#### WETLAND DETERMINATION DATA FORM - Alaska Region

Plot No: ST (6) Project Tetchetet RD Date: 6/1/27 Applicant: Alaska Department of Transportation and Public Facilities Investigators: Borough/City/Location: NAD 83, Decimal Degrees STANTEC Latitude: Watershed: 10 Longitude: -**Location Notes:** Elevation (ft): **SUMMARY OF FINDINGS** Are "Normal Circumstances" Present? YES Hydrophytic Vegetation Present? Significantly Disturbed? **VEG** SOILS **HYDRO** Hydric Soils Present? Naturally Problematic? Wetland Hydrology Present? **VEG** SOILS **HYDRO** Remarks: Is the Sampled Area within a Wetland? **VEGETATION** T< 1%, P = Present SUBREGION: Tree Stratum DBH ≥ 3 inch Dominance Test worksheet: 1/10 acre circular plot unless noted, absolute cover recorded Number of Dominant Species Species IND DOM Cover **Species** IND DOM Cover That Are OBL, FACW, or FAC: 1. 3. **Total Number of Dominant** 2. 4. Species Across All Strata: (B) **Total Tree Cover:** 50% of Total Cover: 20% of Total Cover: Percent of Dominant Species 100 Sapling/Shrub Stratum IND DOM Cover That Are OBL, FACW, or FAC: PUPTRE 9. Prevalence Index Worksheet 2 KHUGIZO 30 10. Total % Cover of: Multiply by: 3. VACUIT 11. F N 10 **OBL** species x1= 4. LARLAR 12. FIL FACW species 18 5. FICHAR 13. 15 80 x3= 240 SAL. BEB H 14. FAC species 10 7: ME UVAUAG 15. FACU species Total Shrub Cover: 20% of Total Cover: 1 50% of Total Cover: **UPL** species **Herbaceous Stratum** IND DOM Cover 13. Column Totals: 108 1. CORCAN FU 14. FESALT Prevalence Index = B/A = 2.93 15. 1-30 3. 16. Hydrophytic Vegetation Indicators: YEJ Dominance Test is >50% 4. 17. 5. YE Prevalence Index is ≤3.0 18. 6. 19. Morphological Adaptations<sup>1</sup> (Provide supporting data in 7. 20. Remarks or on a separate sheet) 8. 21. Problematic Hydrophytic Vegetation<sup>1</sup> Indicators of hydric soil and wetland hydrology 9. 22. must be present unless disturbed or problematic. 10. 23. Project Vegetation Type 11. 24. BSLI 12. Cowardin Code: **Total Herb Cover:** 50% of Total Cover: 20% of Total Cover: 15 HGM Classification: 1. Open Water 2. Bare ground Remarks: Bryophytes and Lichens may be listed in the Herbaceous columns Landform: 50,1 6 ocal Relief: Microtopography: Slope: Aspect

Profile Des	cription: De	escribe to the depth	needed	to docum	ent the presence/a	bsence o	of soil ind	icators	Soil N	lap Unit Name		
	Horizon	Soil Matrix										
Depth (in_)	Name	Color (moist)	%	Type <sup>1</sup>	Color	%	Loc2	Mod <sup>3</sup>	Texture	Horizon Co	mments	
1-0	Ui											
4.0	AI	10424/2	100					-	SIL			
0 /	P V	1-11-10	100									
2 142	BW	104R4/3	100					-	SAL			
2.90	1214	10/10/15	100						1			
			-			-						
			7									
										-		
¹Type: C=Cond	entrations, D=I	    Depletions, OX=Oxidize	ed Roots	, RM = Red	L duced Matrix <sup>2</sup> Locati	ion: PL=Po	re Linings	s, RC=Roo	ot Channels,	M=Matrix, CS=C	oated Sand Grains	
Remarks:								<sup>3</sup> Texture	Modifiers: Mu	icky (MK), Peaty	(PT), Permafrost (PF)	
									_		obbly (CB), Stony (ST) 10% = Extremely (X)	
Hydric Soil I	ndicators	Measure from the to	p of the	mineral s	soil laver except for	A1, A2,	A3, A4	(13-3	370), 33-3370	- very (v), oo e	NOTE - Extremely (A)	
-	or Histel (A1)				aces (A12)				Hydri	c Soils	F .	
. 1		N		Gleyed (						sent?	NO	
	ipedon (A2)4	X 1		• `	•			-		rainage Class: MwD		
N Black His				Redox (A				+			1	
	n Sulfide (A4)				Pores (A15)			-16-V		Organic Soils:		
Indicators fo	r Problemat	ic Hydric Soils (Se								e Layer Type:		
N Depleted	Below Dark	Surface (A11) N	Alaska	Color Ch	ange (TA4) Give o	details of	color cha	1		ayer Depth:		
N Depleted	Matrix (F3)	N	Alaska	Alpine S	wales (TA5)			4	Underlain b	y mineral soil	w/chroma of ≤2	
N Redox D	ark Surface (	F6) <u>V</u>	Alaska	Redox w	rith 2.5Y Hue			5	Must have	Hydrophytic Ve	egetation and	
N Depleted	Dark Surface	e (F7)	Alaska	Gleyed v	v/o Hue 5Y or Redd	der Unde	rlying		Primary Hydrology, and an appropriate landscape position unless disturbed or problematic			
NRedox D	epression (F8	<sub>3)</sub> <u>N</u>	AA Po	sitive (mir	neral soil, 60% of ho	orizon 4 i	nches thi	,				
N Red Pare	ent Material (I	F21) <u>N</u>	Ponde	d/Flooded	d/High Water Table	(12 inch	es or higl	her)	problematic			
N Very Sha	allow Dark Su	rface (F22)	Low O	rganic Ma	atter/Low Iron/High	pH Soil/N	lew Weti	and	Other (	explain in rema	irks)	
HYDROLO	GY											
		Wetland Hydr	ology Ir	ndicators						or more require	ed)	
		e indicator is sufficie					7		ained Leave			
O Surface		<del>.</del>	-		ole on Aerial Imager ated Concave Surfa		-	_	Patterns (f		g Roots (C3)(w/in 12"	
N Saturation	ter Table (A2	) 1/1		Deposits (		ace (DO)				ed Iron (C4)	g 1,0000 (00)(Will 12	
2 Water M		N	•		de Odor (C1) (w/in 1	12")			osits (C5)			
	nt Deposits (B	2)			ater Table (C2)**		2	Stunted	or Stressed	ressed Plants (D1)		
N Drift Dep	osits (B3)	N	Other	(Explain	in Remarks)			-	hic Positio			
	it or Crust (B4		<b></b>		CON - West con	011-					te as restrictive layer	
N Iron Dep					logic Conditions on of Year? Y			· ·	ographic Ro utral Test (D			
	Soil Cracks (E	es from ground surf		i trus tirrie	or real!		ter Sour		20121 1031 (1		drology Present?	
Surface Water		Yes No		Depth (i	nches):	1000		12.0			10	
Water Table		Yes No			nches):						son Water Table	
Saturation P		Yes No			nches):						rior, Western AK:	
(includes cap	oillary fringe)	Episaturation			turation	- 1				Mid N	flay – late July	
Describe Re	corded Data (	stream gauge, mon	toring w			spection	s), if avai	iable		**Mineral	Soils 12-24 inches Soils 12-40 inches	
Remarks:											est = #OBL+FW FU + UPL dominants;	

Plot Number	ST101
Wetland Status	Upland
Plot Type	WD: Wetland Determination
Plot Date	6/1/2022
NWI Classification	U
ндм	N/A
Vegetation Type	Black Spruce Woodland
Latitude (DD)	64.574546
Longitude (DD)	-149.841663



Photo Type: Soils Direction: N/A



Photo Type: Vegetation Direction: E



Plot Number	ST102
Wetland Status	Upland
Plot Type	FVP: Field Verification Point
Plot Date	6/1/2022
NWI Classification	U
ндм	N/A
Vegetation Type	Open Mixed Forest
Latitude (DD)	64.575559
Longitude (DD)	-149.839661



Photo Type: Soils Direction: N/A



Photo Type: Vegetation Direction: N



Plot Number	ST103
Wetland Status	Upland
Plot Type	FVP: Field Verification Point
Plot Date	6/1/2022
NWI Classification	U
ндм	N/A
Vegetation Type	Deciduous Shrub and Sapling Regrowth
Latitude (DD)	64.575214
Longitude (DD)	-149.835764



Photo Type: Soils Direction: N/A



Photo Type: Vegetation Direction: NW



## WETLAND DETERMINATION DATA FORM – Alaska Region

Project: Jotc Applicant: Alaska Depa Borough/City/Location:	haket	17.1					Plot No: ST 104	V
Applicant: Alaska Depa		100				D	ate: 6/1/22	
Borough/City/Location	rtment o		portation and					)
Boroughi Oity/Eoodilon,								
NAD 83, Decimal Degrees						-	STANTEC	
Latitude: 64 53	7794			Watershed: Rock Cycek HUCIO				
Longitude: - 149.	8314	7		Location	n Note	s:		
Elevation (ft): りる								_
			I Van a	1			SUMMARY OF FIND	
Are "Normal Circumstance	s" Preser	ī	Yes		ŀ	Hydroph	ytic Vegetation Present?	IES
Significantly Disturbed?	VEG				la.		Hydric Soils Present?	NO
Naturally Problematic?	VEG	SOILS	HYDRO			Wet	land Hydrology Present?	NO
Remarks:				is the	e Sam	oled Aı	rea within a Wetland?	No
<b>VEGETATION</b> T<	1%, P = Pro	esent		SUBREC	GION:			
Tree Stratum DBH ≥ 3 inch	1/10	acre circu	lar plot unless n	oted, absolu	ite cover i	ecorded	Dominance Test work	sheet:
Species IN	D DOM	Cover	Species	IND	DOM	Cover	Number of Dominant Species That Are OBL, FACW, or FAC:	. 3 <sub>(A</sub>
1. PICMAR FU	VV	60	3,					24
2. PAPTRE FU	N	3	4.				Total Number of Dominant Species Across All Strata:	3 (8
Total Tree Cover: 43	50% of T	otal Cove	r: 31.5	20% of To	otal Cove	1126	B	
Sapling/Shrub Stratum INI	DOM	Cover	8.				Percent of Dominant Species That Are OBL, FACW, or FAC: _	IOO (A/B)
1. VACUIT F	Y	35	9.		1:			
2. SALBEB F	N	5	10.				Prevalence Index Work	
3. RHU620 F	N	3	11,	ni na	100		Total % Cover of:Multiply	/ by:
4. SITECAN F	JN	T	12.		35-		OBL speciesx 1 =	
5.			13.				FACW species 60 x 2 = 1	20
6.			14.				FAC species 4 ( x 3 = 1	38
7.	16-7		15.				FACU species3x 4 =	12
Total Shrub Cover: 43	50% of T	otal Cover	: 21.5	20% of To	tal Cove	-8.6	UPL species x 5 =	
Herbaceous Stratum INI	DOM	Cover	13.				Column Totals: (A)	71 (B)
1. FES ALT F	Y	3	14. HYSP	B	-	7	Column rotals.	(0)
2. GEOLIV FU	N		15.				Prevalence Index = B/A =	348
3.			16.				Hydrophytic Vegetation Ir	
4.			17.				Dominance Test is >50%	idicators:
5.		1	18.				Ye → Prevalence Index is ≤3.0	
6.			19.				Morphological Adaptations <sup>1</sup>	
7.		_	20.				(Provide supporting data in	
8.		-	21.				Remarks or on a separate s  Problematic Hydrophytic Ve	
9.		-	22.			-	1 Indicators of hydric soil and wet	land hydrology
10.		-	23.				must be present unless disturbed or Project Vegetation 1	
11.			24.				OBSP	
12.			25.					
Total Herb Cover:	50% of Ta	otal Cover		20% of Tot	tal Cover	-	Cowardin Code:	
1.Open Water	JU /8 UI 10	-		20 /0 01 101	ai cover	0	HGM Classification:	
Remarks: Bryophytes and Licher	s mav be li	and the second second	2. Bare ground Herbaceous co	umns	-		Landform	
. 7 - F . 7 - 5 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1							mound	
							Local Relief: (UNVC)	
							Microtopography: Slope:	Aspect:

Plot No: ST 10 SOIL Profile Description: Describe to the depth needed to document the presence/absence of soil indicators Soil Map Unit Name Horizon Soil Matrix Redox Features Loc2 Mod<sup>3</sup> Texture **Horizon Comments** % Type<sup>1</sup> Color % Name Color (moist) Depth (in.) -0 SIL 100 <sup>1</sup>Type: C=Concentrations, D=Depletions, OX=Oxidized Roots, RM = Reduced Matrix <sup>2</sup>Location: PL=Pore Linings, RC=Root Channels, M=Matrix, CS=Coated Sand Grains <sup>3</sup>Texture Modifiers: Mucky (MK), Peaty (PT), Permafrost (PF) | Remarks: Coarse Fragments: Gravelly (GR), Cobbly (CB), Stony (ST) (15-35%), 35-60% = Very (V), 60-90% = Extremely (X) Hydric Soil Indicators Measure from the top of the mineral soil laver except for A1, A2, A3, A4

Tydric Con marcatore measure	no top of the filmoral con ray of cheeps for the first	r r	
∕Histosol or Histel (A1)	<u>∼</u> Thick Dark Surfaces (A12)	Hydric Soils	NU
<u></u> Histic Epipedon (A2)⁴	<u></u> Alaska Gleyed (A13)	Present?	
<u></u> Black Histic (A3)	<u></u> Alaska Redox (A14)	NRCS Drainage Class:	MWD
	∠ Alaska Gleyed Pores (A15)	Depth of Organic Soils:	1
Indicators for Problematic Hydric Soils	(See Page 91/Section 4 for Problematic Hydric Soils Details)	Restrictive Layer Type:	_
Depleted Below Dark Surface (A11)	Alaska Color Change (TA4) Give details of color change	Restrictive Layer Depth:	
<u></u> Depleted Matrix (F3)	<u>N</u> Alaska Alpine Swales (TA5)	<sup>4</sup> Underlain by mineral soil w	/chroma of ≤2
	∧ Alaska Redox with 2.5Y Hue	⁵Must have Hydrophytic Vec	etation and
<u></u> Depleted Dark Surface (F7)	∧ Alaska Gleyed w/o Hue 5Y or Redder Underlying	Primary Hydrology, and an	
	AA Positive (mineral soil, 60% of horizon 4 inches thick)	landscape position unless d	isturbed or
<u></u> Red Parent Material (F21)		problematic	
✓ Very Shallow Dark Surface (F22)	∠ Low Organic Matter/Low Iron/High pH Soil/New Wetland	Other (explain in remark	ks)

#### HYDROLOGY

HYDROLOGY					
1	Wetland Hydrology Indicators	Secondary Indicators (2 or more required)			
Primary Indicators (any one ind	dicator is sufficient)		Leaves (B9)		
	Inundation Visible on Aerial Imagery (B7)	<u> ✓</u> Drainage Patte	erns (B10)		
	Sparsely Vegetated Concave Surface (B	8) <u>~</u> Oxidized Rhize	ospheres along Living Roots (C3)(w/in 12")		
✓ Saturation (A3)	Marl Deposits (B15)	✓ Presence of R	educed Iron (C4)		
Water Marks (B1)			(C5)		
		/ Stunted or Str	essed Plants (D1)		
✓ Drift Deposits (B3)	Other (Explain in Remarks)	Geomorphic P	Position (D2)		
∧ Algal Mat or Crust (B4)			ard (D3) (w/in 24", note as restrictive layer)		
✓ Iron Deposits (B5)	Are Climatic/Hydrologic Conditions on Site	<u> ✓ Microtopograp</u>	hic Relief (D4)		
✓ Surface Soil Cracks (B6)	Typical for this time of Year?	FAC-Neutral 7	est (D5)		
Field Observations (inches fro	om ground surface)	Water Source:	Wetland Hydrology Present?		
Surface Water Present?	Yes NoX Depth (inches):		No		
Water Table Present?	Yes No Depth (inches):		Dry Season Water Table		
Saturation Present?	Yes No Depth (inches):		SC, Interior, Western AK:		
(includes capillary fringe)	- VAN988		Bailed Ballery Linder Bridge		
Doscribo Recorded Data (stream	Episaturation Endosaturation Endosat	ions) if available	Mid May – late July  **Mineral Soils 12-24 inches		
Describe Recorded Data (Stree	ani gauge, montoning well, aenai priotos, previous inspect	ons), ii avanabic.	**Organic Soils 12-40 inches		
Remarks:			FAC-Neutral Test = #OBL+FW dominants > #FU + UPL dominants;		

. . . . . . . . .

Plot Number	ST104
Wetland Status	Upland
Plot Type	WD: Wetland Determination
Plot Date	6/1/2022
NWI Classification	U
ндм	N/A
Vegetation Type	Open Black Spruce Forest
Latitude (DD)	64.574935
Longitude (DD)	-149.831472



Photo Type: Soils Direction: N/A



Photo Type: Vegetation Direction: E



Plot Number	ST105
Wetland Status	Upland
Plot Type	FVP: Field Verification Point
Plot Date	6/1/2022
NWI Classification	U
ндм	N/A
Vegetation Type	Deciduous Shrub and Sapling Regrowth
Latitude (DD)	64.575141
Longitude (DD)	-149.819692



Photo Type: Soils Direction: N/A



Photo Type: Vegetation Direction: E



Plot Number	ST106
Wetland Status	Upland
Plot Type	FVP: Field Verification Point
Plot Date	6/1/2022
NWI Classification	U
ндм	N/A
Vegetation Type	Deciduous Shrub and Sapling Regrowth
Latitude (DD)	64.574811
Longitude (DD)	-149.811086



Photo Type: Soils Direction: N/A



Photo Type: Vegetation Direction: N



#### WETLAND DETERMINATION DATA FORM – Alaska Region

								Plot No: ST	7
Project:	Total	chie.	+ Ro					ate: 6/1122	
Applicant: Alaska D	Depart	ment o	f Transı	oortation an	d Public	Facilitie	es In	vestigators: See /AL	)
Borough/City/Locati	on:								
NAD 83, Decimal Degrees								STANTEC	
Latitude:	100	523			Watershed: Fock Cycela Hycio				
Longitude: -	149	8076	0		Location	n Note	s:		
Elevation (ft):	4	204							
				1.				SUMMARY OF FIN	DINGS
Are "Normal Circumst	ances"	Preser	it?	157		ŀ	Hydroph	nytic Vegetation Present?	YES
Significantly Disturbed	1?	VEG	SOILS	HYDRO				Hydric Soils Present?	No
Naturally Problematic	?	VEG	SOILS	HYDRO			Wet	tland Hydrology Present?	No -
Remarks;					Is the	e Samp	oled A	rea within a Wetland?	No
VEGETATION	T< 19	6. P = Pre	esent		SUBREC	GION:		- 1	
Tree Stratum DBH ≥ 3 inc				lar plot unless n			recorded	Dominance Test wor	ksheet:
Species	IND	DOM	Cover	Species	IND	DOM	Cover	Number of Dominant Species	)
1.				3,				That Are OBL, FACW, or FAC:	(A
2.				4.				Total Number of Dominant	٠
Total Tree Cover:		50% of T	otal Cove		20% of Te	otal Cove	L	Species Across All Strata:	(B
Sapling/Shrub Stratum	IND	DOM	Cover	8.				Percent of Dominant Species	67
		DOW	8.			-		That Are OBL, FACW, or FAC:	(A/B
1. POTTRE	FU	Y	15	9.				Prevalence Index Wo	rksheet
	F		15	10.				10.000	ly by:
3. PHOGRO	F	H	2	11,					
4. ROSALI	FU	7	1	12.				OBL speciesx 1 =	
5. VACULI	F	N	8	13.				FACW speciesx 2 =	<u> </u>
6.		V 1		14.				FAC species 3 = x 3 =	<u>~</u>
7				15.				FACU species X4 =	<b>\$</b> U
Total Shrub Cover:	13	50% of To	otal Cover	21.5	20% of To	tal Cover	86	UPL species x 5 =	
Herbaceous Stratum	IND	DOM	Cover	13.				Column Totals: (A)	94 (B)
1. FES ALT	T	Y	10	14.				Column Fotals.	(5)
2. EQUSCI	F	N	T	15.				Prevalence Index = B/A =	5.66
3.	1	14		16.					
4.				17,	1			Hydrophytic Vegetation Dominance Test is >50%	Indicators:
5.	1			18.	7			Dominance Test is >50%  No Prevalence Index is ≤3.0	
6.				19.				Morphological Adaptations	_1
o. 7.	-					-		(Provide supporting data i	
-	-			20,				Remarks or on a separate	and the second second
8.				21.				Problematic Hydrophytic V  Indicators of hydric soil and we	egetation1
9.				22.				must be present unless disturbed o	r problematic.
10.				23.	1   - 1			Project Vegetation	Туре
11.				24.				DSSR	
12.				25.				Cowardin Code:	
Total Herb Cover:	) 5	0% of To	tal Cover	5	20% of Tot	al Cover	7		
1.Open Water				2. Bare ground	35			HGM Classification:	4
Remarks: Bryophytes and I			sted in the	Herbaceous col	lumns			Landform: (UWCLd	
b-rn c	ireu	•						Local Relief: (orcae	
bine	10.44	1						Microtopography: Slope:	Aspect:

Plot No: ST

107

Profile Des	cription: D	escribe to the depth	needed	to aocume			oi soii indi	Caldis	1 3011 N	lap Unit Name	
	Horizon	Soil Matrix	-		Redox Feature	es					
Depth (in.)	Name	Color (moist)	%	Type <sup>1</sup>	Color	%	Loc <sup>2</sup>	Mod <sup>3</sup>	Texture	Horizon Co	mments
2-0	0:										
20	,			1							
			-	-							
0-3	AB	10424/1	100				-2-	-	Sil		
							1				
2 10	10	1440 111							01		
3-18	Bw	10YR 4/2	110						Sil		
				-							
				-							
Type: C=Cond	entrations, Da	Depletions, OX=Oxidiz	ed Roots	, RM = Redu	ced Matrix <sup>2</sup> Location	: PL=Po	ore Linings,	RC=Roo	t Channels,	M=Matrix, CS=Co	pated Sand Grains
Remarks:								<sup>3</sup> Texture I	/lodifiers: Mu	icky (MK), Peaty	(PT), Permafrost (PF)
ixemains.								Coarse I	ragments: (	Gravelly (GR), Co	bbly (CB), Stony (ST)
								(15-35	5%), 35-60%	= Very (V), 60-96	0% = Extremely (X)
ydric Soil I	ndicators	Measure from the to	p of the	mineral so	il layer except for A	1, A2,	A3, A4				
<u>₩</u> Histosol o	or Histel (A1	N	Thick [	Dark Surfac	es (A12)					c Soils	NO
<u>ا</u> Histic Epi	pedon (A2)4	2	Alaska	Gleyed (A	13)				Pres	sent?	110
Black His	tic (A3)	N	Alaska	Redox (A1	4)				NRCS Dr	ainage Class:	MWD
A 3	Sulfide (A4	`	Alaska	Gleyed Po	res (A15)				Depth of	Organic Soils:	2.
		tic Hydric Soils (Se				ludric 9	Soile Deta	ile)		e Layer Type:	Page
											-
					nge (TA4) Give de	talls of	color cna			ayer Depth:	
<u> </u> Depleted	Matrix (F3)	<u>N</u>	_ Alaska	Alpine Swa	ales (TA5)			<u></u> 41	Jnderlain b	y mineral soil w	v/chroma of ≤2
FJ Redox D	ark Surface	(F6) <u>~</u>	_Alaska	Redox with	1 2.5Y Hue			5	/lust have l	Hydrophytic Ve	detation and
~ Depleted	Dark Surfac	ce (F7)	Alaska	Gleyed w/	Hue 5Y or Redde	Unde	rlying			rology, and an	
Nedox D	epression (F	·8) N	AA Po	sitive (mine	ral soil, 60% of hor	zon 4 i	nches thic	ck) la	indscape p	osition unless o	disturbed or
<u>r√</u> Red Pare		•			High Water Table (1			α ا	roblematic		
					er/Low Iron/High pl		_		Other /	explain in remai	rke\
Very Sha		unace (F22)	LOW O	rganic Mail	er/Low Iron/High pr	1 301/1	ACAA AACUS	illu <u> </u>	_ Other (e	xpiain in terna	iks)
IYDROLO	GY										N
		Wetland Hydr		ndicators				•	•	or more required	<b>a</b> )
-	· ·	ne indicator is suffici				(D-7)			ined Leave	• •	
Surface \     \[     \ldots     \]					e on Aerial Imagery ed Concave Surfac			-	Patterns (E		Roots (C3)(w/in 12
				ely vegetat Deposits (B		5 (00)				d Iron (C4)	) 1.00t3 (00)(W/III 12
✓ Water Max					Odor (C1) (w/in 12	")			sits (C5)	<b>(</b> - <b>/</b>	
Sedimen				_	er Table (C2)**	•				Plants (D1)	
Norift Dep			Other	(Explain in	Remarks)				hic Positior		
∧ Algal Ma	t or Crust (B										te as restrictive laye
✓ Iron Dep					gic Conditions on S	ite	. 4	-	graphic Re		
✓ Surface :				r this time of	of Year?	_			tral Test (D		dealess December
		nes from ground surf	- /	Decth //:	h-a):	100	iter Sourc	e.		vvetland Hy	drology Present
Surface Wate		Yes No			hes):						1O .
Water Table I		Yes No	$\overline{}$		hes):						on Water Table ior, Western AK:
Saturation Pr (includes cap		Yes No	<u>X</u>	Depth (Inc	hes):	-				SC, Inter	ioi, vvesterii AN.
		Episaturation		Endosatu				-1-1-			ay – late July
Describe Red	orded Data	(stream gauge, mon	toring w	ell, aerial p	notos, previous ins	ection	s), it availa	able:			Soils 12-24 inches Soils 12-40 inches
Remarks:				7							st = #OBL+FW U + UPL dominants;
										add non-domina	

Plot Number	ST107					
Wetland Status	Upland					
Plot Type	WD: Wetland Determination					
Plot Date	6/1/2022					
NWI Classification	U					
ндм	N/A					
Vegetation Type	Deciduous Shrub and Sapling Regrowth					
Latitude (DD)	64.575237					
Longitude (DD)	-149.807596					



Photo Type: Soils Direction: N/A



Photo Type: Vegetation Direction: NW



# WETLAND DETERMINATION DATA FORM – Alaska Region

								Plot No: ST	08		
Project:							D	ate: 6/1/27	- 0		
Applicant: Alaska D	epart	ment o	f Trans	portation and	d Public	Facilitie		vestigators: She / AL	^		
Borough/City/Location	on:								0		
NAD 83, Decimal Degrees								STANTEC			
Latitude: 64 S	75:				Waters	hed:	160	ch Creek Huc	10		
Longitude: - 149	3	642			Location	n Note	s:				
Elevation (ft):	428										
Are "Normal Circumsta	noon"	Droop	+2	V+0			l	SUMMARY OF FI	7 - 7		
Significantly Disturbed	-	YUS HYDRO			nyaropr	pphytic Vegetation Present?					
Naturally Problematic?		VEG VEG				-	10/04	Hydric Soils Present?	No		
Remarks:		VLO	JOOIL	JIIIDKO			vve	tland Hydrology Present?	NO		
					Is the	e Samp	oled A	rea within a Wetland?	M3		
VEGETATION		6, P = Pre	esent		SUBRE	SION:					
Tree Stratum DBH ≥ 3 incl	h	1/10	acre circu	lar plot unless no	oted, absolu	te cover r	ecorded	Dominance Test w	orksheet:		
Species	IND	DOM	Cover	Species	IND	DOM	Cover	Number of Dominant Species That Are OBL, FACW, or FAC:	(A)		
1,				3,					7		
2.				4.				Total Number of Dominant Species Across All Strata:	(B)		
Total Tree Cover:		50% of T	otal Cove	r:	20% of To	otal Cove	r:	Percent of Dominant Species	100		
Sapling/Shrub Stratum	IND	DOM	Cover	8. SAL BET	3 F	IN	T	That Are OBL, FACW, or FAC:	(A/B)		
1. POPTRE	FU	Y	60	9.			-				
2. RHO GRO	1	N	6	10.				Prevalence Index W	-		
3. VACUIT	F	Y	30	11.		-			iply by:		
4. PICMAR	FW	N	T	12.				OBL speciesx 1 = _			
5. ROSACI	FU	N	T	13.				FACW speciesx 2 = _			
6. BETNEO	FU	N	15	14.				FAC species $3 - x 3 =$	108		
7. LINBOR	FU	2	T	15.				FACU species 75 x 4 =	300		
Total Shrub Cover: //	1	50% of To	otal Cove	57.5	20% of To	tal Cover	227	UPL species x 5 =			
Herbaceous Stratum	IND	DOM	Cover	13.	1			Column Totals: (A)	4 08 (B)		
1. EQUSCI	FU	N.	T	14.					210		
2. CHAANG	Fu	7	T	15.	Ulesi			Prevalence Index = B/A =	3.68		
3.				16,				Hydrophytic Vegetation	n Indicators:		
4.				17.				Dominance rest is >507			
5.				18.			-	Prevalence Index is ≤3.0	0		
6.				19.				Morphological Adaptation (Provide supporting data			
7.				20.				Remarks or on a separa			
8.				21				Problematic Hydrophytic	Vegetation		
9.	H			22.				Indicators of hydric soil and v must be present unless disturbed	or problematic.		
10.				23.				Project Vegetatio	n Type		
11.				24.				DSGN			
12.				25.				Cowardin Code:			
Total Herb Cover:	5	0% of To	tal Cover		20% of Tot	al Cover		HGM Classification: NA			
1.Open Water				2. Bare ground				1 17			
Remarks: Bryophytes and L	icnens i	may be lis	sted in the	Herbaceous colu	umns			Landform: L.USING			
								Local Relief: CONCUM			
						-		Microtopography: Slope:	Aspect		
								flut -	2 N-0		

Profile Dee	cription: D	escribe to the	depth n	eeded	to docur	nent the presence/	absence o	of soil indi	cators	Soil N	Soil Map Unit Name			
Frome Des	1		Matrix	00000	lo dodd.	Redox Feat								
	Horizon			٠,	<b>-</b> 1			12	Mad3	Tautura	Horizon Co	mmonto		
Depth (in.)	Name	Color (mo	oist)	%	Type <sup>1</sup>	Color	%	Loc <sup>2</sup>	Mod <sup>3</sup>	Texture	Horizon Co	illillents		
1-0	0:		,					-						
0-1	A	10412	1/2	00					-	SIL				
								1		5-				
				_		54-11				6	1			
1-16	DW	101/24	2	60		SYRY/C	40		-	SIL				
					-									
					V =						4			
			0		D14 D-		tion: DI -Da	so Liningo	PC-Pee	Channala	M-Matrix CS-C	oated Sand Grains		
¹Type: C=Conc	entrations, D=	Depletions, OX=	Oxidize	ROOTS	, RIVI = RE	duced Matrix <sup>2</sup> Loca	tion: PL-PC					(PT), Permafrost (PF)		
Remarks:												obbly (CB), Stony (ST)		
									(15-35	i%), 35-60%	= Very (V), 60-9	0% = Extremely (X)		
lydric Soil I	ndicators	Measure from	the top	of the	mineral	soil layer except fo	r A1, A2,	A3, A4	- 4					
U Histosol o	or Histel (A1)		12	Thick E	ark Surf	aces (A12)				Hydri	c Soils	No		
. 1	pedon (A2)4		N	Alaska	Gleyed	(A13)					sent?	NU		
N Black His					Redox (					NRCS Dr	ainage Class:	MWD		
T. 101.														
1 Hydroger						Pores (A15)	M7000	. 150	Section 1		Depth of Organic Soils:			
Indicators fo	r Problemat	tic Hydric Soil	ls <sup>5</sup> (See	Page	91/Secti	on 4 for Problemati	ic Hydric S	Soils Deta			strictive Layer Type:			
<u> Depleted</u>	Below Dark	Surface (A11)	N	Alaska	Color Cl	nange (TA4) Give	details of	color cha	inge R	estrictive L	ayer Depth:			
N Depleted	Matrix (F3)		7	Alaska	Alpine S	swales (TA5)			41	Jnderlain b	y mineral soil v	w/chroma of ≤2		
N Redox Da	ark Surface	(F6)	N	Alaska	Redox v	vith 2.5Y Hue								
	Dark Surfac		N	Alaska	Gleved	w/o Hue 5Y or Red	der Under	lvina			⊣ydrophytic Ve rology, and an			
					-	neral soil, 60% of h					osition unless			
	epression (F				-				, l	roblematic				
Ned Pare	ent Material (	(F21)				d/High Water Table		_			4447			
Nery Sha	illow Dark Su	urface (F22)	2	Low O	rganic M	atter/Low Iron/High	pH Soil/N	lew Wetla	and _	_ Other (e	explain in rema	rks)		
HYDROLO	GY													
		Wetland	Hydro	logy In	dicators			1			r more require	ed)		
Primary Indic	ators (any or	ne indicator is s	. 1							ined Leave				
The state of the s	Nater (A1)		7			ble on Aerial Image		. 1	_	Patterns (E		- D t - (00)//i- 41		
	ter Table (A2	2)	7.			tated Concave Surf	face (B8)	_		of Reduce	_	g Roots (C3)(w/in 12		
N Saturatio			7		eposits (	de Odor (C1) (w/in	12"\	-		or Reduce sits (C5)	a non (Ç4)			
Water Market Mar	t Deposits (E	22)	7			ater Table (C2)**	12)	_	-		Plants (D1)			
	osits (B3)	) 	4			in Remarks)				hic Position				
	t or Crust (B	4)		• • • • • • • • • • • • • • • • • • • •	(				•			te as restrictive laye		
	osits (B5)	,	Are	Clima	tic/Hydro	logic Conditions or	n Site	<u>, N</u>	Microtopo	graphic Re	elief (D4)			
	Soil Cracks (	B6)	Ту	oical fo	r this tim	e of Year?		N	AC-Neu	tral Test (D				
Field Observ	rations (inch	nes from groun	d surfa	ce)			1000	iter Source	ce:			drology Present		
Surface Water	er Present?	Yes	_ No _	^_	Depth (	inches):				- 1	No	)		
Water Table I	Present?	Yes	No _	<u>~</u>	Depth (	nches):						son Water Table		
Saturation Pr		Yes	No _	<u>~_</u>	Depth (	inches):	_				SC, Inte	rior, Western AK:		
(includes cap		Episatu	ration	-	Endosa	aturation						lay – late July		
Describe Rec	corded Data	(stream gauge	, monito	oring w	ell, aeria	l photos, previous i	nspection	s), if avail	able:			Soils 12-24 inches Soils 12-40 inches		
Remarks:												est = #OBL+FW TU + UPL dominants;		

0.0100 1100

Plot Number	ST108				
Wetland Status	Upland				
Plot Type	WD: Wetland Determination				
Plot Date	6/1/2022				
NWI Classification	U				
ндм	N/A				
Vegetation Type	Deciduous Shrub and Sapling Regrowth				
Latitude (DD)	64.575321				
Longitude (DD)	-149.796421				



Photo Type: Soils Direction: N/A



Photo Type: Vegetation Direction: NW



Plot Number	ST109					
Wetland Status	Upland					
Plot Type	FVP: Field Verification Point					
Plot Date	6/1/2022					
NWI Classification	U					
ндм	N/A					
Vegetation Type	Deciduous Shrub and Sapling Regrowth					
Latitude (DD)	64.574757					
Longitude (DD)	-149.791355					



Photo Type: Soils Direction: N/A



Photo Type: Vegetation Direction: E



## WETLAND DETERMINATION DATA FORM – Alaska Region

								Plot No: ST	10
Project:	1	cche	Let	-			D	ate: 4/1/22	
Applicant: Alaska D	)epartr	ment o	f Trans	portation and	d Public I	Facilitie	s In	evestigators: SILL / ALJ	
Borough/City/Locati	on:								
NAD 83, Decimal Degrees								STANTEC	
	123	186			Waters		Kich	Creck HUCI	0
Longitude: - Elevation (ft):	43	7.7	8821		Location	n Note	s:		
Lievation (ity.								SUMMARY OF FI	NDINGS
Are "Normal Circumst	ances"	Preser	nt?	YES .		F	Hydroph	nytic Vegetation Present?	1E1
Significantly Disturbed	1?	VEG	SOIL	S HYDRO				Hydric Soils Present?	YES
Naturally Problematic	?	VEG	SOIL	S HYDRO			We	tland Hydrology Present?	YES
Remarks:					Is the	e Samp	oled A	rea within a Wetland?	YES
VEGETATION		6, P = Pre			SUBREC				
Tree Stratum DBH ≥ 3 inc	ch	1/10	acre circi	ular plot unless n	oted, absolu	te cover r	ecorded	Dominance Test w	orksheet:
Species	IND	DOM	Cover	Species	IND	DOM	Cover	Number of Dominant Species That Are OBL, FACW, or FAC:	Y(A)
1,				3.				Total Number of Dominant	41
2.			1	4.				Species Across All Strata:	(B)
Total Tree Cover:		50% of T	otal Cove	r:	20% of To	otal Cove	r:	Percent of Dominant Species	120
Sapling/Shrub Stratum	IND	DOM	Cover	8.				That Are OBL, FACW, or FAC:	(A/B)
1. VACULI	F	Y	50	9.					
2. RHOGRD	P	V	20	10.				Prevalence Index W	
3. SALPUL	FW	N	2	11.					tiply by:
4. RETNAN	F	N	T	12.				OBL speciesx 1 =	-1
5. BENEO	FU	N	T	13.				FACW species x 2 =	ال
6. ROSACI	FU	N	T	14.		-		FAC species $3 = \frac{3}{3}$ x 3 =	731
7. SACARB	FW	N	T	15.		1		FACU species x 4 =	
	1 0 %	50% of T	otal Cove	r: 33.5	20% of To	tal Cove	: 15	UPL species x 5 =	
Herbaceous Stratum	IND	DOM	Cover	13.				Column Totals: (A)	143 (B)
1. CALLAN	F	V	7	14.				Column rotals.	
2. ERIVAG	FIN	Y	7	15.				Prevalence Index = B/A =	2.91
3. RUBCHA	FW	N		16.				Hydrophytic Vegetation	
4.	1 0 0			17.				Dominance Test is >50	
5.				18.				Prevalence Index is ≤3.	
6.				19.				Morphological Adaptation	ns¹
7,				20.				(Provide supporting dat Remarks or on a separa	
8.		-		21.				Problematic Hydrophytic	
9.				22.				Indicators of hydric soil and	wetland hydrology
10.				23.				must be present unless disturbed Project Vegetation	
11.				24.					ST
12.				25.				Salva - Ca	7]
	O 5	0% of T	otal Cove	- per	20% of To	tal Cover	1	Cowardin Code: PSSIB	
1.Open Water	0	- 70 01 11	32. 5070	2. Bare ground	20,00,10		0	HGM Classification:	ild
Remarks: Bryophytes and	Lichens	may be i	isted in the		iumns			Landform:	197
								Local Relief: (ancu	• • • • • • • • • • • • • • • • • • • •
								Microtopography: Slope	

Profile Des	cription: De	scribe to the depth	needed	to docum	ent the presence/abs	sence o	of soil indic	ators	Soil M	/lap Unit Name	
	Horizon	Soil Matrix			Redox Feature	es				-	
Depth (in.)	Name	Color (moist)	%	Type <sup>1</sup>	Color	%	Loc2	Mod <sup>3</sup>	Texture	Horizon Co	omments
8-0	Oe	Rlack	100							Frozen	68.
										1	
			+								
										+	
						111					
	1										
			-					,			
¹Type: C=Conc	entrations, D=D	Depletions, OX=Oxidize	ed Roots	, RM = Red	luced Matrix 2Location	: PL=Po					oated Sand Grains (PT), Permafrost (PF)
Remarks:											obbly (CB), Stony (ST)
1									-		0% = Extremely (X)
Hydric Soil I	ndicators I	Measure from the to	p of the	mineral s	oil layer except for A	1, A2, A	A3, A4	-			
Histosol o	or Histel (A1)	<u>~</u>	Thick D	ark Surfa	ces (A12)					c Soils	Y=0
<u> </u>	ipedon (A2)4	<u>~</u>	Alaska	Gleyed (A	A13)			-	Pres	sent?	YES
<u> ~</u> Black His	tic (A3)	<u>M</u>	Alaska	Redox (A	.14)				NRCS D	ainage Class:	VYD
_∧/Hydroger	Sulfide (A4)	M	Alaska	Gleyed P	ores (A15)				Depth of	Organic Soils:	8
Indicators for	r Problemati	C Hydric Soils (Se	e Page	91/Sectio	n 4 for Problematic H	lydric S	oils Detail	s)	Restrictiv	e Layer Type:	Permagnest
~ Depleted	Below Dark S	Surface (A11)	Alaska	Color Cha	ange (TA4) Give det	ails of	color chan	ge R	estrictive L	ayer Depth:	8
<u>∼</u> Depleted	Matrix (F3)	$\sim$	Alaska	Alpine Sv	vales (TA5)			4	Inderlain b	y mineral soil v	v/chroma of ≤2
<u></u> Redox Da	ark Surface (F	· (6)	Alaska	Redox wi	th 2.5Y Hue						
Depleted					oo Hue 5Y or Redder	Under	lying			⊣ydrophytic V∈ rology, and an	_
<u>~</u> Redox De				-	eral soil, 60% of horiz		-			osition unless	
Red Pare					/High Water Table (1			l nr	oblematic		
<u></u> ✓ Very Sha	•	,			tter/Low Iron/High pH		_		Other (e	xplain in rema	rks)
HYDROLOG		lace (i EE)	LOW OI	garno ivia	acircow moniming in pri	0011/14	CW WCUIDI	_	_ Other (c	Apidin in rema	inaj
TIDROLOG	31	Wetland Hydro	logy In	dicators			Second	larv Indi	cators (2 c	r more require	d)
Primary Indica	ators (any one	indicator is sufficie		diodiois				-	ned Leave		۵,
N Surface V				tion Visib	le on Aerial Imagery (	( <b>B</b> 7)	4		Patterns (E		
* High Wat	er Table (A2)	$\simeq$	Sparse	ely Vegeta	ited Concave Surface	e (B8)	<del></del>		•	•	g Roots (C3)(w/in 12")
> Saturation				eposits (E	,					d Iron (C4)	
✓ Water Ma ✓ Sediment	• ,				e Odor (C1) (w/in 12" ter Table (C2)**	")			sits (C5)	Plants (D1)	
<u> </u>			-		Remarks)				nic Position		
Algal Mat			·					-			te as restrictive layer)
<u>∼</u> Iron Depo					ogic Conditions on Si	te	A A		graphic Re		
✓ Surface S  Elast Observed.		·		this time	of Year?	_			ral Test (D		
Surface Wate	A C COAD	s from ground surfa Yes No		Depth (in	ches):		er Source			Wetland Hy	drology Present?
Water Table F		Yes X No		Depth (in	1.1	- (	DYOUR	6		1/2	<u></u>
Saturation Pre		Yes No		Depth (in		31	6	) who	4		son Water Table ior, Western AK:
(includes capi		6296		The said		9	~ (				ay – late July
Describe Rec	orded Data (s	Episaturation_ tream gauge, monit	oring we	Endosat ell, aerial p	ohotos, previous insp	ections	), if availat	ole:		**Mineral S	Soils 12-24 inches
										**Organic	Soils 12-40 inches
Remarks:											st = #OBL+FW
										add non-domina	U + UPL dominants; ints if tie

Plot Number	ST110					
Wetland Status	Wetland					
Plot Type	WD: Wetland Determination					
Plot Date	6/1/2022					
NWI Classification	PSS1B Flat					
ндм						
Vegetation Type	Open Low Willow Shrub					
Latitude (DD)	64.574863					
Longitude (DD)	-149.788214					



Photo Type: Soils Direction: N/A



Photo Type: Vegetation Direction: E



Plot Number	ST111					
Wetland Status	Upland					
Plot Type	FVP: Field Verification Point					
Plot Date	6/1/2022					
NWI Classification	U					
ндм	N/A					
Vegetation Type	Deciduous Shrub and Sapling Regrowth					
Latitude (DD)	64.574667					
Longitude (DD)	-149.787492					



Photo Type: Vegetation



Photo Type: Vegetation  $\hbox{Direction: } N$ 



Photo Type: Vegetation Direction: W

Plot Number	ST112
Wetland Status	Upland
Plot Type	FVP: Field Verification Point
Plot Date	6/1/2022
NWI Classification	U
ндм	N/A
Vegetation Type	Deciduous Shrub and Sapling Regrowth
Latitude (DD)	64.574717
Longitude (DD)	-149.785773



Photo Type: Soils Direction: N/A



Photo Type: Vegetation Direction: N



## WETLAND DETERMINATION DATA FORM - Alaska Region

	4		4					Plot No: ST 113
Project:	etc	habe	+ 1	Cel				ate: 6/1122
Applicant: Alaska D	epart	ment o	f Trans	portation and	Public I	acilitie	s In	vestigators: Sile (ALo
Borough/City/Location	on:						100	
NAD 83, Decimal Degrees								STANTEC
Latitude: 64	-57	484			Waters	hed:	Roc	h Creek Hul 10
Longitude: -	14	9, 78	3146		Locatio	n Note	S.	
Elevation (ft):		44	5					
				,	T			SUMMARY OF FINDINGS
Are "Normal Circumsta	inces"	Preser	nt?	157		H	lydroph	ytic Vegetation Present?
Significantly Disturbed	?	VEG	SOIL	S HYDRO				Hydric Soils Present?
Naturally Problematic?		VEG	SOIL	S HYDRO			Wet	land Hydrology Present?
Remarks:					1. 41.	_		
					is the	Samp	pied Ai	rea within a Wetland?
VEGETATION	T< 1%	6, P = Pre	esent		SUBREG	SION:		
Tree Stratum DBH ≥ 3 inch				ular plot unless no			ecorded	Dominance Test worksheet:
Species	IND	DOM	Cover	Species	IND	DOM	Cover	Number of Dominant Species
1,				3.				That Are OBL, FACW, or FAC:(A)
2.				4.		-		Total Number of Dominant
Total Tree Cover:		50% of T	otal Cove		20% of To	otal Covo		Species Across All Strata:(B)
	IND	DOM	Cover			Jiai Cove		Percent of Dominant Species
Sapling/Shrub Stratum		DOM	Cover	8. FICMAL	1.4			That Are OBL, FACW, or FAC: (A/B)
1. YOPBAC	FU			9. LINBO	-	-	T	Prevalence Index Worksheet
2. SAL BER	1		50	10. BETNE	o Fu	-	T	Total % Cover of: Multiply by:
3. POPTRE	FU	h	5	11,	1 4-			
4. ROSACI	FU	M	6	12.				OBL speciesx 1 =
5. VACVIT	F	1	15	13.				FACW speciesx 2 =
6. EHOGRO	F	N	5	14.				FAC species <b>75</b> x 3 = <u>225</u>
7. DAS FOO FRU	t	-	T	15.				FACU species X 4 = SL
Total Shrub Cover:	1	50% of To	otal Cove	7.64:1	20% of To	tal Cover	16.2	
Herbaceous Stratum	IND	DOM	Cover	13.				UPL speciesx 5 =(B)  Column Totals:(A)(B)
1. CORCAN	FU	1	.3	14.				
2. CALCAN	F	7	5	15.				Prevalence Index = B/A = 3.16
3.				16.				
4.				17.				Hydrophytic Vegetation Indicators:  Dominance Test is >50%
5.				18.				No Prevalence Index is ≤3.0
6.				19.				Morphological Adaptations <sup>1</sup>
7.		-		20.				(Provide supporting data in
								Remarks or on a separate sheet)
8.		-		21.				Problematic Hydrophytic Vegetation <sup>1</sup> Indicators of hydric soil and wetland hydrology
9.				22.				must be present unless disturbed or problematic.
10.				23.				Project Vegetation Type
11,				24.				D55/2
12.				25.				Cowardin Code:
Total Herb Cover:	5	0% of To	otal Cove	. 4	20% of Tot	al Cover	1,6	oowardin code.
1.Open Water				2. Bare ground				HGM Classification:
Remarks: Bryophytes and L	ichens	may be li	sted in the		umns			Loodfarm
Russ	امیر	ar	04					hill top
001	neo		C -(					Local Relief: CUNVEX
								Microtopography: Slope: Aspect:

Plot No: ST

Profile Des	cription: De	escribe to the depth	needed	to docum	ent the presence/at	sence	of soil indic	cators	Soil M	lap Unit Name	
	Horizon	Soil Matrix			Redox Featu	res					141
Depth (in.)	Name	Color (moist)	%	Type <sup>1</sup>	Color	%	Loc <sup>2</sup>	Mod <sup>3</sup>	Texture	Horizon Cor	nments
17-0	0:				7-						
An 11	A	10107/0					1	- cohita	8:1	01	/
0-7	A	10 YR 3/2	-			+				Charcos	
4-8	BIN	104B315						The State of the S	Sil	Black	fraking
181	1	h									0
- 71		1		4 1							
le.											(-
			-	-						-	
1							- 7				
	+						940				
¹Type: C=Conc	entrations D=I	Depletions, OX=Oxidize	d Roots	RM = Red	tuced Matrix <sup>2</sup> Locatio	n: PI =Pr	ore Linings	RC=Root	Channels I	M=Matrix. CS=Co.	ated Sand Grains
		Soils From									PT), Permafrost (PF)
Remarks: ,	1015+	20112 From	7	- tolor Ch	Second Second	7/45					bly (CB), Stony (ST)
				- 5	Value Committee	- Will		(15-35	%), 35-60%	= Very (V), 60-90	% = Extremely (X)
lydric Soil I	ndicators	Measure from the to	of the	mineral s	soil layer except for a	A1, A2,	A3, A4	-			
<u>r⊸i</u> Histosol d	or Histel (A1)	N	Thick D	ark Surfa	ices (A12)				_	c Soils	No
<u></u> Histic Ep	ipedon (A2)4	mi	Alaska	Gleyed (A	A13)				Pres	ent?	20
Black His المر	stic (A3)	<u>i.1</u>	Alaska	Redox (A	(14)				NRCS Dr	ainage Class:	
✓ Hydroger	n Sulfide (A4)	N	Alaska	Gleyed F	Pores (A15)				Depth of	Organic Soils:	7
Indicators fo	r Problemat	ic Hydric Soils (Se	e Page	91/Section	n 4 for Problematic	Hydric S	Soils Detai	ils)	Restrictiv	e Layer Type:	-
					ange (TA4) Givé de				estrictive L	ayer Depth:	-
<u>~</u> Depleted					wales (TA5)					y mineral soil w	/chroma of ≤2
<u> </u>					ith 2.5Y Hue						
		, <u> </u>				ar Hado	rlying			Hydrophytic Veg	
<u>∼</u> Depleted				_	//o Hue 5Y or Redde					rology, and an a osition unless d	
Nedox D		<i></i>		•	eral soil, 60% of ho			"   pr	oblematic	John Timeso T	Starboa o.
<u>∼</u> Red Pare					l/High Water Table (						
∨ Very Sha	Illow Dark Su	rface (F22)	Low Or	ganic Ma	tter/Low Iron/High p	H Soil/N	lew Wetla	nd	_ Other (e	xplain in remark	(S)
YDROLO	GY										
		Wetland Hydro		dicators				•	-	r more required	
		e indicator is sufficie							ned Leave		
N Surface \					ie on Aerial Imagery		·	-	Patterns (B	•	Boots (C3)/w/in 13
∠ High Wat ∠ Saturation				eposits (E	ated Concave Surfac	ce (B8)			-	d Iron (C4)	Roots (C3)(w/in 12
∠ Saturatio ∠ Water Ma					le Odor (C1) (w/in 12	2"\		alt Depos		a 11011 (04)	
Sedimen					ter Table (C2)**	- /	_	-		Plants (D1)	
Drift Dep		· -	-		n Remarks)		-		nic Position		
Algal Ma		•)					—.				as restrictive layer
<u>~</u> Iron Dep					ogic Conditions on S	Site			graphic Re		
<u> </u> Surface S				this time	of Year?				ral Test (D		
		es from ground surfa	11	Donath (in		VVa	ter Source	9:		Wetland Hyd	Irology Present?
Surface Water		Yes No	K	Depth (in	ches):	-				N	U
Water Table I		Yes No _	X		nches):			- 11			on Water Table or, Western AK:
(includes cap		and the state of the				-	-				
Describe Per	orded Data (	Episaturation_ stream gauge, monit	oring w	Endosal		nections	s) if availa	hle.			y ∸ late July oils 12-24 inches
Describe Rec	orueu Dala (	sucam gauge, mont	ornig we	on, actidi	priotos, previous iris	Peorion	s,, ii availa				oils 12-40 inches
Remarks:									-	AC-Neutral Tes	t = #OBL+FW
											+ UPL dominants;

Plot Number	ST113
Wetland Status	Upland
Plot Type	WD: Wetland Determination
Plot Date	6/1/2022
NWI Classification	U
ндм	N/A
Vegetation Type	Deciduous Shrub and Sapling Regrowth
Latitude (DD)	64.574848
Longitude (DD)	-149.781463



Direction: N/A



Photo Type: Vegetation Direction: E



#### WETLAND DETERMINATION DATA FORM - Alaska Region

				9				Plot No: ST //7	<i>f</i>
Project:		stche		(C)				ate: 6/2/22	
Applicant: Alaska Department of Transportation an						d Public Facilities Investigators: SAE/ALo			0
Borough/City/Location	on:								
NAD 83, Decimal Degrees								STANTEC	
Latitude: LY 5			Waters	shed: 🖔	Scho	ull Sloveh He	010		
Longitude: - 149	.51	260	2		Location	on Note	S:	. , - 4	
Elevation (ft):	20								
				1115	T			SUMMARY OF FINE	1
Are "Normal Circumsta			_	1/5		ŀ	Hydroph	nytic Vegetation Present?	res
Significantly Disturbed	?	VEG	SOIL	S HYDRO				Hydric Soils Present?	NO
Naturally Problematic?		VEG	SOIL	SHYDRO			We	tland Hydrology Present?	NO
Remarks:					is the	e Samp	oled A	rea within a Wetland?	NO
VEGETATION	T< 19	6, P = Pre	esent		SUBRE	GION:			
Tree Stratum DBH ≥ 3 incl				ular plot unless n			recorded	Dominance Test work	sheet:
Species	IND	DOM	Cover	Species	IND	DOM	Cover	Number of Dominant Species	2
1. POPTRE	FU	V	5	3.				That Are OBL, FACW, or FAC:	(A)
2. PICMAR	FW	V	20	4.				Total Number of Dominant	3
Total Tree Cover: 2		50% of T	otal Cove	er: 12.5	20% of T	otal Cove	er: C	Species Across All Strata:	(B)
Sapling/Shrub Stratum	IND	DOM	Cover	8.		T	7	Percent of Dominant Species That Are OBL, FACW, or FAC	67 (A/B)
1. BUTNED	PU	N	7	9.				- Matrice ODE, Triove, of Trio	(/VB)
2. VAC-15	B	7	40	10.				Prevalence Index Wor	ksheet
3. RHO 620	F	1	10	11.	0.0	1	-	Total % Cover of: Multipl	y by:
_	-	N	-	12.	_			OBL speciesx 1 =	
5. ALNVIR	FW		-	13.		1	_	FACW species 20 x 2 =	10
	50	N		14.				FAC species 45 x 3 =	
6. SHECAN	FU	N		15.		1			20
	-	50% of T	otal Cove		20% of To	stal Covo	G	FACU speciesx 4 =	
Herbaceous Stratum	IND	DOM	Cover	13.	20/8 01 10	Tai Covei		UPL speciesx 5 =	C. c
1. ORTSEC			COVE	14.	-			Column Totals: (A)	/ <u>/</u> (B)
2.	PU	N			_	1			225
3.			_	15. 16.		-		Prevalence Index = B/A = _	
								Hydrophytic Vegetation I	ndicators:
4.				17.				Dominance Test is >50%	
5.				18.				Prevalence Index is ≤3.0	1
6.				19.				Morphological Adaptations (Provide supporting data in	1
7.			F	20.				Remarks or on a separate	sheet)
8.			-	21,				Problematic Hydrophytic V  Indicators of hydric soil and we	egetation <sup>1</sup>
9.				22.				must be present unless disturbed or	problematic.
10.				23.				Project Vegetation	Туре
11.				24.				OMF	
12.				25.				Cowardin Code:	
Total Herb Cover:	5	0% of T	otal Cove	r:	20% of To	tal Cover		Jonata is if	
1.Open Water				2. Bare ground				HGM Classification:	CI
Remarks: Bryophytes and I	ichens	may be i	sted in the					Landform:	
								mound	
						- 1		Local Relief: Convey	Angest
								Microtopography: Slope:	Aspect:

SOIL									PIO	t No: ST
Profile Des	cription: D	escribe to the depth	needed	to documer	t the presence/a	absence o	of soil ind	licators	Soil Ma	ap Unit Name
	Horizon	Soil Matrix			Redox Feat	ures				
Depth (in.)	Name	Color (moist)	%	Type <sup>1</sup>	Color	%	Loc <sup>2</sup>	Mod <sup>3</sup>	Texture	Horizon Comments
1-0	0.									
0-13	AB	1042414	100					وخساه در	Sil	
13-18	BW	10 YR 4/3	100					is all through	Sal	very sandy
										3
							9			
¹Type: C=Conc	entrations, D=	Depletions, OX=Oxidize	ed Roots.	RM = Reduc	ed Matrix <sup>2</sup> Locat	ion: PL=Pc	re Linings	RC=Root	Channels, M	 
Remarks:								<sup>3</sup> Texture Mo Coarse Fr	odifiers: Mucl agments: Gr	ky (MK), Peaty (PT), Permafrost (PF)   avelly (GR), Cobbly (CB), Stony (ST) Very (V), 60-90% = Extremely (X)

Hydric Soil Indicators Measure from	the top of the mineral soil layer except for A1, A2, A3, A4		
<u></u> Histosol or Histel (A1)		Hydric Soils	No
_∕_Histic Epipedon (A2)⁴	<u>N</u> Alaska Gleyed (A13)	Present?	
_∕_Black Histic (A3)	<u></u> Alaska Redox (A14)	NRCS Drainage Class:	MWD
	<u>N</u> Alaska Gleyed Pores (A15)	Depth of Organic Soils:	
Indicators for Problematic Hydric Soils	(See Page 91/Section 4 for Problematic Hydric Soils Details)	Restrictive Layer Type:	
<u> </u>	Maska Color Change (TA4) Give details of color change	Restrictive Layer Depth:	-
_/─' Depleted Matrix (F3)	_ <u>∼</u> Alaska Alpine Swales (TA5)	<sup>4</sup> Underlain by mineral soil w	ı/chroma of ≤2
<u></u> Redox Dark Surface (F6)	∧ Alaska Redox with 2.5Y Hue	⁵Must have Hydrophytic Ve	netation and
	<u> </u>	Primary Hydrology, and an	•
	AA Positive (mineral soil, 60% of horizon 4 inches thick)	landscape position unless of	listurbed or
	<u></u> Ponded/Flooded/High Water Table (12 inches or higher)	problematic	
∨ Very Shallow Dark Surface (F22)	Low Organic Matter/Low Iron/High pH Soil/New Wetland	Other (explain in remai	rks)

vary Grianow Dark Guriace	(1 LZ) LOW Organie Watter/Low Holl/High pir o	Silvitett tiettaliaStile!	(explain in remains)			
HYDROLOGY						
	Wetland Hydrology Indicators	Secondary Indicators (2	2 or more required)			
Primary Indicators (any one ind	dicator is sufficjent)	∠ Water-stained Lea	ves (B9)			
N Surface Water (A1)	N Inundation Visible on Aerial Imagery (B7	') Nrainage Patterns	(B10)			
N. High Water Table (A2)	N Sparsely Vegetated Concave Surface (E	38) Novidized Rhizosph	neres along Living Roots (C3)(w/in 12"			
N Saturation (A3)	<u>N</u> Marl Deposits (B15)		ced Iron (C4)			
Water Marks (B1)	── Mydrogen Sulfide Odor (C1) (w/in 12")	▲ Salt Deposits (C5)				
Sediment Deposits (B2)	Dry-Season Water Table (C2)**	Marked or Stresse	ed Plants (D1)			
✓ Drift Deposits (B3)	Other (Explain in Remarks)	Geomorphic Positi	Ceomorphic Position (D2)			
N Algal Mat or Crust (B4)		🔼 Shallow Aquitard (	D3) (w/in 24", note as restrictive layer			
Non Deposits (B5)	Are Climatic/Hydrologic Conditions on Site	Microtopographic Relief (D4)				
Surface Soil Cracks (B6)	Typical for this time of Year?	FAC-Neutral Test (D5)				
Field Observations (inches from	om ground surface)	Water Source:	Wetland Hydrology Present?			
Surface Water Present?	Yes No Depth (inches):	7 14 5	NO			
Water Table Present?	Yes No Depth (inches):		Dry Season Water Table			
Saturation Present?	Yes NoX Depth (inches):		SC, Interior, Western AK:			
(includes capillary fringe)	Episaturation Endosaturation		Mid May – late July			
Describe Recorded Data (strea	Episaturation Endosaturation Endosat	tions) if available	**Mineral Soils 12-24 inches			
Describe Necorded Data (Street	and gauge, memoring wear, denign prices, provides inspect	noney, it available.	**Organic Soils 12-40 inches			
Remarks:			FAC-Neutral Test = #OBL+FW dominants > #FU + UPL dominants; add non-dominants if tie			

Plot Number	ST114
Wetland Status	Upland
Plot Type	WD: Wetland Determination
Plot Date	6/2/2022
NWI Classification	U
НСМ	N/A
Vegetation Type	Open Mixed Forest
Latitude (DD)	64.575039
Longitude (DD)	-149.512605



Photo Type: Soils Direction: N/A



Photo Type: Vegetation Direction: N



Plot Number	ST115
Wetland Status	Upland
Plot Type	FVP: Field Verification Point
Plot Date	6/2/2022
NWI Classification	U
ндм	N/A
Vegetation Type	Deciduous Shrub and Sapling Regrowth
Latitude (DD)	64.574491
Longitude (DD)	-149.535909



Photo Type: Soils

Direction: N/A



Photo Type: Vegetation

Direction: SE



Photo Type: Vegetation

#### WETLAND DETERMINATION DATA FORM – Alaska Region

								Plot No: ST	14		
Project: Tota	hobe	1 Ro	1					Date: 4/2/28			
Applicant: Alaska D			Trans	portation and	Public F	acilitie	es li	nvestigators: \Re / AL	D.		
Borough/City/Locati	ion:										
NAD 83, Decimal Degrees								STANTEC			
Latitude: 64.57520 Watershed: uni								ich Lorbe Huc	10		
Longitude: - 14	9.55	5400	>		Locatio	n Note	s:				
Elevation (ft):	43	36									
				Tylue.				SUMMARY OF F	11 -		
Are "Normal Circumst		1	1	JEZ			Hydrop	hytic Vegetation Present?	765		
Significantly Disturbed	1?	VEG	SOIL	S HYDRO				Hydric Soils Present?	NO		
Naturally Problematic	?	VEG	SOIL	S HYDRO	22	any	We	etland Hydrology Present?	YES		
Remarks:						7	oled A	rea within a Wetland?	NO		
VEGETATION	T< 1%	, P = Pre	esent		SUBREG	SION:					
Tree Stratum DBH ≥ 3 inc	ch	1/10	acre circu	ılar plot unless no	ted, absolut	te cover r	recorded		orksheet:		
Species	IND	DOM	Cover	Species	IND	DOM	Cove	Number of Dominant Species That Are OBL, FACW, or FAC:	(A)		
1.	1 = 1			3.	4 117				(^)		
2.				4.				Total Number of Dominant Species Across All Strata:	<u> </u>		
Total Tree Cover:		50% of To	otal Cove	er:	20% of To	tal Cove	r:				
Sapling/Shrub Stratum	IND	DOM	Cover	8. ARCUVA	UUP	IN	7	<ul> <li>Percent of Dominant Species</li> <li>That Are OBL, FACW, or FAC:</li> </ul>	00 (A/B)		
1. VACVIT	F	Y	10	9.					` '		
2. Rushel	FU	too-	T	10.				Prevalence Index W	orksheet		
3. SALBEB	-	_	7	11.				Total % Cover of: Multiply by:			
4. PILMAR	Ful	V	15	12.				OBL speciesx 1 =			
5. BETNEO	F	que,	7	13.				FACW speciesx 2 =	30		
6. POPTRE	FJ		-	14.				FAC species 33 x 3 =	69		
7. SHECAN	D.J	Name of Street	7	15.				(acre	-10		
Total Shrub Cover:	25	50% of T	otal Cove	-	20% of To	tal Covor	11.	FACU speciesx 4 =	90		
Herbaceous Stratum	IND	DOM	Cover	13.	20 % 01 10	Lai Covei	9.0	UPL speciesx 5 =	TIO		
1. CALCAN	7-	JOIN 1	_		_			Column Totals: (A)	(B)		
2. CORCAN	FU	1	10	14.	_				1 32		
	-		+					Prevalence Index = B/A	<u>~ 17</u>		
3. PEDLAS	FW		(	16.			_	Hydrophytic Vegetation			
4.				17,	-			Dominance Tost is > 30			
5.				18.				Yea Prevalence Index is ≤3			
6.				19.				Morphological Adaptation (Provide supporting date)			
7,				20.				Remarks or on a separa	ate sheet)		
8.				21.				Problematic Hydrophytic Indicators of hydric soil and			
9.				22.				must be present unless disturbed	or problematic.		
10.				23.				Project Vegetation	on Type		
11,				24.				PSSR			
12.		1 1		25.				Cowardin Code:	)		
Total Herb Cover:	5	0% of To	tal Cove	r:	20% of Tot	al Cover	1	LION Observed			
1.Open Water				2. Bare ground	10			HGM Classification:	NA		
Remarks: Bryophytes and	- /	may be li	sted in the	e Herbaceous col	umns			Landform:			
Bur	SN						19	VALLEY			
								Local Relief: Culluc  Microtopography: Slope	: Aspect:		
								Slope	- ICI		

Profile Des	cription: D	escribe to the	e depth :	needed	to docume	ent the presence/a	absence o	of soil indi	cators	Soil M	ap Unit Name	
	Horizon	Soi	l Matrix			Redox Feat	ures			,		
Depth (in.)	Name	Color (n	noist)	%	Type <sup>1</sup>	Color	%	Loc <sup>2</sup>	Mod <sup>3</sup>	Texture	Horizon Co	mments
2-0	0,											
0-16	RW	IOYR	4/2	75					n-Criscologia	511	Froze	^
	100	10.412 3	3/10	25					- Large of the	5.1	Na Tra	
		(0,77	1 63	-								
		1			-	-						
	-										-	
										14		
				1			1					
	-				<u> </u>	2						
						uced Matrix <sup>2</sup> Locat						oated Sand Grains (PT), Permafrost (PF)
Remarks:	Thixoti	ropic	64 ,	DU	חמעון	hydri	3					bbly (CB), Stony (ST)
				`		· ·				-		0% = Extremely (X)
Hydric Soil I	ndicators	Measure froi	m the top	of the	mineral so	oil layer except for	A1, A2,	A3, A4				
N_ Histosol o	or Histel (A1)		N	Thick E	Park Surfac	ces (A12)				Hydric		NO
Histic Epi	pedon (A2)4		N	Alaska	Gleyed (A	13)				Pres	ent?	140
N Black His	tic (A3)		NRCS Drainage Class: 30 PD						SUPD			
N Hydrogen	Hydrogen Sulfide (A4)  Alaska Gleyed Pores (A15)  Depth of Organic Soils:							2				
Indicators for	Indicators for Problematic Hydric Soils (See Page 91/Section 4 for Problematic Hydric Soils Details)  Restrictive Layer Type:							_				
Depleted	Below Dark	Surface (A11	1) N	Alaska	Color Cha	nge (TA4) Give	details of	color chai	nge Re	estrictive La	yer Depth:	_
N Depleted Matrix (F3)  N Alaska Alpine Swales (TA5)  4Underlain by mineral soil w/chroma of ≤2												
	N Redox Dark Surface (F6)  Alaska Redox with 2.5Y Hue											
	New Depleted Dark Surface (F7)  Depleted Dark Surface (F7)  Alaska Gleyed w/o Hue 5Y or Redder Underlying  Malaska Gleyed w/o Hue 5Y or Redder Underlying  SMust have Hydrophytic Vegetation and Primary Hydrology, and an appropriate							-				
1.7	epression (F8		x /		-	eral soil, 60% of h					sition unless o	
2.3	ent Material (F		. 1		•	High Water Table			pr	oblematic		
N Very Sha		•				ter/Low Iron/High				Other (e)	plain in remar	rks)
HYDROLOG		Hade (1 ZZ)		LOW O	gamo mat	ton ton ngn	pri comi	011 110114		_ other (c)	piani in rema	
HIDROLOG	31	Wetlan	d Hydro	logy in	dicators			Secon	dary Indi	cators (2 or	more required	4).
Primary Indica	ators (any on		•		100001013					ned Leaves		-,
Control of the second	Vater (A1)		N.		ition Visible	e on Aerial Image	ry (B7)			Patterns (B	3-50	
N High Wat	er Table (A2)	)	Ň	Sparse	ely Vegetat	ted Concave Surfa	ace (B8)			-		Roots (C3)(w/in 12")
Saturation			K		eposits (B					of Reduced	Iron (C4)	
₩ Water Ma		-\	X	-	-	Odor (C1) (w/in	12")		alt Depos		N4- (D4)	
N Sediment     N Drift Depo     Drift Depo     N		2)	7	-		er Table (C2)** Remarks)		-		Stressed Fic Position		
M Algal Mat		)		Other	(LAPIAIII III	(Terrialks)			_			e as restrictive layer)
✓ Iron Depo			Are	Climat	tic/Hydrolo	gic Conditions on	Site	Z M	licrotopo	graphic Rel	ief (D4)	
✓ Surface S					this time	of Year?				ral Test (D5		
Field Observ	de constitue de la constitue d				Death Ge	-L	Wa	ter Source	1	1	Wetland Hy	drology Present?
Surface Wate Water Table F						ches): ches):		MGL		د ا	X	61
Saturation Pre					Depth (inc			(" Sco	tono	+		on Water Table or, Western AK:
(includes capi							3		( ) co	71		
Describe Rec	orded Data (s		uration_ e, monito	oring we	Endosatu ell, aerial p	iration_ hotos, previous in	spections	), if availa	ble:		**Mineral S	ay – late July Soils 12-24 inches
	·	5 5			•		•				**Organic S	Soils 12-40 inches
Remarks:	<u></u> 11	1		1	1.1							st = #OBL+FW
	Thiy	, not	54	UPG	V.K						ominants > #Ft dd non-domina	J + UPL dominants; nts if tie

Plot Number	ST116
Wetland Status	Upland
Plot Type	WD: Wetland Determination
Plot Date	6/2/2022
NWI Classification	U
ндм	N/A
Vegetation Type	Deciduous Shrub and Sapling Regrowth
Latitude (DD)	64.575202
Longitude (DD)	-149.554007



Photo Type: Soils Direction: N/A



Photo Type: Vegetation Direction: E



Plot Number	ST117
Wetland Status	Upland
Plot Type	FVP: Field Verification Point
Plot Date	6/2/2022
NWI Classification	U
ндм	N/A
Vegetation Type	Deciduous Shrub and Sapling Regrowth
Latitude (DD)	64.574737
Longitude (DD)	-149.55655



Direction: N/A Photo Type: Soils



Photo Type: Vegetation Direction: N



Plot Number	ST118
Wetland Status	Upland
Plot Type	FVP: Field Verification Point
Plot Date	6/2/2022
NWI Classification	U
ндм	N/A
Vegetation Type	Deciduous Shrub and Sapling Regrowth
Latitude (DD)	64.574787
Longitude (DD)	-149.549981



Photo Type: Soils Direction: N/A



Direction: E Photo Type: Vegetation



Direction: N

#### WETLAND DETERMINATION DATA FORM - Alaska Region

								Plot No: ST 119				
								Date: 6/2/22				
Applicant: Alaska Department of Transportation and Public Facilities II								Investigators: SRe/ALo				
Borough/City/Location	n:											
NAD 83, Decimal Degrees								STANTEC				
Latitude: 64.57486						Watershed: Lunch take Huc 10						
Longitude: -	.541	102		Location	n Note	s:						
Elevation (ft):	17	7										
		/			_			SUMMARY OF FINDINGS				
Are "Normal Circumsta	YES		nytic Vegetation Present?									
Significantly Disturbed?		VEG SOILS		SHYDRO				Hydric Soils Present?				
Naturally Problematic?		VEG	SOIL	S HYDRO			Wei	tland Hydrology Present?				
Remarks:		1.		le the Countle d								
					is the	e Samp	oled A	rea within a Wetland?				
VEGETATION	T< 19	6, P = Pre	sent		SUBREC	GION:						
Tree Stratum DBH ≥ 3 inch				ular plot unless n			ecorded	Dominance Test worksheet:				
Species	IND	DOM	Cover	Species	IND	DOM	Cover	Number of Dominant Species				
1,				3.				That Are OBL, FACW, or FAC:				
2.				4.				Total Number of Dominant				
Total Tree Cover:	1	50% of To	otal Cove	1.0	20% of Te	otal Cove	L.	Species Across All Strata:				
Sapling/Shrub Stratum	IND	DOM	Cover	8.	2070 01 10	Jiai Oove		Percent of Dominant Species That Are OBL, FACW, or FAC:  (A/E				
	F	DOW	-	9.	_			That Ale OBL, FACVV, of FAC:(AV				
1. VACUIT	-	7	15					Prevalence Index Worksheet				
2. PICMAR	FW			10.	1			Total % Cover of: Multiply by:				
3. BESALBES	F	_	3	11.								
4. POPTRE	FU	Y	2	12.								
5. SHECAN	FU	100	T	13				FACW speciesx 2 =				
6.	1			14.				FAC species Sax 3 = 174				
7.				15.				FACU species x 4 =				
Total Shrub Cover: 2	3 :	50% of To	tal Cove	r: 1/5	20% of To	tal Cover	46	UPL species x 5 =				
Herbaceous Stratum	IND	DOM	Cover	13.				Column Totals: (A) (B)				
1. PEDLAB	FW	N	7	14.				Solution Foliais. 43 (V)				
2. CALCAN	T	y	30	15,				Prevalence Index = B/A = 3.08				
3. FES ALT	T	V	10	16								
4.		-	1 0	17.		-		Hydrophytic Vegetation Indicators:  Dominance Test is >50%				
5.				18.				Dominance Test is >50%  NO Prevalence Index is ≤3.0				
6.		-	_					Morphological Adaptations <sup>1</sup>				
				19.	_			(Provide supporting data in				
7.				20.				Remarks or on a separate sheet)				
8.				21.				Problematic Hydrophytic Vegetation <sup>1</sup> Indicators of hydric soil and wetland hydrology				
9.				22.				must be present unless disturbed or problematic.				
10.				23.				Project Vegetation Type				
11,				24.			1	DSSR				
12.				25.				Cowardin Code:				
Total Herb Cover: 4	, 5	0% of To	tal Cove	r: 20	20% of To	tal Cover	8	0				
1.Open Water				2. Bare ground			-	HGM Classification:				
Remarks: Bryophytes and L	ichens	may be li	sted in the		iumns			Landform:				
								levuce				
								Local Relief:				
								Microtopography:   Slope: Aspect:				

Plot No: ST

119

	Horizon	Soil Matrix		Redox Features					-	¥			
Depth (in.)	Name	Color (moist)	%	Type <sup>1</sup>	Color	%	Loc <sup>2</sup>	Mod <sup>3</sup>	Texture	Horizon Co	mments		
2-1)	0.			1						17			
0 01	Bw	104R4/4	100		£			-	SIL				
0-1	1200	1011	100						1	-			
			-			-			-				
		- 1			11								
				0 1									
			-					ļ	-				
Type: C=Conc	entrations, D=	Depletions, OX=Oxidize	d Roots	, RM = Redu	uced Matrix <sup>2</sup> Locatio	n: PL=Po							
Remarks:		Ca		1.	+		] ;				(PT), Permafrost (PF		
		76070	52 cal	Do					-		bbly (CB), Stony (S <sup>-</sup> 0% = Extremely (X)		
vdric Soil I	ndicators	Measure from the to	p of the	mineral so	oil layer except for A	1, A2,	A3, A4	(10.00	707, 00 0070	very (v), 00 0	Extremely (M)		
	or Histel (A1)	. 1		Dark Surfac					Llydei	Soile			
1	pedon (A2)4	-		Gleyed (A					Hydric Soils Present?				
		- I											
Black His	` '			Redox (A	•				NRCS Drainage Class: SW P D				
N Hydroger	Sulfide (A4	) <u>N</u>	Alaska	Gleyed Po	ores (A15)			-	Depth of	of Organic Soils:			
ndicators fo	r Problemat	tic Hydric Soils (Se	e Page	91/Section	4 for Problematic	Hydric S	Soils Deta	ils)	Restrictiv	e Layer Type:			
<u></u> Depleted	Below Dark	Surface (A11)	Alaska	Color Cha	nge (TA4) Give de	etails of	color cha	nge R	estrictive L	ayer Depth:	Wykater		
Depleted Matrix (F3)  Alaska Alpine Swales (TA5)								ا₄ل	Inderlain b	nderlain by mineral soil w/chroma of ≤2			
N Redox Dark Surface (F6)  N Alaska Redox with 2.5Y Hue													
<sup>5</sup> Mus									Must have Hydrophytic Vegetation and rimary Hydrology, and an appropriate				
1				-	eral soil, 60% of hor			- 1		osition unless			
	epression (F			•				"' nr	oblematic				
Ned Pare		100			High Water Table (		_						
Very Sha	llow Dark Su	urface (F22)	Low Or	rganic Mat	ter/Low Iron/High p	H Soil/N	lew Wetla	nd _	Other (e	xplain in rema	rks)		
YDROLO	GΥ												
		Wetland Hydro	logy In	dicators			Secon	dary Indi	icators (2 o	r more require	d)		
Primary Indica	ators (any or	ny one indicator is sufficient)						∠ Water-stained Leaves (B9)					
<u>ს</u> Surface V	Vater (A1)	N			e on Aerial Imagery			_	Patterns (B				
_ •	er Table (A2				ted Concave Surfac	e (B8)					Roots (C3)(w/in		
✓ Saturatio				eposits (B		AUX.			of Reduce	d Iron (C4)			
Water Ma		<ul> <li>N Hydrogen Sulfide Odor (C1) (w/in 12")</li> <li>N Dry-Season Water Table (C2)**</li> <li>N Stunted or Stressed Plants (D1)</li> </ul>											
№ Sediment ✓ Drift Depo	t Deposits (E	· · · · · · · · · · · · · · · · · · ·							ed or Stressed Plants (DT) norphic Position (D2)				
_	osits (B3) or Crust (B4		Other	(Explain in	remarks)						te as restrictive la		
Iron Depo			e Climat	tic/Hydrolo	gic Conditions on S	ite			graphic Re				
/	Soil Cracks (	,		r this time	•		-		ral Test (D				
ield Observ	ations (inch	es from ground surfa	ce)			Wa	ter Source	9:		Wetland Hy	drology Preser		
Surface Wate	r Present?	Yes No	×	Depth (inc	ches):	-				NO			
Water Table F	Present?	Yes No	<u>X</u>	Depth (inc	ches):	_			1	Dry Seas	on Water Table		
Saturation Pre		Yes No	<u>X</u>	Depth (inc	ches):	-					or, Western AK:		
(includes capi	iliary tringe)	Episaturation_		Endosatu	iration					Mid M	ay – late July		
Describe Rec	orded Data (	(stream gauge, monit	oring we			pections	s), if availa	ible:		**Mineral S	Soils 12-24 inches Soils 12-40 inches		
Remarks:											st = #OBL+FW		
									k	iominants > #FI	J + UPL dominants		

Plot Number	ST119						
Wetland Status	Upland						
Plot Type	WD: Wetland Determination						
Plot Date	6/2/2022						
NWI Classification	U						
НСМ	N/A						
Vegetation Type	Deciduous Shrub and Sapling Regrowth						
Latitude (DD)	64.57486						
Longitude (DD)	-149.544016						



Direction: N/A Photo Type: Soils



Photo Type: Vegetation Direction: E



Photo Type: Vegetation Direction: N

Plot Number	ST120				
Wetland Status	Upland				
Plot Type	FVP: Field Verification Point				
Plot Date	6/2/2022				
NWI Classification	U				
ндм	N/A				
Vegetation Type	Deciduous Shrub and Sapling Regrowth				
Latitude (DD)	64.574781				
Longitude (DD)	-149.530066				



Photo Type: Vegetation

Direction: E



Photo Type: Vegetation

Direction: N



Photo Type: Vegetation

Direction: SE

# WETLAND DETERMINATION DATA FORM – Alaska Region

								Plot No: ST	21
Project:			120					Date: 6/2/22	
Applicant: Alaska D		ment c	f Trans	portation ar	nd Public	Facilitie	es Ir	nvestigators: SRe/ALC	)
Borough/City/Location	on:								
NAD 83, Decimal Degrees	10 -	-					_	STANTEC	
Latitude: 64		06			Waters		Jalul	nell Sloveh Hue	- 10
		5207	4		Location	on Note	es:	7	
Elevation (ft):	211	+							
Are "Normal Circumsta	, n o o o "	Droop	-40	VEC		-		SUMMARY OF FI	NDINGS
			1	765			Hydropi	hytic Vegetation Present?	No
Significantly Disturbed		VEG	_	-				Hydric Soils Present?	NO
Naturally Problematic?		VEG	SOIL	S HYDRO			We	tland Hydrology Present?	NO
Remarks:					Is the	e Samı	oled A	rea within a Wetland?	Nd
VEGETATION	T< 19	%, P = Pr			SUBRE			. \	
Tree Stratum DBH ≥ 3 inch	1	1/10	acre circ	ular plot unless r	noted, absolu	ite cover i	recorded		orksheet:
Species	IND	DOM	Cover	Species	IND	DOM	Cover	Number of Dominant Species That Are OBL, FACW, or FAC:	1
1,4	1			3.					(A)
2.	Ųī			4.				Total Number of Dominant Species Across All Strata:	2
Total Tree Cover:		50% of T	otal Cove	er:	20% of T	otal Cove	r:		(B)
Sapling/Shrub Stratum	IND	DOM	Cover	8.				Percent of Dominant Species That Are OBL, FACW, or FAC:	50 (A/B)
1. VACVIT	T	Y	70	9.					
2. BETNED	FU	Ý	20	10.	1111			Prevalence Index Wo	orksheet
3. RHOGRO	1-	N	3	11.				Total % Cover of: Multi	ply by:
4. SALBER	F	N	3	12.				OBL speciesx 1 = _	
5. PICMAR	FW	N	T	13.				FACW species x 2 = _	
6. POPTRE	5	N	7	14.				FAC species $\frac{1}{6}$ x 3 =	228
7. ALNUIR	H	N	7	15.				4	A
Total Shrub Cover:	1		otal Cove		20% of To	tal Cover	VG.0	FACU species 23 x 4 = _	1 60-
Herbaceous Stratum	IND	DOM	Cover	13.	2078 01 10	Lai Govei	II N IC	UPL species x5=	22 11
1. CHA ANG	FU	N	T	14.				Column Totals: (A)	(B)
2.			-	15.				Prevalence Index = B/A =	7.27
3.				16.			-		
4.				17.				Hydrophytic Vegetation	
5.				18.				Dominance rest is >50%	
6.				19.				Prevalence Index is ≤3.0	
7.				20.				Morphological Adaptation (Provide supporting data	in
8.								Remarks or on a separat	e sheet)
9.				21.				Problematic Hydrophytic  Indicators of hydric soil and w	Vegetation betalogy
10.	/			22.		-		must be present unless disturbed	or problematic.
11,				23.				Project Vegetation	туре
			-	24.				VSSL	
12.				25.				Cowardin Code:	
Total Herb Cover:	5	0% of To	tal Cover		20% of Tot	al Cover:		HGM Classification:	
1.Open Water	ober-	mar h = !	ted in it	2. Bare ground	Local			1)/6	i
Remarks: Bryophytes and Li	cnens r	nay be li	sted in the	Herbaceous co	iumns			Landform: Lillside	
								Microtopography: Slope:	Aspect:
								1/10/2-	1

riville Desc				,5 Goodilli	ent the presence/		2. 30		1	ap Unit Name	
have the constraint	Horizon	Soil M		Redox Features			12	NA1	Taskura	Horizon Co	mmente
Depth (in.)	Name	Color (mo	ist) %	Type <sup>1</sup>	Color	<u>%</u>	Loc <sup>2</sup>	Mod	1 Texture	Horizon Co	mments
2"-0"	0;					_			-		
0'-8"	BW	104R 4/0	1 100		l i i			_	SIL	Frozer	Below
						4	1				
						4					
					0.0						
						7					
Type: C=Cons	entrations D	-Depletions OX=	Oxidized Roots	RM = Red	uced Matrix <sup>2</sup> Loca	ation: PL=	Pore Linings	RC=Ro	ot Channels, I	M=Matrix, CS=C	oated Sand Grains
Remarks:	entrations, D-							3Texture	Modifiers: Mu	cky (MK), Peaty	(PT), Permafrost (Pf
Neillains.		6	rotan cl	(0	1 Season &	( 07	Τ.				obbly (CB), Stony (ST 10% = Extremely (X)
vdric Soil I	ndicators	Measure from	the top of the	mineral s	oil layer except fo	or A1, A2	, A3, A4	(15-3	1376), 33-00 /6	- very (v), oo-a	DOW - Extremely (X)
	or Histel (A1)		서 Thick D						Hvdri	c Soils	. 1.0
	pedon (A2)4		N Alaska	Gleyed (A	<b>\13</b> )				-	sent?	NO
Black His			N Alaska						NRCS Dr	ainage Class:	SWAD
Hydrogen		5	N Alaska						Depth of	Organic Soils:	12
					n 4 for Problemat	tic Hydric	Soils Deta	ails)	Restrictiv	e Layer Type:	-
The state of the s		Surface (A11)			ange (TA4) Give				Restrictive L		-
Depleted		Ouridoc (XIII)			vales (TA5)			_ T		•	w/chroma of ≤2
2.1	ark Surface	/E6\	• 1		th 2.5Y Hue						
\	Dark Surface				o Hue 5Y or Rec	ider I Ind	erlying			Hydrophytic Vo	_
1					eral soil, 60% of I					rology, and ar osition unless	
	epression (F		<del></del>						problematic		
Ned Pare			-		/High Water Tabl				Other /	untain in same	arke)
Very Sha		urface (F22)	Low O	rganic Ma	tter/Low Iron/High	1 pri 50i	/New vveu	anu	Other (e	explain in rema	iiks)
IYDROLO	GY	\$84-41I	H. duala en la	dlastam			Saco	ndary In	dicators (2 d	or more require	ad)
Drivens e India	atora (any a	wetland ne indicator is s	Hydrology In	dicators					tained Leave		,
. )	ators (any o Nater (A1)	ne muicator is s		ation Visib	le on Aerial Image	erv (B7)			e Patterns (E	· ·	
	ter Table (A	2)			ated Concave Sur			_			g Roots (C3)(w/in
N Saturatio		•	Narl D	Deposits (E	315)		2	resenc	e of Reduce	d Iron (C4)	
Water Ma			<u></u> Hydro	gen Sulfid	e Odor (C1) (w/in	12")	17:	Salt Dep	osits (C5)		•
	t Deposits (E	32)	N Dry-Se	eason Wa	ter Table (C2)**				or Stressed		, .
✓ Drift Dep	osits (B3)		∠ Other	(Explain i	n Remarks)				phic Position		
∠ Algal Ma	t or Crust (B	14)							The second second		ote as restrictive la
P Iron Dep	osits (B5) ·				ogic Conditions o	n Site			ographic Re		
∠ Surface :				r this time	of Year?				utral Test (D		
		hes from ground					Vater Sour	Ce:			drology Prese
Surface Water		Yes			nches):						10
Water Table		Yes			nches):						son Water Table
Saturation Pr (includes cap			_ No _ >_	and the second	nches):	$\rightarrow$					rior, Western AK:
		Episatur	ration , monitoring w	Endosa rell, aerial	turation photos, previous	inspection	ons), if avai	lable:		**Mineral	/lay – late July Soils 12-24 inche Soils 12-40 inche
Remarks:											est = #OBL+FW
. tomanto.										dominants > #I add non-domir	FU + UPL dominan

Plot Number	ST121					
Wetland Status	Upland					
Plot Type	WD: Wetland Determination					
Plot Date	6/2/2022					
NWI Classification	U					
ндм	N/A					
Vegetation Type	Deciduous Shrub and Sapling Regrowth					
Latitude (DD)	64.575061					
Longitude (DD)	-149.52074					



Photo Type: Soils Direction: N/A



Photo Type: Vegetation Direction: S



Photo Type: Vegetation Direction: W

# WETLAND DETERMINATION DATA FORM – Alaska Region

Project									Plot No: ST	22
Project:	a Taga			71.00	10000	15 11		_	Date: 6/2/22	
Applicant: Alaska D		ment	or irans	spor	tation and	d Public	Facilitie	es	Investigators: SR- / AL	0
Borough/City/Location	on:									
NAD 83, Decimal Degrees  Latitude: ( )	74	51				11011			STANTEC	
Longitude: - 149		2151		-		Waters		LUN	.111 Slough Huel	0
Elevation (ft):	7	20				Location	on Note	es:	3	
Lievation (it).		7.0						_	CHMMADYOFF	NDINGO
Are "Normal Circumsta	ances'	' Prese	nt?	T	122		-	lydro	SUMMARY OF FI ohytic Vegetation Present?	
Significantly Disturbed		VEC	-	9	HYDRO			iyalo		NO
Naturally Problematic?		VEC		-	HYDRO				Hydric Soils Present?	NO
Remarks:		VEC	SOIL	-5	HTDRO			VV	etland Hydrology Present?	40
rvomanto.						Is the	e Samp	oled /	Area within a Wetland?	No
VEGETATION	T 4 40	%, P = Pi		_						1.0
Tree Stratum DBH ≥ 3 incl				rular i	olot unless no	SUBREC			d Dominance Test w	orksheet.
Species	IND	DOM	Cover	_	ecies	IND	1		Number of Descious Consis	l l
1. RIMAR	FW	DOM	Cover	3.	ecies	IND	DOM	Cove	That Are OBL, FACW, or FAC:	(A)
2.	11/1	-		-		_		-	Total Number of Dominant	2
Total Tree Cover:		F00/ -57	F-4-1 O	4.					Species Across All Strata:	(B)
Sapling/Shrub Stratum	1	1	otal Cov	_		20% of To	otal Cove	r:	Percent of Dominant Species	50
	IND	DOM	Cover	8.		1			That Are OBL, FACW, or FAC:	(A/B)
1. ARC DUA URSI	UP	Y	20	9.					Describe Indo-W	
2. VACUIT	-	_	10	10.					Prevalence Index.W  Total % Cover of: Mult	a.A.
3. PUPTRE	Fu	_	3	11,						iply by:
4. PILMAR	FV		T	12.					OBL speciesx 1 = _	
5. SALBES	F	Y	15	13,					FACW speciesx 2 = _	
6. SHECAN	Pu	-	T	14.					FAC species $\frac{\partial B}{\partial x} \times 3 = \frac{1}{2}$	84
7. RHOGRO	1	-	3	15.					FACU species x 4 =	12_
Total Shrub Cover: 51	1	50% of T	otal Cove	er: (	13.2	20% of Tot	al Cover	10.2		100
Herbaceous Stratum	IND	DOM	Cover	13.					Column Totals: 5 (A)	19 ( /8)
1. SANANA	Fu	-		14.						(B)
2. ANT ELE	FU	-	T	15.					Prevalence Index = B/A =	787
3 PYR ASA	FV	-	T	16.						
4. TOF COC	F	-	1	17.					Hydrophytic Vegetation Dominance Test is >50%	
5. Lad Stopen	F	1	+	18.					Prevalence Index is ≤3.0	1
6. CYP!				19.					Morphological Adaptation	
7.				20.					(Provide supporting data	in
8.				21.					Remarks or on a separat	
9.				22.					Problematic Hydrophytic Indicators of hydric soil and v	vetland hydrology
10.				23.				_	must be present unless disturbed Project Vegetation	or problematic.
11.				24.		-			Total	TTYPE
12.										
Total Herb Cover:		00/ - 5 T	4-1-0	25.					Cowardin Code:	
	5	U% Of 10	otal Cove	_		20% of Tota	al Cover:		HGM Classification:	
1.Open Water Remarks: Bryophytes and Li	chens r	may he li	sted in the	2. B	are ground	Impo	-		1/10	
2., opinytos and El	J. 10110 1	inay De II	olog in tile	1 161	Javevus CUIL	111113			Landform: LISIN	
								-	Local Relief: Concave	
							-		Microtopography: Slope;	Aspect:
									101	
US Army Corps of Eng	ineers				Alaska Vers	ion 2.0			Form Modified: Stanted	c, Alaska, July 2020

SOIL									PI	ot No: ST	
Profile Desc	ription: De	scribe to the de	pth needed	to docum	nent the presence/abs	sence o	of soil indi	cators	Soil M	ap Unit Name	
	Horizon	Soil Ma			Redox Feature						
B0-0-1		V. Fred and	n - Frank	Type <sup>1</sup>	Color	%	Loc <sup>2</sup>	Mod <sup>3</sup>	Texture	Horizon Co	mments
Depth (in.)	Name	Color (moist	70	TAbe	COIOI	70		3134			
3.0	0										
0-10	Bu	104 B 3/	4 100						SIL		
						1-1-				-	
			17.			7					
-											
1= 0.0	Jankinson Derf	Designations OV-O	vidized Poets	DM = Ro	duced Matrix <sup>2</sup> Location	r PI≂P	ore Linings	RC=Roo	Channels, M	M=Matrix, CS=Co	pated Sand Grains
Type: C=Conce	ntrations, D=L	Depletions, OX-OX						<sup>3</sup> Texture I	/lodifiers: Mu	cky (MK), Peaty	(PT), Permafrost (PF)
Remarks:			SULS	mal	boot at	13	3''				bbly (CB), Stony (ST)
								(15-35	5%), 35-60%	= Very (V), 60-9	0% = Extremely (X)
lydric Soil In	dicators	Measure from th	e top of the	mineral	soil layer except for A	1, A2,	A3, A4		_		
Nistosol or	Histel (A1)		N Thick [	Dark Surf	aces (A12)				-	c Soils	NO
N Histic Epip	edon (A2)4		N Alaska	Gleyed (	(A13)				Pres	sent?	-
✓ Black Histi			N Alaska	Redox (	A14)				NRCS Dr	ainage Class:	SWPD
1	Sulfide (A4)		1 .		Pores (A15)				Depth of	Organic Soils:	3
						Judric	Soils Data	ile\		e Layer Type:	-
			. 1		on 4 for Problematic						
	Below Dark	Surface (A11)			nange (TA4) Give de	etails of	r color cha			ayer Depth:	
Depleted I	Matrix (F3)		Alaska	Alpine S	Swales (TA5)			4(	Jnderlain b	y mineral soil v	v/chroma of ≤2
Nedox Da	rk Surface (	F6)	N Alaska	Redox v	vith 2.5Y Hue			5	Must have I	Hydrophytic Ve	getation and
Depleted I	Dark Surface	e (F7)	Naska	Gleyed	w/o Hue 5Y or Redde	r Unde	erlying			lrology, and an	
N Redox De	pression (F	B)	N AA PO	sitive (mi	neral soil, 60% of hor	izon 4	inches thi	UIL)		osition unless	disturbed or
	nt Material (		N Ponde	d/Floode	d/High Water Table (	12 inch	nes or high	ner) P	roblematic		
Very Shall		. = .,	2010		atter/Low Iron/High p			4	Other (e	explain in rema	rks)
		mace (i zz)	LOW O	igaino in	attor/Low House Ing.						
HYDROLOG	5 Y	147-11-2-111	God - La - La la				Seco	ndary Inc	licators (2 c	or more require	d)
			lydrology li	ndicators	5				ined Leave		-,
		e indicator is sul		ation Visi	ble on Aerial Imagery	(B7)			Patterns (E		
<ul><li>∠ Surface W</li><li>∠ High Wate</li></ul>		)			tated Concave Surface						g Roots (C3)(w/in 12
N Saturation		,	Narl I			. ,	<u>~</u> ı	resence	of Reduce	d Iron (C4)	
Water Ma			N Hydro	gen Sulfi	de Odor (C1) (w/in 12	2")		-	osits (C5)		
	Deposits (B	32)			ater Table (C2)**		_			Plants (D1)	
Drift Depo	sits (B3)		<u></u> COther	(Explain	in Remarks)				hic Positio		to an enetrictive lave
	or Crust (B	4)		e: #1 d-	tanta Oranditione en G	Nito.			aquitard (Di ographic Re		te as restrictive laye
☐ Iron Depo		De)		-	ologic Conditions on S le of Year?	oile	-	-	ıtral Test (E		
N Surface S		es from ground		or uns um	e or rear:	M	later Sour				drology Present
Surface Wate		Yes	No X	Depth (	inches):		V-0-2430	100		Nã	)
Water Table F		Yes	No X		inches):					Dry Sea	son Water Table
Saturation Pre		Yes	No ×		inches):						rior, Western AK:
(includes capi			Market St							Mid N	lay – late July
Describe Rec	orded Data	Episatura (stream gauge, r	monitoring v	ell, aeria	aturation Il photos, previous ins	pection	ns), if avai	lable:		**Mineral	Soils 12-24 inches
Describe Nec	orded Dald	Carouin gauge, I				5-4772				**Organic	Soils 12-40 inches
Remarks:											est = #OBL+FW FU + UPL dominants;

Plot Number	ST122					
Wetland Status	Upland					
Plot Type	WD: Wetland Determination					
Plot Date	6/2/2022					
NWI Classification	U					
ндм	N/A					
Vegetation Type	Deciduous Shrub and Sapling Regrowth					
Latitude (DD)	64.574908					
Longitude (DD)	-149.501518					



Photo Type: Soils Direction: N/A



Photo Type: Vegetation Direction: N



Photo Type: Vegetation Direction: S

Plot Number	ST123						
Wetland Status	Upland						
Plot Type	FVP: Field Verification Point						
Plot Date	6/2/2022						
NWI Classification	U						
ндм	N/A						
Vegetation Type	Deciduous Shrub and Sapling Regrowth						
Latitude (DD)	64.57546						
Longitude (DD)	-149.496887						



Photo Type: Vegetation



Photo Type: Vegetation Direction: N



Photo Type: Vegetation Direction: W

Plot Number	ST124					
Wetland Status	Upland					
Plot Type	FVP: Field Verification Point					
Plot Date	6/2/2022					
NWI Classification	U					
ндм	N/A					
Vegetation Type	Deciduous Shrub and Sapling Regrowth					
Latitude (DD)	64.57544					
Longitude (DD)	-149.488316					



Photo Type: Hydrology Direction: E



Photo Type: Hydrology Direction: N



Photo Type: Hydrology Direction: S

Plot Number	ST125						
Wetland Status	Upland						
Plot Type	FVP: Field Verification Point						
Plot Date	6/2/2022						
NWI Classification	U						
ндм	N/A						
Vegetation Type	Deciduous Shrub and Sapling Regrowth						
Latitude (DD)	64.575154						
Longitude (DD)	-149.480881						



Photo Type: Hydrology Direction: N



Photo Type: Hydrology Direction: S



Photo Type: Hydrology Direction: W

## WETLAND DETERMINATION DATA FORM – Alaska Region

	7 1		-	0.				Plot No: ST	24			
Project:		Cheh		1Col				ate: 4/3/22				
Applicant: Alaska D		ment o	f Trans	sportation an	d Public	Facilitie	es Ir	vestigators: \$ /6_				
Borough/City/Locati	on:						100					
NAD 83, Decimal Degrees					4			STANTEC				
Latitude: 44	-	162			Waters		Lunc	helen Auc 10	)			
Longitude: - 14	9.65	217			Location	on Note	S:					
Elevation (ft):	43	+										
'A ((A) 1 O'		-	10	TVE	1			SUMMARY OF F	NDINGS			
Are "Normal Circumsta		-	7	YES			lydroph	nytic Vegetation Present?	YES			
Significantly Disturbed		VEG	SOIL	S HYDRO				Hydric Soils Present?	YES			
Naturally Problematic?		VEG	SOIL	S HYDRO			Wet	tland Hydrology Present?	YES			
Remarks:					Is the	e Samp	oled A	rea within a Wetland?	YES			
VEGETATION	T< 19	%, P = Pre	esent		SUBRE	GION:						
Tree Stratum DBH ≥ 3 inc	h	1/10	acre circ	ular plot unless n	oted, absolu	ite cover r	ecorded	Dominance Test w	orksheet:			
Species	IND	DOM	Cover	Species	IND	DOM	Cover	Number of Dominant Species	3			
1,				3,				That Are OBL, FACW, or FAC:	(A			
2.				4.				Total Number of Dominant	3			
Total Tree Cover:	1	50% of T	otal Cov	Pr'	20% of To	otal Cove	P	Species Across All Strata:	(B			
Sapling/Shrub Stratum	IND	DOM	Cover	8.	20 /8 01 1	otal Cove		Percent of Dominant Species	100			
1. VACULI	F	7	(0)	9.				That Are OBL, FACW, or FAC:	(A/B)			
2. BUTNAN	E	7	IP	10.				Prevalence Index W	orksheet			
3. RHOTOM	FU	1	3	11.		-		Total % Cover of: Multiply by:				
4. SAL PUL	FW		2	12.	-			OBL speciesx1=				
5. CHA CAL	FIJ		3	13.	-			FACW species 81 x 2 =	100			
6.	PW			14.				FAC species 30 x3=	100			
7,	-			15.								
Total Shrub Cover: Z		50% of To	otal Cove		20% of To	tal Cavar	- w	FACU speciesx 4 = _	<del></del>			
Herbaceous Stratum	IND		Cover	11.2	20% 01 10	tai Cover	7.8	UPL speciesx 5 =	5.7.5			
			2°6	13,	_			Column Totals: 119 (A)	(B)			
1. ELIVAG 2. RURCHA	FW	7	30		_				225			
1 C T P A	FW			15.				Prevalence Index = B/A =	7.97			
3. CALCAN	F	-	T	16.				Hydrophytic Vegetation	n Indicators:			
4. CARBIG	F		12	17.				Dominance Test is >509	%			
5.	7			18.				Ywy Prevalence Index is ≤3.0	0			
6.				19.		1		Morphological Adaptatio				
<b>7</b>				20.				(Provide supporting data Remarks or on a separa	i in te sheet)			
8.	1-1			21.				Problematic Hydrophytic	Vegetation <sup>1</sup>			
9.				22.				Indicators of hydric soil and a must be present unless disturbed	vetland hydrology			
10.				23.				Project Vegetatio				
11.				24.				OMSST				
12.				25.								
Total Herb Cover:	O 5	0% of To	tal Cove		20% of Tot	al Cover		Cowardin Code: PSS ( B				
1.Open Water	0	- /0 01 10	0076	2. Bare ground	20 /0 UI TOL	ai Cover:	10	HGM Classification: Slope	11			
Remarks: Bryophytes and L	ichens	may be lis	sted in the		umns		50,1	Landform:	- 114			
						-		)While				
							2	Local Relief: Ch Chu Microtopography: Slope:				
								any otopograpity.	MSpect.			

Profile Des	cription: Desc	cribe to the depth	needed	to docum	ent the presence/	absence o	f soil inc	dicators	Soil M	lap Unit Name				
	Horizon	Soil Matrix	Redox Features											
Depth (in.)	Name	Color (moist)	%	Type <sup>1</sup>	Color	%	Loc <sup>2</sup>	Mod	3 Texture	e Horizon Comments				
10-0	0e							76						
10-0														
			-			-	-		-	-				
								-						
								+						
			2											
										1				
								-						
			1					_		0.00.0				
'Type: C=Cond	entrations, D=De	pletions, OX=Oxidiz	ed Roots	RM = Red	uced Matrix <sup>2</sup> Loca	tion: PL=Po	re Lining	s, RC=Rc	ot Channels,	M=Matrix, CS=C	(PT), Permafrost (PF)			
Remarks:										• • •	obbly (CB), Stony (ST)			
									•		00% = Extremely (X)			
Hydric Soil I	ndicators M	easure from the to	p of the	mineral s	oil layer except fo	r A1, A2,	A3, A4				1			
M Histosol	or Histel (A1)	14	Thick I	Dark Surfa	ces (A12)				Hydri	c Soils	400			
	ipedon (A2)4	7	Alaska	a Gleyed (A	A13)				Pres	sent?	Irr			
N Black His				a Redox (A					NRCS D	alnage Class:	VPD			
1		. 1			ores (A15)					Organic Soils:	10			
	n Sulfide (A4)					in Undein S	Soile Doi	taile)		e Layer Type:	RMMMON			
A		ALCOHOL: NO THE REAL PROPERTY OF THE PERSON			n 4 for Problemat						10			
<u>り</u> Depleted	Below Dark Su				ange (TA4) Give	details of	color ch	, ,		ayer Depth:				
Depleted	Matrix (F3)	N	Alaska	Alpine Sv	vales (TA5)				⁴Underlain b	y mineral soil	w/chroma of ≤2			
N Redox D	ark Surface (F6	<u> </u>	Alaska	a Redox w	ith 2.5Y Hue				⁵Must have	Hydrophytic V	egetation and			
<u></u> Depleted	Dark Surface	(F7)	Alaska	a Gleyed w	/o Hue 5Y or Red	lder Unde	rlying		Primary Hyd	irology, and ar	appropriate			
P Redox D	epression (F8)	<u>N</u>	AA Po	sitive (min	eral soil, 60% of l	norizon 4 i	nches th	non,		osition unless	disturbed or			
N Red Pare	ent Material (F2	1) \( \( \sum_{1} \)	Ponde	ed/Flooded	/High Water Tabl	e (12 inch	es or hig	jher)	problematic					
Very Sha	allow Dark Surfa	ace (F22)	Low C	Organic Ma	tter/Low Iron/High	pH Soil/N	lew Wet	tland	Other (	explain in rema	arks)			
HYDROLO														
		Wetland Hydr	ology I	ndicators			Sec	ondary Ir	ndicators (2	or more require	ed)			
Primary Indic	ators (any one	indicator is suffici					X	Water-s	tained Leave	es (B9)				
_ /	Water (A1)		Inund		le on Aerial Image		<del>1</del>		e Patterns (E					
Y High Wa	ter Table (A2)	<u> </u>			ated Concave Sur	face (B8)	N		•	=	g Roots (C3)(w/in 12"			
Y Saturation		H		Deposits (l		10")	Z Z		ce of Reduce posits (C5)	a iron (C4)				
	arks (B1)	-		-	le Odor (C1) (w/in iter Table (C2)**	12)	U		or Stressed	Plants (D1)				
_	nt Deposits (B2) posits (B3)	, N	, .		n Remarks)		Y		rphic Positio					
	it or Crust (B4)			A Comment			Y	Shallow	Aquitard (D	3) (w/in 24", n	ote as restrictive layer			
	osits (B5)	Α	re Clima	atic/Hydrol	ogic Conditions o	n Site	7		pographic Re					
	Soil Cracks (B6			or this time	of Year?		<u> </u>		eutral Test (E		D			
A COLOR		from ground surf			750	Wa	ter Sou		11		ydrology Present?			
Surface Water Present? Yes X No Depth (inches): 6. Lo. + \ \( \)														
Water Table		Yes No		_ Depth (in	100	-		bre	919		ison Water Table rior, Western AK:			
Saturation P		Yes X No		_ Depth (ir	icnes).	-			,					
		Episaturation		Endosa	turation	inepoction	e) if ave	ilable.			May – late July Soils 12-24 inches			
Describe Re	corded Data (st	ream gauge, mon	itoring y	veii, aeriai	photos, previous	inspection	o), ii ava	maule.			Soils 12-40 inches			
Domada										FAC-Neutral T	est = #OBL+FW			
Remarks:				1							FU + UPL dominants;			

Plot Number	ST126
Wetland Status	Wetland
Plot Type	WD: Wetland Determination
Plot Date	6/3/2022
NWI Classification	PSS1B
ндм	Flat
Vegetation Type	Open Mixed Shrub Sedge Tundra
Latitude (DD)	64.574626
Longitude (DD)	-149.659145



Photo Type: Soils Direction: N/A



Photo Type: Vegetation Direction: S



Photo Type: Vegetation Direction: W

Plot Number	ST127
Wetland Status	Wetland
Plot Type	FVP: Field Verification Point
Plot Date	6/3/2022
NWI Classification	PSS1B
НСМ	Slope
Vegetation Type	Open Mixed Shrub Sedge Tundra
Latitude (DD)	64.57463
Longitude (DD)	-149.654705



Photo Type: Vegetation Direction: E



Photo Type: Vegetation Direction: S



Photo Type: Vegetation Direction: W

Plot Number	ST128
Wetland Status	Upland
Plot Type	FVP: Field Verification Point
Plot Date	6/3/2022
NWI Classification	U
ндм	N/A
Vegetation Type	Deciduous Shrub and Sapling Regrowth
Latitude (DD)	64.574638
Longitude (DD)	-149.65413



Photo Type: Vegetation Direction: E



Photo Type: Vegetation Direction: N



Photo Type: Vegetation Direction: S

## WETLAND DETERMINATION DATA FORM – Alaska Region

								Plot No: ST 129					
Project: Totchchet Rd								Date: 6/3/22					
Applicant: Alaska D	epart	ment c	es Ir	Investigators: STL / Alo									
Borough/City/Locati	on:												
NAD 83, Decimal Degrees								STANTEC					
Latitude: 64	24			Waters	shed:	unch	Lule Aucto						
Longitude: - 14	963	1864			Location	on Note	s:	1					
Elevation (ft):	20	10				h	reles	al sita					
Are "Normal Circumsta	2000"	Droop	-42	1/2	1		1	SUMMARY OF FINDINGS					
Significantly Disturbed		VEG	-	S TINDES			туагорі	phytic Vegetation Present?					
		-	-				147	Hydric Soils Present?					
Naturally Problematic? Remarks:		VEG	SOIL	S HYDRO			vve	tland Hydrology Present?	0				
Nemarks.					Is the	e Samp	oled A	rea within a Wetland?	9				
VEGETATION	T< 19	%, P = Pr	esent		SUBRE	GION:							
Tree Stratum DBH ≥ 3 inc	h	1/10	acre circ	ular plot unless n	oted, absolu	ite cover r	ecorded	Dominance Test worksheet:					
Species	IND	DOM	Cover	Species	IND	DOM	Cover	Number of Dominant Species That Are OBL, FACW, or FAC:					
1. POPTRE	FU	Y	7	3.					(A)				
2. PILMAR	FW	Y	3	4,				Total Number of Dominant Species Across All Strata:	(B)				
Total Tree Cover:	0	50% of T	otal Cove	er: 5	20% of To	otal Cove	-2	Percent of Dominant Species					
Sapling/Shrub Stratum	IND	DOM	Cover	8.				That Are OBL, FACW, or FAC:	(A/B)				
1. POPTRE	FU	Y	50	9.					-				
2. BETNEO	FV	-	90	10.		71 3		Prevalence Index Worksheet					
3. VACVIT	F	Y	40	11.				Total % Cover of: Multiply by:	-				
4. PILMAR	FW	-	3	12.				OBL speciesx 1 =	_				
5. PHUGRO	F	Higher	3	13.				FACW species x 2 = 12	<u></u>				
6. SALBER	F	-	1	14.				FAC species 49 x3 = 147					
7. ALNUIR	F	-	7	15.				FACU species 77 x4= 368					
Total Shrub Cover: 3	2 !	50% of T	otal Cove	r: 6	20% of To	tal Cover	74.4		_				
Herbaceous Stratum	IND	DOM	Cover	13.				UPL species x 5 = Column Totals: (A)	— (B)				
1,				14.					_(0)				
2,				15.				Prevalence Index = B/A = 3.54					
3.				16,				Hydrophytic Vegetation Indicato					
4.				17.				No Dominance Test is >50%					
5.				18.				N ) Prevalence Index is ≤3.0					
6.				19.				Morphological Adaptations <sup>1</sup>					
7.				20.		-		(Provide supporting data in Remarks or on a separate sheet)					
8			-14	21.				Problematic Hydrophytic Vegetatio	n <sup>1</sup>				
9.				22.				1 Indicators of hydric soil and wetland hy must be present unless disturbed or problem	drology				
10.				23.				Project Vegetation Type					
11,				24.				WMF					
12.		2.1		25.		1		Cowardin Code:					
Total Herb Cover:	5	0% of To	otal Cove	r:	20% of Tot	al Cover:							
1.Open Water				2. Bare ground				HGM Classification: トト					
Remarks: Bryophytes and L	ichens	may be li	sted in the	Herbaceous co	lumns			Landform: Terroce					
						1		Local Police CL-7					
								Local Relief: Slope: Asp	pect:				
						- 1		Ciope: Ast	2001.				

SOIL									Pl	ot No: ST	27	
Profile Des	cription: De	escribe to the d	lepth needed	to docum	ent the presence/	absence o	of soil indi	cators	Soil M	lap Unit Name		
	Horizon	Soil M			Redox Fea							
Depth (in.)							Loc <sup>2</sup>	Mod <sup>3</sup>	Texture	Horizon Cor	nments	
3-U	Oi	GOIOI (IIIO	70	1770								
3 0	7	071							CAI	-		
0-17	Dw	107231	3 100						SAL			
							-					
				-				-				
				[]								
¹Type: C=Cond	centrations, D=	Depletions, OX=0	Oxidized Roots	RM = Red	uced Matrix <sup>2</sup> Loca	tion: PL=Po	ore Linings	RC=Root	Channels, I	M=Matrix, CS=Co	ated Sand Grains	
Remarks								<sup>3</sup> Texture M	odifiers: Mu	cky (MK), Peaty	(PT), Permafrost (PF)	
Nemans.									_		bbly (CB), Stony (ST)	
			1 140-2 F.II	and realize		- 04 02	02.04	(15-35	%), 35-60%	= Very (V), 60-90	% = Extremely (X)	
			4		oil layer except fo	OFAT, AZ,	A3, A4	-1				
P Histosol	or Histel (A1)		Thick E							c Soils	NO	
Histic Ep	ipedon (A2)⁴		Alaska	Gleyed (A	(13)			-	Pres	sent?		
N Black His	stic (A3)		N Alaska	Redox (A	14)			-	NRCS Dr	ainage Class:	MWD	
N Hydroge	n Sulfide (A4)	)	N Alaska	Gleyed P	ores (A15)				Depth of	Organic Soils:		
			S (See Page	91/Sectio	n 4 for Problemat	ic Hydric	Soils Deta	ils)	Restrictiv	tive Layer Type:		
		Surface (A11)	. (		ange (TA4) Give				estrictive L	Layer Depth:		
- 1		Surface (ATT)				dotallo o	00101 0114	100		n by mineral soil w/chroma of ≤2		
7	Matrix (F3)		N Alaska						indenain b	by mineral son wrement of a		
PRedox D	ark Surface (	(F6)			th 2.5Y Hue			5N	lust have l	t have Hydrophytic Vegetation and		
N Depleted	Dark Surfac	e (F7)		-	o Hue 5Y or Rec				Primary Hydrology, and an appropriate			
Nedox D	epression (F	8)	N AA Pos	sitive (min	eral soil, 60% of I	norizon 4 i	nches thi	5117	) landscape position unless disturbed or problematic			
P Red Pare	ent Material (	F21)	✓ Ponde	d/Flooded	/High Water Tabl	e (12 inch	es or high	er)	ODIEMALIC			
Very Sha	allow Dark Su	ırface (F22)	N Low O	rganic Ma	ter/Low Iron/High	pH Soil/N	New Wetla	and 1	Other (e	explain in remar	ks)	
HYDROLO												
TIDIOLO	-	Wetland	Hydrology Ir	dicators			Seco	ndary Indi	cators (2 c	r more required	d)	
Primary Indic	ators (any on	ne indicator is s	A Section of the section of				4.		ned Leave			
	Water (A1)		•	ation Visib	le on Aerial Image	ery (B7)	<u>N</u> [	Orainage I	Patterns (E	310)		
	ter Table (A2	?)	✓ Sparse	ely Vegeta	ited Concave Sur	face (B8)					Roots (C3)(w/in 1	
✓ Saturation	on (A3)		<del></del>	eposits (E	•		<u> </u>	resence	of Reduce	d Iron (C4)		
N Water M	larks (B1)			_	e Odor (C1) (w/in	12")		Salt Depo				
	nt Deposits (B	32)			ter Table (C2)**					Plants (D1)		
	oosits (B3)		M Other	(Explain ir	n Remarks)				nic Position		o oo rootrictiya lay	
	at or Crust (B4	4)	A Olima	المعامينا المالية	asia Conditions o	n Cito			graphic Re		e as restrictive lay	
-	oosits (B5) Soil Cracks (I	D6)		-	ogic Conditions o of Year?	n Sile			ral Test (D			
		es from ground		T (IIIO (III7IO	Of 10ut	Wa	ater Source	2.1			drology Present	
Surface Water		Yes		Depth (in	ches):	1000				٨	) 0	
Water Table	D # ( ) 1								on Water Table			
Saturation P		Yes			ches):						or, Western AK:	
(includes car										Mid M	ay – late July	
Describe Re	corded Data (	Episatur (stream gauge,	monitoring w	Endosat ell, aerial	photos, previous	inspection	s), if avail	able:		**Mineral S	Soils 12-24 inches Soils 12-40 inches	
Remarks:								_		FAC-Neutral Te	st = #OBL+FW	
Remarks.										dominants > #FI	J + UPL dominants;	
										add non-domina	ints if tie	

Plot Number	ST129
Wetland Status	Upland
Plot Type	WD: Wetland Determination
Plot Date	6/3/2022
NWI Classification	U
ндм	N/A
Vegetation Type	Woodland Mixed Forest
Latitude (DD)	64.575033
Longitude (DD)	-149.638638



Photo Type: Soils Direction: N/A



Photo Type: Vegetation Direction: N



Photo Type: Vegetation Direction: S

Plot Number	ST130
Wetland Status	Upland
Plot Type	FVP: Field Verification Point
Plot Date	6/3/2022
NWI Classification	U
ндм	N/A
Vegetation Type	Open Mixed Forest
Latitude (DD)	64.574666
Longitude (DD)	-149.631949



Photo Type: Vegetation Direction: E



Photo Type: Vegetation Direction: N



Photo Type: Vegetation Direction: NW

Plot Number	ST131
Wetland Status	Upland
Plot Type	FVP: Field Verification Point
Plot Date	6/3/2022
NWI Classification	U
ндм	N/A
Vegetation Type	Open Black Spruce Forest
Latitude (DD)	64.574508
Longitude (DD)	-149.618062



Photo Type: Soils Direction: N/A



Photo Type: Vegetation Direction: S



Photo Type: Vegetation Direction: W

#### WETLAND DETERMINATION DATA FORM - Alaska Region

				- 41				i lot ito. o i	32	
Project:		Total	ete: 6/3/22,							
Applicant: Alaska D	epart)	s Ir	Investigators: Ske/Alo							
Borough/City/Locati	on;									
NAD 83, Decimal Degrees								STANTEC		
Latitude: 645	755	1			Watershed: Lunch Lote Huc 10					
Longitude: - 14	9.60	0751			Location	n Note	S:			
Elevation (ft):	1	468								
'A #11 10' 1				11/1-0	1			SUMMARY OF FI	1100	
Are "Normal Circumsta		-	-	127			Hydropl	nytic Vegetation Present?	YES	
Significantly Disturbed		VEG	SOIL					Hydric Soils Present?	NO	
Naturally Problematic?	?	VEG	SOIL	HYDRO			We	tland Hydrology Present?	NO	
Remarks:					Is the	e Samp	oled A	rea within a Wetland?	No	
VEGETATION	T< 19	6, P = Pre	sent		SUBRE	GION:				
Tree Stratum DBH ≥ 3 inc				ılar plot unless n			ecorded	Dominance Test w	orksheet:	
Species	IND	DOM	Cover	Species	IND	DOM	Cover	Number of Dominant Species	7	
1,				3.				That Are OBL, FACW, or FAC:	(A)	
2.				4.				Total Number of Dominant	3	
Total Tree Cover:		50% of Te	otal Cove	r:	20% of T	otal Cove	r:	Species Across All Strata:	(B	
Sapling/Shrub Stratum	IND	DOM	Cover	8.				Percent of Dominant Species That Are OBL, FACW, or FAC:	100 (A/B)	
1. VACUIT	F	7	06	9.				-	(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
2. FILMAL	FW	-	-	10.				Prevalence Index W	orksheet	
3. POPTRE	FU	-	3	11.				Total % Cover of: Mult	iply by:	
4. SALBER	K	1	13	12.				OBL speciesx 1 = _		
5. SHELAN	FU		7	13.				FACW species x 2 = _		
6.	10		2	14.			-	FAC species $\frac{45}{x^3}$		
7				15.	-			FACU species	2 /	
Total Shrub Cover:	1	50% of To	otal Cove		20% of To	tal Cover	2.7		<u>C</u> 7	
Herbaceous Stratum	IND		Cover	13.	20700110	tai oovei	. 012	UPL speciesx5=	100	
1. CORCAN	FU	_	-	14.				Column Totals: \(\sigma\) (A)	(B)	
2. FTS ALT	F	Y	10	15.				Prevalence Index = B/A =	7.12	
3.		-/-	.0	16.						
4.				17.				Hydrophytic Vegetation Dominance Test is >509	n Indicators:	
5.				18.				Dominance Test is >50%  No Prevalence Index is ≤3.	/6	
6.			-	19.	_			Morphological Adaptation		
7.				20.				(Provide supporting data	ı in	
3.								Remarks or on a separa		
9.				21.				Problematic Hydrophytic  Indicators of hydric soil and warming the soil	wetland hydrology	
				22.		-		must be present unless disturbed	or problematic.	
10.				23.				Project Vegetatio	птуре	
11.				24.		4		PSSR		
12.				25.				Cowardin Code:		
Total Herb Cover:	) 5	0% of To	tal Cover	: 7	20% of To	al Cover	2	UCM Classification		
1.Open Water				2. Bare ground	10			71	a	
Remarks: Bryophytes and L	ıchens	may be lis	sted in the	Herbaceous co	lumns			Landform: SUCL		
								Local Relief: (Oh(Gu		
						- 3	-	Microtopography: Slope:	Aspect:	

SOIL									PI	ot No: 51	30	
Profile Des	cription: De	scribe to the	depth needed	to docun	nent the presence/a	absence o	of soil indic	cators	Soll M	ap Unit Name		
Profile Description: Describe to the depth needed to document the presence/absence of soil indicators    Horizon												
Depth (in.)	Name		The second						Texture	Horizon Comments		
Deptii (iii.)	A.	Color (moist) % Type¹ Color % Loc² Mod³ Texture Horizo										
9-0	01	1-1071							DA			
0-17	BWI	10/123/	4 100	)					SAL			
		-								7 -		
	4								16			
				Y								
	-										er.	
						1,000						
¹Type: C=Conc	entrations, D=E	Depletions, OX=	Oxidized Roots	RM = Re	duced Matrix <sup>2</sup> Locat	ion: PL=P	ore Linings,	RC=Roo	t Channels, l	M=Matrix, CS=C	oated Sand Grains	
Remarks:								Texture I	Modifiers: Mu	cky (MK), Peaty	(PT), Permafrost (PF)	
									•		obbly (CB), Stony (ST)	
Judria Sail I	ndicators I	Measure from	the top of the	mineral	soil layer except for	A1 A2	A3 A4	(15-30	1%), 35-60%	- very (v), 60-9	0% = Extremely (X)	
		vicasure morn	H Thick E			711,712,	7.0,711		11	0-11-		
Histosol o								4		Soils ent?	NO	
<u>N</u> Histic Epi			Alaska	-						-	MWD	
Black His	stic (A3)		M Alaska	Redox (/	<b>414</b> )			-	NRCS Dr	ainage Class:	maj	
N Hydroger	Sulfide (A4)		M Alaska	Gleyed F	Pores (A15)			_	Depth of 0	Organic Soils:	L	
Indicators fo	r Problemati	c Hydric Soil	s <sup>§</sup> (See Page	91/Section	on 4 for Problemation	c Hydric S	Soils Deta	ils)	Restrictive	e Layer Type:	-	
M Depleted	Below Dark	Surface (A11)	N Alaska	Color Ch	nange (TA4) Give	details of	color cha	nge R	estrictive L	ayer Depth:		
N Depleted	Matrix (F3)		M Alaska	Alpine S	wales (TA5)			41	<sup>4</sup> Underlain by mineral soil w/chroma of ≤2			
N Redox Da		<del>-</del> 6)		-	vith 2.5Y Hue							
4.4	Dark Surface				w/o Hue 5Y or Redo	der I Inde	rlying		<sup>5</sup> Must have Hydrophytic Vegetation and			
<del></del> .					neral soil, 60% of h		333					
	epression (F8	•		•	· ·		nroblematic					
Ked Pare	ent Material (F	21)	4.4		d/High Water Table		. /				4.46	
N Very Sha	Illow Dark Su	face (F22)	Low O	rganic Ma	atter/Low Iron/High	pH Soil/N	New Wetla	nd _	Other (e	xplain in rema	rks)	
HYDROLO	GY											
		Wetland	Hydrology Ir	dicators				•	•	r more require	d)	
Primary Indica		e indicator is s					-		ined Leave			
	Water (A1)				ble on Àerial Image ated Concave Surfa				Patterns (B		g Roots (C3)(w/in 12"	
High Wat	ter Table (A2)		N Mari D			ace (bo)			of Reduce		3 10003 (C3)(W/III 12	
Water Ma					de Odor (C1) (w/in	12")			sits (C5)	( ,		
N Sedimen		2)			ater Table (C2)**	ŕ	_		r Stressed	Plants (D1)		
N Drift Dep	osits (B3)		<u></u> ✓ Other	(Explain	in Remarks)				hic Position	.,		
Algal Ma		)					í				te as restrictive layer	
N Iron Dep				-	logic Conditions on	Site	- 1	-	ographic Re tral Test (D			
	Soil Cracks (E	s6) es from ground		r this time	e of Year?	M	ater Source		trai rest (D		drology Present?	
Surface Water				Denth (i	nches):	1,100	00010			-	NO	
Water Table I					nches):						son Water Table	
Saturation Pr			No ×		nches):						ior, Western AK:	
(includes cap		-								Mid M	lay – late July	
Describe Rec	corded Data (s	Episatur stream gauge,	monitoring w		ituration_ photos, previous ir	nspection	s), if availa	able:		**Mineral \$	Soils 12-24 inches	
						i				**Organic	Soils 12-40 inches	
Remarks:											st = #OBL+FW	
										dominants > #F add non-domina	U + UPL dominants; ants if tie	

Plot Number	ST132
Wetland Status	Upland
Plot Type	WD: Wetland Determination
Plot Date	6/3/2022
NWI Classification	U
ндм	N/A
Vegetation Type	Deciduous Shrub and Sapling Regrowth
Latitude (DD)	64.575507
Longitude (DD)	-149.607507



Photo Type: Soils Direction: N/A



Photo Type: Vegetation Direction: N



Photo Type: Vegetation Direction: S

Plot Number	ST133					
Wetland Status	Upland					
Plot Type	FVP					
Plot Date	6/3/2022					
NWI Classification	U					
ндм	N/A					
Vegetation Type	Deciduous Shrub and Sapling Regrowth					
Latitude (DD)	64.574751					
Longitude (DD)	-149.592758					



Photo Type: Soils Direction: N/A



Photo Type: Vegetation Direction: E



Photo Type: Vegetation Direction: N

### WETLAND DETERMINATION DATA FORM – Alaska Region

								Plot No: ST	34	
Project:	Totelaket Rd							ate: 6/03/22		
Applicant: Alaska D				portation an	d Public	Facilitie	s In	vestigators: SI ALC	)	
Borough/City/Location	on:									
NAD 83, Decimal Degrees								STANTEC		
Latitude: 645	5749	17			Watershed: Lunuh Luly Huc 10					
Longitude: -	49.	1282			Location	n Note	s:			
Elevation (ft): 489										
SUMMARY OF FINDI									NDINGS	
Are "Normal Circumsta	ances"	Preser	it?	YES		F	Hydroph	nytic Vegetation Present?	RS	
Significantly Disturbed	?	VEG	SOIL	SHYDRO				Hydric Soils Present?	NO	
Naturally Problematic?	)	VEG	SOIL	S HYDRO			Wet	tland Hydrology Present?	No	
Remarks:					lo the	. Com			No	
					is the	e Samp	Jieu A	rea within a Wetland?	70	
VEGETATION T< 1%, P = Present SUBREGION:										
Tree Stratum DBH ≥ 3 inc	h	1/10		ular plot unless n	oted, absolu	ite cover r	ecorded	Dominance Test w	orksheet:	
Species	IND	DOM	Cover	Species	IND	DOM	Cover	Number of Dominant Species That Are OBL, FACW, or FAC:	(A)	
1,				3,				3434	,,,	
2.				4.				Total Number of Dominant Species Across All Strata:	(B)	
Total Tree Cover: 50% of Total Cover: 20% of Total Cover:										
Sapling/Shrub Stratum	IND	DOM	Cover	8.				Percent of Dominant Species That Are OBL, FACW, or FAC	(A/B)	
1. VACUIT	F	Y	20	9.						
2. SALBEB	F	N	10	10.				Prevalence Index W		
3. ROSACI	FU		T	11. Total % Cover of:				Total % Cover of:Mul	tiply by:	
4. 12140 L-RO	F	Y	50	12.				OBL speciesx 1 =		
5. BETNEO	D	-	T	13.				FACW speciesx 2 =		
6.	1			14.		1	-	FAC species 6 v x 3 =	240	
7.				15.				FACU speciesx 4 =		
Total Shrub Cover:	0	50% of To	otal Cove	r: Y 0	20% of To	tal Cover	10	1		
Herbaceous Stratum	IND	DOM	Cover	13.			10	UPL species x 5 = Column Totals: (A)	240 (B)	
1. CHA ANCE	Fu	-	7	14.				Column Totals. (A)	2-10 (B)	
2. CORCAN	FU	to.	7	15.				Prevalence Index = B/A =	300	
3. EQUARU			+	16.	_					
4.	(			17.				Hydrophytic Vegetation		
5.				18.	+-	-		Dominance Test is >50 Prevalence Index is ≤3.		
6.					-					
		-		19.	_			Morphological Adaptation (Provide supporting date		
7.				20.				Remarks or on a separa	ite sheet)	
8.				21				Problematic Hydrophytic  1 Indicators of hydric soil and	Vegetation <sup>1</sup>	
9.				22,				must be present unless disturbed	or problematic.	
10.				23.				Project Vegetation	on Type	
11.		E.J		24.				LST		
12.				25.				Cowardin Code:		
Total Herb Cover:	5	0% of To	tal Cover	:	20% of Tot	al Cover		U		
1.Open Water				2. Bare ground				HGM Classification:	•	
Remarks: Bryophytes and L	ichens i	may be lis	sted in the	Herbaceous col	lumns			Landform: VALLEY		
								Local Relief: (OMCAU  Microtopography: Slope		
								Just Stope	Aspect:	

add non-dominants if tie

Profile Des	cription: De	escribe to the depth	needed	to docum	ent the presence/a	bsence o	f soil indi	cators	Soil N	lap Unit Name	
	Horizon	Soil Matrix			Redox Feat		-			,	
Depth (in.)	Name	Color (moist)	%	Type <sup>1</sup>	Color	%	Loc <sup>2</sup>	Mod <sup>3</sup>	Texture	Horizon Co	mments
4-0	0;	71									
0.0	Bw	10YR3/3	100						SAL		
0.4	OW	10/10/15	100					-	240	1 0	1.1.
				, i					-	Kroten	below
										,	
						-			-	+	
¹Type: C=Conc	entrations, D=I	Depletions, OX=Oxidize	ed Roots	, RM = Rec	luced Matrix <sup>2</sup> Locati	ion: PL=Pc	re Linings	, RC=Root	Channels,	M=Matrix, CS=C	oated Sand Grains
Remarks:								<sup>3</sup> Texture N	Modifiers: Mu	icky (MK), Peaty	(PT), Permafrost (PF)
		Se	40	nel	Grost -				_		obbly (CB), Stony (ST) 0% = Extremely (X)
Hydric Soil I	ndicators	Measure from the to				A1. A2.	A3. A4	(15-35	76), 35-6076	- very (v), 60-8	0% - Extremely (X)
-	or Histel (A1)	M			ces (A12)				Hydri	c Soils	
1 Histic Epi		N		Gleyed (/						sent?	NO
Nack His				Redox (A					NRCS Dr	ainage Class:	MUD
11		- 1								Organic Soils:	4
	Sulfide (A4)				ores (A15)	11	Salla Data	Jak .			Name or
		c Hydric Soils (Se						- 1		e Layer Type:	
Depleted Below Dark Surface (A11) Alaska Color Change (TA4) Give details of color change Restrictive Layer Depth:											
	Matrix (F3)	2		-	vales (TA5)			4[	Jnderlain b	y mineral soil v	w/chroma of ≤2
Nedox D	ark Surface (	F6) <u>7</u>	Alaska	Redox w	ith 2.5Y Hue			51	/lust have l	Hydrophytic Ve	egetation and
N Depleted	Dark Surface	e (F7) <u>N</u>	Alaska	Gleyed w	/o Hue 5Y or Redo	der Under	lying			rology, and an	
<u></u> Redox D	epression (F	3) <u>2</u>	AA Pos	sitive (min	eral soil, 60% of he	orizon 4 iı	nches thic	514	ndscape p roblematic	osition unless	disturbed or
Ned Pare	ent Material (I	=21) <u>N</u>	Ponde	d/Flooded	/High Water Table	(12 inche	es or high	ier)	Oblematic		
N Very Sha	illow Dark Su	rface (F22)	Low O	rganic Ma	tter/Low Iron/High	pH Soil/N	lew Wetla	and _	Other (e	explain in rema	rks)
HYDROLO	GY										
		Wetland Hydro	ology In	dicators			4	_		r more require	d)
		e indicator is sufficie							ined Leave		
	Water (A1)		•		le on Aerial Image	•		_	Patterns (E		- Dt- (00)(ti- 40)
	ter Table (A2)		•		ated Concave Surfa	ace (B8)				res along Livin d Iron (C4)	g Roots (C3)(w/in 12'
Naturation Naturation	-	72		eposits (E gen Sulfid	le Odor (C1) (w/in 1	12")		Salt Depo		d 11011 (O4)	
No Sedimen				_	ter Table (C2)**	/				Plants (D1)	
Drift Dep		M			n Remarks)		MC	Geomorp	hic Position	ı (D2)	
<u>니</u> Algal Ma	t or Crust (B4	-)									te as restrictive layer
P Iron Dep				-	ogic Conditions on	Site	_		graphic Re		
N Surface				r this time	of Year?	hara	ter Source		tral Test (D		drology Present?
Surface Water		es from ground surfa Yes No	<b>X</b>	Depth (in	nches):	111	G Jourc	.c.		_	Cology Present
Water Table i		Yes No			iches):						son Water Table
Saturation Pr			X	Depth (ir							rior, Western AK:
(includes cap				40.5							lay – late July
Describe Rec	corded Data (	Episaturation stream gauge, moni	toring w	Endosa ell, aerial		spections	s), if avail	able:		**Mineral	Soils 12-24 inches
										**Organic	Soils 12-40 inches
Remarks:											est = #OBL+FW U + UPL dominants:

Plot Number	ST134				
Wetland Status	Upland				
Plot Type	WD: Wetland Determination				
Plot Date	6/3/2022				
NWI Classification	U				
ндм	N/A				
Vegetation Type	Low Shrub Tundra				
Latitude (DD)	64.574968				
Longitude (DD)	-149.585115				



Photo Type: Soils Direction: N/A



Photo Type: Vegetation Direction: N



Photo Type: Vegetation Direction: W

#### WETLAND DETERMINATION DATA FORM - Alaska Region

				131				Plot No; ST	35	
Project:		Total	relu	r Rd			D	Date: 6/3/22		
Applicant: Alaska D	epart	ment o	f Trans	portation an	d Public	Facilitie	s Ir	nvestigators: SNe/A	Lo	
Borough/City/Location	on:									
NAD 83, Decimal Degrees								STANTEC		
Latitude: 64	.57	1 1 -			Waters	shed: (	unch	We HULIU		
Longitude: - 149.62160 Location Not										
Elevation (ft):	50	7								
		N:						SUMMARY OF FI	NDINGS	
Are "Normal Circumsta	ances"	Preser	it?	YE2		H	Hydropl	hytic Vegetation Present?	YES	
Significantly Disturbed	?	VEG	SOIL	S HYDRO				Hydric Soils Present?	64	
Naturally Problematic?		VEG	SOIL	S HYDRO			We	tland Hydrology Present?	No	
Remarks:					Is the	e Samp		rea within a Wetland?	No	
VEGETATION	T< 19	6. P = Pre	sent		SUBRE	SION:				
Tree Stratum DBH ≥ 3 inc		-		ular plot unless n			ecorded	Dominance Test w	orksheet:	
Species	IND	DOM	Cover	Species	IND	DOM	Cover	Number of Dominant Species	7	
1.				3.		30111	20761	That Are OBL, FACW, or FAC:	(A)	
2.				4.		-	1	Total Number of Dominant	7	
Total Tree Cover:		- CT	1.10		2001 47			Species Across All Strata:	(B)	
	1	50% of T			20% of To	otal Cove	r:	Percent of Dominant Species	100 (4/8)	
Sapling/Shrub Stratum	IND	DOM	Cover	8.				That Are OBL, FACW, or FAC:	(A/B)	
1. ALNUIR	T	1	20	9.				Drawalance Index W		
2. POPTRE	1-	-	E	10.				Prevalence Index Worksheet		
3. VACUIT	F	1	35	11,						
4. BETNEO	FU	-	10	12.				OBL speciesx 1 =		
5. 12HO6RO	F	7	20	13.		FACW species x 2 =				
6. PICMAL	TW	-	T	14.				FAC species $\frac{78}{2}$ x 3 =	254	
7. SALBEB	T	-	3	15.				FACU species 13 x 4 =		
Total Shrub Cover:		50% of To		r: 45.5	20% of To	tal Cover	12 7			
Herbaceous Stratum	IND	DOM	Cover	13.			10.0	T OPL species X 5	81	
1. CHAANG	FU			14.				Column Totals: (A)	(B)	
2.	-		-	15		-		Prevalence Index = B/A =	3.14	
3.					_	-				
4.				16.	-			Hydrophytic Vegetation		
				17.				1 Dominance rest is > 50.		
5.				18.				Prevalence Index is ≤3.0		
6,				19.				Morphological Adaptation (Provide supporting data		
7,				20.				Remarks or on a separa		
8.				21,				Problematic Hydrophytic	Vegetation <sup>1</sup>	
9.				22.				Indicators of hydric soil and want be present unless disturbed	or problematic.	
10,		1 1		23.				Project Vegetatio		
11,				24.				DSSR		
12,				25.				Cause adia Carda		
Total Herb Cover:	5	0% of To	tal Cove	r:	20% of Tot	tal Cover		Cowardin Code:		
1.Open Water				2. Bare ground				HGM Classification:		
Remarks: Bryophytes and L	ichens	may be lis	sted in the		lumns			Landform:		
		-						Crrace		
	1	Cp 1	n U	177				Local Relief: (CA		
		,						Microtopography Slope:	Aspect:	

								_611 1 _ 4	!4	Calla	faa limit blanna	
Profile Des				eeded	to docun	nent the presence/		of soil ind	cators	5011 1	flap Unit Name	
	Horizon	Soil	Matrix			Redox Feat		1			1	
Depth (in.)	Name	Color (m	oist)	%	Type <sup>1</sup>	Color	%	Loc <sup>2</sup>	Mod	3 Texture	Horizon Co	mments
3-0	$ \alpha $										13-0	
1-9	Bw	1042	3/4	100					-	SIL		
0 /	200	10110	17	100						0.6		
				-			-		+		+	
								4				
								1				
¹Type: C=Conc	entrations, D=0	Depletions, OX	=Oxidized	Roots	, RM = Re	duced Matrix <sup>2</sup> Loca	tion: PL=F					
Remarks:		2012	m /	6	nont	A12'	1					(PT), Permafrost (PF)
		A(0.7)	DNOX	()	1001	2110						obbly (CB), Stony (ST)  0% = Extremely (X)
Hydric Soil I	ndicators !	Measure from	the top	of the	mineral	soil layer except fo	r A1, A2	A3, A4	1100	070), 00 0070	voly (v), oo o	o /o Extraction (**)
	or Histel (A1)		_			aces (A12)				Llvdri	c Soils	
										-	sent?	NO
Histic Epi					Gleyed (				-			7.100
Black His	itic (A3)		. 1		Redox (A				- 1		rainage Class:	3000
	Sulfide (A4)			Alaska	Gleyed F	Pores (A15)	2.7.	_		Depth of	Organic Soils:	
Indicators for Problematic Hydric Soils (See Page 91/Section 4 for Problematic Hydric Soils Details)  Restrictive Layer Type:							-					
N Depleted	Below Dark S	Surface (A11	N/	Alaska	Color Ch	nange (TA4) Give	details o	f color cha	inge [	Restrictive L	ayer Depth:	_
N Depleted	N Depleted Matrix (F3)  N Alaska Alpine Swales (TA5)  4Underlain by mineral soil w/chroma of ≤2								v/chroma of ≤2			
N Redox Da		-6\	1 1			vith 2.5Y Hue						
I	•	•				w/o Hue 5Y or Red	dor Hadi	ndvina			Hydrophytic Ve	-
Depleted					-						Irology, and an osition unless	
Pedox De						neral soil, 60% of h			···,	oroblematic	OSILION UNICSS	disturbed of
Ned Pare	ent Material (F	21)	3.76			d/High Water Table			ner)			
Very Sha	Illow Dark Su	face (F22)	N	ow O	rganic Ma	atter/Low Iron/High	pH Soil	New Wetla	and	Other (	explain in rema	rks)
HYDROLO	GY											
		Wetland	Hydrol	ogy ir	ndicators			Seco	ndary In	dicators (2 d	or more require	d)
Primary Indica	ators (any one	e indicator is	sufficien	t)				<u>, 1</u>	Nater-st	ained Leave	es (B9)	
N Surface V	Water (A1)					ble on Aerial Image			_	e Patterns (I		
N High Wat						ated Concave Surf	face (B8)				_	Roots (C3)(w/in 12"
N Saturatio					eposits (		4.000	_		e of Reduce	d Iron (C4)	
Water Ma		•				de Odor (C1) (w/in ater Table (C2)**	12")		-	osits (C5)	Plants (D1)	
Drift Dep	t Deposits (B2	<u>2)</u>		•		in Remarks)				phic Positio		
1	t or Crust (B4	)	14	Other	(Explain	iii remano)						te as restrictive layer
N Iron Depo		,	Are	Clima	tic/Hydro	logic Conditions or	n Site			ographic Re		
N Surface S		36)			-	e of Year?		NI	AC-Ne	utral Test (D	15)	
Field Observ		s from groun					M	later Source	ce:		Wetland Hy	drology Present?
Surface Wate	er Present?		No _		Depth (i	nches):					1	00
Water Table F	Present?		No _			nches):						son Water Table
Saturation Pro		Yes	No _	<u>×</u>	Depth (i	nches):					SC, Inter	ior, Western AK:
(includes cap		Episatu	ration			aturation						lay – late July
Describe Rec	corded Data (s	stream gauge	e, monito	ring w		photos, previous in	nspection	ns), if avail	able:			Soils 12-24 inches Soils 12-40 inches
Remarks:												st = #OBL+FW U + UPL dominants; ants if tie

Plot Number	ST135				
Wetland Status	Upland				
Plot Type	WD: Wetland Determination				
Plot Date	6/3/2022				
NWI Classification	U				
ндм	N/A				
Vegetation Type	Deciduous Shrub and Sapling Regrowth				
Latitude (DD)	64.574895				
Longitude (DD)	-149.621592				



Photo Type: Soils Direction: N/A



Photo Type: Vegetation Direction: E



Photo Type: Vegetation Direction: W

Plot Number	ST136				
Wetland Status	Upland				
Plot Type	FVP: Field Verification Point				
Plot Date	6/4/2022				
NWI Classification	U				
ндм	N/A				
Vegetation Type	Deciduous Shrub and Sapling Regrowth				
Latitude (DD)	64.575121				
Longitude (DD)	-149.47257				



Photo Type: Hydrology Direction: E



Photo Type: Hydrology Direction: N



Photo Type: Hydrology Direction: S

Plot Number	ST137				
Wetland Status	Upland				
Plot Type	FVP: Field Verification Point				
Plot Date	6/4/2022				
NWI Classification	U				
ндм	N/A				
Vegetation Type	Deciduous Shrub and Sapling Regrowth				
Latitude (DD)	64.575161				
Longitude (DD)	-149.466947				



Photo Type: Hydrology Direction: E



Photo Type: Hydrology  $\hbox{Direction: } N$ 



Photo Type: Hydrology Direction: S

Plot Number	ST138
Wetland Status	Upland
Plot Type	FVP: Field Verification Point
Plot Date	6/4/2022
NWI Classification	U
ндм	N/A
Vegetation Type	Woodland Mixed Forest
Latitude (DD)	64.575373
Longitude (DD)	-149.459292



Photo Type: Hydrology Direction: N



Photo Type: Hydrology Direction: S



Photo Type: Hydrology Direction: W

Plot Number	ST139				
Wetland Status	Upland				
Plot Type	FVP: Field Verification Point				
Plot Date	6/4/2022				
NWI Classification	U				
ндм	N/A				
Vegetation Type	Deciduous Shrub and Sapling Regrowth				
Latitude (DD)	64.575822				
Longitude (DD)	-149.452444				



Photo Type: Hydrology Direction: N



Direction: S Photo Type: Hydrology



Photo Type: Hydrology Direction: W

Plot Number	ST140					
Wetland Status	Upland					
Plot Type	FVP: Field Verification Point					
Plot Date	6/4/2022					
NWI Classification	U					
ндм	N/A					
Vegetation Type	Deciduous Shrub and Sapling Regrowth					
Latitude (DD)	64.575286					
Longitude (DD)	-149.447946					



Photo Type: Hydrology Direction: E



Photo Type: Hydrology Direction: N



Photo Type: Hydrology Direction: S

Plot Number	ST141						
Wetland Status	Upland						
Plot Type	FVP: Field Verification Point						
Plot Date	6/4/2022						
NWI Classification	U						
ндм	N/A						
Vegetation Type	Deciduous Shrub and Sapling Regrowth						
Latitude (DD)	64.575455						
Longitude (DD)	-149.44269						



Photo Type: Hydrology Direction: N



Photo Type: Hydrology Direction: S



Photo Type: Hydrology Direction: W

Plot Number	ST142							
Wetland Status	Upland							
Plot Type	FVP: Field Verification Point							
Plot Date	6/4/2022							
NWI Classification	U							
ндм	N/A							
Vegetation Type	Deciduous Shrub and Sapling Regrowth 64.575385 -149.436273							
Latitude (DD)								
Longitude (DD)								



Photo Type: Hydrology Direction: N



Photo Type: Hydrology Direction: S



Photo Type: Hydrology Direction: W

Plot Number	ST143							
Wetland Status	Upland							
Plot Type	FVP: Field Verification Point							
Plot Date	6/4/2022							
NWI Classification	U							
ндм	N/A							
Vegetation Type	Deciduous Shrub and Sapling Regrowth							
Latitude (DD)	64.575178							
Longitude (DD)	-149.426768							



Photo Type: Hydrology Direction: N



Photo Type: Hydrology Direction: S



Direction: W

Plot Number	ST144							
Wetland Status	Upland							
Plot Type	FVP: Field Verification Point							
Plot Date	6/4/2022							
NWI Classification	U							
ндм	N/A							
Vegetation Type	Deciduous Shrub and Sapling Regrowth							
Latitude (DD)	64.575335							
Longitude (DD)	-149.409938							



Photo Type: Hydrology Direction: E



Photo Type: Hydrology Direction: N



Photo Type: Hydrology Direction: S

Plot Number	ST145							
Wetland Status	Upland							
Plot Type	FVP: Field Verification Point							
Plot Date	6/4/2022							
NWI Classification	U							
ндм	N/A							
Vegetation Type	Deciduous Shrub and Sapling Regrowth							
Latitude (DD)	64.57572							
Longitude (DD)	-149.401427							



Photo Type: Hydrology Direction: N



Photo Type: Hydrology Direction: S



Photo Type: Hydrology Direction: W

Plot Number	ST146							
Wetland Status	Upland							
Plot Type	FVP: Field Verification Point							
Plot Date	6/4/2022							
NWI Classification	U							
ндм	N/A							
Vegetation Type	Deciduous Shrub and Sapling Regrowth							
Latitude (DD)	64.575257							
Longitude (DD)	-149.397012							



Photo Type: Vegetation Direction: E



Photo Type: Vegetation Direction: N



Photo Type: Vegetation Direction: W

Plot Number	ST147						
Wetland Status	Upland						
Plot Type	FVP: Field Verification Point						
Plot Date	6/4/2022						
NWI Classification	U						
ндм	N/A						
Vegetation Type	Deciduous Shrub and Sapling Regrowth						
Latitude (DD)	64.57504						
Longitude (DD)	-149.395542						



Photo Type: Vegetation Direction: E



Photo Type: Vegetation Direction: N



Photo Type: Vegetation Direction: W

Plot Number	ST148							
Wetland Status	Wetland							
Plot Type	FVP: Field Verification Point							
Plot Date	6/4/2022							
NWI Classification	PSS1B							
ндм	Flat							
Vegetation Type	Open Mixed Shrub Sedge Tundra							
Latitude (DD)	64.575186							
Longitude (DD)	-149.394999							



Photo Type: Vegetation Direction: E



Photo Type: Vegetation Direction: N



Photo Type: Vegetation Direction: S

Plot Number	ST149							
Wetland Status	Upland							
Plot Type	FVP: Field Verification Point							
Plot Date	6/4/2022							
NWI Classification	U							
ндм	N/A							
Vegetation Type	Deciduous Shrub and Sapling Regrowth							
Latitude (DD)	64.574724							
Longitude (DD)	-149.392975							



Photo Type: Vegetation Direction: E



Photo Type: Vegetation Direction: S



Photo Type: Vegetation Direction: W

Plot Number	ST150							
Wetland Status	Upland							
Plot Type	FVP: Field Verification Point							
Plot Date	6/4/2022							
NWI Classification	U							
ндм	N/A  Deciduous Shrub and Sapling  Regrowth							
Vegetation Type								
Latitude (DD)	64.574094							
Longitude (DD)	-149.353734							



Photo Type: Soils Direction: N/A



Photo Type: Vegetation Direction: N



Photo Type: Vegetation Direction: W

Plot Number	ST151							
Wetland Status	Upland							
Plot Type	FVP: Field Verification Point							
Plot Date	6/4/2022							
NWI Classification	U							
ндм	N/A							
Vegetation Type	Deciduous Shrub and Sapling Regrowth							
Latitude (DD)	64.574325							
Longitude (DD)	-149.353844							



Photo Type: Hydrology Direction: N



Photo Type: Hydrology Direction: S



Photo Type: Hydrology Direction: W

# WETLAND DETERMINATION DATA FORM - Alaska Region

	-			7				Plot No: ST 152		
Project:	10	tchel	ut k	-cl				Date: 6/4/22		
	Applicant: Alaska Department of Transportation and Public Facilities			es Ir	nvestigators: S/A					
Borough/City/Loca	tion:									
NAD 83, Decimal Degrees	en.	3/			-		, ,	STANTEC		
Latitude: 64	1112	76	-7		Watershed: Lost hiddle Ruer Hucio					
Longitude: -	147	26)	_		Location	on Note	es:			
Elevation (ft):		36	(							
Are "Normal Circums	tances'	' Prese	nt?	YES		-	Hydrop	SUMMARY OF FINDINGS hytic Vegetation Present?		
Significantly Disturbe	d?	VEG	SOIL	1		Hydric Soils Present?				
Naturally Problematic	?	VEG	SOIL	S HYDRO			We	tland Hydrology Present?		
Remarks:					Is the	e Samı		rea within a Wetland?		
VEGETATION	T< 19	%, P = Pr	esent		SUBREC	SION:				
Tree Stratum DBH ≥ 3 in	nch	1/10	acre circ	ular plot unless n	oted, absolu	te cover i	recorded	Dominance Test worksheet:		
Species	IND	DOM	Cover	Species	IND	DOM	Cover	Number of Dominant Species That Are OBL, FACW, or FAC: (A)		
1.				3.				That Are OBL, FACW, or FAC:(A)		
2.				4.				Total Number of Dominant Species Across All Strata: (B)		
Total Tree Cover:		50% of T	otal Cove	er:	20% of To	tal Cove	er:			
Sapling/Shrub Stratum	IND	DOM	Cover	8.				Percent of Dominant Species That Are OBL, FACW, or FAC:  (A/B)		
1. SALPUL	tw	-	T	9.						
2. CHACAL	FW	-	T	10.				Prevalence Index Worksheet		
3.				11.				Total % Cover of: Multiply by:		
4.				12.				OBL species <u>38</u> x 1 = <u>38</u>		
5.				13.				FACW speciesx 2 =		
6.				14.				FAC speciesx 3 =		
7,				15.				FACU species x 4 =		
Total Shrub Cover:		50% of T	otal Cove	r:	20% of Tot	al Cover				
Herbaceous Stratum	IND	DOM	Cover	13.				UPL species x 5 = Column Totals: (A) (B)		
1. CAR PAR	015	Y	25	14.				Column Totals. (A) (B)		
2. CARADY	01>	1	3	15.				Prevalence Index = B/A =		
3. EQUELL	06	-	1	16.				Hodo L C V L C L C L		
4. Com PAL	06	7	10	17,				Dominance Test is >50%		
5.				18.				Prevalence Index is ≤3.0		
6.				19.				Morphological Adaptations <sup>1</sup>		
7.	JIII			20.				(Provide supporting data in Remarks or on a separate sheet)		
8,				21.				Problematic Hydrophytic Vegetation <sup>1</sup>		
9.				22.				Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.		
10.				23.				Project Vegetation Type		
116				24.				WH		
12.				25.						
Total Herb Cover:	SP 5	0% of To	tal Cove	19	20% of Tota	al Cover:	76	PEMIC		
1.Open Water	7	90		2. Bare ground	20			HGM Classification: Ruy 1		
Remarks: Bryophytes and	Lichens	may be li	sted in the	e Herbaceous coli	umns			Landform: flod place Local Relief: flot		
								Microtopography: Slope: Aspect:		

SOIL												
Profile Des	cription: Desc	ribe to the dec	oth needed	to docum	nent the presence	absence o	of soil indi	cators	Soil M	ap Unit Name		
101110 200	Horizon	Soil Mat		-	Redox Fea							
				1		%	Loc²	Mod <sup>3</sup>	Texture	Horizon Co	mments	
Depth (in.)	Name	Color (moist	) %	Type <sup>1</sup>	Color	70	<u> </u>	Mod	TOXIGIO	THOTIESTI GO		
10-0	00											
						. 1 1 1 1 1			14.			
						_						
			_									
	V							-		_		
Type: C=Cond	centrations, D=De				duced Matrix <sup>2</sup> Loca	ation: PL=Po	ore Linings	, RC=Root	Channels, N	M=Matrix, CS=C	oated Sand Grains	
Remarks:		Car	. 0	hat	ct 16"						(PT), Permafrost (PF)   obbly (CB), Stony (ST)	
		760	year!	Dias.	w. 10				_		0% = Extremely (X)	
ludric Soil	Indicators Ma	easure from the	e top of the	mineral	soil layer except for	or A1, A2,	A3. A4	1.0.00				
. 1					aces (A12)				Hydrid	Soils	S.4	
1	or Histel (A1)						-	ent?	15			
/ Histic Ep	oipedon (A2)⁴		Alaska Gieyed (A13)							1125		
Black His	stic (A3)		Alaska	Redox (	A14)			-	THI TOO Brainings Charles			
Mydroge Hydroge	n Sulfide (A4)		N Alaska	Gleyed	Pores (A15)				Depth of C	Organic Soils:	10	
Indicators fo	or Problematic	Hydric Soils	(See Page	91/Secti	on 4 for Problema	tic Hydric	Soils Deta	ails)	Restrictive	e Layer Type:		
41	Below Dark Su				hange (TA4) Give				estrictive La	ayer Depth:		
	d Matrix (F3)	200								<sup>4</sup> Underlain by mineral soil w/chroma of ≤2		
_ `			Alaska Redox with 2.5V Hue									
	Park Surface (F6		VIII							Must have Hydrophytic Vegetation and		
P Depleted	d Dark Surface (	(F7)								Primary Hydrology, and an appropriate landscape position unless disturbed or		
Redox D	Depression (F8)		PA POSITIVE (ITIMETAL SOIL, OUT OF HOUZOIT 4 ITIMETOS TITION)							problematic		
PRed Par	rent Material (F2	1)	Ponded/Flooded/High Water Table (12 inches or higher)									
Very Sh	ace (F22)	Low Organic Matter/Low Iron/High pH Soil/New Wetland						Other (e	xplain in rema	arks)		
HYDROLO												
		Wetland H	vdrology I	ndicator	S		Seco	ndary Ind	icators (2 o	r more require	ed)	
Primary India	cators (any one						Y	Nater-sta	ined Leave	s (B9)		
4/	Water (A1)			lation Visi	ible on Aerial Imag	jery (B7)	1	Drainage	Patterns (B	310)		
	ater Table (A2)		N Sparsely Vegetated Concave Surface (B8)							g Roots (C3)(w/in 12		
₹ Saturation			Mari I	Deposits	(B15)		-		of Reduce	d Iron (C4)	-	
<u>M</u> Water №	flarks (B1)			•	ide Odor (C1) (w/i	n 12")	. /	Salt Depo				
₩ Sedime	nt Deposits (B2)		T .		ater Table (C2)**		200			Plants (D1)		
* * *	posits (B3)		<u></u> ► Othe	r (Explain	in Remarks)		- B		hic Position		ote as restrictive laye	
-	at or Crust (B4)		A Oli	-4:-/I bankar	-legie Conditions	an Sita	67 (1.5)		ographic Re		ole as restrictive layer	
	posits (B5)				ologic Conditions one of Year?	JII SILE			tral Test (D			
	Soil Cracks (B6			or tina tin	A COLITION	W	ater Sour				drology Present	
Surface Wat		Yes X	No	Depth (	inches)		2:	Λ		Yo	25	
Water Table		Yes X	No	- '	inches):	>	4	1		Dry Sea	son Water Table	
Saturation P		Yes ×	No		inches):	}			- 13		rior, Western AK:	
	pillary fringe)	F0000 13 11			STATE:					Mid N	May – late July	
Describe Po	corded Data (et	Episaturat	nonitoring v	vell. aeria	aturation il photos, previous	inspection	s), if avai	lable:		**Mineral	Soils 12-24 inches	
Describe Re	Journal Data (St	. Jam. gaago, II			1					**Organic	Soils 12-40 inches	
Remarks:							_				est = #OBL+FW	
										dominants > #I add non-domir	FU + UPL dominants;	
										THE RESERVE OF THE PARTY OF THE		

Plot Number	ST152				
Wetland Status	Wetland				
Plot Type	WD: Wetland Determination				
Plot Date	6/4/2022				
NWI Classification	PEM1C				
ндм	Riverine				
Vegetation Type	Wet Herbaceous				
Latitude (DD)	64.571759				
Longitude (DD)	-149.261625				



Photo Type: Hydrology Direction: S



Photo Type: Soils Direction: N/A



Photo Type: Vegetation Direction: E

Plot Number	ST153				
Wetland Status	RPW				
Plot Type	SC: Stream Crossing				
Plot Date	6/4/2022				
NWI Classification	R2UBH				
НСМ	Riverine Channel				
Vegetation Type	Open Water				
Latitude (DD)	64.572014				
Longitude (DD)	-149.261483				



Photo Type: Hydrology Direction: E



Photo Type: Hydrology Direction: N/A



Photo Type: Hydrology Direction: W

Plot Number	ST154					
Wetland Status	Upland					
Plot Type	FVP: Field Verification Point					
Plot Date	6/4/2022					
NWI Classification	U					
ндм	N/A					
Vegetation Type	Deciduous Shrub and Sapling Regrowth					
Latitude (DD)	64.580113					
Longitude (DD)	-149.278759					



Photo Type: Vegetation Direction: E



Photo Type: Vegetation Direction: N



Photo Type: Vegetation Direction: W

Plot Number	ST155
Wetland Status	Wetland
Plot Type	FVP: Field Verification Point
Plot Date	6/4/2022
NWI Classification	PEM1C
ндм	Flat
Vegetation Type	Wet Herbaceous
Latitude (DD)	64.580076
Longitude (DD)	-149.27719



Photo Type: Hydrology Direction: E



Photo Type: Hydrology Direction: N



Photo Type: Vegetation Direction: S

Plot Number	ST156					
Wetland Status	Upland					
Plot Type	FVP: Field Verification Point					
Plot Date	6/4/2022					
NWI Classification	U					
ндм	N/A					
Vegetation Type	Deciduous Shrub and Sapling Regrowth					
Latitude (DD)	64.579791					
Longitude (DD)	-149.27721					



Photo Type: Vegetation Direction: N



Photo Type: Vegetation Direction: NW



Photo Type: Vegetation Direction: SE

## WETLAND DETERMINATION DATA FORM -- Alaska Region

								Plot No: ST 152				
Project:		heli		d				Date: 6/4/21				
Applicant: Alaska D				portation an	d Public	Facilitie	es Ir	Investigators: SRe				
Borough/City/Location												
NAD 83, Decimal Degrees								STANTEC				
Latitude: 6Y	578	45			Watershed: Weit Middle Ruen Huci							
Longitude: - 146	1 27	7748			Location	n Note	es:					
Elevation (ft):	YUD											
	1			1				SUMMARY OF FINDINGS				
Are "Normal Circumsta	ances"	Presen	it?	YES		H	Hydrop	nytic Vegetation Present?				
Significantly Disturbed	?	VEG	SOILS	HYDRO				Hydric Soils Present?				
Naturally Problematic?	)	VEG	SOILS	HYDRO			We	tland Hydrology Present?				
Remarks:					Is the	e Samı		ron within a Matlando				
VECETATION								rea within a wetland?				
VEGETATION  Tree Stratum DBH ≥ 3 incl		6, P = Pre		las alat calas:	SUBRE			Dominance Test worksheet:				
	1			lar plot unless n		1	_	Number of Dominant Species				
Species	IND	DOM	Cover	Species	IND	DOM	Cover	That Are OBL, FACW, or FAC:				
1,				3,				Total Number of Dominant				
2.				4.				Species Across All Strata:				
Total Tree Cover:		50% of To	otal Cove	r:	20% of To	otal Cove	r:	Percent of Dominant Species				
Sapling/Shrub Stratum	IND	DOM	Cover	8.				That Are OBL, FACW, or FAC:				
1. POPTRE	FU	7	50	9.		1						
2. VACUIT	F	-	25	10.		2		Prevalence Index Worksheet				
3. RHOGRO	F	-	T	11.				Total % Cover of: Multiply by:				
4. BETNEW	FU	_	15	12,				OBL speciesx 1 =				
5. ARE UVAURSI	UP	Y	50	13.				FACW speciesx 2 =				
6. VACULI	1	_	-	14.				FAC species $25 \times 3 = 75$				
7 SHECAN	= 1		-	15.								
Total Shrub Cover:	O 5	50% of To	tal Cover		20% of To	tal Causa	-70.	FACU species $\frac{25}{x} \times 4 = \frac{260}{x}$				
Herbaceous Stratum	IND	-			20% of To	tai Cover	58	UPL species 30 x 5 = 250				
	E	DOM	Cover	13.	_			Column Totals: (A) (B)				
1. TESALT	-	_		14.				- U 10				
2. ARNICA FA			T	15.		/		Prevalence Index = B/A = 4.18				
3.				16.				Hydrophytic Vegetation Indicators:				
4.	1			17.				Dominance Test is >50%				
5.				18.				No Prevalence Index is ≤3.0				
6.				19.				Morphological Adaptations <sup>1</sup>				
7.	1 1			20.				(Provide supporting data in Remarks or on a separate sheet)				
В.				21.				Problematic Hydrophytic Vegetation <sup>1</sup>				
9.				22.				Indicators of hydric soil and wetland hydrolog				
10.				23.				must be present unless disturbed or problematic.  Project Vegetation Type				
11.			-	24.		7						
12.				25.				DSSR				
Total Herb Cover:	F-	00/, of Tax	-		200/ -5 = 1	-1.0:		Cowardin Code:				
	5	U% OT 101	tal Cover:		20% of Tot	al Cover:		HGM Classification:				
1.Open Water Remarks: Bryophytes and Li	ichene r	nav he lis		2. Bare ground	umne			Ma				
Dijopinytes and Li		nay be ils	.ou in the	i icibaceous col	umins		1,62	Landform: Lillton				
						İ	2	Local Delief				
						1	-	Microtopography: Slope: Aspect:				
							- 1	3				

Plot No: ST

Profile Desc	cription: Des	cribe to the depth n	eded	to docum	ent the presence/abse	ence	of soil indic	cators	Soil M	lap Unit Name	
	Horizon	Soil Matrix		Redox Features							
Depth (in.)	Name	Color (moist)	%	Type <sup>1</sup>	Color	%	Loc <sup>2</sup>	Mod <sup>3</sup>	Texture	Horizon Cor	mments
1-0	0:										
0-3	AB	7.57RY14	lus					gar.	SAL		
	R	104K-5/6	(00)					)	SAL		
3-20	Bn	14 1 1/19	(0)				1				
						-				-	
										4	
	2.5										
						-	-	-			
	/										
¹Type: C=Conc	entrations, D=De	pletions, OX=Oxidized	Roots	RM = Red	duced Matrix <sup>2</sup> Location:	PL=	Pore Linings,	RC=Ro	ot Channels, I	M=Matrix, CS=Co	pated Sand Grains
Remarks:	ndicators M	easure from the top	of the	minerals	soil layer except for A1	1, A2		Coarse	Fragments: 0	Gravelly (GR), Co	(PT), Permafrost (PF)   bbly (CB), Stony (S1) 0% = Extremely (X)
Histosol o				ark Surfa Gleyed (	aces (A12) A13)				_	c Soils sent?	NO
N Black His				Redox (A					NRCS D	ainage Class:	MWD
	n Sulfide (A4)				Pores (A15)					Organic Soils:	
							a Saila Data	ile\		e Layer Type:	-
					on 4 for Problematic H						
	Below Dark St				nange (TA4) Give det	alls	of color cha			ayer Depth:	
N Depleted	Matrix (F3)	<u>N</u>	Alaska	Alpine S	wales (TA5)			1	Underlain b	y mineral soil v	v/chroma of ≤2
Nedox Da	ark Surface (F6	B) <u>H</u>	Alaska	Redox w	vith 2.5Y Hue			5	Must have	Hydrophytic Ve	getation and
N Depleted	Dark Surface	(F7) <u>P</u>	Alaska	Gleyed v	w/o Hue 5Y or Redder	Und	derlying	F	Primary Hyd	Irology, and an	appropriate
H Redox Do	epression (F8)	×.	AA Po	sitive (mir	neral soil, 60% of horiz	zon (	4 inches thic	/		osition unless	disturbed or
N Red Pare	ent Material (F2	21) N	onde	d/Flooded	d/High Water Table (1	2 ind	ches or high	er)	oroblematic		
N Very Sha	allow Dark Surf	ace (F22)	Low O	rganic Ma	atter/Low Iron/High pH	Soi	il/New Wetla	and	Other (	explain in rema	rks)
HYDROLO											
IIIDROLO		Wetland Hydro	logy Ir	dicators			Secor	ndary In	dicators (2 d	or more require	d)
Primary Indic	ators (any one	indicator is sufficier					NV	Vater-st	ained Leave	es (B9)	
1 , ,	Water (A1)			ation Visil	ble on Aerial Imagery (	(B7)		•	Patterns (E	•	
High Wat	ter Table (A2)			-	ated Concave Surface	e (B8	-				g Roots (C3)(w/in 12")
N Saturatio		4		eposits (					e of Reduce	ed Iron (C4)	
M Water Ma		<u> </u>		_	de Odor (C1) (w/in 12" ater Table (C2)**	)	· · · · · · · · · · · · · · · · · · ·		osits (C5) or Stressed	Plants (D1)	
D Sedimen	nt Deposits (B2)		•		in Remarks)				ohic Positio		
	t or Crust (B4)	_		(=	,						te as restrictive layer)
1 7 7	osits (B5)	Are	Clima	tic/Hydro	logic Conditions on Si	ite		and the second	ographic Re		
	Soil Cracks (B6			r this time	e of Year?	_			utral Test (D		1l D
1000000		s from ground surfa	ce)				Water Source	e:	Y	Wetland Hy	drology Present?
Surface Water		YesNo_	$\sim$		nches):					70	
Water Table		Yes No _ Yes No _			nches): nches):						son Water Table rior, Western AK:
Saturation Pr (includes cap	oillary fringe)	Episaturation		Endosa	aturation	1				Mid M	lay – late July
Describe Rec	corded Data (st	ream gauge, monito	oring w	ell, aeria	photos, previous insp	ecti	ons), if avail	able:			Soils 12-24 inches Soils 12-40 inches
Remarks:											est = #OBL+FW FU + UPL dominants; ants if tie

Plot Number	ST157					
Wetland Status	Upland					
Plot Type	WD: Wetland Determination					
Plot Date	6/4/2022					
NWI Classification	U					
НСМ	N/A					
Vegetation Type	Deciduous Shrub and Sapling Regrowth					
Latitude (DD)	64.578445					
Longitude (DD)	-149.277486					



Photo Type: Soils Direction: N/A



Photo Type: Vegetation Direction: N



Photo Type: Vegetation Direction: S

Plot Number	ST158					
Wetland Status	Upland					
Plot Type	FVP: Field Verification Point					
Plot Date	6/9/2022					
NWI Classification	U					
ндм	N/A					
Vegetation Type	Deciduous Shrub and Sapling Regrowth					
Latitude (DD)	64.569308					
Longitude (DD)	-149.255741					



Photo Type: Hydrology Direction: E



Photo Type: Vegetation Direction: N



Photo Type: Vegetation Direction: SW

Plot Number	ST159					
Wetland Status	Wetland					
Plot Type	FVP: Field Verification Point					
Plot Date	6/9/2022					
NWI Classification	PEM1/SS1F					
НСМ	Depressional					
Vegetation Type	Wet Herbaceous					
Latitude (DD)	64.569097					
Longitude (DD)	-149.255501					



Photo Type: Hydrology Direction: E



Photo Type: Hydrology Direction: N



Photo Type: Hydrology Direction: S

Plot Number	ST160					
Wetland Status	Upland					
Plot Type	FVP: Field Verification Point					
Plot Date	6/9/2022					
NWI Classification	U					
ндм	N/A					
Vegetation Type	Deciduous Shrub and Sapling Regrowth					
Latitude (DD)	64.56064					
Longitude (DD)	-149.23525					



Photo Type: Vegetation Direction: E



Photo Type: Vegetation Direction: S



Direction: W

Plot Number	ST161
Wetland Status	Wetland
Plot Type	FVP: Field Verification Point
Plot Date	6/9/2022
NWI Classification	PSS1F
ндм	Depressional
Vegetation Type	Open Low Willow Shrub
Latitude (DD)	64.560525
Longitude (DD)	-149.235293



Photo Type: Hydrology Direction: E



Photo Type: Hydrology Direction: S



Photo Type: Hydrology Direction: W

Plot Number	ST162
Wetland Status	Upland
Plot Type	FVP: Field Verification Point
Plot Date	6/9/2022
NWI Classification	U
ндм	N/A
Vegetation Type	Mesic Herbaceous
Latitude (DD)	64.560262
Longitude (DD)	-149.220385



Photo Type: Soils Direction: N/A



Photo Type: Vegetation Direction: E



Photo Type: Vegetation Direction: N

Plot Number	ST163
Wetland Status	Upland
Plot Type	FVP: Field Verification Point
Plot Date	6/9/2022
NWI Classification	U
ндм	N/A
Vegetation Type	Closed Deciduous Forest
Latitude (DD)	64.560014
Longitude (DD)	-149.220437



Direction: N/A Photo Type: Soils



Direction: E Photo Type: Vegetation



Photo Type: Vegetation Direction: S

Plot Number	ST164
Wetland Status	Upland
Plot Type	FVP: Field Verification Point
Plot Date	6/9/2022
NWI Classification	U
ндм	N/A
Vegetation Type	Open Tall Alder Shrub
Latitude (DD)	64.560261
Longitude (DD)	-149.217255



Photo Type: Hydrology Direction: N



Photo Type: Hydrology Direction: S



Photo Type: Vegetation Direction: E

Plot Number	ST165
Wetland Status	RPW
Plot Type	SC: Stream Crossing
Plot Date	6/9/2022
NWI Classification	R2UBH
ндм	Riverine Channel
Vegetation Type	Open Water
Latitude (DD)	64.560301
Longitude (DD)	-149.217177



Photo Type: Hydrology Direction: N



Photo Type: Hydrology Direction: N/A



Photo Type: Hydrology Direction: S

Plot Number	ST166
Wetland Status	Wetland
Plot Type	FVP: Field Verification Point
Plot Date	6/9/2022
NWI Classification	PSS1C
ндм	Riverine
Vegetation Type	Open Tall Alder Willow Shrub
Latitude (DD)	64.560375
Longitude (DD)	-149.2177



Photo Type: Vegetation

Direction: E



Photo Type: Vegetation

Direction: N



Photo Type: Vegetation Direction: NW

Plot Number	ST167
Wetland Status	Wetland
Plot Type	FVP: Field Verification Point
Plot Date	6/9/2022
NWI Classification	PSS1C
ндм	Riverine
Vegetation Type	Open Tall Alder Willow Shrub
Latitude (DD)	64.56018
Longitude (DD)	-149.217866



Photo Type: Vegetation Direction: E



Photo Type: Vegetation Direction: S



Photo Type: Vegetation Direction: W

Plot Number	ST168
Wetland Status	RPW
Plot Type	SC: Stream Crossing
Plot Date	6/9/2022
NWI Classification	R2UBH
ндм	Riverine Channel
Vegetation Type	Open Water
Latitude (DD)	64.560326
Longitude (DD)	-149.185237



Photo Type: Hydrology Direction: N



Photo Type: Hydrology Direction: S



Photo Type: Hydrology Direction: W

Plot Number	ST169
Wetland Status	Upland
Plot Type	FVP: Field Verification Point
Plot Date	6/9/2022
NWI Classification	U
ндм	N/A
Vegetation Type	Deciduous Shrub and Sapling Regrowth
Latitude (DD)	64.560404
Longitude (DD)	-149.185214



Photo Type: Hydrology Direction: N



Photo Type: Hydrology Direction: S



Photo Type: Vegetation Direction: E

Plot Number	ST170
Wetland Status	Upland
Plot Type	FVP: Field Verification Point
Plot Date	6/9/2022
NWI Classification	U
ндм	N/A
Vegetation Type	Open Tall Alder Shrub
Latitude (DD)	64.560465
Longitude (DD)	-149.185601



Photo Type: Vegetation Direction: E



Photo Type: Vegetation Direction: N



Photo Type: Vegetation Direction: S

Plot Number	ST171
Wetland Status	RPW
Plot Type	SC: Stream Crossing
Plot Date	6/9/2022
NWI Classification	R2UBH
НСМ	Riverine Channel
Vegetation Type	Open Water
Latitude (DD)	64.558462
Longitude (DD)	-149.126641



Photo Type: Hydrology Direction: N



Photo Type: Hydrology Direction: S



Photo Type: Hydrology Direction: W

Plot Number	ST172
Wetland Status	Upland
Plot Type	FVP: Field Verification Point
Plot Date	6/9/2022
NWI Classification	U
ндм	N/A
Vegetation Type	Closed Tall Alder Shrub
Latitude (DD)	64.55839
Longitude (DD)	-149.126565



Photo Type: Hydrology Direction: S



Photo Type: Hydrology Direction: W



Photo Type: Vegetation Direction: SE

Plot Number	ST173						
Wetland Status	Wetland						
Plot Type	FVP: Field Verification Point						
Plot Date	6/9/2022						
NWI Classification	PSS1C						
ндм	Riverine						
Vegetation Type	Open Tall Alder Shrub						
Latitude (DD)	64.558574						
Longitude (DD)	-149.12618						



Photo Type: Hydrology Direction: N



Photo Type: Hydrology Direction: S



Photo Type: Hydrology Direction: W

Plot Number	ST174
Wetland Status	Wetland
Plot Type	FVP: Field Verification Point
Plot Date	6/9/2022
NWI Classification	PSS1/EM1C
HGM	Riverine
Vegetation Type	Open Tall Alder Willow Shrub
Latitude (DD)	64.558431
Longitude (DD)	-149.127106



Photo Type: Hydrology Direction: E



Photo Type: Hydrology Direction: S



Photo Type: Vegetation Direction: SW

Plot Number	ST175							
Wetland Status	Upland							
Plot Type	FVP: Field Verification Point							
Plot Date	6/9/2022							
NWI Classification	U							
ндм	N/A							
Vegetation Type	Deciduous Shrub and Sapling Regrowth							
Latitude (DD)	64.558643							
Longitude (DD)	-149.126831							



Photo Type: Hydrology Direction: SE



Photo Type: Vegetation Direction: N



Photo Type: Vegetation Direction: W

#### WETLAND DETERMINATION DATA FORM - Alaska Region

									Plot No: HBR 500			
Project: Totchaket Road Date: 5/3/ 2622												
Applicant: Departm	ent o	f Trans	portatio	n and Public	c Faci	ilitie	S	In	vestigators:			
Borough/City/Location	n: ˈ	West o	f Nenar	a					2H MA			
NAD 83, Decimal Degrees									HDR			
Latitude: (eu. (e	0110				Watershed: Kantisha River							
Longitude: 150	093	343		•	Location Notes:							
Elevation (ft):												
[·a			40	<u> </u>	SUMMARY OF FINDINGS							
Are "Normal Circumsta			<del>-</del>	Yes			Н	yaropn	ytic Vegetation Present?			
Significantly Disturbed	?	VEG	SOILS		Hydric Soils Present?							
Naturally Problematic?		VEG	SOILS	HYDRO				Wet	land Hydrology Present?			
Remarks:  Is the Sampled Area within a Wetland?												
VEGETATION	T< 1%	6, P = Pre	sent		SUBF	REG	ION:	TAC				
Tree Stratum DBH ≥ 3 inch	)	1/10	acre circul	ar plot unless no	ted, ab	solute	e cover r	ecorded	Dominance Test worksheet:			
Species	IND	DOM	Cover	Species	IN	1D	DOM	Cover	Number of Dominant Species That Are OBL, FACW, or FAC:  (A)			
1. None				3.					Total Number of Dominant / /			
2.				4.					Species Across All Strata:(B)			
Total Tree Cover:	۵,	50% of To	otal Cover		20% c	of To	tal Cove	T. Appendique	Percent of Dominant Species /			
Sapling/Shrub Stratum	IND	DOM	Cover	8. Rho, tom	FA	KW	***	7	That Are OBL, FACW, or FAC: / DO (A/B)			
1. Bet, gla,	FAC	У	25	9. Vac. vli.	FA	10	3	16	Barrier Indiana de la constante de la constant			
2. Bet. pap.	FACU	<b>"</b> ,	5	10.			,		Prevalence Index Worksheet  Total % Cover of: Multiply by:			
3. Aln. Vir.	FAC	3.	5	11.					45			
4. Rho, g, 10.	FAC	<b>y</b> :	10	12.					OBL speciesx 1 =			
5. Cha Cal	FACW		10	13.					FACW species <u>82</u> x 2 = <u>/64</u>			
6. Vac. vit.	FAC	12	3	14.					FAC species <u>73</u> x 3 = <u>219</u>			
7. Sal. beb.	FAC		5	15.					FACU species 5 x 4 = 20			
Total Shrub Cover: 80		50% of To	otal Cover	: 40	20% o	f Tot	al Cover	: 16	UPL species			
Herbaceous Stratum	IND	DOM	Cover	13.					Column Totals: 160 (A) 403 (B)			
1. Er, 166,	FACW	У	65	14.								
2. Cal. can	FAC	/	15	15.					Prevalence Index = B/A = 2.52			
3.				16.					Hydrophytic Vegetation Indicators:			
4. *,				17.					Dominance Test is >50%			
5.				18.					Prevalence Index is ≤3.0			
6.				19.					Morphological Adaptations <sup>1</sup> (Provide supporting data in			
7.				20.					Remarks or on a separate sheet)			
8.				21.					Problematic Hydrophytic Vegetation <sup>1</sup>			
9.				22.					Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.			
10.				23.			ų.		Project Vegetation Type			
11.				24.					TOI			
12.				25.					Cowardin Code:			
Total Herb Cover: <table-cell></table-cell>	5	0% of To	tal Cover	: 40	20% of	f Tota	al Cover	:16	PEM1/551B			
1.Open Water	)			2. Bare ground	0				HGM Classification:			
Remarks: Bryophytes and L			sted in the	Herbaceous col	umns				Landform:			
Passes dominance	if P	L,							Terrau			
						- Line			Local Relief:			
								-	Trees & Slope. Aspect.			

Plot No: HDR500

												111	1000
Profile Des	cription: D	escribe to the	depth n	eeded	to docun	nent the presence/a	absence o	of soil in	dicator	s s	Soil Ma	ap Unit Nam	е
	Horizon	Soil	Matrix			Redox Feat	ures						
Depth (in.)	Name	Color (me	oist)	%	Type <sup>1</sup>	Color	%	Loc2	М	od <sup>3</sup> Te	xture	Horizon C	omments
0-4	0%	104R 3/	/ <u>,</u>	_				7	_				
// 10		1016 6	/		_	44			-				-16
4-10	0e	<u> </u>		`					-			trozen	. 65"
											***************************************		
			vaneuur .										·
										İ			
<sup>1</sup> Type: C=Concentrations, D=Depletions, OX=Oxidized Roots, RM = Reduced Matrix <sup>2</sup> Location: PL=Pore Linings, RC=Root Channels, M=Matrix, CS=Coated Sand Grains													
Remarks: F	Remarks: Frozen @ 5" Chipped to 10"  3Texture Modifiers: Mucky (MK), Peaty (PT), Permafrost (PF)												
·		, Cappe	- 10	10,	•								obbly (CB), Stony (ST)
Hvdric Soil In	dicators N	Measure from	the ton	of the	mineral s	oil layer except for	Δ1 Δ2 Δ	Δ3 Δ1	(15	s-35%), 35	-60% =	Very (V), 60-9	90% = Extremely (X)
M Histosol or						ces (A12)	71,72,7	10, 714				_	
Histic Epip		C									ydric D		V -
		assumedi				•					Prese	ent r	Yes
-	Maska Redox (A14)     NRCS Drainage Class:    NRCS Drainage Class:												
	Multiple Marka Gleyed Pores (A15)     Depth of Organic Soils:												
Indicators for Problematic Hydric Soils (See Page 91/Section 4 for Problematic Hydric Soils Details)  Restrictive Layer Type: Fro 54													
N Depleted E	No Depleted Below Dark Surface (A11) No Alaska Color Change (TA4) Give details of color change Restrictive Layer Depth:												
No Depleted N		` '				vales (TA5)			3-		48 6 7		w/chroma of ≤2
Redox Dar	` '	·6)				th 2.5Y Hue				Ondene	alli by	mineral SULLY	W/Cilionia of 52
	,	•											egetation and
<u></u> Depleted □		• •				o Hue 5Y or Redd		_					appropriate
N Redox Dep	•					eral soil, 60% of ho				problem	5.9	ition unless	disturbed or
Ned Paren	t Material (F	21)	<u>M</u> Po	onded	/Flooded/	High Water Table	(12 inche	s or high	ner)	problem	auc	7	
Very Shall	ow Dark Surl	face (F22)	<u> </u>	w Org	ganic Mat	ter/Low Iron/High p	H Soil/Ne	ew Wetl	and	Oth	er (exp	olain in rema	rks)
HYDROLOG	Y												
		Wetland I	lydrolo	gy inc	licators			Seco	ndary I	ndicators	(2 or r	nore require	d)
Primary Indicat	ors (any one	indicator is su	ufficient)					N	Vater-s	stained Le	eaves	(B9)	
Surface Wa						e on Aerial Imagery	,	<u>~</u> [	Orainag	ge Patterr	ns (B10	))	
	Table (A2)			-	-	ted Concave Surfac	ce (B8)						Roots (C3)(w/in 12
Saturation Water Mark			- 1		posits (B	•	O#\			ce of Rec		ron (C4)	
6.00	ks (B+) Deposits (B2)	`				e Odor (C1) (w/in 12 er Table (C2)**	2")	1		posits (Ca l or Stres	•	(D4)	
Sediment Depos		,	- 1			Remarks)				rphic Pos		• ,	
	r Crust (B4)			(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		riomana)		*					te as restrictive laye
1 Iron Depos			Are C	limatio	c/Hydrolo	gic Conditions on S	Site					f (D4) - Tuss	
∧ Surface So	il Cracks (B6	S)	Typic	al for t	this time	of Year? <u>VC5</u> *		,		eutral Tes		, ,	
Field Observat	•			)		2		er Sourc	e:		W	etland Hy	drology Present
Surface Water F		Yes X	_ No		Depth (inc	ches): 2"	_   You	cip.				Vec	
Water Table Pre		Yes X	_ No		Depth (inc	,		-			-	Dry Seas	on Water Table
Saturation Pres (includes capilla		Yes	_ No		Depth (inc	thes): <u>5</u> //	-						or, Western AK:
		Episatura			Endosatu	ration	]					Mid M	ay – late July
Describe Recor	ded Data (st	ream gauge, r	nonitorii	ng wel	l, aerial p	hotos, previous ins	pections)	, if availa	able:	,Å	7	**Mineral S	oils 12-24 inches
Towace W	ater in	lous a	exca.	s h	/+ +=	1450cks							Soils 12-40 inches
Remarks: Pre	tip, con	lition s	wlin	rai	hge o)	normal hi	wever	ear	ly so	eason			st = #OBL+FW J + UPL dominants;
Caro Dillars	0 1-1	JU 1. 1			J.C. 81	1		21 1	m.)	1/	uul	iniailo / #Fl	→ ·· ∪⊢∟ uommanus;

Plot Number	HDR500
Wetland Status	Wetland
Plot Type	WD
Plot Date	5/31/2022
NWI Classification	PEM1/SS1B
ндм	Flat
Vegetation Type	Open Mixed Shrub Sedge Tundra
Latitude (DD)	64.60116
Longitude (DD)	-150.0934



Photo Type: Soils Direction: NA



Photo Type: Vegetation Direction: N



Photo Type: Vegetation Direction: S

#### WETLAND DETERMINATION DATA FORM - Alaska Region

	Plot No: 501										
Project: Totchaket Road Date: 5/31/2522  Applicant: Department of Transportation and Public Facilities Investigators:											
Applicant: Departm			ln	vestigators:							
Borough/City/Location	on:	West o	f Nenan	a	And the St.	- 20 MA					
NAD 83, Decimal Degrees							·	HDR			
Latitude: 64,600					Watershed: Kanfishna River						
Longitude: 150.69	1632				Location	n Note	s:				
Elevation (ft):											
			Τ	SUMMARY OF FINDINGS							
Äre "Normal Circumsta	<del></del>	Yes		Н	lydroph	ytic Vegetation Present?	yes				
Significantly Disturbed	?	VEG	SOILS	HYDRO				Hydric Soils Present?	Yes		
Naturally Problematic?		VEG	SOILS	HYDRO			Wet	land Hydrology Present?	Nes		
Remarks:  Is the Sampled Area within a Wetland?									Nos		
VEGETATION	T~ 10	/ D = Dra			SUBREG	ION:	IA		yes		
Tree Stratum DBH ≥ 3 inch		6, P = Pre 1/10		ar plot unless no				Dominance Test	worksheet:		
Species	IND	DOM		Species	IND	DOM	Cover	Number of Dominant Species	> 2		
•	110	Bom		3.	100	BOIL	00101	That Are OBL, FACW, or FAC	:(A)		
1. None 2.				4.				Total Number of Dominant	4		
, Jan.		500/ -57			000/ -5.7-	1-10		Species Across All Strata:	(B)		
Total Tree Cover:	· <del>1</del> ······	T	otal Cover		20% of To	tal Cove	F: AMERICAN	Percent of Dominant Species	: 75 % (A/B)		
Sapling/Shrub Stratum	IND	DOM		8. Sal pul	FACW		1	That Are OBL, FACW, or FAC	: <u>/&gt; /0 (</u> A/B)		
1. Rho. 5.00.	FAC	Y		9. Sal. Seb.	FAC		170	Prevalence Index	Workshoot		
2. // 4.	FAC	Ý	20	10. Pla mari	FACUL		3		ultiply by:		
3. Bet, pap,	FACV	/		11.20 . fre .	FACU	. 19	3				
4. Vac. Uli	FAC		5	12. POD, BAL.	FACU		1	OBL speciesx 1 =	· ——		
5. Bet, yla.	FAC			13. Cha. Cal.	FACW	16.5×	3	FACW speciesx 2 =	:_16		
6. Rog, aci,	FACU			14. Aln. inc	FAC		î	FAC species <u>46</u> x 3 =	= <u>288</u>		
JAIN Viv.	FAL		1	15.		311 14.3		FACU species 3 / x 4 =	124		
Total Shrub Cover: //니		50% of To	otal Cover:	: 57	20% of Tot	al Cover	:22.8	UPL species			
Herbaceous Stratum	IND	DOM	Cover	13.				Column Totals: 135 (A)	<u>428</u> (B)		
1. Cal, can.	FAC		10	14.				(1)	(0)		
2. Mer, gan	FACU	ĮŽ,		15.				Prevalence Index = B/A	= 3.17		
3. /=	FAC	17-1	2	 16.							
4 m/s m	1		<del>  </del> -	17.				Hydrophytic Vegetati  Dominance Test is >5			
5.	FACW			18.				Prevalence Index is ≤			
6.	-	7		19.				Morphological Adaptat			
7.	<del> </del>			20.				(Provide supporting da	ata in		
8.	ļ.			21.				Remarks or on a sepa  Problematic Hydrophy	•		
								1 Indicators of hydric soil an	d wetland hydrology		
9.				22.				must be present unless disturbe <u>Project Vegetat</u>			
10.				23.				r Toject Vegetal	топ туре		
11.				24.				461			
12.				25.				Cowardin Code: QCSZD			
Total Herb Cover: 2	5	50% of To	otal Cover:	10.5	20% of Tota	al Cover	: 4.2				
1.Open Water			1	2. Bare ground	<u>o</u>			1-19	<u>'-</u>		
Remarks: Bryophytes and L					umns			Landform:	\$. *		
25% standing de	ao j	BUT NO	a sprain	(Chinaman A				Local Relief:			
	*							Microtopography: J Slop	Con cave e: Aspect:		
Passes dominance	tes	+,						<i>a</i> . "	-16 W		

HDR Plot No: 50 |

Profile Des	cription: D	escribe to the depth r	needed	to docur	nent the presence/ab	sence	of soil inc	dicators	Soi	Map Unit Nam	2
	Horizon	Soil Matrix			Redox Feature						
Depth (in.)	Name	Color (moist)	%	Type <sup>1</sup>	Color	%	Loc <sup>2</sup>	Mod	3 Textu	re Horizon C	omments
0-4	0i	1042 2/2	100		gradient.	dos.	Montes	Name of Street			
4-7	A	10 YR 2/1	100	<b>V</b> essel-		ew.	Manager	* مین	SIL	o Frozen	v 66"
7-14	B	54 4/1	85	C	7.54R 4/4	15	MR	)c .	512	1 :	
									10,50	<u> </u>	
						<del> </del>			-		
	-					<u> </u>		_			
									*		
<sup>1</sup> Type: C=Conce	<sup>1</sup> Type: C=Concentrations, D=Depletions, OX=Oxidized Roots, RM = Reduced Matrix <sup>2</sup> Location: PL=Pore Linings, RC=Root Channels, M=Matrix, CS=Coated Sand Grains										
Remarks:							Ĭ				(PT), Permafrost (PF)
								3			obbly (CB), Stony (ST)
Hydric Soil Ir	ndicators	Measure from the top	of the i	mineral s	oil layer except for A	1, A2, /	A3, A4	(15-3	5%), 35-6U	% - very (v), 60-5	10% = Extremely (X)
1 .	r Histel (A1)				ices (A12)				Hvd	ric Soils	
₩ Histic Epip	pedon (A2)4	W,	Alaska (	Gleyed (A	A13)					esent?	Ves.
N Black Hist	Black Histic (A3)  Y Alaska Redox (A14)  NRCS Drainage Class: SPD								SPD		
	N Hydrogen Sulfide (A4) Alaska Gleyed Pores (A15) Depth of Organic Soils:								hef		
									Frozen		
N Depleted I	Below Dark S	Surface (A11) 🕡 A	Naska (	Color Cha	ange (TA4) Give det	ails of	color cha	ange F		Layer Depth:	6"
N Depleted	Matnx (F3)	<u>N</u> A	Maska A	Alpine Sv	vales (TA5)			41	Underlain	by mineral soil v	v/chroma of ≤2
∠ Redox Date	rk Surface (F	F6) <u>N</u> A	Naska F	Redox wi	th 2.5Y Hue						
N Depleted [	Dark Surface	(F7) <u>//</u> /	Maska C	Sleyed w	o Hue 5Y or Redder	Under	ying			Hydrophytic Verdrology, and an	
Redox De	pression (F8	<u>N</u> A	A Posi	tive (min	eral soil, 60% of horiz	on 4 ir	ches thic			position unless	
Ned Parer	nt Material (F	21) <u>//</u> F	onded/	Flooded	/High Water Table (12	2 inche	s or high	ner) p	roblemation	.y	
<u> </u>	ow Dark Sur	face (F22) <u>//</u> L	ow Org	anic Mat	tter/Low Iron/High pH	Soil/N	ew Wetla	and /	<u></u> ✓ Other	explain in rema	rks)
HYDROLOG	Υ										
		Wetland Hydrol	ogy Ind	icators			Secor	ndary Ind	licators (2	or more require	d)
	• •	indicator is sufficient	•						iпed Leav		
	• •				e on Aerial Imagery (I				Patterns (	•	
✓ Saturation				y vegeta posits (B	ted Concave Surface	(88)				eres along Living ed Iron (C4)	Roots (C3)(w/iri 12")
N Water Mar		* .			. Odor (C1) (w/in 12")	,	4		sits (C5)	ed Holl (O4)	
N Sediment I	Deposits (B2				er Table (C2)**	•				l Plants (D1)	
Drift Depos			Other (E	xplain in	Remarks)		$\lambda$ $\alpha$	Seomorp	hic Positio	n (D2) - Sligu	-Concere
Algal Mat o							,				te as restrictive layer)
Iron Depos					gic Conditions on Sit	е			graphic R		
Nurface Sc		s from ground surface		nis time	of Year? <u>\/e\$</u>	 Wat	er Sourc		tral Test (I		drology Present?
Surface Water	•	Yes No	У. Г	epth (ind	ches):		er Courc	c.		wellallu ny	urology Present?
Water Table Pr	esent?	Yes No		epth (inc	ches):	12	recip.			Ne S	on Water Table
Saturation Pres		Yes No				.   ! ¥	ecip.	•			or, Western AK:
(includes capilla		Episaturation_		Endosatu						Mid M	ay – late July
Describe Recor	ded Data (st	tream gauge, monitor				ctions	, if availa	able:		**Mineral S	oils 12-24 inches
											Soils 12-40 inches
Remarks:										FAC-Neutral Ted dominants > #FI add non-domina	J + UPL dominants;

Plot Number	HDR501							
Wetland Status	Wetland							
Plot Type	WD							
Plot Date	5/31/2022							
NWI Classification	PSS3B							
ндм	Flat							
Vegetation Type	Deciduous Shrub and Sapling Regrowth							
Latitude (DD)	64.60033							
Longitude (DD)	-150.09629							



Photo Type: Soils Direction: NA



Photo Type: Vegetation Direction: E



Photo Type: Vegetation Direction: W

#### WETLAND DETERMINATION DATA FORM – Alaska Region

					*	. 11%		Plot No: 50	2			
Project: Totchake								nte: 5/3//2022				
Applicant: Department of Transportation and Public Facilities Investigators:												
Borough/City/Location: West of Nenana												
NAD 83, Decimal Degrees					, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			HDR				
Latitude: 64.600	<u>e1</u>				Watershed: Kan fishing River							
Longitude: 150.09					Locatio							
Elevation (ft):	, , ,							S				
					SUMMARY OF FINDINGS							
Are "Normal Circumsta	nces"	Preser	it?	Ves	1	Н	lydroph	ytic Vegetation Present?	Ves			
Significantly Disturbed	SOILS	,				Hydric Soils Present?	No					
Naturally Problematic?		VEG VEG	SOILS				Wetl	and Hydrology Present?				
Remarks:			1						Yes			
					is the	Samp	led Ar	ea within a Wetland?	No			
VEGETATION	T< 1%	6, P = Pre	esent		SUBREG	ION:	IA	Lun				
Tree Stratum DBH ≥ 3 inch	1	1/10	acre circu	lar plot unless no	ted, absolut	te cover re		Dominance Test w	orksheet:			
Species	IND	DOM	Cover	Species	IND	DOM	Cover	Number of Dominant Species	5			
1. Bet, pap.	FACV		10	3.				That Are OBL, FACW, or FAC	(A)			
2. Pic, mar.	FACW		55	4.				Total Number of Dominant	5 (B)			
Total Tree Cover: (05			<u>ට ට</u> otal Cove		20% of To	tal Cove	r. 10	Species Across All Strata:	(D)			
(9)	IND	DOM	Cover			1		Percent of Dominant Species	100% (A/B)			
Sapling/Shrub Stratum	<b></b>	DOM		8. V. b. edu	A. FACU		<u>/</u>	That Are OBL, FACW, or FAC	· · · · · · (A/B)			
1. Aln. vir.	FAC	$\mathcal{Y}$	10	9.	をおさい		3	Prevalence Index V	Vorksheet			
2. Juliala	FAC		3	10.	Fus. 4		*		Itiply by:			
3 Sal, pol.	FROW		3	11.		diff.		A				
4. Vac. vit.	FAC	V	15	12.								
5. Linber.	FACU	/	7	13.				FACW species <u>58</u> x2=	116			
6. Rho g10.	FAC	۷.	10	14.				FAC species $\frac{73}{x} \times 3 =$	219			
7. Ros, aci	FACU	1	5	15.				FACU species 46_x4=	184			
Total Shrub Cover: 54		50% of T	otal Cove	r: 27	20% of To	tai Cover	: 108	1	_			
Herbaceous Stratum	IND	DOM	Cover	13.			1 0 10	UPL species  x 5 = Column Totals:	proces   C			
	<b> </b>	. 1		14.				Column Totals: 177 (A)	<u>5 /9(</u> B)			
1. Equ. arv.	FAC	7-1	30	15.				Dunisalamaa lindassiin D/A	298			
2. Mer. pau	FACU	-	5					Prevalence Index = B/A				
3. Geo, 160.	PACU		5	16.				Hydrophytic Vegetation	i			
4.Cal. can.	FAC		5	17.			į	Dominance Test is >50				
5. Cor. can.	FACY		3	18.				Prevalence Index is ≤3				
6. Grt. sec.	FACY		10	19.	-			Morphological Adaptati (Provide supporting da				
7.				20.				Remarks or on a separ				
8.				21.				Problematic Hydrophyt	ic Vegetation <sup>1</sup>			
9.				22.				<sup>1</sup> Indicators of hydric soil and must be present unless disturbe	l wetland hydrology d or problematic.			
10.				23.				Project Vegetati	on Type			
11.				24.				IA1K				
12.				25.				Cowardin Code:				
Total Herb Cover: 59	5	0% of To	otal Cove		20% of Tot	al Cover	:11./~	\frac{1}{2}				
1.Open Water				2. Bare ground	Docher	of proper	(110)	HGM Classification:	;			
Remarks: Bryophytes and L	ichens	may be li	sted in the	Herbaceous col	umns	17 70		Landform:	·			
- · •		-						Terrare				
								Local Relief: Stiglif Conc				
								Microtopography: Slop				
								None 5	% SE			

Plot No: 502

Profile Des	cription: [	Describe to the depth n	eeded	to docur	ment the presence/ab	sence	of soil in	dicators	Soil	Map Unit Nam	e
	Horizon	Soil Matrix			Redox Featur				······································		
Depth (in.)	Name	Color (maist) % Type <sup>1</sup> Color % Loc <sup>2</sup> Mod <sup>3</sup> Texture Horizon Comments								omments	
0-4	0:	104R2/2	100								
4-5	0e	10427/1	100								
5-9	A.	2,593/1	100						5160	Frozen	e6"
9-14	AIB	104R 3/2	60	1	- Circu-	~	_		SILO		
<i>*</i>		2,543/1	40			~	~	appr .	5160		
14-16	B	7.514/1	85	C.	7,54R3/3	15	M	1	SIL		
		7.548.4/2	150	ight Same							
·			•		-						
¹Type: C=Conce	entrations. D=	Depletions, OX=Oxidized	Roots	RM = Re	duced Matrix 2 ocation	) PI =Pc	re Linina	s RC=Ro	ot Channels	M=Matrix CS=C	toated Sand Grains
1		unette Indica	9 .		Succe Wattix Cocation	1. 1 L-1 C	ne camig				(PT), Permafrost (PF)
A1 / L	1	/ A	.//5								obbly (CB), Stony (ST)
Hydria Sail Ir	<i>M9 of</i>	Measure from the top	27+1		lightly conve		10.11	(15-3	35%), 35-60%	% = Very (V), 60-9	00% = Extremely (X)
						1, A2, /	43, A4	·			
4	r Histel (A1) pedon (A2)⁴	* 5		ark Surta Gleyed (/	aces (A12)				_	ic Soils sent?	
N. a								F			SPD
#231 g	W       Black Histic (A3)       NRCS Drainage Class:       SPD         N       Hydrogen Sulfide (A4)       Alaska Gleyed Pores (A15)       Depth of Organic Soils:       5 // 3										
										Forst	
. 0											611
Depleted Matrix (F3)     Alaska Alpine Swales (TA5)     4Underlain by mineral soil w/chroma of ≤2											
Redox Da	rk Surface (I	F6) 🖊 A	laska l	Redox wi	th 2.5Y Hue			5	Must have	Hydrophytic Ve	agetation and
	Dark Surface		laska (	Gleyed w	o Hue 5Y or Redder	Under	lying			drology, and an	
Redox De					eral soil, 60% of horiz			,   _	andscape p problematic	osition unless	disturbed or
Red Parer				er er er er er gere	/High Water Table (1		_	ner) [	. 2		
	ow Dark Su	rface (F22)	ow Org	ganic Ma	tter/Low Iron/High pH	Soil/N	ew Wetla	and /	Other (     other (	explain in rema	rks)
HYDROLOG	i Y 								······································		
Driman/Indicat	toro (any an	Wetland Hydrolo e indicator is sufficient		licators			46.		•	or more require	<b>d)</b> i
Surface W				ion Vieibi	le on Aerial Imagery (	R <b>7</b> \			ained Leave Patterns (I		
·	r Table (A2)				ted Concave Surface		- Ar	_		•	Roots (C3)(w/in 12"
∧ Saturation		6		posits (B		. ,				ed Iron (C4)	,
🔔 Water Mar					e Odor (C1) (w/in 12"	)			osits (C5)		
	Deposits (B2	. 49			er Table (C2)**					Plants (D1)	
/ <u>/</u> Drift Depos / <u>/</u> Algal Mat o	sits (B3) or Crust (B4)		other (E	xplain ir	Remarks)				hic Position		
/ Alganitiat t			limatic	:/Hvdrolc	gic Conditions on Sit	۵	,		Aquitaro (D. ographic Re		te as restrictive layer
Nurface Sc				-	of Year? Ves	•			tral Test (D		
Field Observa	tions (inche	s from ground surface	)			Wat	er Sourc			•	drology Present?
Surface Water	Present?	Yes No	<u> </u>	Depth (inc	ches):	-				N/A	7 6
Water Table Pr	esent?	Yes No	<u> </u>	Depth (inc	ches):	-			}	Dry Seas	on Water Table
Saturation Pres (includes capilla		Yes No	<u>4                                    </u>	Depth (inc	ches):	-					or, Western AK:
		Episaturation		Endosatı		_					ay – late July
Describe Recor	raed Data (s	tream gauge, monitori	ng wel	ı, aerial p	notos, previous inspe	ections)	), if availa	able:			oils 12-24 inches Soils 12-40 inches
Remarks:										FAC-Neutral Tes	st = #OBI +FW
									ŀ		J + UPL dominants;
	·- ·		••	, .	^^			-	** *** 1		

Plot Number	HDR502						
Wetland Status	Upland						
Plot Type	WD						
Plot Date	5/31/2022						
NWI Classification	U						
ндм	N/A						
Vegetation Type	Closed Black Spruce Forest						
Latitude (DD)	64.6006						
Longitude (DD)	-150.09756						



Photo Type: Soils Direction: NA



Photo Type: Vegetation Direction: N



Photo Type: Vegetation Direction: W

#### WETLAND DETERMINATION DATA FORM - Alaska Region

HOR

		,						Plot No: 503		
Project: Totchake	ıd				Date: 5/31/2022					
Applicant: Departm	ent o	f Trans	portation	on and Publi	Facilities Investigators:					
Borough/City/Location	n:	West o	f Nenai	na ·	ZH MA					
NAD 83, Decimal Degrees								HDR		
Latitude: 64.601	71				Watershed: Kantishna River					
Longitude: 150,10	)			Locatio	n Note	s:				
Elevation (ft):										
					T			SUMMARY OF FINDINGS		
Are "Normal Circumsta	t?	yes		H	lydroph	ytic Vegetation Present?				
Significantly Disturbed	?	VEG	SOILS	S HYDRO				Hydric Soils Present? No		
Naturally Problematic?		VEG	SOILS	HYDRO			Wet	land Hydrology Present?		
Remarks:					Is the	Samp	oled A	rea within a Wetland?		
VEGETATION	T< 19	6, P = Pre	sent		SUBREC	SION:	IAC			
Tree Stratum DBH ≥ 3 inch				lar plot unless no			ecorded	Dominance Test worksheet:		
Species	IND	DOM	Cover	Species	IND	DOM	Cover	Number of Dominant Species That Are OBL, FACW, or FAC: (A)		
1. Bet, Das.	FACU		25	3.						
2. Pic. Ala.	FACU	4	10	4.				Total Number of Dominant Species Across All Strata: (B)		
Total Tree Cover: 35	<u> </u>	50% of To	otal Cove	r: 17.5	20% of To	otal Cove	r: 7,	,		
Sapling/Shrub Stratum	IND	DOM	Cover	8.			Γ΄	Percent of Dominant Species That Are OBL, FACW, or FAC: 28-6 (A/B)		
1. V.b. edo.	FACU		25	9.		1	F 1 4.5	Takk		
2. Ros. 4ci.	FACY	lŽ –	30	10.				Prevalence Index Worksheet		
3. Am. Vir.	FAC	Ž.	20	11.		Total % Cover of: Multiply by:				
	1	17-1	25	12.	OBL speciesx1 =					
4. Pop, bal,	FACH	<del>                                     </del>	-3	13.	FACW speciesx 2 =					
6.	\$47 F			14.				FAC species 55 x 3 = 165		
7				15.				FACU species $123 \times 4 = 492$		
Total Shrub Cover:	l	50% of To	stal Cove		20% of To	tal Cover	. , ,	1		
Herbaceous Stratum	IND	T	Cover	13.	20%0110	tai Covei	: 16	UPL species $6 \times 5 = 6$ Column Totals: $78 \times 6$ (A) $657 \times 6$		
1. Equi arv		7	35	14.				Column Totals: <u>178 (</u> A) <u>657 (</u> B)		
2	1 / 1 %	17 1	3	15.			a a	Prevalence Index = B/A = 3.69		
2. Mer. pan.	FACU	<del>[                                    </del>	25	16.		1				
3. Cor. can.	FACU	7-1		17.		<del> </del>		Hydrophytic Vegetation Indicators:		
5.				18.		<del> </del>		Dominance Test is >50% Prevalence Index is <3.0		
				19.		<del> </del>		Morphological Adaptations <sup>1</sup>		
6.				<del> </del>		-		(Provide supporting data in		
7.				20.		<del> </del>		Remarks or on a separate sheet)		
8.				21.				Problematic Hydrophytic Vegetation <sup>1</sup> Indicators of hydric soil and wetland hydrology		
9.				22.				must be present unless disturbed or problematic.		
10.				23. 				Project Vegetation Type		
11.				24.		-		ICZa		
12.				25.				Cowardin Code:		
Total Herb Cover: 63		50% of To	tal Cove	: 31.5	20% of To	tal Cover	:12.6	HGM Classification:		
1.Open Water				2. Bare ground	10			NIA =		
Remarks: Bryophytes and L		-			lumns			Landform: Terracl		
30×10' plot on be Slough ≈ 15' wilde.	nch	abj. to	ologi	4				Local Relief: Flort		
Slough & 15' will.		**	W					Microtopography: Slope: Aspect:		
Ø								Alka Call WA		

HD 6 Plot No: 503

Profile Desc	rofile Description: Describe to the depth needed to document the presence/absence of soil indicators  Soil Map Unit Name								· .					
	Horizon	So	oil Matrix			Redox Feature	s							
Depth (in.)	Name	Color (moist) %			Type <sup>1</sup>	Color	%	Loc <sup>2</sup>	Mod <sup>3</sup>	Texture	Horizon Co	omments		
0-5	De	1248	2/1	100	Photos.	No.	بالتصوم		CERCO III					
5-20	A/B	2.54	3/1	190	***			_	~	SILO				
3 - 40	1712	2,01	/ 1	100						3160				
											. 8			
<sup>1</sup> Type: C=Conce	ntrations, D=[	Depletions, O	X=Oxidized	Roots,	RM = Rec	duced Matrix <sup>2</sup> Location:	PL=Po			<del> </del>				
Remarks:	Α.,	11 1	Α.,	4								(PT), Permafrost (PF)   obbly (CB), Stony (ST)		
No hy	Dic 5		Dika	·								0% = Extremely (X)		
<u>Hydric Soil ∕in</u>	dicators !	Measure fro	m the top	of the	mineral s	oil layer except for A1	, A2, A	\3, A4	1			· ·		
<u></u> Histosol or	Histel (A1)		<u>~</u> 1	hick D	ark Surfa	ices (A12)				Hydric		4		
<u>M</u> Histic Epip	edon (A2)4		N	Naska (	Gleyed (A	A13)			-	Prese	ent?	1/0		
A Black Histi	c (A3)		NA	Naska I	Redox (A	.14)				NRCS Dra	nage Class:	MWD		
	Sulfide (A4)		N	Maska (	Gleyed P	ores (A15)				Depth of Organic Soils: 5				
Indicators for	dicators for Problematic Hydric Soils (See Page 91/Section 4 for Problematic Hydric Soils Details)  Restrictive Layer Type:								None					
M Depleted E	Depleted Below Dark Surface (A11) Alaska Color Change (TA4) Give details of color change Restrictive Layer Depth:									NA				
N Depleted N	/latrix (F3)		$\underline{\mathscr{N}}$	laska A	Alpine Sv	vales (TA5)			⁴Un	derlain by	mineral soil v	v/chroma of ≤2		
Nedox Dar	k Surface (F	·6)	N	daska F	Redox wi	th 2.5Y Hue			54.4					
<u>M</u> Depleted D	ark Surface	(F7)	<u>al</u> A	laska (	Gleyed w	o Hue 5Y or Redder	Underl	ying			drophytic Ve logy, and an	1		
∠ Redox Dep	ression (F8	)	MA	A Posi	tive (min	eral soil, 60% of horize	on 4 in	ches thick)			ition unless o			
$ \underline{\mathcal{N}} $ Red Paren	t Material (F	21)	<u>N</u> F	onded/	/Flooded	/High Water Table (12	inche	s or higher)	pro	blematic				
Nery Shallo	ow Dark Sur	face (F22)	NL	ow Org	anic Mat	tter/Low Iron/High pH	Soil/N	ew Wetland		Other (ex	olain in remai	rks)		
HYDROLOG	Y			,										
ž		Wetlan	d Hydrol	ogy Ind	licators			Seconda	ry Indica	ators (2 or	more required	d)		
Primary Indicate		indicator is	sufficient	)				<i>t</i> Wate	er-stain	ed Leaves	(B9)			
Surface Wa						e on Aerial Imagery (E	•	¥	-	atterns (B1	•			
High Water	Table (A2)				y Vegeta posits (B	ted Concave Surface	(B8)	*				Roots (C3)(w/in 12")		
Water Mark						e Odor (C1) (w/in 12")			Deposi	Reduced	1011 (C4)			
3 0	Deposits (B2	) .				er Table (C2)**		<u></u>	ted or S	Stressed Pl	ants (D1)			
Drift Depos			$\underline{\mathcal{N}}$ (	Other (E	xplain in	Remarks)						o slough on temp		
Algal Mat o	r Crust (B4)		Δre i	Climatic	·/Hvdrolo	ogic Conditions on Site				uitard (D3) aphic Relie		e as restrictive layer)		
Surface So		6)				of Year? <u>\\ \&amp; \ \</u>	•	1		i Test (D5)	ii (D4)			
Field Observat	ions (inche	s from grou					Wate	er Source:			Vetland Hy	drology Present?		
Surface Water F		Yes	No		Pepth (ind			r C		,	Jes			
Water Table Pre		Yes _~	4 No		epth (ind		Fie	poling from	on 	,		on Water Table		
Saturation Pres (includes capilla		Yes}	No	L	Depth (ind	ches):	las.	jacent s	310051	~ .	SC, Interi	or, Western AK:		
Describe Recor	ded Data (et	Episati			Endosatı	uration hotos, previous inspe	ctions)	if available			Mid Ma	ay – late July oils 12-24 inches		
4 11 sh	s nave 4	. Julii gaugi	a ale	y well	s last		J.:.U113)	, n avallable	••			Soils 12-40 inches		
Remarks:	O'	L 1 2	· with	5,(1	2460	recent State	n & 1 / / / /	but no	· · · · · · · · · · · · · · · · · · ·			st = #OBL+FW		
Plot breaked	arjour	n 40 71	ogn, c	~~! (X¢	~~~ 0 	hydrin 561		villeu for	16.		minants > #FU d non-domina	J + UPL dominants; nts if tie		

Plot Number	HDR503						
Wetland Status	Upland						
Plot Type	WD						
Plot Date	5/31/2022						
NWI Classification	U						
НСМ	N/A						
Vegetation Type	Open Mixed Forest						
Latitude (DD)	64.60171						
Longitude (DD)	-150.10288						



Photo Type: Soils Direction: NA



Photo Type: Vegetation Direction: E



Photo Type: Vegetation Direction: S

Plot Number	HDR504					
Wetland Status	RPW					
Plot Type	SC					
Plot Date	5/31/2022					
NWI Classification	R3UBH					
НСМ	Riverine Channel					
Vegetation Type	Open Water					
Latitude (DD)	64.60171					
Longitude (DD)	-150.10285					



Photo Type: Vegetation Direction: N



Photo Type: Vegetation Direction: NE

Photo Type: Direction:

Plot Number	HDR505
Wetland Status	Upland
Plot Type	FVP
Plot Date	5/31/2022
NWI Classification	U
НСМ	N/A
Vegetation Type	Closed Deciduous Forest
Latitude (DD)	64.60137
Longitude (DD)	-150.1021



Photo Type: Vegetation Direction: W



Photo Type: Vegetation Direction: E

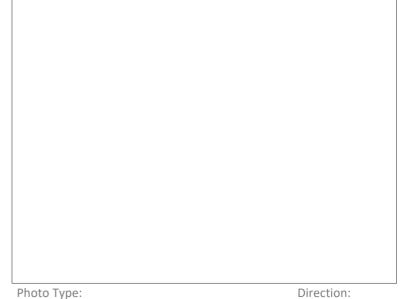


Photo Type:

#### WETLAND DETERMINATION DATA FORM - Alaska Region

Plot No: 506

								Plot No: 50	<u>6</u>	
Project: Totchak								ate: 6/1/2022		
Applicant: Departr			ln	vestigators:						
Borough/City/Locat	on:	West o	of Nena	na					γ <i>A</i>	
NAD 83, Decimal Degrees  HDR  Latitude: 64,57492  Watershed: Rock Creek										
Latitude: 64,57				Creek						
Longitude: 149,91				Location	n Note	s:				
Elevation (ft):										
					<del></del>			SUMMARY OF F	INDINGS	
	Are "Normal Circumstances" Present?							ytic Vegetation Present?	Yes	
Significantly Disturbed	SOIL	S HYDRO				Hydric Soils Present?	Xe5			
Naturally Problematic	?	VEG	SOIL	S HYDRO			Wet	land Hydrology Present?	yes	
Remarks:				is the	Is the Sampled Area within a Wetland?					
VEGETATION	T< 1%	6, P = Pr	esent		SUBREG	ION:	TAL		179	
Tree Stratum DBH ≥ 3 inc				ılar plot unless n		······································		Dominance Test	worksheet:	
Species	IND	DOM	Cover	Species	IND	DOM	Cover	Number of Dominant Species		
1. None				3.				That Are OBL, FACW, or FAC	C:(A)	
2.				4.				Total Number of Dominant	4	
Total Tree Cover:	pato	50% of T	otal Cove		20% of To	tal Cove		Species Across All Strata:	(B)	
Sapling/Shrub Stratum	IND	DOM	Cover	8. Pic. mer.	FACW	lai Cove	1	Percent of Dominant Species That Are OBL, FACW, or FAC	: <u>/00 (</u> A/B)	
1. Bet, nan.	FAC	V	25	9.						
2. Rho. for,	FACW	V	25	10.				Prevalence Index		
3. Cha, cal,	FACW	1,	20	11.				Total % Cover of: M	ultiply by:	
4. Vac. Uli.	FAC	7	10	12.				OBL speciesx.1 :	=	
	FAC		15	13.				FACW species	= 222	
5. Bet, ala				14.					<u>- 783</u>	
6. Sal, fus.	FALW		5						Al mo.	
7 Rho, gro.	FAC		3	15.				FACU speciesx 4 =	_	
Total Shrub Cover: 104			otal Cove		20% of Tot	tal Cove	<u>" 20,8</u>		=	
Herbaceous Stratum	IND	DOM	Cover	13.			-	Column Totals: 172 (A)	<u>405</u> (B)	
1. Eri. Vag.	FACU FAC	7	50 5	14. 15.				Prevalence Index = B/A	2.36	
3. Car line	FAC		3	16.				Hydrophytic Vegetat		
4. P 1	FACW		4	17.		,		Dominance Test is >		
5.	THUN		10	18.				Prevalence Index is		
6 3 3 3 3 3 3 3				19.				Morphological Adapta		
								(Provide supporting d	ata in	
<b>7.</b>				20.			<u> </u>	Remarks or on a sepa	· ·	
8.				21.				Problematic Hydrophy Indicators of hydric soil ar	rtic Vegetation ' id wetland hydrology	
9.				22.				must be present unless disturb	ed or problematic.	
10.				23.				Project Vegeta	tion Type	
11.				24.				ICZe		
12.				25.				Cowardin Code:		
Total Herb Cover: 68	5	0% of T	otal Cove	r: 34	20% of Tot	al Cove	r:13,6	19531EA	N B	
	O			2. Bare ground	D			HGM Classification:		
Remarks: Bryophytes and	Lichens	may be	isted in th	e Herbaceous co				Landform:		
								Lowland		
							L	Local Relief: Nove	no: lancati	
								-Microtopography: Slo	De: Aspect:	

Plot No: 566

Profile Des	cription: D	escribe to the	depth n	eeded	to docur	nent the presence/at	sence	of soil in	dicators	So	il Map Unit	Name		
	Horizon	Soil Matrix Redox Features												
Depth (in.)	Name	Color (m	oist)	%	Type <sup>1</sup>	Color	%	% Loc²		d <sup>3</sup> Textı	ıre Horiz	zon Comments		
0-11	Oe	104/2/	,	100	65.		Willem-	res-				en e B"		
	06	TO WE	-	100							roc	en & D		
							·   · · · · ·							
		£					-							
¹Type: C=Conce	entrations D=I	Denletions OY=	Ovidizad	Poots	PM - Por	dupad Matrix 21 continu	n: DI =:Da	ro I ining		ot Channel		CS=Coated Sand Grains		
		zur soil			KIVI - KEL	Inced Matrix -Focation	I. PL=PC	re Lining:				, Peaty (PT), Permafrost (PF)		
Kemarks. Cy	eipped 500	SW 2011	70	11.								GR), Cobbly (CB), Stony (ST)		
Usadai- O-ilia	1:4								(15-	35%), 35-60	% = Very (V	'), 60-90% = Extremely (X)		
I -		Measure from				oil layer except for A	1, A2, A	43, A4						
<u></u> Histosol o		c (X				ices (A12)				_	ric Soils	1.10		
Histic Epip		assumed)			Gleyed (A	•				Pr	esent?	<u> </u>		
<u></u> ∆ Black Hist	ic (A3)		4		Redox (A				-	NRCS	Drainage C	Class: PD		
// Hydrogen	Sulfide (A4)		<u> N</u> A	laska (	Gleyed P	ores (A15)	n <sub>i</sub> i Servi			Depth of Organic Soils: //				
Indicators for	Problemati	c Hydric Soil	<u>5 (See l</u>	Page 9	31/Sectio	n 4 for Problematic I	lydric S	oils Det	ails)	Restrictive Layer Type: Fost  ge Restrictive Layer Depth: 8"				
N Depleted I	Below Dark S	Surface (A11)	<u>///</u> A	laska (	Color Cha	ange (TA4) Give de	tails of	color cha	ange _	Restrictive	Layer Dep	oth: 8"		
N Depleted I	Depleted Matrix (F3)     Alaska Alpine Swales (TA5)     4Underlain by mineral soil w/chroma of ≤2									l soil w/chroma of ≤2				
N Redox Da	rk Surface (F	<sup>=</sup> 6)	<u> </u>	laska f	Redox wi	th 2.5Y Hue								
N Depleted I	Dark Surface	(F7)	<u> </u>	laska (	Gleyed w	o Hue 5Y or Redder	r Under	ying				rtic Vegetation and nd nd an appropriate		
N Redox De	pression (F8	)	NA	A Posi	tive (min	eral soil, 60% of hori	zon 4 ir	ches thi				nless disturbed or		
Ned Parer	nt Material (F	21)	N P	onded	/Flooded	/High Water Table (1	2 inche	s or high	ner)	oroblemati	С			
✓ Very Shall	ow Dark Sur	face (F22)	N Lo	ow Org	janic Mat	tter/Low Iron/High pl-	l Soil/N	ew Wetla	and	Other	(explain in	remarks)		
HYDROLOG											<b>\</b>			
		Wetland I	lydrolo	gy Ind	licators			Seco	ndary In	dicators (2	or more re	eauired)		
Primary Indicat	tors (any one	indicator is su	ıfficient)						•	ained Leav		,		
X Surface W			<u>₩</u> Ir	nundat	ion Visibl	e on Aerial Imagery	(B7)	$\underline{\mathcal{N}}$	Orainage	Patterns	(B10)			
	r Table (A2)					ted Concave Surface	e (B8)				-	Living Roots (C3)(w/in 12"		
∑ Saturation <u>∧</u> Water Mar	• •				posits (B	.15) e Odor (C1) (w/in 12"	,,				ed Iron (C4	4)		
	Ns (B1) Deposits (B2	)				er Table (C2)**	,		•	osits (C5) or Stresse	d Plants (D	1)		
<u>∧</u> Drift Depos		,				Remarks)		,			on (D2) 一千	•		
<u>∌</u> Algal Mat o												4", note as restrictive layer)		
<u>M</u> Iron Depos		• `			-	gic Conditions on Si	te					-tussocky		
N Surface So		•			his time	of Year? <u>YES</u>	ha/o+			ıtral Test (		J		
Surface Water				-	Depth (ind	ches): 2	vvat	er Sourc	e:		1	d Hydrology Present?		
Water Table Pr		Yes 🛪			Depth (inc		-   <sub>0.</sub>	esp				e5		
Saturation Pres	sent?	Yes X	 _No		Depth (inc	* *	-   '''	wip				Season Water Table Interior, Western AK:		
(includes capilla	ary fringe)	Episatura	tion V	· .	Endocati	ration								
Describe Recor	rded Data (st				Endosatu I, aerial p	iration hotos, previous insp	l ections)	, if availa	able:		**Min	Mid May – late July eral Soils 12-24 inches		
					-		•				**Org	anic Soils 12-40 inches		
Remarks:					-							ral Test = #OBL+FW		
												> #FU + UPL dominants; ominants if tie		

Plot Number	HDR506
Wetland Status	Wetland
Plot Type	WD
Plot Date	6/1/2022
NWI Classification	PSS3/EM1B
ндм	Flat
Vegetation Type	Open Mixed Shrub Sedge Tundra
Latitude (DD)	64.57491
Longitude (DD)	-149.91231



Photo Type: Soils Direction: NA



Photo Type: Vegetation



Photo Type: Vegetation Direction: W

Plot Number	HDR507
Wetland Status	Wetland
Plot Type	FVP
Plot Date	6/1/2022
NWI Classification	PSS3/EM1C
НСМ	Flat
Vegetation Type	Ericaceous Shrub Bog
Latitude (DD)	64.57479
Longitude (DD)	-149.91432



Photo Type: Vegetation Direction: N



Photo Type: Vegetation Direction: E

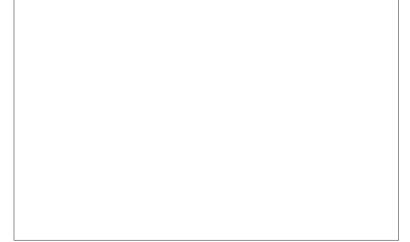


Photo Type:

Direction:

#### WETLAND DETERMINATION DATA FORM - Alaska Region

Plot No: うらと											
1											
Applicant: Departm	ent c	of Trans	Ir	nvestigators:							
Borough/City/Location	on:	West o		ZH M	A						
NAD 83, Decimal Degrees								HDR			
Latitude: 64.57	149	-Creek									
Longitude: 149,9	6			Watershed: Rack Creek Location Notes:							
Elevation (ft):											
								SUMMARY OF FI	NDINGS		
Are "Normal Circumsta	Preser	ıt?	Ves		ŀ	Hydropl	hytic Vegetation Present?	Ves			
Significantly Disturbed	SOILS	S HYDRO				Hydric Soils Present?	No				
Naturally Problematic?		VEG	SOILS	S HYDRO			We	tland Hydrology Present?	Yes		
Remarks:	***************************************			1					103		
•				1	is the	Samp	oled A	rea within a Wetland?	No		
VEGETATION T< 1%, P = Present SUBREGION: IAL											
Tree Stratum DBH ≥ 3 inch				lar plot unless no					orksheet:		
Species	IND	DOM	Cover	Species	IND	DOM	Cover	Number of Dominant Species	?		
1. None.	<del> </del>			3.				That Are OBL, FACW, or FAC:	(A)		
2.	<del> </del>			4.				Total Number of Dominant	3 (8)		
Total Tree Cover:		50% of T	otal Cove		20% of To	tal Cava		Species Across All Strata:	(B)		
<del></del>	1	DOM	Cover			lai Cove		Percent of Dominant Species	1,00		
Sapling/Shrub Stratum	IND	DOW		8. And pol	OBL		1	That Are OBL, FACW, or FAC:	/ <u>////</u> (A/B)		
1. Vac. U1.	FAC	Y	40	9. Vac. Vit.	FAC		5	Prevalence Index W	/orksheet		
2. Rho, tom.	FACW	<b>Y</b>	25	10. Arc. rub.	FAC		3		tiply by:		
3. Sal. beb.	FAC	l l	5	11.					<u> </u>		
4. Pop. tre.	FAKU		3	12.				OBL speciesx1=			
5. Piz. mar.	FACW		1	13.				FACW species 26 x 2 =	// L.1		
6. Bet, gla.	FAC		10	14.				FAC species 82_x3=	Law hallo		
7. But, gan.	FAC		5	15.				FACU species 6 x 4 =	24		
Total Shrub Cover: 98		50% of Te	otal Cove	r: 49	20% of Tota	al Cover	:19.60	-	Com Com		
Herbaceous Stratum	IND	DOM	Cover	13.			1 100	Column Totals: (15 (A)			
1. Equ. sci,	FACU		3	14.				Column Totals. Fr. (A)	<u> </u>		
2.000 100	FAC		3	15.				Prevalence Index = B/A	281		
3.7.	FAC		-,	16.							
101, 504	†·		1	17.				Hydrophytic Vegetation			
5.	FAC	7	10	18.				Dominance Test is >50			
		/						Prevalence Index is ≤3			
6.				19.		·····		Morphological Adaptation (Provide supporting date			
7.				20.				Remarks or on a separa	·		
8.				21.				Problematic Hydrophyti	c Vegetation1		
9.	-			22.				must be present unless disturbed	d or problematic.		
10.				23.				Project Vegetation	on Type		
11.				24.				1111			
12.				25.				Cowardin Code:			
Total Herb Cover: 17	5	0% of To	tal Cover	: 8.5	20% of Tota	al Cover	:3.4				
1.Open Water	6	>		2. Bare ground				HGM Classification:			
Remarks: Bryophytes and L			sted in the	Herbaceous colu	umns			Landform:			
								Lowland			
								Local Relief: Suchtly Long	0		
								Microtopography: Slope	: Aspect:		

HD. 901 No: 508

Profile Des	<b>cription:</b> D	escribe to the depth i	needed	to docur	nent the presence/ab	sence	of soil inc	dicators	Soil	Map Unit Nam	e		
	Horizon	Soil Matrix			Redox Featur						,		
Depth (in.)	Name	Color (moist)	<u>%</u>	Type <sup>1</sup>	Color	<u>%</u>	Loc <sup>2</sup>	Mod <sup>3</sup>	Textur	e Horizon C	omments		
0-3	oi												
3-4	A	10422/1	100	40mpe	Marie	140	geo		5160				
4-9	B.	10423/3	100	· harm	ng/disservice.	34-	sev	Nor	SALL	>			
9-11	B2	10423/1	85	С	7.5 WR 3/3	15	M		5Ac				
11-15	B <sub>2</sub>	2,544/1	90		754R3/3	10	M		SALL	1			
				<b>************</b>									
1Type: C=Cener	ntrations Del	Donlotions OV-Ovidias	I Danta	DM D			L		<u> </u>				
Remarks:	intrations, D-I	Depletions, OX=Oxidized	1 ROOIS,	KM = Ked	duced Matrix -Location	n: PL=P(	ore Linings				coated Sand Grains (PT), Permafrost (PF)		
1 ,		1		1 1	,	ź s					obbly (CB), Stony (ST)		
No Primar	7 to 7 to 7 to 7 to 7 to 7 to 7 to 7 to	o, inot appromentation			NASCAPE AUSI	1 12	.	(15-35	5%), 35-60%	= Very (V), 60-9	90% = Extremely (X)		
// Histosol or						1, AZ, /	43, A4	<u> </u>			<u> </u>		
Histosol of Marketic Epip		77			ices (A12)				-	c Soils sent?	* /		
// Black Hist		-		Gleyed ( <i>l</i> Redox (A	•						SPD		
// Hydrogen	, ,	A /			- '			-					
	2 State of S												
1	Indicators for Problematic Hydric Soils² (See Page 91/Section 4 for Problematic Hydric Soils Details)       Restrictive Layer Type:       Problematic Hydric Soils Details)         № Depleted Below Dark Surface (A11)       № Alaska Color Change (TA4)       Give details of color change       Restrictive Layer Depth:       III									11"			
379	N       Depleted Matrix (F3)       Alaska Alpine Swales (TA5)             4Underlain by mineral soil w/chroma of ≤2									w/chroma of <2			
	N Redox Dark Surface (F6)  Alaska Redox with 2.5Y Hue												
	Dark Surface	A/	daska (	Gleyed w	o Hue 5Y or Redder	Under	lying			Hydrophytic Ve Irology, and an	_		
Nedox Dep	oression (F8	. 1			eral soil, 60% of horiz			- 1		osition unless			
Ned Paren	t Material (F	21) <u>//</u> F	onded	/Flooded	/High Water Table (1	2 inche	s or high	er) pr	oblematic	No.			
Nery Shall	ow Dark Sur	face (F22) 🚺 L	ow Org	janic Mat	tter/Low.lron/High pH	Soil/N	ew Wetla	and	Other (e	xplain in rema	rks)		
HYDROLOG	Υ												
		Wetland Hydrol	ogy Inc	licators			Secor	ndary Indi	cators (2 o	r more require	d) .		
. 1		indicator is sufficient	•				3		ned Leave	• •			
Surface W		4			e on Aerial Imagery (		ž.	-	Patterns (E	•	- t.		
			•	y vegeta posits (B	ted Concave Surface	(B8)				es along Living d Iron (C4)	g Roots (C3)(w/in 12")		
Water Mark					e Odor (C1) (w/in 12"	1		alt Depos		u iion (C4)			
Sediment [					er Table (C2)**	,	6 1	-	. ,	Plants (D1)			
M Drift Depos	its (B3)	<u>∧</u> (	Other (E	Explain in	Remarks)		<u>//</u> G	eomorph	ic Position	(D2)			
1	r Crust (B4)										te as restrictive layer)		
Iron Depos					gic Conditions on Sit	te			graphic Re				
A Surface So		s from ground surface		this time	of Year? <u>YeS</u>	/M/at	F Source		al Test (D		drology Present?		
Surface Water I		Yes No	8	Depth (ind	ches):	, vai	er oddio	о.		wenanu ny	arology Present?		
Water Table Pro	esent?	Yes No	0		ches):	-			_	<u>yes</u>			
Saturation Pres		Yes No	. #	Depth (ind		-					on Water Table or, Western AK:		
(includes capilla		Episaturation_		Endosatu	ıration					Mid M	ay – late July		
Describe Recor	ded Data (st	ream gauge, monitor	ng wel	l, aerial p	hotos, previous inspe	ections	), if availa	ıble:		**Mineral S	Soils 12-24 inches Soils 12-40 inches		
Remarks:				***************************************					- Ir	-	st = #OBL+FW		
* .	area,	30'h Hauling	dear	D 501	KL.				c		J + UPL dominants;		

Plot Number	HDR508						
Wetland Status	Upland						
Plot Type	WD						
Plot Date	6/1/2022						
NWI Classification	U						
ндм	N/A						
Vegetation Type	Deciduous Shrub and Sapling Regrowth						
Latitude (DD)	64.57497						
Longitude (DD)	-149.91853						



Photo Type: Soils Direction: NA



Photo Type: Vegetation Direction: N



Photo Type: Vegetation Direction: S

Plot Number	HDR509						
Wetland Status	Wetland						
Plot Type	FVP						
Plot Date	6/1/2022						
NWI Classification	PSS1/EM1B						
НСМ	Flat						
Vegetation Type	Open Mixed Shrub Sedge Tundra						
Latitude (DD)	64.57495						
Longitude (DD)	-149.91779						



Photo Type: Vegetation Direction: E



Photo Type: Vegetation Direction: W

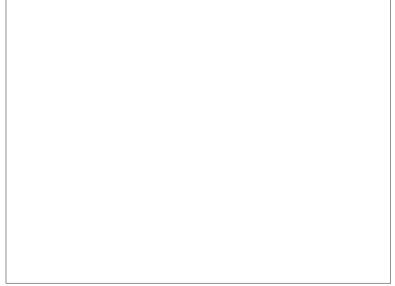


Photo Type:

Direction:

Plot Number	HDR510							
Wetland Status	Wetland							
Plot Type	FVP							
Plot Date	6/1/2022							
NWI Classification	PSS3/EM1B							
ндм	Flat							
Vegetation Type	Ericaceous Shrub Bog							
Latitude (DD)	64.57506							
Longitude (DD)	-149.9209							



Photo Type: Vegetation Direction: N



Photo Type: Vegetation Direction: E

Photo Type: Direction:

#### WETLAND DETERMINATION DATA FORM – Alaska Region

HDR

Plot No: 5/1												
Project: Totchake	ate: 6/1/2011											
Applicant: Departm												
Borough/City/Location	ZA MA											
NAD 83, Decimal Degrees HDR												
Latitude: 64.5구4	512				Watershed: Dak Creek							
Longitude: 149,92	1365	3			Loc	atior	n Note	s:				
Elevation (ft):												
	SUMMARY OF FINDINGS											
Are "Normal Circumsta	nces"	Presen	t?	Ves			H	lydroph	nytic Vegetation Present?			
Significantly Disturbed	?	VEG	SOILS	S HYDRO	:				Hydric Soils Present?			
Naturally Problematic?		VEG	SOILS	S HYDRO				We	tland Hydrology Present?			
Remarks:			<del></del>		1-	41	C	ا امما				
					15	tne	Samp	olea A	rea within a Wetland?			
VEGETATION	T< 19	%, Р = Pre	sent		SUB	REG	ION:	TAC				
Tree Stratum DBH ≥ 3 inch	1	1/10	acre circu	ılar plot unless no	ted, al	bsolute	e cover r	ecorded	Dominance Test worksheet:			
Species	IND	DOM	Cover	Species	I	ND	DOM	Cover	Number of Dominant Species That Are OBL, FACW, or FAC: (A)			
1. None,				3.								
2.				4.					Total Number of Dominant Species Across All Strata: (B)			
Total Tree Cover:	- ;	50% of To	otal Cove	r:	20%	of To	tal Cove	!r: ,				
Sapling/Shrub Stratum	IND	DOM	Cover	8. Pic. Mar.	E	AW		3	Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)			
1. Rho, tom.	FACW	7	35	9. Bet. gla		AC		7	QP CP			
	FAC	17-1	5	10/		ACW	•	7	Prevalence Index Worksheet			
2. Rho, gro,			3				\ /		Total % Cover of: Multiply by:			
Vac. 0XV.	OBL			11 Cha, (al.		ACW	<del>}</del> —	10	OBL species $26 \times 1 = 26$			
4. Arc. rub.	FAC	<del>                                     </del>	3	12.		AC	F	3	FACW species <u>70</u> x2= 140			
5. Vac. vit.	FAC	У	10	13. Das. Cru,		AC		/	1 - 10-			
6. And pal.	C	ý	10	14. Saliala,		Ac		5	1 7 77			
7. Vac. Uli,	FAC	<u> У</u>	10	15. Sal. Sco.		Ac			FACU speciesx 4 =			
Total Shrub Cover: // 3	<del></del>	50% of To	·····	<b>UU</b> 1 U	20%	of Tota	al Cover	:22.6	UPL speciesx 5 =			
Herbaceous Stratum	IND	DOM	Cover	13.					Column Totals: (57 (A) 350 (B)			
1. Cor. agu.	OBL	<b>V</b>	to	14.								
2. Cal can.	FAC	4	15	15.					Prevalence Index = B/A = 2.23			
3. Rub. cha.	FALW	1	10	<b>№16</b> .					Hydrophytic Vegetation Indicators:			
4. Er. 105.	FACW	/	5	17.					Dominance Test is >50%			
5. Fall 5.	FACU		1	18.					Prevalence Index is ≤3.0			
6. Unknown gaundoid		,000	<u> </u>	19.					Morphological Adaptations <sup>1</sup>			
7/1	OBL		3	20.					(Provide supporting data in Remarks or on a separate sheet)			
8.	0.74			21.					Problematic Hydrophytic Vegetation <sup>1</sup>			
9.				22.					Indicators of hydric soil and wetland hydrology			
10.				23.					must be present unless disturbed or problematic.  Project Vegetation Type			
11.				24.					$T_{CI}$			
12.	ļ			25.					Cowardin Code:			
Total Herb Cover: 45	5	50% of To	tal Cove	r: 22.5	20% c	of Tota	al Cover	: 9	PSS3/EMB			
1.Open Water None			T	2. Bare ground			 50	<u> </u>	HGM Classification:			
Remarks: Bryophytes and L	ichens	may be lis	sted in the	Herbaceous col	umns	0			Landform:			
									Lowland			
									Local Relief: Flat			
									Microtopography: Slope: Aspect:			
									1 4 * 1 * CC ( C . 17 h 2 1/2 a.c. )			

Plot No: 511

					<del></del>								/
Profile Des	cription: D	escribe to the	depth r	needed	to docur	nent the presence/ab	sence	of soil ir	dicator	s	Soil M	lap Unit Name	e
	Horizon	Soil	Matrix			Redox Featur	res						
Depth (in.)	Name	Color (m	oist)	%	Type <sup>1</sup>	Color	%	Loc	. м	od <sup>3</sup> 7	rexture	Horizon Co	omments
6-10	Oe	10 TR		100		Esse.	AMERICA.			para-		Frozen	
	106	10 110	-71	100		9	-			para.	<i>Jr</i> -	110 CON	6.2
				<u> </u>									
							1				·		
							-						
							+				<del></del>		
				-		****							
												*	
<sup>1</sup> Type: C=Conc	entrations, D=0	epletions, OX:	Oxidized	l Roots,	RM = Red	luced Matrix <sup>2</sup> Location	n: PL=Pc	re Lining	s. RC=F	Root Cha	nnels. A	/l=Matrix, CS=C	Coated Sand Grains
Remarks:													(PT), Permafrost (PF)
Tromanto.													obbly (CB), Stony (ST)
Livedeia Cail is	- J: 4 1					•••			(15	-35%), 3	35-60%	= Very (V), 60-9	90% = Extremely (X)
		neasure from				oil layer except for A	1, A2, A	43, A4		<u> </u>			I
<u>ソ</u> Histosol o	r Histel (A1)	<i>f</i> 1				ces (A12)				ı	Hydric		
Histic Epip	oedon (A2)4(	assumed)	$\underline{\mathcal{N}}$	Naska I	Gleyed (A	<b>A13)</b>	W =4				Pres	ent?	Ves
<u> </u> Black Hist	ic (A3)		NA	laska l	Redox (A	.14)				NR	CS Dra	inage Class:	PD
$\underline{\mathcal{N}}$ Hydrogen	Sulfide (A4)		NA	laska (	Gleyed P	ores (A15)	egitt.			Dep	pth of C	Organic Soils:	10+
Indicators for	Problematic	Hydric Soil	<b>s</b> ⁵ (See	Page 9	91/Sectio	n 4 for Problematic I	Hvdric S	oils De	tails)	Res	strictive	Layer Type:	1
						ange (TA4) Give de			-			yer Depth:	51
N Depleted I		andoo (reer)	. 1			vales (TA5)	italia Ul	JOIOI CIT	ange				
		۵۱				• •				TUnde	riain by	mineral soil v	w/chroma of ≤2
Nedox Da		•				th 2.5Y Hue				⁵Must	have H	ydrophytic Ve	egetation and
N Depleted I						o Hue 5Y or Redder	-					ology, and an	
Nedox De	pression (F8)	}	N	A Posi	tive (min	eral soil, 60% of hon	zon 4 ir	ches th	ick)			sition unless o	disturbed or
	nt Material (F	21)	<u>/\_/</u> P	onded	/Flooded	/High Water Table (1	2 inche	s or hig	her)	proble	matic		
<u>∧</u> Very Shall	ow Dark Surl	ace (F22)	<u> M</u> L	ow Org	anic Mat	ter/Low Iron/High ph	l Soil/N	ew Wet	land	01	ther (ex	plain in rema	rks)
HYDROLOG	Υ					-						,	
		Wetland	Hvdrold	av Inc	licators			Seco	ndary l	ndicato	rs (2 or	more require	d)
Primary Indicat	tors (any one		-							stained		•	ω,
N Surface W					ion Visibl	e on Aerial Imagery (	(B7)			e Patte		` '	
High Wate	r Table (A2)		-			ted Concave Surface			-		•	•	Roots (C3)(w/in 12"
✓ Saturation	` '		1		posits (B	•						Iron (C4)	. ,
<u>r∠</u> Water Mar	` ,					e Odor (C1) (w/in 12"	')			posits (			
<u>M</u> Sediment I		}				er Table (C2)**		N	Stunted	or Stre	ssed P	lants (D1)	
	or Crust (B4)		<u>M</u> (	Other (E	xplain in	Remarks)						(D2) - Flot	
Iron Depos			Are (	Climatic	·/Hvdrolo	gic Conditions on Si	to					(w/in 24", not ef (D4) = 🏧	te as restrictive layer
Non Bops     Surface So     Surface So		<b>3)</b>				of Year? VES				eutral Te			7
Field Observa							Wat	er Sour					drology Present?
Surface Water	Present?	Yes	_ No	<u>×</u> [	Depth (ind	ches):							are regy 1 recent.
Water Table Pr	esent?	Yes 💢	_ No		Depth (inc	ches):5	_   P	recip	٠,		L	Ves	on Water Table
Saturation Pres		Yes	_ No		Depth (inc	ches):	_   `					SC, Interi	or, Western AK:
(includes capilla	ary fringe)	Episatura	ation 1	·	Endosatu	ration						Mid M	ov loto lulu
Describe Recor	rded Data (st					hotos, previous insp	ections)	, if avai	lable:			**Mineral S	ay – late July Soils 12-24 inches
						•	,						Soils 12-40 inches
Remarks:													st = #OBL+FW
15% sla	WALL LA	20 PM	MA.	5 h/10	6 (h.,	/Asn						minants > #Fl Id non-domina	J + UPL dominants; nts if tie
10.	·- d	D - 200.7 8 8 80° 3	e- b-# #	4.					-	• •			1 1 2000

Plot Number	HDR511							
Wetland Status	Wetland							
Plot Type	WD							
Plot Date	6/1/2022							
NWI Classification	PSS3/EM1B							
ндм	Flat							
Vegetation Type	Deciduous Shrub and Sapling Regrowth							
Latitude (DD)	64.57512							
Longitude (DD)	-149.9236							



Photo Type: Soils Direction: NA



Photo Type: Vegetation Direction: N



Photo Type: Vegetation Direction: S

#### WETLAND DETERMINATION DATA FORM - Alaska Region

HDR

								Plot No: 512				
Project: Totchaket Road Date: 6/1/2022												
	nent c	of Trans	portation	on and Publi	c Facilitie	s		nvestigators:				
Borough/City/Location	on:	West o	f Nena	na				ZH MA				
NAD 83, Decimal Degrees HDR												
Latitude: (94)	57	5-35	Rock	k Creek								
Longitude: 149	192	450	n Note									
Elevation (ft):												
T		returnation		T. W.				SUMMARY OF FINDINGS				
Are "Normal Circumsta	20150300	STATE AND ADDRESS OF THE PARTY.		yes		ŀ	lydroph	ytic Vegetation Present? Ves				
Significantly Disturbed	?	VEG	SOILS	HYDRO				Hydric Soils Present? No				
Naturally Problematic?	?	VEG	SOILS	HYDRO			Wet	land Hydrology Present?				
Remarks:					Is the	Samp	oled Ar	rea within a Wetland?				
VEGETATION	T< 19	%, P = Pre	esent		SUBREG	ION:	IA	4				
Tree Stratum DBH ≥ 3 inc				ilar plot unless no				Dominance Test worksheet:				
Species	IND	DOM	Cover	Species	IND	DOM	Cover	Number of Dominant Species That Are OBL, FACW, or FAC:  2	(4)			
1. Pic. Mar	FALW	Y	35	3.					(A)			
2. Pop. Tre	FACU	1	5	4.				Total Number of Dominant Species Across All Strata:	(B)			
Total Tree Cover: 40		50% of To	otal Cove	r: 20	20% of To	tal Cove	r: 8		(5)			
Sapling/Shrub Stratum	IND	DOM	Cover	8. Ros. aci	FALL		3	Percent of Dominant Species That Are OBL, FACW, or FAC:  (A	/B)			
1. Vac, v/4.	FAC	V	60	9.	1112-1							
2. Rhai gro,	FAC	1	16	10.				Prevalence Index Worksheet				
3. She, can,	FAKU		1	11.			100	Total % Cover of:Multiply by:				
4.	_	-	-	12.				OBL speciesx1 =				
5. Sal, beb.	FAC		3	13.				FACW species 45 x 2 = 95				
6. Va(, 12)	FAC		5	14.				FAC species 78 x3 = 234				
7. Pic Mar	FACW		10	15.				FACU species 25 x4= 10 0				
Total Shrub Cover: 97		50% of To	otal Cove	r: 410	20% of Tot	al Cover	: 10 4					
Herbaceous Stratum	IND	ром	Cover	13.			1011	UPL species $0 \times 5 = 0$ Column Totals: $148 \times 424 \times $				
1. Geo, IV.	FACU	V	5	14.				Column Totals. 776 (A) (B)				
2. Cor, can.	FACU	4	10	15.				Prevalence Index = B/A = 2.87	1			
3. Pur, asa	FAKY	1	1	16.				Hydrophytic Vegetation Indicators:				
4.	11100		1	17.				Dominance Test is >50%				
5.				18.				V Prevalence Index is ≤3.0				
6.			1 - 4	19.				Morphological Adaptations <sup>1</sup>				
7.				20.				(Provide supporting data in Remarks or on a separate sheet)				
8.				21.				Problematic Hydrophytic Vegetation <sup>1</sup>				
9.				22.				Indicators of hydric soil and wetland hydrolog must be present unless disturbed or problematic.	Jy			
10.				23.				Project Vegetation Type				
11.				24.				ADG= T1-0				
12.				25.				OBSE TAZE				
Total Herb Cover: /(p		50% of To	tal Cover	5.07	20% of Tot	al Cover	:7 2	Cowardin code:				
1.Open Water				2. Bare ground			St. 1, 1900	HGM Classification:				
Remarks: Bryophytes and I	ichens	may be lis			lumns	when	33	Landform:	-			
								Low ribge,				
								Local Relief: Con Vex				
								Microtopography: Slope: Aspect:				
								None 5% East				

Plot No: 512

Profile Des	crintion: [	escribe to the	denth i		to docur	nent the presence	/ahsence /	of soil i	ndicator		Soil M	ا عن العام العام العام العام العام العام العام العام العام العام العام العام العام العام العام العام العام الع	<del></del>
1.0.110 200	Horizon		Matrix	iccucu	to docu	Redox Fea		31 3011 1	Ituicator	<u> </u>	301110	iap Unit Nami	<del>-</del>
Depth (in.)	Name	Color (m		%	Type1			1	2 14	3	T d	lla-in-a- 0	
<u>Deptii (iii.)</u>		Color (II	iuist)	70	Type <sup>1</sup>	<u>Color</u>	<u>%</u>	Loc	- IVI	od <sup>3</sup>	Texture	Horizon C	omments
2 =	Oi			<u> </u>									
3-5	A	109R°	4/	100	B41.	Γ.	pare.	*	Pla.	~	SALO		
5-11	B.	10 TR 3	3/3	100	`	-		****			FSALO	Chunk	s of choresal
11-15	Bz	10 YR :	3/3	40	•	Westign.	NAME.	,	-		VESAL		
		104R 6		60	-	<b>L</b>				and the same of th			
				•									
1Tunas CaCanas		Danistiana OV	-0.441	J D 1 -	DM D			L					
l .			=Oxidize	ROOIS,	KM = Ked	duced Matrix <sup>2</sup> Loca	tion: PL=Pc	re Linin	7				oated Sand Grains (PT), Permafrost (PF)
Remarks: [	rozen e	6".							1				obbly (CB), Stony (ST)
									(15	5-35%	s), 35-60% :	= Very (V), 60-9	00% = Extremely (X)
			the top	of the	mineral s	oil layer except fo	r A1, A2, A	43, A4		Γ			I
Mistosol of	r Histel (A1)		$\Delta$	Γhick D	ark Surfa	ices (A12)					Hydric	Soils	_
$rac{\mathcal{N}}{}$ Histic Epip	edon (A2)4		N	Alaska (	Gleyed (/	A13)					Pres	ent?	No
$\underline{\mathcal{N}}$ Black Hist	ic (A3)		N	Alaska I	Redox (A	.14)	1 4				NRCS Dra	inage Class:	QW
	Sulfide (A4)	)	NI	Alaska (	Gleyed P	ores (A15)					Depth of C	rganic Soils:	3
Indicators for	Problemat	ic Hydric Soi	l <u>s⁵ (</u> See	Page 9	91/Sectio	n 4 for Problemati	ic Hydric S	oils De	etails)	F	Restrictive	Layer Type:	``
∆ Depleted E	Below Dark	Surface (A11)	M	Alaska (	Color Ch	ange (TA4) Give	details of	color cl	hange	Res	strictive La	yer Depth:	
<u> ∧</u> Depleted N	Matrix (F3)		$\underline{\mathcal{M}}_{I}$	Naska /	Alpine Sv	vales (TA5)				.⁴Un	derlain by	mineral soil v	w/chroma of ≤2
N Redox Da	rk Surface (I	F6)	$\underline{\mathcal{N}}$	Naska f	Redox wi	th 2.5Y Hue				58.4.	<b></b>		Electrical States
N Depleted	Dark Surface	e (F7)	M	Maska (	Gleyed w	o Hue 5Y or Red	der Underl	ying				ydrophytic Ve ology, and an	
N Redox De	pression (F8	3)	ALF	A Posi	tive (min	eral soil, 60% of h	orizon 4 in	ches th	nick)			sition unless	
Ned Paren	it Material (F	-21)	<u> A/</u> F	onded	/Flooded	/High Water Table	(12 inche	s or hig	gher)	prot	blematic		1
✓ Very Shall	ow Dark Su	rface (F22)	<u> </u>	ow Org	janic Ma	tter/Low Iron/High	pH Soil/N	ew We	tland	. 6-70-00-00-0	Other (ex	plain in rema	rks)
HYDROLOG	Y												-
		Wetland	Hydrol	ogy Inc	licators			Sec	ondary I	ndica	ators (2 or	more require	d)
Primary Indicat		e indicator is s	ufficient	)				N	Water-s	staine	ed Leaves	(B9)	
Surface W						e on Aerial Image		1	-	-	atterns (B1	•	
High Wate			w 15			ted Concave Surfa	ace (B8)	10					Roots (C3)(w/in 12"
A) Saturation					posits (B	•	40%				Reduced	Iron (C4)	
		D)		_		e Odor (C1) (w/in er Table (C2)**	12")		Salt De		s (C5) Stressed P	la-t- (D4)	-
		- <i>)</i>		-				> 8					
,	<ul> <li>✓ Drift Deposits (B3)</li> <li>✓ Other (Explain in Remarks)</li> <li>✓ Algal Mat or Crust (B4)</li> <li>✓ Shallow Aquitard (D3) (w/in 24", note as restrictive laye</li> </ul>									te as restrictive laver			
// Iron Depos	, ,	,	Are	Climatio	/Hvdroic	aic Conditions on	Site					•	e da restrictive layer,
-	✓ Iron Deposits (B5) Are Climatic/Hydrologic Conditions on Site ✓ Microtopographic Relief (D4) ✓ Surface Soil Cracks (B6) Typical for this time of Year? ✓ FAC-Neutral Test (D5)												
Field Observat	tions (inche	s from ground	surface	∍)			Wate	er Sour					drology Present?
Surface Water I	Present?	Yes	_ No	<u>X</u> c	Depth (in	ches):					1	100	
Water Table Pro		Yes	_ No _૽ૣ	<u>×_</u> c	Depth (ind	ches):					-	Dry Seas	on Water Table
Saturation Pres		Yes	_ No _	<u>×</u> c	Depth (ind	ches):							or, Western AK:
(includes capilla	ary iringe)	Episatura	ation		Endosatı	ıration						Mid M	ay – late July
Describe Recor	ded Data (s					hotos, previous in	spections)	, if ava	ilable:			**Mineral S	Soils 12-24 inches Soils 12-40 inches
Remarks:	•			/ , .			ß .		·	. /			st = #OBL+FW

Plot Number	HDR512						
Wetland Status	Upland						
Plot Type	WD						
Plot Date	6/1/2022						
NWI Classification	U						
ндм	N/A						
Vegetation Type	Open Black Spruce Forest						
Latitude (DD)	64.57534						
Longitude (DD)	-149.92447						



Photo Type: Soils Direction: NA



Photo Type: Vegetation Direction: N



Photo Type: Vegetation Direction: S

#### WETLAND DETERMINATION DATA FORM – Alaska Region

HDR

Totchaket Road 6/1/2022 Project: Date: Department of Transportation and Public Facilities Applicant: Investigators: Borough/City/Location: West of Nenana HDR NAD 83, Decimal Degrees Latitude: 64,57498 Watershed: Rock Creek Longitude: 149, 932 98 **Location Notes:** Elevation (ft): SUMMARY OF FINDINGS Are "Normal Circumstances" Present? Hydrophytic Vegetation Present? Significantly Disturbed? VFG | HÝDRO Hydric Soils Present? SOILS Naturally Problematic? **HYDRO** VEG SOILS Wetland Hydrology Present? Remarks: Is the Sampled Area within a Wetland? SUBREGION: **VEGETATION** T< 1%, P = Present **Dominance Test worksheet:** Tree Stratum DBH ≥ 3 inch 1/10 acre circular plot unless noted, absolute cover recorded Number of Dominant Species IND **Species** IND DOM Cover **Species** DOM Cover That Are OBL, FACW, or FAC: (A) 1. None. 3. Total Number of Dominant Species Across All Strata: (B) 50% of Total Cover: 20% of Total Cover: \_\_\_ **Total Tree Cover:** Percent of Dominant Species Sapling/Shrub Stratum IND DOM 8. Ros. aci, (A/B) Cover That Are OBL, FACW, or FAC: FACU 9. 1/ 3 FALL FAC Prevalence Index Worksheet 10. 3 Total % Cover of: Multiply by: 11. FACU/ 10 **OBL** species 12. 10 FAC FACW species 1340 13. 2 14. FACU species 30 x4= 12015. 15 20% of Total Cover: 20. ഉ 50% of Total Cover: ے 🤈 Total Shrub Cover: 1つし UPL species Herbaceous Stratum IND DOM Cover 13. Column Totals: /// 1.CLa. ans 14. Prevalence Index = B/A = 3.1515. 16. Hydrophytic Vegetation Indicators: 17. 4. Dominance Test is >50% 18. 5. Prevalence Index is ≤3.0 Morphological Adaptations<sup>1</sup> 6. 19. (Provide supporting data in 20. 7. Remarks or on a separate sheet) 21. Problematic Hydrophytic Vegetation<sup>1</sup> 8. Indicators of hydric soil and wetland hydrology 22. 9. must be present unless disturbed or problematic. Project Vegetation Type 10. 23. 24. 11. 25. 12. Cowardin Code: 20% of Total Cover: /. (o Total Herb Cover: 50% of Total Cover: **HGM Classification:** 2. Bare ground Remarks: Bryophytes and Lichens may be listed in the Herbaceous columns Landform: Local Relief: Microtopography: Slope: Aspect: Non-1

HDR Plot No: 513

												or No. of	<b>○</b>
Profile Desc	cription: D	escribe to the	depth ne	eded	to docun	nent the presence/a	bsence	of soil ir	dicator	s	Soil M	ap Unit Name	e
	Horizon		Matrix			Redox Feat							
Depth (in.)	Name	Color (mo		%	Type <sup>1</sup>	Color	%	Loc	Mo	A3	Texture	Horizon C	ommonto
6 - 2		<u> </u>	51007	70	1700	<u> </u>	76	LOC	1010	<u>,u-</u>	TEXTUIE	110112011 C	omments
0 - 4	Oi	]											
2-3	0e												
3-18	召	104R 9	1/2/	70		delle			220	.	FSAL		
		18 412:	and di	30	dite	æ.			-		FSAL		
		7/32 11 -		رياد			_			<i>T</i>	7/3/00		
								-					
1Tuna: C=Canaa	ntrotions De	Danistiana OV-			DM - D		DI						
,	ntrations, D=	Depletions, UX=	Oxidized R	oots,	RM = Rec	luced Matrix <sup>2</sup> Location	on: PL=P	ore Lining					
Remarks:													(PT), Permafrost (PF)   obbly (CB), Storry (ST)
													90% = Extremely (X)
Hydric Soil In	dicators	Measure from	the top of	the	mineral s	oil layer except for	A1, A2,	A3, A4					
<u>///</u> Histosol or	Histel (A1)		<u>//</u> Thi	ck D	ark Surfa	ces (A12)					Hydric	Soils	
<u></u> Histic Epip	edon (A2)4		Ala	ska (	Gleyed (A	<b>A13</b> )					Pres	ent?	000
Black Histi	c (A3)		Ala	ska f	Redox (A	.14)				.N	RCS Dra	inage Class:	<b>₩ ₽</b> -
N Hydrogen	Sulfide (A4)		∧ Ala	ska (	Gleyed P	ores (A15)				D	epth of C	rganic Soils:	2
Indicators for	<u>Problemati</u>	c Hydric Soil:	s⁵ (See Pa	age 9	1/Sectio	n 4 for Problematic	Hydric :	Soils De	tails)			Layer Type:	Now
N Depleted E	Below Dark	Surface (A11)	∕ <b>U</b> Ala	ska (	Color Cha	ange (TA4) Give d	etails of	color ch	ange			yer Depth:	NA
Depleted N		, ,	,			vales (TA5)			0-				w/chroma of ≤2
Nedox Dar		<del>-</del> 6)				th 2.5Y Hue				0110		THINCIAN GOIL	With the second of the second
✓ Depleted D			.0. 1			o Hue 5Y or Redde	ar Undo	dvina					egetation and
Nedox Dep			1		-	eral soil, 60% of ho			:=1:\			ology, and an sition unless	
Nedox Dep	•	•	-1		•				, (		lematic	omon unicas	distarbed of
		•	/			High Water Table (		-			<b></b>		
Very Shallo		Tace (FZZ)	LOV	v Org	anic Mai	ter/Low Iron/High p	H 501/1	iew vvet	and		Other (ex	plain in rema	rks)
HYDROLOG	Y												v
Drimon, Indicat	om (onu one	Wetland I	-	y Ind	licators			in the			•	more require	d)
Primary Indicate		e indicator is st		ındəti	ion Vicibl	e on Aerial Imagery	, (D <b>7</b> )	Α.			d Leaves tterns (B1	• •	
N High Water						ted Concave Surfac			_		•	•	g Roots (C3)(w/in 12")
✓ Saturation					posits (B		, (20)					Iron (C4)	3 110013 (00)(Willi 12 )
Nater Mark			20 "			e Odor (C1) (w/in 12	2")		Salt De			` ,	
✓ Sediment D	• •	2)				er Table (C2)**						lants (D1)	
○ Drift Depos     ○ Algorithms     ○ Algorithms			<u></u> ∕√ Oth	ner (E	xplain in	Remarks)	•				Position (	•	
Algal Mat o			Are Cli	matic	·/Hvdrolo	gic Conditions on S	2ita				tard (D3) phic Reli		te as restrictive layer)
✓ Surface So		6)			-	of Year? Xe 5	one.			-	Test (D5		
Field Observat	-	-					Wa	ter Sour					drology Present?
Surface Water F	Present?	Yes	_ No	<u> </u>	epth (ind	ches):	_					1 }m	
Water Table Pre	esent?	Yes	_ No <u> </u>	<u></u>	epth (inc	ches):	_				-	Dry Seas	son Water Table
Saturation Pres		Yes	_ No <u> </u>		epth (ind	ches):	_						ior, Western AK:
(includes capilla		Episatura			Endosatu								ay – late July
Describe Recor	ded Data (s					hotos, previous ins	pections	), if avai	lable:			**Mineral S	Soils 12-24 inches Soils 12-40 inches
Remarks:													st = #OBL+FW J + UPL dominants;
Vry pit					·							ld non-domina	
·~ · · · · ·				• •		~ ~			_	• •		~	1 1 1 2000

Plot Number	HDR513							
Wetland Status	Upland							
Plot Type	WD							
Plot Date	6/1/2022							
NWI Classification	U							
ндм	N/A							
Vegetation Type	Deciduous Shrub and Sapling Regrowth							
Latitude (DD)	64.5749							
Longitude (DD)	-149.93295							



Photo Type: Soils Direction: NA



Photo Type: Vegetation Direction: E



Photo Type: Vegetation Direction: W

Plot Number	HDR514						
Wetland Status	Upland						
Plot Type	FVP						
Plot Date	6/1/2022						
NWI Classification	U						
ндм	N/A						
Vegetation Type	Open Black Spruce Forest						
Latitude (DD)	64.57527						
Longitude (DD)	-149.93422						



Photo Type: Soils Direction: NA



Photo Type: Vegetation Direction: N



Photo Type: Vegetation Direction: S

Plot Number	HDR515						
Wetland Status	Upland						
Plot Type	FVP						
Plot Date	6/1/2022						
NWI Classification	U						
ндм	N/A						
Vegetation Type	Deciduous Shrub and Sapling Regrowth						
Latitude (DD)	64.5748						
Longitude (DD)	-149.96149						



Photo Type: Soils Direction: NA



Photo Type: Vegetation Direction: N



Photo Type: Vegetation Direction: S

#### WETLAND DETERMINATION DATA FORM - Alaska Region

HOR

, Plot No: 516											
Project: Totchake	t Roa	ıd	Da	ate: (1/1/2022							
Applicant: Departm	ent o	f Trans	In	vestigators:							
Borough/City/Location	on:	West o		ZH MA							
NAD 83, Decimal Degrees	. '			HDR							
Latitude: 64,5351	90°				Waters	hed:	Roc	k Creek			
Longitude: 144, 9		/			Locatio	n Note					
Elevation (ft):											
				SUMMARY OF FINDINGS							
Are "Normal Circumsta	Presen	t?	Yes .		F	lydroph	ytic Vegetation Present?				
Significantly Disturbed	?	VEG	SOILS	S HYDRO				Hydric Soils Present?			
Naturally Problematic?		VEG	SOIL	HYDRO			Wet	land Hydrology Present?			
Remarks:					le the	Samr	Jod A	rea within a Wetland?			
					15 1116	Janip	Jieu Ai	ea within a wetland! Yes			
VEGETATION	T< 19	6, P = Pre			SUBREG		IX				
Tree Stratum DBH ≥ 3 incl	1	1/10	acre circu	ılar plot unless no	oted, absolut	te cover r	ecorded	Dominance Test worksheet:			
Species	IND	DOM	Cover	Species	IND	DOM	Cover	Number of Dominant Species That Are OBL, FACW, or FAC:  (A)			
1. None				3.			teris.	,			
2.				4.				Total Number of Dominant Species Across All Strata: (B)			
Total Tree Cover:		50% of To	otal Cove	r:	20% of To	tal Cove	۳: استنسند	Percent of Dominant Species			
Sapling/Shrub Stratum	IND	DOM	Cover	8. Rho. 410	FAC	V	10	Percent of Dominant Species That Are OBL, FACW, or FAC:  3.3 (A/B)			
1. Vac. vit.	FAC	V	10	9.		1					
2. Vac. vli	FAC	4	10	10.				Prevalence Index Worksheet			
3. pic. mar.	FACY	1	1	11.		İ		Total % Cover of: Multiply by:			
4. Ros, aci	FALLA		3	12.				OBL speciesx1 =			
5. Pop, tre	FACU		30	13.				FACW speciesx 2 =/4			
	FACH	17 1	3	14.				FAC species <u>58</u> x3 = <u>/74</u>			
6. Bet pap 7. Gal. beb.	FAC	t. 1	10	15.				FACU species 37 x4= 148			
Total Shrub Cover: 83		50% of To	otal Cove		20% of To	tal Cove	1	FACU species 3 x 4 =			
Herbaceous Stratum	IND	DOM	Cover	13.	1		110,00	UPL species $\sqrt{22}$ x 5 = $\sqrt{236}$ (B)			
1. Cha. Gma.	FACU		1	14.				Column Totals. 70 (A) (B)			
2 1	FAC		15	15.		<del> </del>		Prevalence Index = B/A = 3.29			
3. Car.	FAC	17-1	3	16.							
4.	FILE		<u> </u>	. 17.				Hydrophytic Vegetation Indicators:  Dominance Test is >50%			
5.	<u> </u>			18.		<del> </del>	<b> </b>	Prevalence Index is ≤3.0			
6.				19.				Morphological Adaptations <sup>1</sup>			
7.	<del> </del>			20.				(Provide supporting data in			
	-							Remarks or on a separate sheet)			
8.	ļ			21.		ļ		Problematic Hydrophytic Vegetation Indicators of hydric soil and wetland hydrology			
9.	ļ			22.				must be present unless disturbed or problematic.  Project Vegetation Type			
10.	ļ			23.				Project Vegetation Type			
11.	ļ			24.				DBZ			
12.				25.				Cowardin Code:			
Total Herb Cover: /9		50% of To	otal Cove	11.0	20% of To	tai Cover	:3.8	HGM Classification:			
1.Open Water	)			2. Bare ground	5		T	tlat			
Remarks: Bryophytes and L	icnens	ınay be li	stea in the	e merbaceous col	iumns			Landform:			
								Local Relief: 5/15/4 Concare			
-// I								Microtopography: Slope: Aspect:			
56-1								O alla			

HOR HOR 516

COL									r	TOUNO.	16
Profile Des	cription: D	escribe to the depth	needed	to docu	ment the presence/al	bsence	of soil in	dicators	Soil	Map Unit Name	9
	Horizon	Soil Matrix			Redox Featu	ires					
Depth (in.)	Name	Color (moist)	<u>%</u>	Type <sup>1</sup>	Color	<u>%</u>	Loc <sup>2</sup>	Mod	3 Textur	Horizon C	omments
0-3	06	10 787/1							*		
3-4	00	10427									
4-5	A	104R2/,	100		Collection de la collec	4epa66-1		APPARENT.	SKI	) two see	~ e 8"
5-15	飞	544/1	85	C	7.54R 4/4	15	M.R.C		5140	2	
		-					1				
							-	_			
					-						
								i			
<sup>1</sup> Type: C=Conce	entrations, D=I	Depletions, OX=Oxidize	d Roots	, RM = Re	duced Matrix <sup>2</sup> Locatio	n: PL=P	ore Lining	s, RC=Ro	ot Channels,	M=Matrix, CS=C	oated Sand Grains
Remarks:											(PT), Permafrost (PF)
											obbly (CB), Stony (ST)
Hydric Soil Ir	ndicators	Measure from the to	o of the	mineral	soil layer except for A	A1. A2.	L A3. A4	(15-3	15%), 35-60%	- very (v), 60-s	90% = Extremely (X)
∧ Histosol o	,	_			aces (A12)				Hydri	c Soils	
<u>∧)</u> Histic Epip				Gleyed (	, -					sent?	105
∧) Black Hist				Redox (A				-	NDCS D	rainaga Class:	(<00
		1.		•						rainage Class:	4
1.74	✓ Hydrogen Sulfide (A4)     ✓ Alaska Gleyed Pores (A15)     Depth of Organic Soils:										7
	Indicators for Problematic Hydric Soils (See Page 91/Section 4 for Problematic Hydric Soils Details)  Restrictive Layer Type:									FV55T	
[ ' ,					ange (TA4) Give de	etails of	color cha			ayer Depth:	8
Depleted I					wales (TA5)			4	Underlain b	y mineral soil v	w/chroma of ≤2
. 1	rk Surface (F	* .	Alaska	Redox w	ith 2.5Y Hue			5	Must have	Hydrophytic Ve	egetation and
N Depleted I	Dark Surface	(F7) <u>A</u>	Alaska	Gleyed v	v/o Hue 5Y or Redde	er Under	lying	F	rimary Hyd	Irology, and an	appropriate
Nedox De	pression (F8	) <u>N</u>	AA Pos	itive (mir	eral soil, 60% of hor	izon 4 iı	nches thi	-,		osition unless	disturbed or
M Red Parer	•	-	Ponded	l/Flooded	i/High Water Table (	12 inche	s or higl	her)	roblematic		
<u> </u>	low Dark Sur	face (F22) //	Low Or	ganic Ma	tter/Low Iron/High pl	H Soil/N	ew Wetl	and _	Other (e	explain in rema	rks)
HYDROLOG	Y										
		Wetland Hydro	logy in	dicators			Seco	ndary Ind	dicators (2 d	r more require	d)
	8.47	indicator is sufficier	-				N	Water-sta	ained Leave	es (B9)	
Surface W     Surface					le on Aerial Imagery			- Table 1	Patterns (E		
Saturation	er Table (A2)			ily vegeti eposits (l	ated Concave Surfac	e (88)			Rhizosphei of Reduce		g Roots (C3)(w/in 12"
Water Mar		: "		•	le Odor (C1) (w/in 12	2")			osits (C5)	u II (04)	
- 4	Deposits (B2				ter Table (C2)**	,	<u>~</u> :	Stunted c	r Stressed	Plants (D1)	
<u>∧</u> Drift Depo			Other (	Explain i	n Remarks)					ı (D2) - 5 (i) (4 t	
Al Algal Mat			<b>O</b> !' 4'				g.				te as restrictive layer
// Iron Depos				-	ogic Conditions on S of Year? <u>_V&amp;</u> 5	ite	20	-	ographic Re itral Test (D		
		s from ground surface		ting time	or real rate yes	 Wa	er Source		iliai rest (D		drology Present?
Surface Water		Yes No _	. /	Depth (ir	iches):						erology i rocciie.
Water Table Pr	resent?	Yes <u>×</u> No _		Depth (ir	ches): <u>(, ''- Slow</u>	creep	۰ ۸	۴	}	Dry Seas	son Water Table
Saturation Pres		Yes <u>/</u> No _		Depth (ir		_   "	11	ecip			ior, Western AK:
•			Х	Endosat							ay – late July
Describe Reco	rded Data (s	tream gauge, monito	ring we	II, aerial	photos, previous insp	pections	), if avail	able:			Soils 12-24 inches Soils 12-40 inches
Pomorko:											
Remarks:									ŀ	dominants > #F	st = #OBL+FW U + UPL dominants;
man Cod - Mary Jack	·- ·	4	· : /							add non-domina	

Plot Number	HDR516						
Wetland Status	Wetland						
Plot Type	WD						
Plot Date	6/1/2022						
NWI Classification	PSS1B						
ндм	Flat						
Vegetation Type	Deciduous Shrub and Sapling Regrowth						
Latitude (DD)	64.57499						
Longitude (DD)	-149.97511						



oto Type: Soils Dire



Photo Type: Vegetation Direction: N



Photo Type: Vegetation Direction: S

Plot Number	HDR517						
Wetland Status	Wetland						
Plot Type	FVP						
Plot Date	6/2/2022						
NWI Classification	PFO4/SS3B						
НСМ	Flat						
Vegetation Type	Open Black Spruce Forest						
Latitude (DD)	64.57508						
Longitude (DD)	-149.90689						



Photo Type: Vegetation Direction: N



Photo Type: Vegetation Direction: S

Photo Type:

Direction:

## WETLAND DETERMINATION DATA FORM – Alaska Region

HDR

								Plot No: 578		
Project: Totchaket Road Date: 6/2/2022										
	Applicant: Department of Transportation and Public Facilities Investigators:									
Borough/City/Location	on:	West o	f Nena	na				ZH MA		
NAD 83, Decimal Degrees										
Latitude: 64,575	502		Roc	le Creek						
Longitude: 149,96	0328	2			Locatio	n Note				
Elevation (ft):										
Are "Normal Circumstances" Present? Hvdrophytic Vegetation Present?										
		<del></del>	yes			lydroph	ytic Vegetation Present?			
Significantly Disturbed		VEG						Hydric Soils Present? 100		
Naturally Problematic?		VEG	SOIL	S HYDRO			Wet	land Hydrology Present? No		
Remarks:					is the	Samp	oled Ar	rea within a Wetland?		
VEOFTATION					CUBBES		and the	ea within a Wetland? No		
VEGETATION  Tree Stratum DBH ≥ 3 incl		6, P = Pre			SUBREG		ZA6	Dominance Test worksheet:		
	1			ular plot unless no	<del></del>		T			
Species	IND	DOM	Cover	Species	IND	DOM	Cover	Number of Dominant Species That Are OBL, FACW, or FAC:  (A)		
1. Picmar,	FACE		34	3.		ļ		Total Number of Dominant		
2.	<u> </u>			4.		<u> </u>		Species Across All Strata:(B)		
Total Tree Cover:	· · · · · · · · · · · · · · · · · · ·	<del></del>	otal Cove		20% of To	tal Cove	)r: ,	Percent of Dominant Species		
Sapling/Shrub Stratum	IND	DOM	Cover	8.			.00	That Are OBL, FACW, or FAC:(A/B)		
1. Pop. Ere.	FACU	У	40	9. Pic. anar,			8	Prevalence Index Worksheet		
2. Vac. Vit.	FAC	<b>Y</b>	20	10 Arc. uva.	. UPL		10	Total % Cover of: Multiply by:		
3. Ros. aci,	FRU		7	11. Vac. oli.	FAC		1			
4. Arc. rub,	FAC		5	12. Sal. beb.	FAC		3	$\sim$ $\sim$ 11		
5. Lin. bor.	FACU		3	13.				FACW species x 2 = / G		
6. She. can.	FACU		5	14.				FAC species $\frac{40}{x} = 120$		
7. Kin. 500.	FAC		3	15.				FACU species 6 x4 = 244		
Total Shrub Cover: 105	, ;	50% of T	otal Cove	r: 52,5	20% of Tot	al Cove	r:21	UPL species 10 x5= 50		
Herbaceous Stratum	IND	DOM	Cover	13.				Column Totals: 119 (A) 430 (B)		
1. Cha. am.	FACY	7	5	14.						
2. Cali can.	FAC	4	3	15.				Prevalence Index = B/A = 3.61		
3. Equi asv.	FAC	4	5	16.				Hydrophytic Vegetation Indicators:		
4. Cor. can.	FAKU	1	1	17.				Dominance Test is >50%		
5.			2	18.				Prevalence Index is ≤3.0		
6.				19.			`	_/\mathcal{N} Morphological Adaptations 1		
7.				20.				(Provide supporting data in Remarks or on a separate sheet)		
8.				21.				Problematic Hydrophytic Vegetation <sup>1</sup>		
9.				22.				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.		
10.				23.				Project Vegetation Type		
11.				24.				ガシっ		
12.				25.			, .	Cowardin Code:		
Total Herb Cover:	5	0% of To	otal Cove	r:	20% of Tot	al Cover	:18	To the second se		
1.Open Water				2. Bare ground	25 - le			HGM Classification: ル/A		
Remarks: Bryophytes and L	ichens	may be li	sted in the	e Herbaceous col	umns			Landform:		
Several downed, *Combined with	Mad.	TIC. MO	(A. C.)					Moond		
*Combined with	shrub	Strati	um.					Local Relief: Con VOX Microtopography: Slope: Aspect:		
		, 50	- F					Name 5 South		

	HDR
Plot No:	518

Profile Des	cription: De	escribe to th	e depth r	eeded	to docun	nent the presence/abs	ence (	of soil in	dicators	Soil	Map Unit Nam	е
	Horizon		l Matrix			Redox Feature						•
Depth (in.)	Name	Color (r	noist)	<u>%</u>	Type <sup>1</sup>	Color	<u>%</u>	Loc2	<u>Mod³</u>	Textur	e Horizon C	omments
0-1	A	LOYR	2/1	100	gilles.	Change and Prince of the Control of	photograp	***	or or	SAL	0	
1-4	В,	7,54R	43	100		at the second se	سنفين	200	ate and	VFSA	<b>4</b> 0	
4-18	Β,	104R	3/4	100	/			_	_	VFSAL	0	
							-					
<sup>1</sup> Type: C=Concentrations, D=Depletions, OX=Oxidized Roots, RM = Reduced Matrix <sup>2</sup> Location: PL=Pore Linings, RC=Root Channels, M=Matrix, CS=Coated Sand Grains												
Remarks: 刈o	Remarks:  3Texture Modifiers: Mucky (MK), Peaty (PT), Permafrost (PF) Coarse Fragments: Gravelly (GR), Cobbly (CB), Stony (ST)										obbly (CB), Stony (ST)	
	ndicators N	leasure fror	n the top	of the	mineral s	oil layer except for A1	, A2, A	43, A4	(15-35	76), 33-007	5 - Very (V), 60-5	90% = Extremely (X)
Hydric Soil Indicators Measure from the top of the mineral soil layer except for A1, A2, A3, A4   Hydric Soils  Hydric Soils  A Histic Epipedon (A2) <sup>4</sup> A Alaska Gleved (A13)  Present?										No		
	To make disjust (11)										We	
	N Hydrogen Sulfide (A4)     N Alaska Gleyed Pores (A15)       Depth of Organic Soils:     O										0	
Indicators for	Indicators for Problematic Hydric Soils (See Page 91/Section 4 for Problematic Hydric Soils Details)  Restrictive Layer Type:										None	
N Depleted I		urface (A11	) <u>N</u> A	daska (	Color Cha	ange (TA4) Give deta	ails of	color ch	ange Re	estrictive L	ayer Depth:	NA
Depleted I			1			vales (TA5)	ř '		⁴U	nderlain b	y mineral soil v	w/chroma of ≤2
N Redox Da	•	•				th 2.5Y Hue					Hydrophytic Ve	
N Redox De	Dark Surface	. ,				/o Hue 5Y or Redder   eral soil, 60% of horiz					lrology, and an osition unless	
	nt Material (F:		ě			/High Water Table (12			/ Inn	oblematic	***	
	ow Dark Surf	•				tter/Low Iron/High pH		•	,	Other (e	explain in rema	rks)
HYDROLOG	Υ											j.
		Wetland	Hydrolo	gy Inc	licators			Seco	ndary India	cators (2 c	r more require	d)
Primary Indicat		indicator is		•					Nater-staiı		=	
						e on Aerial Imagery (E			Drainage F		•	
A) Saturation	r Table (A2)		-		y vegeta posits (B	ted Concave Surface	(B8)	_				g Roots (C3)(w/in 12")
Water Mar					-	e Odor (C1) (w/in 12")			Salt Depos		d iron (C4)	
	Deposits (B2)	<b>,</b>		-		er Table (C2)**			-		Plants (D1)	
Drift Depo:						Remarks)		-7	Geomorph		• •	
M Algal Mat	or Crust (B4)			•		·		- 1	-			te as restrictive layer)
✓ Iron Depos	sits (B5)		Are (	Climatio	c/Hydrolo	gic Conditions on Site	<del>)</del>	<u>N</u> 1	Microtopog	raphic Re	lief (D4)	
A Surface So		•			this time	of Year? <u>Ye S</u>		<u>N</u> 1	AC-Neutr	al Test (D	5)	
Field Observa	-	from groun		. /		1	Wat	er Sourc	e:		Wetland Hy	drology Present?
Surface Water		Yes		. 7	Depth (ind						No	;
Water Table Pr			No			ches):					Dry Seas	son Water Table
Saturation Pres (includes capillate)			No	/	Depth (ind							ior, Westem AK:
Describe Reco	rded Data (st	Episatur eam gauge			Endosatu I, aerial p	uration hotos, previous inspe	tions)	), if avail	able:	<u> </u>	**Mineral S	ay – late July Soils 12-24 inches Soils 12-40 inches
Remarks:												st = #OBL+FW
										į.		J + UPL dominants;

Plot Number	HDR518					
Wetland Status	Upland					
Plot Type	WD					
Plot Date	6/2/2022					
NWI Classification	U					
ндм	N/A					
Vegetation Type	Deciduous Shrub and Sapling Regrowth					
Latitude (DD)	64.57502					
Longitude (DD)	-149.90319					



Photo Type: Soils Direction: NA



Photo Type: Vegetation Direction: N



Photo Type: Vegetation Direction: W

## WETLAND DETERMINATION DATA FORM – Alaska Region

HDR Plot No: 519

Project: Totchaket Road Date: 6/2/2022  Applicant: Department of Transportation and Public Facilities Investigators:												
			-	Investigators:								
Borough/City/Location	on:	West	of Nena	na		2H MA						
NAD 83, Decimal Degrees					T			HDR				
Latitude: 64,5						Watershed: Rock Creek						
Longitude: 149,	2			Location Notes:								
Elevation (ft):				·								
[ '4					I				OF FINDINGS			
Are "Normal Circumsta				<u>Ves</u>		·	lydrop	hytic Vegetation Prese				
Significantly Disturbed		VEG						Hydric Soils Prese	<u> </u>			
Naturally Problematic?		VEG	SOIL	S HYDRO			We	etland Hydrology Prese	ent? 1985			
Remarks:					Is the	Samp	oled A	Area within a Wetlar	nd?			
VEGETATION	T< 19	6, P = Pr	esent		SUBREG	ION:	IA	1				
Tree Stratum DBH ≥ 3 incl				ular plot unless no					Test worksheet:			
Species	IND	DOM	Cover	Species	IND	DOM	Cove	Number of Dominant Sp				
	<del> </del>			3.				That Are OBL, FACW, o	r FAC:(A)			
1. None.	-			4.				Total Number of Domina				
Total Tree Cover:		50% of T	otal Cove	<u> </u>	20% of To	tal Cava	P! media	Species Across All Strat	a:(B)			
	<del></del>	T				iai Cove	Γ.,	Percent of Dominant Spering	ecies / O C			
Sapling/Shrub Stratum	IND	DOM	Cover	8. Bet. pip		-	10.	That Are OBL, FACW, o	r FAC: 105 (A/B)			
1. Sal. pul.	FACW	У	15	9. Pop, tre,	FACU		1	Prevalence in	dex Worksheet			
2. Cha. cal.	PAN	Ý_	15	10. Rho, gro	, FAC		7	Total % Cover of:	Multiply by:			
3. And. pol.	OBL	. (	5	11. Rho, form	F. Acres		110		x1= /3			
4. Pic. mar.	FAKW		1	12 Vac. vit	FAC		3					
5. Das, Fru.	FAC		3	13. Avc. UVa.	UPL		3		x2= 146			
6. Bet, gla,	FAC	<b>V</b>	15	14. Vac. Uli	, FAC		3	FAC species 43	x3= <u>129</u>			
7.5al, sco.	FAC	1	5	15. Almivir.	FAC		1	FACU species //	x4= 44			
Total Shrub Cover: 88		50% of T	otal Cove		20% of Total Cover: 13 /							
Herbaceous Stratum	IND	DOM	Cover	13.	57.0			UPL species $\frac{3}{143}$ x 5 = $\frac{75}{347}$ (B)				
1. Eri, Jaz	FACW	V	40	14.				Osiami Totalo.	(·)(D)			
2. Calican.	FAC	7	3	15.	1			Prevalence index =	B/A = 2.43			
3. Ericans.	08L		5	16.								
4.0 1 1 0	FALW		ا	17.				Dominance Test	getation Indicators:			
5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			3	18.	NA.			Prevalence Inde				
6. Cop. Tap.	OBA		3	19.	*2.7			Morphological Ac				
7.	FAC			20.				(Provide support	ing data in			
8.		. 1 - 3,4 /2		21.				Remarks or on a	separate sheet) ophytic Vegetation <sup>1</sup>			
	-			22.				Indicators of hydric se	oil and wetland hydrology			
9.								must be present unless di	sturbed or problematic.			
10.		-		23.				- Floject Ve	deranou Libbs			
11.				24.				I-C2a				
12.				25.				Cowardin Code:	120			
Total Herb Cover: 55	5	0% of To	otal Cove	r:27.5	20% of Tot	al Cover	://	HGM Classification:	15 5			
1.Open Water				2. Bare ground	0	l		part .	<i>i</i> t			
Remarks: Bryophytes and L	ichens.	may be l	isted in th	e Herbaceous col	umns			Landform:	<u> </u>			
								Local Relief: None	8			
								—Microtopography:	Slope: Aspect:			
								Mod humm.	SW			
US Army Corps of En	nineers			Alaska Vers	sion 2 N				Stanter Alaska July 2020			

HD R ot No: 519

						<u> </u>				1 g f	FIOLING. 5/	7
Profile Desc	ription: De	scribe to the	depth n	eeded	to docun	nent the presence	e/absence	of soil in	dicators	s So	il Map Unit Nam	e
	Honzon		Matrix			Redox Fea				· · · · · · · · · · · · · · · · · · ·		
Depth (in.)	Name	Color (mo		%	Type <sup>1</sup>		<u>%</u>	1.002	T NA	d3 Toyt	uro Horizon C	· · · · · · · · · · · · · · · · · · ·
					туре	<u>Color</u>		Loc <sup>2</sup>	<u>Mo</u>	<u>da Text</u>	ure Horizon C	omments
0-3	Oc	10 4R	of Em	100								
3-9	0e	10 W 2/1		100	_	-		_		para sessioni	Frozen	e4"
											* .	
<b>*************************************</b>							10					
								<u></u>				
<sup>1</sup> Type: C=Conce	ntrations, D=De	pletions, OX=	Oxidized	Roots,	RM = Red	luced Matrix <sup>2</sup> Loca	ation: PL=Po	ore Lining	s, RC=F	oot Channel	s, M=Matrix, CS=0	Coated Sand Grains
Remarks:												y (PT), Permafrost (PF)
										_	• • •	cobbly (CB), Storry (ST) 90% = Extremely (X)
Hydric Soil In	dicators M	easure from	the top	of the	mineral s	oil layer except fo	or A1, A2,	A3, A4	(10	-33 /8/, 33-00	7/6 - Very (V), 00-	50 /8 - Extremely (X)
<u>√</u> Histosol or	Histel (A1)		NΤ	hick D	ark Surfa	ces (A12)				Hyo	Iric Soils	
		(ssame								-	esent?	Yes
Histic Epip	c (A3)	Coronial	/\/ A	lacka l	Redov (A	14)	-			NDCS	Drainage Class:	
∴ Hydrogen						ores (A15)						- 4
		Usalsia Caila					Sa I bada'a C	) - 9 - 10 - 4	-!!->	( t)	of Organic Soils:	
						n 4 for Problemat	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				tive Layer Type:	
		irface (A11)				ange (TA4) Give	details of	color ch	ange		Layer Depth:	411
// Depleted N			<u>///</u> A	laska A	Alpine Sv	vales (TA5)			ŀ	<sup>4</sup> Underlain	by mineral soil	w/chroma of ≤2
A Redox Dar	•	•	5			th 2.5Y Hue				⁵Must hav	e Hydrophytic V	egetation and
M Depleted D		•	<u>M</u> A	aska (	Gleyed w	o Hue 5Y or Red	ider Under	lying			ydrology, and ar	- v ·
M Redox Dep			<u> </u>	A Posi	tive (min	eral soil, 60% of h	norizon 4 ir	nches th	ick)	·=·	position unless	disturbed or
Ned Paren	t Material (F2	1)	$\underline{N}$ P	onded	/Flooded	High Water Table	e (12 inche	s or higl	her) (	problemat	IC	in saint i
Very Shallo	w Dark Surfa	ce (F22)	<u> </u>	w Org	ganic Mat	ter/Low Iron/High	pH Soil/N	ew Wetl	and	Other	(explain in rema	arks)
HYDROLOG	Y											
<del></del>		Wetland I	lydrolo	gy Inc	licators			Seco	ndary li	ndicators (2	or more require	ed) 844, 114
Primary Indicate		ndicator is su			,			N	Water-s	tained Lea	ves (B9)	
N Surface Wa						e on Aerial Image			_	e Patterns		
	Table (A2)			-		ted Concave Surf	face (B8)				_	g Roots (C3)(w/in 12")
Saturation Water Mark					posits (B	15) e Odor (C1) (w/in	40"\			ce of Reduc cosits (C5)	ced Iron (C4)	A server
<del></del>	Deposits (B2)			-		er Table (C2)**	12)			, ,	d Plants (D1)	
✓ Drift Depos						Remarks)					on (D2) - Flat @	a tol of ordine
Algal Mat o			•	`	•	•						te as restrictive layer)
$\underline{\underline{N}}$ Iron Depos					-	gic Conditions or		- ' <del>/</del>	Microto	ographic F	Relief (D4)	
✓ Surface So  Field Change	. ,				this time	of Year? <u>ye S</u>				utral Test (		
Field Observat Surface Water F		from ground Yes			Conth (in-	phon):	Wat	er Sourc	ce:			drology Present?
Surface water in		Yes			Jeptn (ind Depth (ind	# 1 m	<del></del>	Jan 1	D		Yes	
Saturation Pres	+	Yes X			Depth (inc			100	-			son Water Table ior, Westem AK:
(includes capilla				,							. *	•
Describe Recor	ded Data (stre	Episatura eam gauge, r			Endosatu I, aerial p	iration hotos, previous ir	nspections	), if avail	able:			lay – late July Soils 12-24 inches
	,	5 0 7					•		-			Soils 12-40 inches
Remarks:												st = #OBL+FW
											dominants > #F add non-domina	U + UPL dominants; ants if tie

Plot Number	HDR519					
Wetland Status	Wetland					
Plot Type	WD					
Plot Date	6/2/2022					
NWI Classification	PSS1/3B					
ндм	Flat					
Vegetation Type	Open Mixed Shrub Sedge Tundra					
Latitude (DD)	64.57484					
Longitude (DD)	-149.89999					



Photo Type: Soils Direction: NA



Photo Type: Vegetation Direction: N



Photo Type: Vegetation Direction: S

#### WETLAND DETERMINATION DATA FORM - Alaska Region

Plot No: 520 **Totchaket Road** Project: Date: Department of Transportation and Public Facilities Applicant: Investigators: Borough/City/Location: West of Nenana HDR NAD 83, Decimal Degrees Latitude: 64,57484 Watershed: Rock Creek Longitude: Location Notes: 149.898 71 Elevation (ft): SUMMARY OF FINDINGS Hydrophytic Vegetation Present? Are "Normal Circumstances" Present? VES Significantly Disturbed? VEG SOILS HYDRO Hydric Soils Present? Naturally Problematic? VEG Wetland Hydrology Present? SOILS **HYDRO** Remarks: Is the Sampled Area within a Wetland? **VEGETATION** T< 1%, P = Present SUBREGION: IAL Dominance Test worksheet: Tree Stratum DBH ≥ 3 inch 1/10 acre circular plot unless noted, absolute cover recorded Number of Dominant Species Species IND DOM **Species** IND Cover DOM Cover That Are OBL, FACW, or FAC: 1. Bet. Dal FAKY 15 3. Plumar, FACINI Total Number of Dominant FACU Species Across All Strata: (B) Total Tree Cover: 50% of Total Cover: 20% of Total Cover: Percent of Dominant Species Sapling/Shrub Stratum DOM Cover 8. Pic, war. That Are OBL, FACW, or FAC: 2 60 Prevalence Index Worksheet FAC FALL Total % Cover of: Multiply by: FAC **OBL** species 12. PAC 5 FACW species 2 13. 14. FAC species FACU 7 15. 15 FACU species Total Shrub Cover: //@ 20% of Total Cover: 23.10 50% of Total Cover: 59 **UPL** species Herbaceous Stratum IND DOM Cover 13. Column Totals: 152 14. Prevalence Index = B/A = 3. FAC 15. 16. 3 asa FACU **Hydrophytic Vegetation Indicators:** 17. Dominance Test is >50% 18. 5. Prevalence index is ≤3.0 Morphological Adaptations<sup>1</sup> 6. 19. (Provide supporting data in 7. 20. Remarks or on a separate sheet) 8. 21. Problematic Hydrophytic Vegetation<sup>1</sup> Indicators of hydric soil and wetland hydrology 22. 9. nust be present unless disturbed or problematic. Project Vegetation Type 23. 10. 24. 11. 25. 12. Cowardin Code: **Total Herb Cover:** 50% of Total Cover: 20% of Total Cover: / HGM Classification: 1.Open Water 2. Bare ground Remarks: Bryophytes and Lichens may be listed in the Herbaceous columns Local Relief: Concry Microtopography: Slope: Aspect: W Ame 30

HDR Plot No: 520

Profile Des	cription: D	escribe to the depth r	eeded	to docum	nent the presence/abs	ence	of soil in	dicators	Soil	Map Unit Nam	e	
	Horizon	Soil Matrix			Redox Feature				-			
Depth (in.)	Name	Color (moist)	<u>%</u>	Type <sup>1</sup>	Color	%	Loc <sup>2</sup>	Mod <sup>3</sup>	Textur	e Horizon C	omments	
0-2	Oi							1	1 0/10/	1.02011 0	<u> </u>	
2-4	00											
4-8	B	7.54R314	100	_		,			5/2	7		
8-13	В	10404/3	100	÷		enima.	ew.		VIERA	11		
13-19	3	2.57 4/3	100		5200	atan''	patrice.		SAL	D .		
		210 1 113	,,,,						1 27 ,-			
											:	
									'		÷.	
	<u></u>											
<sup>1</sup> Type: C=Conce	entrations, D=	Depletions, OX=Oxidized	Roots,	RM = Rec	luced Matrix <sup>2</sup> Location:	PL=Pc	re Lining:					
Remarks:			- m 1,2								/ (PT), Permafrost (PF)   obbly (CB), Stony (ST)	
The state of the s											90% = Extremely (X)	
Hydric Soil Ir	dicators	Measure from the top	of the	mineral s	oil layer except for A1	, A2, A	43, A4					
<u>₩</u> Histosol o	r Histel (A1)	N	hick D	ark Surfa	ces (A12)			٠,	Hydri	ic Soils		
M Histic Epip	pedon (A2)4	N A	laska (	Gleyed (A	<b>A13)</b>			<u> </u>	Pre	sent?	No	
Black Hist	ic (A3)	<u>N</u>	Maska	Redox (A	14)				NRCS Drainage Class: W 1			
****	Sulfide (A4)				ores (A15)		· · · · · · · · · · · · · · · · · · ·		Depth of Organic Soils:			
							None					
Depleted Below Dark Surface (A11) Alaska Color Change (TA4) Give details of color change Restrictive Layer Depth:							NIA					
Depleted Matrix (F3)  Alaska Alpine Swales (TA5)  4Underlain by mineral soil w/chroma of ≤2							w/chroma of ≤2					
Redox Dark Surface (F6)  Alaska Redox with 2.5Y Hue  Must have Hydrophytic Vegetation and								egetation and				
N Depleted [	Dark Surface	e (F7) <u>//</u> A	laska (	Gleyed w	o Hue 5Y or Redder I	Under	lying	Pr	imary Hyd	Irology, and an	appropriate	
Tredux De	oression (F8			,	eral soil, 60% of horizo			nn	ndscape p oblematic	osition unless	disturbed or	
7	it Material (F	. F			High Water Table (12			ner)				
	ow Dark Su	face (F22) /V L	ow Org	ganic Mat	ter/Low Iron/High pH	Soil/N	ew Wetla	and	Other (e	explain in rema	irks)	
HYDROLOG	Y								<u> </u>			
Primary Indicat	ors (any one	Wetland Hydrolo indicator is sufficient		iicators				ndary indi Nater-stai		or more require	( <b>D</b> )	
✓ Surface W		6.	•	ion Visibl	e on Aerial Imagery (E	37)		Orainage F				
,	r Table (A2)				ted Concave Surface					.,	g Roots (C3)(w/in 12")	
Maturation				posits (B			M	Presence o	of Reduce	d iron (C4)		
Water Mar					e Odor (C1) (w/in 12")		E	Salt Depos				
è	Deposits (B2	The second secon			er Table (C2)**		-			Plants (D1)		
✓ Drift Depos ✓ Algal Mat of			Jiner (i	=xpiain in	Remarks)		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Geomorph		` '	to oo oo ta'atii oo (oo oo o	
	<ul> <li>✓ Algal Mat or Crust (B4)</li> <li>✓ Iron Deposits (B5)</li> <li>✓ Are Climatic/Hydrologic Conditions on Site</li> <li>✓ Microtopographic Relief (D4)</li> </ul>							te as restrictive layer)				
Surface So					of Year? <u>\/@ \$</u>	_	,	AC-Neutr				
Field Observa	tions (inche	s from ground surface	<del>)</del>			Wat	er Sourc	e:	<u>`</u>	Wetland Hy	drology Present?	
Surface Water	Present?	Yes No	£		ches):					A Ja		
Water Table Pr		Yes No	A		ches):	1			ŀ	Dry Seas	son Water Table	
Saturation Pres (includes capilla		Yes No	<u> </u>	Depth (inc	ches):					SC, Inter	ior, Western AK:	
Describe Recor	ded Data (s	Episaturation tream gauge, monitor		Endosatu I. aerial p		ctions	), if avail:	able:			ay – late July Soils 12-24 inches	
	– 10		ال ۱۰۰ س	., p	, Fretheso mopel	5, 16,	,, avam				Soils 12-40 inches	
Remarks:	£ :										st = #OBL+FW	
Dry po										dominants > #Fl add non-domina	U + UPL dominants; unts if tie	

Plot Number	HDR520					
Wetland Status	Upland					
Plot Type	WD					
Plot Date	6/2/2022					
NWI Classification	U					
HGM	N/A					
Vegetation Type	Open Mixed Forest					
Latitude (DD)	64.57487					
Longitude (DD)	-149.89869					



Photo Type: Soils Direction: NA



Photo Type: Vegetation Direction: E



Photo Type: Vegetation Direction: W

## WETLAND DETERMINATION DATA FORM – Alaska Region

HDR

Plot No: 57./

	Plot No: 5 Z /														
			· · · · · · · · · · · · · · · · · · ·		Public	Facilitie	S	In	vestigators:						
Borough/City/Location	on:	West o	of Nena	ına				·	2 H	MA					
NAD 83, Decimal Degrees									HDR						
Latitude: 64,57						Waters			CCreeK						
Longitude: 149,8942 Location Not															
Elevation (ft):															
Are "Normal Circumstances" Present?								SUMMARY OF FINDINGS							
				<u> </u>				-iyaropn	ytic Vegetation Presen		10				
Significantly Disturbed		VEG			DRO	<b>P</b>		15	Hydric Soils Presen	1 4	0				
Naturally Problematic?	?	VEG	SOIL	S   HY	DRO		4,5	Wet	land Hydrology Presen	it? /	10				
Remarks:						Is the	Sami	oled Ar	ea within a Wetland	d?	1.				
							100/4	Jani Piline Land	<u> ar en la latera de la latera de la composición del composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición d</u>	<u> </u>	0				
VEGETATION  Tree Stratum DBH ≥ 3 inc		6, P = Pr				SUBREG			Dominance Te	et workehe	aet:				
		<del>,                                     </del>	r			ted, absolut		T	Number of Dominant Spec		<i>~</i>				
Species	IND	DOM	Cover	Specie	·s	IND	DOM	Cover	That Are OBL, FACW, or I		<u>(A)</u>				
1. None.				3.					Total Number of Dominant	t	Processing .				
2.				4.					Species Across All Strata:	-	<u>5 (B)</u>				
Total Tree Cover:		50% of T	otal Cove	er:		20% of To	tal Cove	er:	Percent of Dominant Spec	cies 🕖					
Sapling/Shrub Stratum	IND	DOM	Cover	8.5.	40).	FACW		5	That Are OBL, FACW, or I		<u>O</u> (A/B)				
1 Bet, pap.	FAKU	7	20	9. Sal	, beb.	FAC		10							
2. Pic. mar.	FACIN	1	1	10.20	b, aci,	FACU		5	Prevalence Ind						
3. Rho. 2001	FAC	V	65	11.					Total % Cover of:	Multiply by	<u>:                                    </u>				
4. Vaciust.	FAC	1	15	12.					OBL speciesx	(1 = <u> </u>	<u>)</u>				
5. Vac. uli,	FAC		7	13.					FACW speciesx	2= 12					
6. Pop. tre,	FACU		3	14.					FAC species 105 x 3 = 3/5						
7. Sal. Sco.	FAC		3	15.	***************************************				FACU species 34 x4= 136						
Total Shrub Cover: / ス니		50% of T	otal Cove	er: 6=	1_	20% of Tot	al Cove	r: 26 Q		~	*				
Herbaceous Stratum	IND	DOM	Cover	13.				1		x5= <u>0</u> A) <u>46</u> .	<del>2</del> (D)				
1. Geo, liv.	FAKU		3	14.					Column Totals: /45 (	A) <u>46.</u>	<u>≶</u> (B)				
2	ostili		-	15.					Prevalence Index = E	D/A = 8	19				
3.C.i.	FACU	1 /	5	16.											
1 Cali Can	FAL	$\gamma$		17.				*	Hydrophytic Vege		cators:				
5.	ļ			18.					Dominance Test is						
	-								Prevalence Index i		*				
6.				19.				ļ	Morphological Ada (Provide supporting	g data in					
7.	<u> </u>			20.					Remarks or on a se	•	•				
8.				21.					Problematic Hydrop  Indicators of hydric soil	phytic Veget Land wetlan	tation¹ d hydrology				
9.				22.					must be present unless dist	urbed or pro	blematic,				
10.				23.					Project Vege	etation Typ	e				
11.				24.					AC2						
<b>12.</b>				25.					Cowardin Code:						
Total Herb Cover: //	5	50% of To	otal Cove	r: 5,5	···	20% of Tot	al Cover	:2.2	UOM 01 - 15 - 11						
1.Open Water				2. Bare		0			HGM Classification:	A					
Remarks: Bryophytes and I					eous colu	imns			Landform:						
Several Standing d	ied b	vened	T16. MG	1.80					Local Relief: ELA						
									r w	Slope:	Aspect:				
									Sull hum.	0	NA				

HDR Plot No: 521

Profile Description: Describe to the depth needed to document the presence/absence of soil indicators  Soil Map Unit Name							е					
	Horizon Soil Matrix Redox Features											
Depth (in.)	Name	Color (moist)	<u>%</u>	Type <sup>1</sup>	<u>Color</u>	<u>%</u>	Loc <sup>2</sup>	Mod <sup>3</sup>	Texture	Horizon C	omments	
6-4	06									A 1880, 1887 A 1 2014 A 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	say in the say	
4-7	A	104R2/1	100	#####	**************************************	manual.		-	5140			
7-19	B	2.574/1	90	C	7,5422/3	10	M		SALC	Charcos Frozen	linelysians	
15		TANK THE	10	C Service					VIOLEN & 19"			
	1 200 200 200 200 200 200 200 200 200 200								*			
		22.7										
The second secon												
¹Type: C=Conc	entrations D=	l Depletions, OX=Oxidized	l Roots	RM = Re	duced Matrix 21 ocation	n: Pl =:Pr	ore Linings	BC=Root	Channels	M=Matrix CS=C	Costad Sand Crains	
M Histosol o	n <b>dicators</b> r Histel (A1)	Measure from the top	of the	mineral s	ices (A12)	<u>Cu fo</u> 1, A2,	13.	Coarse F	ragments: 0 %), 35-60% <b>Hydri</b>	Gravelly (GR), C = Very (V), 60-9 C Soils	r (PT), Permafrost (PF)   obbly (CB), Stony (ST) 00% = Extremely (X)	
T Y	pedon (A2)4	A. 34 (1)		Gleyed (	1.000					sent?	NO	
	V Black Histic (A3)     Alaska Redox (A14)       NRCS Drainage Class:     MWD							. 1				
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Indicators for Problematic Hydric Soils <sup>2</sup> (See Page 91/Section 4 for Problematic Hydric Soils Details)  Restrictive Layer Type:  Depleted Below Dark Surface (A11)  Alaska Color Change (TA4) Give details of color change  Restrictive Layer Depth:								2007			
33.4	Depleted Matrix (F3)  Alaska Color Change (TA4) Give details of color Change (TA4)  Alaska Color Change (TA4) Give details of color Change (TA4)  Alaska Color Change (TA4) Give details of color Change (TA4)  Alaska Color Change (TA4) Give details of color Change (TA4)  Alaska Color Change (TA4) Give details of color Change (TA4)  Alaska Color Change (TA4) Give details of color Change (TA4) Give de								v/chroma of ≤2			
	N Redox Dark Surface (F6) N Alaska Redox with 2.5Y Hue											
N Depleted	Dark Surface	e (F7) <u>M</u> A	laska	Gleyed w	/o Hue 5Y or Redde	r Under	lying			Hydrophytic Verology, and an	5.79	
Nedox De	pression (F8	3) <u>*</u> A	A Pos	itive (min	eral soil, 60% of hori	zon 4 ir	nches thick	7	idscape po oblematic	osition unless	disturbed or	
on and an an an an an an an an an an an an an	nt Material (F	-			/High Water Table (1		_	r)	, , , , , , , , , , , , , , , , , , ,		<u> </u>	
	low Dark Sui	rface (F22) 💯 L	ow Or	ganic Ma	tter/Low Iron/High ph	l Soil/N	ew Wetiar	nd <u>/</u>	Other (e	xplain in rema	rks)	
HYDROLOG	;Y	Motional Headral		J:								
Primary Indica	tors (any one	Wetland Hydrolo e indicator is sufficient		aicators				- 7	ators (2 o ned Leave	r more require	<b>d)</b>	
∴ Surface W		)		tion Visib	le on Aerial Imagery	(B7)			atterns (B			
	er Table (A2)				ited Concave Surface					-	g Roots (C3)(w/in 12"	
A Saturation	(A3)	No.	/larl De	eposits (B	115)		W.			d Iron (C4)		
✓ Water Mar	rks (B1)	<u>∧</u> _⊦	lydrog	en Sulfid	e Odor (C1) (w/in 12'	')	🔬 Sa	ilt Depos	its (C5)			
<del></del>	Modern Sequent Deposits (B2)											
M Drift Depo		7	Other (	Explain ir	n Remarks)		4 2 10 1		c Position			
<ul> <li>A supplied to the second</li></ul>	or Crust (B4)						4.				te as restrictive layer	
1 A A A B WAR A A A A A A A A A A A A A A A A A A	√ Iron Deposits (B5)  Are Climatic/Hydrologic Conditions on Site  Microtopographic Relief (D4)											
V 25" 1 "	Surface Soil Cracks (B6)  Typical for this time of Year?   Water Source:  Wetland Hydrology Present?											
Surface Water		Yes No		Depth (in	ches).	vvai	er Source	•		Wetland Hy	drology Present?	
Water Table P		Yes No	1		ches):	-			. L	10		
Saturation Pre-	sent?	Yes No	And the second	Depth (in		-				SC, Inter	son Water Table ior, Western AK:	
Describe Reco	rded Data (s	Episaturation tream gauge, monitor	na we	Endosati		ections	), if availah	ole:		Mid M **Mineral S	ay – late July Soils 12-24 inches	
* * * * * * * * * * * * * * * * * * *	(0			.,			,, wrundi				Soils 12-40 inches	
Remarks:									F	AC-Neutral Te	st = #OBL+FW	
Dry pit.										lominants > #FI dd non-domina	J + UPL dominants; ints if tie	

Plot Number	HDR521							
Wetland Status	Upland							
Plot Type	WD							
Plot Date	6/2/2022							
NWI Classification	U							
ндм	N/A							
Vegetation Type	Deciduous Shrub and Sapling Regrowth							
Latitude (DD)	64.57497							
Longitude (DD)	-149.89419							



Photo Type: Soils Direction: NA



Direction: N Photo Type: Vegetation



Photo Type: Vegetation Direction: S

## WETLAND DETERMINATION DATA FORM – Alaska Region

	Plot No: 522											
Project: Totchake								ate: 6/2 /2023				
Applicant: Departm			•	on and Publi	c Facilitie	es	ln	vestigators:				
Borough/City/Location	on:	West o	f Nenai	na				ZH MA				
NAD 83, Decimal Degrees								HDR #				
Latitude: 64,5	751	D					Rock Creek					
Longitude: 149.	855	793	<u></u>		Location Notes:							
Elevation (ft):		<u> </u>			-							
\ \( \tau_{\text{\tin}\text{\tetx{\text{\te}\tint{\text{\text{\text{\text{\text{\text{\tin}\text{\text{\tex{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\te\tin}\tint{\text{\text{\text{\text{\texi}\tint{\tiint{\text{\texi}\text{\text{\text{\text{\text{\text{\text{\text{\text{\ti		D	10		SUMMARY OF FINDINGS							
Are "Normal Circumsta	· · ·		yes_		F	iyaropn	ytic Vegetation Present?					
	ignificantly Disturbed? VEG SOILS HYDRO Hydric Soils Present?											
Naturally Problematic?		VEG	SOILS	S HYDRO			Wet	land Hydrology Present?				
Remarks:					Is the	Samp	oled Ar	rea within a Wetland?				
VEGETATION	T< 1%	6, P = Pre	esent		SUBREC	SION:	IAL					
Tree Stratum DBH ≥ 3 incl	1	1/10	acre circu	lar plot unless n	oted, absolu	te cover r	ecorded	Dominance Test worksheet:				
Species	IND	DOM	Cover	Species	IND	DOM	Cover	Number of Dominant Species That Are OBL, FACW, or FAC: (A)				
1. None,				3.								
2.				4.				Total Number of Dominant Species Across All Strata:  (B)				
Total Tree Cover:	- ;	50% of To	otal Cove	r:	20% of To	otal Cove	r: —	4				
Sapling/Shrub Stratum	IND	DOM	Cover	8. Arc. wa	. luph	1	3	Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)				
1. Vacivit,	FAC		10	9.	·   W1 =	<del> </del>	<u></u>	(100)				
	FAC	<del> </del>	15	10.				Prevalence Index Worksheet				
2. 1/00.01/1	FALW	17-1	2	11.				Total % Cover of:Multiply by:				
3. Pic, mal.			3	12.				OBL speciesx1=				
TOB PATE CO	FACU		3000	13.				FACW species 3 x2 = 6				
5. Rho. 500.	FAC	7	20	· · · · · · · · · · · · · · · · · · ·				- 1-7-3				
6. She. can.	FACU	*	5	14.				0 2/				
7. Sal. Sco.	FAC		7	15.		<u> </u>		FACU species x 4 = 3 6				
Total Shrub Cover: 66			otal Cove	المراجع المراجع	20% of To	tal Covei	:13.2					
Herbaceous Stratum	IND	DOM	Cover	13.	ļ	-		Column Totals: 44 (A) 234 (B)				
1. Cal, can, as	FAC	У	7-	14.				0.1/				
2. Ped. 50.	-	-		15.				Prevalence Index = B/A = 3.16				
3. Cha, ang.	FACU		l	16.				, Hydrophytic Vegetation Indicators:				
4. Eri, Vag.	FALW		<b>ブ</b>	17.				Dominance Test is >50%				
5.				18.				Prevalence Index is ≤3.0				
6.				19.				Morphological Adaptations <sup>1</sup> (Provide supporting data in				
7.				20.				Remarks or on a separate sheet)				
8.				21.				Problematic Hydrophytic Vegetation <sup>1</sup>				
9.				22.				1 Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.				
10.				23.				Project Vegetation Type				
11. /				24.		1		TICO				
12. /				25.				Cowardin Code:				
Total Herb Cover: G	<u>-</u> 5	0% of To	tal Cover	: 4.5	20% of To	tal Cover	:1.8					
1.Open Water			T	2. Bare ground	30		110	HGM Classification:				
Remarks: Bryophytes and L	ichens	may be li	sted in the					Landform:				
Several Stanting	Several Handling dead Pic. mar.							howland				
								Local Relief: None				
								Microtopography: Slope: Aspect:				
								10000 10 100				

HDR Plot No: 522

Profile Des	cription: D	escribe to the depth r	eeded	to docun	ent the presence/ab	sence (	of soil in	dicators	Soil I	Map Unit Name	)
	Horizon	Soil Matrix			Redox Feature	es			12-1	e la company	
Depth (in.)	Name	Color (moist)	%	Type <sup>1</sup>	Color	<u>%</u>	Loc <sup>2</sup>	Mod <sup>3</sup>	Texture	Horizon Co	omments
0-3	Oi	109R42						•		4	
3-4	De	WYRYI									
4-6	A	104R2/2	100	Name of the last o			est.		SILE	>	·
6-96	B	104R 3/3	100	No.	Chrg.	^	gan	~	SALE		
9-16	B	10424/2	100			-			VESAL	Frozen	~210"
N. Company						12.25					
											84 1 S
						-					
¹Type: C=Conce	entrations. D=I	Depletions, OX=Oxidized	Roots	RM = Rec	uced Matrix <sup>2</sup> Location	PI =Pc	re Linina	s RC=Root	Channels	M=Matrix CS=C	oated Sand Grains
Remarks:		Measure from the top	. \$			1		<sup>3</sup> Texture N Coarse F	nodifiers: Mu ragments: (	ucky (MK), Peaty Gravelly (GR), Co	(PT), Permafrost (PF)   bbbly (CB), Stony (ST) 0% = Extremely (X)
1 1	r Histel (A1)	1			ces (A12)	1, 7 12., 7	10,714				
П	oedon (A2)⁴	78		Gleyed (A					_	c Soils sent?	No
N Black Hist	`			Redox (A					NRCS Dr	ainage Class:	WD
Nydrogen	Hydrogen Sulfide (A4)  Alaska Gleyed Pores (A15)  Depth of Organic Soils:							4			
Indicators for	Indicators for Problematic Hydric Soils (See Page 91/Section 4 for Problematic Hydric Soils Details)  Restrictive Layer Type:										
N Depleted I	Depleted Below Dark Surface (A11) N Alaska Color Change (TA4) Give details of color change Restrictive Layer Depth:										
Depleted Matrix (F3)											
Depleted I Redox De	Redox Dark Surface (F6)  Alaska Redox with 2.5Y Hue  Depleted Dark Surface (F7)  Redox Depression (F8)  Alaska Gleyed w/o Hue 5Y or Redder Underlying  Alaska Gleyed w/o Hue 5Y or Redder Underlying  Alaska Gleyed w/o Hue 5Y or Redder Underlying  Alaska Gleyed w/o Hue 5Y or Redder Underlying  Alaska Gleyed w/o Hue 5Y or Redder Underlying  Alaska Gleyed w/o Hue 5Y or Redder Underlying  Primary Hydrology, and an appropriate landscape position unless disturbed or problematic							appropriate			
<u> </u>	ow Dark Sur	face (F22) <u>N</u> L	ow Or	ganic Ma	ter/Low Iron/High pH	Soil/N	ew Wetl	and _	Other (e	xplain in rema	rks)
HYDROLOG	Y Y									J. 74	
Surface W High Water Saturation Water Mar Sediment Drift Depoi	Water Marks (B1)  Hydrogen Sulfide Odor (C1) (w/in 12")  Salt Deposits (C5)  Stunted or Stressed Plants (D1)										
Surface Water	Present?	Yes No	-	Depth (ind	ches):	_				NOO	e e e e e e e e e e e e e e e e e e e
Water Table Pr		Yes No	ď		ches):	-			F	•	on Water Table
Saturation Pres (includes capillate) Describe Reco	ary fringe)	Yes No Episaturation tream gauge, monitor		Depth (ind Endosatu II, aerial p	ration	- ections	), if avail	able:	····	Mid Ma	or, Western AK: ay – late July oils 12-24 inches soils 12-40 inches
Remarks:	dro	india to	6.					-	ļc	AC-Neutral Tes lominants > #FL dd non-domina	J + UPL dominants;

Plot Number	HDR522							
Wetland Status	Upland							
Plot Type	WD							
Plot Date	6/2/2022							
NWI Classification	U							
ндм	N/A							
Vegetation Type	Deciduous Shrub and Sapling Regrowth							
Latitude (DD)	64.5751							
Longitude (DD)	-149.85791							



Photo Type: Soils Direction: NA



Photo Type: Vegetation Direction: N



Photo Type: Vegetation Direction: S

Plot Number	HDR523						
Wetland Status	Upland						
Plot Type	FVP						
Plot Date	6/2/2022						
NWI Classification	U						
ндм	N/A						
Vegetation Type	Open Deciduous Forest						
Latitude (DD)	64.57481						
Longitude (DD)	-149.8619						



Photo Type: Vegetation Direction: E



Photo Type: Vegetation Direction: N



Photo Type: Soils Direction: NA

Plot Number	HDR524						
Wetland Status	Upland						
Plot Type	FVP						
Plot Date	6/2/2022						
NWI Classification	U						
HGM	N/A						
Vegetation Type	Open Black Spruce Forest						
Latitude (DD)	64.575						
Longitude (DD)	-149.86368						



Photo Type: Soils Direction: NA



Direction: E Photo Type: Vegetation



Photo Type: Vegetation Direction: W

#### WETLAND DETERMINATION DATA FORM - Alaska Region

Plot No: 5 Project: **Totchaket Road** Date: 6/2/2022 Department of Transportation and Public Facilities Applicant: Investigators: Borough/City/Location: West of Nenana MA ZH NAD 83, Decimal Degrees HDR Latitude: 64.57489 Watershed: Rock Creek Longitude: 149,86924 **Location Notes:** Elevation (ft): **SUMMARY OF FINDINGS** Are "Normal Circumstances" Present? VES **Hydrophytic Vegetation Present?** Significantly Disturbed? **VEG** HYDRO Hydric Soils Present? SOILS. **SOILS** Naturally Problematic? VEG **HYDRO** Wetland Hydrology Present? Remarks: Is the Sampled Area within a Wetland? **VEGETATION** SUBREGION: IAL T< 1%, P = Present **Dominance Test worksheet:** Tree Stratum DBH ≥ 3 inch 1/10 acre circular plot unless noted, absolute cover recorded Number of Dominant Species **Species** DOM IND DOM Cover **Species** Cover That Are OBL, FACW, or FAC: 3. Mone Total Number of Dominant 2. 4. Species Across All Strata: (B) 50% of Total Cover: Total Tree Cover: 20% of Total Cover: Percent of Dominant Species Sapling/Shrub Stratum DOM IND Cover That Are OBL, FACW, or FAC: 1. Salix beb FAC FAC Prevalence Index Worksheet 2. Scolie pul 10. FREIR Total % Cover of: Multiply by: 11. 10 **OBL** species 12. FACW species 13. 14. FAC species 7 FACU 15. FACIN 5 Mar FACU species Total Shrub Cover: 117 50% of Total Cover: 56 20% of Total Cover: 77 UPL species **Herbaceous Stratum** IND DOM Cover 13. Column Totals: / 14. 500 Prevalence Index = B/A = 3.04 2. 15. 3. 16. **Hydrophytic Vegetation Indicators:** 4. 17. Dominance Test is >50% 5. 18. Prevalence Index is ≤3.0 Morphological Adaptations<sup>1</sup> 6. 19. (Provide supporting data in 7. 20. Remarks or on a separate sheet) 8. 21. Problematic Hydrophytic Vegetation<sup>1</sup> 1 Indicators of hydric soil and wetland hydrology 9. 22. must be present unless disturbed or problematic. **Project Vegetation Type** 10. 23. 24. 11. 25. Cowardin Code: 50% of Total Cover: Total Herb Cover: 20% of Total Cover: HGM Classification: 2. Bare ground 1.Open Water Remarks: Bryophytes and Lichens may be listed in the Herbaceous columns ocal Relief: Microtopography: Aspect: Slope: NA

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·- ·

HDR Plot No: 525

JOIL					and the second	the Markey			P	10t No: 5 25
Profile Des	<b>cription:</b> D	escribe to the depth	needed	l to docur	ment the presence/a	bsence (	of soil indic	cators	Soil N	Map Unit Name
	Honzon	Soil Matrix			Redox Featu				1 00	пар оттенто
D	1.		Τ.,				1		T	
Depth (in.)	Name	Color (moist)	<u>%</u>	Type <sup>1</sup>	Color	<u>%</u>	Loc <sup>2</sup>	Mod <sup>3</sup>	Texture	Horizon Comments
0-4	Oe_	10YR =	100							
4-10	B	2.54 4/1	85	C.	7.5 YR 4/4	15	M, PL		SiLo	Frozen & 9"
			-		Paris 1		À			
			<del> </del>			_				
		.4								
¹Type: C=Conce	entrations, D=I	Depletions, OX=Oxidize	d Roots	, RM = Re	duced Matrix <sup>2</sup> Location	on: PL=Pc	ore Linings,	RC=Root	Channels, N	M=Matrix, CS=Coated Sand Grains
Remarks: 🖓	nuclin hu	Dio, Vez, ich	ar o pr	12hr	landscupe s	ettiv	3.			cky (MK), Peaty (PT), Permafrost (PF)
	olewat			a 1019			0			Gravelly (GR), Cobbly (CB), Stony (ST)
		Measure from the top	v <i>&amp;⁄i (</i> of the	mineral s	coil layer except for	A1 A2	N2 A4	(15-35	%), 35-60%	= Very (V), 60-90% = Extremely (X)
1						A 1, AZ, /	43, A4	T		
M Histosol o	i sait				aces (A12)				-	Soils
<u>N</u> Histic Epip		*	1100	Gleyed (	14.5					ent?
№ Black Histic (A3)   № Alaska Redox (A14)     NRCS Drainage Class:   SPC										
№ Hydrogen Sulfide (A4)     Alaska Gleyed Pores (A15)     Depth of Organic Soils:							Signatur (in topi pieta) in the contraction of			
Indicators for Problematic Hydric Soils (See Page 91/Section 4 for Problematic Hydric Soils Details)  Restrictive Layer Type:										
N Depleted I	Below Dark S	Surface (A11) 🚺	Alaska	Color Ch	ange (TA4) Give de	etails of	color chan	ge Re	estrictive La	ayer Depth: 9"
Depleted Matrix (F3)  N Alaska Alpine Swales (TA5)  4Underlain by mineral soil w/chroma of ≤2							/ mineral soil w/chroma of ≤2			
/// Redox Da	k Surface (F	F6) 💃	Alaska	Redox w	ith 2.5Y Hue			51.4		
<u>M</u> Depleted [	Dark Surface	(F7) <u>W</u>	Alaska	Gleyed w	/o Hue 5Y or Redde	er Under	lying			lydrophytic Vegetation and ology, and an appropriate
∧ Redox Dep	pression (F8	) <u>V</u>	AA Pos	itive (min	eral soil, 60% of hor	izon 4 ir	ches thick	/		sition unless disturbed or
Ned Parer	t Material (F	(21) <u>/</u>	onded	I/Flooded	/High Water Table (	12 inche	s or highe	r) pro	oblematic	
✓ Very Shall	ow Dark Sur	face (F22) <u></u>	ow Or	ganic Ma	tter/Low Iron/High pl	H Soil/N	ew Wetlan	nd .	Other (e:	xplain in remarks)
HYDROLOG				-			,			
	· · . · · · · ·	Wetland Hydrol	ogy in	dicators			Second	lary Indic	cators (2 or	more required)
Primary Indicat	ors (any one	indicator is sufficien						-	ned Leaves	45.555
✓ Surface W	ater (A1)	N	Inunda	tion Visib	le on Aerial Imagery	(B7)			atterns (B	3000
	r Table (A2)	N	Sparse	ly Vegeta	ited Concave Surfac	e (B8)	<u> </u>	idized R	hizosphere	es along Living Roots (C3)(w/in 12")
Saturation  **Modern Mark  **Water Mark  **Modern M	(A3)	<del></del>		eposits (E	•				of Reduced	Hron (C4)
					e Odor (C1) (w/in 12	2")		It Depos		
<del>-</del>	Deposits (B2	· —			ter Table (C2)**				Stressed F	
Drift Depos N Algai Mat of			Other (	Explain ir	n Remarks)					(D2) - Seperation
. *								- 1		
	Iron Deposits (B5) Are Climatic/Hydrologic Conditions on Site									
Field Observa	tions (inche	s from ground surfac				Wat	er Source:			Wetland Hydrology Present?
Surface Water	Present?	Yes No _	<u> </u>	Depth (in	ches):	_				Yes
Water Table Pr	esent?	Yes No		Depth (in	ches): <u>5് പലോ</u>	- 1 0	9 0		-	Dry Season Water Table
Saturation Pres (includes capilla		√ Yes <u></u> No _		Depth (in	ches):	-   Y	recip.			SC, Interior, Western AK:
		Episaturation		Endosat						Mid May – late July
Describe Recoi	aea Data (st	ream gauge, monito	nng we	ıı, aerial p	onotos, previous insp	pections)	), it availab	ole:		**Mineral Soils 12-24 inches **Organic Soils 12-40 inches
Remarks:									F.	AC-Neutral Test = #OBL+FW
				• .					de	ominants > #FU + UPL dominants; dd non-dominants if tie
										ad non-dominalità il de

41 1 17 1 00

Plot Number	HDR525							
Wetland Status	Wetland							
Plot Type	WD							
Plot Date	6/2/2022							
NWI Classification	PSS1B							
ндм	Depressional							
Vegetation Type	Deciduous Shrub and Sapling Regrowth							
Latitude (DD)	64.57489							
Longitude (DD)	-149.86921							



Photo Type: Soils Direction: NA



Photo Type: Vegetation Direction: E



Photo Type: Vegetation Direction: W

Plot Number	HDR526
Wetland Status	Upland
Plot Type	FVP
Plot Date	6/2/2022
NWI Classification	U
ндм	N/A
Vegetation Type	Deciduous Shrub and Sapling Regrowth
Latitude (DD)	64.5748
Longitude (DD)	-149.86892



Photo Type: Soils Direction: NA



Photo Type: Vegetation Direction: W



Photo Type: Vegetation Direction: E

#### WETLAND DETERMINATION DATA FORM - Alaska Region

Plot No: 527 Totchaket Road Date: 6/3 12022 Project: Department of Transportation and Public Facilities Applicant: Investigators: Borough/City/Location: West of Nenana MA NAD 83, Decimal Degrees **HDR** Latitude: 64,57453 Watershed: Rock Creek Longitude: 149, 7646,8 **Location Notes:** Elevation (ft): **SUMMARY OF FINDINGS** Are "Normal Circumstances" Present? Hydrophytic Vegetation Present? 105 Significantly Disturbed? VEG SOILS HYDRO Hydric Soils Present? Naturally Problematic? **VEG** SOILS **HYDRO** Wetland Hydrology Present? Remarks: Is the Sampled Area within a Wetland? **VEGETATION** T< 1%, P = Present SUBREGION: Dominance Test worksheet: Tree Stratum DBH ≥ 3 inch 1/10 acre circular plot unless noted, absolute cover recorded Number of Dominant Species **Species** DOM Cover IND DOM Cover **Species** That Are OBL, FACW, or FAC: (A) 1. Nhne 3. **Total Number of Dominant** 4. 2. Species Across All Strata: 50% of Total Cover: 20% of Total Cover: **Total Tree Cover:** Percent of Dominant Species 8. P/2, mar. Sapling/Shrub Stratum IND DOM Cover That Are OBL, FACW, or FAC: FACW 35 9. Das. Sru. 3 1. Sal. 606. FAC FAC Prevalence Index Worksheet 10. Vac. 11. FACU 10 FAC 5 Total % Cover of: Multiply by: 2 11. Arc, rub. FALW **OBL** species 12. FAC FACW species 6 13. Rosiaci ALU 10 FAC species 133  $\times$  3 = 39 20 14. FAC 15. FACU species 2 FAW 1 20% of Total Cover: 21.6 Total Shrub Cover: 108 50% of Total Cover: UPL species IND DOM **Herbaceous Stratum** Cover 13. Column Totals: 160 (A) 14. 50 Prevalence Index = B/A = 3.09 15. 16. FACIN **Hydrophytic Vegetation Indicators:** 4. 17. Dominance Test is >50% 5. 18. Prevalence Index is ≤3.0 Morphological Adaptations<sup>1</sup> 6. 19. (Provide supporting data in 7. 20. Remarks or on a separate sheet) 8. 21. Problematic Hydrophytic Vegetation<sup>1</sup> Indicators of hydric soil and wetland hydrology 9. 22. must be present unless disturbed or problematic. **Project Vegetation Type** 10. 23. 11. 24. 25. 12. Y551 EMIB 50% of Total Cover: 26 Total Herb Cover: 20% of Total Cover: HGM Classification: 2. Bare ground 1.Open Water 2. Bare ground

Remarks: Bryophytes and Lichens may be listed in the Herbaceous columns \_andform: Standing deed Pil. mor : Lor. lar. (burned). ocal Relief: State Microtopography: Slope: Aspect: SE None

Plot No: 527

Profile Des	cription: D	escribe to the depth	needed	to docur	ment the presence/ab	sence	of soil in	dicators	Soil	Map Unit Name			
	Horizon	Soil Matrix		l Matrix Redox Features									
Depth (in.)	Name	Color (moist)	%	Type <sup>1</sup>	Color	%	Loc2	Mc	d <sup>3</sup> Textu	re Horizon Comments			
0-1	Oi	10 TR 2/2											
1-10		104R2/1								6274.03"			
1 - 10	<u>Oe</u>	10912 11								Forencz"			
	-				`	-				, ,			
										;			
	1				_		2000			Ž.			
*													
-					7 Sec. 10 Sec.	1							
	ļ.,,,												
¹Type: C=Conc	entrations, D=	Depletions, OX=Oxidize	d Roots,	, RM = Re	duced Matrix <sup>2</sup> Location	n: PL=Pc	re Lining	s, RC=R	oot Channels	, M=Matrix, CS=Coated Sand Grains			
Remarks:										lucky (MK), Peaty (PT), Permafrost (PF)			
					en in de la servición de la se					Gravelly (GR), Cobbly (CB), Stony (ST) % = Very (V), 60-90% = Extremely (X)			
Hydric Soil II	ndicators	Measure from the top	of the	mineral s	soil layer except for A	1, A2, A	43, A4	(10	-33 /8), 33-00	/4 - very (v), 60-50 /4 - Extremely (x)			
. 1	r Histel (A1)	. 1			aces (A12)				Hvdi	ric Soils			
Histic Epi	pedon (A2)	assumed) N	Alaska	Gleyed (	A13)					esent?			
Black Hist			11111	Redox (A		_			NRCS I	Orainage Class: PD			
	Sulfide (A4)		4	-	Pores (A15)			;		oth of Organic Soils: 10			
1				.*	on 4 for Problematic H	lydric S	oils Det	aile\	6 .	ive Layer Type: Fro 34			
A 6		i i			ange (TA4) Give de	10 × 11 × 1				Layer Depth:			
A A	Matrix (F3)	50 July 18			vales (TA5)	talis Ul	COIDI CII	ange					
	rk Surface (I			*	ith 2.5Y Hue			Ġ.	Underlain	by mineral soil w/chroma of ≤2			
A	Dark Surface									Hydrophytic Vegetation and			
					/o Hue 5Y or Redder					drology, and an appropriate			
- 4	pression (F8	- 2		1000	eral soil, 60% of hon			*	problemation	position unless disturbed or			
- T	nt Material (F				/High Water Table (1		_						
	low Dark Su	rface (F22) /V	_ow Org	ganic Ma	tter/Low Iron/High ph	l Soil/N	ew Wetl	and	Other (	explain in remarks)			
HYDROLOG	jΥ				-		·		1, 1, 1, 1	**			
Primary Indian	toro (ony on	Wetland Hydrol		dicators						or more required).			
Nurface W		e indicator is sufficien	•	tion Visib	le on Aerial Imagery (	(R7)			tained Leav e Patterns (				
	r Table (A2)				ited Concave Surface			2.992		eres along Living Roots (C3)(w/in 12"			
∠ Saturation	• •			eposits (E						ed Iron (C4)			
\$500 MARCHAR 1	Water Marks (B1)												
					ter Table (C2)**	r i i i i i i i i i i i i i i i i i i i	$\frac{\nu}{}$	Stunted	or Stressed	Plants (D1)			
· · ·	Drift Deposits (B3)  Other (Explain in Remarks)  Geomorphic Position (D2) Stight depression  Algal Mat or Crust (B4)  Shallow Aquitard (D3) (w/in 24", note as restrictive layer								n (⊔z) ⇒*∜ 3) (w/in 24" note as restrictive laver				
✓ Iron Depos			Climati	c/Hydrolo	ogic Conditions on Si	te	-		ographic R				
✓ Surface Soil Cracks (B6)  Typical for this time of Year?   FAC-Neutral Test (D5)													
	•	s from ground surfac				Wat	er Sourc	ce:		Wetland Hydrology Present?			
Surface Water Water Table Pr		Yes No Yes		Depth (in Depth (in	ches): ches): <u>5 ″ Slow</u> [ <sub>2</sub>	- D	201 h			yes .			
Saturation Pres	1.138	Yes <u>/*</u> No _ Yes ⊠ No			ches): <u>5 71000 (s</u> ches): <u>4"</u>		(ENT	*		Dry Season Water Table SC, Intenor, Western AK:			
(includes capill		·	,		·	-				(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)			
Describe Reco	rded Data (s	Episaturation tream gauge, monito		Endosati	uration. photos, previous inspe	ections	), if avail	able:		Mid May – late July  **Mineral Soils 12-24 inches			
				,	, p. 0.1.340 mop		,,			**Organic Soils 12-40 inches			
Remarks:			, m * -							FAC-Neutral Test = #OBL+FW			
	<u> </u>		n 수							dominants > #FU + UPL dominants; add non-dominants if tie			

Plot Number	HDR527
Wetland Status	Wetland
Plot Type	WD
Plot Date	6/3/2022
NWI Classification	PSS1/EM1B
ндм	Flat
Vegetation Type	Open Tall Willow Shrub
Latitude (DD)	64.57453
Longitude (DD)	-149.76466



Photo Type: Soils Direction: NA



Photo Type: Vegetation Direction: E



Photo Type: Vegetation Direction: W

# WETLAND DETERMINATION DATA FORM – Alaska Region

HDR

en de la companya de la companya de la companya de la companya de la companya de la companya de la companya de La companya de la co	Plot No: 5 7 8												
Project: Totchake	et Roa	ıd	Da	Date: 6/3/2022									
	nent o	f Trans	sportation	on and Publi	c Facilitie	S	'In	vestigators:					
Borough/City/Location	on:	West o	f Nena	na					A				
NAD 83, Decimal Degrees								HDR	,				
Latitude: 64,5361	5				Watershed: Rock Creek								
Longitude: 149.7	647	g			Location Notes:								
Elevation (ft):				· · · · · · · · · · · · · · · · · · ·									
70 may (4) 1 a may a 1 (C) may a 1		D	10		SUMMARY OF FINDINGS								
Are "Normal Circumsta				VC5	Hydrophytic Vegetation Present?								
Significantly Disturbed		VEG						Hydric Soils Present?	/N				
Naturally Problematic? Remarks:		VEG	SOILS	S HYDRO		·	vvet	land Hydrology Present?	N	0			
Remarks.					Is the	Samp	oled Ar	rea within a Wetland?	No	7 .			
VEGETATION	T< 19	6, P = Pre	esent		SUBREG	ION:	IAL						
Tree Stratum DBH ≥ 3 inc	h	1/10	acre circu	ular plot unless no	ted, absolut	e cover r	ecorded	Dominance Test	workshe	eet:			
Species	IND	DOM	Cover	Species	IND	DOM	Cover	Number of Dominant Species That Are OBL, FACW, or FAC	<b>:</b>	<u>5</u> (A)			
1 Pic, mer,	FACIN		37	3.				Total Number of Dominant					
2.			<b>V</b>	4				Species Across All Strata:		<u> </u>			
Total Tree Cover: —	;	50% of T	otal Cove	er:	20% of To	tal Cove	er:	Percent of Dominant Species					
Sapling/Shrub Stratum	IND	DOM	Cover	8. Vac, vit.	FAC	Y	30	That Are OBL, FACW, or FAC	: <u>/(</u>	(A/B)			
1. Sal. 6eb.	FAC	V	15	9. Arc. rub.	FAC		3						
2. Rho. gro.	FAC	4	20	10. Lin bor.	FACU		)	Prevalence Index					
3. Bet. Das.	FACU	1	10	11.					ultiply by	<u> </u>			
4 Pic. mar.	FACW		4	12.	- J	,		OBL speciesx 1 =	: <u> </u>				
5 Pop, tre,	FACU		3	13.				FACW speciesx 2 =					
6. Ros- aci,	FACU		10	14.	7			FAC species 98 x 3 =	<u> 299</u>				
7. Vac, Uli,	FAC	V	15	15.				FACU species 30 x 4 =	12	0			
Total Shrub Cover: / /		50% of To		r: 55,5	20% of Tot	al Cove	:22.4	UPL species x 5					
Herbaceous Stratum	IND	DOM	Cover	13.				Column Totals: 132 (A)					
1. Cha. ang	PAKU		3	14.									
2. Car. can.	FACU		1	15.				Prevalence Index = B/A	_ 3.	20			
3. E43, arv.	FAC	7	15	16.				Hydrophytic Vegetati					
4.	FACU	1	1	17.				Dominance Test is >5					
5. Lupiarci	FACU	1737 11	l	18.				Prevalence Index is ≤	3.0				
6.				19.				Morphological Adaptat					
7.				20.				(Provide supporting da Remarks or on a sepa		et)			
8.		~		21.				Problematic Hydrophy	tic Vege	tation <sup>1</sup>			
9.				22.				Indicators of hydric soil and must be present unless disturbe	d wetlan	d hydrology blematic			
10.				23.				Project Vegetat					
11.				24.				TOO					
12.				25.				Cowardin Code:		***************************************			
Total Herb Cover: 2   50% of Total Cover: 10,5 20% of Total Cover: 4,7													
1.Open Water	0			2. Bare ground	10			HGM Classification:					
Remarks: Bryophytes and L		-		e Herbaceous col	umns			Landform:					
Standing dead spruce (born) *Combined w/shrub stratum								Local Relief: 51521619 600	-A -				
*Combined w/sh	rub	strat.	on.		19			Microtopography: V Slop	υ <sup>ρ</sup> χ e:	Aspect:			
		•	¥					Nme 2		(8)			

HDR Plot No: 528

Profile Des	cription: [	Describe to the depth	needed	to docur	nent the presence/a	bsence	of soil indi	cators	Soil Ma	ap Unit Name	
	Horizon	Soil Matrix	il Matrix Redox Features								
Depth (in.)	Name	Color (moist)	%	Type <sup>1</sup>	Color	%	Loc2	Mod <sup>3</sup>	Texture	Horizon Co	omments
0-2	Oi										
2-3	0e										
2-7	AlB	10423/2	95	C	7,5403/3	5	m		VESALO	Frozen	095
7-11.	В	104R413	98	C	7.54R 3/3	2			VP5A4	170001	
1. 10	- 0	101210	10	0	1.0 14 13	-	M		V 1 5-100		
			-								
¹Type: C=Conc	entrations D=	Depletions, OX=Oxidize	d Roots	RM = Re	duced Matrix 2 ocation	on PI =Pi	ore Linings	RC=Root	Channels M	=Matrix CS=C	nated Sand Grains
M Histosol o			of the Thick D		aces (A12)	1. A2,	A3, A4			Very (V), 60-9	obbly (CB), Stony (ST) 0% = Extremely (X)
M Black Hist	ic (A3)	N	Alaska	Redox (A	(14)		c		NRCS Drai	nage Class:	MWD
	Sulfide (A4)		Alaska	Gleyed P	ores (A15)		^		Depth of O	rganic Soils:	3
Indicators for	Problemat	ic Hydric Soils (See	Page !	91/Section	n 4 for Problematic	Hydric S	Soils Detai	ls)	Restrictive	Layer Type:	4
N Depleted I	Below Dark	Surface (A11)	Alaska	Color Ch	ange (TA4) Give d	etails of	color char	ige Re	estrictive Lay	er Depth:	-
N Depleted I	Matrix (F3)	A)	Alaska	Alpine Sv	vales (TA5)			⁴U	nderlain by	mineral soil v	v/chroma of ≤2
∧ Redox Da	rk Surface (	F6) N	Alaska	Redox wi	ith 2.5Y Hue			58.4	uet have H	drophytic Vo	actation and
N Depleted I	Dark Surfac	e (F7)	Alaska	Gleyed w	/o Hue 5Y or Redde	er Under	lying			logy, and an	getation and appropriate
Nedox De	pression (F8	B) <u>N</u>	AA Pos	itive (min	eral soil, 60% of ho	rizon 4 i	nches thick	/		ition unless	disturbed or
Red Parer	nt Material (I	F21) <u>//</u>	Ponded	/Flooded	/High Water Table (	12 inche	s or highe	r) pro	oblematic	41	
Nery Shall	ow Dark Su	rface (F22)	Low Or	ganic Ma	tter/Low Iron/High p	H Soil/N	ew Wetlar	nd	Other (ex	plain in rema	rks)
HYDROLOG	Υ										
		Wetland Hydro	1	dicators			4.4			more require	d)
		e indicator is sufficien				-	-6.3		ned Leaves		
Surface W	r Table (A2)	The second secon			le on Aerial Imagery Ited Concave Surfac	2 2 22	7-1-4		atterns (B1		
Saturation			A CONTRACTOR OF THE PARTY OF TH	eposits (E		SE (DO)			of Reduced		Roots (C3)(w/in 12
Nater Mar					e Odor (C1) (w/in 12	2")		alt Depos		1011 (0-1)	
Sediment Deposits (B2)  Dry-Season Water Table (C2)**  Stunted or Stressed Plants (D1)											
✓ Drift Depo											
Algal Mat	⚠ Algal Mat or Crust (B4)								e as restrictive layer		
Iron Depos			Climati	c/Hydrolo	ogic Conditions on S	Site	<u>N</u> Mi	crotopog	raphic Relie	ef (D4)	
CONTRACTOR OF THE PARTY OF THE	oil Cracks (B			this time	of Year?				al Test (D5)		
Field Observa Surface Water		es from ground surfac Yes No	2.5	Depth (in	aboat.	Wa	ter Source		V	Vetland Hy	drology Present?
Water Table Pr		Yes No No	- 6	Depth (in						No	
Saturation Pres	C. P. C. C.	Yes No _	20	Depth (in							on Water Table or, Western AK:
(includes capill	ary fringe)	Episaturation	1	Endosati							ay – late July
Describe Reco	rded Data (s	stream gauge, monito				pections	), if availat	ole:		**Mineral S	soils 12-24 inches Soils 12-40 inches
Remarks: Thin Zone	& solur	atton on top	Of 6.	rozen	layer dut to	Pit	washer	J,	do	C-Neutral Tes	st = #OBL+FW J + UPL dominants;

.. . .. . ..

Plot Number	HDR528
Wetland Status	Upland
Plot Type	WD
Plot Date	6/3/2022
NWI Classification	U
ндм	N/A
Vegetation Type	Deciduous Shrub and Sapling Regrowth
Latitude (DD)	64.57514
Longitude (DD)	-149.76475



Photo Type: Soils Direction: NA



Photo Type: Vegetation Direction: N



Photo Type: Vegetation Direction: S

#### WETLAND DETERMINATION DATA FORM - Alaska Region

HDR

Plot No: 5 Project: **Totchaket Road** Date: Department of Transportation and Public Facilities Applicant: Investigators: Borough/City/Location: West of Nenana MA NAD 83, Decimal Degrees HDR Latitude: 64.535n3 Watershed: Longitude: 149,71790 **Location Notes:** Elevation (ft): **SUMMARY OF FINDINGS** Are "Normal Circumstances" Present? **Hydrophytic Vegetation Present?** Significantly Disturbed? VEG SOILS **HYDRO** Hydric Soils Present? SOILS Naturally Problematic? VEG **HYDRO** Wetland Hydrology Present? Remarks: Is the Sampled Area within a Wetland? **VEGETATION** SUBREGION: T< 1%, P = Present **Dominance Test worksheet:** Tree Stratum DBH ≥ 3 inch 1/10 acre circular plot unless noted, absolute cover recorded **Number of Dominant Species Species** IND **DOM** IND Cover **Species** DOM Cover That Are OBL, FACW, or FAC: (A) 1. Nago 3. **Total Number of Dominant** 2. 4. Species Across All Strata: (B) Total Tree Cover: 50% of Total Cover: 20% of Total Cover: Percent of Dominant Species 8. Rho Sapling/Shrub Stratum That Are OBL, FACW, or FAC: Cover (A/B) 1. Rost 9. Prevalence Index Worksheet 10. re. FACU Total % Cover of: Multiply by: 11. OBL species 12. FACW species 13. 14. FAC species 15. FACU species 50% of Total Cover: 32,5 Total Shrub Cover: 20% of Total Cover: / 3 **UPL** species Herbaceous Stratum IND DOM Cover 13. Column Totals: 14. FACU 3 15. Prevalence Index = B/A = FACU 16. FAC **Hydrophytic Vegetation Indicators:** 17. Dominance Test is >50% 5. 18. Prevalence Index is ≤3.0 6. 19. Morphological Adaptations<sup>1</sup> (Provide supporting data in 7. 20. Remarks or on a separate sheet) 8. 21. Problematic Hydrophytic Vegetation<sup>1</sup> 1 Indicators of hydric soil and wetland hydrology 22. nust be present unless disturbed or problematic. **Project Vegetation Type** 23. 10. 24. 11. 25. Cowardin Code: 20% of Total Cover: 2, 8 Total Herb Cover: /ك 50% of Total Cover: HGM Classification: 2. Bare ground 1. Open Water Remarks: Bryophytes and Lichens may be listed in the Herbaceous columns Standing deal spince (burned). ocal Relief: Microtopography: Slope: Aspect:

HDR Plot No: 529

Profile Des	cription:	Describe to th	e depth i	needed	to docun	nent the presence/ab	sence	of soil inc	dicators	Soil	Map Unit Nam	e	
4	Horizon		il Matrix			Redox Feature						-	
Depth (in.)	Name	Color (ı	moist)	<u>%</u>	Type <sup>1</sup>	Color	<u>%</u>	Loc <sup>2</sup>	Mod	i <sup>3</sup> Textu	e Horizon C	omments	
6-1	00										4: 5	***	
1-7	0e	-											
9215	B	104R	3/4	100	-	45022-	Mino	e e e		PSAL	OF.		
- N	15	10912	14	100				ļ		FML	2 100ce	elz"	
			1 191			21.12		ļ					
				-			es <sub>a</sub>						
					·	A.							
		4											
¹Type: C=Conc	ontrations D	-Donlotions O	/-Ovidiza	d Booto	PM = Pos	duced Matrix <sup>2</sup> Location	. DID		- BC-D-		Manhandria CS-C	2-4-10-10-1	
Remarks:	entrations, D-	-Depletions, O	K=Uxidize	J ROOLS,	KM = Ked	uced Matrix -Location	: PL=PC	ore Linings				Joated Sand Grains y (PT), Permafrost (PF)	
Remains.												obbly (CB), Stony (ST)	
Hydric Soil I	ndicators	Mageura from	m the ton	of the	minoral e	oil layer except for A	1 12	A2 A4	(15-	35%), 35-60%	% = Very (V), 60-	90% = Extremely (X)	
1 . 1			. )			P	1, AZ, <i>1</i>	43, A4	-			1 1 1 1 1 1 1 1	
	r Histel (A1)		- I			ces (A12)					ic Soils sent?	x   _	
1	pedon (A2) <sup>4</sup>		- I		Gleyed (A	•	90.		-			11/0	
Black Hist		`	-7		Redox (A					NRCS Drainage Class:			
	Sulfide (A4					ores (A15)			- !! - \	Depth of Organic Soils:			
1 1	ndicators for Problematic Hydric Soils (See Page 91/Section 4 for Problematic Hydric Soils Details)  Restrictive Layer Type:  Depleted Below Dark Surface (A11) Alaska Color Change (TA4) Give details of color change Restrictive Layer Depth:												
		Surrace (A11	- 1			ange (TA4) Give det	alls of	color cha	- F	1	Layer Depth:		
1	Matrix (F3)	EC)	1		•	vales (TA5)			1 (1)	'Underlain I	by mineral soil	w/chroma of ≤2	
	rk Surface (					th 2.5Y Hue					Hydrophytic V	The second of th	
486	Dark Surfac	, ,	3			o Hue 5Y or Redder					drology, and ar position unless		
	pression (Fi nt Material (	-	. 1		-	eral soil, 60% of honz			··,	oroblematic		disturbed of	
	low Dark Su	•	~ 1			/High Water Table (12		_	· -	O#(			
HYDROLOG		mace (FZZ)		.ow Oi	yanıc ıvıaı	tter/Low Iron/High pH	2011/1V	ew wella	anu	Otner (	explain in rema	arks)	
TIDROLOG	<u> </u>	Wetland	d Hydrol	oay in	licatore			Seco	ndany In	dicators (2	or more require		
Primary Indica	tors (anv on		-		aicatoi 5			· A B	-	ained Leav		eu)	
∆ Surface W	• -		- 1	•	ion Visibl	e on Aerial Imagery (l	B <b>7</b> )	. 2		Pattems (I			
	er Table (A2	)				ted Concave Surface	•	A				g Roots (C3)(w/in 12")	
✓ Saturation					eposits (B			<i>≥</i> F	resence	of Reduce	ed Iron (C4)		
	Deposits (B	2)	Dry-Season Water Table (C2)**  Stunted or Stressed Plants (D1)										
Drift Depo	sits (B3) or Crust (B4												
li li													
Field Observa		A n 401-on n 1	571 A				 Wat	er Sourc				drology Present?	
Surface Water	Present?	Yes	No	<u>X</u> 1	Depth (inc	ches):	-				No		
	ater Table Present? Yes NoX Depth (inches): Dry Season Water Table												
Saturation Pres (includes capill		Yes	_ No _	× [	Depth (ind	ches):	.				SC, Inter	ior, Western AK:	
		Episatu			Endosatu		otions	\ if a := !!	able:		Mid M	lay – late July Soils 12-24 inches	
Describe Keco	iueu Dala (S	siream gauge	, monitor	nig wei	п, аепатр	hotos, previous inspe	cuons	), ir availa	aDIE:			Soils 12-24 inches Soils 12-40 inches	
Remarks: $Q_{yy}$	Cila Mi	A h. J. "	lat 50	4016	ted.				-		FAC-Neutral To	st = #OBL+FW	
- 17 m	- 111015	, v 50 ° V			,							U + UPL dominants;	

Plot Number	HDR529
Wetland Status	Upland
Plot Type	WD
Plot Date	6/3/2022
NWI Classification	U
ндм	N/A
Vegetation Type	Deciduous Shrub and Sapling Regrowth
Latitude (DD)	64.57502
Longitude (DD)	-149.71787



Photo Type: Soils Direction: NA



Photo Type: Vegetation Direction: E



Photo Type: Vegetation Direction: W

Plot Number	HDR530
Wetland Status	Upland
Plot Type	FVP
Plot Date	6/3/2022
NWI Classification	U
ндм	N/A
Vegetation Type	Deciduous Shrub and Sapling Regrowth
Latitude (DD)	64.57494
Longitude (DD)	-149.7245



Photo Type: Soils Direction: NA



Photo Type: Vegetation Direction: S



Photo Type: Vegetation Direction: N

#### WETLAND DETERMINATION DATA FORM – Alaska Region

Plot No: 531 Totchaket Road Project: 12027 Date: Department of Transportation and Public Facilities Applicant: Investigators: Borough/City/Location: West of Nenana **HDR** NAD 83, Decimal Degrees (.4,57-4933 Latitude: Watershed: Rock Longitude: 149,73397 **Location Notes:** Elevation (ft): **SUMMARY OF FINDINGS** Are "Normal Circumstances" Present? VP5 Hydrophytic Vegetation Present? Significantly Disturbed? **VEG** SOILS HYDRO Hydric Soils Present? Naturally Problematic? **VEG** SOILS **HYDRO** Wetland Hydrology Present? Remarks: Is the Sampled Area within a Wetland? **VEGETATION** SUBREGION: TAL T< 1%, P = Present **Dominance Test worksheet:** Tree Stratum DBH ≥ 3 inch 1/10 acre circular plot unless noted, absolute cover recorded **Number of Dominant Species** Species IND Cover **Species** IND DOM Cover That Are OBL, FACW, or FAC: (A) 3. 1. None Total Number of Dominant 2. 4. Species Across All Strata: (B) 50% of Total Cover: **Total Tree Cover:** 20% of Total Cover: Percent of Dominant Species DOM Sapling/Shrub Stratum IND Cover That Are OBL, FACW, or FAC: 9. FAC Prevalence Index Worksheet 5 10. Total % Cover of: Multiply by: 11. 10 **OBL** species 12. FACU **FACW** species 13. 14. FAC species ACIA 15. FACU species 21 Total Shrub Cover: 50% of Total Cover: 20% of Total Cover: 157 **UPL** species Herbaceous Stratum IND DOM Cover 13. Column Totals: 8 5 14. b can. Prevalence Index = B/A = 3.23 15. FACU 16. **Hydrophytic Vegetation Indicators:** 4. 17. Dominance Test is >50% 5. 18. Prevalence Index is ≤3.0 6. 19. Morphological Adaptations<sup>1</sup> (Provide supporting data in 7. 20. Remarks or on a separate sheet) 8. 21. Problematic Hydrophytic Vegetation<sup>1</sup> Indicators of hydric soil and wetland hydrology 22. 9. must be present unless disturbed or problematic. **Project Vegetation Type** 10. 23. 11. 24. 25. 12. Cowardin Code: 50% of Total Cover: 20% of Total Cover: 7 **Total Herb Cover:** HGM Classification: 1. Open Water 2. Bare ground Remarks: Bryophytes and Lichens may be listed in the Herbaceous columns andform: Local Relief: 🎤 Microtopography: Slope: Aspect:

Mone

HDR Plot No: 531

Profile Des	cription: D	escribe to the depth r	needed	to docur	ment the presence/al	bsence	of soil inc	dicators	Soil M	lap Unit Name	<u> </u>
	Horizon	Soil Matrix	<del></del>		Redox Featu	res					-
Depth (in.)	Name	Color (moist)	%	Type <sup>1</sup>	Color	<u>%</u>	Loc <sup>2</sup>	Mod <sup>3</sup>	Texture	Horizon Co	omments
0-2	Oi										
2-4	0e	104R 2/1	100	-		Ĺ					
4-6	A	104R 3/2	100	_		_	_		SILO	1.44	
6-11	B	2.544/2	85	C	7.54R 4/4	15	M,RC		SILO	Frozen	09"
1,2	<u> </u>	<u> </u>									
	i i										
								* .	<u> </u>		
					Talling to the second s				<u></u>		
		Depletions, OX=Oxidized					ore Linings				AND REPORT OF THE PERSON OF TH
		idus, hyd. veg,			ite landscap	<b>.</b> .					(PT), Permafrost (PF)
position f	er probl	lematic indication	afors								obbly (CB), Stony (ST) 0% = Extremely (X)
Hydric Soil Ir	ndicators	Measure from the top	of the	mineral s	soil layer except for A	11, A2,	A3, A4				
<u>N</u> Histosol o	r Histel (A1)	<u>N</u> 1	hick D	ark Surfa	aces (A12)			.	Hydric	Soils	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
<u></u> Histic Epip	oedon (A2)4	N	llaska	Gleyed (	A13)				Pres		yes
N Black Hist	ic (A3)	N	Maska	Redox (A	(14)				NRCS Dra	inage Class:	SAD
M Hydrogen Sulfide (A4)								40			
Indicators for Problematic Hydric Soils (See Page 91/Section 4 for Problematic Hydric Soils Details)  Restrictive Layer Type:											
<u></u> Depleted I	Below Dark	Surface (A11) 🛝 A	laska	Color Ch	ange (TA4) Give de	etails of	color cha	ange Re	estrictive La	yer Depth:	9"
♠ Depleted I	Matrix (F3)		laska .	Alpine S	vales (TA5)			⁴U	Inderlain by	mineral soil v	v/chroma of ≤2
<u> </u>	rk Surface (I	F6) $\nearrow$ A	laska l	Redox w	ith 2.5Y Hue			5 <sub>N</sub>	fust have H	ydrophytic Ve	getation and
/// Depleted I			laska	Gleyed w	/o Hue 5Y or Redde	r Under	lying			ology, and an	
<u>M</u> Redox De		<del></del>			eral soil, 60% of hor			nr	ndscape po oblematic	sition unless	disturbed or
Ned Parer					/High Water Table (*		•	ner) [		the S	
/// Very Shall		rface (F22) 🔣 L	ow Org	ganic Ma	tter/Low Iron/High pl	H Soil/N	ew Wetla	and	Other (ex	plain in rema	rks)
HYDROLOG	iY 	17 I									
Primary Indicat	tors (any one	Wetland Hydrolo indicator is sufficient		dicators			_	-	cators (2 or ned Leaves	more require	d)
	• •		•	tion Visib	le on Aerial Imagery	(B7)	-		Patterns (B1		
					ited Concave Surfac			_	•	•	Roots (C3)(w/in 12")
∑ Saturation	(A3)	<u>N</u>	/larl De	eposits (E	315)				of Reduced	-	
	• •				e Odor (C1) (w/in 12	")	<u>//</u> s	Salt Depos	sits (C5)		
<u> </u>		7			ter Table (C2)**				Stressed P		
M Drift Depos			Other (	Explain ir	n Remarks)		J. w	-	ic Position		
Algal Mat of Iron Depos			~!i #:	-// h			1				e as restrictive layer)
✓ Iron Depos				-	ogic Conditions on S of Year? <u>\v&amp;</u> S	ite	4		graphic Reli al Test (D5	, ,	
•		s from ground surface		uns une	or rear: <u>ve</u>	— Wat	er Sourc				drology Present?
Surface Water		Yes No _>	-	Depth (in	ches):			-			urorogy i resenti
Water Table Pr	esent?	Yes 💢 No _		Depth (in		Ez P	recip.		<u> </u>	Ves Dry Seas	on Water Table
Saturation Pres		Yes No	[	Depth (in	ches):5"	-	•				or, Western AK:
		Episaturation		Endosat							ay – late July
Describe Reco	rded Data (s	tream gauge, monitor	ing wel	ı, aerial p	onotos, previous insp	ections	), if availa	able:			oils 12-24 inches Soils 12-40 inches
Remarks:	\$2.5								l le		st = #OBL+FW
					•				do	minants > #Fl	J + UPL dominants;
									ac	ld non-domina	nts if tie

Plot Number	HDR531							
Wetland Status	Wetland							
Plot Type	WD							
Plot Date	6/3/2022							
NWI Classification	PSS1B							
НСМ	Depressional							
Vegetation Type	Open Tall Willow Shrub							
Latitude (DD)	64.57493							
Longitude (DD)	-149.73395							



Photo Type: Soils Direction: NA



Photo Type: Vegetation Direction: N



Photo Type: Vegetation Direction: S

#### WETLAND DETERMINATION DATA FORM - Alaska Region

HDR

Plot No: 53 **Totchaket Road** Project: Date: Department of Transportation and Public Facilities Applicant: Investigators: Borough/City/Location: West of Nenana MA MJ NAD 83, Decimal Degrees **HDR** Latitude: (64,57468 Watershed: Ruck Cook Longitude: 149, 733 70 **Location Notes:** Elevation (ft): **SUMMARY OF FINDINGS** Are "Normal Circumstances" Present? **Hydrophytic Vegetation Present?** VRS Significantly Disturbed? **VEG SOILS HYDRO** Hydric Soils Present? Naturally Problematic? VEG SOILS **HYDRO** Wetland Hydrology Present? Remarks: Photos missing, Is the Sampled Area within a Wetland? **VEGETATION** T< 1%, P = Present SUBREGION: TAL **Dominance Test worksheet:** Tree Stratum DBH ≥ 3 inch 1/10 acre circular plot unless noted, absolute cover recorded Number of Dominant Species **Species** IND **DOM** Cover **Species** IND DOM Cover That Are OBL, FACW, or FAC: (A) 1. Rel, 3. Total Number of Dominant 4. Species Across All Strata: (B) 20% of Total Cover: 5.6 **Total Tree Cover:** 50% of Total Cover: Percent of Dominant Species Sapling/Shrub Stratum IND DOM Cover 8. That Are OBL, FACW, or FAC: 1. Aln. Vir. 9. 45 Prevalence Index Worksheet 10. Total % Cover of: Multiply by: 5 11. **OBL** species 12. FACW species 13. 14. FAC species 15. FACU species 20% of Total Cover: 19.6 Total Shrub Cover: 50% of Total Cover: UPL species Herbaceous Stratum IND DOM Cover 13. Column Totals: 126 14. · Can. Prevalence Index = B/A = 3.29 15. 3. 16. Hydrophytic Vegetation Indicators: 4. 17. Dominance Test is >50% 5. 18. Prevalence Index is ≤3.0 6. 19. Morphological Adaptations<sup>1</sup> (Provide supporting data in 7. 20. Remarks or on a separate sheet) 8. 21. Problematic Hydrophytic Vegetation<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic. 22. 9. **Project Vegetation Type** 10. 23. 11. 24. 12. 25. Cowardin Code: **Total Herb Cover:** 50% of Total Cover: 20% of Total Cover: HGM Classification: 2. Bare ground 20 1.Open Water Remarks: Bryophytes and Lichens may be listed in the Herbaceous columns andform: ocal Relief: Microtopography: Slope: Aspect: Nous

HDR Plot No: 532

Profile Des	crintion: D	locaribo to the den	h noodod	to door	ment the presence to		e a ail in die		CeilA	ر ن ماد انسالد	_	
FIGHE DES	1			to docu	ment the presence/a		or soil ingio	cators	) 2011 N	/lap Unit Nam	е	
	Horizon	Soil Matr			Redox Feat				T			
Depth (in.)	Name	Color (moist)	<u>%</u>	Type <sup>1</sup>	Color	<u>%</u>	Loc <sup>2</sup>	Mod <sup>3</sup>	Texture	Horizon C	<u>omments</u>	
0-2	0%								-		e e e deligio	
2-14	B	104R 4/3	100	4604-	grecis	galaci	gran.	498000-	SILO	Foozen	e 8"	
·											ž.	
				1 1 1 2 2 2 3								
								٠. :				
-												
<sup>1</sup> Type: C=Conce	entrations, D=	Depletions, OX=Oxid	zed Roots,	RM = Re	duced Matrix <sup>2</sup> Locati	on: PL=Po	re Linings,	RC=Root	Channels, I	M=Matrix, CS=0	Coated Sand Grains	
Remarks:			, *	- %-			3-	Texture M	odifiers: Mu	cky (MK), Peat	/ (PT), Permafrost (PF)	
· I											obbly (CB), Stony (ST)	
Hvdric Soil Ir	dicators	Measure from the	op of the	mineral :	soil layer except for	A1 A2 A	3 A4	(15-35	%), 35-60%	= Very (V), 60-9	90% = Extremely (X)	
	Histel (A1)				aces (A12)	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	10,711				150 3000	
)	edon (A2)4		_						- "	c Soils ent?	No	
N Black Hist	` '	* _	Alaska Alaska		W. 74-5	¥* ·					MD	
NRCS Drainage Class:       NRCS Drainage Class:         NRCS Drainage Class:       NRCS Drainage Class:         NRCS Drainage Class:       NRCS Drainage Class:         NRCS Drainage Class:       NRCS Drainage Class:         NRCS Drainage Class:       NRCS Drainage Class:         NRCS Drainage Class:       NRCS Drainage Class:									2			
									§ - 3	tive Layer Type:		
<u>N</u> Depleted E			2		ange (TA4) Give d				1 7 37	ayer Depth:		
Depleted M	Matrix (F3)		Alaska .	Alpine S	wales (TA5)			4∪	nderlain by	/ mineral soil	w/chroma of ≤2	
Redox Dai	k Surface (F	-6) <u>/</u>	Alaska	Redox w	ith 2.5Y Hue			51.4		l. (-lun - lu. 4) - 1 (		
Nepleted [	ark Surface	e (F7) <u>^</u>	Alaska	Gleyed v	//o Hue 5Y or Redd	er Underl	ying			rology, and ar	egetation and appropriate	
A Redox De	oression (F8	S) <u>~</u>	AA Pos	itive (mir	eral soil, 60% of ho	rizon 4 in	ches thick	7		sition unless	disturbed or	
Maren	t Material (F	·21) <u>/</u>	_ Ponded	/Flooded	l/High Water Table	(12 inche	s or highe	r) pro	blematic		B 3 4/8 (1) 1	
Very Shall		face (F22)	Low Org	ganic Ma	tter/Low Iron/High p	H Soil/Ne	ew Wetlan	d	Other (e	xplain in rema	ırks)	
HYDROLOG	Υ					-		* .	7 July 20		W .	
**************************************	,	Wetland Hydi		dicators						r more require	ed)	
1 -		indicator is suffici	i .			<b></b>	. ,		ned Leaves			
Surface W					le on Aerial Imagery	,		_	atterns (B	•		
		<u> </u>		iy vegeta eposits (E	ated Concave Surfac	ce (B8)	-				g Roots (C3)(w/in 12")	
Saturation Water Mar					e Odor (C1) (w/in 1	2"\		it Depos		l Iron (C4)		
	Deposits (B2	n			ter Table (C2)**	<b>-</b> )		•	. ,	Plants (D1)		
✓ Drift Depos		-, 	di .		n Remarks)				c Position			
The state of the s	or Crust (B4)		<b>- \</b> -		,		- *	-			te as restrictive layer)	
✓ Iron Depos			re Climati	c/Hydrole	ogic Conditions on S	Site			raphic Rel			
	il Cracks (B				of Year?	<del></del>	2		al Test (D5			
Field Observa	tions (inche	s from ground surf	ace)			Wate	er Source:			Wetland Hy	drology Present?	
Surface Water	Present?	Yes No	ı	Depth (in	ches):	_				No		
Water Table Pr	esent?	Yes No	<u> </u>	Depth (in	ches):				-	Drv Sea	son Water Table	
Saturation Pres		Yes No	<u>_</u>	Depth (in	ches):						ior, Western AK:	
100		Episaturation		Endosat						Mid M	ay – late July	
Describe Recor	ded Data (s	tream gauge, moni	toring wel	l, aerial p	ohotos, previous ins	pections)	, if availab	le:		**Mineral S	Soils 12-24 inches Soils 12-40 inches	
Remarks:										AC-Neutral To	st = #OBL+FW	
7											St = #OBL+FVV	

Plot Number	HDR533								
Wetland Status	Upland								
Plot Type	FVP								
Plot Date	6/3/2022								
NWI Classification	U								
НСМ	N/A								
Vegetation Type	Deciduous Shrub and Sapling Regrowth								
Latitude (DD)	64.57494								
Longitude (DD)	-149.74226								



Photo Type: Soils Direction: NA



Photo Type: Vegetation Direction: N



Photo Type: Vegetation Direction: S

#### WETLAND DETERMINATION DATA FORM - Alaska Region

Plot No: 534 Totchaket Road Project: Date: 6/3/25 Department of Transportation and Public Facilities Applicant: Investigators: Borough/City/Location: West of Nenana MA NAD 83, Decimal Degrees HDR Latitude: (4,57497 Watershed: R V Creek **Location Notes:** Longitude: 149, 75514 Elevation (ft): SUMMARY OF FINDINGS Are "Normal Circumstances" Present? **Hydrophytic Vegetation Present?** 1105 Significantly Disturbed? VEG SOILS HYDRO Hydric Soils Present? Naturally Problematic? VEG SOILS **HYDRO** Wetland Hydrology Present? Remarks: Is the Sampled Area within a Wetland? **VEGETATION** SUBREGION: IA T< 1%, P = Present **Dominance Test worksheet:** Tree Stratum DBH ≥ 3 inch 1/10 acre circular plot unless noted, absolute cover recorded Number of Dominant Species **Species** IND DOM Cover **Species** IND DOM Cover That Are OBL, FACW, or FAC: (A) 3. ·May 30 Total Number of Dominant 4. FAKU 5 Species Across All Strata: (B) **Total Tree Cover:** 50% of Total Cover: 20% of Total Cover: Percent of Dominant Species Sapling/Shrub Stratum IND DOM Cover 8. That Are OBL, FACW, or FAC: (A/B) 9. Mar FACU **Prevalence Index Worksheet** 10. FAC. 20 CINO Total % Cover of: Multiply by: FAC 11. 3. 7 **OBL** species 4 12. o du FACW species  $35^{\circ}$  x 2 = 3 13. FAC Sco. FAC species 14. 6. 15. 7. FACU species ( 20% of Total Cover: ア.フ Total Shrub Cover: 50% of Total Cover: UPL species DOM Herbaceous Stratum Cover 13. Column Totals: 77 14. can Prevalence Index = B/A = 2.4015. 16. 3. **Hydrophytic Vegetation Indicators:** 17. 4. Dominance Test is >50% 5. 18. Prevalence Index is ≤3.0 6. 19. Morphological Adaptations<sup>1</sup> (Provide supporting data in 7. 20. Remarks or on a separate sheet) 21. Problematic Hydrophytic Vegetation<sup>1</sup> 8. 1 Indicators of hydric soil and wetland hydrology 22. 9. must be present unless disturbed or problematic. **Project Vegetation Type** 10. 23. 24. 11. 25. 12. Cowardin Code: **Total Herb Cover:** 50% of Total Cover: 20% of Total Cover: **HGM Classification:** 2. Bare ground 25 - feather moss 1.Open Water Remarks: Bryophytes and Lichens may be listed in the Herbaceous columns ocal Relief: Microtopography: Slope: Aspect:

None

HDR Plot No: 534

							·			PIOLINO.	3 1	
Profile Des	cription: D	escribe to the depth r	needed	to docur	nent the presence/abs	sence	of soil ir	ndicators	So	il Map Unit Nan	ne	
	Horizon	Soil Matrix			Redox Feature	es						
Depth (in.)	Name		%	Tunel		T	1	2	-13 T-1-4			
Deptil (III.)	. ,	Color (moist)	76	Type <sup>1</sup>	Color	<u>%</u>	Loc	<sup>2</sup> Mo	<u>d³ Text</u>	ure Horizon C	<u>Comments</u>	
0-3	00		<u> </u>			ļ					V	
3-15	B	104R4/3	100	Cita-	Section .	~	420		SIL	7 Fm70	we7"	
<u> </u>										10020	<u> </u>	
-			ļ	-								
					7. Turk							
			<del> </del>	1.			<u> </u>	_				
				•								
			<u> </u>		en i		<b></b>				<u> </u>	
		L					<u></u>					
<sup>1</sup> Type: C=Conce	entrations, D=I	Depletions, OX=Oxidized	Roots,	, RM = Re	duced Matrix <sup>2</sup> Location	: PL=Pe	ore Lining	gs, RC=R	oot Channel	s, M=Matrix, CS=	Coated Sand Grains	
Remarks:				-0-4				3Textur	e Modifiers:	Mucky (MK), Pea	ty (PT), Permafrost (PF)	
								Coars	e Fragments	s: Gravelly (GR),	Cobbly (CB), Stony (ST)	
L		:	<u> </u>					(15	35%), 35-60	)% = Very (V), 60	-90% = Extremely (X)	
402.77#		1			soil layer except for A	1, A2, <i>i</i>	A3, A4		- , -			
Histosol o	r Histel (A1)	<u>~</u> 1	Thick D	ark Surfa	ices (A12)				Hyd	ric Soils	2 4	
<u></u> Mistic Epip	oedon (A2)⁴	$\simeq \sim$	Alaska	Gleyed (	A13)				♣ Pr	esent?	No	
M Black Hist	ic (A3)	N. N.	Naska	Redox (A	(14)	- 4- 1		ſ	NRCS	Drainage Class	: WD	
	Sulfide (A4)	——,			·			Ì				
	. 1 1 4				ores (A15)				. 3	of Organic Soils		
Indicators for Problematic Hydric Soils (See Page 91/Section 4 for Problematic Hydric Soils Details)  Restrictive I								tive Layer Type	1:			
<u> ∕</u> Depleted I	Below Dark S	Surface (A11) 🖊 🎉	\laska.	Color Ch	ange (TA4) Give det	ails of	color ch	nange	Restrictive	Layer Depth:		
N Depleted I	Matrix (F3)	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	laska.	Alpine Sv	vales (TA5)			4 1	⁴Underlain	by mineral soil	w/chroma of ≤2	
N Redox Da	rk Surface (F	F6) W A	Maska	Redox w	th 2.5Y Hue					_ `*	erine La companya di serine	
	Dark Surface					الماما	ما دا م			e Hydrophytic V	· · · · · · · · · · · · · · · · · ·	
_7		- /		-	/o Hue 5Y or Redder				-	ydrology, and a		
/_V_Redox De	pression (F8	3) <u>Æ</u>	A Pos	itive (min	eral soil, 60% of horiz	on 4 i	nches th	nick)	problemat	position unless	s disturbed or	
	nt Material (F	F21) 🔼 F	onded	/Flooded	/High Water Table (12	2 inche	es or hig	jher)	problemat	:-		
<u>/√</u> Very Shall	ow Dark Sur	rface (F22) 🖊 L	ow Or	ganic Ma	tter/Low Iron/High pH	Soil/N	lew Wet	land	Other	(explain in rem	arks)	
HYDROLOG	Ϋ́			,,,,						J2 14 2		
		Wetland Hydrol	oay Inc	dicators			Sacr	andany Ir	dicatore (2	or more requir	od)	
Primary Indicat	tors (any one	indicator is sufficient		uicators			2		tained Lea	-	eu)	
<u>M</u> Surface W		*	•	tion Vielh	le on Aenal Imagery (l	R71			e Patterns			
- T	r Table (A2)				ited Concave Surface						ng Roots (C3)(w/in 12")	
✓ Saturation				eposits (E		(50)	4			ced Iron (C4)	ig noots (CS)(Will, 12 )	
Water Mar					e Odor (C1) (w/in 12")	)	8 4		osits (C5)	(0.)		
d	Deposits (B2				ter Table (C2)**		- /	-		d Plants (D1)		
Drift Depos	sits (B3)				Remarks)				phic Positi	, ,		
Algal Mat	or Crust (B4)						$\underline{N}$	Shallow	Aquitard (I	03) (w/in 24", n	ote as restrictive layer)	
M Iron Depos	sits (B5)				gic Conditions on Sit	е	N	Microtop	ographic F	Relief (D4)		
7 00	oil Cracks (B			this time	of Year? <u>ye 5</u>		M	FAC-Ne	utral Test (	D5)	*	
Field Observa	tions (inche	s from ground surface	₹)/		*	Wat	ter Sour	ce:		Wetland H	ydrology Present?	
Surface Water	Present?	Yes No	<u></u> _	Depth (in	ches):	-				$  \lambda  $		
Water Table Pr	esent?	Yes No	at .	Depth (in		-				Dry Sea	son Water Table	
Saturation Pres		Yes No	<u>r                                    </u>	Depth (in	ches):	.					nor, Western AK:	
(includes capilla	ary minge)	Episaturation		Endosati	uration					Mid M	May – late July	
Describe Reco	rded Data (s				hotos, previous inspe	ctions	), if avai	ilable:		**Mineral	Soils 12-24 inches	
										**Organic	Soils 12-40 inches	
Remarks:	n pl										est = #OBL+FW	
U	d Y'									dominants > #F add non-domin	FU + UPL dominants;	
										auu non-uomin	iai iia ii iic	

41 1 1/ 1 00

Plot Number	HDR534							
Wetland Status	Upland							
Plot Type	WD							
Plot Date	6/3/2022							
NWI Classification	U							
ндм	N/A							
Vegetation Type	Open Black Spruce Forest							
Latitude (DD)	64.57497							
Longitude (DD)	-149.7551							



Photo Type: Soils Direction: NA



Photo Type: Vegetation Direction: E



Photo Type: Vegetation Direction: W

Plot Number	HDR535							
Wetland Status	Wetland							
Plot Type	FVP							
Plot Date	6/3/2022							
NWI Classification	PSS1/EM1B							
ндм	Depressional							
Vegetation Type	Open Tall Willow Shrub							
Latitude (DD)	64.57473							
Longitude (DD)	-149.76357							



Photo Type: Soils Direction: NA



Photo Type: Vegetation Direction: N



Photo Type: Vegetation Direction: W

Plot Number	HDR536							
Wetland Status	Upland							
Plot Type	FVP							
Plot Date	6/3/2022							
NWI Classification	U							
ндм	N/A							
Vegetation Type	Deciduous Shrub and Sapling Regrowth							
Latitude (DD)	64.57466							
Longitude (DD)	-149.77282							



Photo Type: Soils Direction: NA



Photo Type: Vegetation Direction: E



Photo Type: Vegetation Direction: N

#### WETLAND DETERMINATION DATA FORM - Alaska Region

Plot No: Totchaket Road Project: Date: Department of Transportation and Public Facilities Applicant: Investigators: West of Nenana Borough/City/Location: 24 NAD 83, Decimal Degrees HDR Latitude: 64,575 Watershed: Lunch Lake Longitude: Location Notes: Elevation (ft): SUMMARY OF FINDINGS Are "Normal Circumstances" Present? Hydrophytic Vegetation Present? Ves Significantly Disturbed? **VEG** HYDRO Hydric Soils Present? SOILS Naturally Problematic? VEG SOILS **HYDRO** Wetland Hydrology Present? Remarks: Is the Sampled Area within a Wetland? VEGETATION T< 1%, P = Present SUBREGION: IA Dominance Test worksheet: Tree Stratum DBH ≥ 3 inch 1/10 acre circular plot unless noted, absolute cover recorded **Number of Dominant Species** Species IND DOM IND Cover DOM **Species** Cover That Are OBL, FACW, or FAC: (A) 3. 1. one **Total Number of Dominant** 2. 4. Species Across All Strata: (B) **Total Tree Cover:** 50% of Total Cover: 20% of Total Cover: Percent of Dominant Species Sapling/Shrub Stratum IND DOM Cover 8. Ros, aci That Are OBL, FACW, or FAC: FACU 9. 6 Prevalence Index Worksheet FAC 25 10. Total % Cover of: Multiply by: 11. FACU **OBL** species 12. 7 FACU **FACW** species 13. FAC 10 14. FAC species 15. **FACU** species Total Shrub Cover: 50% of Total Cover: 40 20% of Total Cover: **UPL** species IND Herbaceous Stratum DOM Cover 13. Column Totals: 106 14. 1. Eg J. arv. FAC 0 3 15. Prevalence Index = B/A = FALU N. can, 16. Hydrophytic Vegetation Indicators: FAC 17. Dominance Test is >50% 18. Prevalence Index is ≤3.0 19. Morphological Adaptations<sup>1</sup> 1 FACU (Provide supporting data in 20. Remarks or on a separate sheet) 21. 8. Problematic Hydrophytic Vegetation<sup>1</sup> Indicators of hydric soil and wetland hydrology 9. 22. must be present unless disturbed or problematic. **Project Vegetation Type** 10. 23. 11. 24 12. 25. Cowardin Code: Total Herb Cover: 50% of Total Cover: 20% of Total Cover: F 4 **HGM Classification:** 1. Open Water 2. Bare ground 39 - miss Remarks: Bryophytes and Lichens may be listed in the Herbaceous columns Landform: ocal Relief: Microtopography: Aspect: None

HDR Plot No: 537

Profile Des	Profile Description: Describe to the depth needed to document the presence/absence of soil indicators  Soil Map Unit Name										
	Horizon	Soil Matrix			Redox Feature						
Depth (in.)	Name	Color (moist)	%	Type <sup>1</sup>	Color	%	Loc2	Мо	d <sup>3</sup> Textu	ıre Horizon C	omments
6-1	Oi										
1-7	A	104R2/2	100			_	-		- SIL	0	
7-15	B	10484/3	40	-		-			SIL	o Frozer	10911
,		10484/1	60		pitus	-	água-	-	516		
					"Si-	jā)					
							1			1	
¹Type: C=Conce	<sup>1</sup> Type: C=Concentrations, D=Depletions, OX=Oxidized Roots, RM = Reduced Matrix <sup>2</sup> Location: PL=Pore Linings, RC=Root Channels, M=Matrix, CS=Coated Sand Grains										
Remarks:	Remarks:  3Texture Modifiers: Mucky (MK), Peaty (PT), Permafrost (PF)   Coarse Fragments: Gravelly (GR), Cobbly (CB), Stony (ST)										
											obbly (CB), Stony (ST) 00% = Extremely (X)
Hydric Soil Ir	ndicators	Measure from the top	of the	mineral s	soil layer except for A1	, A2, /	A3, A4				
- A	r Histel (A1)	- AP			aces (A12)					ric Soils	A A
4586	pedon (A2)4			Gleyed (	•			ŀ		esent?	No
1988.	✓ Black Histic (A3)       ✓ Alaska Redox (A14)       NRCS Drainage Class:       ✓ ✓         NRCS Drainage Class:       ✓       Depth of Organic Soils:       ✓										1
					on 4 for Problematic H	vdric S	oils Deta	aile)		of Organic Soils: tive Layer Type:	
		State of the second			ange (TA4) Give deta				c.es	Layer Depth:	Nan
N Depleted I					vales (TA5)					by mineral soil	w/chroma of ≤2
A Redox Da	rk Surface (F	F6) <u>N</u> A	laska l	Redox w	ith 2.5Y Hue						
Depleted I	Dark Surface	e (F7) 🔑 A	laska (	Gleyed w	/o Hue 5Y or Redder	Under	ying			e Hydrophytic Vé ⁄drology, and an	- 1
Nedox De	•	- 2			eral soil, 60% of horiz				landscape problemati	position unless	disturbed or
Red Parer	•				/High Water Table (12		-	, .	У		
Very Shall	7.7	face (F22) N L	ow Org	ganic Ma	tter/Low Iron/High pH	Soil/N	ew Wetla	and	Other	(explain in rema	rks)
HYDROLOG	· Y	Wetland Hydrolo	and Inc	licatora			Coon	adam i lu	dicatara (O		
Primary Indicat	ors (any one	indicator is sufficient		licators					tained Leav	or more require	a) 
N Surface W		4		ion Visib	le on Aerial Imagery (E	37)	′ ^ ^		e Patterns		* .表 */
<del></del> ,	r Table (A2)				ited Concave Surface			_			Roots (C3)(w/in 12")
√ Saturation	(A3)	<u> </u>	/larl De	posits (E	315)		•			ed Iron (C4)	
<u></u> Water Mar					e Odor (C1) (w/in 12")		<u>N</u> s	Salt Dep	osits (C5)		4.4
4.1	Deposits (B2	4			ter Table (C2)**		,			d Plants (D1)	
Drift Depos			Other (E	Explain ir	n Remarks)				phic Position		
N Algal Mat of N Iron Depos	or Crust (B4)		limati	o/Wydrole	ogic Conditions on Site	_	/ i		Aquitara (L oographic R		te as restrictive layer)
- T	oil Cracks (B			-	of Year? <u>\vec\$</u>	7			utral Test (	- ,	
	. 21 1 1 1 1	s from ground surface			7	_ Wat	er Sourc				drology Present?
Surface Water	Present?	Yes No	<u>X</u> [	Depth (in	ches):	.				1000	3,
Water Table Pr	esent?	Yes No	<u>×</u> [	Depth (in	ches):					Dry Seas	on Water Table
Saturation Pres		Yes No	<u>×</u> .	Depth (in	ches):						or, Western AK:
•		Episaturation_		Endosati							ay – late July
Describe Recoi	roed Data (s	ream gauge, monitor	ng wel	ı, aeriai p	photos, previous inspe	ctions	), it availa	able:			Soils 12-24 inches Soils 12-40 inches
Remarks:	ž	7, 54								FAC-Neutral Te	st = #OBL+FW
Dry	pit.										J + UPL dominants;

Plot Number	HDR537							
Wetland Status	Upland							
Plot Type	WD							
Plot Date	6/4/2022							
NWI Classification	U							
НСМ	N/A							
Vegetation Type	Deciduous Shrub and Sapling Regrowth							
Latitude (DD)	64.57519							
Longitude (DD)	-149.66163							



Photo Type: Soils Direction: NA



Photo Type: Vegetation Direction: W



Photo Type: Vegetation Direction: E

#### WETLAND DETERMINATION DATA FORM – Alaska Region

1								Plot No: 538					
1													
Applicant: Departm	ent o	of Trans	portatio	n and Publi	c Facilitie	S	In	nvestigators:					
Borough/City/Location	on:	West o	f Nenan	a				24 MA					
NAD 83, Decimal Degrees								HDR					
Latitude: 64.5750	29				Watersh	red: 🗸	unch	Lake					
Longitude: 149,60	009	2,			Location Notes:								
Elevation (ft):					]								
					.,			SUMMARY OF FINDINGS					
Are "Normal Circumsta	Presen	t?	Ves	201	, F	lydroph	ytic Vegetation Present?						
Significantly Disturbed	SOILS	HYDRO	. A. O. W	4		Hydric Soils Present?							
	4 46 11 46 46 11							land Hydrology Present?					
Remarks:	s: Is the Sampled A							rea within a Wetland?					
VEGETATION	T< 19	%, P = Pre	sent		SUBREG	ION:	TAL	_					
Tree Stratum DBH ≥ 3 inch	h	1/10	acre circul	ar plot unless n	oted, absolute	e cover r	ecorded	Dominance Test worksheet:					
Species	IND	DOM	Cover	Species	IND	DOM	Cover	Number of Dominant Species					
1. None	1			3.				That Are OBL, FACW, or FAC:(A)					
2.				4. 🔬				Total Number of Dominant Species Across All Strata:  (B)					
Total Tree Cover:		50% of To	otal Cover	. •••••	20% of To	tal Cove	r:	in the second se					
Sapling/Shrub Stratum	IND	DOM	Cover	8. 🍝	-			Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)					
1. Betiala.	FAC	V	40	9.									
2. Sal 201	FACW	//	10	10.				Prevalence Index Worksheet					
3. \/\a/\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	TAC	V -	15	11.				Total % Cover of:Multiply by:					
4.	1	1		12,				OBL species x1 =					
5.				13.				FACW species / S x 2 = 26					
6.				14.		***************************************		FAC species <u>120</u> x 3 = <u>360</u>					
7.				15.				FACU species3x4 =/2					
Total Shrub Cover: 65		50% of To	otal Cover	: 32.5	20% of Tota	al Cover	:13	UPL species					
Herbaceous Stratum	IND	DOM	Cover	13.				Column Totals: 136 (A) 398 (B)					
1. Cal. can,	FAC	V	65	14.				· / - · · · · · · · · · · · · · · · · ·					
2. Rub, arc,	FAKU			15.				Prevalence Index = B/A = 2.93					
3. Rub, cha.	FALIN		3	16.				Hydrophytic Vegetation Indicators:					
4.	1	3		17.				Dominance Test is >50%					
5.	ļ			18.		<del></del>		Prevalence Index is ≤3.0					
6.			1.	19.				Morphological Adaptations <sup>1</sup>					
7.	<del> </del>			20.				(Provide supporting data in					
8.				21.				Remarks or on a separate sheet)  Problematic Hydrophytic Vegetation <sup>1</sup>					
9.				22.				Indicators of hydric soil and wetland hydrology					
10.				23.				must be present unless disturbed or problematic.  Project Vegetation Type					
11.				 <b>24</b> .				77226					
12.				 25.				Cowardin Code: 10					
Total Herb Cover:		50% of To	tal Cover	355	20% of Tota	al Cover	:14.2	P351/En18					
1.Open Water	 ን			2. Bare ground	1"		g av doos	HGM Classification:					
Remarks: Bryophytes and L	ichens	may be lis	sted in the	Herbaceous co	lumns			Landform:					
							,	Lowland					
								Local Relief: Cocart (Slight)					
								Microtopography: Slope: Aspect:					

HDR 538 Plot No:

Profile Des	cription: De	escribe to the depth	needed	to docun	nent the presence/ab	sence	of soil indi	cators	Soil M	ap Unit Name		
	Horizon	Soil Matrix			Redox Feature	es						
Depth (in.)	Name	Color (moist)	%	Type <sup>1</sup>	Color	%	Loc <sup>2</sup>	Mod <sup>3</sup>	Texture	Horizon Comments		
0-4	00	104/2/2				1						
4-8	Oa	10 42 3/1										
8-10	A	2.542/1	100	r	-	-	-	-	SILO			
11 15	3	2,544/2	70	1	7.5423/4	30	M.PL		SILO			
10-13		21. 1116	10		1. 2 110 774	20	100,52		3160	Frzenc15		
			CVC	9011	120205258		2					
			40	19	San Property Control		135					
		6.7	No. of	000	564	3		1	134	No. 2		
					100	- 3	4 2 7	50.7				
Tunor Co-Conor	L Dep	Carlatiana OV-Outline	d Doots	DM = D		DI D	Na/Arr	PA P 4				
	entrations, D=L	Depletions, OX=Oxidize	d Roots,	KM = Rec	duced Matrix *Location	1: PL=P	The same of			I=Matrix, CS=Coated Sand Grains		
Remarks:					3	1				cky (MK), Peaty (PT), Permafrost (PF) ravelly (GR), Cobbly (CB), Stony (ST)		
		-			to the	10				= Very (V), 60-90% = Extremely (X)		
Hydric Soil Ir	ndicators N	Measure from the top	of the	mineral s	oil layer except for A	1, A2,	A3, A4	2	100	1000 117		
M Histosol o	r Histel (A1)	N	Thick D	ark Surfa	ces (A12)	1011	100		Hydric	Soils		
Y Histic Epip	pedon (A2)4	N	Alaska	Gleyed (A	A13)				Pres	ent? Yes		
M Black Hist	ic (A3)	N	Alaska	Redox (A	14)				NRCS Dra	inage Class: PD		
	Sulfide (A4)	N	Alaska	Gleved P	ores (A15)					erganic Soils: 8		
	San San San San San	Company of the Compan			n 4 for Problematic H	lydric S	Soils Detail	(2)	J. T. Tana	Layer Type: Frost		
		- /			ange (TA4) Give del				estrictive La			
- V	Matrix (F3)	1			vales (TA5)	tana or	COIOI CHAI	100				
. 1	rk Surface (F	4.7			th 2.5Y Hue			0	nuenam by	mineral soil w/chroma of ≤2		
		1				11000				ydrophytic Vegetation and		
- /	Dark Surface	1			/o Hue 5Y or Redder		21.2	- TO-00		ology, and an appropriate sition unless disturbed or		
N /	pression (F8)	200			eral soil, 60% of horiz			pro	oblematic	sition unless disturbed or		
A /	nt Material (F:	7			High Water Table (1)	2.0		r) [	. Consultation			
Very Shall	ow Dark Surf	face (F22)	Low Org	ganic Mat	ter/Low Iron/High pH	Soil/N	lew Wetlar	nd A	Other (ex	explain in remarks)		
HYDROLOG	Υ											
		Wetland Hydro	0.24	dicators	100		4.1			more required)		
The second second second		indicator is sufficien					4.4	North Miles	ned Leaves			
✓ Surface W     ✓ Sur					e on Aerial Imagery (	The same of the same of	-		atterns (B1			
✓ Saturation	r Table (A2)			y vegeta eposits (B	ted Concave Surface	(B8)		10.4		s along Living Roots (C3)(w/in 12"		
Water Mar					e Odor (C1) (w/in 12"	1		It Depos	of Reduced	Iron (C4)		
- TA	Deposits (B2)				er Table (C2)**	,		N. N. 100 P. S. S. S. S. S. S. S. S. S. S. S. S. S.	Stressed P	lants (D1)		
Drift Depos					Remarks)					D2) - Flat		
	or Crust (B4)	-	-							(w/in 24", note as restrictive layer		
M Iron Depos	sits (B5)	Are	Climati	c/Hydrolo	gic Conditions on Sit	te				of (D4) - Humminsol.		
part and a state of the state of	oil Cracks (B6		MACHET I	this time	of Year? Yes	_	Y FA	C-Neutr	al Test (D5)			
Field Observa	tions (inches	from ground surfac	e)		学的 100	Wat	ter Source		- 1	Vetland Hydrology Present?		
Surface Water	Present?	Yes No _	X	Depth (inc	ches):	- 0			1	Ves		
Water Table Pr		Yes No _		Depth (inc	03/14	- Pr	recip.		W.	/Dry Season Water Table		
Saturation Pres (includes capilla		Yes No _		Depth (inc	ches):	-	-		2	SC, Interior, Western AK:		
		Episaturation_)		Endosatu					C- 18	Mid May - late July		
Describe Recor	rded Data (st	ream gauge, monito	ring wel	l, aerial p	hotos, previous inspe	ections	), if availab	ole:		**Mineral Soils 12-24 inches **Organic Soils 12-40 inches		
Remarks:								1		AC-Neutral Test = #OBL+FW minants > #FU + UPL dominants;		

Plot Number	HDR538							
Wetland Status	Wetland							
Plot Type	WD							
Plot Date	6/4/2022							
NWI Classification	PSS1/EM1B							
НСМ	Flat							
Vegetation Type	Open Tall Alder Willow Shrub							
Latitude (DD)	64.57508							
Longitude (DD)	-149.66089							



Photo Type: Soils Direction: NA



Direction: N Photo Type: Vegetation



Photo Type: Vegetation Direction: S

#### WETLAND DETERMINATION DATA FORM - Alaska Region

HDR

Plot No: 53 Totchaket Road Date: 6/4/2022 Project: Applicant: Department of Transportation and Public Facilities Investigators: Borough/City/Location: West of Nenana MA NAD 83, Decimal Degrees **HDR** Watershed: Lunch Lake Latitude: 164.57472 149,69439 Longitude: **Location Notes:** Elevation (ft): **SUMMARY OF FINDINGS** Are "Normal Circumstances" Present? **Hydrophytic Vegetation Present?** Ve5 Significantly Disturbed? VEG HYDRO Hydric Soils Present? SOILS Naturally Problematic? **VEG** SOILS **HYDRO** Wetland Hydrology Present? Remarks: Is the Sampled Area within a Wetland? SUBREGION: VEGETATION T< 1%, P = Present Dominance Test worksheet: Tree Stratum DBH ≥ 3 inch 1/10 acre circular plot unless noted, absolute cover recorded Number of Dominant Species Species IND IND DOM Cover **Species** Cover That Are OBL, FACW, or FAC: (A) 1. None 3. Total Number of Dominant 2. 4. Species Across All Strata: (B) **Total Tree Cover:** 50% of Total Cover: 20% of Total Cover: ---Percent of Dominant Species Sapling/Shrub Stratum DOM Cover That Are OBL, FACW, or FAC: 15 Prevalence Index Worksheet 10. Total % Cover of: Multiply by: 20 11. **OBL** species 12. FACU FACW species 13. FAC species 14. 15. FACU species 50% of Total Cover: 46 5 20% of Total Cover: /Q 6 Total Shrub Cover: 9 2 **UPL** species Herbaceous Stratum IND DOM Cover 13. Column Totals: / 60 14. Prevalence Index = B/A = 3.2615. 16. **Hydrophytic Vegetation Indicators:** 17. 4. Dominance Test is >50% 18. 5. Prevalence Index is ≤3.0 Morphological Adaptations<sup>1</sup> 19. 6. (Provide supporting data in 7. 20. Remarks or on a separate sheet) 21. 8. Problematic Hydrophytic Vegetation<sup>1</sup> 1 Indicators of hydric soil and wetland hydrology 22. 9. must be present unless disturbed or problematic. **Project Vegetation Type** 10. 23. 24. 11. 25. 12. Cowardin Code: 20% of Total Cover: /, 4/ Total Herb Cover: 50% of Total Cover: 3,5 **HGM** Classification: 2. Bare ground 15 - 1005 1.Open Water Remarks: Bryophytes and Lichens may be listed in the Herbaceous columns Landform: Standing dead sprice (born). ocal Relief: Microtopography: Aspect: Slope:

HDR Plot No: 539

												90	<i>[</i>
Profile Des	cription: [	escribe to the	e depth ne	eded	to docun	nent the presence/a	bsence	of soil ir	ndicator	s	Soil Ma	ap Unit Name	Э
	Horizon	Soil	Matrix			Redox Featu	ıres						
Depth (in.)	Name	Color (m	noist)	%	Type <sup>1</sup>	Color	<b>%</b>	Loc	2 M	od <sup>3</sup> T	exture	Horizon Co	nmente
6-1			.5.5.7		.,,,,,	30.01	1 70	1 200	-   - <del>  10.1</del>	-	CALCITO	TROTIZON CO	Jiiiii Cito
0-1	0,	101	7 /										
1-6	B	104R3		100							SAL		
6-18	Bz	7,54R	3/4	10D	cote	dan	_		-   -	- VI	5ALO	Frozen	C18
						*							
											~~~~~~		
¹Type: C=Conce	entrations, D=	Depletions, OX	=Oxidized	Roots,	RM = Red	luced Matrix <sup>2</sup> Location	on: PL=P	ore Linine	as. RC=F	Root Cha	nnels. M	=Matrix. CS=C	oated Sand Grains
Remarks:			** * ***********	-									(PT), Permafrost (PF)
7		,							Į.				obbly (CB), Stony (ST)
Hydric Soil Ir	ndicators	Measure from	the ten	of the	minoral a	oil layer except for	A1 A2	A2 A4	(1	5-35%), 3	5-60% =	Very (V), 60-9	0% = Extremely (X)
1 1	r Histel (A1)		A.				A 1, AZ,	A3, A4		T	· · · · · · · · · · · · · · · · · · ·		
			49.4			ces (A12)				 	lydric Prese		A1
	oedon (A2)⁴				Gleyed (/	-					·· · · · · · · · · · · · · · · · · · ·	~~	1/6
Black Hist	, ,		<u> </u>					NRCS Drainage Class: VV			WD		
✓ Hydrogen Sulfide (A4)       ✓ Alaska Gleyed Pores (A15)       Depth of Organic Soils:													
				Page 9	91/Sectio	n 4 for Problematic	Hydric S	Soils De	tails)	Res	trictive	Layer Type:	_
	Below Dark	Surface (A11)	<u> </u>	laska (	Color Ch	ange (TA4) Give d	etails of	color ch	ange	Restric	tive La	er Depth:	
N Depleted I	Matrix (F3)		N Al	aska /	Alpine Sv	vales (TA5)				⁴Under	lain by	mineral soil v	v/chroma of ≤2
Nedox Da	rk Surface (	<del>-</del> 6)	<u> </u>	aska l	Redox wi	th 2.5Y Hue				5.44.1	11		
<u> </u>	Dark Surface	e (F7)	<u> </u>	aska (	Gleyed w	o Hue 5Y or Redde	er Under	lying				drophytic Ve logy, and an	egetation and
A Redox De	pression (F8	3)	.a. 1			eral soil, 60% of ho			ick)			sition unless	
N Red Parer	nt Material (F	21)	N Po	onded	/Flooded	/High Water Table (	12 inche	es or hic	her)	probler	natic		
A /	ow Dark Su	•	. 4			ter/Low Iron/High p		_	-	Ot	her (ex	olain in rema	rks)
HYDROLOG											nor (ox	Jan III Torria	no,
	-	Wetland	Hvdrolo	av Inc	dicators			Sec	ndary	ndicator	s (2 or	more require	4)
Primary Indicat	tors (any one		-							stained l		-	*/
Surface W			a 1		ion Visib	e on Aerial Imagery	(B7)			ge Patte		` '	
	, ,					ted Concave Surfac	ce (B8)	$\underline{\mathcal{M}}$	Oxidize	ed Rhizo	spheres	s along Living	Roots (C3)(w/in 12")
Saturation	` '				eposits (B							ron (C4)	
Mater Mar	ks (B1) Deposits (B2	)\				e Odor (C1) (w/in 12 er Table (C2)**	2")			posits ((		(D4)	
Drift Depos		-)				Remarks)						ants (D1) D2) = (   e   p / 4	55/0%
Algal Mat		)	`	(2	z.xpia.ii ii	r tomanto)					•		te as restrictive layer)
M Iron Depos			Are C	limati	c/Hydrolo	gic Conditions on S	Site			pograph		-	
∆ Surface So		•			this time	of Year? <u>yes</u>				eutral Te			
Field Observa	•	_	1 A	p.		, ,	Wa	ter Sour	ce:		V	Vetland Hy	drology Present?
Surface Water Water Table Pr		Yes	V.	edit .	Depth (in: Depth (in:	,	-					No	-
Saturation Pres		Yes	_ No _∕_ No ⇒	d'	Depth (in		-		•				on Water Table or, Western AK:
(includes capilla			\$			,	—						,
Describe Reco	rded Data (s	Episatur tream gauge,			Endosati	ıration hotos, previous ins	pections	), if ava	lable.				ay – late July Soils 12-24 iriches
		A PA		J J	, p			,, wea					Soils 12-40 inches
Remarks:													st = #OBL+FW
Profile mo	154 but	not so	atura	Kd								minants > #Fl d non-domina	J + UPL dominants; nts if tie

Plot Number	HDR539						
Wetland Status	Upland						
Plot Type	WD						
Plot Date	6/4/2022						
NWI Classification	U						
ндм	N/A						
Vegetation Type	Deciduous Shrub and Sapling Regrowth						
Latitude (DD)	64.57472						
Longitude (DD)	-149.69436						



Photo Type: Soils Direction: NA



Photo Type: Vegetation Direction: E



Photo Type: Vegetation Direction: W

WETLAND DETERMINATION DATA FORM - Alaska Region Plot No: 540 Totchaket Road Date: Project: 6/4/2022 Department of Transportation and Public Facilities Applicant: Investigators: West of Nenana Borough/City/Location: NAD 83, Decimal Degrees **HDR** Watershed: Lunch Lake Latitude: 64.5747 Longitude: 149,67 Location Notes: Elevation (ft): SUMMARY OF FINDINGS Are "Normal Circumstances" Present? Hydrophytic Vegetation Present? VCS Significantly Disturbed? **VEG** Hydric Soils Present? SOILS HYDRO Naturally Problematic? **VEG** SOILS **HYDRO** Wetland Hydrology Present? Remarks: Is the Sampled Area within a Wetland? **VEGETATION** T< 1%, P = Present SUBREGION: IA 6 **Dominance Test worksheet:** 1/10 acre circular plot unless noted, absolute cover recorded Tree Stratum DBH ≥ 3 inch Number of Dominant Species IND Species IND DOM DOM Cover Cover **Species** That Are OBL, FACW, or FAC: (A) 3. **Total Number of Dominant** 2. 4. Species Across All Strata: 50% of Total Cover: 20% of Total Cover: **Total Tree Cover:** Percent of Dominant Species Sapling/Shrub Stratum IND DOM Cover That Are OBL, FACW, or FAC: 6 lΟ Prevalence Index Worksheet 10. Total % Cover of: Multiply by: 11. **OBL** species 12. O FACW species 13. 14. FAC species 15. FACU species 50% of Total Cover: 30.5 Total Shrub Cover: / / 20% of Total Cover: 12, 2 UPL species Herbaceous Stratum IND DOM Cover 13. Column Totals: 14. 1. Pol Prevalence Index = B/A = 3.43 3 15. 2. Cor. can ALU 16. **Hydrophytic Vegetation Indicators:** PACU 17. Dominance Test is >50% GALU 18. Prevalence Index is ≤3.0 Morphological Adaptations<sup>1</sup> 19. (Provide supporting data in 20. Remarks or on a separate sheet) 8. 21. Problematic Hydrophytic Vegetation<sup>1</sup> Indicators of hydric soil and wetland hydrology 9. 22. must be present unless disturbed or problematic. **Project Vegetation Type** 10. 23. 11. 24. 12. 25. 20% of Total Cover: 7. 2 **Total Herb Cover:** 50% of Total Cover: HGM Classification: 1.Open Water 2. Bare ground 20 - 1:Her Remarks: Bryophytes and Lichens may be listed in the Herbaceous columns Landform: ocal Relief: Con Carl Microtopography:

Worl

Aspect:

Remarks:

HDR Plot No: 540

FAC-Neutral Test = #OBL+FW dominants > #FU + UPL dominants;

add non-dominants if tie

Profile Des	cription: De	escribe to the	depth n	eeded	to docun	nent the presence/al	osence o	of soil indi	cators	Soil	Map Unit Nam	е		
	Horizon	Soil	Matrix			Redox Featu	res							
Depth (in.)	Name	Color (m	noist)	<u>%</u>	Type <sup>1</sup>	Color	%	Loc <sup>2</sup>	Mod	Textu	e <u>Horizon C</u>	omments		
0-2	Oi	10YR	2 2	100			,,,,,,,	MCCOCCAL AND ADDRESS OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PAR		no marganesi				
2-18	В	2.5 Y	1/3	100				سنفهيون						
										-				
						***************************************						\$ 5		
	·											\$ ·		
ula d												-		
<sup>1</sup> Type: C=Conc	entrations, D=D	epletions, OX	=Oxidized	Roots,	RM = Red	luced Matrix <sup>2</sup> Locatio	n: PL=Po	re Linings,	RC=Roc	ot Channels,	M=Matrix, CS=C	Coated Sand Grains		
Remarks:									Texture	Modifiers: M	ucky (MK), Peaty	(PT), Permafrost (PF)		
												obbly (CB), Stony (ST) 90% = Extremely (X)		
Hydric Soil II	ndicators N	Measure from	the top	of the	mineral s	oil layer except for A	1, A2, A	A3, A4	1.5	2,0), 00 00.	, , , , , , , , , , , , , , , , , , , ,	ZONO EXECUTELY (X)		
<u>No</u> Histosol o	r Histel (A1)		No T	hick D	ark Surfa	ces (A12)				Hydr	ic Soils	1947		
<u>№</u> Histic Epip	oedon (A2)4		<u>No</u> A	laska	Gleyed (A	<b>\13</b> )				Pre	sent?	No		
<u>Mo</u> Black Hist	ic (A3)		No A	laska				NRCS D	rainage Class:	WD				
Hydrogen Sulfide (A4)  No Alaska Gleyed Pores (A15)  Depth of Organic Soils:											2			
Indicators for Problematic Hydric Soils (See Page 91/Section 4 for Problematic Hydric Soils Details)  Restrictive Layer Type:														
<u>N</u>	Below Dark S	Surface (A11)	No A	laska (	Color Cha	ange (TA4) Give de	tails of	color chan	ige R	estrictive I	ayer Depth:	No.		
<u>ಗ</u> ಂ Depleted I	Matrix (F3)		<u>Na</u> A	laska <i>i</i>	Alpine Sv	vales (TA5)			4(	Jnderlain t	y mineral soil v	w/chroma of ≤2		
No Redox Da			Alo A	laska l	Redox wi	th 2.5Y Hue			5	Must have	Hydrophytic Ve	egetation and		
<u>N</u>	Dark Surface	(F7)	No A	laska (	Gleyed w	o Hue 5Y or Redde	r Underl	ying			Irology, and an			
<u></u> No Redox De	pression (F8)	)	MοA	A Posi	itive (min	eral soil, 60% of hor	izon 4 in	ches thick	" I	indscape p roblematic	osition unless	disturbed or		
No Red Parer	nt Material (F	21)	<u>N</u> o P	onded	/Flooded	High Water Table (	12 inche	s or highe	er) [P	TODIEMALIC				
<u>No_</u> Very Shall		face (F22)	No L	ow Org	ganic Mai	ter/Low Iron/High pl	H Soil/N	ew Wetlar	nd _	Other (	explain in rema	rks)		
HYDROLOG	Ϋ́										* '''			
		Wetland	-		licators						or more require	d)		
Primary Indicat		indicator is s					·			ined Leave	7	5.5 (c)		
<u>No</u> Surface W <u>No</u> High Wate						e on Aerial Imagery			-	Patterns (i	•	D 1 (00)( (1 10))		
$N_{\alpha}$ Saturation					y vegeta posits (B	ted Concave Surfac	e (DO)					Roots (C3)(w/in 12")		
<u>/√≀</u> Water Mar						e Odor (C1) (w/in 12	<b>"</b> \			sits (C5)	d Iron (C4) To	o eary		
<u>√a</u> Sediment		)	-			er Table (C2)**	,				Plants (D1)			
<u>√o</u> Drift Depo		,				Remarks)					1 (D2) - SW4(1	?		
<u>N</u> ∂ Algal Mat			1	(-		, , , , , , , , , , , , , , , , , , , ,		, .				te as restrictive layer)		
No Iron Depos			Are C	Climatio	c/Hydrolo	gic Conditions on S	ite			graphic Re				
No Surface So	oil Cracks (B6	5)				of Year? <u>√€≲</u>				ral Test (D				
Field Observa	tions (inches	from ground	d surface	) ,			Wate	er Source	:		Wetland Hy	drology Present?		
Surface Water	Present?	Yes	_ No	<u>/_</u> [	Depth (ind	ches):	_				1 1 x			
Water Table Pr		Yes	_ No		Depth (ind	,	_				Dry Seas	son Water Table		
Saturation Pres (includes capillate)		Yes	_ No	<u>/ [</u>	Depth (ind	ches):	-				SC, Inter	ior, Western AK:		
Describe Reco	rded Data (st	Episatura ream gauge,			Endosatı I, aerial p	ıration hotos, previous insp	ections)	, if availat	ole:			ay – late July Soils 12-24 inches		

Plot Number	HDR540						
Wetland Status	Upland						
Plot Type	WD						
Plot Date	6/4/2022						
NWI Classification	U						
ндм	N/A						
Vegetation Type	Deciduous Shrub and Sapling Regrowth						
Latitude (DD)	64.5747						
Longitude (DD)	-149.67777						



Photo Type: Soils Direction: NA



Photo Type: Vegetation Direction: N



Photo Type: Vegetation Direction: S

#### WETLAND DETERMINATION DATA FORM - Alaska Region

HDR

	Plot No: 54/												
Project: Totchake	t Roa	ıd		-			Da	ate: 6/4/7822					
Applicant: Departm	ent o	f Trans	portation	on and Public	c Facilitie	S	In	vestigators:					
Borough/City/Location	n:	West o	f Nenai	na				2H MA					
NAD 83, Decimal Degrees							45	HDR					
Latitude: 64,57								ch Lake					
Longitude: 149,63	24	3			Location Notes:								
Elevation (ft):													
Are "Normal Circumsta	ncec"	Drocon	+2	1		L	lydroph	SUMMARY OF FINDINGS  bytic Vegetation Present?					
Significantly Disturbed?		VEG		Y <i>ES</i> B HYDRO	`	<u>I</u>	iyulopi	722					
Naturally Problematic?		VEG	SOILS				Mot	Hydric Soils Present?					
Remarks:		VLG	JOIL	S ITT DRO		,	vvei	land Hydrology Present?					
					Is the	Samp	oled A	rea within a Wetland?					
VEGETATION	T< 19	6, P = Pre	esent		SUBREG	ION:	IAL						
Tree Stratum DBH ≥ 3 inch				ılar plot unless no				Dominance Test worksheet:					
Species	IND	DOM	Cover	Species	IND	DOM	Cover	Number of Dominant Species					
1. None				3.	51000			That Are OBL, FACW, or FAC:(A)					
2.				4.				Total Number of Dominant Species Across All Strata:  (B)					
Total Tree Cover: 50% of Total Cover: 20% of Total Cover: Percent of Dominant Species													
Sapling/Shrub Stratum	IND	DOM	Cover	8. Vac 01:	FAC		7	That Are OBL, FACW, or FAC: (A/B)					
1. Bet our	FACU		5	9.541 bels	FAC		10						
2. Pop. tre	FACU	V	15	10./ in bor			1	Prevalence Index Worksheet					
3. Rho are	FAC	4/	30	11.	2//			Total % Cover of: Multiply by:					
4. She can.	FACU	Control of	1	12.				OBL speciesx1=					
5. Vac vit	FAC		5	13.				FACW speciesx 2 =					
6. Pic, mar,	FACW		7	14.				FAC species $59 \times 3 = 177$					
7. Arci UVa	UPL		25	15.				FACU species 23 x 4 = 92					
Total Shrub Cover: 78	:	50% of To	otal Cove	r: 39	20% of Tot	al Cover	:15.6	UPL species 3 x 5 = 15					
Herbaceous Stratum	IND	DOM	Cover	13.				Column Totals: 86 (A) 286 (B)					
1. Cor can	FACU		/	14.									
2. P. 1. 20.			1	15.				Prevalence Index = B/A = 3.33					
3. Cul can.	FAC	V	7	16.				Hydrophytic Vegetation Indicators:					
4. Unknown galairoid	_	( :	1	<b>17.</b>				Dominance Test is >50%					
5.	į.			18.	1.			Prevalence Index is ≤3.0					
6.				19.				Morphological Adaptations <sup>1</sup>					
7.				20.				(Provide supporting data in Remarks or on a separate sheet)					
8.				.21.				Problematic Hydrophytic Vegetation <sup>1</sup>					
9.				22.				¹ Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.					
10.				23.				Project Vegetation Type					
11.				24.				1000					
<b>12.</b>				25.				Cowardin Code:					
Total Herb Cover: 10	5	0% of To	tal Cove	: 5	20% of Tot	al Cover	: 2	-6					
1.Open Water	0			2. Bare ground	15			HGM Classification: ル/み					
Remarks: Bryophytes and L	ichens	may be li	sted in the	Herbaceous col	umns			Landform:					
								Local Relief:					
								Microtopography: Slope: Aspect:					

ot No: 541

SUIL				.1.					P	lot No: 5	41
Profile Desc	cription: De	escribe to the depth	needed	to docun	nent the presence/abs	sence o	of soil indic	ators	Soil M	1ap Unit Name	9
	Horizon	Soil Matrix			Redox Feature				I		
Depth (in.)	Name	Color (moist)	<u>%</u>	Type <sup>1</sup>	Color	%	Loc <sup>2</sup>	Mod <sup>3</sup>	Texture	Horizon Co	nmmente
0-1	0.		1 70	.,,,,,		70	<u> </u>	MOG	TOXIGIO	TIONZON OC	SHIP CHO
1-2	A	104R3/1	100	o.	Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction of the Contraction o	djates.	e de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de l	~~~	SILC	)	
2-15	B	104R4/3	100	State of State of	Grant Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the	diss	- Opposition	Ritters	5140	Frozen	e 15"
		- 1								·	
	,	er er er er er er er er er er er er er e							· . ·		
		+ 1 a .									
			٧.						·		
<sup>1</sup> Type: C=Conce	ntrations, D=[	Depletions, OX=Oxidize	d Roots,	RM = Rec	luced Matrix <sup>2</sup> Location	: PL≂Po	re Linings, F	RC=Root	Channels, M	и=Matrix, CS=C	oated Sand Grains
)					oil layer except for A	1, A2, <i>A</i>		Coarse Fr	agments: G 6), 35-60%	Fravelly (GR), Co = Very (V), 60-9	(PT), Permafrost (PF)   bbbly (CB), Stony (ST) 0% = Extremely (X)
Histosol or Histic Epip	Histel (A1) edon (A2)4			ark Surfa Gleyed ( <i>l</i>	ices (A12) A13)				_	Soils ent?	N.
Black Histi				Redox (A		The second second			NRCS Dra	ainage Class:	Wo
<u></u> Mydrogen	Sulfide (A4)	N	Alaska	Gleyed P	ores (A15)				Depth of C	Organic Soils:	
Table 1 and the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the			z		n 4 for Problematic H			S 20 1000	Restrictive	e Layer Type:	M8000-
					ange (TA4) Give det	ails of o	color chan	ge Re	strictive La	ayer Depth:	
<u></u> Depleted №		- >			vales (TA5)			⁴Ur	derlain by	/ mineral soil v	v/chroma of ≤2
Redox Dar	•				th 2.5Y Hue o Hue 5Y or Redder	l landard		· ·		lydrophytic Ve	- ;-
Redox Dep				•	eral soil, 60% of honz					ology, and an esition unless	
Red Paren		,		-	/High Water Table (12			' nro	blematic		61 61
✓ Very Shall					tter/Low Iron/High pH				Other (ex	xplain in rema	rks)
HYDROLOG	Y										4 T
1.1546 1.511 26		Wetland Hydrol	ogy Ind	dicators		·	Second	ary Indic	ators (2 oi	more require	<b>d)</b>
Primary Indicat	ors (any one	indicator is sufficien	t)				<u>N</u> wa	iter-stain	ed Leaves	s (B9)	
<u>M</u> Surface W	ater (A1)	<u>N</u>	Inundat	ion Visibl	le on Aerial Imagery (I	B <b>7</b> )	<u> </u>	ainage P	atterns (B	10) (*§a.)	
Migh Water	r Table (A2)	4	Sparse	ly Vegeta	ted Concave Surface	(B8)	<u></u>	idized RI	nizosphere	es along Living	Roots (C3)(w/in 12")
<u></u> Saturation		<u>N</u>	Marl De	eposits (B	15)		<u>M</u> Pre	esence o	f Reduced	I Iron (C4)	
Water Mark     Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Wat					e Odor (C1) (w/in 12")		· .	it Deposi			
Sediment □	Deposits (B2		-		er Table (C2)**					Plants (D1)	a èm
Drift Depos			Other (I	Explain in	Remarks)					(D2) = depre	te as restrictive layer)
Iron Depos	7.1		Climati	c/Hydrolc	ogic Conditions on Site	е	900		raphic Rel		ic as restrictive layer)
	il Cracks (Be	THE CALL BANK		this time	of Year? <u>Yes</u>				al Test (D5		
	200 mary	s from ground surfac	V	5 . 0 . 0	, ,	Wat	er Source:			Wetland Hy	drology Present?
Surface Water I Water Table Pro		Yes No Yes No		Depth (in:	ches): ches):	-	-			No	
Saturation Pres	ent?	Yes No _	.1	Depth (inc		-					on Water Table or, Western AK:
(includes capilla	ary tringe)	Episaturation	•	Endosatu	uration	1				Mid M	ay – late July
Describe Recor	ded Data (st				hotos, previous inspe	ections)	, if availab	le:		**Mineral S	Soils 12-24 inches Soils 12-40 inches
Remarks:									F		st = #OBL+FW
									d		J + UPL dominants;

\*\* 1 1/ 1 00

Plot Number	HDR541
Wetland Status	Upland
Plot Type	WD
Plot Date	6/4/2022
NWI Classification	U
НСМ	N/A
Vegetation Type	Deciduous Shrub and Sapling Regrowth
Latitude (DD)	64.57448
Longitude (DD)	-149.6724



Photo Type: Soils Direction: NA



Photo Type: Vegetation Direction: N



Photo Type: Vegetation Direction: S

# WETLAND DETERMINATION DATA FORM – Alaska Region

Project: Totchaket Road Date: (1/4/22/2												
								ate: 6/4/2022				
				on and Public	c Facilitie	es	<u>  In</u>	vestigators:				
Borough/City/Location	on:	West o	f Nena	na				ZH MA				
NAD 83, Decimal Degrees								HDR				
Latitude: 64,5756					Waters			Lake				
	0694	430000			Location Notes:							
Elevation (ft):												
					T			SUMMARY OF FINDINGS				
Are "Normal Circumsta		7		Yes			lydroph	ytic Vegetation Present? Ves				
Significantly Disturbed	?	VEG	SOIL	S HYDRO		Hydric Soils Present?						
Naturally Problematic?		VEG	SOILS	S HYDRO			Wet	land Hydrology Present?				
Remarks:					la the	Same	alad A	reconsistain e Mattendo	$\exists$			
	rea within a Wetland?											
VEGETATION	T< 19	6, Р = Pre	\ L-	_								
Tree Stratum DBH ≥ 3 inch	1	1/10	acre circu	ular plot unless no	ted, absolu	te cover r	ecorded	Dominance Test worksheet:				
Species	IND	DOM	Cover	Species	IND	DOM	Cover	Number of Dominant Species That Are OBL, FACW, or FAC:	١			
1. Pop, tre.	FRU	7	5	3.					"			
2.	1, 2, 2, 3	1		4.				Total Number of Dominant Species Across All Strata: (E	.			
Total Tree Cover:		50% of T	otal Cove	er: 2.5	20% of To	tal Cove	r: /		"			
Sapling/Shrub Stratum	IND	DOM	Cover	8. Vac. uli.	FAC		7	Percent of Dominant Species That Are OBL, FACW, or FAC: 57. I (A/B	۱,			
1. Pop. Ere.	FACU	S /	20				*7		'			
	1	V.		9. Vac. uva.	UPL		<del></del>	Prevalence Index Worksheet	ᅱ			
2. Rho. 910.	FAC	<del>/</del>	15	10.5cl, beb.	FAC	<b>Y</b>	10 5	Total % Cover of:Multiply by:				
3. Vac. Vit.	FAC	-	5	11. Pic, a la,	FACU	/	5	OBL species x 1 =				
4. Ros, aci.	FACU		3	12.				0 1/	١			
5. Sal. pol.	FACW		5	13.				1100				
6. Pic, mas.	FACW		3	14.				FAC species $\frac{45}{x} \times 3 = \frac{135}{x}$				
7. Bel, pap,	FACU		3	15.				FACU species 42 x4 = 168				
Total Shrub Cover: 79		50% of To	otal Cove	r: 39.5	20% of To	tal Cover	:15.8	UPL species $3 \times 5 = 15$				
Herbaceous Stratum	IND	DOM	Cover	13.				Column Totals: <u>98</u> (A) 334 (B)				
1. Cov. can.	FACU	7	5	14.								
2. Eau. Gry.	FAC	<b>5</b>	3	15.				Prevalence Index = B/A = 3.91				
3. Cat. can.	FAC	J.	5	16.				Hydrophytic Vegetation Indicators:	$\dashv$			
4. Dio. com.	FACU	. 7	1	17.			٧.	Dominance Test is >50%				
5.				18.				Prevalence Index is ≤3.0				
6.				19.				Morphological Adaptations <sup>1</sup>				
7.				20.				(Provide supporting data in				
8.				21.				Remarks or on a separate sheet)  Problematic Hydrophytic Vegetation <sup>1</sup>				
9.				22.				Indicators of hydric soil and wetland hydrology				
10.				23.				must be present unless disturbed or problematic.  Project Vegetation Type	$\dashv$			
								Troject vegetation Type				
11.				24.				1-32 2-32	ı			
12.				25.				Cowardin Code:				
Total Herb Cover: 14	5	0% of To	tal Cover	r: 7-	20% of Tot	al Cover	:2.g	HGM Classification:	4			
1.Open Water	:=15			2. Bare ground	15	116481	ì	N//H				
Remarks: Bryophytes and L	icnens	may be lis	sted in the	e Herbaceous coli	umns			Landform:				
								Local Relief: Contact	4			
								Microtopography: Slope: Aspect;	$\dashv$			
								NA COLOR				

HDR ot No: 542

SOIL	ių,			ac vilolia i						Plot No: 5	12
Profile Des	cription: D	escribe to the de	epth needed	to docun	nent the presence/a	bsence c	of soil inc	dicators	Soil	Map Unit Nam	ne
	Horizon	Soil M		Phartelings.	Redox Featu						
Donth (in )	1	3.		T 1			12	<b>+</b>	-13 T4		N
Depth (in.)	Name	Color (mois		Type <sup>1</sup>	<u>Color</u>	<u>%</u>	<u>Loc</u> <sup>2</sup>	Mo	d <sup>3</sup> Textu		<u>Comments</u>
0-1	Oi	104291	109	~	particle.		2000			Ash f	organies.
1-18	B	104R 4/4	1 100	edello.	eddidde-	4760-	~	***	- 516	0	
						_		-			
<sup>1</sup> Type: C=Conce	entrations, D=I	Depletions, OX=O	xidized Roots,	RM = Red	luced Matrix <sup>2</sup> Location	on: PL≃Po	re Linings	s, RC=R	oot Channels	, M=Matrix, CS≃	Coated Sand Grains
Remarks:											y (PT), Permafrost (PF)
											Cobbly (CB), Stony (ST)
Hydric Soil Ir	ndicators	Measure from th	e ton of the	mineral s	oil layer except for	Δ1 Δ2 Δ	3 44	(15-	-35%), 35-60%	% = Very (V), 60-	90% = Extremely (X)
j	r Histel (A1)	vicusure iroin a	. /		ces (A12)	, , , , , , , , , , , , , , , , , , ,	10, 714				
	• • •		k	Gleyed (A	` ,				_	ric Soils esent?	NI
. 1	oedon (A2)4	,			1/0						
Black Histic (A3)  Alaska Redox (A14)  NRCS Drainag											: WD
	Sulfide (A4)		<u>M</u> Alaska (	Gleyed P	ores (A15)				Depth of	Organic Soils	:
Indicators for	Problemati	c Hydric Soils <sup>5</sup>	(See Page 9	31/Sectio	n 4 for Problematic	Hydric S	oils Deta	ails)	Restricti	ve Layer Type	
No Depleted I	Below Dark S	Surface (A11)	🔼 Alaska (	Color Cha	ange (TA4) Give d	etails of o	color cha	ange	Restrictive	Layer Depth:	
<u> </u>	Matrix (F3)	i	🔼 Alaska A	Alpine Sv	vales (TA5)				⁴Underlain l	by mineral soil	w/chroma of ≤2
Redox Da	rk Surface (F	·6)	M Alaska F	Redox wi	th 2.5Y Hue				_	4	
5/	Dark Surface		Alaska (	Gleved w	o Hue 5Y or Redde	er Underl	vina			Hydrophytic V	-
a İ	pression (F8				eral soil, 60% of ho		r milary rryarology, and an appropriate				
0.1	nt Material (F		6. 1	-	/High Water Table (			·	problematic		
n 1:	-		.1				_				
Very Shall		race (FZZ)	Low Org	janic Ma	ter/Low Iron/High p	H 2011/N	ew vvetia	ano	Other (	explain in rema	arks)
HYDROLOG	i <b>Y</b> 										
Drimon, Indian	toro (ony one	•	ydrology Ind	licators						or more require	ed)
Mary molean Market W	, -	indicator is suff	*	ion Vicibi	e on Aerial Imagery	, (D7)	75.		tained Leav e Patterns (		-E-1
4 1	r Table (A2)				ted Concave Surfac		<del>- ,</del> -	_	•		g Roots (C3)(w/in 12")
✓ Saturation		,	š .	posits (B		- ()				ed Iron (C4)	
Mater Mar					e Odor (C1) (w/in 12	2")	NS	Salt Dep	oosits (C5)		U
	Deposits (B2	)	la constant		er Table (C2)**					Plants (D1)	248 m
✓ Drift Deposit ✓ Algal Mat of			<u></u> M Other (E	Explain in	Remarks)		7		-	n (D2) - 🕹 🐔	1853/5/
V Iron Depos	or Crust (B4)		Are Climatic	-/Hvdrolc	gic Conditions on S	ito.			ographic R		ote as restrictive layer)
Surface So	* . *	6)		-	of Year? <u>√</u> € §	nic.		-	eutral Test (D		
	· · · · · · · · · · · · · · · · · · ·	s from ground s				Wate	er Sourc			······································	drology Present?
Surface Water	Present?	Yes	No <u> </u>	Depth (in	ches):	_				1),	<del>-,</del>
Water Table Pr	resent?	Yes I	No <u>X</u> [	Depth (ind	ches):	_				Dry Sea	son Water Table
Saturation Pres		Yes I	No <u>X</u> [	Depth (inc	ches):						rior, Western AK:
(includes capill	ary minge)	Episaturation	on	Endosatı	ıration					Mid N	/lay – late July
Describe Reco	rded Data (s				hotos, previous ins	pections)	, if availa	able:		**Mineral	Soils 12-24 inches
										Organic	Soils 12-40 inches
Remarks:											est = #OBL+FW FU + UPL dominants;
Urg	Pit.									add non-domin	

Plot Number	HDR542						
Wetland Status	Upland						
Plot Type	WD						
Plot Date	6/4/2022						
NWI Classification	U						
ндм	N/A						
Vegetation Type	Deciduous Shrub and Sapling Regrowth						
Latitude (DD)	64.57564						
Longitude (DD)	-149.66939						



Photo Type: Soils Direction: NA



Photo Type: Vegetation Direction: E



Photo Type: Vegetation Direction: W

## WETLAND DETERMINATION DATA FORM - Alaska Region

Plot No: 543												
Project: Totchake							Da	ate: 6/5/2022				
Applicant: Departm	nent o	f Trans	sportati	on and Publi	c Facilitie	S	ln <sup>·</sup>	vestigators:				
Borough/City/Location	on:	West o	f Nena	na				ZH M	. A			
NAD 83, Decimal Degrees								HDR		1		
Latitude: 64.5748					Waters	Vatershed: Rock Creek						
Longitude: 149.9	162	2	· ·		_ Location Notes:							
Elevation (ft):												
Äre "Normal Circumsta		D		T 20	T		l	SUMMARY OF	1			
				yes	Hydrophytic Vegetation Present?							
Significantly Disturbed		VEG						Hydric Soils Present?		6		
Naturally Problematic?		VEG	SOIL	S HYDRO			Wet	land Hydrology Present?	LAL	<u> </u>		
Remarks:					Is the	Samp	oled Ar	ea within a Wetland?	N)			
VEGETATION	T< 19		esent		SUBREG	ION:	TA	Las	1/00			
Tree Stratum DBH ≥ 3 incl	<del>,</del>	<del></del>		ular plot unless n	~~~~			Dominance Test	workshe	et:		
Species	IND	DOM	Cover	Species	IND	DOM	Cover	Number of Dominant Species That Are OBL, FACW, or FA		3		
1/Picemar	FACW	V	5	3.					J	<u>ح</u> (A)		
2.	LICIU	1		4.				Total Number of Dominant Species Across All Strata:	3	> >(B)		
Total Tree Cover: 5		50% of T	otal Cove	or: 2,5	20% of To	tal Cove	r:			(0)		
Sapling/Shrub Stratum	IND	DOM	Cover	9 (0)	r FACW	<u> </u>		Percent of Dominant Species That Are OBL, FACW, or FA		(A/B)		
1. Pop tre	FACU		10	9. Bet ala	100000		1.					
2 0	FAI			*10. Cor. can.	FACU		,	Prevalence Index	Workshe	et		
	FACV	7	5	対1.0 1 4	FAC		3	Total % Cover of: N	lultiply by:	<u>.                                    </u>		
NUS NEA	1			対1.Cal.can.	FAC		3	OBL speciesx 1	= <u>0</u>			
- VII	FAC		10	13.				FACW speciesx 2	12			
6 0 1	FAC	17-1	30	14.				FAC species (o(o x 3	= 198	<u></u>		
- Der and	FACU		wg.mad)	15.				a since				
7. Rho gro Total Shrub Cover: 84		50% of T	otal Cove	1 421	20% of Tot	al Cover		FACU speciesx 4		<u>0</u>		
Herbaceous Stratum	IND	DOM	Cover/	13.	20% of Tot	u 0076.	16,0	UPL species	P - 1	<u></u>		
a contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of	<del> </del>	DOM		14.				Column Totals: 27 (A)	2+0	<u>2(</u> B)		
1 Cor can	FACU		1-4	15.				Duayalanaa Inday - D/	. 2	12		
2 Cal, cano	FAC		-25	16.	· ·		21	Prevalence Index = B/A				
4.	<u> </u>			17.				Hydrophytic Vegeta	•	cators:		
5.	1		ASS NO.	18.				Dominance Test is >	<del>-</del>			
				19.				Prevalence Index is:  Morphological Adapta				
6								(Provide supporting of	lata in			
7.				20.		2		Remarks or on a sep		•		
8.	<u> </u>			21.				Problematic Hydrophy Indicators of hydric soil a	/tic Veget 1d wetlan:	ation d hydrology		
9.		6		22.				must be present unless disturt  Project Vegeta	ed or pro	blematic.		
10.		<u> </u>		23.				Floject vegeta	tion Type	별		
11.				24.				1182				
12.				25.				Cowardin Code:				
Total Herb Cover:		50% of To	otal Cove		20% of Tot	al Cover	•	HGM Classification: /				
1.Open Water	<u>O</u>	mov bo li	atad in th	2. Bare ground	15			/\/\/				
Remarks: Bryophytes and I *Moved to Shrub total Cover in	54-7	atum	i gre	to less t	han 5	0/0		Landform: Low land.				
Lal Cores in	100	haron	is stu			Local Relief: None						
1010/1 -00 / 1//	A S. M. S.	M. LENDY B.D.		· •				Microtopography: Slo		Aspect:		
								None	<u> </u>	NE		

Remarks:

HDR Plot No: 542

FAC-Neutral Test = #OBL+FW dominants > #FU + UPL dominants; add non-dominants if tie

Profile Des	cription: D	escribe to the depth i	needed	to docur	nent the presence	/absence o	of soil indi	cators	Soil M	1ap Unit Name	) ·	
	Horizon	Soil Matrix			Redox Fea							
Depth (in.)	Name	Color (moist)	%	Type <sup>1</sup>	Color	<u>%</u>	Loc <sup>2</sup>	Mod <sup>3</sup>	Texture	Horizon Co	omments	
0-2	0;	10YR 3/2	100	Tanahagan,	Color Management of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color of the Color o	wanner	estivation;	_				
2=4	A	10YR2/1	100	and distance	Charles glave 4	- Section 1	Particiona	Section 1	SILO			
4-17	B	104R 4/2	60	_	-	-			STLO			
		10YR 3/3	40			este.	2000		S1-0		5.3	
	ş											
								1				
			1							<u> </u>		
	:											
¹Type: C=Concr	entrations D=I	 Depletions, OX=Oxidized	d Poots	DM = Re.	duced Matrix 21 oca	fion: DI =Dc	-c ! inings	PC-Poot	Channale A	4-14-triv CS-C		
	illiauons, D-i	Jepienons, On-Oxidizer	a Roois,	, KIVI – REG	duced Matrix -Loca	MON: PL-FU					oated Sand Grains (PT), Permafrost (PF)	
Remarks:							ī				obbly (CB), Stony (ST)	
		garante garante									0% = Extremely (X)	
Hydric Soil In	idicators I	Measure from the top	of the	mineral s	soil layer except fo	r A1, A2, A	\3, A4					
<u>No</u> Histosol o	r Histel (A1)	No -	Thick D	ark Surfa	aces (A12)				-	dric Soils		
No Histic Epip	, ,			Gleyed (A	•				Present?			
<u></u> N₃ Black Histi	• •	· · · · · · · · · · · · · · · · · · ·		Redox (A						ainage Class:	WD	
<u>N</u> ₀ Hydrogen					Pores (A15)				POLITI	Organic Soils:	2	
1 .		c Hydric Soils (See			5.4.8.3				- (	Layer Type:		
No Depleted B					ange (TA4) Give	details of o	color chan	_		ayer Depth:		
No Depleted N		. 1			wales (TA5)			⁴Ur	nderlain by	mineral soil w	v/chroma of ≤2	
No Redox Dar	•	<del></del>			ith 2.5Y Hue			⁵Mı	ust have H	lydrophytic Ve	getation and	
No Depleted D					//o Hue 5Y or Redo		· · ·	l l		ology, and an	* * * * * * * * * * * * * * * * * * * *	
No Red Reserve	•		135		eral soil, 60% of h	NY 400		nro	oscape po blematic	sition unless o	JISTURDEO OF	
No Red Paren					l/High Water Table	•		,	/	11 31	- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	
Na Very Shalle		Tace (FZZ) <u>[Val</u> L	-ow Oig	ganic Ma	tter/Low Iron/High	ph Soll/Ne	ew Wetiar	ıd	Other (ex	kplain in remar	ks)	
UIDKOLOG	<u> </u>	Wetland Hudrol	>~v ln/	-1:1			Carani	·				
Primary Indicat	ore (any one	Wetland Hydrole indicator is sufficient		dicators				7	ators (2 or ed Leaves	more required	1)	
No Surface W	` -		•	tion Visib	le on Aerial Image	n/ (B7)				•	and the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second o	
NoSurface Water (A1)NoInundation Visible on Aerial Imagery (B7)NoDrainage Patterns (B10)NoHigh Water Table (A2)NoSparsely Vegetated Concave Surface (B8)NoOxidized Rhizospheres along Living Roots (C3)(w								Roots (C3)(w/in 12")				
	Also Saturation (A3)  Also Saturation (A3)  Also Saturation (A3)  Also Saturation (A3)  Also Saturation (A3)  Also Saturation (A3)  Also Saturation (A3)  Also Saturation (A3)								, , , , , , , , , , , , , , , , , , , ,			
No Water Mark				-	e Odor (C1) (w/in 1	12")		alt Deposi			,	
and the second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second s	N <sub>2</sub> Sediment Deposits (B2)  N <sub>3</sub> Dry-Season Water Table (C2)**  N <sub>3</sub> Stunted or Stressed Plants (D1)											
<u>№</u> Drift Deposits (B3) <u>№</u> Other (Explain in Remarks) <u>№</u> Geomorphic Position (D2)												
<u>Mo</u> Algal Mat o											e as restrictive layer)	
No Iron Deposits (B5)  Are Climatic/Hydrologic Conditions on Site  Are Climatic/Hydrologic Conditions on Site												
No Surface Soil Cracks (B6)  Typical for this time of Year? Yes  Fact Observations (inches from ground surface)												
Field Observations (inches from ground surface)							Wetland Hydrology F				Irology Present?	
Surface Water Present? Yes No Depth (inches):									L	No		
Dry Season W								on Water Table or, Western AK:				
(includes capilla		Episaturation		Endosati	,	_					ay – late July	
Describe Recor	ded Data (sf	tream gauge, monitor	ing wel	II, aerial p	photos, previous in	spections)	, if availat	ole:		**Mineral S	oils 12-24 inches	
									1	**Organic S	Soils 12-40 inches	

Plot Number	HDR543						
Wetland Status	Upland						
Plot Type	WD						
Plot Date	6/4/2022						
NWI Classification	U						
ндм	N/A						
Vegetation Type	Deciduous Shrub and Sapling Regrowth						
Latitude (DD)	64.57487						
Longitude (DD)	-149.9762						



Photo Type: Soils Direction: NA



Photo Type: Vegetation Direction: N



Photo Type: Vegetation Direction: S

Plot Number	HDR544						
Wetland Status	Upland						
Plot Type	FVP						
Plot Date	6/5/2022						
NWI Classification	U						
ндм	N/A						
Vegetation Type	Deciduous Shrub and Sapling Regrowth						
Latitude (DD)	64.57504						
Longitude (DD)	-149.98813						



Photo Type: Soils Direction: NA



Photo Type: Vegetation Direction: N



Photo Type: Vegetation Direction: S

#### WETLAND DETERMINATION DATA FORM – Alaska Region

HDR

									Plot No: 545				
Project: Totchaket Road								Da	Date: 6/5/2022				
	portation	on and Publi	c Fa	Facilities Investigators:									
Borough/City/Location	n:	West o	f Nena	na .					ZH MA				
NAD 83, Decimal Degrees									HDR				
Latitude: 64.57	7			W	Watershed: Rock Creek								
Longitude: 150.					Location Notes:								
Elevation (ft):													
SUMMARY OF FINDINGS													
Are "Normal Circumstances" Present?							; F	lydroph	ytic Vegetation Present?				
Significantly Disturbed	VEG	SOILS HYDRO						Hydric Soils Present? /					
Naturally Problematic?		VEG	SOIL	S HYDRO				Wet	land Hydrology Present?				
Remarks:						Is the Sampled Area within a Wetland?							
					<u> </u>	*		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	ea within a wetland?				
VEGETATION		6, P = Pre				BREG		TAL	Dominance Test worksheet:				
Tree Stratum DBH ≥ 3 inch	1	T T		ular plot unless no	oted,			Τ	Number of Dominant Species				
Species	IND	DOM	Cover	Species		IND DOM Cov		Cover	That Are OBL, FACW, or FAC:(A)				
1. None	·			3.					Total Number of Dominant				
2.	<u> </u>	4.							Species Across All Strata: (B				
Total Tree Cover:	,	50% of To	otal Cove	r	209	% of To	tal Cove	r:	Percent of Dominant Species / / -7				
Sapling/Shrub Stratum	IND	DOM	Cover	8.					That Are OBL, FACW, or FAC: 664 + (A/B)				
1. Bet Pap.	FACU	<b>V</b>	45	9.		***							
2. Poplere	FACU	1	5	10.					Prevalence Index Worksheet  Total % Cover of: Multiply by:				
3. Vac. vit.	FAC		10	11.									
4. Sal. beb.	FAC		150	12.					OBL speciesx1 =				
5.	PACU		ı	13.					FACW speciesx 2 =				
6. Sal, scp.	FAC		1	14.		****		FAC species <u>54</u> x 3 = <u>162</u>					
7. Rho. gro.	FAC		3	15.			ψ.		FACU species 54 x 4 = 216				
Total Shrub Cover: (20)		50% of To	otal Cove	r: 40	20%	6 of Tot	al Cover	: 16	UPL species				
Herbaceous Stratum	IND	DOM	OOM Cover 13.						Column Totals: 108 (A) 378 (B)				
1. Cal. can	FAC	<b>\</b> /	15	14.					(b)				
2. 6. 1. 6.01	FAC	<i>I</i> ,	In	15.					Prevalence Index = B/A = 3,50				
3. Cha. and	FACU	7	3	16.	-				Hydrophytic Vegetation Indicators:				
4.				17.			1411	£"	Dominance Test is >50%				
5.		Aug 1	_	18.	1			<del>V</del>	Prevalence Index is ≤3.0				
6.				19.	$\neg$				Morphological Adaptations <sup>1</sup>				
7.				20.	_		1426 A.T.	10 mg 1	(Provide supporting data in Remarks or on a separate sheet)				
8.				21.		- 14 (		2,8847.5	Problematic Hydrophytic Vegetation <sup>1</sup>				
9.				22.					1 Indicators of hydric soil and wetland hydrology				
10.				23.		74.			must be present unless disturbed or problematic.  Project Vegetation Type				
.11.				24.					$TQ_1$				
12.				25.					4481				
Total Herb Cover: 28 50% of Total Cover: 44 20% of Total Cover: 5.6													
1.Open Water		70 UI 10	, tai Cove	2. Bare ground					HGM Classification:				
Remarks: Bryophytes and L	() ichens	may be li	sted in the	_	2 Iumns		194ev		// //-4 Landform:				
,	-	•							Lowland				
							*	,	Local Relief: Slightly Convex				
									Microtopography: Slope: Aspect:				
									1 1900				

HDR Plot No: 545

Profile Des	cription: [	Describe to the depth	needed	to docui	ment the presence/ab	sence	of soil indi	cators	Soil I	Map Unit Nam	e	
	Honzon	Soil Matrix		Redox Features								
Depth (in.)	Name	Color (moist)	%	Type <sup>1</sup>	Color	%	Loc <sup>2</sup>	Mod <sup>3</sup>	Texture	Horizon C	omments	
0-7	0:				•							
3-7F	A	2.54 3/2	100			-	· ·		5110	)	·	
7-16	A/B	2.54/3/1	90		19.5		*		SIL			
1 10		2.54 5/7	8	C	7,542 44	2	M		SILO		1. 1. 1 mg	
-		2.3 / /			24,000	bases	121		1100	Deplest	an w/resist.	
* vi						<b>-</b>				fro Zen	E 14, 100 1	
			1.	n n nacional							다 다 하는 것이 되는 것이 되는 것이 되었다. 하는 사람들이 되었다면 같다.	
		- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1		17.14(2).		1 1 1 1 1				<u> </u>	t on the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit of the profit	
<u></u>	<u> </u>	<u> </u>										
<sup>1</sup> Type: C=Conce	entrations, D=	Depletions, OX=Oxidize	d Roots	, RM = Re	duced Matrix <sup>2</sup> Location	n: PL=Pc	ore Linings,	RC=Root	Channels,	M=Matrix, CS=0	Coated Sand Grains	
Remarks:				9			3	Texture M	odifiers: Mu	ıcky (MK), Peat	/ (PT), Permafrost (PF)	
.1	10			P		· // •	7				obbly (CB), Stony (ST)	
					1 problematic	indic		(15-35	%), 35-60%	= Very (V), 60-9	90% = Extremely (X)	
~ /		Measure from the top			J. 100 20	11, A2, /	43, A4	· · · · · · · · · · · · · · · · · · ·	1,0		40.317	
	r Histel (A1)	<u> </u>			aces (A12)			Ì		Hydric Soils		
	oedon (A2)⁴		y	Gleyed (	•					sent?	100	
M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist     M Black Hist	•			Redox (A	·					ainage Class:		
A CONTRACTOR OF THE PARTY OF THE	Sulfide (A4)	- 12862 jesungiji			Pores (A15)			46 · · · · · · · · · · · · · · · · · · ·	V (4744)	Organic Soils:	3	
AND AND AND AND AND AND AND AND AND AND										ctive Layer Type:		
Depleted Below Dark Surface (A11) Alaska Color Change (TA4) Give details of color change Restrictive Layer Depth:									7			
	Matrix (F3)	. 1			wales (TA5)			<u> 4U</u>	nderlain b	y mineral soil	w/chroma of ≤2	
Redox Dark Surface (F6)  Alaska Redox with 2.5Y Hue  Alaska Redox with 2.5Y Hue  Must have Hydrophytic Vegetation and Primary Hydrology, and an appropriate												
71		- 1		- 7.				1.		rology, and ar		
	pression (F8 nt Material (I	<u> </u>			neral soil, 60% of hon d/High Water Table (1	2.2	81	nro	oblematic	osition unless	disturbed bi	
- 1	ow Dark Su			177	utter/Low Iron/High ph		J	· —	Other (e	volcin in rome		
HYDROLOG		11400 (1.22)	- OII	garno ivid	MCH20W HOWNINGH PI	1 001//14	CW WCUAI	. ,	_ Other (e	xplain in rema		
7. 0. *	· ·	Wetland Hydrol	ogy In	dicators			Second	dary Indic	cators (2 o	r more require	ed)	
Primary Indicat	tors (any one	e indicator is sufficien	t)						ned Leave			
M. Surface W	ater (A1)	$\underline{\nu}$	nunda	tion Visib	le on Aerial Imagery	(B7)	<u> </u>	ainage P	atterns (B	10)		
/ 1	r Table (A2)	- A			ated Concave Surface	e (B8)	<u>//</u> 0:	xidized R	hizospher	es along Living	g Roots (C3)(w/in 12"	
No Saturation		1 3		eposits (E		•				d Iron (C4)		
· - /	Water Marks (B1) / Hydrogen Sulfide Odor (C1) (w/in 12") / Salt Deposits (C5)											
- 1	Sediment Deposits (B2)  M Dry-Season Water Table (C2)**  Stunted or Stressed Plants (D1)											
' 1	Drift Deposits (B3)  Other (Explain in Remarks)  Other (Explain in Remarks)  Other (Explain in Remarks)									4		
M Algal Mat or Crust (B4) ✓ Shallow Aquitard (D3) (w/in 24", note as restrictive layer ✓ Iron Deposits (B5) Are Climatic/Hydrologic Conditions on Site ✓ Microtopographic Relief (D4)												
- 2 A	oil Cracks (B				of Year? Ves	ile			al Test (D			
	5 5 - 7	es from ground surfac				Wat	er Source		T	•	drology Present?	
Surface Water Present? Yes No Depth (inches):									No	arology i resent?		
Water Table Present? YesNo Depth (inches): Dry Season Water Table									son Water Table			
Saturation Pres (includes capillation)		Yes No	<u>Y</u>	Depth (in	ches):	-					ior, Western AK:	
<u> </u>		Episaturation		Endosat							ay – late July	
Describe Reco	rded Data (s	tream gauge, monito	ing we	II, aerial <sub>I</sub>	photos, previous insp	ections	), if availat	ole:			Soils 12-24 inches Soils 12-40 inches	
Remarks:									F	AC-Neutral Te	st = #OBL+FW	
_ 61		7									II + IIPI dominante:	

Plot Number	HDR545						
Wetland Status	Upland						
Plot Type	WD						
Plot Date	6/5/2022						
NWI Classification	U						
ндм	N/A						
Vegetation Type	Deciduous Shrub and Sapling Regrowth						
Latitude (DD)	64.57507						
Longitude (DD)	-150.0012						



Photo Type: Soils Direction: NA



Photo Type: Vegetation

Direction: E



Photo Type: Vegetation Direction: W

Plot Number	HDR546
Wetland Status	Upland
Plot Type	FVP
Plot Date	6/5/2022
NWI Classification	U
ндм	N/A
Vegetation Type	Deciduous Shrub and Sapling Regrowth
Latitude (DD)	64.57486
Longitude (DD)	-150.01309



Photo Type: Soils Direction: NA



Photo Type: Vegetation Direction: N



Photo Type: Vegetation Direction: S

## WETLAND DETERMINATION DATA FORM - Alaska Region

HDR

Plot No: 547

Date: (e/5/22

	aket Roa		Date: (e/5/22											
			<u> </u>	on and Publi	c Fa	cilitie	S		nvestigators:					
Borough/City/Loc	ation:	West o	f Nena	na					ma ·	24				
NAD 83, Decimal Degrees									HDR					
Latitude: 64.5	9768				Wa	atersl	ned:	Kai	ntishona River	-				
Longitude: 기술이.	06324				Lo	catio	n Note	s:						
Elevation (ft):	-													
					·				SUMMARY OF	<del></del>				
Are "Normal Circun	nstances"	Presen	it?	Ves			<u> </u>	lydrop	hytic Vegetation Present	? Ves				
Significantly Disturb	oed?	VEG	SOIL	S HYDRO					Hydric Soils Present	? 1				
Naturally Problema	tic?	VEG	SOIL	S HYDRO			etland Hydrology Present							
Remarks:  Is the Sampled Area within a Wetland?														
					13	s the	Samp	oled A	Area within a Wetland	? VES				
VEGETATION	T< 1%	, P = Pre	esent		SUE	REG	ION:	TAL	2	7				
Tree Stratum DBH ≥ 3				ular plot unless no						t worksheet:				
Species	IND	DOM	Cover	Species		IND	DOM	Cove	Number of Dominant Specie That Are OBL, FACW, or FA					
1. None				3.						(A)				
2.				4.					Total Number of Dominant Species Across All Strata:	<u>4</u> /(B)				
Total Tree Cover:		50% of T	otal Cov	J	20%	of To	tal Cove	Γ; <sub>στοπούσο</sub>		1 At 1				
Sapling/Shrub Stratum		DOM	Cover	8. (Bet. 100		hau		45	Percent of Dominant Specie	es AC: /00 (A/B)				
1. Aln. vin.	FAC	$\sqrt{}$	20	9. Rhdas		FAC		,:3:						
2. Bet ala	FAC	Ž,	25	10.			N. 1		Prevalence Inde	x Worksheet				
2 ~	FACW	7	5	11.					Total % Cover of:	Multiply by:				
Jai. Pai			3	12.					OBL speciesx	1 = <u> </u>				
72.8	FACW		<u>9</u> 1	13.					FACW species <u>73</u> x 2	2= 146				
Pas. Fru	FAC		- Districts	14.					1 l	3 = 222				
- Ona Lat	FACW		10	15.						/1				
VVC CON	FAC	00/ of T	10		000/	- 4 T - 4								
Total Shrub Cover:			otal Cove		20%	OT I OT	al Cover	:15.6						
Herbaceous Stratum	IND	DOM	Cover	13.					Column Totals: <u>148</u> (A	) <u>372 (</u> B)				
1. Cal can	FAC	4	_15	14.										
2. Eri Vag	FACH	<b>'\</b>	55	15.					Prevalence Index = B/	A = 4.21				
3.		/ -	14.5	16.					Hydrophytic Veget	ation Indicators:				
<b>4</b> . '			. *** <sub>0</sub>	17.					Dominance Test is	>50%				
5.				18.					Prevalence Index is	≤3.0				
6.				19.					Morphological Adap					
7.				20.			·		(Provide supporting Remarks or on a se					
8.				21.					Problematic Hydropl	hytic Vegetation <sup>1</sup>				
9.				22.					Indicators of hydric soil a must be present unless distu	and wetland hydrology				
10.				23.					Project Veget					
11.		-		24.	1.4				470					
12.				25.	•			1.24	452	***************************************				
Total Herb Cover: 7	5	0% of To	tal Cove		20%	of Tot:	al Cover	. 14	Cowardin Code: PSS 1 / Em 1B					
1.Open Water			7101 0010	2. Bare ground			u. 001ci	., 7	HGM Classification:					
Remarks: Bryophytes a	ind Lichens i	nay be li	sted in th		O lumns				Fla+ Landform:					
, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,									- terrace					
							ĺ	1.	Local Poliof:	CONCAVE				
							}		Microtopography: SI	ope: Aspect:				
4									TUSSOCK	27. N				

HDR Plot No: 547

14 UC 11 OL 1 41 1 1 1 0000

Profile Des	cription: D	Soil M	Map Unit Name								
	Horizon	Soil I	Matrix		Redox Feat	ures					
Depth (in.)	Name	Color (mo	oist) %	Type <sup>1</sup>	<u>Color</u>	<u>%</u>	<u>Loc</u> 2	Mod <sup>3</sup>	Texture	Horizon Co	omments
0-10	0e				and the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of t					Frozer	1 at 1"
					+ 1:1.1 + ±1.1						***
						.   '					
					:						<u> </u>
		Maria Maria						-			
					_ a€						
										3 727	
	<u> </u>								L	<u></u>	
	entrations, D=	Depletions, OX=	Oxidized Roots,	RM = Red	luced Matrix <sup>2</sup> Locati	on: PL=Po					11 11 11 11 11 11 11 11 11 11 11 11 11
Remarks:						315 T	-				(PT), Permafrost (PF)   obbly (CB), Stony (ST)
											0% = Extremely (X)
			,		oil layer except for	A1, A2, A	\3, A4	1		,	44-14/2
No Histosol o			Months D						Hydric		Yes
_V Histic Epi		assumed)	No Alaska		• •	magazine.			Prese	ent?	
NRC Black Histic (A3)										inage Class:	Pd
N. Hydrogen	Sulfide (A4)		<u>N₀</u> Alaska	Gleyed P	ores (A15)		-		Depth of O	of Organic Soils: / 0"+	
Indicators for Problematic Hydric Soils (See Page 91/Section 4 for Problematic Hydric Soils Details)  Restrictive Layer Type:											Frost
No Depleted	Below Dark	Surface (A11)	<u>No</u> Alaska	Color Ch	ange (TA4) Give d	letails of d	color chang	e Re	strictive La	yer Depth:	1"
<u>N</u> ೨ Depleted I	Matrix (F3)		<u>N</u> ∂ Alaska	Alpine Sv	vales (TA5)			⁴Ur	nderlain by	mineral soil v	v/chroma of ≤2
<u>N</u> ਼ Redox Da	rk Surface (I	<del>-</del> 6)	No Alaska	Redox wi	th 2.5Y Hue			51.4	ust have H	drophytic Va	getation and
<u>N</u> ু Depleted I	Dark Surface	(F7)	<u>No</u> Alaska ⊓	Gleyed w	o Hue 5Y or Redd	er Underl	ying			ology, and an	
<u>N₀</u> Redox De	pression (F8	3)	No AA Pos	itive (min	eral soil, 60% of ho	rizon 4 in	ches thick)	' 1		sition unless	disturbed or
No Red Parer	nt Material (F	21)	<u></u> № Ponded	/Flooded	High Water Table (	(12 inche	s or higher	) [pro	blematic		
No Very Shall	ow Dark Su	face (F22)	No Low Org	ganic Ma	ter/Low Iron/High p	H Soil/Ne	ew Wetland	<u> </u>	Other (ex	plain in rema	rks)
HYDROLOG	Ϋ́										
		Wetland I	Hydrology Inc	dicators			Seconda	ary Indic	ators (2 or	more require	d)
Primary Indica		e indicator is su						* .	ed Leaves	` '	
Y Surface W N₀ High Wate					e on Aerial Imagery ted Concave Surfac				atterns (B1		Roots (C3)(w/in 12")
✓ Saturation			No Mari De	-		ce (Bo)			nizospriere: f Reduced	_	Roots (C3)(W/In 12")
No Water Mai	化氯化铁 医二氯化二甲基			-	e Odor (C1) (w/in 1	2")	<u>√</u> Sal			` ,	
<u>No</u> Sediment		2)			er Table (C2)**				Stressed Pl	. ,	
<u>∕√</u>		* +	Other (I	Explain in	Remarks)					, ,	te as restrictive layer)
No Iron Depos			Are Climati	c/Hydrolo	gic Conditions on S	Site				(W/III 24 , IIOI ef (D4) TUSS	
<u></u> ✓o Surface So	44.7.4	44, 119 (MORY W A	Typical for	-	of Year? <u>\/eS</u>				al Test (D5)		
Field Observa	•					1	er Source:		V		drology Present?
Surface Water	1	Yes		Depth (in		_   P	redp			Yes	
Water Table Pr Saturation Pres	100	Yes	63	Depth (ind Depth (ind		_					on Water Table or, Western AK:
(includes capill				•	•						john et Alberta
Describe Reco	rded Data (s	Episatura tream gauge, r		Endosatu I, aerial p	ıration hotos, previous ins	pections)	, if availabl	e:		Mid Ma **Mineral S	ay – late July Soils 12-24 inches
	13	<b>5 5</b> -7.		<b>F</b>							Soils 12-40 inches
Remarks: 1-2	"Surface	water bet	ween tuss	ock 5							st = #OBL+FW
	-	ş V ş								minants > #I-L d non-domina	J + UPL dominants; nts if tie

\*\* 1 1/ 1 00

Plot Number	HDR547						
Wetland Status	Wetland						
Plot Type	WD						
Plot Date	6/5/2022						
NWI Classification	PSS1/EM1B						
НСМ	Flat						
Vegetation Type	Low Shrub Tundra						
Latitude (DD)	64.59767						
Longitude (DD)	-150.06321						



Photo Type: Soils Direction: NA



Photo Type: Vegetation Direction: E



Photo Type: Vegetation Direction: S

### WETLAND DETERMINATION DATA FORM – Alaska Region

Plot No: 548													
Project: Totchake					,		Da	ate: 6/6/2022	-				
				on and Publi	c Facilitie	S	Inv	vestigators:					
Borough/City/Location	n:	West c	f Nenai	na					hA .				
NAD 83, Decimal Degrees								HDR					
Latitude: 64.5974					Waters	hed:	Kauti	tishna River					
Longitude: / 50, 002	92				Locatio	n Note	s:						
Elevation (ft):													
					<del></del>			SUMMARY OF F	NDINGS				
Are "Normal Circumsta	nces"	Preser	lydroph	ytic Vegetation Present?	Ves								
Significantly Disturbed	?	VEG	SOILS	S HYDRO				Hydric Soils Present?	No				
Naturally Problematic?		VEG	SOILS	HYDRO			Wetl	and Hydrology Present?	100				
Remarks:  Is the Sampled Area within a Wetland?													
VEGETATION	T< 19	6, P = Pre	LAL										
Tree Stratum DBH ≥ 3 inch				lar plot unless no				Dominance Test w	orksheet:				
Species	IND	DOM	Cover	Species	IND	DOM	Cover	Number of Dominant Species	9				
1. Worl				3.				That Are OBL, FACW, or FAC	(A)				
2.		-		4.				Total Number of Dominant	3 (0)				
Total Tree Cover:	<u> </u>	50% of T	otal Cove		20% of To	tal Cove	r	Species Across All Strata:	(B)				
Sapling/Shrub Stratum	IND	DOM	Cover	***	······································	1	and the second	Percent of Dominant Species	66.7 (A/B)				
	-	DOM		8. Vac. v. +	· FAC		15	That Are OBL, FACW, or FAC	(80.7 (A/B)				
1. Bet pap.	FACU		5	9.				Prevalence Index V	Vorksheet				
2. Pop. tre.	FACU	Y	40	10.					Itiply by:				
3. Ala, Vir.	FAC	/	7	11.				<u></u>					
4. Sal. heb.	FAC		5	12.									
5. Pic Mar.	FACW		ı	13.				FACW species 2 x 2 =					
6. Ros. Aci.	FACU		3	14.				FAC species $\frac{77}{x} \times 3 =$	231				
7. Pho. 9101	FAC	<b>y</b>	20	15.			-	FACU species 50 x 4 =	200				
Total Shrub Cover: 96		50% of T	otal Cove	r: 48	20% of To	tal Cove	:19,2	UPL speciesx 5 =					
Herbaceous Stratum	IND	DOM	Cover	13.				Column Totals: 129 (A)	110 000				
1. Equ. arv.	FAC	7	30	14.									
2. Cha. ans.	FACY	/	1	15.				Prevalence Index = B/A	= <u>S.37</u>				
3. Mer. Pan.	FACU		1	16.				Hydrophytic Vegetation					
4. Ste, cal	FACW	,	1	17.				Dominance Test is >50					
5. Unknown graminaid	- appropri		.3	18.				7N Prevalence Index is ≤3					
6.				19.				Morphological Adaptati					
7.				20.				(Provide supporting da Remarks or on a separ					
8.				21.	***************************************			A Problematic Hydrophyt	c Vegetation <sup>1</sup>				
9.				22.				1 Indicators of hydric soil and must be present unless disturbe					
10.				23.				Project Vegetati					
11.				24.				TEBO					
12.		1607		25.				Cowardin Code:					
Total Herb Cover: 36	Ę	50% of To	otal Cover	: 18	20% of Tot	al Cover	:7.2	HOM Olsa-is-4					
1.Open Water	0			2. Bare ground	20	Utk	γ,	HGM Classification:	p				
Remarks: Bryophytes and L	ichens	may be li	sted in the	Herbaceous col	lumns			Landform:					
						À		Local Relief:					
								Microtopography: Slope	e: Aspect:				
								000					

HDF Plot No: 54

												10t 140.	40	
Profile Desc	ription: D	escribe to th	e depth	needed	to docun	nent the presence/	absence o	of soil in	dicator	s	Soil N	Map Unit Nam	e	
	Horizon		il Matrix			Redox Feat						7.0p 07.11.1.10.1.1		
Danth (in )				T ,,	<b>T</b> 1		1	, ,	<del></del>		<b>-</b> .	T		
Depth (in.)	Name	Color (r	noist)	<u>%</u>	Type <sup>1</sup>	Color	<u>%</u>	<u>Loc</u> <sup>2</sup>	Mo	od <sup>3</sup>	Texture	Horizon C	omments	
0-3	0;													
3-9	B	LOTR	3/2	100	Ma <sub>k</sub> ,	prio.	g-sin-	4	دي ا	-	5160			
9-20	B-2	2.54	4/1	100)	es.	æ		COLO.	*	-	FSALO	Froze	n e 20	
	•										·	,		
		,		1										
							]							
			• • • • • • • • • • • • • • • • • • • •	: 8					-					
		<u> </u>								l				
<sup>1</sup> Type: C=Conce	ntrations, D=I	Depletions, O	<=Oxidize	d Roots,	RM = Red	duced Matrix <sup>2</sup> Locat	ion: PL=Po	re Lining						
Remarks:													y (PT), Permafrost (PF)	
													obbly (CB), Stony (ST) 90% = Extremely (X)	
Hydric Soil In	dicators	Measure from	n the top	of the	mineral s	soil layer except for	A1, A2, A	\3, A4		, 00,0	<u>,, 00 00 70</u>	10.9 (1), 00	CON EXACTION (X)	
N Histosol or	Histel (A1)	/	N.	Thick D	ark Surfa	ices (A12)					Hydri	c Soils		
A .	edon (A2)4	/	. 1		Gleyed (A						_	sent?	N/a	
Niets Epip	• •				Redox (A	•	· Angelen						WD	
- 1	•		A 1		•	·						ainage Class:	3	
	Sulfide (A4)	/				ores (A15)						f Organic Soils:		
Ł			. 1			n 4 for Problemation	-			F	Restrictiv	e Layer Type:		
M Depleted B	Below Dark S	Surface (A11	) <u>~</u> /	Alaska (	Color Cha	ange (TA4) Give	details of o	color ch	ange	Res	trictive L	ayer Depth:		
M Depleted N	/latrix (F3)		N.	Alaska /	Alpine Sv	vales (TA5)				⁴Un(	derlain b	by mineral soil w/chroma of ≤2		
Mar. Redox Dar	k <sub>.</sub> Surface (F	<del>-</del> 6)	<u>//</u> /	Alaska I	Redox wi	th 2.5Y Hue				58.4	et have k	Judrophytic V	egetation and	
M Depleted D	ark Surface	e (F7)	N	Alaska (	Gleyed w	o Hue 5Y or Redo	ler Underl	ying		l.		rology, and ar		
MRedox Dep	ression (F8	)	N	AA Posi	itive (min	eral soil, 60% of ho	orizon 4 in	ches th	ick)			osition unless		
✓ Red Paren	t Material (F	21)	W.	onded	/Flooded	/High Water Table	(12 inche	s or hig	her)	prob	lematic			
Very Shallo	ow Dark Sur	face (F22)	_ [			tter/Low Iron/High	-	_			Other (e	xplain in rema	ırks)	
HYDROLOG			<u>'</u>			<u> </u>					est des			
		Wetland	Hvdroi	oay Inc	licators			Seco	ndanul	ndica		r more require	v4)	
Primary Indicat	ors (ariv one		_		alcator 3				-		ed Leave	•	;u)	
Nurface Wa				-	ion Visibl	le on Aerial Imager	v (B7)	- 6			tterns (B	• •		
	Table (A2)					ited Concave Surfa			_	-	•	•	g Roots (C3)(w/in 12"	
Saturation	(A3)				posits (B	•		<u> </u>	Presen	ce of	Reduce	d Iron (C4)		
Water Mark			- 1	-		e Odor (C1) (w/in 1	2")		Salt De					
· 1	Deposits (B2	2)	_			er Table (C2)**						Plants (D1)		
<ul><li>✓ Drift Depos</li><li>✓ Algal Mat of</li></ul>	r Crust (B4)		<u>MJ</u>	Otner (E	explain in	Remarks)				-	Position		te as restrictive layer	
/ Iron Depos			Are	Climatio	c/Hydrolo	gic Conditions on	Site	8			aphic Re	•	ne as restrictive layer,	
Surface So		6)			-	of Year? <u>YeS</u>	<del></del>				· Test (D			
Field Observat	ions (inche	s from groun	d surfac	e)			Wat	er Sour				Wetland Hy	drology Present?	
Surface Water I	Present?	Yes		<u>×                                    </u>	Depth (in	ches):			30 30			111	<b>N</b>	
Water Table Pro		Yes	No _		Depth (ind	-					ŀ	Dry Seas	son Water Table	
Saturation Present? Yes No Depth (inches): (includes capillary fringe)												SC, Inter	ior, Western AK:	
		Episatu			Endosati			Mid May – late July						
Describe Recor	ded Data (st	tream gauge	, monito	ring wel	l, aerial p	hotos, previous ins	spections)	vections), if available:  **Mineral Soils 12-24 inches  **Organic Soils 12-40 inches						
					·	····								
Remarks:	, f.	/	90···		-1								st = #OBL+FW U + UPL dominants;	
No hyd	windia	whos.	<u>D</u> ,	m P	1.							dd non-domina		

Plot Number	HDR548							
Wetland Status	Upland							
Plot Type	WD							
Plot Date	6/6/2022							
NWI Classification	U							
ндм	N/A							
Vegetation Type	Deciduous Shrub and Sapling Regrowth							
Latitude (DD)	64.59749							
Longitude (DD)	-150.06289							



Photo Type: Soils Direction: NA



Direction: N Photo Type: Vegetation



Photo Type: Vegetation Direction: S

Plot Number	HDR549
Wetland Status	Upland
Plot Type	FVP
Plot Date	6/6/2022
NWI Classification	U
ндм	N/A
Vegetation Type	Deciduous Shrub and Sapling Regrowth
Latitude (DD)	64.59721
Longitude (DD)	-150.06134



Photo Type: Soils Direction: NA



Photo Type: Vegetation Direction: W



Photo Type: Vegetation Direction: E

#### WETLAND DETERMINATION DATA FORM - Alaska Region

Plot No: 550 **Totchaket Road** Project: Date: 6/1/2020 Department of Transportation and Public Facilities Applicant: Investigators: MA Borough/City/Location: West of Nenana 2HNAD 83, Decimal Degrees **HDR** Latitude: 64,59622 Watershed: Kanfish na River Longitude: 150,060 13 **Location Notes:** Elevation (ft): **SUMMARY OF FINDINGS** Are "Normal Circumstances" Present? **Hydrophytic Vegetation Present?** VP5 Significantly Disturbed? HYDRO **VEG** SOILS Hydric Soils Present? Naturally Problematic? **HYDRO VEG SOILS** Wetland Hydrology Present? Remarks: Is the Sampled Area within a Wetland? **VEGETATION** SUBREGION: IAL T< 1%, P = Present Dominance Test worksheet: Tree Stratum DBH ≥ 3 inch 1/10 acre circular plot unless noted, absolute cover recorded **Number of Dominant Species** Species IND DOM **Species** IND DOM Cover That Are OBL, FACW, or FAC: (A) 3. 1. None **Total Number of Dominant** 2. 4. Species Across All Strata: (B) Total Tree Cover: 50% of Total Cover: 20% of Total Cover: -Percent of Dominant Species Sapling/Shrub Stratum DOM Cover That Are OBL, FACW, or FAC: FACU FAC 10 Sal. arb FALW Prevalence Index Worksheet 7 Acul Total % Cover of: Multiply by: FAC **OBL** species 10 FACW species 7 3 13. 5. Cha. cal. 6. Vac. Uli. 14. FAC species FAC 15. 5 FACU species Total Shrub Cover: 20 50% of Total Cover: 20% of Total Cover: / UPL species **Herbaceous Stratum** IND DOM 13. Cover Column Totals: 123 14. 45 Prevalence Index = B/A = 2.4015. PACIN 10 16. FAC 3 Hydrophytic Vegetation Indicators: 5 17. FAC Dominance Test is >50% 18. Prevalence Index is ≤3.0 6. 19. Morphological Adaptations<sup>1</sup> (Provide supporting data in 7. 20. Remarks or on a separate sheet) 8. 21. Problematic Hydrophytic Vegetation<sup>1</sup> Indicators of hydric soil and wetland hydrology 9 22 must be present unless disturbed or problematic. **Project Vegetation Type** 10. 23. 11. 24. 12 25 Cowardin Code: 20% of Total Cover: 12.6 **Total Herb Cover:** 50% of Total Cover: HGM Classification: 1.Open Water 2. Bare ground Remarks: Bryophytes and Lichens may be listed in the Herbaceous columns \_andform: ocal Relief: Microtopography: Slope: Aspect: WASOUK

HDR Plot No: 550

						e test		A 1	Г	101 JO: 22	0				
Profile Desc	<b>cription:</b> D	escribe to the depth	needed	to docun	nent the presence/a	bsence c	of soil indi	cators	Soil	Map Unit Nam	9				
	Horizon	Soil Matrix			Redox Featu			T	.1						
Donth (in )	1			T 1			2		Ι	T					
Depth (in.)	Name	Color (moist)	<u>%</u>	Type <sup>1</sup>	Color	<u>%</u>	<u>Loc</u> <sup>2</sup>	Mod <sup>3</sup>	Textur	e Horizon C	omments				
0-6	Oi	10 YR 2/1	Approx.	Wasir	6990	grage.	60±20.								
6-9	0e	J		. ,	<i>p</i> **	Sec.	ge-			Frozen	.06"				
9-12	A	104R 2/2			parent .	an.	- passer	pate.	SALO						
					·										
				·											
											·				
¹Type: C≃Conce	entrations, D=I	Depletions, OX=Oxidiz	ed Roots,	RM = Red	duced Matrix <sup>2</sup> Location	on: PL=Po	re Linings,	RC=Root	Channels,	M=Matrix, CS=C	oated Sand Grains				
Remarks:			v. 4 -				3		*		(PT), Permafrost (PF)				
							İ		_	• • •	obbly (CB), Stony (ST)				
Hvdric Soil In	dicators	Measure from the to	n of the	mineral s	oil laver except for	A1 A2 A	3 A4	(15-35	%), 35-6U%	= very (v), 60-9	90% = Extremely (X)				
					ices (A12)	7(1,7(2,7	.0, 7.4				A25 5/33				
T		10	,							c Soils sent?	1/20				
Histic Epip	edon (A2)*	10	1967	Gleyed (A	3 v <b>*</b>	an equi			Pre:	sent?	YES				
∠ Black Histi	c (A3)	<u>~</u>	Alaska	Redox (A	.14)				NRCS D	rainage Class:	PD				
	Sulfide (A4)	N	Alaska	Gleyed P	ores (A15)				Depth of	f Organic Soils:					
Indicators for	Problemati	c Hydric Soils⁵ (Se	e Page	91/Sectio	n 4 for Problematic	Hydric S	oils Detai	<u>ls)</u>	Restrictiv	e Layer Type:	First				
N Depleted E	Below Dark S	Surface (A11) 🔊	Alaska	Color Ch	ange (TA4) Give do	etails of c	olor char	nge Re	strictive L	ayer Depth:	63				
N Depleted N		· · · · · · · · · · · · · · · · · · ·			vales (TA5)						w/chroma of ≤2				
Redox Dar		(e) (7)			th 2.5Y Hue				ilderiain b	y mineral son t	WCIIIOIIIa UI 32				
$r \rightarrow r$										Hydrophytic Ve					
	Dark Surface				o Hue 5Y or Redde		-	3		lrology, and an					
Redox Dep	-		AA Pos	itive (min	eral soil, 60% of ho	rizon 4 in	ches thicl		idscape p oblematic	osition unless	disturbed or				
Red Paren	t Material (F	21) 📈	Ponded	/Flooded	/High Water Table (	12 inche	s or highe	er) <u></u>		· .					
Very Shallo	ow Dark Sur	face (F22) /V	Low Org	ganic Ma	tter/Low Iron/High p	H Soil/Ne	ew Wetlar	nd $\Delta$	Other (e	explain in rema	rks)				
HYDROLOG	Υ						4								
		Wetland Hydro	logy inc	dicators			Second	dary Indic	ators (2 o	r more require	d)				
Primary Indicate	ors (any one	indicator is sufficie	nt)					-	ned Leave	•					
✓ Surface Wa	ater (A1)	N	Inundat	tion Visibl	e on Aerial Imagery	(B7)	u Dr	ainage P	atterns (B	10)					
🔼 High Water		$\underline{N}$		-	ted Concave Surfac	e (B8)					Roots (C3)(w/in 12")				
		<u> </u>		eposits (B						d Iron (C4)					
Water Mark	ks (B1) Deposits (B2	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			e Odor (C1) (w/in 12	2")		alt Depos		a	÷				
✓ Sediment L ✓ Drift Depos		)			er Table (C2)** ı Remarks)					Plants (D1) (D2) ~ Dep	10				
	or Crust (B4)	************	Other (i		i Kemarks)	(					te as restrictive layer)				
/ Iron Depos			Climati	c/Hydrolc	gic Conditions on S	Site				lief (D4) 🎝 🤧					
✓ Surface So	il Cracks (B			-	of Year? <u>√<i>e</i></u>				al Test (D						
Field Observat	ions (inche	s from ground surfa				Wate	er Source	:	ĺ	Wetland Hy	drology Present?				
Surface Water I	Present?	Yes No _			,					Ves					
Water Table Pre	esent?		/		ches):	_   }	e Andre		-		on Water Table				
Saturation Present? Yes No Y Depth (inches): (includes capillary fringe)											or, Western AK:				
(monuces capilla	ary minge)	Episaturation_	* _/*	Endosati	uration	_				Mid M	ay – late July				
Describe Recor	ded Data (s	ream gauge, monito	oring we	l, aerial p	hotos, previous insp	pections)	, if availal	ole:		**Mineral S	Soils 12-24 inches				
		-								""Organic S	Soils 12-40 inches				
Remarks:	ř.,									AC-Neutral Te	st = #OBL+FW J + UPL dominants;				
										idd non-domina					

Plot Number	HDR550						
Wetland Status	Wetland						
Plot Type	WD						
Plot Date	6/6/2022						
NWI Classification	PSS1/EM1B						
ндм	Flat						
Vegetation Type	Low Shrub Tundra						
Latitude (DD)	64.59621						
Longitude (DD)	-150.0601						



Photo Type: Soils Direction: NA



Photo Type: Vegetation Direction: N



Photo Type: Vegetation Direction: S

### WETLAND DETERMINATION DATA FORM – Alaska Region

HDR

	Project: Totchaket Road Pate: ////2017												
							D:	ate: 6/6/2022					
				on and Pub	olic Facilitie	es	<u>In</u>	vestigators:	·				
Borough/City/Location	n:	West c	of Nena	na					A				
NAD 83, Decimal Degrees								HDR					
Latitude: 64,5966					Waters	<u>-</u>	Kant.	ishna River					
Longitude: 150.05	595:	<u> 58                                    </u>			Locatio	n Note	s:						
Elevation (ft):													
[a45] 1.6° /			10	Ves	1 .			SUMMARY OF FINDINGS					
Are "Normal Circumsta			lydroph	ytic Vegetation Present?	<u> 705</u>								
Significantly Disturbed	?	VEG	SOIL	s Hydro		-		Hydric Soils Present?	yes				
Naturally Problematic?		VEG	SOIL	S HYDRO	4		Wet	land Hydrology Present?	y <i>e</i> 5				
Remarks: Is the Sampled Area within a Wetland?													
<u> </u>													
VEGETATION	T< 19												
Tree Stratum DBH ≥ 3 inch	) ,	1/10	acre circi	ular plot unless	noted, absolu	te cover r	ecorded	Dominance Test w	orksheet:				
Species	IND	DOM	Cover	Species	IND	DOM	Cover	Number of Dominant Species That Are OBL, FACW, or FAC:	(A)				
1. None				3.									
2.				4.				Total Number of Dominant Species Across All Strata:	(B)				
Total Tree Cover:		50% of T	otal Cove	er:	20% of To	otal Cove	F: *********	Percent of Dominant Species					
Sapling/Shrub Stratum	IND	DOM	Cover	8. Vac. vi	I. FAC		NC SALES	That Are OBL, FACW, or FAC:	<u> 75</u> (A/B)				
1. Bet. pap.	FACU	V	15	9. Pic. m			3						
2. Sal. beb.	FAC	V	15	10. Alm Vi			3	Prevalence Index W	orksheet/				
3. Sal. pol.	FACW	1	3	115		<b>†</b>	3	Total % Cover of: Mul	tiply by:				
10 . 1	PACU		3	12.	6, 1710	<del> </del>		OBL speciesx 1 =					
5. Rinner	FAC		7	13.		<b>-</b>		FACW species /2 x2=	24				
6 1 01				14.				FAC species 57 x3=					
Vac. UII'	FAC	7	10	15.				7	84				
7. Ras. aci. Total Shrub Cover: 44	FACU	FOR/ of T	otal Cove		209/ of To	1-1	10 ^	FACU speciesx 4 =	<u> </u>				
<u> </u>	·	<del></del>	Cover	O 10000	20% of To	tai Covei	12.8	UPL speciesx 5 =	0				
Herbaceous Stratum	IND	DOM	7 7 7 7	13.				Column Totals: (A)	<u> 280 (B)</u>				
1. Calican.	FAC	У	15	14.					0 00				
2. Rub. cha.	FACW	4	. )	15.				Prevalence Index = B/A	= 5.00				
3. Eri. Vaz.	FALW	10.12	5	16.				Hydrophytic Vegetation	n Indicators:				
4. Equ. aru,	FAC	1	3	17.				Dominance Test is >50	%				
5. Fgu. Sch	FACU		l	18.				Prevalence Index is ≤3					
6. Cha. ang.	FACU		1	19.				Morphological Adaptation (Provide supporting dat					
7 Car, Vag.	OBL		1	20.				Remarks or on a separa					
8.				21.				Problematic Hydrophyti	c Vegetation <sup>1</sup>				
9.				22.			And the state of the state of	Indicators of hydric soil and must be present unless disturbed	wetland hydrology d or problematic.				
10.				23.				Project Vegetation	on Type				
11.				24.				T. P. M. T. P.	2				
12.				25.				Cowardin Code:	ler .				
Total Herb Cover: 2 7		0% of To	otal Cove	r: 13,5	20% of Tot	tal Cover	5.4	PSS1B	-				
1.Open Water	<u></u>			2. Bare ground			<u> </u>	HGM Classification:					
Remarks: Bryophytes and L	ichens	may be li	isted in the					Landform:	£				
						71 140	5 \ \ \ 10	Lustand					
								Local Relief: Concord	. 14				
								Microtopography: Slope	: Aspect:				
								how mod 2	1100				

lot No: 55

				2 1 1	* \$\displaystyle{\partial} \tag{2}		295 E.	1 1	120	ГI	ot No. 5	<u> </u>				
Profile Des	cription: [	Describe t	o the depth	needed	to docu	ment the presence/at	sence	of soil indi	icators	Soil M	lap Unit Name	Э				
	Horizon		Soil Matrix			Redox Featu										
Depth (in.)	Name	Cole	or (moist)	%	Type <sup>1</sup>		%	Loc <sup>2</sup>	Mod3	Touturo	Harizon C					
	1 .	Con	or (moist)	<del></del>	туре	Color	70	LOC	Mod <sup>3</sup>	Texture	Horizon C	omments				
0-3	01	1									- 12 Jul 688					
3-8	0e				ļ		-									
8-10	AlB	5Y	4/1	80	C	7.54244	10	MRC		5160	o trozeno 10					
			a		C	7.54R 3/4	10	V								
			-		14 <sup>7</sup>						A					
¹Type: C=Conce	entrations D=	:Denletions	: OX=Ovidiza	d Roots	RM = Re	duced Matrix 21 ocatio	n: DI =D	ore Linings	PC=Poot	Channels A	1-Matrix CS-C	oated Sand Grains				
	ontiduona, D-	Depletions	s, OX-OXIGIZE	iu reoots,	, IXIVI – IXE	duced Matrix Locatio	11. FL-F					(PT), Permafrost (PF)				
Remarks:												obbly (CB), Stony (ST)				
									(15-35%	%), 35-60% <b>:</b>	= Very (V), 60-9	0% = Extremely (X)				
Hydric Soil Ir	ndicators	Measure	from the to	of the	mineral	soil layer except for A	1, A2,	A3, A4			-					
Mistosol o	r Histel (A1)		N	Thick D	ark Surf	aces (A12)				Hydric	Soils					
Histic Epip	oedon (A2)4		N	Alaska	Gleyed (	A13)				Pres		Yes				
<u> </u>	ic (A3)		<u> </u>	Alaska	Redox (A	<b>A14)</b>	> ************************************			NRCS Dra	inage Class:	Po				
	Sulfide (A4	)	N	Alaska	Gleyed F	Pores (A15)				Depth of C	rganic Soils:	8				
											Frost					
N Depleted I	Below Dark	Surface (	A11) <u>/</u>	Alaska	Color Ch	nange (TA4) Give de	tails of	color char	nge <u>Re</u>	strictive La	yer Depth:	16"				
<u> </u>	Matrix (F3)		N	Alaska .	Alpine S	wales (TA5)			4Ur	nderlain by	mineral soil v	v/chroma of ≤2				
N Redox Da	rk Surface (	F6)	<u>N</u>	Alaska	Redox w	rith 2.5Y Hue			5 <sub>M</sub>	uet have H	ydrophytic Ve	ugetation and				
<u> </u> Depleted [	Dark Surfac	e (F7)	www.	Alaska	Gleyed v	v/o Hue 5Y or Redde	r Under	lying			ology, and an	1, 1 G + 1				
MRedox De	pression (F	3) 🤏 🏢		AA Pos	itive (mir	neral soil, 60% of hor	izon 4 iı	nches thic	~,	dscape po blematic	sition unless	disturbed or				
Red Parer	nt Material (I	F21)	1			d/High Water Table (*		· · · · · · · ·	er)	Diemanc	<u> </u>					
<u></u> Very Shall		rface (F2	2) //	Low Or	ganic Ma	atter/Low Iron/High pl	1 Soil/N	lew Wetlar	nd	Other (ex	plain in rema	rks)				
HYDROLOG	Υ								100							
D. 22			and Hydro		dicators			n . 1			more require	d)				
Primary Indicat  N Surface W		e indicato		•	\ <i>(</i> !_:		(D.Z)	4 4 -		ed Leaves						
	ater (A i ) r Table (A2)	١				ole on Aerial Imagery ated Concave Surfac				atterns (B1		Roots (C3)(w/in 12")				
Saturation	, ,	,		•	eposits (E		E (DO)	A.		f Reduced		) Roots (C3)(W/IN 12)				
Water Mar			-			le Odor (C1) (w/in 12	")		alt Deposi		11011 (0-1)					
N Sediment I	Deposits (B	2)				ter Table (C2)**	•			Stressed P	lants (D1)					
Drift Depos	sits (B3)		N	Other (I	Explain i	n Remarks)		∑ Ge	eomorphi	c Position	(D2) - 1000 0	N				
- Taran	or Crust (B4	)										te as restrictive layer)				
Iron Depos					-	ogic Conditions on S	ite	e .			ef (D4) - 🎶	dhomes.				
Surface So	-				this time	of Year? <u>Ye s</u>				al Test (D5						
Surface Water		s irom gr Yes	ound surrac No		Depth (in	iches):	vva	ter Source	);		_	drology Present?				
Water Table Pr		Yes	<u> </u>	1.1.		nches): B-Slow we	- ερ. Ο,	recipo.		_	465					
Saturation Pres	and the second second	Yes	<u></u> No _		Depth (in	7	_   '	00.1				on Water Table or, Western AK:				
(includes capilla			aturation_		Endosat						Mid M	ay – late July				
Describe Reco	rded Data (s	tream ga	uge, monito	ring we	ll, aerial j	photos, previous insp	ections	), if availal	ble:		**Mineral S	Soils 12-24 inches Soils 12-40 inches				
Remarks:																
. tomanto.	Ža.									do	minants > #Fl	st = #OBL+FW J + UPL dominants;				
										ac	ld non-domina	nts if tie				

Plot Number	HDR551							
Wetland Status	Wetland							
Plot Type	WD							
Plot Date	6/6/2022							
NWI Classification	PSS1B							
НСМ	Flat							
Vegetation Type	Low Shrub Tundra							
Latitude (DD)	64.59664							
Longitude (DD)	-150.05953							



Photo Type: Soils Direction: NA



Photo Type: Vegetation Direction: N



Photo Type: Vegetation Direction: S

#### WETLAND DETERMINATION DATA FORM – Alaska Region

Plot No: 552 Totchaket Road Project: Date: 12022 Department of Transportation and Public Facilities Applicant: Investigators: Borough/City/Location: West of Nenana 7 H NAD 83, Decimal Degrees **HDR** Latitude: 64,59642 Watershed: River Lishna Longitude: 150.05964 **Location Notes:** Elevation (ft): **SUMMARY OF FINDINGS** Are "Normal Circumstances" Present? Hydrophytic Vegetation Present? Significantly Disturbed? **VEG SOILS HYDRO** Hydric Soils Present? Naturally Problematic? **VEG SOILS HYDRO** Wetland Hydrology Present? Remarks: Is the Sampled Area within a Wetland? **VEGETATION** T< 1%, P = Present SUBREGION: Dominance Test worksheet: Tree Stratum DBH ≥ 3 inch 1/10 acre circular plot unless noted, absolute cover recorded **Number of Dominant Species Species** IND DOM Cover **Species** IND DOM Cover That Are OBL, FACW, or FAC: (A) 3. 1. None Total Number of Dominant 2. 4. Species Across All Strata: (B) **Total Tree Cover:** 50% of Total Cover: 20% of Total Cover: . Percent of Dominant Species Sapling/Shrub Stratum DOM Cover 8. That Are OBL, FACW, or FAC: 35 9. Prevalence Index Worksheet 10. 15 Total % Cover of: Multiply by: 11. 20 **OBL** species 3 12. FACW species 13. 14. FAC species Acu 0 15. FACU species Total Shrub Cover: 💢 🤇 50% of Total Cover: 44 20% of Total Cover: 1 **UPL** species Herbaceous Stratum IND DOM Cover 13. Column Totals: 102 FAC 14. Prevalence Index = B/A = 3.5% 15. FACU 16. FAC **Hydrophytic Vegetation Indicators:** 17. Dominance Test is >50% 18. 5. Prevalence Index is ≤3.0 6. 19. Morphological Adaptations<sup>1</sup> (Provide supporting data in 7. 20. Remarks or on a separate sheet) 8. 21. Problematic Hydrophytic Vegetation<sup>1</sup> Indicators of hydric soil and wetland hydrology 9. 22. must be present unless disturbed or problematic **Project Vegetation Type** 10. 23. 11. 24. 12. 25. Cowardin Code: **Total Herb Cover:** 50% of Total Cover: 20% of Total Cover: HGM Classification: 1. Open Water 2. Bare ground Remarks: Bryophytes and Lichens may be listed in the Herbaceous columns \_andform: ocal Relief: Microtopography: Slope: Aspect: None

HDR Plot No: 55Z

Profile Des	crintion: [	Describe to the depth	poodod	to door	mont the probance/s	.boonee	of a all in d	in atom	1		32
1 Tollie Des	Honzon	Soil Matrix		to docu	Redox Featu		oi soii ina	icators	5011	//ap Unit Name	€
Depth (in.)	Name	Color (moist)	%	Type <sup>1</sup>	Color	% %	Loc <sup>2</sup>	Mod <sup>3</sup>	Texture	Horizon C	ommente
(2 - 7	0:	Solet (most)	<del>/</del>	1100	COICI	78		Midd	I GALUIC	110112011 01	Jilinents
0 - 2	00	7/1/27/									
0-11	B.	7.542 3/3	100			parine.	*	-	SILO		*
11-18	B2	1042 3/4	100				****		SALO		
		· Para Alaman									
Ju.			1 10								
· ·											
			\$ 500 60								<u> </u>
					l <sub>est</sub>						i dipari di
<sup>1</sup> Type: C=Conce	entrations, D=	Depletions, OX=Oxidize	ed Roots,	RM = Re	duced Matrix <sup>2</sup> Location	on: PL=Po	re Linings	, RC=Root	Channels, I	M=Matrix, CS=C	oated Sand Grains
Remarks:		N. St. Careful	1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1	Em.							(PT), Permafrost (PF)
		and the second second									obbly (CB), Stony (ST) 0% = Extremely (X)
Hydric Soil Ir	ndicators	Measure from the to	p of the	mineral :	soil layer except for	A1, A2, A	\3, A4		,	10.7 (17,100	C/O ZXIIOMOI, (X)
<u></u> Histosol o	r Histel (A1)	<u>~</u>	Thick D	ark Surfa	aces (A12)				Hydri	c Soils	
M Histic Epip	pedon (A2)4	N	Alaska	Gleyed (	A13)				Pres	ent?	Nomen
<u></u> Black Hist	ic (A3)	$\sim$	Alaska	Redox (A	<b>A14</b> )			-	NRCS Dr	ainage Class:	WD
∧ Hydrogen	Sulfide (A4	<u>N</u>	Alaska	Gleyed F	Pores (A15)				Depth of 0	Organic Soils:	2
Indicators for	Problemat	ic Hydric Soils⁵ (Se	e Page 9	91/Section	on 4 for Problematic	Hydric S	oils Deta	ils)	Restrictiv	e Layer Type:	
Nepleted E	Below Dark	Surface (A11) 🖊	Alaska	Color Ch	ange (TA4) Give d	etails of o	color cha	nge Re	strictive L	ayer Depth:	
N Depleted	Matrix (F3)	N	Alaska .	Alpine S	wales (TA5)			4Uı	nderlain by	/ mineral soil v	v/chroma of ≤2
<u>M</u> Redox Da	rk Surface (	F6)	Alaska	Redox w	ith 2.5Y Hue						
N Depleted	Dark Surfac	e (F7) 🔥 🔥	Alaska	Gleyed v	v/o Hue 5Y or Redde	er Underl	ying			lydrophytic Ve rology, and an	
✓ Redox Dep	pression (F	3) N	AA Pos	itive (min	neral soil, 60% of ho	rizon 4 in	ches thic			sition unless	
Red Paren	ıt Material (I	* *			l/High Water Table (			Dro	blematic		
₩ Very Shall	ow Dark Su				itter/Low Iron/High p		_	-	Other (e	xplain in rema	rks)
HYDROLOG											
		Wetland Hydro	logy inc	dicators			Secon	dary Indic	ators (2 o	r more require	d) 3 272
Primary Indicat	ors (any on	e indicator is sufficier	ıt)						ned Leave:		
<u>M</u> Surface W					le on Aerial Imagery		4		atterns (B	-	
0.43	r Table (A2)	) ~			ated Concave Surfac	ce (B8)	15				Roots (C3)(w/in 12")
Saturation Water Mar		A		eposits (E	315) le Odor (C1) (w/in 12	ס"ו)		resence o alt Deposi	1 /	I Iron (C4)	
- 1	Deposits (B				ter Table (C2)**	۷ )				Plants (D1)	
North Depos		$\overline{\mathcal{N}}$	-		n Remarks)				c Position		
Algal Mat o	or Crust (B4	)	•	•	,						e as restrictive layer)
N Iron Depos	its (B5)				ogic Conditions on S	Site	<u> </u>	icrotopog	raphic Rel	ief (D4)	
M Surface Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc     Sc	4 4	. 80-		this time	of Year? <u>Yes</u>		<u>A</u> F	AC-Neutra	al Test (D5	-	
	the way of the con-	s from ground surfac	•		*	Wate	er Source	e:		Wetland Hy	drology Present?
Surface Water		Yes No _	9							No	
Water Table Pro		Yes No _ Yes No _	•	-							on Water Table
(includes capilla	4.9.2.		/	Depth (in		-				•	or, Western AK:
Describe Recor	ded Data (e	Episaturation_ stream gauge, monito		Endosat		nections)	if availa	hle:		Mid Ma Mid M**	ay – late July ioils 12-24 inches
2001D0 10001	COG Data (S	cam gaage, monit	ing we	i, acital j	onotos, previous ilis	peciions)	, ii avalid	DIG.			Soils 12-40 inches
Remarks:	The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s		····						F	AC-Neutral Tes	st = #OBL+FW
Dm	n. +.								d	ominants > #Fl	J + UPL dominants;
···	<u> </u>				^^	····		-	a	dd non-domina	nts ir tie

Plot Number	HDR552								
Wetland Status	Upland								
Plot Type	WD								
Plot Date	6/6/2022								
NWI Classification	U								
НСМ	N/A								
Vegetation Type	Deciduous Shrub and Sapling Regrowth								
Latitude (DD)	64.59642								
Longitude (DD)	-150.059								



Photo Type: Soils Direction: NA



Photo Type: Vegetation Direction: E



Photo Type: Vegetation Direction: W

Plot Number	HDR553					
Wetland Status	Upland					
Plot Type	FVP					
Plot Date	6/6/2022					
NWI Classification	U					
ндм	N/A					
Vegetation Type	Deciduous Shrub and Sapling Regrowth					
Latitude (DD)	64.59626					
Longitude (DD)	-150.05839					



Photo Type: Soils Direction: NA



Photo Type: Vegetation Direction: N



Photo Type: Vegetation Direction: S

Plot Number	HDR554							
Wetland Status	Wetland							
Plot Type	FVP							
Plot Date	6/6/2022							
NWI Classification	PSS1/EM1B							
ндм	Flat							
Vegetation Type	Open Mixed Shrub Sedge Tundra							
Latitude (DD)	64.5961							
Longitude (DD)	-150.0581							



Photo Type: Soils Direction: NA



Photo Type: Vegetation Direction: W



Photo Type: Vegetation Direction: E

Plot Number	HDR555						
Wetland Status	Wetland						
Plot Type	FVP						
Plot Date	6/6/2022						
NWI Classification	PSS1/EM1B						
ндм	Flat						
Vegetation Type	Open Tall Willow Shrub						
Latitude (DD)	64.59572						
Longitude (DD)	-150.0568						



Photo Type: Soils Direction: NA



Photo Type: Vegetation Direction: N



Photo Type: Vegetation Direction: S

### WETLAND DETERMINATION DATA FORM - Alaska Region

HDR

Plot No: 556											
Project: Totchaket Road Date: 6/6/2022											
Applicant: Department of Transportation and Public Facilities Investigators:											
Borough/City/Location: West of Nenana Z/4 MA											
NAD 83, Decimal Degrees HDR											
Latitude: 64, 595	47				Waters	hed:	Lan.	Fishna River			
Longitude: 150.05					Location	n Note	s:				
Elevation (ft):					9			\$ .			
					SUMMARY OF FINDINGS						
Are "Normal Circumsta				yes		1	lydropr	nytic Vegetation Present? Ves			
Significantly Disturbed	?	VEG	SOILS		· .			Hydric Soils Present?			
Naturally Problematic?		VEG	SOILS	HYDRO			Wet	tland Hydrology Present?			
Remarks:					Is the	e Samr	oled A	rea within a Wetland?			
								yes			
VEGETATION  Tree Stratum DBH ≥ 3 inch		6, P = Pre		ar plot unless no	SUBREC			Dominance Test worksheet:			
	·			•			·	Number of Dominant Species			
Species	IND	DOM	Cover	Species	IND	DOM	Cover	That Are OBL, FACW, or FAC:(A)			
1. None				<b>3</b> . <b>4</b> .		-		Total Number of Dominant			
2.		F09/ - FT	otal Cover		20% of T	atal Carra		Species Across All Strata:(B)			
Total Tree Cover:		DOM			- 1 4		·	Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)			
Sapling/Shrub Stratum	IND	DOM		8. Pic.ne.	r. FACW	<u> </u>	3	That Are OBL, FACW, or FAC:(A/B)			
1. Alm. Vir.	FAC	7	<u> </u>			-	·	Prevalence Index Worksheet			
2. Rho. gro.	FAC	ý	50	10.				Total % Cover of: Multiply by:			
3. Vac. 011.	FAC	ŧ.	15	11.		<u> </u>		OBL species5_x1 =5_			
4. Bet. pap.	FALL		3	12.			,				
5. Ros. aci.	FACU		3	13.				FACW species x 2 =			
6. Vac. vi7.	FAC		5	14.				FAC species 130 x3 = 390			
7. Sal. beb.	FAC		5	15.				FACU speciesx 4 =x			
Total Shrub Cover: //9		50% of To	otal Cover	: 59.5	20% of To	tal Cove	r: 23. 8	UPL speciesx 5 =			
Herbaceous Stratum	IND	DOM	Cover	13.				Column Totals: <u>145 (</u> A) <u>429 (</u> B)			
1 Caribia.	FAC	7	15	14.							
2. Equ. arv.	FAC		5	15.				Prevalence Index = B/A = 2.96			
3. Car Vag	OBL		5	16.				Hydrophytic Vegetation Indicators:			
4.503.50	FACU		T	17.				Dominance Test is >50%			
5. 5.			7	18.				Prevalence Index is ≤3.0			
6.				19.				Morphological Adaptations <sup>1</sup>			
7.				20.				(Provide supporting data in Remarks or on a separate sheet)			
8.				21.				Problematic Hydrophytic Vegetation <sup>1</sup>			
9.				22.				must be present unless disturbed or problematic.			
10.				23.				Project Vegetation Type			
11.				24.				TRO			
12.				25.				Cowardin Code			
Total Herb Cover: 26		50% of To	otal Cover	: 13.	20% of To	tal Cove	r: 5.2	HGM Classification:			
1.Орел Water	C			2. Bare ground	S			FUX			
Remarks: Bryophytes and I	ichens	may be li	sted in the	Herbaceous co	lumns			Landform:			
								Local Relief: A ASSA B			
								Microtopography: Slope: Aspect:			
								Mrs hum 2 N			

Plot No: 556

Profile Des	Profile Description: Describe to the depth needed to document the presence/absence of soil indicators  Soil Map Unit Name											
	Horizon	Soil Matrix Redox Features										
Depth (in.)	Name	Color (moist)	%	Type <sup>1</sup>	Color	%	Loc <sup>2</sup>	Мо	d <sup>3</sup> Textu	re Horizon C	omments	
0-3	Oi											
3-6	0e											
6-8	00											
8-12	89	N4/1	80	C	7,5424/4	20	MRC		512	Frozen e10"		
									·			
<sup>1</sup> Type: C=Concentrations, D=Depletions, OX=Oxidized Roots, RM = Reduced Matrix <sup>2</sup> Location: PL=Pore Linings, RC=Root Channels, M=Matrix, CS=Coated Sand Grains												
Remarks:											(PT), Permafrost (PF)	
											obbly (CB), Stony (ST) 10% = Extremely (X)	
Hydric Soil Ir	ndicators	Measure from the top	of the	mineral s	soil layer except for A	1, A2, /	43, A4			, \ , \		
	r Histel (A1) pedon (A2)4			ark Surfa Gleyed (/	aces (A12)	•				ic Soils esent?	Yes	
Black Hist				Redox (A				ŀ			D N	
Black filst		( )			Pores (A15)			ŀ		rainage Class: Organic Soils:	8	
					n 4 for Problematic H	vdric S	oils Deta	aile)		ve Layer Type:	Frost	
1.25		. 3			ange (TA4) Give det					Layer Depth:	10"	
Depleted N					vales (TA5)	uno 01 1	00101 0110	inge		by mineral soil v	V	
1 3	rk Surface (I	" n. I			ith 2.5Y Hue			ŀ	Origenam	by mineral soli (	W/CITIOTHA OF 32	
	Dark Surface				o Hue 5Y or Redder	Under	lying			Hydrophytic Ve drology, and an		
N Redox De	pression (F8	B) <u>~</u> F	A Pos	itive (min	eral soil, 60% of horiz	on 4 ir	nches thi	ck)	landscape	position unless		
<u></u> Red Parer	nt Material (F	F21) / / F	onded	/Flooded	/High Water Table (12	2 inche	s or high	ner)	problemation	·		
Very Shall	ow Dark Su	rface (F22) /VL	ow Or	ganic Ma	tter/Low Iron/High pH	Soil/N	ew Wetla	and	Other (	explain in rema	rks)	
HYDROLOG	Υ											
	_	Wetland Hydrol		dicators					1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1	or more require	d)	
		e indicator is sufficient	•			~ <b>~</b> \			tained Leav			
∆ Surface W     ✓ High Wate	ater (A1) r Table (A2)				le on Aerial Imagery (I Ited Concave Surface	•		_	e Patterns (	•	Roots (C3)(w/in 12")	
> Saturation		A CONTRACTOR OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY O		eposits (B		(50)				ed Iron (C4)	3 1,0009 (03)(Mill 12 )	
Water Mar	ks (B1)	$\overline{\mathcal{N}}$ (	Hydrog	en Sulfid	e Odor (C1) (w/in 12")	1			osits (C5)	,		
	Deposits (B2		-		ter Table (C2)**		N S	Stunted	or Stressed	Plants (D1)		
		<del></del>	Other (I	Explain ir	Remarks)				phic Positio			
Algal Mat of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the prop			Climati	a/Usadrala	raia Canditiona on Sit	_	- 4				te as restrictive layer)	
Nurface Sc				-	ogic Conditions on Site of Year? $\ensuremath{^{ ullet}}$	Ð	/ >		utral Test ([	elief (D4) - k.a. 05)	w mg/k k	
		s from ground surface				Wat	er Sourc				drology Present?	
Surface Water	Present?	Yes No	<u>X</u> _, ı	Depth (in		-				W05		
Water Table Pr		Yes <u>X</u> No _	 	Depth (in	ches): 977 weap	2	Preci	D		- 16	on Water Table	
Saturation Pres (includes capilla		YesX No	9	Depth (in			11601				or, Western AK:	
Describe Recor	rded Data (s	Episaturation / tream gauge, monitor		Endosatu II, aerial p	uration hotos, previous inspe	ctions	), if availa	able:		**Mineral S	ay – late July Soils 12-24 inches Soils 12-40 inches	
Remarks:										FAC-Neutral Te		
Nemarks.											J + UPL dominants;	

Plot Number	HDR556								
Wetland Status	Wetland								
Plot Type	WD								
Plot Date	6/6/2022								
NWI Classification	PSS1/3B								
ндм	Flat								
Vegetation Type	Deciduous Shrub and Sapling Regrowth								
Latitude (DD)	64.59547								
Longitude (DD)	-150.05656								



Photo Type: Soils Direction: NA



Photo Type: Vegetation Direction: E



Photo Type: Vegetation Direction: W

### WETLAND DETERMINATION DATA FORM - Alaska Region

Plot No: 557												
			<u>.</u>		c Facilitie	es 	<u>In</u>	vestigators:				
Borough/City/Location	on:	West o	f Nenar	na				OF1 1	A			
NAD 83, Decimal Degrees	HDR	*										
Latitude: 64.5			· · · · · · · · · · · · · · · · · · ·		Waters			itishna River				
	05	629			Locatio	n Note	s:					
Elevation (ft):					<u> </u>			SUMMARY OF F	INDINGS			
Are "Normal Circumsta	nces"	Presen	nt?	Ve5		H	lvdroph	ytic Vegetation Present?	Ves			
Significantly Disturbed		VEG					., с. ор.	Hydric Soils Present?	No			
Naturally Problematic?		VEG					Wet	land Hydrology Present?	No			
Remarks:					lo the	Came						
					<u> </u>			rea within a Wetland?	$\mathcal{N}_{\mathfrak{d}}$			
VEGETATION		6, P = Pre			SUBREC		<del></del>		radala at			
Tree Stratum DBH ≥ 3 inch		TT	т	lar plot unless no		T	,	Dominance Test v  Number of Dominant Species	/orksneet:			
Species	IND	DOM	Cover	Species	IND	DOM	Cover	That Are OBL, FACW, or FAC	: <u> </u>			
1. None	<u> </u>			3.				Total Number of Dominant	1 1			
2.	<u> </u>			4.		·		Species Across All Strata:	(B)			
Total Tree Cover:	w	50% of T	otal Cove		20% of To	otal Cove	T: emilion	Percent of Dominant Species				
Sapling/Shrub Stratum	IND	DOM	Cover	8. Rosiaci.	FALL		5	That Are OBL, FACW, or FAC	:(A/B)			
1 Rho, gra.	FAC	7	30	9.				Prevalence Index V	Vorkshoot			
2. Piz. ner.	FAW	ý	20	10.					Itiply by:			
3. Vac. vity	FAC	1	7	11.								
4. Bet, pap,	FACU		15	12.								
5. Pop. tre.	FACU		3	13.				FACW species 23 x 2 =	5			
6. Sal. pol.	FACW		3	14.				FAC species 57 x 3 = 171				
7. Sal. beb.	FAL		7	15.	.	<u> </u>		FACU species 30_x4=	120			
Total Shrub Cover: 96		50% of To	otal Cove	: 45	20% of To	tal Cover	: 18	UPL species 🗘 x 5 =	: 🔘			
Herbaceous Stratum	IND	DOM	Cover	13.		-		Column Totals: // (A)	337 (B)			
1. Equ. Sci.	MICH		1	14.					e-5			
2. Cha. aug.	FACL	4	5"	15.			-	Prevalence Index = B/A	= <u>3.06</u>			
3. Egs. avs.	FAC	Ý	10	16.				Hydrophytic Vegetati	on Indicators:			
4. Mer. pan.	FACU	(	1	17.				Dominance Test is >50	)%			
5. Calican.	FAC		3	18.				Prevalence Index is ≤3				
6.			2002	19.				Morphological Adaptati (Provide supporting da				
7.				20.				Remarks or on a separ				
8.				21.				Problematic Hydrophyt	ic Vegetation <sup>1</sup>			
9.		· ·		22.				must be present unless disturbe	ed or problematic.			
10.				23.				Project Vegetati	on Type			
11.				24.				1187				
12.				25.		<u> </u>	war	Cowardin Code:				
Total Herb Cover: 20		60% of To	tal Cover	: 10.	20% of To	tal Cover	: 4	HGM Classification:				
1.Open Water	0			2. Bare ground	15			N/A				
Remarks: Bryophytes and L	ichens	may be li	sted in the	Herbaceous co	lumns			Landform:				
								Local Relief: Con VCX				
								Microtopography: Slope	e: Aspect:			
						1		Non	N			

Plot No: 557

Jine Des	Horizon		Matrix	200 10 0	Journ	ent the presence/ Redox Feat		J UI SC	in mult	JaiUIS	3011	Map Unit Nam		
Depth (in.)	Name		1	% Tv	.n.a1			Т.	2	14-43	T			
	O {	Color (m	ioist)	<u>% 1</u>	/pe <sup>1</sup>	<u>Color</u>	<u> </u>		.oc²	Mod <sup>3</sup>	Texture	Horizon C	omments	
0-6	<del> </del>	1000	21 1								<del>  _ , _ </del>			
<u>6-8.</u>	A	10 40		70	esta-	eja-	4000				5120	•		
8-19	B	10423		PO .		hittani-	`	-	State.	g <b>e</b> n.	SILO			
		2.544/	2 3	0		AND THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPER	-	qu-	****	******	5160			
	-													
										-				
<sup>1</sup> Type: C=Conce	entrations, D=	Depletions, OX	=Oxidized Ro	ots, RM	= Redi	uced Matrix <sup>2</sup> Locat	ion: PL=	Pore Li	nings,	RC=Root	Channels,	M=Matrix, CS=0	Coated Sand Grains	
Remarks:									1				y (PT), Permafrost (F	
1-													obbly (CB), Stony (S 90% = Extremely (X)	-
Hydric Soil In	dicators	Measure from	the top of	he mine	eral so	oil layer except for	A1, A2	, A3, A	14					
Histosol or	r Histel (A1)		M Thic	k Dark	Surfac	ces (A12)					Hydri	c Soils		
M Histic Epip	edon (A2)⁴		Alas	ka Gley	ed (A	13)					Pres	sent?	No	
M Black Hist	ic (A3)		Alas	ka Red	ox (A1	14)					NRCS D	ainage Class:	MWD	
	Sulfide (A4)					ores (A15)					Depth of	Organic Soils:	6	
á			ø			4 for Problemation					Restrictiv	e Layer Type:	- //	
. 4		Surface (A11)				nge (TA4) Give o	details o	f colo	r chan	ge <u>Re</u>	strictive L	ayer Depth:		
<u>₩</u> Depleted N			ar .			ales (TA5)				⁴Ur	nderlain b	y mineral soil	w/chroma of ≤2	
13.44	rk Surface (I	-				h 2.5Y Hue				⁵Mı	ust have I	Hydrophytic V	egetation and	
	Dark Surface		4			o Hue 5Y or Redd				1		rology, and ar	the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s	
	oression (F8		i i		-	ral soil, 60% of ho				' Inro	oscape p blematic	osition unless	disturbed or	
Very Shall	it Material (F	•	- 4			High Water Table	-		_	,	O45 /-		**************************************	
YDROLOG		nace (FZZ)		Organic	c Matt	er/Low Iron/High	pri 5011/	New v	vetian	0	Otner (e	xplain in rema	arks)	
TIDROLOG	1	Wetland	Hydrology	Indicat	tors			S	econd	ary Indic		r more require	ad)	
Primary Indicat	ors (any one								. %	-	ed Leave	•	,u) ,	
M Surface W						on Aerial Imager			⊻ Dra	ainage P	atterns (B	10)		
∠ High Wate ∠ Saturation	r Table (A2)			rsely Ve Deposi		ed Concave Surfa	ice (B8)	4			-		g Roots (C3)(w/in	12"
*****				•	•	odor (C1) (w/in 1	2"\	<u> </u>		esence o It Deposi		d Iron (C4)		
24	Deposits (B2	2)				er Table (C2)**	_,		- 6	-		Piants (D1)		
🔀 Drift Depos	sits (B3)	,	4			Remarks)		1	-		c Position	, ,		
	or Crust (B4)	)						Þ	- k				te as restrictive la	/er
Iron Depos				-	_	gic Conditions on	Site	_			raphic Re	• •		
Field Observat	il Cracks (B tions (inche			or this	time o	f Year? <u>YES</u>		ater S			al Test (D		drology Preser	.+2
Surface Water	-	_	_ No <u></u>	_ Dept	h (incl	hes):			ource.			n)	diology Piesei	JL F
Water Table Pro	esent?	Yes	_ No _ <u>×</u>	_ Dept	h (incl	nes):					-	Dry Seas	son Water Table	
Saturation Pres (includes capilla	500	Yes	_ No <u> </u>	_ Dept	h (incl	nes):							ior, Western AK:	
		Episatura			osatu			-\ :r		1			lay – late July	
Describe Recor	ueu Data (S	ıream gauge,	inonitoring	well, ae	ınaı ph	otos, previous ins	spection	s), if a	ivailab	ie:			Soils 12-24 inches Soils 12-40 inches	
Remarks: p	ale verm	anoist 1	but not	Sat	1/4	48.51.54tl	y the	100	٠		1		st = #OBL+FW	
- F F - 3	1	_				V	ji .					lominants > #F dd non-domina	U + UPL dominants ants if tie	;

Plot Number	HDR557							
Wetland Status	Upland							
Plot Type	WD							
Plot Date	6/6/2022							
NWI Classification	U							
ндм	N/A							
Vegetation Type	Deciduous Shrub and Sapling Regrowth							
Latitude (DD)	64.59531							
Longitude (DD)	-150.0562							



Photo Type: Soils Direction: NA



Photo Type: Vegetation Direction: E



Photo Type: Vegetation Direction: W

Plot Number	HDR558
Wetland Status	Wetland
Plot Type	FVP
Plot Date	6/6/2022
NWI Classification	PSS1B
ндм	Flat
Vegetation Type	Open Tall Willow Shrub
Latitude (DD)	64.59476
Longitude (DD)	-150.0548



Photo Type: Soils Direction: NA



Photo Type: Vegetation Direction: N



Photo Type: Vegetation Direction: S

Plot Number	HDR559
Wetland Status	Upland
Plot Type	FVP
Plot Date	6/6/2022
NWI Classification	U
ндм	N/A
Vegetation Type	Deciduous Shrub and Sapling Regrowth
Latitude (DD)	64.59492
Longitude (DD)	-150.05487



Photo Type: Soils Direction: NA



Photo Type: Vegetation Direction: N



Photo Type: Vegetation Direction: S

Plot Number	HDR560					
Wetland Status	Wetland					
Plot Type	FVP					
Plot Date	6/6/2022					
NWI Classification	PSS1B					
НСМ	Flat					
Vegetation Type	Open Tall Willow Shrub					
Latitude (DD)	64.59437					
Longitude (DD)	-150.05373					



Photo Type: Soils Direction: NA



 $\hbox{Direction: } {\bf N}$ Photo Type: Vegetation



Photo Type: Vegetation Direction: S

Plot Number	HDR561
Wetland Status	Upland
Plot Type	FVP
Plot Date	6/6/2022
NWI Classification	U
ндм	N/A
Vegetation Type	Deciduous Shrub and Sapling Regrowth
Latitude (DD)	64.59416
Longitude (DD)	-150.0534



Photo Type: Soils Direction: NA



Photo Type: Vegetation Direction: N



Photo Type: Vegetation Direction: S

Plot Number	HDR562
Wetland Status	Wetland
Plot Type	FVP
Plot Date	6/6/2022
NWI Classification	PSS1/EM1B
ндм	Flat
Vegetation Type	Open Mixed Shrub Sedge Tundra
Latitude (DD)	64.594
Longitude (DD)	-150.05281



Photo Type: Soils Direction: NA



Photo Type: Vegetation Direction: N



Photo Type: Vegetation Direction: S

Plot Number	HDR563						
Wetland Status	Wetland						
Plot Type	FVP						
Plot Date	6/6/2022						
NWI Classification	PSS1/EM1B						
HGM	Flat						
Vegetation Type	Open Mixed Shrub Sedge Tundra						
Latitude (DD)	64.5928						
Longitude (DD)	-150.05033						



Photo Type: Vegetation Direction: S



Photo Type: Vegetation Direction: N

Photo Type:

Direction:

### WETLAND DETERMINATION DATA FORM - Alaska Region

HDR

								Plot No: 5764			
Project: Totchaket	Road	<u> </u>					Da	te: 4/6/2020			
Applicant: Department of Transportation and Public Fa				17.67.00							
Borough/City/Location: West of Nenana					7.H MA						
Bolodgii/Oity/256duoli.											
NAD 83, Decimal Degrees  Latitude:					Waters	hed:	Kan	Lishna River			
Longitude:					Location			1: 30:00			
Elevation (ft):						.,					
Lievation (it).					1			SUMMARY OF FINDINGS			
Are "Normal Circumsta	Are "Normal Circumstances" Present? Ve5 Hydrophytic Vegetation Present?						ytic Vegetation Present?				
Significantly Disturbed?	?	VEG	SOILS	HYDRO				Hydric Soils Present?			
Naturally Problematic?		VEG	SOILS	HYDRO			Wetl	and Hydrology Present?			
Remarks:					Is the	e Samp	oled Ar	ea within a Wetland?			
							T- 6 4	ea within a wetland: yes			
VEGETATION		, P = Pre			SUBRE			Dominance Test worksheet:			
Tree Stratum DBH ≥ 3 inch				lar plot unless no		1		Number of Dominant Species			
Species	IND	DOM	Cover	Species	IND	DOM	Cover	That Are OBL, FACW, or FAC:(A)			
1. None				3.				Total Number of Dominant			
2.				4.			<u> </u>	Species Across All Strata:(B)			
Total Tree Cover:	{	50% of T	otal Cove	er:	20% of T	otal Cove	r:	Percent of Dominant Species /			
Sapling/Shrub Stratum	IND	DOM	Cover	8. Bet pay	- FAKU		3	That Are OBL, FACW, or FAC: 100 (A/B)			
1. Rho gro	FAC	>	35	9. Bet now	FAC		5	Prevalence Index Worksheet			
2. Pop tre	FACU	1:	-	10. 🔿 🔻 🗼				Total % Cover of:Multiply by:			
3. Sal pul	FACW		7	11.	j.						
4. Sal belo	FAC		3	12.				OBL speciesx1 =			
301 000	FAC		5	13.				FACW species <u>38</u> x 2 = <u>76</u>			
7000 411	FAC		<u> </u>	14.	FAC			FAC species 64 x3 = 192			
VIAC VIII	FACW		3	15.	2 450			FACU speciesx 4 =			
7. Pic mar Total Shrub Cover: (67	Iracw	50% of T		r: 33,5	20% of To	otal Cove	r:13 4	<u> </u>			
Herbaceous Stratum	IND	DOM	Cover	13.			J.	UPL species			
Herbaceous Stratum			25	14.				Column Totals: / O + (A) _ 288 (B)			
2. Ruh cha	FACW	7	2	15.	Prevalence Index = B/A = 2,60			Prevalence Index = B/A = 2,69			
3. Char chs				16.		1		Hydrophytic Vegetation Indicators:			
Orac aris	FACU	. 1	1 10	17.			*	Dominance Test is >50%			
4. Cal can	FAC	7	10	18.		1		Prevalence Index is ≤3.0			
5. Equi arv	FAC		1	19.				Morphological Adaptations <sup>1</sup>			
6. V							-	(Provide supporting data in			
7.				20.				Remarks or on a separate sheet)			
8.				21.			<u> </u>	Problematic Hydrophytic Vegetation¹ ¹Indicators of hydric soil and wetland hydrology			
9.				22.			-	must be present unless disturbed or problematic.  Project Vegetation Type			
10.				23.				- Project vegetation Type			
11.				24.				ICZa			
12.	Cowardin Code:					Cowardin Code:					
Total Herb Cover: 40 50% of Total Cover: 20% of Total Cover: 8 HGM Classification:											
1.Open Water  Remarks: Bryophytes and	Cichens	may he	listed in th	2. Bare ground		<u></u>		Landform:			
nemarks: Dryophytes and	-10116119	may be	iiotou III U	, 10.5000000				Lowland.			
								Local Relief: Consume			
								Microtopography: Slope: Aspect:			
							1	TUSSOCKY 2 W			

HDR Plot No: 564

Profile Des	cription: D	escribe to the depth	needec	to docur	ment the presence/abs	sence	of soil in	dicators	Soi	l Map Unit Nam	e
	Horizon	Soil Matrix	Matrix Redox Features								
Depth (in.)	Name	Color (moist)	<u>%</u>	Type <sup>1</sup>	Color	<u>%</u>	Loc2	Mc Mc	<u>d3</u> <u>Textι</u>	re Horizon C	omments
0-6	0e	747									
- 4			1								
6-8	Oa										
8-10	B	51 1/2	85	O <sup>r</sup>	7.5YR 1/4	15	MR	۷	SIL	J Frozena	+10
				.8	, The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the		1				
			<del>                                     </del>					_			
			<del> </del>			<u> </u>		**.	4		
									, v		
			1				- 14				
	<u> </u>		1								<u> </u>
<sup>1</sup> Type: C=Conce	entrations, D=0	Depletions, OX=Oxidize	d Roots	RM = Re	duced Matrix <sup>2</sup> Location	PL=Pc	re Lining				
Remarks:											(PT), Permafrost (PF)
											obbly (CB), Stony (ST) 90% = Extremely (X)
Hydric Soil Ir	ndicators N	Measure from the top	of the	mineral s	soil layer except for A	I, A2, /	A3, A4	1.5	00707, 00 00	70 TOLY (1), 00 C	Some Extremely (X)
<u></u> Mistosol o					aces (A12)				Hyd	ric Soils	2.7.
Histic Epip	edon (A2)4			Gleyed (					_	esent?	Vac
N Black Histi		•			· · · · · · · · · · · · · · · · · · ·			Ì	NBCCI	Drainage Class	700
· -									PD		
	ydrogen Sulfide (A4)  Alaska Gleyed Pores (A15)  Depth of Organic Soils:							8			
	dicators for Problematic Hydric Soils (See Page 91/Section 4 for Problematic Hydric Soils Details)  Restrictive Layer Type:							Lovers			
Depleted E	Depleted Below Dark Surface (A11) 🖊 Alaska Color Change (TA4) Give details of color change Restrictive Layer Depth:							10"			
<u>M</u> Depleted M	Depleted Matrix (F3)  Alaska Alpine Swales (TA5)  4 Underlain by mineral soil w/chroma of ≤2  Alaska Alpine Swales (TA5)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Alaska Alpine Swales (TA5)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)										
<u></u> Redox Dar											
<u> </u>	Dark Surface	(F7) <u>/</u>	laska i	Gleyed w	o Hue 5Y or Redder	Under	ying			: Hydrophytic Ve drology, and an	
N Redox Dep	oression (F8)	al P	A Pos	itive (min	eral soil, 60% of horiz	on 4 ir	ches th	ick)		position unless	
// Red Paren	-	<del>-</del>			/High Water Table (12			- 1	problemation		
✓ Very Shall	and the second of the second				tter/Low Iron/High pH		_		045	/	
		iace (1 22) No L	.UW CI	Janic Ivia	iter/Low from/High ph	SUII/IN	ew well	anu	Other	(explain in rema	rks)
HYDROLOG	Y										
Drimon, Indicat	ora (ony ona	Wetland Hydrol		dicators					,	or more require	d)
A .	• •	indicator is sufficient	•	ion Violbl	io on Aorial Images //	1 <b>7</b> \			tained Leav	, ,	
<del></del>	Surface Water (A1)    Irrundation Visible on Aerial Imagery (B7)   \( \triangle \) Drainage Patterns (B10)    High Water Table (A2)   \( \triangle \) Sparsely Vegetated Concave Surface (B8)   \( \triangle \) Oxidized Rhizospheres along Living Roots (C3)(w/in)						Poots (C2)(w/in 42")				
₹ Saturation	( ) = 1 ) 0 = 1 ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) (						roots (Co)(W/III 12 )				
<u>∜</u> Water Marl	Water Marks (B1)  Hydrogen Sulfide Odor (C1) (w/in 12")  A Salt Deposits (C5)										
	✓ Sediment Deposits (B2)  ✓ Dry-Season Water Table (C2)**  ✓ Stunted or Stressed Plants (D1)										
4	/ Drift Deposits (B3) / Other (Explain in Remarks) / Geomorphic Position (D2) - Con care										
	Algal Mat or Crust (B4)  Shallow Aquitard (D3) (w/in 24", note as restrictive layer										
	/ Iron Deposits (B5)  Are Climatic/Hydrologic Conditions on Site  / Microtopographic Relief (D4)  / FAC-Neutral Test (D5)										
Field Observations (inches from ground surface)  Water Source:  Wetland Hydrology Present?  Surface Water Present?  Yes No Depth (inches):											
Water Table Pro	1 TU D 10 10 10 10 10 10 10 10 10 10 10 10 10										
Saturation Pres	Diy Season water raple										
(includes capilla	ncludes capillary fringe)										
Describe Recor	Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  **Mineral Soils 12-24 inches						•				
	•	-	-	•	•	,					Soils 12-40 inches
Remarks:									r	FAC-Neutral Tes	st = #OBL+FW
										dominants > #Fl add non-domina	J + UPL dominants;
	·- ·		••	, .	^^					· · · · ·	nis ii iie

Plot Number	HDR564
Wetland Status	Wetland
Plot Type	WD
Plot Date	6/6/2022
NWI Classification	PSS3/EM1B
ндм	Flat
Vegetation Type	Open Mixed Shrub Sedge Tundra
Latitude (DD)	64.59149
Longitude (DD)	-150.04684



Photo Type: Soils

Direction: NA



Photo Type: Vegetation

Direction: E



Photo Type: Vegetation

Direction: W

Plot Number	HDR565						
Wetland Status	Upland						
Plot Type	FVP						
Plot Date	6/6/2022						
NWI Classification	U						
ндм	N/A						
Vegetation Type	Deciduous Shrub and Sapling Regrowth						
Latitude (DD)	64.59132						
Longitude (DD)	-150.0465						



Photo Type: Soils Direction: NA



Photo Type: Vegetation Direction: NE



Photo Type: Vegetation Direction: SW

#### WETLAND DETERMINATION DATA FORM - Alaska Region

Plot No: 5(a/a Totchaket Road Project: Date: Department of Transportation and Public Facilities Applicant: Investigators: Borough/City/Location: West of Nenana 24 HDR NAD 83, Decimal Degrees 64.58994 Watershed: Kay Lishna Latitude: River Location Notes: Longitude: 150,04349 Elevation (ft): **SUMMARY OF FINDINGS** Are "Normal Circumstances" Present? **Hydrophytic Vegetation Present?** 185 Significantly Disturbed? VEG -SOILS **HYDRO** Hydric Soils Present? Naturally Problematic? VEG SOILS **HYDRO** Wetland Hydrology Present? Remarks: Is the Sampled Area within a Wetland? TAL **VEGETATION** T< 1%, P = Present SUBREGION: **Dominance Test worksheet:** Tree Stratum DBH ≥ 3 inch 1/10 acre circular plot unless noted, absolute cover recorded **Number of Dominant Species Species** IND **Species** Cover Cover That Are OBL, FACW, or FAC: (A) 1. N x 1 3. Total Number of Dominant 4. Species Across All Strata: 50% of Total Cover: **Total Tree Cover:** 20% of Total Cover: Percent of Dominant Species DOM Sapling/Shrub Stratum IND Cover That Are OBL, FACW, or FAC: 3 FAC Prevalence Index Worksheet 10. Total % Cover of: Multiply by: 11. 20 FAC OBL species 12. FACW species 13. 0 14. FAC species 6. Plc. Mar. 15. FACU species Total Shrub Cover: 50% of Total Cover: 20% of Total Cover: **UPL** species Herbaceous Stratum IND DOM Cover 13. Column Totals: // © 14. MIA Prevalence Index = B/A = 2.60 15. FAC FAKW 16. Hydrophytic Vegetation Indicators: 9B1 17. Dominance Test is >50% 18. Prevalence Index is ≤3.0 FAC lo 19. Morphological Adaptations<sup>1</sup> Acu (Provide supporting data in 20. Remarks or on a separate sheet) 8. 21. Problematic Hydrophytic Vegetation<sup>1</sup> 1 Indicators of hydric soil and wetland hydrology 22. 9. must be present unless disturbed or problematic **Project Vegetation Type** 10. 23. 11. 24. 25. 12. Cowardin Code: 20% of Total Cover: 10,6 Total Herb Cover: 50% of Total Cover: 2(0,5 HGM Classification: 1. Open Water 2. Bare ground Remarks: Bryophytes and Lichens may be listed in the Herbaceous columns andform: Local Relief: Microtopography: Aspect: Slope:

Plot No: 566

Profile Desi	crintion: [	Describe to the depth	needed	l to docu	ment the presence/al	heanca	of soil ind	licators	Soil A	ع کے الم		
1 Tome Des	Horizon	Soil Matrix	needed	10 00,00	Redox Featu		or son inc	Taluis	I SUII I	nap Onit Name	-	
Depth (in.)	Name	Color (moist)	%	Type <sup>1</sup>	Color	%	Loc <sup>2</sup>	Mod <sup>3</sup>	3,2,311	11		
Deptit (iii.)	1 / Car	Color (moist)	1 /8	Type	Color	76	LUC	iviou <sup>2</sup>	Texture	Horizon Co	<u>/</u>	
0-2	00			1		-			\(\frac{1}{2}\)			
2-5	0 e										· ·	
5.7	Oa					:				1.	8,6 Grafe 5,50	
7-13	B	543/2	80	C	7.54R4/4	15	MRC		SALO	Frozen	@12: AA+	
		·			7.54R 3/4	5	MRC	,	V		<b>,</b> 75%	
3.6									15 7 54			
									1.4.7.7			
				7								
¹Type: C=Conce	ntrations D=	Depletions, OX=Oxidize	d Poote	PM - Po	duced Matrix 21 cention	n: DI =D	ro Uningo	PC=Post	Characta N	4=Matrix CC=C		
Remarks:	sittations, D-	Depletions, OX-Oxidize	u Roots	, KIVI – KE	duced Matrix -Locatio	n. PL=PC					Oated Sand Grains (PT), Permafrost (PF)	
Remarks.				en en en en en en en en en en en en en e			1				obbly (CB), Stony (ST)	
Usalaia Cail Ia	alia ataua	N4						(15-35	%), 35-60%	= Very (V), 60-9	0% = Extremely (X)	
		Measure from the to		11	• :	41, A2, <i>i</i>	43, A4		**			
1 198 M									-	Soils ent?	YE5	
The second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second secon									ainage Class:	PD		
	Sulfide (A4)	$T_{i}$			Pores (A15)					f Organic Soils:		
The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s								Y 1981.	e Layer Type: Frost			
<u></u> Depleted €	Below Dark	Surface (A11) N	Alaska	Color Ch	nange (TA4) Give de	etails of	color cha	nge Re		ayer Depth:	12"	
								v/chroma of ≤2				
Nedox Dark Surface (F6)  Nalaska Redox with 2.5Y Hue												
N Depleted [	Dark Surface	e (F7) <u>N</u>	Alaska	Gleyed v	v/o Hue 5Y or Redde	r Under	lying	1		lydrophytic Ve ology, and an	T	
Nedox Dep	pression (F8	B) <u>N</u>	AA Pos	itive (mir	neral soil, 60% of hor	izon 4 ir	nches thic	k) lan	dscape po	sition unless		
Ned Paren	nt Material (I	=21) <u>N</u>	Ponded	d/Flooded	d/High Water Table (	12 inche	s or high	er) pro	blematic			
Very Shall	ow Dark Su	rface (F22)	Low Or	ganic Ma	utter/Low Iron/High pl	H Soil/N	ew Wetla	ind 🔨	Other (ex	kplain in rema	rks)	
HYDROLOG	Υ								urina.	al Barrella (1984)		
		Wetland Hydro		dicators			Secon	dary Indic	ators (2 o	more require	d)	
		e indicator is sufficier							ed Leaves			
Surface W					le on Aerial Imagery		The state of the state of the	27 km / 2 E	atterns (B		48 3 6 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	
N Saturation	r Table (A2)	3		ely vegeta eposits (E	ated Concave Surfac	e (B8)					Roots (C3)(w/in 12'	
<u>₩</u> Water Mar		The second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second secon			le Odor (C1) (w/in 12	77	- / /	alt Depos	f Reduced	i iron (C4)	The second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second secon	
-	Deposits (B				ter Table (C2)**	,	1.00	-		Plants (D1)		
Drift Depos	•	·			n Remarks)						ly Concave	
	or Crust (B4		•		•						e as restrictive layer	
Non Depos	its (B5)	Are	Climati	ic/Hydrol	ogic Conditions on S	ite	,		raphic Rel		·	
	oil Cracks (B	. 1986		this time	of Year? <u>VES</u>		<u> </u>	AC, Neutra	al Test (D5		. *	
	15 Turker	es from ground surfac	8/			Wat	er Source	<b>ə</b> :	,	Wetland Hy	drology Present?	
Surface Water		Yes No _ Yes No	. / .	Depth (in						Ves		
Water Table Present? Yes No Depth (inches): Dry Season Water Saturation Present? Yes No Depth (inches): Sc, Interior, Wester												
(includes capillary fringe)								V**				
Describe Recor	rded Data (s	Episaturation_ tream gauge, monito	ring we			ections	), if availa	ıble:		**Mineral S	ay – late July oils 12-24 inches	
										**Organic S	Soils 12-40 inches	
Remarks:	_										st = #OBL+FW	
Soil yer	y moist	but not sa	lura -	ted.						ominanis > #1-1 dd non-domina	J + UPL dominants; nts if tie	

Plot Number	HDR566					
Wetland Status	Wetland					
Plot Type	WD					
Plot Date	6/7/2022					
NWI Classification	PSS1/EM1B					
ндм	Flat					
Vegetation Type	Open Mixed Shrub Sedge Tundra					
Latitude (DD)	64.5899					
Longitude (DD)	-150.04347					



Photo Type: Soils Direction: NA



Photo Type: Vegetation Direction: N



Plot Number	HDR567					
Wetland Status	Wetland					
Plot Type	FVP					
Plot Date	6/7/2022					
NWI Classification	PSS1/EM1B					
ндм	Flat					
Vegetation Type	Open Mixed Shrub Sedge Tundra					
Latitude (DD)	64.58985					
Longitude (DD)	-150.04247					



Photo Type: Soils Direction: NA



Photo Type: Vegetation Direction: N



#### WETLAND DETERMINATION DATA FORM - Alaska Region

Project: Totchake	at Pos	-d		52 T 12 1 1 1	<u> </u>			Plot No: 36	<u> </u>				
			enortati	on and Publi	c Facilitie	) C		late: 6/7/2022 nvestigators:					
Borough/City/Location			of Nena		- aciiile	7 <b>.</b>	- In	vestigators:					
<u> </u>	OH.	VVCSI (	JI INCIIA	ııa .	. 200	1		HDR	1/-1				
NAD 83, Decimal Degrees  Latitude: (4 5894	<u></u>				Motors	hod:	1/						
	0.04	11.1		3 - 1 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2	Watershed: Kam fishna 12 iver Location Notes:								
Elevation (ft):	0109	101	.*	<u> </u>	Localio	IIIVOLE	<b>ა.</b>						
Liovation (it).			t,	\$\$^ \$	SUMMARY OF FINDINGS								
Are "Normal Circumsta	ances"	' Preser	nt?	VPS	1112	Ves							
Significantly Disturbed	?	VEG	SOIL	S HYDRO		- 14	- '	Hydric Soils Present?	No				
Naturally Problematic?	<b>)</b>	VEG	SOIL	S HYDRO		seri r	Wet	land Hydrology Present?	No				
Remarks:	Remarks:  Is the Sampled Area within a Wetla							ea within a Wetland?	No				
Service Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of th													
VEGETATION  Tree Stratum DBH ≥ 3 inc				ular plot unless no				Dominance Test w	orksheet:				
Species	IND	DOM	Cover	Species	IND	DOM	Cover	Number of Dominant Species	Presso				
■ 74.7 a 479	IND	DOW	COVE	3.	IND	DOM	Cover	That Are OBL, FACW, or FAC	<u> ೨ (A)</u>				
1 None		<u> </u>						Total Number of Dominant					
		500/ 57		4.			1 1	Species Across All Strata:	(B)				
Total Tree Cover:			otal Cove		20% of To	otal Cove	r; water	Percent of Dominant Species	022				
Sapling/Shrub Stratum	IND	DOM	Cover	8. Picma	r FACW		B	That Are OBL, FACW, or FAC:	<u>83.3 (</u> a/b)				
1. Rho, gro,	FAC	Y	160	9.			- 121	Prevalence Index V	/orksheet				
2. Vac. Vi +1	FAC	ý	20	10.		10.00			tiply by:				
3. Ala. Vic.	FAC	<b>Y</b>	20	<b>-11</b> 0 (1966)			g i satar		0				
4. Bet page	FAKU	1	10	12.			i, telebe	OBL speciesx 1 =	<del></del>				
5. Vaculi	FAC		5	13.				FACW speciesx 2 =					
6. Rosaci	FACU		3	14.			1 1	FAC species 16 x 3 =	<u>348                                    </u>				
7 Salvbeb	FAC		5	15.			FACU species 19 x 4 =	76					
Total Shrub Cover: 12	1	50% of T	otal Cove	r: 62	20% of To	tal Cover	:24.8	UPL species					
Herbaceous Stratum	IND	DOM	Cover	13.				Column Totals: 136 (A)	426 (B)				
1. One ang	MU		ı	14.					નામ કુંચ				
2. Egy ary	FAC	7	3	15. ·				Prevalence Index = B/A	= 3.13				
3. Mer ma	FACU	V.	5	16.				Hydrophytic Vegetation					
4. Fan 5.11	FAC	<b>.</b>	3	17.			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Dominance Test is >50					
5.	1770	7		18.		:		Prevalence Index is ≤3					
<b>6.</b>				19.				Morphological Adaptation					
7.	1		<u> </u>	20.				(Provide supporting date   Remarks or on a separate	a in				
8.			,	21.				Problematic Hydrophyti					
9.	1			22.				Indicators of hydric soil and	wetland hydrology				
10.				23.				must be present unless disturbe Project Vegetati					
11.		7.4		24.				01.00					
12.	-			25.			<u> </u>	U BL					
Total Herb Cover: 12 50% of Total Cover: (2 20% of Total Cover: 2,								Cowardin Code:					
1.Open Water	n			2. Bare ground	6	)	017	HGM Classification:					
Remarks: Bryophytes and I	ichens	may be l	isted in th	-	lumns		*	Landform:					
<u> </u>								Lowland					
								Local Relief:					
								Microtopography: Slope	e: Aspect:				
								SOURCE CORPT 1	1846				

Profile Des	orintian: D	cooribe to the de	m&b ====================================	4			-f11 111			- II II I		
Fibilie Des				to docur	nent the presence/ab		of soil indi	cators	Soll N	ap Unit Nam	9	
Donth (in )	Honzon	Soil Ma		<b>T</b> 1	Redox Featur	T	T . 2	12	T	T	a ja tila	
Depth (in.)	Name	Color (moist	<u>%</u>	Type <sup>1</sup>	Color	<u>%</u>	Loc <sup>2</sup>	Mod <sup>3</sup>	Texture	Horizon C	omments	
0-3	0i					-				3.5	<u> Anna anna anna a</u>	34.
3-5	0e					ļ						
5-9	В	10YR 3/3	95	C	7.54R 3/3	5	(M)		SILO	Very moi	St. Not sat	
9-17	B	104R2 9/3	90	C	7.5 YR 4/4	5	M		VFSA L			
				D	104R 4/1	5	m		VFSAL			
							45.5	1 (1) 1 (1)				
·, J		9 4 5 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	.13-:-							-	1.132	
¹Type: C=Conce	entrations, D=I	Depletions, OX=Oxi	idized Roots,	RM = Re	duced Matrix <sup>2</sup> Location	.: PL=P	ore Lininas.	RC=Root	Channels, N	I=Matrix. CS=C	oated Sand Grai	ins
Remarks:				Jan 198	<b>《高麗典》</b> 第二十二						(PT), Permafros	
	ry hydr	o indicator	- For p	roblen	autic Soil in	Lica	lovs,				obbly (CB), Stong	
Hydric Soil Ir	dicators I	Measure from the			oil layer except for A							
No_Histosol o	r Histel (A1)	·	$\frac{_0}{}$ Thick D	ark Surfa	ices (A12)				Hydrid		. )	
N <sub>O</sub> Histic Epipedon (A2)⁴ No Alaska Gleyed (A13) Present? No										No		
No Black Histic (A3) NRCS Drainage NRCS Drainage										inage Class:	MUD	
No Hydrogen Sulfide (A4) N € Alaska Gleyed Pores (A15) Depth of Organic Soils: 5									5			
taran daran kalangan daran daran daran daran daran daran daran daran daran daran daran daran daran daran daran								Restrictive	ive Layer Type:			
Depleted Below Dark Surface (A11) No Alaska Color Change (TA4) Give details of color change Rest								strictive La	Layer Depth:			
<u>N₀</u> Depleted Matrix (F3) <u>N₀</u> Alaska Alpine Swales (TA5)								⁴Uı	nderlain by	mineral soil v	v/chroma of ≤2	2
<u>Ma</u> Redox Da			4		th 2.5Y Hue			5M	ust have H	ydrophytic Ve	getation and	
Plan Depleted I					o Hue 5Y or Redder			1 .	Primary Hydrology, and an appropriate landscape position unless disturbed or			
No Redox De		-			eral soil, 60% of horiz			' Inro	idscape po oblematic	sition unless	disturbed or	
Red Paren		_			/High Water Table (1		· · · ·	-				
No Very Shall		Tace (F22)	<u>to</u> Low Org	ganic Ma	tter/Low Iron/High pH	SOII/N	lew Wetlar	nd	Other (ex	plain in rema	rks)	
HIDROLOG	<u> </u>	Wetland Hy	drology lne	dicators			Casan	don i India	otoro (O or	more require		
Primary Indicat	ors (arıv one	indicator is suffice		aicatoi S				-	ned Leaves		u) 	er i
N₂ Surface W				ion Visib	le on Aerial Imagery (	B7)			atterns (B1			
No High Wate	r Table (A2)	4	<u>√</u> Sparsel	ly Vegeta	ted Concave Surface	(B8)					Roots (C3)(w	/in 12")
<u>Mo</u> Saturation			<u>√ુ</u> Marl De						f Reduced	Iron (C4)		
No Water Mar					e Odor (C1) (w/in 12"	)		alt Depos				
$N_{\odot}$ Sediment I $N_{\odot}$ Drift Depos		-	<u>lo</u> Other (I		er Table (C2)**				Stressed P			
<u>Na</u> Algal Mat o			<u>va</u> Other (r	=хріані п	r remarks)				ic Position ( uitard (D3)		te as restrictive	a laver)
No Iron Depos	3 (14)		Are Climati	c/Hydrolo	gic Conditions on Si	te			raphic Reli			, ayen,
Surface Soil Cracks (B6)  Typical for this time of Year?								al Test (D5	)			
	•	s from ground su	/			Wa	ter Source	:	1	Vetland Hy	drology Pres	sent?
Surface Water   Water Table Pr		Yes N Yes N		Depth (in		-				No		
Saturation Pres				Depth (in:	ches):	-			Γ		on Water Tabl or, Western Al	
(includes capillary fringe)								<b>∵</b> :				
Describe Recor	ded Data (st	Episaturatio tream gauge, mo			uration hotos, previous inspi	l ections	), if availat	ole:		**Mineral S	ay – late July Soils 12-24 inch	
			ya. Yan	·	•						Soils 12-40 inch	
Remarks:											st = #OBL+FW J + UPL domina	
										ld non-domina		ત્રાહિ,

Plot Number	HDR568							
Wetland Status	Upland							
Plot Type	WD							
Plot Date	6/7/2022							
NWI Classification	U							
ндм	N/A							
Vegetation Type	Deciduous Shrub and Sapling Regrowth							
Latitude (DD)	64.58949							
Longitude (DD)	-150.04158							



Photo Type: Soils Direction: NA



Photo Type: Vegetation Direction: N



Plot Number	HDR569					
Wetland Status	Wetland					
Plot Type	FVP					
Plot Date	6/7/2022					
NWI Classification	PSS1/EM1B					
ндм	Depressional					
Vegetation Type	Open Mixed Shrub Sedge Tundra					
Latitude (DD)	64.58125					
Longitude (DD)	-150.02668					



Photo Type: Soils Direction: NA



Photo Type: Vegetation Direction: NE



Plot Number	HDR570
Wetland Status	Upland
Plot Type	FVP
Plot Date	6/7/2022
NWI Classification	U
ндм	N/A
Vegetation Type	Deciduous Shrub and Sapling Regrowth
Latitude (DD)	64.5813
Longitude (DD)	-150.02697



Photo Type: Soils Direction: NA



Direction: N Photo Type: Vegetation



## WETLAND DETERMINATION DATA FORM – Alaska Region

HDR

								Plot No: 571			
Project: Totchake	ate: 61712022										
Applicant: Departn	nent o	f Trans	sportati	on and Publi	c Facilitie	s	ln	vestigators:			
Borough/City/Location	on:	West c	of Nena	na				ZH MA			
NAD 83, Decimal Degrees								HDR			
Latitude: 64,582	JOD				Watershed: Kantishna River						
Longitude: 156.	028	73			Locatio	n Note	s:				
Elevation (ft):		2									
Äre "Normal Circumsta		D			T	<del></del>	L. d t	SUMMARY OF FINDINGS			
			S HYDRO			1yaropn	ytic Vegetation Present?				
Significantly Disturbed		VEG					10/-4	Hydric Soils Present?			
Naturally Problematic? Remarks:		VEG	SOIL	5   HTDRO			vvel	land Hydrology Present? yes			
Remarks.	rea within a Wetland?										
VEGETATION	yes										
Tree Stratum DBH ≥ 3 inc		6, P = Pre 1/10		ular plot unless no	SUBREG oted, absolut		TAL ecorded	Dominance Test worksheet:			
Species	IND	DOM	Cover	Species	IND	DOM	Cover	Number of Dominant Species			
1. None				3.				That Are OBL, FACW, or FAC:			
2.				4.				Total Number of Dominant Species Across All Strata:  (B)			
Total Tree Cover:		50% of T	otal Cove	Pr:	20% of To	tal Cove	r:	· · · · · · · · · · · · · · · · · · ·			
Sapling/Shrub Stratum	IND	DOM	Cover	8. Sal. 5001	FAC		-1	Percent of Dominant Species That Are OBL, FACW, or FAC: 4/5 (A/B)			
1. Bet. pap.	FACU	V	15	9. Rho, for	1. 1		3				
2. 5-1, 001	FACW	7	-	1054 beb.	FAC		3	Prevalence Index Worksheet			
3.Cha. Cal.	FACW	V	16	11.	177.0			Total % Cover of: Multiply by:			
	FAC	7	10	12.			1.	OBL species <u>3</u> x 1 = <u>3</u>			
4. Rhs. 300.	FAC	7	3	13.				FACW species 2 1 x 2 = 42			
5. Vac. vii.	FAC	8	3	14.				FAC species 93 x 3 = 249			
6 Ala. vir.	FAC		3	15.							
7 Bet Gla. Total Shrub Cover: 56		50% of To	otal Cove		20% of Tot	al Cover	· // ɔ				
Herbaceous Stratum	IND	DOM	Cover	13.	1		1/16	UPL species			
1. Cal. can.	FAC	y	50	14.				Column Totals: 122 (A) 354 (B)			
2 1000	FAC	7	10	15.	<u> 1</u> -2555 1			Prevalence Index = B/A = 2.90			
2-1-9U. SYI.	OBL		3	16.							
AC arg.			7	17.				Hydrophytic Vegetation Indicators:			
5.	FACW		ے_	18.			78 2 7 7	Dominance Test is >50%			
6.				19.				Prevalence Index is ≤3.0  Morphological Adaptations¹			
	<del> </del>	-			A gi			(Provide supporting data in			
7.				20.				Remarks or on a separate sheet)			
8.				21.				Problematic Hydrophytic Vegetation <sup>1</sup> Indicators of hydric soil and wetland hydrology			
9.				22.				must be present unless disturbed or problematic.  Project Vegetation Type			
10.				23.				Froject Vegetation Type			
11.				24.				IBZ			
12.		00/ of To		25.	000/ -4.T-4	-1.0	100	Cowardin Code:   P591   Fm   B			
Total Herb Cover: (66		70 UI IC	otal Cove	r: 33 2. Bare ground	20% of Tot	ai COVEF	15.4	HGM Classification:			
Remarks: Bryophytes and I	ichens	may be li	sted in the	_	Turb .			Landform:			
		•						Lowland			
								Local Relief: Concave			
								Microtopography: Slope: Aspect:			
								Hum. mod. 2% S			

HDR Plot No: 571

Profile Desc	ription: D	escribe to the de	pth needed	to docur	nent the presence/a	absence (	of soil indica	itors	Soil I	/lap Unit Name	<b>)</b>	
	Horizon	Soil Ma	ıtrix		Redox Featu	ures						
Depth (in.)	Name	Color (mois	t) <u>%</u>	Type <sup>1</sup>	Color	<u>%</u>	Loc <sup>2</sup>	Mod <sup>3</sup>	Texture	Horizon Co	omments	
6-6	Oi.	10 YR 21									41 di 3	
1-8	De	10 42 7			,							
0-10	ß	54 4/1	85	C	104R 9/4	1,500	.A. A.		644-	10	× 4,	
010	IJ ·	37 71	05	<u> </u>	10412-44	15	M,PL		5/40	frozen	e 10"	
									2			
:												
		. *			<i>*</i>							
¹Type: C=Conce	ntrations D=F	Depletions OX=Ox	idized Roots	RM = Red	duced Matrix <sup>2</sup> Location	on: Pl =Pc	re Linings P	C=Root	Channels	M=Matrix CS=C	agted Sand Grains	
Remarks:	dicators I		,		soil layer except for	n en e	3T6	exture Mo oarse Fr	odifiers: Mu agments: 0	icky (MK), Peaty Gravelly (GR), Co	(PT), Permafrost (PF)   bbbly (CB), Stony (ST) 10% = Extremely (X)	
Histosol or		<u>. 1</u>			aces (A12)					c Soils sent?	Ves	
Histic Epip			<u>W</u> Alaska ∣					-			20	
										J		
N Hydrogen Sulfide (A4)     N Alaska Gleyed Pores (A15)     Depth of Organic Soils:     B										1 x1		
Indicators for Problematic Hydric Soils (See Page 91/Section 4 for Problematic Hydric Soils Details)  Restrictive Layer Type:									Frost			
Depleted Below Dark Surface (A11) Alaska Color Change (TA4) Give details of color change Restrictive Layer Depth: 70"									70			
<u>M</u> Depleted Matrix (F3)									v/chroma of ≤2			
Nedox Dar			🔼 Alaska i	Redox wi	ith 2.5Y Hue			⁵Mı	ust have I	lydrophytic Ve	egetation and	
Depleted D	ark Surface	(F7)	<u>∕</u> Alaska (	Gleyed w	/o Hue 5Y or Redde	er Under	ying	l l		rology, and an	-	
Nedox Dep	ression (F8	)	M AA Posi	tive (min	eral soil, 60% of ho	nzon 4 ir	ches thick)			osition unless	disturbed or	
∠ Red Paren	t Material (F	21) 🔟	<u> </u>	Flooded	/High Water Table (	(12 inche	s or higher)	pro	blematic			
Very Shallo	ow Dark Sur	face (F22)	N Low Org	janic Ma	tter/Low Iron/High p	H Soil/N	ew Wetland	birdin	Other (e	xplain in rema	rks)	
HYDROLOG	Y											
2912	-	Wetland Hy	drology Inc	licators			Seconda	ry Indic	ators (2 o	r more require	d)	
. 1		indicator is suffi					21. 8		ed Leave	, .	<b>8</b> ,	
Surface Water	, ,				le on Aerial Imagery		1.00	_	attems (B	. 5.		
Saturation	Table (A2)		<u> </u>		ited Concave Surfac	ce (B8)				es along Living Hiron (C4)	Roots (C3)(w/in 12")	
Water Mark				-	e Odor (C1) (w/in 12	2")	Fie:			111011 (C4)		
N Sediment D	` '				ter Table (C2)**	-,				Plants (D1)		
North Depos	its (B3)	_	Other (Ⅰ		• •					(D2) - Conca	ul.	
_/V Algal Mat o	r Crust (B4)						`_⊈ Sha	llow Aqı	uitard (D3	) (w/in 24", no	te as restrictive layer)	
/ Iron Depos				-	ogic Conditions on S	Site	£		raphic Re			
Surface So		The second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second secon		this time	of Year? Yes			-Neutra	il Test (D			
Surface Water F	• •	s from ground su Yes N	× .	Depth (in	chee):	Wat	er Sóurce:			,	drology Present?	
Water Table Pre				Depth (in			0			Ye5		
Saturation Pres	ent?	<u> </u>			ches): <u>6 -5,0150</u>	<u></u>	Precip.				on Water Table or, Western AK:	
(includes capilla		Episaturatio		Endosati							ay – late July	
Describe Recor	ded Data (st	ream gauge, mo			photos, previous ins	pections	, if available	e:		**Mineral S	Soils 12-24 inches Soils 12-40 inches	
										-		
Remarks:									d		st = #OBL+FW J + UPL dominants; nts if tie	

Plot Number	HDR571					
Wetland Status	Wetland					
Plot Type	WD					
Plot Date	6/7/2022					
NWI Classification	PSS1/EM1B					
ндм	Depressional					
Vegetation Type	Deciduous Shrub and Sapling Regrowth					
Latitude (DD)	64.5819					
Longitude (DD)	-150.0287					



Photo Type: Soils

Direction: NA



Photo Type: Vegetation

Direction: E



Photo Type: Vegetation

Direction: W

WETLAND DETERMINATION DATA FORM – Alaska Region Plot No: 577 **Totchaket Road** Project: Date: 6/7/2022 Applicant: Department of Transportation and Public Facilities Investigators: West of Nenana Borough/City/Location: NAD 83, Decimal Degrees **HDR** Latitude: (64,58223 Watershed: Longitude: 150,02917 Location Notes: Elevation (ft): **SUMMARY OF FINDINGS** Are "Normal Circumstances" Present? **Hydrophytic Vegetation Present?** Significantly Disturbed? VEG SOILS HYDRO Hydric Soils Present? Naturally Problematic? **VEG** SOILS **HYDRO** Wetland Hydrology Present? Remarks: Is the Sampled Area within a Wetland? **VEGETATION** SUBREGION: T< 1%, P = Present **Dominance Test worksheet:** Tree Stratum DBH ≥ 3 inch 1/10 acre circular plot unless noted, absolute cover recorded Number of Dominant Species Species IND DOM Cover **Species** IND DOM Cover That Are OBL, FACW, or FAC: (A) 1. Boto pan 20 3. FACU **Total Number of Dominant** 4. Species Across All Strata: (B) Total Tree Cover: 50% of Total Cover: 10 20% of Total Cover: 📣 Percent of Dominant Species Sapling/Shrub Stratum DOM Cover That Are OBL, FACW, or FAC: 9. FAKU Prevalence Index Worksheet 20 10. hacii Total % Cover of: Multiply by: 11. **OBL** species 12. 0 FACW species O x2= O 13. FAC species  $53 \times 3 = 159$ 6. 14. 7. 15. FACU species  $55 \times 4 = 220$ Total Shrub Cover: 名か 50% of Total Cover: 20% of Total Cover: // 40 UPL species **Herbaceous Stratum** DOM Cover IND 13. Column Totals: 108 (A) FAC 14. 15. LAUN Prevalence Index = B/A = 3.5 16. Hydrophytic Vegetation Indicators: 4. 17. Dominance Test is >50% 5. 18. Prevalence Index is ≤3.0 6. 19. Morphological Adaptations<sup>1</sup> (Provide supporting data in 7. 20. Remarks or on a separate sheet) 8. 21. Problematic Hydrophytic Vegetation<sup>1</sup> Indicators of hydric soil and wetland hydrology 9. 22. must be present unless disturbed or problematic. **Project Vegetation Type** 10. 23. 11. 24. 12. 25. 20% of Total Cover:/./e Total Herb Cover: 🖳 50% of Total Cover: **HGM Classification:** 2. Bare ground 20 - 1/1+e/. 1.Open Water 2. Bare ground 20

Remarks: Bryophytes and Lichens may be listed in the Herbaceous columns 25 higher in elevation than 571 Local Relief: Cov

Slope:

Aspect:

Microtopography:

Nous

HOR

SOIL										. F	Plot No: 5	72
Profile Desc	cription: D	Describe to	the depth r	needed	to docur	ment the presence/abs	sence	of soil indi	cators	Soil	Map Unit Nam	e ·
	Horizon		Soil Matrix			Redox Feature		01 00m ma.		1 0011	viap Onit Hain	
Depth (in.)	Name		1.	%	Tuna1			12	h #1	3		The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s
-		COIDI	(moist)	70	Type <sup>1</sup>	Color	<u>%</u>	Loc <sup>2</sup>	Mod	3 Textur	Horizon C	omments
0-2	00							**		Angenia de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición dela composición de la composición de la composición de la composición dela composición de la composición dela composición dela composición de la composición dela composición de la composición dela composición dela composición dela composición dela composición dela composición dela composición dela composición dela composición dela composición		
2-3	B,	7,50	TR 3/4	100		gilinno.		28000		SILO	,	X is a
3-17	$B_2$	104R	4/4	100	eser.		_	n : _	dilar	SILC	,	
	_											
								800		# 1		. (2:
			i	1.00				* 155				
										\$13.n		
						52						
<sup>1</sup> Type: C=Conce	ntrations, D=	Depletions,	OX=Oxidized	l Roots,	RM = Re	duced Matrix <sup>2</sup> Location	: PL=Pc	ore Linings,	RC=Ro	ot Channels,	M=Matrix, CS=C	Coated Sand Grains
Remarks:								3				/ (PT), Permafrost (PF)
												obbly (CB), Storry (ST)
lydric Soil In	dicators	Measure fr	rom the top	of the	mineral s	soil layer except for A	1, A2,	A3, A4	(10-0	0 70), 00-00 70	- very (v), 00-3	50% - Extremely (X)
$\underline{\mathcal{N}}$ Histosol or	Histel (A1)		<u>N</u> 1	hick D	ark Surfa	aces (A12)				Hvdri	c Soils	1. 1. 4.5.1
N Histic Epip	edon (A2)4		NA	Alaska (	Gleyed (	A13)					sent?	No
N Black Histi	c (A3)		k.		Redox (A					NRCS D	ainage Class:	WD
N Hydrogen	Sulfide (A4)	)				ores (A15)					Organic Soils:	2
						on 4 for Problematic H	vdric S	Soils Detai	le)		e Layer Type:	
N Depleted E						ange (TA4) Give det					ayer Depth:	
Depleted N	1.4	Canaco (71				wales (TA5)	ans or	COIOI CIIAI		-34, 7, 7		
Redox Dar	4.7	E6)	". à			ith 2.5Y Hue			-	Unuenain u	y minerai soii y	w/chroma of ≤2
7							1 las al - a	tt			Hydrophytic Ve	
å	ark Surface		e /			//o Hue 5Y or Redder			- 1		rology, and an	
Redox Dep	•	•	- A - B			eral soil, 60% of horiz			n n	roblematic	osition unless	disturbed of
Ned Paren		•	Al			/High Water Table (12			-	en en en en en en en en en en en en en e		and the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second o
Very Shallo		пасе (F22)	/ // L	ow Org	janic Ma	tter/Low Iron/High pH	Soil/N	ew Wetlar	nd	Other (e	xplain in rema	ırks)
IYDROLOG	Y											es established
Primary Indicate	ore (any on		nd Hydrolo		licators			1	-	-	r more require	d)
Surface Wa		e illuicator i	_ £	-	ion Visih	le on Aerial Imagery (I	R <b>7</b> )	, ,		ined Leave Patterns (E		
Migh Water		)			4 1	ated Concave Surface	-		_		-	g Roots (C3)(w/in 12
Saturation			- 8		posits (E	•		/		of Reduce		
Mater Mark			E .			e Odor (C1) (w/in 12")	)	,	-	sits (C5)		
N Sediment Depose		2)	A . F	-		ter Table (C2)** n Remarks)		1		r Stressed hic Positior	Plants (D1)	
Algal Mat o	or Crust (B4)	)	<u>* * * * * * * * * * * * * * * * * * * </u>	J. 101 (L		ritemarks		1				te as restrictive layer
$\underline{\Psi}$ Iron Depos	its (B5)		Are	Climatio	c/Hydrolo	ogic Conditions on Site	е	1		graphic Re		•
<u>M</u> Surface So					this time	of Year? YES				tral Test (D	-	
Fi <mark>eld Observat</mark> Surface Water I	-	_	100		>==4h /:=	-h\.	Wat	er Source	:		Wetland Hy	drology Present?
Suriace water i Water Table Pro		Yes Yes		. 119	Depth (in Depth (in	ches):	-				No	
Saturation Pres			No 3	a	-	ches):	- 1					son Water Table ior, Western AK:
(includes capilla	ary fringe)		7									
Describe Recor	ded Data (s		turation ge, monitor		Endosati I, aerial p	uration photos, previous inspe	ctions	), if availal	ole:			lay – late July Soils 12-24 inches
					-	·					**Organic \$	Soils 12-40 inches
Remarks:		· · · · · · · · · · · · · · · · · · ·								c		st = #OBL+FW U + UPL dominants;
<u> </u>	·- ·			^1.	, .	^^			_	14 117		

Plot Number	HDR572
Wetland Status	Upland
Plot Type	WD
Plot Date	6/7/2022
NWI Classification	U
ндм	N/A
Vegetation Type	Woodland Deciduous Forest
Latitude (DD)	64.58223
Longitude (DD)	-150.02915



Photo Type: Soils Direction: NA



Photo Type: Vegetation Direction: N



# WETLAND DETERMINATION DATA FORM — Alaska Region

HDR

								Plot No: 573				
Project: Totchaket Road Date: (2/7												
Applicant: Department of Transportation and Public Facilities								Investigators:				
Borough/City/Location	n:	West o	f Nena	na				mar ZH				
NAD 83, Decimal Degrees								HDR				
Latitude: 64,583	13				Watershed: Kantishna River							
Longitude: 150.030	267				Locatio	n Note						
Elevation (ft):												
								SUMMARY OF FINDINGS				
Are "Normal Circumsta				yes		Hydrophytic Vegetation Present?						
Significantly Disturbed		VEG						Hydric Soils Present?				
Naturally Problematic?		VEG	SOIL	S HYDRO			Wet	land Hydrology Present?				
Remarks:					Is the	Samr	oled Ar	rea within a Wetland?				
Ves												
VEGETATION		6, P = Pre			SUBREG		LAL	Dominous Took workshook				
Tree Stratum DBH ≥ 3 inch	1	1		ular plot unless no			ecorded	Dominance Test worksheet:  Number of Dominant Species				
Species	IND	DOM	Cover	Species	IND	DOM	Cover	That Are OBL, FACW, or FAC: (A)				
1. Nonesco				3.	***			Total Number of Dominant				
2.	<u> </u>			4.				Species Across All Strata:(B)				
Total Tree Cover:	,		otal Cove		20% of To	tal Cove	· ·	Percent of Dominant Species 16				
Sapling/Shrub Stratum	IND	DOM	Cover	8. Sal pul	FAKW		5	That Are OBL, FACW, or FAC: 7 (A/B)				
1. Sal beb	FAC	Ŋ	25	9. Aln. vic	FAC		3	Leading River Comments				
2. Bet pap	FACE	l	15	10. pie ma.	- FACW		3	Prevalence Index Worksheet Total % Cover of: Multiply by:				
3. Por tre	FACU		3	11.			-					
4. Rho gro	FAC	7	20	12.				OBL speciesx1=				
5. Vaculi	FAC	1	5	13.				FACW species 29 x 2 = 58				
6.	***		ئے۔	14.				FAC species $69 \times 3 = 207$				
7. Vac vit	FAC		3	15.				FACU species <u>/ 8</u> x 4 = <u>72</u>				
Total Shrub Cover: 82		50% of To	otal Cove	r: 41	20% of Tot	al Cover	://0.4	UPL species				
Herbaceous Stratum	IND	DOM	Cover	13.				Column Totals: // (6 (A) 33 7 (B)				
1. Equi syl	FAC		3	14.				( )				
2. Eri vag	FACW	7	20	15.				Prevalence Index = B/A = 2.91				
3. Rub cha	FACW	1		16.				Hydrophytic Vegetation Indicators:				
4. Cal can	FAC	7	10	17.				Dominance Test is >50%				
5. Purola co	Name of Street	1	1	18.				Prevalence Index is ≤3.0				
6.				19.				Morphological Adaptations <sup>1</sup>				
7.				20.				(Provide supporting data in Remarks or on a separate sheet)				
8: .				21.				Problematic Hydrophytic Vegetation <sup>1</sup>				
9.				22.				Indicators of hydric soil and wetland hydrology				
10.				23.			:	must be present unless disturbed or problematic.  Project Vegetation Type				
11.				24.				The				
12.				25.				DOZa				
Total Herb Cover: 25	5	i0% of To	tal Cove		20% of Tot	al Cover	: 7	Cowardin Code:				
1.Open Water	HGM Classifications											
Remarks: Bryophytes and L	ichens	may be li	sted in the	_	<i>U</i> umns			Landform:				
								gwals.				
								Local Relief: Con Cut				
						į		Microtopography: Slope: Aspect:				
								• 1 (f. 10) a c 2 (d)				

Plot No: 573

Profile Des	cription: D	escribe to the depth	needed	to docun	nent the presence/abs	ence (	of soil indic	cators	Soil	Map Unit Nam	8
	Horizon	Soil Matrix			Redox Feature	s					
Depth (in.)	Name	Color (moist)	<u>%</u>	Type <sup>1</sup>	<u>Color</u>	%	Loc <sup>2</sup>	Mod <sup>3</sup>	Textur	e Horizon C	omments
0-3	Oi.	10402/1				-					
3-9	00	104R 3/1									
9-11	A	104R3/1	100	_			-	^	SILL	, Satio	18" AA+
	<i>I</i> 1	701.571	1/00				***************************************		0126	ryozen	at 10. 11117
			<del> </del>					***************************************			
			<b> </b>								
											44.5
11.87.51.7											1, 1, 1, 1
¹Type: C=Conce	entrations, D=	Depletions, OX=Oxidize	Roots	, RM = Red	luced Matrix <sup>2</sup> Location:	PL=Pa	re Linings,	RC=Root	t Channels.	M=Matrix, CS=C	coated Sand Grains
Remarks:			. 6 -								(PT), Permafrost (PF)
**;											obbly (CB), Stony (ST)
Hydric Soil Ir	ndicators	Measure from the top	of the	mineral s	oil layer except for A1	, A2, A	\3, A4	(15-35	/%), 35-6U%	= very (v), 60-9	90% = Extremely (X)
<u>√</u> Histosol o		,			ces (A12)				Hvdr	ic Soils	
✓ Histic Epip	oedon (A2)⁴	No A	Alaska	Gleyed (A	<b>\13</b> )				_	sent?	ye5
No Black Hist									PO		
N @ Hydrogen	Sulfide (A4)	No A	laska	Gleyed P	ores (A15)					Organic Soils:	9
Indicators for										Frost	
No Depleted I	Below Dark	Surface (A11) <u>∤∤a</u> A	Naska	Color Ch	ange (TA4) Give deta	ails of d	color chan	ge R	estrictive I	ayer Depth:	10
No Depleted	No Depleted Matrix (F3)  No Alaska Alpine Swales (TA5)  4Underlain by mineral soil w/chroma of ≤2										
N. Redox Da	rk Surface (I	F6) <u>N</u> a A	Maska	Redox wi	th 2.5Y Hue			5.			
No Depleted [	Dark Surface	e (F7) <u>Na</u> A	Naska	Gleyed w	o Hue 5Y or Redder	Underl	ying	w 1		Hydrophytic Ve Irology, and an	T. 4 Ta
No Redox De	pression (F8	B) <u>Na</u> A	A Pos	itive (min	eral soil, 60% of horiz	on 4 in	ches thick	) la	ndscape p	osition unless	
Na Red Parer	nt Material (F	F21) <u>No</u> F	onded	l/Flooded	/High Water Table (12	inche	s or highe	r) pr	oblematic		
No Very Shall	ow Dark Su	rface (F22) Na L	ow Or	ganic Ma	ter/Low Iron/High pH	Soil/N	ew Wetlan	d	Other (	explain in rema	rks)
HYDROLOG	Υ	•					Marchen				
74-35		Wetland Hydrol		dicators			Second	ary Indi	cators (2	or more require	d)
1		indicator is sufficient ہے۔ آب	•						ned Leave		
✓ Surface W ✓ High Wate	ater (A1) r Table (A2)	A 1			e on Aerial Imagery (E ted Concave Surface	•			Patterns (E Phizosphe		Roots (C3)(w/in 12")
✓ Saturation				eposits (B		(50)			-	d Iron (C4)	j 110013 (03)(W/III 12 )
// Water Mar					e Odor (C1) (w/in 12")		i i		sits (C5)		
75. I	Deposits (B2 sits (B3)		-		er Table (C2)**		<u>M</u> Stu V Ge	inted or	Stressed ic Position	Plants (D1)	Busile
	<ul> <li>✓ Drift Deposits (B3)</li> <li>✓ Other (Explain in Remarks)</li> <li>✓ Geomorphic Position (D2)</li> <li>✓ Shallow Aquitard (D3) (w/in 24", note as restrictive laye</li> </ul>									≠ te as restrictive laver)	
F = /	✓ Iron Deposits (B5)  Are Climatic/Hydrologic Conditions on Site  Microtopographic Relief (D4)									. ,	
*	Surface Soil Cracks (B6)  Typical for this time of Year?  Yes  FAC-Neutral Test (D5)  Water Source:  Wetland Hydrology Present?										
Surface Water	•	Yes No	'/	Depth (in	ches):	vvau	er Source.			wetiand Hy	drology Present?
Water Table Pr	esent?	Yes No		Depth (inc	0.10					Veg	on Water Table
Saturation Pres		Yes <u>/</u> No _		Depth (ind	ches): <u> </u>						or, Western AK:
(includes capilla		Episaturation		Endosati							ay – late July
Describe Recor	rded Data (s	tream gauge, monitor	ing we	ll, aerial p	hotos, previous inspe	ctions)	, if availab	le:			Soils 12-24 inches Soils 12-40 inches
Remarks:											st = #OBL+FW
											J + UPL dominants;

Plot Number	HDR573
Wetland Status	Wetland
Plot Type	WD
Plot Date	6/7/2022
NWI Classification	PSS1/EM1B
ндм	Depressional
Vegetation Type	Open Mixed Shrub Sedge Tundra
Latitude (DD)	64.58313
Longitude (DD)	-150.03065



Photo Type: Soils Direction: NA



Direction: N Photo Type: Vegetation



Plot Number	HDR574
Wetland Status	Upland
Plot Type	FVP
Plot Date	6/7/2022
NWI Classification	U
ндм	N/A
Vegetation Type	Deciduous Shrub and Sapling Regrowth
Latitude (DD)	64.58331
Longitude (DD)	-150.03091



Photo Type: Soils Direction: NA



Photo Type: Vegetation Direction: N



Plot Number	HDR575
Wetland Status	Wetland
Plot Type	FVP
Plot Date	6/7/2022
NWI Classification	PSS1/EM1B
ндм	Depressional
Vegetation Type	Open Mixed Shrub Sedge Tundra
Latitude (DD)	64.58373
Longitude (DD)	-150.03222



Photo Type: Soils Direction: NA



Photo Type: Vegetation Direction: N



Plot Number	HDR576
Wetland Status	Wetland
Plot Type	FVP
Plot Date	6/7/2022
NWI Classification	PSS1/EM1B
ндм	Depressional
Vegetation Type	Deciduous Shrub and Sapling Regrowth
Latitude (DD)	64.58389
Longitude (DD)	-150.03245



Photo Type: Soils Direction: NA



Photo Type: Vegetation Direction: N



Plot Number	HDR577				
Wetland Status	Wetland				
Plot Type	FVP				
Plot Date	6/7/2022				
NWI Classification	PSS1/EM1B				
ндм	Depressional				
Vegetation Type	Deciduous Shrub and Sapling Regrowth				
Latitude (DD)	64.58438				
Longitude (DD)	-150.03241				



Photo Type: Soils Direction: NA



Photo Type: Vegetation Direction: N



## WETLAND DETERMINATION DATA FORM – Alaska Region

Plot No. 57

Project: Totchake	et Roa	ad						Da	ate: /a/7	δ
Applicant: Department of Transportation and Public Facilities Investigators:										
Borough/City/Location	on:	West o	of Nena	na					MA ZI	1
NAD 83, Decimal Degrees				424		g lib		٠.	HDR	
Latitude: 64,584					,	Watershed: Kantishna River				
Longitude: 150,03242						Locatio	n Note	s:		
Elevation (ft):										
									SUMMARY OF F	
Are "Normal Circumsta				yes				lydroph	ytic Vegetation Present?	yes
Significantly Disturbed		VEG							Hydric Soils Present?	Yes
Naturally Problematic? Remarks:		VEG	SOIL	S   HYDR	0			Wet	land Hydrology Present?	<u>yes</u>
remarks.						is the	Samp	led Ar	ea within a Wetland?	VIES
VEGETATION	T< 19	6, P = Pr	esent		,	SUBREG	ION:	IA	4	7
Tree Stratum DBH ≥ 3 incl	h	1/10	acre circ	ular plot unle	ss not	ted, absolut	e cover r	ecorded	Dominance Test v	vorksheet:
Species	IND	DOM	Cover	Species		IND	DOM	Cover	Number of Dominant Species That Are OBL, FACW, or FAC	: 4 (A)
1. None				3.		1.4				
2.			·	4.					Total Number of Dominant Species Across All Strata:	
Total Tree Cover:	2000	50% of T	otal Cove	)r:	ocostili-	20% of To	tal Cove	Γ: <sub>************</sub>	Percent of Dominant Species	_
Sapling/Shrub Stratum	IND	DOM	Cover	8. Sal p	m	FACW		/	That Are OBL, FACW, or FAC	: <u>80</u> (а/в)
1. Rho gro	FAC	У	25	9.						
2. Bet page	PACU	$\checkmark$	15	10.					Prevalence Index V	
3. Picmar	FALW	/ .	7	11.						Itiply by:
4. Vac vit	FAC	V	15	12.		·			OBL speciesx 1 =	
5. Ros aci	FACG	l	5	13.					FACW speciesx 2 =	16
6. Sad beb	FAC		10.	14.					FAC species <u>56</u> x 3 =	168_
7. pop tre	FACY		5	15.					FACU species $\frac{27}{x}$ x 4 =	108
Total Shrub Cover: 응3		50% of T	otal Cove	r: 41.5		20% of To	al Cover	:16.6	UPL species 🔘 x 5 =	. <u>O</u>
Herbaceous Stratum	IND	DOM	Cover	13.						292 (B)
1. Ebui arv	FAC	V	3	14.					,	
2. Cha ang	FACU	1		15.					Prevalence Index = B/A	= <u>3.21</u>
3. Cal can	FAC	V	3	16.					Hydrophytic Vegetati	on Indicators:
4. Geo IV	FACU	1		17.					Dominance Test is >50	)%
<b>5</b> .			:	18.					Prevalence Index is ≤3	3.0
6.				19.					Morphological Adaptati (Provide supporting da	
7.				20.					Remarks or on a separ	
8.				21.					Problematic Hydrophyt	ic Vegetation <sup>1</sup>
9.				22.					must be present unless disturbe	d or problematic.
10.				23.					<u>Project Vegetati</u>	on Type
11.	· .			24.					ICZ	
12. Total Herb Cover:		10% of T	otal Cove	25.		20% of Tot	al Cover	.1 /	Cowardin Code: (2593/1 2	)
1.Open Water		,	Jai Cove	2. Bare grou				1.0	HGM Classification:	in line i
Remarks: Bryophytes and Lichens may be listed in the Herbaceous columns								Landform:	-77/UM EN	
•									Lowland	
									Local Relief: Concare	o. Januari
									Microtopography: Slope ルルト の	e: Aspect:
									1-20 -102-1	Myr

HDR Plot No: 578

- COIL				\$8 11 A A A A		1 2 1	91		г	IOT NO:	7 0
Profile Desc	cription: De	escribe to the de	epth needed	to docur	ment the presence/a	bsence	of soil indic	cators	Soil M	lap Unit Nam	e
	Horizon	Soil M			Redox Featu						
5 " " >						T	T			1	
Depth (in.)	Name	Color (mois	st) <u>%</u>	Type <sup>1</sup>	<u>Color</u>	<u>%</u>	Loc <sup>2</sup>	<u>Mod³</u>	Texture	Horizon C	<u>omments</u>
0-5	0e						· ·				
5-9	В.	544/1	80	<u>C</u>	54R 4/4	20	MRC, PL		SILC	Frozen	e 8
			. 44								
			·						**.		
,		***************************************		·							Market State Control
	•	×2.		-							
											-
<sup>1</sup> Type: C=Conce	ntrations, D=D	epletions, OX=O	xidized Roots,	RM = Re	duced Matrix <sup>2</sup> Location	on: PL=Po	ore Linings,	RC=Root	Channels, M	/I=Matrix, CS=C	Coated Sand Grains
Remarks:			. A	***			3-	Texture Mo	odifiers: Mu	cky (MK), Peaty	(PT), Permafrost (PF)
\$ .											obbly (CB), Stony (ST)
Urdeia Cail In	ا حدمامال							(15-35%	6), 35-60%	= Very (V), 60-9	90% = Extremely (X)
. 1					soil layer except for	A1, A2,	A3, A4	<del></del>			T
M Histosol or	Histel (A1)		★ Thick Date	ark Surfa	aces (A12)					Soils	Mac
N Histic Epip			<u>M</u> Alaska (	Gleyed (	A13)			ļ	Pres	ent?	XC>
N Black Histi			🙏 Alaska F					<u> </u>	NRCS Dra	ainage Class:	Pb
n time tracklessens	Sulfide (A4)	<u> </u>			Pores (A15)			- 1		Organic Soils:	5
Indicators for	Problemation	Hydric Soils	(See Page 9	1/Section	on 4 for Problematic	Hydric S	Soils Detail	<u>s)</u>	Restrictive	Layer Type:	trost
N Depleted E	Below Dark S	urface (A11)	M Alaska (	Color Ch	ange (TA4) Give d	etails of	color chan	ge Re	strictive La	yer Depth:	8"
N Depleted N	/latrix (F3)		<u>M</u> Alaska A	Alpine S	wales (TA5)	.6		⁴Ur	iderlain by	mineral soil	w/chroma of ≤2
Nedox Dar	k Surface (F	6)	<u>M</u> Alaska F	Redox w	ith 2.5Y Hue		*, * *	5Mı	st have ⊢	lydrophytic Ve	enetation and
No Depleted D	ark Surface	(F7)	<u>∧/</u> Alaska 0	Sleyed w	/o Hue 5Y or Redde	er Under	lying			ology, and an	T :
M Redox Dep	ression (F8)		✓ AA Posit	tive (min	eral soil, 60% of ho	rizon 4 iı	nches thick	,		sition unless	disturbed or
Ned Paren	t Material (F:	21)	N Pondéd/	Flooded	/High Water Table (	12 inche	s or highe	r) pro	blematic	į. ·	
✓ Very Shalle	ow Dark Surf	ace (F22)	✓ Low Org	anic Ma	tter/Low Iron/High p	H Soil/N	ew Wetlan	id	Other (ex	cplain in rema	ırks)
HYDROLOG	Y ,			,					ek ja s		
		Wetland Hy	/drology Ind	icators			Second	lary Indic	ators (2 or	more require	d)
Primary Indicat	ors (any one	indicator is suff	icient)						ed Leaves	-	
N Surface W	ater (A1)		M Inundati	on Visib	le on Aerial Imagery	(B7)			atterns (B		X.,+
High Water  Saturation	Table (A2)				ited Concave Surfac				•		Roots (C3)(w/in 12")
✓ Saturation	(A3)	•	Marl De	posits (E	315)				Reduced		
Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark     Water Mark	·		Hydroge	n Sulfid	e Odor (C1) (w/in 12	2")	N Sa	It Deposi	ts (C5)		
	Deposits (B2)	)		son Wa	ter Table (C2)**		N Sti	unted or S	Stressed F	lants (D1)	:
M Drift Depos	A. 4		💯 Other (E	xplain ir	Remarks)		∕ Ge	omorphic	Position	(D2) − Con C	
	r Crust (B4)					,					te as restrictive layer)
Iron Deposits (B5)  Are Climatic/Hydrologic Conditions on Site  Microtopographic Relief (D4) - home may 7											
Surface Soil Cracks (B6)  Typical for this time of Year?   FAC-Neutral Test (D5)											
	eld Observations (inches from ground surface)  Water Source:  Wetland Hydrology Preser  Unface Water Present?  Yes No Depth (inches):							drology Present?			
Water Table Pro		7		epth (in		e.   n				Yes	Mark Commence
Saturation Pres		-1		epth (in	-		recip.				son Water Table ior, Westem AK:
(includes capilla		7		•	ž	-					
Describe Recor	ded Data (st	Episaturation ream gauge, mo		Endosat , aerial p	uration photos, previous ins	pections	), if availah	ole:		MICE M **Mineral S	ay – late July 🧳 Soils 12-24 inches
	,	J J-1	<b>J</b> == 3	<b>r</b>			,,				Soils 12-40 inches
Remarks:									F	AC-Neutral Te	st = #OBL+FW
					zi.				do		J + UPL dominants;

Plot Number	HDR578				
Wetland Status	Wetland				
Plot Type	WD				
Plot Date	6/7/2022				
NWI Classification	PSS3/1B				
ндм	Depressional				
Vegetation Type	Deciduous Shrub and Sapling Regrowth				
Latitude (DD)	64.58476				
Longitude (DD)	-150.0324				



Photo Type: Soils Direction: NA



Photo Type: Vegetation Direction: E



Plot Number	HDR579
Wetland Status	Upland
Plot Type	FVP
Plot Date	6/7/2022
NWI Classification	U
ндм	N/A
Vegetation Type	Deciduous Shrub and Sapling Regrowth
Latitude (DD)	64.5854
Longitude (DD)	-150.03262



Photo Type: Soils Direction: NA



Photo Type: Vegetation Direction: E



Plot Number	HDR580
Wetland Status	Wetland
Plot Type	FVP
Plot Date	6/7/2022
NWI Classification	PSS1/3B
HGM	Depressional
Vegetation Type	Deciduous Shrub and Sapling Regrowth
Latitude (DD)	64.58655
Longitude (DD)	-150.03541



Photo Type: Soils Direction: NA



Photo Type: Vegetation Direction: N



Plot Number	HDR581
Wetland Status	Wetland
Plot Type	FVP
Plot Date	6/7/2022
NWI Classification	PSS1B
ндм	Depressional
Vegetation Type	Deciduous Shrub and Sapling Regrowth
Latitude (DD)	64.58666
Longitude (DD)	-150.03577



Photo Type: Soils Direction: NA



Photo Type: Vegetation Direction: N



Plot Number	HDR582
Wetland Status	Wetland
Plot Type	FVP
Plot Date	6/7/2022
NWI Classification	PSS1/EM1B
НСМ	Depressional
Vegetation Type	Open Mixed Shrub Sedge Tundra
Latitude (DD)	64.58726
Longitude (DD)	-150.03724



Photo Type: Soils Direction: NA



Photo Type: Vegetation Direction: N



Plot Number	HDR583
Wetland Status	Upland
Plot Type	FVP
Plot Date	6/7/2022
NWI Classification	U
ндм	N/A
Vegetation Type	Deciduous Shrub and Sapling Regrowth
Latitude (DD)	64.5876
Longitude (DD)	-150.03788



Photo Type: Soils Direction: NA



Direction: SW Photo Type: Vegetation

