SMOKY LAKE COUNTY

AGENDA: **MUNICIPAL PLANNING COMMISSION** to be held on

Monday, December 7, 2020 at 1:00 p.m., conducted remotely via Zoom due to the

COVID-19 Virus.

https://us02web.zoom.us/j/87524878085?pwd=SHcrYkdVcVowSUNkMENObktueEszQT09

- 1. CALL TO ORDER
 - 1.1 Election of a Chairperson
 - 1.2 Election of Vice-Chairperson
- 2. AGENDA
- 3. MINUTES
 - 3.1 Adoption of the Minutes of the Meeting of September 10, 2020
- 4. REQUEST FOR DECISION
 - 4.1 <u>Development Permit(s) to be Considered:</u>
 - 4.1.1 DP 046-20: Scotford Aggregates (Barry & Cindy Cherniwchan)
- 5. ISSUES FOR INFORMATION
 - 5.1 Nil.
- 6. CORRESPONDANCE
 - 6.1 Nil.
- 7. DELEGATON(S)
 - 7.1 Nil.
- 8. ADJOURNMENT

SMOKY LAKE COUNTY

Minutes of the **Municipal Planning Commission** meeting from **Thursday, September 10, 2020**, held in County Council Chambers and Virtually online through Zoom Meeting.

The meeting was called to Order at 1:23 p.m. by the Chairperson, Lorne Halisky in the presence of the following persons:

PRESENT

Dan Gawalko	Councillor Div. 1	Present in Chambers
Johnny Cherniwchan	Councillor Div. 2	Present in Chambers
Craig Lukinuk, Reeve	Councillor Div. 3	Present in Chambers
Lorne Halisky	Councillor Div. 4	Present in Chambers
Randy Orichowski, Deputy Reeve	Councillor Div. 5	Present in Chambers
Lydia Cielin	Interim CAO	Absent
Jordan Ruegg	P&D Manager	Absent
Kyle Schole	P&D Assistant	Present in Chambers
Patti Priest	Recording Secretary	Present Virtually

No Members of the Public were present. No Member of the Media was present.

2.0 ADOPTION OF AGENDA

MPC20.082: Orichowski

That the Municipal Planning Commission meeting for Thursday, September 10, 2020, at 3:00 p.m. be rescheduled to Thursday, September 10, 2020, at 1:20 p.m. to be held in County Council Chambers and Virtually online through Zoom Meeting.

CARRIED UNANIMOUSLY.

MPC20.083: Lukinuk

That the Agenda for the Municipal Planning Commission meeting for Thursday, September 10, 2020, be adopted as presented.

CARRIED UNANIMOUSLY.

3.0 MINUTES

MPC20.084: Orichowski

That the Minutes of Municipal Planning Commission meeting held on Thursday, August 27, 2020, be adopted as presented.

CARRIED.

4.0 REQUEST FOR DECISION

4.1 Development Permits to be Considered:

4.1.1 DP 036-20: Second Dwelling, Manufactured Home.

MPC20.085: Orichowski

That the Municipal Planning Commission **APPROVE** Development Permit No. 036-20: NE-21-60-18-W4M, for the development of a SECOND DWELLING, MANUFACTURED HOME (16 x 76 ft), subject to the following conditions:

- 1. The proposed Manufactured Home shall be constructed and sited as per the Site Plan, dated July 23, 2020, attached to, and forming part of, this Development Permit.
 - a. Minimum Front Yard Setback: 25.0 feet.
 - b. Minimum Rear Yard Setback: 25.0 feet.
 - c. Minimum Side Yard Setbacks: 5.0 feet.
- 2. The Manufactured Home shall be a minimum of 600.0 square feet in ground floor area.

- 3. The maximum height of the Manufactured Home shall not exceed 33.0 feet.
- 4. The maximum lot coverage shall not exceed 45% of the total lot, of which, a maximum of 15% of the total lot are may be covered by Accessory Buildings.
- 5. The construction of the proposed Manufactured Home shall commence within twelve (12) months from the date of issuance of this Development Permit and be completed within five (5) years from the date of issuance.
- 6. The Developer shall provide evidence to the Development Authority for Smoky Lake County that the Manufactured Home meets the CSA A277 Standard for Manufactured homes.
- 7. The Developer shall keep the site in a clean and tidy manner, free from rubbish and non-aggregate debris during construction.
- Natural gas services are provided by Smoky Lake County. All
 costs associated with connecting to this utility shall be borne
 solely by the Developer. Please contact Smoky Lake County
 Natural Gas Department Manager at 780-656-5734 for more
 information.
- 9. Municipal water and sewer services are not available at this location. It will be the sole responsibility of the Developer to ensure that water and private sewage disposal systems associated with the Manufactured Home conform to current provincial regulations and standards. All infrastructure improvement costs associated with the work approved by this Development Permit shall be borne solely by the Developer.
- 10. The Developer shall be required to obtain all necessary permits, approvals, licenses and authorizations from any and all agencies, departments and authorities as may be required.
- 11. The Developer shall be held financially responsible during construction, renovation and/or demolition, for any and all damages caused by the Developer, his servants, his suppliers, his agents and/or his contractors, to any public or private property.

CARRIED UNANIMOUSLY.

5.0 **ISSUES FOR INFORMATION**

5.1 Nil.

6.0 CORRESPONDENCE

6.1 Nil.

7.0 DELEGATION

7.1 Nil.

MPC20.086: Halisky

8.0 ADJOURNMENT

That the Municipal Planning Commission Meeting of September 10, 2020 adjourn at 1:30 p.m.

CARRIED.

Lorne Halisky, Chairperson
S E A L

Lydia Cielin, Interim CAO

MUNICIPAL PLANNING COMMISSION DEVELOPMENT REPORT



AGENDA ITEM 4.1.1

MEETING DATE	DECEMBER 7, 2020
FILE NO.	DP 046-20
LEGAL DESCRIPTION	SE-7-60-15-W4M & NE-6-60-15-W4M
LOT AREA	320 ACRES
PIT AREA	4.4 HECTARES +/- (10.87 ACRES +/-)
APPLICANT	SCOTFORD AGGREGATES LTD.
LANDOWNER	BARRY & CINDY CHERNIWCHAN
PROPOSED DEVELOPMENT	NATURAL RESOURCE EXTRACTION/PROCESSING FACILITY (SAND AND
	GRAVEL)
ZONING	AGRICULTURE (AG) DISTRICT
DEVELOPMENT TYPE	DISCRETIONARY USE
ROLL NO.	15600710 & 15600640
DIVISION	4

RECOMMENDATION

That the Municipal Planning Commission APPROVE Development Permit No. 046-20: **SE-7-60-15-W4M & NE-6-60-15-W4M** for the development of **Natural Resource Extraction/Processing Facility (Sand and Gravel), (10.87 Acres +/-),** subject to the following conditions:

- 1. The proposed Development shall be sited as per the Figure 2: Existing Conditions, dated October 17, 2020, of the Development Permit application, prepared by Scotford Aggregates Ltd., attached to, and forming part of, this Development Permit. The proposed Development shall be developed in accordance with the mitigation recommendations made in the Preliminary Biophysical Assessment, dated November, 2020, prepared by Nadurra Ecological Consulting Ltd., attached to, and forming part of, this Development Permit.
- 2. This Development Permit will expire **five (5) years** from the date of issuance.
- 3. The Developer shall comply with all requirements of Alberta Environment and Parks (AEP), including provisions contained in any registrations, permits, licenses and approvals issued by AEP pursuant to the Development.
- Tree and bush removal on Said Lands shall take place only during the approved period of July 31 to April 15, as required by the Alberta Wildlife Act and the federal Migratory Birds Convention Act.
- 5. Any burning of vegetation on Said Lands will require a Burn Permit to be issued by Smoky Lake County's Fire Chief or his designate.
- **6.** Reclamation and rehabilitation of Said Lands shall be in accordance with the *Alberta Environmental Protection and Enhancement Act (EPEA)*.

- 7. All equipment and activity relating to the mining and crushing operation shall be located within and take place in areas approved for gravel extraction.
- **8.** Hours of Operation:
 - a. **Crushing Operations:** 24 hours per day, 365 days per year.
 - b. On-Site Development Operations (including tree removal, pit development, reclamation): 24 hours per day, 365 days per year.
 - c. <u>Hauling</u>: 7:00 a.m. 9:00 p.m., Monday to Saturday inclusive. Hauling will not be permitted on Sundays and Statutory Holidays.
- 9. The Developer shall ensure that dust and noise control measures are undertaken to prevent such items from becoming a nuisance to adjacent landowners. In this regard, stockpiles shall be located in a position so as to act as a sound barrier. The Developer shall also apply methods of minimizing the noise created from machinery wherever possible, to the satisfaction of the Development Authority.
- 10. The Developer shall be required to comply with Smoky Lake County Bylaw No. 1306-17: Licensing of Aggregate Extraction Businesses Operating Within Smoky Lake County prior to this Development Permit taking affect.
- 11. The Developer shall be required to enter into a Development Agreement with Smoky Lake County prior to this Development Permit taking affect.
- 12. The Developer shall be required to enter into a Haul Road Agreement with Smoky Lake County prior to this Development Permit taking affect.
- 13. The Developer shall keep the area subject to the Development Permit in a clean and tidy manner, free from rubbish and non-aggregate debris.
- 14. The Developer shall install and maintain appropriate traffic and safety signage on and about Said Lands and adjacent road accesses.
- 15. Accesses and haul routes into extraction areas shall be located away from residential areas.
- 16. The Developer shall ensure that any development involving pipeline and/or powerline rights-of-way shall be sited to comply with all relevant federal and provincial regulations and legislation. Setbacks from pipelines shall be in accordance with appropriate provincial legislation and regulations established by the Alberta Energy Regulator (AER). Setbacks from utility corridors shall be in accordance with provincial legislation and regulations established by the Alberta Utilities Commission (AUC).
- 17. No development, disturbance or alteration of a surface waterbody is permitted without first obtaining the necessary approvals under the *Water Act* and from the Department of Fisheries and Oceans. Evidence of a *Water Act* approval or license must be provided to the

Development Authority for Smoky Lake County in cases where a surface waterbody is altered or disturbed.

- 18. No washing activities shall take place under this Development Permit. Should the Developer wish to undertake any washing activities on Said Lands, the Developer must provide a copy of a *Water Act* License or Approval to the Development Authority for Smoky Lake County before washing activities may commence.
- **19.** All reasonable measures shall be taken by the Developer to control erosion in the areas approved for sand and gravel extraction.
- 20. If a portion of the pit should become inactive for a period lasting more than **three (3) consecutive months**, the pit faces shall be sloped to a ratio of **2:1** to ensure public safety and prevent erosion.
- 21. The Developer shall obtain any and all approvals, permits, authorizations, certificates and licenses from any and all agencies, departments and authorities as may be required.
- 22. Truck drivers shall not be permitted to use engine-retarder brakes within $\frac{1}{2}$ mile of a residence on municipally owned roads.
- 23. The storage of bulk fuels will not be permitted on Said Lands.
- **24.** Weed control measures shall be implemented at the request of, and to the satisfaction of, Smoky Lake County.

BACKGROUND

- 1. The reason this application is being referred to MPC is that a Natural Resource Extraction/Processing Facility (Sand and Gravel) is a Discretionary Use in the Agriculture (AG) District (Section 8.2).
- 2. In accordance with Section 2.7 of Land Use Bylaw 1272-14, if approved, it is recommended to expand the notification area to send notices to landowners within 500m of the subject property.

SUPPORTING DOCUMENTS

APPENDIX A LAND USE BYLAW NO 1272-14: SECTION 8.2 – PAGE 5

AGRICULTURE (AG) DISTRICT

APPENDIX B LAND USE BYLAW NO 1272-14: SECTION 2.7 – NATURAL PAGE 11

RESOURCE EXTRACTION DEVELOPMENT PERMITS

APPENDIX C DEVELOPMENT PERMIT APPLICATION PAGE 13

APPENDIX D GENERAL LOCATION MAP PAGE 109

Prepared by: December 4, 2020

Jordan Ruegg Date

Planning and Development Manager

APPENDIX A SECTION 8.2: AGRICULTURE (AG) DISTRICT

AG

8.2 AGRICULTURE (AG) DISTRICT

Purpose

The general purpose of this District is to allow a range of activities associated with working landscapes including agricultural uses and resource extraction uses that support the rural economy, rural lifestyle and discourage the fragmentation of the County's land base.

Permitted Uses

- A. Agricultural Support Service
- B. Basement Suite
- C. Bed and Breakfast Establishment
- D. Buildings and Uses Accessory to Permitted Uses
- E. Community Hall
- F. Day Home
- G. Dwelling, Single Detached
- H. Extensive Agriculture
- I. Garage Suite
- J. Garden Suite
- K. Guest House
- L. Home Occupation, Major
- M. Home Occupation, Minor
- N. In-law Suite
- O. Manufactured Home
- P. Modular Home
- Q. Natural Area
- R. Public Utility
- S. Secondary Suite
- T. Shipping Container
- U. Wind Energy Conversion System, Micro

Discretionary Uses

- A. Animal Breeding and/or Boarding Facility
- B. Animal Clinic
- C. Animal Hospital
- D. Animal Hospital, Large
- E. Boarding Facility
- F. Buildings and Uses Accessory to Discretionary Uses
- G. Cemetery
- H. Child Care Facility
- I. Communication Tower Facility
- J. Day Care Facility
- K. Duplex (Vertical and Side-by-Side)
- L. Family Care Facility
- M. Intensive Agriculture
- N. Kennel

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- O. Natural Resource Extraction Industry
- P. Place of Worship
- Q. Public and Quasi-Public Building and Use
- R. Public Utility
- S. Recreational Use
- T. Relocated Building
- U. Secondary Commercial
- V. Sign
- W. Surveillance Suite
- X. Solar Energy Collection Systems
- Y. Small Radio Communication Facilities
- Z. Transfer Station
- AA. Utility Building
- BB. Wind Energy Conversion System, Small
- CC. Wind Energy Conversion System, Large
- DD. Workcamp, Short-Term
- EE. Other Uses which, in the opinion of the Development Authority, are similar to the above mentioned Permitted and Discretionary Uses

Subdivision Regulations

A maximum of five (5) parcels per quarter section may be subdivided for agricultural, or residential uses including the subdivision of fragments. The following chart presents information by use type regarding the maximum number of parcels allowed per quarter section.

	Maximum Parcel Density Per Quarter Section By Use Type	Minimum Parcel Size	Maximum Parcel Size
Agricultural Use	2 parcels per quarter section	Normally 32.0 ha (80.0 ac.) however a single 16.0 ha (40.0 ac.) parcel may be subdivided if the proposed parcel conforms to 4(A)(ii)	At the Discretion of the Subdivision Authority
Residential Use	4 parcels per quarter section	0.8 ha (2.0 ac.)	8.0 ha (20.0 ac.)
Commercial Use	At the Discretion of the	At the Discretion of the	At the Discretion of the
	Subdivision Authority	Subdivision Authority	Subdivision Authority
Community/	At the Discretion of the	At the Discretion of the	At the Discretion of the
Institutional Use	Subdivision Authority	Subdivision Authority	Subdivision Authority
Industrial Use	At the Discretion of the	At the Discretion of the	At the Discretion of the
	Subdivision Authority	Subdivision Authority	Subdivision Authority

A. Lot Area – Agricultural Use

The minimum parcel size for extensive agricultural uses shall normally be 32.0

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ha (80.0 ac.) less any approved subdivisions.

- ii. Notwithstanding (A)(i) above, the subdivision of a single 16.0 ha (40.0 ac.) parcel for agricultural use may by permitted out of an un-subdivided quarter section if the following criteria are met to the satisfaction of the County:
 - Legal and year round physical access to the proposed parcel and the remainder are developed to County standards;
 - The proposed use of the parcel will not adversely impact adjacent agricultural uses;
 - c. The parcel is should normally be located:
 - adjacent to or near quarter section boundaries;
 - in close proximity to existing residential parcels or farmsteads on adjacent quarter sections;
 - III. along a designated rural residential collector road;
 - The applicant demonstrates that the parcel can be serviced on-site as per provincial regulations;
 - e. If the parcel is to be used for an intensive agricultural operation or a value added agricultural industry¹, the use and size of the parcel is supported by a business plan that may include:
 - a financial plan to the satisfaction of the County;
 - a detailed site plan of the proposed operation including the required land area, expansion possibilities and possible effects on adjacent landowners, uses and municipal infrastructure;
 - information regarding potential traffic generation which may include a Traffic Impact Assessment;
 - IV. potential nuisance factors and any mitigation measures necessary to reduce nuisance factors; and
 - where necessary, a detailed site assessment which indicates the location, character and parcel coverage percentages of the environmentally sensitive areas and/or heritage features on the site.

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¹ Value added industry in this context means: an industry which economically adds value to a product by changing it from its current state to a more valuable state.

B. Lot Area - Residential Use

- Normally, a maximum of 8.0 ha (20.0 ac.) per quarter section will be allowed for residential subdivisions.
- Normally, the minimum lot area allowed for vacant residential parcels or for farmstead separations will be 0.8 ha (2.0 ac.) and the maximum lot area will be 8.0 ha (20.0 ac.).

C. Lot Area - Other Uses

The minimum parcel size for other uses shall be as provided for elsewhere in this Bylaw, in the County's Municipal Development Plan, in any relevant Area Structure Plan, or as required by the Development Authority.

Development Regulations

A. Minimum Yard Dimensions

It should be noted that adjacent to Provincial Highways, Alberta Transportation may require greater setbacks for development. Contact Alberta Transportation regarding their requirements in this regard.

i. Minimum Front Yards

From Municipal Road Allowances	23.1 m (92.0 ft.) from the property line
From Highways	40.8 m (134.0 ft.) from the boundary of the right-of-way or as required by Alberta Transportation
Internal Subdivision Road	7.6 m (25.0 ft.) from the property line

ii. Minimum Side Yards

From Municipal Road Allowances	18.3 m (60.0 ft.) from the property line
From Highways	40.8 m (134.0 ft.) from the boundary of the right-of-way or as required by Alberta Transportation
Internal Subdivision Road	7.6 m (25.0 ft.) from the property line
Adjacent to Another Parcel	18.3 m (60.0 ft.) from the property line

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iii. Minimum Rear Yards

From Municipal Road Allowances	18.3 m (60.0 ft.) from the property line
From Highways	40.8 m (134.0 ft.) from the boundary of the right-of-way or as required by Alberta Transportation
Internal Subdivision Road	7.6 m (25.0 ft.) from the property line
Adjacent to Another Parcel	18.3 m (60.0 ft.) from the property line

- Notwithstanding subsections (A), (B), and (C) above, where there is an
 intersection or sharp curve, the minimum yard requirements shown on Figures
 20 and 21 of this Bylaw shall apply.
- B. Minimum Floor Area
 - Single detached dwellings 69.7 sq. m (750.0 sq. ft.)
 - ii. Manufactured and modular home units 65.0 sq. m (700.0 sq. ft.)
 - iii. All others uses at the discretion of the Development Authority
- C. Maximum Site Coverage 45%

Of the 45% site coverage, a maximum of 15% of the total site may be covered by accessory buildings

- D. Maximum Height
 - i. 11.0 m (36.1 ft.)
 - In the case of buildings which are accessory to extensive agriculture and for discretionary uses, the maximum height shall be at the discretion of the Development Authority.
- Other Regulations
 - A. Residential parcels in the Agriculture District will not be allowed:
 - within required setbacks from a sewage treatment plant or lagoon or solid waste disposal site as specified by the appropriate guidelines or authority;
 - within required setbacks from sour gas wells, pipelines and ancillary facilities;

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- within an area likely to be subject to high levels of noise or emissions from industry, transportation facilities, or other sources; or
- iv. within a 1 in 100 year flood plain.
- B. A development permit for a dwelling shall be issued only on condition that approval of the proposed sewage disposal system is received in accordance with provincial regulations.
- Development proposals adjacent to a primary highway shall comply with any relevant provincial regulations.
- D. Fences shall be developed in accordance with Section 7.7 of this Bylaw.
- E. Landscaping shall be provided in accordance with Section 6.11 of this Bylaw.
- F. The keeping of recreational vehicles shall be provided in accordance with Section 7.23 of this Bylaw.
- G. Shipping containers shall be developed in accordance with Section 7.31 of this Bylaw
- H. Accessory buildings shall be developed in accordance with Section 6.1 of this Bylaw.

Smoky Lake County - Land Use Bylaw No. 1272-14

APPENDIX B SECTION 2.7: NATURAL RESOURCE EXT RACTION DEVELOPMENT PERMITS

- a reclamation plan and a statement indicating the projected final use of the site. In those
 cases where the proponent is required to do so by the Province, the proponent shall submit
 a copy of the reclamation plan to the County;
- B. for Class I Pits on Private Land (5 ha. (12.5 ac.) or greater in area): proof of approval from Environment and Sustainable Resource Development;
- C. for Class II Pits on Private Land (under 5 ha. (12.5 ac.) in area): a reclamation deposit in the amount of \$2,000 per acre for each acre of land within the working pit;
- D. the developer shall be responsible to ensure compliance with all applicable federal and provincial legislation and regulations.
- E. all natural resource extraction development permits shall be considered temporary developments as specified by the Development Authority.
- F. statement indicating the number of years the pit is proposed to be in operation;
- G. anticipated generation of motor vehicle traffic estimated on a daily, weekly or monthly basis;
- H. number of vehicles that will be used in the hauling of materials and the proposed hauling route to and from the site;
- I. type and number of equipment to be used for each activity to be carried out on the site;
- J. access locations to and from the site, including roads and highways, and anticipated traffic generation on each of the roads and highways resulting from the development;
- dust control measures to be implemented, including the suppressant materials or methods to be used either on the pit floor and on stockpiles as well as the proposed frequency of application;
- projected impacts of dust or emissions (asphalt, gravel crushing, concrete or other) and the methods to be used for controlling such dust or emission;
- M. proposed frequency for cleaning settled dust from, in and around gravel crushing plants;
- N. provisions for loading and parking;
- O. descriptions of an noxious, toxic, radioactive, flammable or explosive materials to be stored or used on the site:
- P. location of garbage and storage areas and proposed fencing and screening for the same, as well as the proposed method for disposing of garbage;
- Q. provision of a written security plan that identifies potential dangerous situations, area and typical procedures to be used for monitoring the site during periods of activity and also when activity on the site is suspended;

- R. proposed methods to be used to restrict public access, protect wildlife, neighbouring livestock and domestic animals;
- S. quality and quantity of well water and soil tests for the water systems that may be used in conjunction with the proposed development;
- amount of water required for the proposed development on a daily, weekly or monthly basis and the proposed water source;
- engineering studies which demonstrate the suitability of the proposed method of water supply;
- V. engineering studies which demonstrate the suitability of the proposed method of effluent disposal;
- W. engineering studies which demonstrate the suitability of the proposed method of surface water management;
- Method proposed for controlling noise, dust and drainage from the site both during and after completion of the operation;
- Y. profiles and cross sections showing the original ground level, the proposed depth of any excavation, the finished grade elevation, the depth of the over-burden and water table elevations:
- Z. the method intended to be used for excavation of the materials contained within the land, backfilling, terracing, compacting, leveling, reclaiming the site and equipment to be used in connection therewith;
- AA. the method to be used for supporting pit walls;
- BB. size, number and location of stockpiles of topsoil, overburden and gravel;
- CC. proposed days and hours of operation for each activity and any known or regularly anticipated periods of inactivity;
- DD. if the proposal is located within the heritage overlay area, then a Historic Resource Impact Assessment and/or clearance from the Alberta Culture and Community Spirit; and
- EE. where an asphalt paving plan or concrete producing plant is proposed, a signed statement indicating that the proposed development conforms to the current Code of Practice for asphalt paving plants or concrete producing plants.
- Without limiting the requirements of the Development Authority, the proponent will also be required to enter into:
 - A. a haul road agreement with the County; and
 - B. a development agreement with the County.

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APPENDIX C DEVELOPMENT PERMIT APPLICATION

Development Permit Application for the "Cherniwchan Pit" Aggregate Operations (SE 07 & NE 06 Twp. 060, Rge. 15 W4M)



Prepared by: Gdubblu Consulting Ltd. & Nadurra Ecological Consulting Ltd.

November 16, 2020

DEVELOPMENT PERMIT APPLICATION FORM

Our File Number: Roll Number:	Your File Number:
Applicant Information	
Applicant/Agent: Scotford Aggregates Ltd.	Phone:(587) 200-0294
Address: 8511 115 Street, C	Cell Phone:(780) 271-2170
City/Prov.Fort Saskatchewan/AB Postal Code: T8L 4N1 Email address: Scotford@clearwave.ca	and the second
Applicant/Agent Authorization: I am the applicant/agent	at authorized to act on behalf of the registered owner and that the statement of the facts relating
Registered Landowner Information	☐ Owner same as applicant
Registered Owner: Barry Chemiwchan Civily Cutorwaller	Phone: (780) 656-0271
	Fax:n/a
City/Prov. Smoky Lake / Alberta Postal Code: TOA 3CO	Signature:
Section A - Property Information Legal: Lot Block Plan an	
Subdivision Name (if applicable) or Area of Development Rural Address/Street Address	
Number of existing dwellings on property (please describ 2 buildings, farmhouse and garage, 575 meters north, northeast corner of the	e)
Has any previous application been filed in connection with If yes, please describe the details of the application and	
Is the subject property near a steep slope (exceeding 15%	6)?
s the subject property near or bounded by a body of wat	
s the subject property within 800m of a provincial highw	ray? ☐ Yes ☑ No
is the subject property near a Confined Feeding Operation	
is the subject property within 1.5km of a sour gas facility?	
Is the subject property within 1.5km of a sewage treatme	ent plant/lagoon?

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Section B – Proposed Development Information			
Estimated Cost of Project \$			
Estimated Commencement Date December 1, 2020	Estimated Completion Date January 1, 2030		
Dwelling:			
Floor Areasq. ft. % of Lot Occo	upiedft / m		
Accessory Building:			
Floor Areasq. ft. % of Lot Occu	pied ft / m		
Parking: # of Off-Street Parking Stalls (if applicable)			
Land Use District (Zoning) of Property: Agricultural District - Zo	one A		
Description of Work: Development of a Class II gravel pit, under 5.0 ha including access road. Target area straddles the property line owned by Barry Cherniwchan (SE 7) & Barry and Cindy Cherniwchan (NE 6).			
Section C – Preferred Method of Communication			
When a decision has been made on your file, do you wish	n for us to:		
\square call you for pick up \square mail the decision \square email t	he decision		
Section 608(1) of the Municipal Government Act, R.S.A. 2	000, c. M-26, as amended states:		
608(1) Where this Act or a regulation or bylaw made under this Section requires a document to be sent to a person, the document may be sent by electronic means if			
 the recipient has consented to receive documents from the sender by those electronic means and has provided an e-mail address, website or other electronic address to the sender for that purpose. 			
I/we grant consent for the Development Authority to communicate information and/or the decision electronically			
regarding my/our application. VES	NO		
OFFICE USE ONLY	Authorization:		
Type of Payment: ☐ DEBIT ☐ CASH ☐ CHEQUE	Issuing Officer's Name		
Fee \$	Issuing Officer's Signature		
Receipt #	Date of Approval		
Receipt Date Date Issued			
Date Received	Comments and/or Variances		
*and deemed complete by Development Authority. □ Entered into MuniSight PD #			

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1.0 INTRODUCTION

Gdubblu Consulting Ltd. (Gdubblu) was retained by Scotford Aggregates Ltd. (Scotford) to conduct a preliminary assessment of the proposed "Cherniwchan Pit" (the pit or the project) in SE 07 & NE 06-060-15 W4M (Figure 1). Scotford will submit an application package for the project to Smoky Lake County in as required under the County's Natural Resource Extraction Development Permit program.

2.0 Project Area Description

The project is located within Smoky Lake County approximately 16 km northeast of Smoky Lake, north of Highway 28 on Range Road 155 (Figure 1). It is zoned as Agricultural District - Zone "A" by Smoky Lake County. The project is bounded on the north by an ephemeral draw and associated low lying area that will limit any development. And limited to the east, west and south by the lateral extent of the gravel resource itself. The privately owned land is held by Barry Cherniwchan and Barry and Cindy Cherniwchan for the NE-06 and SE-07 respectively.

3.0 Terrain and Soils

A review of the AGRASID database on the Alberta Soil Information Center (ASIC 2001) website was conducted prior to the field assessment to identify the soil subgroup level according to the Canadian System of Soil Classification (SCWG 1998). It was also reviewed to obtain background information on expected landforms and soil characteristics. Soil sample locations were chosen at locations throughout the project area and where representative changes in topography and vegetation occurred. Soils were assessed to a depth of 30 cm for topsoil depth, color, and texture.

The soil polygon primarily located within the in northeast of quarter section six is characterized by having an undulating, high relief landform (U1h) with a limiting slope of 4%. The primary soil units are the Primula (PRM), which is characterized by Eluviated Eutric Brunisols on coarse to very coarse sediments deposited by wind or water (AGRASID 2017), and the Miscellaneous Organic (ZOR) series which are characterized by Typic Mesisols on undifferentiated material. The LSRS rating for this unit is a 5M(8) – 7WBV(2), which has severe and very severe limitations that may restrict the growth of the specified crop or require modified management practices (AIWG 1995). The limitations are caused by lack of water due to inherent soil characteristics (M), soils in which excess water (not due to inundation) limits production (W), organic soils in which the degree of decomposition of the organic material is not optimum for production (B) and soils with a pH either too high or too low for optimal growth (V) respectively.



The Canadian Land Inventory (CLI) land capability rating for agriculture (soils) for the Pit is Class 6S, this results in a targeted reclamation slope of 3:1 for the all of the internal pit boundaries. Class 6 are capable only of producing perennial forage crops, and improvement practices are not feasible. The soils provide some sustained grazing for farm animals, but the limitations are so severe that improvement by use of farm machinery is impractical. Terrain may be unsuitable for use of farm machinery, or the soils may not respond to improvement of the grazing season may be very short. The "S" subclass indicates cumulative adverse soil characteristics that topography is the limiting factor for the area. Subclass "S" will be used in place of subclasses D, F, M or N. If two or more of the subclasses D, F, M or N are applicable to the same area. In the case of this soil polygon, it is likely "F" – low fertility and "M"-moisture limitations are contributing factors.

Ten soil inspection locations were advanced within, and immediately adjacent to, the proposed development area capturing an average of the overall site conditions and inherent variability. Textures of the topsoil were primarily sandy loam to loam overlying the sandy-gravel deposit. The Eluviated Eutric Brunisols, as identified in the project area, have a very thin topsoil horizon identified as an Ah, Ahe and/or Ae layer. The litter, LFH and forest moss layer are typically not included in the topsoil depth, they will be included in the bulking factor of the material during salvage but not in the actual thickness salvaged or replaced. Topsoil depths ranged from 4 cm to 9 cm, averaging 6.2 cm. LFH layer depths also ranged from 4 cm to 9 cm, averaging 5.3 cm.

7 of the observed 22 test pits advanced by Scotford showed a subsoil layer ranging from 15 cm to 90 cm, the remainder of the test pits transitioned from a shallow topsoil layer into the underlying sand-gravel deposit. The subsoil will be evenly distributed over the entire project area upon reclamation, averaging a targeted replacement depth of 17 cm.

4.0 Environmental Sensitivities

The following are potential terrain and soils sensitivities:

- slopes where the access road enters the project area are steep enough to incur the potential of water erosion;
- potential may also arise for loss of topsoil from topsoil piles due to wind or water erosion;
- some operational losses of material are incurred during the stripping, stockpiling and soil handling;
- · during the phases of operations;
- potential compaction of soils and subsoils; and
- excessive rutting by construction and operations equipment due to wet conditions



4.1 Proposed Mitigation

A 10-meter setback will be maintained from the north border where soil clearing will not occur. A three-meter buffer will be defined around the border of the project where existing soils and vegetation will not be cleared to allow existing vegetation to intercept sediments moved by any overland flow from stripped areas. Salvaged topsoil and overburden piles will be placed on stable ground away from pit faces and vegetated to mitigate any wind and water erosion and to prevent soil loss or degradation. Additional mechanical erosion control measures will be deployed if and when required. Soil handling activities will be suspended during adverse weather conditions (wind or rain) to prevent or minimize any soil loss and degradation, as well as to limit the compaction and rutting of soils.

Topsoil and overburden will be replaced targeting complete replacement of all topsoil and subsoil materials.

5.0 Surface Water

An ephemeral drainage was observed along the northern border of the project area. It had no distinct channel where it ran adjacent to the project area and there is no culvert at the range road intersection. It had no distinct bed and banks along the northern boundary of the project area. There was no standing or running water observed in the drainage and it was well vegetated with grasses, forbs and low shrubs as per Wetland and Riparian Areas section locations 4.2.1 and 4.2.2.



CODE OF PRACTICE FOR PITS

Registration Application (Schedule 1)

Date: November 16, 2020

Previous Environmental Protection and Enhancement Act Approval Number: N/A
Water Act authorization required? Yes No
If Yes, \square application submitted or current Water Act Authorization Number: N/A
Name of Applicant (company or person in whose name the pit will be registered):
Company: Scotford Aggregates Ltd.
Address: 8511 115 Street, Fort Saskatchewan, Alberta, T8L 2T4
Phone: 780-998-9956
E-mail: scotford@clearwave.ca
Name of Person Submitting Application: Grant Woynarowich
Company Name: Gdubblu Consulting Ltd.
lob Title: Environmental Consultant
Address: 4 Lodgepole Cr., St.Albert, Alberta, T8N 2R7
Phone: (780) 975-5577 Facsimile: n/a
E-mail: GrantWoynarowich@gmail.com

Signature:

Name of Primary Contact for Pit: Todd Berg and/or Jaret Berg

Job Title: Owner(s)

Address: 8511 115 Street, Fort Saskatchewan, Alberta, T8L 2T4

Phone: (780) 271-2170 (Todd), (780) 991-4210 (Jaret)

E-mail: scotford@clearwave.ca



Pit Location Municipal Address or LSD-Sec-Twp-Rge-Mer	Registered Owners Name, Address and Phone Number	Occupants Name, Address and Phone Number
SE 07-060-15 W4M	Barry Cherniwchan Box 382 Smoky Lake, Alberta T0A 3C0 (780) 656-0271	same
NE 06-060-15 W4M	Barry and Cindy Cherniwchan Box 382 Smoky Lake, Alberta T0A 3C0 (780) 656-0271	n/a



Activities Plan (Schedule 2)

Part 1 Informa	ation
Aggregate Type	e (check off all that apply): Sand Clay Marl
Cumunt Siza of	Dit. 00ha
Current Size of	
	ness (indicate metres or centimetres for each one):
Topsoil:	<u>6 cm</u>
Subsoil:	<u>17 cm</u>
Overburden:	<u>0 cm</u>
Aggregate:	<u>1.29 m</u>
organic soil	e (check all that apply): mineral soil clay loam silty loam sand sandy loam silt other
A variety	rechniques to prevent wind and water erosion, and to limit the movement of dust from the pit: of techniques and construction practices will be implemented throughout the on and operation of the pit to prevent erosion and dust. These techniques may include:
	nsion of soil handling activities during adverse weather conditions (windy or rain) to
preven	et soil loss and degradation.
 Topsoi 	and subsoil stockpiles to be placed on stable ground, away from pit faces.
 Stockp 	iles are vegetated to prevent erosion.
• In pit r	oads will be graded and watered as necessary to prevent dust.
Participatio	on in local or regional air monitoring initiative: Not applicable, no regional monitoring.
Inactive pit	conservation and reclamation techniques:
When the	pit is left inactive the following techniques and procedures will be implemented.
	iles will be placed in a stable location and seeded to protect against erosion and weed on. The Pit will be monitored and maintained to control weeds.
	es will be sloped to a gradient no steeper than 3:1 in the Pit and 3:1 to prevent slumping create safer pit conditions.
 Debris 	and garbage will be removed from the Pit.

Appropriate signage may be installed throughout the Site to create safer pit conditions.

Scale drawings and cross-sections of existing pit conditions and planned sequence of operation attached.

The Pit will be monitored to ensure these conditions are met.



Part 2 Information

Maximum planned size of pit: 4.4 ha Depth to groundwater (metres) in test holes (indicate each depth if multiple holes): Groundwater was not encountered during any of the test pitting up to a depth of 2.75 meters. A hand auger hole was advanced nearly 2 meters below test hole bottom and no indicators of a water table were present. Planned activities at the pit (check off all that apply): wet pit excavation concrete production mixing salt and aggregate spraying truck boxes mixing asphalt with aggregate aggregate washing use of alternative materials for reclamation Mitigative measures for all of the above activities: Not applicable. Proposed land uses for reclaimed pit (check all appropriate boxes): cultivation % hayland <u>100</u>% pasture ___% native range ____% grassland ___% forest ____% waterbody __% proposed subdivision wildlife habitat _____% other (specify) ____% Average topsoil replacement depth (cm): 6 cm (5 cm; calculated at a minimum, at 80% due to potential operational losses during soil handling and storage) Average subsoil replacement depth (cm): 17 cm (14 cm; calculated at a minimum, at 80% due to potential operational losses during soil handling and storage) Scale drawings and cross-sections of reclaimed pit conditions attached.



Description of surface water bodies in the reclaimed pit: N/A

Design: N/A

Intended use: N/A

Water elevation at full supply level:

Slope of land one metre above full supply level: N/A

Slope of land one metre below full supply level: N/A

Average depth of the excavation including the removal of topsoil, subsoil, overburden and materials: 1.52 m

Expected life of the deposit:

10 * years, based on current projects/market demand.

Equipment that will be used for removing and replacing topsoil and subsoil

Dozer, excavator and rock trucks will be used to remove and replace elimination sand and topsoil.

How the property boundaries and buffers have been located and marked.

Buffers and boundaries will be marked to prevent trespass.

Extraction setback:

A variable width extraction setback is to be applied to ensure sufficient material is retained for reclamation of slopes.

Detailed description of the quality, depth and variation of groundwater encountered in test holes, reports, databases etc.

Test pit excavations did not intercept the water table. This is anticipated as a dry Pit operation. Alberta Environment's Groundwater Information Centre (GIC) identified one comparable groundwater well in the quarter-section surrounding the pit. GIC Well Id. 194768 had a static water level at 2.44 meters. This was a hand dug water well excavated to a total depth of 3.66 meters.



Canadian Land Inventory Rating.

The Canadian Land Inventory (CLI) land capability rating for agriculture (soils) for the Pit is Class 6S, this results in a targeted reclamation slope of 3:1 for the all of the internal pit boundaries

Class 6S: Class 6 are capable only of producing perennial forage crops, and improvement practices are not feasible. The soils provide some sustained grazing for farm animals, but the limitations are so severe that improvement by use of farm machinery is impractical. Terrain may be unsuitable for use of farm machinery, or the soils may not respond to improvement of the grazing season may be very short.

The "S" subclass indicates cumulative adverse soil characteristics that topography is the limiting factor for the area. Subclass "S" will be used in place of subclasses D, F, M or N. If two or more of the subclasses D, F, M or N are applicable to the same area. In the case of this soil polygon it is likely "F" – low fertility and "M"- moisture limitations are contributing factors.

Revegetation

Revegetation will be dependent upon intended end land use and the species mix will be selected by the landowner at the time of reclamation, forested or incorporation into hayland. For the purposes of the development permit, the seed mixture provided by Brett Young Seeds commonly utilized by Scotford is a mixture of 65% Blend 4440 Alfalfa (ultracoat), 25%—Fleet Meadow Brome Grass (ultracoat) and 10% Promesse Timothy.

Signature and title of person who developed Activities Plan:

Grant Wdynarowich, B.Sc., P.Ag. Environmental Consultant



Security Estimate (Schedule 3)

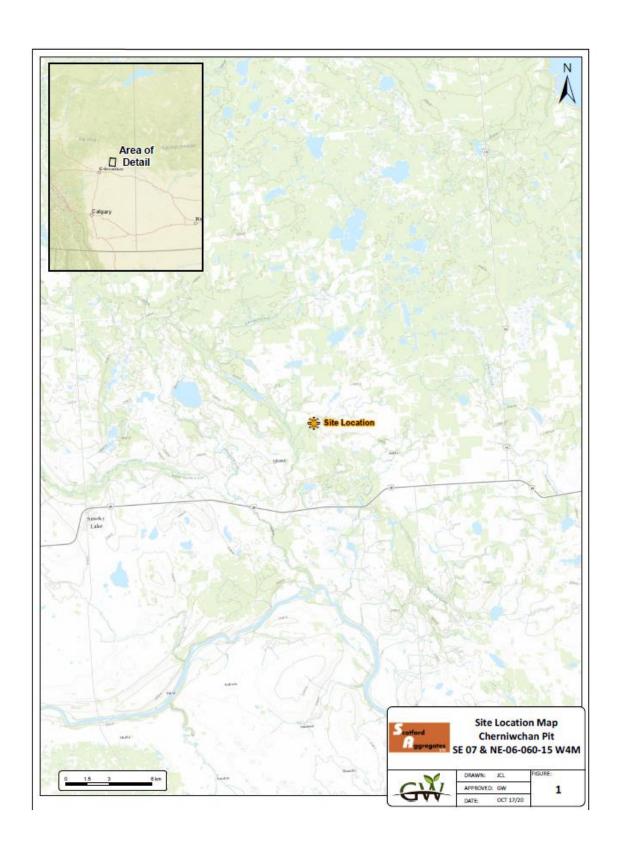
Acres of land certified at \$250/acre: N/A Acres x \$250	$0 = \underline{N/A}(a)$	
Detailed full-cost security calculation attached	Total full-cost = N/A (b)	
Area of land at full-cost 4.4 hectares / 10.87 acres	Cost/area = <u>\$2,000 / acre</u>	
Security currently in place: \$0.00_ Total security to be provided (a) - (b): \$21,740.00_		
Proposed method of payment: Letter of Credit 🛛 Cash 🗌 Other (explain)		

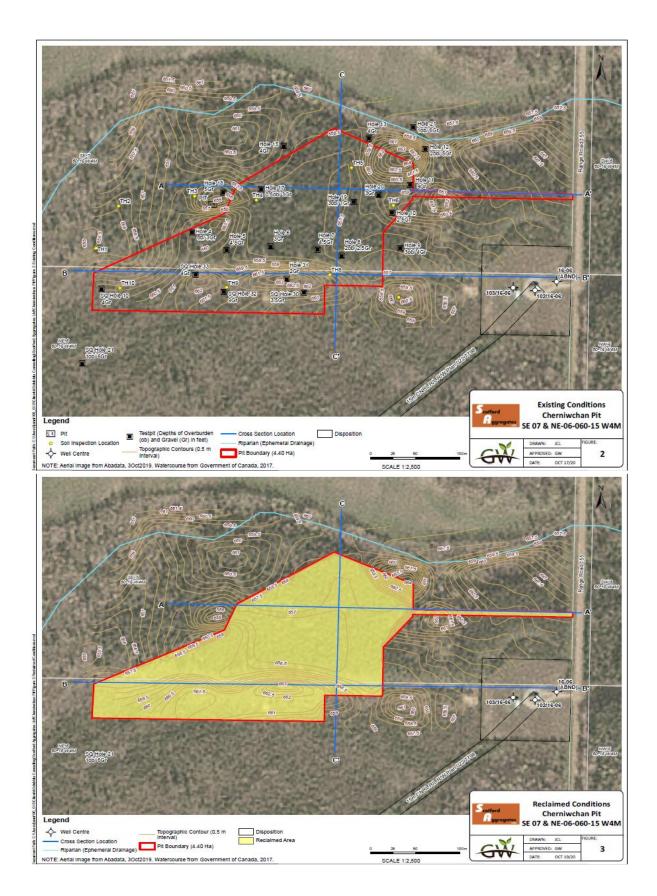
Signature and title of person submitting estimate:

Grant Woynarowich, B.Sc., P.Ag. Environmental Consultant

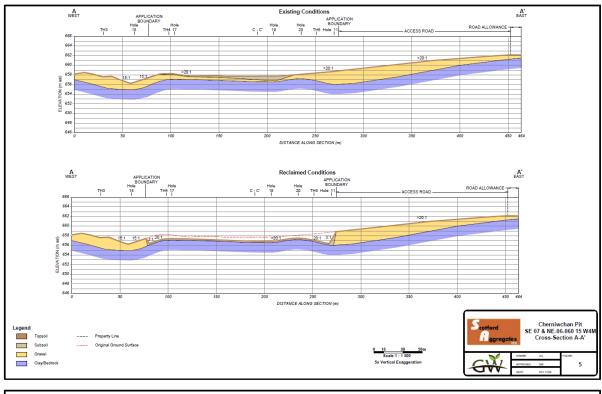


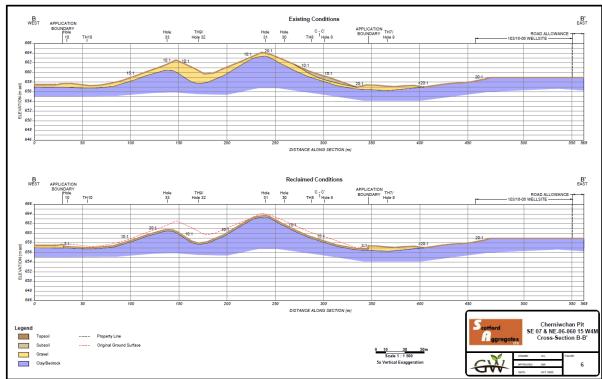
Appendix A - Figures

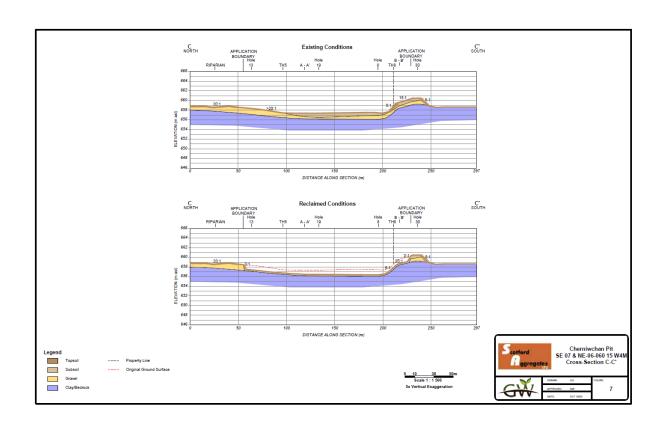




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Appendix B - Photographs





Photo 1. Typical topsoil at TH2, profile of shallow littler layer and light gray Ae horizon (topsoil layer)





Photo 2. Topsoil profile at TH 6, shallow litter layer and thin topsoil, gray Ae horizon.





Photo 3. Greater view of soil profile at TH6, shallow litter/topsoil overlying sandy subsoil material and followed by the target sand and gravel deposit.



Appendix C - Nadurra Ecological Consulting Ltd.



Preliminary Biophysical Assessment
Of the Proposed Cherniwchan Pit
SE 07 and NE 06-60-15-W4M
Scotford Aggregates

#82 5317 3 Ave SW Edmonton, AB T6X 0W7

Tel: 780-720-6682

Email: jgreter@hotmail.com

Prepared For: Gdubblu Consulting Ltd. St. Albert, Alberta

Prepared By:

Nadurra Ecological Consulting Ltd.

Edmonton, Alberta

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Appendix A Alberta Conservation Information Management System (ACIMS) Database Search

Appendix B Fish and Wildlife Information Management System (FWMIS) Database Search

Appendix C Site Photographs

Appendix D List of Plant Species

Appendix E List of Wildlife Species/Features

1.0 INTRODUCTION

Nadurra Ecological Consulting Ltd. (Nadurra) was retained by Gdubblu Consulting Ltd. to conduct a preliminary biophysical (vegetation, wetlands, and wildlife) assessment to support a development permit application for a proposed gravel pit (Cherniwchan pit) for Scotford Aggregates located at SE 07 and NE 06-60-15-W4M. The purpose of the preliminary biophysical assessment was to review and summarize any existing data, and compile basic field data, for vegetation, wetlands, and wildlife components of the proposed site, in order to identify, and then mitigate, any environmental issues related to this information. This background data (desktop and field) was used to inform the best location for the pit and access road into the pit, therefore mitigating proactively for any environmental constraints related to these parameters.

Specifically, the biophysical assessment included the following:

- A review of available vegetation and ecosite/natural region background information for the site;
- A review of available background information on wetlands, riparian zones, and water courses within and immediately adjacent to the site;
- A search of available rare plant information for the site using the ACIMS rare plant database and other applicable background information;
- A search of available endangered species information using the FWMIS database and other applicable background information;
- Field visit to ground-truth vegetation and wetlands components, complete a wildlife sweep of the proposed disturbance area to document any wildlife features, and determine any environmental sensitivities/constraints with respect to these biophysical components; and,
- Documentation of general conclusions and recommendations going forward for the site as it relates to the above information

2.0 PROJECT AREA DESCRIPTION

2.1 Natural Region

The proposed site is located within the Dry Mixedwood subregion, which is the most southerly Boreal Natural Subregion characterized by warmer summers and milder winters than most other Subregions in the Boreal Natural Region (Natural Regions Committee 2006). The dry mixedwood subregion represents a transition between the Central Parkland and Central Mixedwood subregions, and as such has plant species and vegetation community types characteristic of both of these other regions. In general, aspen is the dominant forest type occurring on moist mesic sites within the region, with jack pine forest stands occurring on coarse textured soils, and black spruce, willows, and sedges (bogs and fens) dominant in the poorly drained areas. Cultivated areas also exist throughout the subregion.

The region around the proposed site itself is mostly forested by jack pine stands on dry, well-drained glaciofluvial and eolian parent materials located on upland hummocks, with more moist sites located on level terrain forested by trembling aspen and upland forb species. Moist, rich sites and riparian areas support balsam poplar, aspen, and white spruce forests, with nutrient-rich forb species such as ferns and horsetails dominating the understory. A few peatlands (fens and bogs) occur within close vicinity to the proposed site in lowlands, supporting black spruce and tamarack forests. The project site is located northwest of the nearby Bellis North and Bellis Lake natural areas and is northeast of the community of Smoky Lake (Alberta Environment and Parks [AEP] 2020a).

3.0 ASSESSMENT METHODS

The biophysical assessment consisted of both a desktop review and a field assessment which was conducted on September 20, 2020. The assessment methods are discussed in more detail below.

3.1 Desktop Review

3.1.1 Vegetation

Available background documents, imagery, and databases were reviewed to determine general vegetation characteristics and features of the proposed project site in order to aid in determining the best placement of site infrastructure and access and identify any constraints due to vegetation parameters (e.g. rare plant species) within the proposed disturbance area. An Alberta Conservation Information Management System (ACIMS) database search was conducted to determine if there were any past observations of plant species of special conservation concern within and immediately adjacent to the proposed project site.

Specifically, the following databases and documents were searched and reviewed for historical information:

- Natural Regions and Subregions of Alberta (Natural Regions Committee 2006);
- Alberta Environment and Parks Natural Areas (AEP 2020a);
- Ecosite Guide to Northern Alberta (Beckingham and Archibald 2006);
- Alberta Conservation Information Management System (ACIMS) (AEP 2017a); and,
- Fisheries & Wildlife Management Information System (FWMIS) (AEP 2020b).

The proposed project footprint was also projected onto recent aerial imagery (Abadata 2019) to create a field map to aid in determining what vegetation community types existed within the proposed disturbance area.

3.1.2 Wetlands/Riparian Areas

Aerial imagery of the proposed project site and regional surrounding area (Google 2020) was reviewed to determine presence of any wetlands or riparian areas within proposed project boundaries. In addition, relevant background documents and databases were reviewed to further determine if there were any potential wetland or riparian areas that existed within the proposed disturbance area. Specifically, databases such as the Natural Regions of Alberta and

the watercourse mapping layers and management area maps provided through Government of Alberta (2019) were consulted to aid in determining any potential wetland/riparian areas. These potential areas were then made note of on field maps for use during the field assessment to aid in wetland/riparian area ground-truthing.

3.1.3 Wildlife

The desktop review for the wildlife component consisted of a Fisheries and Wildlife Management Information System (FWMIS) database search for any wildlife species of provincial (those species listed as At Risk, May Be At Risk, or Sensitive within Alberta [AEP 2017b; Government of Alberta [GOA] 2017b]) or federal (all species listed in Schedule 1 of the Species At Risk Act [Government of Canada 2020] or listed as Endangered, Threatened, or Special Concern by COSEWIC [2017]) concern in order to determine if any had been previously observed within 2 km of the proposed project footprint (AEP 2020b).

In addition to wildlife occurrence information gathered from the database, a review of available background documents and information relating to species of conservation concern such as published species habitat use accounts and distribution maps (e.g. Sensitive Species Inventory Guidelines [GOA 2013]), was undertaken to evaluate habitat requirements of species of concern in order to determine potential habitat use and likelihood of occurrence within the proposed disturbance area.

Wildlife habitat type polygons were preliminarily delineated out on field maps based on broad vegetation community type polygons and aerial imagery, and these maps used during the field survey to further refine and identify wildlife habitat types and use within the proposed project area.

3.2 Field Survey

The field component of the preliminary biophysical assessment for the Project was conducted on September 20, 2020. GPS coordinates and photographs were taken at field plots as well as points of interest within the proposed project footprint. Topography, hydrology, vegetation, wetlands, and wildlife components were investigated during the field assessment and are described below.

3.2.1 Vegetation

Vegetation assessment plots were located wherever a distinct or new vegetation community was encountered and in select areas across the footprint for distribution of coverage. Capture of data at plots to determine vegetation community characteristics followed known protocols (Alberta Environmental Protection 1994). Canopy species composition and the percent cover of the dominant vegetation strata were documented at each plot, along with the percent groundcover of coarse woody debris, litter, live plant cover, exposed organic material and mineral soil. Field ecosite phase (vegetation community) classifications were given, based on an evaluation of indicator plant species, basic soil properties such as moisture and nutrient regime, and topographic features. Plots were also used to identify potential wetlands, rare (listed) plants and invasive plant species. GPS coordinates and photographs were taken at each plot.

A specific rare plant survey was not conducted as the field survey was conducted at a time in the growing season when most plants would have senesced, and thus, are beyond phenology stages (e.g. flowering, fruiting) capable of differentiating between rare and more common species. However, survey personnel still searched for rare plants where possible, in conjunction with vegetation community and wetland assessment plots as well as between plots. A meander survey of any unique or special landscape features such as microhabitats, ephemeral habitats, wet areas or transition zones was conducted throughout the proposed disturbance area as these areas typically have a higher potential for harboring rare plants (Kershaw et. al 2001). Any observations of these features were recorded and used in conjunction with vegetation assessment plot data to provide information on overall rare plant potential for the various vegetation communities occurring within proposed project boundaries.

Although invasive plant species were not specifically surveyed for, any weeds identified as 'Noxious' under the Alberta Weed Act (GOA 2011; GOA 2010), and invasive species considered weedy by land use managers but not listed under the Weed Act, that were encountered during the general vegetation assessment (both at plots and while travelling between plots), were identified and recorded within the proposed project footprint.

3.2.2 Wetlands and Riparian Areas

Any potential wetlands identified during the desktop review were assessed and classified according to the Alberta Wetland Classification System (AWCS) (ESRD 2015), if present. The review of desktop information, as well as the field survey and delineation of any wetlands on the Site, were based on the Alberta Wetland Identification and Delineation Directive (GOA 2015) in keeping with the Alberta Wetland Policy (ESRD 2013). Any potential riparian areas were also assessed for wetland potential and/or to determine riparian class size and fish-bearing potential in accordance with the Water Act (GOA 2017a) and associated Codes of Practice (GOA 2019). In addition, plots were completed within wetland/riparian areas to characterize the vegetation community type and field ecosite phase.

3.2.3 Wildlife and Wildlife Habitat

The wildlife and wildlife habitat field work were completed within the proposed disturbance area, both at vegetation assessment plots and while traversing between plots. Specifically, the wildlife field component consisted of habitat delineation based on vegetation and topography at plots across the site; a meander survey of the study area documenting any incidental observations of wildlife, including individuals or groups of individuals, and sign such as tracks and scat; and, a general wildlife sweep of the proposed disturbance area searching for wildlife features that would require buffers or protection, such as dens, hibernacula, raptor nests, and other nests requiring year-round protection (GOA 2018).

4.0 RESULTS & INTEPRETATIONS

Results and interpretations for the vegetation, wetland/riparian areas, and wildlife reviews are summarized in the following sections.

4.1 Desktop Review

4.1.1 Vegetation

The property is located within the Dry Mixedwood Natural Sub-Region of Alberta, with mature aspen, aspen-spruce, and jack pine forests interspersed with cultivated lands common throughout the region (Natural Regions Committee 2006). The Bellis North Natural Area (a jack pine-dominated sand dune landscape with several major ravines, numerous ponds, tamarack/dwarf birch wetlands, black spruce wetlands, willow shrublands, and patterned fen) lies within close proximity to the proposed site, about 1 km southeast of the subject property (AEP 2020a). Immediately east of the property is a Canadian Natural wellsite with an access road leading into the property. To the south of the access road, a previously harvested jack pine cutblock exists, and to the north of the lease line access road, a mature jack pine stand is present. North of this exists a small riparian area forested by aspen and balsam poplar, and a cultivated field further north from the forested area. The subject property and proposed access road are also adjacent to a range road to the east (Range Road 155) (Google 2020). Figure 1 provides a spatial representation of site features and associated background data.

The rare plant search of the subject property was conducted using the Alberta Conservation Information Management System (ACIMS) database. It is important to note that this data base presents information on locations of rare plants recorded within the Province; it does not provide detailed information on the likelihood of occurrences for any particular area. Currently, no rare plants have been found on the site or immediately adjacent to the site (see results of the ACMIS database search in Appendix A). Although there are microhabitats that occur within the proposed disturbance area, none were unique specifically to the project area, and the majority of the area is forested with vegetation communities and species typical for the surrounding region; thus, rare plant potential for the study area is overall low.

4.1.2 Wetlands/Riparian Areas

Observations from aerial imagery and a background data search suggest a riparian area or potential linear wetland exists immediately to the north of the proposed disturbance area (see Figure 1 for spatial representation). General boundaries of the riparian area were determined using vegetation community changes and topography (slope) changes from aerial imagery and maps of the area, and delineated on field maps for use during the field survey to further refine the boundaries and classify the wetland/riparian area as per the Alberta Wetland Policy and associated directives (ESRD 2015; GOA 2015; ESRD 2013), and the Alberta Water Act (GOA 2017a) and associated Codes of Practice (GOA 2019).

4.1.3 Wildlife and Wildlife Habitat

A search of the proposed development area and a 2 km buffer around it within the Fish and Wildlife Management Information System (FWMIS) database revealed no previous observations in the area of any species at risk or listed species (see Appendix B for database search results).

However, it is important to note that this database presents information on observations of species of concern recorded within the Province; it does not provide detailed information on the likelihood of occurrences for any particular area.

Thus, a desktop review of habitat requirements and use and distribution maps for species at risk (provincial and federal) was also completed to determine if potential habitat existed within the proposed disturbance area for any of these species. This information was compared with aerial imagery and maps of the study area to determine wildlife habitat type polygons within study area boundaries, and whether any of these met the various species at risk requirements.

In general terms, as the area is forested, it provides contiguous mature forest cover (mature jack pine stand) with the nearby Bellis North Natural Area and surrounding vegetated sand dune complex, and within its riparian areas (mature balsam poplar-aspen stand) provides landscape connectivity to large mammals (e.g., deer, moose, black bear) and habitat for forest birds (e.g. snags and old rotting trees for nests and feeding).

Key habitat features in the study area, that may be relevant to species of concern, include:

- potential overwintering habitat for Canadian toad (Bufo hemiophrys) in sandy upland soils like those found beneath the mature jack pine stand:
- large trees within the riparian area that are potential breeding habitat for raptors such as broad-winged hawk (Buteo platypterus), and various species of owls, as well as great blue heron (Ardea herodias);
- mature aspen/balsam poplar forests are potential breeding and foraging habitat for
 pileated woodpecker (*Dryocopus pileatus*) and a variety of songbirds, including
 Baltimore oriole (*Icterus galbula*), eastern phoebe (*Sayornis phoebe*), least flycatcher
 (*Empidonax minimus*), olive-sided flycatcher (*Contopus coopen*), western tanager
 (*Piranga ludoviciana*), and western wood-pewee (*Contopus sordidulus*); and,
- the forest canopy and riparian area adjacent to open pasture may provide potential foraging habitat for aerial insectivores such as bats, swallows, and common nighthawk (Chordeiles minor).

From a desktop review of wildlife habitat types within the study area, the area itself does not appear to provide unique or specific habitat for any species at risk that does not also exist adjacent to or in close proximity to the proposed disturbance area.

4.2 Field Survey

4.2.1 Vegetation

In total, eleven vegetation assessment plots were completed across the proposed disturbance area during the field assessment completed on September 20, 2020 (see Figure 1). Select site photographs representative of the study area are presented in Appendix C. A total of six plots (four within proposed pit boundaries, 2 within proposed access road boundaries) were completed in the mature jack pine forest stand which made up the majority of the study area. From information gathered at plots, this forested vegetation community is consistent with a b1 ecosite (Beckingham and Archibald 1996). The stand was dominated by a homogenous

overstory of jack pine (*Pinus banksiana*), with a diverse understory consisting of species characteristic of both a lichen (a) ecosite such as blueberry (*Vaccinium myrtilloides*) and bearberry (*Arctostaphylos uva-ursi*) shrubs, and a low bush-cranberry (d) ecosite such as prickly rose (*Rosa acicularis*) and bunchberry (*Cornus canadensis*).

Three plots were also completed in a regenerating jack pine cutblock south of the access road, with plant species and site characteristics consistent with a b1 ecosite similar to the undisturbed mature b1 ecosite north of the road, with the exception of a few disturbance species observed (e.g. Kentucky bluegrass [Poa pratensis]).

Lastly, two plots were completed within the potential wetland/riparian area identified from the desktop review just to the north of the proposed disturbance area, in order to characterize this vegetation community and determine potential riparian area boundaries. The forest stand was dominated by an overstory of mature trembling aspen (*Populus tremuloides*), with some balsam poplar (*Populus balsamifera*) and paper birch (*Betula papyrifera*), and a diverse understory of shrubs and forbs characteristic of an e1 ecosite (e.g. raspberry [*Rubus idaeus*] and willow species [*Salix* spp.]) Although there was no distinct channel where water was flowing and no surface water was present within surveyed boundaries, riparian features were present such as downed logs and water channels, and together with site characteristics such as slope and topographical position (toe and lower slope), suggest this area meets the conditions for an ephemeral (draw or drainage) waterbody, where flooded and water-logged conditions exist for at least part of the year, mostly during spring and early summer following spring freshet, and does not meet characteristics or the definition of a wetland (ESRD 2015; GOA 2019; GOA2017a).

In addition to specific plots conducted to characterize the vegetation across the study site, most of the area was traversed by foot to further aid in delineating vegetation community boundaries, and to define riparian area boundaries. A list of the dominant plant species encountered in the proposed project footprint, and the vegetation community they were found in at the time of the survey, is presented in Appendix D. Nomenclature of plant species follows that of known plant identification guides such as *Plants of the Western Boreal Forest and Aspen Parkland* (Johnson et. Al 2005) and *Flora of Alberta* (Moss 1983).

As previously noted, although a specific survey for listed (rare) plant species could not be conducted due to time of year, field personnel were still observing for any and all rare plant species during the vegetation survey that might still be identifiable. However, no listed plant species were observed within the proposed project footprint at the time of the vegetation assessment survey. Similarly, no invasive plant species were encountered at vegetation assessment plots or while traversing between plots across the study area.

4.2.2 Wetlands and Riparian Areas

Potential wetland areas identified during the desktop review process were assessed in conjunction with vegetation assessment plots during the field assessment conducted on September 20, 2020. Potential areas were assessed in the field for wetland soil and vegetation indicators and classified according to the Alberta Wetland Classification System (ESRD 2015), if applicable. No mineral or organic wetlands were observed within the proposed project footprint that met Alberta Wetland Policy and directives definitions and criteria (ESRD 2015; ESRD 2013). In addition, no fish-bearing or classified (Class A, B, C, or D) watercourses according to

Water Act (GOA 2017a) and Code of Practice (GOA 2019) criteria and definitions were observed

However, as discussed in section 4.2.1 above, an ephemeral draw riparian area exists just to the north of the proposed pit boundaries, and has site characteristics consistent with an e1 ecosite (Beckingham and Archibald 1996). Due to the ephemeral nature of the linear watercourse, it is unclassified (Class D) and does not qualify as a wetland, but still meets general requirements to be classified as a riparian area and waterbody requiring protection under the *Water Act* (GOA 2017a).

4.2.3 Wildlife and Wildlife Habitat

Wildlife habitat type polygons were further refined from those delineated during the desktop review, and more exact boundaries determined, during the field assessment conducted on September 20, 2020. Results of the field survey show wildlife habitat types are consistent with vegetation community types across the site, and thus followed vegetation community type polygon boundaries and can be characterized by ecosite (refer to Figure 1 for spatial representation of polygons). The forested areas within the project area (mature jack pine stand [b1 ecosite] and mature aspen-balsam poplar stand [e1 ecosite]) have potential to provide habitat for a variety of migratory bird species that utilize mature trees for foraging and nesting, and also provide foraging and cover for mammal species. The regenerating cutblock also has potential to provide wildlife habitat for bird species that require more open forest canopy cover or that within an earlier successional stage (e.g. flycatcher and sparrow species prefer more open areas).

As the field survey of the proposed disturbance area was meant to assess general environmental conditions in support of development permit application requirements, the focus for the wildlife component was on recording incidental observations and use by wildlife of the area, and on completing a wildlife sweep across the area looking for any significant wildlife features (e.g. dens, nests) (GOA 2018). Wildlife observations were completed at vegetation assessment plots, as well as while traversing across the study area between plots, in order to most accurately capture wildlife use of the area. A list of wildlife species or features encountered during the survey is provided in Appendix E.

Although the field survey was conducted outside of restricted activity periods (RAP) for migratory birds (GOC 2018), a few bird species (e.g. black-capped chickadee [Poecile atricapillus] and ruffed grouse [Bonasa umbellus]) were heard or seen across the site. No active nests (raptor or otherwise) requiring buffers were observed during the field survey; however, there was significant woodpecker activity (potential nesting and feeding holes) noted in a few mature balsam poplar and aspen trees within the riparian habitat type. Although no evidence of raptor or owl use (such as whitewash, pellets, etc.) was observed in these areas, the size and type of trees, as well as the abundance of woodpecker holes and activity, are potential habitat for these species (GOA 2013). In addition to birds, moose (Alces alces) and whitetail (Odocoileus virginianus) deer sign, as well as black bear (Ursus americanus) and coyote (Canis latrans) sign, were observed intermittently throughout the area in densities expected of this type of landscape.

No wildlife species of concern that had potential to be within the study area based on habitat requirements (identified during the desktop review) were observed or identified during the field survey, although the lack of observation of species of concern with potential to occur in the

project area does not preclude their presence in the habitats throughout and adjacent to the project area.

5.0 ENVIRONMENTAL SENSITIVITIES AND PROPOSED MITIGATION

Information gathered from the desktop review and field survey were compiled and reviewed to identify any potential sensitivities with respect to vegetation, wetlands, and wildlife components of the proposed disturbance area, and identify any potential adverse effects of the project on these components. Environmental sensitivities for each area are presented below along with mitigation measures to address them.

5.1 Vegetation

5.1.1 Environmental Sensitivities

As no listed (rare) plant species or invasive species (weeds) were observed within the proposed disturbance area, few environmental sensitivities exist for the vegetation component of the project. The only potential environmental sensitivities to upland communities would include:

- increased risk of erosion on slopes due to vegetation removal as soils are sandy; and,
- introduction of weeds identified under the Weed Act as Noxious, or non-listed species that are considered weedy, with use of heavy equipment and disturbance.

5.1.2 Proposed Mitigation

To ensure construction and operations minimize erosion potential, vegetation will be cleared prior to soil salvage in consultation with the landowner's wishes and in a manner that reduces erosion and topsoil loss.

To prevent the spread of undesirable or weedy species and to restore the disturbed area to an equivalent land capability following extraction, the following mitigation strategies apply:

- hand clean vehicles prior to arriving on site to minimize the spread of invasive species that may be carried by vehicles;
- selecting re-vegetation strategies (e.g., natural re-vegetation, native seed mixes and/or infilling with trees/shrubs) during reclamation that meet end land use and biodiversity goals;
- · utilizing a non-invasive seed mix for reclamation;
- monitor site for Noxious and Restricted weeds as defined by Alberta's Weed Control Act and County bylaws;
- controlling weeds in accordance with the latest edition of the Environmental Code of Practice for Pesticides (Alberta Environment 1997) and the Code of Practice for Pesticides; and,
- establishing monitoring criteria and targets consistent with end land use goals in reclamation

5.2 Wetlands/Riparian Areas

5.2.1 Environmental Sensitivities

There were no organic or mineral wetlands requiring mitigation or compensation found within the proposed project footprint at the time of the assessment. However, an ephemeral draw riparian area exists just to the north of the proposed project footprint which will require mitigation and buffering to prevent effects to water resources within the area. Specific environmental sensitivities for this area include:

- potential sediment deposition/siltation from adjacent upland disturbance activities;
- potential effects to water quality and water flow/drainage patterns from disturbance activities:
- potential soil compaction from heavy equipment traffic if travelling through this area;
- negative effects to vegetation and wildlife that utilize this riparian area as a corridor and habitat.

5.2.2 Proposed Mitigation

It is recommended to avoid the riparian area during proposed disturbance activities as much as possible to protect this area and reduce impacts to it. The riparian area is currently outside of proposed pit boundaries, but it is also recommended to locate the proposed access road into the pit outside of the riparian area boundary. This will help to prevent any potential soil compaction, rutting of soils, and disturbance to the riparian vegetation community.

Mitigation measures that can be implemented to ensure protection and minimal disturbance of the riparian area include:

- implement a minimum 10 m buffer from boundaries of the e1 ecosite (see Figure 1 for spatial representation) so as to prevent erosion/sedimentation effects to the ephemeral watercourse and allow vegetation to act as a buffer and sediment trap for any potential soil erosion;
- implement mechanical erosion and sediment control measures close to riparian boundaries during the life of the proposed pit as needed to control any adverse effects from soil and water erosion; and.
- only clear/disturb that vegetation required for pit and access road development, keeping
 intact surrounding forest and vegetation so as to slow down surface water flow velocities
 and trap sediments before they enter the ephemeral drainage, thereby buffering
 soil/sedimentation effects of disturbance activities.

5.3 Wildlife and Wildlife Habitat

5.3.1 Environmental Sensitivities

Overall, project impacts to wildlife are low as the proposed disturbance area is small (< 5 ha) relative to existing natural resources in the area. The proposed site also does not contain unique habitat or features important to wildlife species of concern that does not exist nearby within similar vegetation communities. The Bellis North and Bellis Lake Natural Areas are

protected areas within close proximity to the disturbance area, and these forested complexes combined with adjacent mature forest surrounding the proposed project site, will ensure there is landscape connectivity, contiguity of wildlife corridors for movement, and plenty of similar habitat to that which exists within the project site. In addition, no active dens, nests, or other wildlife features requiring protection (e.g. hibernacula) were observed during the wildlife sweep completed as part of the field survey. The riparian area (e1 ecosite) just north of the proposed project footprint showed the most wildlife use and potential breeding/foraging habitat for wildlife species at risk (including migratory birds, raptors, and potential bat species), so this area should be avoided during project activities, if at all possible.

Given this, potential impacts to wildlife associated with the project are few, but include:

- loss of habitat through vegetation clearing and sensory disturbance;
- · reduced habitat connectivity and disruption of wildlife movement;
- · increased mortality risk from vegetation clearing and operations activities; and,
- · reduced abundance.

5.3.2 Proposed Mitigation

To address the potential project effects on wildlife, the following mitigation measures should be implemented:

- avoid disturbing or impacting the riparian area to the north of the proposed pit footprint, by placing the access road into the pit area outside of this area and implementing at least a 10 m buffer from boundaries of this polygon elsewhere, in order to retain this good quality wildlife habitat and minimize sensory disturbance effects to wildlife using it;
- only disturb/develop that area allotted for pit extraction and access road development, using a staged approach if possible, in order to minimize the amount and duration of vegetation clearing and disturbance to wildlife habitat, thereby allowing for maximum habitat connectivity and movement around the disturbed area for wildlife:
- all vegetation clearing should be completed outside the restricted activity period (RAP) for the area (April 25 to August 15 for migratory birds; March 1-August 31 for owls and raptors), in order to maintain compliance with the Alberta Wildlife Act and the Migratory Birds Convention Act.
- if vegetation clearing must occur within these RAPs, nest sweeps must be conducted by
 qualified personnel prior to clearing activities. If an active nest site is located, the nest
 will be flagged and recommended species-specific setback distances (minimum of 30 m,
 up to 1,000 m) will be established. These setback distances will be kept in place until the
 young have fledged and left the nest, which is typically by August 31; no clearing will be
 done within these established setbacks. Note that nest searches in wooded areas may
 not be compliant with the Migratory Birds Convention Act and will only be done if
 compliance can be assured; and.
- Construction should be completed as soon as possible after clearing within treed areas to minimize sensory disturbance effects on wildlife, which may force wildlife into suboptimal habitats.

Additional general best management practice mitigation measures related to wildlife should be implemented, where possible, for the project area and during the life of the project, such as:

 To avoid vehicle/wildlife collisions, construction personnel should follow posted speed limits on local roads in the vicinity of the proposed pit, as well as use appropriate speeds when travelling through or along the project area.

- Policies on feeding wildlife and proper disposal of food items should be developed for
 the construction of the pit areas and strictly enforced. Discarded food and/or wrappers
 and containers could attract wildlife species to the construction area, which will lead to a
 higher probability of human/wildlife interactions. Food should be kept inside vehicles or
 on person at all times, and garbage/litter should be carried out of the work area and
 disposed of properly.
- Construction workers should not feed wildlife, as this is also considered a wildlife hazard.
- Policies should be established that limit the opportunity for nuisance wildlife to become
 habituated to human feeding. The greater the interaction between construction workers
 and wildlife, the greater the chance that nuisance wildlife will need to be removed.
- Pets should be prohibited from worksites to avoid harassing wildlife.

6.0 CONCLUSIONS AND RECOMMENDATIONS

6.1 Summary

With respect to the vegetation, wetland/riparian areas, and wildlife components of the proposed pit, few adverse effects exist for the project, especially given the small proposed development area (<5 ha). No wetlands, listed (rare) plant species, and wildlife species of concern (species at risk) requiring specific recommendations were identified during either the desktop review or during the field assessment.

Therefore, the main environmental sensitivities identified in the Project are of a more general nature and are as follows:

- potential for disturbance (erosion, sedimentation, water quality effects) to adjacent ephemeral drainage riparian area just to the north of the proposed pit extraction area; and,
- potential disturbance (sensory) and loss of good-quality habitat (for breeding and foraging, landscape connectivity, movement corridor) for wildlife (especially some species of concern such as raptors and migratory birds) within the mature aspen-balsam poplar riparian area.

6.2 Recommendations

The mitigation measures described in this report should be considered for implementation to mitigate the environmental sensitivities identified proactively through this preliminary biophysical assessment. Specifically, avoiding or minimizing disturbance to the ephemeral drainage riparian area just north of the proposed disturbance area is recommended. Adherence to this recommendation, and the other recommended strategies given in section 5.0, will ensure the proposed pit reduces, minimizes, or avoids effects to the environment with respect to vegetation, riparian areas, and wildlife. Upon the end of its operating life the pit will be reclaimed to an appropriate end land use as requested by the landowner.

7.0 CLOSURE

We thank you for the opportunity to be of assistance, and trust that the contents of this report meet your current requirements. Should you have any questions or require further information, please contact the undersigned at 780-720-6682 or jgreter@hotmail.com.

Respectfully,

Nadurra Ecological Consulting Ltd.

Jamie-Lynn Greter, B. Sc., P. Biol.

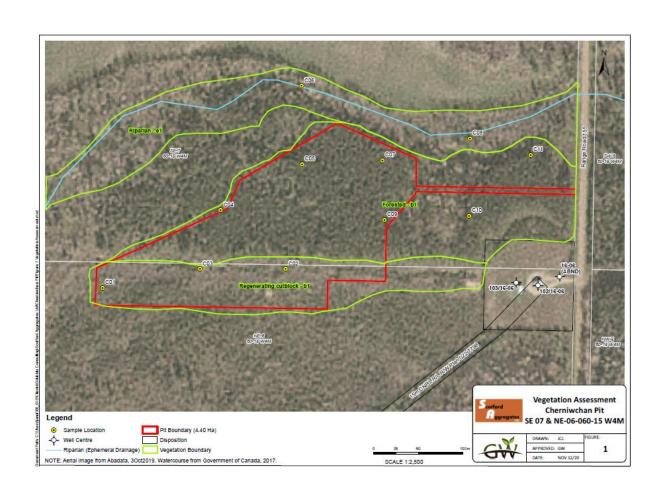
Director and Environmental Scientist

8.0 REFERENCES

- Alberta Environment and Parks (AEP). 2020a. Bellis North and Bellis Lake Natural Areas. Information and Facilities. Alberta Parks. Available online at: https://albertaparks.ca/parks/northeast/bellis-north-na/. Accessed October 2020.
- Alberta Environment and Parks (AEP). 2020b. Access FWMIS Data. FWMIT Fish and Wildlife Internet Mapping Tool. Government of Alberta. Available online at: http://aep.alberta.ca/accessfwmisdata.aspx. Accessed September 2020.
- Alberta Environment and Parks (AEP). 2017a. Alberta Conservation Information Management System. Element Occurrences (Part 1: Non-Sensitive, Part 2: Sensitive, by Township) Spatial Data. Updated October 2017. Government of Alberta Tourism, Parks and Recreation. Edmonton, AB. Available online at: https://www.albertaparks.ca/albertaparksca/management-land-use/alberta-conservation-information-management-system-acims/. Accessed September 2020.
- Alberta Environment and Parks (AEP). 2017b. Alberta Wild Species General Status Listing-2015. Fish and Wildlife Division. Available online at: https://extranet.gov.ab.ca/env/wild-species-status/default.aspx. Accessed September 2020.
- Alberta Environment and Sustainable Resource Development (ESRD). 2015. Alberta Wetland Classification System. Water Policy Branch, Policy and Planning Division. Edmonton, AB. Effective June 1, 2015.
- Alberta Environment and Sustainable Resource Development (ESRD). 2013. Alberta Wetland Policy. September 2013. 25 pp. ISBN: 978-1-4601-1287-8.
- Alberta Environmental Protection. 1994. Ecological Land Survey Site Description Manual. Alberta Forestry, Lands and Wildlife, Land Information Services Division, Resource Information Branch. 193 pp.
- Beckingham, J.D., and J.H. Archibald. 1996. Field guide to ecosites of Northern Alberta. Natural Resource Canada, Canadian Forestry Service, Northwest Region, Northern Forestry Centre, Edmonton, Alberta.
- Committee on the Status of Endangered Wildlife in Canada (COSEWIC). 2017. COSEWIC Wildlife Species Assessments, April 2017. Available online at: https://www.canada.ca/en/environment-climate-change/services/committee-status-endangered-wildlife/wildlife-species-assessment-short-april-2017.html. Accessed September 2020.
- Google. 2020. Google Earth Map Imagery of Site:06-60-15-W4M and surrounding area. Google Earth. Imagery from TerraMetrics (2020). Online data accessed September-November 2020.
- Government of Alberta (GOA). 2019. Code of Practice for Watercourse Crossings and management area maps. Amended. Water Policy Branch, Alberta Environment and Parks. Edmonton, AB. 40 pp.

- Government of Alberta (GOA). 2018. Master Schedule of Standards and Conditions. Alberta Environment and Parks (AEP) and Alberta Energy Regulator (AER), Government of Alberta. Edmonton, AB. 308 pp.
- Government of Alberta (GOA). 2017a. Alberta Water Act. Revised Statutes of Alberta 2000. Chapter W-3. Water Policy Branch, Alberta Environment and Parks. Alberta Queen's Printer. Edmonton, AB. 135 pp.
- Government of Alberta (GOA). 2017b. Species Assessed by Alberta's Endangered Species Conservation Committee. Fish and Wildlife Policy Branch. 2 pp. Available online at: https://open.alberta.ca/dataset/0b3421d5-c6c1-46f9-ae98-968065696054/resource/2eb5a538-3150-405a-98c7-286131537305/download/speciesassessed-conservation-2017-listing.pdf. Accessed September 2020.
- Government of Alberta (GOA). 2015. Alberta Wetland Identification and Delineation Directive. Water Policy Branch, Alberta Environment and Parks. Edmonton, AB. 60 pp.
- Government of Alberta (GOA). 2013. Sensitive Species Inventory Guidelines. Alberta Environment and Sustainable Resource Development (ESRD). Edmonton, AB. 128 pp.
- Government of Alberta. 2011. Weed Control Act. Statutes of Alberta, 2008, Chapter W-5.1. Queen's Printer. Edmonton, Alberta. Current as of October 1, 2011. http://www.qp.alberta.ca/1266.cfm?page=W05P1.cfm&leg_type=Acts&isbncln=97807797 6062. Accessed September 2020.
- Government of Alberta. 2010. Weed Control Regulation. Alberta Regulation 19/2010. Extract. Queen's Printer. Edmonton, AB. 8 pp.
- Government of Canada (GOC). 2020. Species at Risk Public Registry. Available online at: https://www.canada.ca/en/environment-climate-change/services/species-risk-public-registry.html. Accessed September 2020.
- Government of Canada (GOC). 2018. General Nesting Periods of Migratory Birds. Environment and Climate Change Canada (ECCC). Available online at: https://www.canada.ca/en/environment-climate-change/services/avoiding-harm-migratory-birds/general-nesting-periods.html. Accessed October 2020.
- Johnson, D, L. Kershaw, A. MacKinnon and J. Pojar. 1995. Plants of the Western Boreal Forest and Aspen Parkland. Lone Pine Publishing, Edmonton, Alberta. 392 pp.
- Kershaw, L., J. Gould, D. Johnson and J. Lancaster. 2001. Rare Vascular Plants of Alberta. University of Alberta Press, Edmonton, AB; and Nat. Resour. Can, Can. For. Serv., North. For. Cent. Edmonton, AB. 484 pp.
- Moss, E.H., 2nd Ed. by J.G. Packer, 1983. Flora of Alberta. University of Toronto Press, Toronto, Ontario. 687 pp.
- Natural Regions Committee. 2006. Natural Regions and Subregions of Alberta. Compiled by D.J. Downing and W.W. Pettapiece. Government of Alberta. Publication No. T/852. ISBN: 0-7785-4573-3. http://albertaparks.ca/media/2942026/nrsrcomplete_may_06.pdf. Accessed September 2020.

FIGURES



APPENDIX A

Alberta Conservation Information Management System (ACIMS) Database Search Date: 8/10/2020 Requestor: Consultant

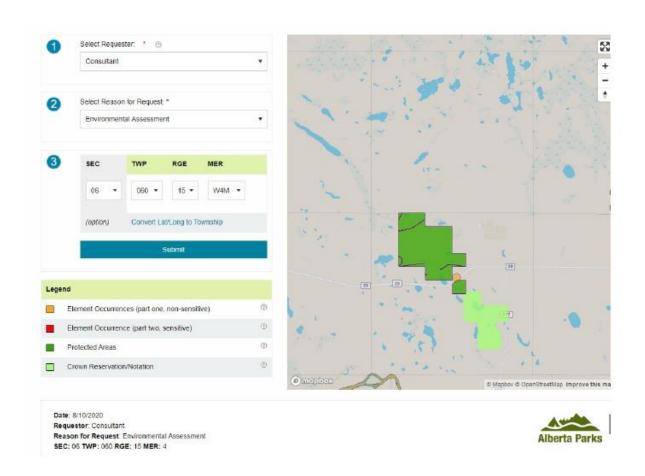
Reason for Request: Environmental Assessment

SEC: 06 TWP: 060 RGE: 15 MER: 4



Non-sensitive EOs (updated: October 2017)							
M_RR_TTT_\$\$	EO_ID	ECODE	S_RANK	SNAME	SCOMNAME	LAST_0	DBS_D
No Non-sensitive EOs Found: Next Steps - <u>See FAQ (https://www.albertaparks.ca/albertaparksca/management-land-use/alberta-conservation-information-management-system-acims/faqs.aspx#2 - Process).</u>						anagement-	
Sensitive EOs	(updated:	October	2017)				
M-RR-TTT EO	_ID ECC	DDE S	_RANK	SNAME	SCOMNAME	LAST_OB	SS_D
No Sensitive EOs Found: Next Steps - See FAQ (https://www.albertaparks.ca/albertaparksca/management-land-use/alberta-conservation-information-management-system-acims/faqs.aspx#2 - Process)							
Protected Areas (updated: October 2017)							
M-RR-TTT-SS	PR	OTECTED_A	AREA_NAME			TYPE	IUCN
4-15-060-06	Ве	llis North - 10	Om proximity			n/a	n/a
Next Steps: Email Parks (mailto:PPA.referrals@gov.ab.ca?subject=Data Request PPA Found) or See FAQ							
(https://www.albertaparks.ca/albertaparksca/management-land-use/alberta-conservation-information-							
management-system-acims/faqs.aspx#3 - Process)							
Crown Reservations/Notations (updated: October 2017)							
M-RR-TTT-SS				NAME		TYPE	
No Crown Reservat	ions/Notatio	ns Found					

Updated: Dec 11, 2019



APPENDIX B

Fish and Wildlife Management Information System (FWMIS) Database Search



Fish and Wildlife Internet Mapping Tool (FWIMT)

(source database: Fish and Wildlife Management Information System (FWMIS))

Species Summary Report

Report Date: 08-Oct-2020 10:45

Species present within the current extent

Fish Inventory Wildlife Inventory Stocked Inventory

No Species Found in Search Extent No Species Found in Search Extent

Buffer Extent

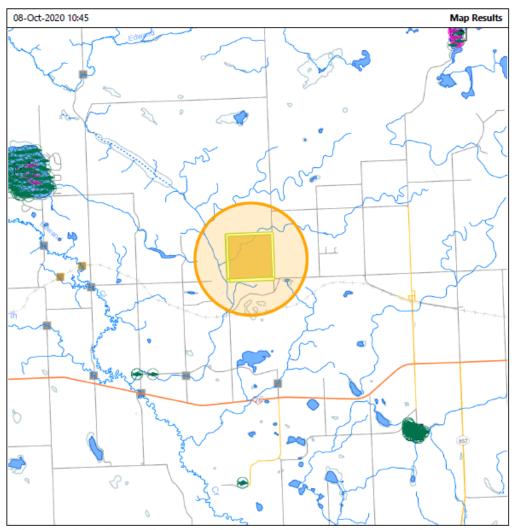
Centroid (X,Y) Projection Centroid Radius or Dimensions
(Qtr Sec Twp Rng Mer)

680261, 6002233 10-TM AEP Forest SE 6 60 15 4 2 kilometers

Contact Information

For contact information, please visit:

https://www.alberta.ca/fisheries-and-wildlife-management-contacts.aspx



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APPENDIX C Site Photographs



Photo 1: Proposed Cherniwchan pit site overview looking west down access road, showing regenerating jack pine cutblock (ecosite b1) on the left, and mature b1 jack pine stand on the right (September 20,2020)



Photo 2: Proposed Cherniwchan pit site overview looking east down access road, showing regenerating jack pine cutblock (ecosite b1) on the right, and mature b1 jack pine stand on the left (September 20,2020)



Photo 3: Example of regenerating jack pine cutblock (b1 ecosite) vegetation polygon type found at plots C01, C02, and C03 (September 20,2020)



Photo 4 : Example of mature jack pine stand (b1 ecosite) vegetation polygon type found at plots CO4, CO5, CO7, and CO9 (September 20,2020)



Photo 5: Example of riparian trembling aspen/balsam poplar stand (e1 ecosite) vegetation polygon type found at plots C06 and C08 (September 20,2020)



Photo 6: Example of water channels and downed logs in riparian ephemeral drainage (September 20, 2020) $_{\rm 3}$



Photo 7: Wildlife trees (snags) showing woodpecker activity at Plot C06 within riparian (el ecosite) vegetation polygon type (September 20, 2020)



Photo 8: Representative photo of wildlife tracks (moose, deer, coyote), seen all throughout the site (September 20, 2020)



Photo 9: Bear scat seen around Plot CO2 (September 20, 2020)

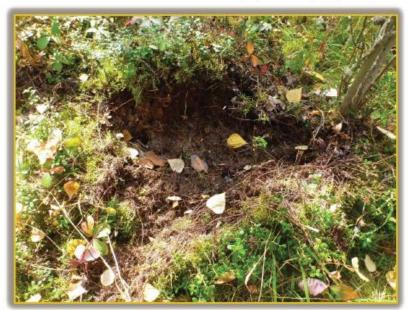


Photo 10: Bear dig seen around plot C10 (September 20, 2020)

APPENDIX D

List of Plant Species

Scientific Name	Common Name	Ecosite Found In
Achillea millefolium	Common yarrow	e1
Agrimonia striata	Agrimony	e1
Agropyron trachycaulum var. trachycaulum	Slender wheatgrass	Regen b1, e1
Agrostis scabra	Tickle grass	Regen b1
Alnus viridis	Green alder	e1
Amelanchier alnifolia	Saskatoon	Regen b1, b1, e1
Arctostaphylos uva-ursi	Bearberry	Regen b1, b1
Aster ciliolatus	Fringed aster	e1
Aster laevis	Smooth aster	Regen b1, e1
Betula papyrifera	Paper birch	Regen b1, b1, e1
Calamagrostis canadensis	Marsh reed grass	e1
Cladonia mitis	Green reindeer lichen	Regen b1, b1
Cornus canadensis	Bunchberry	b1, e1
Epilobium angustifolium	Fireweed	Regen b1, e1
Fragaria virginiana	Wild strawberry	Regen b1, e1
Galium boreale	Northern bedstraw	Regen b1, b1
Gentiana amarella	Northern gentian	Regen b1
Geocaulon lividum	Northern bastard toadflax	Regen b1
Hylocomium splendens	Stair-step moss	Regen b1, b1
Lathyrus ochroleucus	Creamy peavine	b1, e1
Leymus innovatus	Hairy wild rye	Regen b1, b1
Linnaeus borealis	Twinflower	Regen b1, b1
Maianthemum canadense	Wild lily-of-the-valley	b1, e1
Oryzopsis asperifolia	Rough-leaved rice grass	b1
Pinus banksiana	Jack pine	Regen b1, b1
Pleurozium schreberi	Big red stem moss	Regen b1, b1
Poa palustris	Fowl bluegrass	Regen b1
Poa pratensis	Kentucky bluegrass	Regen b1, b1
Populus balsamifera	Balsam poplar	e1
Populus tremuloides	Trembling aspen	Regen b1, b1, e1
Prunus virginiana	Chokecherry	Regen b1
Pyrola asarifolia	Common pink wintergreen	e1
Rosa acicularis	Prickly rose	Regen b1, b1, e1
Rubus idaeus	Wild red raspberry	Regen b1, e1
Salix bebbiana	Bebb's willow	Regen b1, e1
Salix planifolia	Planar-leaved willow	e1
Schizachne purpurascens	Purple oat grass	Regen b1, b1
Senecio triangularis	Arrowleaf ragwort	b1
Shepherdia canadensis	Canada buffaloberry	b1
Solidago canadensis	Canada goldenrod	Regen b1
Trifolium hybridum	Alsike clover	Regen b1
Vaccinium myrtilloides	Common blueberry	Regen b1, b1
Vaccinium vitis-idaea	Bog cranberry	Regen b1, b1
Vicia americana	Wild vetch	e1, b1
Viola adunca	Early blue violet	Regen b1

APPENDIX E

List of Wildlife Species/Features

Scientific Name	Common Name	Wildlife Species/Feature Observed/Comments
		Animal trails throughout site
		Wildlife trees/snags throughout riparian ephemeral drainage
	Woodpecker spp.	Woodpecker holes/activity in snags within riparian area
Alces alces	Moose	Scat, tracks
Bonasa umbellus	Ruffed grouse	Visual
Canis latrans	Coyote	Scat, tracks
Chen caerulescens	Snow goose	Auditory
Grus canadensis	Sandhill crane	Auditory
Odocoileus virginianus	White-tailed deer	Scat, tracks
Poecile atricapillus	Black-capped chickadee	Visual, auditory
Poecile hudsonicus	Boreal chickadee	Auditory
Tamiasciurus hudsonicus	Red squirrel	Visual, middens
Turdus migratorius	American robin	Auditory
Ursus americanus	American black bear	Scat. digs



Appendix D – Land Titles and Landowner Lease(s)



LAND TITLE CERTIFICATE

S

LINC SHORT LEGAL 0023 530 042 4;15;60;6;NE TITLE NUMBER 012 072 927

LEGAL DESCRIPTION

MERIDIAN 4 RANGE 15 TOWNSHIP 60

SECTION 6

QUARTER NORTH EAST

EXCEPTING THEREOUT ALL MINES AND MINERALS AREA: 64.7 HECTARES (160 ACRES) MORE OR LESS

ESTATE: FEE SIMPLE

MUNICIPALITY: SMOKY LAKE COUNTY REFERENCE NUMBER: 012 072 926

REGISTERED OWNER(S)

REGISTRATION DATE (DMY) DOCUMENT TYPE VALUE CONSIDERATION

012 072 927 13/03/2001 TRANSFER OF LAND \$32,000 \$32,000

OWNERS

BARRY CHERNIWCHAN

AND

CINDY CHERNIWCHAN

BOTH OF: BOX 103 BELLIS

ALBERTA TOA OJO AS JOINT TENANTS

ENCUMBRANCES, LIENS & INTERESTS

REGISTRATION

NUMBER DATE (D/M/Y) PARTICULARS

012 352 592 02/11/2001 CAVEAT

RE : SURFACE LEASE UNDER 20 ACRES CAVEATOR - CANADIAN NATURAL RESOURCES LIMITED. BOX 6926, STN D

/ COMPTATION V

ENCUMBRANCES, LIENS & INTERESTS

REGISTRATION

PAGE 2 # 012 072 927

NUMBER DATE (D/M/Y) PARTICULARS

CALGARY

ALBERTA T2P2G1

AGENT - PIONEER LAND SERVICES LTD.

(DATA UPDATED BY: CHANGE OF NAME 042227536)

022 036 933 30/01/2002 CAVEAT

RE : PIPELINE RIGHT OF WAY

CAVEATOR - CANADIAN NATURAL RESOURCES LIMITED.

BOX 6926, STATION "D"

CALGARY

ALBERTA T2P2G1

AGENT - PIONEER LAND SERVICES LTD.

052 302 739 23/07/2005 UTILITY RIGHT OF WAY

GRANTEE - CANADIAN NATURAL RESOURCES LIMITED.

122 082 584 20/03/2012 MORTGAGE

MORTGAGEE - SERVUS CREDIT UNION LTD.

BOX 1570 ST PAUL

ALBERTA TOA3A0

ORIGINAL PRINCIPAL AMOUNT: \$383,000

172 044 363 13/02/2017 CAVEAT

RE : AGREEMENT CHARGING LAND

CAVEATOR - SERVUS CREDIT UNION LTD.

151 KARL CLARK ROAD NW

EDMONTON

ALBERTA T6N1H5

AGENT - DARLENE OSINCHUK

202 149 913 23/07/2020 CAVEAT

RE : LEASE INTEREST

CAVEATOR - SCOTFORD AGGREGATES LTD.

BOX 3511

FORT SASKATCHEWAN ALBERTA T8L2T4

AGENT - JOHN D JENKINS

TOTAL INSTRUMENTS: 006

/ COMPTMED A

THE REGISTRAR OF TITLES CERTIFIES THIS TO BE AN ACCURATE REPRODUCTION OF THE CERTIFICATE OF TITLE REPRESENTED HEREIN THIS 6 DAY OF AUGUST, 2020 AT 11:20 A.M.

ORDER NUMBER: 39855210
CUSTOMER FILE NUMBER:



END OF CERTIFICATE

THIS ELECTRONICALLY TRANSMITTED LAND TITLES PRODUCT IS INTENDED FOR THE SOLE USE OF THE ORIGINAL PURCHASER, AND NONE OTHER, SUBJECT TO WHAT IS SET OUT IN THE PARAGRAPH BELOW.

THE ABOVE PROVISIONS DO NOT PROHIBIT THE ORIGINAL PURCHASER FROM INCLUDING THIS UNMODIFIED PRODUCT IN ANY REPORT, OPINION, APPRAISAL OR OTHER ADVICE PREPARED BY THE ORIGINAL PURCHASER AS PART OF THE ORIGINAL PURCHASER APPLYING PROFESSIONAL, CONSULTING OR TECHNICAL EXPERTISE FOR THE BENEFIT OF CLIENT(S).



LAND TITLE CERTIFICATE

SHORT LEGAL LINC 0034 375 189 4;15;60;7;SE

TITLE NUMBER 102 226 608 +2

LEGAL DESCRIPTION

MERIDIAN 4 RANGE 15 TOWNSHIP 60

SECTION 7

QUARTER SOUTH EAST

CONTAINING 64.7 HECTARES (160 ACRES) MORE OR LESS

A) PLAN 2228ET - ROAD 0.737 1.50 MORE OR LESS A) PLAN 2228ET - ROAD 0.737 1.82 B) PLAN 0826383 - DESCRIPTIVE 4.00 9.88 C) PLAN 1024024 - ROAD 0.883 2.06

EXCEPTING THEREOUT ALL MINES AND MINERALS

ESTATE: FEE SIMPLE

MUNICIPALITY: SMOKY LAKE COUNTY REFERENCE NUMBER: 102 077 560

REGISTERED OWNER(S)

REGISTRATION DATE (DMY) DOCUMENT TYPE VALUE CONSIDERATION

102 226 608 30/06/2010 ROAD PLAN

OWNERS

BARRY WAYNE CHERNIWCHAN OF POST OFFICE BOX 382 SMOKY LAKE

ALBERTA TOA 3CO

(DATA UPDATED BY: CHANGE OF ADDRESS 102273088)

ENCUMBRANCES, LIENS & INTERESTS

REGISTRATION

NUMBER DATE (D/M/Y) PARTICULARS

762 034 709 01/03/1976 UTILITY RIGHT OF WAY

GRANTEE - THE COUNTY OF SMOKY LAKE NO. 13.

012 352 593 02/11/2001 CAVEAT

/ COMPUTATION A

ENCUMBRANCES, LIENS & INTERESTS

REGISTRATION

NUMBER DATE (D/M/Y) PARTICULARS

RE : SURFACE LEASE UNDER 20 ACRES

CAVEATOR - CANADIAN NATURAL RESOURCES LIMITED.

BOX 6926, STN D

CALGARY

ALBERTA T2P2G1

AGENT - PIONEER LAND SERVICES LTD.

(DATA UPDATED BY: CHANGE OF NAME 042215165)

PAGE 2

102 226 608 +2

122 082 587 20/03/2012 MORTGAGE

MORTGAGEE - SERVUS CREDIT UNION LTD.

BOX 1570 ST PAUL

ALBERTA TOA3AO

ORIGINAL PRINCIPAL AMOUNT: \$383,000

152 206 473 11/07/2015 CAVEAT

RE : UTILITY RIGHT OF WAY CAVEATOR - ATCO ELECTRIC LTD.

ATTENTION: LAND & PROPERTIES, 10035-105 STREET

EDMONTON

ALBERTA T5J2V6

172 044 367 13/02/2017 CAVEAT

RE : AGREEMENT CHARGING LAND

CAVEATOR - SERVUS CREDIT UNION LTD.

151 KARL CLARK ROAD NW

EDMONTON

ALBERTA T6N1H5

AGENT - DARLENE OSINCHUK

202 149 912 23/07/2020 CAVEAT

RE : LEASE INTEREST

CAVEATOR - SCOTFORD AGGREGATES LTD.

BOX 3511

FORT SASKATCHEWAN

ALBERTA T8L2T4

AGENT - JOHN D JENKINS

TOTAL INSTRUMENTS: 006

/ COMPTMED A

THE REGISTRAR OF TITLES CERTIFIES THIS TO BE AN ACCURATE REPRODUCTION OF THE CERTIFICATE OF TITLE REPRESENTED HEREIN THIS 6 DAY OF AUGUST, 2020 AT 11:20 A.M.

ORDER NUMBER: 39855210
CUSTOMER FILE NUMBER:



END OF CERTIFICATE

THIS ELECTRONICALLY TRANSMITTED LAND TITLES PRODUCT IS INTENDED FOR THE SOLE USE OF THE ORIGINAL PURCHASER, AND NONE OTHER, SUBJECT TO WHAT IS SET OUT IN THE PARAGRAPH BELOW.

THE ABOVE PROVISIONS DO NOT PROHIBIT THE ORIGINAL PURCHASER FROM INCLUDING THIS UNMODIFIED PRODUCT IN ANY REPORT, OPINION, APPRAISAL OR OTHER ADVICE PREPARED BY THE ORIGINAL PURCHASER AS PART OF THE ORIGINAL PURCHASER APPLYING PROFESSIONAL, CONSULTING OR TECHNICAL EXPERTISE FOR THE BENEFIT OF CLIENT(S).

-1-

THIS INDENTURE made this 18 day of June A. D. 2020

BETWEEN:

SCOTFORD AGGREGATES LTD.
BOX 3511
FORT SASKATCHEWAN, ALBERTA, T8L 2T4
(hereinafter referred to as the "Lessee")
OF THE FIRST PART

-AND-

BARRY WAYNE CHERNIWCHAN AND CINDY CHERNIWCHAN

BOX 103 BELLIS, ALBERTA, TOA 0.00

382 | Smooth LAKE, TOA 300 (hereinafter referred to as the "Lessor")

OF THE SECOND PART

WHEREAS the Lesser is the registered owner of the lands hereinafter described and composed as follows: LSD's

QUARTER NE-6-60-15-4

Excepting thereout all mines and minerals and the right to work the same.

all of which land is hereinafter referred to as "the said lands".

AND WHEREAS the Lessor is entitled to all sand and gravel contained within the said lands.

AND WHEREAS the lessee is interested in obtaining a lease to remove the same.

THEREFORE THE PARTIES AGREE AS FOLLOWS:

-2-

1.	Subject to the terms, conditions and provisions contained herein, the Lessor leases
to th	e Lessee such portion of the said lands as may be reasonably required by the Lessee
from said	time to time for the sole purpose of removing sand and gravel and clay from the lands.
2.	This lease shall be in effect for a period of 10 years from the 18 th day
of_	JUNE , A.D. 2020 . The Lessee shall have the
optio	on to extend this lease for a further 5 years on the same terms herein contained except
	royalty. The Lessee may exercise the option by notice given to the Lessor not later
tnan	June 18, 2029 . If the parties cannot agree as to the royalty to apply during the
optio	on period then the royalty shall be determined by arbitration pursuant to the Alberta
Arbi	tration Act.
	d O Go
3.	(a) Lessee shall pay to the Lessor as a royalty for each metric tonne of Gravel
	(b) Lessee shall pay to the Lessor as a royalty Sand for each metric tonne of Sand
	(a) Lessee shall pay to the Lessor as a royalty Gravel (b) Lessee shall pay to the Lessor as a royalty Sand (c) Lessee shall pay to the Lessor as a royalty Clay for each metric tonne of Bullet for each metric tonne of Bullet for each metric tonne of Bullet
of sa	nd and gravel removed from the said lands during the term of the Lease.
4.	Fees required to be paid by the Lessee to the Lessor for each Metric Tonne of
	and gravel or clay removed from the said lands shall be paid to the Lessor as per
	Quarterly payment schedule. & Q & C
5.	Any royalty payment not made by the date it is due shall bear interest at the rate
of R	oyal Bank Prime plus one per cent (1%) per month until paid.
6.	The Lessee may clear brush and undergrowth from such portions of the said lands

may be reasonably necessary to explore for sand and/or gravel or to locate pits, quarries

and stockpile areas. In order to obtain access to the said lands and to carry on its

operations hereunder, the Lessee shall have the right to make all roadways presently

existing on the said lands and shall have the further right to build such additional roads on

-3-

the said lands as may be necessary for the production and removal of sand and/or gravel therefrom the said lands and Lessee shall not be required to pay royalties to Lessor for any sand or gravel used. In conducting its operations on said lands, Lessee shall at all times attempt to minimize the interference by the Lessee with the use of the surface of the land not being actively mined. Lessee has the right to install such machinery and equipment as may be useful to the lessee in connection with its operations hereunder on the said lands.

- 7. Lessee shall comply with all laws and regulations of any government authority with respect to the removal and replacement of overburden in carrying on its operations on the said lands; without limiting the generality of the foregoing, the Lessee shall, in digging pits for the purpose of producing and removing sand and/or gravel therefrom, make separate stockpiles of topsoil and of waste substances. On completion of the removal of sand and/or gravel from any mine pits that have been dug on the said lands, Lessee will place any unused waste substances and materials used for roadways back into the pits from which such substances and material were removed with topsoil placed on top. The lessee will backslope such pits using such substances and materials as may have been removed from such pits. Before the expiration of the lease, the Lessee will restore the surface of the said lands to the same condition, so far as may be practicable, as existed before his entry thereon.
- 8. Lessor shall pay all real estate taxes levied against the said lands and mortgage payments before the same become delinquent. In the event Lessor fails to pay any such taxes, Lessee may, at its option, pay any such taxes and assessments and mortgage payments as may be levied against said lands and deduct the amount of such payments

-4-

together with any penalties or interest required to be paid and paid by Lessee from any amount thereafter due to lessor hereunder. Lessee shall pay all taxes levied in respect of its operations, undertaking and equipment upon the said lands.

- 9. All improvements and equipment placed on the said lands by the Lessee shall remain the property of the Lessee and the Lessee shall have the right to remove such property prier to the expiration of this lease. On termination of this lease for any cause, the Lessee shall have the right to remove all such improvements and equipment within a reasonable time, all subject to payment of the royalties provided for herein.
- 10. Lessee shall indemnify the Lessor from liability for all claims, damages and/or injuries to persons or properties including without limiting the generality of the foregoing, claims brought by third parties against the Lessor arising from the acts or omissions of the Lessee, its agents, contractors or employees during the term hereof, and claims for the reasonable value of any livestock and crops that may be damaged or destroyed or injured by the Lessee, its agents or employees.
- 11. The Lessee shall indemnify and save harmless the Lessor, and does hereby release the Lessor, in respect of any claim for damages to the property or person of the Lessee, its employees, invitees or licensees not attributable to the Lessor while on the said lands pursuant to the lease.
- 12. In the event any default occurs in performance of any term or condition of this lease by Lessee, Lessor shall have the right to give the Lessee thirty (30) days notice in writing demanding the correction or removal of such default. In the event Lessee fails to correct or remove such default within such thirty (30) day period, Lessor may, without

-5-

prejudice to any other right or remedy, terminate this lease. If this lease is terminated by the Lessor pursuant to this section, Lessor's rights and remedies as against the Lessee shall survive the termination of this lease.

- 13. The Lessee covenants not to carry on any business or operation on the said lands which shall be deemed a nuisance and will at all times make adequate provision in its operations to maintain continuing support for adjacent premises so as to effectually prevent cave-ins, subsidence or any other condition which would adversely affect any adjacent owned or occupiers right to support.
- 14. The Lessee shall pay all accounts of every kind for wages, supplies, Worker's Compensation, assessments and all other accounts and indebtedness incurred by it in connection with any operations carried on by the Lessee in or upon the said lands as such payments become due and payable so that no claim or lien can arise from the Lessee's operations on said lands. In particular, the Lessee shall be responsible for all security deposits or other amounts payable by reason of the Land Surface Conservations and Reclamation Act and regulations passed pursuant thereto as amended or substituted from time to time and the requirements of the municipality within which the said lands are located.
- 15. The Lessee shall at all times during the term of this lease maintain in full force and effect with respect to its sand and/or gravel operations on the said lands the following insurance with insurance companies authorized to carry on business in the Province of Alberta.

Public liability and property damage insurance covering the sand and/or gravel mining and removal operations of the Lessee with a limit of not less than the sand and/or gravel

-6-

Million (\$2,000,000.00) Dollars per occurrence;

Automobile public liability and property damage covering all automotive units engaged in the sand and/or gravel mining and removal operations of the Lessee with a limit of not less than One Million (\$1,000,000.00) Dollars per occurrence.

- 16. The Lessee's obligations to pay royalty to the Lessor, to indemnify the Lessor and to reclaim the said lands shall survive the expiration of the lease term.
- 17. The Lessee shall provide the Lessor with copies of all plans filed with and permits and/or approvals obtained from any governing authority with respect to the operations carried out by the Lessee on the said lands.
- 18. The provisions of this lease shall bind and ensure to the benefit of the Lessor and the Lessee and their respective successors, legal representatives and assigns.
- 19. All disputes or differences between the parties hereto as to a matter herein specified to be the subject of arbitration shall be referred (unless the parties concur in the appointment of a single arbitrator) to two arbitrators (one to be appointed by each party to the dispute or difference) who shall be instrument in writing appoint a third arbitrator immediately after they are themselves appointed.

The parties shall be deemed to have failed to concur in the appointment of a single arbitrator if such an arbitrator shall not have been appointed fifteen (15) clear days after the service by either party on the other of a notice requesting it to concur in the appointment of such and arbitrator.

If either party shall neglect or refuse to appoint an arbitrator within fifteen (15)clear days

-7-

after the other party (provided such other party has appointed his arbitrator) has served the party with notice to make the appointment, the party who has appointed its arbitrator shall be entitled to apply to a Justice of the Court of Queen's Bench of Alberta to have him appoint an arbitrator for the party in default. Any arbitrator appointed under the provision of this Clause by the joint concurrence of the parties, by either party, by the arbitrators, or by a Justice of the Court of Queen's Bench of Alberta shall be possessed of such technical or other qualifications as may be reasonably necessary to enable him to properly adjudicate upon the dispute or difference.

Upon expiration of this agreement, the Lessee shall have access to any processed product stockpile for sixty (60) months after termination.

IN WITNESS WHEREOF the Lessor and Lessee have executed and delivered this Lease

and Grant, the day and year first above written.

SIGNED, SEALED AND DELIVERED

-in the presence of

LESSOR:	
	PER: CHERNING

LESSEE: SCOTFORD AGGREGATES LTD.



LAND TITLE CERTIFICATE

SHORT LEGAL LINC 0023 530 042 4;15;60;6;NE

TITLE NUMBER 012 072 927

LEGAL DESCRIPTION

MERIDIAN 4 RANGE 15 TOWNSHIP 60

QUARTER NORTH EAST

EXCEPTING THEREOUT ALL MINES AND MINERALS AREA: 64.7 HECTARES (160 ACRES) MORE OR LESS

ESTATE: FEE SIMPLE

MUNICIPALITY: SMOKY LAKE COUNTY REFERENCE NUMBER: 012 072 926

REGISTERED OWNER(S)

REGISTRATION DATE (DMY) DOCUMENT TYPE VALUE CONSIDERATION

012 072 927 13/03/2001 TRANSFER OF LAND \$32,000 \$32,000

OWNERS

BARRY CHERNIWCHAN

CINDY CHERNIWCHAN

BOTH OF:

BOX 103

BELLIS

ALBERTA TOA 0J0 AS JOINT TENANTS

ENCUMBRANCES, LIENS & INTERESTS

REGISTRATION

NUMBER DATE (D/M/Y) PARTICULARS

012 352 592 02/11/2001 CAVEAT

RE : SURFACE LEASE UNDER 20 ACRES CAVEATOR - CANADIAN NATURAL RESOURCES LIMITED. BOX 6926, STN D

(CONTINUED)

ENCUMBRANCES, LIENS & INTERESTS

PAGE 2 # 012 072 927

REGISTRATION

NUMBER DATE (D/M/Y)

PARTICULARS

CALGARY

ALBERTA T2P2G1

AGENT - PIONEER LAND SERVICES LTD.

(DATA UPDATED BY: CHANGE OF NAME 042227536)

022 036 933 30/01/2002 CAVEAT

RE : PIPELINE RIGHT OF WAY

CAVEATOR - CANADIAN NATURAL RESOURCES LIMITED.

BOX 6926, STATION "D"

CALGARY

ALBERTA T2P2G1

AGENT - PIONEER LAND SERVICES LTD.

052 302 739 23/07/2005 UTILITY RIGHT OF WAY

GRANTEE - CANADIAN NATURAL RESOURCES LIMITED.

122 082 584 20/03/2012 MORTGAGE

MORTGAGEE - SERVUS CREDIT UNION LTD.

BOX 1570 ST PAUL

ALBERTA TOASAO

ORIGINAL PRINCIPAL AMOUNT: \$383,000

172 044 363 13/02/2017 CAVEAT

RE : AGREEMENT CHARGING LAND

CAVEATOR - SERVUS CREDIT UNION LTD.

151 KARL CLARK ROAD NW

EDMONTON

ALBERTA T6N1H5

AGENT - DARLENE OSINCHUK

TOTAL INSTRUMENTS: 005

THE REGISTRAR OF TITLES CERTIFIES THIS TO BE AN ACCURATE REPRODUCTION OF THE CERTIFICATE OF TITLE REPRESENTED HEREIN THIS 15 DAY OF JUNE, 2020 AT 12:20 P.M.

ORDER NUMBER: 39510901

CUSTOMER FILE NUMBER:

TO THE PARTY OF TH

END OF CERTIFICATE

(CONTINUED)

THIS ELECTRONICALLY TRANSMITTED LAND TITLES PRODUCT IS INTENDED FOR THE SOLE USE OF THE ORIGINAL PURCHASER, AND NONE OTHER, SUBJECT TO WHAT IS SET OUT IN THE PARAGRAPH BELOW.

THE ABOVE PROVISIONS DO NOT PROHIBIT THE ORIGINAL FURCHASER FROM INCLUDING THIS UNMODIFIED PRODUCT IN ANY REPORT, OPINION, APPRAISAL OR OTHER ADVICE PREPARED BY THE ORIGINAL PURCHASER AS PART OF THE ORIGINAL PURCHASER APPLYING PROFESSIONAL, CONSULTING OR TECHNICAL EXPERTISE FOR THE BENEFIT OF CLIENT(S).

ANNUAL ROYALTY PAYMENT SCHEDULE

- 1st Quarter January 1 to March 31 Paid by 15th of April.
- 2nd Quarter April 1 to June 30 Paid by 15th of July.
- 3rd Quarter July 1 to Sept 30 Paid by 15th of October.
- 4th Quarter October 1 to December 31 Paid by 15th of January.

This procedure aligns with the County quarterly levy payment schedule.

A copy of the County quarterly Levy report will be included with the quarterly Royalty payment. The levy copies of the scale tickets are retained at the Scotford office and are available for examination if required.

-1-

THIS INDENTURE made this 18 day of June A. D. 2020

BETWEEN:

SCOTFORD AGGREGATES LTD.
BOX 3511
FORT SASKATCHEWAN, ALBERTA, T8L 2T4
(hereinafter referred to as the "Lessee")
OF THE FIRST PART

-AND-

BARRY WAYNE CHERNIWCHAN BOX 382 SMOKY LAKE, ALBERTA, T0A 3C0

(hereinafter referred to as the "Lessor")
OF THE SECOND PART

WHEREAS the Lesser is the registered owner of the lands hereinafter described and composed as follows: LSD's

QUARTER SE-7-60-15-4

Excepting thereout all mines and minerals and the right to work the same.

all of which land is hereinafter referred to as "the said lands".

AND WHEREAS the Lessor is entitled to all sand and gravel contained within the said lands.

AND WHEREAS the lessee is interested in obtaining a lease to remove the same.

THEREFORE THE PARTIES AGREE AS FOLLOWS:

1. Subject to the terms, conditions and provisions contained herein, the Lessor leases

-2-

to the Lessee such portion of the said lands as may be reasonably required by the Lessee from time to time for the sole purpose of removing sand and gravel and clay from the said lands.

said	ands.			
2.	This lease shall b	e in effect for a	period of 10	years from the 18 th day BC
of_	JUNE	, A.D	2020	The Lessee shall have the
optio	n to extend this leas	e for a further 5	years on the	same terms herein contained except
than .	June 18, 2029.	If the parties car	not agree as	notice given to the Lessor not later to the royalty to apply during the arbitration pursuant to the Alberta
	ration Act.	yarty small be de	actinitied by	aronation pursuant to the Arocita
Aton	ration Act.			2
3.	(a) Lessee shall p	pay to the Lesso	r as a royalty	for each metric tonne of BRC
	(b) Lessee shall	pay to the Lesso	r as a royalty	for each metric tonne of
	Sand	. 4 7		B BC
	(c) Lessee shall j Clay	nay to the Lesso	r as a royalty	for each metric tonne of BBC

of sand and gravel removed from the said lands during the term of the Lease.

- 4. Fees required to be paid by the Lessee to the Lessor for each Metric Tonne of sand and gravel or clay removed from the said lands shall be paid to the Lessor as per Quarterly payment schedule
- Any royalty payment not made by the date it is due shall bear interest at the rate of Royal Bank Prime plus one per cent (1%) per month until paid.
- 6. The Lessee may clear brush and undergrowth from such portions of the said lands may be reasonably necessary to explore for sand and/or gravel or to locate pits, quarries and stockpile areas. In order to obtain access to the said lands and to carry on its operations hereunder, the Lessee shall have the right to use all roadways presently existing on the said lands and shall have the further right to build such additional roads on

-3-

the said lands as may be necessary for the production and removal of sand and/or gravel therefrom the said lands and Lessee shall not be required to pay royalties to Lessor for any sand or gravel used. In conducting its operations on said lands, Lessee shall at all times attempt to minimize the interference by the Lessee with the use of the surface of the land not being actively mined. Lessee has the right to install such machinery and equipment as may be useful to the lessee in connection with its operations hereunder on the said lands.

- 7. Lessee shall comply with all laws and regulations of any government authority with respect to the removal and replacement of overburden in carrying on its operations on the said lands; without limiting the generality of the foregoing, the Lessee shall, in digging pits for the purpose of producing and removing sand and/or gravel therefrom, make separate stockpiles of topsoil and of waste substances. On completion of the removal of sand and/or gravel from any mine pits that have been dug on the said lands, Lessee will place any unused waste substances and materials used for roadways back into the pits from which such substances and material were removed with topsoil placed on top. The lessee will backslope such pits using such substances and materials as may have been removed from such pits. Before the expiration of the lease, the Lessee will restore the surface of the said lands to the same condition, so far as may be practicable, as existed before his entry thereon.
- 8. Lessor shall pay all real estate taxes levied against the said lands and mortgage payments before the same become delinquent. In the event Lessor fails to pay any such taxes, Lessee may, at its option, pay any such taxes and assessments and mortgage payments as may be levied against said lands and deduct the amount of such payments

-4-

together with any penalties or interest required to be paid and paid by Lessee from any amount thereafter due to lessor hereunder. Lessee shall pay all taxes levied in respect of its operations, undertaking and equipment upon the said lands.

- 9. All improvements and equipment placed on the said lands by the Lessee shall remain the property of the Lessee and the Lessee shall have the right to remove such property prier to the expiration of this lease. On termination of this lease for any cause, the Lessee shall have the right to remove all such improvements and equipment within a reasonable time, all subject to payment of the royalties provided for herein.
- 10. Lessee shall indemnify the Lessor from liability for all claims, damages and/or injuries to persons or properties including without limiting the generality of the foregoing, claims brought by third parties against the Lessor arising from the acts or omissions of the Lessee, its agents, contractors or employees during the term hereof, and claims for the reasonable value of any livestock and crops that may be damaged or destroyed or injured by the Lessee, its agents or employees.
- 11. The Lessee shall indemnify and save harmless the Lessor, and does hereby release the Lessor, in respect of any claim for damages to the property or person of the Lessee, its employees, invitees or licensees not attributable to the Lessor while on the said lands pursuant to the lease.
- 12. In the event any default occurs in performance of any term or condition of this lease by Lessee, Lessor shall have the right to give the Lessee thirty (30) days notice in writing demanding the correction or removal of such default. In the event Lessee fails to correct or remove such default within such thirty (30) day period, Lessor may, without prejudice to any other right or remedy, terminate this lease. If this lease is terminated by

-5-

the Lessor pursuant to this section, Lessor's rights and remedies as against the Lessee shall survive the termination of this lease.

- 13. The Lessee covenants not to carry on any business or operation on the said lands which shall be deemed a nuisance and will at all times make adequate provision in its operations to maintain continuing support for adjacent premises so as to effectually prevent cave-ins, subsidence or any other condition which would adversely affect any adjacent owned or occupiers right to support.
- 14. The Lessee shall pay all accounts of every kind for wages, supplies, Worker's Compensation, assessments and all other accounts and indebtedness incurred by it in connection with any operations carried on by the Lessee in or upon the said lands as such payments become due and payable so that no claim or lien can arise from the Lessee's operations on said lands. In particular, the Lessee shall be responsible for all security deposits or other amounts payable by reason of the Land Surface Conservations and Reclamation Act and regulations passed pursuant thereto as amended or substituted from time to time and the requirements of the municipality within which the said lands are located.
- 15. The Lessee shall at all times during the term of this lease maintain in full force and effect with respect to its sand and/or gravel operations on the said lands the following insurance with insurance companies authorized to carry on business in the Province of Alberta.

Public liability and property damage insurance covering the sand and/or gravel mining and removal operations of the Lessee with a limit of not less than

-6-

Million (\$2,000,000.00) Dollars per occurrence;

Automobile public liability and property damage covering all automotive units engaged in the sand and/or gravel mining and removal operations of the Lessee with a limit of not less than One Million (\$1,000,000.00) Dollars per occurrence.

- 16. The Lessee's obligations to pay royalty to the Lessor, to indemnify the Lessor and to reclaim the said lands shall survive the expiration of the lease term.
- 17. The Lessee shall provide the Lessor with copies of all plans filed with and permits and/or approvals obtained from any governing authority with respect to the operations carried out by the Lessee on the said lands.
- 18. The provisions of this lease shall bind and ensure to the benefit of the Lessor and the Lessee and their respective successors, legal representatives and assigns.
- 19. All disputes or differences between the parties hereto as to a matter herein specified to be the subject of arbitration shall be referred (unless the parties concur in the appointment of a single arbitrator) to two arbitrators (one to be appointed by each party to the dispute or difference) who shall be instrument in writing appoint a third arbitrator immediately after they are themselves appointed.

The parties shall be deemed to have failed to concur in the appointment of a single arbitrator if such an arbitrator shall not have been appointed fifteen (15) clear days after the service by either party on the other of a notice requesting it to concur in the appointment of such and arbitrator.

If either party shall neglect or refuse to appoint an arbitrator within fifteen (15)clear days after the other party (provided such other party has appointed his arbitrator) has served -7-

the party with notice to make the appointment, the party who has appointed its arbitrator shall be entitled to apply to a Justice of the Court of Queen's Bench of Alberta to have him appoint an arbitrator for the party in default. Any arbitrator appointed under the provision of this Clause by the joint concurrence of the parties, by either party, by the arbitrators, or by a Justice of the Court of Queen's Bench of Alberta shall be possessed of such technical or other qualifications as may be reasonably necessary to enable him to properly adjudicate upon the dispute or difference.

Upon expiration of this agreement, the Lessee shall have access to any processed product stockpile for sixty (60) months after termination.

IN WITNESS WHEREOF the Lessor and Lessee have executed and delivered this Lease

and Grant, the day and year first above written.

SIGNED, SEALED AND DELIVERED

-in the presence of

LESSOR:		
	PER: By	Bony Cherninghan
	PER:	

LESSEE: SCOTFORD AGGREGATES LTD.



LAND TITLE CERTIFICATE

LINC SHORT LEGAL

0034 375 189 4;15;60;7;SE

TITLE NUMBER 102 226 608 +2

LEGAL DESCRIPTION

MERIDIAN 4 RANGE 15 TOWNSHIP 60

SECTION 7

QUARTER SOUTH EAST

CONTAINING 64.7 HECTARES (160 ACRES) MORE OR LESS

EXCEPTING THEREOUT:

HECTARES (ACRES) MORE OR LESS

A) PLAN 2228ET - ROAD B) PLAN 0826383 - DESCRIPTIVE 4.00

0.737 1.82 4.00 9.88

C) PLAN 1024024 - ROAD

0.883 2.06

EXCEPTING THEREOUT ALL MINES AND MINERALS

ESTATE: FEE SIMPLE

MUNICIPALITY: SMOKY LAKE COUNTY

REFERENCE NUMBER: 102 077 560

REGISTERED OWNER(S)

REGISTRATION DATE (DMY) DOCUMENT TYPE VALUE CONSIDERATION

102 226 608 30/06/2010 ROAD PLAN

OWNERS

BARRY WAYNE CHERNIWCHAN OF POST OFFICE BOX 382 SMOKY LAKE

ALBERTA TOA 3CO

(DATA UPDATED BY: CHANGE OF ADDRESS 102273088)

ENCUMBRANCES, LIENS & INTERESTS

REGISTRATION

NUMBER DATE (D/M/Y) PARTICULARS

762 034 709 01/03/1976 UTILITY RIGHT OF WAY

GRANTEE - THE COUNTY OF SMOKY LAKE NO. 13.

012 352 593 02/11/2001 CAVEAT

(CONTINUED)

ENCUMBRANCES, LIENS & INTERESTS

PARTICULARS

PAGE 2

REGISTRATION

NUMBER DATE (D/M/Y)

102 226 608 +2

RE : SURFACE LEASE UNDER 20 ACRES

CAVEATOR - CANADIAN NATURAL RESOURCES LIMITED.

BOX 6926, STN D

CALGARY

ALBERTA T2P2G1

AGENT - PIONEER LAND SERVICES LTD.

(DATA UPDATED BY: CHANGE OF NAME 042215165)

122 082 587 20/03/2012 MORTGAGE

MORTGAGEE - SERVUS CREDIT UNION LTD.

BOX 1570 ST PAUL

ALBERTA TOASAO

ORIGINAL PRINCIPAL AMOUNT: \$383,000

152 206 473 11/07/2015 CAVEAT

RE : UTILITY RIGHT OF WAY CAVEATOR - ATCO ELECTRIC LTD.

ATTENTION: LAND & PROPERTIES, 10035-105 STREET

EDMONTON

ALBERTA T5J2V6

172 044 367 13/02/2017 CAVEAT

RE : AGREEMENT CHARGING LAND

CAVEATOR - SERVUS CREDIT UNION LTD.

151 KARL CLARK ROAD NW

EDMONTON

ALBERTA T6N1H5

AGENT - DARLENE OSINCHUK

TOTAL INSTRUMENTS: 005

THE REGISTRAR OF TITLES CERTIFIES THIS TO BE AN ACCURATE REPRODUCTION OF THE CERTIFICATE OF TITLE REPRESENTED HEREIN THIS 15 DAY OF JUNE, 2020 AT 12:20 P.M.

ORDER NUMBER: 39510901

CUSTOMER FILE NUMBER:

END OF CERTIFICATE

(CONTINUED)

THIS ELECTRONICALLY TRANSMITTED LAND TITLES PRODUCT IS INTENDED FOR THE SOLE USE OF THE ORIGINAL PURCHASER, AND NONE OTHER, SUBJECT TO WHAT IS SET OUT IN THE PARAGRAPH BELOW.

THE ABOVE PROVISIONS DO NOT PROHIBIT THE ORIGINAL PURCHASER FROM INCLUDING THIS UNMODIFIED PRODUCT IN ANY REPORT, OPINION, APPRAISAL OR OTHER ADVICE PREPARED BY THE ORIGINAL PURCHASER AS PART OF THE ORIGINAL PURCHASER APPLYING PROFESSIONAL, CONSULTING OR TECHNICAL EXPERTISE FOR THE BENEFIT OF CLIENT(S).

ANNUAL ROYALTY PAYMENT SCHEDULE

- 1st Quarter January 1 to March 31 Paid by 15th of April.
- 2nd Quarter April 1 to June 30 Paid by 15th of July.
- 3rd Quarter July 1 to Sept 30 Paid by 15th of October.
- 4th Quarter October 1 to December 31 Paid by 15th of January.

This procedure aligns with the County quarterly levy payment schedule.

A copy of the County quarterly Levy report will be included with the quarterly Royalty payment. The levy copies of the scale tickets are retained at the Scotford office and are available for examination if required.



Appendix E – Supporting Documentation.



UNKNOWN NA DRILLER

UNKNOWN DRILLER

Water Well Drilling Report

View in Imperial Export to Excel GIC Well ID 194768

The drifler supplies the data contained in this report. The Province disclaims responsibility for its accuracy. The information on this report will be retained in a public database.

Drilling Company Well ID

Date Report Received 1970/06/29 Well Identification and Location Measurement in Metric Town Province Country Postal Code SHERNIWCHAN, METRO TWP Location 1/4 or LSD SEC RGE W of MER Lot Block Plan Additional Description Measured from Boundary of Latitude 54.169739 Longitude -112.232271 m from How Elevation Obtained m from Map Not Obtained Drilling Information Method of Drilling Type of Work Chemistry Hand Dug Yield Test Summary Measurement in Metric Measurement in Metric 0.00 L/min Lithology Description Recommended Pump Rate ground level (m) Bearing Test Date Water Removal Rate (L/min) Static Water Level (m) 1970/06/23 Well Completion Total Depth Drilled Finished Well Depth Start Date 3.66 m Diameter (cm) From (m) 0.00 0.00 Well Casing/Liner Surface Casing (if applicable) Size OD : Size OD: 0.00 cm Wall Thickness: 0.000 cm Wall Thickness: 0.000 cm Bottom at: 0.00 m Top at : 0.00 m Bottom at: 0.00 m Diameter or Hole or Slot Slot Width Slot Length (cm) From (m) To (m) (cm) Interval(cm) Perforated by Annular Seal 0.00 m to 0.00 m Placed from Amount Screen Type Size OD: 0.00 cm Slot Size (cm) Attachment Top Fittings Bottom Fittings Grain Size Туре Amount Contractor Certification Name of Journeyman responsible for drilling/construction of well Certification No.

Printed on 10/20/2020 2:56:05 PM Page: 1 / 2

Copy of Well report provided to owner Date approval holder signed



Water Well Drilling Report GIC Well ID GOA Well Tag No. Export to Excel 194768

GOWN ID		T	he driller supplic ccuracy. The inf	s the data or ormation on	contained in this rep this report will be r	ort. The Prov etained in a p	ince disclaims ublic database	responsibility n.	for its	Drilling Compan Date Report Re	y Well ID	1970/06/29
Well Ident	tification and L	ocation									Me	asurement in Metric
Owner Nan SHERNIW	ne CHAN, METRO		Address BELLIS			Town			Province	Coun	itry	Postal Code
Location	1/4 or LSD SE	SEC 7	TWP 60	RGE 15	W of MER 4	Lot	Block	Plan	Additio	nal Description		
Measured I		m from m from			GPS Coordin Latitude <u>5</u> How Location Map	4.169739				Elevation How Elevation Not Obtained		m
Additional	Information										Me	asurement in Metric
	From Top of Cas an Flow						s Flow Cont	rol Installed				
	Rate		L/min					Describe				
l .	ended Pump Rate ended Pump Inta	7			0.00 L/min		Installed_			Depth	m H.P.	
										Model (Outpo	ut Rating)	
Addition	nal Comments or	ı Well	C	las	Depth				physical Log Submitted to Potability	ESRD		o ESRD <u>Yes</u>
Yield Test	t							Tak	en From G	iround Level	Mea	asurement in Metric
Test Date		Start Tin	10	Stati	c Water Level				Dept	h to water level		
1970/06/2		12:00 AM		-	2.44 m		Pum	ping (m)		lapsed Time Minutes:Sec		Recovery (m)
Depth Wil	f Water Remova Type _ Removal Rate _ thdrawn From _ moval period wa		0.00 m			_						
Water Div	erted for Drillin	ng										
Water Soul	rce			Am	ount Taken L				Diversio	n Date & Time		

Water Source	Amount Taken L	Diversion Date & Time

Contractor Certification		
Name of Journeyman responsible for drilling/construction of well UNKNOWN NA DRILLER	Certification No	
Company Name UNKNOWN DRILLER	Copy of Well report provided to owner	Date approval holder signed

Printed on 10/20/2020 2:56:05 PM



HRA Number: 4650-20-0098-001

November 18, 2020

Historical Resources Act Approval

Proponent: Scotford Aggregates Ltd.

8511 - 115 Street, Fort Saskatchewan, AB T8L 2T4

Contact: Todd Berg

Agent: Consultant

Contact: Grant Woynarowich

Project Name: Scotford Aggregates - Cherniwchan Pit

Project Components: Sand / Gravel Extraction

Access Road

Application Purpose: Requesting HRA Approval / Requirements

Historical Resources Act approval is granted for the activities described in this application and its attached plan(s)/sketch(es) subject to Section 31, "a person who discovers an historic resource in the course of making an excavation for a purpose other than for the purpose of seeking historic resources shall forthwith notify the Minister of the discovery." The chance discovery of historical resources is to be reported to the contacts identified within Standard Reguirements under the Historical Resources Act: Reporting the Discovery of Historic Resources.

Martina Purdon
Manager, Regulatory Approvals
and Information Management
Alberta Culture, Multiculturalism
and Status of Women

Lands Affected: All New Lands

Proposed Development Area:

MER	RGE	TWP	SEC	LSD Lis
4	15	60	7	1-2
4	15	60	6	15-16

Documents Attached:

Document Name Document Type reclamation plan Illustrative Material site location map Illustrative Material

OPaC HR Application # 019335583

LIDM Droiget # 4650 20 0000

Page 1 of 1



STANDARD REQUIREMENTS UNDER THE HISTORICAL RESOURCES ACT: REPORTING THE DISCOVERY OF HISTORIC RESOURCES

If development proponents and/or their agents become aware of historic resources during the course of development activities, they are required, under Section 31 of the *Historical Resources Act*, to report these discoveries to the Heritage Division of Alberta Culture, Multiculturalism and Status of Women. This requirement applies to all activities in the Province of Alberta.

1.0 REPORTING THE DISCOVERY OF ARCHAEOLOGICAL RESOURCES

The discovery of archaeological resources is to be reported to Darryl Bereziuk, Director, Archaeological Survey, at 780-431-2316 (toll-free by first dialing 310-0000) or darryl.bereziuk@qov.ab.ca.

2.0 REPORTING THE DISCOVERY OF PALAEONTOLOGICAL RESOURCES

The discovery of palaeontological resources is to be reported to Dan Spivak, Head, Resource Management, Royal Tyrrell Museum of Palaeontology, at 403-820-6210 (toll-free by first dialing 310-0000) or dan.spivak@gov.ab.ca.

3.0 REPORTING THE DISCOVERY OF HISTORIC PERIOD SITES

The discovery of historic structures to be reported to Rebecca Goodenough, Manager, Historic Places Research and Designation Program, at 780-431-2309 (toll-free by first dialing 310-0000) or rebecca.goodenough@gov.ab.ca. Please note that some historic structure sites may also be considered Aboriginal traditional use sites.

4.0 REPORTING THE DISCOVERY OF ABORIGINAL TRADITIONAL USE SITES

The discovery of any Aboriginal traditional use site that is of a type listed below is to be reported to Valerie Knaga, Director, Aboriginal Heritage Section, at 780-431-2371 (toll-free by first dialing 310-0000) or valerie.k.knaga@gov.ab.ca.

Aboriginal Traditional Use sites considered by Alberta Culture, Multiculturalism and Status of Women to be historic resources under the *Historical Resources Act* include:

Historic cabin remains; Historic cabins (unoccupied); Cultural or historical community camp sites;

Page 1 of 2



STANDARD REQUIREMENTS UNDER THE HISTORICAL RESOURCES ACT: REPORTING THE DISCOVERY OF HISTORIC RESOURCES

Ceremonial sites/Spiritual sites; Gravesites; Historic settlements/Homesteads; Historic sites; Oral history sites; Ceremonial plant or mineral gathering sites; Historical Trail Features; and, Sweat/Thirst/Fasting Lodge sites

5.0 FURTHER SALVAGE, PRESERVATIVE OR PROTECTIVE MEASURES

If previously unrecorded historic resources are discovered, proponents may be ordered to undertake further salvage, preservative or protective measures or take any other actions that the Minister of Alberta Culture, Multiculturalism and Status of Women considers necessary.

From: opac_do_not_reply@gov.ab.ca
Subject: Historic Resources Application - Application #: 019335583 - Accepted
Date: November 5, 2020 at 1:06 PM

To: grant.woynarowich@gmail.com



Name: Mr. Grant Woynarowich Affiliation: Consultant

Application Type: Historic Resources Application Application No: 019335583, Revision No: 01 Original Submission Date: Nov 05, 2020

https://www.opac.alberta.ca/Default.aspx?PossePresentation=External&PosseObjectId=19335583 (Click the link above to view the application OR copy it into the browser address bar.)

49455	4	15	58	9 13	5 W4-R15-T058-S09 p	
25604	4	15	58	16 4,5,12-14	5 W4-R15-T058-S16 a, p	р
53533	4	15	58	16 11	5 W4-R15-T058-S16 p	
41150	4	15	58	17 1,2	5 W4-R15-T058-S17 a, p	р
39119	4	15	58	20 9,15,16	5 W4-R15-T058-S20 a, p	р
53475	4	15	58	20 8	5 W4-R15-T058-S20 p	
34844	4	15	58	21 4,5,12	5 W4-R15-T058-S21 a, p	р
37270	4	15	58	21 3,6,13	5 W4-R15-T058-S21 p	
32439	4	15	58	25 13-16	5 W4-R15-T058-S25 a	
69777	4	15	58	27 9	1 W4-R15-T058-S27 h	
22862	4	15	58	29 2,3,5-7,12	5 W4-R15-T058-S29 a, p	р
39856	4	15	58	29 1,4	5 W4-R15-T058-S29 p	
33513	4	15	58	30 8,9,15,16	5 W4-R15-T058-S30 a, p	р
53463	4	15	58	30 10	5 W4-R15-T058-S30 p	
14188	4	15	58	31 1-6,11-13	5 W4-R15-T058-S31 a, p	р
69486	4	15	58	32 3-6,11,12	1 W4-R15-T058-S32 h	
24002	4	15	58	36 1,4-8	5 W4-R15-T058-S36 a	
62182	4	15	58	36 2,3	4 W4-R15-T058-S36 a	
17343	4	15	59	6 5,7-10,14-16	5 W4-R15-T059-S06 a	
15872	4	15	59	6 1-4,6,11-13	5 W4-R15-T059-S06 a, p	р
17440	4	15	67	25 9-16	5 W4-R15-T067-S25 a	
32980	4	15	67	26 9,10,15,16	5 W4-R15-T067-S26 a	
14144	4	15	67	35 2-6,11-14	5 W4-R15-T067-S35 a	
51066	4	15	67	36 1	5 W4-R15-T067-S36 a	
45945	4	15	68	2 4	5 W4-R15-T068-S02 a	
8034	4	15	68	3 1,2,5-14	5 W4-R15-T068-S03 a	
62989	4	15	68	3 12	4 W4-R15-T068-S03 a	
15151	4	15	68	4 7-11,13-16	5 W4-R15-T068-S04 a	
65109	4	15	68	4 9	4 W4-R15-T068-S04 a	
50131	4	15	68	5 16	5 W4-R15-T068-S05 a	
14284	4	15	68	7 5-7,10-15	5 W4-R15-T068-S07 a	
60352	4	15	68	7 11,12	4 W4-R15-T068-S07 a	
15115	4	15	68	8 1,7-11,13-15	5 W4-R15-T068-S08 a	
56904	4	15	68	9 3-6	4 W4-R15-T068-S09 a	
14228	4	15	68	9 2-7,10-12	5 W4-R15-T068-S09 a	
33795	4	15	68	17 3-5	5 W4-R15-T068-S17 a	
11289	4	15	68	18 1-4,7-10,12,13	5 W4-R15-T068-S18 a	
29515	4	15	68	19 4,5,12,13	5 W4-R15-T068-S19 a	
44282	4	15	68	24 8,9	5 W4-R15-T068-S24 a	
66300	4	15	68	24 16	4 W4-R15-T068-S24 c	

Locations not included in; Listing of Historical Resources

APPENDIX D GENERAL LOCATION MAP

