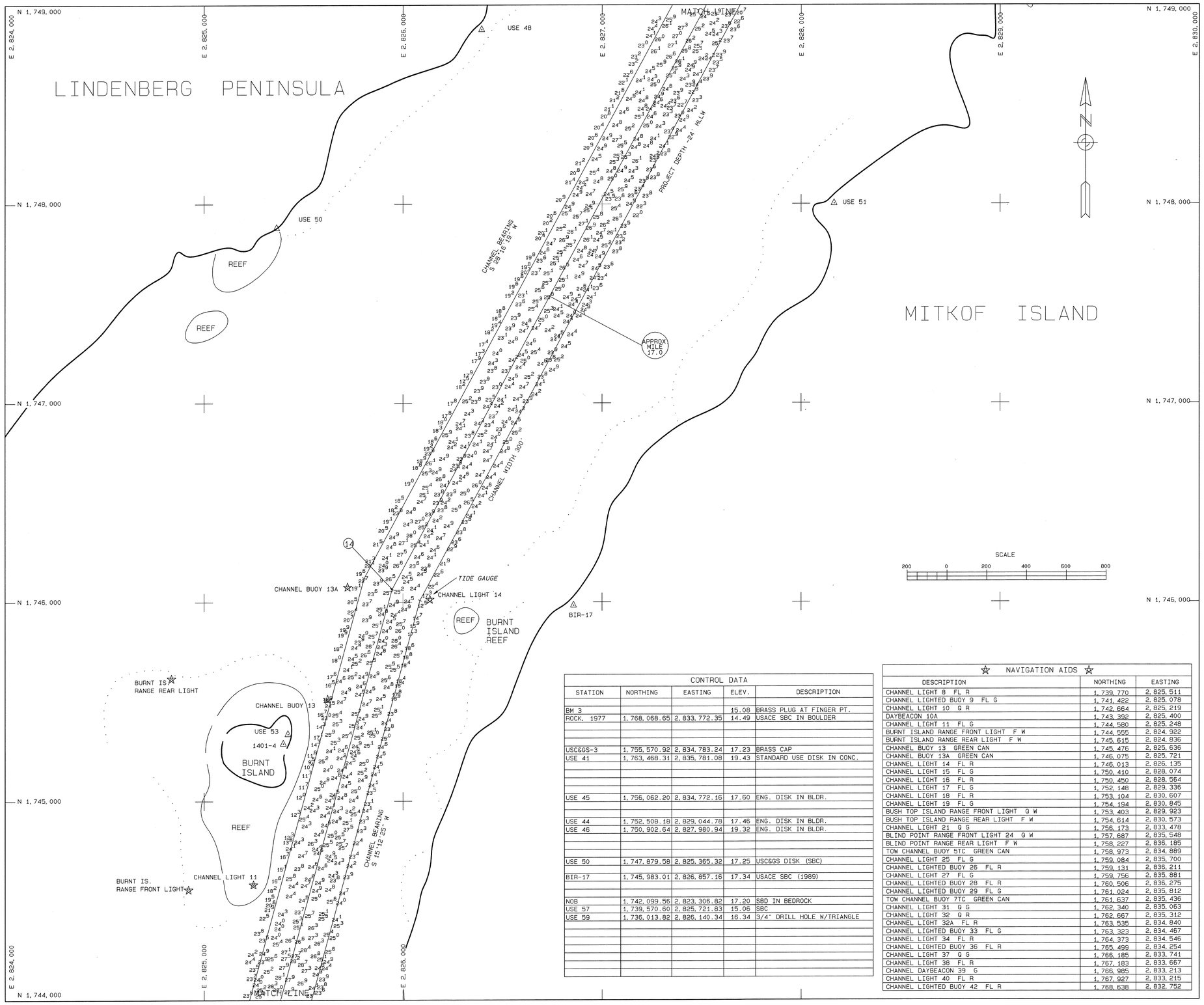
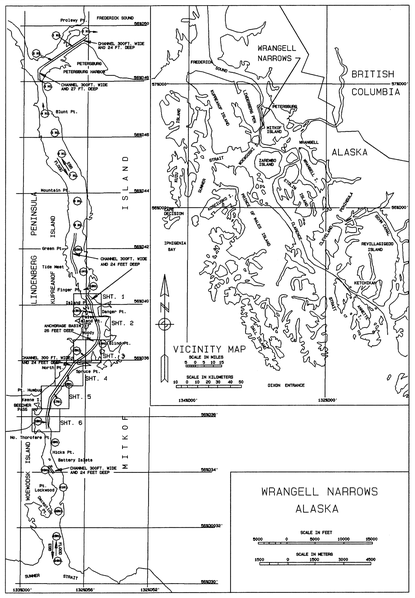




NOTES

1. HORIZONTAL DATUM: NAD 27 ALASKA STATE PLANE (ZONE 1) IN FEET.
2. VERTICAL DATUM: VERTICAL CONTROL IS IN FEET REFERRING TO MEAN LOWER LOW WATER (MLLW = 0.0') HOLDING USC&GS SBD "NOB" AS 17.20'.
3. DEPTHS ARE SHOWN IN FEET BELOW MEAN LOWER LOW WATER (MLLW = 0.0'). THE DECIMAL POINT OF THE SOUNDING IS THE POSITION OF THE SOUNDING.
4. HORIZONTAL POSITIONS FOR DATA COLLECTION WERE DERIVED FROM A GPS SYSTEM OPERATING IN DIFFERENTIAL MODE. CORRECTIONS WERE RECIEVED FROM THE CONTINUOUSLY OPERATING REFERENCE STATION (CORS) NAMED "BIORKA" OPERATING AT 305 KHZ.
5. BATHYMETRIC DATA WAS COLLECTED USING A SEABEAM 1180 MULTIBEAM SONAR SYSTEM. VESSEL ATTITUDE WAS MEASURED WITH A SEATEX MRU 5 MOTION SENSOR. HEADING WAS MEASURED WITH A SCAN 2000 GYRO COMPASS. TIDE DATA WAS COLLECTED WITH A OHMEX INSTRUMENTS TIDALITE TIDE GAUGE. VESSEL NAVIGATION, DATA COLLECTION, AND DATA PROCESSING WAS PERFORMED USING COASTAL OCEANOGRAPHICS "HYPACK AND HYSWEEP" SOFTWARE.
6. PHYSICAL FEATURE DRAWING WAS PROVIDED BY THE ALASKA DISTRICT CORPS OF ENGINEERS.
7. DATA COLLECTED: DECEMBER 28, 2000.

STATE OF ALASKA
497M
Rick G. Braun
LS-5485
REGISTERED PROFESSIONAL LAND SURVEYOR

CONTROL DATA

STATION	NORTHING	EASTING	ELEV.	DESCRIPTION
BM 3			15.08	BRASS PLUG AT FINGER PT.
ROCK, 1977	1,768,068.65	2,833,772.35	14.49	USACE SBC IN BOULDER
USC&GS-3	1,755,570.92	2,834,783.24	17.23	BRASS CAP
USE 41	1,763,468.31	2,835,781.08	19.43	STANDARD USE DISK IN CONC.
USE 45	1,756,062.20	2,834,772.16	17.60	ENG. DISK IN BLDR.
USE 44	1,752,508.18	2,829,044.78	17.46	ENG. DISK IN BLDR.
USE 46	1,750,902.64	2,827,980.94	19.32	ENG. DISK IN BLDR.
USE 50	1,747,879.58	2,825,365.32	17.25	USC&GS DISK (SBC)
BIR-17	1,745,983.01	2,826,857.16	17.34	USACE SBC (1989)
NOB	1,742,099.56	2,823,306.82	17.20	SBD IN BEDROCK
USE 57	1,739,570.60	2,825,721.83	15.06	SBC
USE 59	1,736,013.82	2,826,140.34	16.34	3/4" DRILL HOLE W/TRIANGLE

☆ NAVIGATION AIDS ☆

DESCRIPTION	NORTHING	EASTING
CHANNEL LIGHT 8 FL R	1,739,770	2,825,511
CHANNEL LIGHTED BUOY 9 FL G	1,741,422	2,825,078
CHANNEL LIGHT 10 Q R	1,742,664	2,825,219
DAYBEACON 10A	1,743,392	2,825,400
CHANNEL LIGHT 11 FL G	1,744,580	2,825,248
BURNT ISLAND RANGE FRONT LIGHT F W	1,744,555	2,824,922
BURNT ISLAND RANGE REAR LIGHT F W	1,745,615	2,824,836
CHANNEL BUOY 13 GREEN CAN	1,745,476	2,825,636
CHANNEL BUOY 13A GREEN CAN	1,746,075	2,825,721
CHANNEL LIGHT 14 FL R	1,746,013	2,826,135
CHANNEL LIGHT 15 FL G	1,750,410	2,828,074
CHANNEL LIGHT 16 FL R	1,750,450	2,828,564
CHANNEL LIGHT 17 FL G	1,752,148	2,829,336
CHANNEL LIGHT 18 FL R	1,753,104	2,830,607
CHANNEL LIGHT 19 FL G	1,754,194	2,830,845
BUSH TOP ISLAND RANGE FRONT LIGHT Q W	1,753,403	2,829,923
BUSH TOP ISLAND RANGE REAR LIGHT F W	1,754,614	2,830,573
CHANNEL LIGHT 21 Q G	1,756,173	2,833,478
BLIND POINT RANGE FRONT LIGHT 24 Q W	1,757,687	2,835,548
BLIND POINT RANGE REAR LIGHT F W	1,758,227	2,836,185
TOW CHANNEL BUOY 5TC GREEN CAN	1,758,973	2,834,889
CHANNEL LIGHT 25 FL G	1,759,084	2,835,700
CHANNEL LIGHTED BUOY 26 FL R	1,759,131	2,836,211
CHANNEL LIGHT 27 FL G	1,759,756	2,835,881
CHANNEL LIGHTED BUOY 28 FL R	1,760,506	2,836,275
CHANNEL LIGHTED BUOY 29 FL G	1,761,024	2,835,812
TOW CHANNEL BUOY 7TC GREEN CAN	1,761,637	2,835,436
CHANNEL LIGHT 31 Q G	1,762,340	2,835,063
CHANNEL LIGHT 32 Q R	1,762,667	2,835,312
CHANNEL LIGHT 32A FL R	1,763,535	2,834,840
CHANNEL LIGHTED BUOY 33 FL G	1,763,323	2,834,467
CHANNEL LIGHT 34 FL R	1,764,373	2,834,546
CHANNEL LIGHTED BUOY 36 FL R	1,765,499	2,834,254
CHANNEL LIGHT 37 Q G	1,766,185	2,833,741
CHANNEL LIGHT 38 FL R	1,767,183	2,833,667
CHANNEL DAYBEACON 39 G	1,766,985	2,833,213
CHANNEL LIGHT 40 FL R	1,767,927	2,833,215
CHANNEL LIGHTED BUOY 42 FL R	1,768,638	2,832,752

CENTERLINE OF 300 FOOT WIDE CHANNEL

CORNER	NORTHING	EASTING	CORNER	NORTHING	EASTING
1	1,768,548	2,832,534	10 (PT/PC)	1,759,604	2,836,082
REV 2 (PT)	1,766,651	2,833,771	11 (PT)	1,756,830	2,834,567
3 (PC)	1,766,155	2,833,969	12	1,754,121	2,831,177
4	1,764,973	2,834,186	13	1,750,551	2,828,357
5	1,764,359	2,834,341	14	1,746,065	2,825,945
6	1,763,792	2,834,523	15	1,742,760	2,825,047
7	1,763,212	2,834,766	16	1,741,380	2,825,190
8	1,762,626	2,835,081	17	1,739,373	2,825,281
9 (PT)	1,762,019	2,835,495			

REV.	DATE	DESCRIPTION	BY	APP'D.

CONTRACT NO. DACW85-00-C-0015
CONTRACTOR WESTERN MARINE CONSTRUCTION
CITY SEATTLE STATE WASHINGTON

ALASKA DISTRICT
CORPS OF ENGINEERS
ANCHORAGE, ALASKA

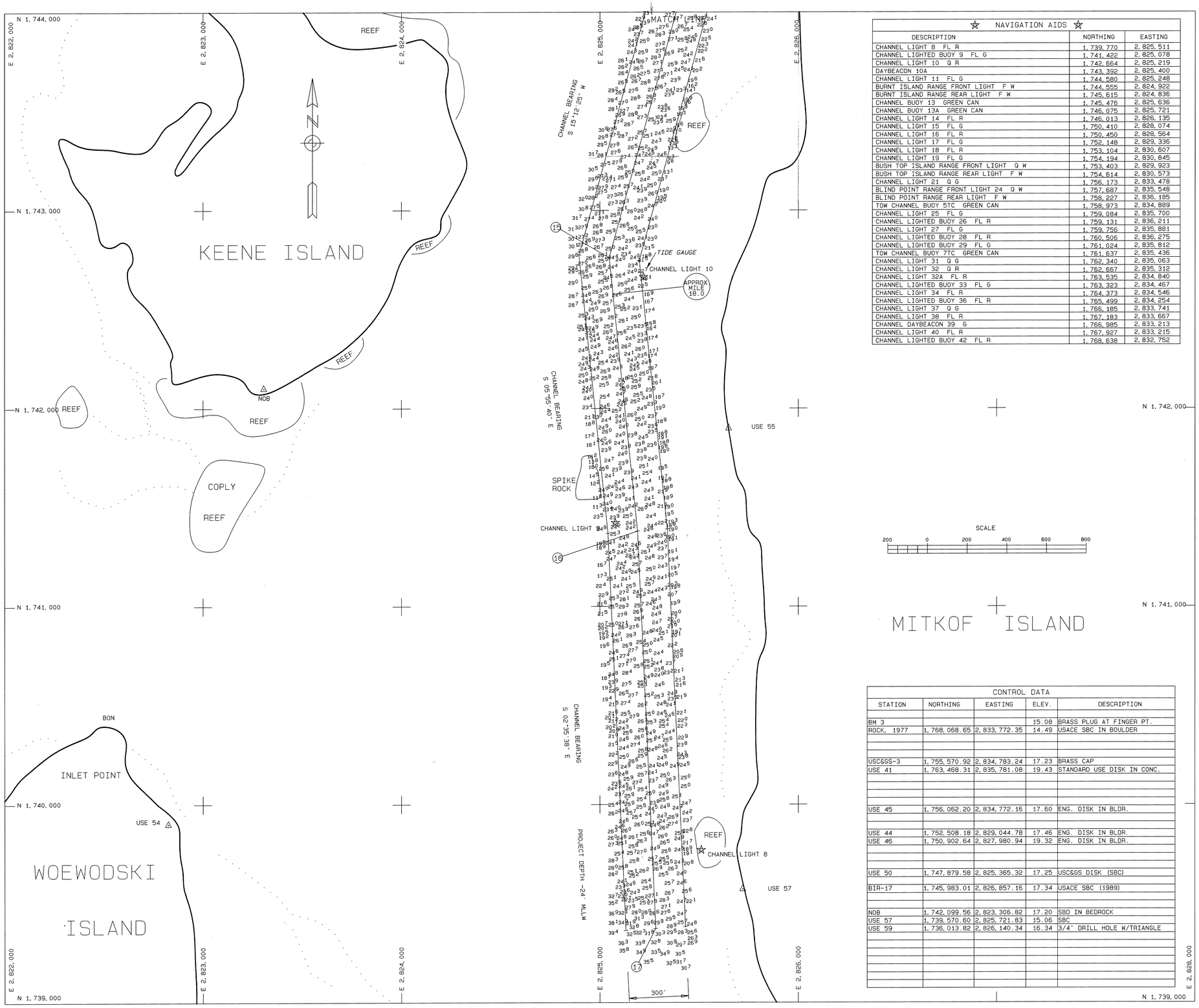
SURVEYED: DRP
DRAWN: TAH
CHECKED: RGB
SUBMITTED: KEH

WRANGELL NARROWS, ALASKA
BUOY 8 TO BUOY 42
(THIS SHEET APPROXIMATELY MILE 16.6 TO 17.6)
POST DREDGE SURVEY
DECEMBER 28, 2000

RECOMMENDED: PROJECT MANAGER
APPROVED: CHIEF OPERATIONS-READINESS BRANCH
DATE:

SURVEY NO.
SCALE: 1" = 200'
SHEET 5 OF 6

DRAWING NO. post1228 sh-5.pro



☆ NAVIGATION AIDS ☆		
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CONTROL DATA				
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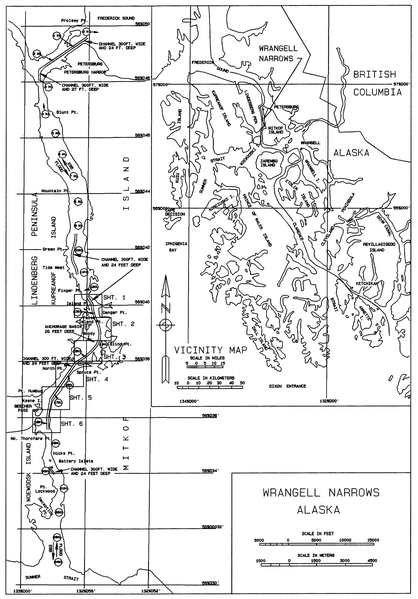
USE 59	1,736,013.82	2,826,140.34	16.34	3/4" DRILL HOLE W/TRIANGLE



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6. PHYSICAL FEATURE DRAWING WAS PROVIDED BY THE ALASKA DISTRICT CORPS OF ENGINEERS.
7. DATA COLLECTED: DECEMBER 27, 2000

STATE OF ALASKA 4910 Rick G. Braun LS-#5485 REGISTERED PROFESSIONAL LAND SURVEYOR

CENTERLINE OF 300 FOOT WIDE CHANNEL					
CORNER	NORTHING	EASTING	CORNER	NORTHING	EASTING
1	1,768,548	2,832,534	10 (PT/PC)	1,759,604	2,836,082
REV 2 (PT)	1,766,651	2,833,771	11 (PT)	1,756,830	2,834,567
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REV.	DATE	DESCRIPTION	BY	APP'D.

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CONTRACTOR WESTERN MARINE CONSTRUCTION
CITY SEATTLE STATE WASHINGTON

ALASKA DISTRICT
CORPS OF ENGINEERS
ANCHORAGE, ALASKA

SURVEYED: DRP
DRAWN: TAH
CHECKED: RGB
SUBMITTED: KEH

WRANGELL NARROWS, ALASKA
BUOY 8 TO BUOY 42
(THIS SHEET APPROXIMATELY MILE 17.6 TO 18.4)
POST DREDGE SURVEY
DECEMBER 27, 2000.

RECOMMENDED: PROJECT MANAGER
APPROVED: CHIEF OPERATIONS-READINESS BRANCH
DATE:

SURVEY NO.
SCALE: 1" = 200'
SHEET 6 OF 6

DRAWING NO. POST1227 SH-6.PRO