

OPERATIONS NOTES

GENERAL INFORMATION

1. 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 VARY WITH MATERIAL QUALITY, SITE HYDROLOGY AND HYDROGEOLOGY OR MARKET DEMAND. PHASES DO NOT REPRESENT ANY SPECIFIC OR EQUAL TIME PERIOD.  
  
EXTRACTION SHALL GENERALLY FOLLOW THE SEQUENCE SHOWN. WHEN PARTIAL REHABILITATION OF A PHASE IS POSSIBLE IT SHALL BE CARRIED OUT. NOT WITHSTANDING 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 MAJOR DEVIATIONS FROM THE OPERATIONS SEQUENCE SHOWN WILL REQUIRE APPROVAL FROM MNRF.
2. REFER TO DRAWING 1 OF 5, EXISTING FEATURES, FOR A DESCRIPTION OF EXISTING VEGETATION AND BUILDINGS WITHIN THE 120 METRE BOUNDARY AND ON SITE.
3. SITE PLAN OVERRIDES ARE LISTED IN THE SITE PLAN OVERRIDE TABLE SHOWN ON THIS PAGE.

RESOURCE INFORMATION

4. RESOURCE INFORMATION IS OBTAINED FROM REPORT BY GOLDER ASSOCIATES LTD, DATED FEBRUARY 2016.

EXTRACTION/PROCESSING/HAULING INFORMATION

5. TOTAL AREA TO BE EXTRACTED IS 21.2 HECTARES.
6. MAXIMUM NUMBER OF TONNES OF AGGREGATE TO BE REMOVED FROM THE SITE IN ANY CALENDAR YEAR IS 750,000 TONNES.
7. EXTRACTION OF SAND AND GRAVEL ABOVE WATER TABLE WILL TAKE PLACE IN ONE TO TWO BENCHES, WITH A MAXIMUM HEIGHT OF ±8 METRES. THE GROUNDWATER TABLE ESTIMATED TO BE ± 307.2 - 309.3m ABOVE SEA LEVEL (M.A.S.L.) (SEE HYDROGEOLOGICAL REPORT). EXTRACTION WILL BE BY FRONT END LOADERS AND AGGREGATE WILL BE TRANSPORTED BY TRUCK OR CONVEYOR TO THE PLANT IN ADJACENT LICENCE NO. 17346 FOR FURTHER PROCESSING AND SHIPPING. REFER TO SECTIONS A-A' AND B-B' ON DRAWING 3 OF 5 FOR FURTHER DETAILS.  
  
EQUIPMENT TO BE USED IN THE OPERATION OF THE PIT MAY INCLUDE TRUCKS, LOADERS, EXCAVATORS, BULLDOZERS, SCRAPERS, CONVEYORS AND OTHER RELATED EQUIPMENT.
8. EQUIPMENT, SCRAP AND MACHINERY ASSOCIATED WITH THE EXTRACTION OPERATIONS WILL BE REMOVED UPON COMPLETION OF EXTRACTION.

HYDROGEOLOGICAL INFORMATION

9. HYDROGEOLOGICAL INFORMATION INCLUDING GROUNDWATER ELEVATION WAS OBTAINED FROM REPORT BY GOLDER ASSOCIATES LTD, DATED APRIL 2021.
10. THE WATER TABLE ELEVATION WITHIN THESE PROPERTIES IS ESTIMATED TO BE BETWEEN ±307.2 - 309.3m ABOVE SEA LEVEL (M.A.S.L.) BASED ON THE HYDROGEOLOGICAL REPORT BY GOLDER ASSOCIATES, DATED APRIL 2021.
11. SURFACE DRAINAGE ON THE PIT FLOOR WILL BE DIRECTED TO LOW AREAS FOR WATER TO INFILTRATE INTO THE GRANULAR MATERIALS ON THE PIT FLOOR.

NOISE MITIGATION INFORMATION

12. HOURS OF OPERATION:  
SITE PREPARATION AND REHABILITATION: 07:00-18:00 WEEKDAYS;  
EXCAVATION: 07:00-18:00 WEEKDAYS;  
SHIPPING: 07:00-18:00 WEEKDAYS;  
  
ACTIVITIES ON SITE ON WEEKENDS SHALL BE LIMITED TO MAINTENANCE ONLY.

PHASE A  
SCALE 1:2000



PHASE A NOTES

1. PRIOR TO EXTRACTION COMMENCING IN AREA 1, CONSTRUCT AND UPGRADE THE FENCING ON PORTIONS OF THE LICENCED BOUNDARIES OF THE SITE TO THE STANDARDS OF THE AGGREGATE RESOURCES ACT (1.2m POST AND WIRE FENCE), EXCEPT WHERE SITE PLAN OVERRIDES ARE NOTED.  
  
INSTALL SILT FENCE AS SHOWN (REFER TO AIR QUALITY TECHNICAL RECOMMENDATIONS, PAGE 3 OF 5).
3. PRIOR TO EXTRACTION IN AREA 1, PREPARE THE SITE WITHIN AREA 1 BY REMOVING ALL EXISTING TREES AND SCRUB VEGETATION LOCATED IN THE AREA TO BE EXTRACTED. REFER TO OPERATIONAL NOTE #18 FOR DETAILS REGARDING TREE HARVESTING AND USE OF STUMPS/ WOODY MATERIAL DURING PROGRESSIVE REHABILITATION.
4. PRIOR TO EXTRACTION IN AREA 1, STRIP TOPSOIL AND OVERBURDEN SEPARATELY. USE MATERIAL TO CONSTRUCT ACOUSTIC BERM A. EXCESS MATERIAL SHALL BE STOCKPILED ON PIT FLOOR.
4. BEGIN EXTRACTION IN AREA 1 IN DIRECTION SHOWN.
5. AREA 2 AND 3 TO REMAIN IN AGRICULTURAL USE.

AIR QUALITY INFORMATION

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

SITE MANAGEMENT INFORMATION

14. MAINTENANCE/PROTECTION OF VEGETATION 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

15. BOUNDARIES OF THE AREA TO BE LICENCED THAT ARE PRESENTLY FENCED ARE SHOWN ON DRAWING 1 OF 5 EXISTING FEATURES. PRIOR TO ANY STRIPPING OR PREPARATION, FENCING ON THE LICENCED BOUNDARIES WILL BE UPGRADED TO 1.2m HIGH POST AND WIRE FENCE TO COMPLY WITH THE AGGREGATE RESOURCES ACT WHERE REQUIRED (EXCEPT WHERE SITE PLAN OVERRIDES ARE NOTED). HIGHLY VISIBLE AND SEPARATELY DISTINGUISHABLE 1.2m HIGH PAINTED MARKER POSTS WILL BE INSTALLED ALONG THE WEST SHARED BOUNDARY.

- SILT FENCE SHALL BE INSTALLED AT THE OUTSIDE TOE OF ALL BERMS AS THEY ARE CONSTRUCTED. ALL FENCING AND MARKER POSTS SHALL BE MAINTAINED.

TOPSOIL/SUBSOIL/OVERBURDEN STORAGE INFORMATION

16. TOPSOIL AND OVERBURDEN SHALL BE STRIPPED AND STORED SEPARATELY IN BERMS AND STOCKPILES, AS SHOWN. TOPSOIL BERMS SHALL BE GRADED TO STABLE SLOPES AND SEEDED WITH A GRASS/LEGUME MIXTURE TO PREVENT EROSION AND MINIMIZE DUST.

BERM INFORMATION

17. BERMS SHALL CREATE AN EFFECTIVE VISUAL OR ACOUSTICAL BARRIER TO A MINIMUM OF ±2.5 METRES ABOVE THE EXISTING GRADE. BERMS SHALL NOT EXCEED 2:1. REFER TO TYPICAL BERM CROSS SECTION ON DRAWING 3 OF 4 DETAILS AND SECTIONS. ALL BERMS SHALL BE SEEDED (USING GRASS/ LEGUME MIXTURE. SEE REHABILITATION PLAN, NOTE #7) IMMEDIATELY UPON COMPLETION.

- ON COMPLETION OF THE BERMS, EXCESS ON-SITE OVERBURDEN WILL BE USED TO PROGRESSIVELY BACKFILL AND REHABILITATE THE SITE.

SCRAP STORAGE INFORMATION

18. ALL SCRAP, USED MACHINERY AND STUMPS GENERATED THROUGH THE OPERATIONS WITHIN THIS LICENCE WILL BE REMOVED ON AN ONGOING BASIS. LOGS WILL BE UTILIZED FOR FIREWOOD OR THEIR BEST USE, STUMPS, LOGS AND OVERSIZE ROCK MAY REMAIN ON SITE FOR USE IN PROGRESSIVE REHABILITATION, UPON COMPLETION OF EXTRACTION, ALL SCRAP EQUIPMENT AND USED MACHINERY SHALL BE REMOVED.

PETROLEUM STORAGE INFORMATION

19. FUEL, OIL, RADIATOR AND HYDRAULIC 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, CLIMATE, AND PARKS' CHEMICAL STORAGE GUIDELINES. ALL REFUELING SHALL BE WITHIN A CONTAINMENT PAD AND ANY SPILL SHALL BE REMOVED AND DISPOSED OF AT AN APPROPRIATE MECF APPROVED FACILITY.

IMPORTATION OF TOPSOIL INFORMATION

20. IN ORDER TO MAXIMIZE RESOURCE RECOVERY, IMPORTATION OF CLEAN INERT FILL (EG. TOPSOIL AND/OR OVERBURDEN) MAY BE IMPORTED TO FACILITATE 3:1 SIDESLOPE REHABILITATION. ONLY SUFFICIENT MATERIAL TO CREATE FINAL GRADES AS SHOWN MAY BE IMPORTED.

- IMPORTED MATERIAL SHALL MEET THE MINISTRY OF ENVIRONMENT, CONSERVATION AND PARKS (MECP) REGULATIONS FOR IMPORTED FILL.

- SAMPLING AND TESTING OF ALL IMPORTED MATERIAL SHALL BE PERFORMED AT SOURCE PRIOR TO THE IMPORTATION OF MATERIAL ONTO THE LICENCED SITE BY A QUALIFIED PROFESSIONAL (QP) UNDER EPA. QP WILL ALSO DESIGN FILL MONITORING PROGRAM. RANDOM SAMPLING OF ALL IMPORTED MATERIAL SHALL BE CONDUCTED AT THE REQUEST OF MNRF.

- 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 MNRF OR MECF.

LEGEND

120m INFORMATION BOUNDARY

BOUNDARY OF AREA TO BE LICENCED

BOUNDARY OF EXISTING LICENCE

LIMIT OF EXTRACTION LINE

REGULATORY SETBACK LINE

EXISTING VEGETATION

BERM (MIN. HEIGHT AS SHOWN)

UNDISTURBED AREA

AREA STRIPPED OF TOPSOIL AND OVERBURDEN

EXTRACTION FACE

PRODUCT TRANSPORTATION

EXISTING ENTRANCE/ EXIT (LOCATION IS APPROXIMATE)

EXISTING BUILDING

• HP

EXISTING HYDRO POLE

DIRECTION OF TOPSOIL AND OVERBURDEN MOVEMENT

2

DIRECTION OF EXTRACTION

BH/ MW

BOREHOLE LOCATION AND NUMBER DRILLED AND MONITORING WELLS INSTALLED BY GOLDER ASSOCIATES LTD. JANUARY 2016

A

LOCATION OF SECTION

280  
275

EXISTING ELEVATION  
PROPOSED ELEVATION

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
FENCING IS OMITTED ALONG THE ENTIRE WEST BOUNDARY, ADJACENT LICENCED LANDS UNDER SAME LICENSEE, AND ALONG THE SOUTH BOUNDARY PER AGREEMENT WITH ADJACENT LICENSEE/LANDOWNER.	5.1
SETBACK IS REDUCED TO 0m ALONG WEST BOUNDARY, ADJACENT LICENCED LANDS UNDER SAME LICENSEE AND ALONG THE SOUTH BOUNDARY PER AGREEMENT WITH ADJACENT LICENSEE/LANDOWNER.	5.10.1
GATE OMITTED BETWEEN THE SITE AND ADJACENT LICENCE. ADJACENT LICENCED LANDS UNDER THE SAME LICENSEE.	5.2
STOCKPILES MAY BE LOCATED WITHIN 30m OF THE WEST BOUNDARY, ADJACENT PIT IS SAME LICENSEE.	5.13.1

NO. DATE REVISIONS OWNER HM MM	NO. DATE REVISIONS OWNER HM MM

Pre Licence Review

Site Plan Amendments

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DANCE PIT EXTENSION

LICENCE No.  
PART LOT 14 & 15, CONCESSION 10  
TOWNSHIP OF NORTH DUMFRIES,  
REGIONAL MUNICIPALITY OF WATERLOO

Scale 1:2000

North

Stamp

Drawing Status

ISSUED TO MNRF  
FOR APPROVAL

Drawn A.C./S.B.

Checked G.D.H./R.M

Issue Date MAY 2021

Drawing Title

OPERATIONAL  
PLAN  
PHASE A

Project Number

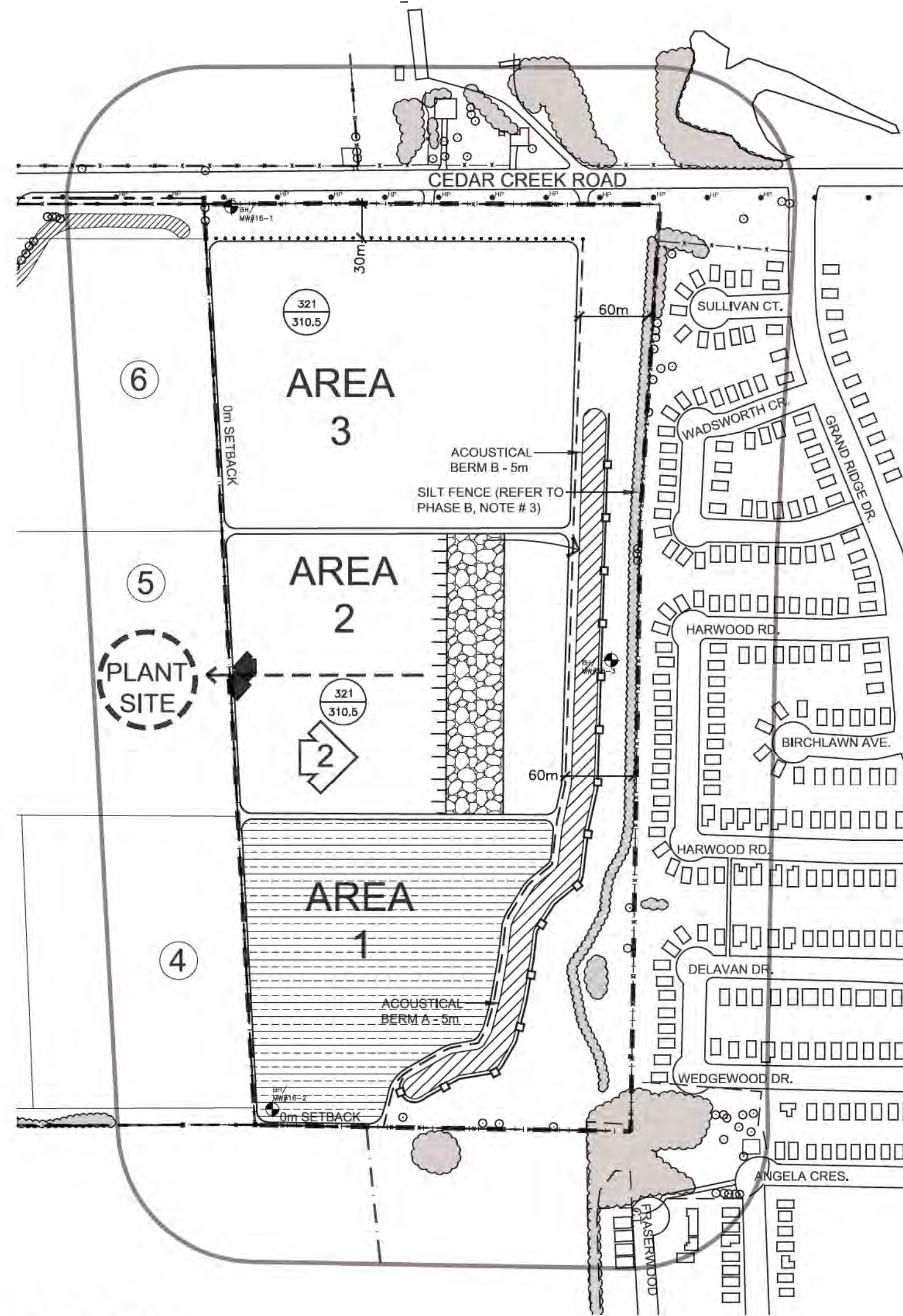
12-10

Drawing Number

2 OF 5

FILE NAME: 12-10/COMP/1210-2.DWG  
PLOT DATE: MAY 11, 2021





## PHASE B

### PHASE B NOTES

1. COMPLETE EXTRACTION IN AREA 1.
2. PREPARE SITE WITHIN AREA 2 BY REMOVING ALL EXISTING TREES AND SCRUB VEGETATION LOCATED IN THE AREA TO BE EXTRACTED.
3. BEGIN STRIPPING TOPSOIL AND OVERBURDEN SEPARATELY FROM AREA 2 AND USE THE MATERIAL TO CONSTRUCT ACOUSTIC BERM B (EXTENSION OF BERM A) AS SHOWN. EXCESS MATERIAL SHALL BE USED TO BEGIN PROGRESSIVE REHABILITATION OF AREA 1. INSTALL SILT FENCE AS SHOWN (SEE AIR QUALITY TECHNICAL RECOMMENDATIONS, THIS PAGE).
4. BEGIN PROGRESSIVE REHABILITATION OF AREA 1 USING MATERIAL STOCKPILED ON PIT FLOOR.
5. BEGIN EXTRACTION IN AREA 2, IN DIRECTION SHOWN.
6. AREA 3 TO REMAIN IN AGRICULTURAL USE.



## PHASE C

### PHASE C NOTES

1. COMPLETE EXTRACTION IN AREA 2.
2. PREPARE SITE WITHIN AREA 3 BY REMOVING ALL EXISTING TREES AND SCRUB VEGETATION LOCATED IN THE AREA TO BE EXTRACTED.
3. BEGIN STRIPPING TOPSOIL AND OVERBURDEN SEPARATELY FROM AREA 3 AND USE TO CONSTRUCT ACOUSTIC BERM C (EXTENSION OF BERM B) AND CONTINUE PROGRESSIVE REHABILITATION OF AREA 1. INSTALL SILT FENCE AS SHOWN (SEE AIR QUALITY TECHNICAL RECOMMENDATIONS, THIS PAGE).
4. COMPLETE PROGRESSIVE REHABILITATION OF AREA 1 AND BEGIN PROGRESSIVE REHABILITATION OF AREA 2 USING MATERIAL STOCKPILED ON PIT FLOOR.
5. BEGIN EXTRACTION IN AREA 3, IN DIRECTION SHOWN.

## PHASE D

### PHASE D NOTES

1. COMPLETE EXTRACTION IN AREA 3.
2. BEGIN PROGRESSIVE REHABILITATION OF AREA 3 USING MATERIAL FROM ACOUSTIC BERM C AND D.
3. COMPLETE REHABILITATION OF ALL REMAINING AREAS (INCLUDING ALL INTERNAL HAUL ROADS) USING TOPSOIL AND OVERBURDEN STOCKPILED IN BERMS.
4. RETURN SITE TO AGRICULTURE.

## TECHNICAL RECOMMENDATIONS

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

ARCHAEOLOGICAL ASSESSMENT - GOLDER ASSOCIATES - SEPTEMBER 2017  
SHOULD DEEPLY BURIED ARCHAEOLOGICAL RESOURCES BE IDENTIFIED DURING GROUND DISTURBANCE ACTIVITY ASSOCIATED WITH FUTURE DEVELOPMENT OF THE SITE, GROUND DISTURBANCE ACTIVITIES SHOULD BE IMMEDIATELY HALTED AND THE ARCHAEOLOGY DIVISION OF THE CULTURE PROGRAMS UNIT OF THE MTCS NOTIFIED.

SHOULD PREVIOUSLY UNDOCUMENTED 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 OR HAVING KNOWLEDGE OF A BURIAL SITE SHALL IMMEDIATELY NOTIFY THE POLICE OR CORONER. IT IS RECOMMENDED THAT THE REGISTRAR OF CEMETERIES AT THE MINISTRY OF CONSUMER SERVICES IS ALSO IMMEDIATELY NOTIFIED.

### WATER RESOURCES ASSESSMENT - GOLDER ASSOCIATES - APRIL 2021

1. QUARTERLY GROUNDWATER LEVEL MONITORING SHALL BE CARRIED OUT ON MONITORING WELLS BH16-1, BH16-2, AND BH16-3 TO MONITOR GROUNDWATER FLUCTUATIONS AND CONFIRM THE HIGH GROUNDWATER TABLE IN ORDER TO ENSURE MAXIMUM DEPTH OF EXTRACTION IS AT LEAST 1.5m ABOVE THE WATER TABLE ON THE PROPERTY IN ACCORDANCE WITH THE WATER RESOURCE ASSESSMENT REPORT (GOLDER, 2020).
2. ANNUAL WATER QUALITY MONITORING SHALL TAKE PLACE IN MONITORING WELLS BH16-1, BH16-2 AND BH16-3 DURING OPERATIONS, AND UP TO THE POINT OF LICENCE SURRENDER, FOR THE FOLLOWING PARAMETERS: GENERAL INORGANICS, METALS AND BENZENE, TOLUENE, ETHYLBENZENE AND XYLENE (BTEX).
3. WATER LEVEL AND QUALITY MONITORING SHALL BE DOCUMENTED IN AN ANNUAL REPORT BY A QUALIFIED PROFESSIONAL AND BE AVAILABLE FOR REVIEW UPON REQUEST.

### NOISE IMPACT ASSESSMENT - GOLDER ASSOCIATES - MARCH 2021

1. THE IDENTIFIED BERMS WILL BE INSTALLED PRIOR TO EXTRACTION IN AREAS 1, 2, AND 3:
  - a) BERM A SHALL BE INSTALLED ALONG THE SOUTH BORDER OF AREA 1 AND ALONG THE EAST BORDER OF AREA 1 AND 2, WITH A MINIMUM HEIGHT OF 5m ABOVE EXISTING GRADE, PRIOR TO EXTRACTION IN AREA 1.
  - b) BERM B SHALL BE INSTALLED ALONG THE EAST BORDER OF AREAS 2 AND PARTIALLY AREA 3, WITH A MINIMUM HEIGHT OF 5m ABOVE EXISTING GRADE, PRIOR TO EXTRACTION IN AREA 2. THIS IS AN EXTENSION OF BERM A.
  - c) BERM C SHALL BE INSTALLED ALONG THE EAST BORDER OF AREA 3 WITH A MINIMUM HEIGHT OF 5m ABOVE EXISTING GRADE, PRIOR TO EXTRACTION AREA 3. THIS IS AN EXTENSION OF BERM B.
  - d) BERM D WILL BE INSTALLED ALONG THE NORTH BORDER OF NORTH LIMIT OF EXTRACTION WITH A MINIMUM HEIGHT OF 3m ABOVE EXISTING GRADE, PRIOR TO EXTRACTION IN AREA 3.
2. ONCE INSTALLED, BARRIERS SHALL REMAIN THROUGHOUT THE COMPLETION OF EXTRACTION OF THE EXTENSION LANDS.
3. LOCAL BARRIERS, OR ACOUSTICALLY EQUIVALENT SOURCE TREATMENT REDUCING NOISE LEVELS OF THE CRUSHING/SCREENING PLANT TO 55 dBA WHEN MEASURED AT A DISTANCE OF 100 m (IN THE DIRECTION OF FORTS) SHALL BE INSTALLED.
4. ALTERNATIVE EQUIPMENT/OPERATIONS CAN BE CONSIDERED IF ASSESSED BY AN ACOUSTICAL CONSULTANT AND SHOWN TO MEET THE APPLICABLE NOISE LIMITS.

### NATURAL ENVIRONMENT REPORT - GOLDER ASSOCIATES - APRIL 2021

1. GROUNDWATER LEVEL MONITORING, AS DESCRIBED IN THE MAXIMUM PREDICTED WATER TABLE REPORT (GOLDER 2021), WILL BE IMPLEMENTED; AND

2. THE SITE WILL BE REHABILITATED IN ACCORDANCE WITH THE REQUIREMENTS OF THE REHABILITATION PLAN RETURNING THE SITE PRIMARILY TO AGRICULTURAL USE.

### AIR QUALITY IMPACT ASSESSMENT - GOLDER ASSOCIATES - DECEMBER 2018

1. NO PROCESSING EQUIPMENT SHALL BE LOCATED ON THE EXPANSION LAND AND/OR NO STOCKPILING OF EXTRACTED MATERIALS.
2. WATER, OR SIMILAR DUST SUPPRESSANT WILL BE APPLIED TO ROADS IN THE EXPANSION AREA ON OPERATIONAL DAYS, AFTER 24-HOUR PERIODS OF NO PRECIPITATION.
3. A SILT FENCE WILL BE INSTALLED AT THE TOE OF THE BERM TO BE INSTALLED IN THE EXPANSION AREA.
4. A SPEED LIMIT OF 25 km PER HOUR WILL BE IMPOSED ON ROADS IN THE EXPANSION AREA.

## LEGEND

- 120m INFORMATION BOUNDARY  
BOUNDARY OF AREA TO BE LICENSED  
BOUNDARY OF EXISTING LICENCE  
LIMIT OF EXTRACTION LINE  
REGULATORY SETBACK LINE
- EXISTING VEGETATION  
BERM (MIN. HEIGHT AS SHOWN)  
UNDISTURBED AREA  
AREA STRIPPED OF TOPSOIL AND OVERBURDEN  
EXTRACTION FACE  
AREA UNDER REHABILITATION  
REHABILITATION COMPLETE  
PRODUCT TRANSPORTATION
- EXISTING BUILDING  
HP  
EXISTING HYDRO POLE  
DIRECTION OF TOPSOIL AND OVERBURDEN MOVEMENT  
DIRECTION OF EXTRACTION  
EXISTING ENTRANCE/ EXIT  
EXISTING ELEVATION  
PROPOSED ELEVATION

NO.	DATE	REVISIONS	OWNER	JM	MM

NO.	DATE	REVISIONS	OWNER	JM	MM

Pre Licence Review

Site Plan Amendments



Project Name

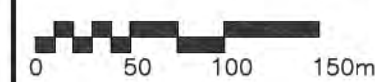


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## DANCE PIT EXTENSION

LICENCE No.  
PART LOT 14 & 15, CONCESSION 10  
TOWNSHIP OF NORTH DUMFRIES,  
REGIONAL MUNICIPALITY OF WATERLOO

Scale 1:4000



North



Stamp



Drawing Status

ISSUED TO MNRF  
FOR APPROVAL

Drawn A.C./S.B.

Checked G.D.H./R.M.

Issue Date MAY 2021

Drawing Title

OPERATIONAL  
PLAN  
PHASE B - D

Project Number

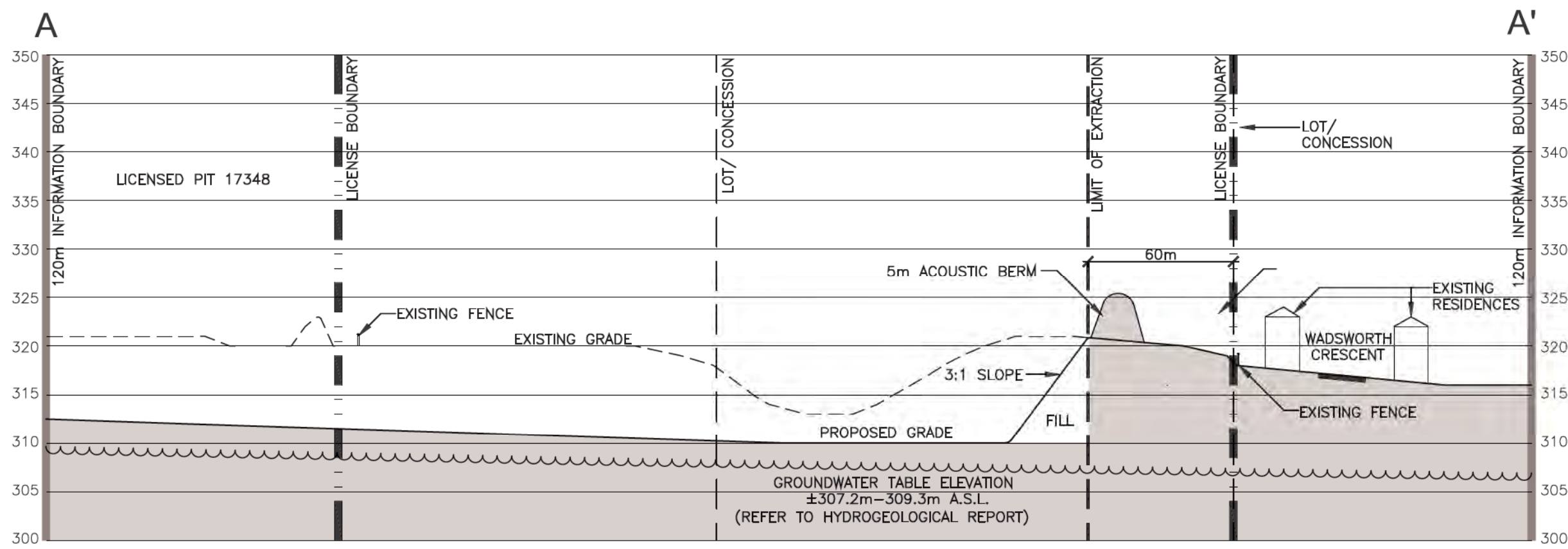
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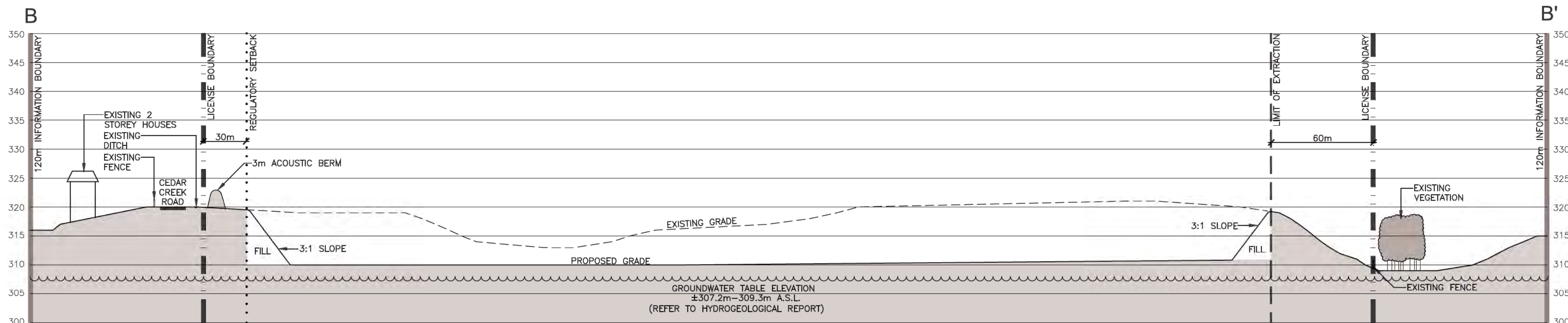
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PLOT DATE: MAY 11, 2021

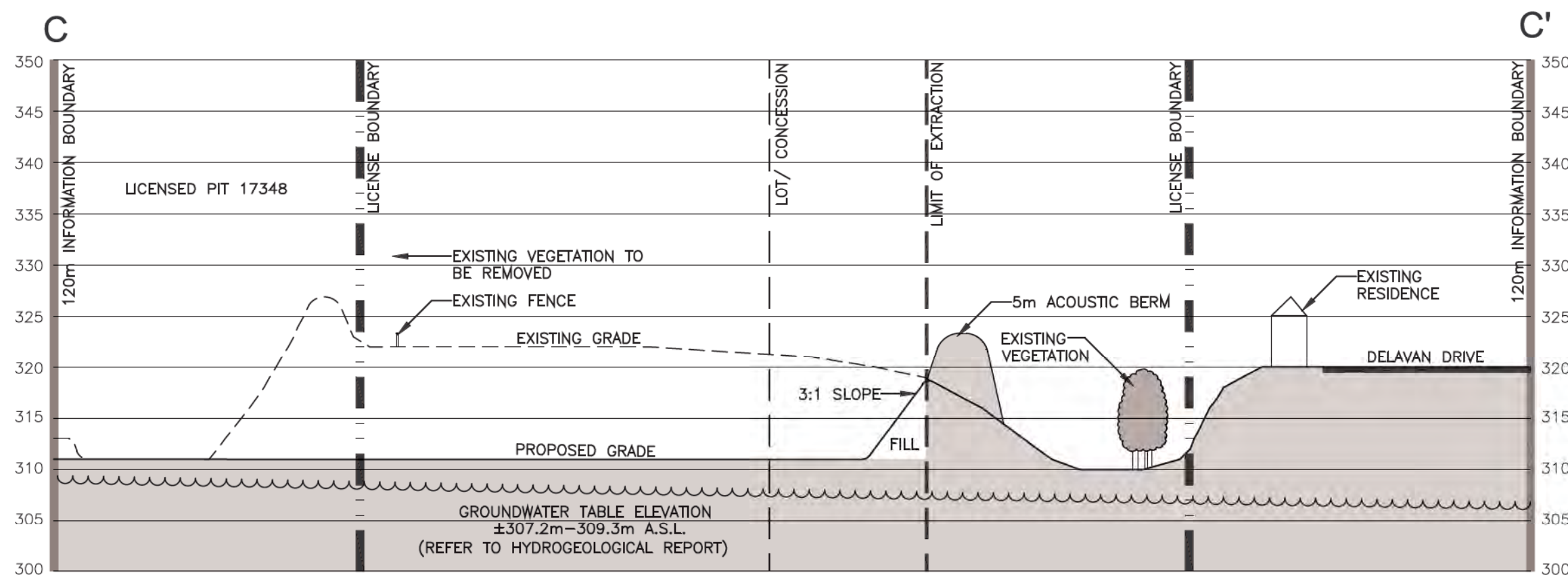




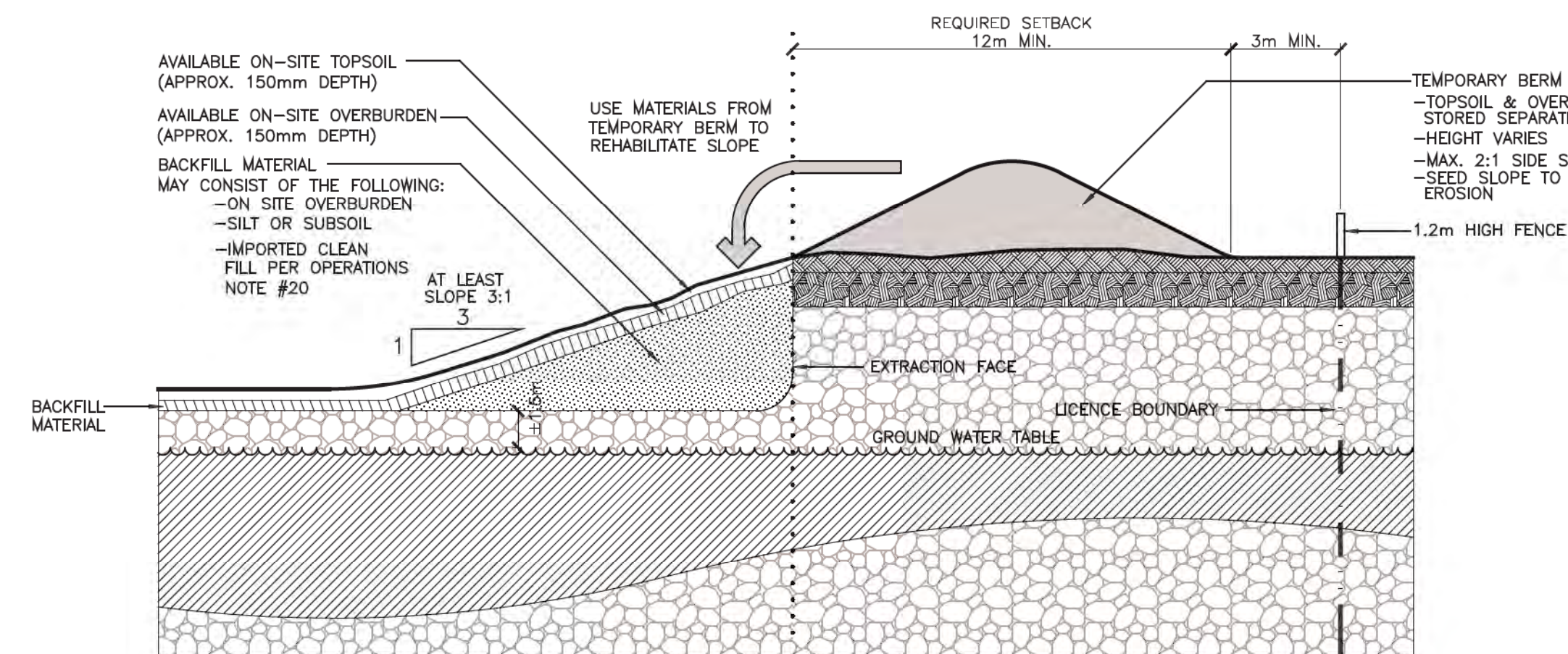
SECTION A-A' VERTICAL SCALE 1:500  
HORIZONTAL SCALE 1:2000



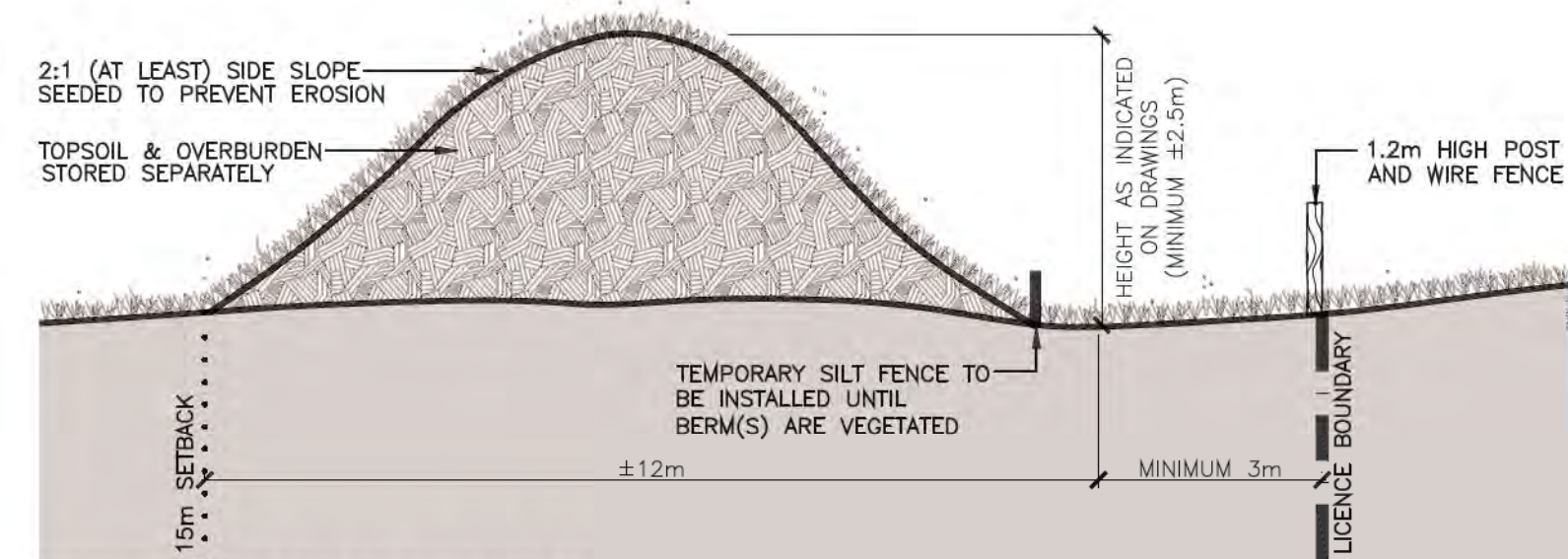
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HORIZONTAL SCALE 1:2000



SECTION C-C' VERTICAL SCALE 1:500  
HORIZONTAL SCALE 1:2000

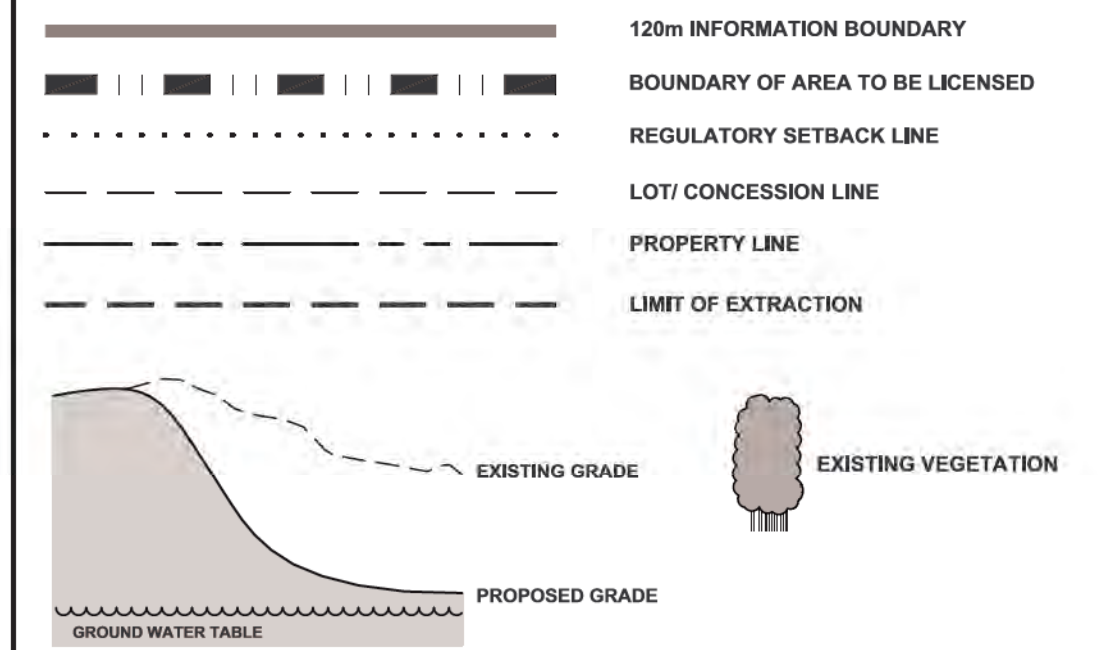


TYPICAL SIDESLOPE REHABILITATION BY BACKFILLING N.T.S.



TYPICAL BERM SECTION N.T.S.

## LEGEND



## SECTION NOTES GENERAL INFORMATION

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

NO.	DATE	REVISIONS	OWNER	HM	MM

NO.	DATE	REVISIONS	OWNER	HM	MM

Pre Licence Review

Site Plan Amendments



Project Name



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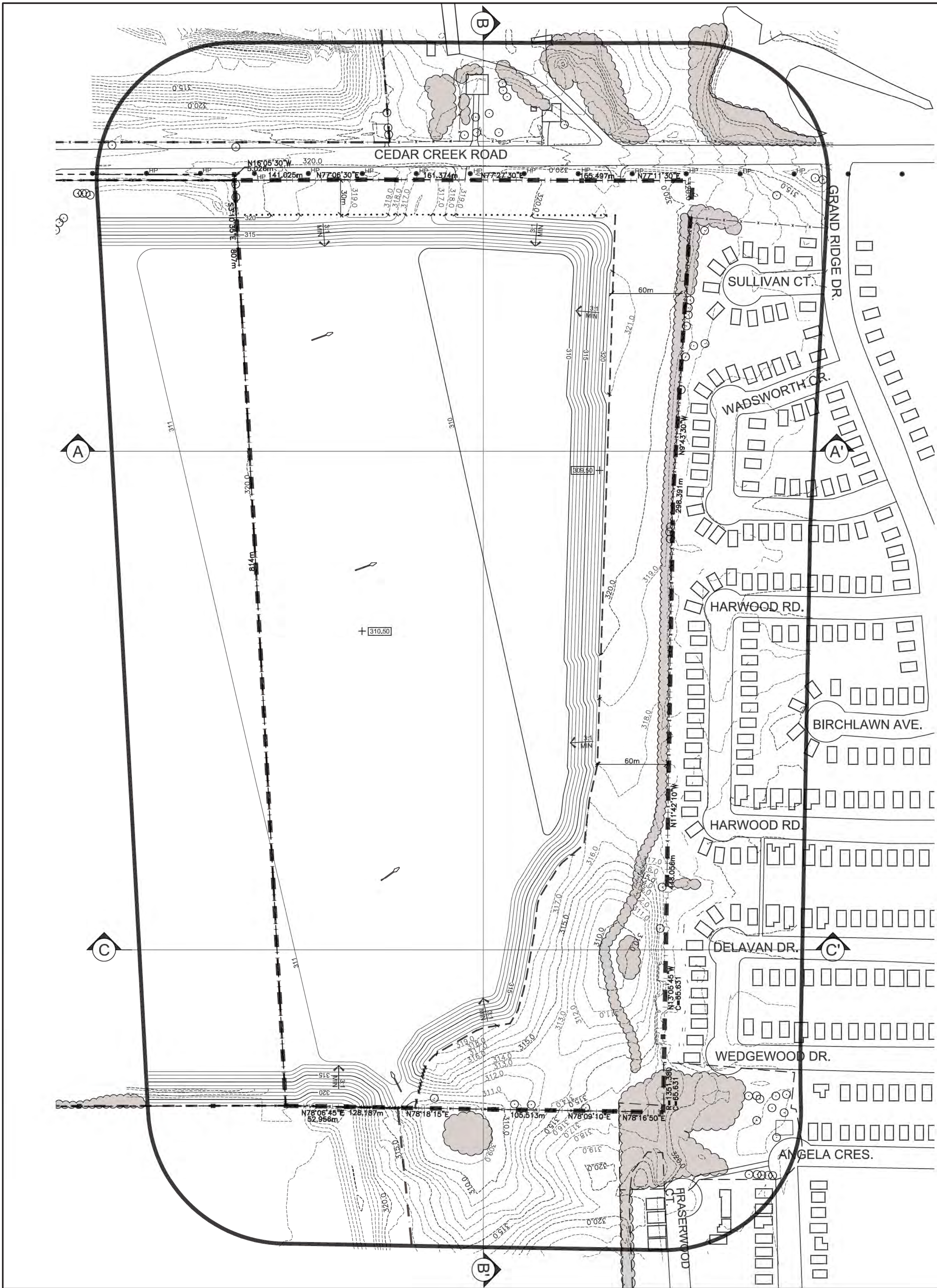
## DANCE PIT EXTENSION

LICENCE No.  
PART LOT 14 & 15, CONCESSION 10  
TOWNSHIP OF NORTH DUMFRIES,  
REGIONAL MUNICIPALITY OF WATERLOO

Scale	AS SHOWN	North	Stamp
Drawing Status	ISSUED TO MNRF FOR APPROVAL		
Drawn	S.B./ A.C.	Checked	G.D.H./R.M.
Issue Date	MAY 2021	Project Number	12-10
Drawing Title	SECTIONS AND DETAILS	Drawing Number	4 OF 5

FILE NAME: 12-10/COMP/1210-4.DWG  
PLOT DATE: MAY 11, 2021





REHABILITATION NOTES

GENERAL INFORMATION

1. REFER TO SHEET 4 OF 5 FOR SECTIONS, SHEETS 2 & 3 OF 5 FOR OPERATIONS AND PHASING DIAGRAMS AND NOTES AND SHEET 5 OF 5 FOR FINAL REHABILITATION AND NOTES.
2. PROPERTY SHALL BE REHABILITATED TO:  
AGRICULTURE  
TOTAL REHABILITATION 21.2 HECTARES  
21.2 HECTARES

HYDROGEOLOGICAL INFORMATION

3. IT IS ANTICIPATED THAT THE GROUNDWATER ELEVATION ACROSS THE SITE WILL REMAIN RELATIVELY UNCHANGED AT 307.2 - 309.3m MASL (REFER TO WATER RESOURCE ASSESSMENT REPORT BY GOLDER ASSOCIATES LTD., DATED APRIL 2021).
4. ALL SURFACE DRAINAGE WILL BE DIRECTED TO THE LOW AREAS REMAINING ON THE PIT FLOOR SO THAT THE WATER CAN INFILTRATE INTO THE SOILS.

SIDESLOPE/MEADOW REHABILITATION INFORMATION

GRADING INFORMATION

5. REHABILITATED SLOPES WITHIN THE LICENCED AREA WILL BE CONSTRUCTED AS SHOWN ON THE CROSS SECTIONS. SLOPES SHALL BE REHABILITATED BY BACKFILLING (MINIMUM 3:1) AND/OR CUT AND FILL METHOD USING AVAILABLE ON-SITE OVERBURDEN AND TOPSOIL AND/OR CLEAN INERT IMPORTED FILL PER OPERATIONAL NOTE 20, PAGE 2. SIDESLOPES MAY BE FLATTENED TO INCREASE AGRICULTURAL VIABILITY.
- REFER TO DRAWING 4 OF 5, SECTIONS AND DETAILS, FOR MORE INFORMATION ON BACKFILLING AND CREATION OF REHABILITATED SIDESLOPES.

TOPSOILING INFORMATION

6. ALL AVAILABLE TOPSOIL ON THE SITE WILL REMAIN TO BE USED FOR REHABILITATION OF THIS SITE.

VEGETATION STABILIZATION INFORMATION

7. TOPSOIL SHALL BE SEEDED WITH A MIXTURE OF GRASSES AND LEGUMES THAT MAY INCLUDE THE FOLLOWING AT A RATE OF APPROXIMATELY 125 kg/HA:  
BUCKWHEAT RED CLOVER WHITE CLOVER  
TALL FESCUE ANNUAL RYE

REHABILITATING TO AGRICULTURAL FIELDS INFORMATION

8. AREAS SHALL BE REHABILITATED BACK TO AGRICULTURE AS FOLLOWS:  
- DEEP RIPPING OF AREA TO ELIMINATE COMPACTION (WHERE REQUIRED)  
- SPREADING OF APPROXIMATELY 200mm OF OVERBURDEN AND ROUGH GRADING  
- SPREADING OF APPROXIMATELY 200-300mm OF TOPSOIL AND FINE GRADING  
- SEED AREAS WITH SEED MIXTURE NOTED ABOVE. ALL VEGETATION PLANTED DURING THIS LICENSE WILL BE MAINTAINED IN A HEALTHY, VIGOROUS GROWING CONDITION.  
- USE OF ACCEPTED FARMING PRACTICES TO RESTORE AND MAINTAIN VEGETATION

FINAL REHABILITATION INFORMATION

9. UPON COMPLETION OF EXTRACTION, ALL SCRAP AND EQUIPMENT SHALL BE REMOVED FROM THE SITE. ALL INTERNAL HAUL ROADS SHALL BE REHABILITATED ONCE NO LONGER IN USE FOR EXTRACTION RELATED ACTIVITIES.

LEGEND

- 120m INFORMATION BOUNDARY  
BOUNDARY OF AREA TO BE LICENSED  
BOUNDARY OF AREA TO BE LICENSED  
REGULATORY SETBACK LINE  
LOT/ CONCESSION LINE  
PROPERTY LINE  
LIMIT OF EXTRACTION

- EXISTING VEGETATION  
EXISTING 1m CONTOUR LINE  
EXISTING 1m CONTOUR LINE  
PROPOSED 1m CONTOUR LINE  
PROPOSED 1m CONTOUR LINE  
DIRECTION OF SURFACE WATER DRAINAGE  
EXISTING BUILDING  
HP  
DIRECTION OF SURFACE WATER DRAINAGE

NO.	DATE	REVISIONS	OWNER	JM	MM

NO.	DATE	REVISIONS	OWNER	JM	MM

Pre Licence Review

Site Plan Amendments



Project Name

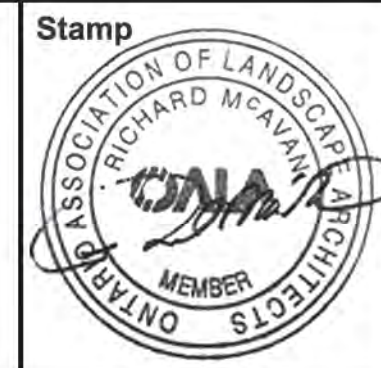
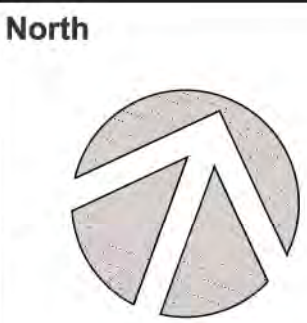


St. Marys Cement Inc. (Canada)  
55 Industrial Street  
Toronto, Ontario  
M4G 3W9  
(416) 423-1300

DANCE PIT EXTENSION

LICENCE No.  
PART LOT 14 & 15, CONCESSION 10  
TOWNSHIP OF NORTH DUMFRIES,  
REGIONAL MUNICIPALITY OF WATERLOO

Scale 1:2000  
0 10 50 80m



Drawing Status  
ISSUED TO MNRF  
FOR APPROVAL

Drawn A.C./S.B.

Checked G.D.H./R.M.

Issue Date MAY 2021

Drawing Title

REHABILITATION  
PLAN

Project Number

12-10

Drawing Number

5 OF 5