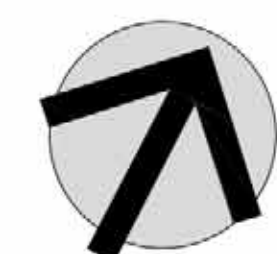


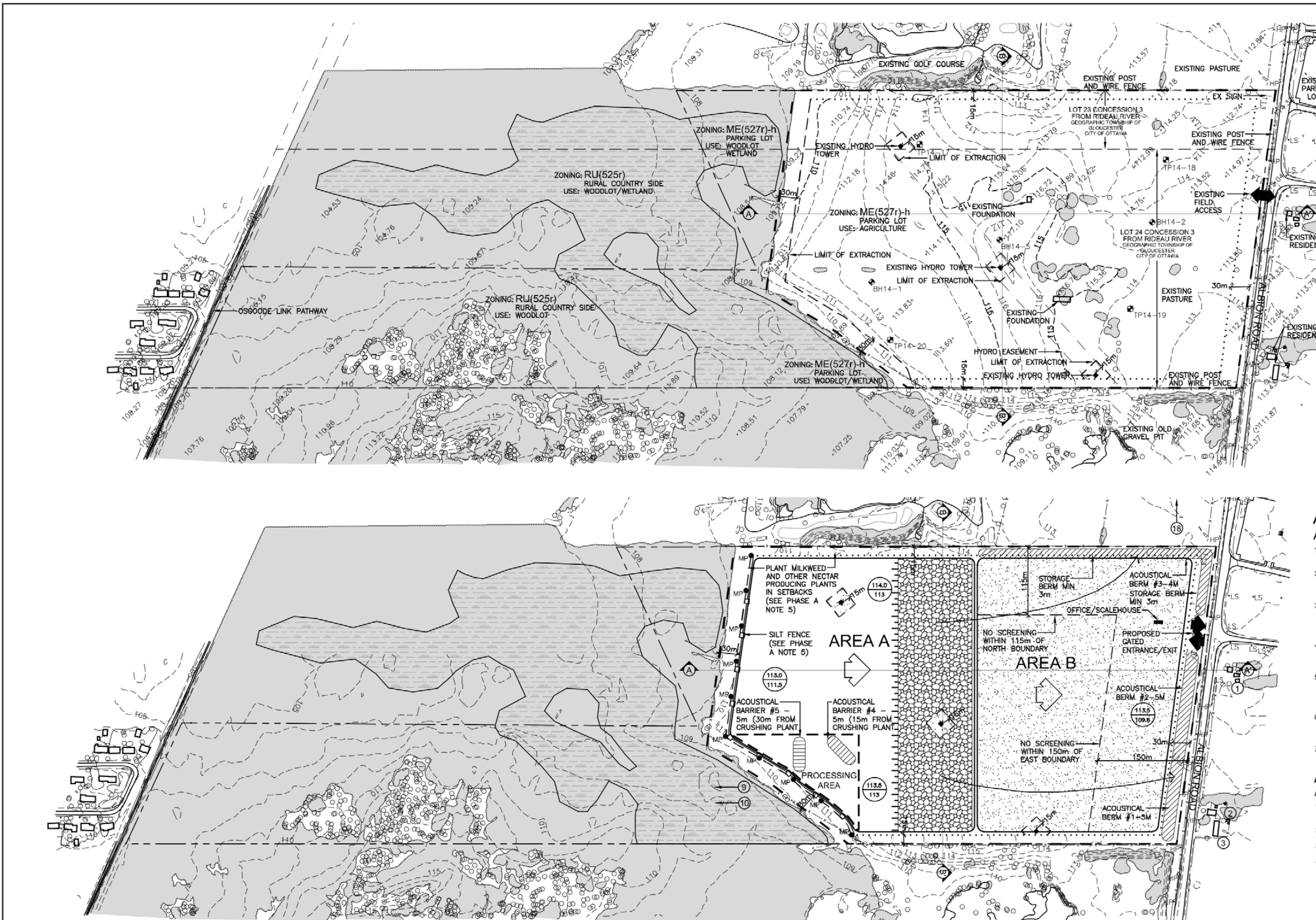
OTTAWA AIRPORT AUTHORITY, PARCEL 'C' - 4788 ALBION RD PROPOSED AGGREGATE OPERATION



CAVANAGH
OTTAWA AIRPORT
PIT



DATE: MARCH 2020



EXISTING FEATURES NOTES

GENERAL SITE PLAN INFORMATION

1. THIS SITE PLAN CONSISTS OF 2 DRAWINGS AND MUST BE READ COLLECTIVELY.
2. ALL MEASUREMENTS SHOWN ON THIS SITE PLAN ARE IN METRES.
3. THIS SITE PLAN IS PREPARED FOR SUBMISSION TO THE CITY OF OTTAWA.
4. APPLICANT: THOMAS CAVANAGH CONSTRUCTION LTD. 9554 CAVANAGH ROAD, ASHTON, ONTARIO K0A 1B0
5. TOTAL AREA OF PIT: 36.4 ha
TOTAL AREA TO BE EXTRACTED: 33.0 ha
TOTAL AREA TO BE REHABILITATED: 33.0 ha

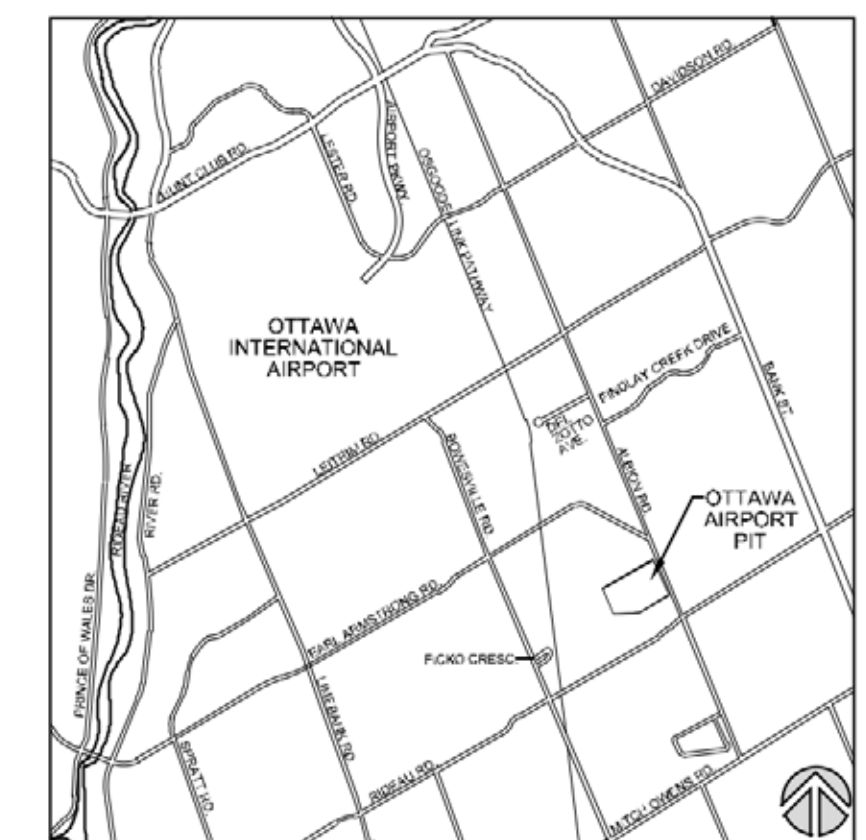
BASE INFORMATION

6. PROPERTY BOUNDARY INFORMATION FOR PART OF LOTS 23 AND 24, CONCESSION 3 FROM RIDEAU RIVER. CITY OF OTTAWA WAS OBTAINED FROM ARNETT, KENNEDY, RIDDELL AND JASON SURVEYING LTD. LEGAL SURVEY, DATED NOVEMBER 24, 1988. ALL ELEVATIONS ARE GEODETIC AND ABOVE SEA LEVEL (A.S.L.)
7. ZONING INFORMATION OBTAINED FROM GEOTOWNA ONLINE MAPPING WEBSITE FEBRUARY 2020.

TECHNICAL REPORTS

8. HYDROGEOLOGICAL INFORMATION WAS OBTAINED FROM TECHNICAL MEMORANDUM BY STANTEC, DATED DECEMBER 2019.
9. NATURAL ENVIRONMENT INFORMATION WAS OBTAINED FROM REPORT BY STANTEC DATED FEBRUARY 2020 (SEE PAGE 2 OF 2 FOR TECHNICAL RECOMMENDATIONS).
10. ARCHAEOLOGICAL INFORMATION WAS OBTAINED FROM REPORT BY STANTEC DATED FEBRUARY 2020 (SEE PAGE 2 OF 2 FOR TECHNICAL RECOMMENDATIONS).
11. NOISE INFORMATION WAS OBTAINED FROM REPORT BY FREEFIELD LTD. DATED FEBRUARY 2020 (REFER TO SHEET 1 OF 2 FOR TECHNICAL RECOMMENDATIONS).

KEY MAP



LEGEND

- BOUNDARY OF PIT
- LOT LINE
- PARCEL LINE
- SETBACK LINE
- LIMIT OF EXTRACTION
- EASEMENT LINE
- EXISTING FENCE
- EXISTING 5m CONTOUR LINE
- EXISTING 1m CONTOUR LINE
- EXISTING SPOT ELEVATION
- EXISTING VEGETATION
- EXISTING WETLAND
- EXTRACTION FACE
- BERM (MIN. HEIGHT AS SHOWN)
- UNDISTURBED AREA
- AREA STRIPPED OF TOPSOIL AND OVERBURDEN
- LOCATION OF CROSS SECTION
- EXISTING 1m CONTOUR LINE
- BOUNDARY OF PIT
- LOT LINE
- PARCEL LINE
- LIMIT OF EXTRACTION
- EASEMENT LINE
- HP - EXISTING HYDRO POLE
- WATER DRAINAGE
- MONITORING WELL (HOLE CHEVRIER ENGINEERING, 2014)
- TEST PIT (HOLE CHEVRIER ENGINEERING, 2014)
- EXISTING ENTRANCE/EXIT
- DIRECTION OF EXTRACTION
- DIRECTION OF TOPSOIL AND OVERBURDEN MOVEMENT
- PRODUCT TRANSPORTATION VIA HAUL ROAD
- EXISTING ELEVATION PROPOSED ELEVATION
- NOISE RECEPTOR

AREA A

AREA A NOTES

1. ESTABLISH ENTRANCE/EXIT FROM ALBION ROAD WHERE SHOWN ON SITE PLANS, ACCORDING TO MUNICIPAL STANDARDS AND APPROVALS.
2. PRIOR TO OPERATIONS COMMENCING IN AREA A, UPGRADE (IF NECESSARY) FENCING ON THE BOUNDARY OF THE GRAVEL PIT AND INSTALL MARKER POSTS AS SHOWN (SEE OPERATIONAL NOTE #10 FOR EXCEPTIONS). ALL FENCING SHALL BE MAINTAINED.
3. PRIOR TO OPERATIONS COMMENCING ON SITE THE LIMITS OF THE WOODLAND BUFFER SHOULD BE FLAGGED AND CLEARLY MARKED BY A QUALIFIED PERSON. THE CITY OF OTTAWA WILL BE NOTIFIED, SHOULD CITY STAFF WISH TO CONFIRM THE BOUNDARIES.
4. BEGIN STRIPPING TOPSOIL AND/OR OVERBURDEN SEPARATELY FROM AREA A AND USE THE MATERIAL TO CONSTRUCT ACOUSTIC BERMS AS SHOWN. EXCESS MATERIAL MAY BE STOCKPILED ON THE PIT FLOOR OR STORED IN STORAGE BERMS AS SHOWN.
5. PLANT COMMON MILKWEED AND OTHER NECTAR PRODUCING PLANTS IN THE SETBACKS (SEE NEAR TECHNICAL RECOMMENDATIONS PAGE 2 OF 2) AND INSTALL SILT FENCE ALONG 30m WOODLAND SETBACK WHEN OPERATIONS ARE WITHIN 50m OF THE WOODLAND.
6. BEGIN EXTRACTION IN AREA A IN DIRECTION SHOWN. TEMPORARY STOCKPILES MAY BE LOCATED ON PIT FLOOR NEAR THE PIT FACE DURING EXCAVATION OF AGGREGATE.
7. MAINTAIN ALL VEGETATION IN A HEALTHY, VIGOROUS CONDITION.

AREA B

AREA B NOTES (NOT SHOWN)

1. BEGIN STRIPPING TOPSOIL AND/OR OVERBURDEN SEPARATELY FROM AREA B AND USE THE MATERIAL TO BEGIN PROGRESSIVE REHABILITATION OF AREA A.
2. PROGRESSIVE REHABILITATION OF AREA A WHILE EXTRACTION AREA B.
3. REHABILITATION IN AREA B USING MATERIAL STORED IN BERMS.
4. REMOVE ALL EQUIPMENT, STRUCTURES AND SCRAP FROM THE SITE AND REHABILITATE ALL HAUL ROADS.

TECHNICAL RECOMMENDATIONS

THE FOLLOWING ARE THE TECHNICAL RECOMMENDATIONS FROM ALL OF THE EXPERTS' REPORTS. ADDITIONAL RECOMMENDATIONS MAY BE INCLUDED AS A RESULT OF THE REVIEW PROCESS.

ACOUSTIC ASSESSMENT REPORT - FREEFIELD LTD. FEBRUARY 2020

1. OPERATIONS AT THE PIT SHALL TAKE PLACE ONLY DURING THE DAYTIME PERIOD, 7 A.M. TO 7 P.M.

2. THE OPERATION OF THE SCREENING PLANT SHALL COMPLY WITH THE FOLLOWING:
 - a. THE SCREENING PLANT SHALL BE LOCATED ON THE FLOOR OF THE PIT.
 - b. WHEN OPERATING IN AREA A, THERE ARE NO RESTRICTIONS ON THE LOCATION OF THE SCREENING PLANT.
 - c. THE SCREENING PLANT SHALL BE AT LEAST 150 M WEST OF THE EASTERN SITE BOUNDARY AND AT LEAST 115 M SOUTH OF THE NORTHERN SITE BOUNDARY.

3. THE OPERATION OF THE CRUSHING PLANT SHALL COMPLY WITH THE FOLLOWING:
 - a. THE CRUSHING PLANT SHALL BE LOCATED ON THE FLOOR OF THE PIT.
 - b. THE CRUSHING PLANT SHALL BE LOCATED WITHIN AREA A.
 - c. THE CRUSHING PLANT SHALL BE SHIELDED BY BERMS 4 AND 5 AS DESCRIBED IN TABLE 7 AND BELOW.

4. NOISE BARRIERS OR BERMS ARE TO BE PROVIDED AS FOLLOWS:
 - a. NOISE BARRIERS OR BERMS ARE TO BE PROVIDED AS FOLLOWS. NOTE THAT BERMS 1, 2 AND 3 ARE ONLY REQUIRED WHEN EXTRACTION IS TAKING PLACE IN AREA B.

- a. A NOISE BARRIER MAY BE SUBSTITUTED FOR A BERM, AND VICE VERSA, PROVIDED THAT THE MINIMUM HEIGHT, MINIMUM EXTENT AND LOCATION REQUIREMENTS ARE SATISFIED.

- a. NOISE BARRIERS OR 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 ARE AS FOLLOWS:
 - i. LIFT FACE OR EXISTING TERRAIN.
 - ii. EARTH, GRAVEL OR AGGREGATE BERMS OR STOCKPILES.
 - iii. CONCRETE OR BRICK WALLS.
 - iv. COMMERCIAL NOISE BARRIERS.
 - v. SHIPPING CONTAINERS.

5. IF A NEW PROCESS IS INTRODUCED TO THE SITE, 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 CITY OF OTTAWA AND MECOP SOUND LEVEL LIMITS ARE MET AT ALL POINTS OF RECEPTION.

WASH PLANT INFORMATION

17. SHOULD A WASH PLANT BE REQUIRED WITH A PREDICTED WATER USAGE OF 50,000 L/DAY OR MORE, PRODUCER WILL APPLY TO THE MECOP FOR A PERMIT TO TAKE WATER. THIS PERMIT APPLICATION WILL BE ACCOMPANIED BY THE APPROPRIATE SUPPORTING DOCUMENTATION.

IMPORTATION OF FILL INFORMATION

16. IN ORDER TO MAXIMIZE RESOURCE RECOVERY, IMPORTATION OF CLEAN INERT FILL (E.G. TOPSOIL AND/OR OVERBURDEN) MAY BE IMPORTED TO FACILITATE AGRICULTURAL REHABILITATION.

IMPORTED MATERIAL SHALL MEET THE MINISTRY OF THE ENVIRONMENT, CONSERVATION, AND PARKS' CURRENT STANDARDS.

PETROLEUM STORAGE INFORMATION

15. FUEL, OIL, RADIATOR AND HYDRAULIC FLUID, AND OTHER CHEMICALS NEEDED FOR THE MAINTENANCE AND FUNCTIONING OF ON-SITE AGGREGATE PROCESSING EQUIPMENT SHALL BE APPROPRIATELY STORED IN ABOVE-GROUND CONTAINERS AND SHALL MEET THE REQUIREMENTS OF THE GASOLINE HANDLING ACT, AS AMENDED, AND THE GASOLINE HANDLING CODE AND REGULATIONS, AS AMENDED BY THE TECHNICAL STANDARDS AND SAFETY ACT (TSSA) AND LIQUID FUELS HANDLING CODE, AND IN ACCORDANCE WITH THE MINISTRY OF THE ENVIRONMENT, CONSERVATION, AND PARKS' CHEMICAL STORAGE GUIDELINES. ALL REFUELING SHALL BE WITHIN A CONTAINMENT PAD. ALL SPILLS TO THE ENVIRONMENT MUST BE REPORTED TO THE SPILLS ACTION CENTRE OF MECOP. ANY SPILL SHALL BE REMOVED AND DISPOSED OF AT AN APPROPRIATE MECOP APPROVED FACILITY.

EQUIPMENT SHALL BE RE-FUELED A MINIMUM 30m AWAY FROM SENSITIVE NATURAL FEATURES (E.G. WETLANDS) TO AVOID POTENTIAL IMPACTS IF AN ACCIDENTAL SPILL OCCURS.

WASH PLANT INFORMATION

17. SHOULD A WASH PLANT BE REQUIRED WITH A PREDICTED WATER USAGE OF 50,000 L/DAY OR MORE, PRODUCER WILL APPLY TO THE MECOP FOR A PERMIT TO TAKE WATER. THIS PERMIT APPLICATION WILL BE ACCOMPANIED BY THE APPROPRIATE SUPPORTING DOCUMENTATION.

BERM INFORMATION

12. BERMS SHALL CREATE AN EFFECTIVE VISUAL BARRIER AND BE A MINIMUM OF #2.5 METRES ABOVE THE EXISTING GRADE. BERMS SHALL NOT EXCEED 2:1. REFER TO TYPICAL BERM CROSS SECTION ON DRAWING 2 OF 2. ALL BERMS SHALL BE SEEDED (USING GRASS/LEGUME MIXTURE. SEE REHABILITATION PLAN, NOTE #7) IMMEDIATELY UPON COMPLETION TO MINIMIZE NOISE, DUST AND EROSION.

13. ON COMPLETION OF THE BERMS, EXCESS ON-SITE OVERBURDEN WILL BE USED TO PROGRESSIVELY BACKFILL AND REHABILITATE THE SITE. TOPSOIL CAN BE TEMPORARILY STOCKPILED ON THE PIT FLOOR.

SCRAP STORAGE INFORMATION

14. ALL SCRAP, USED MACHINERY AND STUMPS GENERATED THROUGH THE OPERATIONS WILL BE STORED IN THE PROCESSING AREA. A MINIMUM OF 30m FROM THE BOUNDARY OF THE SITE AND NOT WITHIN 30m OF ANY BODY OF WATER AND SHALL BE DISPOSED OF ON AN ONGOING BASIS. STUMPS/WOODY MATERIAL MAY BE CHIPPED AND USED FOR SOIL ENHANCEMENT DURING PROGRESSIVE REHABILITATION. TREES WILL BE HARVESTED AND SOLD AS LUMBER OR UTILIZED FOR FIREWOOD AND/OR THEIR BEST USE. UPON COMPLETION OF EXTRACTION, ALL SCRAP EQUIPMENT AND USED MACHINERY SHALL BE REMOVED.

OPERATIONS NOTES

GENERAL INFORMATION

1. THIS PLAN DEPICTS A SCHEMATIC OPERATIONS AND REHABILITATION SEQUENCE FOR THIS PROPERTY BASED ON THE BEST INFORMATION AVAILABLE AT THE TIME OF PREPARATION. AREAS SHOWN ARE SCHEMATIC AND MAY SLIGHTLY VARY WITH MATERIAL QUALITY, SITE HYDROLOGY AND HYDROGEOLOGY OR MARKET DEMAND. AREAS DO NOT REPRESENT ANY SPECIFIC OR EQUAL TIME PERIOD.

EXTRACTION SHALL GENERALLY FOLLOW THE SEQUENCE SHOWN. WHEN PARTIAL REHABILITATION OF AREA A IS POSSIBLE IT SHALL BE CARRIED OUT, NOT WITHSTANDING THE EXTRACTION AND REHABILITATION PROCESS ABOVE. DEMAND FOR CERTAIN PRODUCTS OR BLENDING OF MATERIALS MAY REQUIRE SOME DEVIATION IN THE EXTRACTION AND REHABILITATION AREAS.

EXTRACTION/PROCESSING/HAULING INFORMATION

2. TOTAL AREA TO BE EXTRACTED IS 33.0 HECTARES.

3. MAXIMUM NUMBER OF TONNES OF AGGREGATE TO BE REMOVED FROM THE SITE IN ANY CALENDAR YEAR IS 250,000 TONNES. TONNAGE AMOUNT MAY BE TEMPORARILY AMENDED FOR SPECIFIC PROJECTS.

EXTRACTION OF SAND AND GRAVEL WILL TAKE PLACE IN ONE OR TWO BENCHES, WITH A MAXIMUM HEIGHT OF 40 METRES. THE GROUNDWATER TABLE IS ESTIMATED TO BE BETWEEN ± 107.7 AND 109.3m A.S.L. (SEE HYDROGEOLOGICAL TECHNICAL MEMO BY STANTEC DATED DECEMBER 2019). MATERIAL FROM AREAS A AND B MAY BE EXTRACTED SIMULTANEOUSLY TO BLEND CUSTOM PRODUCTS AS MARKET DEMANDS.

OTHER SITE ACTIVITIES WILL INCLUDE CRUSHING, WASHING, STRIPPING AND REHABILITATION. OPERATIONAL EQUIPMENT MAY INCLUDE TRUCKS, LOADERS, EXCAVATOR, BACKHOES, BULLDOZERS, SCRAPERS, CONVEYORS AND OTHER RELATED EQUIPMENT. PRODUCT STOCKPILES WILL BE LOCATED ON THE PIT FLOOR.

MATERIAL FROM OTHER PROPERTIES MAY BE IMPORTED INTO THE SITE FOR BLENDING CUSTOM PRODUCTS AND/OR RESALE.

4. OFFICE/STORAGE BUILDING AND/OR SCALE/SCALEHOUSE MAY BE CONSTRUCTED WHERE SHOWN.

HYDROGEOLOGICAL INFORMATION

5. THE WATER TABLE ELEVATION VARIES ACROSS THIS LICENCE FROM APPROXIMATELY ± 107.7 ± 109.3m ABOVE SEA LEVEL (A.S.L.). BASED ON THE HYDROGEOLOGICAL TECHNICAL MEMORANDUM (SEE ABOVE), REFER TO SECTIONS ON SHEET 2 OF 2.

6. SURFACE DRAINAGE WILL BE DIRECTED TO LOW AREAS FOR WATER TO INFILTRATE INTO THE GRANULAR MATERIALS ON THE PIT FLOOR. THERE WILL BE NO OFF-SITE DITCHING/DISCHARGE.

NOISE MITIGATION INFORMATION

7. HOURS OF OPERATION:
 - SITE PREPARATION AND REHABILITATION: 07:00-19:00
 - EXCAVATION AND PROCESSING: 07:00-19:00
 - SHIPPING: 07:00-19:00

AIR QUALITY INFORMATION

8. WATER WILL BE APPLIED TO INTERNAL HAUL ROADS AND PROCESSING AREAS AS OFTEN AS REQUIRED TO MITIGATE DUST.

SITE MANAGEMENT INFORMATION

MAINTENANCE/PROTECTION OF VEGETATION INFORMATION

9. EXISTING VEGETATION SHALL BE MAINTAINED IN A HEALTHY VIGOROUS GROWING CONDITION UNTIL SEQUENTIAL STRIPPING BEGINS OR UNTIL THE REHABILITATION IS COMPLETE. ANY VEGETATION PLANTED AS PART OF SITE IMPROVEMENTS OR PROGRESSIVE AND FINAL REHABILITATION WILL ALSO BE MAINTAINED IN A HEALTHY, VIGOROUS GROWING CONDITION (SEE NATURAL ENVIRONMENT TECHNICAL RECOMMENDATIONS PAGE 2 OF 2).

FENCING AND DEMARCATION INFORMATION

10. BOUNDARIES OF THE PIT THAT ARE PRESENTLY FENCED ARE SHOWN ON DRAWING 1 OF 2 EXISTING FEATURES. THE WEST BOUNDARY ALONG THE WOODED FEATURE SHALL BE CLEARLY MARKED DUE TO THE EXISTING VEGETATION MAKING THIS BOUNDARY INACCESSIBLE. SILT FENCING WILL BE CONSTRUCTED ONCE STRIPPING OCCURS WITHIN 50m OF THE SETBACKS ADJACENT TO THE NATURAL HERITAGE FEATURES IDENTIFIED ON SITE. THE 30m SETBACK ADJACENT TO THE WOODED AREA NATURAL FEATURE SHALL BE DEMARCATED WITH HIGHLY VISIBLE MARKER POSTS AT INTER-VISIBLE DISTANCES. ALL FENCING AND MARKER POSTS SHALL BE MAINTAINED UNTIL FINAL REHABILITATION IS COMPLETE.

SETBACKS AND EXTRACTION LIMITS SHALL BE DEMARCATED BY HIGHLY VISIBLE MARKERS AT INTER-VISIBLE DISTANCES AND SHALL BE MAINTAINED.

TOPSOIL/SUBSOIL/OVERBURDEN STORAGE INFORMATION

11. TOPSOIL AND OVERBURDEN SHALL BE STRIPPED AND STORED SEPARATELY IN BERMS WITHIN THE SETBACK WHERE SHOWN ON PLAN.

BERM INFORMATION

12. BERMS SHALL CREATE AN EFFECTIVE VISUAL BARRIER AND BE A MINIMUM OF #2.5 METRES ABOVE THE EXISTING GRADE. BERMS SHALL NOT EXCEED 2:1. REFER TO TYPICAL BERM CROSS SECTION ON DRAWING 2 OF 2. ALL BERMS SHALL BE SEEDED (USING GRASS/LEGUME MIXTURE. SEE REHABILITATION PLAN, NOTE #7) IMMEDIATELY UPON COMPLETION TO MINIMIZE NOISE, DUST AND EROSION.

13. ON COMPLETION OF THE BERMS, EXCESS ON-SITE OVERBURDEN WILL BE USED TO PROGRESSIVELY BACKFILL AND REHABILITATE THE SITE. TOPSOIL CAN BE TEMPORARILY STOCKPILED ON THE PIT FLOOR.

SCRAP STORAGE INFORMATION

14. ALL SCRAP, USED MACHINERY AND STUMPS GENERATED THROUGH THE OPERATIONS WILL BE STORED IN THE PROCESSING AREA. A MINIMUM OF 30m FROM THE BOUNDARY OF THE SITE AND NOT WITHIN 30m OF ANY BODY OF WATER AND SHALL BE DISPOSED OF ON AN ONGOING BASIS. STUMPS/WOODY MATERIAL MAY BE CHIPPED AND USED FOR SOIL ENHANCEMENT DURING PROGRESSIVE REHABILITATION. TREES WILL BE HARVESTED AND SOLD AS LUMBER OR UTILIZED FOR FIREWOOD AND/OR THEIR BEST USE. UPON COMPLETION OF EXTRACTION, ALL SCRAP EQUIPMENT AND USED MACHINERY SHALL BE REMOVED.

NO.	DATE	REVISION	OWNER	HM	NO.	DATE	REVISION	OWNER	HM

Pre Approval Review Site Plan Amendments

Harrington McAvan Ltd
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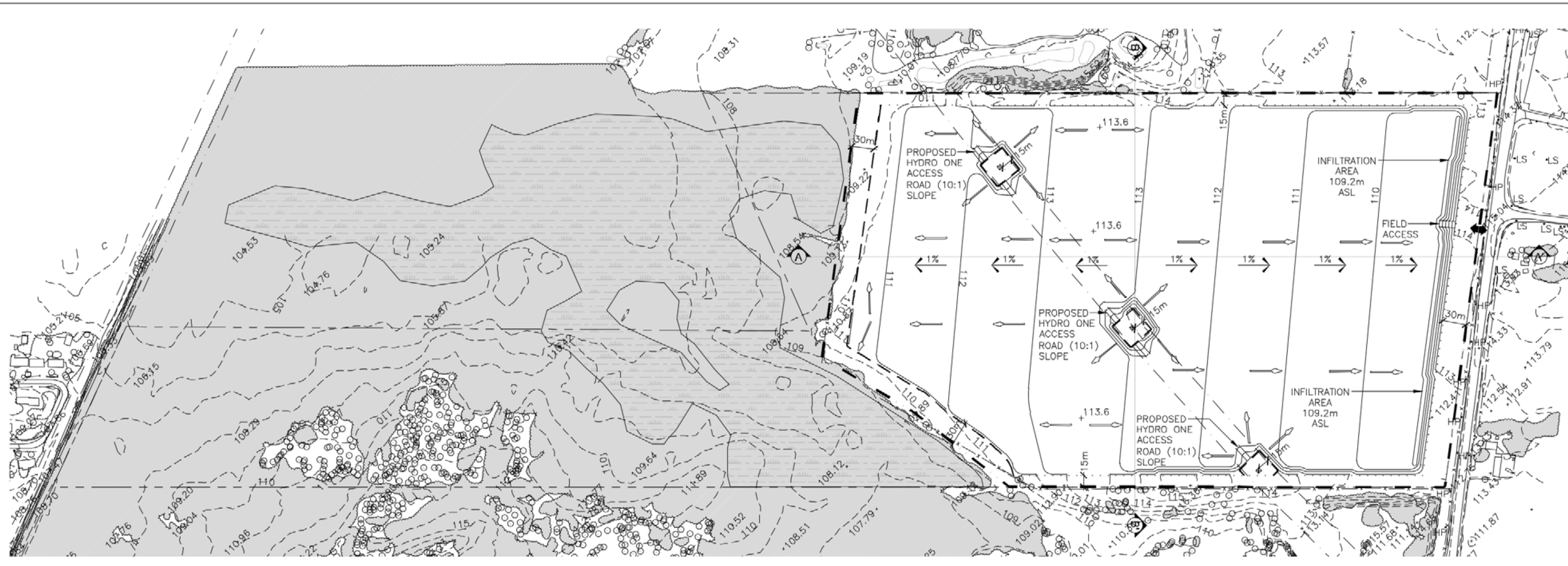
Project Name

CAVANAGH OTTAWA AIRPORT PIT
 PART OF LOTS 23 AND 24, CONCESSION 3 FROM RIDEAU RIVER
 GEOGRAPHIC TOWNSHIP OF GLOUCESTER
 CITY OF OTTAWA

Scale 1:4000 North Stamp
 Drawing Status PRELIMINARY FOR DISCUSSION
 Drawing Title EXISTING FEATURES AND OPERATIONAL PLAN

Drawn S.B. Checked M.H. Issue Date MAR 2020
 Project Number 19-27
 Drawing Number 1 OF 2

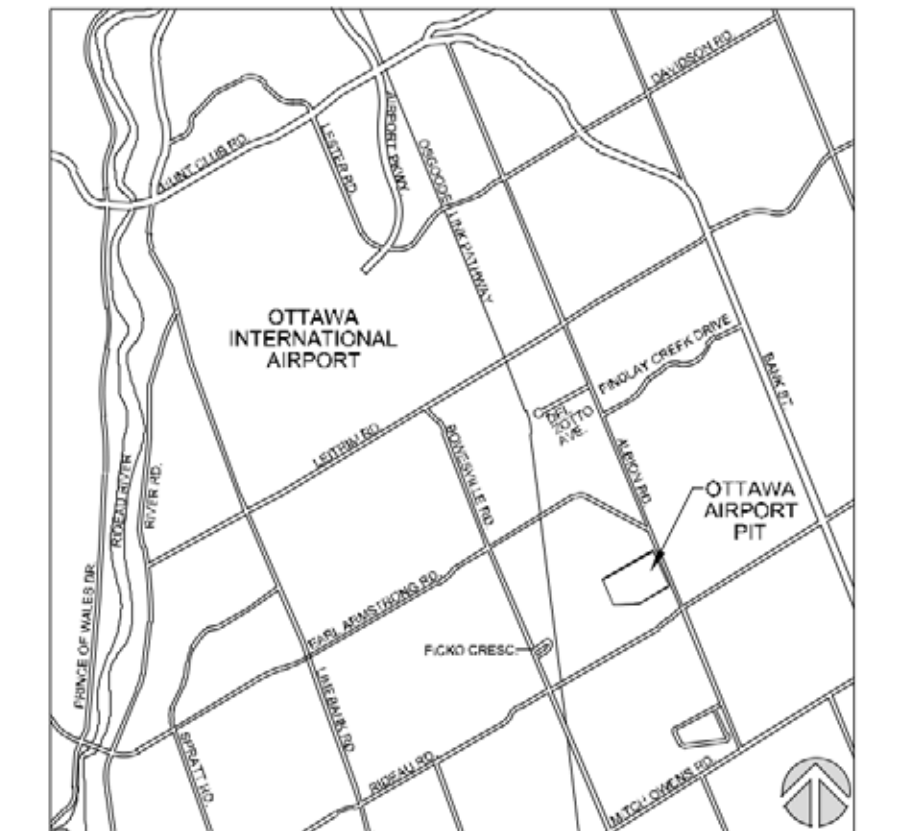
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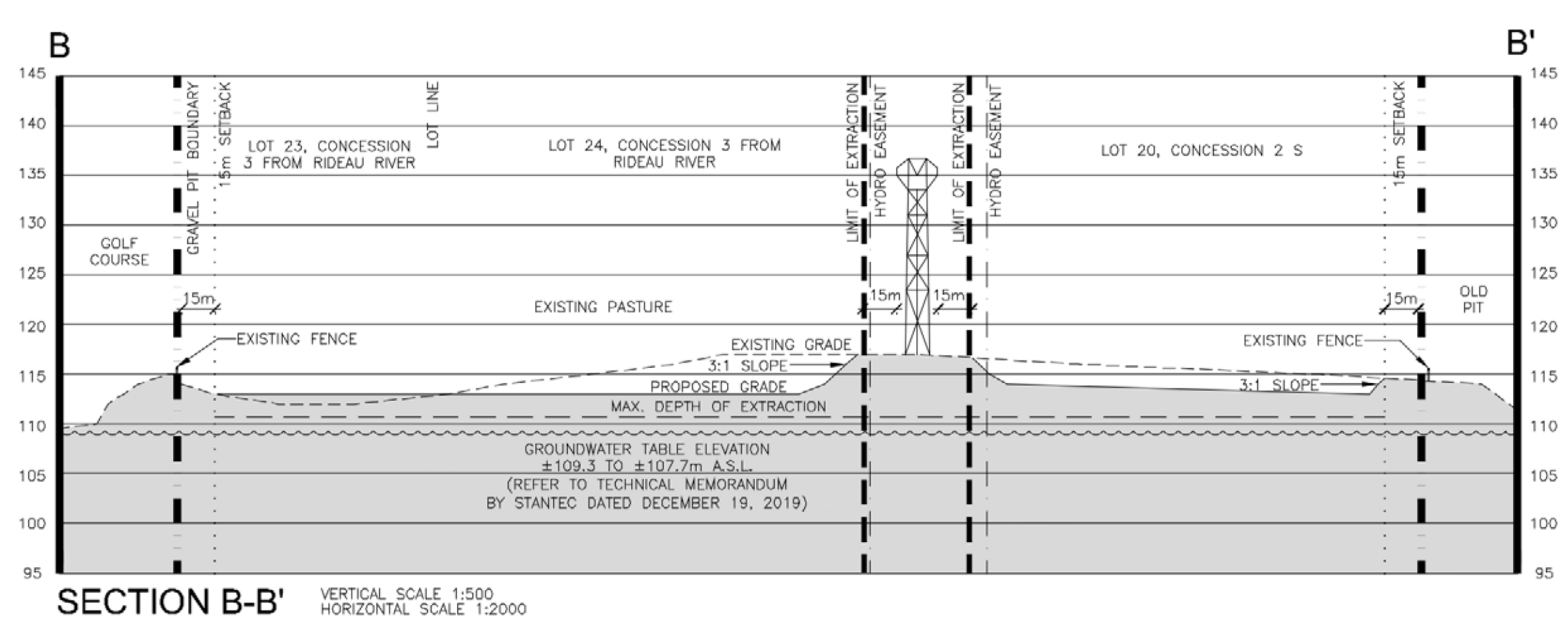
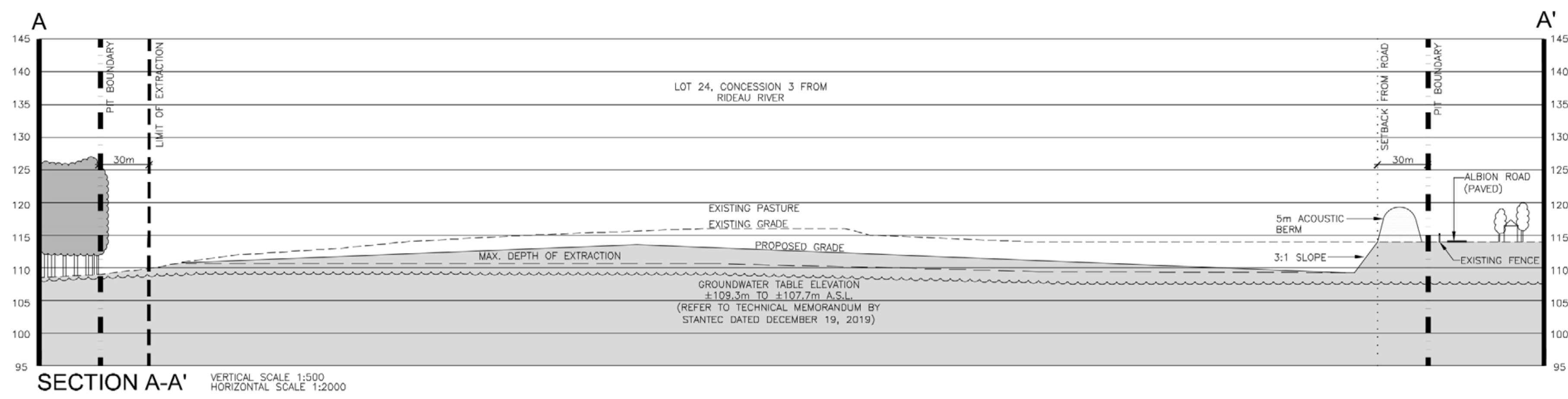
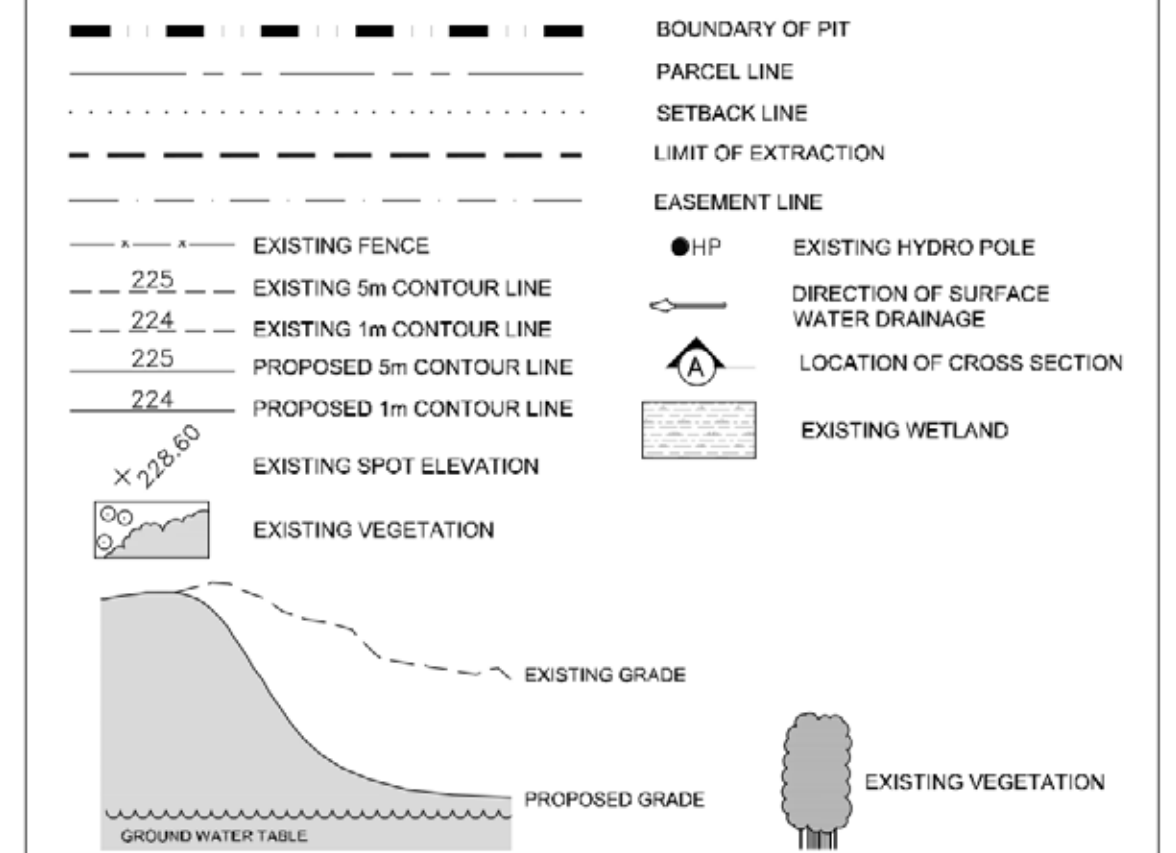
REHABILITATION NOTES

- GENERAL INFORMATION**
- REFER TO SHEET 2 OF 2 FOR SECTIONS, SHEET 1 OF 2 FOR OPERATIONS AND AREA DIAGRAMS AND NOTES AND SHEET 2 OF 2 FOR FINAL REHABILITATION AND NOTES.
 - PROPERTY SHALL BE REHABILITATED TO: GRASSLAND/PASTURE 33 HA
- HYDROGEOLOGICAL INFORMATION**
- IT IS ANTICIPATED THAT THE GROUNDWATER ELEVATION ACROSS THE SITE WILL REMAIN RELATIVELY UNCHANGED AT ±109.3m TO 107.7m A.S.L. (REFER TO HYDROGEOLOGICAL TECHNICAL MEMORANDUM).
 - ALL SURFACE DRAINAGE WILL BE DIRECTED TO THE LOW AREAS REMAINING ON THE PIT FLOOR ON SITE SO THAT THE WATER CAN INFILTRATE INTO THE GRANULAR MATERIALS. THERE WILL BE NO SURFACE DISCHARGE OFF-SITE.
- SIDESLOPE/MEADOW REHABILITATION INFORMATION**
- GRADING INFORMATION**
- REHABILITATED SLOPES WILL BE CONSTRUCTED AS SHOWN ON THE CROSS SECTIONS. REHABILITATION SHALL BE BY BACKFILLING (MINIMUM 3:1) AND/OR CUT AND FILL METHOD USING AVAILABLE ON-SITE OVERBURDEN AND TOPSOIL FROM WITHIN THE SITE AND/OR CLEAN INERT IMPORTED FILL THAT MEETS MEC'S CURRENT STANDARDS.
 - AVAILABLE OVERBURDEN REPLACED WILL BE APPROXIMATELY 200mm THICK.
- REFER TO DRAWING 2 OF 2, SECTIONS, FOR MORE INFORMATION ON BACKFILLING AND CREATION OF REHABILITATED SLOPES.
- TOPSOILING INFORMATION**
- ALL AVAILABLE TOPSOIL ON THE SITE WILL REMAIN TO BE USED FOR REHABILITATION OF THIS SITE. AVAILABLE TOPSOIL REPLACED WILL BE APPROXIMATELY 200-300mm THICK.
- VEGETATION STABILIZATION INFORMATION**
- TOPSOIL SHALL BE SEEDED WITH A MIXTURE OF GRASSES AND LEGUMES THAT MAY INCLUDE THE FOLLOWING AT A RATE OF APPROXIMATELY 125KG/HA:
 BUCKWHEAT RED CLOVER WHITE CLOVER
 TALL FESCUE ANNUAL RYE COMMON MILKWEED
- REHABILITATION TO GRASSLAND/PASTURE INFORMATION**
- DEEP RIPPING OF FIELDS SHALL BE PERFORMED TO ELIMINATE COMPACTION (WHERE REQUIRED).
 - SPREADING OF AVAILABLE SUBSOIL/OVERBURDEN AND ROUGH GRADING.
 - SPREADING OF AVAILABLE TOPSOIL AND FINE GRADING.
 - REMOVAL OF STONES LARGER THAN 100mm.
 - SEED AREAS WITH SEED MIXTURE NOTED ABOVE. ALL VEGETATION PLANTED SHALL BE MAINTAINED IN A HEALTHY, VIGOROUS GROWING CONDITION.
 - MATERIAL FROM OTHER PROPERTIES (EG. MANURE AND/OR TOPSOIL) MAY BE IMPORTED INTO THE SITE FOR SOIL ENHANCEMENT USING STANDARD AGRICULTURAL PRACTICES.
- SETBACK REHABILITATION INFORMATION**
- AFTER SIDESLOPES ARE CREATED AND REQUIRED BERMS ARE REMOVED FROM SETBACKS, THESE AREAS WILL BE IMMEDIATELY STABILIZED WITH A SUITABLE GROUND COVER AND THEN CULTIVATED THE FOLLOWING SPRING.

KEY MAP



LEGEND



TECHNICAL RECOMMENDATIONS CONTINUED

- NATURAL ENVIRONMENT ASSESSMENT LEVEL 1 & 2 - STANTEC, FEBRUARY 2020**
- MITIGATION MEASURES TO PROTECT NATURAL HERITAGE FEATURES FROM DIRECT AND INDIRECT IMPACTS (DESCRIBED IN SECTION 7.0 OF THE REPORT), WILL BE IMPLEMENTED BY THE OPERATOR.
 - A MINIMUM 30m SETBACK SHALL BE ESTABLISHED BETWEEN THE EXTRACTION FOOTPRINT AND THE SIGNIFICANT WOODLAND TO MINIMIZE IMPACTS TO WILDLIFE AND THE FORESTED WETLAND.
 - PRIOR TO STRIPPING AND OPERATIONS IN ANY AREA, THE LIMITS OF THE WOODLAND BUFFER SHALL BE STAKED OR OTHERWISE CLEARLY MARKED BY A QUALIFIED PERSON. THE CITY OF OTTAWA WILL BE NOTIFIED, SHOULD CITY STAFF WISH TO CONFIRM THE BOUNDARIES.
 - SILT FENCING FOR INTERNAL SEDIMENT AND EROSION CONTROL DURING STRIPPING OPERATIONS AS ILLUSTRATED ON THE SITE PLAN SHOULD BE INSTALLED AND MAINTAINED.
 - SILT BARRIERS AND EROSION CONTROL MEASURES WILL BE MONITORED AND REGULARLY MAINTAINED DURING ACTIVE OPERATIONS.
 - TOPSOIL AND OVERBURDEN SHOULD BE STRIPPED AND STORED SEPARATELY IN BERMED STOCKPILES. BERMS AND STOCKPILES OF TOPSOIL SHOULD BE GRADED TO STABLE SLOPES AND SEEDED TO PREVENT EROSION AND MINIMIZE DUST. STOCKPILES SHALL BE MAINTAINED IN ACCORDANCE WITH THE BEST MANAGEMENT PRACTICES FOR THE PROTECTION, CREATION AND MAINTENANCE OF BANK SWALLOW HABITAT IN ONTARIO (MNRFP 2017).
 - CONSTRUCTION ACTIVITIES WITH THE POTENTIAL TO HARM MONARCH EGGS, CATERPILLAR OR PUPAE (E.G. VEGETATION CLEARING) SHALL NOT BE UNDERTAKEN DURING THE LARVAL PERIOD WHICH IS APPROXIMATELY MAY 1 TO SEPTEMBER 30 (MNRFP/MONARCH 2020).
 - DURING OPERATION, COMMON MILKWEED (*ASCLEPIAS SYRIACA*) AND NECTAR PRODUCING PLANTS SHALL BE PLANTED WITHIN THE LICENCE BOUNDARY BUT OUTSIDE THE EXTRACTION AREA AND WHERE HABITAT DISTURBANCE CAN BE AVOIDED, TO PROVIDE HABITAT FOR MONARCH.
 - CONSTRUCTION ACTIVITIES WITH THE POTENTIAL TO REMOVE RESIDENCES OF BOBOLINK OR EASTERN MEADOWLARK (E.G., VEGETATION CLEARING) SHALL NOT BE UNDERTAKEN DURING THE BREEDING SEASON WHICH IS APRIL 8 TO AUGUST 28 IN THIS REGION (ENVIRONMENT CANADA 2014).

Pre Approval Review				Site Plan Amendments					
NO.	DATE	REVISIONS	OWNER	HM	NO.	DATE	REVISIONS	OWNER	HM

Harrington McAvan Ltd

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 Tel 905-294-8282 Fax: 905-294-7623
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Project Name

CAVANAGH OTTAWA AIRPORT PIT

PART OF LOTS 23 AND 24, CONCESSION 3 FROM RIDEAU RIVER
 GEOGRAPHIC TOWNSHIP OF GLOUCESTER
 CITY OF OTTAWA

Scale 1:4000 North Stamp

0 50 100 150m

Drawing Status PRELIMINARY FOR DISCUSSION

DRAFT

Drawn S.B. Checked M.H. Issue Date MAR 2020

Drawing Title SECTIONS, DETAILS AND REHABILITATION PLAN

Project Number 19-27

Drawing Number 2 OF 2

TECHNICAL RECOMMENDATIONS CONTINUED

ARCHAEOLOGICAL ASSESSMENT - STANTEC DATED FEBRUARY 2020 SHOULD PREVIOUSLY UNDOCUMENTED ARCHAEOLOGICAL RESOURCES BE DISCOVERED, THEY MAY BE A NEW ARCHAEOLOGICAL SITE AND THEREFORE SUBJECT TO SECTION 48(1) OF THE ONTARIO HERITAGE ACT (GOVERNMENT OF ONTARIO 1990B). THE PROPONENT OR PERSON DISCOVERING THE ARCHAEOLOGICAL RESOURCES MUST CEASE ALTERATION OF THE SITE IMMEDIATELY AND ENGAGE A LICENSED CONSULTANT ARCHAEOLOGIST TO CARRY OUT ARCHAEOLOGICAL FIELDWORK, IN COMPLIANCE WITH SECTION 48(1) OF THE ONTARIO HERITAGE ACT (GOVERNMENT OF ONTARIO 1990B).

THE FUNERAL BURIAL AND CREMATION SERVICES ACT, 2002, S.O. 2002, C.33 (GOVERNMENT OF ONTARIO 2002) REQUIRES THAT ANY PERSON DISCOVERING HUMAN REMAINS MUST NOTIFY THE POLICE OR CORONER AND THE REGISTRAR OF CEMETERIES AT THE MINISTRY OF GOVERNMENT AND CONSUMER SERVICES.

