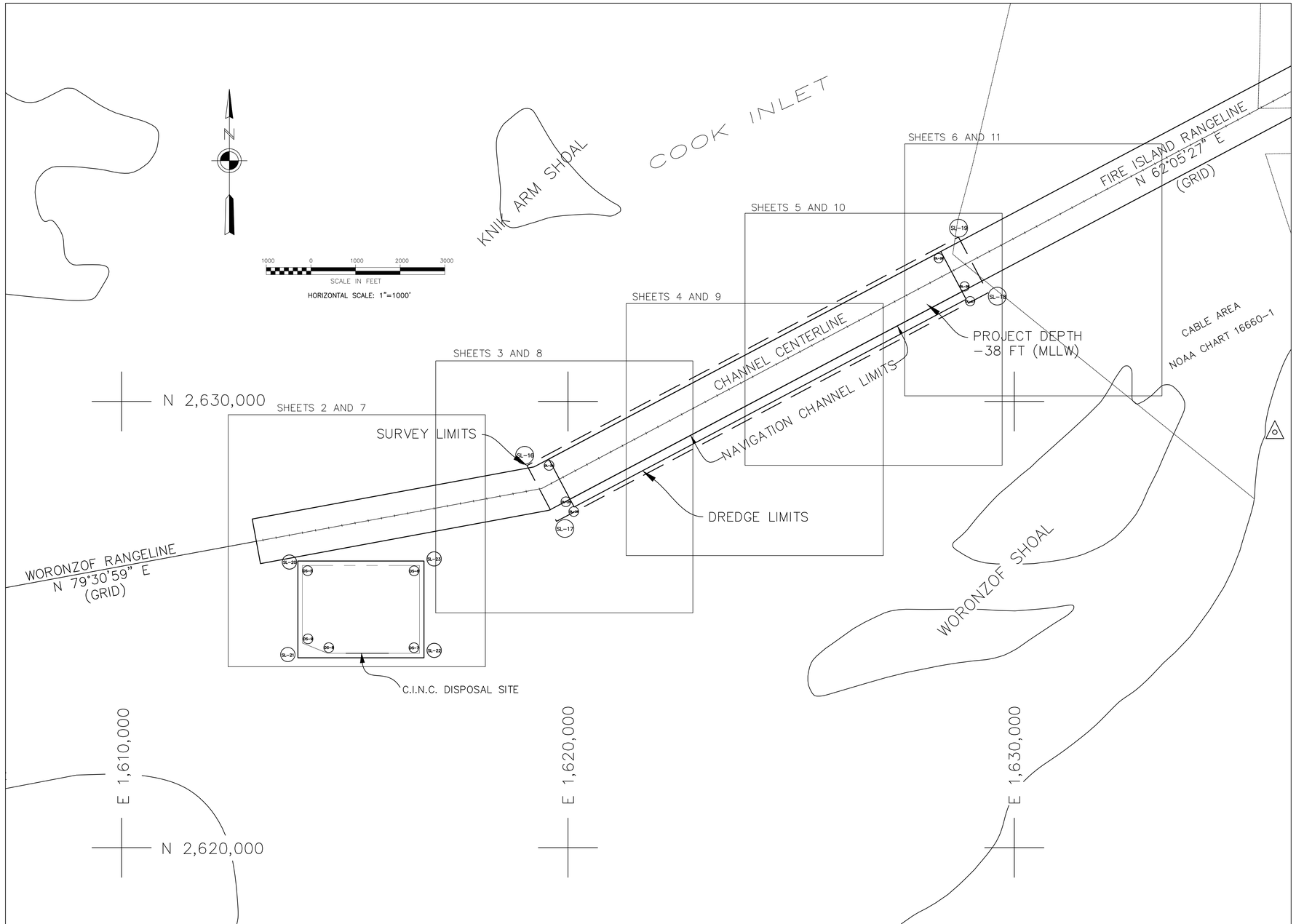
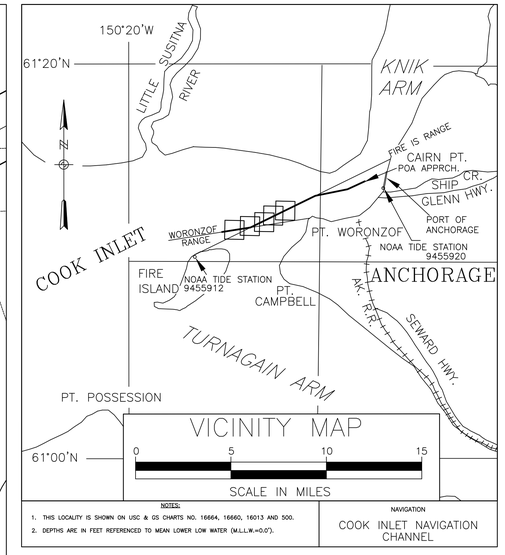
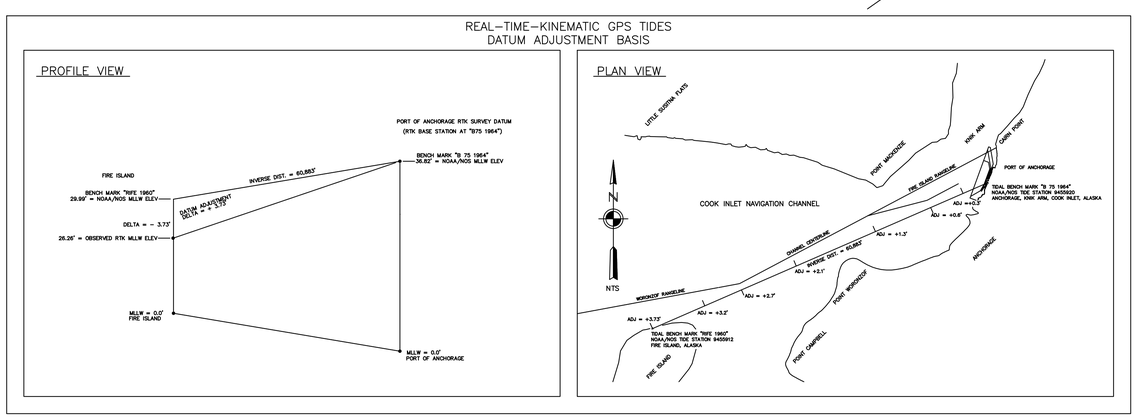
CORPS OF ENGINEERS







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DREDGE LIMITS - AREA C

Corner #	Northing	Easting
DL-24	2628708.65	1619570.25
DL-25	2627809.70	1620045.97
DL-28	2632462.12	1628828.90
DL-29	2633360.88	1628352.82

CINC DISPOSAL SITE

Corner #	Northing	Easting
DS-5	2626323.49	1614048.61
DS-6	2626323.49	1616673.28
DS-7	2624354.99	1616673.28
DS-8	2624354.99	1614619.08
DS-9	2624587.68	1614048.61

DREDGE LIMITS - AREA D

Corner #	Northing	Easting
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DL-26	2627635.79	1620138.09
DL-27	2632288.21	1628921.02
DL-28	2632462.12	1628828.90

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SL-17	2627313.36	1619743.03
SL-18	2632433.89	1629409.67
SL-19	2633683.29	1628747.85
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CONTROL DATA

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CRAIG	2,642,635.95	1,661,029.47	44.95	Brass Cap
ETRAC-1	2,646,395.57	1,660,814.72	38.34	Brass Cap
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TERRA 12 ARP	2,644,990.65	1,660,166.56	81.21	Antennae Reference Point
5920 THERMO 1 1988	2,642,784.70	1,660,183.87	37.32	Almon

VOLUME COMPUTATIONS

DREDGE AREA C	CUBIC YARDS
VOLUME AVAILABLE ABOVE -38' MLLW	0
VOLUME AVAILABLE ABOVE -40' MLLW	26
VOLUME AVAILABLE ABOVE -43' MLLW	90,259
DREDGE AREA D	**CUBIC YARDS**
VOLUME AVAILABLE ABOVE -38' MLLW	6
VOLUME AVAILABLE ABOVE -40' MLLW	2,010
VOLUME AVAILABLE ABOVE -43' MLLW	65,303
DISPOSAL AREA	**CUBIC YARDS**
FILL VOLUME AVAILABLE BELOW -45' MLLW	1,574,285

STATE OF ALASKA 49TH
(Lewis J. Epps)
05/17/2016
No. 3510
REGISTERED PROFESSIONAL LAND SURVEYOR

THIS HYDROGRAPHIC SURVEY WAS COMPLETED UNDER THE OVERSIGHT OF AN ACSM/THSOA CERTIFIED HYDROGRAPHER

David R. Neff CH(275)

BATHYMETRY

US ARMY CORPS OF ENGINEERS
ALASKA DISTRICT

CONTRACT NO. W911KB-15-C-0006
CONTRACTOR MANSON CONSTRUCTION CO.
CITY SEATTLE STATE WA
Recommended: Approved: Date:
PRIME CONTRACTOR RESIDENT ENGINEER

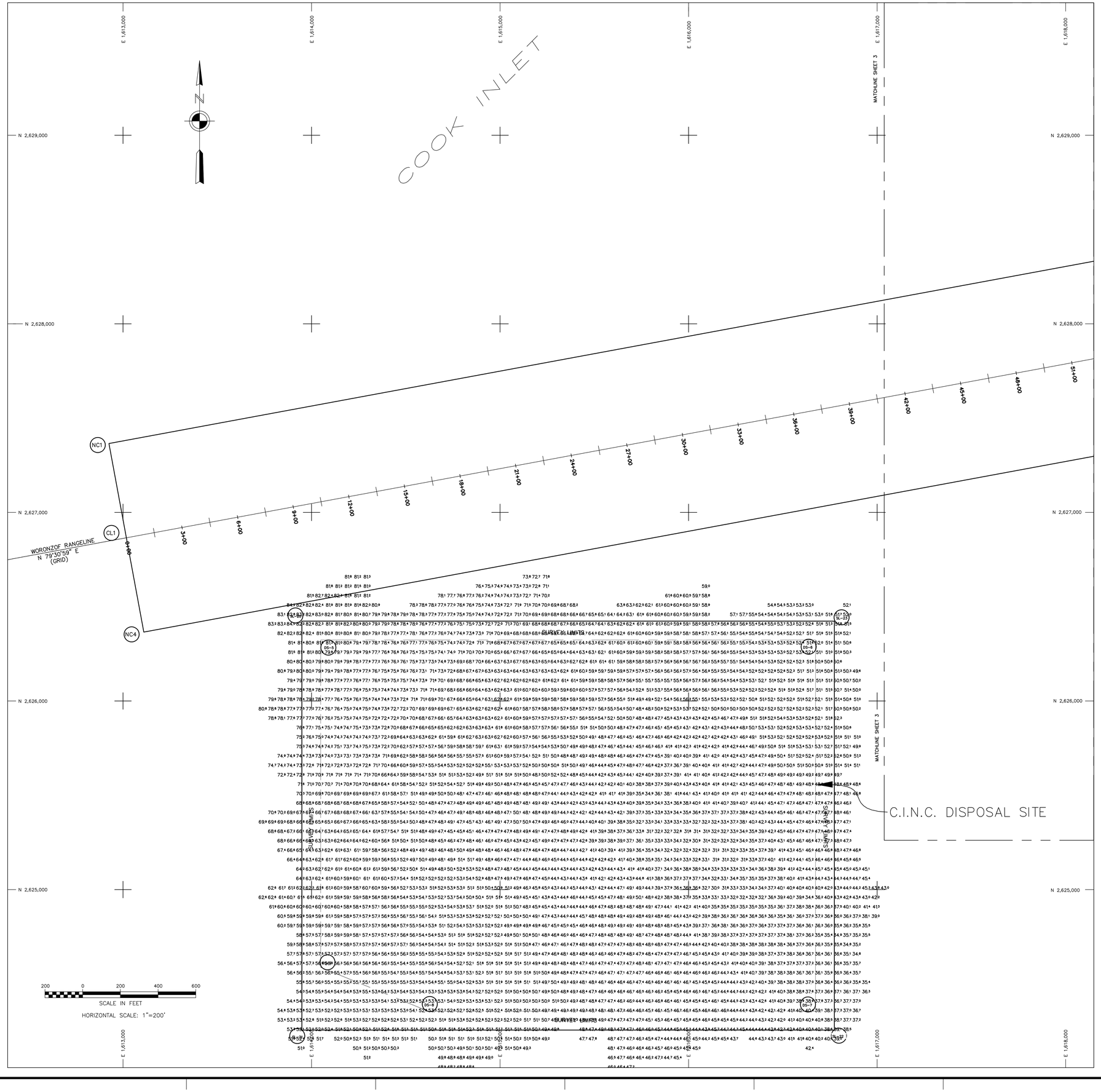
Sym	Action	Description	Date	Appvd

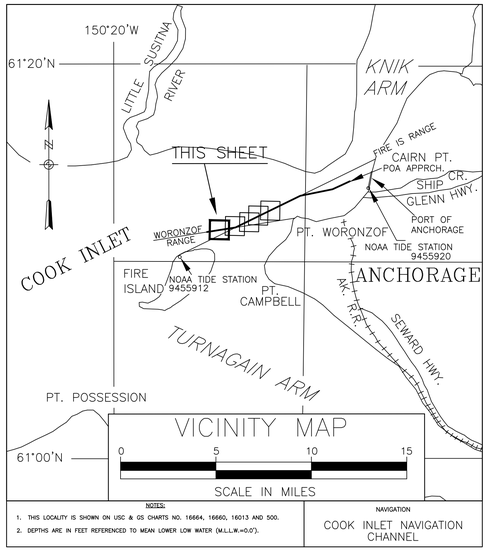
Date: 05/17/2016
Dwg Scale: 1" = 1000'
Plot Scale: 1:1
File: CONSTRUCTION_SV160415_CHRT_FINAL.dwg
Designed: M. TENCZA
Drawn: M. TENCZA
Reviewed: J. ANDERSON
Chief Section
Submitted: A. CHURCHILL
Chief Branch
USACE Survey No: 3352-16

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

COOK INLET, ALASKA
COOK INLET NAVIGATION CHANNEL
CONDITION SURVEY
APRIL 15, 2016

Reference number:
V-101
Sheet 1 of 11





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David R. Neff CH(275)

BATHYMETRY

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ALASKA DISTRICT

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CONTRACTOR MANSON CONSTRUCTION CO.
CITY SEATTLE STATE WA
Recommended: Approved: Date:
PRIME CONTRACTOR RESIDENT ENGINEER

Sym	Action	Description	Date	Appvd

Date: 05/17/2016
Dwg Scale: 1" = 200'
Plot Scale: 1:1
File: DSMOTION_20160415_DWG_FINAL_R1

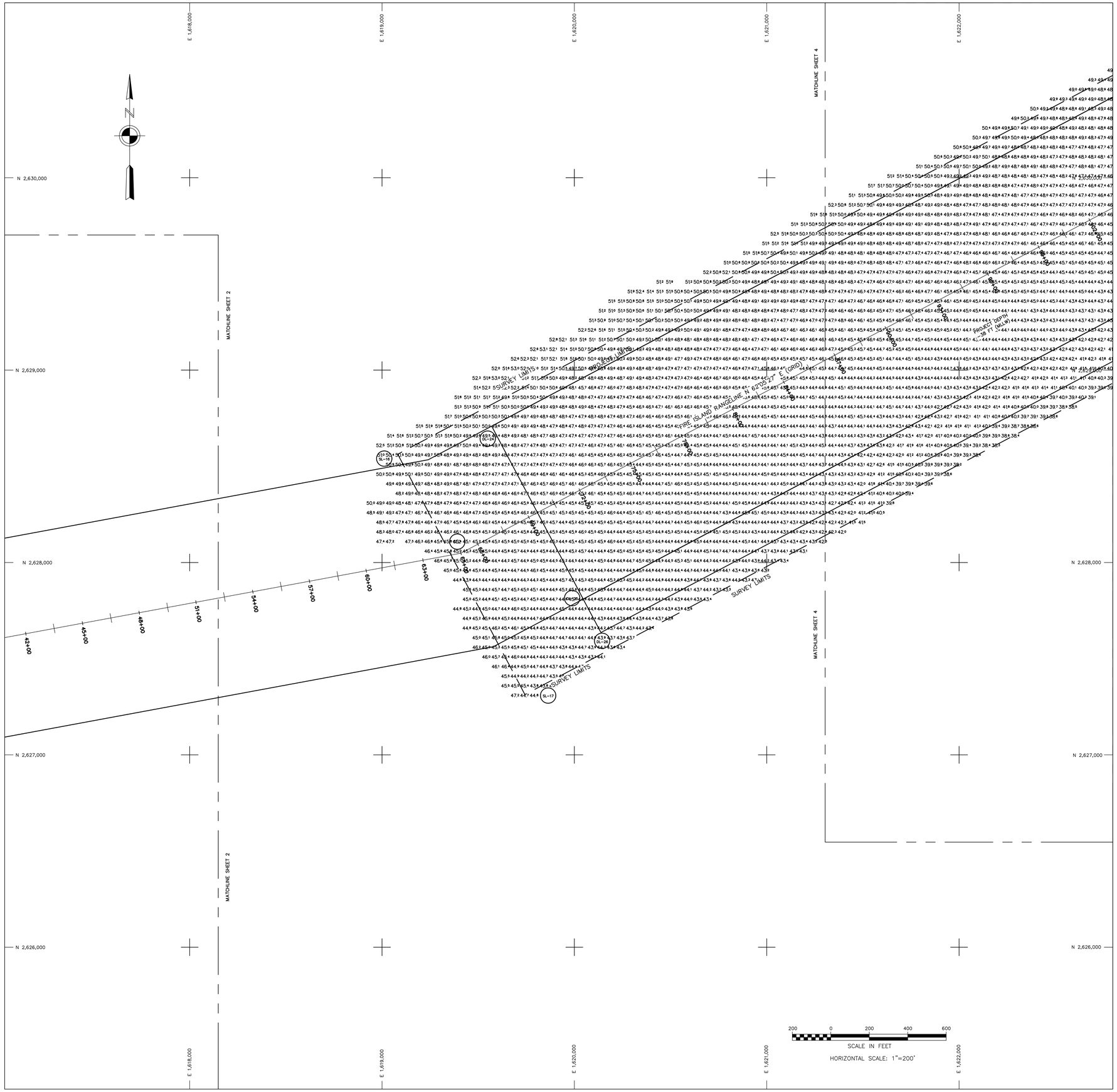
Designed: M. TENCZA
Drawn: M. TENCZA
Reviewed: J. ANDERSON
Chief Section
Submitted: A. CHURCHILL
Chief Branch
USACE Survey No: 3352-16

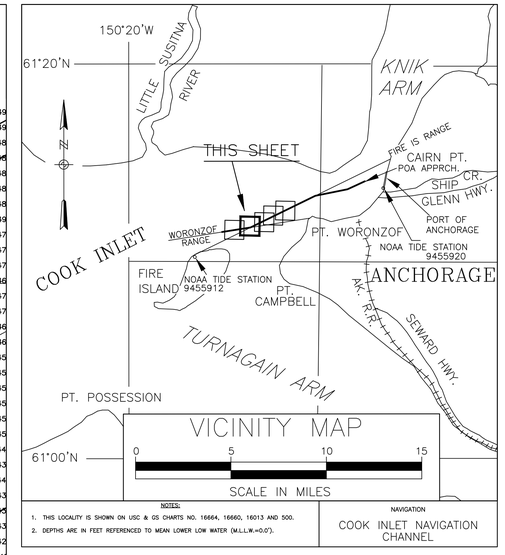
U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
ANCHORAGE, ALASKA

COOK INLET, ALASKA
COOK INLET NAVIGATION CHANNEL
CONDITION SURVEY
APRIL 15, 2016

Reference number:
V-102
Sheet 2 of 11

CORPS OF ENGINEERS





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David R. Neff CH(275)

BATHYMETRY

US ARMY CORPS OF ENGINEERS
ALASKA DISTRICT

CONTRACT NO. W911KB–15–C–0006
CONTRACTOR MANSON CONSTRUCTION CO.
CITY SEATTLE STATE WA
Recommended: Approved: Date:
PRIME CONTRACTOR RESIDENT ENGINEER

Sym	Action	Description	Date	Appvd

Date: 05/17/2016
Dwg Scale: 1" = 200'
Plot Scale: 1:1
File: CONSTRUCTION 150415_CINC_FINAL_CH
Section
Branch

Designed: M. TENCZA
Drawn: M. TENCZA
Reviewed: J. ANDERSON
Chief
Submitted: A. CHURCHILL
Chief

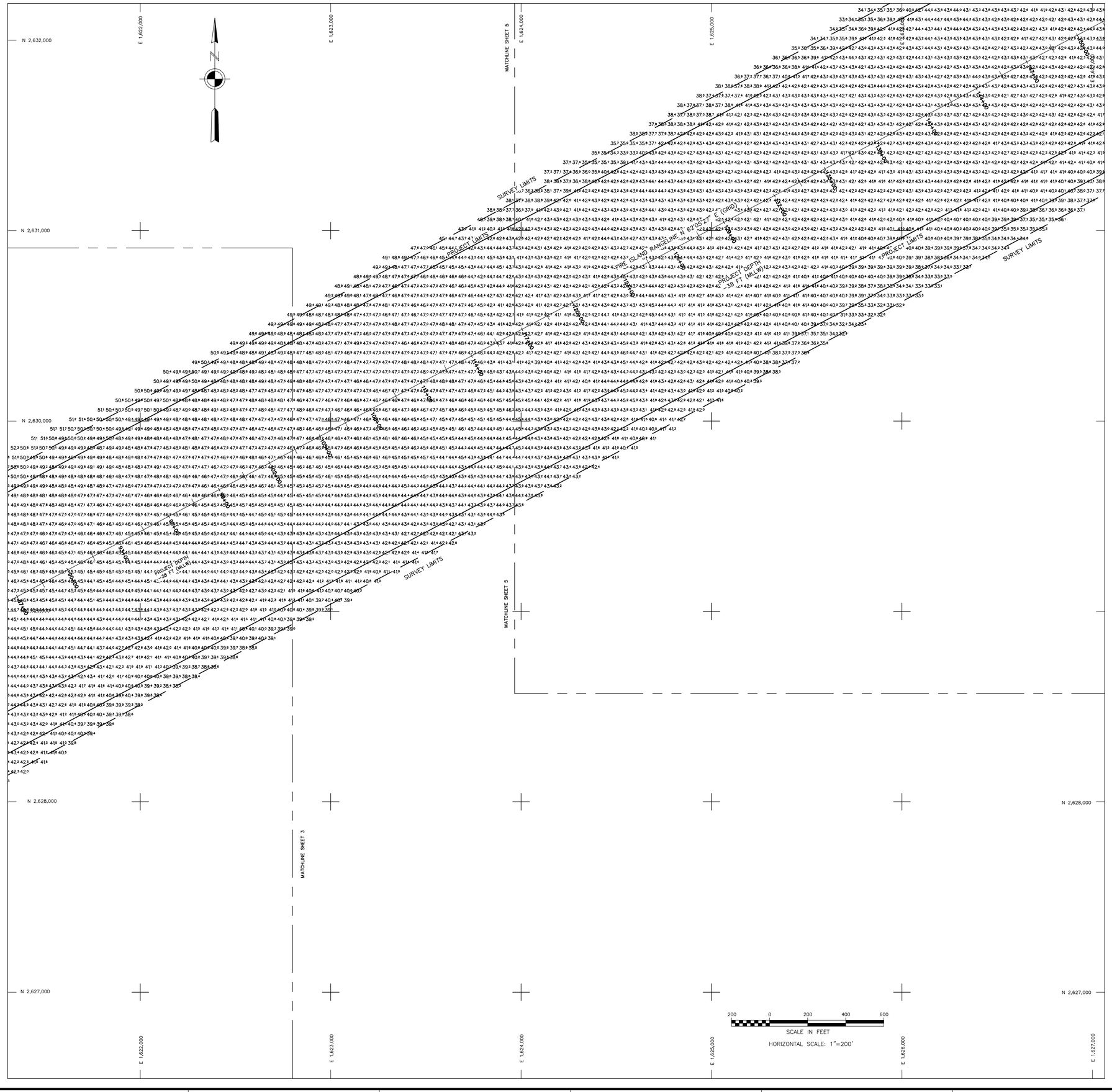
U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
ANCHORAGE, ALASKA

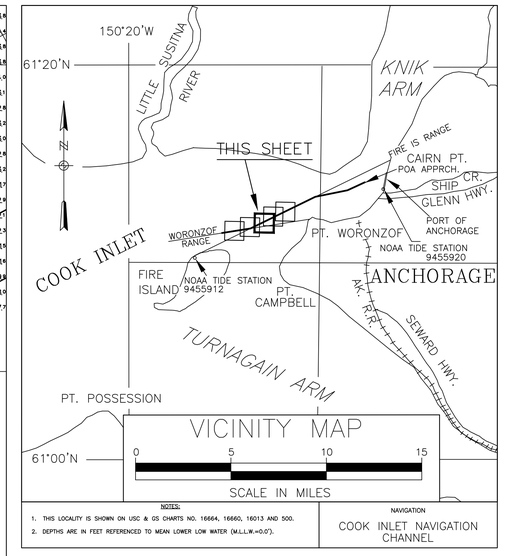
USACE Survey No: 3352–16

COOK INLET, ALASKA
COOK INLET NAVIGATION CHANNEL
CONDITION SURVEY
APRIL 15, 2016

Reference number:
V–103
Sheet 3 of 11

CORPS OF ENGINEERS





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DL-25	2627809.70	1620045.97
DL-28	2632462.12	1628828.90
DL-29	2633360.88	1628352.82

CINC DISPOSAL SITE		
Corner #	Northing	Easting
DS-5	2626323.49	1614048.61
DS-6	2626323.49	1616673.28
DS-7	2624354.99	1616673.28
DS-8	2624354.99	1614619.08
DS-9	2624587.68	1614048.61

DREDGE LIMITS - AREA D		
Corner #	Northing	Easting
DL-25	2627809.70	1620045.97
DL-26	2627635.79	1620138.09
DL-27	2632288.21	1628921.02
DL-28	2632462.12	1628828.90

CINC SURVEY LIMITS		
Corner #	Northing	Easting
SL-16	2628562.99	1619081.63
SL-17	2627313.36	1619743.03
SL-18	2632433.89	1629409.67
SL-19	2633683.29	1628747.85
SL-20	2626423.49	1613948.61
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BM 5934 F	2,655,203.73	1,655,049.51	36.48	Brass Cap
CRAIG	2,642,635.95	1,661,029.47	44.95	Brass Cap
ETRAC-1	2,646,395.57	1,660,814.72	38.34	Brass Cap
ETRAC-2	2,644,443.04	1,660,120.66	36.38	Brass Cap
MIKE	2,645,987.73	1,661,875.48	48.67	Brass Cap
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TERRA 12 ARP	2,644,990.65	1,660,166.56	81.21	Antennae Reference Point
5920 THERMO 1 1988	2,642,784.70	1,660,183.87	37.32	Almon

VOLUME COMPUTATIONS	
DREDGE AREA C	CUBIC YARDS
VOLUME AVAILABLE ABOVE -38' MLLW	0
VOLUME AVAILABLE ABOVE -40' MLLW	26
VOLUME AVAILABLE ABOVE -43' MLLW	90,259
DREDGE AREA D	CUBIC YARDS
VOLUME AVAILABLE ABOVE -38' MLLW	6
VOLUME AVAILABLE ABOVE -40' MLLW	2,010
VOLUME AVAILABLE ABOVE -43' MLLW	65,303
DISPOSAL AREA	CUBIC YARDS
FILL VOLUME AVAILABLE BELOW -45' MLLW	1,574,285

STATE OF ALASKA 49TH
(Lewis J. Epps)
05/17/2016
No. 3510
REGISTERED PROFESSIONAL LAND SURVEYOR

THIS HYDROGRAPHIC SURVEY WAS COMPLETED UNDER THE OVERSIGHT OF AN ACSM/THSOA CERTIFIED HYDROGRAPHER

David R. Neff CH(275)

BATHYMETRY

US ARMY CORPS OF ENGINEERS
ALASKA DISTRICT

CONTRACT NO. W911KB-15-C-0006
CONTRACTOR MANSON CONSTRUCTION CO.
CITY SEATTLE STATE WA
Recommended: Approved: Date:
PRIME CONTRACTOR RESIDENT ENGINEER

Sym	Action	Description	Date	Approd

Date: 05/17/2016
Dwg Scale: 1" = 200'
Plot Scale: 1:1
File: CONSTRUCTION SURVEY_PRINT.DWG
Section
Branch

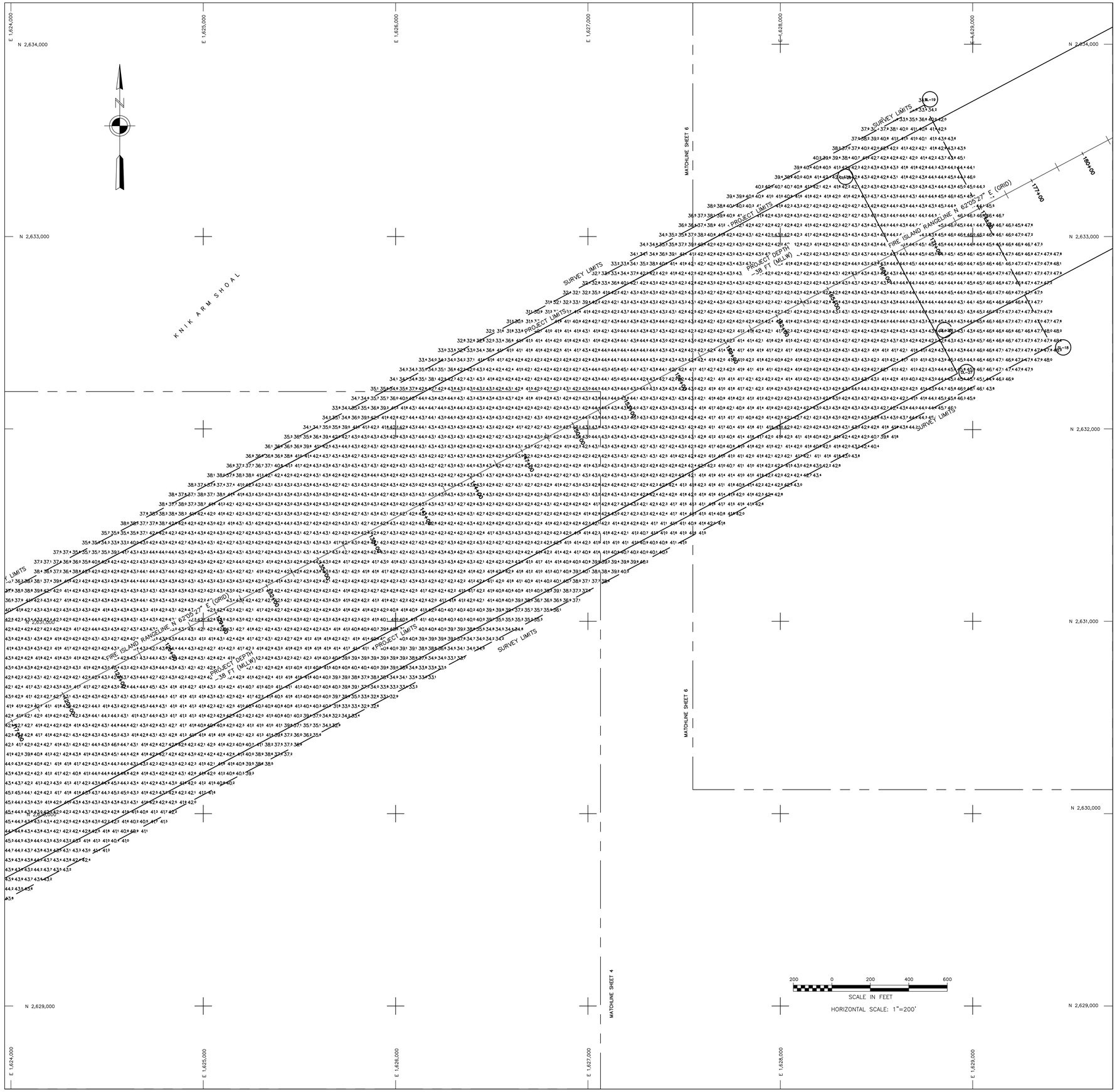
Designed: M. TENCZA
Drawn: M. TENCZA
Reviewed: J. ANDERSON
Chief
Submitted: A. CHURCHILL
Chief
USACE Survey No: 3352-16

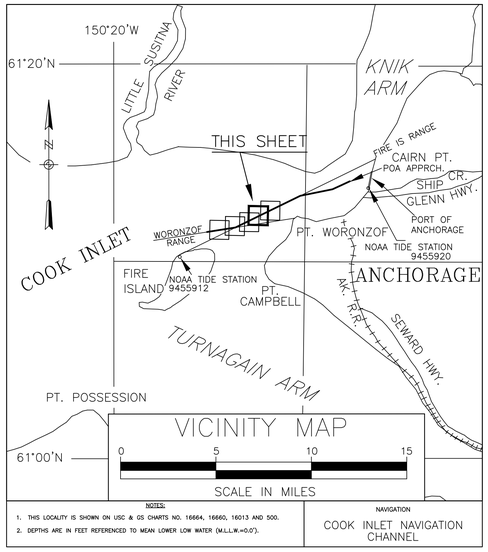
U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
ANCHORAGE, ALASKA

COOK INLET, ALASKA
COOK INLET NAVIGATION CHANNEL
CONDITION SURVEY
APRIL 15, 2016

Reference number:
V-104
Sheet 4 of 11

CORPS OF ENGINEERS





NOTES

1. HORIZONTAL CONTROL IS ALASKA STATE PLANE, ZONE 4, NAD83 IN U.S. SURVEY FEET HOLDING USACE "TERRA 11" AS N 2,644,969.84, E 1,660,159.24.
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3. SOUNDINGS ARE IN FEET AND ARE MINUS UNLESS OTHERWISE INDICATED.
4. THIS DRAWING INDICATES GENERAL CONDITIONS AT THE TIME OF SURVEY.
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VOLUME AVAILABLE ABOVE -40' MLLW	2,010
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DISPOSAL AREA	CUBIC YARDS
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STATE OF ALASKA 49TH
(Lewis J. Epps) 05/17/2016 No. 3510
REGISTERED PROFESSIONAL LAND SURVEYOR

THIS HYDROGRAPHIC SURVEY WAS COMPLETED UNDER THE OVERSIGHT OF AN ACSM/THSOA CERTIFIED HYDROGRAPHER

David R. Neff CH(275)

BATHYMETRY

US ARMY CORPS OF ENGINEERS
ALASKA DISTRICT

CONTRACT NO. W911KB-15-C-0006
CONTRACTOR MANSON CONSTRUCTION CO.
CITY SEATTLE STATE WA
Recommended: Approved: Date:
PRIME CONTRACTOR RESIDENT ENGINEER

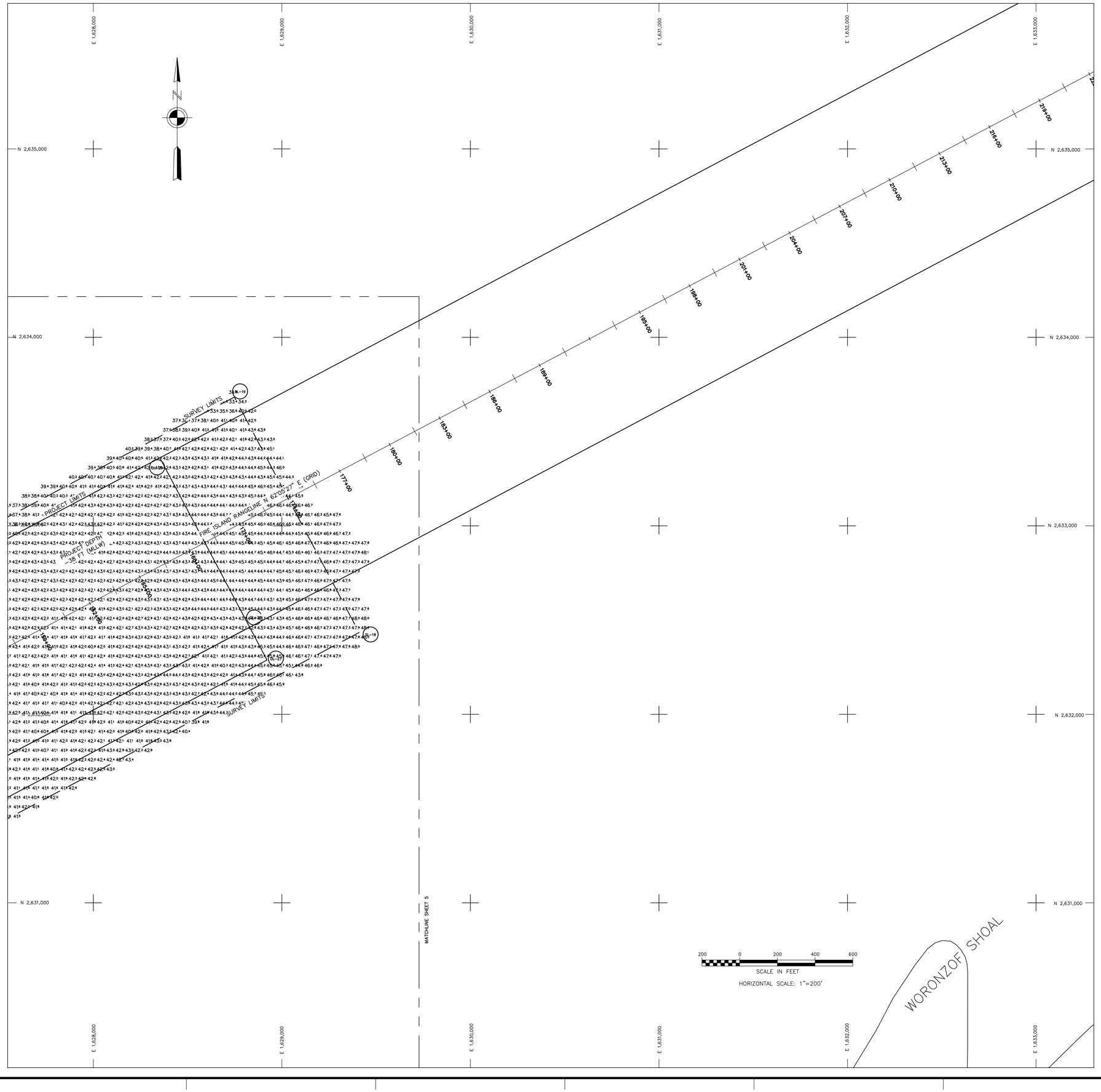
Sym	Action	Description	Date	Appvd

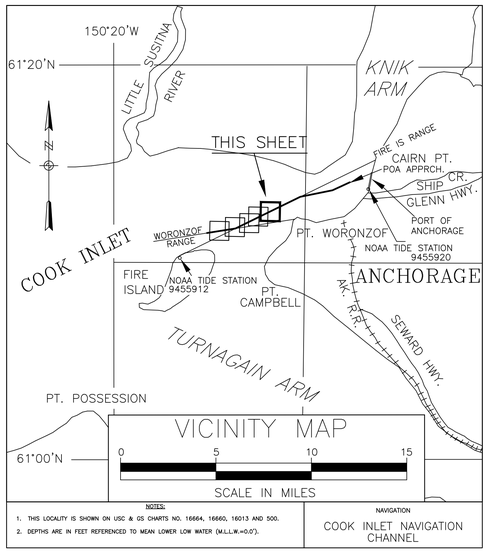
Date: 05/17/2016
Dwg Scale: 1" = 200'
Plot Scale: 1:1
File: DSMOTION_20160415_DWG_FINAL.dwg
Section
Branch
Designed: M. TENCZA
Drawn: M. TENCZA
Reviewed: J. ANDERSON
Chief:
Submitted: A. CHURCHILL
Chief:
USACE Survey No: 3352–16

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

COOK INLET, ALASKA
COOK INLET NAVIGATION CHANNEL
CONDITION SURVEY
APRIL 15, 2016

Reference number:
V–105
Sheet 5 of 11





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THIS HYDROGRAPHIC SURVEY WAS COMPLETED UNDER THE OVERSIGHT OF AN ACSM/THSOA CERTIFIED HYDROGRAPHER

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US ARMY CORPS OF ENGINEERS
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CONTRACTOR MANSON CONSTRUCTION CO.
CITY SEATTLE STATE WA
Recommended: Approved: Date:
PRIME CONTRACTOR RESIDENT ENGINEER

Sym	Action	Description	Date	Approd

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Dwg Scale: 1" = 200'
Plot Scale: 1:1
File: C:\DWG\TOA_20160415_CINC_FINAL_.dwg
Section
Branch
Designed: M. TENCZA
Drawn: M. TENCZA
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U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
ANCHORAGE, ALASKA

COOK INLET, ALASKA
COOK INLET NAVIGATION CHANNEL
CONDITION SURVEY
APRIL 15, 2016

Reference number:
V-106
Sheet 6 of 11