WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: Point Hope Airport Improvements Borough/City: North Slope Borough Sampling Date: 7.14.14

Applicant/Owner: Alaska Department of Transportation & Public Facilities Sampling Point: 1

Investigator(s): Kacy Hillman & Daniel De Bord Landform (hillside, terrace, hummocks, etc.): coastal plain

Local relief (concave, convex, none): convex Slope (%): 0

Subregion: North Slope Lat: N 68.3519° Long: W -166.7861° Datum: WGS 84

Soil Map Unit Name: Not Available NWI classification: Upland

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes x No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No x
Hydric Soil Present?	Yes _____	No x
Wetland Hydrology Present?	Yes _____	No x

Is the Sampled Area within a Wetland? Yes _____ No x

Remarks:

Upland coastal plain area west of cemetary on raised beach dune.

VEGETATION – Use scientific names of plants. List all species in the plot.

			Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum					
1.					
2.					
3.					
4.					
		Total Cover:	0		
		50% of total cover: 0		20% of total cover: 0	
Sapling/Shrub Stratum					
1.	salarc	Salix arctica	20	Yes	FACU
2.					
3.					
4.					
5.					
6.					
		Total Cover:	20		
		50% of total cover: 10		20% of total cover: 4	
Herb Stratum					
1.	flaniv	Flavocetraria nivalis	10	Yes	UPL
2.	erinan	Eritrichium nanaum	5	No	UPL
3.	saxopp	Saxifraga oppositifolia	5	No	FAC
4.	papgor	Papaver gorodkovii	3	No	UPL
5.	luzcon	Luzula confusa	2	No	FAC
6.	chalat	Chamerion latifolium	2	No	FAC
7.	potnan	Potentilla nana	2	No	FAC
8.	oxynig	Oxytropis nigrescens	Tr	No	UPL
9.					
10.					
		Total Cover:	29		
		50% of total cover: 14.5		20% of total cover: 5.8	

Plot size (radius, or length x width) 15 foot radius % Bare Ground _____

% Cover of Wetland Bryophytes (Where applicable) _____ Total Cover of Bryophytes _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	11	x 3 =	33
FACU species	20	x 4 =	80
UPL species	18	x 5 =	90
Column Totals:	49 (A)		203 (B)

Prevalence Index = B/A = 4.14

Hydrophytic Vegetation Indicators:

No Dominance Test is >50%

No Prevalence Index is ≤3.0

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No x

Remarks:

Sparce vegetation cover with exposed gravel throughout test plot.

SOIL

Sampling Point: 1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-10	10 YR 3/1							gravely/sand

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

___ Histosol or Histel (A1)
___ Histic Epipedon (A2)
___ Hydrogen Sulfide (A4)
___ Thick Dark Surface (A12)
___ Alaska Gleyed (A13)
___ Alaska Redox (A14)
___ Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

___ Alaska Color Change (TA4)[4]
___ Alaska Alpine Swales (TA5)
___ Alaska Redox With 2.5Y Hue
___ Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
___ Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present unless disturbed or problematic.
[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: permafrost
Depth (inches): 10

Hydric Soil Present? Yes _____ No X

Remarks:

No indications of hydric soil observed at sample location.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

___ Surface Water (A1)
___ High Water Table (A2)
___ Saturation (A3)
___ Water Marks (B1)
___ Sediment Deposits (B2)
___ Drift Deposits (B3)
___ Algal Mat or Crust (B4)
___ Iron Deposits (B5)
___ Surface Soil Cracks (B6)
___ Inundation Visible on Aerial Imagery (B7)
___ Sparsely Vegetated Concave Surface (B8)
___ Marl Deposits (B15)
___ Hydrogen Sulfide Odor (C1)
___ Dry-Season Water Table (C2)
___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

___ Water-stained Leaves (B9)
___ Drainage Patterns (B10)
___ Oxidized Rhizospheres along Living Roots (C3)
___ Presence of Reduced Iron (C4)
___ Salt Deposits (C5)
___ Stunted or Stressed Plants (D1)
___ Geomorphic Position (D2)
___ Shallow Aquitard (D3)
___ Microtopographic Relief (D4)
___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____
Water Table Present? Yes _____ No X Depth (inches): _____
Saturation Present? (includes capillary fringe) Yes _____ No X Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No field indication of hydrology.

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: Point Hope Airport Improvements Borough/City: North Slope Borough Sampling Date: 7.14.14

Applicant/Owner: Alaska Department of Transportation & Public Facilities Sampling Point: 2

Investigator(s): Kacy Hillman & Daniel De Bord Landform (hillside, terrace, hummocks, etc.): coastal plain

Local relief (concave, convex, none): concave Slope (%): 2

Subregion: North Slope Lat: N 68.3517° Long: W -166.7864° Datum: WGS 84

Soil Map Unit Name: Not Available NWI classification: Upland

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes x No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes x	No _____	Is the Sampled Area within a Wetland? Yes _____ No x
Hydric Soil Present?	Yes _____	No x	
Wetland Hydrology Present?	Yes _____	No x	

Remarks:

Upland coastal plain area west of cemetary on the linear deression of a beach dune.

VEGETATION – Use scientific names of plants. List all species in the plot.

			Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum					
1.					
2.					
3.					
4.					
		Total Cover:	0		
		50% of total cover:	0	20% of total cover:	0
Sapling/Shrub Stratum					
1.	salarc	Salix arctica	20	Yes	FACU
2.					
3.					
4.					
5.					
6.					
		Total Cover:	20		
		50% of total cover:	10	20% of total cover:	4
Herb Stratum					
1.	poaarc	Poa arctica	15	Yes	FAC
2.	equarv	Equisetum arvense	10	Yes	FAC
3.	petfri	Petasites frigidus	5	No	FACW
4.	flaniv	Flavocetraria nivalis	5	No	UPL
5.	erilon	Erigeron lonchophyllus	3	No	FACW
6.					
7.					
8.					
9.					
10.					
		Total Cover:	38		
		50% of total cover:	19	20% of total cover:	7.6

Plot size (radius, or length x width) 15 foot radius % Bare Ground _____

% Cover of Wetland Bryophytes _____ (Where applicable) Total Cover of Bryophytes _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 67% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	8	x 2 =	16
FAC species	25	x 3 =	75
FACU species	20	x 4 =	80
UPL species	5	x 5 =	25
Column Totals:	58 (A)		196 (B)

Prevalence Index = B/A = 3.38

Hydrophytic Vegetation Indicators:

Y Dominance Test is >50%

No Prevalence Index is ≤3.0

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes x No _____

Remarks:

Sparce vegetation cover with exposed gravel throughout test plot.

SOIL

Sampling Point: 2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	10 YR 2/2							sandy/organics
8-15	10 YR 2/1							sand

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

___ Histosol or Histel (A1)
___ Histic Epipedon (A2)
___ Hydrogen Sulfide (A4)
___ Thick Dark Surface (A12)
___ Alaska Gleyed (A13)
___ Alaska Redox (A14)
___ Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

___ Alaska Color Change (TA4)[4]
___ Alaska Alpine Swales (TA5)
___ Alaska Redox With 2.5Y Hue
___ Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
___ Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present unless disturbed or problematic.
[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: rocks/gravel
Depth (inches): 15

Hydric Soil Present? Yes _____ No X

Remarks:

No indications of hydric soil observed at sample location.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

___ Surface Water (A1)
___ High Water Table (A2)
___ Saturation (A3)
___ Water Marks (B1)
___ Sediment Deposits (B2)
___ Drift Deposits (B3)
___ Algal Mat or Crust (B4)
___ Iron Deposits (B5)
___ Surface Soil Cracks (B6)
___ Inundation Visible on Aerial Imagery (B7)
___ Sparsely Vegetated Concave Surface (B8)
___ Marl Deposits (B15)
___ Hydrogen Sulfide Odor (C1)
___ Dry-Season Water Table (C2)
___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

___ Water-stained Leaves (B9)
___ Drainage Patterns (B10)
___ Oxidized Rhizospheres along Living Roots (C3)
___ Presence of Reduced Iron (C4)
___ Salt Deposits (C5)
___ Stunted or Stressed Plants (D1)
___ Geomorphic Position (D2)
___ Shallow Aquitard (D3)
___ Microtopographic Relief (D4)
___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____
Water Table Present? Yes _____ No X Depth (inches): _____
Saturation Present? (includes capillary fringe) Yes _____ No X Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No field indication of hydrology.

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: Point Hope Airport Improvements Borough/City: North Slope Borough Sampling Date: 7.15.14

Applicant/Owner: Alaska Department of Transportation & Public Facilities Sampling Point: 5

Investigator(s): Kacy Hillman & Daniel De Bord Landform (hillside, terrace, hummocks, etc.): coastal plain

Local relief (concave, convex, none): convex Slope (%): 2

Subregion: North Slope Lat: N 68.3513° Long: W -166.7929° Datum: WGS 84

Soil Map Unit Name: Not Available NWI classification: Upland

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes x No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No x
Hydric Soil Present?	Yes _____	No x
Wetland Hydrology Present?	Yes _____	No x

Is the Sampled Area within a Wetland? Yes _____ No x

Remarks:

Upland coastal plain area.

VEGETATION – Use scientific names of plants. List all species in the plot.

			Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum					
1.					
2.					
3.					
4.					
		Total Cover:	0		
		50% of total cover:	0	20% of total cover:	0
Sapling/Shrub Stratum					
1.	salarc	Salix arctica	4	Yes	FACU
2.	castet	Cassiope tetragona	2	Yes	FACU
3.					
4.					
5.					
6.					
		Total Cover:	6		
		50% of total cover:	3	20% of total cover:	1.2
Herb Stratum					
1.	chalat	Chamerion latifolium	4	Yes	FAC
2.	papgor	Papaver gorodkovii	2	Yes	UPL
3.	erinan	Eritrichium nanaum	2	Yes	UPL
4.					
5.					
6.					
7.					
8.					
9.					
10.					
		Total Cover:	8		
		50% of total cover:	4	20% of total cover:	1.6

Plot size (radius, or length x width) 15 foot radius % Bare Ground _____

% Cover of Wetland Bryophytes (Where applicable) _____ Total Cover of Bryophytes _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 20% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	4	x 3 =	12
FACU species	6	x 4 =	24
UPL species	4	x 5 =	20
Column Totals:	14 (A)		56 (B)

Prevalence Index = B/A = 4.00

Hydrophytic Vegetation Indicators:

No Dominance Test is >50%

No Prevalence Index is ≤3.0

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No x

Remarks:

Sparce vegetation cover with exposed gravel throughout test plot.

SOIL

Sampling Point: 5

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 3/1							organics/sand/gravel
4-14	10YR 2/2							sand/gravel

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

___ Histosol or Histel (A1)
___ Histic Epipedon (A2)
___ Hydrogen Sulfide (A4)
___ Thick Dark Surface (A12)
___ Alaska Gleyed (A13)
___ Alaska Redox (A14)
___ Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

___ Alaska Color Change (TA4)[4]
___ Alaska Alpine Swales (TA5)
___ Alaska Redox With 2.5Y Hue
___ Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
___ Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present unless disturbed or problematic.
[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

Gravel falling in on itself while attempting to excavate test hole deeper.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

___ Surface Water (A1)
___ High Water Table (A2)
___ Saturation (A3)
___ Water Marks (B1)
___ Sediment Deposits (B2)
___ Drift Deposits (B3)
___ Algal Mat or Crust (B4)
___ Iron Deposits (B5)
___ Surface Soil Cracks (B6)
___ Inundation Visible on Aerial Imagery (B7)
___ Sparsely Vegetated Concave Surface (B8)
___ Marl Deposits (B15)
___ Hydrogen Sulfide Odor (C1)
___ Dry-Season Water Table (C2)
___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

___ Water-stained Leaves (B9)
___ Drainage Patterns (B10)
___ Oxidized Rhizospheres along Living Roots (C3)
___ Presence of Reduced Iron (C4)
___ Salt Deposits (C5)
___ Stunted or Stressed Plants (D1)
___ Geomorphic Position (D2)
___ Shallow Aquitard (D3)
___ Microtopographic Relief (D4)
___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____
Water Table Present? Yes _____ No X Depth (inches): _____
Saturation Present? (includes capillary fringe) Yes _____ No X Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No field indication of hydrology.

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: Point Hope Airport Improvements Borough/City: North Slope Borough Sampling Date: 7.15.14

Applicant/Owner: Alaska Department of Transportation & Public Facilities Sampling Point: 6

Investigator(s): Kacy Hillman & Daniel De Bord Landform (hillside, terrace, hummocks, etc.): coastal plain

Local relief (concave, convex, none): concave Slope (%): 2

Subregion: North Slope Lat: N 68.3511° Long: W -166.7908° Datum: WGS 84

Soil Map Unit Name: Not Available NWI classification: PEM1B

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes x No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes x	No _____	**Is the Sampled Area within a Wetland?** Yes x No _____
Hydric Soil Present?	Yes x	No _____	
Wetland Hydrology Present?	Yes x	No _____	

Remarks:

Linear depressional area carries water within the beach dune area.

VEGETATION – Use scientific names of plants. List all species in the plot.

			Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum					
1.					
2.					
3.					
4.					
		Total Cover:	0		
		50% of total cover:	0	20% of total cover:	0
Sapling/Shrub Stratum					
1.	salarc	Salix arctica	5	Yes	FACU
2.					
3.					
4.					
5.					
6.					
		Total Cover:	5		
		50% of total cover:	2.5	20% of total cover:	1
Herb Stratum					
1.	carbig	Carex bigelowii	60	Yes	FAC
2.		Carex microchaeta	5	No	FAC
3.	petfri	Petasites frigidus	5	No	FACW
4.					
5.					
6.					
7.					
8.					
9.					
10.					
		Total Cover:	70		
		50% of total cover:	35	20% of total cover:	14

Plot size (radius, or length x width) 15 foot radius % Bare Ground _____

% Cover of Wetland Bryophytes (Where applicable) _____ Total Cover of Bryophytes _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	5	x 2 =	10
FAC species	65	x 3 =	195
FACU species	5	x 4 =	20
UPL species	0	x 5 =	0
Column Totals:	75 (A)		225 (B)

Prevalence Index = B/A = 3.00

Hydrophytic Vegetation Indicators:

No Dominance Test is >50%

Y Prevalence Index is ≤3.0

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yesx _____ No _____

Remarks:

Carex bigelowii dominates vegetation in test plot area. Lack of surface gravel as seen in previous test plot areas.

SOIL

Sampling Point: 6

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-20	10YR 3/1							organics/sandy

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

___ Histosol or Histel (A1)
___ Histic Epipedon (A2)
_X_ Hydrogen Sulfide (A4)
___ Thick Dark Surface (A12)
___ Alaska Gleyed (A13)
___ Alaska Redox (A14)
___ Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

___ Alaska Color Change (TA4)[4]
___ Alaska Alpine Swales (TA5)
___ Alaska Redox With 2.5Y Hue
___ Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
___ Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present unless disturbed or problematic.
[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes _X_ No _____

Remarks:

Hydrogen sulfide odor apparent walking through test area without test pit excavation.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

_X_ Surface Water (A1)
_X_ High Water Table (A2)
_X_ Saturation (A3)
___ Water Marks (B1)
___ Sediment Deposits (B2)
___ Drift Deposits (B3)
___ Algal Mat or Crust (B4)
___ Iron Deposits (B5)
___ Surface Soil Cracks (B6)
___ Inundation Visible on Aerial Imagery (B7)
___ Sparsely Vegetated Concave Surface (B8)
___ Marl Deposits (B15)
___ Hydrogen Sulfide Odor (C1)
___ Dry-Season Water Table (C2)
___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

___ Water-stained Leaves (B9)
___ Drainage Patterns (B10)
___ Oxidized Rhizospheres along Living Roots (C3)
___ Presence of Reduced Iron (C4)
___ Salt Deposits (C5)
___ Stunted or Stressed Plants (D1)
___ Geomorphic Position (D2)
___ Shallow Aquitard (D3)
___ Microtopographic Relief (D4)
___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _X_ No _____ Depth (inches): 0
Water Table Present? Yes _X_ No _____ Depth (inches): 0
Saturation Present? (includes capillary fringe) Yes _X_ No _____ Depth (inches): 0

Wetland Hydrology Present? Yes _X_ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Visible standing water throught test plot area.

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: Point Hope Airport Improvements Borough/City: North Slope Borough Sampling Date: 7.15.14

Applicant/Owner: Alaska Department of Transportation & Public Facilities Sampling Point: 7

Investigator(s): Kacy Hillman & Daniel De Bord Landform (hillside, terrace, hummocks, etc.): coastal plain

Local relief (concave, convex, none): convex Slope (%): 2

Subregion: North Slope Lat: N 68.3494° Long: W -166.7934° Datum: WGS 84

Soil Map Unit Name: Not Available NWI classification: Upland

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes x No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No x	Is the Sampled Area within a Wetland? Yes _____ No x
Hydric Soil Present?	Yes _____	No x	
Wetland Hydrology Present?	Yes _____	No x	

Remarks:

Rolling beach dunes of coastal plain area. Gravel ground cover abundant.

VEGETATION – Use scientific names of plants. List all species in the plot.

Tree Stratum			Absolute % Cover	Dominant Species?	Indicator Status
1.					
2.					
3.					
4.					
		Total Cover:	0		
		50% of total cover:	0	20% of total cover:	0
Sapling/Shrub Stratum					
1.	salarc	Salix arctica	10	Yes	FACU
2.	castet	Cassiope tetragona	4	Yes	FACU
3.					
4.					
5.					
6.					
		Total Cover:	14		
		50% of total cover:	7	20% of total cover:	2.8
Herb Stratum					
1.	chalat	Chamerion latifolium	4	Yes	FAC
2.	elyare	Elymus arenarius	4	Yes	UPL
3.	papgor	Papaver gorodkovii	Tr	NO	UPL
4.					
5.					
6.					
7.					
8.					
9.					
10.					
		Total Cover:	8		
		50% of total cover:	4	20% of total cover:	1.6

Plot size (radius, or length x width) 15 foot radius % Bare Ground _____

% Cover of Wetland Bryophytes _____ (Where applicable) Total Cover of Bryophytes _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 25% (A/B)

Prevalence Index worksheet:

	Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0	
FACW species	0	x 2 =	0	
FAC species	4	x 3 =	12	
FACU species	14	x 4 =	56	
UPL species	4	x 5 =	20	
Column Totals:	22	(A)	88	(B)

Prevalence Index = B/A = 4.00

Hydrophytic Vegetation Indicators:

No Dominance Test is >50%

No Prevalence Index is ≤3.0

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No x

Remarks:

Sparce vegetation cover with exposed gravel throughout test plot.

SOIL

Sampling Point: 7

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-10								sandy/gravel

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

___ Histosol or Histel (A1)
___ Histic Epipedon (A2)
___ Hydrogen Sulfide (A4)
___ Thick Dark Surface (A12)
___ Alaska Gleyed (A13)
___ Alaska Redox (A14)
___ Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

___ Alaska Color Change (TA4)[4]
___ Alaska Alpine Swales (TA5)
___ Alaska Redox With 2.5Y Hue
___ Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
___ Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present unless disturbed or problematic.
[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

Gravel falling in on itself while attempting to excavate test hole deeper.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

___ Surface Water (A1)
___ High Water Table (A2)
___ Saturation (A3)
___ Water Marks (B1)
___ Sediment Deposits (B2)
___ Drift Deposits (B3)
___ Algal Mat or Crust (B4)
___ Iron Deposits (B5)
___ Surface Soil Cracks (B6)
___ Inundation Visible on Aerial Imagery (B7)
___ Sparsely Vegetated Concave Surface (B8)
___ Marl Deposits (B15)
___ Hydrogen Sulfide Odor (C1)
___ Dry-Season Water Table (C2)
___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

___ Water-stained Leaves (B9)
___ Drainage Patterns (B10)
___ Oxidized Rhizospheres along Living Roots (C3)
___ Presence of Reduced Iron (C4)
___ Salt Deposits (C5)
___ Stunted or Stressed Plants (D1)
___ Geomorphic Position (D2)
___ Shallow Aquitard (D3)
___ Microtopographic Relief (D4)
___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____
Water Table Present? Yes _____ No X Depth (inches): _____
Saturation Present? (includes capillary fringe) Yes _____ No X Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No field indication of hydrology.

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: Point Hope Airport Improvements Borough/City: North Slope Borough Sampling Date: 7.15.14

Applicant/Owner: Alaska Department of Transportation & Public Facilities Sampling Point: 9

Investigator(s): Kacy Hillman & Daniel De Bord Landform (hillside, terrace, hummocks, etc.): coastal plain

Local relief (concave, convex, none): convex Slope (%): 2

Subregion: North Slope Lat: N 68.3447° Long: W -166.8008° Datum: WGS 84

Soil Map Unit Name: Not Available NWI classification: Upland

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes x No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes x	No _____	**Is the Sampled Area within a Wetland?** Yes _____ No x
Hydric Soil Present?	Yes _____	No x	
Wetland Hydrology Present?	Yes _____	No x	

Remarks:

Old material site south of apron. Mostly exposed gravel with minimal vegetation.

VEGETATION – Use scientific names of plants. List all species in the plot.

Tree Stratum			Absolute % Cover	Dominant Species?	Indicator Status
1.					
2.					
3.					
4.					
		Total Cover:	0		
		50% of total cover:	0	20% of total cover:	0
Sapling/Shrub Stratum					
1.					
2.					
3.					
4.					
5.					
6.					
		Total Cover:	0		
		50% of total cover:	0	20% of total cover:	0
Herb Stratum					
1.	chalat	Chamerion latifolium	2	Yes	FAC
2.	elyare	Elymus arenarius	Tr	No	UPL
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
		Total Cover:	2		
		50% of total cover:	1	20% of total cover:	0.4

Plot size (radius, or length x width) 15 foot radius % Bare Ground _____

% Cover of Wetland Bryophytes (Where applicable) _____ Total Cover of Bryophytes _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	2	x 3 =	6
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	2 (A)		6 (B)

Prevalence Index = B/A = 3.00

Hydrophytic Vegetation Indicators:

Y Dominance Test is >50%

Y Prevalence Index is ≤3.0

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yesx_____ No _____

Remarks:

Mostly exposed gravel (90%) with minimal vegetation.

SOIL

Sampling Point: 9

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-10								gravel/sand

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

___ Histosol or Histel (A1)
___ Histic Epipedon (A2)
___ Hydrogen Sulfide (A4)
___ Thick Dark Surface (A12)
___ Alaska Gleyed (A13)
___ Alaska Redox (A14)
___ Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

___ Alaska Color Change (TA4)[4]
___ Alaska Alpine Swales (TA5)
___ Alaska Redox With 2.5Y Hue
___ Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
___ Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present unless disturbed or problematic.
[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

Gravel falling in on itself while attempting to excavate test hole deeper.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

___ Surface Water (A1)
___ High Water Table (A2)
___ Saturation (A3)
___ Water Marks (B1)
___ Sediment Deposits (B2)
___ Drift Deposits (B3)
___ Algal Mat or Crust (B4)
___ Iron Deposits (B5)
___ Surface Soil Cracks (B6)
___ Inundation Visible on Aerial Imagery (B7)
___ Sparsely Vegetated Concave Surface (B8)
___ Marl Deposits (B15)
___ Hydrogen Sulfide Odor (C1)
___ Dry-Season Water Table (C2)
___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

___ Water-stained Leaves (B9)
___ Drainage Patterns (B10)
___ Oxidized Rhizospheres along Living Roots (C3)
___ Presence of Reduced Iron (C4)
___ Salt Deposits (C5)
___ Stunted or Stressed Plants (D1)
___ Geomorphic Position (D2)
___ Shallow Aquitard (D3)
___ Microtopographic Relief (D4)
___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____
Water Table Present? Yes _____ No X Depth (inches): _____
Saturation Present? (includes capillary fringe) Yes _____ No X Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No field indication of hydrology.

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: Point Hope Airport Improvements Borough/City: North Slope Borough Sampling Date: 7.15.14

Applicant/Owner: Alaska Department of Transportation & Public Facilities Sampling Point: 11

Investigator(s): Kacy Hillman & Daniel De Bord Landform (hillside, terrace, hummocks, etc.): coastal plain

Local relief (concave, convex, none): convex Slope (%): 2

Subregion: North Slope Lat: N 68.3434° Long: W -166.8100° Datum: WGS 84

Soil Map Unit Name: Not Available NWI classification: Upland

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes x No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes x	No _____	Is the Sampled Area within a Wetland? Yes _____ No x
Hydric Soil Present?	Yes _____	No x	
Wetland Hydrology Present?	Yes _____	No x	

Remarks:

Southwest edge of where vegetation begins growing from tidal area.

VEGETATION – Use scientific names of plants. List all species in the plot.

Tree Stratum			Absolute % Cover	Dominant Species?	Indicator Status
1.					
2.					
3.					
4.					
		Total Cover:	0		
		50% of total cover:	0	20% of total cover:	0
Sapling/Shrub Stratum					
1.					
2.					
3.					
4.					
5.					
6.					
		Total Cover:	0		
		50% of total cover:	0	20% of total cover:	0
Herb Stratum					
1.	poaarc	Poa arctica	20	Yes	FAC
2.	chalat	Chamerion latifolium	4	No	FAC
3.	astalp	Astragalus alpinus	3	No	FAC
4.	taroff	Taraxacum officinale	Tr	No	FACU
5.					
6.					
7.					
8.					
9.					
10.					
		Total Cover:	27		
		50% of total cover:	13.5	20% of total cover:	5.4

Plot size (radius, or length x width) 15 foot radius % Bare Ground _____

% Cover of Wetland Bryophytes (Where applicable) _____ Total Cover of Bryophytes _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	27	x 3 =	81
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	27 (A)		81 (B)

Prevalence Index = B/A = 3.00

Hydrophytic Vegetation Indicators:

Y Dominance Test is >50%

Y Prevalence Index is ≤3.0

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yesx_____ No _____

Remarks:

Sparse vegetation coverage with 80% of ground cover comprised of gravel.

SOIL

Sampling Point: 11

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-10								gravel/rock

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

___ Histosol or Histel (A1)
___ Histic Epipedon (A2)
___ Hydrogen Sulfide (A4)
___ Thick Dark Surface (A12)
___ Alaska Gleyed (A13)
___ Alaska Redox (A14)
___ Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

___ Alaska Color Change (TA4)[4]
___ Alaska Alpine Swales (TA5)
___ Alaska Redox With 2.5Y Hue
___ Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
___ Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present unless disturbed or problematic.
[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

Gravel falling in on itself while attempting to excavate test hole deeper.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

___ Surface Water (A1)
___ High Water Table (A2)
___ Saturation (A3)
___ Water Marks (B1)
___ Sediment Deposits (B2)
___ Drift Deposits (B3)
___ Algal Mat or Crust (B4)
___ Iron Deposits (B5)
___ Surface Soil Cracks (B6)
___ Inundation Visible on Aerial Imagery (B7)
___ Sparsely Vegetated Concave Surface (B8)
___ Marl Deposits (B15)
___ Hydrogen Sulfide Odor (C1)
___ Dry-Season Water Table (C2)
___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

___ Water-stained Leaves (B9)
___ Drainage Patterns (B10)
___ Oxidized Rhizospheres along Living Roots (C3)
___ Presence of Reduced Iron (C4)
___ Salt Deposits (C5)
___ Stunted or Stressed Plants (D1)
___ Geomorphic Position (D2)
___ Shallow Aquitard (D3)
___ Microtopographic Relief (D4)
___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____
Water Table Present? Yes _____ No X Depth (inches): _____
Saturation Present? (includes capillary fringe) Yes _____ No X Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

FALSE

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: Point Hope Airport Improvements Borough/City: North Slope Borough Sampling Date: 7.15.14

Applicant/Owner: Alaska Department of Transportation & Public Facilities Sampling Point: 13

Investigator(s): Kacy Hillman & Daniel De Bord Landform (hillside, terrace, hummocks, etc.): coastal plain

Local relief (concave, convex, none): concave Slope (%): 2

Subregion: North Slope Lat: N 68.3453° Long: W -166.8060° Datum: WGS 84

Soil Map Unit Name: Not Available NWI classification: Upland

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes x No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____ No x	Is the Sampled Area within a Wetland? Yes _____ No x
Hydric Soil Present?	Yes _____ No x	
Wetland Hydrology Present?	Yes x No _____	

Remarks:

Linear beach dune depression between raised beach dune areas.

VEGETATION – Use scientific names of plants. List all species in the plot.

			Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum					
1.					
2.					
3.					
4.					
		Total Cover:	0		
		50% of total cover: 0		20% of total cover: 0	
Sapling/Shrub Stratum					
1.	salarc	Salix arctica	3	Yes	FACU
2.					
3.					
4.					
5.					
6.					
		Total Cover:	3		
		50% of total cover: 1.5		20% of total cover: 0.6	
Herb Stratum					
1.	poaarc	Poa arctica	10	Yes	FAC
2.	priexi	Primula eximia	10	Yes	UPL
3.	luzcon	Luzula confusa	3	No	FAC
4.					
5.					
6.					
7.					
8.					
9.					
10.					
		Total Cover:	23		
		50% of total cover: 11.5		20% of total cover: 4.6	

Plot size (radius, or length x width) 15 foot radius % Bare Ground _____

% Cover of Wetland Bryophytes (Where applicable) 40 Total Cover of Bryophytes _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 33% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	13	x 3 =	39
FACU species	3	x 4 =	12
UPL species	10	x 5 =	50
Column Totals:	26 (A)		101 (B)

Prevalence Index = B/A = 3.88

Hydrophytic Vegetation Indicators:

No Dominance Test is >50%

No Prevalence Index is ≤3.0

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No x

Remarks:

Less gravel ground coverage than previous test area, more vegetation coverage, and addition of sphagnum cover.

SOIL

Sampling Point: 13

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 3/1							sandy/organics
5-15								gravely/sand

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

___ Histosol or Histel (A1)
___ Histic Epipedon (A2)
___ Hydrogen Sulfide (A4)
___ Thick Dark Surface (A12)
___ Alaska Gleyed (A13)
___ Alaska Redox (A14)
___ Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

___ Alaska Color Change (TA4)[4]
___ Alaska Alpine Swales (TA5)
___ Alaska Redox With 2.5Y Hue
___ Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
___ Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present unless disturbed or problematic.
[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

No indications of hydric soil observed at sample location.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

___ Surface Water (A1)
___ High Water Table (A2)
___ Saturation (A3)
___ Water Marks (B1)
___ Sediment Deposits (B2)
___ Drift Deposits (B3)
___ Algal Mat or Crust (B4)
___ Iron Deposits (B5)
X Surface Soil Cracks (B6)
___ Inundation Visible on Aerial Imagery (B7)
___ Sparsely Vegetated Concave Surface (B8)
___ Marl Deposits (B15)
___ Hydrogen Sulfide Odor (C1)
___ Dry-Season Water Table (C2)
___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

___ Water-stained Leaves (B9)
___ Drainage Patterns (B10)
___ Oxidized Rhizospheres along Living Roots (C3)
___ Presence of Reduced Iron (C4)
___ Salt Deposits (C5)
___ Stunted or Stressed Plants (D1)
___ Geomorphic Position (D2)
___ Shallow Aquitard (D3)
___ Microtopographic Relief (D4)
___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____
Water Table Present? Yes _____ No X Depth (inches): _____
Saturation Present? (includes capillary fringe) Yes _____ No X Depth (inches): _____

Wetland Hydrology Present? Yes X No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Surface soil cracks indicate prolonged ponding during part of the year, but no other wetland indicators present within the test area.

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: Point Hope Airport Improvements Borough/City: North Slope Borough Sampling Date: 7.15.14

Applicant/Owner: Alaska Department of Transportation & Public Facilities Sampling Point: 15

Investigator(s): Kacy Hillman & Daniel De Bord Landform (hillside, terrace, hummocks, etc.): coastal plain

Local relief (concave, convex, none): concave Slope (%): 2

Subregion: North Slope Lat: N 68.344774802 Long: W -166.807623606 Datum: WGS 84

Soil Map Unit Name: Not Available NWI classification: PEM1B

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes x No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes x No _____	**Is the Sampled Area within a Wetland?** Yes x No _____
Hydric Soil Present?	Yes x No _____	
Wetland Hydrology Present?	Yes x No _____	

Remarks:

Linear beach dune depression between raised beach dune areas.

VEGETATION – Use scientific names of plants. List all species in the plot.

			Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum					
1.					
2.					
3.					
4.					
		Total Cover:	0		
		50% of total cover: 0		20% of total cover: 0	
Sapling/Shrub Stratum					
1.	salarc	Salix arctica	2	Yes	FACU
2.					
3.					
4.					
5.					
6.					
		Total Cover:	2		
		50% of total cover: 1		20% of total cover: 0.4	
Herb Stratum					
1.	cararc	Carex arcta	80	Yes	OBL
2.	poaarc	Poa arctica	60	Yes	FAC
3.	chalat	Chamerion latifolium	10	No	FAC
4.		Carex microchaeta	5	No	FAC
5.					
6.					
7.					
8.					
9.					
10.					
		Total Cover:	155		
		50% of total cover: 77.5		20% of total cover: 31	

Plot size (radius, or length x width) 15 foot radius % Bare Ground _____

% Cover of Wetland Bryophytes (Where applicable) _____ Total Cover of Bryophytes _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 67% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	80	x 1 =	80
FACW species	0	x 2 =	0
FAC species	75	x 3 =	225
FACU species	2	x 4 =	8
UPL species	0	x 5 =	0
Column Totals:	157 (A)		313 (B)

Prevalence Index = B/A = 1.99

Hydrophytic Vegetation Indicators:

Y Dominance Test is >50%

Y Prevalence Index is ≤3.0

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes x No _____

Remarks:

Wetland vegetation present at the bottom of linear depressional area.

SOIL

Sampling Point: 15

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 3/1							sandy/organics
4-13								gravely/sand

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

___ Histosol or Histel (A1)
___ Histic Epipedon (A2)
_X_ Hydrogen Sulfide (A4)
___ Thick Dark Surface (A12)
___ Alaska Gleyed (A13)
___ Alaska Redox (A14)
___ Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

___ Alaska Color Change (TA4)[4]
___ Alaska Alpine Swales (TA5)
___ Alaska Redox With 2.5Y Hue
___ Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
___ Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present unless disturbed or problematic.
[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes _X_ No _____

Remarks:

Hydrogen sulfide odor apparent walking through test area without test pit excavation.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

___ Surface Water (A1)
_X_ High Water Table (A2)
_X_ Saturation (A3)
___ Water Marks (B1)
___ Sediment Deposits (B2)
___ Drift Deposits (B3)
___ Algal Mat or Crust (B4)
___ Iron Deposits (B5)
___ Surface Soil Cracks (B6)
___ Inundation Visible on Aerial Imagery (B7)
___ Sparsely Vegetated Concave Surface (B8)
___ Marl Deposits (B15)
___ Hydrogen Sulfide Odor (C1)
___ Dry-Season Water Table (C2)
___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

___ Water-stained Leaves (B9)
___ Drainage Patterns (B10)
___ Oxidized Rhizospheres along Living Roots (C3)
___ Presence of Reduced Iron (C4)
___ Salt Deposits (C5)
___ Stunted or Stressed Plants (D1)
___ Geomorphic Position (D2)
___ Shallow Aquitard (D3)
___ Microtopographic Relief (D4)
___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No _X_ Depth (inches): _____
Water Table Present? Yes _X_ No _____ Depth (inches): 10
Saturation Present? (includes capillary fringe) Yes _X_ No _____ Depth (inches): 10

Wetland Hydrology Present? Yes _X_ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Wetland hydrology observed at sample point.

WETLAND DETERMINATION DATA FORM – Alaska Region

Project/Site: Point Hope Airport Improvements Borough/City: North Slope Borough Sampling Date: 7.15.14

Applicant/Owner: Alaska Department of Transportation & Public Facilities Sampling Point: 17

Investigator(s): Kacy Hillman & Daniel De Bord Landform (hillside, terrace, hummocks, etc.): coastal plain

Local relief (concave, convex, none): concave Slope (%): 2

Subregion: North Slope Lat: N 68.346357846 Long: W -166.803958716 Datum: WGS 84

Soil Map Unit Name: Not Available NWI classification: Upland

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes x No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No x
Hydric Soil Present?	Yes _____	No x
Wetland Hydrology Present?	Yes x	No _____

Is the Sampled Area within a Wetland? Yes _____ No x

Remarks:

Upland coastal plain area on the raised area of a beach dune.

VEGETATION – Use scientific names of plants. List all species in the plot.

			Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum					
1.					
2.					
3.					
4.					
		Total Cover:	0		
		50% of total cover:	0	20% of total cover:	0
Sapling/Shrub Stratum					
1.	salarc	Salix arctica	5	Yes	FACU
2.					
3.					
4.					
5.					
6.					
		Total Cover:	5		
		50% of total cover:	2.5	20% of total cover:	1
Herb Stratum					
1.	poaarc	Poa arctica	10	Yes	FAC
2.	elyare	Elymus arenarius	5	Yes	UPL
3.	petfri	Petasites frigidus	3	No	FACW
4.	luzcon	Luzula confusa	2	No	FAC
5.					
6.					
7.					
8.					
9.					
10.					
		Total Cover:	20		
		50% of total cover:	10	20% of total cover:	4

Plot size (radius, or length x width) 15 foot radius % Bare Ground _____

% Cover of Wetland Bryophytes _____ Total Cover of Bryophytes _____ (Where applicable)

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 33% (A/B)

Prevalence Index worksheet:

	Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0	
FACW species	3	x 2 =	6	
FAC species	12	x 3 =	36	
FACU species	5	x 4 =	20	
UPL species	5	x 5 =	25	
Column Totals:	25	(A)	87	(B)

Prevalence Index = B/A = 3.48

Hydrophytic Vegetation Indicators:

No Dominance Test is >50%

No Prevalence Index is ≤3.0

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1] Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No x

Remarks:

Exposed gravel abundant with sparse vegetation coverage.

SOIL

Sampling Point: 17

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR 4/3							sandy/organics
5-14								sandy/gravel

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

___ Histosol or Histel (A1)
___ Histic Epipedon (A2)
___ Hydrogen Sulfide (A4)
___ Thick Dark Surface (A12)
___ Alaska Gleyed (A13)
___ Alaska Redox (A14)
___ Alaska Gleyed Pores (A15)

Indicators for Problematic Hydric Soils[3]:

___ Alaska Color Change (TA4)[4]
___ Alaska Alpine Swales (TA5)
___ Alaska Redox With 2.5Y Hue
___ Alaska Gleyed Without Hue 5Y or Redder Underlying Layer
___ Other (Explain in Remarks)

[3]One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, and an appropriate landscape position must be present unless disturbed or problematic.
[4]Give details of color change in Remarks.

Restrictive Layer (if present):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

No indications of hydric soil observed at sample location.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

___ Surface Water (A1)
X High Water Table (A2)
X Saturation (A3)
___ Water Marks (B1)
___ Sediment Deposits (B2)
___ Drift Deposits (B3)
___ Algal Mat or Crust (B4)
___ Iron Deposits (B5)
___ Surface Soil Cracks (B6)
___ Inundation Visible on Aerial Imagery (B7)
___ Sparsely Vegetated Concave Surface (B8)
___ Marl Deposits (B15)
___ Hydrogen Sulfide Odor (C1)
___ Dry-Season Water Table (C2)
___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

___ Water-stained Leaves (B9)
___ Drainage Patterns (B10)
___ Oxidized Rhizospheres along Living Roots (C3)
___ Presence of Reduced Iron (C4)
___ Salt Deposits (C5)
___ Stunted or Stressed Plants (D1)
___ Geomorphic Position (D2)
___ Shallow Aquitard (D3)
___ Microtopographic Relief (D4)
___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____
Water Table Present? Yes X No _____ Depth (inches): 10
Saturation Present? (includes capillary fringe) Yes X No _____ Depth (inches): 10

Wetland Hydrology Present? Yes X No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Wetland hydrology observed at sample point.