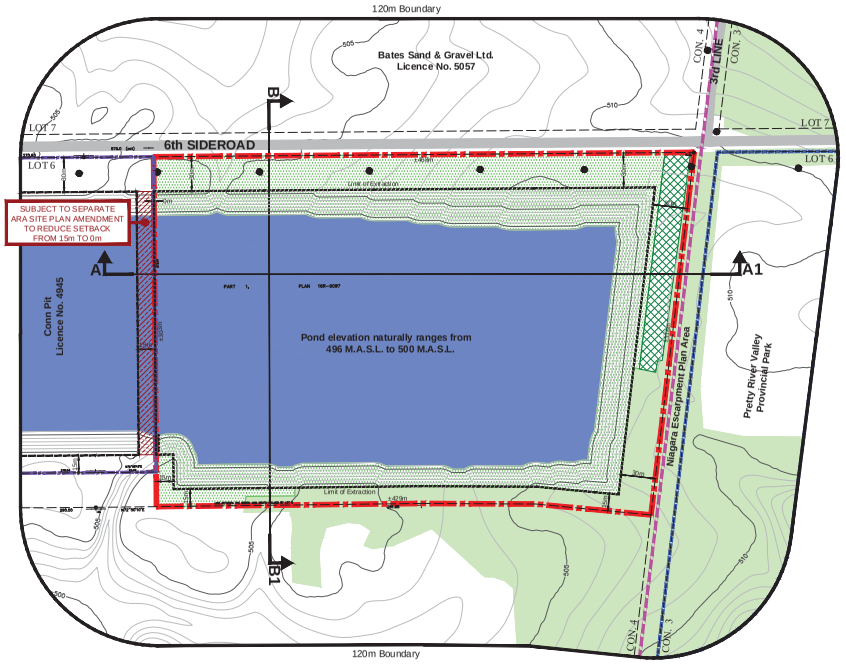


NOTES:

1. AREA TO BE REHABILITATED ±12.7ha (±31.4ac). THIS INCLUDES THE AREA TO BE EXTRACTED AS WELL AS PORTIONS OF THE SETBACK TO BE REHABILITATED.
2. ALL MEASUREMENTS SHOWN ON THIS PLAN ARE IN METRES.
3. NUMBERING SEQUENCE USED FOR REHABILITATION NOTES REFERS TO AGGREGATE RESOURCES ACT PROVINCIAL STANDARDS FOR A CLASS 'A' (CATEGORY 1) LICENCE APPLICATION.

1.3.1 PROGRESSIVE REHABILITATION WILL PROCEED IN A WEST TO EAST DIRECTION. REHABILITATION WILL OCCUR AS LIMITS OF EXTRACTION ARE REACHED AND THE RESOURCE IS DEPLETED. WHEN EXTRACTION COMMENCES IN PHASE 2 REHABILITATED SIDE SLOPES IN PHASE 1 SHALL BE COMPLETED. WHEN EXTRACTION COMMENCES IN PHASE 3 REHABILITATED SIDE SLOPES IN PHASE 2 SHALL BE COMPLETED. ALONG THE NORTH BOUNDARY ON THE PIT FLOOR ADJACENT TO THE REHABILITATED SIDE SLOPES AN INTERNAL HAUL ROUTE WILL REMAIN TO TRANSPORT THE MATERIAL BACK TO THE EXISTING PIT (LICENCE NO. 4945) FOR SHIPPING. THIS HAUL ROUTE WILL BE REHABILITATED ONCE EXTRACTION OPERATIONS ARE COMPLETE.

1.3.2 THE AREA WILL BE STRIPPED OF TOPSOIL AND SUBSOIL IN STAGES. WHERE THERE IS A DISTINGUISHABLE LAYER, ALL SOILS WILL BE STRIPPED, HANDLED AND REPLACED AS A SEPARATE LAYER. WHEREVER POSSIBLE TOPSOIL WILL BE MOVED DIRECTLY TO A REHABILITATION LOCATION. ALL SUBSOIL WILL BE RETAINED AND USED IN REHABILITATION OF THIS SITE OR THE ADJACENT LICENCE NO. 4945. (SEE OVERRIDE 5.16 / 5.17).

1.3.3 / 1.4.3 THE REHABILITATION OBJECTIVE FOR THIS SITE IS TO PROVIDE A POND (99%) AND FORESTED SIDE SLOPES AND WOODLAND CONDITIONS (41%). FOR DETAILS REGARDING PLANTINGS, SEE PLANTING DETAILS ON THIS PAGE.

1.3.4 / 1.4.2 SIDE SLOPES WILL BE NO STEEPER THAN 3:1 AND WILL BE ESTABLISHED BY CUTFILL AND/OR BACKFILLING METHODS USING ON-SITE OR MATERIAL FROM ADJOINING SITES AS PER OVERRIDE 5.16 / 5.17 (SEE PAGE 2 OF 3). THE FINAL LANDFORM SHOWN REPRESENTS THE MAXIMUM EXTENT OF EXTRACTION AND MAY BE REDUCED IF MARKETABLE RESOURCES ARE NOT ENCOUNTERED.

1.3.5 PROGRESSIVE REHABILITATION WILL BE ONGOING AND WILL FOLLOW A WEST TO EAST SEQUENCE AS STRIPPING AND EXTRACTION PROGRESSES. WHEN EXTRACTION COMMENCES IN PHASE 2 REHABILITATED SIDE SLOPES IN PHASE 1 SHALL BE COMPLETED. WHEN EXTRACTION COMMENCES IN PHASE 3 REHABILITATED SIDE SLOPES IN PHASE 2 SHALL BE COMPLETED. ALONG THE NORTH BOUNDARY ON THE PIT FLOOR ADJACENT TO THE REHABILITATED SIDE SLOPES AN INTERNAL HAUL ROUTE WILL REMAIN TO TRANSPORT THE MATERIAL BACK TO THE EXISTING PIT (LICENCE NO. 4945) FOR SHIPPING. THIS HAUL ROUTE WILL BE REHABILITATED ONCE EXTRACTION OPERATIONS ARE COMPLETE. SIDE SLOPE AND PIT FLOOR AREAS NOT BEING UTILIZED AS PART OF ACTIVE OPERATIONS WHERE EXTRACTION HAS BEEN COMPLETED WILL BE PROGRESSIVELY REHABILITATED.

1.3.6 / 1.4.1 CLEAN INERT FILL MAY NOT BE IMPORTED.

1.4.4 NO BUILDINGS OR STRUCTURES ARE PROPOSED TO REMAIN ON SITE.

1.4.5 THE FINAL POND ELEVATION WILL VARY BETWEEN 496 M.A.S.L. AND 500 M.A.S.L. BASED ON NATURAL VARIABILITY.

1.4.6 NO INTERNAL HAUL ROUTES WILL REMAIN ON SITE FOLLOWING FINAL REHABILITATION. DURING PROGRESSIVE REHABILITATION AN INTERNAL HAUL ROUTE WILL BE MAINTAINED ONSITE TO TRANSFER MATERIAL TO THE EXISTING OPERATION FOR SHIPPING.

1.4.7 THE SURFACE DRAINAGE WITHIN THE EXTRACTION LIMIT WILL REMAIN ON SITE AND BE DIRECTED TO THE ONSITE POND.

1.4.8 FINAL ELEVATIONS OF THE REHABILITATED AREA SHOWN ON THIS PAGE.

PLANTING DETAILS:

A PLANTINGS WITHIN SETBACK AREAS

i) PRIOR TO EXTRACTION IN PHASE 2, THE PORTION OF THE EAST SETBACK AS SHOWN ON THE OPERATIONS SCHEMATIC SHALL BE PLANTED IN ACCORDANCE WITH SECTION B OF THIS PAGE.

ii) FOLLOWING EXTRACTION AND REMOVAL OF THE BERM THE NORTH AND SOUTH SETBACK AREAS SHALL BE PLANTED IN ACCORDANCE WITH SECTION B OF THIS PAGE.

B RECOMMENDATIONS FOR PLANTINGS WITHIN SETBACK AREAS

i) TREES SHALL BE SPACED AT APPROXIMATELY 4 M OFF CENTRE LINE, STAGGERED. THE TREE ARRANGEMENT SHALL BE VARIABLE AND NOT IN ROWS, TO MIMIC A NATURAL FOREST.

ii) TREE SPECIES SHALL BE RANDOMLY MIXED BUT OFTEN ARRANGED INTO SINGLE SPECIES GROUPINGS.

iii) SHRUB PLANTINGS SHALL BE ARRANGED IN RANDOM CLUMPS. PLANTED AS CLOSE AS 1 M OFF CENTRE LINE IN PATCHES BUT NOT UNIFORMLY SPREAD THROUGH TREE PLANTING AREA.

iv) SPECIES AND PERCENTAGES CAN BE ADJUSTED DEPENDING ON AVAILABILITY AND SURVIVORSHIP BASED ON MONITORING.

v) SEEDLINGS OR SAPLINGS ARE BEST PLANTED IN SPRING OR AUTUMN.

vi) PLANT MATERIAL CAN BE BARE ROOT IF PLANTED BEFORE LEAF OUT (APRIL TO MID MAY, OR OCTOBER TO NOVEMBER) BUT SHOULD BE POTTED OR B&B IF PLANTED WHEN LEAFED OUT (MID MAY TO LATE SEPTEMBER).

vii) PLANT MATERIAL SHALL BE WATERED IMMEDIATELY AFTER PLANTING AND MONTHLY AFTER DURING THE FIRST GROWING SEASON.

viii) PLANT MATERIAL SHALL BE INSPECTED ANNUALLY FOR SURVIVAL FOR THE FIRST THREE YEARS. PLANTS SHALL BE REPLACED IF THERE IS LESS THAN 70% SURVIVAL.

ix) TREE GUARDS SHALL BE PLACED ON STEMS OF PLANTS TO REDUCE MAMMAL BROWSING.

x) TREE STAKES SHALL NOT BE USED.

xi) TREES RECOMMENDED FOR PLANTING INCLUDE:

- WHITE PINE (*PINUS STROBUS*): 20%
- RED PINE (*PINUS RESINOSA*): 5%
- SUGAR MAPLE (*ACER SACCHARUM*): 20%
- RED OAK (*QUERCUS RUBRA*): 10%
- BUR OAK (*QUERCUS MACROCARPA*): 5%
- BIG-TOOTHED ASPEN (*POPULUS GRANDIDENTATA*): 10%
- AMERICAN BASSWOOD (*TILIA AMERICANA*): 10%
- AMERICAN BEECH (*FAGUS GRANDIFOLIA*): 5%
- BLACK CHERRY (*PRUNUS SEROTINA*): 5%
- IRONWOOD (*OSTRYA VIRGINIANA*): 5%
- BUTTERNUT (*JUGLANS CINEREA*): 20 SEEDLINGS WITHIN EASTERN SETBACK ONLY

xii) SHRUBS RECOMMENDED FOR PLANTING INCLUDE:

- CHOKE CHERRY (*PRUNUS VIRGINIANUS*): 20%
- BUSH HONEYSUCKLE (*DIERVILLA LONICERA*): 20%
- ALTERNATE-LEAVED DOGWOOD (*CORNUS ALTERNIFOLIA*): 20%
- ROUND-LEAVED DOGWOOD (*CORNUS RUGOSA*): 10%
- BEAKED HAZEL (*CORYLUS CORNUTA*): 10%
- RED-BERRIED ELDER (*SAMBUCUS RACEMOSA*): 10%
- DOWNY ARROWWOOD (*VIBURNUM RAFINESQUIANUM*): 10 %

C PLANTINGS FOR SIDE SLOPE AREAS

i) FOLLOWING EXTRACTION THE SIDE SLOPES SHALL BE PLANTED IN ACCORDANCE WITH SECTION D OF THIS PAGE.

D RECOMMENDATIONS FOR PLANTINGS FOR SIDE SLOPE AREAS

i) TOPSOIL LAYER OF AT LEAST 30 CM DEEP SHALL BE PLACED OVER ALL PLANTED TREES.

ii) TREES SHALL BE SPACED AT APPROXIMATELY 4 M OFF CENTRE LINE, STAGGERED. THE TREE ARRANGEMENT SHOULD BE VARIABLE AND NOT IN ROWS, TO MIMIC A NATURAL FOREST.

iii) TREE SPECIES SHALL BE RANDOMLY MIXED BUT OFTEN ARRANGED INTO SINGLE SPECIES GROUPINGS.

iv) SHRUB PLANTINGS SHALL BE ARRANGED IN RANDOM CLUMPS. PLANTED AS CLOSE AS 1 M OFF CENTRE LINE IN PATCHES BUT NOT UNIFORMLY SPREAD THROUGH TREE PLANTING AREA.

v) SPECIES AND PERCENTAGES CAN BE ADJUSTED DEPENDING ON AVAILABILITY AND SURVIVORSHIP BASED ON MONITORING.

vi) SEEDLINGS OR SAPLINGS ARE BEST PLANTED IN SPRING OR AUTUMN.

vii) PLANT MATERIAL CAN BE BARE ROOT IF PLANTED BEFORE LEAF OUT (APRIL TO MID MAY, OR OCTOBER TO NOVEMBER) BUT SHOULD BE POTTED OR B&B IF PLANTED WHEN LEAFED OUT (MID MAY TO LATE SEPTEMBER).

viii) PLANT MATERIAL SHALL BE WATERED IMMEDIATELY AFTER PLANTING AND MONTHLY DURING THE FIRST GROWING SEASON.

ix) PLANT MATERIAL SHALL BE INSPECTED ANNUALLY FOR SURVIVAL FOR THE FIRST THREE YEARS. PLANTS SHALL BE REPLACED IF THERE IS LESS THAN 70% SURVIVAL.

x) TREE GUARDS SHALL BE PLACED ON STEMS OF PLANTS TO REDUCE MAMMAL BROWSING.

xi) TREE STAKES SHALL NOT BE USED.

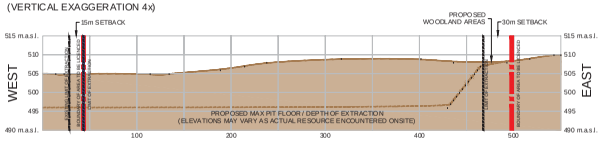
xii) TREES RECOMMENDED FOR PLANTING INCLUDE:

- WHITE PINE (*PINUS STROBUS*): 20%
- RED PINE (*PINUS RESINOSA*): 5%
- WHITE SPRUCE (*PICEA GLAUCA*): 5%
- EASTERN RED CEDAR (*JUNIPERUS VIRGINIANUS*): 5%
- RED MAPLE (*ACER RUBRUM*): 20%
- RED OAK (*QUERCUS RUBRA*): 20%
- BIG-TOOTHED ASPEN (*POPULUS GRANDIDENTATA*): 10%
- TREMBLING ASPEN (*POPULUS TREMULOIDES*): 10%
- PIN CHERRY (*PRUNUS PENNSYLVANICA*): 5%

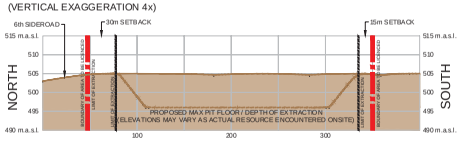
xii) SHRUBS RECOMMENDED FOR PLANTING INCLUDE:

- BUSH HONEYSUCKLE (*DIERVILLA LONICERA*): 20%
- ROUND-LEAVED DOGWOOD (*CORNUS RUGOSA*): 20%
- STAGHORN SUMAC (*RHUS HIRTA*): 20%
- DOWNY ARROWWOOD (*VIBURNUM RAFINESQUIANUM*): 20 %
- BUFFALO BERRY (*SHEPHERDIA CANADENSIS*): 10%
- COMMON JUNIPER (*JUNIPERUS COMMUNIS*): 10%

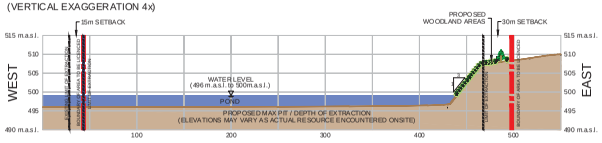
SECTION A - A1 EXISTING CONDITIONS
(VERTICAL EXAGGERATION 4x)



SECTION B - B1 EXISTING CONDITIONS
(VERTICAL EXAGGERATION 4x)



SECTION A - A1 REHABILITATED CONDITIONS
(VERTICAL EXAGGERATION 4x)



SECTION B - B1 REHABILITATED CONDITIONS
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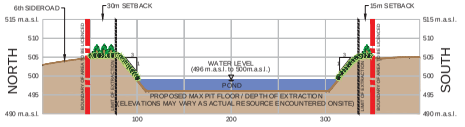


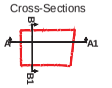
Legal Description

RP 16R9097 PART 1,
NORTH PART LOT 6, CONCESSION 4
TOWN OF THE BLUE MOUNTAINS,
COUNTY OF GREY

Legend

- Boundary of Area to be Licenced
- Limit of Extraction (All Setbacks are Drawn to Scale & Show Labelled Distances)
- Existing Licence Boundary (Licence Reference No. 4945)
- Existing Extraction Limit (Licence Reference No. 4945)
- Existing Vegetation
- Area Planted Prior to Phase 2
- Woodland
- Niagara Escarpment Plan Area
- Pretty River Valley Provincial Park
- Property Line
- Paved Road
- Hydro Pole
- Elevation Contour (Metres Above Mean Sea Level)
- Pond

Cross-Sections



Site Plan Amendments

No.	Date	Description	By

MHBC PLANNING URBAN DESIGN & LANDSCAPE ARCHITECTURE
113 COLLIER STREET BARRIE, ON. L4M 1H2 | P: 705 728 0045 F: 705 728 2010 | WWW.MHBCPLAN.COM

MNRF Approval Stamp

Stamp

LICENSEE: 2223117 ONTARIO INC..

AUTHORIZED SIGNATURE: _____

Project

CONN PIT EXTENSION

2223117 ONTARIO INC.
1443 HURONTARIO STREET
MISSISSAUGA, ONTARIO, L5G 3H5

MNRF Licence Reference No.

Pre-approval review:
First Submission to MNRF, December 23, 2015
Second Submission to MNRF, January 22, 2016

Plan Scale **1:2000 (Arch D)**

Metres
0 25 50 100

Plot Scale 1:1 (Arch D)

Drawn By M.M.

Checked By B.Z.

File No. **Y537K**

File Name

REHABILITATION PLAN

Drawing No.

3 OF 3

N:\Y537K - Conn Pit Due Diligence\Drawings\ARA Site Plans\CAD\Y537K_RehabPlan_2016-01-22.dwg