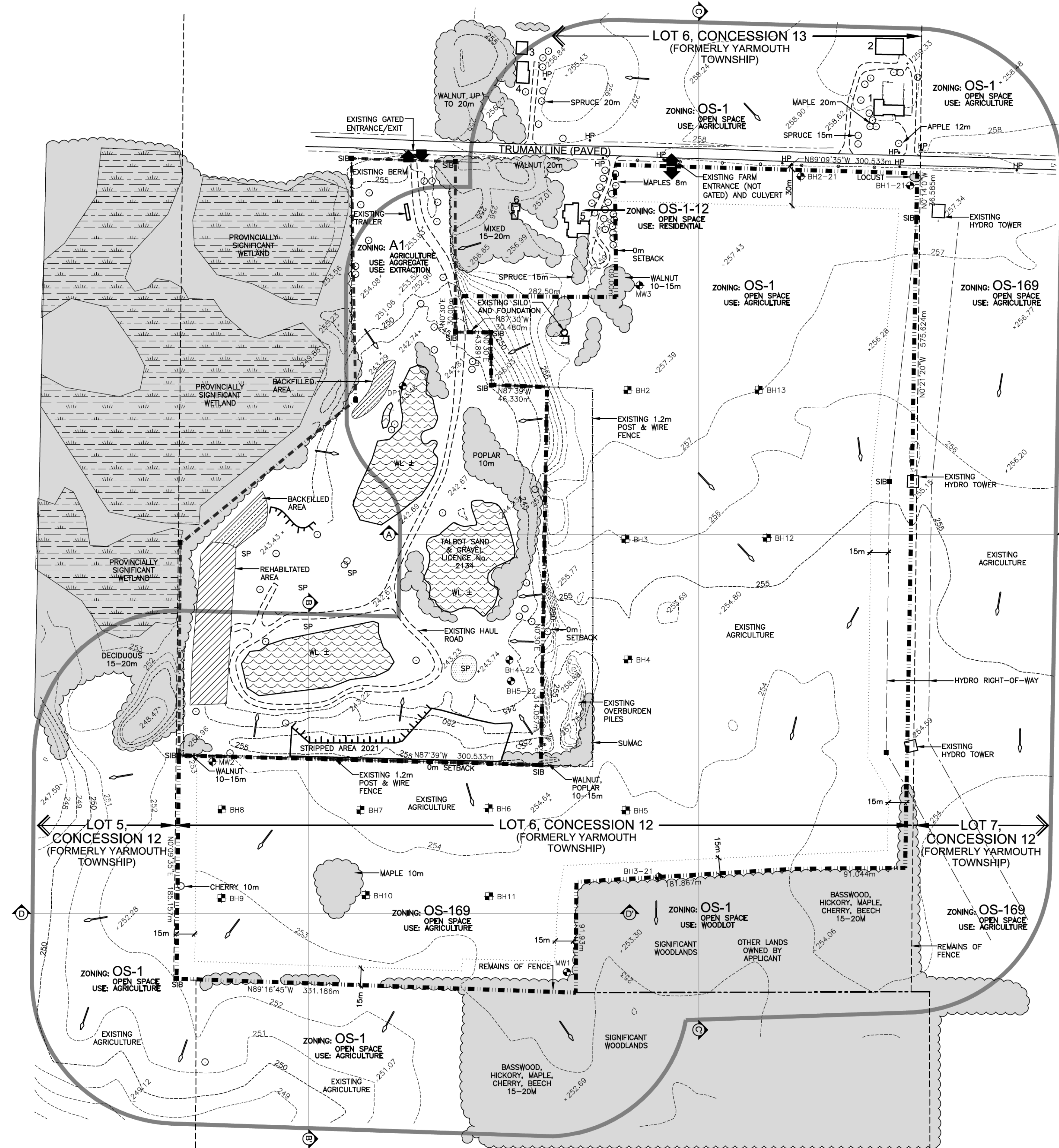


Appendix F

Site Plans

Harrington McAvan Ltd





KEYMAP n.t.s



EXISTING FEATURES NOTES

GENERAL SITE PLAN INFORMATION

1. THIS SITE PLAN CONSISTS OF 5 DRAWINGS AND MUST BE READ COLLECTIVELY.
2. ALL MEASUREMENTS SHOWN ON THIS SITE PLAN ARE IN METRES.

LICENCE INFORMATION

3. THIS SITE PLAN IS PREPARED FOR SUBMISSION TO THE MINISTRY OF NORTHERN DEVELOPMENT, MINES, NATURAL RESOURCES AND FORESTRY UNDER THE AGGREGATE RESOURCES ACT FOR A CLASS 'A' LICENCE, PIT BELOW THE WATER TABLE.

4. APPLICANT:

TALBOT SAND AND GRAVEL
RR 6 ST. THOMAS, ONTARIO
N5P 3T1

5. TOTAL AREA TO BE LICENCED: 23.4 ha
- TOTAL AREA TO BE EXTRACTED: 20.0 ha
- TOTAL AREA TO BE REHABILITATED: 20.0 ha

BASE INFORMATION

6. TOPOGRAPHIC INFORMATION FOR LOT 6, CONCESSION 12 NER WAS OBTAINED FROM SURVEY COMPLETED BY FIRST BASE SOLUTIONS DATED JANUARY 6, 2021.
- SITE BOUNDARIES OBTAINED FROM LEGAL PLAN OF SURVEY, PLAN 11R-5645 DATED JUNE 3, 1994 AND COMPLETED BY DONALD L. HOUGHTON, ONTARIO LAND SURVEYER.
- THE SITE WAS FIELD CHECKED BY HARRINGTON MCAVAN LTD., JANUARY 5, 2021.
- PROVINCIAL SIGNIFICANT WETLAND INFORMATION OBTAINED FROM MNRF MAKE A MAP: NATURAL HERITAGE AREAS, JANUARY 2021.
7. ZONING INFORMATION OBTAINED FROM THE MUNICIPALITY OF CENTRAL ELGIN JANUARY 2021. EXISTING LICENCE No. 2321 IS ZONED E - EXTRACTIVE RESOURCE. PROPOSED LICENCE AREA IS PRESENTLY ZONED A- AGRICULTURE.

HYDROGEOLOGICAL INFORMATION

8. THE WATER TABLE ELEVATION VARIES ACROSS THE EXTRACTION AREA FROM ±242.1 TO 242.2m ABOVE SEA LEVEL (A.S.L.).
9. SOURCE WATER PROTECTION POLICIES DO NOT APPLY TO THIS SITE (REFER TO HYDROGEOLOGICAL REPORT)

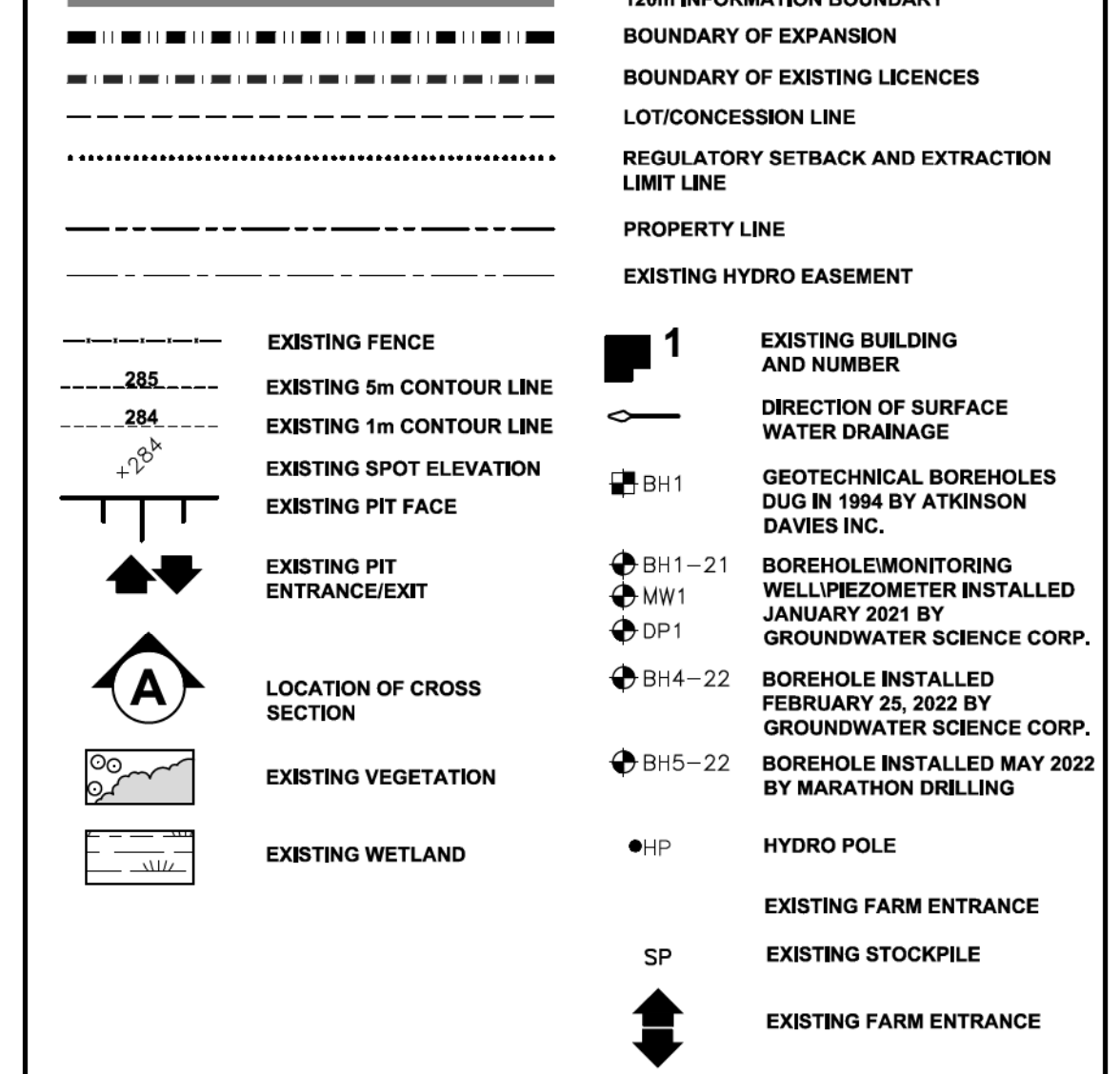
TECHNICAL REPORTS

10. NATURAL ENVIRONMENT TECHNICAL REPORT BY TERRASTORY ENVIRONMENTAL CONSULTING INC. DATED AUGUST 1, 2022 (REFER TO SHEET 3 OF 5 FOR TECHNICAL RECOMMENDATIONS).
11. ARCHAEOLOGICAL INFORMATION WAS OBTAINED FROM REPORT BY TIMMINS MARTELLE HERITAGE CONSULTANTS INC. DATED JANUARY 2021 (REFER TO SHEET 3 OF 5 FOR TECHNICAL RECOMMENDATIONS).
12. HYDROGEOLOGICAL INFORMATION WAS OBTAINED FROM REPORT BY GROUNDWATER SCIENCE CORP. DATED JUNE 2022 (REFER TO SHEET 3 OF 5 FOR TECHNICAL RECOMMENDATIONS).
13. NOISE INFORMATION WAS OBTAINED FROM REPORT BY HGC ENGINEERING DATED APRIL 1, 2022 (REFER TO SHEET 3 OF 5 FOR TECHNICAL RECOMMENDATIONS).

BUILDING LIST

No.	Description
1.	HOUSE
2.	DRIVE SHED
3.	SHED
4.	HOUSE
5.	HOUSE
6.	ABANDONED BUILDING

LEGEND



Pre Licence Review				Site Plan Amendments			
No.	DATE	REVISIONS	OWNER	No.	DATE	REVISIONS	OWNER

Harrington McAvan Ltd
41 Main Street, Unit 102
Unionville, Ontario L3R 2E5
Tel: 905-294-6282 Fax: 905-294-7623
www.harringtonmccavan.com

Project Name
TALBOT SAND AND GRAVEL
MACPHERSON PIT EXPANSION
LICENCEE SIGNATURE *[Signature]*
LICENCE No. *[Signature]*
PART LOT 6, CONCESSION 12
MUNICIPALITY OF CENTRAL ELGIN
(FORMERLY TOWNSHIP OF YARMOUTH), COUNTY OF ELGIN

Scale 1:2000
North
Stamp: ASSOCIATION OF LANDSCAPE ARCHITECTS ONTARIO MEMBER

Drawing Status: SUBMITTED FOR LICENCE APPROVAL
Drawn SB, Checked BJ, Issue Date OCT 2022
Drawing Title: **EXISTING FEATURES PLAN**
Project Number: 20-03
Drawing Number: **1 OF 5**

OPERATIONS NOTES

GENERAL INFORMATION

- THIS PLAN DEPICTS A SCHEMATIC OPERATIONS AND REHABILITATION SEQUENCE FOR THIS PROPERTY BASED ON THE BEST INFORMATION AVAILABLE AT THE TIME OF PREPARATION. PHASES SHOWN ARE SCHEMATIC AND MAY SLIGHTLY VARY WITH MATERIAL QUALITY, SITE HYDROLOGY AND HYDROGEOLOGY OR MARKET DEMAND. PHASES DO NOT REPRESENT ANY SPECIFIC OR EQUAL TIME PERIOD.
- EXTRACTION SHALL FOLLOW THE SEQUENCE SHOWN. WHEN PARTIAL REHABILITATION OF A PHASE IS POSSIBLE IT SHALL BE CARRIED OUT. NOTWITHSTANDING THE EXTRACTION AND REHABILITATION PROCESS ABOVE, DEMAND FOR CERTAIN PRODUCTS OR BLENDING OF MATERIALS MAY REQUIRE SOME DEVIATION IN THE EXTRACTION AND REHABILITATION PHASING. ANY DEVIATIONS FROM THE OPERATIONS SEQUENCE SHOWN WILL REQUIRE APPROVAL FROM DNMRF.
- REFER TO DRAWING 1 OF 5, EXISTING FEATURES, FOR A DESCRIPTION OF EXISTING VEGETATION AND BUILDINGS WITHIN THE 120 METRE BOUNDARY AND ON SITE.
- SITE PLAN OVERRIDES ARE LISTED IN THE SITE PLAN OVERRIDE TABLE SHOWN ON THIS PAGE.

EXTRACTION/PROCESSING/HAULING INFORMATION

- TOTAL AREA TO BE EXTRACTED IS 20.0 HECTARES.
 - MAXIMUM NUMBER OF TONNES OF AGGREGATE TO BE REMOVED FROM THE SITE IN ANY CALENDAR YEAR IS 250,000 TONNES.
- EXTRACTION OF SAND AND GRAVEL ABOVE WATER TABLE WILL TAKE PLACE IN ONE OR TWO BENCHES, WITH A MAXIMUM HEIGHT OF 8 METRES. THE GROUNDWATER TABLE IS ESTIMATED TO BE BETWEEN 242.1 AND 242.2 m ASL. THERE WILL BE ONE LIFT BELOW THE WATER TABLE TO A DEPTH OF 225 m ASL TO BE EXTRACTED BY EXCAVATOR OR BACKHOE. FRONT END LOADERS WILL BE USED TO EXTRACT MATERIAL AND HAUL TRUCKS OR CONVEYORS WILL CARRY MATERIAL VIA HAUL ROUTES TO THE PLANT FOR FURTHER PROCESSING. REFER TO SECTIONS A-A', B-B' AND C-C' ON DRAWING 4 OF 5 FOR FURTHER DETAILS.

PORTABLE PROCESSING EQUIPMENT, FOR CRUSHING, SCREENING, AND WASHING WILL BE USED ON SITE AND WILL BE LOCATED ON THE PIT FLOOR IN AREA 1a AT START UP. IN ADDITION TO PROCESSING, SITE ACTIVITIES WILL INCLUDE STRIPPING AND REHABILITATION OPERATIONAL EQUIPMENT MAY INCLUDE TRUCKS, LOADERS, EXCAVATOR, DRAGLINE, BACKHOES, BULLDOZERS, SCRAPERS, CONVEYORS AND OTHER RELATED EQUIPMENT. PROCESSING EQUIPMENT, STACKERS AND PRODUCT STOCKPILES WILL NOT EXCEED 4.5 METRES IN HEIGHT AND WILL BE LOCATED IN THE PROCESSING AREA AND/OR CLOSE TO PIT FACES. MATERIAL FROM OTHER PROPERTIES MAY BE IMPORTED INTO THE SITE FOR BLENDING. CUSTOM PRODUCTS AND/OR RESALE. THIS MAY INCLUDE AGGREGATE (IN THE PROCESSING AREA AND/OR PEAT AND TOPSOIL (IN AREA 1).

- OFFICE/STORAGE BUILDING AND/OR SCALE/SCALEHOUSE MAY BE CONSTRUCTED WHERE SHOWN.

AGGREGATE RECYCLING

THERE MAY BE RECYCLING OF MATERIAL (ASPHALT AND CONCRETE) ON THIS SITE. MATERIAL IMPORTED FOR RECYCLING WILL BE STORED IN SEGREGATED STOCKPILES WITHIN THE PROCESSING AREA. RECYCLABLE ASPHALT MATERIALS WILL NOT BE STOCKPILED WITHIN 30M OF ANY WATER BODY OR MAN-MADE POND, OR 2M OF THE SURFACE OF THE ESTABLISHED WATER TABLE. ANY REBAR AND OTHER STRUCTURAL METAL MUST BE REMOVED FROM THE RECYCLED MATERIAL DURING PROCESSING AND PLACED IN A DESIGNATED SCRAP PILE ON SITE WHICH WILL BE REMOVED ON AN ON-GOING BASIS. REMOVAL OF RECYCLED AGGREGATE IS TO BE ONGOING. ONCE THE AGGREGATE ON SITE HAS BEEN DEPLETED THERE WILL BE NO FURTHER IMPORTATION OF RECYCLABLE MATERIALS PERMITTED. ONCE FINAL REHABILITATION HAS BEEN COMPLETED AND APPROVED IN ACCORDANCE WITH THE SITE PLAN, ALL RECYCLING OPERATIONS MUST CEASE.

- EQUIPMENT, SCRAP AND MACHINERY ASSOCIATED WITH THE EXTRACTION OPERATIONS WILL BE REMOVED UPON COMPLETION OF EXTRACTION.

HYDROGEOLOGICAL INFORMATION

- THE WATER TABLE ELEVATION VARIES ACROSS THIS LICENCE FROM APPROXIMATELY 242.1 TO 242.2 m ABOVE SEA LEVEL (A.S.L.), BASED ON THE HYDROGEOLOGICAL REPORT (SEE ABOVE), REFER TO SECTIONS ON SHEET 4 OF 5.
- SURFACE DRAINAGE WILL BE DIRECTED TO THE POND AND/OR LOW AREAS FOR WATER TO INFILTRATE INTO THE GRANULAR MATERIALS ON THE PIT FLOOR. THERE WILL BE NO OFF-SITE DITCHING/DISCHARGE.

NOISE MITIGATION INFORMATION

- HOURS OF OPERATION:
SITE PREPARATION AND REHABILITATION: 07:00-19:00 WEEKDAYS; 07:00 - NOON SATURDAYS
EXCAVATION AND PROCESSING: 07:00-19:00 WEEKDAYS; 07:00 - NOON SATURDAYS
SHIPPING: 07:00-19:00 WEEKDAYS; 07:00 - NOON SATURDAYS

AIR QUALITY INFORMATION

- WATER OR CALCIUM CHLORIDE WILL BE APPLIED TO INTERNAL HAUL ROADS AND PROCESSING AREAS AS OFTEN AS REQUIRED TO MITIGATE DUST.

SITE MANAGEMENT INFORMATION

EXISTING VEGETATION WITHIN THE LICENCED AREA SHALL BE MAINTAINED IN A HEALTHY VIGOROUS GROWING CONDITION UNTIL SEQUENTIAL STRIPPING BEGINS OR UNTIL THE REHABILITATION IS COMPLETE. ANY VEGETATION PLANTED AS PART OF SITE IMPROVEMENTS OR PROGRESSIVE AND FINAL REHABILITATION WILL ALSO BE MAINTAINED IN A HEALTHY, VIGOROUS GROWING CONDITION.

FENCING INFORMATION

- BOUNDARIES OF THE AREA TO BE LICENCED THAT ARE PRESENTLY FENCED ARE SHOWN ON DRAWING 1 OF 4 EXISTING FEATURES. PRIOR TO ANY STRIPPING OR PREPARATION, FENCING ON THE LICENCED BOUNDARIES WILL BE UPGRADED TO 1.2m HIGH POST AND WIRE TO COMPLY WITH THE AGGREGATE RESOURCES ACT WHERE REQUIRED.

TOPSOIL/SUBSOIL/OVERBURDEN STORAGE INFORMATION

- TOPSOIL AND OVERBURDEN SHALL BE STRIPPED AND STORED SEPARATELY IN BERMS WHERE SHOWN AND STOCKPILES ON PIT FLOOR CLOSE TO EXTRACTION FACE.

BERM INFORMATION

- BERMS SHALL BE CONSTRUCTED AS SPECIFIED IN THE HGC ENGINEERING LIMITED NOISE ASSESSMENT REPORT DATED JANUARY 2022 AND SHOWN ON OPS PLAN AND AS TO HEIGHTS REQUIRED FOR STORAGE BERMS. BERMS SHALL NOT EXCEED 2.1 METRES. REFER TO TYPICAL BERM CROSS SECTION ON DRAWING 4 OF 5 DETAILS AND SECTIONS. ALL BERMS SHALL BE SEEDED (USING GRASS/LEGUME MIXTURE, SEE REHABILITATION PLAN, NOTE #7) IMMEDIATELY UPON COMPLETION TO MINIMIZE NOISE, DUST AND EROSION.

- ON COMPLETION OF THE BERMS, EXCESS ON-SITE OVERBURDEN WILL BE USED TO PROGRESSIVELY BACKFILL AND REHABILITATE THE SITE. TOPSOIL CAN BE TEMPORARILY STOCKPILED ON THE PIT FLOOR.

SCRAP STORAGE INFORMATION

- ALL SCRAP AND USED MACHINERY GENERATED THROUGH THE OPERATIONS WITHIN THIS LICENCE SHALL BE DISPOSED OF ON AN ONGOING BASIS. STUMPS/WOODY MATERIAL MAY BE CHIPPED AND USED FOR SOIL ENHANCEMENT DURING PROGRESSIVE REHABILITATION. TREES WILL BE HARVESTED AND SOLD AS LUMBER OR UTILIZED FOR FIREWOOD AND/OR THEIR BEST USE. UPON COMPLETION OF EXTRACTION, ALL SCRAP EQUIPMENT AND USED MACHINERY SHALL BE REMOVED.

PETROLEUM STORAGE INFORMATION

- FUEL, OIL, RADIOLIC AND HYDROLYC FLUID, AND OTHER CHEMICALS NEEDED FOR THE MAINTENANCE AND FUNCTIONING OF ON-SITE AGGREGATE PROCESSING EQUIPMENT SHALL BE APPROPRIATELY STORED IN ABOVE-GROUND CONTAINERS AND SHALL MEET THE REQUIREMENTS OF THE GASOLINE HANDLING ACT, AS AMENDED, AND THE GASOLINE HANDLING CODE AND REGULATIONS, AS AMENDED BY THE TECHNICAL STANDARDS AND SAFETY ACT (TSSA) AND LIQUID FUELS HANDLING CODE, AND IN ACCORDANCE WITH THE MINISTRY OF THE ENVIRONMENT, CONSERVATION AND PARKS CHEMICAL STORAGE GUIDELINES. ALL SPILLS TO THE ENVIRONMENT MUST BE REPORTED TO THE SPILLS ACTION CENTRE OF MECOP. ANY SPILL SHALL BE REMOVED AND DISPOSED OF AT AN APPROPRIATE MECOP APPROVED FACILITY.

LEGEND

	120m INFORMATION BOUNDARY		EXISTING BUILDING
	BOUNDARY OF EXPANSION		DIRECTION OF SURFACE WATER DRAINAGE
	BOUNDARY OF EXISTING LICENCES		BOREHOLE MONITORING WELL/PEZOMETER INSTALLED JANUARY 2021 BY GROUNDWATER SCIENCE CORP.
	LOT/CONCESSION LINE		BOREHOLE INSTALLED FEBRUARY 25, 2022 BY GROUNDWATER SCIENCE CORP.
	REGULATORY SETBACK AND EXTRACTION LIMIT LINE		BOREHOLE INSTALLED MAY 2022 BY MARATHON DRILLING
	PROPERTY LINE		MARKER POST
	EXISTING HYDRO EASEMENT		HYDRO POLE
	EXISTING FENCE		DIRECTION OF EXTRACTION
	EXISTING 5m CONTOUR LINE		DIRECTION OF TOPSOIL AND OVERBURDEN MOVEMENT
	EXISTING 1m CONTOUR LINE		PRODUCT TRANSPORTATION VIA HAUL ROAD
	EXISTING SPOT ELEVATION		LOCATION OF NOISE RECEPTOR
	EXISTING PIT FACE		
	ENTRANCE/EXIT		
	LOCATION OF CROSS SECTION		
	EXISTING VEGETATION		
	EXISTING WETLAND		
	BERM (MIN. HEIGHT AS SHOWN)		
	UNDISTURBED AREA		
	AREA STRIPPED OF TOPSOIL AND OVERBURDEN		
	EXISTING ELEVATION		
	PROPOSED ELEVATION		

SITE PLAN VARIANCES

THE FOLLOWING CONDITIONS ILLUSTRATED ON THESE PLANS VARY FROM THE OF THE PROVINCIAL STANDARDS MADE UNDER THE AGGREGATE RESOURCES ACT

ITEM	SECTION
1. SETBACK REDUCED TO 0m ALONG BOUNDARY ABUTTING LICENCE No. 2134, LICENCE No. 2134 IS SAME LICENSEE AND BOUNDARY ABUTTING RESIDENCE, PROPERTY UNDER SAME OWNERSHIP.	0.13(1)10I 0.13(1)10H
2. NO FENCING ALONG BOUNDARY ABUTTING LICENCE No. 2134, LICENCE No. 2134 IS SAME LICENSEE, RESIDENCE, PROPERTY IS UNDER SAME OWNERSHIP; NORTHWEST SIDE OF SOUTHEAST WOODED AREA, EXISTING VEGETATION AND FENCE ALONG PROPERTY LINE PREVENT ENTRANCE TO SITE.	0.13(9)a
3. NO GATE AT ENTRANCE/EXIT TO ADJACENT LICENCE No. 2134, LICENCE No. 2134 IS SAME LICENSEE AND ENTRANCE/EXIT TO LICENCE No. 2134 AT TRUMAN LINE IS GATED.	0.13(1)1
4. STOCKPILES AND PORTABLE PROCESSING PLANT MAY BE LOCATED WITHIN 30m OF BOUNDARY ABUTTING LICENCE No. 2134, LICENCE No. 2134 IS SAME LICENSEE AND BOUNDARY ABUTTING RESIDENCE, PROPERTY UNDER SAME OWNERSHIP.	0.13(1)13I 0.13(1)13IIA

NO.	DATE	REVISIONS	OWNER	HA	WA	NO.	DATE	REVISIONS	OWNER	HA	WA

Pre Licence Review

Site Plan Amendments

**Harrington
McAvan Ltd**

41 Main Street, Unit 102
Unionville, Ontario L3R 2E5
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Project Name

TALBOT SAND AND GRAVEL

**MACPHERSON PIT
EXPANSION**

PART LOT 6, CONCESSION 12
MUNICIPALITY OF CENTRAL ELGIN
(FORMERLY TOWNSHIP OF YARMOUTH), COUNTY OF ELGIN

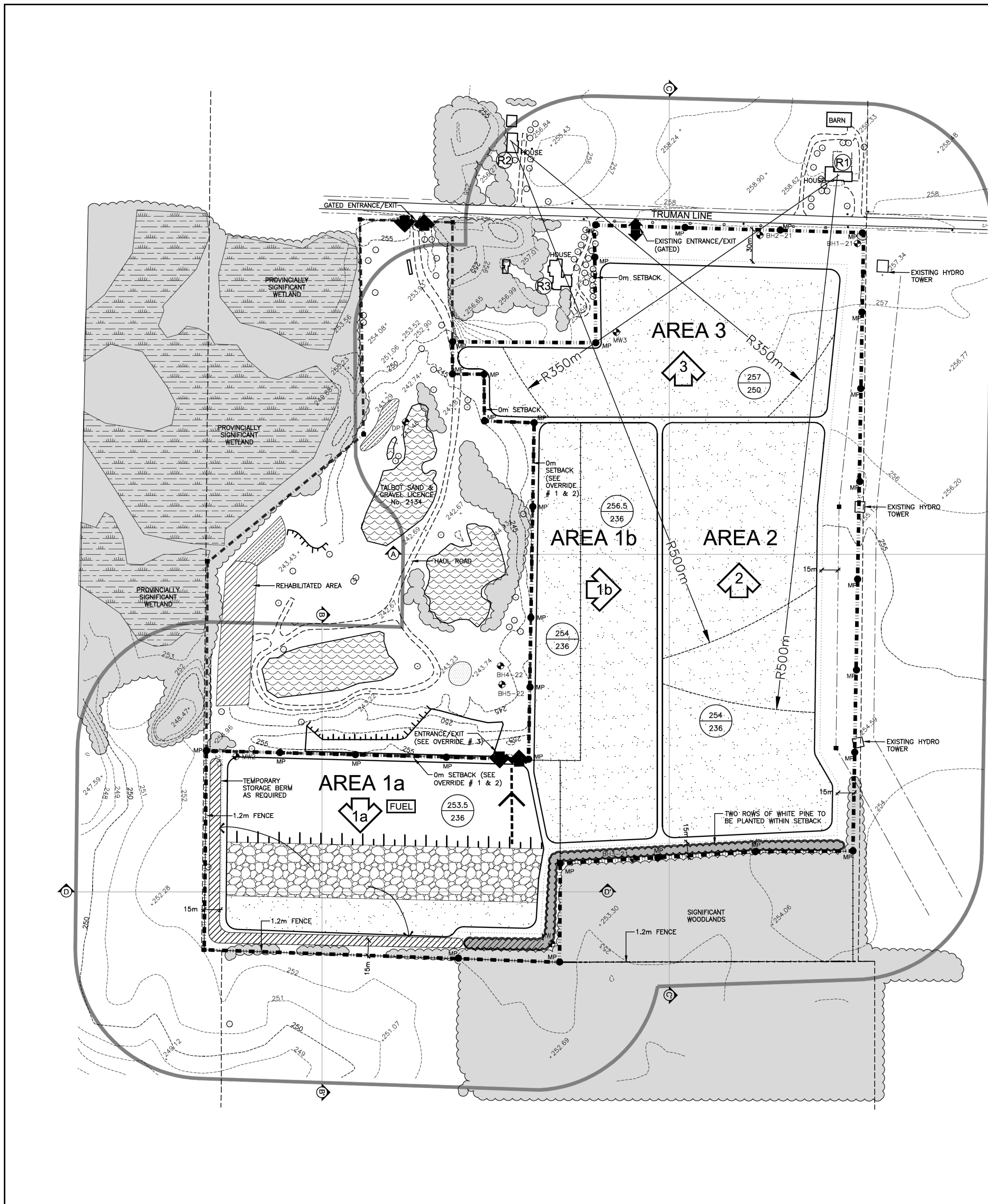
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Drawing Status	SUBMITTED FOR LICENCE APPROVAL	

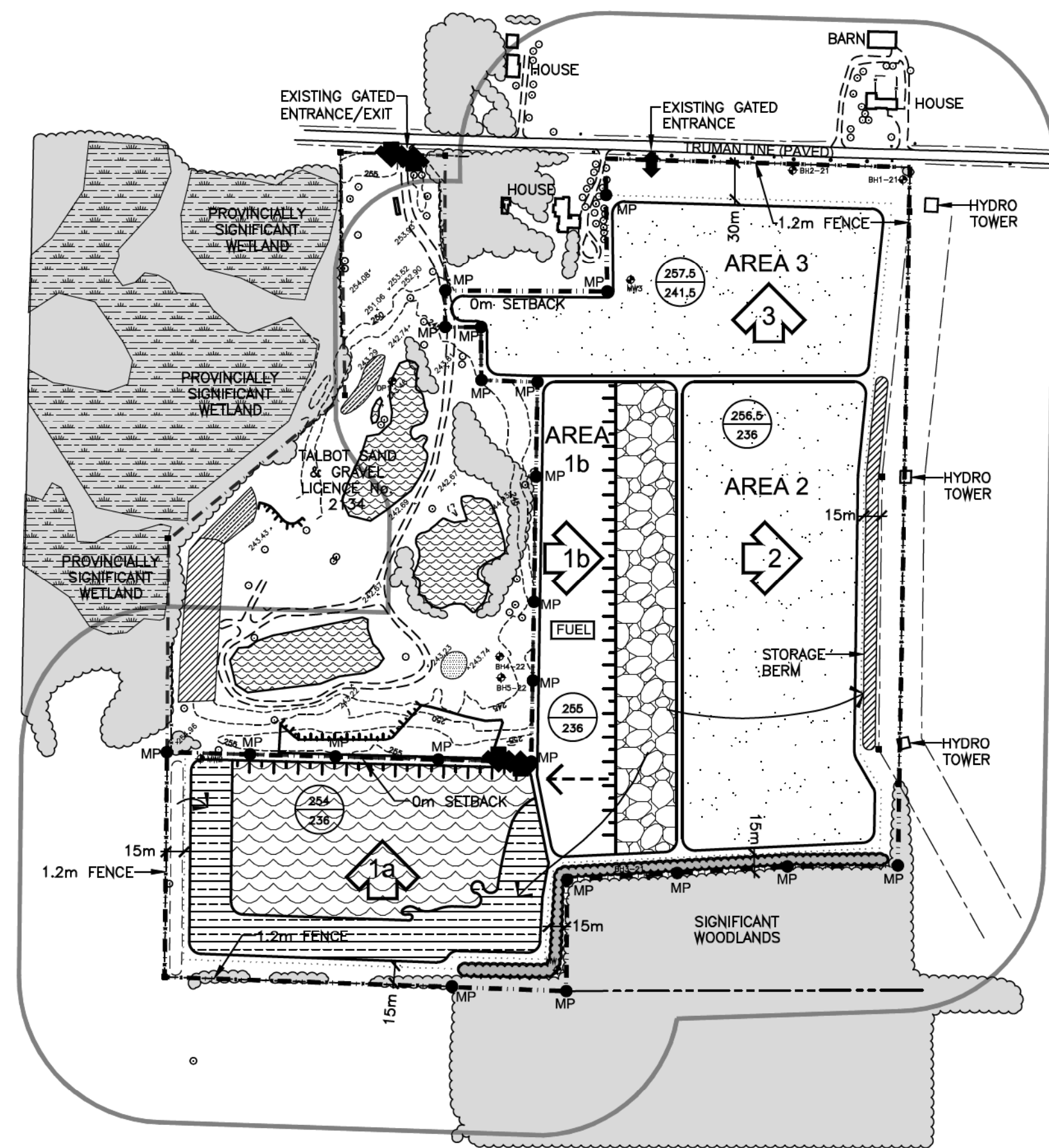
Drawn SB	Checked BJ	Issue Date OCT 2022
Drawing Title		Project Number
OPERATIONAL PLAN		20-03
		Drawing Number
		2 OF 5

PHASE A

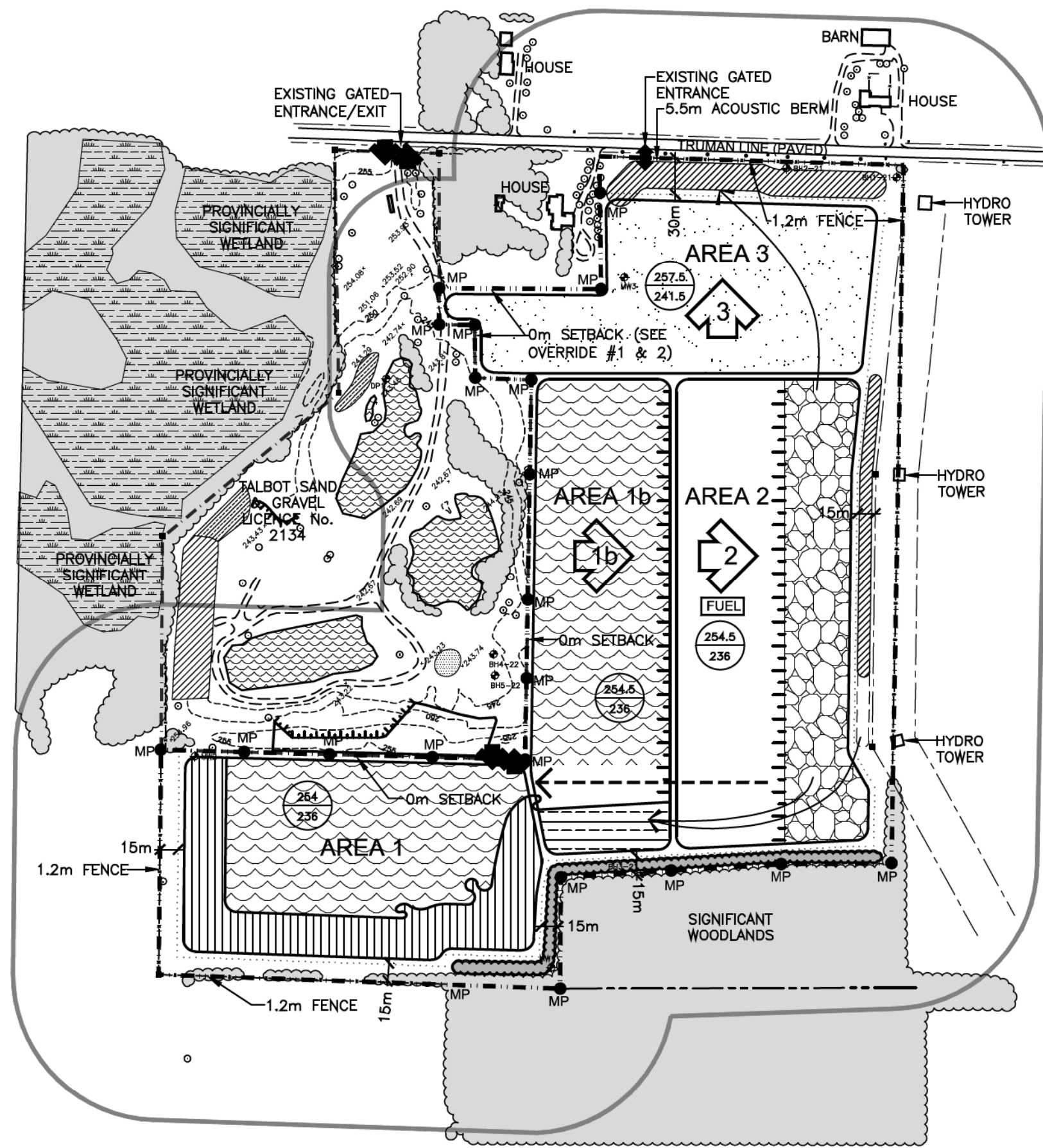
PHASE A NOTES

- PRIOR TO ANY ON SITE OPERATIONS, CONSTRUCT OR UPGRADE THE FENCING ON THE PERIMETER OF AREA 1a TO THE STANDARDS OF THE AGGREGATE RESOURCES ACT (1.2m HIGH POST AND WIRE FENCE) TO RESTRICT ACCESS, EXCEPT WHERE SITE PLAN VARIANCES ARE NOTED. ALL FENCING SHALL BE MAINTAINED.
- CONSTRUCT THE HAUL ROAD THROUGH AREA 1a AND STORE STRIPPED MATERIAL IN STORAGE BERMS AS SHOWN.
- PLANT TWO ROWS OF WHITE PINE ALONG THE SIGNIFICANT WOODLAND PER TECHNICAL RECOMMENDATIONS (PAGE 3 OF 5).
- PRIOR TO EXTRACTION IN AREA 1a, STRIP TOPSOIL AND OVERBURDEN SEPARATELY AND STORE MATERIALS IN STORAGE BERMS AS SHOWN.
- BEGIN ABOVE WATER EXTRACTION OF AREA 1a IN DIRECTION SHOWN. PORTABLE PROCESSING PLANT AND STOCKPIILING AREA MAY BE TEMPORARILY LOCATED NEAR THE PIT FACE.
- UNDISTURBED PORTIONS OF AREAS 1a, 1b, 2, AND 3 REMAIN IN AGRICULTURAL USE.





- ### PHASE B PHASE B NOTES
1. COMPLETE ABOVE WATER EXTRACTION IN AREA 1.
 2. BEGIN REHABILITATION OF AREA 1a SHORELINE USING MATERIALS IN STORAGE BERM.
 3. BEGIN BELOW WATER EXTRACTION IN AREA 1 IN DIRECTION SHOWN. MATERIAL EXTRACTED FROM BELOW WATER WILL BE PLACED IN WINDROWS ON THE PIT FLOOR TO DRAIN BEFORE BEING TRANSPORTED FOR PROCESSING. SHIP MATERIAL TO TEMPORARY PLANT SITE (NOT SHOWN, PORTABLE PROCESSING EQUIPMENT TO BE USED).
 3. PRIOR TO EXTRACTION IN AREA 1b, STRIP TOPSOIL AND OVERBURDEN SEPARATELY AND USE MATERIALS TO CONTINUE REHABILITATION OF SOUTH/SOUTHEAST SHORELINE IN AREA 1a. EXCESS MATERIAL MAY BE STORED IN TEMPORARY STORAGE BERM ALONG EAST BOUNDARY.
 4. COMPLETE BELOW WATER EXTRACTION IN AREA 1a.
 5. COMPLETE REHABILITATION OF SHORELINE IN AREA 1a.
 6. BEGIN ABOVE WATER EXTRACTION OF AREA 1b IN DIRECTION SHOWN. PORTABLE PROCESSING PLANT AND STOCKPILING AREA MAY BE TEMPORARILY LOCATED NEAR THE PIT FACE.
 7. UNDISTURBED PORTIONS OF AREA 2 AND 3 REMAIN IN AGRICULTURAL USE.



- ### PHASE C PHASE C NOTES
1. COMPLETE ABOVE WATER EXTRACTION IN AREA 1b.
 2. BEGIN BELOW WATER EXTRACTION OF AREA 1b IN DIRECTION SHOWN. MATERIAL EXTRACTED FROM BELOW WATER WILL BE PLACED IN WINDROWS ON THE PIT FLOOR TO DRAIN BEFORE BEING TRANSPORTED FOR PROCESSING. SHIP MATERIAL TO TEMPORARY PLANT SITE (NOT SHOWN, PORTABLE PROCESSING EQUIPMENT TO BE USED).
 3. BEGIN REHABILITATION OF SHORELINE IN AREA 1b USING MATERIAL STORED IN STORAGE BERM.
 4. PRIOR TO EXTRACTION IN AREA 2, STRIP TOPSOIL AND OVERBURDEN SEPARATELY AND USE MATERIALS TO COMPLETE REHABILITATION OF SOUTH SHORELINE IN AREA 1b AND BEGIN CONSTRUCTION OF ACOUSTIC BERM.
 5. BEGIN ABOVE WATER EXTRACTION OF AREA 2 IN DIRECTION SHOWN. PORTABLE PROCESSING PLANT AND STOCKPILING AREA MAY BE TEMPORARILY LOCATED NEAR THE PIT FACE.
 6. UNDISTURBED PORTIONS OF AREA 3 REMAIN IN AGRICULTURAL USE.

LEGEND

	120m INFORMATION BOUNDARY		EXISTING BUILDING
	BOUNDARY OF EXPANSION		DIRECTION OF SURFACE WATER DRAINAGE
	BOUNDARY OF EXISTING LICENCES		BOREHOLE MONITORING WELL/PIEZOMETER INSTALLED JANUARY 2021 BY GROUNDWATER SCIENCE CORP.
	LOT/CONCESSION LINE		BOREHOLE INSTALLED FEBRUARY 25, 2022 BY GROUNDWATER SCIENCE CORP.
	REGULATORY SETBACK AND EXTRACTION LIMIT LINE		BOREHOLE INSTALLED MAY 2022 BY MARATHON DRILLING
	PROPERTY LINE		MARKER POST
	EXISTING HYDRO EASEMENT		HYDRO POLE
	EXISTING FENCE		EXISTING STOCKPILE
	EXISTING 5m CONTOUR LINE		DIRECTION OF EXTRACTION
	EXISTING 1m CONTOUR LINE		DIRECTION OF TOPSOIL AND OVERBURDEN MOVEMENT
	EXISTING SPOT ELEVATION		PRODUCT TRANSPORTATION VIA HAUL ROAD
	EXISTING PIT FACE		EXISTING ELEVATION
	EXISTING PIT ENTRANCE/EXIT		PROPOSED ELEVATION
	EXISTING VEGETATION		
	EXISTING WETLAND		
	EXISTING POND		
	BERM (MIN. HEIGHT AS SHOWN)		
	UNDISTURBED AREA		
	AREA STRIPPED OF TOPSOIL AND OVERBURDEN		
	BELOW WATER EXTRACTION		
	PROGRESSIVE REHABILITATION		
	REHABILITATED AREA		

TECHNICAL RECOMMENDATIONS

THE FOLLOWING ARE THE TECHNICAL RECOMMENDATIONS FROM ALL OF THE EXPERTS' REPORTS AS OF JANUARY 2021. ADDITIONAL RECOMMENDATIONS MAY BE INCLUDED AS A RESULT OF THE LICENCE REVIEW PROCESS.

ARCHAEOLOGICAL ASSESSMENT - TIMMIS MARTELLE HERITAGE CONSULTANTS INC. DATED JANUARY 2021
 SHOULD PREVIOUSLY UNDOCUMENTED (I.E. UNKNOWN OR DEEPLY BURIED) ARCHAEOLOGICAL RESOURCES BE DISCOVERED, THEY MAY BE A NEW ARCHAEOLOGICAL SITE AND THEREFORE SUBJECT TO SECTION 48(1) OF THE ONTARIO HERITAGE ACT. THE PROPONENT OR PERSON DISCOVERING THE ARCHAEOLOGICAL RESOURCES MUST CEASE ALTERATION OF THE SITE IMMEDIATELY AND ENGAGE A LICENSED CONSULTANT ARCHAEOLOGIST TO CARRY OUT ARCHAEOLOGICAL FIELDWORK, IN COMPLIANCE WITH SECTION 48(1) OF THE ONTARIO HERITAGE ACT.

THE FUNERAL, BURIAL AND CREMATION SERVICES ACT, 2002, S.O. 2002, C.33 REQUIRES THAT ANY PERSON DISCOVERING HUMAN REMAINS MUST NOTIFY THE POLICE OR CORNER AND THE REGISTRAR OF BURIAL SITES, WAR GRAVES, ABANDONED CEMETERIES AND CEMETERY CLOSURES, ONTARIO MINISTRY OF GOVERNMENT AND CONSUMER SERVICES. AS OF DECEMBER 2020, CRYSTAL FORREST IS SERVING AS A REGISTRAR, BURIAL SITES, REPLACING NANCY TINKINS IN THIS ROLE. THE NEW REGISTRAR'S CONTACT INFORMATION IS: 416-212-7499, CRYSTAL.FORREST@ONTARIO.GA

NOISE ASSESSMENT - HGC ENGINEERING DATED APRIL 1, 2022
 1. THE FOLLOWING TABLE PRESENTS THE REFERENCE SOUND LEVELS USED FOR THE ACOUSTIC MODELING PRESENTED HEREIN. THESE SOUND LEVELS WERE BASED ON SITE MEASUREMENTS OF SIMILAR PROCESSING EQUIPMENT TO BE USED IN THIS PIT.

EQUIPMENT	SOUND POWER LEVEL dBA re: 10" W
CRUSHING PLANT WITH AND ASSOCIATED LOADER	115
SCREENING PLANT WITH AND ASSOCIATED LOADER	108
EXCAVATOR/DIGGLINE	107
TRUCKS	101

IF OTHER EQUIPMENT IS PROPOSED FOR OPERATION IN THE GRAVEL PIT, IT SHALL BE CONFIRMED THROUGH MEASUREMENT TO PRODUCE SOUND LEVELS CONSISTENT WITH THE ABOVE REFERENCED SOUND LEVELS OR ADDITIONAL MITIGATION MEASURES MAY BE REQUIRED.

2. A MINIMUM 7.0 M HIGH LOCAL ACOUSTICAL BARRIER SHALL BE CONSTRUCTED AND MAINTAINED ON THE PIT FLOOR BESIDE THE CRUSHING PLANT IN THE DIRECTION OF R1 AND R2 WHEN OPERATING WITHIN 500 M OF R1 AND R2 IN AREA 2.
3. A MINIMUM 5.5 M HIGH PERIMETER BERM (ABOVE EXISTING GRADE) SHALL BE CONSTRUCTED ALONG THE NORTHERN BOUNDARY ADJACENT TO AREA 3, PRIOR TO THE COMMENCEMENT OF EXTRACTION OR PROCESSING ACTIVITIES IN AREA 3.
4. A MINIMUM 7.0 M HIGH LOCAL ACOUSTICAL BARRIER SHALL BE CONSTRUCTED AND MAINTAINED ON THE PIT FLOOR BESIDE THE SCREENING PLANT IN THE DIRECTION OF R1 AND R2 ONCE EXTRACTION IN AREA 3 HAS COMMENCED.
5. THE CRUSHING PLANT SHALL NOT OPERATE WITHIN 350 M OF R1 AND R2 ONCE EXTRACTION IN AREA 3 HAS COMMENCED.
6. IT IS UNDERSTOOD THAT THE OWNERS OF R3 ALSO OWN THE LANDS OF THE EXISTING PIT AND THE EXPANSION LANDS TO BE LICENSED FOR AGGREGATE EXTRACTION. WE UNDERSTAND THAT THEY HAVE SIGNED AN AGREEMENT THAT GRANTS THE PIT OPERATOR RELIEF FROM IMPLEMENTING ANY NOISE MITIGATION MEASURES WITH REGARD TO R3.
- SHOULD THE OWNERSHIP OR OCCUPANCY OF R3 CHANGE, A SIMILAR AGREEMENT SHALL BE REACHED WITH THE NEW OWNERS/OCCUPANTS OR MITIGATION MEASURES SHALL BE IMPLEMENTED WITH RESPECT TO R3. THOSE MITIGATION MEASURES INCLUDE:
 - THE CONSTRUCTION OF A MINIMUM 6.0 M HIGH PERIMETER BERM TO THE SOUTH AND EAST OF R3 PRIOR TO COMMENCEMENT OF PROCESSING ACTIVITIES IN AREA 1A.
 - THE CONSTRUCTION OF THE MINIMUM 7.0 M HIGH LOCAL ACOUSTICAL BARRIER ON THE PIT FLOOR BESIDE THE CRUSHING PLANT IN THE DIRECTION OF R3.
7. THE LOCAL ACOUSTICAL BARRIERS MENTIONED ABOVE COULD BE THE PIT FACE WHEN THE EQUIPMENT IS LOCATED LESS THAN 100 M FROM THE PIT FACE; OR COULD BE COMPRISED OF AN EARTH BERM, A NOISE WALL, AGGREGATE STOCKPILES OR ANY OTHER CONSTRUCTION WITH A MINIMUM SURFACE DENSITY OF 20 KG/M2.
8. ACTIVITIES USED TO PREPARE THE SITE FOR EXCAVATION, SUCH AS THE STRIPPING OF TOPSOIL, CONSTRUCTION OF BERMS, OR ACTIVITIES RELATED TO THE REMEDIATION OF THE SITE ARE CONSIDERED TO BE CONSTRUCTION ACTIVITIES. THEY ARE REGULATED UNDER MUNICIPAL BYLAWS AND MPC-15 "SOUND LEVEL LIMITS FOR MOTORIZED CONSTRUCTION EQUIPMENT".

HYDROGEOLOGICAL ASSESSMENT - GROUNDWATER SCIENCE CORP. DATED JUNE 2022
MONITORING, MITIGATION AND CONTINGENCY PLAN
 WHERE THE MINISTRY OF NORTHERN DEVELOPMENT, MINES, NATURAL RESOURCES AND FORESTRY WITH THE ASSISTANCE OF THE MINISTRY OF THE ENVIRONMENT CONSERVATION AND PARKS, ACCORDING TO EXISTING WATER WELL INTERFERENCE COMPLAINT PROTOCOLS, HAS DETERMINED THAT THE OPERATION OF THE PIT HAS CAUSED ANY WELL WATER TO BE ADVERSELY AFFECTED, THE LICENSEE SHALL, AT THE LICENSEE'S EXPENSE, EITHER DEEPEN THE WELL OR REPLACE THE WELL TO ENSURE THAT HISTORIC WATER PRODUCTION QUALITY STANDARDS ARE MAINTAINED FOR THAT WELL. IF THIS PIT OPERATION HAS CAUSED A WATER SUPPLY PROBLEM, THE LICENSEE SHALL, AT THEIR EXPENSE, ENSURE A CONTINUOUS SUPPLY OF POTABLE WATER TO THE AFFECTED LANDOWNER. IN ORDER TO TRACK WATER TABLE ELEVATIONS AND GROUNDWATER QUALITY AT THE SITE, THE FOLLOWING MONITORING PROGRAM IS RECOMMENDED:

1. WATER LEVEL MEASUREMENTS SHALL BE OBTAINED ON A QUARTERLY (SEASONAL) BASIS AT MW1, MW2 AND MW3, AS ACCESSIBLE.
2. ANNUAL WATER QUALITY SAMPLES FOR GENERAL PARAMETERS (ANIONS AND METALS) AND PETROLEUM HYDROCARBONS SHALL BE OBTAINED AT MW1 AND MW3 (AS ACCESSIBLE) ON AN ANNUAL BASIS.
3. THE MONITORING RESULTS WILL BE SUMMARIZED AND SUBMITTED IN AN ANNUAL REPORT TO THE MINISTRY OF NORTHERN DEVELOPMENT, MINES, NATURAL RESOURCES AND FORESTRY.

NATURAL ENVIRONMENT ASSESSMENT - TERRASTROY ENVIRONMENTAL CONSULTING INC. DATED AUGUST 1, 2022

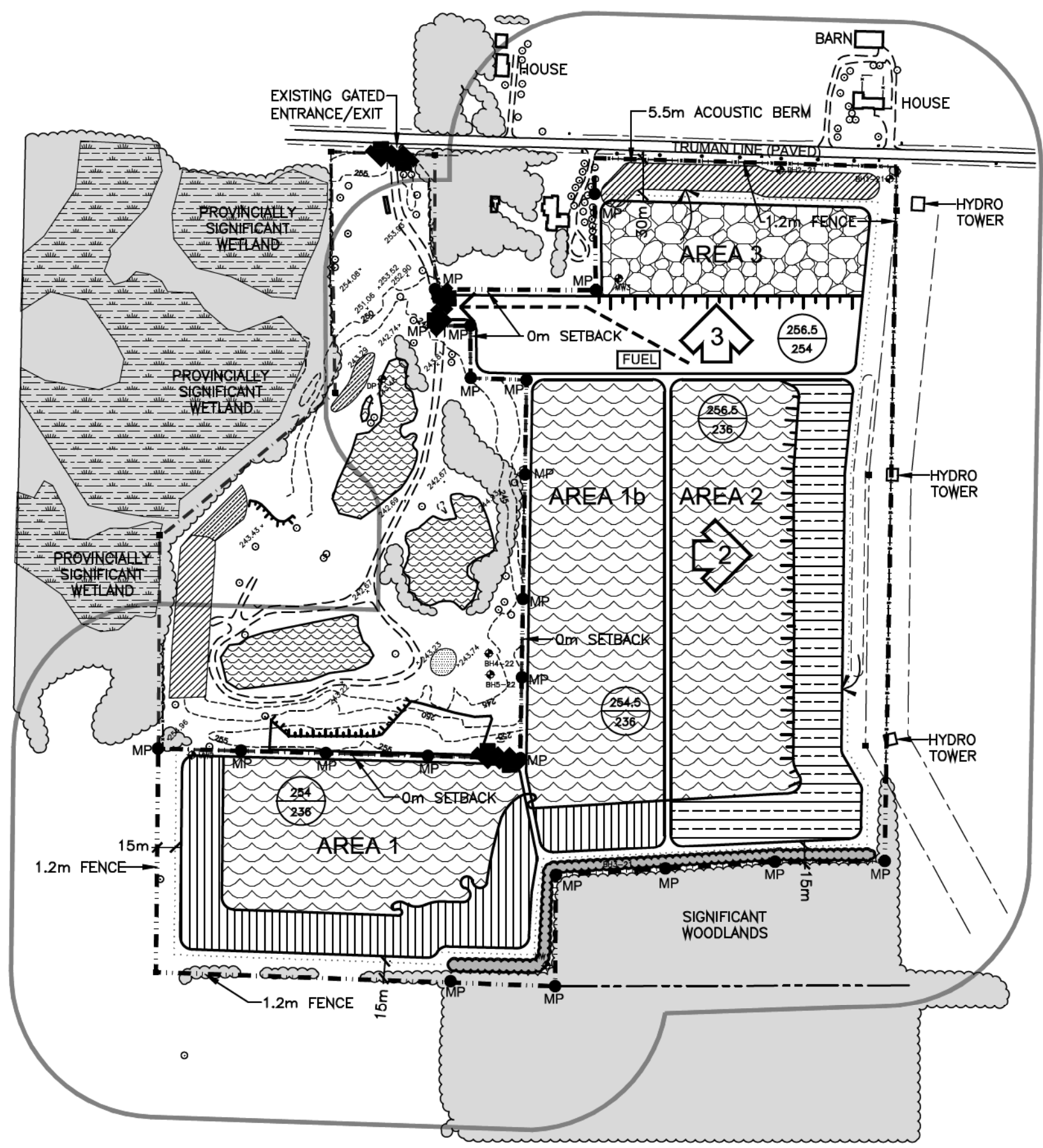
- SIGNIFICANT WOODLAND**
1. THE 15 M SETBACK FROM THE DRIPLINE OF THE DECIDUOUS WOODLAND WILL BE WELL-MARKED (I.E. STAKED) UNDER THE DIRECTION OF A QUALIFIED ECOLOGIST PRIOR TO THE COMMENCEMENT OF ADJACENT PIT OPERATIONS.
 2. OPERATIONAL ACTIVITIES AND OTHER DISTURBANCES ARE PROHIBITED WITHIN THE 15 M DRIPLINE SETBACK OF THE DECIDUOUS WOODLAND.
 3. TWO (2) ROWS OF EASTERN WHITE PINE (PINUS STROBUS) WILL BE PLANTED WITHIN THE 15 M DRIPLINE SETBACK FROM THE SIGNIFICANT WOODLAND.
 4. THE 15 M DRIPLINE SETBACK FROM THE SIGNIFICANT WOODLAND WILL BECOME NATURAL, SELF-SUSTAINING VEGETATION (I.E. NO VEGETATION MAINTENANCE OR HUMAN ACTIVITIES).
 5. ANY NECESSARY LIGHTING TO SUPPORT PIT OPERATIONS WILL BE DIRECTED AWAY FROM THE DECIDUOUS WOODLAND (I.E. NORTHWARD) TO THE EXTENT PRACTICABLE.

BANK SWALLOW

6. ALL AGGREGATE OPERATIONS WITHIN THE SITE WILL BE UNDERTAKEN CONSISTENT WITH THE DOCUMENT TITLED "BEST MANAGEMENT PRACTICES FOR THE PROTECTION, CREATION AND MAINTENANCE OF BANK SWALLOW HABITAT IN ONTARIO" (OMNRF 2017).

OTHER WILDLIFE

7. ANY NECESSARY REMOVAL OF VEGETATION TO SUPPORT PIT OPERATIONS WILL BE COMPLETED OUTSIDE THE PRIMARY BIRD NESTING AND BAT ACTIVITY PERIODS (I.E., TO BE COMPLETED BETWEEN OCTOBER 1 AND MARCH 31).



- ### PHASE D PHASE D NOTES
1. COMPLETE ABOVE WATER EXTRACTION IN AREA 2.
 2. BEGIN REHABILITATION OF AREA 2 SHORELINE USING MATERIAL IN STORAGE BERM.
 3. BEGIN BELOW WATER EXTRACTION OF AREA 2 IN DIRECTION SHOWN. MATERIAL EXTRACTED FROM BELOW WATER WILL BE PLACED IN WINDROWS ON THE PIT FLOOR TO DRAIN BEFORE BEING TRANSPORTED FOR PROCESSING. SHIP MATERIAL TO TEMPORARY PLANT SITE (NOT SHOWN, PORTABLE PROCESSING EQUIPMENT TO BE USED).
 4. COMPLETE BELOW WATER EXTRACTION IN AREA 2.
 2. PRIOR TO EXTRACTION IN AREA 3, STRIP TOPSOIL AND OVERBURDEN SEPARATELY AND USE MATERIALS TO COMPLETE REHABILITATION OF AREA 2 SHORELINE AND COMPLETE CONSTRUCTION OF ACOUSTIC BERM. EXCESS MATERIALS MAY BE USED TO COMPLETE REHABILITATION OF AREA 2 SHORELINE.
 3. BEGIN ABOVE WATER EXTRACTION OF AREA 3 IN DIRECTION SHOWN. PORTABLE PROCESSING PLANT AND STOCKPILING AREA MAY BE TEMPORARILY LOCATED NEAR THE PIT FACE.

- ### PHASE E (NOT SHOWN) PHASE E NOTES
1. COMPLETE ABOVE WATER EXTRACTION IN AREA 3.
 2. BEGIN BELOW WATER EXTRACTION OF AREA 3 IN DIRECTION SHOWN. MATERIAL EXTRACTED FROM BELOW WATER WILL BE PLACED IN WINDROWS ON THE PIT FLOOR TO DRAIN BEFORE BEING TRANSPORTED FOR PROCESSING. SHIP MATERIAL TO TEMPORARY PLANT SITE (NOT SHOWN, PORTABLE PROCESSING EQUIPMENT TO BE USED).
 3. COMPLETE BELOW WATER EXTRACTION OF AREA 3 AND BEGIN REHABILITATION OF AREA 3 SHORELINE USING MATERIAL STORED IN ACOUSTIC BERM.
 4. REMOVE ALL SCRAP AND EQUIPMENT.
 5. COMPLETE REHABILITATION OF ALL REMAINING AREAS (INCLUDING ALL INTERNAL HAUL ROADS) USING TOPSOIL AND OVERBURDEN STOCKPILED IN BERMS.
 6. REHABILITATION WILL BE TO POND AND NATURAL AREAS.

Pre Licence Review				Site Plan Amendments			
NO.	DATE	REVISIONS	OWNED	NO.	DATE	REVISIONS	OWNED

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Project Name
TALBOT SAND AND GRAVEL
MACPHERSON PIT EXPANSION

PART LOT 6, CONCESSION 12
 MUNICIPALITY OF CENTRAL ELGIN
 (FORMERLY TOWNSHIP OF YARMOUTH), COUNTY OF ELGIN

Scale 1:4000
 North
 Drawing Status
 SUBMITTED FOR LICENCE APPROVAL
 Drawn SB
 Checked BJ
 Drawing Title
OPERATIONAL PLAN PHASES B-D

Stamp

Issue Date OCT 2022
 Project Number
20-03
 Drawing Number
3 OF 5

LEGEND

- 120m INFORMATION BOUNDARY
- BOUNDARY OF EXPANSION
- BOUNDARY OF EXISTING LICENCES
- LOT/CONCESSION LINE
- REGULATORY SETBACK AND EXTRACTION LIMIT LINE
- PROPERTY LINE
- EXISTING HYDRO EASEMENT
- EXISTING GRADE
- PROPOSED GRADE
- EXISTING VEGETATION
- PROPOSED VEGETATION

SECTION NOTES

GENERAL INFORMATION

1. SECTION LINES ARE INDICATED ON DRAWINGS 1, 2 AND 5.

NO.	DATE	REVISIONS	OWNER	HW	WHY

Pre Licence Review Site Plan Amendments

**Harrington
McAvan Ltd**

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Project Name

TALBOT SAND AND GRAVEL

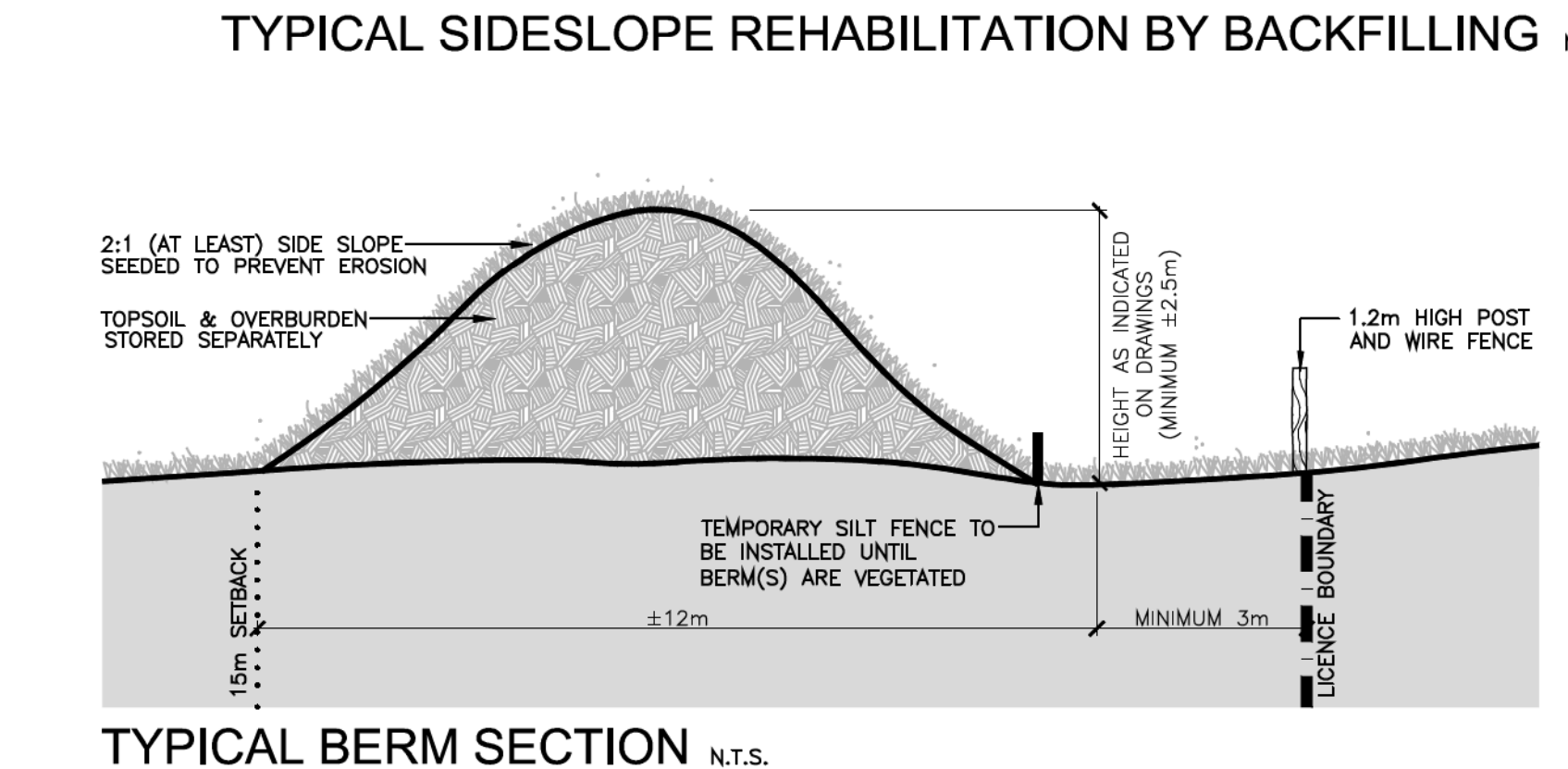
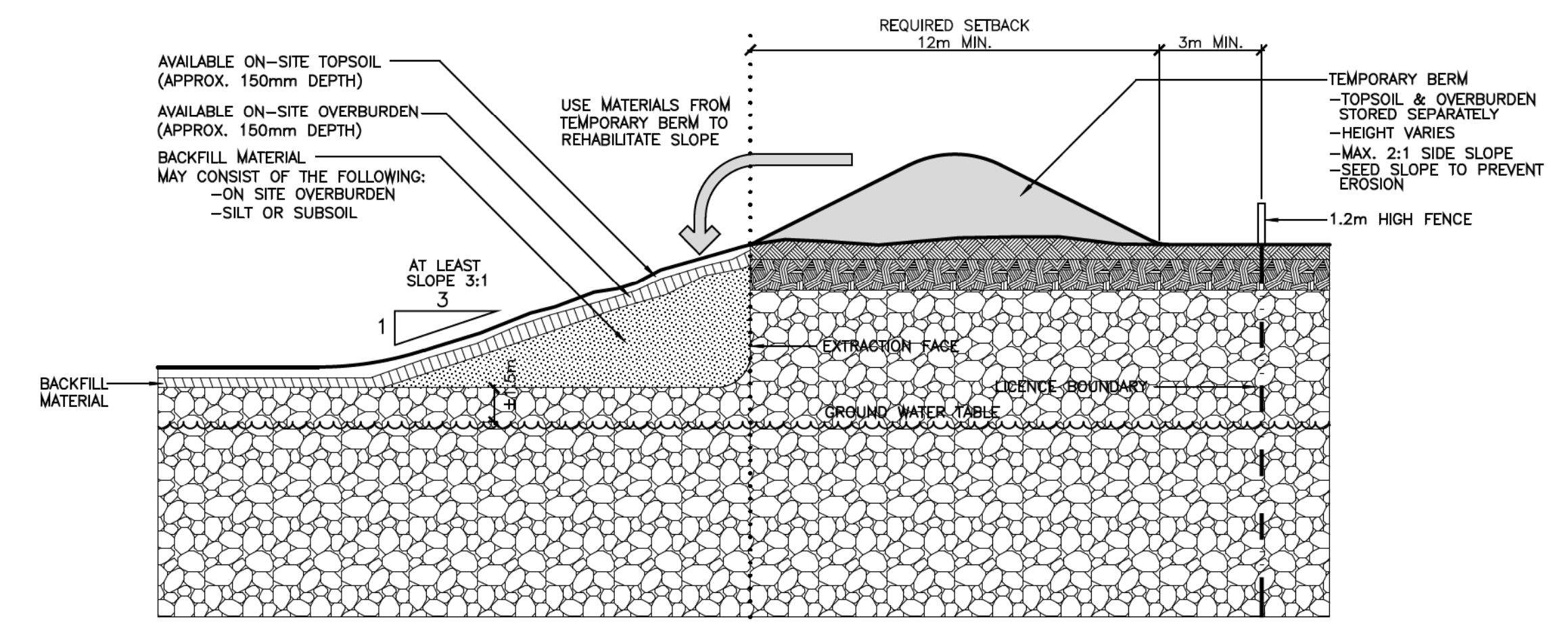
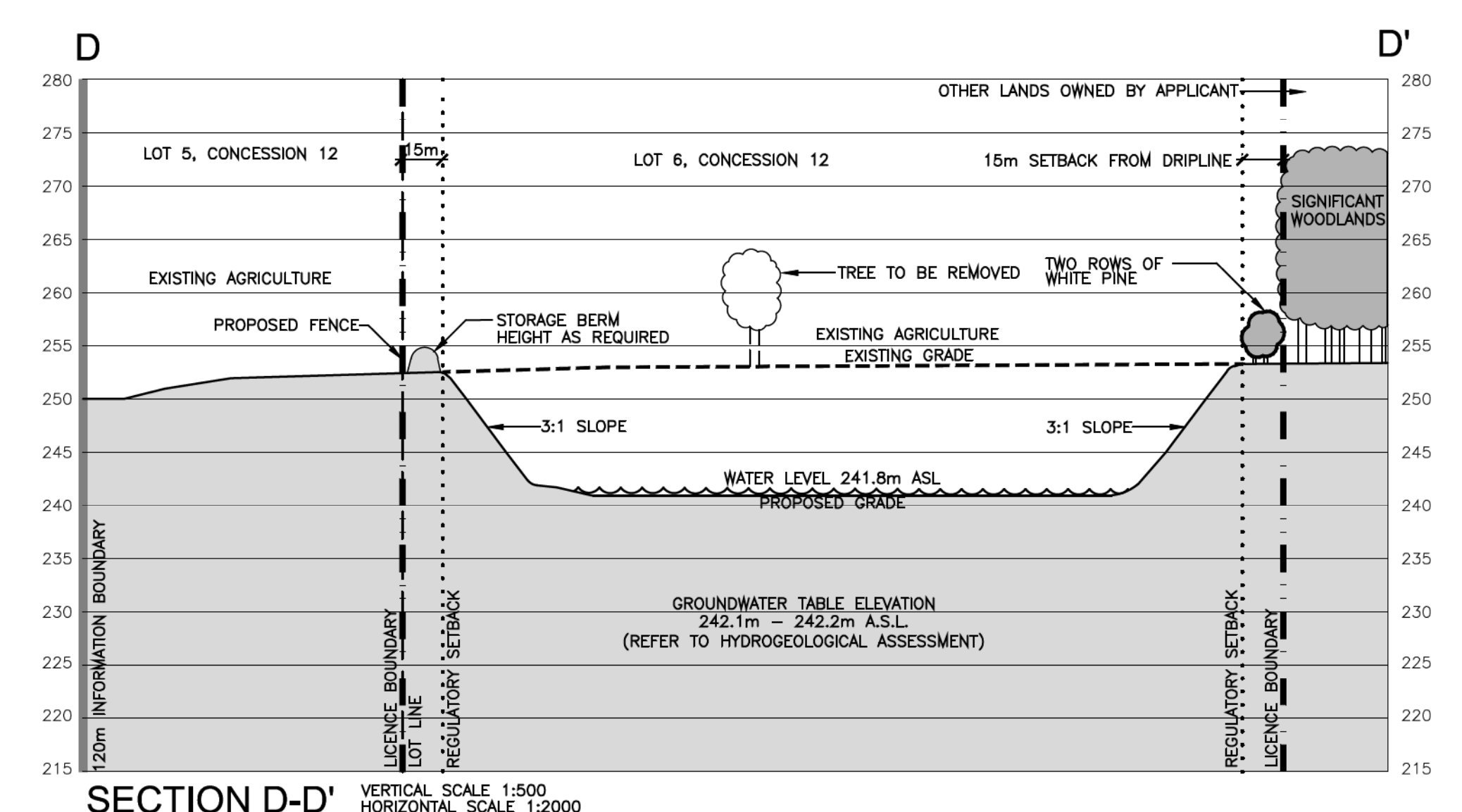
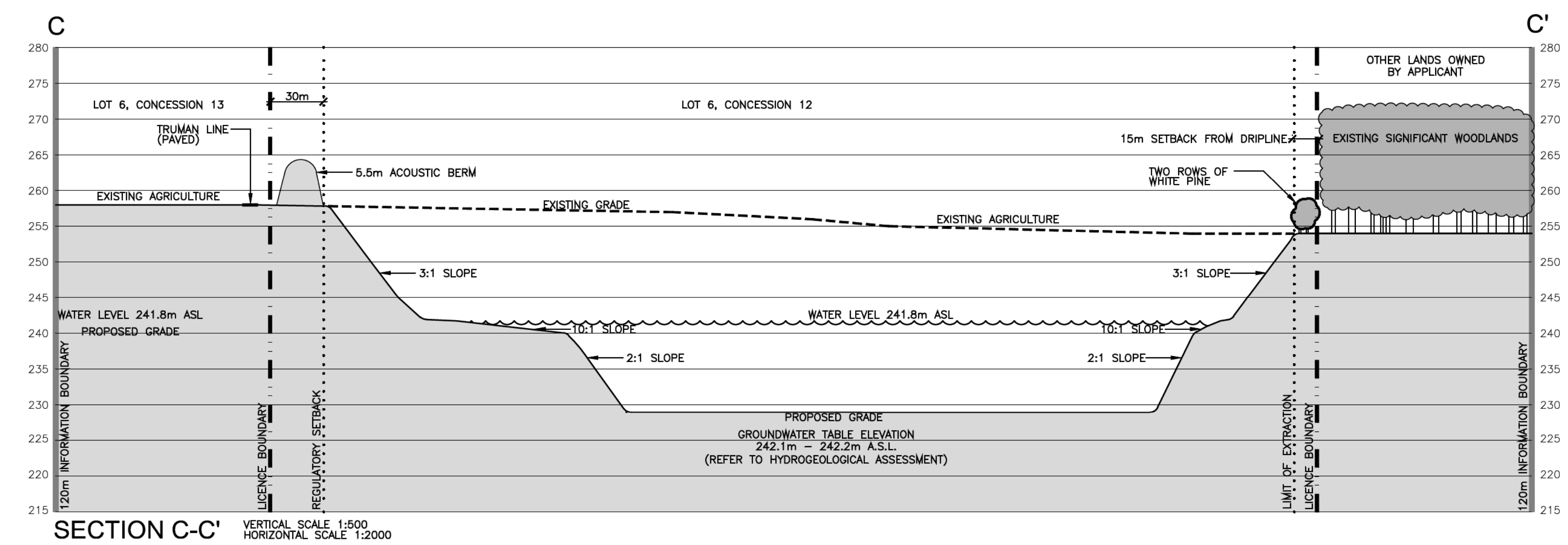
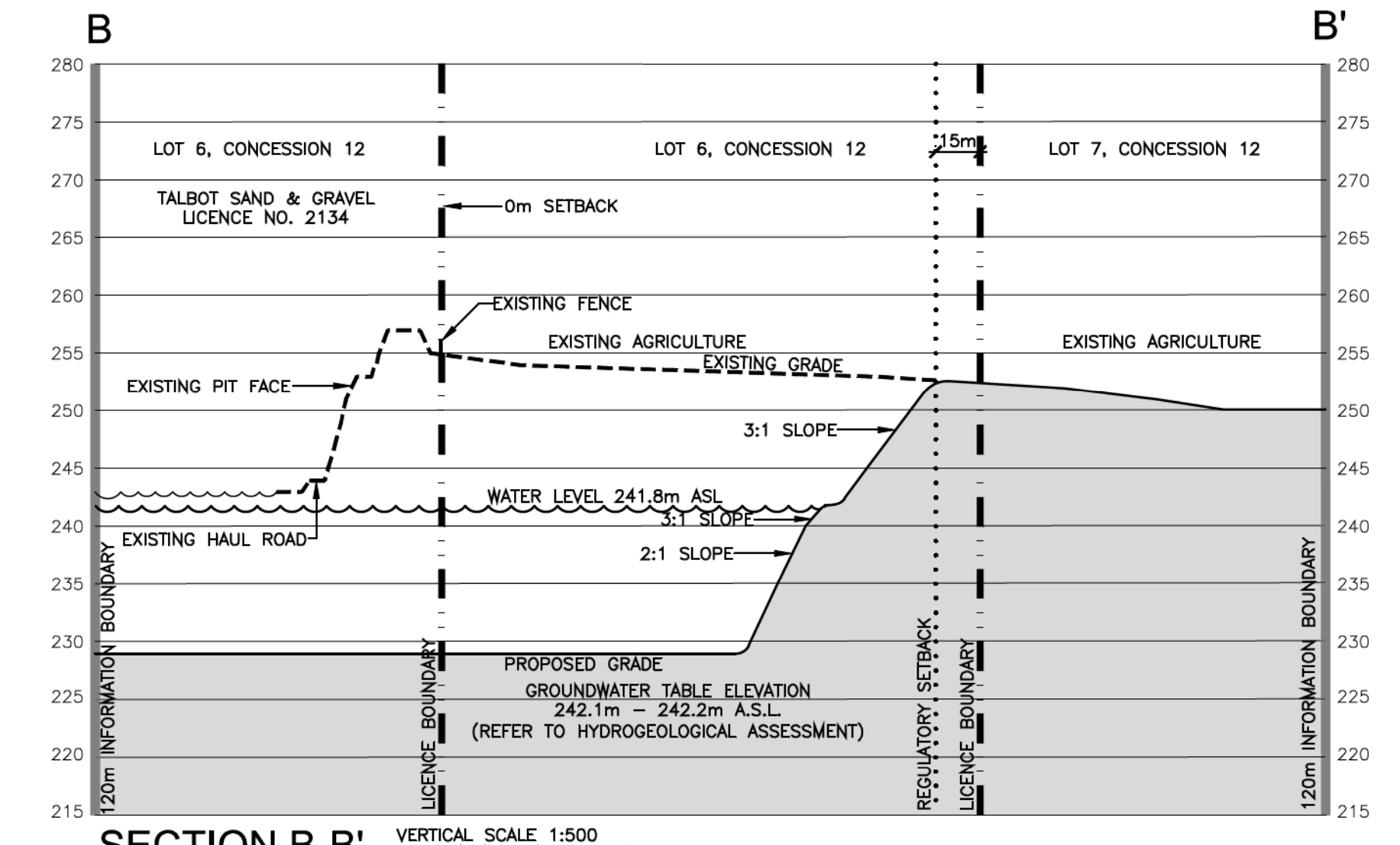
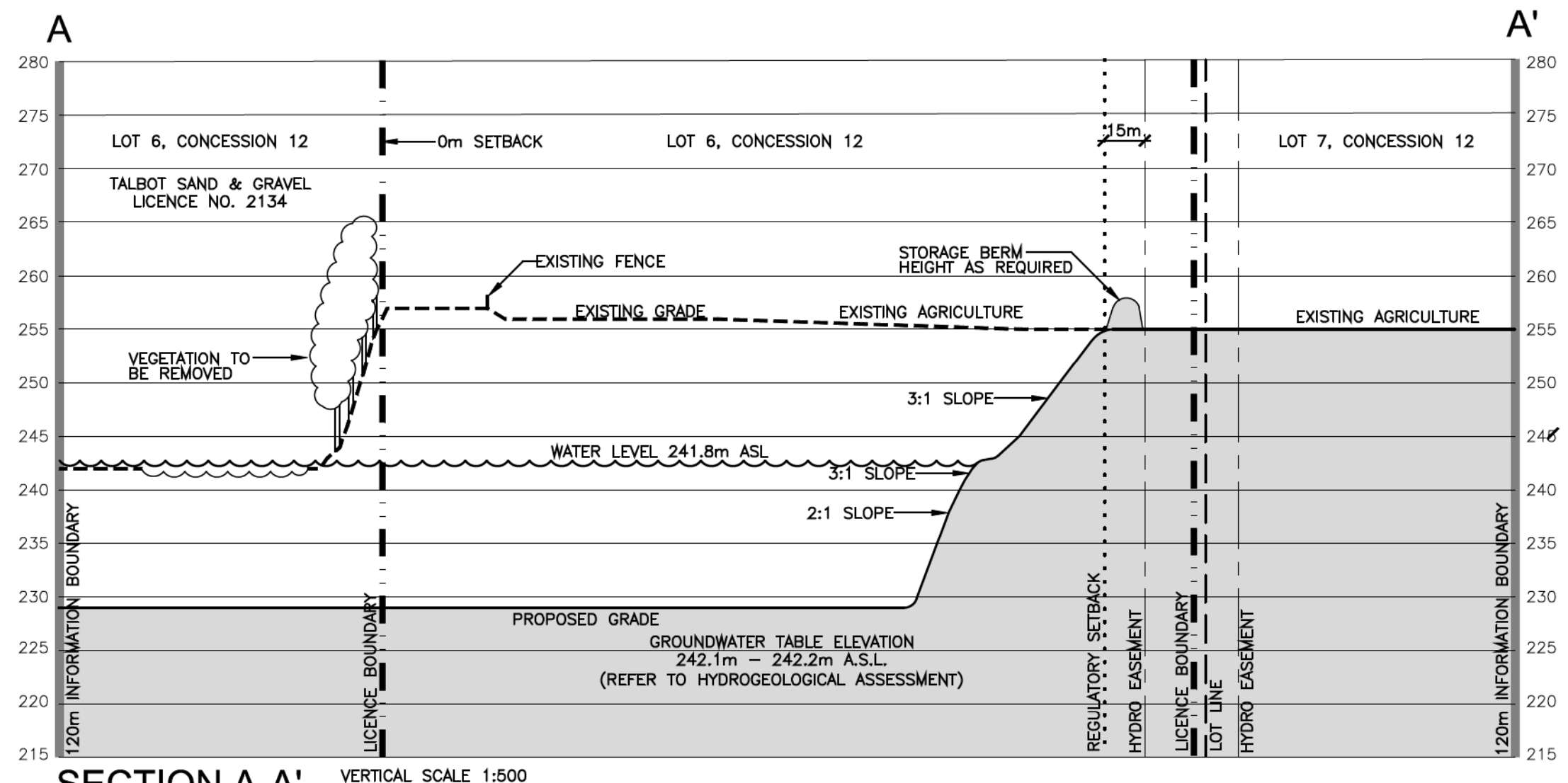
MACPHERSON PIT EXPANSION

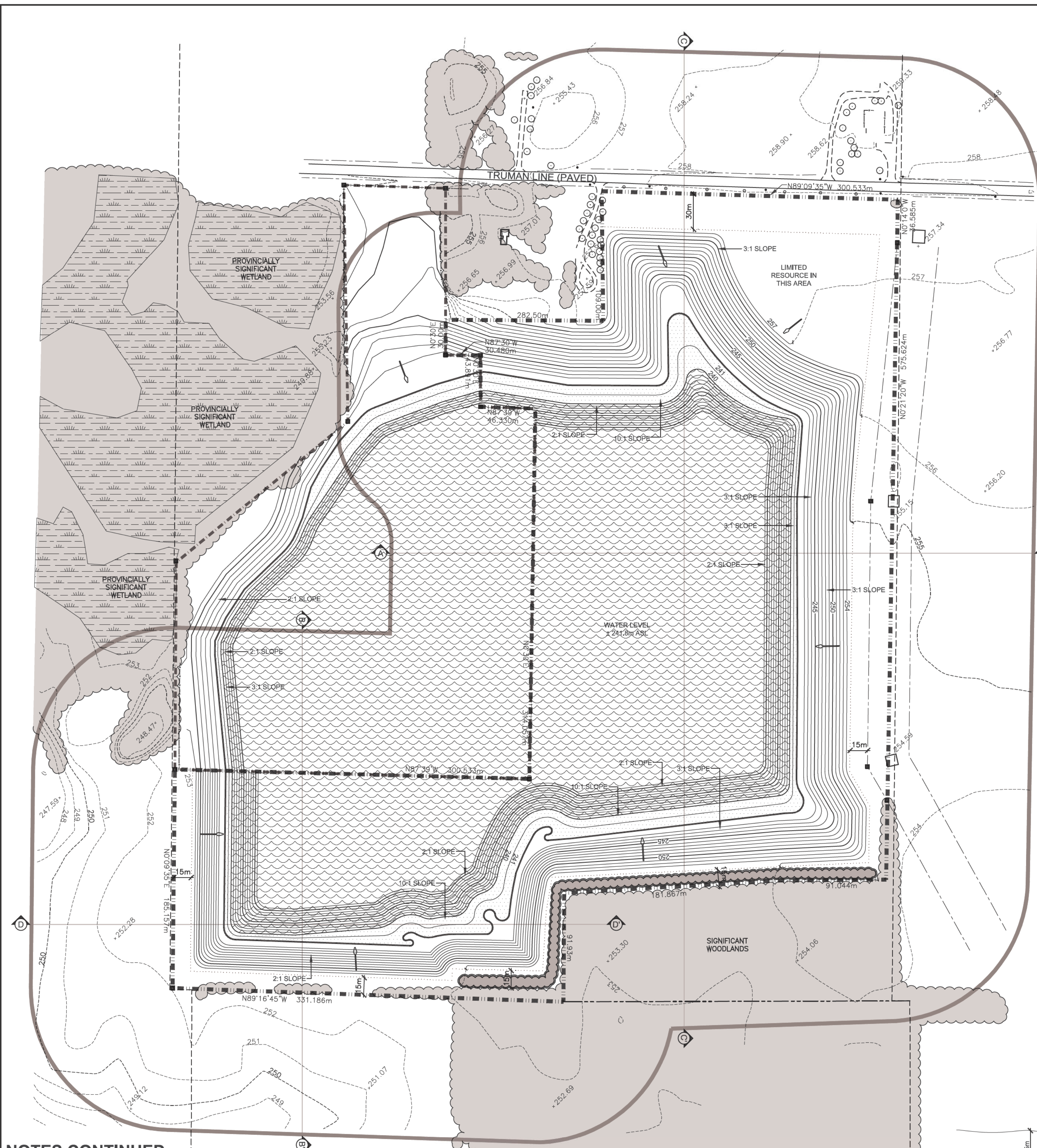
PART LOT 6, CONCESSION 12
MUNICIPALITY OF CENTRAL ELGIN
(FORMERLY TOWNSHIP OF YARMOUTH), COUNTY OF ELGIN

Scale	AS SHOWN	North	Stamp	
Drawing Status	SUBMITTED FOR LICENCE APPROVAL			
Drawn	SB	Checked		BJ
Drawing Title	SECTIONS AND DETAILS		Issue Date	OCT 2022

Project Number
20-03

Drawing Number
4 OF 5





NOTES CONTINUED

IMPORTATION OF FILL INFORMATION
 15. EXCESS SOIL, AS DEFINED IN ONTARIO REGULATION 406/19 UNDER THE ENVIRONMENTAL PROTECTION ACT, MAY BE IMPORTED TO THIS SITE TO FACILITATE THE FOLLOWING REHABILITATION:
 I. CREATION OF 3:1 SLOPES
 II. TOP DRESSING TO ESTABLISH VEGETATION

THE QUALITY OF EXCESS SOIL IMPORTED TO THE SITE FOR FINAL PLACEMENT MUST NOT EXCEED THE APPLICABLE EXCESS SOIL QUALITY STANDARDS IN ACCORDANCE WITH O. REG 406/19 AS AMENDED FROM TIME TO TIME AND MUST BE CONSISTENT WITH THE SITE CONDITIONS AND THE END USE IDENTIFIED IN THE APPROVED REHABILITATION PLAN.

EXCESS SOIL IMPORTED TO FACILITATE REHABILITATION AS DESCRIBED SHALL BE UNDERTAKEN IN ACCORDANCE WITH THE "RULES FOR SOIL MANAGEMENT AND EXCESS SOIL QUALITY STANDARDS" PUBLISHED BY THE MINISTRY OF THE ENVIRONMENT, CONSERVATION AND PARKS UNDER O. REG. 406/19, AS AMENDED FROM TIME TO TIME.

THE MAXIMUM TOTAL AMOUNT OF EXCESS SOIL THAT MAY BE IMPORTED TO THIS SITE FOR REHABILITATION PURPOSES IS 100,000 M³.

SAMPLING AND TESTING OF ALL IMPORTED MATERIAL SHALL BE PERFORMED AT SOURCE PRIOR TO THE IMPORTATION OF MATERIAL ONTO THE LICENSED SITE BY A QP UNDER EPA, A QP SHALL ALSO DESIGN A FILL MONITORING PROGRAM.

THE LICENSEE SHALL KEEP DETAILED RECORDS OF THE AMOUNT OF MATERIAL BROUGHT ON SITE FOR REHABILITATION AND THE TESTING RESULTS OF ALL SAMPLES. ALL RECORDS AND TESTING RESULTS SHALL BE AVAILABLE UPON REQUEST BY NDMNRF OR MECP.

NOTES CONTINUED

TOPSOILING INFORMATION
 6. ALL AVAILABLE TOPSOIL ON THE SITE WILL REMAIN TO BE USED FOR REHABILITATION OF THIS SITE. AVAILABLE TOPSOIL REPLACED WILL BE APPROXIMATELY 200-300mm THICK.

VEGETATION STABILIZATION INFORMATION
 7. AGRICULTURAL AREAS:
 TOPSOIL SHALL BE SEED WITH A MIXTURE OF GRASSES AND LEGUMES THAT MAY INCLUDE THE FOLLOWING AT A RATE OF APPROXIMATELY 125KG/HA:
 BUCKWHEAT
 TALL FESCUE
 RED CLOVER
 ANNUAL RYE
 WHITE CLOVER

MEADOW AREAS AND SIDESLOPES:
 TOPSOIL SHALL BE SEED WITH A SUITABLE MEADOW MIX COMPOSED OF NATIVE SPECIES LOCAL TO THE AREA.

OPEN WATER POND REHABILITATION INFORMATION
 8. THE AVERAGE WATER LEVEL IN THE POST-EXTRACTION LAKE IS ESTIMATED TO BE 241.8 m ASL.
 9. THE SHAPE AND GRADING OF THE PROPOSED POND IS APPROXIMATE, BASED ON THE BEST AVAILABLE INFORMATION AT THE TIME OF LICENSING. ACTUAL EXTRACTION WILL FOLLOW THE BELOW WATER DEPOSIT AND REHABILITATION SHALL FOLLOW THE CONCEPT ILLUSTRATED.

WETLAND REHABILITATION INFORMATION
 10. AREAS SHALL BE REHABILITATED TO WETLAND HABITAT AS FOLLOWS:
 - UNDERWATER SLOPES WILL BE FORMED WITH ON-SITE FILL AND/OR IMPORTED, INERT FILL
 - UNDERWATER SLOPES SHALL BE A MAXIMUM OF 2:1

11. RESTORATION OF THE NEARSHORE, SHALLOW WETLAND ZONE AS SHOWN ON THE TYPICAL SHALLOW SHORELINE SECTION, SHEET 5 OF 5 WILL GENERALLY BE ACCOMPLISHED AS FOLLOWS:
 • EXTRACTION AND ROUGH GRADING WILL CREATE A NEARSHORE SHORELINE AREA AT A SLOPE OF 10:1
 • FINAL SLOPING OF THE SHORELINE TO CREATE PHYSICAL DIVERSITY SHALL BE BY SCALLOPING THE SHORELINE AND ADDING STRUCTURES.
 • WOODY DEBRIS, BRANCHES, TREE TRUNKS, STUMPS, ETC. CLEARED IN THE EXTRACTION PROCESS WILL BE SALVAGED WHERE POSSIBLE, FOR USE IN SHORELINE RESTORATION/ UNDERWATER HABITAT ENHANCEMENT, STUMPS, LOGS, BRUSH BUNDLES, ETC. SHALL BE INSTALLED 330m O.C. ALONG THE SHORELINE IN THE SHALLOW ZONE TO CREATE PHYSICAL DIVERSITY.
 • OVERSIZE ROCKS NOT UTILIZED IN THE AGGREGATE OPERATIONS WILL ALSO BE PLACED IN THE SHALLOW ZONE TO CREATE PHYSICAL DIVERSITY.
 • THE INITIAL SHORELINE RESTORATION AREA WILL BE SPORADICALLY PLANTED WITH TREES AND SHRUBS. SPECIES MAY INCLUDE THE FOLLOWING NATIVE PLANTS:
 RED MAPLE
 LARCH
 PUSSY WILLOW
 SPECKLED ALDER
 SILVER MAPLE
 WHITE CEDAR
 RED OSIER DOGWOOD

12. INITIAL SHORELINE WETLAND AREAS SHALL BE PLANTED WITH CLUMPS OF EMERGENT AND SUBMERGENT NATIVE WETLAND PLANTS TO INITIATE COLONIZATION OF THE SITE AS NUTRIENT LEVELS INCREASE TO SUPPORT THEM. NATIVE WETLAND PLANTS SUCH AS:
 FLOATING PONDWEED
 BLUE FLAG
 COONTAIL
 PICKERELWEED
 SOFTSTEM BULRUSH
 WATER-LILY
 RIVER BULRUSH
 ARROWHEAD

WILL BE PLANTED IN CLUSTERS OF 5 AT APPROPRIATE DEPTHS TO BEGIN THE COLONIZATION.

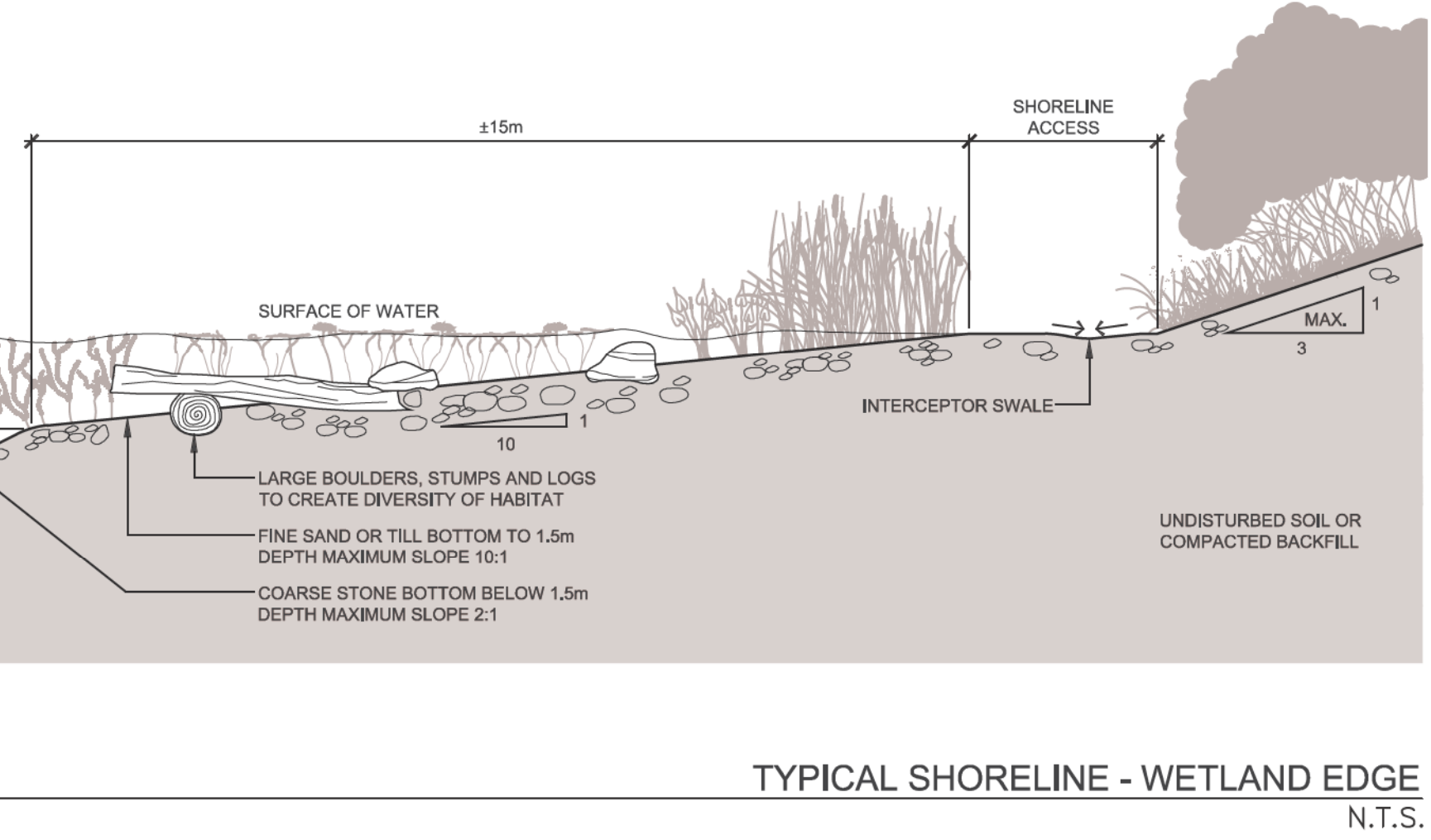
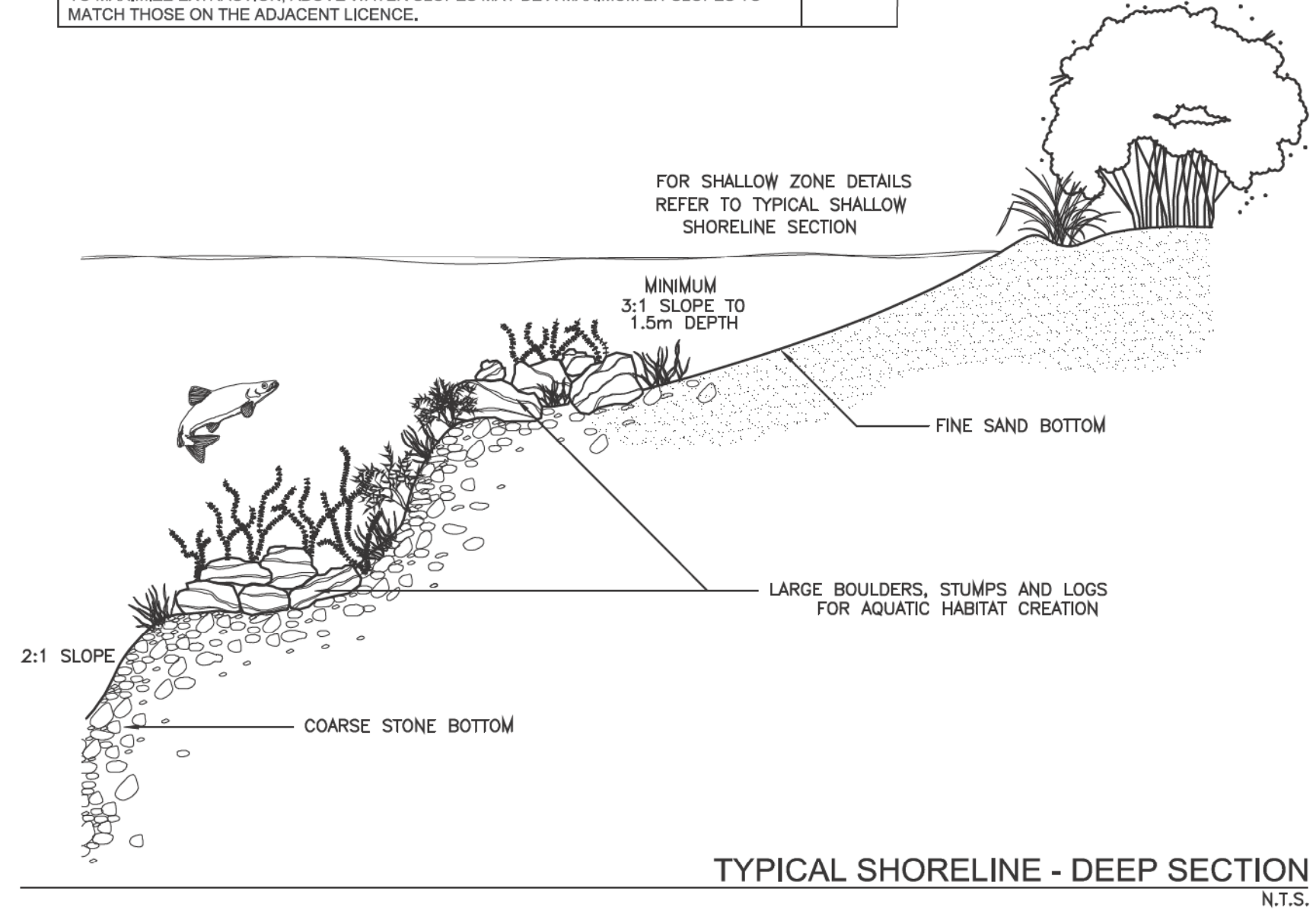
SETBACK REHABILITATION INFORMATION
 13. AFTER SIDESLOPES ARE CREATED AND REQUIRED BERMS ARE REMOVED FROM SETBACKS, THESE AREAS WILL BE IMMEDIATELY STABILIZED WITH A SUITABLE GROUND COVER.

AGRICULTURAL REHABILITATION INFORMATION
 14. AREAS SHALL BE REHABILITATED BACK TO AGRICULTURE AS FOLLOWS:
 • DEEP RIPPING OF FIELDS SHALL BE PERFORMED TO ELIMINATE COMPACTION (WHERE REQUIRED).
 • SPREADING OF AVAILABLE SUBSOIL OVERBURDEN AND ROUGH GRADING.
 • REMOVAL OF STONES LARGER THAN 100mm.
 • SPREADING OF AVAILABLE TOPSOIL AND FINE GRADING.
 • SEED AREAS WITH SEED MIXTURE NOTED ABOVE. ALL VEGETATION PLANTED DURING THIS LICENCE WILL BE MAINTAINED IN A VIGOROUS, HEALTHY GROWING CONDITION.
 • MATERIAL FROM OTHER PROPERTIES (EG. MANURE AND/OR TOPSOIL) MAY BE IMPORTED INTO THE SITE FOR SOIL ENHANCEMENT USING STANDARD AGRICULTURAL PRACTICES.

SITE PLAN OVERRIDE (VARIANCE)

THE FOLLOWING CONDITIONS ILLUSTRATED ON THESE PLANS VARY FROM THE OF THE PROVINCIAL STANDARDS MADE UNDER THE AGGREGATE RESOURCES ACT

ITEM	SECTION
TO MAXIMIZE EXTRACTION, BELOW WATER SLOPES MAY BE A MAXIMUM 2:1 SLOPES, TO MAXIMIZE EXTRACTION, ABOVE WATER SLOPES MAY BE A MAXIMUM 2:1 SLOPES TO MATCH THOSE ON THE ADJACENT LICENCE.	0.13 (1) 19 I



LEGEND

- 120m INFORMATION BOUNDARY
- BOUNDARY OF EXPANSION
- BOUNDARY OF EXISTING LICENCES
- LOT/CONCESSION LINE
- REGULATORY SETBACK AND EXTRACTION LIMIT LINE
- PROPERTY LINE
- EXISTING HYDRO EASEMENT
- EXISTING FENCE
- EXISTING 5m CONTOUR LINE
- EXISTING 1m CONTOUR LINE
- EXISTING SPOT ELEVATION
- LOCATION OF CROSS SECTION
- EXISTING VEGETATION
- EXISTING WETLAND
- PROPOSED 5m CONTOUR
- PROPOSED 1m CONTOUR
- PROPOSED WETLAND
- PROPOSED OPEN WATER POND
- EXISTING BUILDING
- DIRECTION OF SURFACE WATER DRAINAGE
- HYDRO POLE

REHABILITATION NOTES

GENERAL INFORMATION

- REFER TO SHEET 4 OF 5 FOR SECTIONS, SHEET 2 AND 3 OF 5 FOR OPERATIONS AND PHASING DIAGRAMS AND NOTES AND SHEET 5 OF 5 FOR FINAL REHABILITATION AND NOTES.
- PROPERTY SHALL BE REHABILITATED TO:
 OPEN WATER POND 10.5 HA
 WETLAND 1.6 HA
 MEADOW 6.8 HA
 AGRICULTURE 1.1 HA
 FOR A TOTAL OF 20.0 HECTARES.
 REFORESTATION OUTSIDE OF EXTRACTION AREA 0.04 HA

HYDROGEOLOGICAL INFORMATION

- IT IS ANTICIPATED THAT THE GROUNDWATER ELEVATION ACROSS THE SITE WILL REMAIN RELATIVELY UNCHANGED AT 242.1-242.2m A.S.L. (REFER TO HYDROGEOLOGICAL REPORT).
- ALL SURFACE DRAINAGE WILL BE DIRECTED TO THE POND, THERE WILL BE NO OFF-SITE DISCHARGE.

SIDESLOPE/MEADOW REHABILITATION INFORMATION

GRADING INFORMATION

- REHABILITATED SLOPES WITHIN THE LICENSED AREA WILL BE CONSTRUCTED AS SHOWN ON THE CROSS SECTIONS. REHABILITATION OF ABOVE WATER SLOPES SHALL BE BY BACKFILLING (MINIMUM 3:1) AND/OR CUT AND FILL METHOD USING AVAILABLE ON-SITE OVERBURDEN AND TOPSOIL. FROM WITHIN THE LICENSED AREA AND/OR CLEAN INERT IMPORTED EXCESS SOIL THAT MEETS THE ONTARIO REGULATION 406/19 (SEE NOTE #2, PAGE 2 OF 5)

AVAILABLE OVERBURDEN REPLACED WILL BE APPROXIMATELY 200mm THICK.

REFER TO DRAWING 4 OF 5, SECTIONS, FOR MORE INFORMATION ON BACKFILLING AND CREATION OF REHABILITATED SIDESLOPES.

NO.	DATE	REVISIONS	OWNED	HA	WAT	NO.	DATE	REVISIONS	OWNED	HA	WAT

Pre Licence Review Site Plan Amendments

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Project Name

TALBOT SAND AND GRAVEL

MACPHERSON PIT EXPANSION

PART LOT 6, CONCESSION 12
 MUNICIPALITY OF CENTRAL ELGIN
 (FORMERLY TOWNSHIP OF YARMOUTH), COUNTY OF ELGIN

Scale 1:2000 North Stamp

Drawing Status SUBMITTED FOR LICENCE APPROVAL

Drawn SB Checked BJ Issue Date OCT 2022

Drawing Title **REHABILITATION PLAN**

Project Number 20-03 Drawing Number **5 OF 5**