

**VOLUME COMPUTATIONS**

Project Depth -5' MLLW	CUBIC YARDS
MINIMUM PAY LINE (-5' MLLW)	237
Between MINIMUM PAY LINE and MAXIMUM PAY LINE (-6' MLLW)	591
VOLUME AVAILABLE ALONG SIDESLOPES (3:1, H:V)	367
TOTAL	1,194

**PROJECT LIMITS**

CORNER	NORTHING	EASTING	CORNER	NORTHING	EASTING
PI-1	1,722,720.44	2,671,971.84	PI-6	1,767,339.84	2,672,364.76
PI-2	1,771,463.35	2,672,190.30	PI-7	1,766,450.98	2,672,230.21
PI-3	1,770,714.97	2,672,599.36	PI-8	1,765,022.34	2,672,948.20
PI-4	1,769,783.12	2,672,806.62	PI-9	1,764,787.46	2,673,644.94
PI-5	1,768,148.33	2,672,691.37			

**NAVIGATION AIDS**

USCG NO.	DESCRIPTION	NORTHING	EASTING
23306.6	DAYBEACON 23 - SG ON PILE	1,764,634.00	2,673,037.00
23306.65	DAYBEACON 24 - TR ON PILE	1,765,266.6	2,672,936.0
23306.7	DAYBEACON 25 - SG ON PILE	1,765,775.5	2,672,308.9
23306.8	DAYBEACON 26 - TR ON PILE	1,767,194.0	2,672,506.3
23306.83	DAYBEACON 26A - TR ON PILE	1,769,141.3	2,672,916.0
23306.85	DAYBEACON 27 - SG ON PILE	1,770,948.3	2,672,374.1
23306.86	DAYBEACON 28 - TR ON PILE	1,771,492.5	2,672,306.4
23306.9	DAYBEACON 29 - SG ON PILE	1,772,457.9	2,671,777.1
23307	DAYBEACON 30 - TR ON PILE	1,773,344.0	2,671,632.5

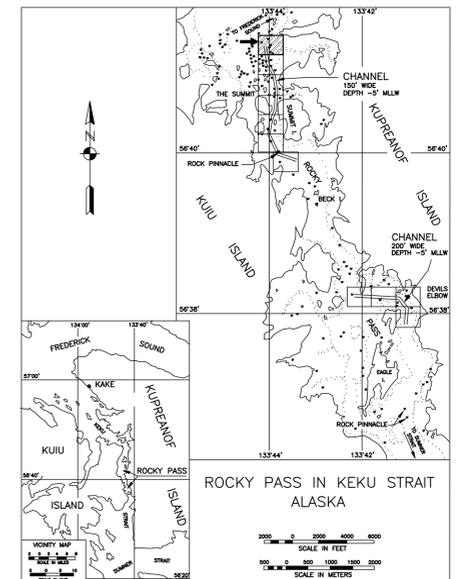
**MLLW ELEVATION AND ELLIPSOID HEIGHT COMPARISON**

STATION	2001		2007	
	MLLW	EHT	MLLW	EHT
SUMMIT-1 2001	17.80'	-	17.85'	10.44'
SUMMIT-2 2001	16.45'	-	16.48'	9.21'
YOU 1927	16.35'	-	16.65'	9.06'

**SURVEYOR'S CERTIFICATE**

I HEREBY CERTIFY THAT I AM PROPERLY REGISTERED AND LICENSED TO PRACTICE LAND SURVEYING IN THE STATE OF ALASKA AND THAT THIS PLAT REPRESENTS A HYDROGRAPHIC SURVEY MADE BY ME OR UNDER MY DIRECT SUPERVISION. THE ELEVATIONS SHOWN HEREON DEPICT THE DEPTHS AS SURVEYED MAY 10-13, 2007, TO THE BEST OF MY KNOWLEDGE AND BELIEF.

KARL D. WOODS, P.L.S. DATE \_\_\_\_\_  
 REGISTRATION NO. LS 10950



- NOTES**
- HORIZONTAL CONTROL IS ALASKA STATE PLANE, ZONE 1, NAD83(CORS96), IN US SURVEY FEET, BASED ON A STATIC GPS NETWORK HOLDING THE NGS EPOCH 2003.00 CORS ARP VALUES FIXED FOR 'JUNEAU WAAS 1" (NGS PID A4430)', 'BIORKA ISLAND 1" (NGS PID A5022) AND 'LEVEL ISLAND 1" (NGS PID A4430). HARBOR CONTROL WAS TRANSFORMED INTO THE NGS EPOCH 2003.00 DATUM HOLDING USCGS SBC 'YOU 1927' AS N 1,764,322.55 E 2,672,497.52 AND USACE DOMEID BC 'SUMMIT-2 2001' AS N 1,772,192.79 E 2,671,484.26.
  - VERTICAL CONTROL IS MEAN-LOWER-LOW-WATER DATUM, IN US SURVEY FEET (MLLW=0.0'). HOLDING USCGS 'BENCH MARK 1' 1929 AS 17.85'. TIDAL DATUM IS BASED ON NGS TIDAL BENCH MARK SHEET FOR 'THE SUMMIT, N.W. SUMMIT ISLAND ALASKA', STATION ID 9451349, TIDAL EPOCH 1983-2001, PUBLISHED JULY 2, 2007.
  - SOUNDINGS ARE IN US SURVEY FEET AND ARE MINUS UNLESS INDICATED OTHERWISE.
  - THIS DRAWING INDICATES GENERAL CONDITIONS AT THE TIME OF SURVEY.
  - SURVEY DATA ACQUISITION WAS PERFORMED MAY 10-13, 2007. SOUNDINGS WERE COLLECTED USING AN ODOM HYDROTRAC PRECISION DEPTH SOUNDER WITH A 200KHZ, 3 DEGREE BEAM-WIDTH, SINGLE-BEAM TRANSDUCER. POSITIONING WAS PROVIDED USING A TRIMBLE 4000SSI RECEIVER OPERATING ON RTCM CORRECTIONS BROADCAST FROM A TRIMBLE 4000SSI RECEIVER SET AT USACE SBC 'SUMMIT-1 2001'. NAVIGATION, DATA COLLECTION AND DATA PROCESSING WERE PERFORMED USING HYPACK MAK INTEGRATED SOFTWARE. SOUNDINGS WERE CORRECTED FOR TIDE USING THE RTK DATA. REDUNDANT WATER LEVEL DATA COLLECTED USING A DAA WATERLOG H-5000L RECORDER AND H-310 PRESSURE TRANSDUCER SET BY TERRASOFT, LTD THIS SURVEY. HORIZONTAL CONTROL WAS SURVEYED USING CONVENTIONAL EQUIPMENT AND TECHNIQUES. VERTICAL CONTROL WAS SURVEYED USING OPTICAL INSTRUMENTS AND DIFFERENTIAL LEVELING TECHNIQUES. PLANIMETRIC FEATURES WERE SURVEYED USING OPTICAL INSTRUMENTS AND CONVENTIONAL LAND-SURVEYING TECHNIQUES.
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  - CONTROL MONUMENTS OF RECORD WHICH WERE NOT SURVEYED ARE DENOTED IN THE CONTROL TABLE WITH AN ASTERISK (\*). THESE MONUMENTS, PLAT FEATURES, PROJECT LIMITS AND ASSOCIATED VALUES WERE CONVERTED FROM NAD83(CORPSCON) TO NAD83(CORS96) USING A FIXED-SCALE, LEAST SQUARES TRANSFORMATION WITHIN TRIMBLE GEOMATICS OFFICE (V1.60).

**CONTROL DATA**

STATION	NORTHING	EASTING	ELEV.	DESCRIPTION
*FAST 1927	1,769,882.42	2,672,950.21	-	SEARCHED FOR, LOST (REMOVE)
MOST 1927	1,767,184.21	2,672,497.52	10.95	3.25" USCGS SBC HYDROGRAPHIC STATION
YOU 1927	1,764,322.55	2,673,005.64	16.65	3.25" USCGS SBC HYDROGRAPHIC STATION
*ABLE 1958	1,772,781.08	2,672,206.09	-	SEARCHED FOR, LOST (REMOVE)
*BAKER 1958	1,770,387.60	2,672,875.82	16.50	NOT SEARCHED FOR
CHARLIE 1958	1,770,237.18	2,672,408.92	16.77	BRIDGE SPIKE IN BEDROCK
DOG 1958	1,768,794.28	2,672,899.38	17.01	5/8" CONC. FILLED, GALV. PIPE W/ TACK
*EASY 1958	1,768,221.13	2,672,442.11	-	NOT SEARCHED FOR
*FOX 1958	1,767,196.06	2,672,511.32	15.88	OBOLITERATED (UNDER NAV AID FOUNDATION)
GEORGE 1958	1,766,531.37	2,671,774.80	18.39	BRIDGE SPIKE IN BEDROCK
*RKY-3 1973	1,767,012.35	2,672,541.29	15.98	SEARCHED FOR, LOST (REMOVE)
*RKY-4 1973	1,767,470.01	2,672,575.32	13.31	SEARCHED FOR, LOST (REMOVE)
R-6 1977	1,770,967.42	2,673,044.51	-	USACE SBC, CAP NOT GROUDED
R-7 1977	1,770,129.56	2,672,241.98	17.15	USACE SBC, CAP NOT GROUDED
*R-8 1977	1,770,045.39	2,672,872.62	19.57	USACE SBC, CAP NOT GROUDED
R-9 1977	1,768,795.03	2,672,903.85	17.67	USACE SBC, CAP NOT GROUDED
SUMMIT-1 2001	1,769,152.43	2,672,939.01	17.85	3.25" DBC
SUMMIT-2 2001	1,772,192.79	2,671,484.38	16.48	2.35" DBC
SUMMIT-3 2007	1,770,295.49	2,672,487.76	17.89	3.25" DBC, SET THIS SURVEY
1349-5 2006	1,770,667.49	2,672,034.91	16.37	3.25" NOS BC, TIED THIS SURVEY
RKY-2 1973/2007	1,766,666.54	2,671,823.30	19.09	USACE SBC, RESET THIS SURVEY

CONTRACT NO. W911KB-04-D-0006-0016  
 CONTRACTOR TERRA SURVEYS, LLC  
 CITY PALMER STATE ALASKA

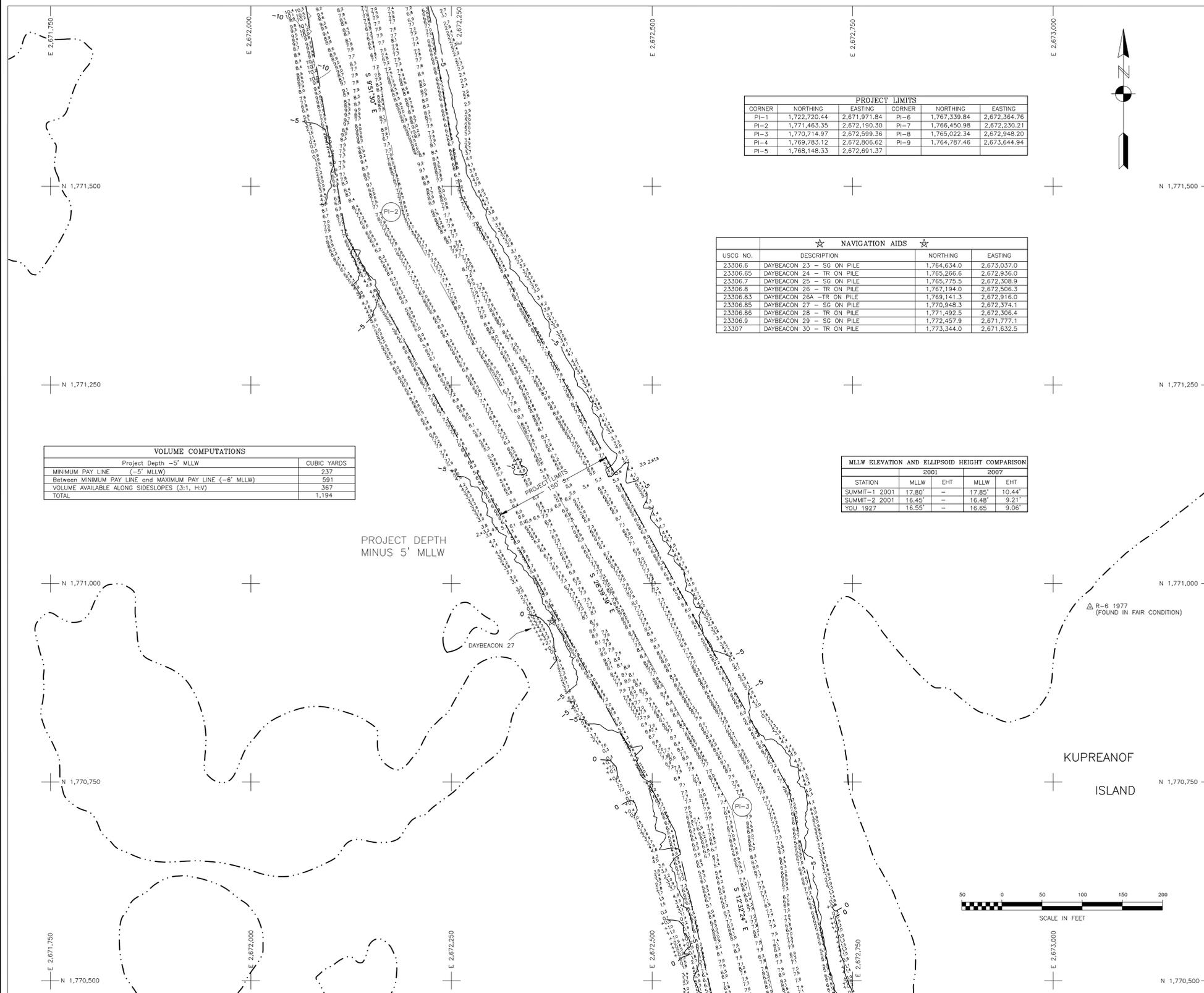
ALASKA DISTRICT  
 CORPS OF ENGINEERS  
 ANCHORAGE, ALASKA

SURVEYED: \_\_\_\_\_  
 DRAWN: LES  
 CHECKED: KDW  
 SUBMITTED: \_\_\_\_\_

ROCKY PASS, KEKU STRAIT, ALASKA  
 THE SUMMIT  
 PROJECT CONDITION SURVEY  
 MAY 10-13, 2007

RECOMMENDED: \_\_\_\_\_ APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_  
 PROJECT MANAGER CHIEF OPERATIONS-BUSINESS BRANCH

SURVEY NO. 2474-07 SCALE: 1" = 50'  
 SHEET 1 OF 7

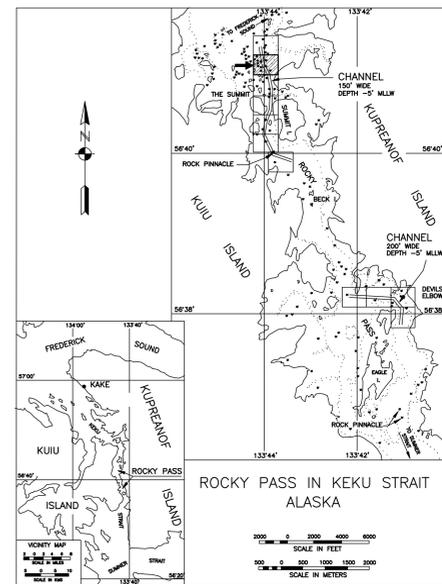


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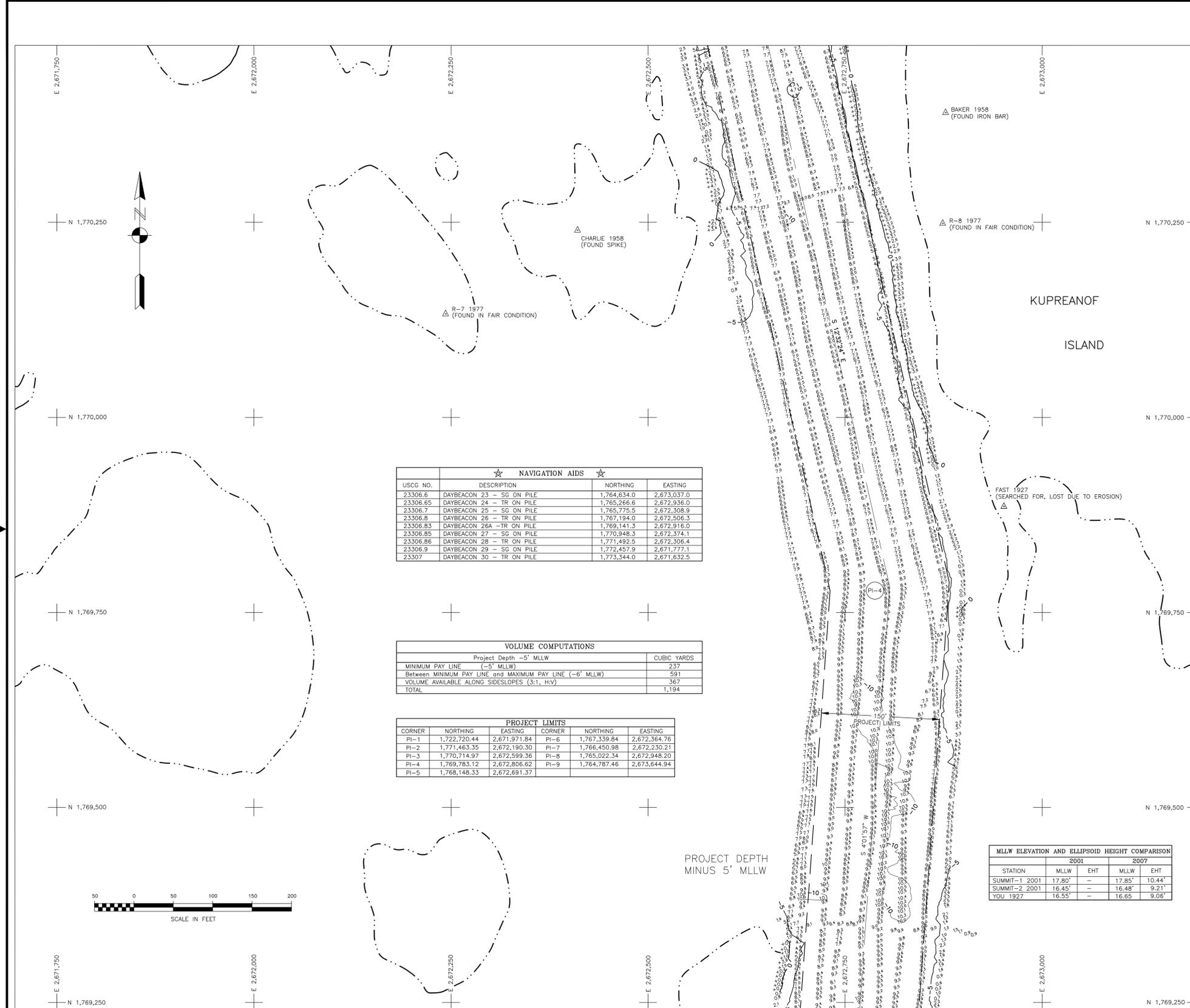
SURVEYED: CDK/CRR  
 DRAWN: LES  
 CHECKED: KDW  
 SUBMITTED:

ROCKY PASS, KEKU STRAIT, ALASKA  
 THE SUMMIT  
 PROJECT CONDITION SURVEY  
 MAY 10-13, 2007

RECOMMENDED: APPROVED: DATE:  
 PROJECT MANAGER: CHIEF OPERATING-BUSINESS BRANCH:

SURVEY NO. 2474-07 SCALE: 1"= 50'  
 SHEET 2 OF 7



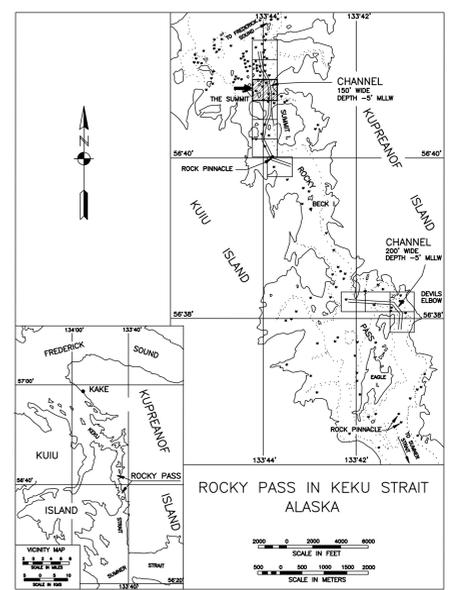


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STATION	NORTHING	EASTING	DESCRIPTION
*FAST 1927	1,769,882.42	2,672,950.21	SEARCHED FOR, LOST (REMOVE)
MOST 1927	1,767,184.21	2,672,497.52	10.95 3.25" USCGS SBC HYDROGRAPHIC STATION
YOU 1927	1,764,322.55	2,673,005.64	16.65 3.25" USCGS SBC HYDROGRAPHIC STATION
*ABLE 1958	1,772,781.08	2,672,206.09	SEARCHED FOR, LOST (REMOVE)
*BAKER 1958	1,770,387.60	2,672,875.82	16.50 NOT SEARCHED FOR
CHARLIE 1958	1,770,237.18	2,672,408.92	16.77 BRIDGE SPIKE IN BEDROCK
DOG 1958	1,768,794.28	2,672,899.38	17.01 5/8" CONC. FILLED, GALV. PIPE W/ TACK
*EASY 1958	1,768,221.13	2,672,442.11	NOT SEARCHED FOR
*FOX 1958	1,767,196.06	2,672,511.32	15.88 OBLITERATED (UNDER NAV AID FOUNDATION)
GEORGE 1958	1,766,531.37	2,671,774.80	18.38 BRIDGE SPIKE IN BEDROCK
*RKY-3 1973	1,767,012.35	2,672,541.29	15.98 SEARCHED FOR, LOST (REMOVE)
*RKY-4 1973	1,767,470.01	2,672,575.32	13.31 SEARCHED FOR, LOST (REMOVE)
R-6 1977	1,770,967.42	2,673,044.51	USACE SBC, CAP NOT GROUDED
R-7 1977	1,770,129.56	2,672,241.98	17.15 USACE SBC, CAP NOT GROUDED
*R-8 1977	1,770,245.29	2,672,872.62	19.57 USACE SBC, CAP NOT GROUDED
R-9 1977	1,768,795.03	2,672,903.85	17.67 USACE SBC, CAP NOT GROUDED
SUMMIT-1 2001	1,769,152.43	2,672,939.01	17.85 3.25" DBC
SUMMIT-2 2001	1,772,192.79	2,671,484.38	16.48 2.35" DBC
SUMMIT-3 2007	1,770,295.49	2,672,487.76	17.89 3.25" DBC, SET THIS SURVEY
1349-5 2006	1,770,667.49	2,672,034.91	16.37 3.25" NOS BC, TIED THIS SURVEY
RKY-2 1973/2007	1,766,666.54	2,671,823.30	19.09 USACE SBC, RESET THIS SURVEY

CONTRACT NO. W911KB-04-D-0006-0016  
 CONTRACTOR TERRA SURVEYS, LLC  
 CITY PALMER STATE ALASKA

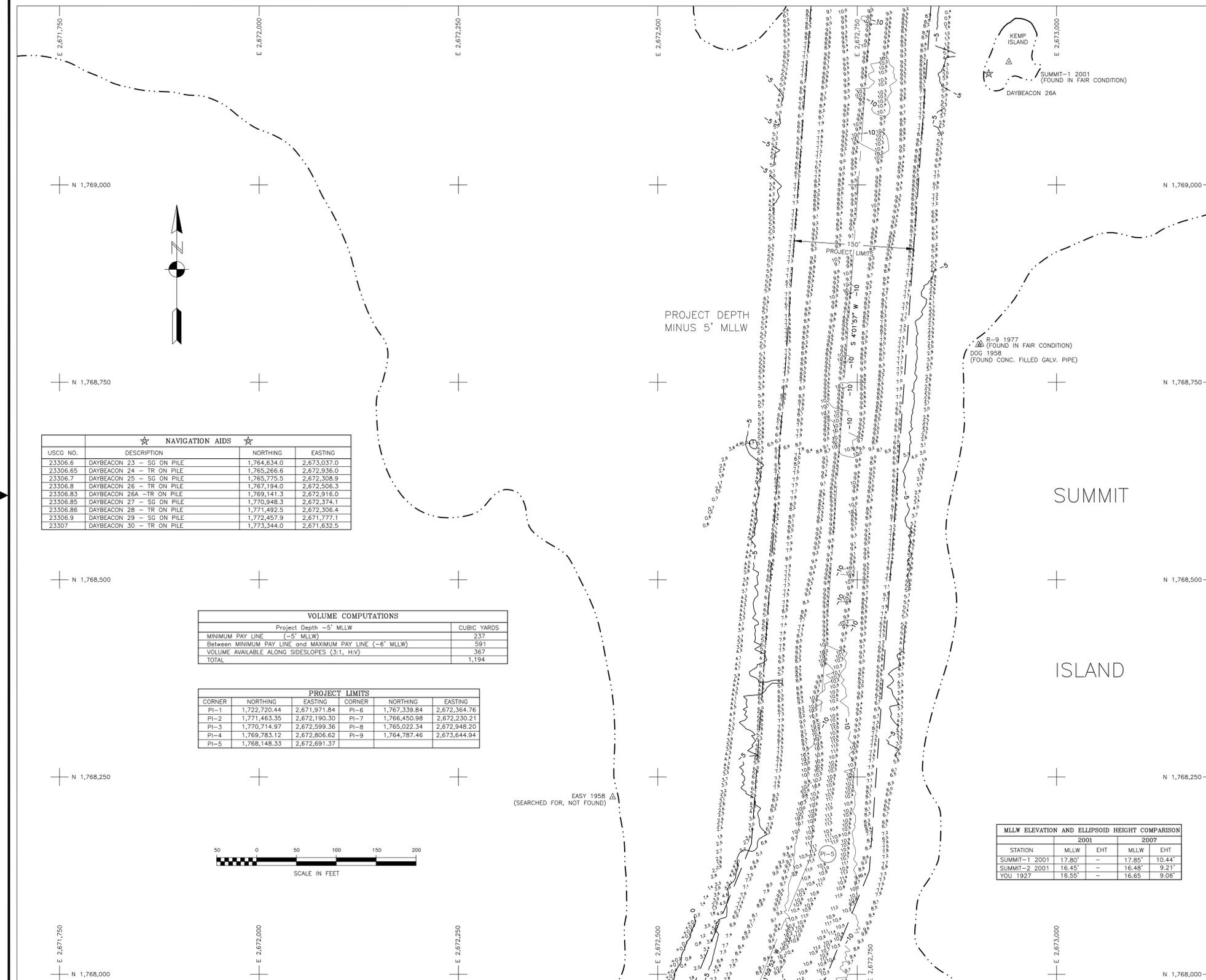
ALASKA DISTRICT  
 CORPS OF ENGINEERS  
 ANCHORAGE, ALASKA

SURVEYED: CDK/CRR  
 DRAWN: LES  
 CHECKED: KDW  
 SUBMITTED:

ROCKY PASS, KEKU STRAIT, ALASKA  
 THE SUMMIT  
 PROJECT CONDITION SURVEY  
 MAY 10-13, 2007

RECOMMENDED: APPROVED: DATE:  
 PROJECT MANAGER: CHIEF OPERATING-ENGINEER BUNICH

SURVEY NO. 2474-07  
 SCALE: 1" = 50'  
 SHEET 3 OF 7



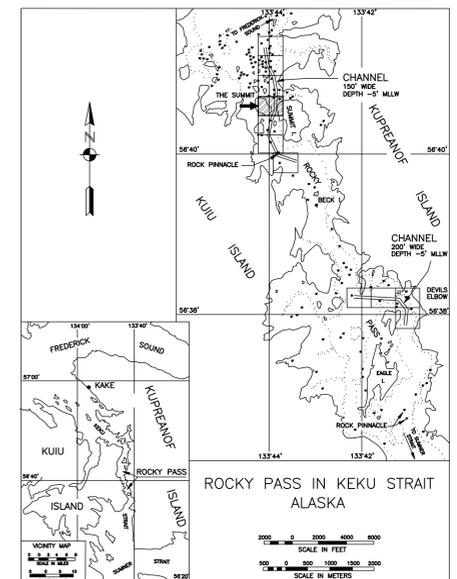
NAVIGATION AIDS			
USCG NO.	DESCRIPTION	NORTHING	EASTING
23306.6	DAYBEACON 23 - SG ON PILE	1,764,634.0	2,673,037.0
23306.65	DAYBEACON 24 - TR ON PILE	1,765,266.6	2,672,936.0
23306.7	DAYBEACON 25 - SG ON PILE	1,765,775.5	2,672,308.9
23306.8	DAYBEACON 26 - TR ON PILE	1,767,194.0	2,672,506.3
23306.83	DAYBEACON 26A - TR ON PILE	1,769,141.3	2,672,916.0
23306.85	DAYBEACON 27 - SG ON PILE	1,770,948.3	2,672,374.1
23306.86	DAYBEACON 28 - TR ON PILE	1,771,492.5	2,672,306.4
23306.9	DAYBEACON 29 - SG ON PILE	1,772,457.9	2,671,777.1
23307	DAYBEACON 30 - TR ON PILE	1,773,344.0	2,671,632.5

VOLUME COMPUTATIONS	
Project Depth -5' MLLW	CUBIC YARDS
MINIMUM PAY LINE (-5' MLLW)	237
BETWEEN MINIMUM PAY LINE and MAXIMUM PAY LINE (-6' MLLW)	591
VOLUME AVAILABLE ALONG SIDESLOPES (3:1, HV)	367
TOTAL	1,194

PROJECT LIMITS					
CORNER	NORTHING	EASTING	CORNER	NORTHING	EASTING
PI-1	1,722,720.44	2,671,971.84	PI-6	1,767,339.84	2,672,364.76
PI-2	1,771,463.35	2,672,190.30	PI-7	1,766,450.98	2,672,230.21
PI-3	1,770,714.97	2,672,599.36	PI-8	1,765,022.34	2,672,948.20
PI-4	1,769,783.12	2,672,806.62	PI-9	1,764,787.46	2,673,644.94
PI-5	1,768,148.33	2,672,691.37			



MLLW ELEVATION AND ELLIPSOID HEIGHT COMPARISON				
STATION	2001		2007	
	MLLW	EHT	MLLW	EHT
SUMMIT-1 2001	17.80'	-	17.85'	10.44'
SUMMIT-2 2001	16.45'	-	16.48'	9.21'
YOU 1927	16.55'	-	16.65'	9.06'



- NOTES**
- HORIZONTAL CONTROL IS ALASKA STATE PLANE, ZONE 1, NAD83(CORS96), IN US SURVEY FEET, BASED ON A STATIC GPS NETWORK HOLDING THE NGS EPOCH 2003.00 CORS ARP VALUES FIXED FOR JUNEAU WAS 1" (NGS PID DF437), "BIORKA ISLAND 1" (NGS PID A5022) AND "LEVEL ISLAND 1" (NGS PID A4430). HARBOR CONTROL WAS TRANSFORMED INTO THE NGS EPOCH 2003.00 DATUM HOLDING USCGS SBC "YOU 1927" AS N 1,764,322.55 E 2,672,497.52 AND USACE DOME BC "SUMMIT-2 2001" AS N 1,772,192.79 E 2,671,484.38.
  - VERTICAL CONTROL IS MEAN-LOWER-LOW-WATER DATUM, IN US SURVEY FEET (MLLW=0.0') HOLDING USCGS "BENCH MARK 1" 1929 AS 17.88'. TIDAL DATUM IS BASED ON NOS TIDAL BENCH MARK SHEET FOR "THE SUMMIT, N.W. SUMMIT ISLAND ALASKA", STATION ID 9451349, TIDAL EPOCH 1983-2001, PUBLISHED JULY 2, 2007.
  - SOUNDINGS ARE IN US SURVEY FEET AND ARE MINUS UNLESS INDICATED OTHERWISE.
  - THIS DRAWING INDICATES GENERAL CONDITIONS AT THE TIME OF SURVEY.
  - SURVEY DATA ACQUISITION WAS PERFORMED MAY 10-13, 2007. SOUNDINGS WERE COLLECTED USING AN ODOM HYDROTRAC PRECISION DEPTH SOUNDER WITH A 200KHZ, 3 DEGREE BEAM-WIDTH, SINGLE-BEAM TRANSDUCER. POSITIONING WAS PROVIDED USING A TRIMBLE 4000SSI RECEIVER OPERATING ON RTCM CORRECTIONS BROADCAST FROM A TRIMBLE 4000SSC RECEIVER SET AT USACE SBC "SUMMIT-1 2001". NAVIGATION, DATA COLLECTION AND DATA PROCESSING WERE PERFORMED USING HYPACK MAX INTEGRATED SOFTWARE. SOUNDINGS WERE CORRECTED FOR TIDE USING 1/2 RTK DATA. REDUNDANT WATER LEVEL DATA COLLECTED USING A DVA WATERLOG H-5000K REORDERER AND H-310 PRESSURE TRANSDUCER SET BY TERRASOND, LTD THIS SURVEY. HORIZONTAL CONTROL WAS SURVEYED USING CONVENTIONAL EQUIPMENT AND TECHNIQUES. VERTICAL CONTROL WAS SURVEYED USING OPTICAL INSTRUMENTS AND DIFFERENTIAL LEVELING TECHNIQUES. PLANIMETRIC FEATURES WERE SURVEYED USING OPTICAL INSTRUMENTS AND CONVENTIONAL LAND-SURVEYING TECHNIQUES.
  - STATIC GPS SESSIONS OF 2+ HOURS WERE OBSERVED AT "YOU 1927", "SUMMIT-1 2001" AND "SUMMIT-2 2001". ELLIPSOID HEIGHTS WERE PROCESSED USING THE NGS ONLINE POSITIONING USER SERVICE (OPUS) HOLDING NAD83 (CORS96), EPOCH 2003.00 VALUES FOR "BIORKA ISLAND 1 CORS ARP" (NGS PID A5022), "LEVEL ISLAND 1 CORS ARP" (NGS PID A4430) AND "JUNEAU WAS 1 CORS ARP" (NGS PID DF4367). ELLIPSOID HEIGHTS AND MLLW ELEVATIONS ARE SHOWN IN THE "MLLW ELEVATIONS AND ELLIPSOID HEIGHT COMPARISONS" TABLE. ALL MLLW ELEVATIONS ARE BASED ON THE MOST CURRENT TIDAL DATUM AND EPOCH AS DESCRIBED IN NOTE 2.
  - CONTROL MONUMENTS OF RECORD WHICH WERE NOT SURVEYED ARE DENOTED IN THE CONTROL TABLE WITH AN ASTERISK (\*). THESE MONUMENTS, PLAT FEATURES, PROJECT LIMITS AND ASSOCIATED VALUES WERE CONVERTED FROM NAD83(CORPSCON) TO NAD83(CORS96) USING A FIXED-SCALE, LEAST SQUARES TRANSFORMATION WITHIN TRIMBLE GEOMATICS OFFICE (V1.60).

CONTROL DATA			
STATION	NORTHING	EASTING	DESCRIPTION
*FAST 1927	1,769,882.42	2,672,950.21	SEARCHED FOR, LOST (REMOVE)
MOST 1927	1,767,184.21	2,672,497.52	10.95 3.25" USCGS SBC HYDROGRAPHIC STATION
YOU 1927	1,764,322.55	2,673,005.64	16.65 3.25" USCGS SBC HYDROGRAPHIC STATION
*ABLE 1958	1,772,781.08	2,672,206.09	SEARCHED FOR, LOST (REMOVE)
*BAKER 1958	1,770,387.60	2,672,875.82	16.50 NOT SEARCHED FOR
CHARLIE 1958	1,770,237.18	2,672,408.92	16.77 BRIDGE SPIKE IN BEDROCK
DOG 1958	1,768,794.28	2,672,899.38	17.01 5/8" CONC. FILLED, GALV. PIPE W/ TACK
*EASY 1958	1,768,221.13	2,672,442.11	NOT SEARCHED FOR
*FOX 1958	1,767,196.06	2,672,511.32	15.88 OBLITERATED (UNDER NAV AID FOUNDATION)
GEORGE 1958	1,766,531.37	2,671,774.80	18.39 BRIDGE SPIKE IN BEDROCK
*HAYY-3 1973	1,767,012.35	2,672,541.29	15.98 SEARCHED FOR, LOST (REMOVE)
*RKY-4 1973	1,767,470.01	2,672,575.32	13.31 SEARCHED FOR, LOST (REMOVE)
R-6 1977	1,770,967.42	2,673,044.51	USACE SBC, CAP NOT GROUTED
R-7 1977	1,770,129.56	2,672,241.98	17.15 USACE SBC, CAP NOT GROUTED
R-8 1977	1,770,245.29	2,672,872.62	19.57 USACE SBC, CAP NOT GROUTED
R-9 1977	1,768,795.03	2,672,903.85	17.67 USACE SBC, CAP NOT GROUTED
SUMMIT-1 2001	1,769,152.43	2,672,939.01	17.85 3.25" DBC
SUMMIT-2 2001	1,772,192.79	2,671,484.38	16.48 2.35" DBC
SUMMIT-3 2007	1,770,295.49	2,672,487.76	17.89 3.25" DBC, SET THIS SURVEY
1349-5 2006	1,770,667.49	2,672,034.91	16.37 3.25" NOS BC, TIED THIS SURVEY
RKY-2 1973/2007	1,766,666.54	2,671,823.30	19.09 USACE SBC, RESET THIS SURVEY

CONTRACT NO. W911KB-04-D-0006-0016  
 CONTRACTOR TERRA SURVEYS, LLC  
 CITY PALMER STATE ALASKA

ALASKA DISTRICT  
 CORPS OF ENGINEERS  
 ANCHORAGE, ALASKA

SURVEYED: CDK/CRR  
 DRAWN: LES  
 CHECKED: KDW  
 SUBMITTED:

ROCKY PASS, KEKU STRAIT, ALASKA  
 THE SUMMIT  
 PROJECT CONDITION SURVEY  
 MAY 10-13, 2007

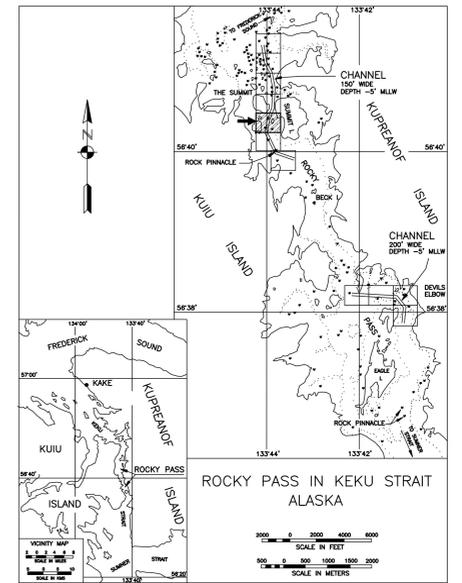
RECOMMENDED: PROJECT MANAGER CHIEF OPERATIONS-HEADQUARTERS BRANCH DATE:  
 APPROVED: SCALE: 1"= 50'  
 SURVEY NO. 2474-07 SHEET 4 OF 7



VOLUME COMPUTATIONS		
Project Depth -5' MLLW	CUBIC YARDS	
MINIMUM PAY LINE (-5' MLLW)	237	
BETWEEN MINIMUM PAY LINE AND MAXIMUM PAY LINE (-6' MLLW)	591	
VOLUME AVAILABLE ALONG SIDESLOPES (3:1, H:V)	367	
TOTAL	1,194	

PROJECT LIMITS					
CORNER	NORTHING	EASTING	CORNER	NORTHING	EASTING
PI-1	1,722,720.44	2,671,971.84	PI-6	1,767,339.84	2,672,364.76
PI-2	1,771,463.35	2,672,190.30	PI-7	1,766,450.98	2,672,230.21
PI-3	1,770,714.97	2,672,589.36	PI-8	1,765,022.34	2,672,948.20
PI-4	1,769,783.12	2,672,806.62	PI-9	1,764,767.46	2,673,644.34
PI-5	1,768,148.33	2,672,691.37			

MLW ELEVATION AND ELLIPSOID HEIGHT COMPARISON					
STATION	2001		2007		EHT
	MLW	EHT	MLW	EHT	
SUMMIT-1 2001	17.80'	-	17.85'	10.44'	
SUMMIT-2 2001	16.45'	-	16.48'	9.21'	
YOU 1927	16.55'	-	16.65'	9.06'	



NOTES

- HORIZONTAL CONTROL IS ALASKA STATE PLANE, ZONE 1, NAD83(CORS96), IN US SURVEY FEET, BASED ON A STATIC GPS NETWORK HOLDING THE NGS EPOCH 2003.00 CORS ARP VALUES FIXED FOR JUNEAU WAAS 1" (NGS PID DF4367), BIORKA ISLAND 1" (NGS PID A5022) AND LEVEL ISLAND 1" (NGS PID A4430). HARBOR CONTROL WAS TRANSFORMED INTO THE NGS EPOCH 2003.00 DATUM HOLDING USCGS SBC "YOU 1927" AS N 1,764,322.55 E 2,672,497.52 AND USACE DOME BC "SUMMIT-2 2001" AS N 1,772,192.79 E 2,267,148.38.
- VERTICAL CONTROL IS MEAN-LOWER-LOW-WATER DATUM, IN US SURVEY FEET (MLLW=0.0') HOLDING USCGS "BENCH MARK 1" 1929 AS 17.88'. TIDAL DATUM IS BASED ON NOS TIDAL BENCH MARK SHEET "THE SUMMIT, N.W. SUMMIT ISLAND ALASKA", STATION ID 9451349, TIDAL EPOCH 1983-2001, PUBLISHED JULY 2, 2007.
- SOUNDINGS ARE IN US SURVEY FEET AND ARE MINUS UNLESS INDICATED OTHERWISE.
- THIS DRAWING INDICATES GENERAL CONDITIONS AT THE TIME OF SURVEY.
- SURVEY DATA ACQUISITION WAS PERFORMED MAY 10-13, 2007. SOUNDINGS WERE COLLECTED USING AN ODOM HYDROTRAC PRECISION DEPTH SOUNDER WITH A 200KHZ, 3 DEGREE BEAM-WIDTH, SINGLE-BEAM TRANSDUCER. POSITIONING WAS PROVIDED USING A TRIMBLE 4000SSI RECEIVER OPERATING ON RTCM CORRECTIONS BROADCAST FROM A TRIMBLE 4000SSSE RECEIVER SET AT USACE SBC "SUMMIT-1 2001". NAVIGATION, DATA COLLECTION AND DATA PROCESSING WERE PERFORMED USING HYDRAC MAX INTEGRATED SOFTWARE. SOUNDINGS WERE CORRECTED FOR TIDE USING 1HZ RTK DATA. REDUNDANT WATER LEVEL DATA COLLECTED USING A DAA WATERLOG H-500XL RECORDER AND H-510 PRESSURE TRANSDUCER SET BY TERRASOUND. LTD THIS SURVEY. HORIZONTAL CONTROL WAS SURVEYED USING CONVENTIONAL EQUIPMENT AND TECHNIQUES. VERTICAL CONTROL WAS SURVEYED USING OPTICAL INSTRUMENTS AND DIFFERENTIAL LEVELING TECHNIQUES. PLANNIMETRIC FEATURES WERE SURVEYED USING OPTICAL INSTRUMENTS AND CONVENTIONAL LAND-SURVEYING TECHNIQUES.
- STATIC GPS SESSIONS OF 2+ HOURS WERE OBSERVED AT "YOU 1927", "SUMMIT-1 2001" AND "SUMMIT-2 2001". ELLIPSOID HEIGHTS WERE PROCESSED USING THE NGS ONLINE POSITIONING USER SERVICE (OPUS) HOLDING NAD83 (CORS96), EPOCH 2003.00 VALUES FOR "BIORKA ISLAND 1" CORS ARP" (NGS PID DF4367), "LEVEL ISLAND 1" CORS ARP" (NGS PID A4430) AND "JUNEAU WAAS 1" CORS ARP" (NGS PID A5022). ELLIPSOID HEIGHTS AND MLLW ELEVATIONS ARE SHOWN IN THE "MLW ELEVATIONS AND ELLIPSOID HEIGHT COMPARISONS" TABLE. ALL MLLW ELEVATIONS ARE BASED ON THE MOST CURRENT TIDAL DATUM AND EPOCH AS DESCRIBED IN NOTE 2.
- CONTROL MONUMENTS OF RECORD WHICH WERE NOT SURVEYED ARE DENOTED IN THE CONTROL TABLE WITH AN ASTERISK (\*). THESE MONUMENTS, PLAT FEATURES, PROJECT LIMITS AND ASSOCIATED VALUES WERE CONVERTED FROM NAD83(CORS96) TO NAD83(CORS96) USING A FIXED-SCALE, LEAST SQUARES TRANSFORMATION WITHIN TRIMBLE GEOMATICS OFFICE (V1.60).

NAVIGATION AIDS			
USCG NO.	DESCRIPTION	NORTHING	EASTING
23306.6	DAYBEACON 23 - SG ON PILE	1,764,634.0	2,673,037.0
23306.65	DAYBEACON 24 - TR ON PILE	1,765,266.6	2,672,936.0
23306.7	DAYBEACON 25 - SG ON PILE	1,765,775.5	2,672,308.9
23306.8	DAYBEACON 26 - TR ON PILE	1,767,194.0	2,672,506.3
23306.83	DAYBEACON 26A - TR ON PILE	1,769,141.3	2,672,916.0
23306.85	DAYBEACON 27 - SG ON PILE	1,770,948.3	2,672,374.1
23306.86	DAYBEACON 28 - TR ON PILE	1,771,492.5	2,672,306.4
23306.9	DAYBEACON 29 - SG ON PILE	1,772,451.9	2,671,771.1
23307	DAYBEACON 30 - TR ON PILE	1,773,344.0	2,671,632.5

CONTROL DATA				
STATION	NORTHING	EASTING	ELEV.	DESCRIPTION
*FAST 1927	1,769,882.42	2,672,950.21	-	SEARCHED FOR, LOST (REMOVE)
*MOST 1927	1,767,184.21	2,672,487.52	10.95	3.25" USCGS SBC HYDROGRAPHIC STATION
YOU 1927	1,764,322.55	2,673,005.64	16.65	3.25" USCGS SBC HYDROGRAPHIC STATION
*MABLE 1958	1,772,781.08	2,672,206.09	-	SEARCHED FOR, LOST (REMOVE)
*BAKER 1958	1,770,387.60	2,672,875.82	16.50	NOT SEARCHED FOR
CHARLIE 1958	1,770,237.18	2,672,408.92	16.77	BRIDGE SPIKE IN BEDROCK
DOG 1958	1,766,794.28	2,672,899.38	17.01	5.0' CONC. FILLED GALV. PIPE W/ TACK
*EASY 1958	1,768,221.13	2,672,442.11	-	NOT SEARCHED FOR
*FOX 1958	1,767,196.06	2,672,511.32	15.88	OBOLTERATED (UNDER NAV AID FOUNDATION)
GEORGE 1958	1,766,531.37	2,671,774.80	18.39	BRIDGE SPIKE IN BEDROCK
*RKY-3 1973	1,767,012.35	2,672,541.29	15.98	SEARCHED FOR, LOST (REMOVE)
*RKY-4 1973	1,767,470.01	2,672,575.32	13.31	SEARCHED FOR, LOST (REMOVE)
R-6 1977	1,770,967.42	2,673,044.51	-	USACE SBC, CAP NOT GROUDED
R-7 1977	1,770,129.56	2,672,241.98	17.15	USACE SBC, CAP NOT GROUDED
*R-8 1977	1,770,245.29	2,672,872.62	19.57	USACE SBC, CAP NOT GROUDED
R-9 1977	1,768,795.03	2,672,903.85	17.67	USACE SBC, CAP NOT GROUDED
SUMMIT-1 2001	1,769,152.43	2,672,939.01	17.85	3.25" DBC
SUMMIT-2 2001	1,772,192.79	2,671,484.38	16.48	2.35" DBC
SUMMIT-3 2007	1,770,295.49	2,672,487.76	17.89	3.25" DBC, SET THIS SURVEY
1349-5 2006	1,770,667.49	2,672,034.91	16.37	3.25" NOS BC, TIED THIS SURVEY
RKY-2 1973/2007	1,766,666.54	2,671,823.30	19.09	USACE SBC, RESET THIS SURVEY

CONTRACT NO. W911KB-04-D-0006-0016

CONTRACTOR TERRA SURVEYS, LLC  
CITY PALMER STATE ALASKA

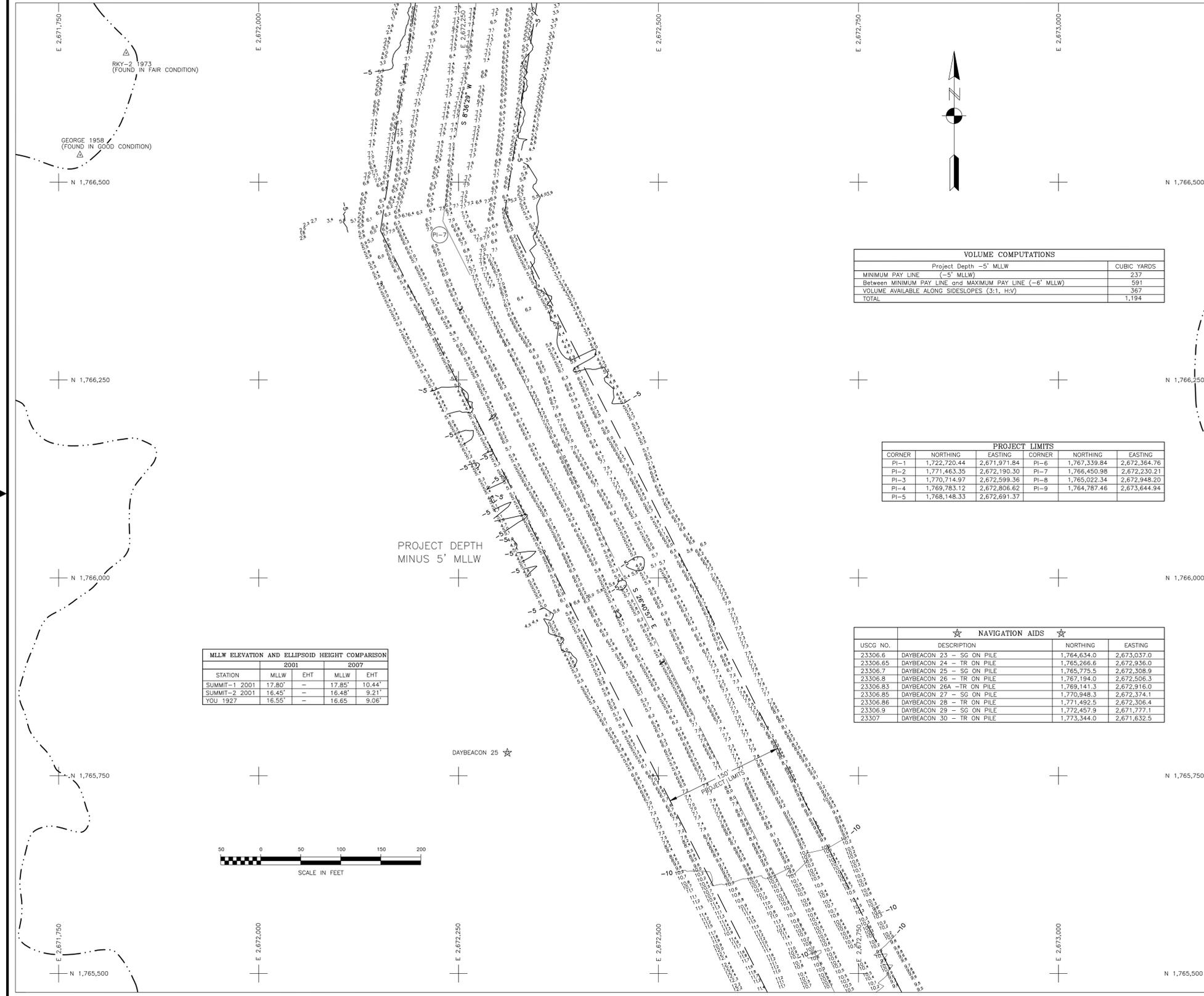
ALASKA DISTRICT  
CORPS OF ENGINEERS  
ANCHORAGE, ALASKA

SURVEYED: CDK/CRR  
DRAWN: LES  
CHECKED: KDW  
SUBMITTED:

ROCKY PASS, KEKU STRAIT, ALASKA  
THE SUMMIT  
PROJECT CONDITION SURVEY  
MAY 10-13, 2007

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

SURVEY NO. 2474-07  
SCALE: 1"= 50'  
SHEET 5 OF 7

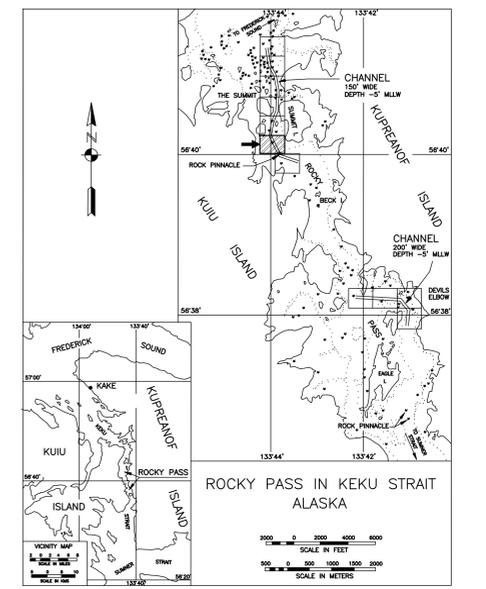


VOLUME COMPUTATIONS	
Project Depth -5' MLLW (-5' MLLW)	237
MINIMUM PAY LINE (-5' MLLW)	591
Between MINIMUM PAY LINE and MAXIMUM PAY LINE (-6' MLLW)	367
VOLUME AVAILABLE ALONG SIDESLOPES (3:1, HV)	1,194
TOTAL	1,194

PROJECT LIMITS					
CORNER	NORTHING	EASTING	CORNER	NORTHING	EASTING
PI-1	1,722,720.44	2,671,971.84	PI-6	1,767,339.84	2,672,364.76
PI-2	1,771,463.35	2,672,190.30	PI-7	1,766,450.98	2,672,230.21
PI-3	1,770,714.97	2,672,599.36	PI-8	1,765,022.34	2,672,948.20
PI-4	1,769,783.12	2,672,806.62	PI-9	1,764,787.46	2,673,644.94
PI-5	1,768,148.33	2,672,691.37			

NAVIGATION AIDS			
USCG NO.	DESCRIPTION	NORTHING	EASTING
23306.6	DAYBEACON 23 - SG ON PILE	1,764,634.0	2,673,037.0
23306.65	DAYBEACON 24 - TR ON PILE	1,765,266.6	2,672,936.0
23306.7	DAYBEACON 25 - SG ON PILE	1,765,775.5	2,672,308.9
23306.8	DAYBEACON 26 - TR ON PILE	1,767,194.0	2,672,506.3
23306.83	DAYBEACON 26A - TR ON PILE	1,769,141.3	2,672,916.0
23306.85	DAYBEACON 27 - SG ON PILE	1,770,948.3	2,672,374.1
23306.86	DAYBEACON 28 - TR ON PILE	1,771,492.5	2,672,306.4
23306.9	DAYBEACON 29 - SG ON PILE	1,772,457.9	2,671,777.1
23307	DAYBEACON 30 - TR ON PILE	1,773,344.0	2,671,632.5

MLLW ELEVATION AND ELLIPSOID HEIGHT COMPARISON						
STATION	2001			2007		
	MLLW	EHT	MLLW	EHT	MLLW	EHT
SUMMIT-1 2001	17.80'	--	17.85'	10.44'		
SUMMIT-2 2001	16.45'	--	16.48'	9.21'		
YOU 1927	16.55'	--	16.65'	9.06'		



- NOTES**
- HORIZONTAL CONTROL IS ALASKA STATE PLANE, ZONE 1, NAD83(CORS96), IN US SURVEY FEET, BASED ON A STATIC GPS NETWORK HOLDING THE NGS EPOCH 2003.00 CORS ARP VALUES FIXED FOR "JUNEAU WAAS 1" (NGS PID DF4367), "BIORKA ISLAND 1" (NGS PID A5022) AND "LEVEL ISLAND 1" (NGS PID A4430). HARBOR CONTROL WAS TRANSFORMED INTO THE NGS EPOCH 2003.00 DATUM HOLDING USCGS SBC "YOU 1927" AS N 1,764,322.55 E 2,672,497.52 AND USACE DOMED BC "SUMMIT-2 2001" AS N 1,772,192.79 E 2,671,484.38.
  - VERTICAL CONTROL IS MEAN-LOWER-LOW-WATER DATUM, IN US SURVEY FEET (MLLW=0.0') HOLDING USCGS "BENCH MARK 1" 1928 AS 17.88'. TIDAL DATUM IS BASED ON NOS TIDAL BENCH MARK SHEET FOR "THE SUMMIT, N.W. SUMMIT ISLAND ALASKA", STATION ID 9451349, TIDAL EPOCH 1983-2001, PUBLISHED JULY 2, 2007.
  - SOUNDINGS ARE IN US SURVEY FEET AND ARE MINUS UNLESS INDICATED OTHERWISE.
  - THIS DRAWING INDICATES GENERAL CONDITIONS AT THE TIME OF SURVEY.
  - SURVEY DATA ACQUISITION WAS PERFORMED MAY 10-13, 2007. SOUNDINGS WERE COLLECTED USING AN ODOM HYDROTRAC PRECISION DEPTH SOUNDER WITH A 200KHZ, 3 DEGREE BEAM-WIDTH, SINGLE-BEAM TRANSDUCER. POSITIONING WAS PROVIDED USING A TRIMBLE 4000SSI RECEIVER OPERATING ON RTCM CORRECTIONS BROADCAST FROM A TRIMBLE 4000SSSE RECEIVER SET AT USACE SBC "SUMMIT-1 2001". NAVIGATION, DATA COLLECTION AND DATA PROCESSING WERE PERFORMED USING HYPERACK MAX INTEGRATED SOFTWARE. SOUNDINGS WERE CORRECTED FOR TIDE USING 1HZ RTK DATA. REDUNDANT WATER LEVEL DATA COLLECTED USING A DAA WATERLOG H-500XL RECORDER AND H-310 PRESSURE TRANSDUCER SET BY TERRASOUND, LTD THIS SURVEY. HORIZONTAL CONTROL WAS SURVEYED USING CONVENTIONAL EQUIPMENT AND TECHNIQUES. VERTICAL CONTROL WAS SURVEYED USING OPTICAL INSTRUMENTS AND DIFFERENTIAL LEVELING TECHNIQUES. PLANIMETRIC FEATURES WERE SURVEYED USING OPTICAL INSTRUMENTS AND CONVENTIONAL LAND-SURVEYING TECHNIQUES.
  - STATIC GPS SESSIONS OF 2+ HOURS WERE OBSERVED AT "YOU 1927", "SUMMIT-1 2001" AND "SUMMIT-2 2001". ELLIPSOID HEIGHTS WERE PROCESSED USING THE NGS ONLINE POSITIONING USER SERVICE (OPUS) HOLDING NAD83 (CORS96), EPOCH 2003.00 VALUES FOR "BIORKA ISLAND 1" CORS ARP (NGS PID A5022), "LEVEL ISLAND 1" CORS ARP (NGS PID A4430) AND "JUNEAU WAAS 1" CORS ARP (NGS PID DF4367). ELLIPSOID HEIGHTS AND MLLW ELEVATIONS ARE SHOWN IN THE "MLLW ELEVATIONS AND ELLIPSOID HEIGHT COMPARISONS" TABLE. ALL MLLW ELEVATIONS ARE BASED ON THE MOST CURRENT TIDAL DATUM AND EPOCH AS DESCRIBED IN NOTE 2.
  - CONTROL MONUMENTS OF RECORD WHICH WERE NOT SURVEYED ARE DENOTED IN THE CONTROL TABLE WITH AN ASTERISK (\*). THESE MONUMENTS, PLAT FEATURES, PROJECT LIMITS AND ASSOCIATED VALUES WERE CONVERTED FROM NAD83(CORS96) TO NAD83(CORS96) USING A FIXED-SCALE, LEAST SQUARES TRANSFORMATION WITHIN TRIMBLE GEOMATICS OFFICE (V1.60).

CONTROL DATA			
STATION	NORTHING	EASTING	ELEV.
*FAST 1927	1,769,882.42	2,672,950.21	--
NOS 1927	1,767,184.21	2,672,497.52	10.95
YOU 1927	1,764,322.55	2,673,005.64	16.65
*ABLE 1958	1,772,781.08	2,672,206.09	--
*BAKER 1958	1,770,387.60	2,672,875.82	16.50
CHARLE 1958	1,770,237.18	2,672,408.92	16.77
DOG 1958	1,768,794.28	2,672,899.38	17.01
*EASY 1958	1,768,221.13	2,672,442.11	--
*FOX 1958	1,767,196.06	2,672,511.32	15.88
GEORGE 1958	1,766,531.37	2,671,774.80	18.39
*RKY-3 1973	1,767,012.35	2,672,541.29	15.98
*RKY-4 1973	1,767,470.01	2,672,575.32	13.31
R-6 1977	1,770,967.42	2,673,044.51	--
R-7 1977	1,770,129.56	2,672,241.98	17.15
*R-8 1977	1,770,245.29	2,672,872.62	19.57
R-9 1977	1,768,795.03	2,672,903.85	17.67
SUMMIT-1 2001	1,769,152.43	2,672,939.01	17.85
SUMMIT-2 2001	1,772,192.79	2,671,484.38	16.48
SUMMIT-3 2007	1,770,295.49	2,672,487.76	17.89
1349-5 2006	1,770,667.49	2,672,034.91	16.37
RKY-2 1973/2007	1,766,666.54	2,671,823.30	19.09

CONTRACT NO. W911KB-04-D-0006-0016  
 CONTRACTOR TERRA SURVEYS, LLC  
 CITY PALMER STATE ALASKA

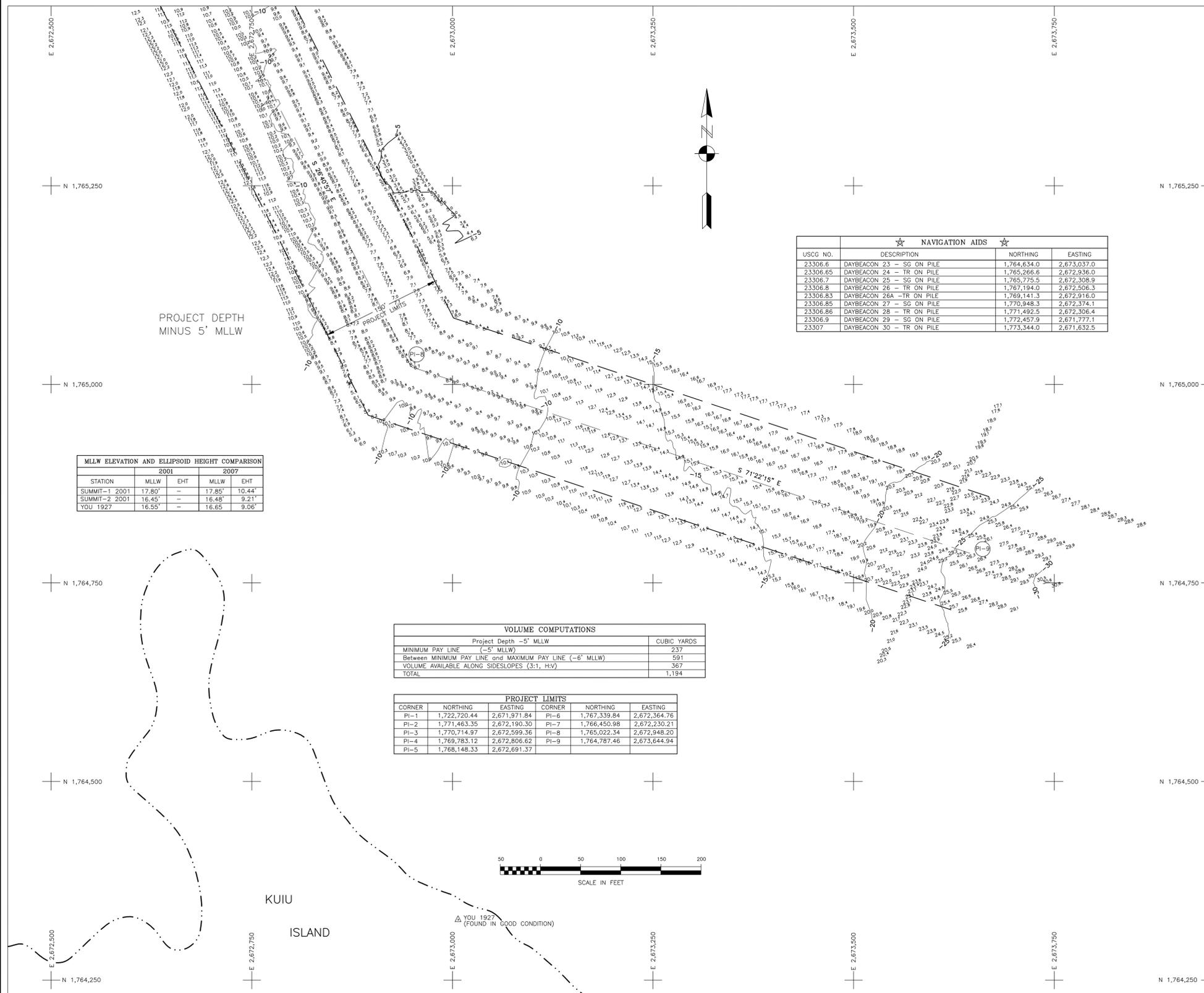
ALASKA DISTRICT  
 CORPS OF ENGINEERS  
 ANCHORAGE, ALASKA

SURVEYED: CDK/CRR  
 DRAWN: LES  
 CHECKED: KDW  
 SUBMITTED: KDW

ROCKY PASS, KEKU STRAIT, ALASKA  
 THE SUMMIT  
 PROJECT CONDITION SURVEY  
 MAY 10-13, 2007

RECOMMENDED: APPROVED: DATE:  
 PROJECT MANAGER: CHIEF OFFICER-ENGINEER BROWN

SURVEY NO. 2474-07  
 SCALE: 1"= 50'  
 SHEET 6 OF 7



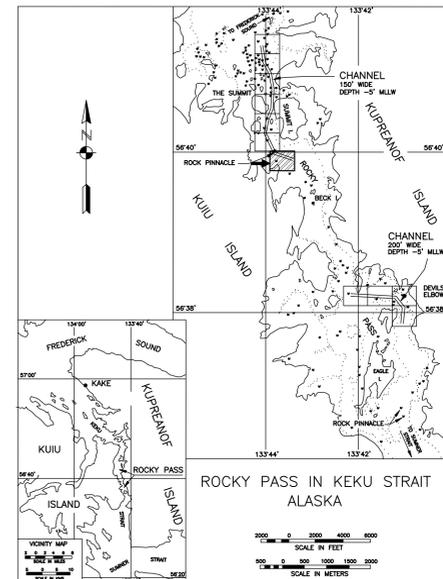
PROJECT DEPTH  
MINUS 5' MLLW

STATION	2001		2007	
	MLLW	EHT	MLLW	EHT
SUMMIT-1 2001	17.80'	-	17.85'	10.44'
SUMMIT-2 2001	16.45'	-	16.48'	9.21'
YOU 1927	16.55'	-	16.65'	9.06'

Project Depth -5' MLLW		CUBIC YARDS
MINIMUM PAY LINE (-5' MLLW)		237
BETWEEN MINIMUM PAY LINE and MAXIMUM PAY LINE (-6' MLLW)		591
VOLUME AVAILABLE ALONG SIDESLOPES (3:1, HV)		367
TOTAL		1,194

CORNER	NORTHING	EASTING	CORNER	NORTHING	EASTING
PI-1	1,722,720.44	2,671,971.84	PI-6	1,767,339.84	2,672,364.76
PI-2	1,771,463.35	2,672,190.30	PI-7	1,766,450.98	2,672,230.21
PI-3	1,770,714.97	2,672,599.36	PI-8	1,765,022.34	2,672,948.20
PI-4	1,769,783.12	2,672,806.62	PI-9	1,764,787.46	2,673,644.94
PI-5	1,768,148.33	2,672,691.37			

USCG NO.	DESCRIPTION	NORTHING	EASTING
23306.6	DAYBEACON 23 - SG ON PILE	1,764,634.0	2,673,037.0
23306.65	DAYBEACON 24 - TR ON PILE	1,765,266.6	2,672,936.0
23306.7	DAYBEACON 25 - SG ON PILE	1,765,776.5	2,672,308.9
23306.8	DAYBEACON 26 - TR ON PILE	1,767,194.0	2,672,506.3
23306.83	DAYBEACON 26A - TR ON PILE	1,769,141.3	2,672,916.0
23306.85	DAYBEACON 27 - SG ON PILE	1,770,948.3	2,672,374.1
23306.86	DAYBEACON 28 - TR ON PILE	1,771,492.5	2,672,306.4
23306.9	DAYBEACON 29 - SG ON PILE	1,772,457.9	2,671,777.1
23307	DAYBEACON 30 - TR ON PILE	1,773,344.0	2,671,632.5



NOTES

- HORIZONTAL CONTROL IS ALASKA STATE PLANE, ZONE 1, NAD83(CORS96), IN US SURVEY FEET, BASED ON A STATIC GPS NETWORK HOLDING THE NGS EPOCH 2003.00 CORS ARP VALUES FIXED FOR JUNEAU WAAS (NGS PID DF437), BIORKA ISLAND 1" (NGS PID AB022) AND LEVEL ISLAND 1" (NGS PID AJ4430). HARBOR CONTROL WAS TRANSFORMED INTO THE NGS EPOCH 2003.00 DATUM HOLDING USCGS SBC "YOU 1927" AS N 1,764,322.55 E 2,672,497.52 AND USCGS DOMEID BC "SUMMIT-2 2001" AS N 1,772,192.29 E 2,671,484.26.
- VERTICAL CONTROL IS MEAN-LOWER-LOW-WATER DATUM, IN US SURVEY FEET (MLLW=0.0'). HOLDING USCGS "BENCH MARK 1929 AS 17.85" TIDAL DATUM IS BASED ON NGS TIDAL BENCH MARK SHEET FOR "THE SUMMIT, N.W. SUMMIT ISLAND ALASKA", STATION ID 9451349, TIDAL EPOCH 1983-2001, PUBLISHED JULY 2, 2007.
- SOUNDINGS ARE IN US SURVEY FEET AND ARE MINUS UNLESS INDICATED OTHERWISE.
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- SURVEY DATA ACQUISITION WAS PERFORMED MAY 10-13, 2007. SOUNDINGS WERE COLLECTED USING AN ODOM HYDROTRAC PRECISION DEPTH SOUNDER WITH A 200KHZ, 3 DEGREE BEAM-WIDTH, SINGLE-BEAM TRANSDUCER. POSITIONING WAS PROVIDED USING A TRIMBLE 4000SSI RECEIVER OPERATING ON RTCM CORRECTIONS BROADCAST FROM A TRIMBLE 4000SSE RECEIVER SET AT USACE SBC "SUMMIT-1 2001". DATA COLLECTION AND DATA PROCESSING WERE PERFORMED USING HYPACK MAX INTEGRATED SOFTWARE. SOUNDINGS WERE CORRECTED FOR TIDE USING THE RTK DATA. REDUNDANT WATER LEVEL DATA COLLECTED USING A DAA WATERLOG H-SOONL RECORDER AND H-110 PRESSURE TRANSDUCER SET BY TERRASOFT, LTD THIS SURVEY. HORIZONTAL CONTROL WAS SURVEYED USING CONVENTIONAL EQUIPMENT AND TECHNIQUES. VERTICAL CONTROL WAS SURVEYED USING OPTICAL INSTRUMENTS AND DIFFERENTIAL LEVELING TECHNIQUES. PLANIMETRIC FEATURES WERE SURVEYED USING OPTICAL INSTRUMENTS AND CONVENTIONAL LAND-SURVEYING TECHNIQUES.
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STATION	NORTHING	EASTING	ELEV.	DESCRIPTION
*FAST 1927	1,769,882.42	2,672,950.21	-	SEARCHED FOR, LOST (REMOVE)
MOST 1927	1,767,184.21	2,672,497.52	10.95	3.25" USCGS SBC HYDROGRAPHIC STATION
YOU 1927	1,764,322.55	2,673,005.64	16.65	3.25" USCGS SBC HYDROGRAPHIC STATION
*ABLE 1958	1,772,781.01	2,672,206.09	-	SEARCHED FOR, LOST (REMOVE)
*BAKER 1958	1,770,387.60	2,672,876.89	16.50	NOT SEARCHED FOR
CHARLIE 1958	1,770,237.18	2,672,408.92	16.77	BRIDGE SPIKE IN BEDROCK
DOG 1958	1,768,794.28	2,672,899.38	17.01	5/8" CONC. FILLED, GALV. PIPE W/ TACK
*EASY 1958	1,768,221.13	2,672,442.11	-	NOT SEARCHED FOR
*FOX 1958	1,767,196.06	2,672,511.32	15.88	OBLITERATED (UNDER NAV AID FOUNDATION)
GEORGE 1958	1,766,531.37	2,671,774.80	18.39	BRIDGE SPIKE IN BEDROCK
*HRY-3 1973	1,767,012.35	2,672,541.29	15.98	SEARCHED FOR, LOST (REMOVE)
*HRY-4 1973	1,767,470.01	2,672,575.32	13.31	SEARCHED FOR, LOST (REMOVE)
R-6 1977	1,770,967.42	2,673,044.51	-	USACE SBC, CAP NOT GROUDED
R-7 1977	1,770,129.56	2,672,241.98	17.15	USACE SBC, CAP NOT GROUDED
*R-8 1977	1,770,045.39	2,672,872.62	19.57	USACE SBC, CAP NOT GROUDED
R-9 1977	1,768,795.03	2,672,903.85	17.67	USACE SBC, CAP NOT GROUDED
SUMMIT-1 2001	1,769,152.43	2,672,939.01	17.85	3.25" DBC
SUMMIT-2 2001	1,772,192.29	2,671,484.38	16.48	2.35" DBC
SUMMIT-3 2007	1,770,295.49	2,672,487.76	17.89	3.25" DBC, SET THIS SURVEY
1349-5 2006	1,770,667.49	2,672,034.91	16.37	3.25" NOS BC, TIED THIS SURVEY
RKY-2 1973/2007	1,766,666.54	2,671,823.30	19.09	USACE SBC, RESET THIS SURVEY

CONTRACT NO. W911KB-04-D-0006-0016  
 CONTRACTOR TERRA SURVEYS, LLC STATE ALASKA  
 CITY PALMER

ALASKA DISTRICT  
 CORPS OF ENGINEERS  
 ANCHORAGE, ALASKA

SURVEYED: CDK/CRR  
 DRAWN: LES  
 CHECKED: KDW  
 SUBMITTED:

ROCKY PASS, KEKU STRAIT, ALASKA  
 THE SUMMIT  
 PROJECT CONDITION SURVEY  
 MAY 10-13, 2007

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

SURVEY NO. 2474-07 SCALE: 1" = 50'  
 SHEET 7 OF 7