

ANCHORAGE HARBOR ALASKA
 NAVIGATION
 REVISION 2012

- ### NOTES
- HORIZONTAL CONTROL IS ALASKA STATE PLANE, ZONE 4, NAD83, US SURVEY FEET. HOLDING USACE SBC "N END 1978" AS N 2,646,649.84; E 1,660,584.80 AND USACE SBC "S END 1978" AS N 2,644,296.27; E 1,659,728.03.
 - VERTICAL CONTROL: ELEVATIONS ARE MEAN LOWER LOW WATER (MLLW) BASED ON THE 1983-2001 TIDAL EPOCH EXPRESSED IN US FEET. THE BASIS OF ELEVATIONS IS NOAA/NOS TIDE STATION 945920 "ANCHORAGE, KNICK ARM, COOK INLET, ALASKA" PUBLISHED 10/24/2011 HOLDING "NO 15 RESET 1966" (PID T70711 / VM# 1332) AS 37.14; "B 75 1964 (PID T70712 / VM# 1334) AS 36.81; "TIDAL 16 1966" (PID T70713 / VM# 1335) AS 40.53; "520 B 1987" (VM# 1336) AS 38.96; "5290 D 1980" (VM# 1337) AS 44.69; AND "520 THERMO 1 1988 (vm# 1339) AS 37.52.
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 - THIS SURVEY WAS PERFORMED BY ETRAC ENGINEERING ON 01 NOVEMBER, 2013.
 - SOUNDINGS WERE COLLECTED USING A RESONIC 2024 MULTIBEAM ECHO SOUNDER OPERATING AT 300KHZ. SURFACE VELOCITY WAS MEASURED USING A VALEPORT SV-PLUS MOUNTED TO THE SONAR HEAD.
 - SOUND VELOCITY PROFILES WERE COLLECTED USING A TELEDYNE ODOM DIGIBAR-PRO SVF UNIT.
 - VESSEL POSITION, HEADING, ATTITUDE, AND RTK TIDES WERE ACQUIRED USING AN APPLIED AUTOMATED INERTIAL POSITIONING SYSTEM RECEIVING RTK CORRECTIONS FROM A TRIMBLE SPSS GPS RECEIVER SET AT CONTROL STATION "TERRA 11", LOCATED ATOP THE PORT OFFICE BUILDING.
 - SURVEY NAVIGATION AND DATA COLLECTION WERE PERFORMED USING QPS QINSY (V8.0). DATA PROCESSING WAS PERFORMED IN QPS QLOUD (V2.2.0.0).
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THIS HYDROGRAPHIC SURVEY WAS COMPLETED UNDER THE OVERSIGHT OF AN ACSM/TTHOSAA CERTIFIED HYDROGRAPHER

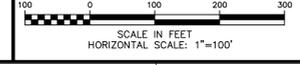
David R. Neff C.H.(275)

DREDGE LIMIT POINT TABLE		
CORNER	NORTHING	EASTING
DL-A01	2,644,001.92	1,659,811.68
DL-A02	2,643,944.48	1,659,516.63
DL-A03	2,643,483.73	1,659,246.67
DL-B03	2,640,256.22	1,659,566.97
DL-A04	2,642,358.80	1,657,316.67
DL-A05	2,642,355.68	1,657,218.16
DL-A06	2,648,342.16	1,659,254.03
DL-B03	2,649,256.22	1,659,566.97
DL-B04	2,649,430.26	1,659,086.40
DL-B05	2,651,624.46	1,659,988.47
DL-B06	2,650,382.05	1,660,981.52
DL-PND01	2,648,458.45	1,661,136.91
DL-PND02	2,648,122.65	1,661,000.83
DL-PND03	2,647,112.20	1,660,267.74
DL-ADR	2,646,798.08	1,660,526.67
DL-ARM03	2,646,770.56	1,660,198.67

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SL-A03	2,643,483.73	1,659,246.67
SL-A09	2,646,798.28	1,660,516.50
SL-01	2,651,701.73	1,659,893.33
SL-02	2,650,728.25	1,659,837.33
SL-03	2,642,358.54	1,658,604.02
SL-04	2,641,056.81	1,658,114.19
SL-05	2,641,055.18	1,658,077.63
SL-06	2,646,746.32	1,660,662.07
SL-07	2,646,897.79	1,660,717.23
SL-08	2,647,352.20	1,660,906.89

DISPOSAL AREA POINT TABLE		
CORNER	NORTHING	EASTING
DS02	2,650,829.90	1,658,779.24
DS03	2,642,254.11	1,659,790.80
DS04	2,641,976.91	1,658,579.94

CONTROL DATA			
POINT ID	NORTHING	EASTING	ELEV. (MLLW)
PORT 009	2,609,934.29	1,602,925.43	-8.25
5200 THERMO 1 1988	2,642,764.70	1,655,183.67	37.57
S. ENG	2,644,296.27	1,659,728.03	40.50
ETRAC-2	2,644,443.04	1,660,129.99	36.38
TERRA 11	2,644,869.84	1,660,159.89	63.48
TERRA 12	2,644,920.05	1,660,166.58	61.21
ETRAC-1	2,646,595.67	1,660,814.72	26.34
N. ENG	2,646,649.84	1,660,584.80	41.56
USACE SBC 9978 APPROX. STA 68+73.09			



BATHYMETRY

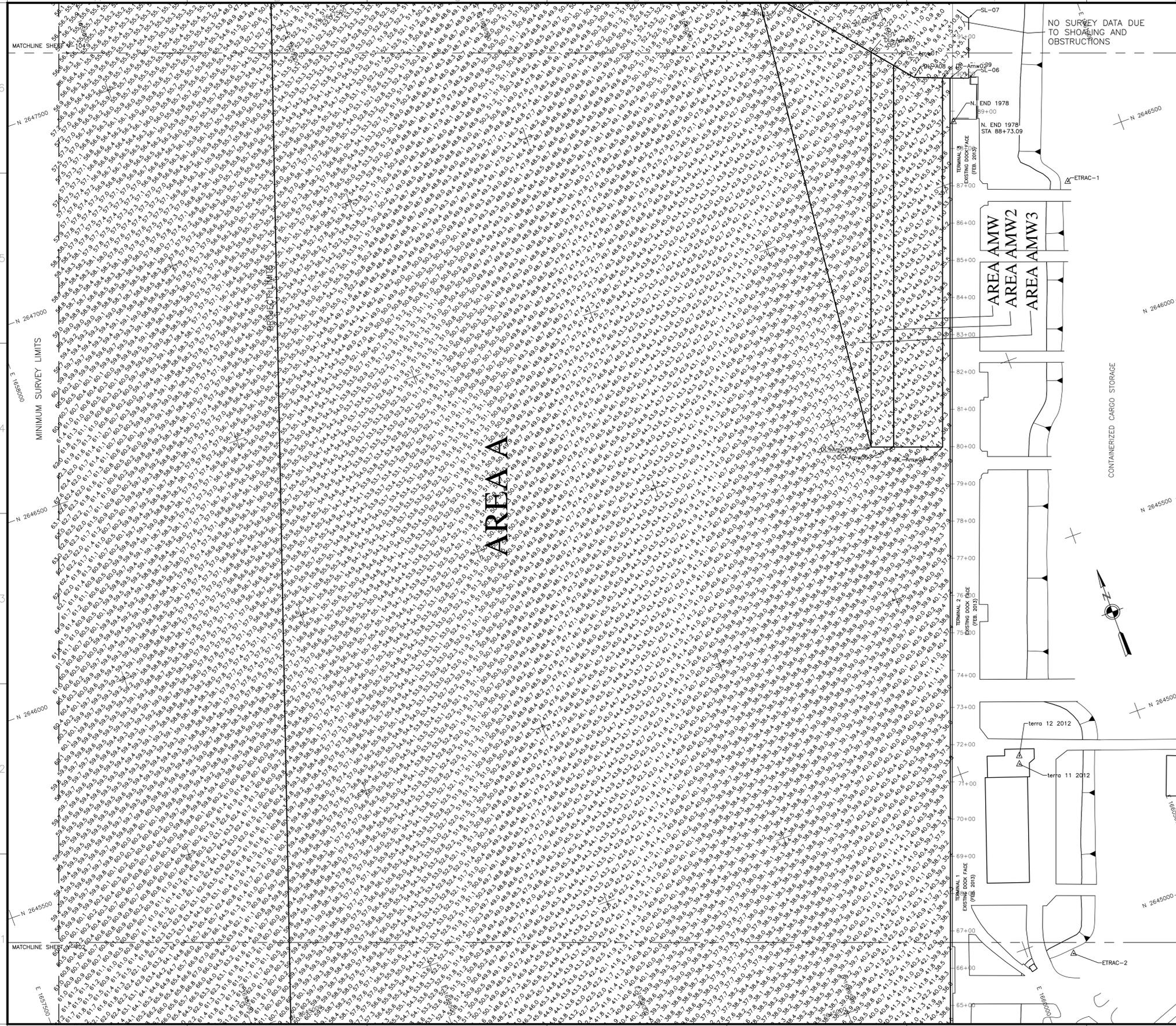


CONTRACT NO. W911KB-12-C-0004
 CONTRACTOR: MANSON CONSTRUCTION CO.
 CITY: SEATTLE STATE: WASHINGTON
 Recommended: _____ Date: _____
 Approved: _____
 PRIME CONTRACTOR: _____ RESIDENT ENGINEER: _____

Date	Scale	Author
11/04/13	1"=100'	J. ANDERSON
	1"=100'	A. CHURCHILL
		POSTDREDGE SURVEY

ANCHORAGE, ALASKA
 PORT OF ANCHORAGE
 MAINTENANCE DREDGING
 01 NOVEMBER, 2013
 POSTDREDGE SURVEY

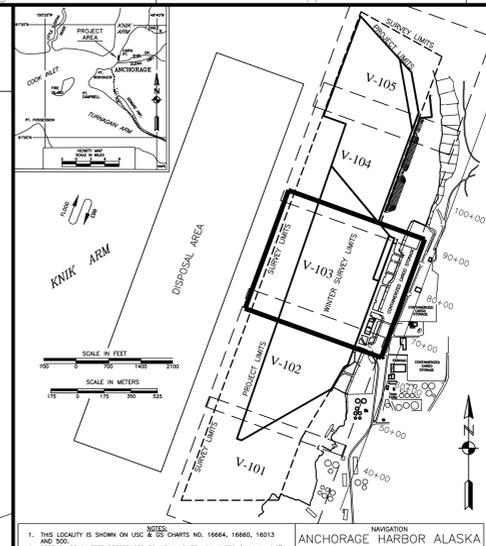
Reference number:
V-101
 Sheet 1 of 6



NO SURVEY DATA DUE TO SHOALING AND OBSTRUCTIONS

AREA AMW
AREA AMW2
AREA AMW3

CONTAINERIZED CARGO STORAGE



ANCHORAGE HARBOR ALASKA

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DL-A3	2,643,483.73	1,659,246.97
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DL-A5	2,642,358.68	1,657,218.16
DL-A6	2,648,342.16	1,659,254.03
DL-B3	2,649,256.22	1,659,566.97
DL-B4	2,649,430.26	1,659,086.40
DL-B5	2,651,824.46	1,659,988.47
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DL-PND1	2,648,458.45	1,661,136.91
DL-PND2	2,648,123.65	1,661,000.33
DL-PND3	2,647,112.20	1,660,207.74
DL-ADR	2,646,798.08	1,660,526.67
DL-AMW2	2,646,770.56	1,660,198.87

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DISPOSAL AREA POINT TABLE

CORNER	NORTHING	EASTING
DS-01	2,641,025.18	1,658,077.42
DS-02	2,650,829.80	1,658,779.24
DS-03	2,642,358.68	1,657,218.16
DS-04	2,641,976.93	1,658,679.83

CONTROL DATA

POINT ID	NORTHING	EASTING	ELEV. (MLLW)	DESCRIPTION
5620 THERMO 1 1988	2,642,764.70	1,660,183.87	37.57	Altimet
S END	2,644,296.27	1,659,728.03	40.00	USACE SBC 9978 APPROX STA 63-67.96)
ETRAC-2	2,644,443.04	1,660,120.99	36.38	Blacks Cap
TERRA 11	2,644,660.64	1,660,529.85	63.62	Antenna Reference Point
TERRA 12	2,644,900.05	1,660,168.58	61.21	Antenna Reference Point
ETRAC-1	2,646,995.97	1,660,814.72	26.34	Blacks Cap
N END	2,646,649.84	1,660,584.80	41.58	USACE SBC 9978 APPROX STA 68+73.09)



BATHYMETRY



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 CONTRACTOR: MANSON CONSTRUCTION CO.
 CITY: SEATTLE STATE: WASHINGTON
 Recommended: [Signature] Date: [Date]
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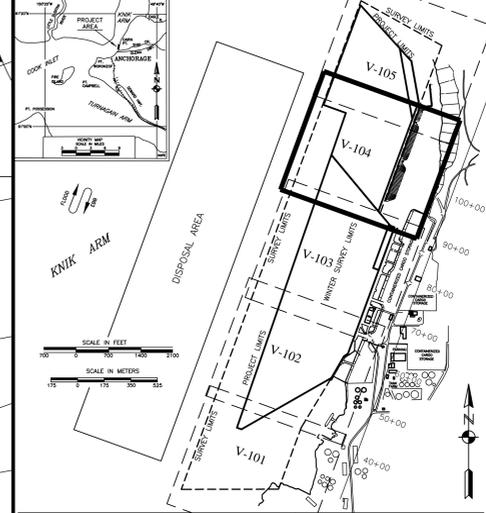
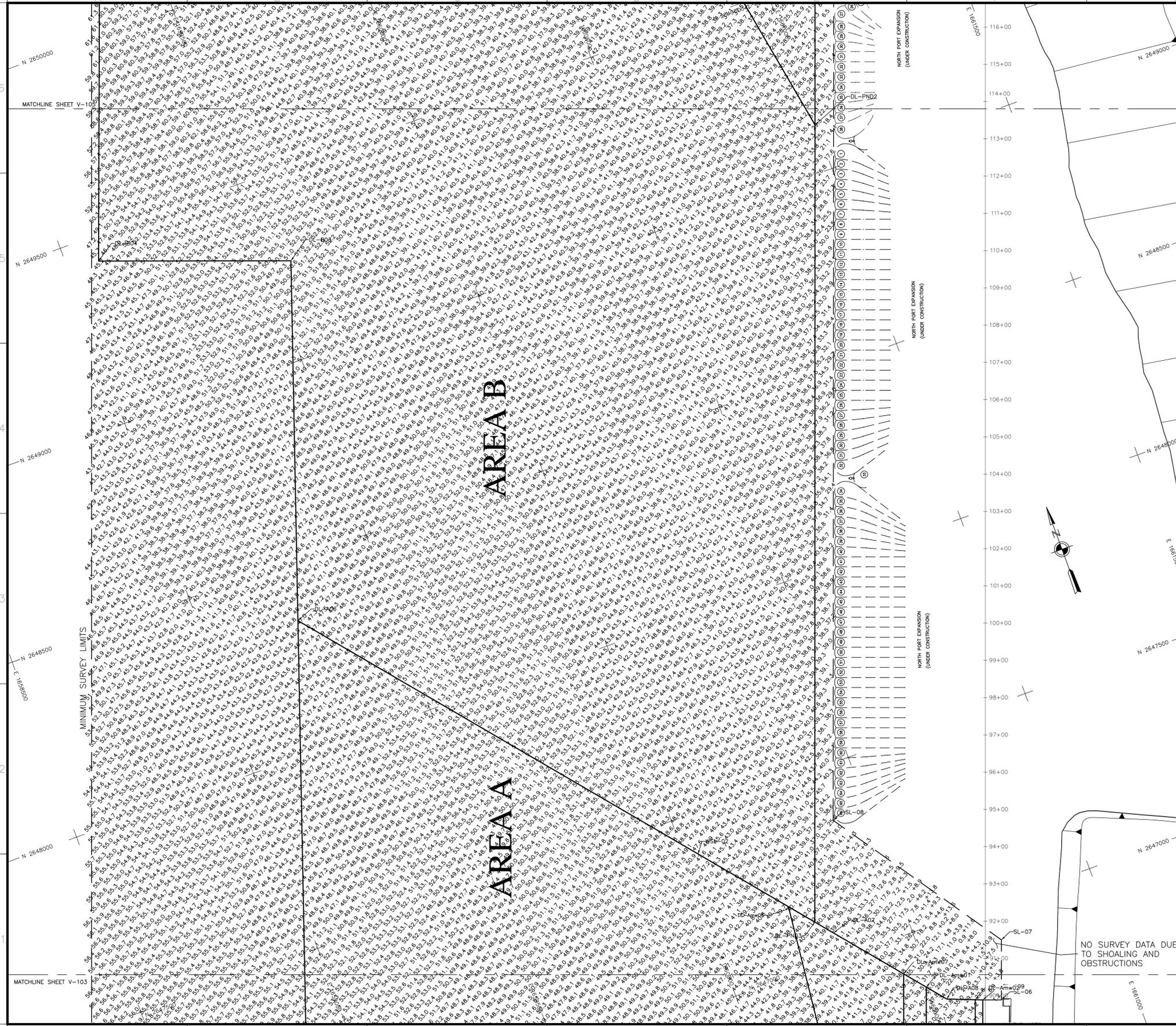
Date	Drawn	Checked	Reviewed	Scale
11/04/13	S. OLSON	S. OLSON	J. ANDERSON	1"=100'
			A. CHURCHILL	1:1

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

POSTDREDGE SURVEY
 USACE Survey No.: 3150-13

ANCHORAGE, ALASKA
 PORT OF ANCHORAGE
 2012-2014
 MAINTENANCE DREDGING
 01 NOVEMBER, 2013
 POSTDREDGE SURVEY

Reference number:
V-103
 Sheet 3 of 6



NOTES

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David R. Neff C.H.(275)

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US ARMY CORPS OF ENGINEERS ALASKA DISTRICT

CONTRACT NO. W911KB-12-C-0004

CONTRACTOR: MANSON CONSTRUCTION CO.

CITY: SEATTLE STATE: WASHINGTON

Recommended: [Signature] Date: [Date]

Approved: [Signature] Date: [Date]

Scale: [Scale]

Date: 11/04/13

Draw Scale: 1"=100'

Plot Scale: 1:1

Project No: 2013101-ANK-ARV

USACE Survey No.: 3150-13

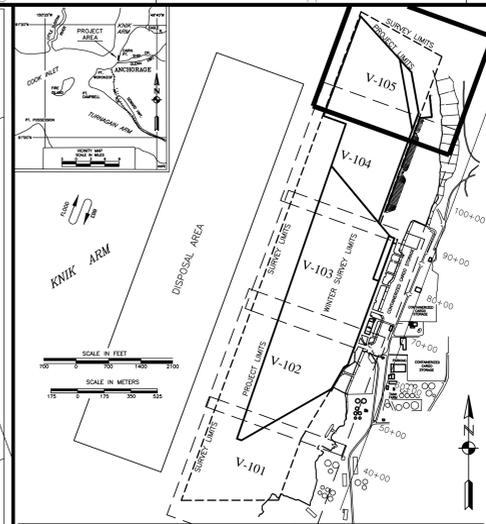
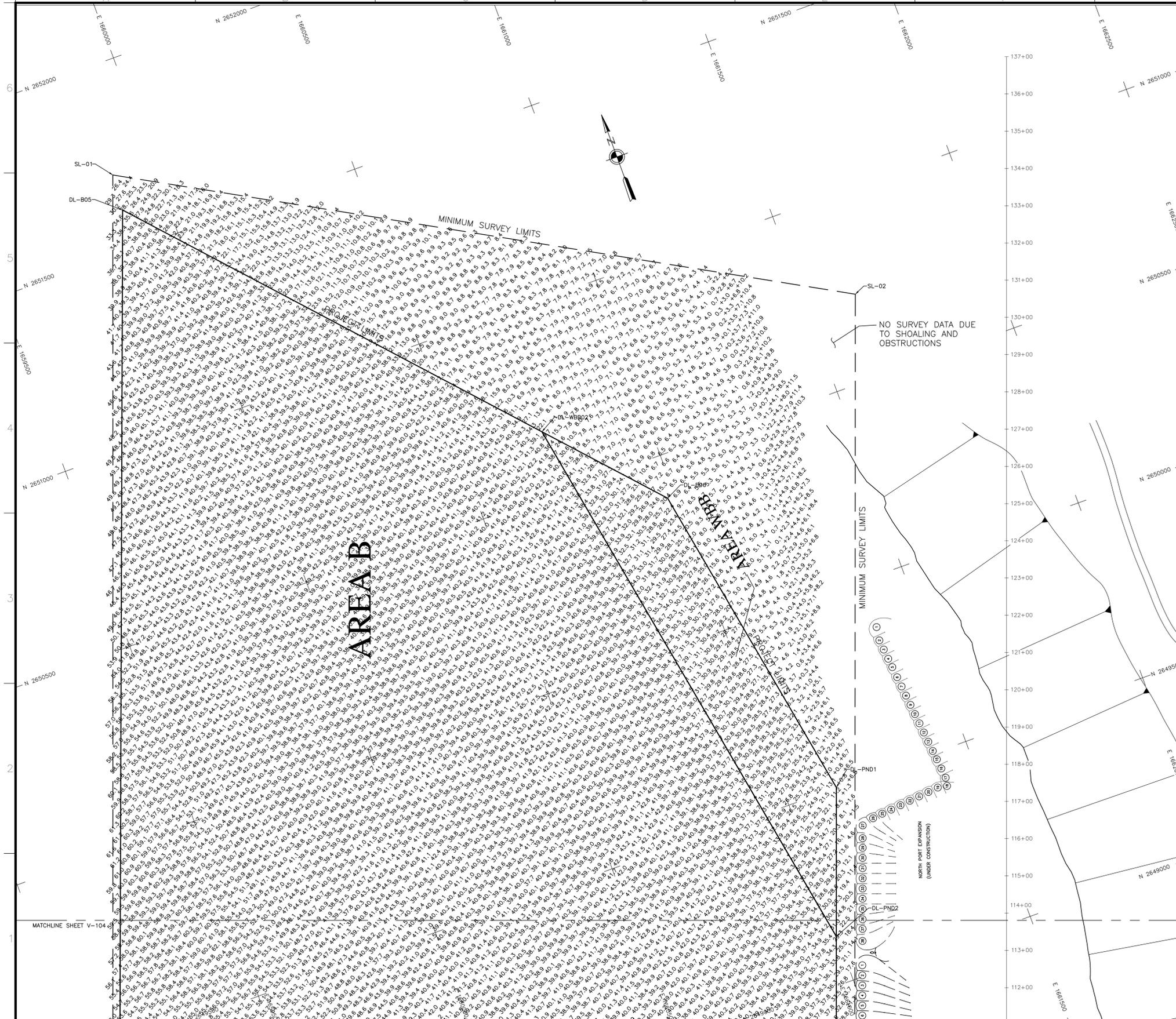
U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS ANCHORAGE, ALASKA

POSTDREDGE SURVEY

ANCHORAGE, ALASKA PORT OF ANCHORAGE 2012-2014 MAINTENANCE DREDGING 01 NOVEMBER, 2013 POSTDREDGE SURVEY

Reference number: V-104

Sheet 4 of 6



CONTRACT NO. W911KB-12-C-0004
 CONTRACTOR: MANSON CONSTRUCTION CO.
 CITY: SEATTLE STATE: WASHINGTON
 Recommended: [Signature] DATE: [Blank]
 Approved: [Signature] DATE: [Blank]

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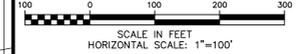
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 David R. Neff C.H.(275)
 [Signature]

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DL-A06	2,648,342.16	1,659,254.03
DL-B03	2,649,256.22	1,659,566.97
DL-B04	2,649,430.26	1,659,086.40
DL-B05	2,651,624.46	1,659,988.47
DL-B06	2,650,382.05	1,660,981.52
DL-PND1	2,649,458.45	1,661,136.91
DL-PND2	2,649,123.65	1,661,000.33
DL-PND3	2,647,112.20	1,660,267.74
DL-A08	2,646,798.08	1,660,526.67
DL-A09	2,646,770.56	1,660,981.67

SUMMER SURVEY LIMITS POINT TABLE		
CORNER	NORTHING	EASTING
SL-01	2,644,001.92	1,659,811.68
DL-A02	2,643,944.48	1,659,516.63
DL-A03	2,643,483.73	1,659,246.67
DL-A09	2,646,798.08	1,660,516.50
SL-01	2,651,701.73	1,659,893.33
SL-02	2,650,728.25	1,659,637.33
SL-03	2,642,358.54	1,658,604.02
SL-04	2,641,056.81	1,658,114.19
SL-05	2,641,056.18	1,658,077.42
SL-06	2,646,746.32	1,660,662.07
SL-07	2,646,897.79	1,660,717.23
SL-08	2,647,352.20	1,660,904.89

DISPOSAL AREA POINT TABLE		
CORNER	NORTHING	EASTING
DS01	2,650,126.73	1,658,658.25
DS02	2,650,829.80	1,658,779.24
DS03	2,646,897.79	1,660,717.23
DS04	2,641,976.91	1,658,679.84

CONTROL DATA				
POINT ID	NORTHING	EASTING	ELEV. (MLLW)	DESCRIPTION
5620 THERMO 1 1988	2,642,764.70	1,659,183.87	37.57	Altimet
S END	2,644,296.27	1,659,728.03	40.52	USACE SBC 5978 APPROX STA 63-67.96)
ETRAC 2	2,644,443.04	1,660,129.99	36.38	Black Cap
TERRA 11	2,644,990.05	1,660,159.59	61.62	Antenna Reference Point
TERRA 12	2,644,990.05	1,660,158.58	61.21	Antenna Reference Point
ETRAC 1	2,646,995.97	1,660,814.72	26.34	Black Cap
N END	2,646,649.84	1,660,584.80	40.53	USACE SBC 5978 APPROX STA 68-73.09)



BATHYMETRY

ANCHORAGE, ALASKA
 PORT OF ANCHORAGE
 2012-2014
 MAINTENANCE DREDGING
 01 NOVEMBER, 2013
 POSTDREDGE SURVEY

Reference number:
V-105
 Sheet 5 of 6

