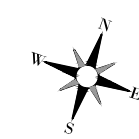
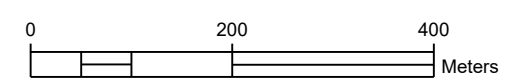


Key Natural Heritage Features

Scale 1:7500



Significant Woodland, Wetland and Fish Habitat

- Significant Woodland
- Wetland - Non-Provincially Significant (LID)
- Fish Habitat

Habitat for Endangered and Threatened Species

- Bobolink & Eastern Meadowlark - Category 1 Habitat
- Bobolink & Eastern Meadowlark - Category 2 Habitat
- Bobolink & Eastern Meadowlark - Category 3 Habitat
- Potential Bobolink & Eastern Meadowlark Habitat
- Black Ash Tree
- Butternut Tree

Significant Wildlife Habitat

- Amphibian Breeding Habitat (Woodland)
- Rail Migratory Corridor
- Open Country Bird Breeding Habitat
- Mourning Dove
- Shrub/Early Successional Bird Breeding Habitat
- Waterfowl Nesting Habitat
- Terrestrial Clayfish Habitat
- Terrestrial Clayfish Burrow
- Species Observation
- Abandoned Rail Line (white)

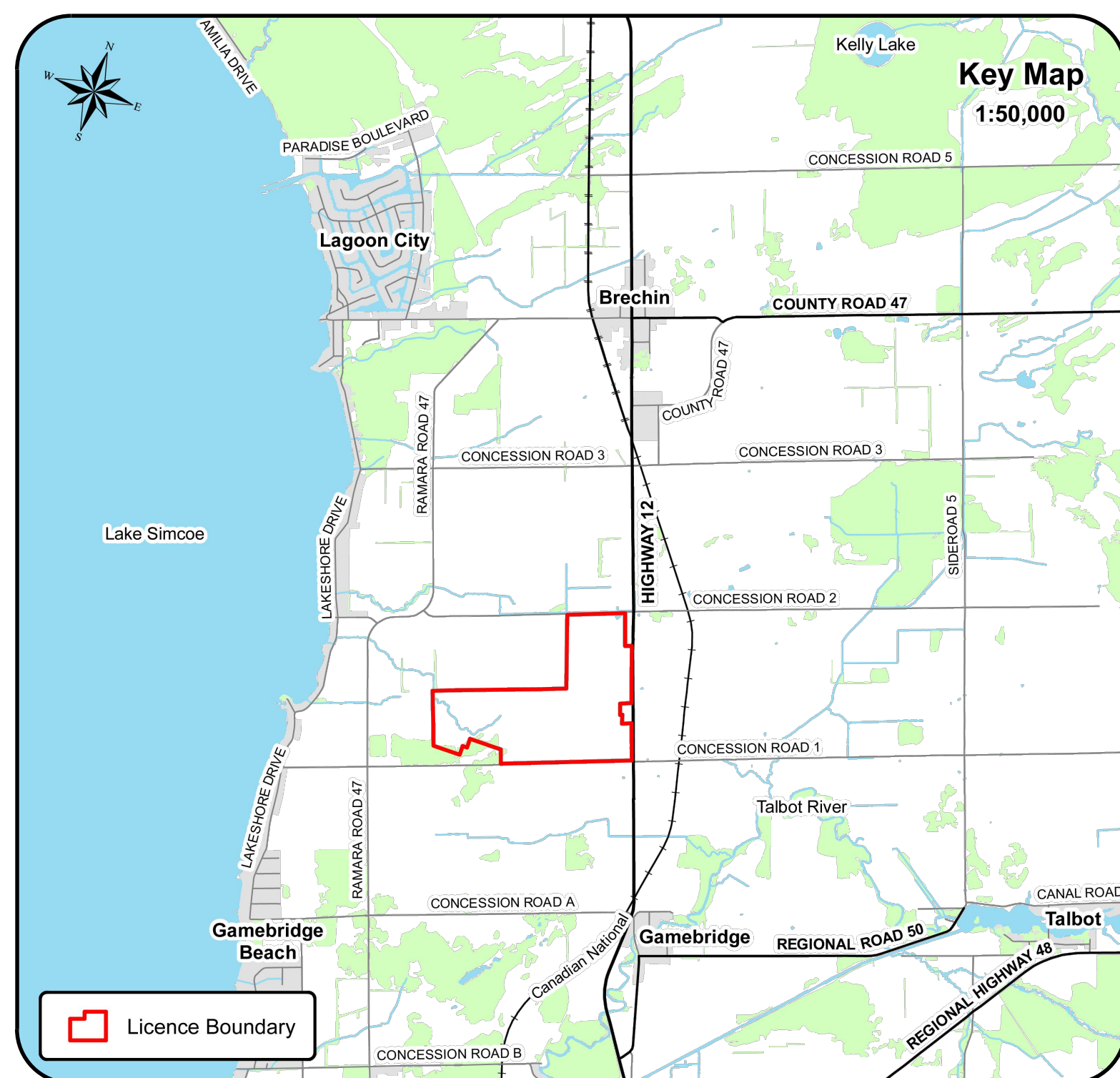
- Note:
- Traded areas and structures west of the abandoned rail line may provide habitat for Species at Risk (SAR) birds.
 - Golden-winged Warbler habitat for all land west of the abandoned rail line within 120 metres of the licence boundary.
 - Eastern Wood pewee and Wood Thrush habitat for all woodlands west of the abandoned rail line within 120 metres of the licence boundary.

Legal Description

Part of Lots 11, 12 and 13, Concession 1
(former geographic Township of Mara)
Township of Ramara
County of Simcoe

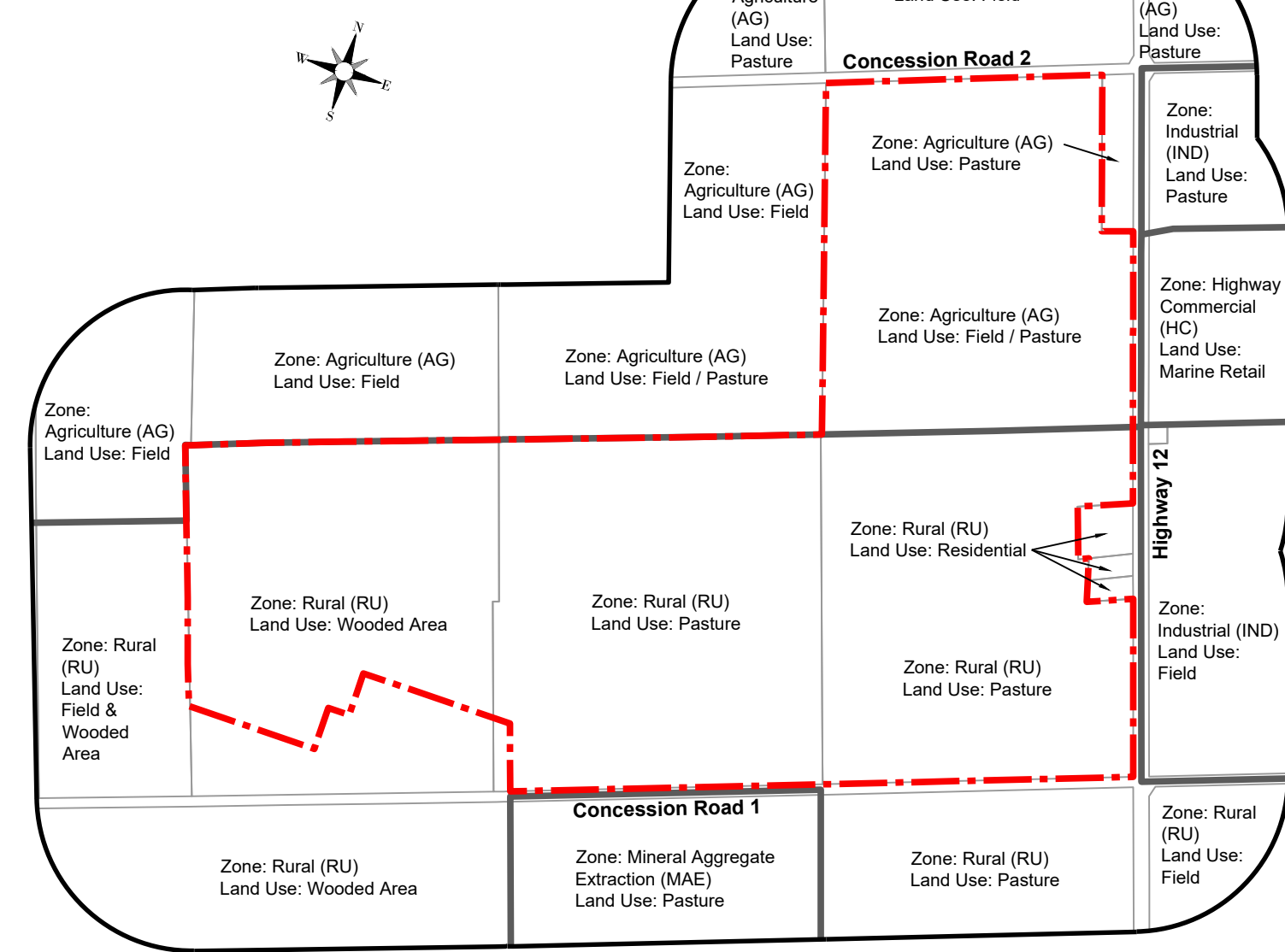
Legend

- Licence Boundary
- Limit of Extraction
- Contours with Elevation
Metres above sea level (MASL)
- Public Road
- Driveway
- Watercourse
Perennial
(Direction of flow indicated by arrows)
- Watercourse
Intermittent
(Direction of flow indicated by arrows)
- Water Feature
- Wooded Area
- Wetland
(Non-Provincially Significant Wetland)
From Land Information Ontario (LIO)
- 120m Offset From Licence Boundary
- Additional Land Owned by Licensee
- Lot Fabric
Lot and Concessions - dark grey
Parcel Fabric - light grey
- Fence
Cross - 1.2m post & wire fence
Square - 1.3m wood fence
- Entrance / Exit
Field Entrance
- Gate
- Direction of Surface Drainage
- Berm
- Building/Structure
- Cross Sections
A1



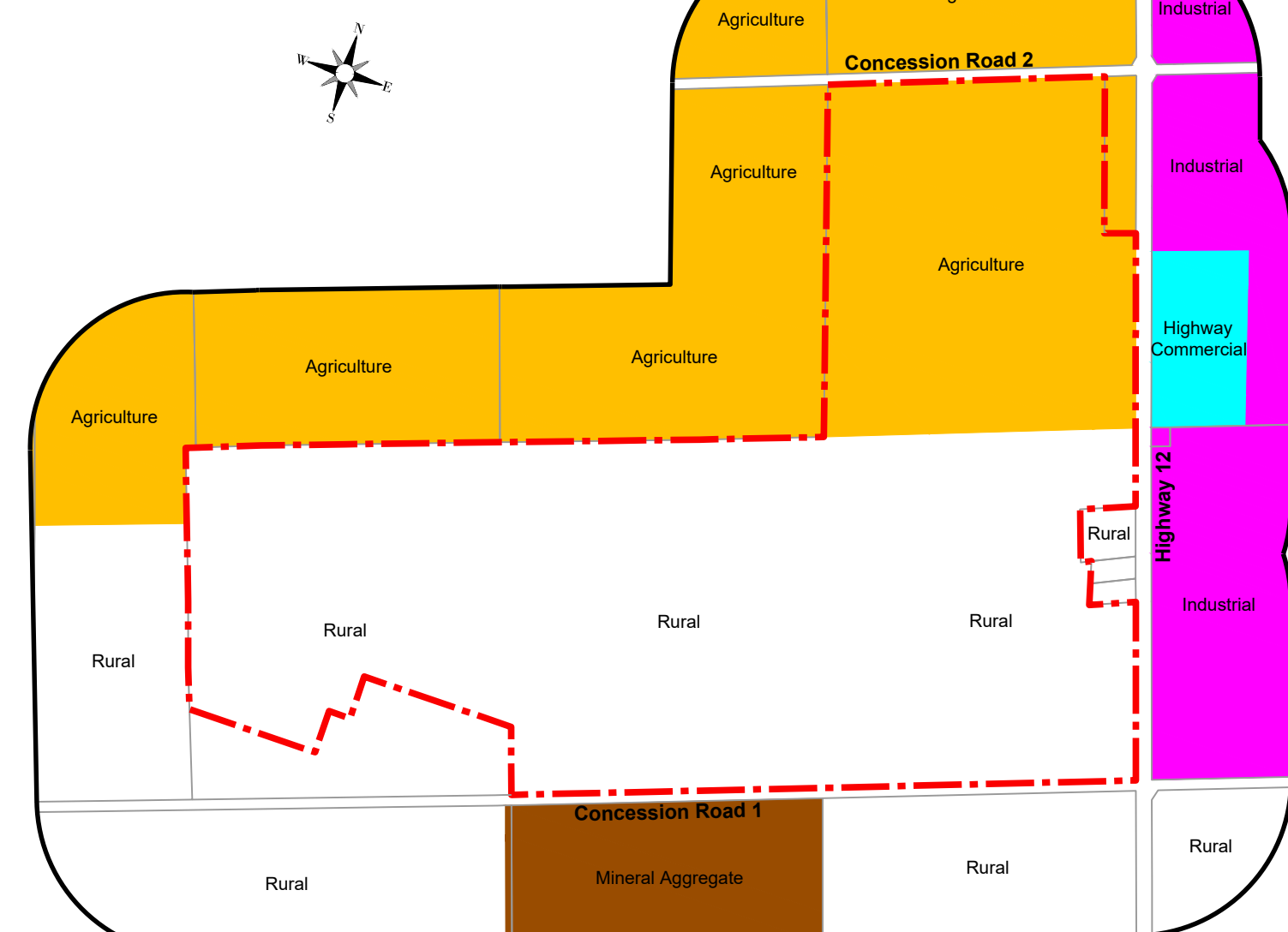
Zoning and Land Use

Scale 1:12,500



Land Use Designation

Scale 1:12,500



A. General

- This site plan is prepared under the Aggregate Resources Act (ARA) for a Class 'A' Licence for a quarry below the groundwater table.
- Area calculations:
 - 2.1. Licence Boundary: 151.4 ha
 - 2.2. Limit of Extraction: 91.5 ha
- Nothing and nothing coordinates have been provided at all major corners of the licence boundary and at the centre point of every entrance and exit that intersects the licence boundary on the plan view of this drawing.

B. References

- Contours were obtained from Ontario GeoHub (Land Information Ontario) and are based on the 2013 South Central Ontario Orthophotography Project imagery-derived digital elevation model. Contours are displayed in one metre intervals and elevations shown are in metres above sea level (masl).
- Topographic information was obtained from numerous sources including Ontario GeoHub (Land Information Ontario), Google Earth Pro aerial photography captured on September 28, 2022 and field investigations for technical reports.
- All topographic features and structures are shown to scale in Universal Mercator (UTM) with North American Datum 1983 (NAD83), Zone 17 (metres), Central Meridian 81 degrees west coordinate system.
- The licence boundary was established using parcel fabric information from the Municipal Property Assessment Corporation.
- Existing land use designations on and within 300 metres of the licence boundary (see schematic on this drawing) was obtained from the Township of Ramara Official Plan, Schedule 'A' - Land Use Plan, dated December 27, 2006.
- Existing zoning on and within 300 metres of the licence boundary (see schematic on this drawing) was obtained from the Township of Ramara Zoning Bylaw 2003.85, Schedule 'A' - Zoning Map, dated December 27, 2006.
- Land use information identified on or within 300 metres of the licence boundary boundary (see schematic on this drawing) was determined using Google Earth Pro aerial photography captured on September 28, 2022.
- Structures identified on or within 120 metres of the licence boundary was determined using Google Earth Pro aerial photography captured on September 28, 2022.

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.
- There are three locations where existing watercourses flow off-site to the north as depicted on the plan view of this drawing.

D. Groundwater

- The maximum predicted water table within the limit of extraction varies between 231.5 masl and 236.0 masl and is shown in each cross section on drawing 5 of 5.

E. Site Access and Fencing

- Four gated field access points exist in the locations shown on the plan view. Three of the field access points are from Concession Road 1 to the south while one is from Highway 12 to the east.
- Post and wire, as well as wood fencing, exist in the locations shown on the plan view.

F. Significant Natural Features Within 120 Metres

- There are Significant Woodlands, Significant Wildlife Habitat, habitat for endangered and threatened species, fish habitat and wetlands evaluated by Acmuth Environmental Consulting and determined to be non-provincially significant within the licence boundary (see the Key Natural Heritage Features schematics on this drawing).
- There are Significant Woodlands, Significant Wildlife Habitat, habitat for endangered and threatened species, fish habitat and Ministry of Natural Resources and Forestry (MNRF) identified evaluated wetlands (non-significant) within the licence boundary within 120 metres (see the Key Natural Heritage Features schematics on this drawing).

G. Significant Human-Made Features Within 120 Metres

- There are four existing structures within the licence boundary as shown on the plan view.
- There are four residential buildings, as well as several accessory structures, within 120 metres of the licence boundary as shown on the plan view.
- An existing quarry operation (Licence # 3717) is located south of Concession Road 1. A 1,322 metre long berm has been constructed adjacent to Concession Road 1.

H. Aggregate Related Site Features

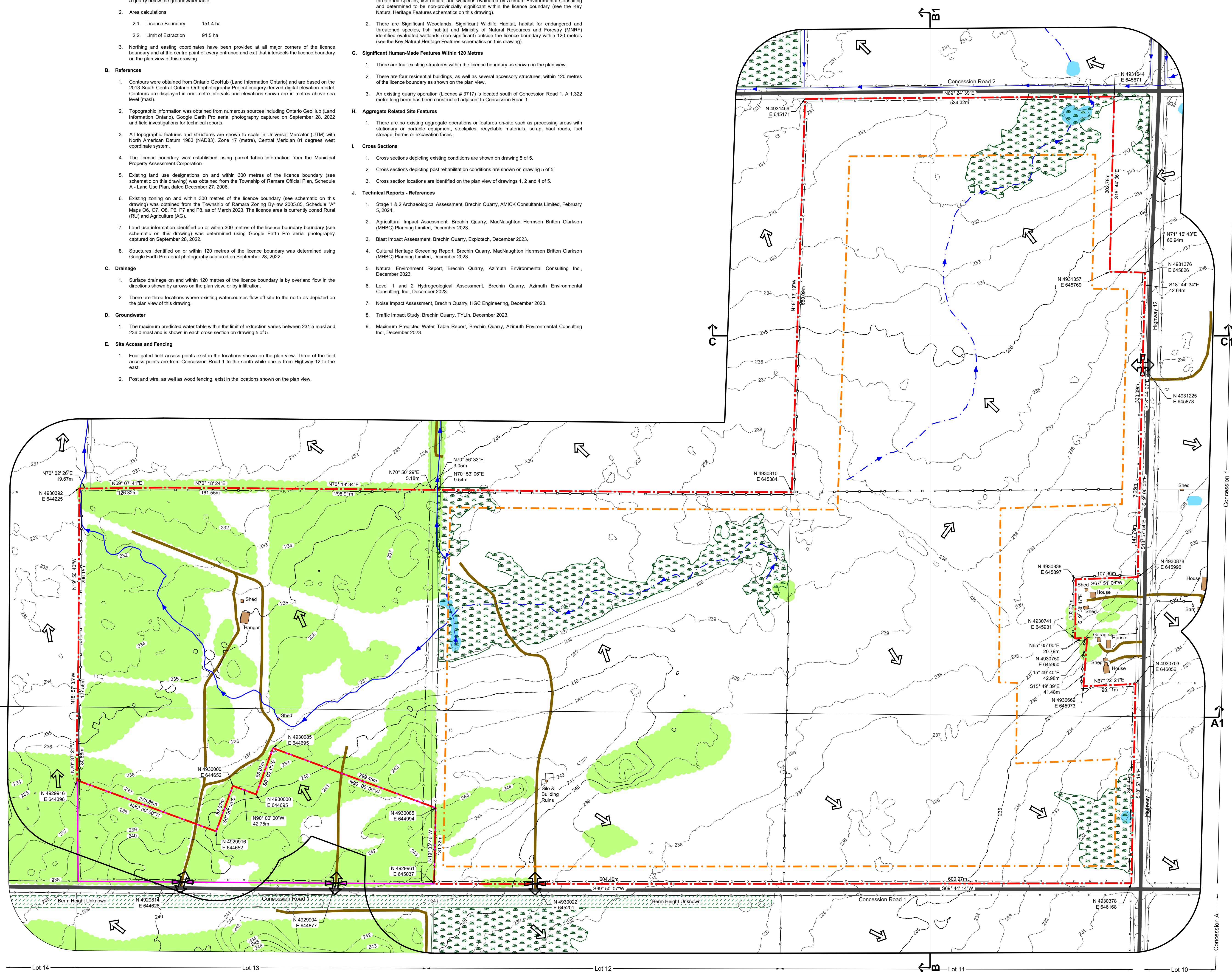
- There are no existing aggregate operations or features on-site such as processing areas with stationary or portable equipment, stockpiles, recyclable materials, scrap, haul roads, tail storage, berms or excavation faces.

I. Cross Sections

- Cross sections depicting existing conditions are shown on drawing 5 of 5.
- Cross sections depicting post rehabilitation conditions are shown on drawing 5 of 5.
- Cross section locations are identified on the plan view of drawings 1, 2 and 4 of 5.

J. Technical Reports - References

- Stage 1 & 2 Archaeological Assessment, Brechin Quarry, AMICK Consultants Limited, February 3, 2024.
- Agricultural Impact Assessment, Brechin Quarry, MacNaughton Herman Britton Clarkson (MHBC) Planning Limited, December 2023.
- Basal Impact Assessment, Brechin Quarry, Explotech, December 2023.
- Cultural Heritage Screening Report, Brechin Quarry, MacNaughton Herman Britton Clarkson (MHBC) Planning Limited, December 2023.
- Natural Environment Report, Brechin Quarry, Acmuth Environmental Consulting Inc., December 2023.
- Level 1 and 2 Hydrogeological Assessment, Brechin Quarry, Acmuth Environmental Consulting Inc., December 2023.
- Noise Impact Assessment, Brechin Quarry, HGC Engineering, December 2023.
- Traffic Impact Study, Brechin Quarry, TYUN, December 2023.
- Maximum Predicted Water Table Report, Brechin Quarry, Acmuth Environmental Consulting Inc., December 2023.



Site Plan Acronyms

- ARA - Aggregate Resources Act
- MASL - Metres Above Sea Level
- MNRF - Ministry of Natural Resources and Forestry
- MCM - Ministry of Citizenship and Multiculturalism
- MGCS - Ministry of Government and Consumer Services
- MECP - Ministry of Environment, Conservation and Parks
- MTO - Ministry of Transportation - Ontario
- DFO - Fisheries and Oceans Canada
- PTTW - Permit to Take Water
- ECA - Environmental Compliance Approval
- ESA - Environmental Site Assessment
- SAR - Species at Risk
- LIO - Land Information Ontario

Site Plan Amendments

No.	Date	Description	By

Site Plan Revisions (Pre-Licensing)

No.	Date	Description	By
1	May 2024	Updated the site plan per the MNRF's letter dated April 22, 2024	CAP



**PLANNING
URBAN DESIGN
& LANDSCAPE
ARCHITECTURE**

113 COLLIER STREET, BARRE, ON L4M 1H2 | P: 705.728.0045 F: 705.728.3010 | WWW.MHBC-ON.COM

MNRF Stamp

Christopher Poole

MHBC Stamp

Is authorized by the Ministry of Natural Resources and Forestry pursuant to Subsection 0.2(3)(f) of Ontario Regulation 244/07 to prepare and certify site plans.

Christopher Poole

Applicant

LCP Quarry Limited
145 Adelaide Street West
Suite 500
Toronto, Ontario
M5H 4E5

Project

Brechin Quarry
1646 & 1506 Highway 12 and 2440 & 2530 Concession Road 1, Brechin, Ontario, L0K 1B0

MNRF Licence Reference No.

Applicant's Signature
Christopher Poole

Plan Scale: 1:3000 (Arch E)
Date: May 2024
Drawn By: C.P. File No.: 12135B
Checked By: B.Z.

File Name

Existing Features

Drawing No.

1 of 5

File Path: N:\Bram\12135B Talker - Proposed Brechin Quarry\Drawings\Site Plan\CAD\12135B - Site Plan.dwg

General

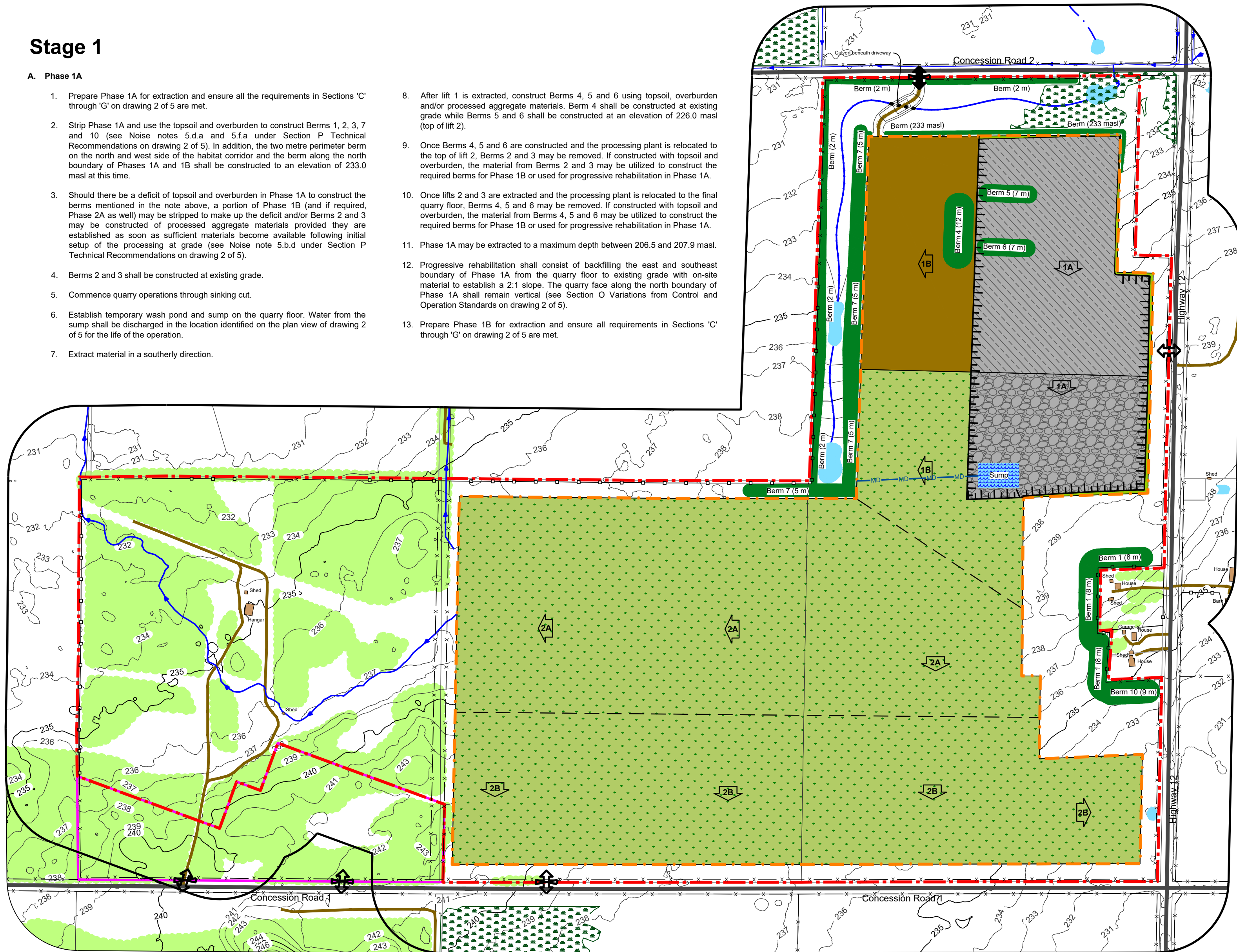
1. Extraction shall occur in four phases (Phases 1A, 1B, 2A and 2B) as shown on the plan view.
2. Phases do not represent any specific or equal time period.
3. Progressive and final rehabilitation shall be completed in direct correlation to the development of the quarry as the maximum extraction limits and depths are reached and enough area is available to ensure rehabilitation activities will not interfere with the production, stockpiling and processing of aggregate material.

Stage 1

A. Phase 1A

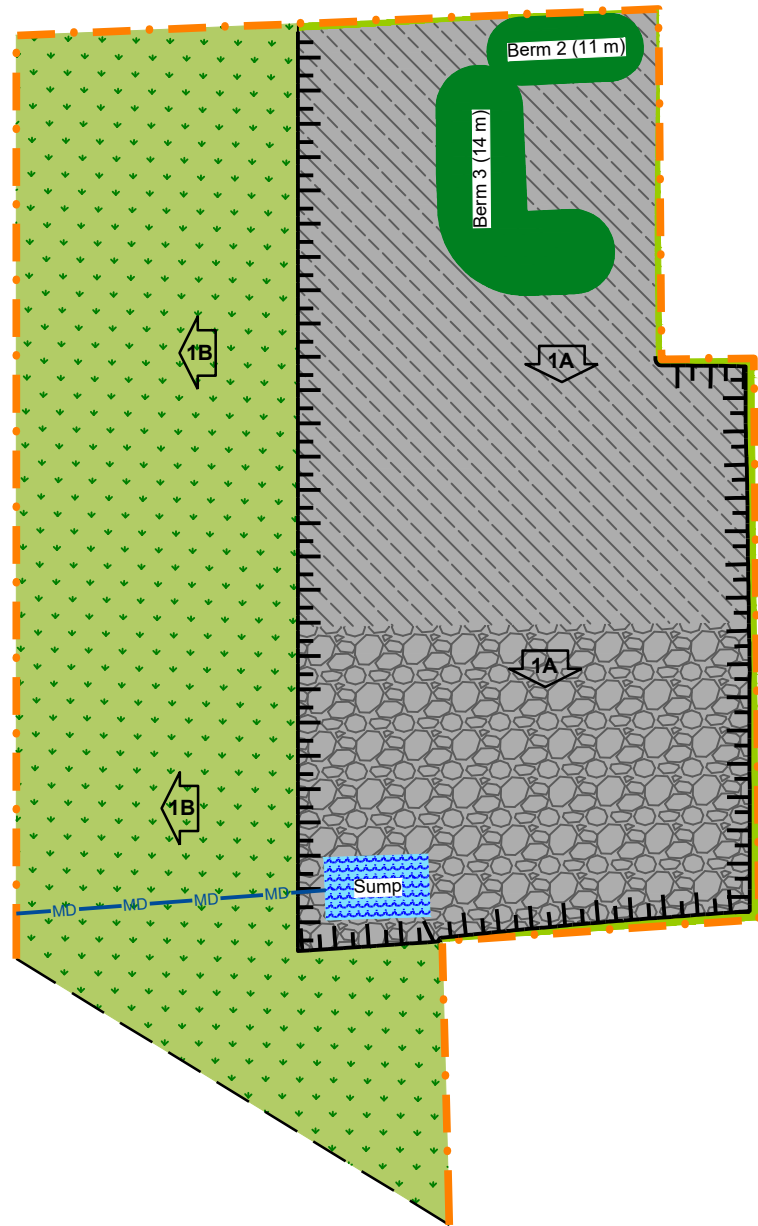
1. Prepare Phase 1A for extraction and ensure all the requirements in Sections "C" through "Q" on drawing 2 of 5 are met.
2. Strip Phase 1A and use the topsoil and overburden to construct Berms 1, 2, 3, 7 and 10 (see Noise notes 5.2.a and 5.2.a under Section P Technical Recommendations on drawing 2 of 5). In addition, the two metre parallel berm on the north and west side of the habitat corridor and the berm along the north boundary of Phases 1A and 1B shall be constructed to an elevation of 233.0 msl at this time.
3. Should there be a deficit of topsoil and overburden in Phase 1A to construct the berms mentioned in the note above, a portion of Phase 1B (and if required, Phase 2A as well) may be stripped to make up the deficit and/or Berms 2 and 3 may be constructed of processed aggregate materials provided they are established as soon as sufficient materials become available following initial setup of the processing at grade (see Noise note 5.3.d under Section P Technical Recommendations on drawing 2 of 5).
4. Berms 2 and 3 shall be constructed at existing grade.
5. Commence quarry operations through sinking out.
6. Establish temporary wash pond and sump on the quarry floor. Water from the sump shall be discharged in the location identified on the plan view of drawing 2 of 5 for the life of the operation.
7. Extract material in a southerly direction.

8. After lift 1 is extracted, construct Berms 4, 5 and 6 using topsoil, overburden and/or processed aggregate materials. Berm 4 shall be constructed at existing grade while Berms 5 and 6 shall be constructed at an elevation of 230.0 msl (top of lift 2).
9. Once Berms 4, 5 and 6 are constructed and the processing plant is relocated to the top of lift 2, Berms 2 and 3 may be removed. If constructed with topsoil and overburden, the material from Berms 2 and 3 may be utilized to construct the required berms for Phase 1B or used for progressive rehabilitation in Phase 1A.
10. Once lift 2 and 3 are extracted and the processing plant is relocated to the first quarry floor, Berms 4, 5 and 6 may be removed. If constructed with topsoil and overburden, the material from Berms 4, 5 and 6 may be utilized to construct the required berms for Phase 1B or used for progressive rehabilitation in Phase 1A.
11. Phase 1A may be extracted to a maximum depth between 206.5 and 207.9 msl.
12. Progressive rehabilitation shall consist of backfilling the east and southeast boundary of Phase 1A from the quarry floor to existing grade with on-site material to establish a 2:1 slope. The quarry face along the north boundary of Phase 1A shall remain vertical (see Section O Variations from Control and Operation Standards on drawing 2 of 5).
13. Prepare Phase 1B for extraction and ensure all requirements in Sections "C" through "Q" on drawing 2 of 5 are met.

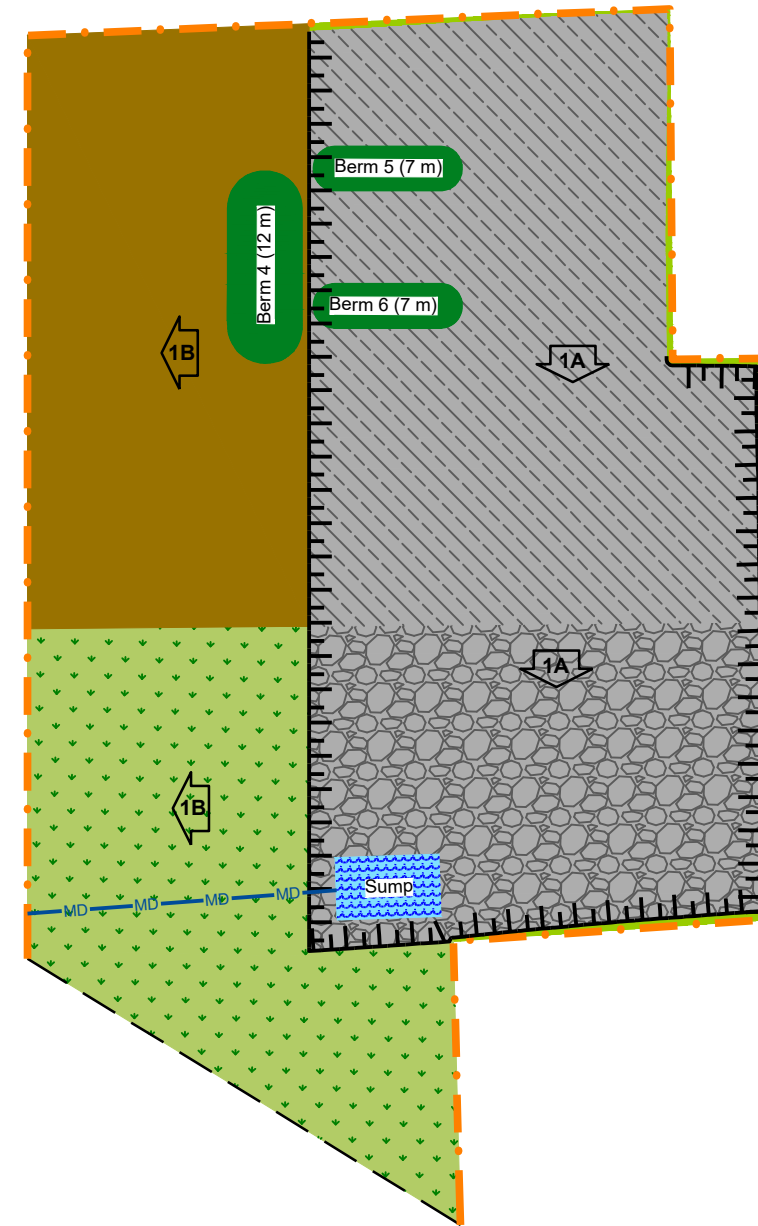


Required Berms in Phase 1

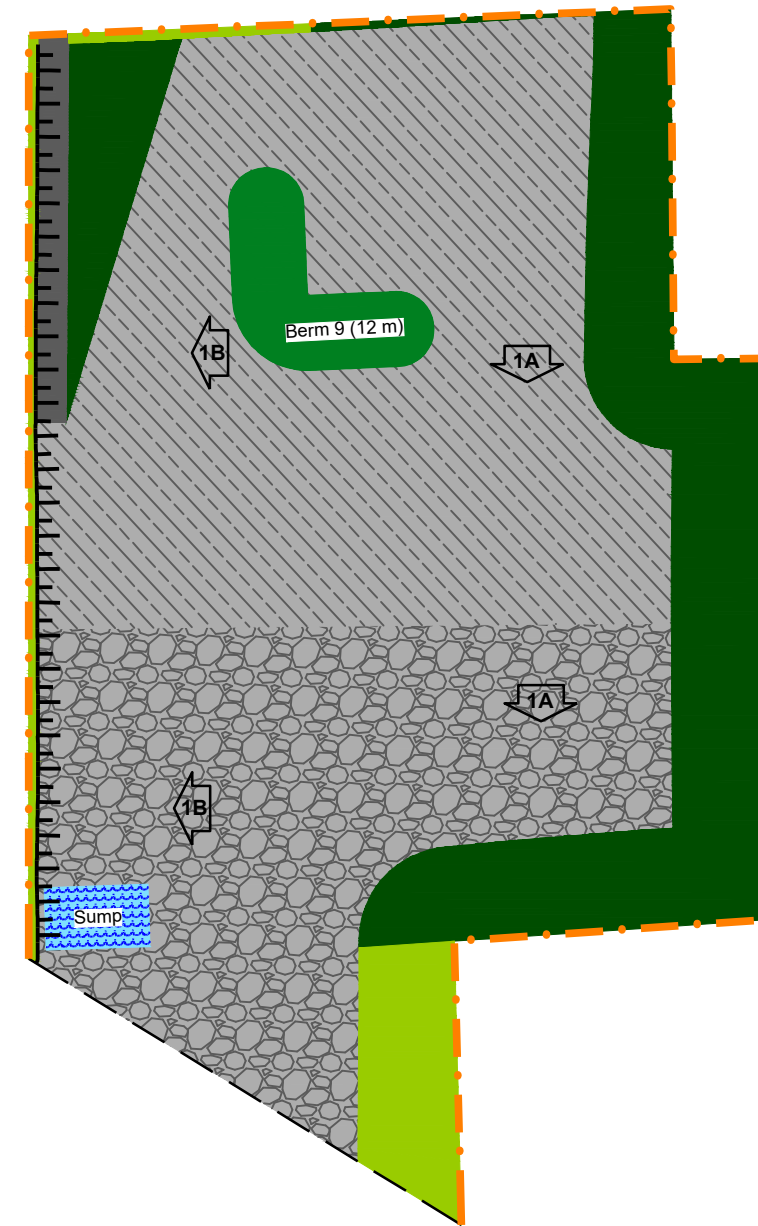
While Extracting Lift 1



While Extracting Lifts 2 and 3



All Lifts Have Been Extracted



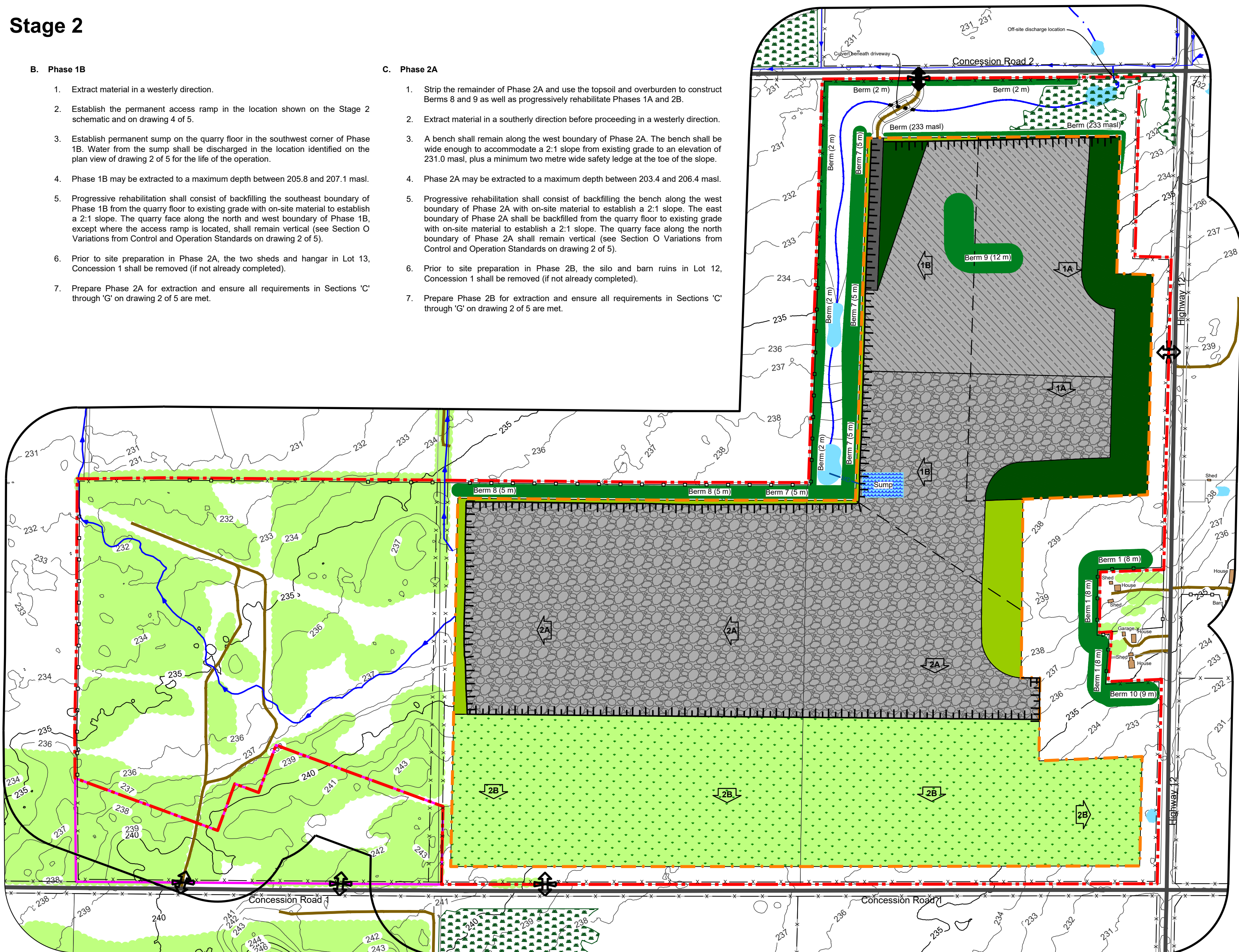
Stage 2

B. Phase 1B

1. Extract material in a westerly direction.
2. Establish the permanent access ramp in the location shown on the Stage 2 schematic and on drawing 4 of 5.
3. Establish permanent sump on the quarry floor in the southwest corner of Phase 1B. Water from the sump shall be discharged in the location identified on the plan view of drawing 2 of 5 for the life of the operation.
4. Phase 1B may be extracted to a maximum depth between 205.8 and 207.1 msl.
5. Progressive rehabilitation shall consist of backfilling the southeast boundary of Phase 1B from the quarry floor to existing grade with on-site material to establish a 2:1 slope. The quarry face along the north and west boundary of Phase 1B, except where the access ramp is located, shall remain vertical (see Section O Variations from Control and Operation Standards on drawing 2 of 5).
6. Prior to site preparation in Phase 2A, the two sheds and hangar in Lot 13, Concession 1 shall be removed (if not already completed).
7. Prepare Phase 2B for extraction and ensure all requirements in Sections "C" through "Q" on drawing 2 of 5 are met.

C. Phase 2A

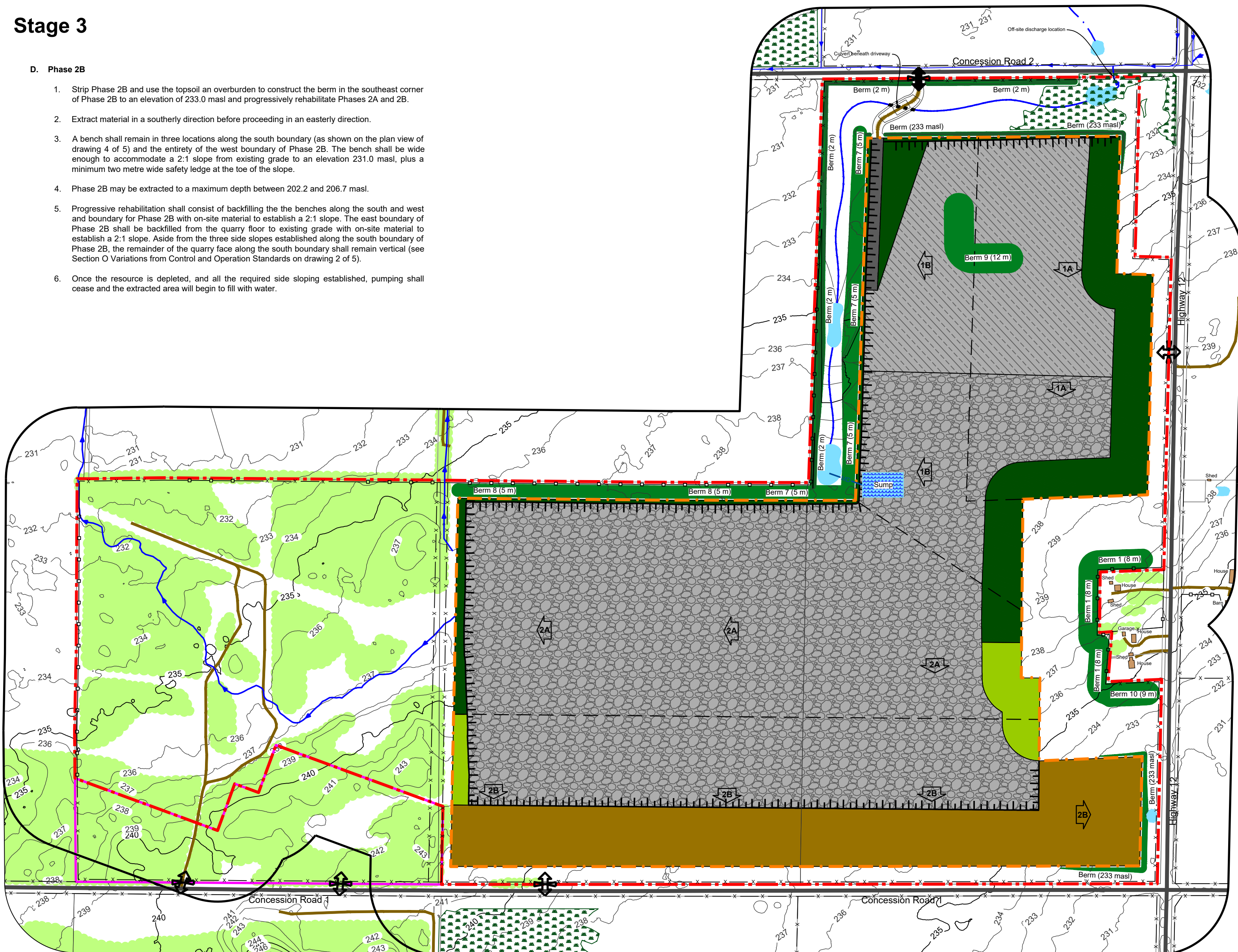
1. Strip the remainder of Phase 2A and use the topsoil and overburden to construct Berms 8 and 9 as well as progressively rehabilitate Phases 1A and 2B.
2. Extract material in a southerly direction before proceeding in a westerly direction.
3. A berm shall remain along the west boundary of Phase 2A. The berm shall be wide enough to accommodate a 2:1 slope from existing grade to an elevation of 231.0 msl, plus a minimum two metre wide safety ledge at the toe of the slope.
4. Phase 2A may be extracted to a maximum depth between 203.4 and 204.4 msl.
5. Progressive rehabilitation shall consist of backfilling the berm along the west boundary of Phase 2A with on-site material to establish a 2:1 slope. The east boundary of Phase 2A shall be backfilled from the quarry floor to existing grade with on-site material to establish a 2:1 slope. The quarry face along the north boundary of Phase 2A shall remain vertical (see Section O Variations from Control and Operation Standards on drawing 2 of 5).
6. Prior to site preparation in Phase 2B, the site and berm ruins in Lot 12, Concession 1 shall be removed (if not already completed).
7. Prepare Phase 2B for extraction and ensure all requirements in Sections "C" through "Q" on drawing 2 of 5 are met.



Stage 3

D. Phase 2B

1. Strip Phase 2B and use the topsoil and overburden to construct the berm in the southeast corner of Phase 2B to an elevation of 233.0 msl and progressively rehabilitate Phases 2A and 2B.
2. Extract material in a southerly direction before proceeding in an easterly direction.
3. A berm shall remain in three locations along the south boundary (as shown on the plan view of drawing 4 of 5) and the entirety of the west boundary of Phase 2B. The berm shall be wide enough to accommodate a 2:1 slope from existing grade to an elevation of 231.0 msl, plus a minimum two metre wide safety ledge at the toe of the slope.
4. Phase 2B may be extracted to a maximum depth between 202.2 and 206.7 msl.
5. Progressive rehabilitation shall consist of backfilling the berms along the south and west boundary for Phase 2B with on-site material to establish a 2:1 slope. The east boundary of Phase 2B shall be backfilled from the quarry floor to existing grade with on-site material to establish a 2:1 slope. Aside from the three side slopes established along the south boundary of Phase 2B, the remainder of the quarry face along the south boundary shall remain vertical (see Section O Variations from Control and Operation Standards on drawing 2 of 5).
6. Once the resource is depleted, and all the required side sloping established, pumping shall cease and the extracted area will begin to fill with water.



Legal Description

Part of Lots 11, 12 and 13, Concession 1
(former geographic Township of Mara)
Township of Ramara
County of Simcoe

Legend

- | | | | |
|--|---|--|--|
| | Licence Boundary | | 120m Offset From Licence Boundary |
| | Limit of Extraction | | Additional Land Owned by Licensee |
| | Contours with Elevation
Metres above sea level (MASL) | | Lot Fabric
Lot and Concessions - dark grey
Phase Fabric - light grey |
| | Public Road | | Fence
Cross - 1.2m post & wire fence
Square - 1.3m wood fence |
| | Driveway | | Entrance / Exit
Field Entrance - Hollow
Operational Entrance - Solid |
| | Watercourse
Perennial
(Direction of flow indicated by arrows) | | Gate |
| | Watercourse
Intermittent
(Direction of flow indicated by arrows) | | Direction of Excavation & Phase Boundary |
| | Water Feature | | Berm
Proposed - Solid
Existing - Dashed |
| | Wooded Area | | Building/Structure |
| | Wetland
(Non-Privately Significant Wetland)
From Land Information Ontario (LIO) | | Cross Sections
A1 |
| | Main Discharge Pipe | | |

Legend - Phasing Sequence

- | | |
|--|-----------------------------------|
| | Agriculture |
| | Stripping |
| | Processing Area |
| | Extraction |
| | Progressive Rehabilitation |
| | Fully Rehabilitated - Above Water |
| | Berm |
| | Extraction Face |

Site Plan Acronyms

1. ARA - Aggregate Resources Act
2. MASL - Metres Above Sea Level
3. MNR - Ministry of Natural Resources and Forestry
4. MCM - Ministry of Citizenship and Multiculturalism
5. MGCS - Ministry of Government and Consumer Services
6. MECP - Ministry of Environment, Conservation and Parks
7. MTO - Ministry of Transportation - Ontario
8. DFO - Fisheries and Oceans Canada
9. PTW - Permit to Take Water
10. ECA - Environmental Compliance Approval
11. ESA - Environmental Site Assessment
12. SAR - Species at Risk
13. LIO - Land Information Ontario

Site Plan Amendments

No.	Date	Description	By

Site Plan Revisions (Pre-Licensing)

No.	Date	Description	By
1	May 2024	Updated the site plan per the MNR's letter dated April 22, 2024.	CAP

No.	Date	Description	By

**PLANNING
URBAN DESIGN
& LANDSCAPE
ARCHITECTURE**

113 COLLIER STREET, BARRE, ON L4M 1H2 | P: 705.728.0045 F: 705.728.3010 | WWW.MHBC-PLAN.COM

MNR Stamp

MHBC Stamp

Christopher Poole
Is authorized by the Ministry of
Natural Resources and Forestry
pursuant to Subsection 0.2(3)(f)
of Ontario Regulation 244/07 to
prepare and certify site plans.

Christopher Poole

Applicant

LCP Quarry Limited
145 Adelaide Street West
Suite 500
Toronto, Ontario
M5H 4E5

Project

Brechin Quarry

1646 & 1506 Highway 12 and 2440 & 2530 Concession Road 1, Brechin, Ontario, L0K 1B0

MNR Licence Reference No.

Applicant's Signature

Christopher Poole

Plan Scale: 1:5000 (Arch E)

Date

May 2024

Drawn By

C.P.

File No.

12135B

Checked By

B.Z.

File Name

Extraction Sequence

Drawing No.

3 of 5

File Path

N:\Bran\12135B Tallaker - Proposed Brechin Quarry\Drawings\Site Plan\CAD\12135B - Site Plan.dwg

PROGRESSIVE REHABILITATION

A. General

- Area calculations
 - Licence Boundary 151.4 ha
 - Limit of Extraction 91.5 ha
- The maximum annual tonnage is 2,000,000 tonnes.
- The maximum predicted water table within the limit of extraction varies between 231.5 masl and 236.0 masl. The maximum predicted water table is shown in each cross section on drawing 5 of 5.

B. Phasing

- As excavation reaches the limit of extraction or maximum depth, progressive rehabilitation shall commence.
- Progressive rehabilitation shall follow the general direction and sequence of extraction identified on the plan view and described in the notes on drawings 2 and 3 of 5.
- Each phase of extraction shall undergo progressive rehabilitation, prior to proceeding to the next phase of extraction.

C. Slopes and Grading

- Progressive rehabilitation shall consist of backfilling the eastern excavation face, the western and southern excavation faces where benching is to remain as well as sloping and grading the habitat corridor within the setback. Quarry faces shall remain vertical below the final lake level and in selected locations above the final lake level as depicted on the plan view on this drawing (see Section D Variations from Control and Operation Standards on drawing 2 of 5).
- The access ramp in Phase 1B shall remain as part of the final rehabilitated landform.
- Benching shall be backfilled with on-site material to establish a 2:1 slope, dressed with topsoil / overburden and seeded.
- The excavation face along the eastern limit of extraction (in the location shown on the plan view of this drawing) shall be backfilled from the quarry face to existing grade with on-site material to establish a 2:1 slope, dressed with topsoil / overburden and seeded.
- No excess soil shall be imported on-site for rehabilitation purposes.

D. Drainage

- Final surface drainage will follow the rehabilitated contours and directional arrows shown on the plan view of this drawing.
- Once operations have been completed and the rehabilitated landform has been established, pumping shall occur and the excavated area will be allowed to flood to form the final lake. The final lake level is predicted to be 232.0 masl.
- Passive overflow discharge for the final lake shall occur in the location identified on the plan view of this drawing. A 10 metre wide section of the berm shall be removed until an elevation of 232.0 masl is achieved.
- Once overflow from the final lake passes through the habitat corridor, it will discharge off-site in the location shown on the plan view of this drawing.

E. Natural Environment

- The following notes are a continuation of the Natural Environment Technical Recommendations noted under Section P.4. on drawing 2 of 5.
- Areas A and B shall comprise an Upland Planting Zone and shall be planted after construction of the berms shown on the plan view of this drawing.
- Areas D1 and D2 shall comprise a Wetland Edge Planting Zone and shall be completed when the water mitigation system is installed.
- Areas F, G, and H shall comprise Permanently Flooded Zones and shall be completed when the water mitigation system is installed.
- No buildings, structures or haul roads shall remain.
- The access ramp may remain.
- The maximum predicted water table within the limit of extraction varies between 231.5 masl and 236.0 masl and is shown in each cross section on drawing 5 of 5.
- The final anticipated lake level is 232.0 masl.
- Invasive species control methods may include (if required) mowing, soil tillage, spot burning using a drip torch, and flooding. Herbicide application shall be undertaken on a species-specific basis and shall only be applied judiciously and as a last measure. Spot treatments and/or working devices shall be used to minimize the risk of herbicide to native vegetation.
- In Area D2, the driveway and associated culvert shall be installed in advance of the commencement of local restoration works, to avoid damaging plant and seed materials.

- In Area E, the existing culvert crossing under the former airport runway shall be removed or jacked prior to the commencement of restoration works. To facilitate an appropriate moisture regime conducive to the establishment of a wetland vegetation community.

- Upland Planting Zones (Areas A-C) shall include the following tree species (or approved equivalents):
 - Trembling Aspen (*Populus tremuloides*)
 - Large-toothed Aspen (*Populus grandidentata*)
 - Balsam Poplar (*Populus balsamifera*)
 - Paper Birch (*Betula papyrifera*)
 - Fireman's Maple (*Acer x freemanii*)
 - Eastern White Pine (*Pinus strobus*)
 - Eastern White Cedar (*Thuja occidentalis*)
 - Eastern Redcedar (*Juniperus virginiana*)
 - Bittern Honey (*Carya cordiformis*)
 - Black Cherry (*Prunus serotina*)
 - Northern Red Oak (*Quercus rubra*)

- Upland Planting Zones (Areas A-C) shall include the following shrub species (or approved equivalents):
 - Chokeberry (*Prunus virginiana*)
 - Common Juniper (*Juniperus communis*)
 - Sagehen Sumac (*Rhus typhina*)
 - Gray Dogwood (*Cornus rostrata*)
 - Alternate-leaved Dogwood (*Cornus alternifolia*)
 - Wild Black Currant (*Ribes americanum*)
- Wetland Edge Planting Zones (Areas D1-D2 and E) shall include the following shrub species (or approved equivalents):
 - Nannyberry (*Viburnum lentago*)
 - Red-osier Dogwood (*Cornus sericea*)
 - Bottle's Willow (*Salix bethula*)
 - Plum-yellow (*Salix discolor*)
 - Heart-leaved Willow (*Salix elaeagnifolia*)
 - Meadow Willow (*Salix pediculus*)

- Wetland Edge Planting Zones (Areas D1-D2 and E) shall include a suitable native mesic/wetland edge mix such as TRCA-SW-2 Wet Slope Mix (or approved equivalent), installed at a minimum density of 25 kilograms/hectare.
- Tree and shrub materials shall be planted as bare root stock or potted stock (minimum 1-gallon) at a minimum density of 2.5m on-centre.
- Restoration areas and berms shall include initial application of a nurse crop of Annual Cuts (*Avena sativa*) for spring/summer seed mix application(s) and/or winter wheat (*Triticum aestivum*) for fall seed mix application(s), installed at a minimum density of 30 kilograms/hectare.
- In Upland Planting Zones, shrubs shall not represent more than 10% of woody materials planted.
- Natural restoration zones shall be monitored at least once annually for at least the first two (2) years after woody plant and seed mix materials are installed.
- A survival rate of 80% of the original number of planted stems is the target after two years for each planting Area.
- After two (2) years, seed tree/shrub material exceeds 20% in any planting Area, woody materials shall be replaced during the spring planting season of the following year to meet or exceed the 80% survival threshold.

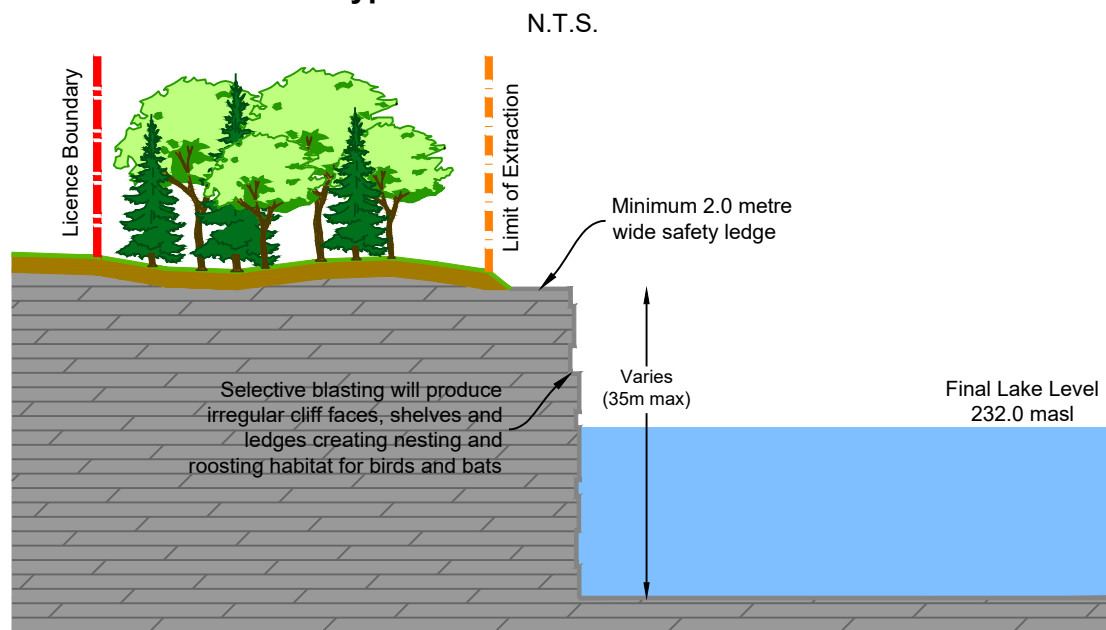
FINAL REHABILITATION

F. General

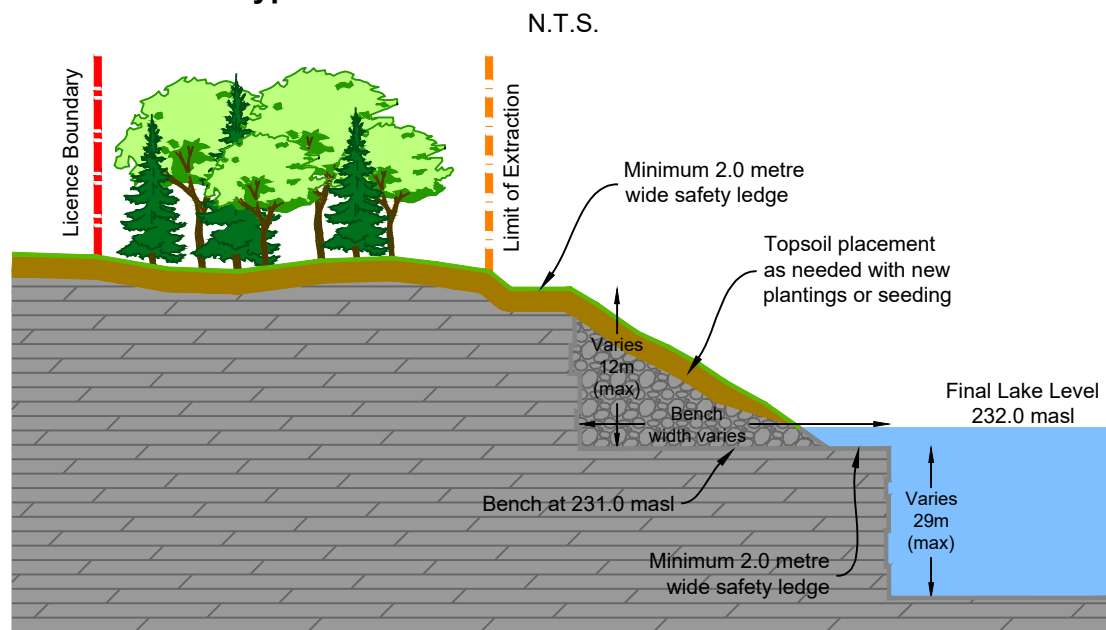
- All equipment shall be removed from the site.
- No buildings, structures or haul roads shall remain.
- The access ramp may remain.
- The maximum predicted water table within the limit of extraction varies between 231.5 masl and 236.0 masl and is shown in each cross section on drawing 5 of 5.
- The final anticipated lake level is 232.0 masl.
- The anticipated final end-use will be naturalized open spaces, woodlands, wetlands and lake.

Rehabilitation Techniques Not to Scale

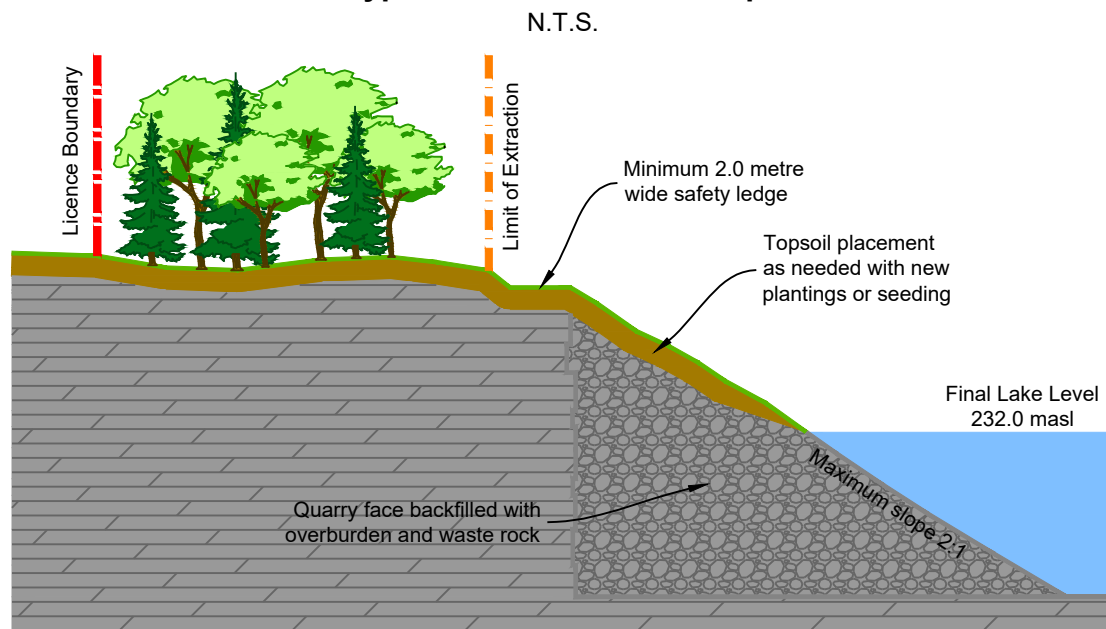
Typical Cliff Face Above Water
N.T.S.



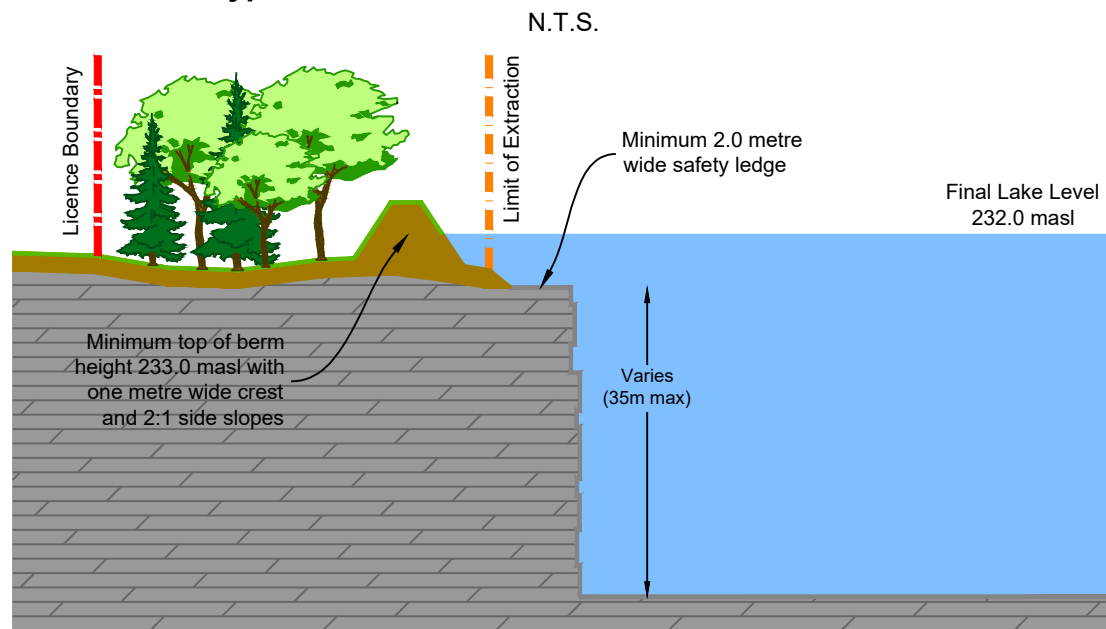
Typical Cliff Face Below Water - With Bench
N.T.S.



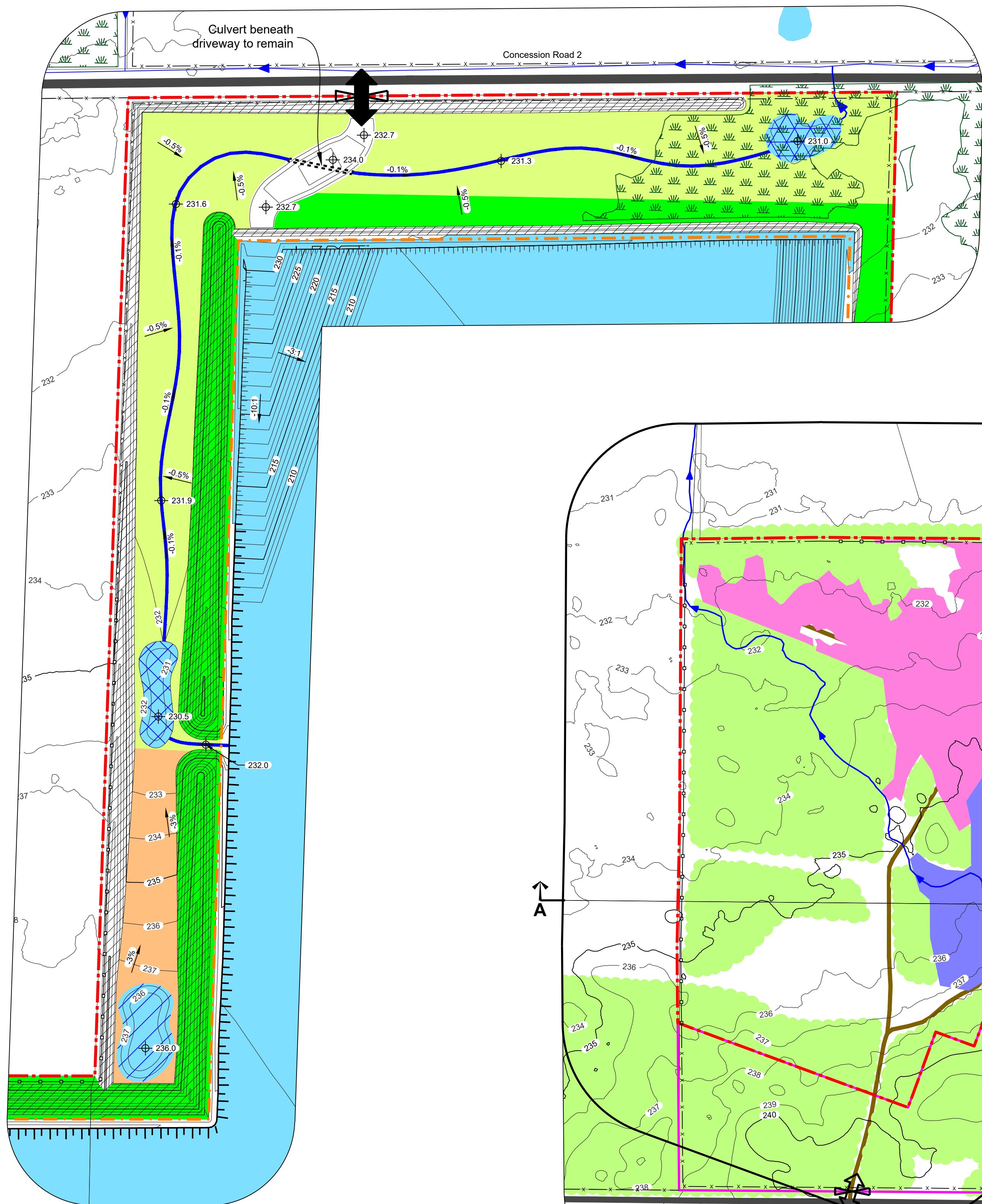
Typical Backfilled Side Slope
N.T.S.



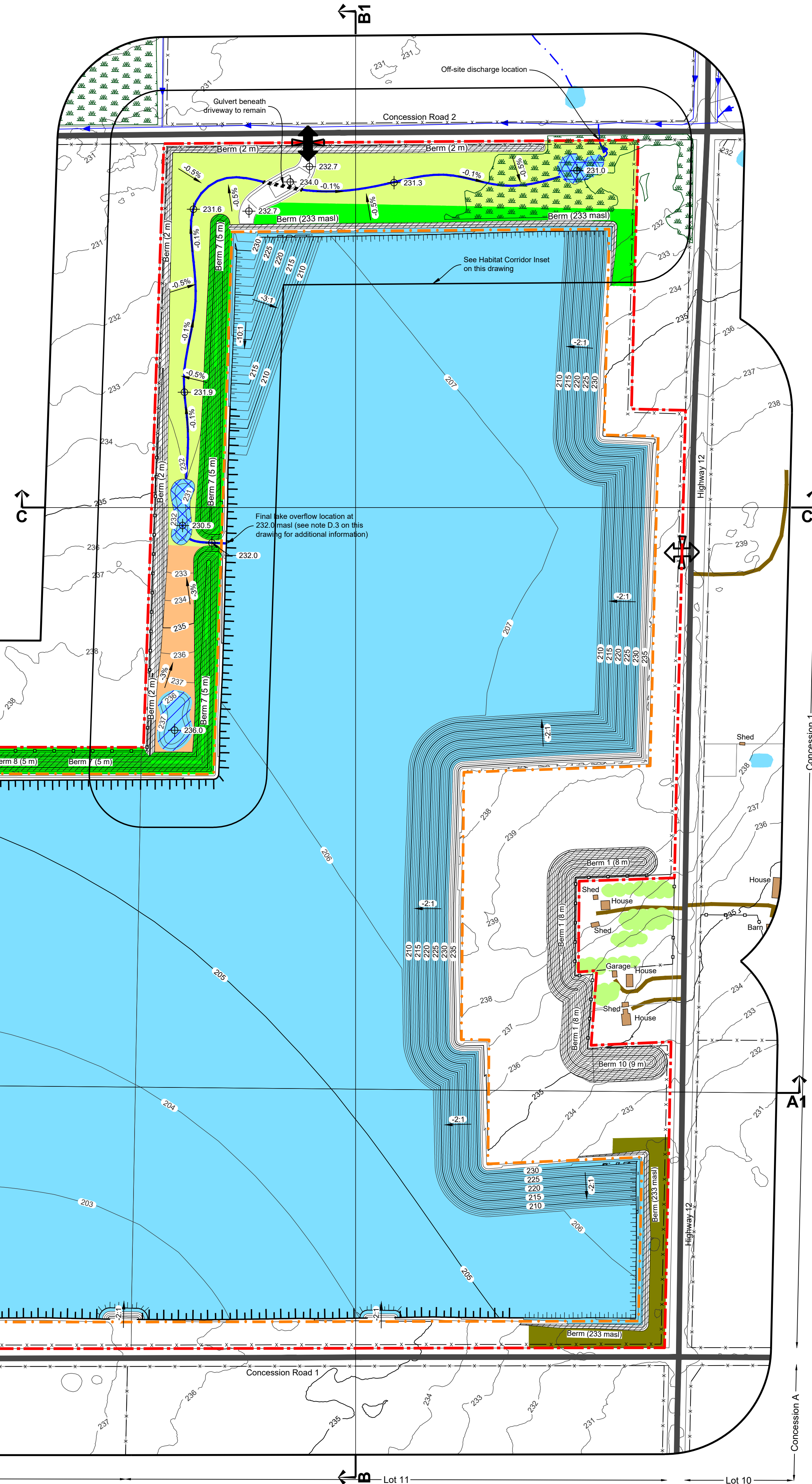
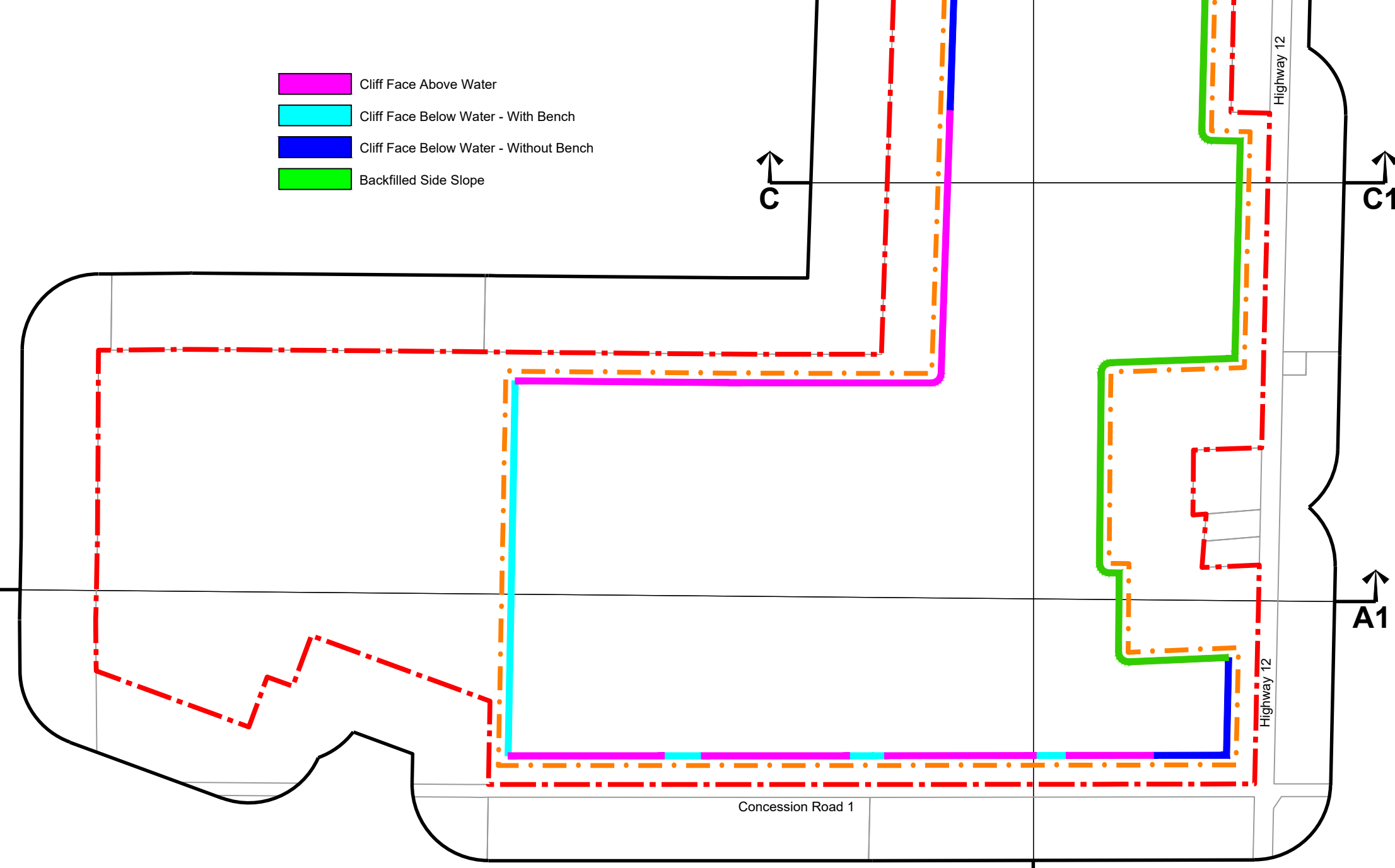
Typical Cliff Face Below Water - Without Bench
N.T.S.



Habitat Corridor Inset
Scale 1:2000



Rehabilitation Techniques Key Map
Scale 1:7500



Legal Description
Part of Lots 11, 12 and 13, Concession 1
(former geographic Township of Mara)
Township of Ramara
County of Simcoe

Legend

- Licence Boundary
- Limit of Extraction
- Contours with Elevation
Metres above sea level (MASL)
- Public Road
- Driveway
- Watercourse
Perennial
(Direction of flow indicated by arrows)
- Watercourse
Intermittent
(Direction of flow indicated by arrows)
- Water Feature
- Wooded Area
- Wetland
(Non-Privately Significant Wetland)
From Land Information Ontario (LIO)
- Extraction Face
Above Water
- Extraction Face
Below Water
- 120m Offset From Licence Boundary
- Additional Land Owned by Licensee
- Lot Fabric
Lot and Concessions - dark grey
Parcel Fabric - light grey
- Fence
Cross - 1.2m post & wire fence
Square - 1.3m wood fence
- Entrance / Exit
Field Entrance - Hollow
Operational Entrance - Solid
- Gate
- Berm
Permanent
- Building/Structure
- Proposed Elevation
Metres above sea level (MASL)
- Proposed Final Slope
(Horizontal - Vertical)
- Proposed Final Grade
0.0%
- Cross Sections
A1

Restoration Areas

- Area A
Upland Planting Zone
- Area B
Upland Planting Zone
- Area C
Upland Planting Zone
(Woodland Rehabilitation - Linkage)
- Area D1
Wetland Edge Planting Zone
(During Operations and Closure)
- Area D2
Wetland Edge Planting Zone
(During Operations - Upland After Closure)
- Area E
Upland Planting Zone
(Creek / Wetland Rehabilitation)
- Area F
Permanently Flooded Zone
- Area G
Permanently Flooded Zone
- Area H
Permanently Flooded Zone

Site Plan Acronyms

- ARA - Aggregate Resources Act
- MASL - Metres Above Sea Level
- MNR - Ministry of Natural Resources and Forestry
- MCM - Ministry of Citizenship and Multiculturalism
- MGCS - Ministry of Government and Consumer Services
- MECP - Ministry of Environment, Conservation and Parks
- MTO - Ministry of Transportation - Ontario
- DFO - Fisheries and Oceans Canada
- PTTW - Permit to Take Water
- ECA - Environmental Compliance Approval
- SAR - Species at Risk
- LIO - Land Information Ontario

Site Plan Amendments

No.	Date	Description	By

Site Plan Revisions (Pre-Licensing)

No.	Date	Description	By
1	May 2024	Updated the site plan per the MNR's letter dated April 22, 2024	CAP

MHBC
PLANNING
URBAN DESIGN
& LANDSCAPE
ARCHITECTURE
113 COLLIER STREET, BARRE, ON, L4M 1H2 | P: 705.728.0045 F: 705.728.3010 | WWW.MHBC-ON.COM

MNR Stamp

MHBC Stamp

Christopher Poole
Is authorized by the Ministry of
Natural Resources and Forestry
pursuant to Subsection 0.2(3)(f)
of Ontario Regulation 24/07 to
prepare and certify site plans.

Christopher Poole

Applicant

LCP Quarry Limited
145 Adelaide Street West
Suite 500
Toronto, Ontario
M5H 4E5

Project

Brechin Quarry

1646 & 1506 Highway 12 and 2440 & 2530 Concession Road 1, Brechin, Ontario, L0K 1B0

MNR Licence Reference No.

Applicant's Signature

Christopher Poole

Plan Scale: 1:3000 (Arch E)

Date

May 2024

Drawn By

C.P.

File No.

Checked By

B.Z.

12135B

File Name

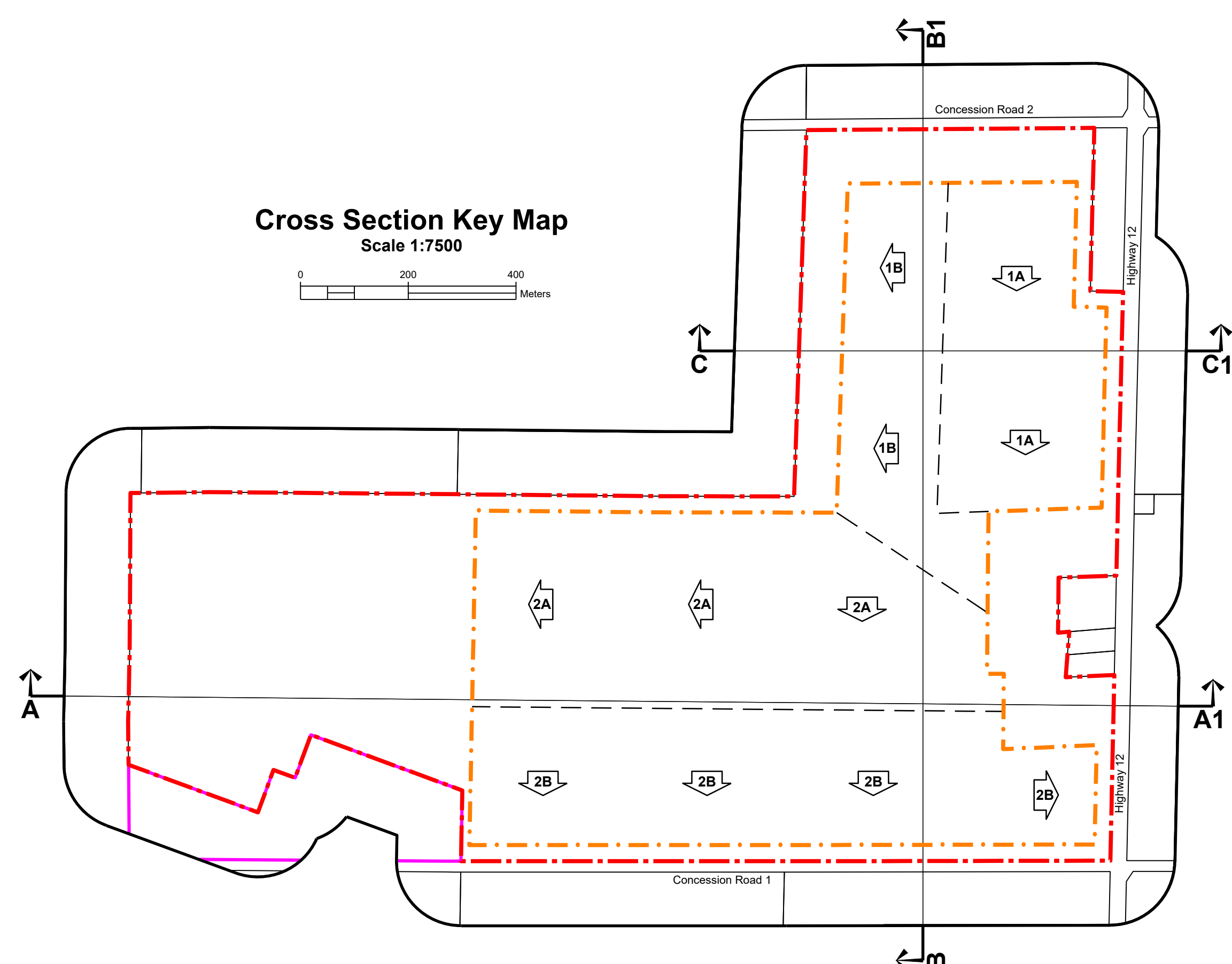
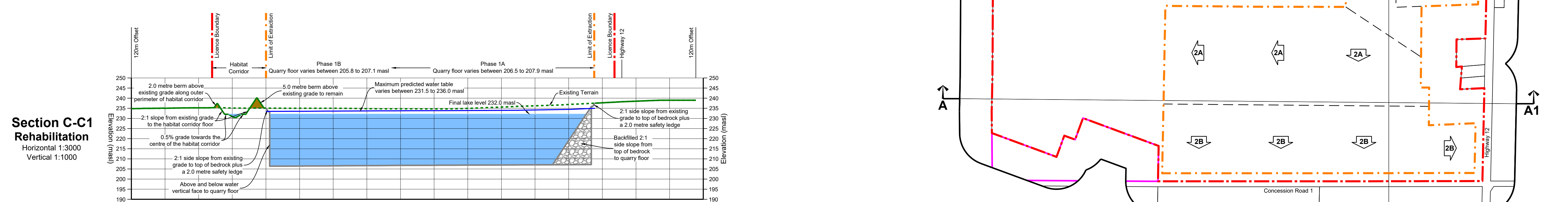
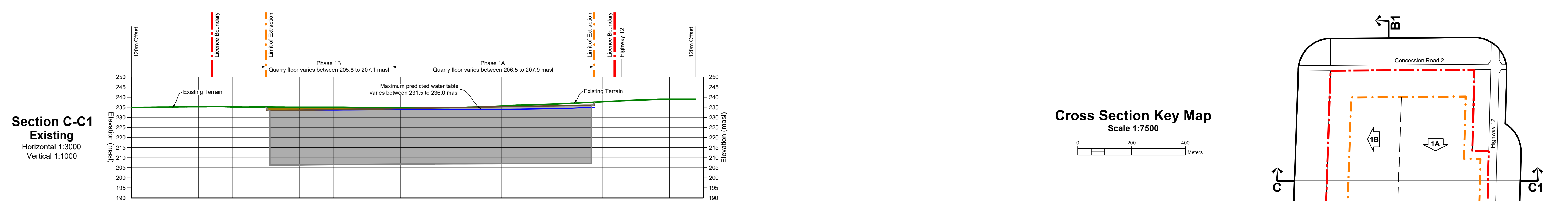
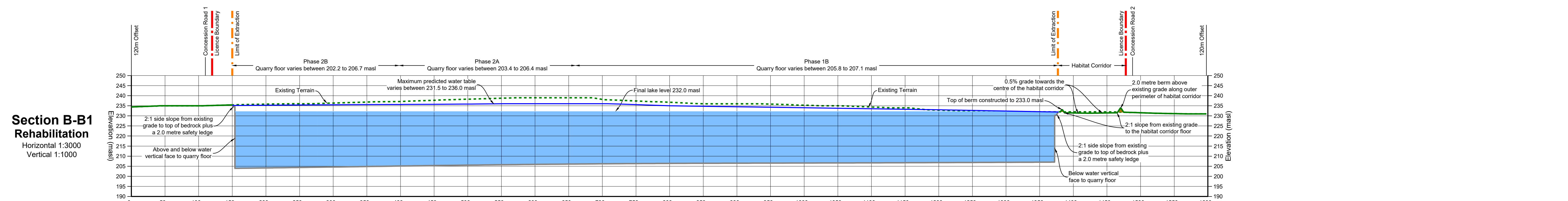
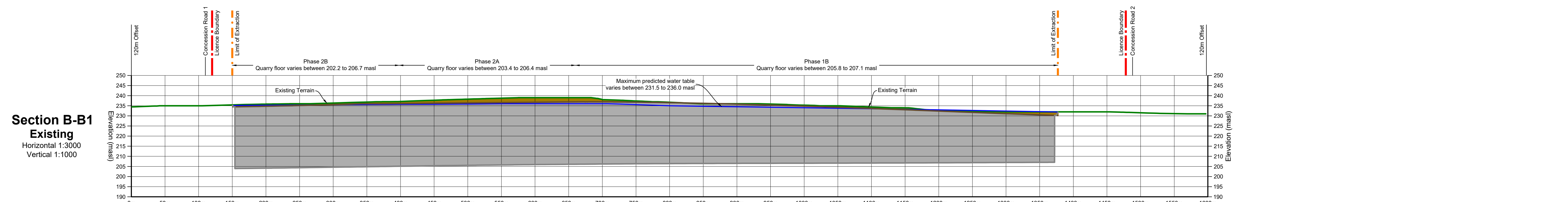
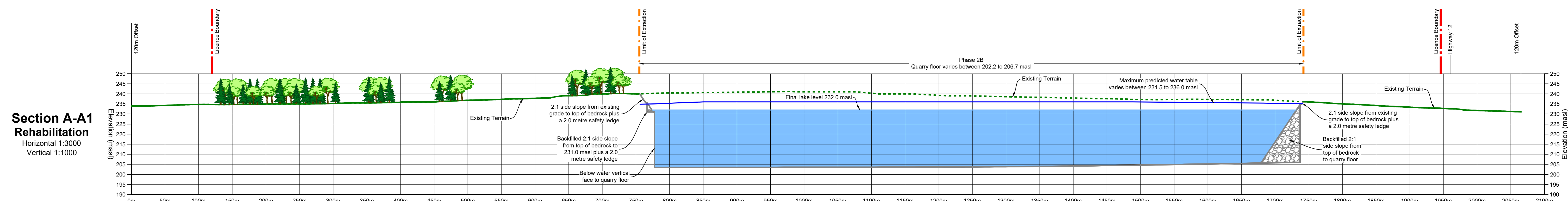
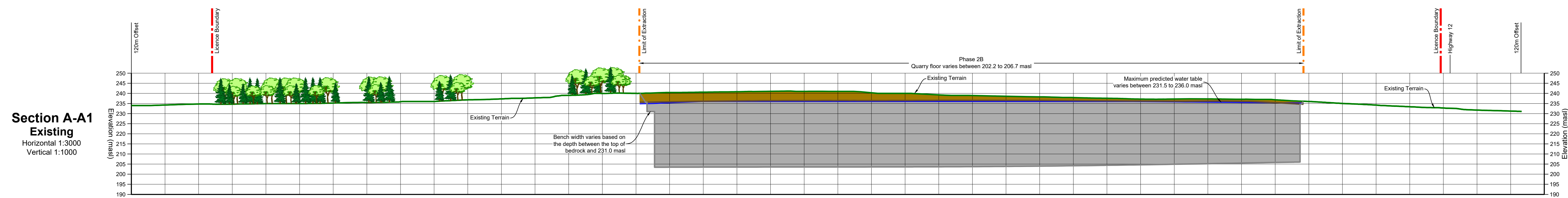
Rehabilitation Plan

Drawing No.

4 of 5

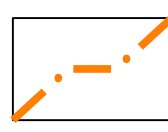
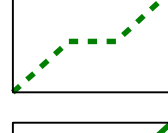
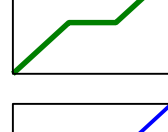
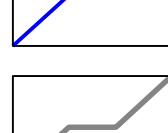


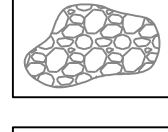



File Path

N:\Bran\12135B Talker - Proposed Brechin Quarry\Drawings\Site Plan\CAD\12135B - Site Plan.dwg



Legal Description
Part of Lots 11, 12 and 13, Concession 1 (former geographic Township of Mara) Township of Ramara County of Simcoe


Legend

- | | |
|---|---|
|  | Licence Boundary |
|  | Limit of Extraction |
|  | Existing Grade - Removed / Altered |
|  | Existing Grade - Undisturbed |
|  | Maximum Predicted Water Table |
|  | Quarry Floor / Face |
|  | Topsoil and/or Overburden |
|  | Aggregate Available for Extraction - Quarry |
|  | Backfilled |
|  | Lake or Pond |

Site Plan Acronyms

1. **ARA - Aggregate Resources Act**
2. **MASL - Metres Above Sea Level**
3. **MNRNF - Ministry of Natural Resources and Forestry**
4. **MCM - Ministry of Citizenship and Multiculturalism**
5. **MGCS - Ministry of Government and Consumer Services**
6. **MECP - Ministry of Environment, Conservation and Parks**
7. **MTO - Ministry of Transportation - Ontario**
8. **DFO - Fisheries and Oceans Canada**
9. **PTTW - Permit to Take Water**
10. **ECA - Environment Canada Compliance Approval**
11. **ESA - Environmental Site Assessment**
12. **SAR - Species at Risk**
13. **LIO - Land Information Ontario**

[illegible]



MHBC

**P L A N N I N G
U R B A N D E S I G N
& L A N D S C A P E
A R C H I T E C T U R E**

113 COLLIER STREET, BARRE, ON. L4M 1H2 | P: 705/728-0308 F: 705/728-2010 | WWW.MHBCPLAN.COM


MNRF Stamp

MHBC Stamp

Christopher Poole



Is authorized by the Ministry of Natural Resources and Forestry pursuant to Subsection 2.2(1)(f) of Ontario Regulation 24/03 to prepare and certify site plans.

Christopher Poole



Project ***Brechin Quarry***

1646 & 1506 Highway 12 and 2440 & 2530 Concession Road 1, Brechin, Ontario, L0K 1B0

MNRF Licence Reference No.	Applicant's Signature 				
Plan Scale: 1:3000 (Arch E)	Date May 2024				
	<table border="1"> <tr> <td data-bbox="2615 1929 2716 1933"> Drawn By C.P. </td> <td data-bbox="2716 1929 2780 1933"> File No. </td> </tr> <tr> <td data-bbox="2615 1933 2716 1940"> Checked By R Z </td> <td data-bbox="2716 1933 2780 1940"> 12135B </td> </tr> </table>	Drawn By C.P.	File No.	Checked By R Z	12135B
Drawn By C.P.	File No.				
Checked By R Z	12135B				

File Name **Cross Sections**

File Path N:\Brian\12135B Talisker - Proposed Brechin Quarry\Drawings\Site Plan\CAD\12135B - Site Plan.dwg