

- Notes**
- A. General**
- This site plan is prepared under the Aggregate Resources Act (ARA) Aggregate Resources of Ontario, Site Plan Standards August 2020, specifically Existing Features for all sites (Numbers 1-26 in the standards).
 - Area Calculations:
Licence Area: 17.9 hectares (44.2 acres)
Limit of Extraction: 15.4 hectares (38.1 acres)
 - All references to north, south, east and west on this site plan are based on site north (not true north).
 - All measurements shown are in metres unless specified otherwise.
- B. References**
- Topographic information compiled by GeoOptic (a Division of Aeon Egmond Ltd.) produced from aerial photography flown July 19, 2018. Mapping is produced in real world scale and coordinates (NAD83 UTM Zone 17N). Contour interval is 1m. All elevations shown are in metres above sea level (masl). Contours for existing site (Licence #6593) from drone flight flown by Lafarge, October 2020.
 - The licence boundary was established using property boundary compiled from Plan of Survey prepared by: H.F. Grandier Co. Ltd., Ontario Land Surveyor, October 5, 1971 (Plan 40R-6692).
 - Existing zoning on and within 120 metres of the licence is from the Township of Uxbridge Zoning By-law 81-19 (as amended), Office Consolidation July 2020. The site is currently zoned Rural (RU).
 - Existing designations from Township of Uxbridge Official Plan (office consolidation 2014).
 - Land use information and structures identified on or within 120 metres of the site boundary was determined using July 2018 aerial imagery and 2018/2020 site visits.
- C. Drainage**
- Surface drainage on and within 120 metres of the licence boundary is by overland flow in the directions shown by arrows on the plan view, or by infiltration.
- D. Maximum Predicted Water Table**
- The water table elevation on site ranges between 322.25 masl in the southeast portion of the site (MW18-02) to 320.97 masl in the northeast portion of the site (MW18-01). The existing water table elevations are shown in each cross section on this drawing and drawing 3 of 3.
- E. Site Access and Fencing**
- There is an existing field access from Concession Road 4.
 - Post and wire fencing (unless noted otherwise) exists in the locations shown on the plan view.
- F. Aggregate Related Site Features**
- There are no existing aggregate operations or features on-site such as processing areas with stationary or portable equipment, stockpiles, recyclable materials, scrap, haul roads, fuel storage, berms or excavation faces.
- G. Significant Natural Heritage Features On and Within 120m of Site**
- On-site: Bank Swallow, Eastern Meadow Lark and Little Brown Myotis
 - Off-site and within 120m: Significant Woodland
- H. Significant Human-made Features On and Within 120m of Site**
- There are no known built heritage resources on site or within 120m of the site
 - A Euro-Canadian Archaeological Site is located on site (Site 2 BaG1-45)
- I. Cross Sections**
- As shown on this page.
 - Cross section locations are identified on the plan view for each drawing.
- J. Technical Reports - References**
- Hydrogeology: "Water Report Level 2, Lafarge Goodwood Pit Extension" June 2023 (Source: WSP)
 - Maximum Predicted Water Table Elevation: "Lafarge Goodwood Pit Extension: Maximum Predicted Water Table Elevation", June 7, 2023 (Source: WSP)
 - Natural Environment: "Proposed Goodwood Pit Extension Natural Environment Level 1 and 2 Technical Report", July 2023 (Source: WSP)
 - Noise: "Noise Impact Study - Project: 18200.00 Goodwood Pit Extension, Township of Uxbridge, Ontario" April 16, 2023 (Source: Aerocoustics Engineering Ltd.)
 - Archaeology: Review and Entry into the Ontario Public Register of Archaeological Reports: Archaeological Assessment Report Entitled, "Stage 3 Archaeological Assessment: Goodwood Location 1 (BaG1-45), Lafarge Goodwood Extension Property, Part of Lot 20, Concession 3, Geographic Township of Uxbridge, former Ontario County, now Regional Municipality of Durham, Ontario", Dated Jul 13, 2021, Filed with MHSTICI Toronto Office on Jul 14, 2021, MHSTICI Project Information Form Number P256-0670-2021, MHSTICI File Number 0009350.
 - Air Quality Assessment: "Lafarge Goodwood Pit Extension, Goodwood Ontario, Air Quality Assessment" April 20, 2023 (Source: RWDI Air Inc.)

Legal Description
PART OF LOT 20
CONCESSION 3
Township of Uxbridge
Region of Durham

Legend

- Boundary of Area to be Licensed
- Existing Licensed Boundary
- Existing Fence
- Public Road
- Private Driveway/Laneway
- Existing Farm/Field Access
- Monitoring Wells
- Parcel Fabric
- Hydro Pole
- Cross Sections
- Limit of Extraction
- Existing Extraction Limit
- Contour and Elevation
- Spot Height Elevation
- Building/Structure
- Existing Vegetation
- Direction of Surface Drainage
- Maximum Predicted Water Table
- Archaeological Site

Site Plan Amendments

No.	Date	Description	By

MNRF Approval Stamp

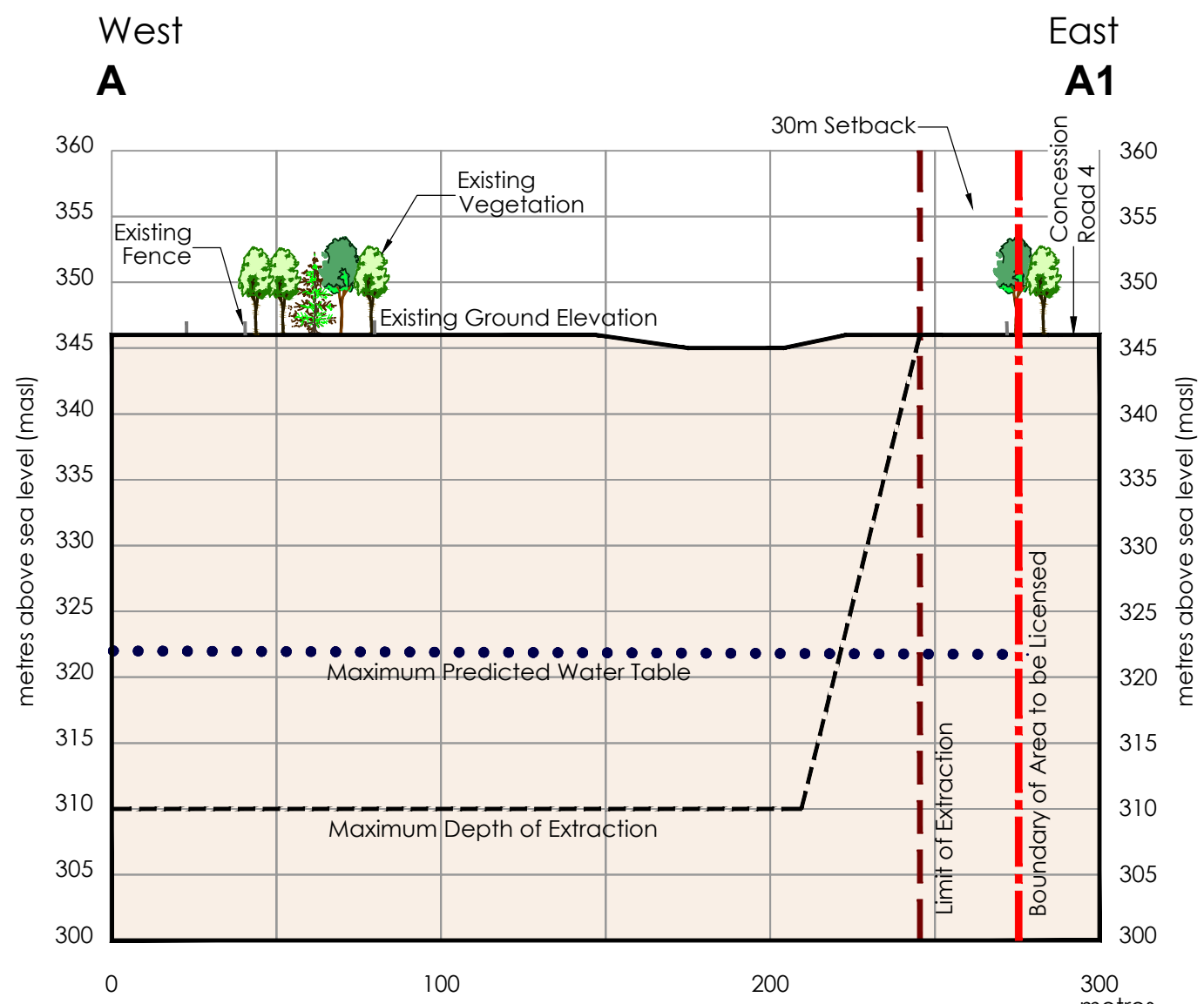
Stamp

LAFARGE
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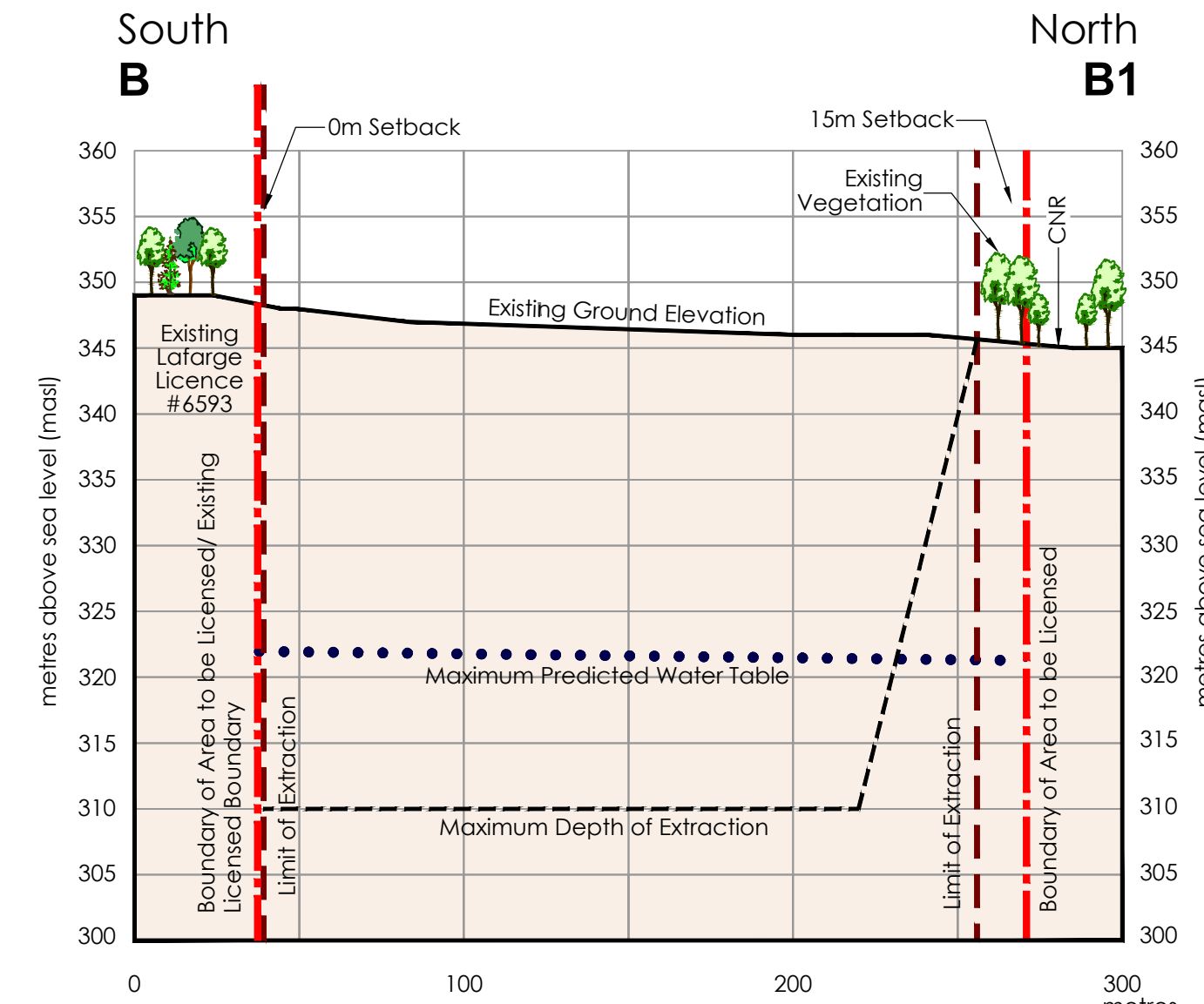
Applicant's Signature
Chris Galway
Chris Galway
Senior Land Manager - East Central Ontario
Lafarge Canada Inc.

Project
Goodwood Pit Extension
Lafarge Canada Inc.
6509 Airport Road, Mississauga Ontario L4V 1S7
Tel: (905) 738-7732

MNRF Licence Reference No.	Pre-approval review:
Plan Scale: See Plan	Plot Scale: 1:2.0 [1mm = 2.0 units] MODEL
Drawn By: D.G.S.	File No. 9526HC
Checked By: C.P.	

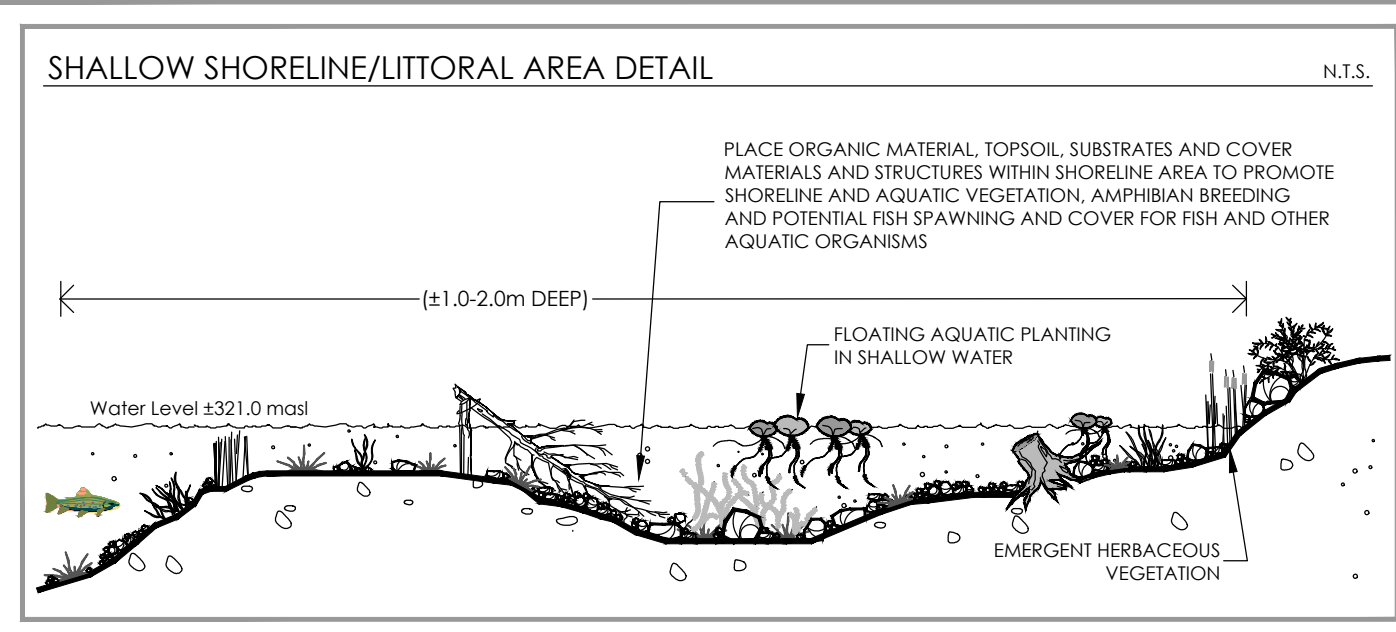


Section A-A1 - Existing Conditions

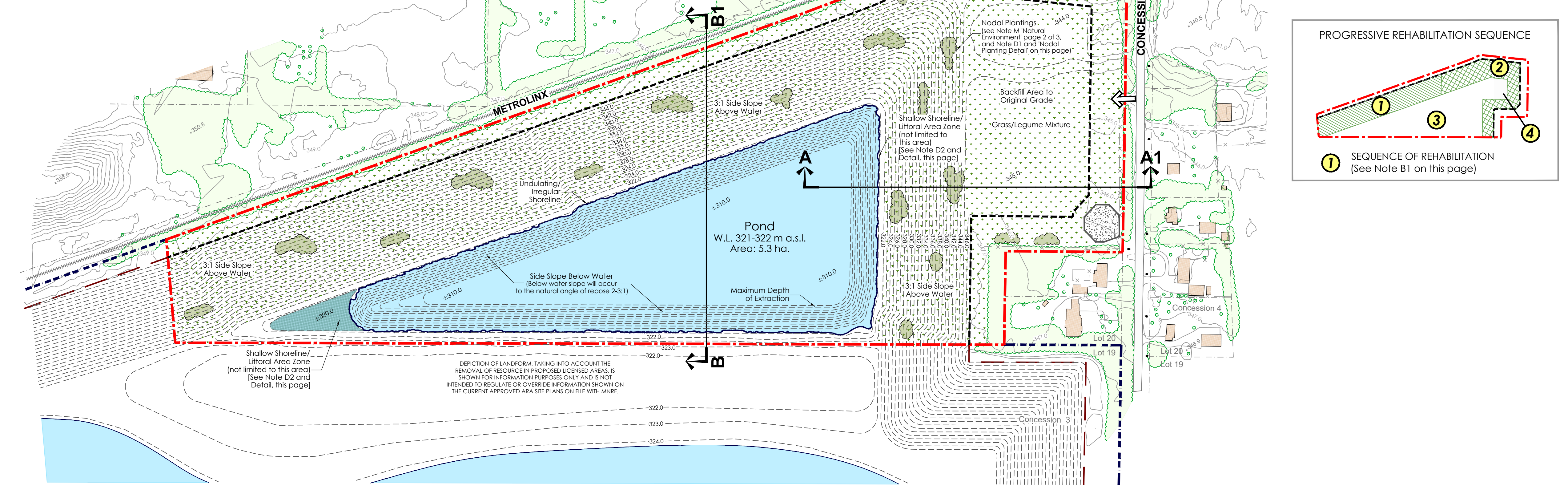
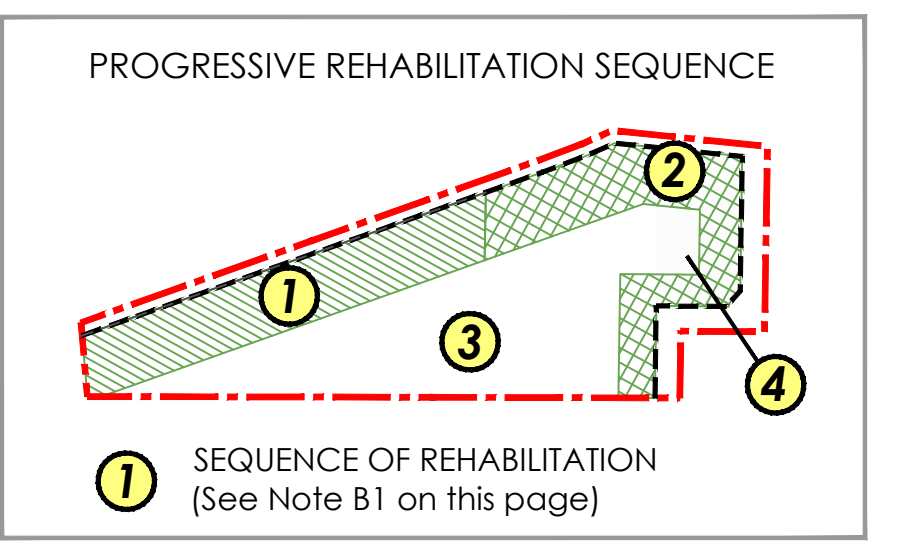
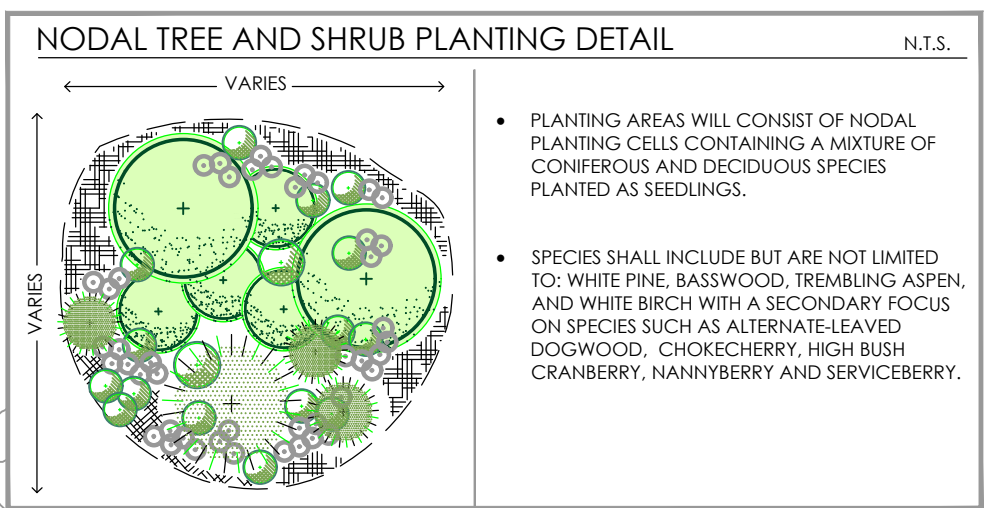


Section B-B1 - Existing Conditions

Horizontal Scale 1:2,000
Vertical Exaggeration 4x



Drawing Scale 1:2,000



Legal Description
PART OF LOT 20
CONCESSION 3
Township of Uxbridge
Region of Durham

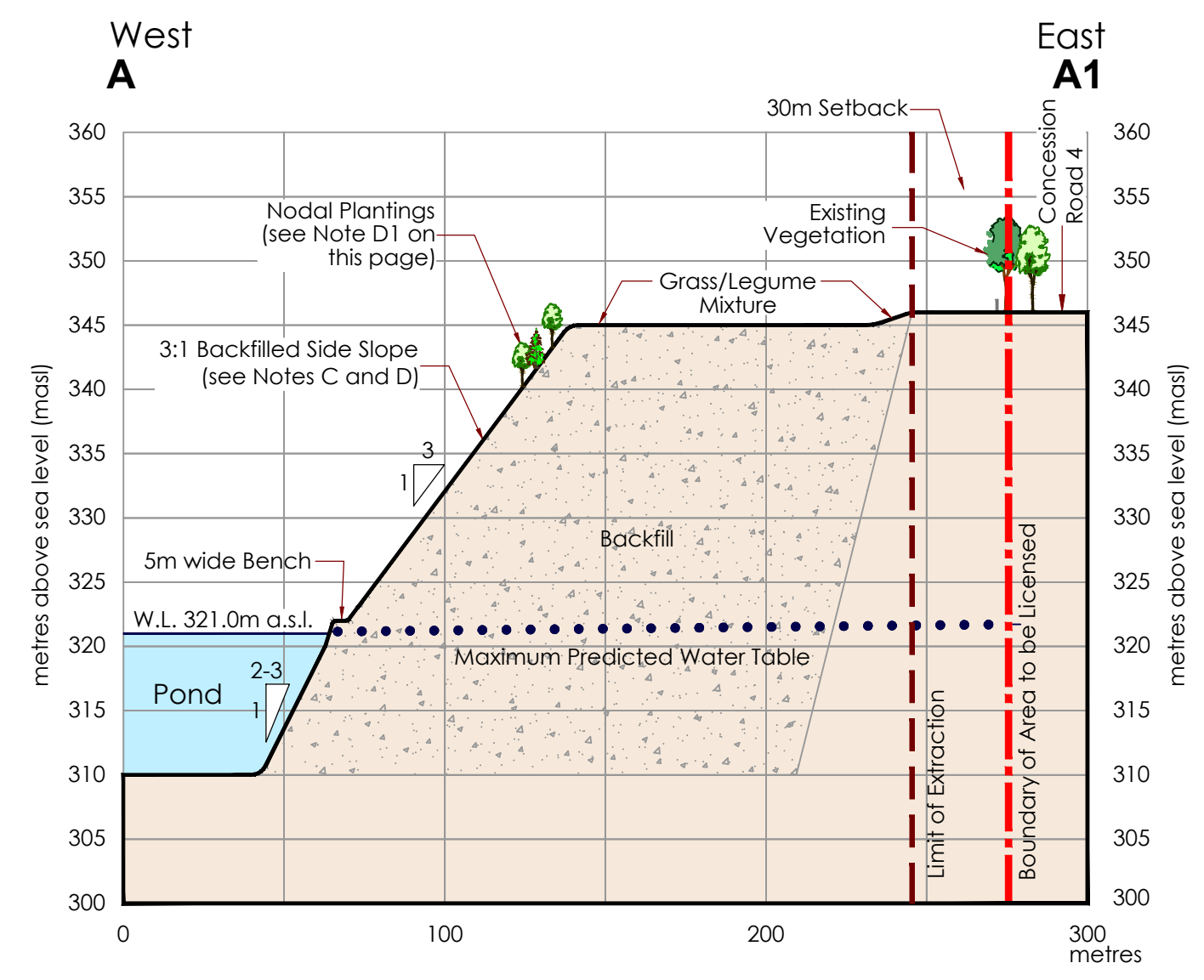
Legend

	Boundary of Area to be Licensed		Limit of Extraction ALL SETBACKS ARE DRAWN TO SCALE AND SHOW LABELLED DISTANCES
	Existing Licensed Boundary GOODWOOD PIT - LICENCE #6593		Existing Extraction Limit GOODWOOD PIT - LICENCE #6593
	Contour and Elevation METRES ABOVE SEA LEVEL		Proposed Contour METRES ABOVE SEA LEVEL (m A.S.L.)
	Spot Height Elevation METRES ABOVE SEA LEVEL		Proposed Spot Elevation MAXIMUM DEPTH OF EXTRACTION PROPOSED PIT FLOOR (m A.S.L.)
	Existing Vegetation		Maximum Depth of Extraction
	Field Access		Proposed Pond METRES ABOVE SEA LEVEL (m A.S.L.)
	Maximum Predicted Water Table (SEE NOTE F AND CROSS SECTIONS ON THIS PAGE)		Proposed Shallow Littoral Area (SEE DETAIL ON THIS PAGE)
	Vegetation/Trees EXISTING/PROPOSED AS INDICATED		Nodal Planting Areas SEE ALSO PAGE 2 OF 3 NOTE M "NATURAL ENVIRONMENT"
	Cross Sections SEE PAGE 1 AND 3 OF 3 FOR EXISTING AND REHABILITATED CROSS SECTIONS		Grassland Area (SEE NOTE D ON THIS PAGE)

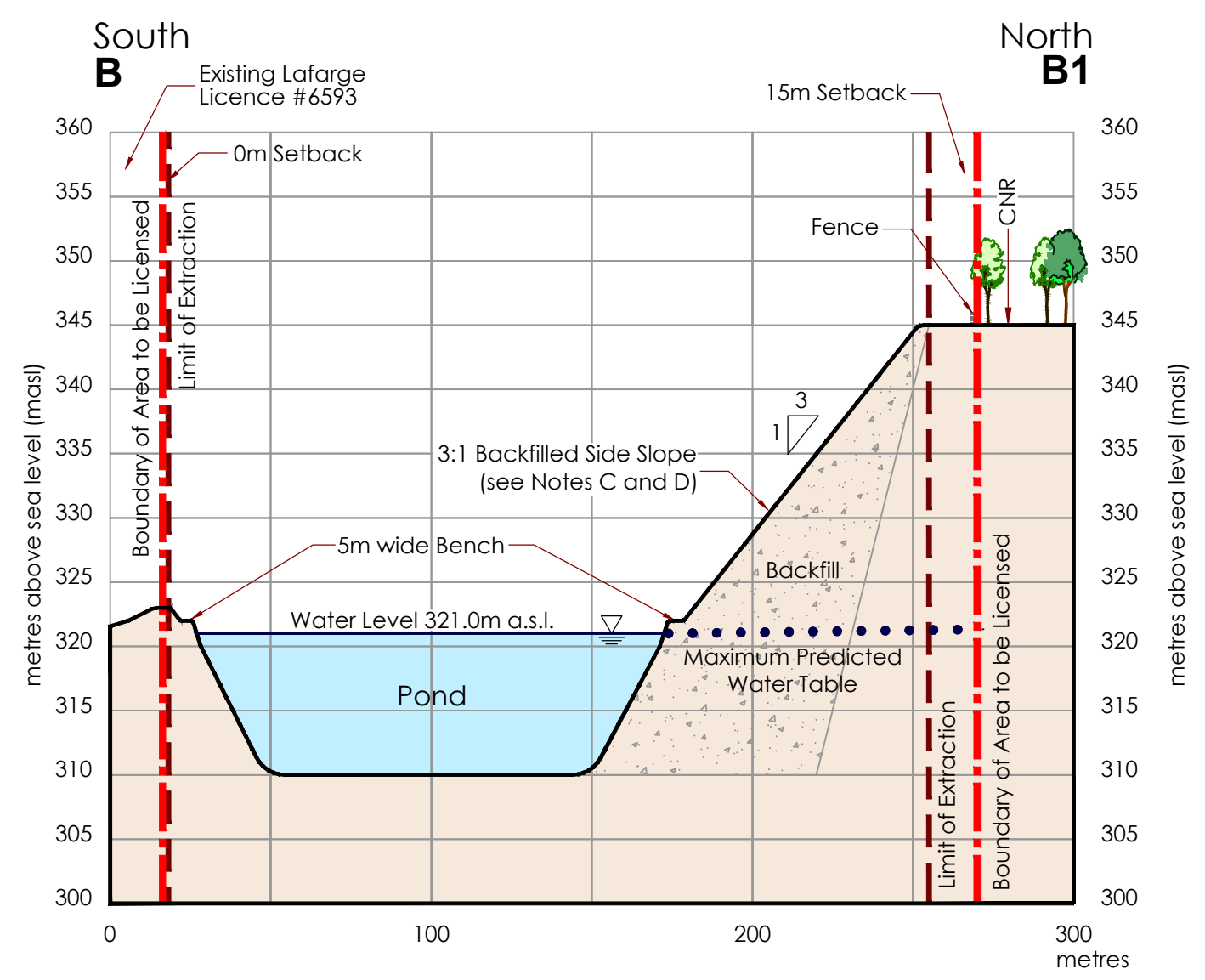
- A. General**
- Area Calculations:
Licence Area: 17.9 hectares (44.2 acres)
Limit of Extraction: 15.4 hectares (38.1 acres)
 - The rehabilitated landform of this site will include: pond, shallow shoreline/littoral area zone, 3:1 side slopes and an area that will be backfilled to original grade. Nodal tree and shrub plantings will also be part of rehabilitation.
- B. Phasing**
- Rehabilitation will be progressive following the direction of extraction and proceed as limits of extraction (area and depth) are reached. The sequence of rehabilitation will follow the "Sequence of Operations" diagram located on page 2 of 3. The above water side slopes in Phase 1 and Phase 2 will be rehabilitated prior to below water extraction commencing in Phase 2. This will involve grading to a 3:1 slope and covering the area with a minimum of 150mm of topsoil/organic matter. Below water side slopes will be rehabilitated as below water excavation proceeds across the site. The area to be backfilled to original grade adjacent to Concession 4 Road will be the final stage of land form rehabilitation on site [See "Progressive Rehabilitation Sequence" on this page].
- C. Slopes and Grading**
- Topsoil and overburden will be used in the progressive rehabilitation of the side slope areas. Above water side slope areas will be covered with a minimum 150mm of topsoil/organic matter. Overburden/soil will be used to backfill pit faces to desired finished grades (i.e. 3:1 slope). Importation of excess soil will be required to achieve the rehabilitated landform as shown.
 - Importation of excess soil is planned for this site to facilitate progressive and final rehabilitation.
 - Excess soil, as defined in Ontario Regulation 244/97 may be imported to this site to facilitate the following rehabilitation:
 - Creation of 3:1 slopes (or sloping ratio otherwise described on this page)
 - Top dressing to establish vegetation
 - Liquid soil, as defined in Ontario Regulation 406/19 under the Environmental Protection Act, is not authorized for importation to the site.
 - The quality of excess soil imported to the site for final placement must be equivalent to or more stringent than the applicable excess soil quality standards as determined in accordance with Ontario Regulation 244/97 as amended from time to time and must be consistent with the site conditions and the end use identified in the approved rehabilitation plan.
 - Where a qualified person is retained or required to be retained in accordance with Ontario Regulation 244/97, the quality, storage, and final placement of excess soils shall be done according to the advice of the qualified person.
 - Excess soil imported to facilitate rehabilitation as described on this site plan shall be undertaken in accordance with Ontario Regulation 244/97 under the Aggregate Resources Act, as amended from time to time.
 - The cumulative total amount of excess soil that may be imported to this site for rehabilitation purposes is 2,500,000 m³.
- D. Proposed Vegetation and Rehabilitated Features**
- All nodal tree and shrub plantings and side-slope seeding will consist of native non-invasive vegetation species. All ground covers on overburden piles and side slopes will be established as part of the phased stripping operations that proceed extraction and will be maintained and replaced should it fail to establish itself to control erosion.
 - Shallow Shoreline / Shallow Littoral Area
The following recommendations shall be incorporated into the planting design. All plantings (i.e., nodal plantings) included in the rehabilitation plan shall be locally native, non-invasive species that create habitat in the short term and promote natural succession processes. Recommended shoreline and aquatic plants include shrubs such as red-osier dogwood (*Cornus sericea*) and slender willow (*Salix petiolaris*), and herbaceous plants such as water plantain (*Alisma plantago-aquatica*), lake sedge (*Carex lacustris*), swamp milkweed (*Asclepias incarnata*), softstem bulrush (*Schoenoplectus tobermونتاني*), and cattail (*Typha* spp.). Shallow littoral/wetland habitats should be created through construction of submerged benches up to 2 m deep. Shallow emergent marsh vegetation (i.e. herbaceous species listed above) shall be planted in water ±0.15 m deep and extend ±5 m from the shore and be interspersed with cover structures (e.g., boulders and root wads) in the shallow shoreline littoral/wetland areas. Organic material and topsoil shall be added to the shoreline areas to promote shoreline vegetation, and the placement of basking logs (i.e. large woody debris) and rubble/boulders along the shoreline is recommended to create turtle basking areas, waterfowl nesting areas and bird perching sites (see "Shallow Shoreline Detail" and "Shoreline Wetland Detail" this page). Shoreline and Aquatic plantings will coincide with the final stages of site rehabilitation.

- Side Slopes, Setbacks & Backfilled Areas
Side slope and backfilled areas will be covered with a minimum 150mm of topsoil/organic matter and seeded with a grass/legume mixture. Terrestrial nodal plantings on the side slope and within the setback areas shall include a mixture of coniferous and deciduous tree species to promote species diversity and provide a variety of species to compensate for any substrate deficiencies. Recommended species include white pine, basswood, trembling aspen (*Populus tremuloides*) and white birch (*Betula papyrifera*) with a secondary focus on species such as choke cherry (*Prunus virginiana*), alternate-leaved dogwood (*Cornus alternifolia*), highbush cranberry (*Viburnum opulus*), nannyberry (*Viburnum lentago*) and serviceberry (*Amelanchier* spp.). It is recommended that ash (*Fraxinus* spp.) species be avoided in rehabilitation plantings due to the invasion of the emerald ash borer. The establishment of nodal planting areas/cells will occur progressively and generally follow the sequence of extraction and side slope/setback grading and seeding. Vegetation shall be replaced should it fail to establish and prevent erosion.
- Rehabilitated Landform
The proposed rehabilitation includes an opportunity to enhance the biological diversity of the local landscape by providing a feature that will attract migratory waterfowl and provide elements that will be of value to locally resident wildlife. Rehabilitation of this site involves the creation of 5.3 ha. of lake and 9.7 ha. of terrestrial landform comprised of overburden side slopes, setback areas and an area backfilled to original grade for future development opportunity. The final pit landform will be in accordance with the drawing as shown on this page.

- E. Drainage**
- Final surface drainage will follow the rehabilitated contours as shown and be directed towards the post-extraction pond.
- F. Final Rehabilitation**
- No buildings or structures associated with aggregate operations will remain on site.
 - There will be no internal roads remaining on the site.
 - The water level of the proposed lake (± 321 m a.s.l.) and the post extraction ground water table, are as shown on pages 1 and 3 of 3 as per hydrogeological/hydrological assessments.



Section A-A1 - Rehabilitated Conditions



Section B-B1 - Rehabilitated Conditions

Horizontal Scale 1:2,000
Vertical Exaggeration 4x

Site Plan Amendments

No.	Date	Description	By

MNRF Approval Stamp

Stamp

MHBC
PLANNING URBAN DESIGN & LANDSCAPE ARCHITECTURE
200-540 BINGEMANS CENTRE DR., KITCHENER, ON. N2B 3X9 | P: 519.576.3650 F: 519.576.0121 | WWW.MHBCPLAN.COM

Applicant's Signature
Chris Galway
Senior Land Manager - East Central Ontario
Lafarge Canada Inc.

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Project
Goodwood Pit Extension
Lafarge Canada Inc.
6509 Airport Road, Mississauga Ontario L4V 1S7
Tel: (905) 738-7732

MNRF Licence Reference No.

Pre-approval review:

For Application Submission - January 2024
Plot Scale 1:2.0 [1mm = 2.0 units] MODEL

Plan Scale: See Plan
HORIZONTAL SCALE
25 0 25 50 75 100 METRES

Drawn By: D.G.S. File No.: 9526HC
Checked By: C.P.

File Name: **REHABILITATION PLAN**
Drawing No.: **3 OF 3**

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