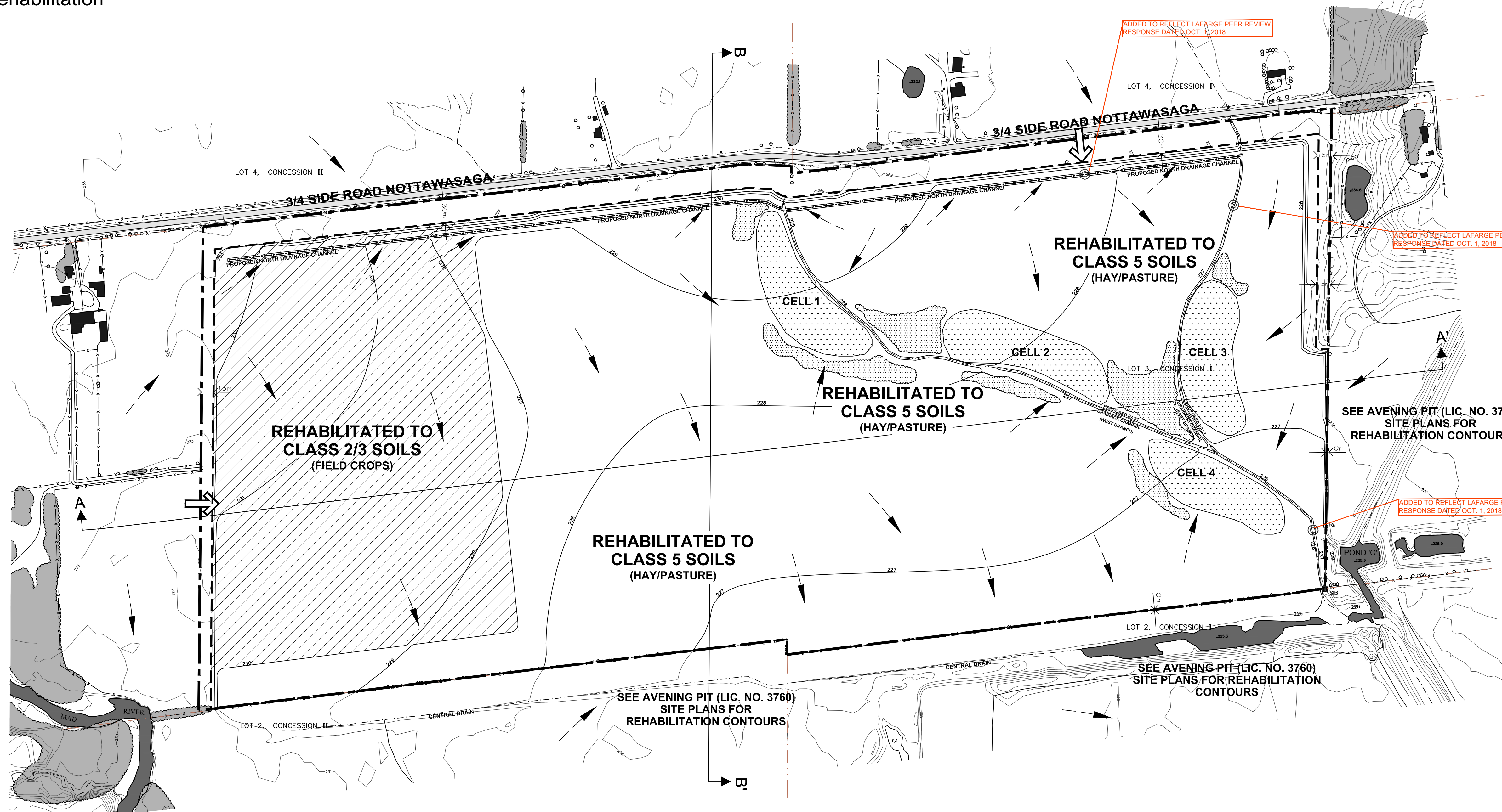
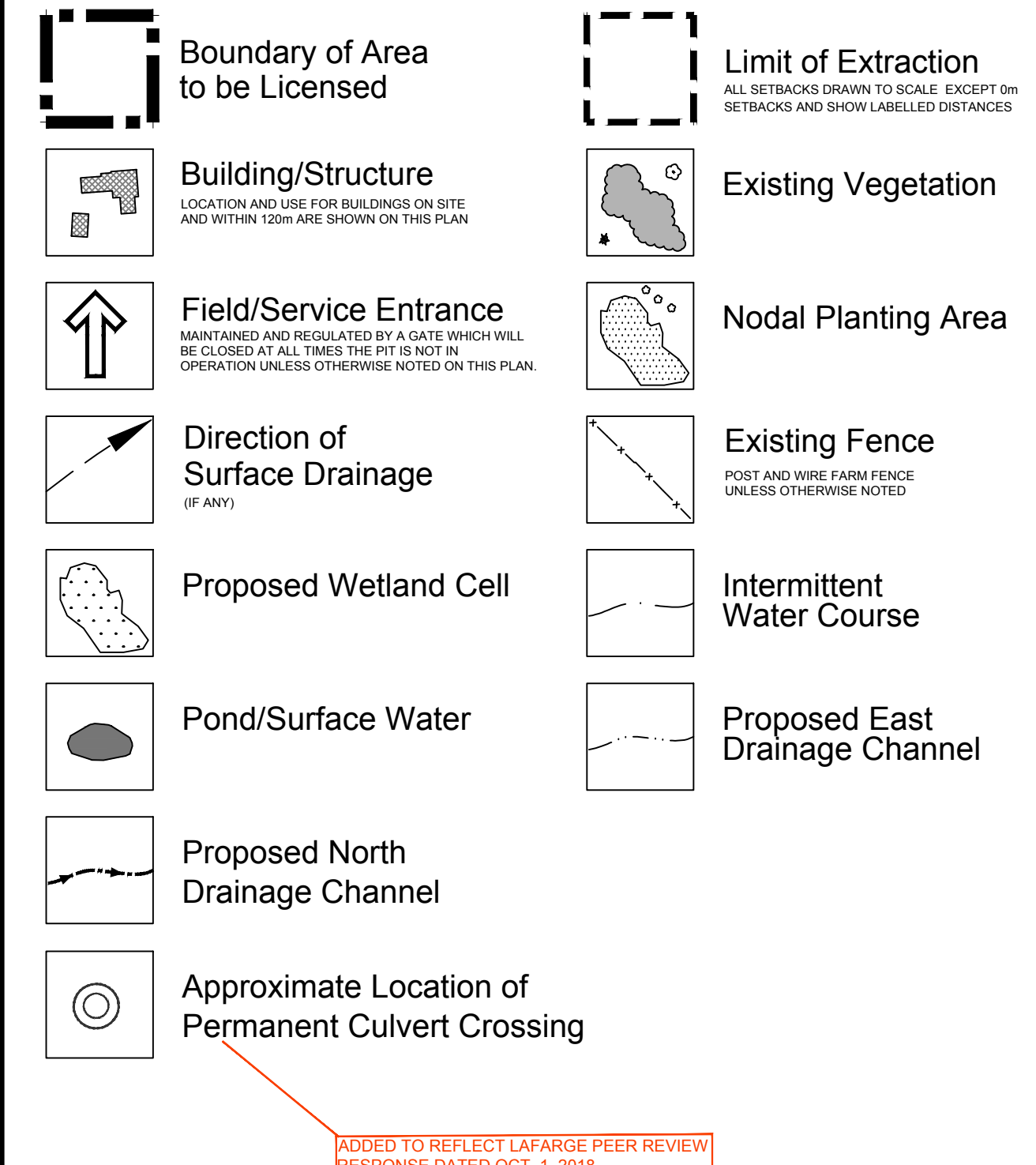


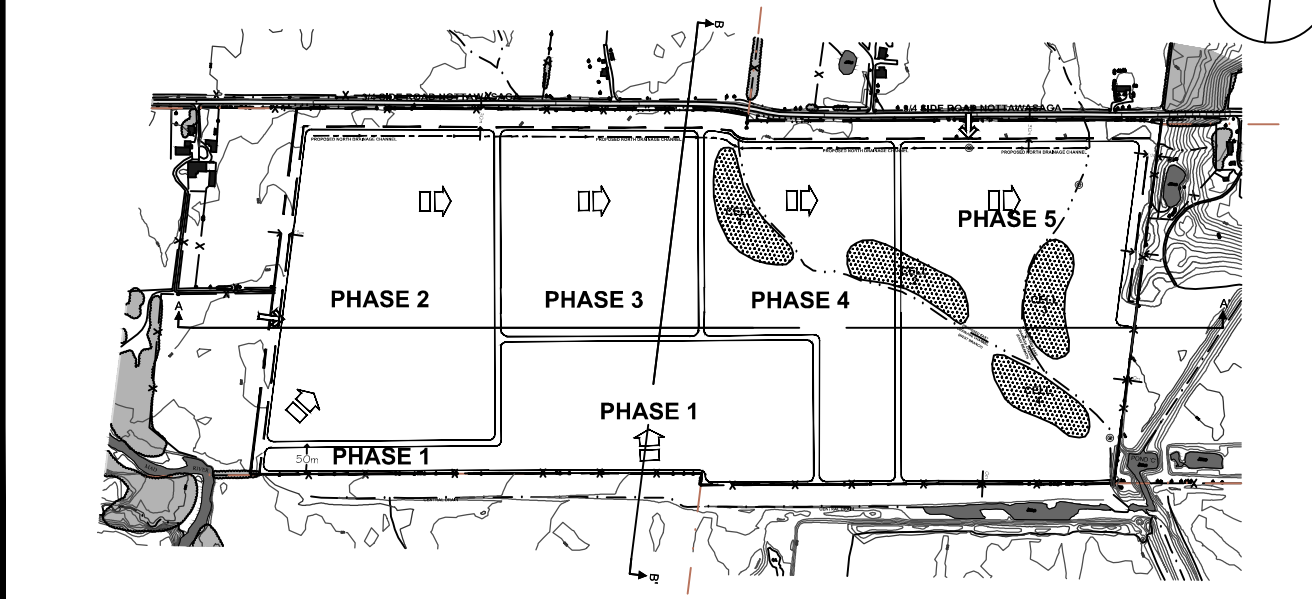
Final Rehabilitation



Legend

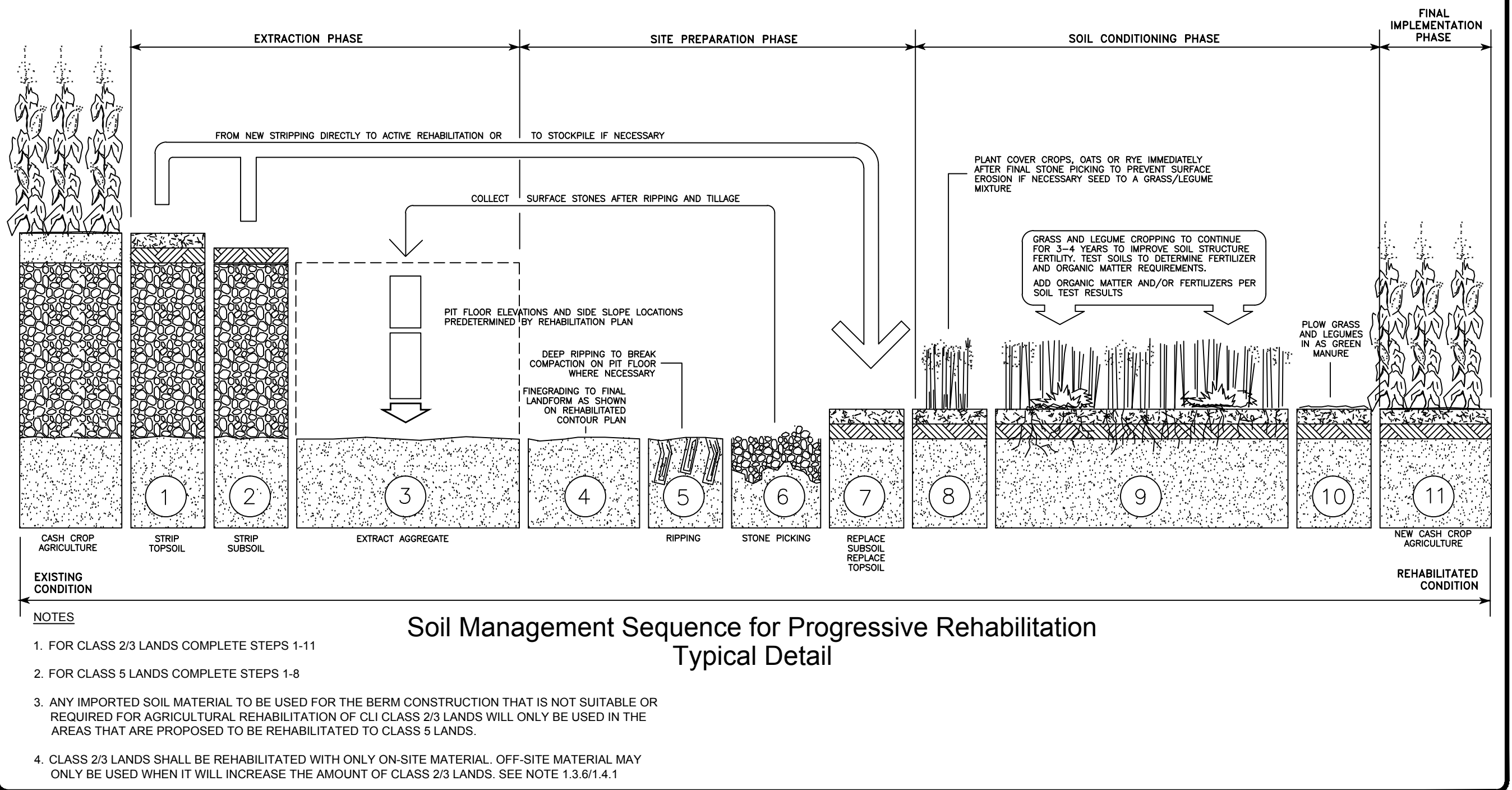


Phasing Schematic



- GENERAL NOTES**
- AREA TO BE REHABILITATED: 80.6 HA.
 - ALL MEASUREMENTS SHOWN ON THIS PLAN ARE IN METRES.
 - NUMBERING SEQUENCE USED FOR REHABILITATION NOTES REFERS TO AGGREGATE RESOURCES ACT PROVINCIAL STANDARDS FOR A CLASS 'A' CATEGORY 1 LICENCE APPLICATION.
 - IN ACCORDANCE WITH THE PHASING SCHEMATIC ON THIS PAGE DIRECTION OF PROGRESSIVE REHABILITATION WILL START IN THE WESTERLY PORTION OF THE SITE AND WILL GENERALLY PROCEED IN AN EASTERLY DIRECTION IN ACCORDANCE WITH THE PHASING SCHEMATIC. PROGRESSIVE REHABILITATION WILL OCCUR AS LIMITS OF EXTRACTION ARE REACHED AND THE RESOURCE IS DEPLETED. WITH THE EXCEPTION OF PHASE 1, PRIOR TO EXTRACTION COMMENCING IN THE NEXT PHASE, PROGRESSIVE REHABILITATION SHALL COMMENCE WITHIN THE PREVIOUS PHASE. WITH THE EXCEPTION OF THE PROCESSING AREA AND INTERNAL HAUL ROUTE.
 - PHASE 1 PROGRESSIVE REHABILITATION SHALL BE COMPLETED PRIOR TO EXTRACTION COMMENCING IN PHASE 2.
 - PHASE 2 PROGRESSIVE REHABILITATION SHALL BE COMPLETED PRIOR TO EXTRACTION COMMENCING IN PHASE 3.
 - PHASE 3 PROGRESSIVE REHABILITATION SHALL BE COMPLETED PRIOR TO EXTRACTION COMMENCING IN PHASE 4.
 - PHASE 4 & 5 PROGRESSIVE REHABILITATION SHALL BE PROGRESSIVE DURING EXTRACTION OF PHASE 5.
 - THE FINAL AREAS TO BE PROGRESSIVELY REHABILITATED ARE THE PROCESSING AREA AND INTERNAL HAUL ROUTE.
 - THE AREA WILL BE STRIPPED OF TOPSOIL AND SUBSOIL IN STAGES. WHERE THERE IS A DISTINGUISHABLE LAYER, TOPSOIL WILL BE STRIPPED, HANDLED AND REPLACED AS A SEPARATE LAYER, WHEREVER POSSIBLE. TOPSOIL WILL BE MOVED DIRECTLY TO A REHABILITATION LOCATION. ALL TOPSOIL AND SUBSOIL WILL BE USED IN REHABILITATION OF THIS SITE AND IF SUFFICIENT TOPSOIL AND SUBSOIL IS AVAILABLE EXCESS TOPSOIL AND OVERBURDEN MAY BE MOVED BETWEEN THIS SITE AND THE ADJACENT LICENCE NO. 3760 TO PROVIDE APPROPRIATE TIMING AND EFFECTIVE PROGRESSIVE REHABILITATION OF BOTH SITES. SEE 'AGRICULTURAL REHABILITATION' SCHEMATIC ON THIS PAGE. IF IMPORTED SOIL IS REQUIRED (SEE NOTE 1.2.18/1.2.19 PAGE 2 OF 4), THE IMPORTED SOIL SHALL NOT BE USED FOR REHABILITATION OF CLASS 2/3 SOILS.
 - FOR REHABILITATION TO CLASS 2/3 SOILS AND CLASS 5 SOILS SEE THE SOIL MANAGEMENT SEQUENCE SHOWN ON THE 'AGRICULTURAL REHABILITATION' SCHEMATIC ON THIS PAGE. PORTIONS OF PHASES 4 AND 5 WILL BE REHABILITATED AS NATURAL AREA AS SHOWN ON THE REHABILITATION SCHEMATIC IN ACCORDANCE WITH THE FOLLOWING:
 - PRIOR TO THE SPREADING OF SOIL MATERIALS, WETLAND CELLS 1, 2, 3 AND 4 SHALL BE CREATED OFFLINE FROM THE NEW NATURALIZED DRAINAGE COURSES BY SCULPTING THE UNDERLYING CLAY LAYER, FOLLOWING COMPLETION OF EXTRACTION.
 - PRIOR TO THE SPREADING OF SOIL MATERIALS, DEPRESSIONS WITHIN THE CLAY LAYER SHALL BE SCULPTED TO CREATE THE NATURALIZED DRAINAGE COURSES.
 - THE WETLAND CELLS WILL BE SEEDED WITH A GRASS MIX CONSISTING PREDOMINATELY OF FOX SEDGE (*Carex vulpinoidea*), VIRGINIA WILD RYE (*Elymus virginicus*), SPOTTED JOE-PYE WEED (*Eupatorium maculatum*) AND FOWL MANNA GRASS (*Glyceria striata*) AND HERBS SUCH AS BONESET (*Eupatorium sp.*), CARDINAL FLOWER (*Lobelia cardinalis*) AND LANCE-LEAVED ASTER (*Aster lanceolatus*). NATIVE SHRUB SPECIES INCLUDING RED-OSIER DOGWOOD (*Cornus stolonifera*) AND PUSSY WILLOW (*Salix discolor*) WILL BE PLANTED IN AND IMMEDIATELY ADJACENT TO THESE CELLS TO PROVIDE GREATER HABITAT STRUCTURE. THESE SHRUB SPECIES WILL BE PLANTED AS BARE ROOT STOCK, APPROXIMATELY 30-60 CM IN HEIGHT.
 - FOLLOWING THE SPREADING OF TOPSOIL, PLANTINGS WILL BE POSITIONED IN THE RIPARIAN ZONES OF THE PROPOSED EAST DRAINAGE CHANNEL, INTERSPERSED WITH GRASSED OPENINGS. THE PLANTINGS WILL BE MADE UP OF A VARIETY OF NATIVE SPECIES INCLUDING, SLENDER WILLOW (*Salix petiolaris*), MEADOWSWIFT (*Spiraea sp.*), LAKE SEDGE (*Carex lasiocarpa*) AND SPIKE RUSH SPECIES (*Eleocharis sp.*). STABILIZING GROUND COVERS SUCH AS PIONEER GRASSES AND FORBS WILL BE SEEDED EXTENSIVELY IN BETWEEN THE NODAL SHRUB AND TREE PLANTINGS. TRANSPLANTING OF EXISTING PLANT SPECIES WILL ALSO BE USED WHERE POSSIBLE TO PROMOTE NATURAL SUCCESSIONAL PROCESSES IN APPROPRIATE AREAS.
 - NODAL PLANTING ZONES WILL BE POSITIONED IN ECOLOGICALLY STRATEGIC LOCATIONS OF PHASES 4 AND 5 OF THE EXTRACTION PLAN, IN CONJUNCTION WITH STABILIZING GROUND COVER SPECIES INCLUDING PIONEER GRASSES AND FORBS, WHERE NECESSARY. NATIVE TREE SPECIES SUITABLE FOR PLANTING IN THESE NODES INCLUDE, BUT ARE NOT LIMITED TO, SILVER MAPLE (*Acer saccharinum*), CRACK WILLOW (*Salix x fragilis*).
 - SPECIES IDENTIFIED ABOVE ARE SUBJECT TO AVAILABILITY. SUBSTITUTION OF OTHER NATIVE SPECIES IS PERMITTED.
 - 3.1 SIDE SLOPES WILL BE ESTABLISHED BY CUTFILL AND/OR BACKFILLING METHODS. THE FINAL LANDFORM SHOWN REPRESENTS THE MAXIMUM EXTENT OF EXTRACTION AND MAY BE REDUCED IF MARKETABLE RESOURCE IS NOT ENCOUNTERED. FINAL LANDFORM SHOWS A 3:1 SIDE SLOPE.
 - PROGRESSIVE REHABILITATION WILL BE ONGOING AS STRIPPING AND EXTRACTION PROGRESS SEE 'PHASING' SCHEMATIC (THIS PAGE) AND NOTE 1.3.1 (THIS PAGE). 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 IF CLEAN AND INERT FILL WILL BE IMPORTED FOR THE ESTABLISHMENT OF THE BERMS (SEE NOTE 1.2.18/1.2.19 PAGE 2 OF 4), THE IMPORTED MATERIAL SHALL ONLY BE USED FOR REHABILITATION OF CLASS 5 LANDS. CLEAN AND INERT FILL MAY BE IMPORTED FOR REHABILITATION PROVIDED THE MATERIAL IS SUITABLE FOR AGRICULTURAL REHABILITATION AND WILL INCREASE THE AMOUNT OF LAND TO BE REHABILITATED TO CLASS 2/3. MINOR CHANGES TO THE FINAL GROUND ELEVATIONS AND INCREASED AREA OF CLASS 2/3 SOILS MAY BE PERMITTED UPON RECEIPT OF WRITTEN APPROVAL FROM MNRF. THE MAXIMUM DEPTH OF IMPORTED MATERIAL IS 1 METRE. THE LICENSEE MUST ENSURE THAT THE MATERIAL MEETS THE MOECC'S CRITERIA UNDER TABLE 1 OF THE SOILS, GROUNDWATER AND SEDIMENT STANDARDS FOR USE PART XV.1 OF THE ENVIRONMENTAL PROTECTION ACT. SAMPLING RESULTS WILL BE PROVIDED TO MNRF UPON REQUEST. WHERE THE IMPORTED MATERIAL IS NOT BEING PLACED WITHIN 1.5M OF THE SURFACE THE CRITERIA UNDER TABLE 1 FOR SODIUM ABSORPTION RATIO AND ELECTRICAL CONDUCTIVITY DO NOT HAVE TO BE MET.
 - NO BUILDINGS OR STRUCTURES WILL REMAIN ON-SITE.
 - FOLLOWING REHABILITATION THE ANTICIPATED ELEVATION OF GROUNDWATER RANGES FROM 226 MASL ALONG THE SOUTHEAST PORTION OF THE SITE TO 231 MASL ALONG THE NORTHWEST PORTION OF THE SITE.
 - NO INTERNAL HAUL ROUTE WILL REMAIN ON-SITE.
 - SEE REHABILITATION SCHEMATIC FOR DIRECTION OF SURFACE WATER DRAINAGE FACILITIES. SEE PAGE 2 OF 4 FOR TIMING TO CONSTRUCT THE PROPOSED NORTH AND EAST DRAINAGE CHANNEL.
 - FINAL ELEVATIONS OF REHABILITATION AREA ARE SHOWN ON THIS PAGE.

Agricultural Rehabilitation



APPROVED LICENSED SITE PLAN AMENDMENTS

No.	Date	Description	By

LICENSEE SIGNATURE: Licensee: Lafarge Canada Inc.
 Authorized Signature: _____
 MNRF LICENSE REFERENCE No. _____

MNRF APPROVAL STAMP: _____
 STAMP: _____

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PROJECT: **Avening Pit Extension**
 Part of Lot 3, Concession I & II
 Formerly in the Township of Nottawasaga
 Now in the Township of Clearview
 County of Simcoe

PRE-APPROVAL REVIEW: First Submission to MNRF, Aug. 2016
 Second Submission to MNRF, Sept. 2016
 Resubmission to Township, March 2018
 Resubmission to Township, Oct. 2018

PLAN SCALE: 1:3,000
 PLOT SCALE: 1:1 Arch D
 DRAWN BY: M.M.
 CHECKED BY: B.Z.
 FILE No.: 9526AA
 DRAWING No.: 3 of 4

DRAWING PATH: N:\9526AA\Drawings\Site Plans\CAD\RehabPlan_2018-09-26.dwg