

## NOTICE

The Materials Source data and information included in this file has been gathered and compiled for the express purpose of assisting in The Alaska Department of Transportation and Public Facilities during the design process of various projects. It does not signify that the source is available or suitable for use during the construction of any specific current or future project. The included data and information does not determine that this Materials Source will provide suitable materials in the required quantities for any construction project.

The included data and information is suitable for use *by experienced and qualified experts in the fields of geology, geological engineering, and geotechnical engineering* to make reasonable estimates regarding the quantity, quality, and suitability for construction purposes of material that can be produced from the source.

Sources intended for use for any specific construction project will be referenced in the appropriate section of the Plans and Specifications of the Contract Documents for that construction project.

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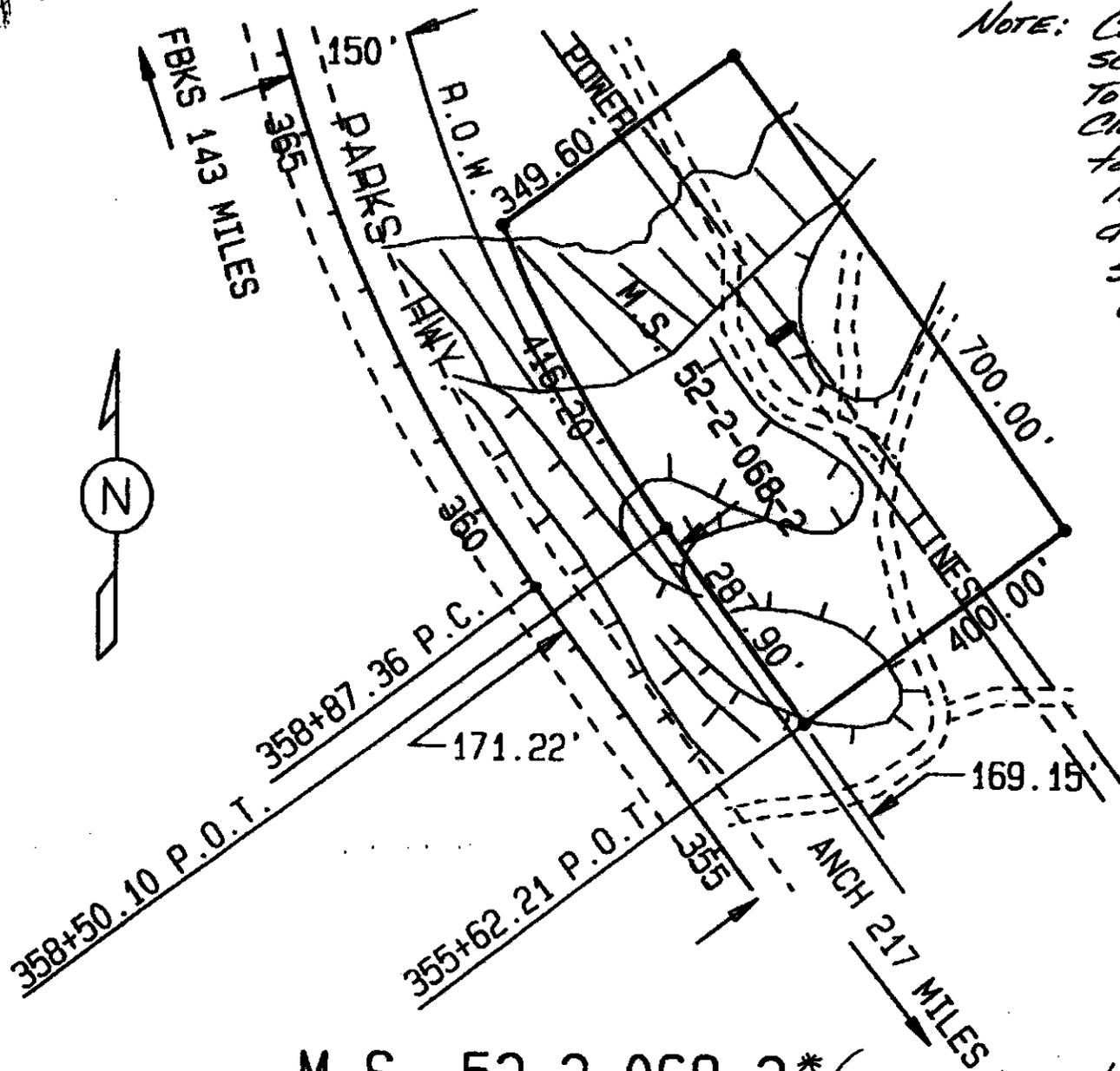


13/1/14  
Map 100-418 1992

1992

NOTE: Contractor had to scavenge entire pit area to try to find enough Class II Riprap. (Pit appears to have been poorly mixed in the past - test holes dug by the contractor showed 12' depths of Class I Riprap or smaller waste.)

B. Hermin



M.S. 52-2-068-2\* (This pit may be signed -DSB-?)

AHTNA, INC.  
STATE MATERIAL RIGHTS  
RIPRAP SOURCE

PROJECT:  
PARKS Hwy, 216 North RENAB.  
I-044-3(3)/64924



# United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Anchorage District Office  
4700 East 72nd Avenue  
Anchorage, Alaska 99507

IN REPLY REFER TO

2800 (014)  
F-033438

APR 23 1984

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

## DECISION

Ahtna, Incorporated	:	F-033438
Drawer G	:	Material Site
Copper Center, Alaska 99573	:	Right-of-Way
	:	
State of Alaska	:	
Department of Transportation	:	
and Public Facilities	:	
Pouch 6900	:	
Anchorage, Alaska 99502	:	

### Administration Waived Case Closed

Interim Conveyance No. 443, issued October 23, 1981, to the Ahtna, Incorporated is subject to the following right-of-way.

<u>Serial No.</u>	<u>Type</u>	<u>Grantee</u>	<u>Expiration Date</u>
F-033438	Right-of-Way	State of Alaska	Perpetual

Pursuant to Section 14(g) of the Alaska Native Claims Settlement Act (ANCSA) of December 18, 1971, the United States hereby waives administration of the above described right-of-way. This waiver affects all of the right-of-way which is contained in Interim Conveyance No. 443, more specifically described as Section 1, T. 17 S., R. 7 W., Fairbanks Meridian. Pursuant to law, the grantee is entitled to all rights, privileges, and benefits granted by the terms of the right-of-way during the term of the grant until it expires, is relinquished, or is modified by mutual consent of Ahtna, Incorporated and the State of Alaska, Department of Transportation and Public Facilities.

Ahtna, Incorporated is entitled to any and all interests previously held by the United States as grantor in any such grant within the conveyance boundaries.

There are no rental, or other revenues associated with this right-of-way.

The pertinent documents covering the use authorization for which we are waiving administration are enclosed. The original case file will be transmitted under separate cover; since it will be retained in this office for approximately 45 days, until the appeal period is over.

An appeal from this decision may be taken to the Board of Land Appeals, Office of Hearings and Appeals, in accordance with the attached regulations in Title 43

Code of Federal Regulations (CFR), Part 4, Subpart E. If an appeal is taken, the notice of appeal must be filed in the Anchorage District Office of the Bureau of Land Management within 30 days of the receipt of this decision. Do not send the appeal directly to the Board. The appeal and case history file will be sent to the Board from this office. The regulations also require the appellant to serve a copy of the notice of appeal, statement of reasons, written arguments or briefs on the Regional Solicitor, Alaska Region, U.S. Department of the Interior, 701 C Street, Box 34, Anchorage, Alaska 99513. To avoid summary dismissal of the appeal, there must be strict compliance with the regulations. Form 1842-1 is enclosed for additional information.

*Mike Hawkins*

Chief, Branch of  
Case File Processing

Enclosures: (5)

- 1 - Form 1842-1
- 2 - Appeal Regulations
- 3 - Pertinent Documents F-033438
- 4 - Status Plat
- 5 - Conveyance Documents

Copy Furnished To:

State of Alaska  
Department of Transportation  
and Public Facilities  
Regional Director  
Maintenance of Operations  
Box 2301 Peger Road  
Fairbanks, Alaska 99701

# MEMORANDUM

# State of Alaska

TO: Tom Kouremetis  
Right-of-Way Supervisor

DATE: October 4, 1974

Attn: Evelyn Melville

FILE NO:

FROM: Donald W. Benjamin *DWB*  
Project Engineer

SUBJECT: Summary of Material Sources  
Cantwell-McKinley Park  
Project No. BRF-ALF-037-2(19)

Project Pit No.	M.S. No.	Station	Quantity Used in Tons	Type of Material
52-2	522-052-2	164+83.4 to 173+00	144,406	Subbase & Borrow
44-2/	✓ 522-044-2	233+00 to 241+00	164,041	Borrow
55-2/	522-055-2	246+00 to 252+00	95,374	Borrow
✓ 68-2/	522-068-2	340+00 to 363+00	89,097	Riprap
59-2/	522-059-2	392+00 to 401+08.1	234,479	Borrow
47-2/	522-047-2	514+98.7 to 526+90	280,084	Subbase & Borrow
48-2/	522-048-2	2138+14.4 to 2147+71	109,772	Borrow
64-2	522-064-2	2177+00 to 2187+00	132,439	Borrow
T.T.O. Sta. 2360 Rt.	None	2360+00 right	95,369	Subbase & Borrow & Riprap 1-A

*For EV M.*

*Accumulative*

# STATE OF ALASKA

## DEPARTMENT OF HIGHWAYS

WILLIAM A. EGAN, GOVERNOR

INTERIOR DISTRICT

2301 PEGER ROAD  
FAIRBANKS 99701

September 10, 1973

Your Reference: 2800 (220)

F-029727

F-029729

F-029731

F-033437

F-033434

F-033436

F-033438

F-033590

Bureau of Land Management  
Fairbanks District Office  
P. O. Box 1150  
Fairbanks, Alaska 99707

Attention: Harold E. Waldo  
Chief, Division of Land Office

Dear Mr. Waldo,

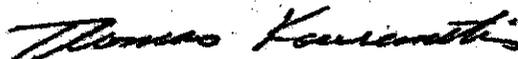
Please be advised, in response to your letter of September 4, 1973, that these grants for material sources were used for construction and maintenance on Cantwell to Nenana #2 section of the Fairbanks-Anchorage Highway. The material is primarily gravel and quantities are listed below:

✓ F-029727	M.S. 52-2-044-2	119,985 tons
F-029729	M.S. 52-2-046-2	2,200 yards
F-029731	M.S. 52-2-048-2	109,769 tons
F-033437	M.S. 52-2-055-2	97,914 tons
F-033434	M.S. 52-2-047-2	222,208 tons
✓ E-033436	M.S. 52-2-059-2	1,750 yards
✓ F-033438	M.S. 52-2-068-2	750 yards

Please refer to your case file F-033590: this grant was for a Channel Change, the material source stipulations are not applicable, and we so mentioned in our letter to your office dated April 10, 1972.

Sincerely yours,

WOODROW JOHANSEN  
Interior District Engineer



Thomas Kouremetis  
Interior District R/W Agent

*Accumulative*

Nenana Recording District

Serial number below  
F-033438

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Fairbanks District

~~Fairbanks Land Office~~ and Land Office

P.O. Box 1150  
Fairbanks, Alaska

Date: NOV 18 1964

DECISION

RIGHT-OF-WAY GRANTED

Details of Grant

Serial number of grant Fairbanks 033438

Name of grantee State of Alaska, Department of Highways,  
Box 1841, Juneau, Alaska

Map showing the location  
and dimensions of grant:

Map designations Department of Highways Plat, Project No.  
F-052-2(1), Cantwell to Nenana No. 2, Parcel No. M.S.  
522-068-2, 62-2505  
Date filed October 1, 1964

Permitted use by grantee Material Site

Authority for grant Federal Aid Highway Act of November 9, 1921.

Regulations applicable to grant: 43 CFR 2234.1-1 and 2234.2-4  
(formerly 43 CFR, Part 244, subparts "A" and "G")  
Code reference (23 U.S.C. 317) as amended

Circular number 1915 and 2084

Date of grant NOV 18 1964

Expiration date of grant None

Rental:

Amount None

RECEIVED

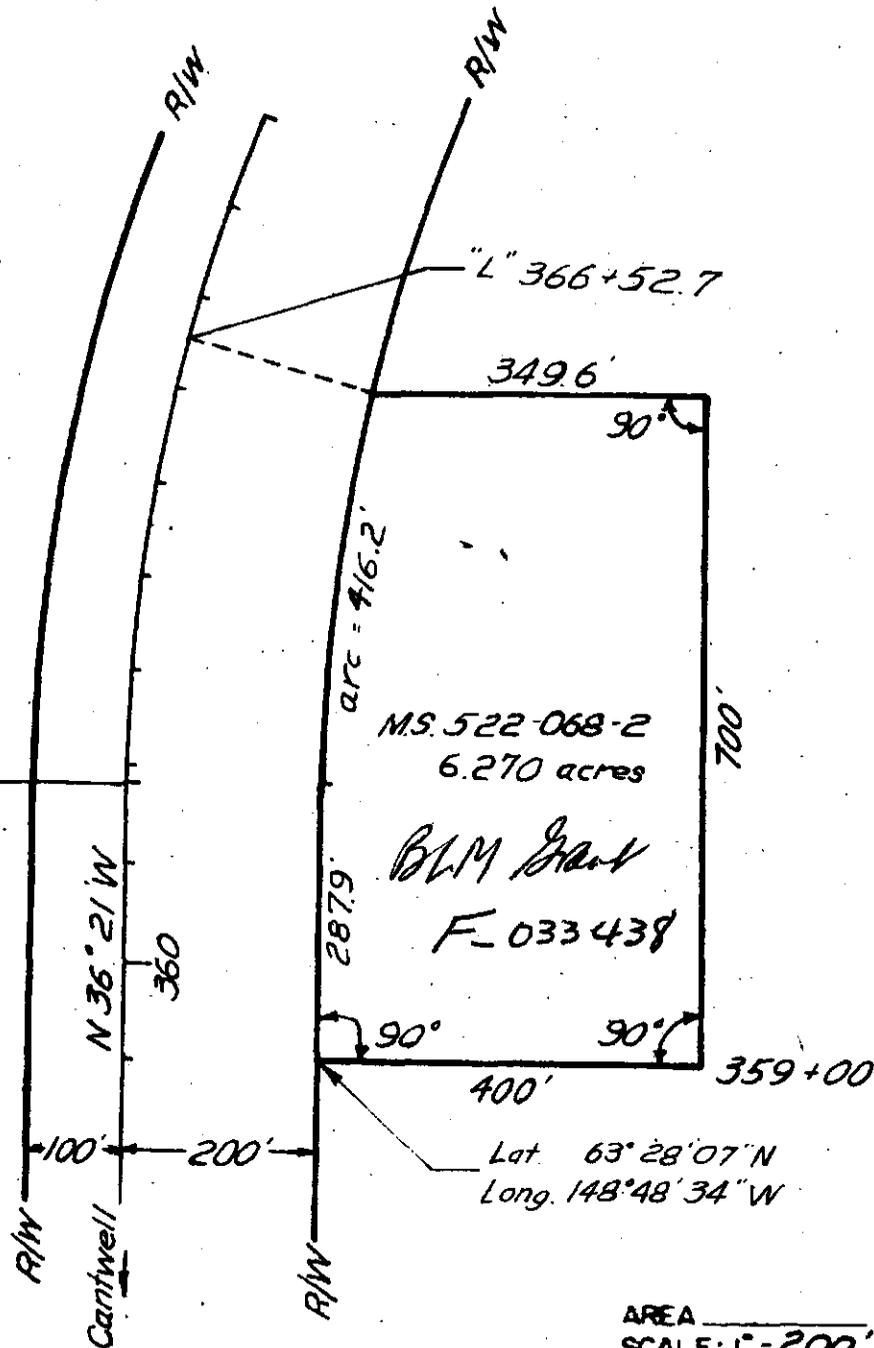
NOV 19 1964

FAIRBANKS DISTRICT OFFICE

RECORDED	FILED
REC. DIST.	
DATE Nov 23 1964	
TIME 11:20 a.m.	
RECORDED BY State Dept of Highways	
ADDRESS 612 S. Delta Fairbanks	

P.I. = "L" 366+95.3  
 $\Delta = 29^{\circ}45'$   
 $D = 3.0'$   
 $T = 507.3'$   
 $L = 991.7'$

"L" 361+87.9 P.C.



AREA                      SQ. FT. 6.270 ACRES  
 SCALE: 1" = 200' DRAWN BY J.F.M.

**ENGINEER'S STATEMENT**

ANDY ZAHARE States that he is by occupation a Civil Engineer employed by Alaska Department of Highways to supervise the survey of Highway Project No. F-052-2(1) as shown on this plat, that the survey of said Project was made under his supervision and under authority, that this parcel was surveyed during the survey of this Highway Project which was conducted in 1962, and that such survey is accurately represented upon this plat.

Engineer Andy Zahare

**APPLICANT'S CERTIFICATE**

This is to certify that ANDY ZAHARE who subscribed the statement hereon is the person employed by the undersigned applicant to supervise the preparation of this plat, which has been adopted by the applicant as the approximate final location of the Project thereby shown, and that this plat is filed as part of the complete application, and in order that the applicant may obtain the benefits of the Act of August 27, 1958 (72 Stat. 885, 23 U.S.C. 317) and I further certify that the right-of-way herein described is desired for Alaska Project No. F-052-2(1).

Commissioner \_\_\_\_\_

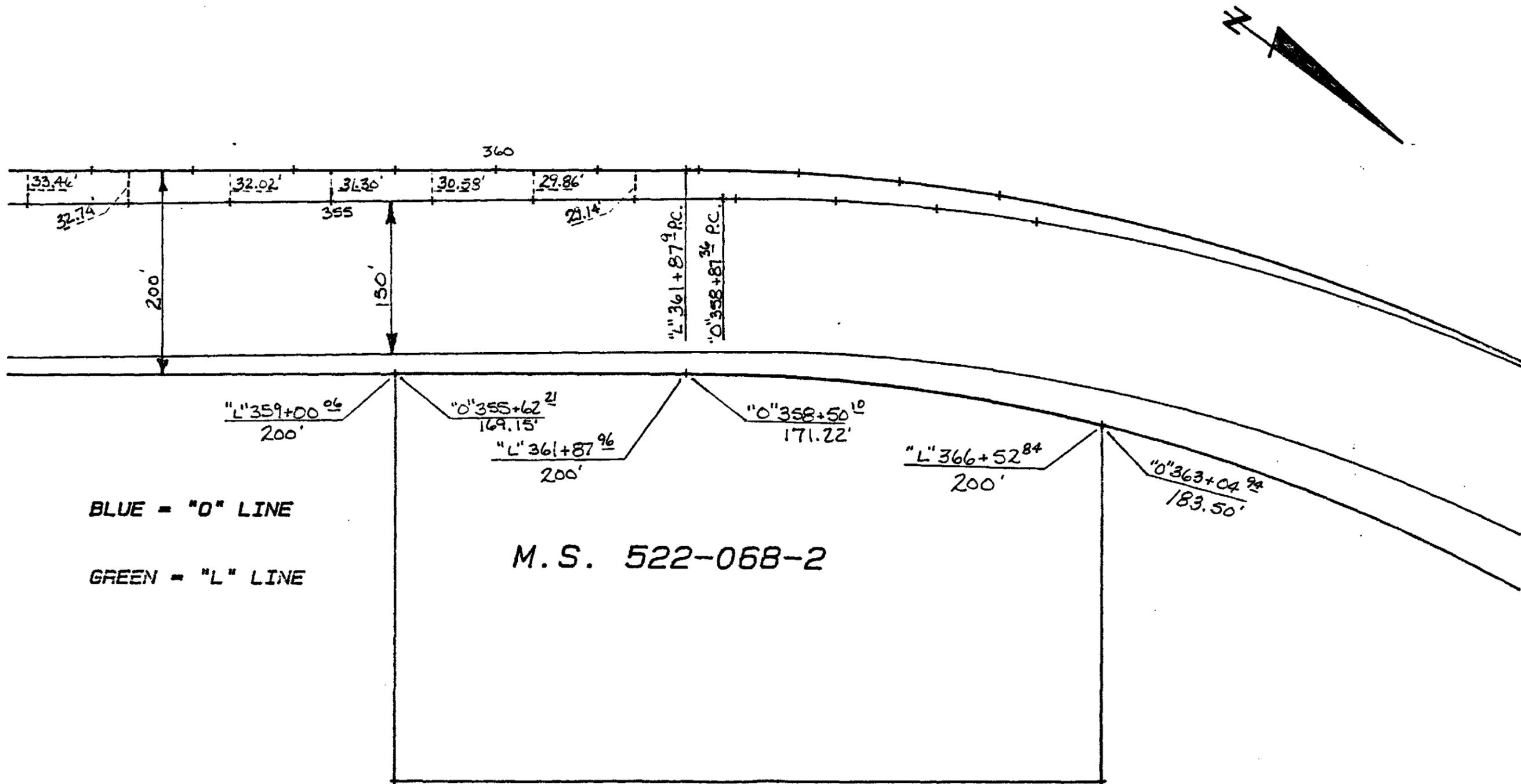
Attest \_\_\_\_\_

STATE OF ALASKA  
 DEPARTMENT OF HIGHWAYS

PLAT  
 SHOWING MATERIAL SOURCE REQUIRED  
 FOR

PROJECT F-052-2(1) FAIRBANKS DISTRICT  
 PARCEL NO. M.S. 522-068-2 DATE JULY 15, 1964



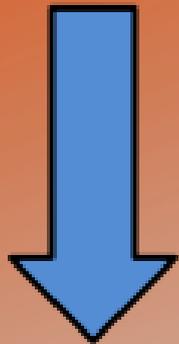


STATE OF ALASKA  
 DEPT. OF TRANSPORTATION  
 AND  
 PUBLIC FACILITIES

SCALE: 1"=100'



**RIGHT OF WAY INFORMATION**



**GEOLOGIC INFORMATION**

**STATEWIDE MATERIAL SITE INVENTORY**

**MATERIAL SITE**  
**INSPECTION REPORT**

**Federal Project No. STP-000S(530)**  
**AKSAS Project No. 76174**

**NORTHERN PARKS HIGHWAY**

**MS 52-2-068-2**  
**Panorama Mountain #2**

November 30, 2010

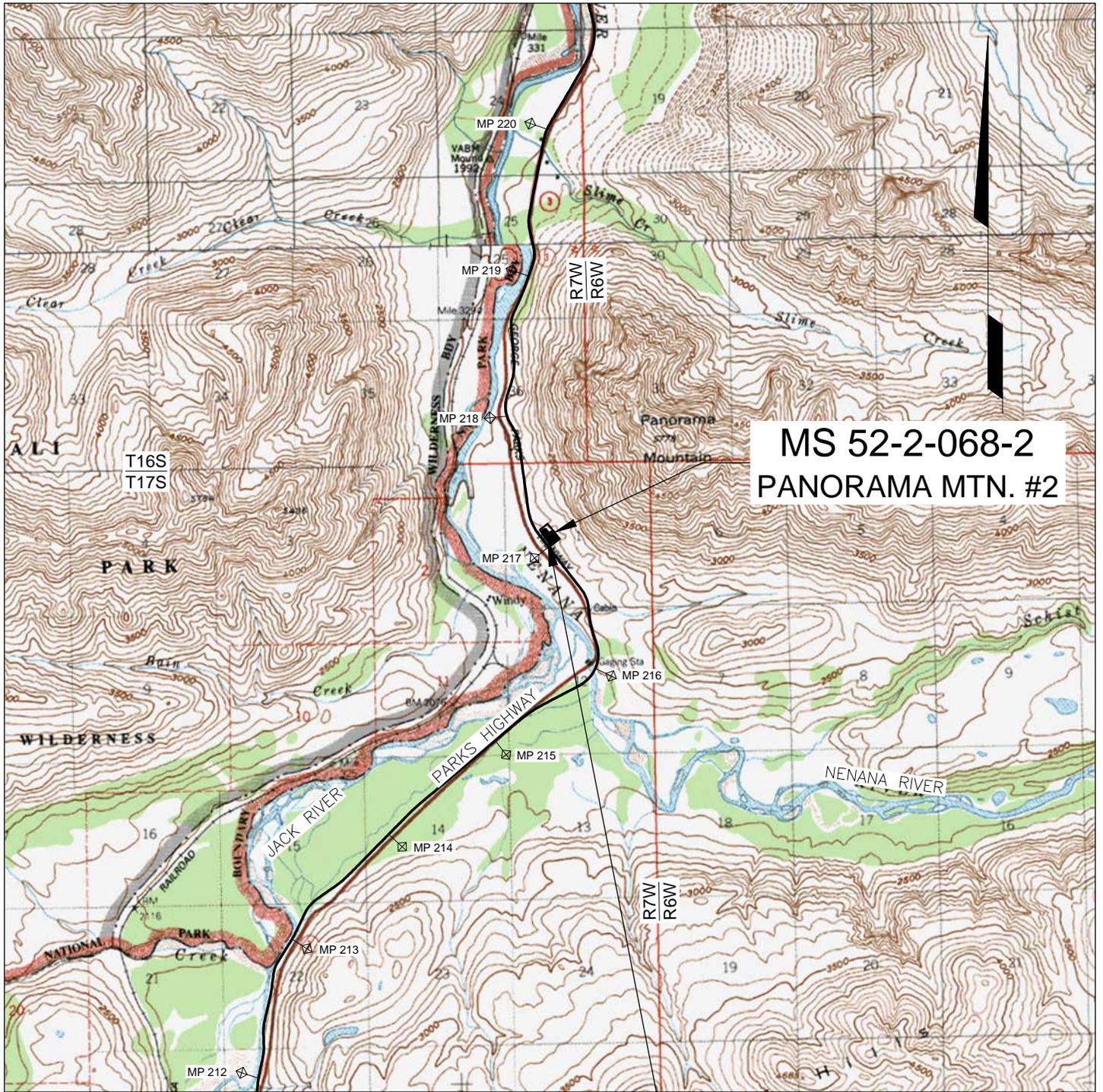
<u>CONTENTS</u>	<u>PAGE</u>
COVER SHEET.....	1
LOCATION MAP .....	2
SITE MAP .....	3A & 3B
INSPECTION FORM.....	4 thru 10

**CATEGORY:**

**ACTIVE – STATUS UNKNOWN**

According to information found in the DOT&PF EDMS system in January 2009 and BLM and DNR case file abstracts, this site lies on lands owned by the Cantwell Yedatene NA, Corporation (surface) and AHTNA, Incorporated (subsurface). The site was originally designated MS 22-337-63 and Pit “O”. An indefinite right-of-way grant (F-33438) was issued to DOT&PF by BLM in 1964. An interim Conveyance (IC 443) for the land was issued to AHTNA, Incorporated (F-14844-AZ) and the Cantwell Yedatene NA, Corporation (F-14844-A) by BLM in 1981. BLM transferred administration of the site to AHTNA in 1984. The Alaska Power Authority (now Alaska Energy Authority) was issued a public easement (ADL 213063) in 1988 for the Willow-Healy Intertie, which crosses the site. The site limits do not abut the Parks Highway right-of-way. There is an existing access road. However, there appears to be a 19 to 33-foot gap between the site limits and the Parks Highway right-of-way and the access right-of-way is not clear. The site appears to contain significant quantities of talus and rock and should be retained by DOT&PF for future use.

# LOCATION MAP



**MS 52-2-068-2  
PANORAMA MTN. #2**

U.S.G.S. QUADRANGLE: HEALY (B-4) & (C-4)

GPS COORDINATES FROM GOOGLE EARTH  
 UTM (WGS84-METERS)  
 ZONE 6: N7,039,315 E409,627  
 AK STATE PLANE (NAD83-US SURVEY FT)  
 ZONE 4: N3,462,520 E1,834,443

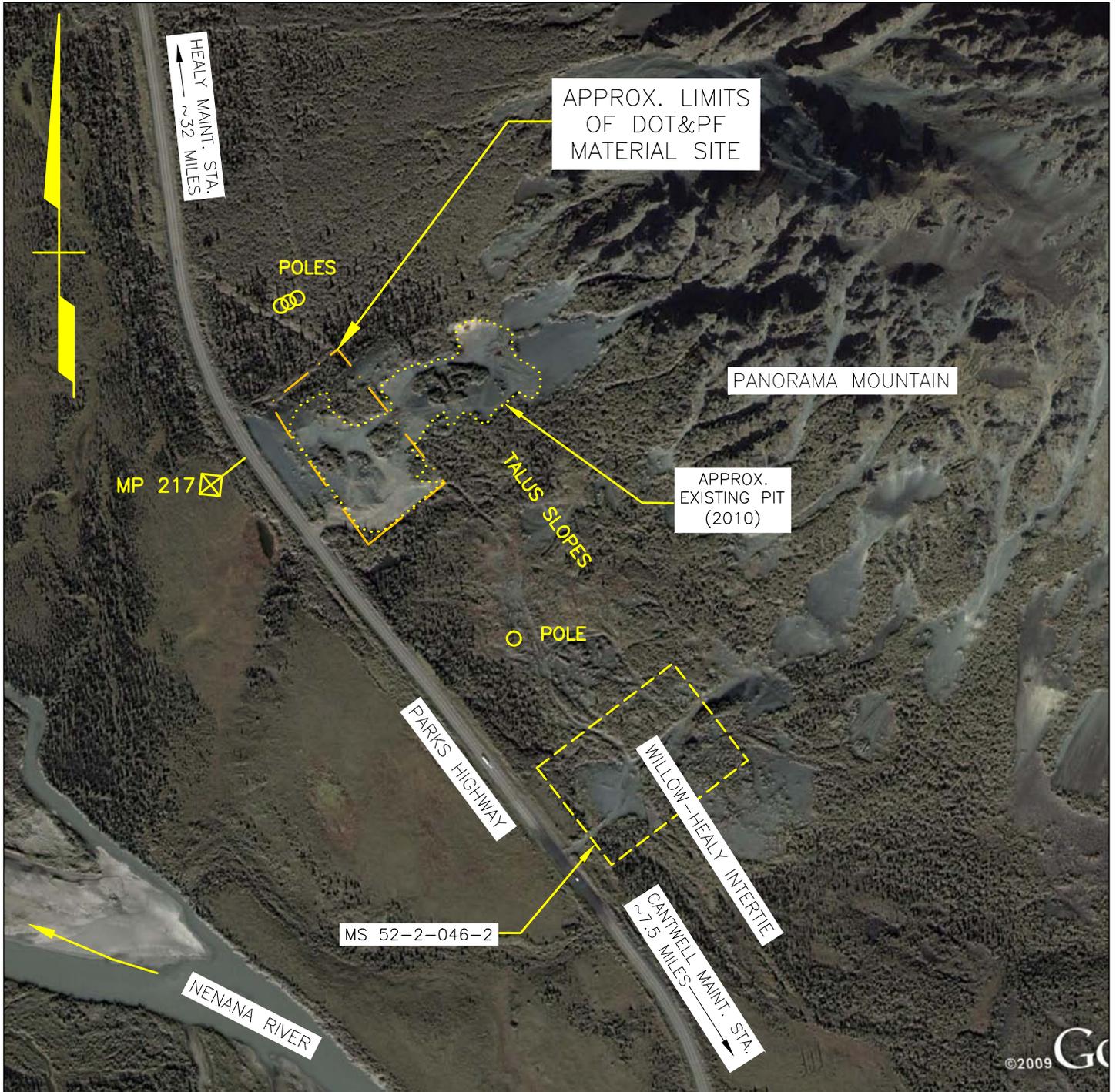
**ACTIVE - STATUS  
UNKNOWN**



GRAPHIC SCALE IN MILES

STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES			
STATEWIDE MATERIAL SITE INVENTORY			
MS 52-2-068-2			
SCALE AS SHOWN	DESIGNED CHECKED P.K.H. C.H.R.	DRAWN DATE J.D.N. MAY 2010	PAGE 2

# SITE MAP



BASE MAP IS AUGUST 8, 2004 GEOEYE SATELLITE IMAGERY.  
 THIS IS A PLANNING DOCUMENT ONLY. THE MATERIAL SITE BOUNDARIES SHOWN ON THIS  
 DRAWING ARE APPROXIMATE. OWNERSHIP OF THE LANDS ADJACENT TO THIS SITE ARE  
 UNKNOWN. THE ACCESS ROW SHOULD BE VERIFIED.

## ACTIVE - STATUS UNKNOWN



BASE MAP FROM GOOGLE EARTH PRO 7/18/2010

Prepared By:  
R&M CONSULTANTS, INC.

STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES			
STATEWIDE MATERIAL SITE INVENTORY			
MS 52-2-068-2			
SCALE	DESIGNED	DRAWN	PAGE
AS SHOWN	P.K.H. CHECKED C.H.R.	P.K.H. DATE JULY 2010	3A

Z:\project\1443.06\37\_North\_Parks\_Highway\MS 52-2-068-2\acad\geo\ccad\MS\_Site\_Map\_52-2-068-2.dwg

Plotted 2/28/2011 6:29 PM by Jim Nelson

# SITE MAP



BASE MAP IS AUGUST 8, 2004 GEOEYE SATELLITE IMAGERY.  
 THIS IS A PLANNING DOCUMENT ONLY. THE MATERIAL SITE BOUNDARIES SHOWN ON THIS  
 DRAWING ARE APPROXIMATE. OWNERSHIP OF THE LANDS ADJACENT TO THIS SITE ARE  
 UNKNOWN. THE ACCESS ROW SHOULD BE VERIFIED.

## ACTIVE - STATUS UNKNOWN



BASE MAP FROM GOOGLE EARTH PRO 7/18/2010

Prepared By:  
 R&M CONSULTANTS, INC.

STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES			
STATEWIDE MATERIAL SITE INVENTORY			
MS 52-2-068-2			
SCALE	DESIGNED	DRAWN	PAGE
AS SHOWN	P.K.H. CHECKED C.H.R.	P.K.H. DATE JULY 2010	3B

Z:\project\1443.06\37\_North\_Parks\_Highway\MS 52-2-068-2\acad\geo\ccad\MS\_Site\_Map\_52-2-068-2.dwg

Plotted 2/28/2011 6:29 PM by Jim Nelson

**STATEWIDE MATERIAL SITE INVENTORY  
MATERIAL SITE INSPECTION FORM**

**THIS REPORT IS BASED ON A REVIEW OF EXISTING DATA AND BRIEF FIELD INSPECTIONS. THUS THE DATA CONTAINED HEREIN SHOULD BE CONSIDERED PRELIMINARY AND USED FOR PLANNING PURPOSES ONLY. USERS OF THIS DATA SHOULD VERIFY THE INFORMATION PRIOR TO USING IT FOR DESIGN OR CONSTRUCTION PURPOSES.**

**IF OTHER IS SELECTED FOR A SECTION, EXPLAIN IT IN SECTION 44. NOTES.  
IF AN ANSWER IS UNKNOWN SELECT "UNKNOWN" OR LEAVE BLANK**

1. **MS\_ID** 52-2-068-2  
Enter the full material site number e.g.. 37-3-045-2
2. **DATE\_INSPECT** 8/8/2010  
Date of field inspection
3. **FLD\_INSPEC\_ORG** WILL RHODES / R&M CONSULTANTS  
Name of inspector / Organization or Company

4. **REGION** NORTHERN
5. **LOCATION** NORTHERN PARKS HIGHWAY  
Name of Highway Enter Name of Facility or Secondary Route Name  
(i.e.Kotzebue Airport, Nash Road, etc.)
6. **MILEPOST** 217  
List the closest main highway milepost
7. **NAME** Panorama Mountain #2  
Enter commonly used name (s), e.g. Hess pit, Gobblers Knob, Midway. List all that apply separated by commas.
8. **MAINT\_DIST/STAT** District INTERIOR/FAIRBANKS Station HEALY  
Highway Maintenance District and Station, for locations not on highways select other.
9. **QUAD** HEALY B-4  
U.S.G.S. Quad. Map
10. **TOWNSHIP /RANGE** T#S R#E T17S R7W &                      Meridian FM  
Section 1
- |  |  |
|--|--|
| <p>11. <b>COOR_UTM</b></p> <p>          ZONE <u>6</u></p> <p>          NORTHING <u>7,039,315</u></p> <p>          EASTING <u>409,627</u></p> <p>                                UTM WGS84 - Meters</p> | <p>12. <b>COOR_STATE_PLANE</b></p> <p>          ZONE <u>4</u></p> <p>          NORTHING <u>3,462,520</u></p> <p>          EASTING <u>1,834,443</u></p> <p>                                Alaska State Plane NAD83 - Survey Feet</p> |
|--|--|
13. **BOROUGH/CITY** DENALI BOROUGH **TAX ID NO.**
14. **DNR\_LAND\_USE\_PLAN** YUKON-TANANA AREA PLAN

15. **CATEGORY** (To be filled in the office)
- 15a. **CLASSIFICATION** ACTIVE
- 15b. **STATUS** UNKNOWN







**STATEWIDE MATERIAL SITE INVENTORY  
MATERIAL SITE INSPECTION FORM**

**36. LITHOLOGY\_1**

COLLUVIAL

**37. LITHOLOGY\_2**

Dominant type

Subordinate type

IGNEOUS ROCK	Undifferentiated Igneous Rocks
GRANITIC	Granite/Monzonite/Granodiorite
DIORITE/GABBRO	Diorite/Gabbro
BASALT	Dark colored fine-grained Igneous Rocks
GREENSTONE	Altered Volcanic Rocks w/green tint
METAMORPHIC ROCK	Undifferentiated Metamorphic Rocks
SCHIST/PHYLLITE	Includes rocks ranging from slate to schist
GNEISS	Includes hard schistose rocks
MARBLE	
CATACLASTIC	Incl. Valdez Formation Rocks, Kenai Penn.
MÉLANGE	Incl. McHugh Formation Rocks, Kenai Penn.
SEDIMENTARY ROCK	Undifferentiated Sedimentary Rocks
CONGLOMERATE	
SANDSTONE	Includes greywacke, etc.
SHALE/MUDSTONE	
LIMESTONE	
FLUVIAL	River and stream deposits (floodplain), includes outwash.
ALLUVIAL	Alluvial / Debris Fan deposits
GLACIOFLUVIAL	Eskers, kames, etc.
GLACIAL	Till
COLLUVIAL	Talus, etc.
EOLIAN	Sand Dunes, etc.
SILT	Loess, fluvial silts, etc.
OTHER	Explain in Section 44.

**38. MATERIAL CLASSIFICATION**

ASTM Classification, generally they should range from coarse to fine.

38a. \_\_\_\_\_ 38c. \_\_\_\_\_ 38e. \_\_\_\_\_ 38g. \_\_\_\_\_  
 38b. \_\_\_\_\_ 38d. \_\_\_\_\_ 38f. \_\_\_\_\_ 38h. \_\_\_\_\_



**STATEWIDE MATERIAL SITE INVENTORY  
MATERIAL SITE INSPECTION FORM**

**43. RIPRAP**

**PREVIOUS PRODUCTION**

---

Class II or larger. Does not include production for erosion control riprap for ditches or culverts.

PREVIOUS PRODUCTION

There is a record of production.

POSSIBLE FURTHER INVESTIGATION NEEDED

The site is a bedrock quarry containing hard rock

NOT POSSIBLE

The site has soft rock or soil.

UNKNOWN

OTHER

Explain in Section 44, Notes.

**44. NOTES**

Note number of item being discussed.

28/30. Scattered spoil piles were noted in the pit.

36. Rock is typically 0.5' to 1.0' in diameter, blocky, basalt, some greenstone alteration, hard and slightly weathered to fresh.

# ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES

## MATERIAL SITE DATA COLLECTION FORM

Collected by: GRAHEK

Date: 7/9/84

### I. GENERAL SITE DATA

1. Material Site No.: 52-2-068-2

2. Site Name: CDS-PARKS4-182, 7  
PL 217, 1

3. Community: CANTWELL-MOODY

4. Owner/Agency: BLM

5. Permit No.: E-033438

6. Permit Type: 02B 7. Expiration Date: 00

8. Contact: \_\_\_\_\_

9. Lat/Long: 6328'07" N 14848'34" W

10. Quad Map: HEALY 1A4

11. Legal Description: SECTION 17 T17S R7W E1M

12. Acreage: 6 13. Reference Data: 010206

14. Maps & Photos: 02030406

15. Special Considerations: \_\_\_\_\_

16. History: \_\_\_\_\_

17. Remarks: \_\_\_\_\_

### CODES

<b>6. PERMIT TYPE</b>	<b>20. TEST VALUES</b>
00 None	1A Los Angeles Abrasion
<b>GRANTS</b>	0G Degradation
01 Grant	FV Frost Suscept. Value
02 Rt. of Way Grant	P3 % passing #200 screen
<b>DEEDS</b>	SS Sulfate Soundness
11 Deed	SG Specific Gravity
12 Quit Claims Deed	LL Liquid Limit
<b>PERMITS</b>	PT Plastic Index
21 Permit	OR Organic Content
22 PUP	PS % of Organics
23 PUP	
24 SLOP	
25 Prospect Permit	<b>22. PRESENT STATUS</b>
26 Mat'l Site Permit	ACT Active mining
27 Rt. of Entry Permit	IDA Inertive site
28 Rt. of Way Permit	DPL Depleted
29 PTTB	STR Stockpile site
<b>OTHER</b>	HWY Highway M & O Use
41 ILMT	AVI Aviation M & O Use
42 ILMG	STA Maintenance Station
43 Lease	PRV Private Pit
44 Agreement	SQU Squatters
45 Waste Area Agreement	DMP Dump site
46 Easement	JWT Joint Use (Remarks)
47 No. of Way Easement	ESS Other (Remarks)
48 Court Award	
49 Withdrawal	<b>23. RECOMMENDED USE</b>
50 Release	SDR Storage
51 Material Sales	RWP Riprap
A Applied for	ACH Crushed Aggr.
B Issued	SMB Sand Source
	SXM Slusher Mat'l
	TOP Topsoil
<b>11. REFERENCE DATA</b>	STR Strip./Warehousing
00 None available	MTB Maintenance Use
01 Published N.S. rpt.	STA Maintenance Station
02 Lab analyses of mat'l	FTF Further Testing Rec.
03 Design study/loc. rpt.	FTF Purpose Use
04 Construction use data	REL Relinquish Permits
05 Environmental data	WPA Waste Disposal Area
06 TH Loc. Map & Logs	ZZZ Other
07 Name (ref. to file)	
99 Other (Remarks)	
	<b>14. MAPS &amp; PHOTOS</b>
	00 None available
	01 Sketch map
	02 Location map
	03 Site plat
	04 Vert. air photos
	05 Ob. air photos
	06 Ground photos
	99 Other (Remarks)
	<b>19. SPECIAL CONSIDERATIONS</b>
	00 None
	01 Pit obligated
	02 Royalty Payments
	03 Proof of Use (incl. yr.)
	04 3rd Party Encumbr.
	05 Environmental Restr.
	06 Historical Site
	07 Archaeological Site
	08 Paleontological Site
	09 Quantity Restr. (Remarks)
	99 Other (Remarks)

### II. LAB DATA

18. Date: \_\_\_\_\_

19. Soil Class: BLASALT

20. Test Values: \_\_\_\_\_

21. Remarks: \_\_\_\_\_

### III. USE DATA

22. Present Status: \_\_\_\_\_ 23. Recommended Use: RAP

24. Quantities - Indicated: \_\_\_\_\_ cubic yards Date: \_\_\_\_\_  
 Removed: 49629 cubic yards Date: 8/1

25. Remarks: \_\_\_\_\_

# MATERIAL SITE DATA COLLECTION FORM

 Material Site No.: 52-2-068-2

 Date: 190484

 Collected by: GRANEK

## III. SURFACE SITE DATA

26. Date: 230683      27. Investigation: 01      28. Drainage: G

29. Geomorphic Description: HILL

30. Vegetation: 000 D # %      % D # %      % D # %

31. Topography: STP % %      32. Debris: 00 % % %

33. Rock Outcrops: YES      34. Water Bodies: 00      35. Access: 04

36. Boundary Markers: 00      37. Utility Corridors: 00

38. Site Improvements: PIT EHR

39. Remarks: STEEP TALUS SLOPE

15 FR HWY, 26-27 FR E BACK EDGE

## CODES

<b>27. &amp; 41. INVESTIGATION</b> BK Backhoe WA Wheel-mount Auger TA Track-mount Auger PD Portable Drill FT Foot Recon. AR Aerial Recon. SN Seismic Survey CD Conductivity Survey RV Resistivity Survey SE Other (Remarks) O1 Recon, sparse coverage O2 Part coverage, random O3 Part coverage, specific O4 High-density TR invest. O5 Special Survey	<b>30. VEGETATION</b> 000 None - bare soil BIR Birch COT Cottonwood ASP Aspen WIL Willow species ALD Alder species MSP White Spruce BSP Black Spruce SSP Sitka Spruce HEM Hemlock TMM Tamarack CED Cedar CON Coniferous DEC Deciduous GND Low ground cover HOG Hog weeds, etc. XSE Other (unknown) 0 None 1 Scattered 2 Low (>10' sep) 3 Moderate 4 High (<3' sep)	<b>30. VEGETATION (cont'd)</b> SH Shrub ST Small Tree (<5' #) MT Med Tree (5"-12" #) LT Lg Tree (12"-30" #) HT Huge Tree (>30" #) % of site covered <b>31. TOPOGRAPHY</b> FLT Flat and level MCL Rolling MOD Moderate hillsides STP Steep hillsides CLF Cliffside % of site, each category <b>32. DEBRIS</b> WO Woody debris CW Const. waste mat'ls TR Dump mat'l, trash HA Abnd. habitations SE Other (Remarks) % of site, each category	<b>33. ROCK OUTCROPS</b> A 1'-10' height B 10'-25' C 25'-50' D 50'-100' E >100' % of site covered <b>34. WATER BODIES</b> 00 None 01 River 02 Stream 03 Creek 04 Internat. Stream 05 Lake 06 Pond 07 Impoundment 08 Bog/Swamp 09 Marina 99 Other % of site covered	<b>35. ACCESS</b> 00 >1 mile from nearest rd 01 Adj to unimproved rd 02 Adj to secondary gravel rd 03 Adj to secondary paved rd 04 Adj to primary paved rd 05 Access by Water 99 Other (Remarks) <b>36. BOUNDARY MARKERS</b> 00 None found 01 One corner found 02 Number corners found 99 Other (Remarks) <b>37. UTILITY CORRIDORS</b> EL Electric WA Water TL Telephone GS Gas PT Petroleum SW Sewer RR Railroad SE Other (Remarks) <b>38. SITE IMPROVEMENTS</b> FRC Fencing SCR Screening BDC Bridge (Remarks) SCL Seales LRF Loading Ramps SWA Solid Waste Area GAT Locked Gate on access PIT Opened Pit TRL Trailhead EHR Existing Seal Road HAB Habitations BLD Buildings SEE Other (Remarks) % of site occupied
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## IV. SUBSURFACE SITE DATA

40. Date:         41. Investigation:         42. Drainage:   

43. Water Table: 00      44. Permafrost: N      45. Overburden:    0 ' An

46. Soil Description:    2 An       An       An      47. %+3":         48. %+10":   

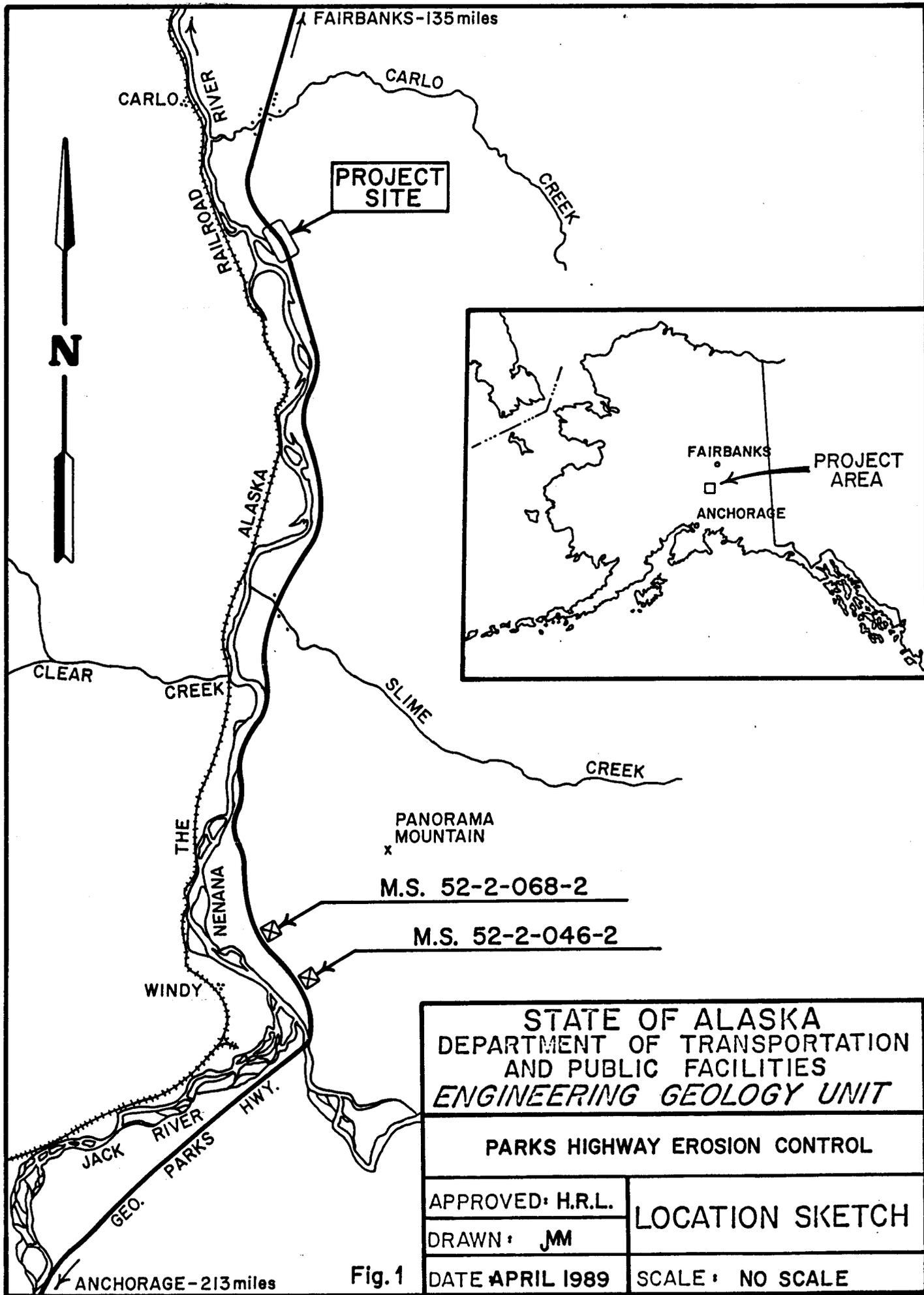
49. Quantity Estimate:             cubic yards          An

50. Remarks: STEEP TALUS SLOPE

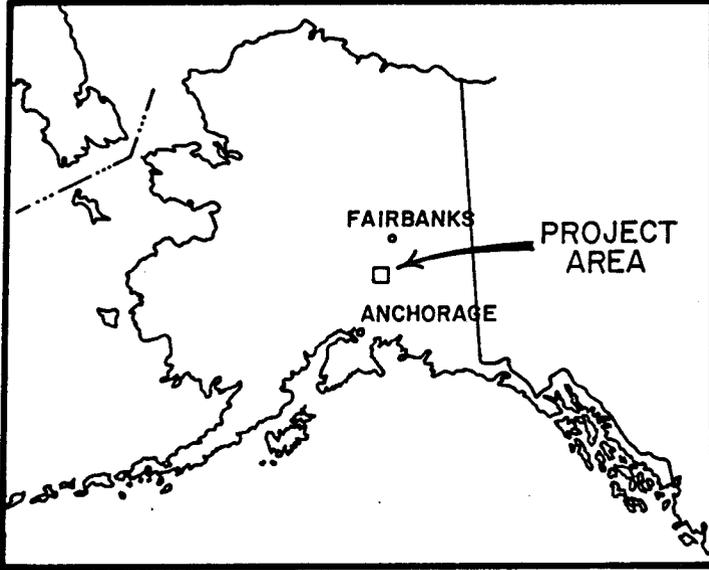
RTIP RAP, TYPE A

## CODES

<b>42. DRAINAGE</b> F Poor - fine-grn, saturated P Fair G Good - coarse-grn, well-drn	<b>45. OVERBURDEN</b> Soil Type (see Item 46) Thickness (ft.) Moisture (see Item 46) Method of Analysis	<b>46. SOIL DESCRIPTION</b> A Gravel      0 Undetermined B Sand      1 Dry C Silt      2 Damp D Clay      3 Free Moisture E Ash F Organic      Method of Analysis G Bedrock Z Other	<b>METHOD OF ANALYSIS</b> A Outcrop exposure B Shovel pit C Soil auger D Soil probe E Prev. rpts. Z Other
<b>44. PERMAFROST</b> Y Yes P Probable N Not likely	<b>49. QUANTITY ESTIMATE</b> Cubic Yards (Visual Est.) Soil Description, primary product Method of Analysis		



**PROJECT SITE**



PANORAMA MOUNTAIN  
x

M.S. 52-2-068-2

M.S. 52-2-046-2

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
*ENGINEERING GEOLOGY UNIT*

PARKS HIGHWAY EROSION CONTROL

APPROVED: H.R.L.

DRAWN: JM

DATE APRIL 1989

LOCATION SKETCH

SCALE: NO SCALE

Fig. 1

GENERAL MATERIALS SITES INFORMATION

Two sources of riprap were investigated for potential use on this project. Material Site (M.S.) 52-2-046-2 and MS 52-2-068-2 are both located near Mile 217 on the George Parks Highway. This report contains the results of the field investigation and the results of laboratory tests performed on samples taken from the sites.

Both of the sites have been used for construction projects in the past. The purpose of this field investigation was to determine whether materials suitable for use on this project remain in the sites. Test trenches were dug with a backhoe, some of the excavated rock fragments were measured to determine size ranges, and a visual estimate was made of the percentage of various-size fragments in the excavated material. The measurements and estimates are shown on the Plan View with Test Trench Logs for each site.

The contractor should be required to determine for himself which areas he intends to mine, the type of equipment needed, and the amount of effort required to produce a sufficient quantity of specified material for this project. He should be required to prepare a mining plan for each area he intends to mine. The mining plan should be approved by the Resident Engineer and by regional materials personnel before any mining takes place.

MS 52-2-068-2

LOCATION AND ACCESS

M.S. 52-2-068-2 lies 30 to 40 feet east of the R.O.W. on the east side of the George Parks Highway at Mile 217.1. Existing access is south of the site and crosses privately-owned land. The Fairbanks-Anchorage Electrical Intertie transmission lines cross the west half of the site with a support tower located in the central part of the site. The site is partially screened from the highway by a road cut backslope.

DESCRIPTION

Material in this site generally consists of basalt fragments ranging in size from less than one inch to more than 6 feet in diameter. The material occurs as a talus cone at the foot of Panorama Mountain. The larger sizes were observed to be generally concentrated on the surface of the ground and at the toe of the slopes.

Class II riprap was obtained from this site for use in the reconstruction of the George Parks Highway in the early 1970's. It appears that selective excavation was necessary to obtain the specified material.

CLEARING AND STRIPPING

Most of the talus cone and some of the excavated areas are unvegetated. A fairly large disturbed area in the east corner of the site has a growth of 6-foot high alders between unvegetated dozer cuts. Grass grows in the areas between debris piles. A large draw in the northwest end of the site has 4 to 12-inch diameter spruce trees spaced 10 to 50 feet apart. Dense alders to 6 feet high grow between the spruce trees. No silt overburden was noted in the test trenches.

WATER TABLE

The water table was not found in any of the test trenches, the deepest of which reached 9 feet below the ground surface.

FROZEN CONDITIONS

In early June 1988, frozen material was found in 2 of the 4 test trenches dug in this site. It was noted at depths of 4 feet and 8 feet below the ground surface in test trenches 88-4 and 88-3, respectively. The frozen zone of test trench 88-4, which bottomed at a depth of 8 feet still in frozen material, was difficult to dig with the backhoe. Rock fragments in the unfrozen zones were loosely-arranged and the test trench walls tended to collapse.

LAND STATUS

This site is located on land owned by AHTNA, Incorporated, a native regional corporation. The United States Bureau of Land Management issued

the State of Alaska a Right-Of-Way grant, F-026067, on July 9, 1962 permitting use of the site as a material source. The Grant is currently administered by AHTNA, Inc.

#### QUALITY AND MATERIALS

Results of laboratory testing of samples taken from this site generally indicate that the material meets the requirements for riprap. Processing will be required to meet the gradation requirements. The average specific gravity (coarse) of 4 rock samples taken from this site was found to be 3.00, or 187.3 pounds per cubic foot. Accordingly, the following relationships between rock sizes and weights were calculated.

<u>Weight (Pounds)</u>	<u>Approx. Size* (inches)</u>
400	15.5
200	12.3
25	6.1

\*Size is determined by averaging the nominal length, width, and thickness of an angular or blocky rock fragment.

Visual estimates of the rock sizes found in the test trenches are shown on the Plan View with Test Trench Logs.

#### MINING PLAN GUIDELINES

Clearing debris should be placed on the periphery of the site to maximize the area available for excavation. Backslopes should be left no steeper than 1½ horizontal to 1 vertical for stability.

A 50-foot, or larger, square island of undisturbed ground should be maintained around the base of the transmission line tower. Guidelines for the configuration of the island can be found in the Alaska DOT&PF Utilities Manual.

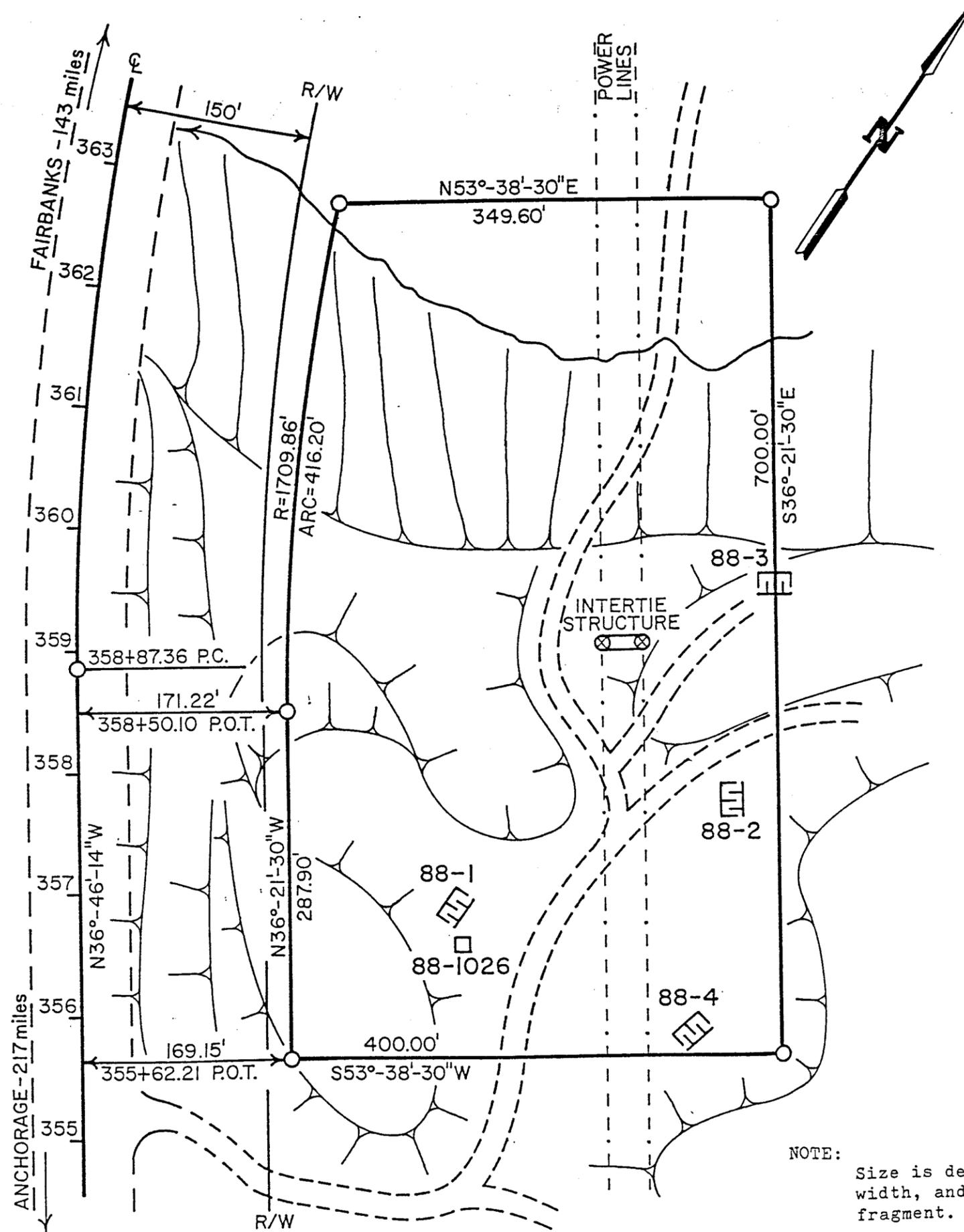
The site should be left in a neat and orderly condition, sloped to drain, with suitable access for future use.

STATE OF ALASKA - NORTHERN REGION  
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES  
SOILS TESTING REPORT

PROJECT NAME: PARKS HIGHWAY EROSION CONTROL  
PROJECT #: I-OA4-3(6)/64249  
SOURCE: M.S.52-2-068-2  
SAMPLED BY: G. BRAZO

TEST HOLE NO.	88-1	Near 88-1	88-3	88-4				
DEPTH (FEET)	2-4	GRAB	3-5	1-3				
STATION (LOCATION)								
OFFSET (FEET)								
LAB NO.	88-1025	88-1026	88-1027	88-1028				
DATE SAMPLED	6-9-88	6-10-88	6-10-88	6-10-88				
Est. +10" (boulders)								
Est. 10"-3" (cobbles)								
+3"								
3"								
2"								
Gravel 1"								
3/4"								
P P 1/2"								
E A 3/8"								
R S #4								
C S								
E I #10								
N N Sand #40								
T G #50								
#100								
Silt - Clay #200								
Clay .02mm								
Size .005mm								
LIQUID LIMIT								
PLASTIC INDEX								
CLASSIFICATION								
SOIL DESCRIPTION	Basalt Bx	Basalt Bx	Basalt Bx	Basalt Bx				
NATURAL MOISTURE								
SP.GR. (FINE)								
SP.GR. (COARSE)	3.01	3.02	2.98	3.00				
MAX DRY DENSITY								
OPTIMUM MOISTURE								
L.A. ABRASION	9	9	10	10				
DEGRADATION FACTOR	41	81	31	41				
SODIUM SULF. (CRSE)		0.4						
SODIUM SULF. (FINE)								
ORGANICS								

REMARKS



NOTE: Size is determined by averaging the nominal length, width, and thickness of an angular or blocky rock fragment.

88-3  
 0.0-8.0 Ang. Gy. Basalt Frags.  
 loose, damp  
 0.0-5.0 Size Est.: 100%: 1"-5"  
 40%: 1'-5"  
 15%: >4'

SAMPLE NO. 88-1027  
 L.A. 10  
 Deg. 3l  
 5.0-8.0 Size Est.: 100%: <10"

88-2  
 0.0-8.0 Ang. Gy. Basalt Frags.  
 loose, damp  
 Size Est.: 100%: <10"

88-1  
 0.0-9.0 Ang. Gy. Basalt Frags.,  
 loose, damp  
 Size Est.: 100%: 1"-6"  
 40%: 1'-2"  
 20%: >4'

SAMPLE NO. 88-1025  
 L.A. 9  
 Deg. 4l

88-4  
 0.0-6.0 Ang. Gy. Basalt Frags.  
 loose, damp  
 0.0-3.0 Size Est.: 100%: 1"-2"  
 25%: 1'-2"

GRAB SAMPLE NO. 88-1026.  
 L.A. 9  
 Deg. 8l

SAMPLE NO. 88-1028  
 L.A. 10  
 Deg. 4l  
 3.0-6.0 Size Est.: 100%: <6"

NOTE: Test Trenches 88-1 thru 88-4 were dug by D.O.T. & P.F. in June 1988. All estimates are visual.

**STATE OF ALASKA**  
 DEPARTMENT OF TRANSPORTATION  
 AND PUBLIC FACILITIES  
**ENGINEERING GEOLOGY UNIT**

PARKS HIGHWAY EROSION CONTROL

DATA: D.O.T. & P.F.	M.S. CODE NO.
DRAWN: JM	52-2-068-2
DATE: APRIL 1989	SCALE: AS SHOWN

LOCATION AND ACCESS

This material site is located 150 ft. right of "L" Station 361+87.9 and is presently being utilized as a material source. The toe of the talus slope is in the right ditch and material is being removed from this slope. No access road is necessary.

FIELD DESCRIPTION

This material site occupies a large lobe-shaped feature of angular rock fragments derived from the steep mountainside immediately to the northeast. Fragments range in size from coarse sand to large blocks measuring 5 to 20 ft. in diameter. Some of these large blocks lie exposed on the surface while others are contained within the deposit. These large blocks, when drilled and blasted, will provide material for riprap. The face of this site stands at an angle of approximately 35°; while the upper surface has a lower angle of repose of about 10°.

CLEARING

Vegetation on this talus slope above the presently worked site consists of 2 to 3 in. diameter alders on 15 to 20 ft. centers and scattered 6 in. diameter white spruce trees. Moss and stunted willows cover that part of the site which has not been stripped.

STRIPPING

Overburden is thin in the unstripped part of the pit and consists of up to 1.0 ft. of silty material.

FROST CONDITIONS

No frozen material was encountered in any of the test holes in this site. Frozen material will be found beneath undisturbed thick organic cover.

WATER TABLE

No water was encountered in any of the test holes in this site.

DRAINAGE

Surface and subsurface drainage in this site are excellent.

AREA

Existing pit	0.7 Acres
Total pit	5.1 Acres
Waste area	2.1 Acres
Total pit plus waste area	7.2 Acres

QUALITY

The granular talus material of this site is reasonably uniform in distribution vertically and horizontally. The quality based on samples taken is A-1-a. This material is suitable for Type I select borrow and with appropriate processing will provide select Type II borrow.

QUANTITIES

Stripping (average horizon 1.0 ft.)

$$\frac{450 \times 500 \times 1.0}{27} = 8,400 \text{ cu. yds.}$$

Less stripped area:

$$\frac{100 \times 300 \times 1.0}{27} = 1,100 \text{ cu. yds.}$$

$$\text{Total stripping} = 7,300 \text{ cu. yds.}$$

Borrow (average horizon 40.0 ft.)

$$\frac{450 \times 500 \times 40}{27} = 333,000 \text{ cu. yds.}$$

$$\text{Less slope correction} = 10,000 \text{ cu. yds.}$$

$$\text{Total borrow} = 323,000 \text{ cu. yds.}$$

522-068-2

STATE OF ALASKA  
DEPARTMENT OF HIGHWAYS  
DISTRICT MATERIALS LABORATORY  
FAIRBANKS, ALASKA

REPORT OF TESTING

PROJ. NAME Cantwell-McKinley PROJ. NO. E-052-2(1)

PIT NO. "0" MATERIALS CODE NO. 22-337-63

LOCATION Sta. 361+87.9, 150 ft. right SAMPLED BY Livingston

Test Hole No.	0-1	0-2			
Field No.	0-1	0-2			
Lab No.	781	779			
APPROX. 1/2"	9				
1/2" PASSING 2"		S			
1 1/2"	87	E			
1"	65	E			
3/4"	47				
1/2"	30	R			
3/8"	21				
#4	11				
#10	6				
#20	3	A			
#200	2	P			
LIQUID LIMIT	18.7				
PLASTIC INDEX	0				
AASHTO CLASS.	A-1-a				
SP. G., COARSE		P			
SP. G., FINE		0			
MAX. DENSITY		R			
OPT. MOISTURE		T			
UNIT WT., LOSS					
UNIT WT., LOSS					
L.A. ABRASION		5			

The data shown herewith was compiled from the samples taken as noted and constitutes the best information available. It is for informational purposes only, and is not guaranteed.

*Thomas J. ...*  
District Materials Engr.

STATE OF ALASKA  
DEPARTMENT OF HIGHWAYS

REPORT OF SAMPLE OF BITUM

Laboratory No. F-779  
July 27, 1962  
Received July 13, 1962

Quantity represented Source  
Source of material Station 363+00, 50' Pt.  
Sampled from Same  
Submitted by E. Livingston  
Identification marks Q-2  
Location used or to be used Chitina, Kenai River, F-024-2(1)  
Examined for \_\_\_\_\_ Spec. No. \_\_\_\_\_

TEST RESULTS

Standard Sieve Mesh Sizes SIEVE ANALYSIS		
As Submitted	Fraction (F. & T.)	
	Passes	Retained
Retained on 20"		
Retained on 2"		
" " 1 1/2"		
" " 1"		
" " 3/4"		
" " 3/8"		
" " 1/2"		
" " 1/4"		
" " 1/8"		
" " 30"		
" " 60"		
" " 100"		
Residue on Pan		
From 2 1/2"		

Specific Gravity (Dry) 2.98 Saturated \_\_\_\_\_  
Water absorbed 0.37 %  
Los Angeles Abrasion (Wear) 10.9 %  
Sandstone (Edge Sample) (F. & T.) 0.00 at 25 cycles  
Material passing 200 mesh sieve (F. & T.) \_\_\_\_\_ %  
Weight per cubic foot {  
D & S \_\_\_\_\_ lb.  
As Test \_\_\_\_\_ lb.

Sindis edge

Description: **Microcrystalline Resalt**

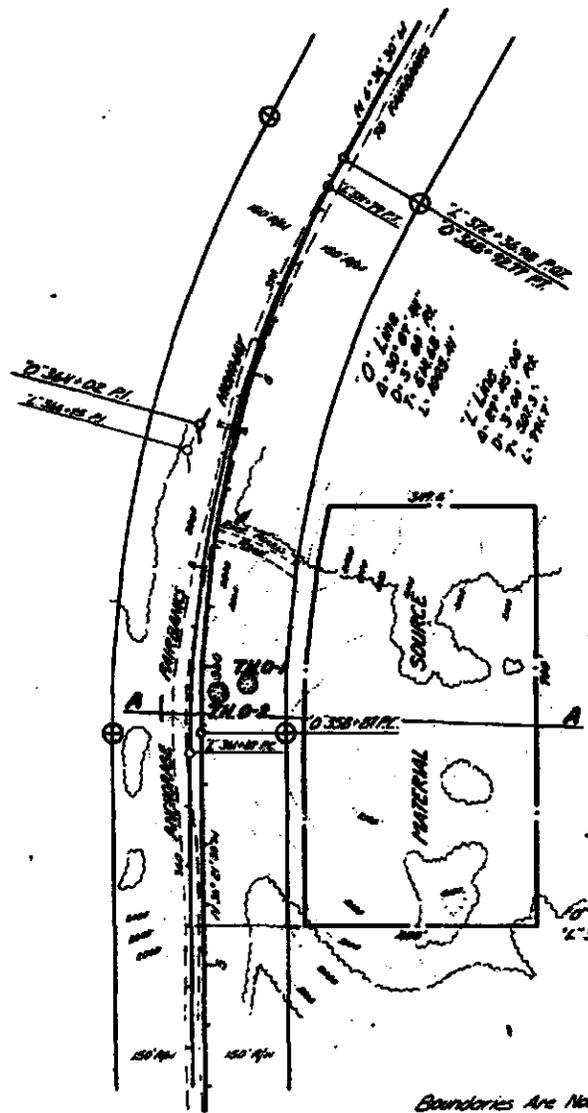
Remarks: The material as represented by this sample is suitable for riprap.

FOR INFORMATION ONLY

Pre-Construction Sample  
Copies to:  
R. D. Finney, CME (2)  
A. W. Balvin, Dist. Geo. (2)  
File

Chief Materials Engineer  


50000 yds Arrow  
 50000 yds Saturated  
 7500 yds riprap, Class II

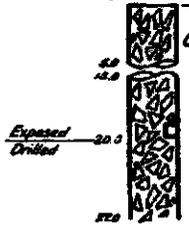


**T.H. 0-1**

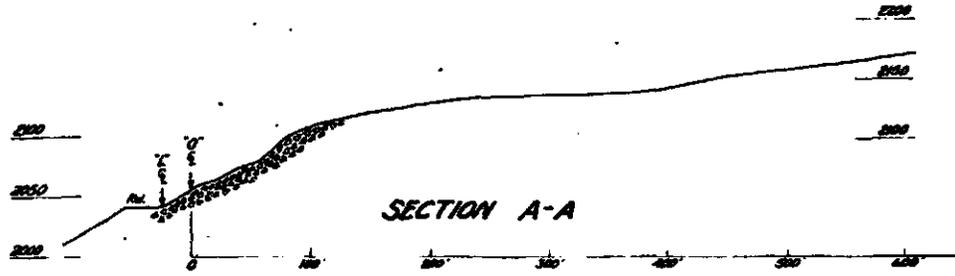


00-31.0 Angular Greenstone  
 Fragments 25% - 30% + 2"  
 10% + 10" (Boulders)  
**SAMPLE # 0-1**  
 A-1-a NFS

**T.H. 0-2**



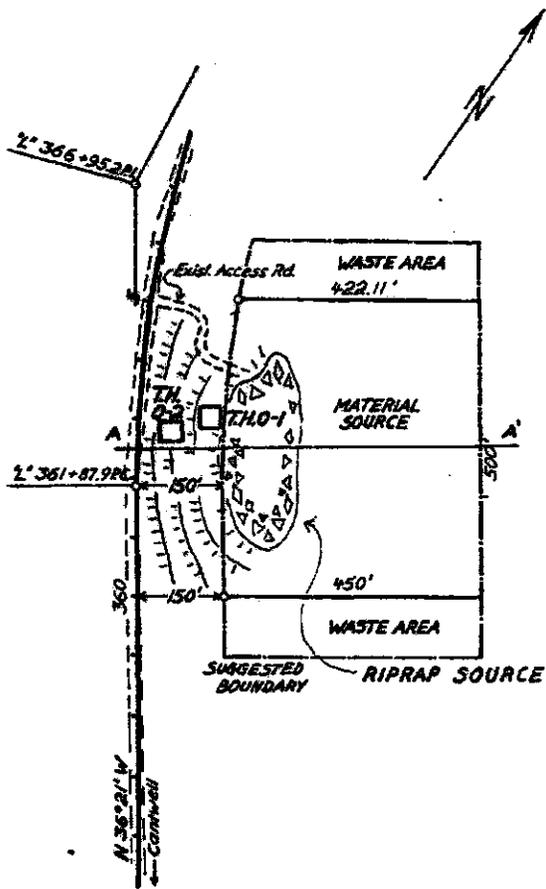
00-27.0 Angular Greenstone  
 Fragments 25% - 30% + 2"  
 10% + 10"  
**SAMPLE # 0-2**  
 L.A. 10.7% SB. 2.9% Abs. 0.37%



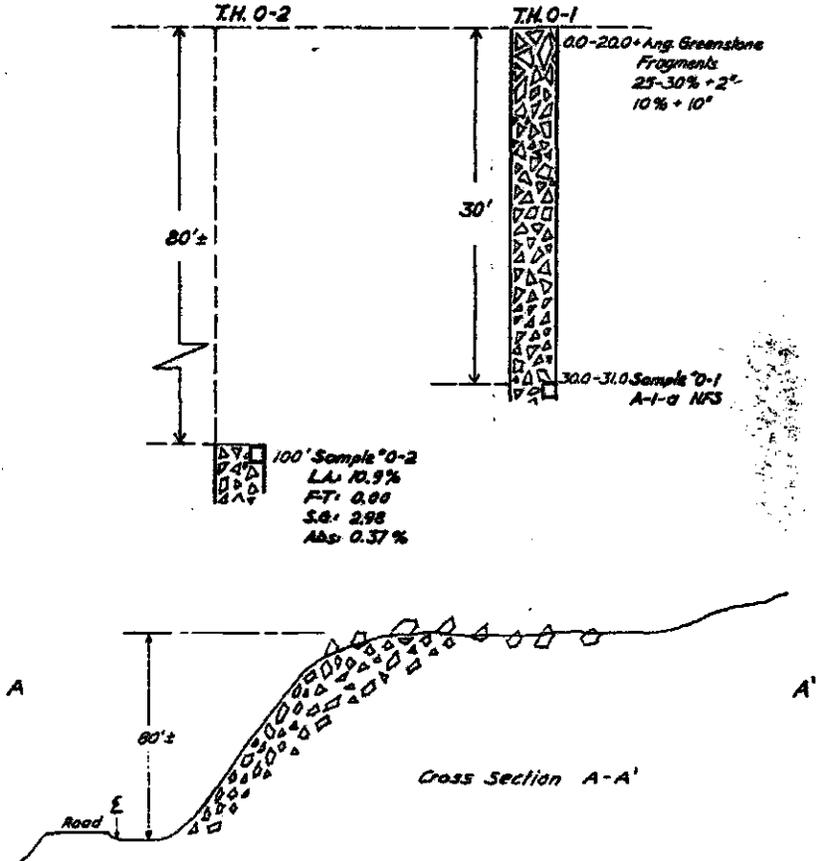
52-2-068-2

Boundaries Are Not Surveyed  
 Date Of Test Notes 0-1-0-2 July 1962  
 Boulders To 20 Feet In Diameter On The Surface

STATE OF ALASKA DEPARTMENT OF HIGHWAYS ENGINEERING GEOLOGY SECTION	
CANTWELL NORTH EXCEPTION F-052-2(1)	
DATA: H.R.L.	MS. CODE NO:
DRAWN: B.R.N.	522-068-2
DATE: 3-71	SCALE:



NOTE:  
BOUNDARIES NOT SURVEYED

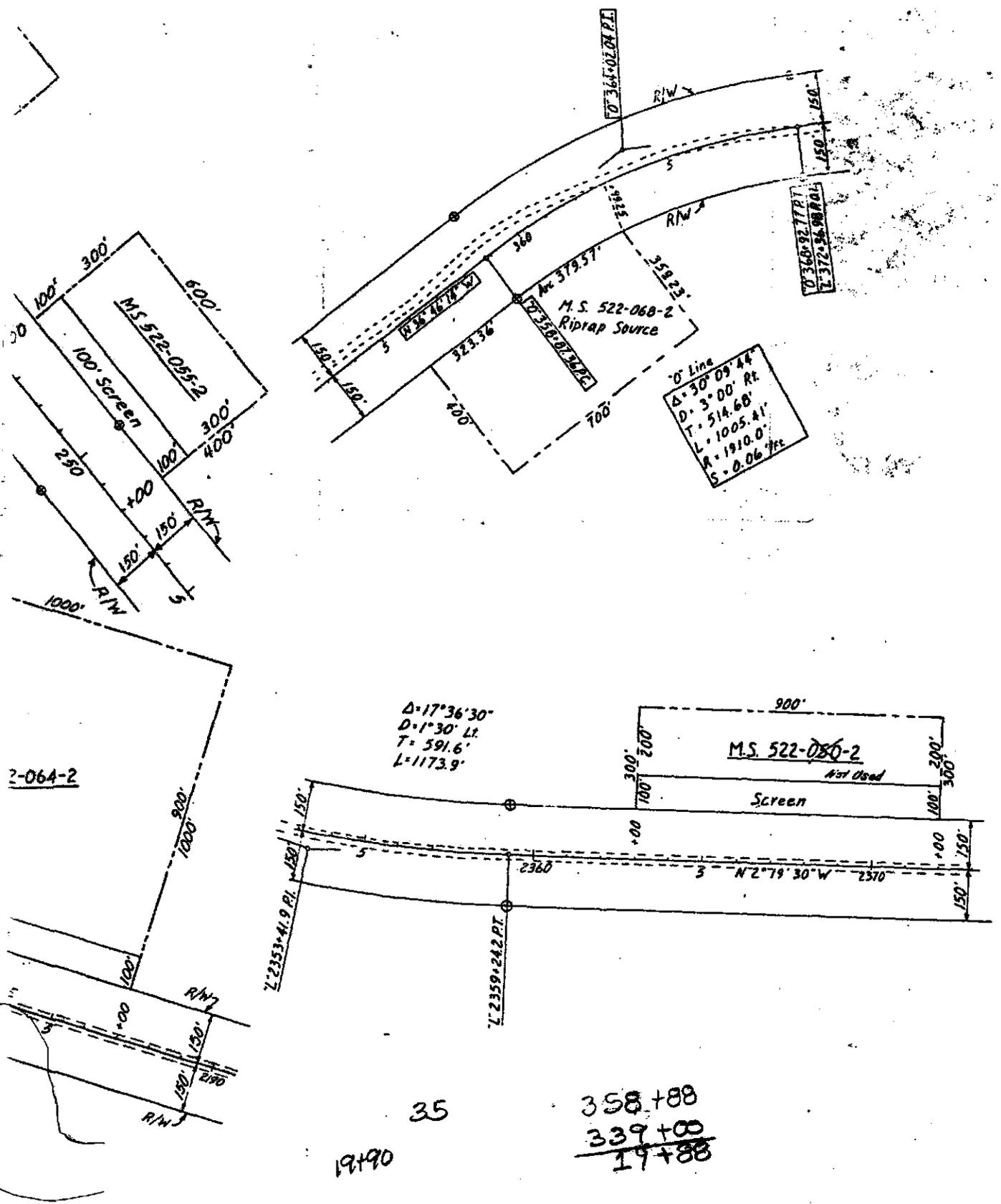


QUANTITY: 323,000 yd<sup>3</sup>  
 QUALITY: A-1-a  
 OVERSIZE: 15-20% 2"-10", 10-20% +10"  
 WATERTABLE: Not Seen in TH  
 FROST: None  
 VEGETATION: Low Brush & Moss  
 TOPOGRAPHY: Site Slopes Steeply Up To The NE  
 MINERALOGY: Angular Fragments Consisting Chiefly Of Cantwell Volcanics

STATE OF ALASKA DEPARTMENT OF HIGHWAYS FAIRBANKS DISTRICT MATERIALS SECTION	
CANTWELL - MC KINLEY PROJECT No F-052-2(1)	
DATA: H.R.L.	M.S. CODE NO: 22-337-63
DRAWN: H.A.N.	MAT. SITE NO: 70
DATE: 1-63	SCALE: 1" = 100'

522-068-30E 92

# SOURCES



2-064-2

$\Delta = 17^{\circ} 36' 30''$   
 $D = 1^{\circ} 30' Lt$   
 $T = 591.6'$   
 $L = 1173.9'$

0' Line  
 $\Delta = 30^{\circ} 09' 44''$   
 $D = 5^{\circ} 00' Rt$   
 $T = 514.68'$   
 $L = 1005.41'$   
 $R = 1910.0'$   
 $S = 0.06 ft/c$

35

19+90

358+88  
 339+00  
 19+88

2010































































