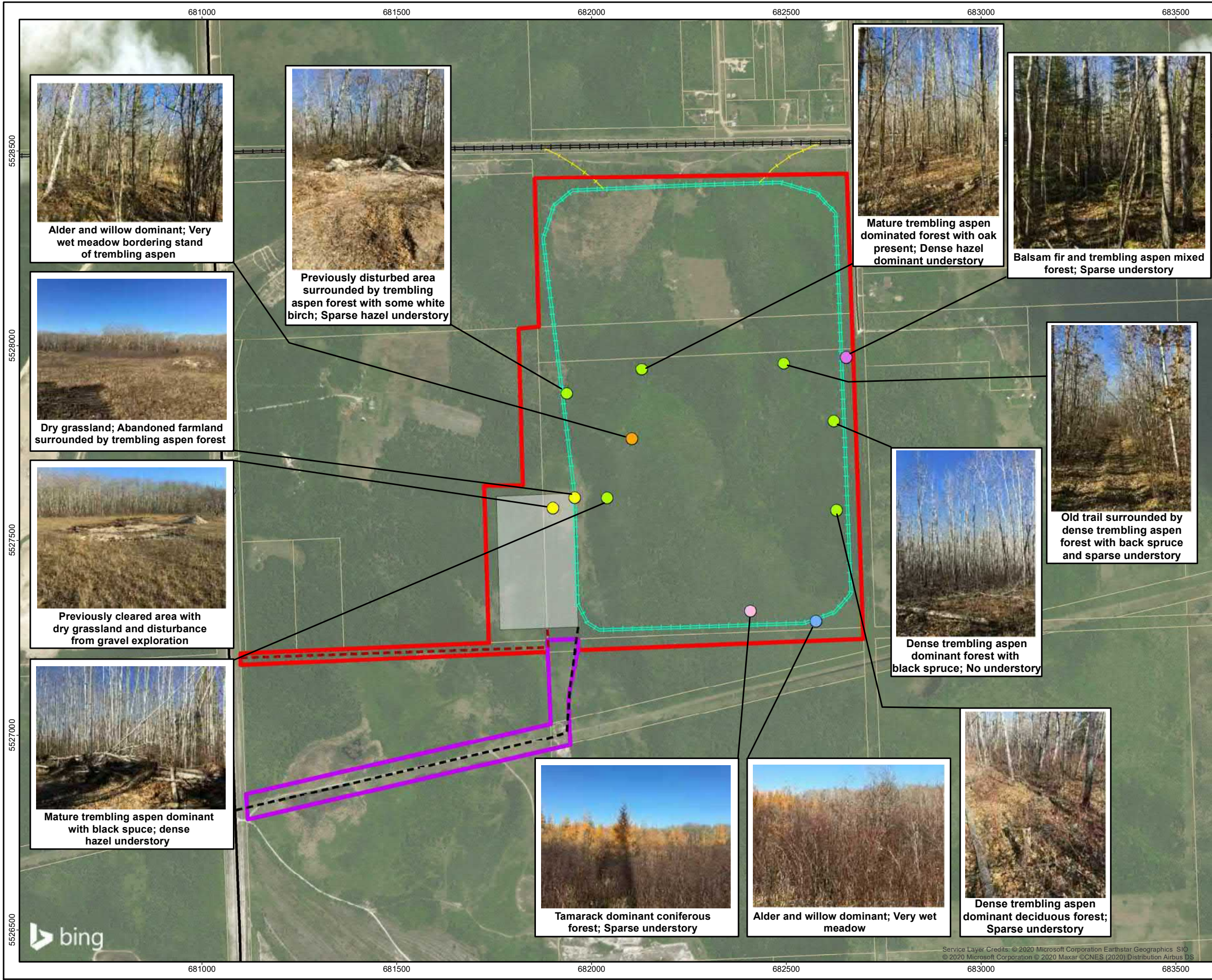


Appendix D

Representative Landcover Photographs



Alder and willow dominant; Very wet meadow bordering stand of trembling aspen



Previously disturbed area surrounded by trembling aspen forest with some white birch; Sparse hazel understory



Mature trembling aspen dominated forest with oak present; Dense hazel dominant understory



Balsam fir and trembling aspen mixed forest; Sparse understory



Dry grassland; Abandoned farmland surrounded by trembling aspen forest



Previously cleared area with dry grassland and disturbance from gravel exploration



Mature trembling aspen dominant with black spruce; dense hazel understory



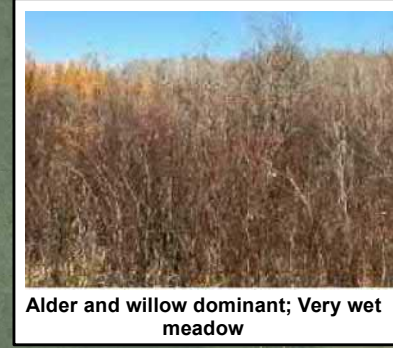
Dense trembling aspen dominant forest with black spruce; No understory



Old trail surrounded by dense trembling aspen forest with black spruce and sparse understory



Tamarack dominant coniferous forest; Sparse understory



Alder and willow dominant; Very wet meadow



Dense trembling aspen dominant deciduous forest; Sparse understory



Key Map

Legend

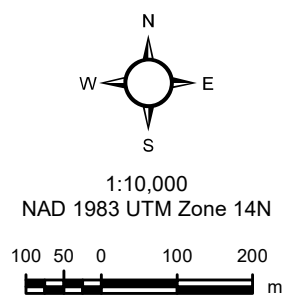
- Deciduous/Conifer Mixed Forest
- Mixed Deciduous Forest
- Aspen Dominant Forest
- Wet Meadow
- Coniferous Forest
- Pastureland
- Project Site
- Project Site - Temporary Use
- Rail Loop
- Train Spurs
- Permanent Access Road
- Temporary Access Road
- General Features**
- Highway
- Road
- Canadian National Railway
- Land Parcels

Project Components

- Wet Plant and Dry Plant Location
- Rail Loop
- Train Spurs
- Permanent Access Road
- Temporary Access Road

General Features

- Highway
- Road
- Canadian National Railway
- Land Parcels



Basemap: Canvec
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Appendix E

Species of Conservation Concern in the
Interlake Plain Ecoregion

Appendix E: Species of Conservation Concern in the Interlake Plain Ecoregion

Category	Scientific Name	Common Name	Rank
Amphibian	<i>Ambystoma tigrinum</i>	Eastern Tiger Salamander	S2?
Amphibian	<i>Lithobates pipiens</i>	Northern Leopard Frog	S4
Animal Assemblage	-	<i>Gull Colony</i>	SNR
Animal Assemblage	-	Gulls	SNR
Animal Assemblage	-	Snake Hibernaculum	SNR
Animal Assemblage	-	<i>Tern Colony</i>	SNR
Bird	<i>Aechmophorus occidentalis</i>	Western Grebe	S4B
Bird	<i>Ammodramus savannarum</i>	Grasshopper Sparrow	S3B
Bird	<i>Antrostomus vociferus</i>	Whip-poor-will	S3B
Bird	<i>Ardea alba</i>	Great Egret	S2S3B
Bird	<i>Ardea herodias</i>	Great Blue Heron	S5B
Bird	<i>Asio flammeus</i>	Short-eared Owl	S2S3B
Bird	<i>Buteo lagopus</i>	Rough-legged Hawk	S3B,SUM
Bird	<i>Cardellina canadensis</i>	Canada Warbler	S3B
Bird	<i>Chaetura pelagica</i>	Chimney Swift	S2B
Bird	<i>Charadrius melodus</i>	Piping Plover	S1B
Bird	<i>Chlidonias niger</i>	Black Tern	S4B
Bird	<i>Chordeiles minor</i>	Common Nighthawk	S3B
Bird	<i>Coccythraustes vespertinus</i>	Evening Grosbeak	S3
Bird	<i>Contopus cooperi</i>	Olive-sided Flycatcher	S3B
Bird	<i>Contopus virens</i>	Eastern Wood-pewee	S4B
Bird	<i>Coturnicops noveboracensis</i>	Yellow Rail	S3B
Bird	<i>Cygnus buccinator</i>	Trumpeter Swan	S1B
Bird	<i>Dolichonyx oryzivorus</i>	Bobolink	S4B
Bird	<i>Hirundo rustica</i>	Barn Swallow	S4B
Bird	<i>Hydroprogne caspia</i>	Caspian Tern	S3B
Bird	<i>Ixobrychus exilis</i>	Least Bittern	S2B
Bird	<i>Lanius ludovicianus migrans</i>	Loggerhead Shrike	S1B
Bird	<i>Larus argentatus</i>	Herring Gull	S4B
Bird	<i>Larus californicus</i>	California Gull	S3B
Bird	<i>Larus delawarensis</i>	Ring-billed Gull	S5B
Bird	<i>Leucophaeus pipixcan</i>	Franklin's Gull	S4B
Bird	<i>Melanerpes erythrocephalus</i>	Red-headed Woodpecker	S3B
Bird	<i>Nycticorax nycticorax</i>	Black-crowned Night-heron	S4B
Bird	<i>Pelecanus erythrorhynchos</i>	American White Pelican	S4B
Bird	<i>Phalacrocorax auritus</i>	Double-crested Cormorant	S5B
Bird	<i>Podiceps auritus</i>	Horned Grebe	S4B

Category	Scientific Name	Common Name	Rank
Bird	<i>Podiceps nigricollis</i>	Eared Grebe	S4B
Bird	<i>Riparia riparia</i>	Bank Swallow	S5B
Bird	<i>Sterna forsteri</i>	Forster's Tern	S4B
Bird	<i>Sterna hirundo</i>	Common Tern	S5B
Bird	<i>Strix nebulosa</i>	Great Gray Owl	S4
Bird	<i>Vermivora chrysoptera</i>	Golden-winged Warbler	S3B
Fish	<i>Coregonus zenithicus</i>	Shortjaw Cisco	S2
Insect	<i>Danaus plexippus</i>	Monarch	S3S4B
Insect	<i>Erynnis martialis</i>	Mottled Dusky Wing	S1
Insect	<i>Hesperia dacotae</i>	Dakota Skipper	S2
Insect	<i>Oarisma powesheik</i>	Powesheik Skipper	S1
Insect	<i>Wallengrenia egeremet</i>	Northern Broken-dash	S1
Mammal	<i>Geomys bursarius</i>	Plains Pocket Gopher	S3
Mammal	<i>Myotis lucifugus</i>	Little Brown Myotis	S2N,S5B
Mammal	<i>Myotis septentrionalis</i>	Northern Myotis	S3S4N,S4B
Mammal	<i>Rangifer tarandus caribou</i>	Woodland Caribou	S2S3
Mussel	<i>Amblema plicata</i>	Threeridge	S3
Mussel	<i>Fusconaia flava</i>	Wabash Pigtoe	S3
Mussel	<i>Lasmigona complanata</i>	White Heelsplitter	S3
Mussel	<i>Lasmigona costata</i>	Flutedshell	S2
Mussel	<i>Ligumia recta</i>	Black Sandshell	S3
Mussel	<i>Quadrula quadrula</i>	Mapleleaf Mussel	S1
Other	<i>Orconectes immunis</i>	Calico Crayfish	S3
Plant	<i>Achnatherum richardsonii</i>	Richardson Needle Grass	S1S2
Plant	<i>Agalinis aspera</i>	Rough Agalinis	S2
Plant	<i>Agalinis tenuifolia</i>	Narrow-leaved Agalinis	S2S3
Plant	<i>Agrimonia gryposepala</i>	Common Agrimony	S1S2
Plant	<i>Alisma gramineum</i>	Narrow-leaved Water-plantain	S1
Plant	<i>Amorpha fruticosa</i>	False Indigo	S1S2
Plant	<i>Arabidopsis lyrata</i>	Lyre-leaved Rock Cress	S1S2
Plant	<i>Aralia racemosa</i>	Spikenard	S2
Plant	<i>Arethusa bulbosa</i>	Dragon's-mouth	S2
Plant	<i>Asclepias verticillata</i>	Whorled Milkweed	S3
Plant	<i>Astragalus australis</i>	Indian milkvetch	S1S2
Plant	<i>Astragalus neglectus</i>	Neglected Milkvetch	S1
Plant	<i>Astragalus pectinatus</i>	Narrow-leaved Milkvetch	S2
Plant	<i>Boltonia asteroides var. recognita</i>	White Boltonia	S2S3
Plant	<i>Botrychium campestre</i>	Prairie Moonwort	S1
Plant	<i>Botrychium matricariifolium</i>	Daisy-leaf Moonwort	S1
Plant	<i>Bouteloua curtipendula</i>	Side-oats Grama	S2

Category	Scientific Name	Common Name	Rank
Plant	<i>Bromus kalmii</i>	Wild Chess	S2S3
Plant	<i>Bromus porteri</i>	Porter's Chess	S2S3
Plant	<i>Calamagrostis montanensis</i>	Plains Reed Grass	S3
Plant	<i>Calopogon tuberosus</i>	Swamp-pink	S2
Plant	<i>Canadanthus modestus</i>	Large Northern Aster	S2
Plant	<i>Cardamine bulbosa</i>	Spring Cress	SH
Plant	<i>Carex conoidea</i>	Field Sedge	S1
Plant	<i>Carex cryptolepis</i>	Northeastern Sedge	S1
Plant	<i>Carex douglasii</i>	Douglas Sedge	S2
Plant	<i>Carex flava</i>	Yellow Sedge	S2
Plant	<i>Carex hystericina</i>	Porcupine Sedge	S3
Plant	<i>Carex livida</i>	Livid Sedge	S3
Plant	<i>Carex parryana</i>	Parry's Sedge	S3
Plant	<i>Carex pedunculata</i>	Stalked Sedge	S3
Plant	<i>Carex sterilis</i>	Dioecious Sedge	S2
Plant	<i>Carex stricta</i>	Tussock Sedge	S1
Plant	<i>Carex supina ssp. spaniocarpa</i>	Weak Sedge	S2S3
Plant	<i>Carex tetanica</i>	Rigid Sedge	S3
Plant	<i>Carex vulpinoidea</i>	Fox Sedge	S3
Plant	<i>Caulophyllum thalictroides</i>	Papoose-root	S2
Plant	<i>Ceanothus herbaceus</i>	New Jersey Tea	S2S3
Plant	<i>Chrysosplenium iowense</i>	Iowa Golden-saxifrage	S1
Plant	<i>Cladium mariscoides</i>	Twig Rush	S2S3
Plant	<i>Clematis ligusticifolia</i>	Western Virgin's-bower	S1
Plant	<i>Clematis virginiana</i>	Virgin's-bower	S2?
Plant	<i>Corispermum villosum</i>	Hairy Bugseed	S1S2
Plant	<i>Cyperus erythrorhizos</i>	Red-root Flatsedge	S1
Plant	<i>Cyperus houghtonii</i>	Houghton's Umbrella-sedge	S2S3
Plant	<i>Cypripedium arietinum</i>	Ram's Head Lady's-slipper	S2S3
Plant	<i>Cypripedium candidum</i>	Small White Lady's-slipper	S1
Plant	<i>Desmodium canadense</i>	Beggar's-lice	S2
Plant	<i>Elymus lanceolatus</i>	Northern Wheat Grass	S3
Plant	<i>Elymus lanceolatus ssp. lanceolatus</i>	Thickspike Wheatgrass	S3
Plant	<i>Festuca hallii</i>	Plains Rough Fescue	S3
Plant	<i>Fraxinus nigra</i>	Black Ash	S2S3
Plant	<i>Gentiana rubricaulis</i>	Closed Gentian	S3
Plant	<i>Geranium maculatum</i>	Wild Crane's-bill	S1
Plant	<i>Goodyera tessellata</i>	Tesselated Rattlesnake Plantain	S2
Plant	<i>Hesperostipa curtiseta</i>	Western Porcupine Grass	S3
Plant	<i>Hudsonia tomentosa</i>	False Heather	S3

Category	Scientific Name	Common Name	Rank
Plant	<i>Krigia biflora</i>	Two-flowered Dwarf-dandelion	S2S3
Plant	<i>Lactuca canadensis</i>	Tall Yellow Lettuce	S3
Plant	<i>Lactuca floridana</i>	Woodland Lettuce	SH
Plant	<i>Lechea intermedia</i>	Pinweed	S1?
Plant	<i>Linum sulcatum</i>	Grooved Yellow Flax	S3
Plant	<i>Lomatium foeniculaceum</i>	Hairy-fruited Parsley	S3
Plant	<i>Lomatium macrocarpum</i>	Long-fruited Parsley	S2S3
Plant	<i>Lysimachia quadriflora</i>	Whorled Loosestrife	S2
Plant	<i>Maianthemum racemosum</i>	False Spikenard	S1
Plant	<i>Malaxis monophyllos</i>	White Adder's-mouth	S2?
Plant	<i>Malaxis paludosa</i>	Bog Adder's-mouth	S1?
Plant	<i>Malaxis unifolia</i>	Green Adder's-mouth	S2?
Plant	<i>Muhlenbergia andina</i>	Foxtail Muhly	S1
Plant	<i>Oenothera perennis</i>	Sundrops	S1
Plant	<i>Onoclea sensibilis</i>	Sensitive Fern	S3?
Plant	<i>Ophioglossum pusillum</i>	Northern Adder's-tongue	S1
Plant	<i>Orobanche fasciculata</i>	Clustered Broom-rape	S3
Plant	<i>Orobanche ludoviciana</i>	Louisiana Broom-rape	S2
Plant	<i>Osmunda claytoniana</i>	Interrupted Fern	S2S3
Plant	<i>Oxytropis lambertii</i>	Purple Locoweed	S3
Plant	<i>Parnassia parviflora</i>	Small Grass-of-parnassus	S1
Plant	<i>Pellaea gastonyi</i>	Gastony's Cliffbrake	S1
Plant	<i>Pellaea glabella</i>	Smooth Cliffbrake	S2
Plant	<i>Pellaea glabella ssp. occidentalis</i>	Western Dwarf Cliffbrake	S2
Plant	<i>Penthorum sedoides</i>	Ditch-stonecrop	S1S2
Plant	<i>Phryma leptostachya</i>	Lopseed	S3
Plant	<i>Platanthera praeclara</i>	Western Prairie Fringed Orchid	S1
Plant	<i>Polygala verticillata</i>	Whorled Milkwort	S2
Plant	<i>Pyrola americana</i>	Round-leaved Pyrola	S2?
Plant	<i>Ranunculus hispidus var. caricetorum</i>	Bristly Buttercup	S2
Plant	<i>Rhynchospora alba</i>	White Beakrush	S3
Plant	<i>Rhynchospora capillacea</i>	Horned Beakrush	S2S3
Plant	<i>Sceptridium multifidum</i>	Leathery Grape-fern	S3
Plant	<i>Selaginella densa</i>	Prairie Spike-moss	S3
Plant	<i>Sisyrinchium campestre</i>	White-eyed Grass	S3
Plant	<i>Solidago mollis</i>	Velvety Goldenrod	S3
Plant	<i>Solidago riddellii</i>	Riddell's Goldenrod	S2S3
Plant	<i>Spiranthes magnicamporum</i>	Great Plains Ladies'-tresses	S1S2
Plant	<i>Symphotrichum sericeum</i>	Western Silvery Aster	S2S3

Category	Scientific Name	Common Name	Rank
Plant	<i>Teucrium canadense</i>	American Germander	S3
Plant	<i>Thalictrum revolutum</i>	Waxleaf Meadow-rue	S1
Plant	<i>Utricularia minor</i>	Lesser Bladderwort	S3
Plant	<i>Vaccinium caespitosum</i>	Dwarf Bilberry	S3
Plant	<i>Veronicastrum virginicum</i>	Culver's-root	S1S2
Plant	<i>Viola labradorica</i>	Early Blue Violet	S3
Reptile	<i>Chelydra serpentina</i>	Snapping Turtle	S3
Reptile	<i>Thamnophis radix</i>	Western Plains Garter Snake	S4
Reptile	<i>Thamnophis sirtalis</i>	Red-sided Garter Snake	S4
Reptile	<i>Thamnophis sirtalis parietalis</i>	Red-sided Garter Snake	S4

Updated February 2020.

Source: Manitoba Conservation Data Centre. 2017. Manitoba Conservation Data Centre Species of Conservation Concern. Manitoba Sustainable Development. Accessed from: https://www.gov.mb.ca/sd/environment_and_biodiversity/cdc/ecoregions/index.html.

Conservation Data Centre Ranks (Global and Provincial)

Species are evaluated and ranked by the Conservation Data Centre on the basis of their range-wide (global - G) status, and their province-wide (subnational - S) status according to a standardized procedure used by all Conservation Data Centres and Natural Heritage Programs. These ranks are used to determine protection and data collection priorities and are revised as new information becomes available.

For each level of distribution—global and provincial—species are assigned a numeric rank ranging from 1 (very rare) to 5 (demonstrably secure). This reflects the species' relative endangerment and is based primarily on the number of occurrences of that species globally or within the province. However, other information, such as date of collection, degree of habitat threat, geographic distribution patterns and population size and trends, is considered when assigning a rank. The number of occurrences listed below are suggestions, not absolute criteria.

For example, the Green Frog (*Rana clamitans*) is ranked G5, S2. That is, globally the species is abundant and secure, while in Manitoba it is rare and may be vulnerable to extirpation.

Rank	Definition
1	Very rare throughout its range or in the province (5 or fewer occurrences, or very few remaining individuals). May be especially vulnerable to extirpation.
2	Rare throughout its range or in the province (6 to 20 occurrences). May be vulnerable to extirpation.
3	Uncommon throughout its range or in the province (21 to 100 occurrences).
4	Widespread, abundant, and apparently secure throughout its range or in the province, with many occurrences, but the element is of long-term concern (> 100 occurrences).
5	Demonstrably widespread, abundant, and secure throughout its range or in the province, and essentially impossible to eradicate under present conditions.

Rank	Definition
U	Possibly in peril, but status uncertain; more information needed.
H	Historically known; may be rediscovered.
X	Believed to be extinct; historical records only, continue search.
SNR	A species not ranked. A rank has not yet assigned, or the species has not been evaluated.
SNA	A conservation status rank is not applicable to the element.

Other Heritage Codes

Code	Definition
G#G#	Numeric range rank: A range between two of the numeric ranks. Denotes range of uncertainty about the exact rarity of the species.
S#S#	

Subrank

Code	Definition
T	Rank for subspecific taxon (subspecies, variety, or population); appended to the global rank for the full species, e.g. G4T3.

Qualifiers

Code	Definition
B	Breeding status of a migratory species. Example: S1B,SZN - breeding occurrences for the species are ranked S1 (critically imperiled) in the province, nonbreeding occurrences are not ranked in the province.
N	Non-breeding status of a migratory species. Example: S1B,SZN - breeding occurrences for the species are ranked S1 (critically imperiled) in the province, nonbreeding occurrences are not ranked in the province.
Q	Taxonomic questions or problems involved, more information needed; appended to the global rank.
T	Rank for subspecific taxon (subspecies, variety, or population); appended to the global rank for the full species.
#	A modifier to SX or SH; the species has been reintroduced, but the population is not yet established.
?	Inexact or uncertain; for numeric ranks, denotes inexactness.

Source: Natureserve. 2019. Natureserve – Conservation Status Assessment. Accessed from:

<https://www.natureserve.org/conservation-tools/conservation-status-assessment>

Appendix F

Historic Resources Branch Communications

From: [+WPG574 - HRB Archaeology \(SCH\)](#)
To: [Gifford, Marlene](#)
Cc: [Cusitar, Kristiina](#); [Davies, Irene](#)
Subject: RE: Heritage Resources Screening Request - Vivian Sand Wash and Dry Facility Project
Date: March 25, 2020 12:50:03 PM
Attachments: [image001.png](#)
[HRIA Process Flowchart.pdf](#)
[HRB Archaeological Consultants List updated Nov 2019.pdf](#)
[AAS-19-15647 AECOM-CanWhite 2020-03-25 concern.pdf](#)

Dear Marlene,

HRIA requested

The Archaeological Assessment Services Unit (AASU) has reviewed the supplied project coverage and is requesting that a heritage resources impact assessment (HRIA) be conducted prior to project start.

We recommend an archaeological survey involving pedestrian survey and judgemental shovel testing. You will find attached a flowchart that outlines the HRIA process.

General process

At this point the onus is on the owner/developer to hire a qualified archaeological consultant to conduct an HRIA of the property to determine if any heritage resources are present and to make recommendations to the Historic Resources Branch (HRB) regarding their findings. HRB will receive a follow-up summary report from the archaeological consultant with their recommendations. If no significant heritage resources are identified then the Branch will sign off on the condition placed by the governing agency and provide a letter of clearance. If significant heritage resources are identified, the archaeological consultant will make recommendations on how to mitigate these resources before the development can proceed.

Heritage/archaeological consultants

Please find attached an archaeological consultants' list for reference. All the consultants listed provide the same services and due diligence should be conducted by obtaining a number of quotes as there can be quite a spread in estimates.

Once a consultant is hired, the consultant will contact HRB to discuss the terms of reference as noted above and proceed to conduct the HRIA in accordance with a timeline agreed to with the owner/developer. General requirements for the consultant would typically involve a systematic pedestrian survey with shovel tests, deep tests where necessary and a report that includes pictures of stratigraphy, GPS tracks and the locations of shovel tests. A report will then be drafted and submitted to the HRB to be reviewed and processed. If the consultant is expedient in submitting their report, the review process takes approximately 15-20 business days.

If you have any further questions, please do not hesitate to contact me. At this point in time, the best option would be via e-mail...even to set-up a time to talk as the AASU has implemented a work from home policy.

Sincerely,
Suyoko

Suyoko Anne Tsukamoto

Senior Impact Assessment Archaeologist | Archaeological Assessment Services Unit

Historic Resources Branch | Manitoba Sport, Culture and Heritage
213 Notre Dame Avenue, Main Floor | Winnipeg, MB | R3B 1N3
T. 204.945.3893 | F.204.945.2384 | E. suyoko.tsukamoto@gov.mb.ca

From: Gifford, Marlene <Marlene.Gifford@aecom.com>
Sent: March 10, 2020 12:00 PM
To: +WPG574 - HRB Archaeology (SCH) <HRB.archaeology@gov.mb.ca>
Cc: Cusitar, Kristiina <Kristiina.Cusitar@aecom.com>; Davies, Irene <irene.davies@aecom.com>
Subject: Heritage Resources Screening Request - Vivian Sand Wash and Dry Facility Project

Good morning,

AECOM is currently working on an Environment Act Proposal for a proposed Silica Sand Wash and Dry Facility, and associated rail infrastructure to be located adjacent to Vivian, Manitoba in the RM of Springfield as shown on the attached map. The CanWhite Sands Corp. Project is still in the early design phase but the attached map (and associated kmz files) provides the general location of the project components.

Parcels of land potentially affected by proposed development activities include the following:

- NE-31-10-8E1
- SE-31-10-8E1
- SW-31-10-8E1
- NE-29-10-8E1
- NW-29-10-8E1

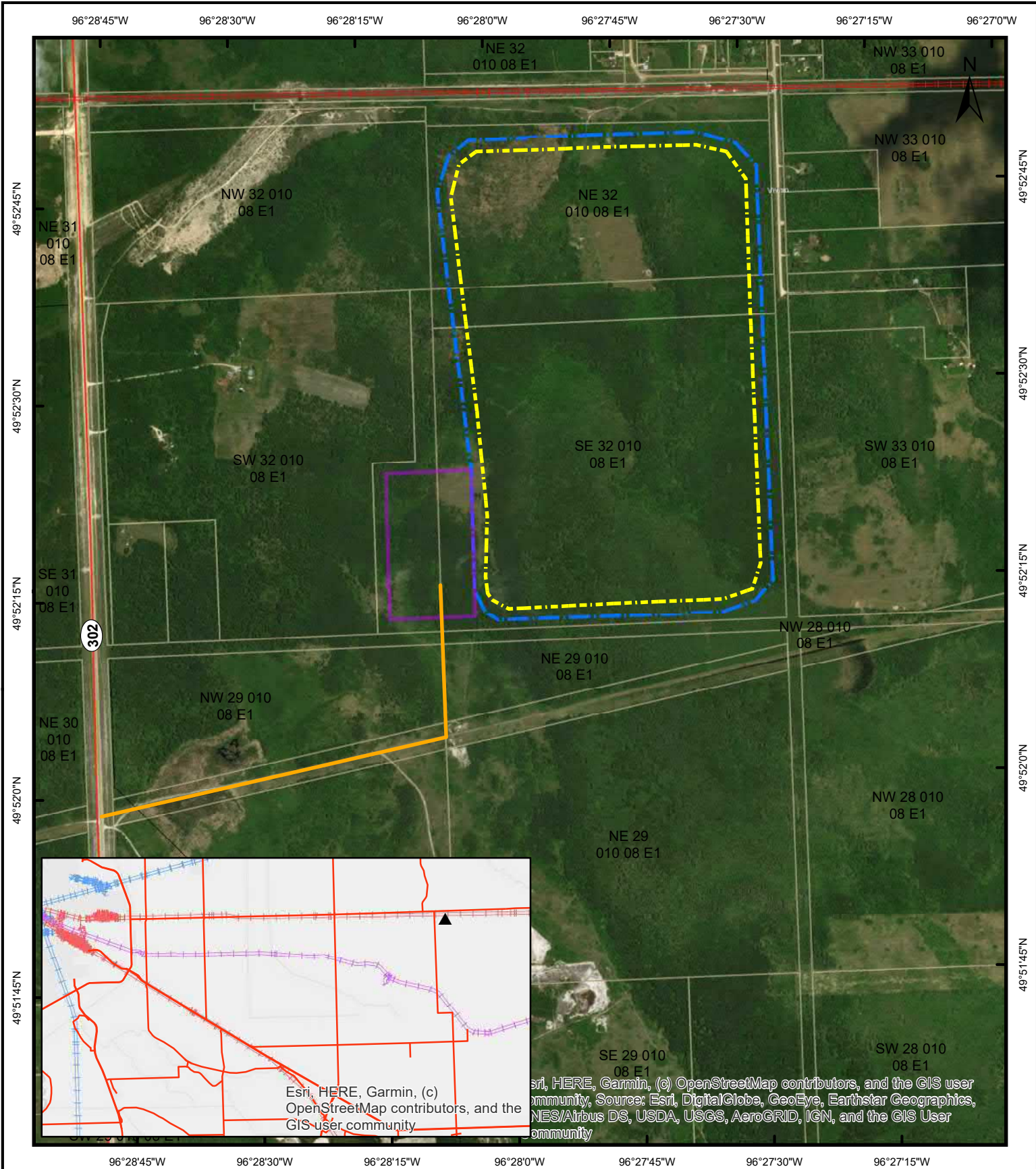
I would like to request a heritage screening of the above described project area to determine if there are any potential heritage resources that may be affected by the project and to determine if a Heritage Resources Impact Assessment is required.

If you require additional information, please call me at 204-928-9210.

Thank you for your time and assistance,

Marlene Gifford, M.Sc., P.Biol., R.P.Bio.
Biologist, Environmental Assessor, Environment
D +1-204-928-9210
M +1-204-430-5633
marlene.gifford@aecom.com

AECOM

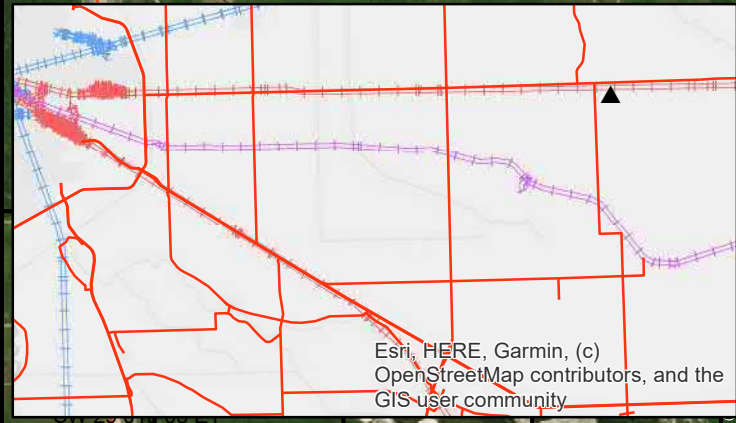


96°28'45"W 96°28'30"W 96°28'15"W 96°28'0"W 96°27'45"W 96°27'30"W 96°27'15"W 96°27'0"W

49°52'45"N
49°52'30"N
49°52'15"N
49°52'0"N
49°51'45"N

49°52'45"N
49°52'30"N
49°52'15"N
49°52'0"N
49°51'45"N

302



Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community, Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNR/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User community

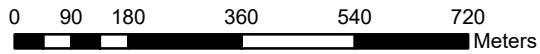
96°28'45"W 96°28'30"W 96°28'15"W 96°28'0"W 96°27'45"W 96°27'30"W 96°27'15"W

Map Features

- Proposed Access 2
- Phase 2 Rail
- Facility
- Circular_Rail
- Canadian National
- Canadian Pacific
- GWWD
- Parcel_Blocks

**Manitoba Railways
Railway Company**

Scale 1:12,000



Facility Site

Projection - NAD 83 UTM Zone 14

Drawn by TN
02-03-2020

DATE: 2020-03-25

TO: **Marlene Gifford**
Biologist, Environmental
Assessor
AECOM
99 Commerce Drive
Winnipeg, MB

FROM: **Suyoko Anne TSUKAMOTO**
Senior Impact Assessment Archaeologist
Historic Resources Branch
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SUBJECT: **CanWhite Sand Facility – Heritage Screening Request**
HRB File #: AAS-19-15647

HRIA requested.

Section	Comments
NE 32-10-8 E	Historic cart trails lead to quarter section
SE 32-10-8 E	Possible paleo-corridor/route along ridge west of Broken River marsh area

Further to your e-mail regarding the above-noted proposed sand extraction facilities, the Historic Resources Branch has examined the location in conjunction with Branch records for areas of potential concern. The proposed structures are situated in the vicinity of a network of historic cart trails leading to/from the area. In addition, the developments are situated on a sandy ridgeline skirting marshland which would have served as a resource extraction area and travel corridor for Past Peoples. These factors suggest that any future planned development within the area has the potential to impact heritage resources, therefore, the Historic Resources Branch has concerns.

Under Section 12(2) of The Heritage Resources Act, if the Minister of Sport, Culture and Heritage has reason to believe that heritage resources or human remains are known, or thought likely to be present, on lands that are to be developed, then the owner/developer is required to conduct at his/her own expense, a heritage resource impact assessment (HRIA) and mitigation, if necessary, prior to the project's start.

The developer must contract a qualified archaeological consultant to conduct a Heritage Resources Impact assessment (HRIA) of the proposed development location, in order to identify and assess any heritage resources that may be negatively impacted by development. If desirable, the Branch will work with the developer/land owners and its consultant to draw up terms of reference for this project.

If you have any further questions or comments, please feel free to contact the Branch as above.

Manitoba Historic Resources Branch
Archaeological Assessment Services