

2019-2

DECLARATION OF PURPOSE

THIS SITE PLAN IS PREPARED UNDER THE AGGREGATE RESOURCES ACT FOR A CLASS 'A' LICENCE, CATEGORY 2.

PART LOTS 18, 19, 20, & 21 CONCESSION 4
PART LOTS 19, 20 CONCESSION 5
GEOGRAPHIC TOWNSHIP OF DALTON
CITY OF KAWARTHA LAKES

A. GENERAL

- 1. LICENCED AREA 83.74 HA
2. AREA TO BE EXTRACTED
PHASE 1 17.1 HA
PHASE 2 2.2 HA
TOTAL 23.3 HA
3. THE ESTABLISHED GROUNDWATER TABLE IS AT AN ELEVATION OF BETWEEN 228.89 MASL...

B. HOURS OF OPERATION

- 1. LOADING, TRANSPORTATION 7:00 AM TO 6:00 PM MONDAY TO THURSDAY AND 7:00 AM TO 3:00 PM FRIDAY
2. EXTRACTION, PROCESSING 7:00 AM TO 6:00 PM MONDAY TO FRIDAY AND 7:00 AM TO 12:00 PM SATURDAY
3. MAINTENANCE 7:00 AM TO 6:00 PM MONDAY TO FRIDAY AND 7:00 AM TO 12:00 PM SATURDAY
4. BLASTING 8:00 AM TO 4:00 PM MONDAY TO FRIDAY

NO OPERATIONS WILL OCCUR ON SUNDAYS OR PUBLIC HOLIDAYS AS DEFINED BY THE EMPLOYMENT STANDARDS ACT.

C. FENCING

- 1. POST AND WIRE FENCING, MINIMUM HEIGHT 1.2 M, WILL BE INSTALLED ALONG PART OF THE SOUTHERLY LICENCED BOUNDARY AS SHOWN ON THIS PLAN WITHIN 12 MONTHS OF LICENSING...

D. SITE PREPARATION

- 1. PRIOR TO ANY CLEARING, STRIPPING OR EXTRACTION ON THE SITE, THE LIMIT OF EXTRACTION AND THE LOCATION OF THE REPTILE FENCE AND BOUNDARIES OF THE WETLANDS WILL BE STAKED BY A QUALIFIED PERSON USING GPS.
2. NO CLEARING WILL OCCUR BETWEEN MAY 15 AND JULY 31.
3. THE AREA OF TOPSOIL/OVERBURDEN EQUALIZATION PONDS, AND ADJACENT AREA, WILL BE CLEARED FIRST TO MAKE ROOM FOR ACCESS AND EQUIPMENT FOR CONSTRUCTION OF THE PONDS AND INSTALLATION OF THE REPTILE FENCE...

E. SILTATION CONTROL

- 1. SILTATION CONTROL MECHANISMS WILL INCLUDE SEDIMENT TRAPS AND SILT FENCE INSTALLED ON THE REPTILE FENCE.
2. SEDIMENT TRAPS AND/OR SILT FENCE WILL BE INSTALLED IN LOCATIONS SHOWN ON THIS PLAN AND IN ACCORDANCE WITH DETAIL 2A AND 2B ON DWG NO. 2019-4 OF 5 ALONG THE LIMIT OF EXTRACTION DOWN SLOPE OF AREAS TO BE PREPARED FOR EXTRACTION:
A) AS SPECIFIED IN NOTE D.
B) PRIOR TO STRIPPING WITHIN 30 METRES OF THE LIMIT OF EXTRACTION, AND
C) PRIOR TO ANY STRIPPING IN AREAS WHERE THERE IS INSUFFICIENT NATURAL VEGETATION WITHIN 30 METRES OF THE LIMIT OF EXTRACTION TO PREVENT SILTATION ONTO SETBACKS OR ADJACENT LANDS.

F. DRAINAGE AND WATER DIVERSION

- 1. DRAINAGE OF UNDISTURBED AREAS WILL CONTINUE AS SHOWN AND DESCRIBED ON THE EXISTING CONDITIONS PLAN.
2. DURING INITIAL EXTRACTION IN PHASE 1A DRAINAGE FROM THE EXTRACTION AREA WILL BE DIRECTED TO THE SETTLING POND. THE SUMP WILL BE CONSTRUCTED IN PHASE 1 ONCE EXTRACTION IS BELOW THE ELEVATION OF THE ADJACENT LANDS.
3. THE SUMP WILL BE LOCATED A MINIMUM OF 10 METRES FROM THE LIMIT OF EXTRACTION.
4. FOLLOWING INSTALLATION OF THE SUMP IN PHASE 1, AND DURING EXTRACTION IN PHASE 2, PRECIPITATION AND GROUNDWATER FROM THE DISTURBED AREAS WILL BE COLLECTED IN THE SUMP AND DISCHARGED TO MAINTAIN FLOW IN THE WATERCOURSES OR TO THE EQUALIZATION POND.

G. WASHING AND PONDS

- 1. A WASH PLANT WILL BE INSTALLED AFTER A SUMP HAS BEEN ESTABLISHED IN PHASE 1 AND THE SETTLING AND EQUALIZATION PONDS HAVE BEEN CONSTRUCTED. THE WASH PLANT MAY BE RELOCATED FROM TIME TO TIME BUT WILL REMAIN WITHIN THE LIMIT OF EXTRACTION.

- 2. THE SETTLING AND EQUALIZATION PONDS WILL BE CONSTRUCTED AS SHOWN ON THE DETAILS, DWG NO. 2019-5 OF 5.
3. THE SETTLING POND WILL BE THE PRIMARY SETTLING POND FOR RUNOFF FROM THE ACCESS, STOCKPILE AND PROCESSING AREA, AND WASH WATER FROM THE WASH PLANT. WATER FROM THIS POND WILL BE RECYCLED TO THE WASH PLANT, USED FOR DUST CONTROL OR DISCHARGED TO THE EQUALIZATION POND.
4. THE EQUALIZATION POND WILL PROVIDE SECONDARY SETTLING AND WILL COLLECT OVERFLOW FROM SETTLING POND AND WATER PUMPED FROM THE SUMPS. WATER FROM THE EQUALIZATION POND WILL BE DISCHARGED TO MAINTAIN FLOW IN WATERCOURSE 1. (SEE DETAIL 1, DWG NO. 2019-4 OF 5)
5. THE SETTLING AND EQUALIZATION PONDS WILL BE CONSTRUCTED WITH CONTROL STRUCTURES TO MAINTAIN ACCEPTABLE SURFACE WATER QUALITY FOR DISCHARGE TO WATERCOURSE 1. SIMILARLY, DIRECT DISCHARGE INTO THE HEADWATER OF WATERCOURSE 2 WILL SATISFY THE PROVINCIAL WATER QUALITY OBJECTIVES (1999 AND UPDATES) OR BACKGROUND CONDITIONS.

H. DUST CONTROL

- 1. DUST WILL BE MITIGATED ON SITE.
2. WATER FROM THE SETTLING POND, OR OTHER PROVINCIALY APPROVED DUST SUPPRESSANT, WILL BE APPLIED TO HAUL ROADS AND PROCESSING AREAS AS OFTEN AS REQUIRED TO MITIGATE DUST IN ACCORDANCE WITH THE POND MANAGEMENT PLAN. (SEE DETAILS DWG NO. 2019-5 OF 5)
3. PRIMARY AND SECONDARY DUST COLLECTORS WILL BE EMPLOYED ON THE ROCK DRILL TO KEEP THE LEVEL OF ROCK DUST TO A MINIMUM.
4. MAXIMUM SPEED ON THE ACCESS ROAD AND INTERNAL HAUL ROADS WILL BE 30km/hr.

I. BLASTING

- 1. BLASTING WILL OCCUR A MAXIMUM OF 3 TIMES PER WEEK.
2. AN ATTENUATION STUDY SHALL BE UNDERTAKEN BY AN INDEPENDENT BLASTING CONSULTANT DURING THE FIRST 12 MONTHS OF OPERATION IN ORDER TO OBTAIN SUFFICIENT QUARRY DATA FOR THE DEVELOPMENT OF SITE SPECIFIC ATTENUATION RELATIONS. THIS STUDY WILL BE USED TO CONFIRM THE APPLICABILITY OF THE INITIAL GUIDELINE PARAMETERS AND ASSIST IN DEVELOPMENT OF FUTURE BLAST DESIGNS.
3. MINIMUM COLLAR WILL BE 1.5 METRES ON BODY HOLES AND 2.7 METRES ON FACE HOLES. IN THE EVENT OF THE APPLICATION OF BOREHOLES GREATER THAN 100 MILLIMETRES IN DIAMETER, COLLARS WILL BE INCREASED ACCORDINGLY.
4. CLEAR CRUSHED STONE WILL BE USED FOR STEMMING.
5. BLAST DESIGN WILL BE CONTINUALLY REVIEWED WITH RESPECT TO FRAGMENTATION, GROUND VIBRATION AND OVERPRESSURE. BLAST DESIGNS SHALL BE MODIFIED AS REQUIRED TO ENSURE COMPLIANCE WITH APPLICABLE GUIDELINES AND REGULATIONS. DECKING, REDUCED HOLE DIAMETERS AND SEQUENTIAL BLASTING TECHNIQUES WILL BE USED TO ENSURE MINIMAL EXPLOSIVES PER DELAY PERIOD INITIATED.
6. BLASTING WILL BE MONITORED IN ACCORDANCE WITH THE PERFORMANCE MONITORING PROGRAM. (SEE DRAWING 5 OF 5)
7. THE OPERATOR WILL BE AWARE OF THE GUIDELINES FOR USE OF EXPLOSIVES IN OR NEAR CANADIAN FISHERIES WATERS.
8. BUFFERS SHOULD BE PROTECTED FROM ROCK SHATTER AND/OR PHYSICAL DISRUPTION THROUGH PROPER BLAST DESIGN, BLAST ORIENTATION AND MONITORING.
9. BLAST DESIGN MUST BE SUCH THAT DURING THE WARM WATER SPAWNING SEASON (APRIL 1 TO JUNE 30) OVERPRESSURE DOES NOT EXCEED 100 KPA (14.5 PSI) OR VIBRATION EXCEED 13 MM/SEC AT THE EDGE OF THE CLOSEST OPEN WATER.
10. A QUALIFIED PROFESSIONAL IS TO BE RETAINED TO PREPARE A BLASTING PLAN THAT IS COMPLIANT WITH DFO REGULATIONS, AND 13mm/sec GUIDELINE VIBRATION LIMIT.

J. EXTRACTION SEQUENCE

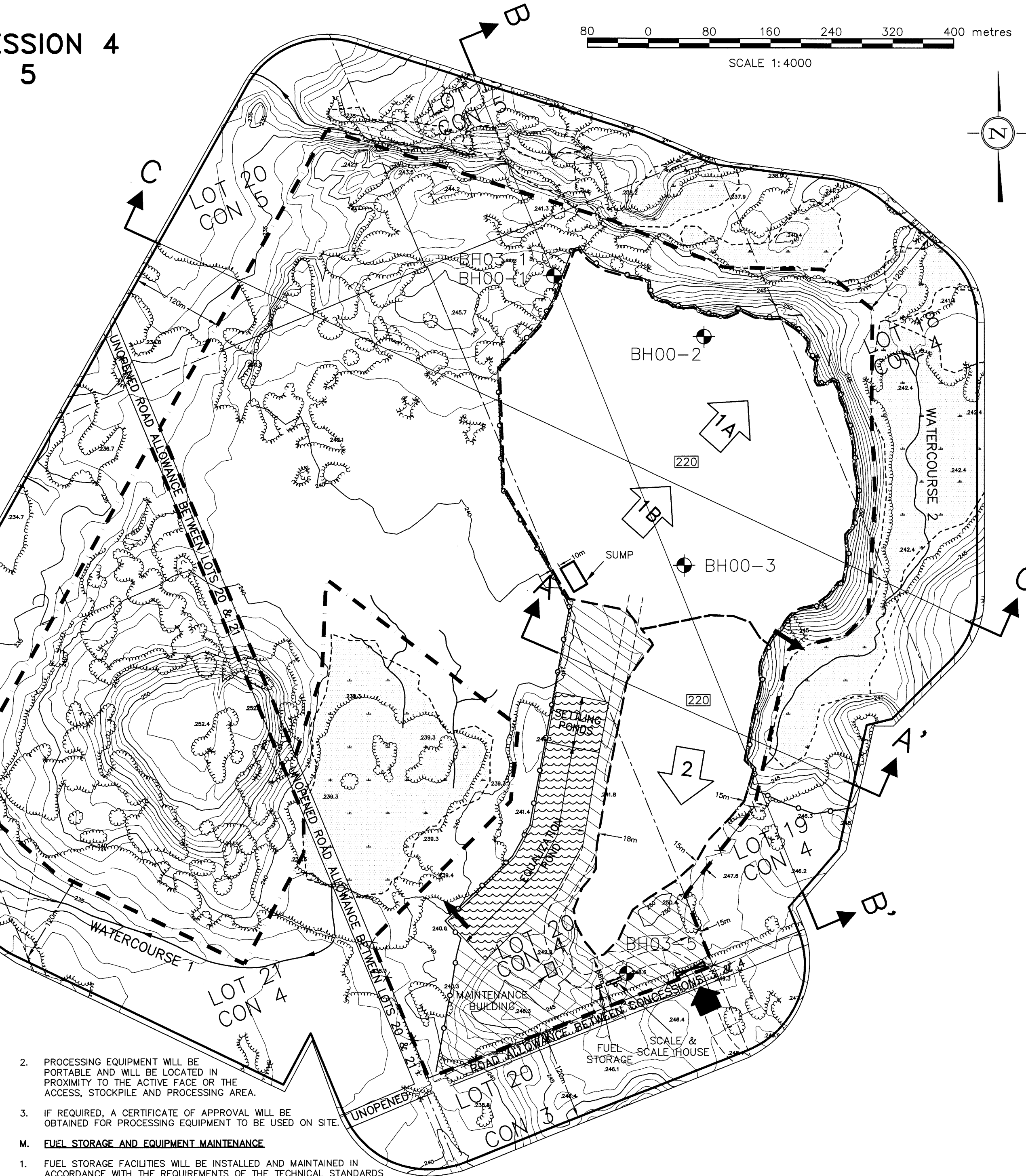
- 1. INITIAL EXTRACTION WILL OCCUR IN PHASE 1A. MATERIAL WILL BE CRUSHED, SCREENED AND STOCKPILED WITHIN THE DISTURBED AREA. NO WASHING OF THIS MATERIAL WILL OCCUR ON SITE.
2. EXTRACTION WILL CONTINUE IN PHASE 1A AND PROCEED FROM SOUTH TO NORTH THROUGH THE PHASE TO DEPTH OF APPROXIMATELY 242 MASL.
3. EXTRACTION IN PHASE 1B MAY COMMENCE DURING EXTRACTION IN PHASE 1A AND PROCEED FROM SOUTH TO NORTH TO AN ELEVATION OF 220 MASL.
4. EXTRACTION IN PHASE 2 WILL PROCEED FROM NORTH TO SOUTH THROUGH THE PHASE, AND MAY OCCUR DURING EXTRACTION IN PHASES 1A OR 1B.
5. AS THE HORIZONTAL LIMIT OF EXTRACTION IN ANY PART OF EACH PHASE, PROGRESSIVE REHABILITATION WILL COMMENCE AS SHOWN ON THE PROGRESSIVE AND FINAL REHABILITATION PLAN.
6. IF DEVELOPMENT AND SITE ALTERATION IS GOING TO OCCUR BETWEEN MAY 15 AND JULY 31, A NEST SURVEY IS SUGGESTED PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES TO LOCATE AND IDENTIFY ACTIVE NESTS OF MIGRATORY BIRD SPECIES COVERED BY THE ACT. IF A NEST IS LOCATED OR EVIDENCE OF BREEDING NOTED, THEN A MITIGATION PLAN SHOULD BE DEVELOPED TO ADDRESS ANY POTENTIAL IMPACTS ON MIGRATORY BIRD NESTS OR THEIR ACTIVE NESTS. MITIGATION MAY REQUIRE ESTABLISHING APPROPRIATE BUFFERS AROUND ACTIVE NESTS OR DELAYING CONSTRUCTION ACTIVITIES UNTIL THE CONCLUSION OF THE NESTING SEASON.

K. EXTRACTION DETAILS

- 1. HEIGHT OF THE LIFTS WILL VARY DUE TO ROCK QUALITY AND SAFETY CONSIDERATIONS, BUT WILL NOT EXCEED 20 M. THE NUMBER OF LIFTS WILL VARY THROUGH THE PHASES DUE TO THE VARIABLE SURFACE TOPOGRAPHY.
2. THE HIGHEST ELEVATION WITHIN THE LIMIT OF EXTRACTION IS 266.2 MASL EXTRACTED TO A QUARRY FLOOR ELEVATION OF 220 MASL. ESTABLISHES AN APPROXIMATE MAXIMUM DEPTH OF EXTRACTION OF 46.2 M. AT THE MAXIMUM LIFT HEIGHT OF 20 METRES THERE WILL BE A MAXIMUM OF 3 LIFTS.
3. AGGREGATE STOCKPILES WILL BE LOCATED ON THE QUARRY FLOOR IN CLOSE PROXIMITY TO THE EXTRACTION FACE, AND IN THE ACCESS, STOCKPILE AND PROCESSING AREA.
4. WHERE THE QUALITY OF MATERIAL DOES NOT MEET THE OPERATORS MARKET REQUIREMENTS, THE HORIZONTAL EXTENT OR DEPTH OF EXTRACTION MAY BE REDUCED.
5. THE LOCATION OF THE INTERNAL HAUL ROAD FROM THE ENTRANCE TO PHASE 1 WILL BE PERMANENT. THE LOCATION OF SECONDARY HAUL ROADS WILL VARY AS THE OPERATION PROGRESSES.
6. SCRAP WILL BE STORED IN THE ACCESS, STOCKPILE AND PROCESSING AREA AND WILL BE REMOVED FROM THE SITE ON AN ON-GOING BASIS.

L. EQUIPMENT

- 1. EQUIPMENT TO BE UTILIZED ON THE SITE WILL INCLUDE, BUT NOT BE LIMITED TO:
MOBILE (SELF PROPELLED) - SCRAPERS, EXCAVATORS, LOADERS, DOZERS, TRUCKS AND OFF-ROAD TRUCKS
STATIONARY - SCREENING PLANT, STACKER, CONVEYORS, POWER PLANT, FEED BIN, CRUSHING PLANT, WASH PLANT, TOOL TRAILER AND ROCK DRILLS



LEGEND
LICENCED BOUNDARY
LIMIT OF EXTRACTION
LIMIT OF EXTRACTION VERTICAL FACE
LIMIT OF EXTRACTION CUT & FILL
LOT/CONCESSION LINE
BOUNDARY OF LANDS WITHIN 120m OF THE LICENCED BOUNDARY
INTERNAL HAUL ROAD
POST & WIRE FENCE
TRAIL
CONTOURS & SPOT ELEVATIONS
GENERAL DIRECTION OF DRAINAGE
PIT ENTRANCE/EXIT
GATE
TREES/BUSH
BOREHOLE
WETLANDS DIGITIZED FROM AERIAL PHOTOGRAPHY
WATERCOURSE
SECTION ARROWS
DIRECTION/SEQUENCE OF EXTRACTION
BUILDING
MAXIMUM DEPTH OF EXTRACTION
DISCHARGE POINTS
REPTILE FENCE
PERIMETER DITCH
SUMP DISCHARGE
ACCESS, STOCKPILE AND PROCESSING AREA

SCHEDULE OF REVISIONS PRIOR TO LICENCE
Table with columns: NO., DATE, DESCRIPTION, APPROVED. Includes revisions from Dec 11/08 to June 6 2011.

SCHEDULE OF AMENDMENTS
Table with columns: NO., DATE, DESCRIPTION, APPROVED. Currently empty.

TRUDY P. PATERSON
IS APPROVED BY THE
MINISTRY OF NATURAL RESOURCES
PURSUANT TO SECTION 8 (4) OF THE
AGGREGATE RESOURCES ACT TO
PREPARE AND CERTIFY SITE PLANS.
Date: June 6/11

SEBRIGHT QUARRY
CITY OF KAWARTHA LAKES
APPLICANT: GIOFAM INVESTMENTS INC.
BOX 1359
UXBRIDGE, ONTARIO
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OPERATIONAL PLAN
PROJECT NO. 05-2019 DRWG. NO. 052019 -2 OF 5
DATE: APR 2011 SCALE: 1:4000
DRAWN: TAR CHECKED: TP APPROVED: TP

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Table with 4 columns: No., DESCRIPTION, REFERENCE STANDARDS, COMMENTS. Contains 4 rows of extraction details.

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