

**STATE OF ALASKA ITB NUMBER 2524N096
AMENDMENT NUMBER Three (3)**

AMENDMENT ISSUING OFFICE:



Department of Transportation & Public Facilities
Statewide Contracting & Procurement
P.O. Box 112500
(3132 Channel Drive, Room 350)
Juneau, Alaska 99811-2500

THIS IS NOT AN ORDER

DATE AMENDMENT ISSUED: May 31, 2024

ITB TITLE: Crushed Aggregate, Stockpiled, Dalton Highway- Federally Funded

OPENING DATE: May 31, 2024 at 2:00PM. Alaska Time

This is not a mandatory return Amendment.

The purpose of Amendment #3 is to:

- Provide answers to questions received
- Provide additional site inspection reports for MS 65-9-099-2 for Dalton MP 275 (Galbraith Lake) Attachment #1
- Provide additional site inspection reports for MS 65-9-105-2 Inspection Report (Informational Only) Attachment #2
- Provide additional documentation 2024 Dalton Sites Combined Attachment #3
- Provide a call in phone number for the Bid Opening

Question #1:

I intended to ask this previously, but the asterisk on the Amended Bid Tab says, "Note that this site requires a Mining and Reclamation Plan (MRP) in accordance with Section 106-1.02-5, to be submitted at least 60 days in advance of mobilization." This timeline cannot be met given the completion dates listed in the Amended Bid Tab.

Answer # 1:

The 60 day language has been revised to 15 days in advance of mobilization by issuance of this amendment. The State cannot guarantee approval prior to 60 days in advance. If his delay causes contract completion dates to be extended, the Department will accept late delivery accordingly without penalty."

Question #2:

We are hoping for a little clarification on the Dalton MP 221 material site. Can you please confirm which material site is to be used for the material? In the amended bid schedule, there is reference to MS 65-9-105-2. However, there is no inspection report for this site – only a BLM Free Use Permit. Are you sure that the material site shouldn't be for the Dietrich Quarry at MP 222 – MS 65-69-089-2 – as there was a material site inspection report already included in the original ITB as Attachment D. IF the Dietrich Quarry is not to be used and MS 65-9-105-2 is, please include a material site inspection report for this location.

Answer # 2:

Please see attachment #1 provided with this Amendment #3.

Question #3:

Please include a material site inspection report for MS 65-9-099-2 for Dalton MP 275 (Galbraith Lake).

Answer # 3:

Please see attachment #2 provided with this Amendment #3.

Question #4:

Are there any other documents available for MS 65-9-029-2 for Dalton MP 64 (Shooting Range) – such as a BLM Free Use Permit?

Answer # 4:

Please see Answer #2

Question #5:

Phone in questions from last week included – I asked for clarification on bid bond vs certified check for bid security – you confirmed that you only need to receive a copy of the cashier's check prior to bid. IF we are deemed apparent low bidder, the check must be submitted to you prior to award. You also confirmed that bids can be emailed in and that a hard copy does not need to be received at bid opening.

Answer # 5:

The Bid Guarantee must be an authentic and valid check. A copy is not acceptable to meet this requirement.

Per ITB Section 3.02 Bid Guarantee:

Bids must be accompanied by a bid guarantee in the form of a Certified or Cashier's check in the amount of \$5,000.00 made payable to the State of Alaska. Bid Bonds will not be accepted. The bid guarantee of each successful bidder will be retained until that bidder has furnished a satisfactory Performance Bond or Individual Surety. If the successful bidder fails to deliver the required Performance Bond or Individual Surety within the time required, the bid guarantee will be forfeited to the State of Alaska. The bid guarantee of each unsuccessful bidder will be returned as soon as practical after award has been made. The Bid Guarantee shall be submitted under the name appearing on the bidder's current Alaska business license. Failure to submit a bid guarantee in the proper form and amount, by the time set for opening of bids, will cause the State to determine the bid non-responsive and reject the bid.

Per ITB Section 1.07 Return Instructions: (Excerpt)

If submitting your bid via email, the entire bid may be emailed to dotnrprocurement@alaska.gov and must contain the ITB number in the subject line of the email. The maximum size of a single email (including all text and attachments) that can be received by the state is 15 mb (megabytes). If the email containing the bid exceeds this Page 5 of 26 size, the bid must be sent in multiple emails that are each less than 15 megabytes and each email must comply with the requirements described above. Please note that email transmission is not instantaneous. Like sending a hard copy bid, if you are emailing your bid, the state recommends sending it enough ahead of time to ensure the email is delivered by the deadline for receipt of bids. It is the bidder's responsibility to contact the issuing agency at (907) 451-2222 to confirm the bid has been received. The State will not confirm contents of any email received, only that an email was received. The State is not responsible for unreadable, corrupt, or missing attachments.

Call In phone number for the Bid Opening:

1-907-451-2222

Signature:



Date:

5-31-24

Name:

Chris Hunt

Title:

Procurement Specialist 5

Attachment # 1

STATEWIDE MATERIAL SITE INVENTORY

MATERIAL SITE INSPECTION REPORT

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

DALTON HIGHWAY

MS 65-9-099-2

November 4, 2009

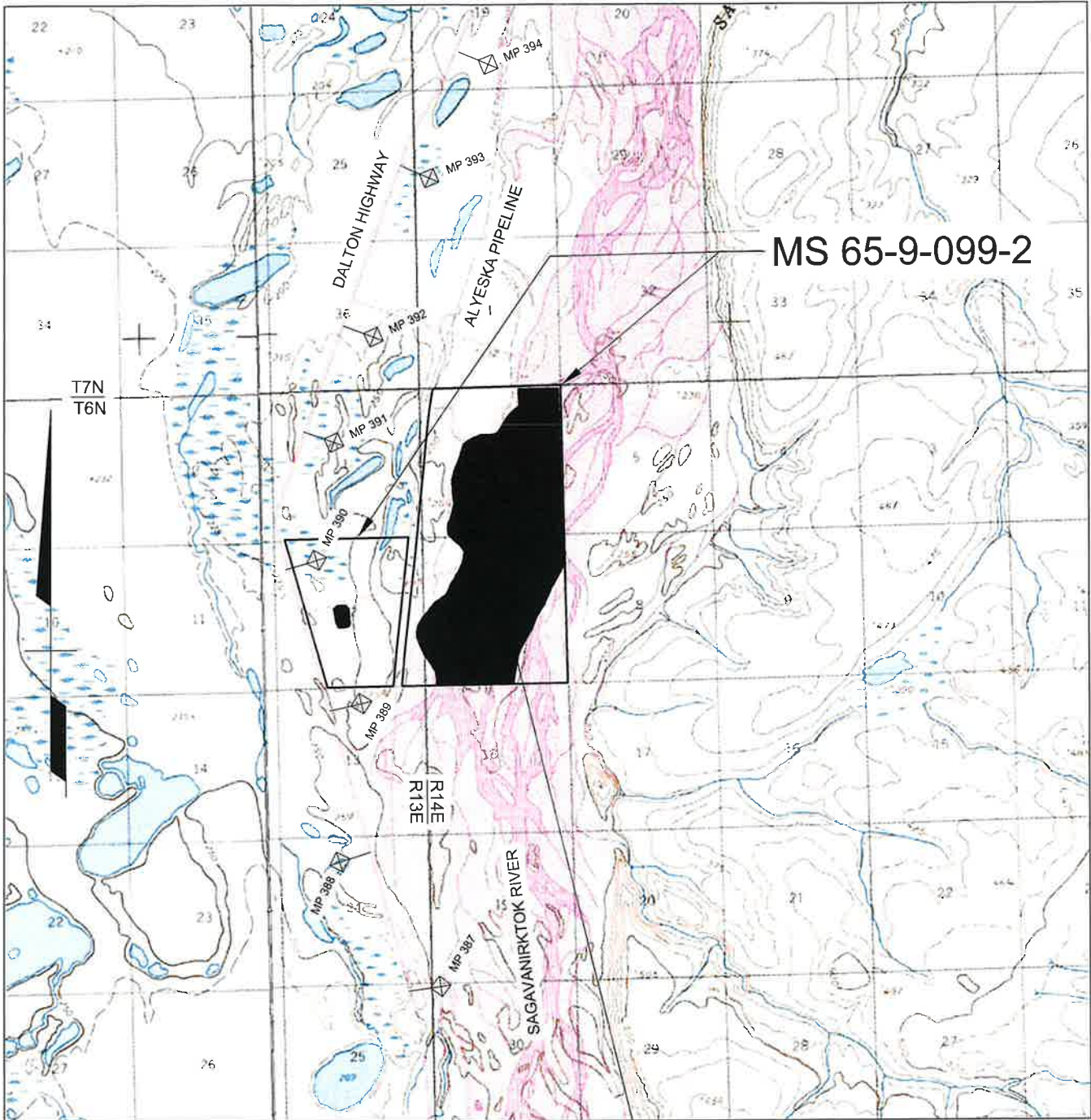
<u>CONTENTS</u>	<u>PAGE</u>
COVER SHEET.....	1
LOCATION MAP	2
SITE MAP	3A & 3B
INSPECTION FORM.....	4 thru 10

CATEGORY:

ACTIVE – STATUS UNKNOWN

According to information found in the DOT&PF EDMS system in January 2009 and data in the DNR case file abstracts, this site lies on State of Alaska lands managed by DNR. The site (MS-133-2) originally lay within the active floodplain of the Sagavanirktok River and was developed for construction of the Dalton Highway and Alyeska Pipeline in the 1970's. An upland site (OMS 133-2A) was developed by Alyeska in the 1990's (ADL 415608) which was closed in 2000. DOT&PF has an application for a new contract (ADL 416892) pending. The rehabilitation plan states "A waterfowl pond will be created on the upland site" and "the river site will become an overwintering pond for fish." The University of Alaska Toolik Field Station has a climate station (LAS 22830) and a snow fence (LAS 27219) within the site. The permit for the station expires on April 4, 2013 and the permit for the snow fence was pending. An existing access road (131-APL-3) connects the site to the Dalton Highway. The access road right-of-way is included in the contract application. The site appears to contain significant quantities of sand and gravel and should be retained by DOT&PF for future use.

LOCATION MAP



MS 65-9-099-2

U.S.G.S. QUADRANGLE: SAGAVANIRKTOK (D-3) & (D-4)

GPS COORDINATES FROM GOOGLE EARTH
 UTM (WGS84-METERS)
 ZONE 6: N7,754,531 E431,649
 AK STATE PLANE (NAD83-US SURVEY FT)
 ZONE 4: N5,810,388 E1,793,871

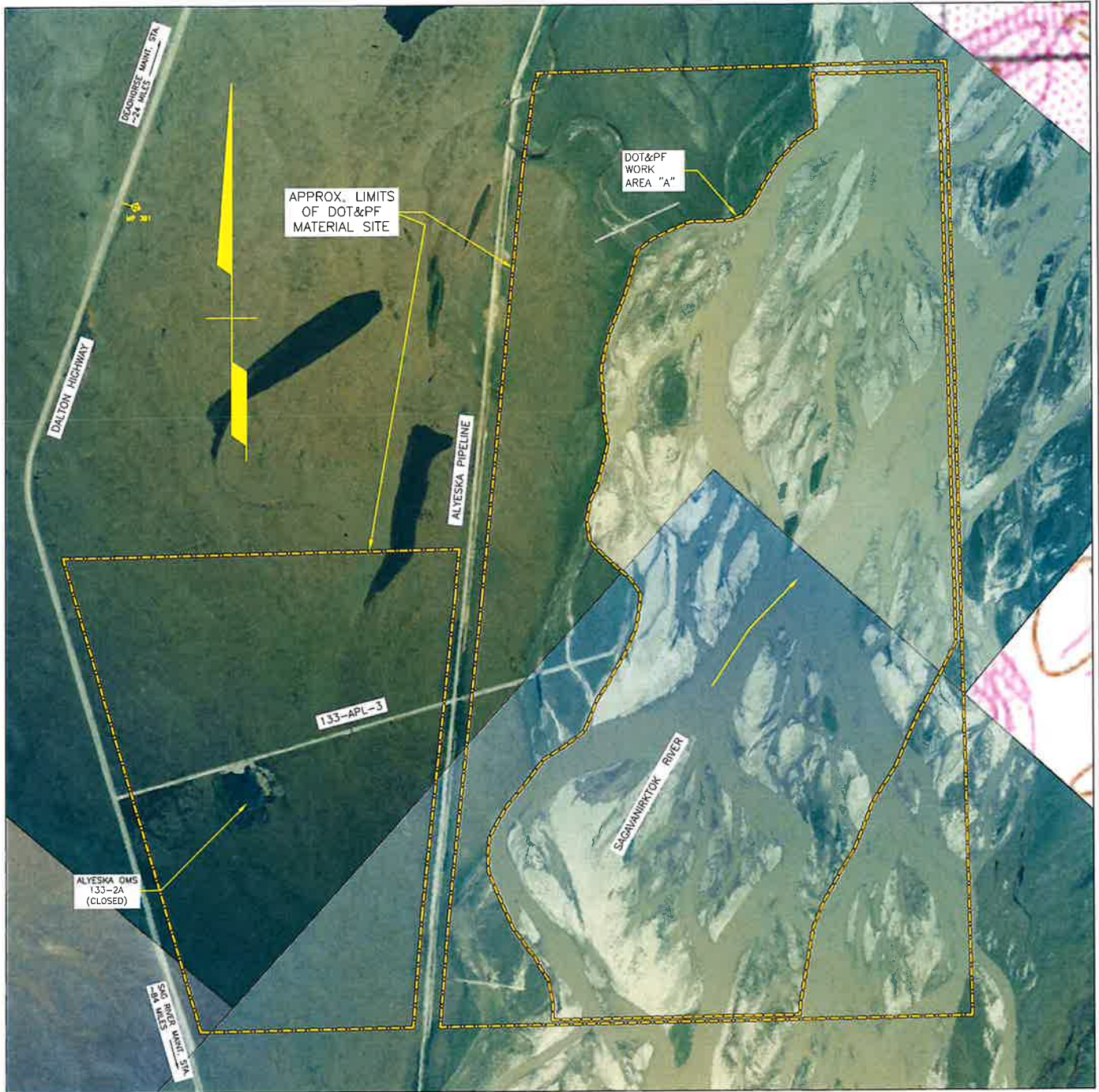
ACTIVE - STATUS UNKNOWN



GRAPHIC SCALE IN MILES

STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES			
STATEWIDE MATERIAL SITE INVENTORY			
MS 65-9-099-2			
SCALE AS SHOWN	DESIGNED P.K.H.	DRAWN A.T.B.	PAGE 2
	CHECKED C.H.R.	DATE MAY 2009	

SITE MAP



BASE MAP IS 2006 AERIAL PHOTOGRAPHY. 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



GRAPHIC SCALE IN FEET

BASE MAP FROM AERIAL PHOTOS DATED 7/25/06

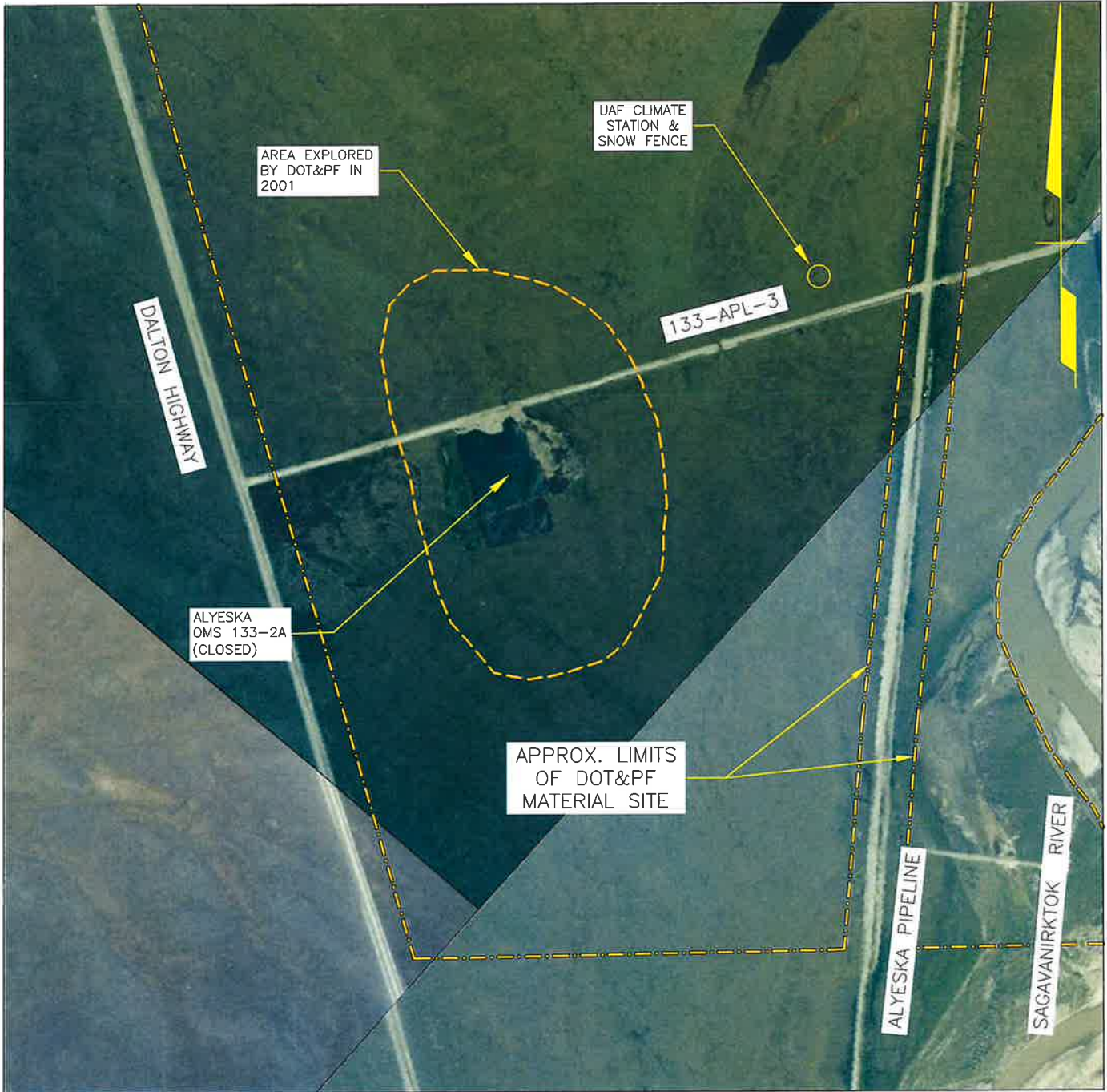
Prepared By:
R&M CONSULTANTS, INC.

STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES			
STATEWIDE MATERIAL SITE INVENTORY			
MS 65-9-099-2			
SCALE AS SHOWN	DESIGNED P.K.H.	DRAWN P.K.H.	PAGE 3A
CHECKED C.H.R.	DATE JUNE 2009		

Z:\project\1443.03\65_Dalton_Highway\MS 65-9-099-2\acad\geo\ocad\MS_Site_Map_65-9-099-2.dwg

Plotted 1/26/2010 2:59 PM by Aaron Banks

SITE MAP



BASE MAP IS 2006 AERIAL PHOTOGRAPHY. 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 AERIAL PHOTOS DATED 7/25/06

Prepared By:
R&M CONSULTANTS, INC.

STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES			
STATEWIDE MATERIAL SITE INVENTORY			
MS 65-9-099-2			
SCALE	DESIGNED	DRAWN	PAGE
AS SHOWN	P.K.H.	P.K.H.	3B
	CHECKED	DATE	
	C.H.R.	JUNE 2009	

Z:\project\1443.03\65-Dalton_Highway\MS 65-9-099-2\acad\geo\ocad\MS_Site_Map_65-9-099-2.dwg

Plotted 1/26/2010 3:03 PM by Aaron Banks

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

16. **POTENTIAL_STATUS** SIGNIFICANT

Estimated quantity of material in the site at the time of inspection.

NONE	There appeared to be no useable material in the site.
LIMITED	There appeared to be less than 25,000 c.y. available within the developed site.
SIGNIFICANT	There appeared to be greater than 25,000 c.y. available within the developed site.
EXPANDABLE	There was limited material within the developed site, but there appeared to be significant material outside existing site limits.
UNDEVELOPED	The pit has not been mined (used only for new sites).
CLOSED	There may be useable material left in the pit but it is not available.
UNKNOWN	
OTHER	The site does not fit any of the categories above. Explain in Section 44, Notes.

17. **PRESENT_USERS**

17a. **PRESENT_USER_1** DOT&PF CONSTRUCTION

17b. **PRESENT_USER_2** _____

17c. **PRESENT_USER_3** _____

18. **PERMITTED_ACREAGE** 1700

Area within site permit or R.O.W. boundaries, from permit application or property plat.

19. **DEVELOPED_ACREAGE** 800

Area within an existing pit, excluding spoil berms lying outside the pit, access roads etc. Explain below.

Includes Alyeska OMS 133-2A and DOT&PF working area.

20. **ACREAGE_COMP_METHOD** FROM MAP/PHOTO

Method used to determine developed acreage.

21. **EST_QUAN_AVAIL** 11,000,000 ROUGH ESTIMATE

Estimated quantity available (b.c.y.), may be based on acreage computed above plus expansion area.

Explain computation assumptions and calculations below.

The site can be divided into two parts. The first is the upland portion on either side of the Alyeska Pipeline. Given prior use, other uses and rehabilitation constraints, about one-half of the area west of the pipeline may be minable. Assuming an average 5 feet of overburden and a 30-foot working depth approximately 5,000,000 c.y. (200 acres x 25 feet x 1,000 c.y. per acre-foot) of material are minable. Much of the upland area east of the pipeline would not be minable due to river bank erosion and fishery concerns and only limited amounts of material would be available. A mining operation on the active floodplain north of the location where the access road ends would produce approx. 6,000,000 c.y. (200 acres x 30 feet x 1,000 c.y. per acre-foot). There was little to no available material in the active floodplain if mining is restricted to above MLW.

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

22. **ACCESS_TYPE** EXISTING ROAD / OPEN

NONE	No access road has been built.
EXISTING ROAD / OPEN	Drivable. May have gate.
EXISTING ROAD / REVEG	Can be reopened with little effort.
EXISTING ROAD / CLOSED W/BERMS	Can be reopened with little effort.
EXISTING ACCESS / REMOVED	Can be reopened with much effort.
SNOW ROAD	Can only be accessed during winter.
ICE ROAD	Requires crossing river or lake ice in the winter.
BARGE	Material can only be moved by barge.
OTHER	The site does not fit any of the categories above. Describe in Section 44, Notes.

23. **ACCESS_LENGTH** 100
Approx. length from edge of pit to highway/secondary route (ft.)

24. **VEGETATION**

Wet upland polygonal tundra with brush and grasses. Vegetation within the floodplain of the Sag River consists of sparse willow brush to 6 feet high.

25. **TYPE_1** BORROW PIT 26. **TYPE_2** RIVER BAR

Dominant type	Subordinate type
General Types of Materials Available	Enter data in Type_2 only if two types of material site available
QUARRY	Bedrock sources requiring blasting
BORROW PIT	Soils or soft bedrock (rippable), above water table
BAILING	Requires production below the water table
RIVER BAR	Sand/gravel bars in active channels

27. **OB_CLASS_1** >6 FT. 28. **OB_CLASS_2** NONE

New Site or expansion Area	Existing Pit (Spoil)
A site may have both. Data should be based on actual subsurface exploration, otherwise unknown.	
Estimated average depth over the area.	
NONE	UNKNOWN
<3 FT.	OTHER
3 TO 6 FT.	
>6 FT.	

29. **OB_TYPE_1** SILT 30. **OB_TYPE_2** _____

New Site or expansion Area	Existing Pit (Spoil)
A site may have both.	
SILT	PEAT
COLLUVIUM	SPOIL
	SOLID WASTE
	OTHER
	UNKNOWN

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

<p>31. MAT_TYPE_1</p> <p>Dominant type</p>	<p><u>FLUVIAL</u></p>	<p>32. MAT_TYPE_2</p> <p>Subordinate type</p>
<p>BEDROCK</p> <p>WEATHER. BEDROCK</p> <p>FLUVIAL</p> <p>GLACIAL</p> <p>COLLUVIAL</p> <p>EOLIAN</p> <p>SILT</p>	<p>Bedrock sources requiring blasting</p> <p>Bedrock sources requiring ripping</p> <p>Water deposited sand and gravel, includes glaciofluvial</p> <p>Glacial till</p> <p>Talus slopes, etc.</p> <p>Sand Dunes, etc.</p> <p>Silt deposits, loess, fluvial, etc.</p>	

<p>33. PERMAFROST_1</p> <p>New Site or Expansion Area</p>	<p><u>DETECTED IN MOST TEST HOLES OR PITS</u></p>
<p>34. PERMAFROST_2</p> <p>Existing Site</p> <p>DETECTED IN MOST TEST HOLES</p> <p>DETECTED IN SOME TEST HOLES</p> <p>DETECTED IN IMMEDIATE VICINITY</p> <p>DETECTED IN NO TEST HOLES</p> <p>DATA OUTDATED</p> <p>UNKNOWN</p> <p>OTHER</p>	<p><u>DATA OUTDATED</u></p>

<p>35. GROUNDWATER</p>	<p>Perched groundwater has been observed between 0 and 2 feet in test borings drilled in the upland areas during September 2001. The water table in the Sag River floodplain will vary with river levels.</p>
-------------------------------	---

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

36. LITHOLOGY_1

FLUVIAL

37. LITHOLOGY_2

Dominant type

Subordinate type

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

38. MATERIAL CLASSIFICATION

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

38a.	GW-GM	38c.	GM	38e.	_____	38g.	_____
38b.	GP-GM	38d.	_____	38f.	_____	38h.	_____

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

39. COBBLES AND BOULDERS

Test Boring Callout / ASTM Classification, either a. or b. and c. (Can use ranges i.e. 0 to 20)

39a.	CONTAINS	_____	
39b.	Est. % by VOL.	_____ 15 _____	(Est. From Visual Observations)
39c.	MAX. SIZE (in.)	_____ 12 _____	(Observed Size)

40. AGG TEST RESULTS

Year of test or report- Test result / Year of test or report- Test Results

40a. SG APP COARSE	_____	2001- 2.79, 2.68, 2.66
40b. SG APP FINE	_____	
40c. ABSORPTION CRSE	_____	
40d. ABSORPTION FINE	_____	
40e. NORDIC ABRASION	_____	
40f. L.A. ABRASION	_____	2001- 20
40g. DEGRADATION (T-13)	_____	2001- 61, 79
40h. NASO4 LOSS COARSE	_____	2001- 0.4
40i. NASO4 LOSS FINE	_____	2001- 2.2

41. POTENTIAL USABILITY

TYPES A AND B MATERIAL AVAILABLE

Best known potential use of the material, based on records, exploration and laboratory data.

CONCRETE AGGREGATE PRODUCED	The site has produced concrete aggregate
PAVING AGGREGATE PRODUCED	The site has produced paving aggregate
CRUSHED PRODUCTS PRODUCED	Base, Surface Coarse, Subbase, etc. has been produced.
TYPE A AND B MATERIAL AVAILABLE	0 to 10 percent passing 200
TYPE C AVAILABLE	Compactable material
TYPE C NOT AVAILABLE	Uncompactable material (Lower Kuskokwim and Yukon River, etc.)
UNKNOWN	
OTHER	Explain in Section 44.

42. SPECIAL PROBLEMS

Special problems encountered or anticipated with use of the material, based on records, exploration and laboratory data.

ORGANIC CONTENT	The material is very difficult to compact.
HIGHLY WEATHERED GRAVEL	The gravel is highly weathered and may break down when handled.
BREAKS DOWN UNDER USE	Material breaks down on grade.
SENSITIVE TO WATER CONTENT	Material is sensitive to water content, i.e.. some glacial tills, soft bedrock.
VARIABLE MATERIAL	Deposit contains mixture of suitable and unsuitable material.
POSSIBLE CONTAMINATION	Site may be contaminated by petroleum products or hazardous materials.
CONTAINS ASBESTOS	Site contains naturally occurring asbestos.
POTENTIAL ASBESTOS	Site in area where naturally occurring asbestos is mapped.
ACID ROCK DRAINAGE	Site contains rock susceptible to producing acid rock drainage.
UNKNOWN	
OTHER	Explain in Section 44, Notes.

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

43. RIPRAP

NOT POSSIBLE

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.

22. The eastern portion of the site can only be accessed by crossing the pipeline corridor. The access road (133-APL-3) has 5 low water crossing east of the TAPS, with the easternmost 2 crossings being unfordable by a highway vehicle.

27. Test borings completed in 2001 indicated that silty overburden ranged from 5 to 9 ft. in thickness.

Attachment #2

STATEWIDE MATERIAL SITE INVENTORY

MATERIAL SITE INSPECTION REPORT

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

DALTON HIGHWAY

MS 65-9-105-2
Ruff Creek Site

November 12, 2009

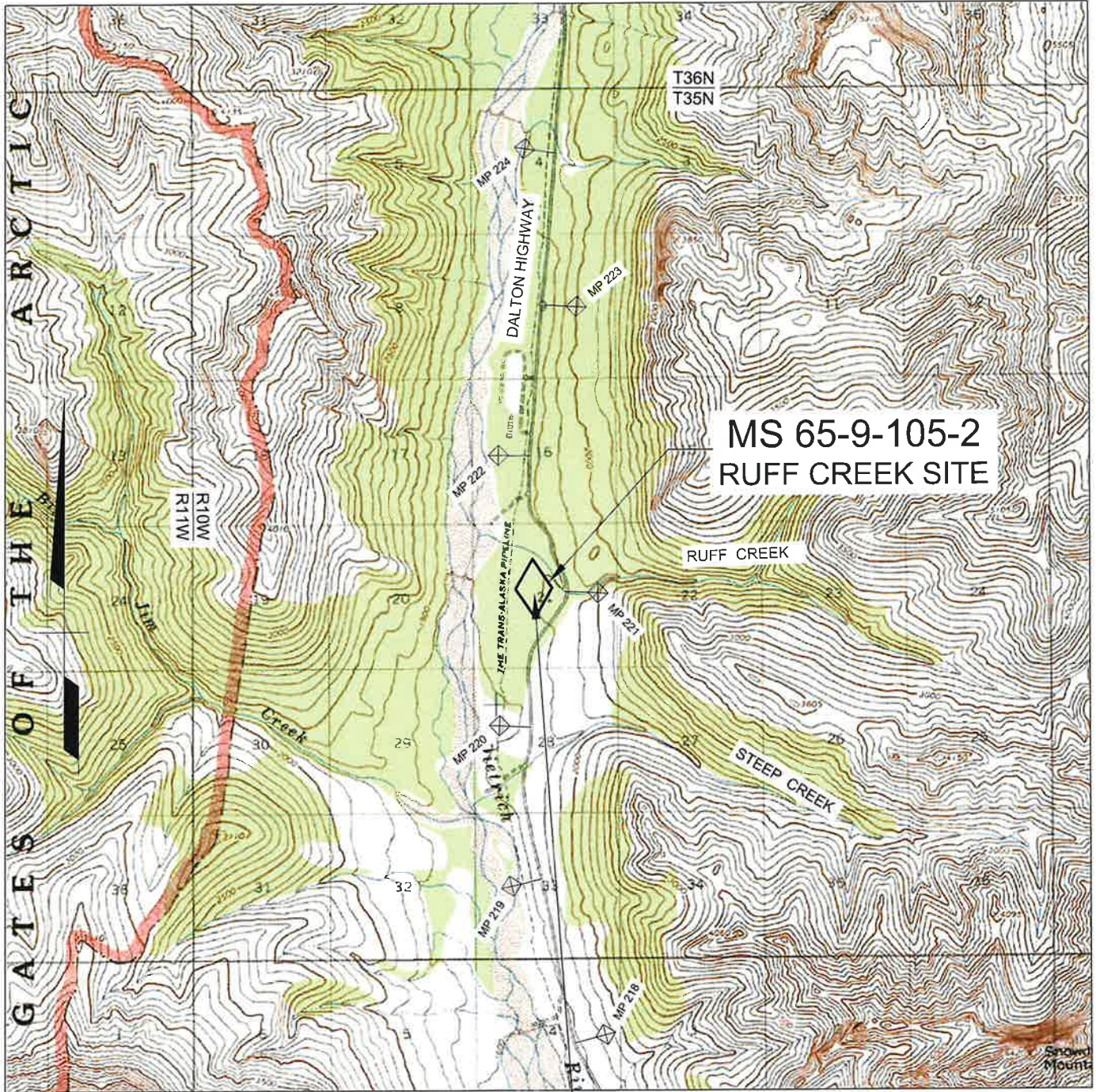
<u>CONTENTS</u>	<u>PAGE</u>
COVER SHEET.....	1
LOCATION MAP	2
SITE MAP	3
INSPECTION FORM.....	4 thru 10

CATEGORY:

ACTIVE – POTENTIAL

There was no information in the DOT&PF EDMS system in January 2009 concerning this site. The proposed site was drilled by Golder in 2003 at which time it was called Unnamed Creek – DH MP 221. DOT&PF drilled the site in January 2009. There were no previous material sites in this location and there is no existing access road. The site appears to contain silty sand and gravel and would provide marginal embankment material.

LOCATION MAP



**MS 65-9-105-2
RUFF CREEK SITE**

U.S.G.S. QUADRANGLE: CHANDALAR (D-6)

GPS COORDINATES FROM GOOGLE EARTH

UTM (WGS84-METERS)
 ZONE 6: N7,528,173 E381,138
 AK STATE PLANE (NAD83-US SURVEY FT)
 ZONE 4: N5,060,389 E1,664,581

ACTIVE - POTENTIAL



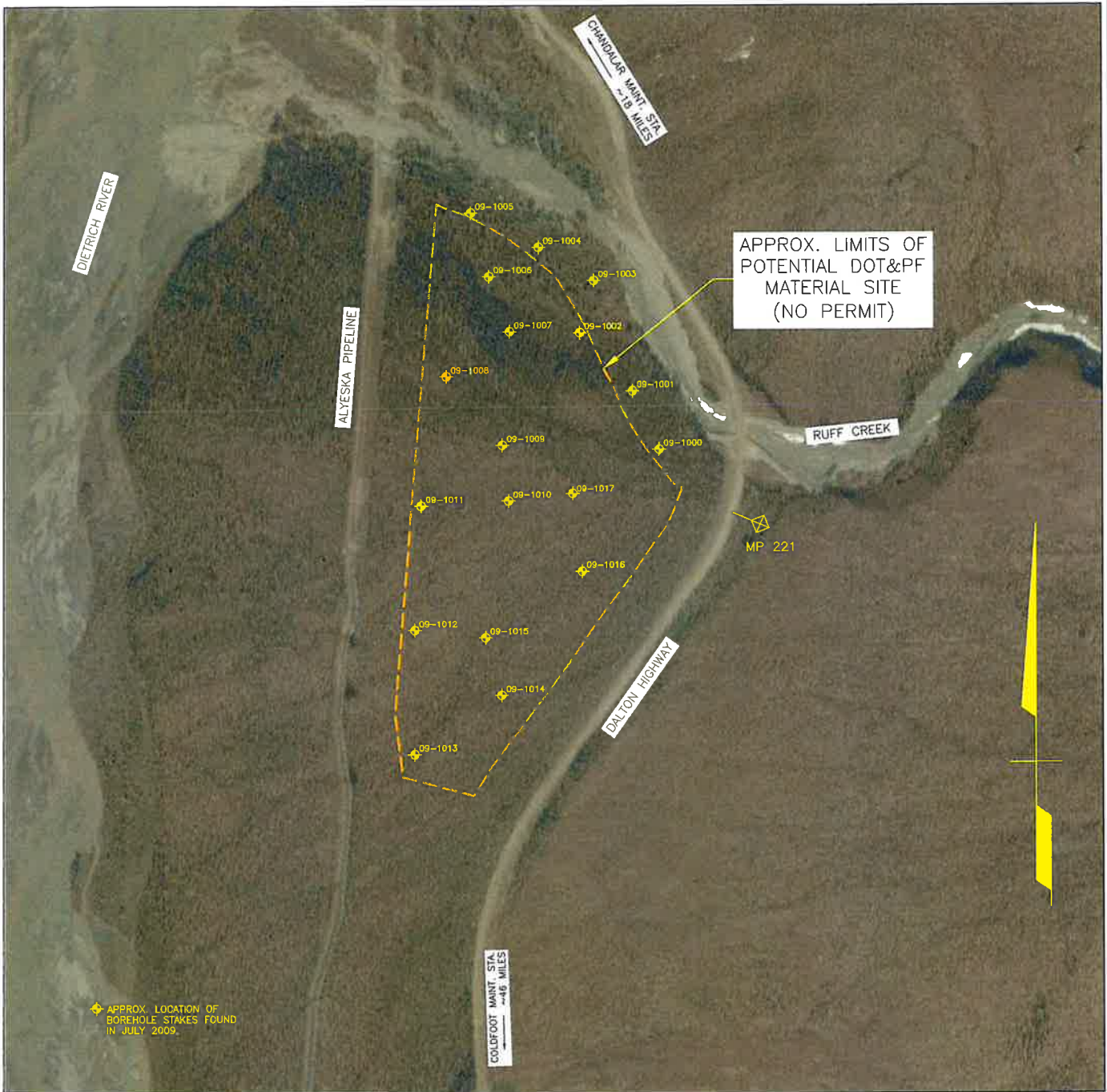
GRAPHIC SCALE IN MILES

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 AND PUBLIC FACILITIES

STATEWIDE MATERIAL SITE
 INVENTORY

MS 65-9-105-2

SITE MAP



APPROX. LIMITS OF
POTENTIAL DOT&PF
MATERIAL SITE
(NO PERMIT)

◆ APPROX. LOCATION OF
BOREHOLE STAKES FOUND
IN JULY 2009.

Z:\project\1443\03\65_Dalton_Highway\MS_65-9-105-2\ecad\geo\ecad\MS_Site_Map_65-9-105-2.dwg

Plotted 1/26/2010 3:56 PM by Aaron Banks

BASE MAP IS 2005 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 - POTENTIAL



STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES			
STATEWIDE MATERIAL SITE INVENTORY			
MS 65-9-105-2			
SCALE AS SHOWN	DESIGNED P.K.H.	DRAWN P.K.H.	PAGE 3
	CHECKED C.H.R.	DATE JUNE 2009	

BASE MAP FROM GOOGLE EARTH PRO 6/01/09

Prepared By:
R&M CONSULTANTS, INC.

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

16. **POTENTIAL_STATUS** UNDEVELOPED

Estimated quantity of material in the site at the time of inspection.

- | | |
|-------------|---|
| NONE | There appeared to be no useable material in the site. |
| LIMITED | There appeared to be less than 25,000 c.y. available within the developed site. |
| SIGNIFICANT | There appeared to be greater than 25,000 c.y. available within the developed site. |
| EXPANDABLE | There was limited material within the developed site, but there appeared to be significant material outside existing site limits. |
| UNDEVELOPED | The pit has not been mined (used only for new sites). |
| CLOSED | There may be useable material left in the pit but it is not available. |
| UNKNOWN | |
| OTHER | The site does not fit any of the categories above. Explain in Section 44, Notes. |

17. **PRESENT_USERS**

17a. **PRESENT_USER_1** NONE

17b. **PRESENT_USER_2** _____

17c. **PRESENT_USER_3** _____

18. **PERMITTED_ACREAGE** 0

Area within site permit or R.O.W. boundaries, from permit application or property plat.

19. **DEVELOPED_ACREAGE** 0

Area within an existing pit, excluding spoil berms lying outside the pit, access roads etc. Explain below.

The site has not been developed.

20. **ACREAGE_COMP_METHOD** FROM MAP/PHOTO

Method used to determine developed acreage.

21. **EST_QUAN_AVAIL** 550,000 ROUGH ESTIMATE

Estimated quantity available (b.c.y.), may be based on acreage computed above plus expansion area.

Explain computation assumptions and calculations below.

Assuming one-foot of overburden and a 25-foot mining depth the site would produce approx. 1,644,000 c.y. (68.5 acres x 24 feet x 1,000 c.y. per acre-foot) of material. However, the material had marginal suitability and it may be difficult to use all the material from the site. For planning purposes we are assuming that only one-third of the material would be useable or $1,644,000/3=548,000$.

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

<p>31. MAT_TYPE_1</p> <p>Dominant type</p>	<p><u>FLUVIAL</u></p>	<p>32. MAT_TYPE_2</p> <p>Subordinate type</p>
<p>BEDROCK</p> <p>WEATHER. BEDROCK</p> <p>FLUVIAL</p> <p>GLACIAL</p> <p>COLLUVIAL</p> <p>EOLIAN</p> <p>SILT</p>	<p>Bedrock sources requiring blasting</p> <p>Bedrock sources requiring ripping</p> <p>Water deposited sand and gravel, includes glaciofluvial</p> <p>Glacial till</p> <p>Talus slopes, etc.</p> <p>Sand Dunes, etc.</p> <p>Silt deposits, loess, fluvial, etc.</p>	

33. **PERMAFROST_1** DETECTED IN SOME TEST HOLES OR PITS

New Site or Expansion Area

34. **PERMAFROST_2** _____

Existing Site

DETECTED IN MOST TEST HOLES

DETECTED IN SOME TEST HOLES

DETECTED IN IMMEDIATE VICINITY

DETECTED IN NO TEST HOLES

DATA OUTDATED

UNKNOWN

OTHER

35. **GROUNDWATER**

Of the 29 test holes advanced up to 38-feet during April 2003 and January 2009, none encountered groundwater. During the 2009 site inspection, a diversion structure was observed along both banks of Ruff Creek. Approximately 900 feet downstream from the bridge, this structure had been breached by Ruff Creek and surface waters had begun to impact northern extents of the proposed site.

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

36. **LITHOLOGY_1**
Dominant type

ALLUVIAL

37. **LITHOLOGY_2**

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. <u>GM</u>	38c. <u>ML</u>	38e. _____	38g. _____
38b. <u>SM</u>	38d. _____	38f. _____	38h. _____

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

39. COBBLES AND BOULDERS

Test Boring Callout / ASTM Classification, either a. or b. and c. (Can use ranges i.e. 0 to 20)

39a. CONTAINS _____
 39b. Est. % by VOL. _____ 15 (Est. From Visual Observations)
 39c. MAX. SIZE (in.) _____ 18 (Observed Size)

40. AGG TEST RESULTS

Year of test or report- Test result / Year of test or report- Test Results

40a. SG APP COARSE _____ 2009- 2.76, 2.74
 40b. SG APP FINE _____ 2009- 2.75, 2.75
 40c. ABSORPTION CRSE _____
 40d. ABSORPTION FINE _____
 40e. NORDIC ABRASION _____
 40f. L.A. ABRASION _____ 2003- 31 / 2009- 29, 31
 40g. DEGRADATION (T-13) _____ 2003- 50, 50, 31, 31, 37, 43, 28 / 2009- 67, 58
 40h. NASO4 LOSS COARSE _____ 2003- 0.3, 0.3 / 2009- 0
 40i. NASO4 LOSS FINE _____ 2003- 2.4, 2.4 / 2009- 2

41. POTENTIAL USABILITY

TYPE C MATERIAL AVAILABLE

Best known potential use of the material, based on records, exploration and laboratory data.

CONCRETE AGGREGATE PRODUCED The site has produced concrete aggregate
 PAVING AGGREGATE PRODUCED The site has produced paving aggregate
 CRUSHED PRODUCTS PRODUCED Base, Surface Coarse, Subbase, etc. has been produced.
 TYPE A AND B MATERIAL AVAILABLE 0 to 10 percent passing 200
 TYPE C AVAILABLE Compactable material
 TYPE C NOT AVAILABLE Uncompactable material (Lower Kuskokwim and Yukon River, etc.)
 UNKNOWN
 OTHER Explain in Section 44.

42. SPECIAL PROBLEMS

OTHER

Special problems encountered or anticipated with use of the material, based on records, exploration and laboratory data.

ORGANIC CONTENT The material is very difficult to compact.
 HIGHLY WEATHERED GRAVEL The gravel is highly weathered and may break down when handled.
 BREAKS DOWN UNDER USE Material breaks down on grade.
 SENSITIVE TO WATER CONTENT Material is sensitive to water content, i.e.. some glacial tills, soft bedrock.
 VARIABLE MATERIAL Deposit contains mixture of suitable and unsuitable material.
 POSSIBLE CONTAMINATION Site may be contaminated by petroleum products or hazardous materials.
 CONTAINS ASBESTOS Site contains naturally occurring asbestos.
 POTENTIAL ASBESTOS Site in area where naturally occurring asbestos is mapped.
 ACID ROCK DRAINAGE Site contains rock susceptible to producing acid rock drainage.
 OTHER Explain in Section 44, Notes.

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

43. RIPRAP

NOT POSSIBLE

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.

42. Material has high silt contents with low degradation values. Compaction tests indicate it has optimum moistures ranging from 5 to 6 percent with natural moistures ranging from 3.4 to 18.7 percent.

Attachment #3

ARCTIC OCEAN



65-9-102-2

65-9-099-2

NORTH SLOPE

ROMANZOF MOUNTAIN

BROOKS RANGE 65-9-104-2

NORTHERN RURAL AVIATION MAINTENANCE DISTRICT

65-9-055-2
65-9-089-2

NORTHERN RURAL AVIATION MAINTENANCE DISTRICT

DALTON MAINTENANCE DISTRICT

65-9-029-2

PAY MOUNTAINS

FAIRBANKS MAINTENANCE DISTRICT

680-105-2

680-114-2

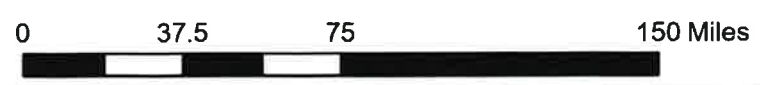
Sources: Esri, USGS, NOAA, Sources: Esri, Garmin, USGS, NPS
Fairbanks

Document Path: X:\Asset Management\Material Sites\Project Files\2024\Development\Maps\ArcGIS_Pro\2024_Aggregates_Work_Sites.aprx



Legend

- Aggregate Sites
- DOT&PF Road System
- - - State Border
- NR Maintenance District



STATE OF ALASKA
Department of Transportation and Public Facilities
2301 Peger Road Fairbanks, AK 99709

NR FFY24 AGGREGATE STOCKPILING SITES DALTON DISTRICT

DATE: January 2024

FIGURE 1 / 9



Legend

-  DOT&PF Road System
-  Site Limits

STATE OF ALASKA
Department of Transportation and Public Facilities
2301 Peger Road Fairbanks, AK 99709

NR AGGREGATE PROGRAM
DALTON DISTRICT
DALTON HWY MILE 221.7 65-9-089-2

DATE: January 2024

FIGURE 3 / 9





Legend

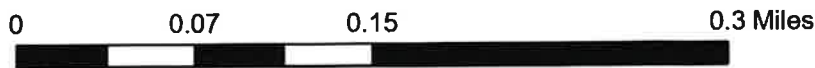
-  DOT&PF Road System
-  Site Limits
-  Planned Mining/Work Area

STATE OF ALASKA
Department of Transportation and Public Facilities
2301 Peger Road Fairbanks, AK 99709

**NR AGGREGATE PROGRAM
DALTON DISTRICT
DALTON HWY MILE 221 65-9-105-2**




DATE: January 2024

FIGURE 4 / 9





Legend

-  DOT&PF Road System
-  Site Limits
-  Planned Mining/Work Area

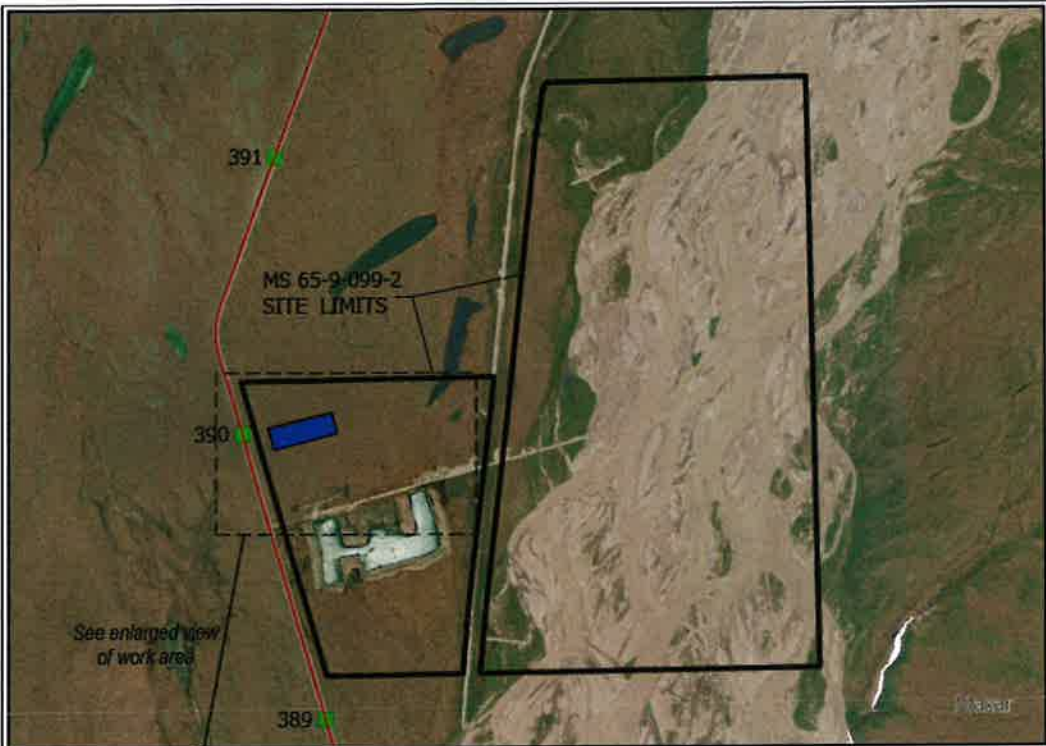
STATE OF ALASKA
 Department of Transportation and Public Facilities
 2301 Peger Road Fairbanks, AK 99709

NR AGGREGATE PROGRAM
DALTON DISTRICT
DALTON HWY MILE 274.7 65-9-104-2

DATE: January 2024

FIGURE 5 / 9





Legend

-  DOT&PF Road System
-  Site Limits
-  Planned Mining/Work Area

STATE OF ALASKA
 Department of Transportation and Public Facilities
 2301 Peger Road Fairbanks, AK 99709

NR AGGREGATE PROGRAM
DALTON DISTRICT
DALTON HWY MILE 389.7 65-9-099-2

DATE: January 2024

FIGURE 6 / 9





Legend

-  DOT&PF Road System
-  Site Limits
-  Planned Mining/Work Area

STATE OF ALASKA
 Department of Transportation and Public Facilities
 2301 Peger Road Fairbanks, AK 99709

NR AGGREGATE PROGRAM
DALTON DISTRICT
DALTON HWY MILE 411.2 65-9-102-2




DATE: January 2024

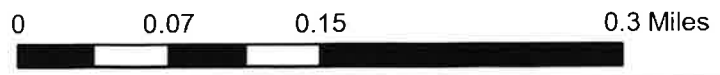
FIGURE 7 / 9





Legend

-  DOT&PF Road System
-  Site Limits
-  Planned Mining/Work Area



STATE OF ALASKA
 Department of Transportation and Public Facilities
 2301 Peger Road Fairbanks, AK 99709

**NR AGGREGATE PROGRAM
 DALTON DISTRICT
 ELLIOTT HWY MILE 0.1 680-105-2**

DATE: January 2024

FIGURE 8 / 9



Legend

- DOT&PF Road System
- Site Limits
- Planned Mining/Work Area

STATE OF ALASKA
 Department of Transportation and Public Facilities
 2301 Peger Road Fairbanks, AK 99709

**NR AGGREGATE PROGRAM
 DALTON DISTRICT
 ELLIOTT HWY MILE 133.1 680-114-2**

DATE: January 2024

FIGURE 9 / 9

