RU RURAL

SR LIMITED SERVICES RURAL

MAR-h MINERAL AGGREGATE RESOURCES RESERVE

MXP MINERAL AGGREGATE RESOURCES PIT

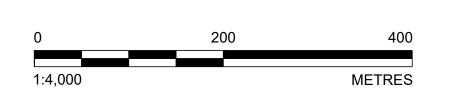
ZONES WITH AN "h" FOLLOWING THE ZONE SYMBOL (e.g. MAR-h) ILLUSTRATES PROPERTIES WHICH HAVE BEEN PLACED IN A HOLDING ZONE.

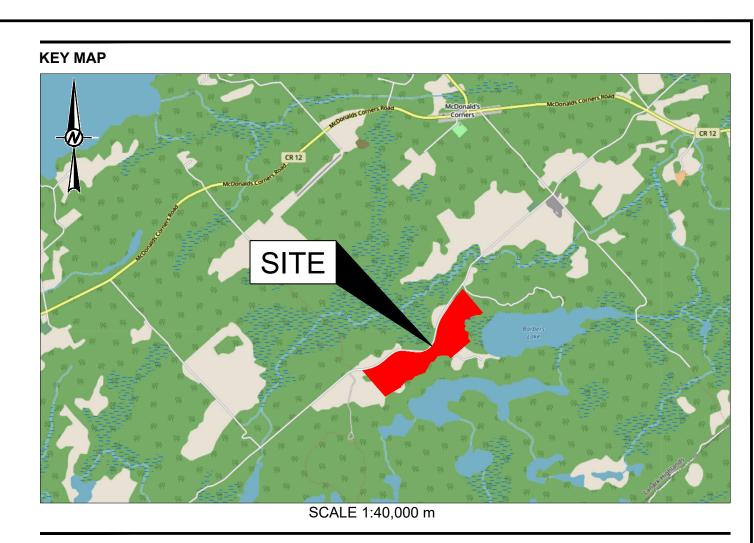


EXISTING FEATURES - GENERAL SCALE 1:4,000 m

CONSTRUCTION LIMITED

AMENDMENTS	DATE	APPROVAL DATE				
SITE PLANS APPROVED BY THE MINISTRY OF NATURAL RESOURCES.						
SIGNATURE		DATE				





HIGHLAND LINE PIT

LOT 5, CONCESSION 10 GEOGRAPHIC TOWNSHIP OF DALHOUSIE TOWNSHIP OF LANARK HIGHLANDS,

LANARK COUNTY, ONTARIO APPLICANT:

THOMAS CAVANAGH CONSTRUCTION LIMITED 9094 CAVANAGH ROAD ASHTON, ONTARIO

PIT LICENCE NO. 626599

NOTE(S)

1. LICENCED AREA, HIGHLAND LINE PIT 37.6 HECTARES.

- AREA OF OPERATION, HIGHLAND LINE PIT <u>28.4</u> HECTARES.
 THIS SITE PLAN IS PEPARED UNDER THE AGGREGATE RESOURCES ACT FOR A CLASS A LICENCE FOR A PIT BELOW THE GROUND WATER TABLE.
- 4. THIS PLAN WAS PREPARED USING PHOTOGRAMMETRIC METHODS FROM AERIAL
- PHOTOGRAPHS.
 5. LOT, CONCESSION AND BOUNDARY LINES ON THIS PLAN ARE APPROXIMATE.
- 6. THIS IS NOT A LEGAL SURVEY DRAWING IN ACCORDANCE WITH THE PROVINCE OF ONTARIO SURVEYORS ACT 1987. THIS DRAWING WAS PRODUCED USING STANDARD PHOTOGRAMMETRIC PRACTICES.

SEND

— — — — — 120-METRE SURROUND

KOA 1B0

— – BOUNDARY OF AREA TO BE LICENCED

BOREHOLE / MONITORING WELL

PRIVATE WELL (AS PER MINISTRY OF ENVIRONMENT, CONSERVATION AND PARKS WATER WELL INFORMATION SYSTEM)

CON 10, LOT 5 CON 10, LOT 4 LOTS AND CONCESSION LINES

MAR-h LAND ZONING BY-LAW

— — ADJACENT PIT AND QUARRY BOUNDARY

UTILITY POLE

BUILDING; S-SILO, H-HOUSE, G-GARAGE, B-BARN, S-SHED, O-OFFICE, SC-SCALE HOUSE

ROAD: PAVED

----- ROAD: PAVED

CONTOURS/INDEX CONTOURS

O.O.O.O.C WOODED AREA

WATERCOURSE

Y — X PAGE WIRE FENCE/GATE

ENTRANCE

EXIT

REFERENCE(S)

 KEY PLAN: Service Layer Credits: Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community.

2. LAND INFORMATION ONTARIO (LIO) DATA PRODUCED BY GOLDER ASSOCIATES LTD. UNDER LICENCE FROM ONTARIO MINISTRY OF NATURAL RESOURCES, © QUEENS PRINTER 2016

3. PROJECTION: TRANSVERSE MERCATOR, DATUM: NAD 83, COORDINATE SYSTEM: UTM ZONE 18, VERTICAL DATUM: CGVD28

EXISTING FEATURES - GENERAL NOTES (PAGE 1 OF 5)

NOTE: THE NUMBERS BELOW REFER TO AGGREGATE RESOURCES OF ONTARIO: SITE PLAN STANDARDS (AUGUST 2020)

16 EXISTING ZONING THE EXISTING ZONING (

THE EXISTING ZONING OF LAND ON AND WITHIN 120 METRES OF THE SITE IS SHOWN ON THIS PLAN (PAGE 1 OF 5).

CLIEN

THOMAS CAVANAGH CONSTRUCTION LIMITED

ROJECT

HIGHLAND LINE PIT

TITLE

B.J. HENDERSON

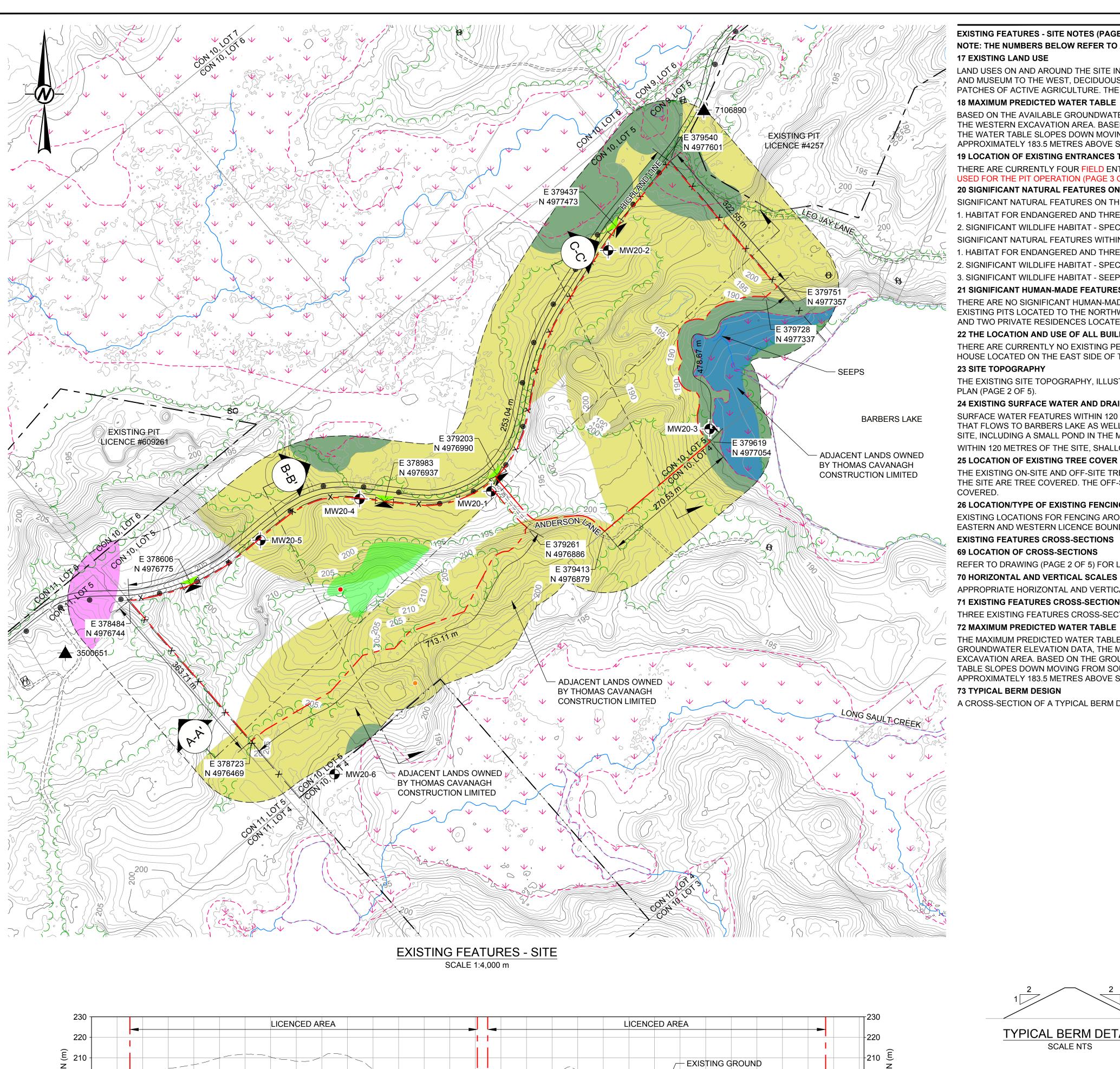
EXISTING FEATURES - GENERAL

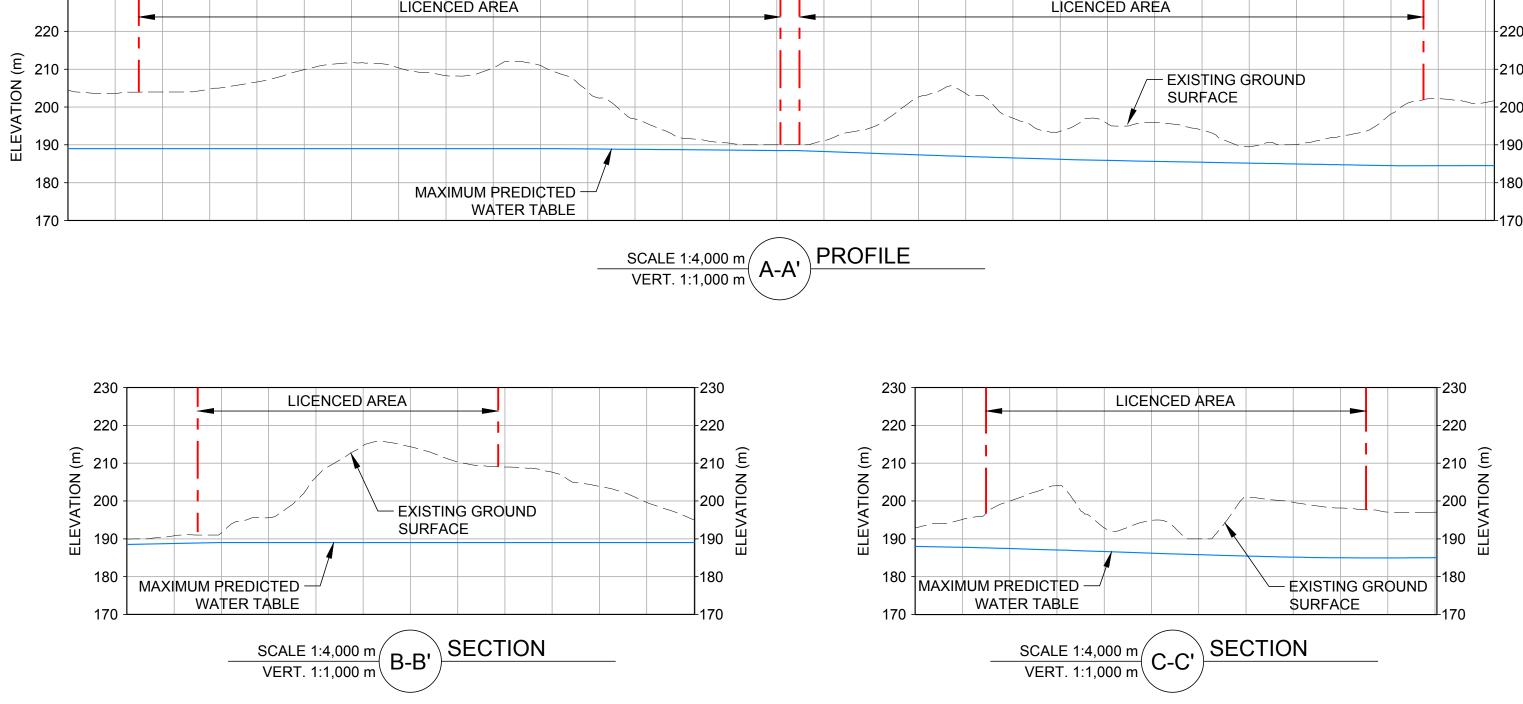


	YYYY-MM-DD	2025-09-08	
	DESIGNED	ВН	
	PREPARED	JM	
	REVIEWED	KAM	
ED	A DDD OV (ED	14004	

PROJECT NO. CONTROL REV. DRAWING 19126620 0014 3 1 OF 5

25 mm IF THIS MEASUREMENT DOES NOT MATCH WHAT IS





EXISTING FEATURES - SITE NOTES (PAGE 2 OF 5):

NOTE: THE NUMBERS BELOW REFER TO AGGREGATE RESOURCES OF ONTARIO: SITE PLAN STANDARDS (AUGUST 2020)

17 EXISTING LAND USE

LAND USES ON AND AROUND THE SITE INCLUDE EXISTING LICENCED PITS TO THE NORTHWEST AND NORTHEAST, AN EXISTING SUGARBUSH, RESTAURANT AND MUSEUM TO THE WEST, DECIDUOUS, MIXED AND CONIFEROUS FOREST AND WETLAND TO THE SOUTH, EAST AND NORTH, INTERSPERSED WITH SMALL PATCHES OF ACTIVE AGRICULTURE. THE EXISTING LAND USE ON THE SITE IS VACANT.

18 MAXIMUM PREDICTED WATER TABLE

BASED ON THE AVAILABLE GROUNDWATER ELEVATION DATA, THE MAXIMUM PREDICTED WATER TABLE ON THE SITE IS 189 METRES ABOVE SEA LEVEL ON THE WESTERN EXCAVATION AREA. BASED ON THE GROUNDWATER ELEVATION DATA MEASURED AT MW20-3 LOCATED ON THE EASTERN SIDE OF THE SITE, THE WATER TABLE SLOPES DOWN MOVING FROM SOUTHWEST TO EAST, AND THE MAXIMUM PREDICTED WATER TABLE ON THE EAST SIDE OF THE SITE IS

APPROXIMATELY 183.5 METRES ABOVE SEA LEVEL (PAGE 2 OF 5).

19 LOCATION OF EXISTING ENTRANCES TO AND EXITS FROM THE SITE THERE ARE CURRENTLY FOUR FIELD ENTRANCES/EXITS FOR THE SITE AS SHOWN ON THIS PLAN (PAGE 2 OF 5) BUT ONLY TWO ENTRANCES SHALL BE

USED FOR THE PIT OPERATION (PAGE 3 OF 5).

20 SIGNIFICANT NATURAL FEATURES ON AND WITHIN 120 METRES OF SITE SIGNIFICANT NATURAL FEATURES ON THE SITE:

1. HABITAT FOR ENDANGERED AND THREATENED SPECIES: TRI-COLOURED BAT; LITTLE BROWN MYOTIS; NORTHERN MYOTIS; BLANDING'S TURTLE.

2. SIGNIFICANT WILDLIFE HABITAT - SPECIES OF CONSERVATION CONCERN: BARN SWALLOW.

SIGNIFICANT NATURAL FEATURES WITHIN 120 METRES OF THE SITE:

1. HABITAT FOR ENDANGERED AND THREATENED SPECIES: BLACK ASH; BLANDING'S TURTLE; EASTERN MEADOWLARK. 2. SIGNIFICANT WILDLIFE HABITAT - SPECIES OF CONSERVATION CONCERN: BARN SWALLOW; EASTERN WOOD PEWEE; COMMON NIGHTHAWK.

3. SIGNIFICANT WILDLIFE HABITAT - SEEPS

21 SIGNIFICANT HUMAN-MADE FEATURES ON AND WITHIN 120 METRES OF SITE

THERE ARE NO SIGNIFICANT HUMAN-MADE FEATURES ON THE SITE. SIGNIFICANT HUMAN-MADE FEATURES WITHIN 120 METRES OF THE SITE INCLUDE EXISTING PITS LOCATED TO THE NORTHWEST (LICENCE NUMBER 609261) AND TO THE NORTHEAST (LICENCE NUMBER 4257), HIGHLAND LINE TO THE NORTH

AND TWO PRIVATE RESIDENCES LOCATED NORTH AND EAST OF THE SITE. 22 THE LOCATION AND USE OF ALL BUILDINGS AND STRUCTURES EXISTING ON AND WITHIN 120 METRES OF THE SITE

THERE ARE CURRENTLY NO EXISTING PERMANENT BUILDINGS OR STRUCTURES LOCATED ON THE SITE. WITHIN 120 METRES OF THE SITE THERE IS ONE HOUSE LOCATED ON THE EAST SIDE OF THE SITE, ACCESSED FROM LEO JAY LANE.

THE EXISTING SITE TOPOGRAPHY, ILLUSTRATED BY A ONE-METRE CONTOUR INTERVAL, EXPRESSED IN METRES ABOVE SEA LEVEL IS PRESENTED ON THIS PLAN (PAGE 2 OF 5).

24 EXISTING SURFACE WATER AND DRAINAGE FACILITIES ON AND WITHIN 120 METRES OF THE SITE

SURFACE WATER FEATURES WITHIN 120 METRES OF THE SITE INCLUDE BARBERS LAKE (SOUTHEAST), A SINGLE SMALL INTERMITTENT WATERCOURSE THAT FLOWS TO BARBERS LAKE AS WELL AS UNEVALUATED WETLANDS. THERE ARE LOW MOIST AREAS THROUGHOUT SOME OF THE FORESTS ON THE SITE, INCLUDING A SMALL POND IN THE MIXED FOREST.

WITHIN 120 METRES OF THE SITE, SHALLOW ROADSIDE DITCHES EXIST ALONG THE NORTH AND SOUTH SIDES OF HIGHLAND LINE.

25 LOCATION OF EXISTING TREE COVER

THE EXISTING ON-SITE AND OFF-SITE TREE COVER IS SHOWN ON THIS PLAN (PAGE 2 OF 5). THE EASTERN, SOUTHWEST AND NORTHWEST PORTIONS OF THE SITE ARE TREE COVERED. THE OFF-SITE LANDS SURROUNDING THE SITE TO THE SOUTH, NORTHEAST AND SOUTHWEST ARE GENERALLY TREE

26 LOCATION/TYPE OF EXISTING FENCING

EXISTING LOCATIONS FOR FENCING AROUND THE SITE ARE SHOWN ON THIS PLAN (PAGE 2 OF 5). PAGE WIRE FENCING EXISTS ON THE NORTHERN, EASTERN AND WESTERN LICENCE BOUNDARIES. THERE IS NO FENCING PRESENT ON THE SOUTHERN BOUNDARY OF THE SITE.

EXISTING FEATURES CROSS-SECTIONS

69 LOCATION OF CROSS-SECTIONS

REFER TO DRAWING (PAGE 2 OF 5) FOR LOCATION OF EXISTING FEATURES CROSS-SECTIONS

APPROPRIATE HORIZONTAL AND VERTICAL SCALES ARE MARKED ON THE CROSS-SECTIONS.

71 EXISTING FEATURES CROSS-SECTIONS

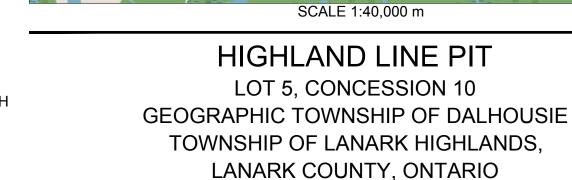
THREE EXISTING FEATURES CROSS-SECTIONS ARE PROVIDED ON THE EXISTING FEATURES PLAN (PAGE 2 OF 5).

72 MAXIMUM PREDICTED WATER TABLE

THE MAXIMUM PREDICTED WATER TABLE IS IDENTIFIED ON THE EXISTING FEATURES CROSS-SECTIONS (PAGE 2 OF 5). BASED ON THE AVAILABLE GROUNDWATER ELEVATION DATA, THE MAXIMUM PREDICTED WATER TABLE ON THE SITE IS 189 METRES ABOVE SEA LEVEL ON THE WESTERN TABLE SLOPES DOWN MOVING FROM SOUTHWEST TO EAST, AND THE MAXIMUM PREDICTED WATER TABLE ON THE EAST SIDE OF THE SITE IS APPROXIMATELY 183.5 METRES ABOVE SEA LEVEL

73 TYPICAL BERM DESIGN

A CROSS-SECTION OF A TYPICAL BERM DESIGN IS SHOWN ADJACENT TO THE EXISTING FEATURE CROSS-SECTIONS (PAGE 2 OF 5).



APPLICANT: THOMAS CAVANAGH CONSTRUCTION LIMITED 9094 CAVANAGH ROAD ASHTON, ONTARIO

PIT LICENCE NO. 626599

KOA 1B0

KEY MAP

1. LICENCED AREA, HIGHLAND LINE PIT 37.6 HECTARES.

2. AREA OF OPERATION, HIGHLAND LINE PIT 28.4 HECTARES. 3. THIS SITE PLAN IS PEPARED UNDER THE AGGREGATE RESOURCES ACT FOR A CLASS A

LICENCE FOR A PIT BELOW THE GROUND WATER TABLE. 4. THIS PLAN WAS PREPARED USING PHOTOGRAMMETRIC METHODS FROM AERIAL

PHOTOGRAPHS. 5. LOT, CONCESSION AND BOUNDARY LINES ON THIS PLAN ARE APPROXIMATE.

6. THIS IS NOT A LEGAL SURVEY DRAWING IN ACCORDANCE WITH THE PROVINCE OF ONTARIO SURVEYORS ACT 1987. THIS DRAWING WAS PRODUCED USING STANDARD PHOTOGRAMMETRIC PRACTICES.

—— — BOUNDARY OF AREA TO BE LICENCED — — — — — 120-METRE SURROUND

BOREHOLE / MONITORING WELL

PRIVATE WELL (AS PER MINISTRY OF ENVIRONMENT, CONSERVATION AND PARKS WATER WELL INFORMATION SYSTEM)

CON 10, LOT 4 LOTS AND CONCESSION LINES

— – ADJACENT PIT AND QUARRY BOUNDARY

UTILITY POLE

BUILDING; S-SILO, H-HOUSE, G-GARAGE, B-BARN, S-SHED, O-OFFICE, SC-SCALE HOUSE

·--- ROAD: GRAVEL

- ROAD: PAVED

CONTOURS/INDEX CONTOURS

O.O.O.O.O.C WOODED AREA

WATERCOURSE

____ WETLAND

X — X PAGE WIRE FENCE/GATE POTENTIAL TRI-COLOURED BAT ROOST HABITAT

POTENTIAL TRI-COLOURED BAT MATERNITY ROOST

CATEGORY 1/2 BLANDING'S TURTLE HABITAT

CATEGORY 3 BLANDING'S TURTLE HABITAT

POTENTIAL CATEGORY 3 EASTERN MEADOWLARK HABITAT

EASTERN WOOD PEEWEE

BLACK ASH HABITAT



ENTRANCE

1. KEY PLAN: Service Layer Credits: Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community.

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UNDER LICENCE FROM ONTARIO MINISTRY OF NATURAL RESOURCES, © QUEENS

3. PROJECTION: TRANSVERSE MERCATOR, DATUM: NAD 83, COORDINATE SYSTEM: UTM ZONE 18, VERTICAL DATUM: CGVD28

THOMAS CAVANAGH CONSTRUCTION LIMITED

HIGHLAND LINE PIT

B. J. HENDERSON

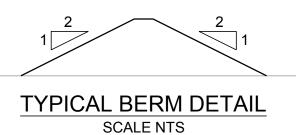
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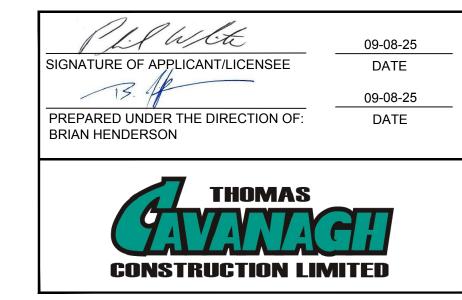
EXISTING FEATURES - SITE

APPLICANT THOMAS

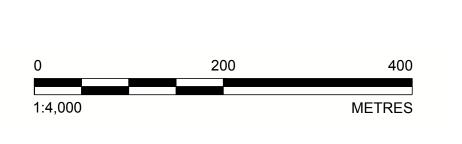
YYYY-MM-DD 2025-09-08 DESIGNED PREPARED JM REVIEWED KAM

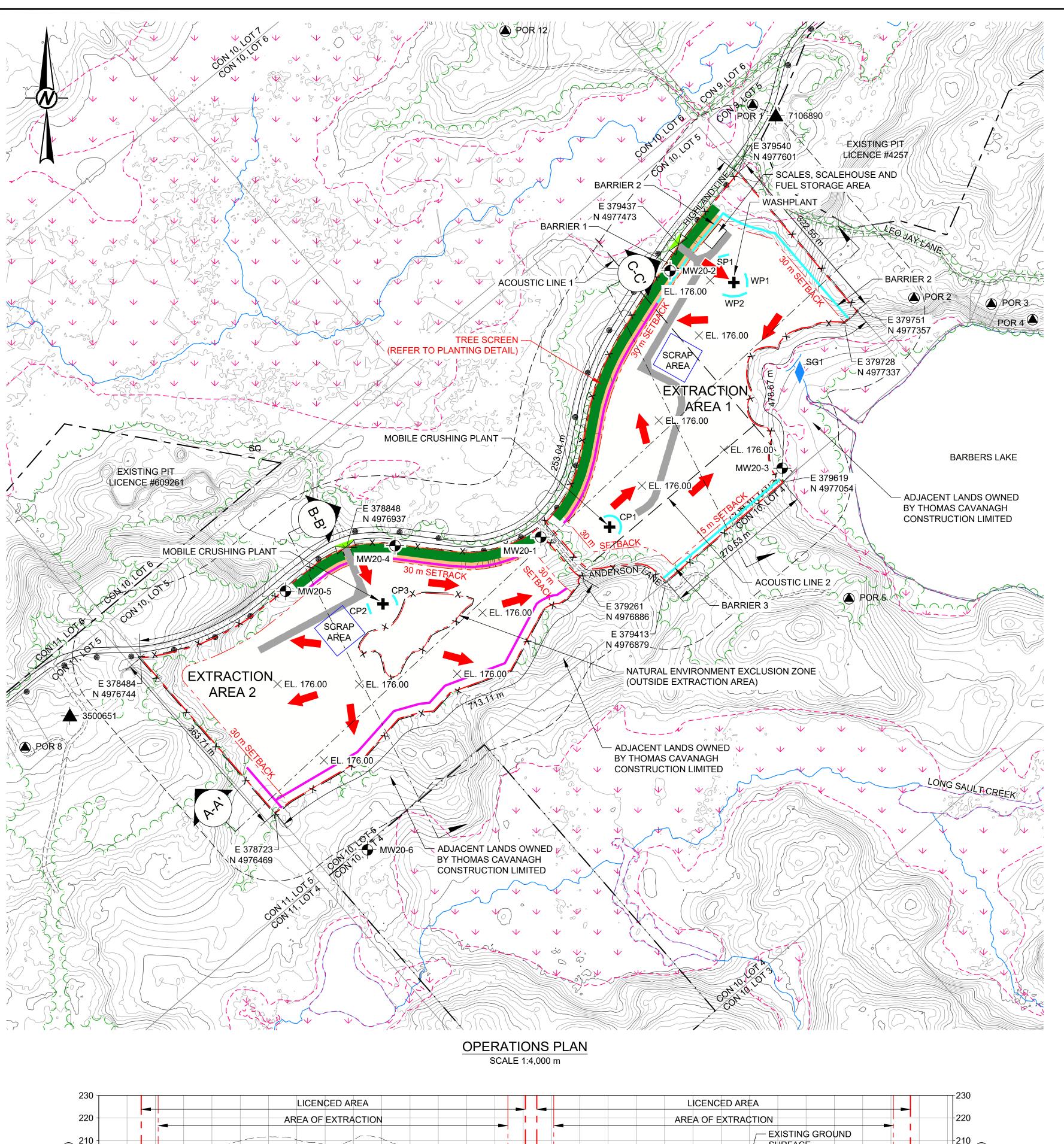
APPROVED KAM PROJECT NO. CONTROL **DRAWING** REV. 2 OF 5 19126620 0014

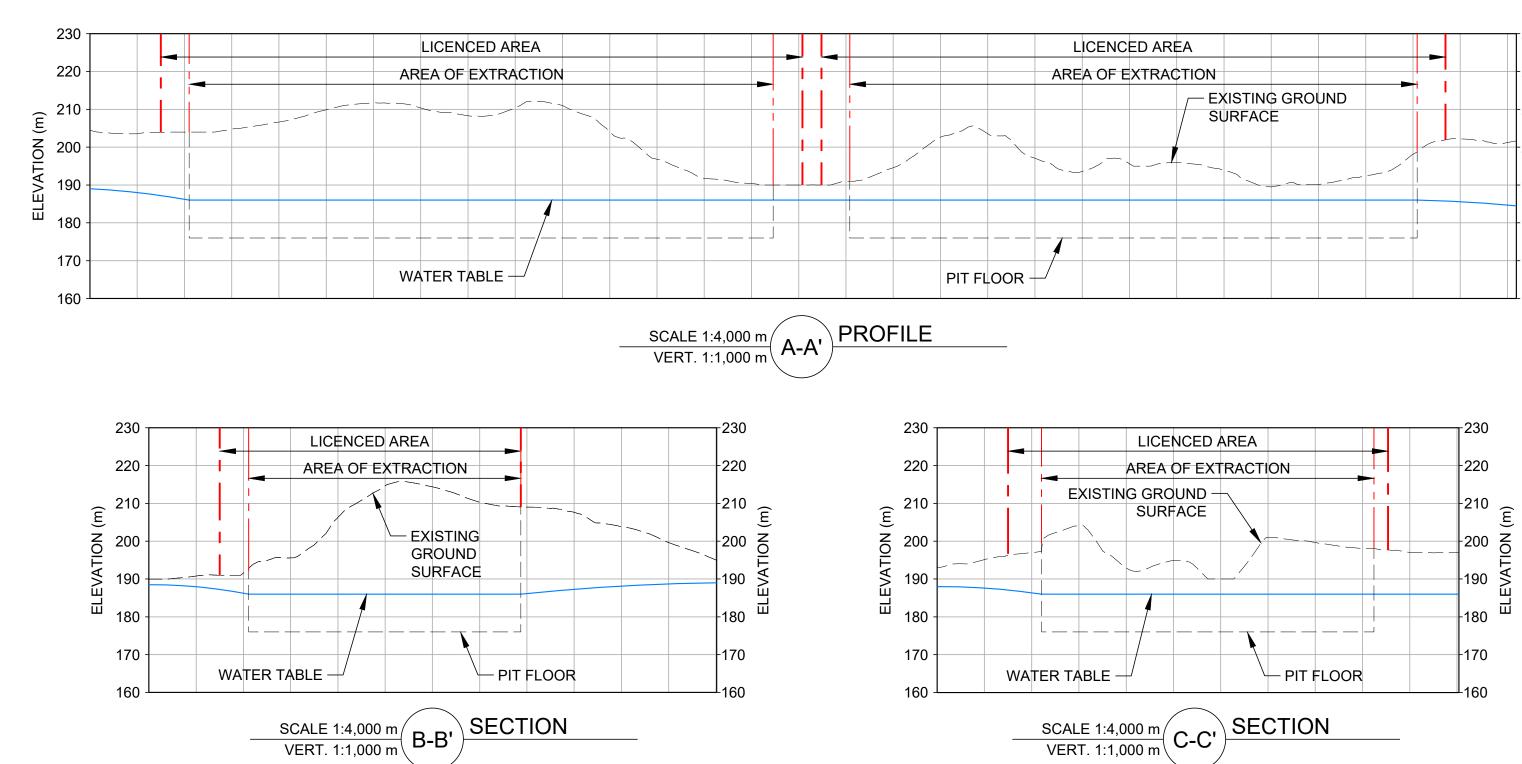




AMENDMENTS	DATE	APPROVAL
SITE PLANS APPROVED BY THE MINISTRY OF NATURAL	RESOURCES.	
SIGNATURE		DATE

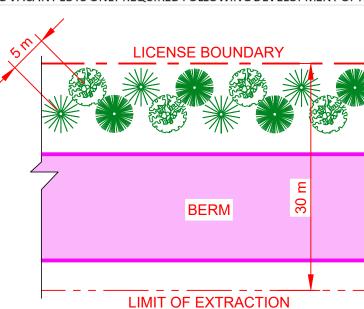






BARRIER	MINIMUM HEIGHT (M / MASL)	MINIMUM LENGTH (M)	MAXIMUM DISTANCE FROM SOURCE (M)	REQUIRED TO SHIELD LINE OF SIGHT FROM IDENTIFIED SOURCE ID	REQUIRED TO SHIELD LINE OF SIGHT TO IDENTIFIED RECEPTOR/S	DESCRIPTION
BARRIER 1 (SITE BERM)	196 MASL	UP TO 100 M	-	MOBILE SCREENING PLANT AND EXTRACTION OPERATIONS OCCURRING IN EXTRACTION AREA 1 EAST OF LINE AA ACOUSTIC LINE 1	POR_12*	NEW BARRIER (BERM / LIFT FACE): REQUIRED TO SHIELD NOISE IMPACTS TO THE IDENTIFIED RECEPTORS WHEN OPERATING IN EXTRACTION AREA 1 EAST OF ACOUSTIC LINE 1 (ONLY REQUIRED FOLLOWING DEVELOPMENT OF A NEW NOISE SENSITIVE DEVELOPMENT AT POR 12)
BARRIER 2 (SITE BERM)	196 MASL	UP TO 400 M	-	MOBILE SCREENING PLANT AND EXTRACTION OPERATIONS OCCURRING IN EXTRACTION AREA 1 EAST OF LINE AA ACOUSTIC LINE 1	POR_1 POR_2 POR_3 POR_4	NEW BARRIER (BERM / LIFT FACE): REQUIRED TO SHIELD NOISE IMPACTS TO THE IDENTIFIED RECEPTORS WHEN OPERATING IN EXTRACTION AREA 1 EAST OF ACOUSTIC LINE 1
BARRIER 3 (SITE BERM)	3 M	UP TO 285 M	-	MOBILE SCREENING PLANT AND EXTRACTION OPERATIONS OCCURRING IN EXTRACTION AREA 1 SOUTH OF LINE BB- ACOUSTIC LINE 2	POR_5	NEW BARRIER (BERM): REQUIRED TO SHIELD NOISE IMPACTS AT THE IDENTIFIED RECEPTOR WHEN OPERATING IN EXTRACTION AREA 1 SOUTH OF ACOUSTIC LINE 2
SP1 STOCKPILE)	4 M	10 M	20 M	SCREENER WHEN OPERATING IN EXTRACTION AREA 1	POR_1 POR_2 POR_3 POR_5	NEW BARRIER (STOCKPILE): REQUIRED TO BE MAINTAINED TO SHIELD NOISE IMPACTS AT THE IDENTIFIED RECEPTORS WHEN OPERATING GREATER THAN 20 M FROM A LIFT FACE OR SITE BERM THAT OTHERWISE SHIELDS IN THE DIRECTION OF THE IDENTIFIED RECEPTORS
WP1 STOCKPILE)	7 M	20 M	25 M	WASH PLANT AND ASSOCIATED GENERATOR WHEN OPERATING IN EXTRACTION AREA 1	POR_2	NEW BARRIER (STOCKPILE): REQUIRED TO BE MAINTAINED TO SHIELD NOISE IMPACTS AT THE IDENTIFIED RECEPTOR
WP2 STOCKPILE)	6 M	30 M	25 M	WASH PLANT AND ASSOCIATED GENERATOR WHEN OPERATING IN EXTRACTION AREA 1	POR_5	NEW BARRIER (STOCKPILE): REQUIRED TO BE MAINTAINED TO SHIELD NOISE IMPACTS AT THE IDENTIFIED RECEPTOR
CP1 STOCKPILE)	10 M	47 M (55 M)*	20 M	CRUSHER WHEN OPERATING IN EXTRACTION AREA 1	POR_1 POR_2 POR_3 POR_5 POR_12*	NEW BARRIER (STOCKPILE): REQUIRED TO BE MAINTAINED TO SHIELD NOISE IMPACTS AT THE IDENTIFIED RECEPTOR NEW BARRIER REQUIRED TO BE EXTENDED TO MINIMUM 55 METRES IN LENGTH FOLLOWING DEVELOPMENT OF A NEW NOISE SENSITIVE DEVELOPMENT AT POR 12
CP2 STOCKPILE)	6 M	20 M	25 M	CRUSHER WHEN OPERATING IN EXTRACTION AREA 2	POR_8	NEW BARRIER (STOCKPILE): REQUIRED TO BE MAINTAINED TO SHIELD NOISE IMPACTS AT THE IDENTIFIED RECEPTOR
CP3 STOCKPILE)	6 M	30 M	25 M	CRUSHER WHEN OPERATING IN EXTRACTION AREA 2	POR_1 POR_2 POR_3 POR_4 POR_5	NEW BARRIER (STOCKPILE): REQUIRED TO BE MAINTAINED TO SHIELD NOISE IMPACTS AT THE IDENTIFIED RECEPTOR
CLUE BULL 5		DDECENTED TO				IT OF A MELWALDING OF MOUTH IS DESCRIBED.

*SHIELDING OF RECEPTORS REPRESENTING VACANT LOTS ONLY REQUIRED FOLLOWING DEVELOPMENT OF A NEW NOISE SENSITIVE DEVELOPMENT.

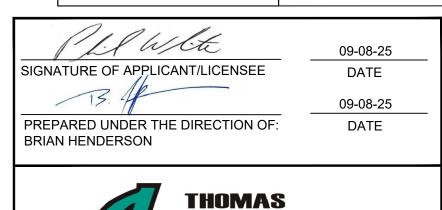


- PLANTED CONIFEROUS TREES SHALL BE TWO METRES IN HEIGHT.
- DECIDUOUS SAPLINGS SHOULD BE 50-MILLIMETRE CALIBRE. PLANTED TREES SHALL INCLUDE WHITE SPRUCE, WHITE PINE AND WHITE BIRCH.
- TREES SHALL BE PLANTED IN THE SPRING OR FALL FOLLOWING INSTALLATION OF THE BERM. TREES ADJACENT TO AREA 1 SHALL BE PLANTED PRIOR TO EXTRACTION IN AREA 1 AND TREES ADJACENT TO AREA 2 SHALL BE PLANED PRIOR TO EXTRACTION IN AREA 2. ANY PLANTED TREES

PLANTING DETAIL

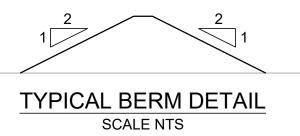
THAT DO NOT SURVIVE DURING THE OPERATIONAL PERIOD OF THE PIT SHALL BE REPLACED.

SCALE NTS						
ITEM/OPERATIONAL STANDARD (O.REG. 244/97)	VARIATION TO OPERATIONAL STANDARDS	RATIONALE				
0.13 (1) 9 0.13 (1) 10 0.13 (1) 11	EXACAVATION IN THE SETBACK AREAS CAN OCCUR ALONG HIGHLAND LINE ROAD IN AREAS IDENTIFIED ON PAGE 3 OF 5 WHERE ELEVATIONS OF THE EXISTING GROUND SURFACE IS ABOVE THE ELEVATION OF THE ROAD. AGGREGATE WILL BE REMOVED IN THE SETBACK AREA TO MATCH THE ELEVATION OF THE FENCE LINE TO A MAXIMUM DEPTH OF EXTRACTION OF 11 METRES.	REMOVAL OF AGGREGATE WITHIN THE SETBACK AREA ALONG THE ROAD WILL ALLOW FOR A CLEARER VIEW OF THE HIGHWAY IN BOTH DIRECTIONS AT THE ENTRANCES AND EXITS.				
SETBACKS 0.13 (1) 10i	NO SETBACK ALONG THE SOUTHEASTERN EDGE OF THE SITE IN EXTRACTION AREA 1 AND THE SOUTHERN BOUNDARY OF EXTRACTION AREA 2 WHERE THE ADJACENT LANDS ARE OWNED BY THE APPLICANT.	REDUCTION OF SETBACK ALONG COMMON BOUNDARY TO ALLOW FOR AGGREGATE EXTRACTION: ADJACENT LANDS ARE OWNED BY THE APPLICANT. IN EXTRACTION AREA 1, THE LICENCE BOUNDARY AND EXTRACTION LIMIT ARE SETBACK 30 M FROM THE ADJACENT WETLAND.				





CUNS I RUC I IUN I	LIMITED	
AMENDMENTS	DATE	APPROVAL D
SITE PLANS APPROVED BY THE MINISTRY OF NATURA	AL RESOURCES	
THE WINDOW OF TWO OR	ALTECONOLO.	
SIGNATURE		DATE





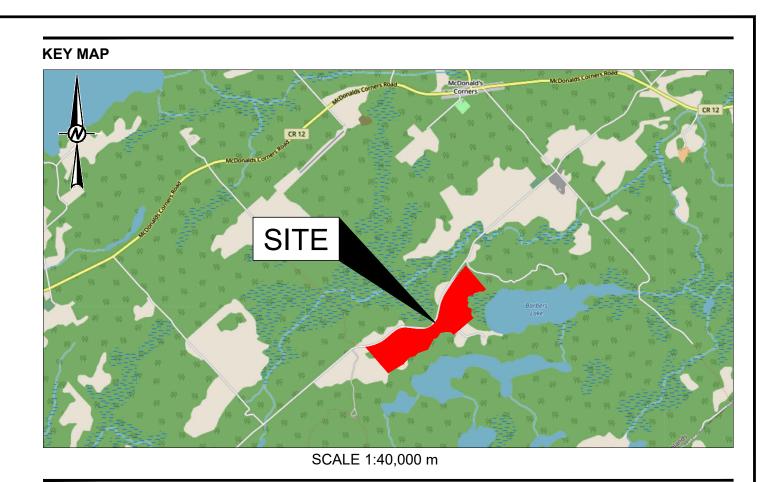




DESIGNED PREPARED REVIEWED KAM APPROVED KAM

2025-09-08

CONTROL DRAWING REV. 3 OF 5 0014



HIGHLAND LINE PIT LOT 5, CONCESSION 10 GEOGRAPHIC TOWNSHIP OF DALHOUSIE

TOWNSHIP OF LANARK HIGHLANDS,

LANARK COUNTY, ONTARIO

APPLICANT:

THOMAS CAVANAGH CONSTRUCTION LIMITED 9094 CAVANAGH ROAD

ASHTON, ONTARIO

PIT LICENCE NO. 626599

- 1. LICENCED AREA, HIGHLAND LINE PIT **37.6** HECTARES. 2. AREA OF OPERATION, HIGHLAND LINE PIT **28.4** HECTARES.
- 3. THIS SITE PLAN IS PEPARED UNDER THE AGGREGATE RESOURCES ACT FOR A CLASS A LICENCE FOR A PIT BELOW THE GROUND WATER TABLE. 4. THIS PLAN WAS PREPARED USING PHOTOGRAMMETRIC METHODS FROM AERIAL
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- 6. THIS IS NOT A LEGAL SURVEY DRAWING IN ACCORDANCE WITH THE PROVINCE OF ONTARIO SURVEYORS ACT 1987. THIS DRAWING WAS PRODUCED USING STANDARD PHOTOGRAMMETRIC PRACTICES.

LEGEND

BOUNDARY OF AREA TO BE LICENCED —— - - — LIMIT OF EXTRACTION

— — — — — 120-METRE SURROUND BOREHOLE / MONITORING WELL

PRIVATE WELL (AS PER MINISTRY OF ENVIRONMENT, CONSERVATION AND PARKS WATER WELL INFORMATION SYSTEM)

SURFACE WATER STATION

CON 10, LOT 5 CON 10, LOT 4 LOTS AND CONCESSION LINES

—— — ADJACENT PIT AND QUARRY BOUNDARY

UTILITY POLE

BUILDING; S-SILO, H-HOUSE, G-GARAGE, B-BARN, S-SHED,

O-OFFICE, SC-SCALE HOUSE ROAD: PAVED

·---- ROAD: GRAVEL

CONTOURS/INDEX CONTOURS O.O.O.O.O.C WOODED AREA

WATERCOURSE

____ WETLAND X — X PAGE WIRE AND TURTLE FENCE/GATE



ENTRANCE

TREE SCREEN

GENERAL DIRECTION OF EXCAVATION

POINTS OF RECEPTION (PORs) FROM ACOUSTIC REPORT WASH PLANT AND MOBILE CRUSHING PLANT

ACOUSTIC BERM BERM

HAUL ROAD EXCAVATION IN SETBACK

XEL. 176.00 PROPOSED PIT FLOOR SPOT ELEVATION, mASL

REFERENCE(S)

- 1. KEY PLAN: Service Layer Credits: Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community.
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- PROJECTION: TRANSVERSE MERCATOR, DATUM: NAD 83, COORDINATE SYSTEM: UTM ZONE 18, VERTICAL DATUM: CGVD28

THOMAS CAVANAGH CONSTRUCTION LIMITED

PROJECT HIGHLAND LINE PIT

OPERATIONS PLAN

APPLICANT

PROJECT NO. 19126620

33 PROPOSED ENTRANCE AND EXIT

ACCESS TO THE SITE FOR HAULAGE PURPOSES WILL BE FROM/TO HIGHLAND LINE ROAD. THE ENTRANCE/EXIT POINTS FOR THE SITE ARE SHOWN ON THE OPERATIONS SITE PLAN (PAGE 3 OF 5). THE WESTERNMOST ACCESS IN EXTRACTION AREA 2 CANNOT BE USED BY HEAVY FOUIPMENT DUE TO DEFICIENT SITE STICS. ACCESS TO THE SITE WILL BE CONTROLLED BY GATES ERECTED AND MAINTAINED AT THE ENTRANCES/EXITS OF THE PROPERTY

THESE GATES WILL BE KEPT CLOSED WHEN THE SITE IS NOT IN OPERATION. SHIPPING OF AGGREGATE PRODUCTS FROM THE SITE IS PROHIBITED DURING HALF-LOAD SEASON AS DETERMINED BY THE TOWNSHIP ON AN ANNUAL BASIS A SIGN WITH THE FOLLOWING WORDING SHALL BE PLACED AT ALL TRUCK ENTRANCES/EXITS: ATTENTION DRIVERS USE EXTRA CAUTION WHEN DRIVING ON LOCAL ROADS AS THEY ARE ALSO USED BY SCHOOL BUSES, PEDESTRIANS, AND OTHERS IN THE COMMUNITY.

34 AREA TO BE EXTRACTED

THE MAXIMUM AREA OF EXTRACTION IS 28.4 HECTARES. THE SITE WILL BE DIVIDED INTO TWO EXTRACTION AREAS (EXTRACTION AREA 1 AND 2) WITH THE TWO AREAS SEPARATED BY ANDERSON LANE. THE MAXIMUM AREA OF EXTRACTION FOR AREA 1 IS 14.4 HECTARES AND THE MAXIMUM AREA OF EXTRACTION FOR AREA 2 IS 14.0 HECTARES. THE BOUNDARY OF THE AREA OF EXTRACTION IS SHOWN ON THE OPERATIONS SITE PLAN (PAGE 3 OF 5). THE EXTRACTION AREAS DO NOT INCLUDE THE NATURAL ENVIRONMENT EXCLUSION ZONE.

36 PROPOSED FENCING

THE EXISTING FENCING WILL BE REPAIRED/REPLACED. AS NECESSARY, BEFORE EXTRACTION OPERATIONS BEGIN AT THE SITE, NEW FENCING IS PROPOSED. FOR THE SOUTHERN BOUNDARY OF THE SITE. ALL SIDES OF THE SITE WILL BE FENCED DURING THE OPERATIONAL PERIOD INCLUDING BOTH SIDES OF ANDERSON LANE. THE FENCING SHALL BE A MINIMUM OF 1.2 METRES IN HEIGHT. TURTLE EXCLUSION FENCING WILL BE COMBINED WHERE FEASIBLE WITH EXISTING AND/OR NEW FENCING.

TURTLE EXCLUSION FENCING SHALL BE INSTALLED AROUND THE ENTIRETY OF EXTRACTION AREA 1 AND EXTRACTION AREA 2 PRIOR TO EXTRACTION IN EACH AREA, WITH OPENINGS TO ALLOW SITE ACCESS AT THE SITE ENTRANCES/EXITS. THE TURTLE EXCLUSION FENCING SHALL INCLUDE A "TURN-AROUND" AT THE END OF EACH FENCING SEGMENT WHERE IT MEETS THE SITE ENTRANCES/EXITS. FENCING SHALL BE SUITABLE FOR THE EXCLUSION OF TURTLES AT THE SITE AND WILL CONSIST OF METAL OR WOODEN FRAME WITH WIRE MESH AND/OR SLATS. THE FENCING SHALL BE DESIGNED TO BE HEAVY-DUTY AND SUITABLE FOR LONG-TERM USE. INSTALLATION METHODS WILL BE COMPLETED AS FOLLOWS:

1. MINIMUM HEIGHT OF 0.6 M 2. MINIMUM BURIED DEPTH OF 0.1 M

3. PLACE POSTS 2-3 M APART ON THE ACTIVITY SIDE OF THE FENCE

4. BACK-FILL AND COMPACT SOIL ON BOTH SIDES

5. INSTALL TURN-AROUNDS AT THE ENDS OF EACH FENCE SEGMENT OF AT LEAST 0.5 M WIDE AND 2.0 M LONG

6. INSTALL PRIOR TO EMERGENCE FROM HIBERNATION TO AVOID NESTING TURTLES OR NESTS BEING TRAPPED WITHIN THE FENCING INSPECTION / MONITORING OF THE EXCLUSION FENCE BY SITE STAFF SHALL OCCUR TWICE ANNUALLY, ONCE DURING SPRING AFTER SNOW MELT AND ONCE

EARLY SUMMER TO FACILITATE THE FENCE BEING IN GOOD CONDITION DURING THE MOST ACTIVE SEASON FOR TURTLES. ANY DEFICIENCIES SHALL BE IF A GRADIENT EXISTS SUCH THAT DISCHARGE TO WATERBODIES COULD OCCUR DURING WORKS AT THE SITE. SEDIMENT AND EROSION CONTROL FENCING

WILL BE IMPLEMENTED. 37 PROPOSED BUILDINGS AND STRUCTURES, SCRAP STORAGE, STOCKPILES AND INTERNAL HAUL ROAD

1. NO BUILDINGS OR PERMANENT STRUCTURES ARE PROPOSED FOR THE SITE. A SCALE HOUSE AND SCALES WILL BE ESTABLISHED AT THE SITE HOWEVER IT WILL BE PORTABLE AND WILL MOVE WITHIN THE LICENSED AREA. THE SCALE HOUSE AND SCALES WILL INITIALLY BE ESTABLISHED NEAR THE ENTRANCE/EXIT AT THE NORTHEAST CORNER OF THE SITE GREATER THAN 30 METRES FROM THE LICENCED BOUNDARY.

SCRAP FROM THE SITE WILL BE TEMPORARILY STORED IN DESIGNATED AREAS. SCRAP STORAGE WILL INITIALLY BE ESTABLISHED WITHIN THE AREAS DESIGNATED ON THE OPERATIONS SITE PLAN (PAGE 3 OF 5) HOWEVER MAY MOVE WITHIN THE LICENSED AREA DURING OPERATIONS. THE SCRAP AREAS MUST REMAIN GREATER THAN 30 METRES FROM ANY WATER BODY AND THE LICENCED BOUNDARY AT ALL TIMES. SHOULD THERE BE NO LOCATION(S) WITHIN THE LICENSED BOUNDARY THAT SATISFIES THE REQUIREMENTS OF THE SITE PLAN NOTE, THEN SCRAP CANNOT BE STORED ON SITE

3. LOCATIONS OF THE AGGREGATE STOCKPILES WILL FOLLOW OPERATIONS AND THEREFORE VARY ON SITE. STOCKPILES WILL BE LOCATED NO CLOSER THAN 30 METRES TO THE LICENSED BOUNDARY. THE MAXIMUM HEIGHT OF AGGREGATE STOCKPILES SHALL BE 15 METRES.

EXCESS TOPSOIL WILL BE STOCKPILED IN BERMS WITHIN THE LICENSED AREA AS IT BECOMES AVAILABLE, FOR LATER USE IN REHABILITATION. 4. INTERNAL HAUL ROADS WILL BE ESTABLISHED WITHIN THE PIT FOLLOWING THE DIRECTION OF EXCAVATION. DUST WILL BE MITIGATED ON SITE. WATER OR ANOTHER PROVINCIALLY APPROVED DUST SUPPRESSANT WILL BE APPLIED TO INTERNAL HAUL ROADS AS OFTEN AS REQUIRED TO MITIGATE DUST.

38 LOCATION OF ANY PROPOSED PERMANENT AND/OR TEMPORARY PROCESSING AREA(S) ON THE SITE PROCESSING WILL OCCUR IN ACCORDANCE WITH THE ACOUSTIC ASSESSMENT REPORT OF THE SITE PREPARED BY FREEFIELD LTD. AND THE OTHER

TECHNICAL REPORTS. PROCESSING AREAS WILL OPERATE IN THE AREAS IDENTIFIED ON THE OPERATIONS SITE PLAN (PAGE 3 OF 5). DUST WILL BE MITIGATED ON SITE. WATER OR ANOTHER PROVINCIALLY APPROVED DUST SUPPRESSANT WILL BE APPLIED TO PROCESSING AREAS AS OFTEN AS

NECESSARY TO MITIGATE DUST. PROCESSING EQUIPMENT WILL BE EQUIPPED WITH DUST SUPPRESSION OR COLLECTION DEVICES WHERE THE EQUIPMENT CREATES DUST AND IS BEING OPERATED WITHIN 300 METRES OF A SENSITIVE RECEPTOR.

PROCESSING EQUIPMENT WILL NOT BE LOCATED WITHIN 30 METRES OF THE LICENSED BOUNDARY 39 LOCATION OF ANY PROPOSED RECYCLABLE MATERIALS

IMPORTATION OF RECYCLABLE MATERIALS WILL NOT BE PERMITTED ON THIS SITE.

40 SEQUENCE/DIRECTION OF OPERATION

THE SITE WILL BE DIVIDED INTO TWO EXTRACTION AREAS (EXTRACTION AREA 1 AND AREA 2). THE TWO EXTRACTION AREAS CAN BE OPERATED

IN EXTRACTION AREA 1, EXTRACTION WILL COMMENCE IN THE AREA OF EACH THE ENTRANCE/EXIT AND PROCEED SOUTHEAST TO THE LIMIT OF EXTRACTION. IN THE WESTERN SIDE OF THE EXTRACTION AREA AND MOVE TO THE NORTHEAST AND SOUTHEAST BEFORE MOVING TO TOWARDS THE NORTHWEST. FROM THE NORTHERN ENTRANCE/EXIT, EXTRACTION WILL PROCEED TO THE SOUTHEAST AND THEN TO THE SOUTHWEST. FROM THE SOUTHERN ENTRANCE/EXIT, EXTRACTION WILL PROCEED TO THE SOUTHEAST AND NORTHEAST.

IN EXTRACTION AREA 2, EXTRACTION WILL COMMENCE IN THE AREA OF EACH THE ENTRANCE/EXIT AND PROCEED TOWARDS THE CENTER OF THE SITE. EXTRACTION WILL THEN PROCEED EAST AROUND THE EXCLUSION AREA AND WEST. EXTRACTION WILL THEN PROCEED TO THE SOUTHWEST, AND ALONG THE SOUTHERN SIDE OF THE EXCLUSION ZONE BEFORE PROCEEDING TO THE NORTH. FROM THE NORTHERN ENTRANCE/EXIT, EXTRACTION WILL PROCEED TO THE

SOUTH AND EAST. FROM THE SOUTHERN ENTRANCE/EXIT, EXTRACTION WILL PROCEED TO THE NORTHEAST AND RADIATE TO THE NORTH, EAST AND SOUTH. 41 STRIPPING AND STOCKPILING OF TOPSOIL/OVERBURDEN TOPSOIL OR OVERBURDEN STRIPPED IN THE OPERATION OF THE SITE SHALL BE STORED IN BERMS AS IDENTIFIED ON THE OPERATIONS SITE PLAN (PAGE 3 OF

5) WITHIN THE SETBACK ON ALL SIDES OF THE SITE. THE TOPSOIL OR OVERBURDEN STORED IN BERMS AND WILL BE USED IN THE REHABILITATION OF THE SITE. DURING CONSTRUCTION AND EARTH-MOVING OPERATIONS, SEDIMENT CONTROL MEASURES WILL BE PUT IN PLACE TO PREVENT RUNOFF OF SUSPENDED SOLIDS FROM LEAVING THE SITE.

THE LOCATIONS OF THE BERMS ARE AS SHOWN ON THE OPERATIONS SITE PLAN (PAGE 3 OF 5).

42 EXTRACTION LIFTS

THE EXTRACTION WILL TAKE PLACE IN A SERIES OF THREE LIFTS, WITH THE BOTTOM LIFT REACHING A FINAL ELEVATION OF 176 METRES ABOVE SEA LEVEL AS INDICATED ON THE OPERATIONS SITE PLAN (PAGE 3 OF 5). THE MAXIMUM LIFT HEIGHT WOULD BE TEN (10) METRES.

EXTRACTION LIFTS AND BENCH HEIGHTS WILL BE IN COMPLIANCE WITH MINISTRY OF LABOUR REQUIREMENTS. THE PIT MAY OPERATE MULTIPLE LIFTS AND BENCHES IN ORDER TO MEET MARKET DEMAND AND/OR CONTRACT REQUIREMENTS FOR SPECIFIC MATERIALS. 43 SURFACE WATER DIVERSION/DISCHARGE

BASED ON TOPOGRAPHY, WATER FROM THE SITE CURRENTLY FLOWS NORTH TOWARDS HIGHLAND LINE, SOUTH TOWARDS THE UNEVALUATED WETLAND ALONG LONG SAULT CREEK, AND EAST TOWARDS BARBERS LAKE. DURING OPERATIONS, THE WATER FROM THE ACTIVE SITE WILL DRAIN TO THE OPEN PIT AREAS AND REMAIN AS WATER BODY FEATURES ONCE THE EXCAVATION IS BELOW THE WATER TABLE. THE PIT LAKES WILL OUTLET INTO BARBERS LAKE ON THE EASTERN LIMIT OF EXTRACTION AREA 1.

44 SOURCE WATER PROTECTION POLICIES THE SITE FALLS OUTSIDE OF ANY IDENTIFIED SOURCE WATER PROTECTION AREAS AND, AS SUCH, NO SOURCE WATER PROTECTION POLICIES ARE APPLICABLE

TO THE SITE. 45 PROPOSED FUEL STORAGE AREAS

A FUEL STORAGE AREA WILL BE ESTABLISHED AT THE SITE NEAR THE SCALE HOUSE. FUEL AND ASSOCIATED PRODUCTS WILL BE STORED IN ABOVE GROUND TANKS OR CONTAINERS AND IN COMPLIANCE WITH THE TECHNICAL STANDARDS AND SAFETY ACT, 2000, LIQUID FUELS REGULATION O.REG.217/01 AND LIQUID FUELS HANDLING CODE, 2000. FUEL TRUCKS MAY BE USED FOR REFUELING OF ON-SITE EQUIPMENT WITHIN THE PIT IN ACCORDANCE WITH THE "PRESCRIBED CONDITIONS" THAT APPLY TO ALL CLASS A, BELOW WATER TABLE PIT LICENCES. A SPILLS CONTINGENCY PLAN WILL BE DEVELOPED PRIOR TO THE FIRST FUEL

DELIVERY. 46 LOCATION OF ALL EXCAVATION SETBACKS

EXCAVATION SETBACKS INCLUDE A 30-METRE SETBACK ON THE NORTH (HIGHLAND LINE ROAD) AND WEST (ROAD ALLOWANCE BETWEEN CONCESSION 10 AND CONCESSION 11) SIDES OF THE SITE AND THROUGH THE CENTRE OF THE SITE ADJACENT TO ANDERSON LANE. A 30-METRE SETBACK ALSO EXISTS FROM WETLANDS ON OR WITHIN 120 METRES FROM THE SITE.

A 15-METRE SETBACK EXISTS ON THE NORTHEAST SIDE OF THE SITE AND ALONG THE WESTERN BOUNDARY OF THE PROPERTY. NO SETBACK IS PRESENT ALONG THE SOUTHEASTERN EDGE OF THE SITE WHERE THE ADJACENT LANDS ARE OWNED BY THOMAS CAVANAGH CONSTRUCTION LIMITED. PRIOR TO SITE OPERATIONS, ALL SETBACKS FROM NATURAL HERITAGE FEATURES SHALL BE CLEARLY MARKED UNDER THE DIRECTION OF A QUALIFIED ECOLOGIST.

THE EXCAVATION SETBACKS ARE AS SHOWN ON THE OPERATIONS SITE PLAN (PAGE 3 OF 5).

47 FINAL ELEVATION

THE FINAL FLOOR ELEVATION OF THE SITE WILL BE APPROXIMATELY 176 METRES ABOVE SEA LEVEL AS INDICATED BY THE SPOT ELEVATIONS ON THE OPERATIONS SITE PLAN (PAGE 3 OF 5). **48 PROPOSED BERMS**

STORAGE BERMS FOR TOPSOIL AND OVERBURDEN WILL BE LOCATED WITHIN THE SETBACKS OF THE SITE WHERE THEY EXIST, OR ALONG THE EDGE OF THE EXTRACTION AREA, GREATER THAN 3 METRES FROM THE LICENCE BOUNDARY, IN AREAS WHERE NO SETBACKS EXIST. NO BERMS WILL BE CONSTRUCTED IN THE NORTHWEST CORNER OF EXTRACTION AREA 2, ADJACENT TO ANDERSON LANE OR ON THE EASTERN EDGE OF EXTRACTION AREA 1 AS IDENTIFIED ON THE PERATIONS SITE PLAN (PAGE 3 OF 5). THE MINIMUM HEIGHT FOR STORAGE BERMS WILL BE 2 METRES. THE MINIMUM HEIGHT FOR THE BERMS THAT ARE REQUIRED FOR NOISE ATTENUATION WILL BE CONSTRUCTED AS PER THE "RECOMMENDED NOISE BARRIERS" TABLE (PAGE 3 OF 5). MATERIAL MAY BE IMPORTED TO COMPLETE THE NOISE ATTENUATION BERMS SHOULD THERE BE INSUFFICIENT ON-SITE MATERIAL. IMPORTED MATERIAL MUST MEET THE REQUIREMENTS OF NOTE 62 (PAGE 5 OF 5). ACOUSTIC BERMS WITHIN SETBACKS TO WETLANDS WILL BE PLACED AS CLOSE TO THE INNER EDGE (EXTRACTION SIDE) OF THE SETBACK AS FEASIBLE. BERMS WILL BE REMOVED AS PART OF SITE REHABILITATION.

49 BERM VEGETATION AND MAINTENANCE

BERMS WILL BE KEPT BACK AT LEAST 3 METRES FROM THE LICENSE BOUNDARY AND WILL HAVE AN APPROXIMATE SLOPE OF 2:1. THE SLOPES WILL BE SEEDED WITH NATIVE VEGETATION TO ENSURE THAT ADEQUATE VEGETATION IS ESTABLISHED AND MAINTAINED TO CONTROL EROSION. 50 METHOD OF EXTRACTION AND EQUIPMENT TO BE USED

THE AGGREGATE AT THE SITE WILL BE EXTRACTED USING EXCAVATION EQUIPMENT. THE EQUIPMENT TO BE LOCATED ON SITE WILL INCLUDE THE FOLLOWING: LOADERS, DUMP TRUCKS, WATER TRUCKS, EXCAVATORS, BULLDOZERS, HAULAGE TRUCKS, SCRAPERS, AND MOBILE CRUSHING/SCREENING AND WASHING

THE PLANTS WILL INCLUDE A SCREENING/WASHING OPERATION CONSISTING OF, BUT NOT LIMITED TO, A HOPPER (FEED BIN), DRY SCREEN AND WET SCREEN DECKS, A CLASSIFIER, TWO DOUBLE SCREW MATERIAL WASHERS, A DEWATERING DERRICK, DIESEL ENGINE, SPRAYBARS AND CONVEYORS AND STACKERS, AND A CRUSHING OPERATION, CONSISTING OF, BUT NOT LIMITED TO, A HOPPER (FEED BIN), PRIMARY AND SECONDARY CRUSHING UNITS, A DIESEL ENGINE. VIBRATING SCREENS, A MAGNETIC SEPARATOR AND CONVEYORS.

51 PROPOSED TREE SCREENS

NO ADDITIONAL TREE SCREENS ARE PROPOSED AT THIS TIME. NATURAL TREE SCREENS CURRENTLY EXIST ON THE NORTHEAST. SOUTHEAST AND PORTIONS OF THE SOUTHWEST SIDES OF THE SITE.

A TREE SCREEN CONSISTING OF WHITE SPRUCE, WHITE PINE AND WHITE BIRCH WILL BE ESTABLISHED IN THE SETBACK ADJACENT TO HIGHLAND LINE IN THE AREA INDICATED ON THE OPERATIONS SITE PLAN (PAGE 3 OF 5). WHERE BERMS ARE LOCATED WITHIN THIS SETBACK, THE TREE SCREEN WILL BE PLANTED BETWEEN THE BERM AND HIGHLAND LINE. SEE 'PLANTING DETAIL' ON PAGE 3 OF 5 FOR DETAILS REGARDING THE PROPOSED TREE SCREEN. **52 HOURS OF OPERATION**

HOURS OF OPERATION ARE FROM 06:00 - 21:00 07:00 - 19:00 SUBJECT TO THE FOLLOWING RESTRICTIONS CONDITIONS: DAYTIME OPERATIONS (07:00 - 19:00) - DURING THE DAYTIME PERIOD, ALL SIGNIFICANT NOISE SOURCES ARE ASSUMED TO BE IN OPERATION AND INCLUDE THE

1. ONE MOBILE SCREENING PLANT

2. ONE MOBILE WASH PLANT

3. ONE MOBILE CRUSHING PLANT 4. UP TO SIX LOADERS OR EXCAVATORS

5. ON-SITE TRUCK MOVEMENTS USED TO DELIVER MATERIAL TO THE MOBILE CRUSHING PLANT AND SHIP PROCESSED PRODUCT OFF-SITE.

OPERATIONS PLAN NOTES (PAGE 4 OF 5) CONTINUED:

DURING THE PERIOD FROM 06:00 - 07:00 AND 19:00 - 21:00, THE FOLLOWING SIGNIFICANT NOISE SOURCES MAY BE IN OPERATION:

1. UP TO TWO LOADERS OR EXCAVATORS

2. ON-SITE TRUCK MOVEMENTS USED TO SHIP PROCESSED PRODUCT OFF-SITE.

FURTHER DETAILS ARE PROVIDED WITHIN THE RECOMMENDATIONS OF THE ACOUSTIC ASSESSMENT REPORT (REFER TO TECHNICAL REPORT RECOMMENDATIONS).

RESPONSES TO EMERGENCIES AND REQUIRED MAINTENANCE IS NOT LIMITED BY THE HOURS OF OPERATION LISTED IN THE ACOUSTIC ASSESSMENT REPORT **53 TREES AND STUMPS**

WITHIN THE AREA TO BE EXTRACTED, ALL TREES WITHIN 5 METRES OF THE EXCAVATION FACE WILL BE REMOVED. ANY TREES PRESENT WITHIN THE EXTRACTION AREA ARE TO BE HARVESTED AND UTILIZED IN THE MOST APPROPRIATE MANNER. SMALL TREES AND STUMPS REMAINING ONSITE WILL BE GROUND UP OR BROKEN DOWN USING AN EXCAVATOR AND MIXED WITH TOPSOIL TO BE UTILIZED DURING REHABILITATION OF THE SITE. LARGE PIECES OF

WOOD MATERIAL MAY BE LEFT IN THE REHABILITATED AREAS AS HABITAT STRUCTURE AND COVER FOR SMALL MAMMALS AS WELL AS BASKING AREAS FOR

REPTILES AND PERCHING AREAS FOR WATERFOWL 54 VARIATIONS FROM OPERATIONAL REQUIREMENTS

TECHNICAL REPORT RECOMMENDATIONS AND/OR MONITORING

REFER TO VARIATIONS FROM OPERATIONAL REQUIREMENTS TABLE ON THE OPERATIONS SITE PLAN (PAGE 3 OF 5). 55 MAXIMUM ANNUAL TONNAGE

THE NUMBER OF TONNES TO BE REMOVED FROM THE SITE IN A CALENDAR YEAR WILL NOT EXCEED 500,000. **OPERATIONS CROSS-SECTIONS**

REFER TO OPERATIONS PLAN (PAGE 3 OF 5) FOR LOCATION OF OPERATIONS CROSS-SECTIONS. 70 HORIZONTAL AND VERTICAL SCALES

APPROPRIATE HORIZONTAL AND VERTICAL SCALES ARE MARKED ON THE CROSS-SECTIONS 71 OPERATIONS CROSS-SECTIONS

69 LOCATION OF CROSS-SECTIONS

THREE OPERATIONS CROSS-SECTIONS ARE PROVIDED ON THE OPERATIONS SITE PLAN (PAGE 3 OF 5). DURING OPERATIONS, THE WATER TABLE SURROUNDING THE PITS WILL MATCH THE WATER LEVEL IN THE PIT LAKE (186 METRES ABOVE SEA LEVEL). THE PREDICTED WATER TABLE DURING OPERATIONS IS SHOWN ON THE OPERATIONS CROSS-SECTIONS ON THIS THE OPERATIONS SITE PLAN (PAGE 3 OF 5).

73 TYPICAL BERM DESIGN A CROSS-SECTION OF A TYPICAL BERM DESIGN IS SHOWN ADJACENT TO THE OPERATIONS CROSS-SECTIONS (PAGE 3 OF 5).

LIST OF REFERENCES WHICH APPLY SPECIFICALLY TO THE SITE PLAN: 1. FREEFIELD LTD, 2025, ACOUSTIC ASSESSMENT FOR THE HIGHLAND LINE PIT, LANARK HIGHLAND TOWNSHIP, LANARK COUNTY, ONTARIO, PREPARED FOR

THOMASCAVANAGH CONSTRUCTION LIMITED, SEPTEMBER 5, 2025. 2. GOLDER ASSOCIATES LTD., 2022. NATURAL ENVIRONMENT REPORT, PROPOSED HIGHLAND LINE PIT, LANARK COUNTY, ONTARIO. PREPARED FOR THOMAS CAVANAGH CONSTRUCTION LIMITED, DECEMBER 2022.

3. GOLDER ASSOCIATES LTD., 2022. LEVEL 1 AND LEVEL 2 WATER REPORT, PROPOSED HIGHLAND LINE PIT, TOWNSHIP OF LANARK HIGHLANDS, ONTARIO. PREPARED FOR THOMAS CAVANAGH CONSTRUCTION LIMITED, DECEMBER 2022.

GOLDER ASSOCIATES LTD., 2020. STAGE 1 AND 2 ARCHAEOLOGICAL ASSESSMENT, DUNCAN PIT PROPERTY, PART OF LOT 5, CONCESSION 10, DALHOUSIE TOWNSHIP, LANARK COUNTY, ONTARIO. PREPARED FOR THOMAS CAVANAGH CONSTRUCTION LIMITED, OCTOBER 5, 2020. 5. GOLDER ASSOCIATES LTD., 2021. STAGE 3 ARCHAEOLOGICAL ASSESSMENT, DUNCAN SITE (BfGd-9), PART OF LOT 5, CONCESSION 10, DALHOUSIE

TOWNSHIP, LANARK COUNTY, ONTARIO. PREPARED FOR THOMAS CAVANAGH CONSTRUCTION LIMITED, FEBRUARY 2021. GOLDER ASSOCIATES LTD., 2021. STAGE 1 ARCHAEOLOGICAL ASSESSMENT, HIGHLAND LINE PIT, PART OF LOTS 4 AND 5, CONCESSION 10, DALHOUSIE

TOWNSHIP, LANARK COUNTY, ONTARIO. PREPARED FOR THOMAS CAVANAGH CONSTRUCTION LIMITED, APRIL 14, 2021.

7. GOLDER ASSOCIATES LTD., 2021. STAGE 4 ARCHAEOLOGICAL MITIGATION, TURNBULL SITE (BfGd-8), PART OF LOT 5, CONCESSION 10, DALHOUSIE TOWNSHIP, LANARK COUNTY, ONTARIO. PREPARED FOR THOMAS CAVANAGH CONSTRUCTION LIMITED, MAY 14, 2021. 8. GOLDER ASSOCIATES LTD., 2021. STAGE 3 ARCHAEOLOGICAL ASSESSMENT, TURNBULL SITE (BfGd-8), PART OF LOT 5, CONCESSION 10, DALHOUSIE

TOWNSHIP, LANARK COUNTY, ONTARIO. PREPARED FOR THOMAS CAVANAGH CONSTRUCTION LIMITED, MAY 17, 2021. 9. GOLDER ASSOCIATES LTD., 2021. STAGE 4 ARCHAEOLOGICAL MITIGATION, DUNCAN SITE (BfGd-9), PART OF LOT 5, CONCESSION 10, DALHOUSIE TOWNSHIP

LANARK COUNTY, ONTARIO. PREPARED FOR THOMAS CAVANAGH CONSTRUCTION LIMITED, JUNE 8, 2021. 10. MATRIX HERITAGE INC., 2024. STAGE 1 AND 2 ARCHAEOLOGICAL ASSESSMENT, HIGHLAND LINE PIT, PART OF LOT 5, CONCESSION 10, GEOGRAPHIC

TOWNSHIP OF DALHOUSIE, TOWNSHIP OF LANARK HIGHLANDS, LANARK COUNTY, ONTARIO, NOVEMBER 5, 2024. 11. FISHERIES AND OCEANS CANADA, 2024. AGGREGATE PIT, BARBER'S LAKE, LONG SAULT CREEK, TOWNSHIP OF LANARK HIGHLANDS - IMPLEMENTATION OF

MEASURES TO AVOID AND MITIGATE THE POTENTIAL FOR PROHIBITED EFFECTS TO FISH AND FISH HABITAT, MARCH 12, 2024. STUDY RECOMMENDATIONS AND MONITORING REQUIREMENTS HAVE BEEN INCORPORATED INTO THE SITE PLAN NOTES, AS APPROPRIATE, AND ARE SUMMARIZED BELOW:

NATURAL ENVIRONMENT: 1. NO CLEARING OR GRUBBING OF VEGETATION WILL TAKE PLACE WITHIN THE CORE BREEDING BIRD SEASON OR ACTIVE SEASON FOR BATS (APRIL 1 -

SEPTEMBER 30) UNLESS A NESTING SURVEY HAS BEEN COMPLETED BY A QUALIFIED BIOLOGIST WITHIN 48 HOURS OF VEGETATION REMOVAL, AND NO ACTIVE NESTS WERE OBSERVED.

2. FENCE AND PROTECT THE AREA IDENTIFIED AS MATERNITY ROOST HABITAT FOR TRI-COLOURED BAT TO PREVENT INTRUSION INTO THIS AREA. AVOID PLACING LIGHTING IN THE VICINITY OF THIS AREA.

3. AN AWARENESS PACKAGE. SPECIES AT RISK ENCOUNTER PROTOCOL AND SPECIES AT RISK TRAINING PROGRAM IS TO BE PREPARED THAT LISTS THE SPECIES AT RISK THAT MAY BE PRESENT ON THE SITE OR IN THE LOCAL LANDSCAPE. AND IDENTIFIES WHAT TO DO IF ONE IS OBSERVED ON THE SITE. THE AWARENESS PACKAGE WILL INCLUDE:

A. INFORMATION / TRAINING ON IDENTIFYING SPECIES AT RISK;

B. WHAT TO DO IF A SPECIES AT RISK IS OBSERVED (MOVING, INJURED, DEAD OR NESTING);

C. HOW TO PROTECT A TURTLE OR BIRD NEST:

D. INFORMATION ON HOW TO REPORT A SPECIES AT RISK SIGHTING TO THE NATURAL HERITAGE INFORMATION CENTRE; AND,

E. A REQUIREMENT THAT IF A SPECIES AT RISK IS FOUND ON THE SITE, ALL WORK MUST STOP AND THE SPECIES SHALL BE PROTECTED FROM HARM. MECP THE MINISTRY OF ENVIRONMENT CONSERVATION AND PARKS SHALL BE NOTIFIED IMMEDIATELY TO SEEK GUIDANCE ON WAYS TO AVOID IMPACTS UNDER THE ENDANGERED SPECIES ACT (E.G., MITIGATION, CONDITIONAL EXEMPTION) PRIOR TO RESUMING WORK.

STANDARD BEST MANAGEMENT PRACTICES FOR NOISE AND DUST MITIGATION AT PIT OPERATIONS WILL BE EMPLOYED TO REDUCE IMPACTS ON ADJACENT LANDS, AND THE HABITATS THEY PROVIDE

PRIOR TO SITE OPERATIONS, ALL WETLAND BOUNDARIES SHALL BE MARKED AND SURVEYED IN THE FIELD UNDER THE DIRECTION OF A QUALIFIED AND CERTIFIED OWES WETLAND EVALUATOR, USING OWES PROTOCOLS. THIS SHALL INCLUDE THE DEMARACTION OF 30 M SETBACKS FROM THE WETLAND BOUNDARIES.

6. ANY LIGHTING REQUIRED FOR THE PIT WILL BE MINIMAL AND ADHERE TO DARK SKY PRINCIPLES.

7. IF ANY WATER QUALITY ISSUES ARE NOTED AT ANY TIME, WORK IS TO STOP IMMEDIATELY AND MEASURES TAKEN TO IMPROVE WATER QUALITY, PRIOR TO WORK CONTINUING. FISHERIES AND OCEANS CANADA WILL BE CONTACTED IF ISSUES AFFECTING FISH HABITAT ARE IDENTIFIED.

8. NO WORKS ARE PROPOSED WITHIN 30 M OF A WATERBODY; HOWEVER, TO AVOID AND MITIGATE THE POTENTIAL FOR PROHIBITED EFFECTS TO FISH AND FISH HABITAT, WHEREVER SITE WORKS MAY IMPACT A NATURAL WATERBODY, THE FOLLOWING MITIGATION MEASURES WILL BE IMPLEMENTED: A. LIMIT IMPACTS ON RIPARING VEGETATION TO THOSE APPROVED FOR THE WORK:

I. LIMIT ACCESS TO BANKS OR AREAS ADJACENT TO WATERBODIES.

II. PRUNE OR TOP VEGETATION INSTEAD OF GRUBBING OR UPROOTING, WHERE FEASIBLE.

III. LIMIT GRUBBING ON WATERCOURSE BANKS TO THE AREA REQUIRED FOR THE FOOTPRINT OF WORKS. IV. CONSTRUCT ACCESS POINTS AND APPROACHES PERPENDICULAR TO THE WATERCOURSE OR WATERBODY. V. REMOVE VEGETATION SELECTIVELY AND IN PHASES.

VI. RE-VEGETATE THE DISTURBED AREA WITH NATIVE SPECIES SUITABLE FOR THE SITE.

B. OPERATE MACHINERY IN A MANNER THAT MINIMIZES DISTURBANCE TO THE WATERCOURSE BED AND BANKS. C. DEVELOP AND IMPLEMENT A SEDIMENT CONTROL PLAN TO MINIMIZE SEDIMENTATION OF THE WATERBODY DURING ALL PHASES OF THE WORK: I. SCHEDULE WORK TO AVOID WET, WINDY AND RAINY PERIODS (AND HEED WEATHER ADVISORIES)

II. REGULARLY INSPECT AND MAINTAIN THE EROSION AND SEDIMENT CONTROL MEASURES AND STRUCTURES DURING ALL PHASES OF THE PROJECT. III. USE BIODEGRADABLE SEDIMENT CONTROL MATERIALS WHENEVER POSSIBLE.

IV. REMOVE ALL EXPOSED NON-BIODEGRADABLE SEDIMENT CONTROL MATERIALS ONCE SITE HAS BEEN STABILIZED.

V. OPERATE MACHINERY ON LAND, OR FROM BARGES OR ON ICE.

VI. USE METHODS TO PREVENT SUBSTRATE COMPACTION (E.G., SWAMP MATS, PADS).

VII. MONITOR THE WATERBODY TO OBSERVE SIGNS OF SEDIMENTATION DURING ALL PHASES OF THE WORK AND TAKE CORRECTIVE ACTION. VIII. DISPOSE AND STABILIZE ALL DREDGED MATERIAL ABOVE THE HIGH WATER MARK OF NEARBY WATERBODIES TO PREVENT ENTRY IN THE WATER. D. DEVELOP AND IMMEDIATELY IMPLEMENT A RESPONSE PLAN TO PREVENT DELETERIOUS SUBSTANCES FROM ENTERING A WATER BODY:

I. STOP WORKS IN THE EVENT OF A SPILL OF A DELETERIOUS SUBSTANCE. II. IMMEDIATELY REPORT ANY SPILLS (E.G., SEWAGE, OIL, FUEL OR OTHER DELETERIOUS MATERIAL), WHETHER NEAR OR DIRECTLY INTO A WATER

III. KEEP AN EMERGENCY SPILL KIT ON SITE DURING THE WORKS. IV. CONTAIN ANY WATER WITH DELETERIOUS SUBSTANCES.

PREPARED UNDER THE DIRECTION OF:

CONSTRUCTION LIMITE

BRIAN HENDERSON

VII. MAINTAIN ALL MACHINERY ON SITE IN A CLEAN CONDITION AND FREE OF FLUID LEAKS.

V. ENSURE CLEAN-UP MEASURES ARE SUITABLY APPLIED SO AS NOT TO RESULT IN FURTHER ALTERATION OF THE BED AND/OR BANKS OF THE WATERBODY. VI. CLEAN-UP AND APPROPRIATELY DISPOSE OF THE SEDIMENT-LADEN WATER AND WATER CONTAMINATED WITH DELETERIOUS SUBSTANCES.

VIII. WASH, REFUEL AND SERVICE MACHINERY AND STORE FUEL AND OTHER MATERIALS FOR THE MACHINERY IN SUCH A WAY AS TO PREVENT ANY DELETERIOUS SUBSTANCES FROM ENTERING THE WATER. IX. DISPOSE OF ALL WASTE MATERIALS (E.G., CONSTRUCTION, DEMOLITION, COMMERCIAL LOGGING) ABOVE THE ORDINARY HIGH WATER MARK TO

PREVENT ENTRY INTO THE WATERBODY. X. PLAN ACTIVITIES NEAR WATER SUCH THAT MATERIALS SUCH AS PAINT, PRIMERS, BLASTING ABRASIVES, RUST SOLVENTS, DEGREASERS, GROUT, POURED CONCRETE OR OTHER CHEMICALS DO NOT ENTER THE WATERBODY. E. AQUATIC INVASIVE SPECIES ARE INTRODUCED AND SPREAD THROUGH TRANSPORTING SANDS AND SEDIMENTS AND USING CONTAMINATED

AMENDMENTS

SIGNATURE

SITE PLANS APPROVED BY THE MINISTRY OF NATURAL RESOURCES.

CONSTRUCTION EQUIPMENT. TO PREVENT THE SPREAD OF AQUATIC INVASIVE SPECIES DURING CONSTRUCTION IN AQUATIC ENVIRONMENTS: I. CLEAN, DRAIN AND DRY ANY EQUIPMENT USED IN THE WATER.

09-08-25

09-08-25

DATE

II. NEVER MOVE ORGANISMS OR WATER FROM ONE BODY OF WATER TO ANOTHER. IF THE PROPOSED WORKS CAUSE, OR ARE ABOUT TO CAUSE, THE DEATH OF FISH AND/OR THE HARMFUL ALTERATION, DISRUPTION OR DESTRUCTION OF FISH HABITAT, CAVANAGH WILL NOTIFY FISHERIES AND OCEANS CANADA IMMEDIATELY IN FULFILMENT OF THEIR DUTY TO NOTIFY UNDER THE FISHERIES ACT.

OPERATIONS PLAN NOTES (PAGE 4 OF 5) CONTINUED:

ACOUSTIC ASSESSMENT:

1. NOISE BARRIERS AND BERMS A.NOISE BARRIERS AND BERMS ARE TO BE PROVIDED AS PER THE "RECOMMENDED NOISE BARRIERS" TABLE AND OPERATIONS

SITE PLAN (PAGE 3 OF 5). B. NOISE BARRIERS AND BERMS ARE TO BE SOLID, HAVING NO GAPS, AND ARE TO HAVE A SURFACE DENSITY OF NO LESS THAN 20 KG/M². EXAMPLES OF SUITABLE BARRIERS OR BERMS INCLUDE:

I. LIFT FACE OR EXISTING TERRAIN: II. EARTH, GRAVEL OR AGGREGATE BERMS OR STOCKPILES;

III. CONCRETE OR BRICK WALLS;

IV. COMMERCIAL NOISE BARRIERS;

PLAN (PAGE 3 OF 5).

PLAN (PAGE 3 OF 5).

V. SHIPPING CONTAINERS OR BUILDINGS; IV. A PORTABLE BARRIER SUCH AS A TRUCK TRAILER EQUIPPED WITH MOVABLE FLAPS TO BLOCK THE SPACE BETWEEN THE

GROUND AND THE BOTTOM OF THE TRAILER AND INCREASE HEIGHT IF REQUIRED. C. NOISE BARRIERS SHIELDING PORTABLE EQUIPMENT MAY BE PROGRESSIVELY ESTABLISHED TO PROVIDE SHIELDING FROM LOCATION OF OPERATION TO THE IDENTIFIED NOISE SENSITIVE POINT OF RECEPTION (POR). 2. MOBILE SCREENING PLANT

A. THE OPERATION OF THE MOBILE SCREENING PLANT (SCREENER) SHALL TAKE PLACE ONLY DURING THE DAYTIME PERIOD (07:00 TO 19:00) AND SHALL COMPLY WITH THE FOLLOWING:

I. THE SCREENER IS TO BE LOCATED ON THE PIT FLOOR AT A MAXIMUM ELEVATION OF 188 METRES ABOVE SEA LEVEL. II. NOISE BARRIERS ARE TO BE PROVIDED AS PER THE RECOMMENDED NOISE BARRIERS"; TABLE AND OPERATIONS SITE PLAN (PAGE 3 OF 5).

3. WASH PLANT A. THE OPERATION OF THE WASH PLANT AND ASSOCIATED DIESEL GENERATOR SHALL TAKE PLACE ONLY DURING THE DAYTIME PERIOD (07:00 TO 19:00) AND SHALL COMPLY WITH THE FOLLOWING:

I. THE WASH PLANT IS TO BE LOCATED ON THE PIT FLOOR AT A MAXIMUM ELEVATION OF 188 METRES ABOVE SEA LEVEL IN LOCATIONS SHOWN ON THE OPERATIONS SITE PLAN (PAGE 3 OF 5). II. NOISE BARRIERS ARE TO BE PROVIDED AS PER THE RECOMMENDED NOISE BARRIERS"; TABLE AND OPERATIONS SITE

III. THE GENERATOR IS TO BE HOUSED INSIDE A TRAILER AND FITTED WITH AN EXHAUST SILENCER THAT MEETS THE MINIMUM INSERTION LOSS REQUIREMENTS LISTED IN "THE MINIMUM INSERTION LOSS FOR GENERATOR EXHAUST SILENCER" TABLE (PAGE 4 OF 5). THE SILENCER IS TO BE LOCATED INSIDE THE TRAILER OR AS CLOSE AS POSSIBLE TO THE LOCATION WHERE THE EXHAUST EXITS THE TRAILER WITH THE DUCT MATERIAL BETWEEN THE SILENCER AND THE GENERATOR CONSTRUCTED OF 16-GAUGE WEATHER RESISTANT METAL. THE SILENCERS SHALL HAVE A HIGH TRANSMISSION LOSS CASING. THIS ITEM DOES NOT APPLY IF HYDRO IS USED TO PROVIDE POWER TO THE PLANT.

IV. ITEM 3.A.III ABOVE DOES NOT APPLY IF HYDRO IS USED TO PROVIDE POWER TO THE PLANT. 4. MOBILE CRUSHING PLANT

(07:00 TO 19:00) AND SHALL COMPLY WITH THE FOLLOWING: II. THE CRUSHER IS TO BE LOCATED ON THE PIT FLOOR AT A MAXIMUM ELEVATION OF 188 METRES ABOVE SEA LEVEL IN LOCATIONS SHOWN ON THE OPERATIONS SITE PLAN (PAGE 3 OF 5).

I. THE OPERATION OF THE MOBILE CRUSHING PLANT (CRUSHER) SHALL TAKE PLACE ONLY DURING THE DAYTIME PERIOD

III. NOISE BARRIERS ARE TO BE PROVIDED AS PER THE "RECOMMENDED NOISE BARRIERS" TABLE AND OPERATIONS SITE

5. LOADERS AND EXCAVATORS A. THE OPERATION OF THE LOADERS AND EXCAVATORS MAY SHALL TAKE PLACE ONLY DURING THE DAYTIME PERIOD (07:00 -19:00), EVENING AND NIGHTTIME PERIOD ANYWHERE IN THE EXTRACTION AREA, AND SHALL COMPLY WITH THE FOLLOWING:

I. A MAXIMUM OF SIX (6) LOADERS OR EXCAVTORS MAY BE IN OPERATION CARRYING OUT EXTRACTION, STOCKPILING AND LOADING OPERATIONS CONCURRENTLY WITH OTHER PIT OPERATIONS. 6. HIGHWAY TRUCKS

A. THE LOADING AND SHIPPING OF PRODUCT USING HIGHWAY TRUCKS MAY SHALLTAKE PLACE ONLY DURING THE DAYTIME

PERIOD (07:00 - 19:00), EVENING AND NIGHTTIME PERIOD AND SHALL COMPLY WITH THE FOLLOWING:

I. WHEN OPERATING ON-SITE, HIGHWAY TRUCKS SHALL NOT EXCEED 30 KM/H AND SHALL NOT USE COMPRESSION BRAKING (JAKE BRAKES). 7. PORTABLE CONSTRUCTION EQUIPMENT A. PORTABLE CONSTRUCTION EQUIPMENT USED FOR SITE PREPARATION (E.G. LAND CLEARING AND CONSTRUCTION OF

BERMS) AND REHABILITATION SHALL COMPLY WITH MECP THE MINISTRY OF ENVIRONMENT CONSERVATION AND PARKS

PUBLICATION NPC-115, CONSTRUCTION EQUIPMENT, AUGUST 1978. (THIS PUBLICATION GIVES NOISE STANDARDS TO BE MET BY CONSTRUCTION EQUIPMENT IN ONTARIO.) SITE PREPARATION AND REHABILITATION ACTIVITIES SHALL TAKE PLACE ONLY DURING DAYTIME HOURS (07:00 - 19:00). 8. NEW PROCESS A. IF A NEW PROCESS IS INTRODUCED TO THE SITE THAT IS NOT CURRENTLY INCLUDED IN THE SITE PLAN. THEN THIS PROCESS SHALL BE ASSESSED BY A QUALIFIED ACOUSTICAL CONSULTANT PRIOR TO COMMISSIONING. NOISE MITIGATION

MEASURES SHALL BE REVIEWED, AND ALTERED IF NECESSARY, TO ENSURE THAT MECP THE MINISTRY OF ENVIRONMENT

CONSERVATION AND PARKS SOUND LEVEL LIMITS ARE MET AT ALL POINTS OF RECEPTION AND THE SITE PLAN SHALL BE

AMENDED AS REQUIRED BY MNRF MINISTRY OF NATURAL RESOURCES. WATER REPORT AND AGENCY COMMENTS (MAY 19, 2023, JUNE 2, 2023, JUNE 5, 2023 AND MARCH 5, 2025):

MW20-4, MW20-5 AND MW20-6 ONCE THE PIT IS OPERATING BELOW THE WATER TABLE.

THE PURPOSE OF THE MONITORING PROGRAM IS TO MEASURE AND EVALUATE THE ACTUAL EFFECTS ON WATER RESOURCES ASSOCIATED WITH LONG TERM PIT DEVELOPMENT, AND TO ALLOW A COMPARISON BETWEEN THE ACTUAL EFFECTS MEASURED DURING THE MONITORING PROGRAM WITH THOSE PREDICTED AS PART OF THE IMPACT ASSESSMENT. THE GROUNDWATER AND SURFACE WATER MONITORING PROGRAM SHALL CONSIST OF THE FOLLOWING: 1. QUARTERLY GROUNDWATER LEVEL MONITORING DURING PIT OPERATIONS, IN MONITORING WELLS MW20-1, MW20-2, MW20-3,

2. ONCE THE PIT IS OPERATING BELOW THE WATER TABLE, DATALOGGERS TO MEASURE WATER LEVELS AND WATER TEMPERATURES ON A DAILY BASIS SHALL BE INSTALLED IN MONITORING WELLS MW20-6 AND MW20-03 AND SURFACE WATER 3. ONCE THE PIT IS OPERATING BELOW THE WATER TABLE, MONITORING WELLS MW20-3 AND MW20-6 AND SURFACE WATER STATION SG-1 SHALL BE MONITORED/SAMPLED ON AN ANNUAL BASIS FOR THE FOLLOWING PARAMETERS (AS A MINIMUM):

TEMPERATURE, PH. CONDUCTIVITY, METALS SCAN (INCLUDING URANIUM AND THORIUM), TOTAL SUSPENDED SOLIDS, TOTAL DISSOLVED SOLIDS, ALKALINITY, TURBIDITY, AND NUTRIENTS. DURING THE OPERATIONAL PHASE, OBSERVATIONS OF THE PRESENCE/ABSENCE OF DIRECT FLOW FROM THE PIT POND SHALL BE A COMPONENT OF THE ROUTINE MONITORING PROGRAM. THE WATER LEVEL IN THE PIT POND, ONCE EXTRACTION IS BELOW THE GROUNDWATER TABLE, SHALL BE MONITORED USING A DATALOGGER NEAR THE LOWEST GROUND SURFACE ELEVATION POINT ALONG THE EASTERN LIMIT OF THE EXTRACTION AREA. IF THE WATER LEVEL AT THIS MONITORED LOCATION REACHES WITH 30 CENTIMETRES OF THE OVERFLOW INVERT ELEVATION, AN OUTFLOW STRUCTURE (WITH EROSION CONTROL) AND BAFFLES (TO MINIMIZE SEDIMENT TRANSPORT TO THE OUTFLOW LOCATION) SHALL BE CONSTRUCTED AT/NEAR THE OUTFLOW POINT. SAMPLING OF THE OUTFLOW DURING THE OPERATIONAL PHASE SHALL BE CONDUCTED, AND THESE SAMPLES SHALL BE ANALYZED FOR THE FOLLOWING PARAMETERS (AS A MINIMUM): TEMPERATURE, PH, CONDUCTIVITY, TOTAL SUSPENDED SOLIDS, TOTAL DISSOLVED SOLIDS, ALKALINITY, TURBIDITY, AND NUTRIENTS. DURING THE REHABILITATION PHASE, IF THERE IS A CONSISTENT DIRECT SURFACE WATER OUTFLOW FROM THE REHABILITATED PIT LAKE, AN OUTFLOW STRUCTURE WITH EROSION CONTROL SHALL BE CONSTRUCTED/RETAINED AT THE

OUTFLOW LOCATION. 5. PRIOR TO COMMENCEMENT OF SITE OPERATIONS, GROUNDWATER SAMPLES SHALL BE COLLECTED FROM MONITORING WELLS MW20-1, MW20-2, MW20-3, MW20-4, MW20-5 AND MW20-6 AND THE SAMPLES SHALL BE ANALYZED FOR THE FOLLOWING PARAMETERS (AS A MINIMUM): TEMPERATURE, PH, CONDUCTIVITY, METALS SCAN (INCLUDING URANIUM AND THORIUM),

TOTAL SUSPENDED SOLIDS, TOTAL DISSOLVED SOLIDS, ALKALINITY, TURBIDITY, AND NUTRIENTS. PRIOR TO COMMENCEMENT OF SITE OPERATIONS, A GROUNDWATER SEEP(S) IN THE AREA BETWEEN THE PROPOSED EXTRACTION LIMIT AND BARBERS LAKE SHALL BE SAMPLED AND A SURFACE WATER SAMPLE FROM BARBERS LAKE SHALL BE COLLECTED. THESE SAMPLES SHALL BE ANALYZED FOR THE FOLLOWING PARAMETERS (AS A MINIMUM): TEMPERATURE. PH. CONDUCTIVITY, METALS SCAN (INCLUDING URANIUM AND THORIUM), TOTAL SUSPENDED SOLIDS, TOTAL DISSOLVED SOLIDS, ALKALINITY, TURBIDITY, AND NUTRIENTS.

7. PRIOR TO COMMENCEMENT OF SITE OPERATIONS, UP TO 5 PRIVATE WATER SUPPLY WELLS IN THE AREA OF THE SITE SHALL BE SAMPLED PROVIDED THAT OWNER CONSENT IS PROVIDED. THESE PRIVATE WELL SAMPLES SHALL BE ANALYZED FOR THE FOLLOWING PARAMETERS (AS A MINIMUM): TEMPERATURE, PH, CONDUCTIVITY, METALS SCAN (INCLUDING URANIUM AND THORIUM), TOTAL SUSPENDED SOLIDS, TOTAL DISSOLVED SOLIDS, ALKALINITY, TURBIDITY, AND NUTRIENTS. IN THE EVENT OF A WELL INTERFERENCE COMPLAINT. THE LICENSEE SHALL IMPLEMENT THE COMPLAINTS RESPONSE PROGRAM

MINIMUM INSERTION LOSS FOR GENERATOR EXHAUST SILENCER

ENVIRONMENT, CONSERVATION AND PARKS.

,	NAME	OCTAVE BAND CENTRE FREQUENCY, HZ MINIMUM DYNAMIC INSERTION LOSS (DB)							RW	
		63	125	250	500	1000	2000	4000	8000	
Γ,	SILENCER TO BE INSTALLED AT THE GENERATOR EXHAUST ² (SOURCE: GENERATOR)	10	30	38	30	25	20	20	20	24

PRESENTED IN ATTACHMENT 3 TO THE WSP CANADA INC. AUGUST 3, 2023 LETTER RESPONSE TO THE MINISTRY OF THE

DATE APPROVAL DATE

DATE

 OCTAVE BAND CENTRE FREQUENCY, HZ, WITH MINIMUM DYNAMIC INSERTION LOSS IN DB OR DBA UNITS RE 10-12 WATTS. ALTERNATIVE LEVELS AT EACH FREQUENCY BAND PERMISSIBLE PROVIDING THE OVERALL INSERTION LOSS MEETS THE OVERALL INSERTION LOSS (RW) AS NOTED ABOVE AND IS NOT TONAL IN CHARACTER.

INSERTION LOSS BASED ON SILEX SILENCER MODEL JB 6.



THOMAS CAVANAGH CONSTRUCTION LIMITED

OPERATIONS PLAN NOTES

HIGHLAND LINE PIT

YYYY-MM-DD 2025-09-08 **DESIGNED** PREPARED JM KAM REVIEWED KAM APPROVED

4 OF 5

CONTROL REV. 0014

KEY MAP

SCALE 1:40,000 m

HIGHLAND LINE PIT

LOT 5, CONCESSION 10

GEOGRAPHIC TOWNSHIP OF DALHOUSIE

TOWNSHIP OF LANARK HIGHLANDS.

LANARK COUNTY, ONTARIO

. THIS SITE PLAN IS PREPARED UNDER THE AGGREGATE RESOURCES ACT FOR A CLASS A

1. KEY PLAN: Service Layer Credits: Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P

Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom, MapmyIndia,

PIT LICENCE NO. 626599

THOMAS CAVANAGH CONSTRUCTION LIMITED

APPLICANT:

KOA 1B0

REFERENCE(S)

9094 CAVANAGH ROAD

1. LICENCED AREA, HIGHLAND LINE PIT 37.6 HECTARES.

. AREA OF OPERATION, HIGHLAND LINE PIT 28.4 HECTARES.

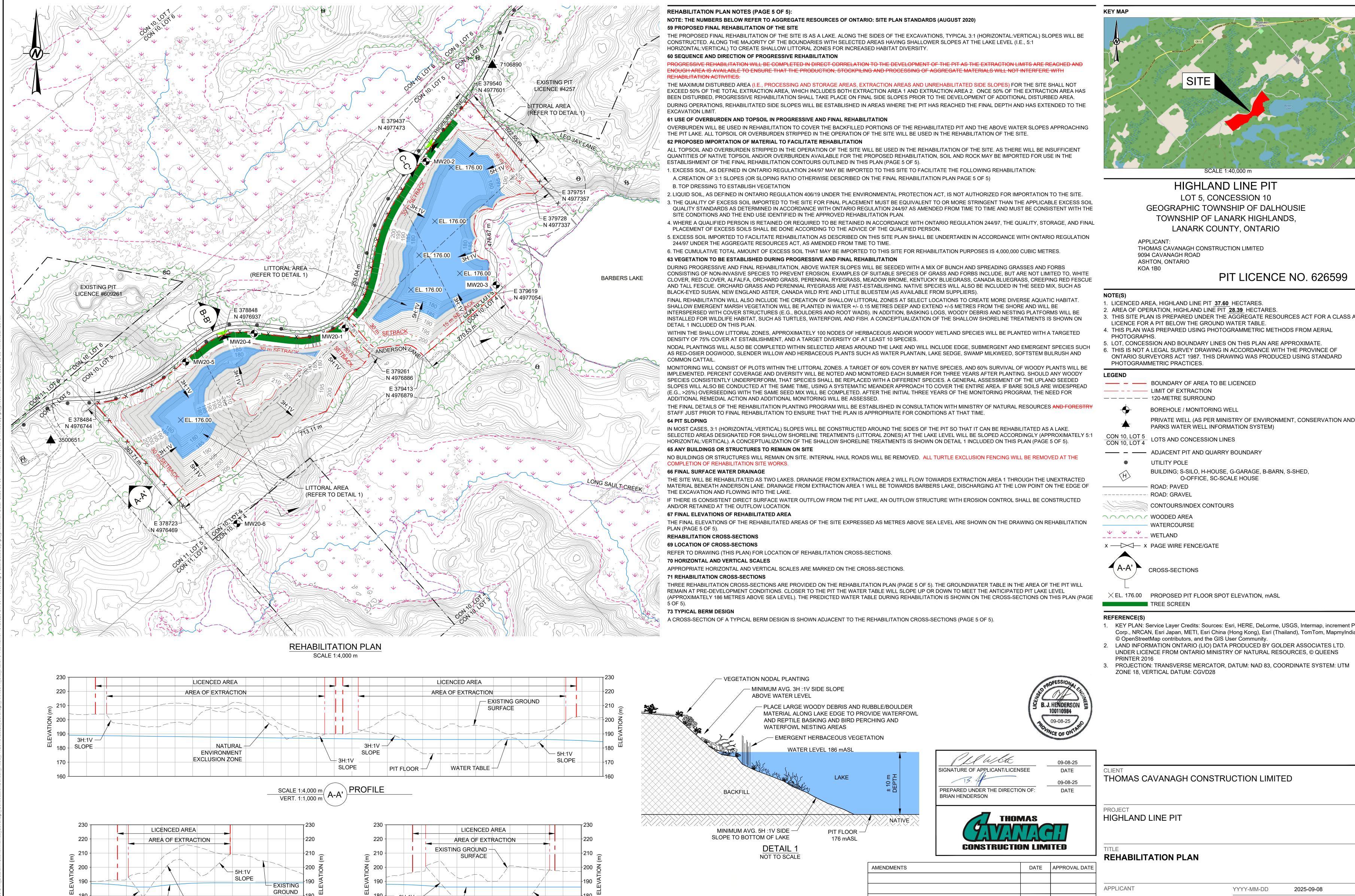
LICENSE FOR A PIT BELOW THE GROUND WATER TABLE

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ASHTON, ONTARIO

APPLICANT

PROJECT NO. 19126620



SLOPE

acksquare PIT FLOOR

SURFACE

- NATURAL

ENVIRONMENT

EXCLUSION ZONE

SECTION

SLOPE

WATER TABLE -

SCALE 1:4,000 m (C-C') SECTION

3H:1V -

WATER TABLE -

SCALE 1:4,000 m (B-B')

SLOPE -

HIGHLAND LINE PIT

SCALE 1:40,000 m

LOT 5, CONCESSION 10 GEOGRAPHIC TOWNSHIP OF DALHOUSIE TOWNSHIP OF LANARK HIGHLANDS, LANARK COUNTY, ONTARIO

THOMAS CAVANAGH CONSTRUCTION LIMITED

9094 CAVANAGH ROAD

PIT LICENCE NO. 626599

1. LICENCED AREA, HIGHLAND LINE PIT **37.60** HECTARES.

- 2. AREA OF OPERATION, HIGHLAND LINE PIT 28.39 HECTARES. 3. THIS SITE PLAN IS PREPARED UNDER THE AGGREGATE RESOURCES ACT FOR A CLASS A
- 4. THIS PLAN WAS PREPARED USING PHOTOGRAMMETRIC METHODS FROM AERIAL
- 5. LOT, CONCESSION AND BOUNDARY LINES ON THIS PLAN ARE APPROXIMATE.
- THIS IS NOT A LEGAL SURVEY DRAWING IN ACCORDANCE WITH THE PROVINCE OF ONTARIO SURVEYORS ACT 1987. THIS DRAWING WAS PRODUCED USING STANDARD

—— — BOUNDARY OF AREA TO BE LICENCED

PRIVATE WELL (AS PER MINISTRY OF ENVIRONMENT, CONSERVATION AND

LOTS AND CONCESSION LINES

BUILDING; S-SILO, H-HOUSE, G-GARAGE, B-BARN, S-SHED,

O-OFFICE, SC-SCALE HOUSE

CONTOURS/INDEX CONTOURS

x — X PAGE WIRE FENCE/GATE

CROSS-SECTIONS

- Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community
- 2. LAND INFORMATION ONTARIO (LIO) DATA PRODUCED BY GOLDER ASSOCIATES LTD.
- UNDER LICENCE FROM ONTARIO MINISTRY OF NATURAL RESOURCES, © QUEENS
- 3. PROJECTION: TRANSVERSE MERCATOR, DATUM: NAD 83, COORDINATE SYSTEM: UTM ZONE 18, VERTICAL DATUM: CGVD28

THOMAS CAVANAGH CONSTRUCTION LIMITED

REHABILITATION PLAN

PROJECT NO.

19126620

DATE

SITE PLANS APPROVED BY THE MINISTRY OF NATURAL RESOURCES.

SIGNATURE



CONTROL

0014

KAM APPROVED KAM **DRAWING** REV. 5 OF 5

2025-09-08