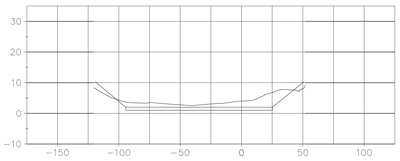

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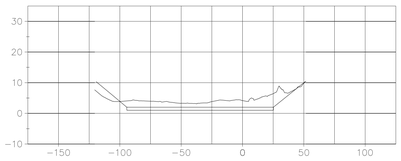

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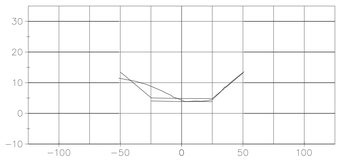

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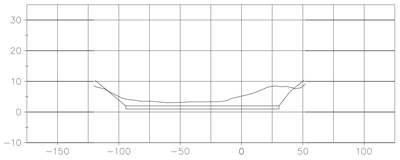

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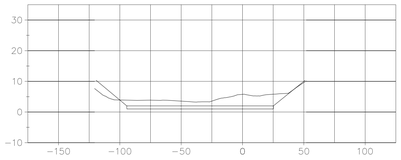

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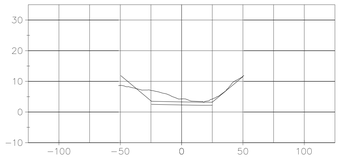

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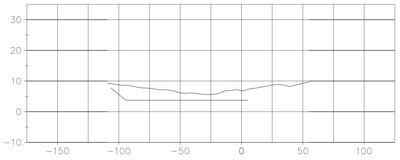

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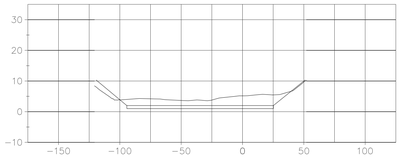

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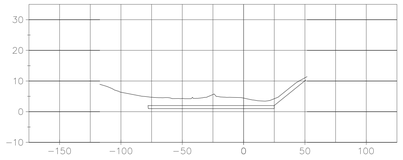

PRE-DREDGE SURVEY
APRIL 25, 2014

POST-DREDGE SURVEY
XXXXX XX, 2014

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

STATE OF ALASKA
49TH
CORY S. HUGHES
LS-13089
REGISTERED PROFESSIONAL LAND SURVEYOR

SURVEY

US ARMY CORPS OF ENGINEERS
ALASKA DISTRICT

CONTRACT NO. W911KB-12-C-0005
CONTRACTOR ALASKA MARINE EXCAVATION
CITY ANCHOR POINT STATE ALASKA
Recommended: PRIME CONTRACTOR
Approved: RESIDENT ENGINEER
Date:

Sym.	Action	Description	Date	Appvd

Date 4-25-2014
Dwg Scale:
Plot Scale:
File:
Drawing #:
Section
Branch
3177-14

Designed:
Drawn: BTH
Reviewed: CSH
Chief:
Submitted:
Chief:

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

NINILCHIK, ALASKA
NINILCHIK HARBOR
PRE DREDGE SURVEY
APRIL 25, 2014

Reference number:

Sheet 2 of 4

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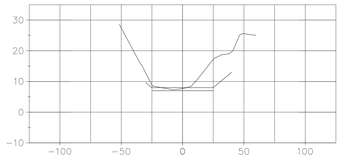

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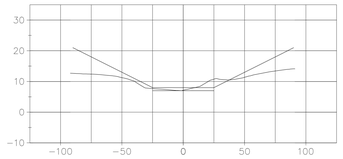

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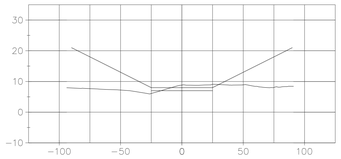

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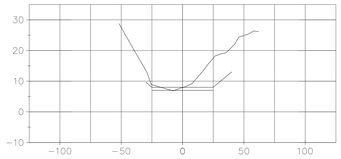

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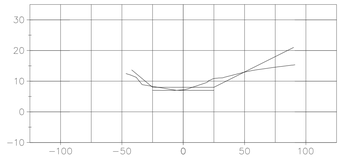

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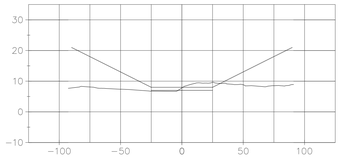

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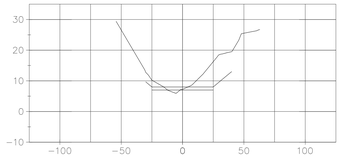

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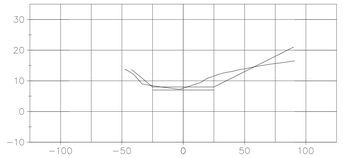

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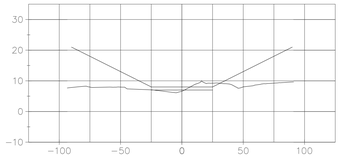

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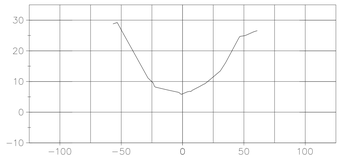

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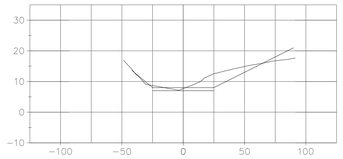

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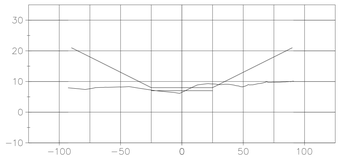

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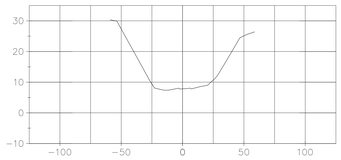

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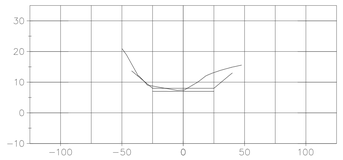

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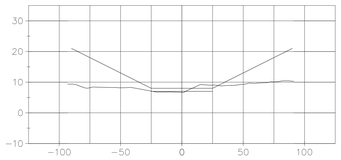

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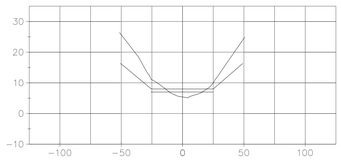

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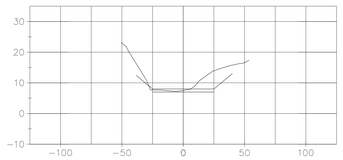

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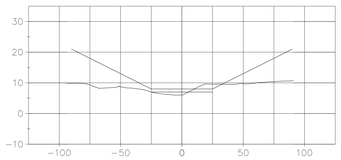

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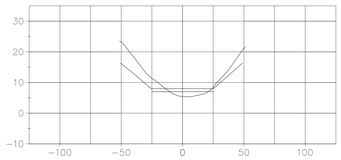

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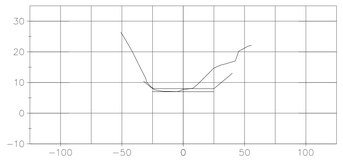

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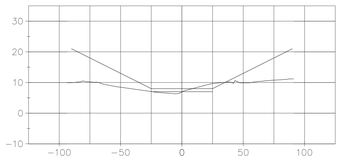

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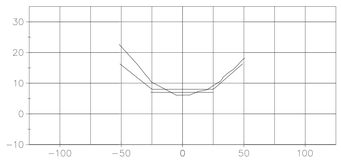

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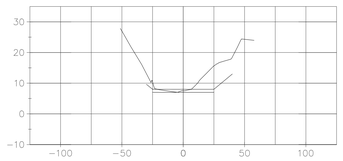

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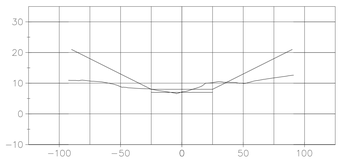


PRE-DREDGE SURVEY
APRIL 25, 2014

POST-DREDGE SURVEY
XXXXX XX, 2014

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

STATE OF ALASKA
49TH
CORY S. HUGHES
LS-13069
REGISTERED PROFESSIONAL LAND SURVEYOR

SURVEY

US ARMY CORPS
OF ENGINEERS
ALASKA DISTRICT

CONTRACT NO. W911KB-12-C-0005
CONTRACTOR ALASKA MARINE EXCAVATION
CITY ANCHOR POINT STATE ALASKA
Recommended: PRIME CONTRACTOR
Approved: RESIDENT ENGINEER
Date:

Sym.	Action	Description	Date	Appvd

Date 4-25-2014
Dwg Scale:
Plot Scale:
File:
Drawing #:
Section
Branch
3177-14

Designed:
Drawn: BTH
Reviewed: CSH
Chief:
Submitted:
Chief:

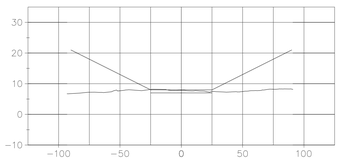
U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
ANCHORAGE, ALASKA

NINILCHIK, ALASKA
NINILCHIK HARBOR
PRE DREDGE SURVEY
APRIL 25, 2014

Reference number:

Sheet 3 of 4

23+75



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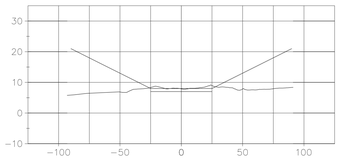

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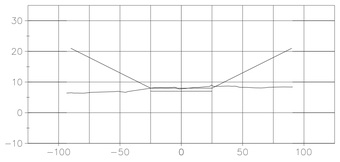

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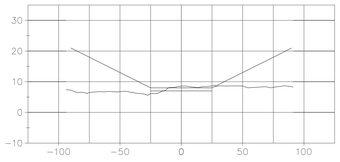

PRE-DREDGE SURVEY
APRIL 25, 2014

POST-DREDGE SURVEY
XXXXX, 2014

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

STATE OF ALASKA
49TH
COREY S. HUGHES
LS-13089
REGISTERED PROFESSIONAL LAND SURVEYOR

SURVEY

US ARMY CORPS
OF ENGINEERS
ALASKA DISTRICT

CONTRACT NO. W911KB-12-C-0005
CONTRACTOR ALASKA MARINE EXCAVATION
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Drawn: BTH
Reviewed: CSH
Chief, Section
Submitted: Chief, Branch

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

NINILCHIK, ALASKA
NINILCHIK HARBOR
PRE DREDGE SURVEY
APRIL 25, 2014

Reference number:

Sheet 4 of 4