#### PROGRESSIVE REHABILITATION

- STAGING OF PROGRESSIVE AND FINAL REHABILITATION WILL FOLLOW THE DIRECTION AND SEQUENCE OF EXTRACTION AS SHOWN ON THE OPERATIONAL PLAN AND THIS
- AS THE HORIZONTAL LIMIT OF EXTRACTION IS REACHED IN ANY PART OF EACH PHASE, SLOPES WILL BE ESTABLISHED BY BACKFILLING WITH ON-SITE MATERIALS, CUT AND FILL, OR EXTRACTION TO A 2:1 SLOPE IN STEPS AS SHOWN IN DETAIL 3 DWG. NO. 052019 - 4 of 5.
- WHERE THE QUALITY OF MATERIAL DOES NOT MEET THE OPERATORS MARKET REQUIREMENTS, THE HORIZONTAL EXTENT OR DEPTH OF EXTRACTION MAY BE REDUCED AND PROGRESSIVE REHABILITATION COMMENCED AS REQUIRED THROUGHOUT THE PIT.

- ONCE EXTRACTION IS COMPLETE, DEWATERING WILL CEASE AND LAKES WILL BE CREATED IN THE EXCAVATED AREAS.
- OUTLET STRUCTURES FOR THE LAKE WILL BE CREATED AT THE LOCATIONS SHOWN AS PART OF THE PROGRESSIVE REHABILITATION OF THE SLOPES. THE STRUCTURES WILL BE DESIGNED IN CONSULTATION WITH QUALIFIED PROFESSIONALS TO PROVIDE FOR USE BY FISH AND WILDLIFE.
- ALL AVAILABLE MATERIALS SUCH AS ROOT WADS, LOGS AND BRANCHES, BRUSH PILES AND ROCKS AND BOULDERS MAY BE PLACED RANDOMLY ON THE QUARRY FLOOR. THESE MATERIALS WILL PROVIDE AQUATIC HABITAT AS THE LAKES FILL.
- IT IS ANTICIPATED THAT IT WILL TAKE 30 TO 40 YEARS FOR THE LAKE REACH A STABLE LEVEL.

### SEEDING AND PLANTING

SHAPES AND SPACING.

- ALL AVAILABLE OVERBURDEN AND ORGANIC MATERIAL WILL BE PLACED ON BACKFILLED SLOPES AND THE AREAS WILL BE SEEDED WITH A NATIVE GRASS SEED MIX AS SOON AS POSSIBLE TO CONTROL EROSION.
- NATIVE PLANT SPECIES WILL BE PLANTED OR TRANSPLANTED IN CLUSTERS ON STEPPED AND BACKFILLED SLOPES.
- PLANTING NODES WILL BE CREATED THROUGHOUT THE STOCKPILING/PROCESSING AREA UTILIZING ALL AVAILABLE OVERBURDEN, TOPSOIL AND ORGANIC MATERIAL.
- NODES WILL BE APPROXIMATELY 100 SQUARE METRES IN AREA WITH RANDOM
- NATIVE/LOCAL PLANT MATERIAL WILL BE PLANTED OR TRANSPLANTED TO THE

## FINAL REHABILITATION

NODES.

- ALL EQUIPMENT, AGGREGATE, SCALES, SCALE HOUSE, FUEL STORAGE, AND THE ROAD BETWEEN THE SETTLING/EQUALIZATION POND AND THE LAKE WILL BE REMOVED FROM THE SITE. MAINTENANCE BUILDING MAY REMAIN FOR PRIVATE USE.
- ALL STOCKPILES OF OVERBURDEN AND ORGANIC MATERIAL WILL BE UTILIZED IN PROGRESSIVE AND FINAL REHABILITATION.
- THE ANTICIPATED FINAL END USE IS PRIVATE RECREATION OPEN SPACE.
- THE INTERNAL ROAD WILL REMAIN FOR ACCESS TO SITE.
- FOR SPECIES SUITABLE FOR QUARRY REHABILITATION SEE TABLE BELOW.

## White Spruce (Picea glauca)

- Red Pine (Pinus resinosa)
- Eastern White Cedar (Thuja occidentalis)
- Tamarack (Larix laricina)
- Largetooth Aspen (Populus grandidentata) Trembling Aspen (Populus tremuloides)
- Pin Cherry (Prunus pensylvanica) Red Maple (Acer rubrum)
- White Birch (Betula papyrifera)
- Black Locust (Robinia pseudo-acacia) Choke Cherry (Prunus virginiana)
- Red-osier Dogwood (Cornus stolonifera)
- Staghorn Sumac (Rhus typhina)
- Narrow-leaved Meadowsweet (Spirea alba) Red Raspberry (Rubus idaeus)
- Smooth Serviceberry (Amelanchier laevis)
- Common Blackberry (Rubus allegheniensis)
- Canada Bluegrass (Poa compressa) Timothy (Phleum pratense)

- Perennial Rye (Lolium perenne)
- Alfalfa (Medicago sativa)
- Red Clover (Trifolium pratense)
- Rough Hair Grass (Agrostis scabra)
- Poverty Oat Grass (Danthonia spicata)
- Little Bluestem (Schizachyrium scoparium) • Sideoats Grama (Bouteloua curtipendula)
- New England Aster (Aster novae-angliae)
- Lanceleaf Coreopsis (Coreopsis lanceolata) • Flat Topped White Aster (Aster umbellatus var.
- Philadelphia Fleabane (Erigeron philadelphicus
- ssp. philadelphicus)

umbellatus)

- Black-eyed Susan (Rudbeckia hirta)
- Canada Goldenrod (Solidago canadensis)
- Gray Goldenrod (Solidago nemoralis ssp. Nemoralis)
- Canada Milkvetch (Astragalus canadensis)

# PROGRESSIVE & FINAL REHABILITATION PLAN

NO.

PROJECT NO. 05 -2019 DRWG. NO. 052019 -30F DATE: APRIL 2011 SCALE: DRAWN: TAR/CAP | CHECKED: APPROVED:



CONSULTING ENGINEERS & PLANNERS

951BEEERRARM LROWED, SUSTUETE107300 TELEPHONE (705) 726-1141 BARRIE, ONTOARTARIO4M 56M 6C1 FAX. (705) 726-0331

TRUDY P. PATERSON IS APPROVED BY THE MINISTRY OF NATURAL RESOURCES PURSUANT TO SECTION 8 (4) OF THE

TOP

**APPROVED** 

AGGREGATE RESOURCES ACT TO PREPARE AND CERTIFY SITE PLANS.

GIOFAM SEBRIGHT QUARRY CITY OF KAWARTHA LAKES

**LEGEND** 

BOUNDARY OF LANDS WITHIN 120m OF LICENCE BOUNDARY

CONTOURS & SPOT ELEVATIONS

LICENCED BOUNDARY

LOT/CONCESSION LINE

PIT ENTRANCE/EXIT

WETLAND DIGITIZED FROM AERIAL PHOTOGRAPHY

INTERMITTENT WATERCOURSE

REHABILITATED COMPLETELY

UNDERGOING PROGRESSIVE REHABILITATION

PLANTING NODES (SCHEMATIC ONLY)

FINAL DEPTH OF EXTRACTION

SCHEDULE OF REVISIONS PRIOR TO LICENCE

SCHEDULE OF AMENDMENTS

DESCRIPTION

GENERAL REVISIONS

DESCRIPTION

DEC. 11/08 REV PER MNR COMMENTS NOV 24/08

BELOW WATER TABLE

TREES/BUSH

BENCH MARK

WATERCOURSE

SECTION ARROWS

REHABILITATED LAKE

UNDER EXTRACTION

UNEXCAVATED AREA

LAKE OUTLET

---- LIMIT OF EXTRACTION

APPLICANT: GIOFAM INVESTMENTS INC. BOX 1359 UXBRIDGE, ONTARIO