

STOCKPILE DATA

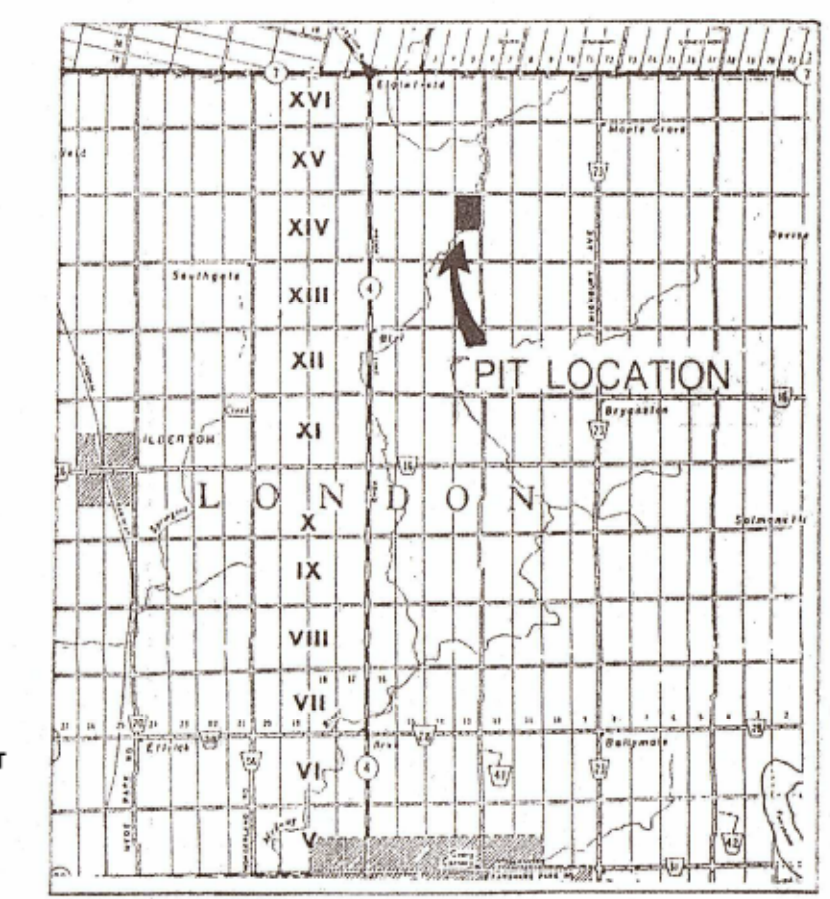
No.	Material	Dimensions (m)
1	Pit Material	52W x 62.0L x 1.6H
2	6" Pit Run	20.0W x 36.0L x 3.9H
3	Excavator Mat	25.0W x 55.0L x 9.3H
4	Clear Stone	15.0W x 12.0L x 2.3H
5	Bedding Sand	22.0W x 16.0L x 9.3H

WELL DATA

No.	Location	Type	Top Elevation	Bottom Elevation	Static Level	MOEE Well Ref
1	As shown on plan	Drilled	298.7	294.4	295.0	2444
2	As shown on plan	Drilled	297.2	240.2	242.2	2427
3	As shown on plan	Drilled	297.5	223.1	239.9	4105906
4	As shown on plan	Drilled	300.2	231.0	239.3	2428
5	As shown on plan	Drilled	292.6	199.6	233.5	4109244
6	240 m N. of Conc. 14/15 Rd. 46 m E. of Lot 13/14 Lotline	Drilled	296.3	229.8	246.0	4107823
7	As shown on plan	Drilled	294.4	287.7	291.1	4104550
8	As shown on plan	Drilled	298.4	—	288.6	—
9	As shown on plan	Drilled	298.8	—	292.8	—

GENERAL NOTES

- SITE PLANS**
THIS SITE PLAN WAS PREPARED FOR SUBMISSION TO THE MINISTRY OF NATURAL RESOURCES AND FORESTRY IN CONJUNCTION WITH A CLASS A LICENCE UPDATE UNDER THE AGGREGATE RESOURCES ACT.
- LICENSEE:**
McCANN REDI-MIX
69478 Bronson Line
R.R.#3
Dashwood, Ontario
- TOPOGRAPHY**
THE TOPOGRAPHY OF THE EXISTING SITE WAS DETERMINED FROM MNR 1978 PHOTOGRAPHY AND FIELD SURVEYS COMPLETED IN APRIL, 1987 AND SEPTEMBER, 1987 BY HURON-MIDDLESEX ENGINEERING LTD. THE 1978 DETAIL WAS REVISED TO REFLECT PRESENT CONDITIONS. ALL EXISTING DETAIL WITHIN 150m OF THE PIT BOUNDARY ARE SHOWN.
- ELEVATIONS**
ALL ELEVATIONS AND CONTOURS SHOWN ARE GEODETIC AND ARE REFERENCED TO THE BENCHMARK # 76-8067 (BRASS CAPPED ROD, EAST SIDE OF HWY 4, 7 km NORTH OF CONCESSION ROAD 13, APPROX 90m SOUTH OF DRIVEWAY).
- LICENCE AREA**
AREA OF LICENCE: 40.5 HA
AREA TO BE EXTRACTED: 28.7 HA
PREVIOUSLY DISTURBED AREA: 4.0 HA
- ZONING**
THE OWNERSHIP, ZONING, AND USE OF THE ADJACENT PROPERTIES IS AS NOTED. THE PRESENT ZONING OF THE SITE IS EXTRACTIVE INDUSTRIAL (M4) WHICH ALLOWS USE AS A GRAVEL PIT.
- BUILDINGS**
THE EXISTING BARN ON THE SITE SHALL REMAIN AND SHALL BE USED FOR AN ACCESSORY USE TO THE EXTRACTION OPERATIONS.
- FENCING**
ALL BOUNDARIES ARE PRESENTLY FENCED AND IN ACCORDANCE WITH THE ACT WITH THE EXCEPTION OF THE SOUTHEAST CORNER OF THE SITE.
- WATER LEVEL**
GROUNDWATER ELEVATION VARIES ACROSS THE SITE FROM 285.95 TO 290.96 m ASL, DURING THE HYDROLOGIC HIGH PER HYDROGEOLOGICAL REPORT BY NOVATERRA ENVIRONMENTAL LTD., DATED APRIL 2024.
- SOILS INFORMATION**
SOILS INFORMATION IS CONTAINED IN A CONFIDENTIAL "REPORT OF SOILS INVESTIGATION TO APPRAISE DEPOSIT, LOT 13, CONCESSION 14, TOWNSHIP OF LONDON", PREPARED BY ATKINSON DAVIES INC., CONSULTING ENGINEERS, REF. 1-0855, DATED AUGUST 31, 1987.



KEY PLAN
SCALE 1 : 200 000
LICENCE No. 2191

- LEGEND**
- LOT AND CONCESSION LINES
 - SPOT ELEVATION
 - CONTOUR LINES
 - EXISTING DITCH
 - EXISTING PIT FACES
 - OPEN DITCH
 - FENCE
 - ENTRANCE & EXIT GATE
 - MUNICIPAL ROADS
 - OTHER ROADS (PRIVATE)
 - EXISTING TREES/BUSH (D-DECIDUOUS) (C-CONIFEROUS)
 - EXISTING BUILDING & STRUCTURES
 - BOUNDARY OF LICENCE AREA
 - LOCATION OF WATER MONITORING PIZOMETERS
 - WELL (DEPTH TO WATER TABLE)
 - UTILITY POLE AND WELL No.
 - STOCK PILE
 - LOW RUN
 - SURFACE DRAINAGE PATTERN
 - U.T.R.C.A. REG. FILL LINES

REFERENCES

- HYDROGEOLOGICAL ASSESSMENT BY NOVATERRA ENVIRONMENTAL LTD., DATED JUNE 2024
- NATURAL ENVIRONMENT ASSESSMENT BY TERRASTORY ENVIRONMENTAL CONSULTING INC., DATED JUNE 2024
- MEDWAY CREEK CHANNEL REALIGNMENT DESIGN BRIEF DATED APRIL 2024 AND STANLEY PIT NATURAL CHANNEL RELOCATION DRAWINGS DATED MAY 3, 2024 BY GRECK AND ASSOCIATES LTD.
- DEPARTMENT OF FISHERIES AND OCEANS LETTER, DATED DECEMBER 11, 2023.

HM AMENDMENT BOX

1.	UPDATED LICENSEE INFORMATION AND LEDGIBILITY OF PLAN, UPDATED HYDROGEOLOGICAL INFORMATION.	JULY 2024	SB
No.	Revision	Date	Initial
Revisions made by Harrington McAvan Ltd. dating from FEB 2024 only.			

Harrington McAvan Ltd
41 Main Street, Unit 102
Uxbridge, Ontario L3R 2E5
Tel: 905-294-8292 Fax: 905-294-7823
www.harringtonmcavan.com

SITE PLAN AMENDMENTS

NO	DESCRIPTION	DATE	BY
1	DESIGNED: RTM		
2	DRAWN: CAH/RTM		
3	CHECKED: RTM		
4	APPROVED: DWP		
5	DATE: 23 DEC. 1981		

Huron-Middlesex Engineering Ltd.
ORIGINAL PLAN STAMPED BY D.W. PLETCH

McCANN REDI-MIX
69478 Bronson Line
R.R.#3
Dashwood, Ontario

SCALE
1 : 2000

EXISTING FEATURES
STANLEY PIT
NORTH HALF LOT, 13, CONCESSION 14
MUNICIPALITY OF MIDDLESEX CENTRE
(FORMERLY TOWNSHIP OF LONDON),
COUNTY OF MIDDLESEX

PROJECT NO.
93-16
SHEET NO.
1 OF 4
PLAN FILE NO.
0CT 25 1994

SPILLS PLAN

In case of an accidental spill of petroleum products, the following contingency plan will be activated:

- a) The Ministry of Environment (See address & phone number below) and surrounding landowners will be notified.
b) For a leakage or spill immediate action will be taken to stop it. At the same time measures will be taken to prevent spreading. These measures may include building or a berm or construction of a ditch, for instance.
c) The pit operator shall commence recovery procedures by collecting the spilled substance into containers.
d) The soil in the area affected by the spill or leak shall be removed and disposed of at a location prescribed by the Ministry of the Environment.

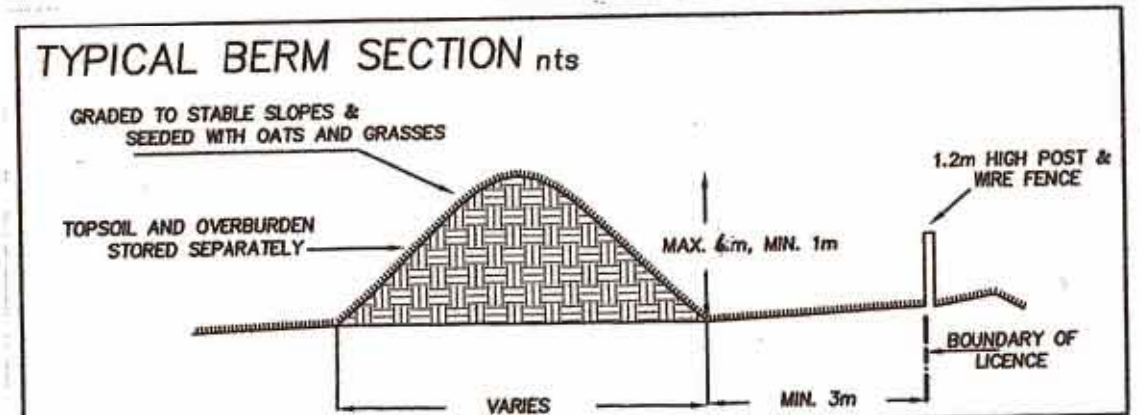
Ministry of Environment/Southeast Regional Office
733 Exeter Road, 2nd Floor
London, Ontario, N6E 1L3
Spills Action Centre: 1-800-268-6060

SITE PLAN OVERRIDES UNDER OPERATIONAL STANDARDS

Table with 2 columns: DESCRIPTION, SECTION. Includes entries for fencing on the east part of the south boundary, below water slopes and shoreline zones, and east boundary fence location.

LEGEND

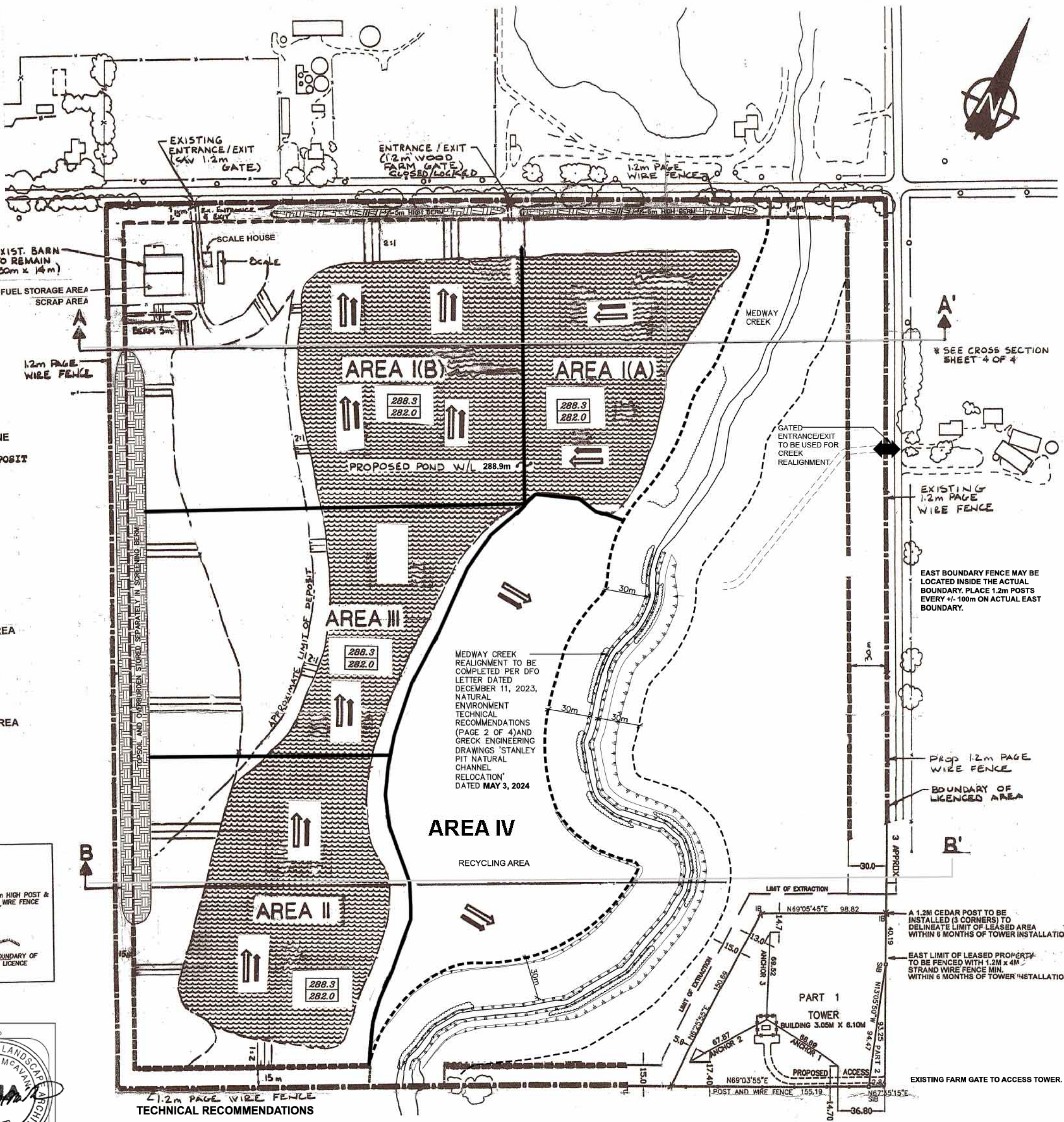
- LOT AND CONVESSION LINES
UTRCA REGULATORY FILL LINE
APPROXIMATE LIMIT OF DEPOSIT
FENCE
ENTRANCE & EXIT GATE
MUNICIPAL ROADS
OTHER ROADS (PRIVATE)
EXISTING TREES/BUSH (D-DECIDUOUS) (S-CONIFEROUS)
EXISTING BUILDING & STRUCTURES
BOUNDARY OF LICENSED AREA
LIMITS OF EXTRACTION
EXTRACTION SLOPES
UTILITY POLES
BELOW WATER EXTRACTION AREA



HM AMENDMENT BOX table with columns for No., Revision, Date, Initial. Includes a stamp from the Association of Landowners Ontario.

Harrington McAvan Ltd logo and contact information.

Table with columns: NO, SITE PLAN AMENDMENTS, DATE, BY. Lists various amendments to the site plan.



TECHNICAL RECOMMENDATIONS

NATURAL ENVIRONMENT REPORT BY TERRASTORY ENVIRONMENTAL CONSULTING, DATED JULY 2024

- SIGNIFICANT WILDLIFE HABITAT
1. NATIVE WILDFLOWERS AND MILKWEED SPECIES WILL BE INCLUDED AS PART OF THE SEED MIX FOR THE REALIGNED MEDWAY CREEK RIPARIAN AREA.
2. A SURVEY FOR TURTLES WILL BE UNDERTAKEN CONCURRENTLY WITH THE FISH RESCUE PRIOR TO REALIGNMENT OF MEDWAY CREEK UNDER THE AUTHORITY OF A WILDLIFE SCIENTIFIC COLLECTOR'S AUTHORIZATION ISSUED BY MNRF.
3. ANY TURTLES ENCOUNTERED WILL BE RELOCATED TO SUITABLE HABITAT UPSTREAM OR DOWNSTREAM OF THE MEDWAY CREEK REALIGNMENT AREA.
4. 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).
5. ANY NECESSARY REMOVAL OF NATURAL 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).
6. MEDWAY CREEK REALIGNMENT AND FISH HABITAT
7. ALL EXTRACTION, OPERATIONAL ACTIVITIES AND DISTURBANCES WILL BE SET BACK A MINIMUM OF 30 m FROM THE REALIGNED CHANNEL BANKS OF MEDWAY CREEK.
8. THE 30 m SETBACK AREAS WILL BE SEEDING AND PLANTED CONSISTENT WITH THE NATURAL CHANNEL RELOCATION PLAN (CREEK AND ASSOCIATED) AND WILL BE TREATED AS NATURAL, SELF-SUSTAINING VEGETATION (NO MOW OR AGRICULTURAL USES).
9. ALL FISH AND MUSSEL SPECIES WILL BE RELOCATED DOWNSTREAM AND IMMEDIATELY PRIOR TO REDIRECTION OF FLOWS TO THE NEW CHANNEL OF MEDWAY CREEK UNDER THE AUTHORITY OF A LICENCE TO COLLECT FISH FOR SCIENTIFIC PURPOSES ISSUED BY MNRF.
10. ALL MEASURES RECOMMENDED BY DFO PER THEIR 11 DECEMBER 2023 LETTER OF ADVICE WILL BE IMPLEMENTED AS PART OF REALIGNING MEDWAY CREEK.

SEQUENCE OF OPERATIONS CONTINUED

- AREA IV
1. CONSTRUCT FENCING AND INSTALL GATE ON EAST LICENCE BOUNDARY FOR MEDWAY CREEK REALIGNMENT.
2. STRIP AREA IV AND STOCKPILE TOPSOIL AND OVERBURDEN SEPARATELY ALONG THE SOUTH SETBACK.
3. INITIATE ABOVE WATER EXTRACTION IN DIRECTION SHOWN TO ELEVATION 288.3m ASL.
4. PRIOR TO COMPLETING ABOVE WATER EXTRACTION IN AREA IV, INITIATE BELOW WATER EXTRACTION IN DIRECTION SHOWN TO ELEVATION 282m ASL OR 4 m BELOW WATER.
5. COMPLETE BELOW WATER EXTRACTION AND COMPLETE REHABILITATION USING MATERIAL STORED IN BERMS.

GENERAL NOTES

- STAGING
1. REHABILITATION SHALL PROCEED IN EACH AREA UPON COMPLETION OF EXTRACTION OPERATIONS AS OUTLINED ON PAGE 2 OF 4.
2. GRADING/SLOPES
THE FINAL GRADING ELEVATIONS SHALL BE IN GENERAL CONFORMANCE WITH THE ELEVATIONS SHOWN ON THE PLAN.
ALL SIDE SLOPES SHALL BE GRADED TO A MINIMUM OF 3:1 ABOVE WATER TABLE, ESTABLISHED BY BACKFILLING AND 2:1 BELOW WATER LEVEL, ESTABLISHED BY EXTRACTION.
EXTRACTION SLOPES SHALL BE 2:1 UNLESS OTHERWISE NOTED.
A MINIMUM DEPTH OF 850mm OF SUBSOIL AND/OR OVERBURDEN SHALL BE SPREAD UNIFORMLY OVER EACH REHABILITATED AREA.
3. SOIL MANAGEMENT
WHERE COMPACTION OF THE PIT FLOOR HAS OCCURRED, DEEP RIPPING (SUB-SOILING) WILL BE REQUIRED PRIOR TO REAPPLICATION OF THE SUBSOIL AND TOPSOIL TO ALLOW DRAINAGE AND AERATION ACCORDANCE WITH ACCEPTED FARMING PRACTICES.
UPON COMPLETION OF REPLACING TOPSOIL IN EACH AREA, THE TOPSOIL SHALL BE CULTIVATED, FERTILIZED AND SEEDED WITH A GRASS/LEGUME MIXTURE CONTAINING ALFALFA, BIRDS-FOOT TREFOIL, AND/OR CLOVERS.
4. ZONING AND FINAL LAND USE
THE ZONING OF THE EXISTING SITE ALLOWS AREAS II AND IV TO BE USED FOR AGRICULTURE UPON COMPLETION OF REHABILITATION.
AREAS I AND III SHALL BE REZONED TO ALLOW USE OF THE REMAINING POND IN THIS AREA AS A FISH HATCHERY. THE POND MAY ALSO BE USED FOR RECREATIONAL AND IRRIGATION PURPOSES.
5. REHABILITATION AREAS
REHABILITATION SHALL BE IN GENERAL CONFORMANCE TO WHAT IS SHOWN ON PAGE 3 OF 4.
THE AREA TO BE REHABILITATED IS +/- 28.7 ha AND THE TOTAL LENGTH OF OPERATION IS ESTIMATED TO BE 19-20 YEARS (DEPENDENT ON ECONOMIC CONDITIONS).
FARMING OPERATIONS SHALL CONTINUE IN THOSE AREAS NOT UNDER EXTRACTION OPERATIONS AND IN AREAS REHABILITATED.
UPON COMMENCING EXTRACTION, TOPSOIL AND SUBSOIL SHALL BE TEMPORARILY STOCKPILED SEPARATELY FOR REHABILITATION USE, OR CONSTRUCTION OF BERMS.
6. DRAINAGE
SURFACE DRAINAGE SHALL CONFORM TO THE FINAL CONTOURS OF THE PIT FLOOR AS SHOWN ON PAGE 3 OF 4. DRAINAGE SHALL BE DIRECTED TO THE POND OR THROUGH THE PIT FLOOR.
THE WEST SIDE OF THE SITE DRAINS TOWARD THE POND AND AWAY FROM MEDWAY CREEK.
7. PETROLEUM STORAGE
ALL PETROLEUM STORAGE SHALL BE IN ABOVE GROUND CONTAINERS THAT MEET THE REQUIREMENTS OF THE TECHNICAL STANDARDS AND SAFETY ACT. ANY SPILLS SHALL BE REMOVED AND DISPOSED OF AT A FACILITY APPROVED BY THE MECP. SEE THE SPILLS PLAN ON THIS PAGE. MOBILE FUEL TANKS SHALL BE THE NEW GENERATION ENGINEERED DOUBLE-TANKED VARIETY WITH VACUUM SEALED VALVES.
8. NOISE AND DUST AND GROUNDWATER INTERFERENCE DUST CONTROL SHALL BE APPLIED AS REQUIRED, AT EACH ENTRANCE/EXIT AND HAUL ROAD (CALCIUM CHLORIDE OR BRINE SOLUTION).
IF NOISE, DUST AND/OR GROUNDWATER INTERFERENCE COMPLAINTS ARE RECEIVED FROM THE SURROUNDING RESIDENCES, THE LICENSEE SHALL TAKE APPROPRIATE MEASURES AS DEEMED NECESSARY BY THE MECP TO RECTIFY THE PROBLEMS.
9. PUMPING AND DEWATERING
NO PUMPING AND DEWATERING SHALL TAKE PLACE ON THIS SITE.
10. HYDROGEOLOGICAL ASSESSMENT
NOVATERRA ENVIRONMENTAL LTD., DATED APRIL 2024.
11. TOPSOIL/SUBSOIL/OVERBURDEN STORAGE AND BERMS
ALL TOPSOIL, SUBSOIL, AND OVERBURDEN SHALL BE SEPARATELY STRIPPED AND USED EITHER FOR BERM CONSTRUCTION IN THE SETBACK AREAS OR STOCKPILED FOR PROGRESSIVE REHABILITATION. ALL TOPSOIL, SUBSOIL, AND OVERBURDEN STOCKPILES SHALL BE A MAXIMUM 6m IN HEIGHT, GRADED TO STABLE SLOPES, AND SEEDING TO PREVENT EROSION. ALL TOPSOIL AND SUBSOIL, STRIPPED IN THE OPERATION OF THE SITE SHALL BE USED IN THE REHABILITATION OF THE PROPERTY. SEE 'TYPICAL BERM DETAIL' THIS PAGE.
12. AGGREGATE STOCKPILES AND PROCESSING EQUIPMENT NO AGGREGATE STOCKPILES OR PROCESSING EQUIPMENT SHALL BE LOCATED WITHIN 30m OF ANY LICENCE BOUNDARY. AGGREGATE STOCKPILES SHALL FOLLOW THE ACTIVE PIT FACE AND BE A MAXIMUM OF 10m IN HEIGHT.
PORTABLE DRY SCREENING EQUIPMENT WILL BE USED ON THIS SITE. EXCAVATION ABOVE THE WATER TABLE WILL BE WITH A LOADER, TANDEM AND SINGLE AXLE TRUCKS WILL TRANSPORT MATERIAL OFF SITE. DREDGING WILL BE WITH A BACKHOE OR DRAGLINE.
13. MAINTENANCE OF VEGETATION
VEGETATION SHALL BE MAINTAINED ON ALL REHABILITATED AREAS, BERMS, TOPSOIL AND SUBSOIL PILES. ANY VEGETATION THAT DIES OR IS OTHERWISE DAMAGED SHALL BE REPLACED IN ORDER TO PREVENT EROSION.
14. SCRAP STORAGE
ALL SCRAP ON THE SITE SHALL BE COLLECTED AND STORED IN THE DESIGNATED AREA SHOWN, LOCATED A MINIMUM OF 30m FROM ANY LICENSED BOUNDARY. ALL SCRAP SHALL BE REMOVED FROM THE SITE ON AN ONGOING BASIS.
15. IMPORTATION OF MATERIALS FOR RECYCLING AND REHABILITATION
MATERIALS MAY BE RECYCLING OF MATERIALS (ASPHALT AND CONCRETE) ON THIS SITE. MATERIAL IMPORTED FOR RECYCLING WILL BE STORED IN SEGREGATED STOCKPILES IN AREA 4. RECYCLABLE ASPHALT MATERIALS WILL NOT BE STOCKPILED WITHIN 30m OF ANY WATERBODY 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 ONGOING BASIS. REMOVAL OF RECYCLED AGGREGATE IS TO BE ONGOING. ONCE THE AGGREGATE ON SITE HAS BEEN DEPLETED THERE WILL BE NO FURTHER IMPORTATION OF RECYCLED MATERIALS PERMITTED. ONCE FINAL REHABILITATION HAS BEEN COMPLETED AND APPROVED IN ACCORDANCE WITH THE SITE PLAN, ALL RECYCLING OPERATIONS MUST CEASE.
STUMPS AND BRUSH MAY BE IMPORTED FOR USE IN REHABILITATION AS SHOWN ON PAGE 3 OF 4.

OPERATIONS

LICENCE # 2191

McCann Redimix Inc.

R.R. 3

Dashwood, Ontario

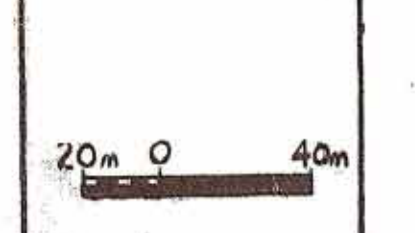
NOM 1N0

- 16. FENCING
1.2m PAGE WIRE FENCING SHALL BE MAINTAINED ALONG ALL LICENCE BOUNDARIES, EXCEPT THE EAST PORTION OF THE SOUTH BOUNDARY. PRIOR TO COMMENCING EXTRACTION IN AREA IV, 1.2m PAGE WIRE FENCING SHALL BE INSTALLED ON THE SOUTH PART OF THE EAST BOUNDARY. THE EAST BOUNDARY FENCE MAY BE LOCATED INSIDE THE ACTUAL BOUNDARY.
17. GATES
1.2m FARM GATES SHALL BE MAINTAINED AT ALL ENTRANCE/EXITS NOTED ON THE PLAN. ALL GATES SHALL BE KEPT LOCKED WHEN THE PIT IS NOT IN OPERATION. PRIOR TO COMMENCING THE REALIGNMENT OF MEDWAY CREEK, A FARM GATE SHALL BE INSTALLED ALONG THE EAST BOUNDARY, AS SHOWN.
18. MAXIMUM DEPTH OF EXTRACTION
MAXIMUM DEPTH OF EXTRACTION ON THE PROPERTY SHALL BE TO AN ELEVATION OF 282m A.S.L. OR 6m BELOW WATER. EXTRACTION ON THE PROPERTY SHALL TAKE PLACE IN TWO LIFTS WITH A FACE HEIGHT OF UP TO 3m ABOVE WATER AND 6m BELOW WATER.
19. SETBACKS
30m ALONG THE EAST BOUNDARY OF MEDWAY CREEK, 15m ALONG THE WEST, SOUTH AND NORTH BOUNDARIES.
20. ENVIRONMENTAL PROTECTION AREA (30m SETBACK) AND UTRCA REG. FILL LINES
NO STRIPPING, EXTRACTION, DITCHING, OR STOCKPILING OF AGGREGATE SHALL BE PERMITTED WITHIN THE 30m SETBACK ADJACENT MEDWAY CREEK. PRIOR TO COMMENCING EXTRACTION IN EACH AREA, THE 30m SETBACK SHALL BE DELINEATED WITH HIGHLY VISIBLE 1.2m MARKER POSTS SPACED A MAXIMUM OF 60m APART.
21. ENTRANCES AND EXITS
TWO ENTRANCES SHALL BE LOCATED ALONG THE NORTH BOUNDARY OF THE SITE. ONLY THE WEST ENTRANCE SHALL BE USED TO TRANSPORT MATERIAL.
TWO ENTRANCES SHALL BE LOCATED ALONG THE EAST BOUNDARY OF THE SITE. ONE EXTENSIVELY TO ACCESS THE TOWER, AND THE OTHER FOR THE REALIGNMENT OF MEDWAY CREEK CONSTRUCTION. ALL ENTRANCE/EXITS SHALL BE APPROVED BY THE MUNICIPALITY OF MIDDLESEX CENTRE.
22. CELLULAR TOWER
A CELLULAR TOWER AND ASSOCIATED ANCHORING TO BE INSTALLED IN THE SOUTHEAST CORNER OF THE SITE. A GRANULAR ACCESS ROAD SHALL BE CONSTRUCTED FROM ADELAIDE STREET TO PROVIDE ACCESS FOR MAINTENANCE VEHICLES. THE EAST LIMIT OF THE CELLULAR TOWER LEASED LANDS IS TO BE FENCED AS NOTED. 1.2m HIGHLY CEDAR POSTS SHALL BE INSTALLED AT THE CORNERS OF THE LEASED LAND TO DELINEATE THE LIMITS.

SEQUENCE OF OPERATIONS

- AREA IB
1. PRIOR TO COMPLETING EXTRACTION OF AREA IA, STRIP AREA IB AND USE TOPSOIL AND OVERBURDEN TO COMPLETE CONSTRUCTION OF BERM ALONG NORTH BOUNDARY.
2. SURPLUS TOPSOIL AND OVERBURDEN TO BE STOCKPILED IN AREA IB FOR FUTURE REHABILITATION OR PROGRESSIVE REHABILITATION IN AREA IA.
3. CONTINUE EXTRACTION IN DIRECTION SHOWN TO ELEVATION 288.30m A.S.L. OR 0.3m ABOVE WATER.
4. AS EXTRACTION APPROACHES THE NORTH, WEST AND EAST LIMITS EXTRACTION, INITIATE PROGRESSIVE REHABILITATION OF THE SIDE SLOPES USING STOCKPILED TOPSOIL AND OVERBURDEN.
5. PRIOR TO COMPLETION OF EXTRACTION ABOVE WATER IN AREA IB, EXTRACTION BELOW WATER IN DIRECTION SHOWN TO ELEVATION 282m A.S.L. OR 6m BELOW WATER.
6. AS EXTRACTION APPROACHES THE NORTH AND WEST LIMITS EXTRACTION, INITIATE PROGRESSIVE REHABILITATION OF THE SIDE SLOPES USING STOCKPILED TOPSOIL AND OVERBURDEN.
7. COMPLETE REHABILITATION OF AREA IB USING STOCKPILED TOPSOIL AND OVERBURDEN CONTAINED WITHIN BERM LOCATED ALONG WEST BOUNDARY.
AREA II
1. NOTE 1 REMOVED
2. STRIP AREA II AND STOCKPILE TOPSOIL AND OVERBURDEN IN THE WEST SETBACK FOR FUTURE PROGRESSIVE REHABILITATION.
3. INITIATE EXTRACTION IN DIRECTION SHOWN TO ELEVATION 288.30m A.S.L. OR 0.3m ABOVE WATER.
4. BELOW WATER EXTRACTION TO ELEVATION 282m A.S.L. SHALL FOLLOW BEHIND ABOVE WATER EXTRACTION AS ABOVE WATER EXTRACTION PROCEEDS IN DIRECTION SHOWN.
5. PRIOR TO USING CLAY MATERIALS FROM LANDS WEST OF AREAS I AND II, THE CLAY BACKFILL AREA SHALL BE STRIPPED AND THE TOPSOIL AND OVERBURDEN STOCKPILED SEPARATELY FOR FUTURE PROGRESSIVE REHABILITATION.
6. AS BELOW WATER EXTRACTION APPROACHES THE EAST AND WEST LIMITS OF EXTRACTION, INITIATE PROGRESSIVE BACKFILLING OF POND USING MATERIAL FROM CLAY BACKFILL AREA.
7. BACKFILL SHALL BE GRADED IN ACCORDANCE WITH ELEVATIONS SHOWN ON PAGE 3 OF 4. SURFACE DRAINAGE SHALL BE TOWARD THE POND.
8. USE REMAINING TOPSOIL AND OVERBURDEN FROM STOCKPILE ON WEST SETBACK TO COMPLETE REHABILITATION OF AREA II.
9. AFTER PLACING FILL AND SUBSOIL, PLACE A MINIMUM OF 150mm OF TOPSOIL. THE AREA SHALL THEN BE SEEDING IN ACCORDANCE WITH NOTES ON PAGE 3 OF 4.
AREA III
1. STRIP AREA III AND STOCKPILE TOPSOIL AND OVERBURDEN SEPARATELY ON THE SOUTH SETBACK FOR FUTURE PROGRESSIVE REHABILITATION.
2. INITIATE EXTRACTION IN DIRECTION SHOWN TO ELEVATION 288.30m A.S.L.
3. BELOW WATER EXTRACTION TO ELEVATION 282m A.S.L. SHALL FOLLOW BEHIND ABOVE WATER EXTRACTION IN DIRECTION SHOWN.
4. AS BELOW WATER EXTRACTION APPROACHES EAST, WEST, AND SOUTH LIMITS OF EXTRACTION, INITIATE PROGRESSIVE BACKFILLING OF POND USING MATERIAL FROM CLAY BACKFILL AREA.
5. BACKFILL SHALL BE GRADED IN ACCORDANCE WITH ELEVATIONS SHOWN ON PAGE 3 OF 4. SURFACE DRAINAGE SHALL BE TOWARD THE POND.
6. AT THE NARROW CHANNEL, BACKFILL TO CREATE ACCESS TO AREA IV.
7. COMPLETE REHABILITATION OF AREA III USING STOCKPILED TOPSOIL AND OVERBURDEN AND CLAY MATERIAL FROM THE RIDGE ALONG THE SIDE OF THE AREA II TO BACKFILL TO A MINIMUM OF 1m ABOVE THE WATER TABLE IN AREA III.
8. AFTER PLACING FILL AND SUBSOIL, PLACE A MINIMUM OF 150mm TOPSOIL. THE AREA SHALL THEN BE SEEDING IN ACCORDANCE WITH NOTE # 3 ON SHEET PAGE 3 OF 4.

SCALE 1:2000



OPERATIONAL PLAN
STANLEY PIT
NORTH HALF LOT, 13, CONCESSION 14
MUNICIPALITY OF MIDDLESEX CENTRE (FORMERLY TOWNSHIP OF LONDON), COUNTY OF MIDDLESEX
PROJECT NO. 93-16
SHEET NO. 2 OF 4
PLAN FILE NO.

Huron-Middlesex Engineering Ltd.

REHABILITATION NOTES

- STAGING:** Rehabilitation shall proceed in each area upon completion of extraction operations.
- GRADING/SLOPES:** The final grading elevations shall be in general conformance with the elevations shown on the plan. The final elevation shall be 1 metre above the normal water table.
All sideslopes shall be graded to a minimum of 3 horizontal to 1 vertical above water level. Below water slopes and shoreline zones may vary from 1:1 to 10:1 to enhance wildlife and aquatic diversity. See details below.
A minimum depth of 850 mm of subsoil shall be spread uniformly over each rehabilitated area.
A minimum depth of 150 mm of topsoil shall be spread uniformly over each rehabilitated area.
- SOIL STRUCTURE:** Where compaction of the pit floor has occurred, deep ripping (sub-soiling) will be required prior to reapplication of the subsoil and topsoil to allow drainage and aeration in accordance with accepted farming practices.
Upon completion of placing topsoil in each rehabilitated area, the topsoil shall be cultivated, fertilized and seeded with a MIXTURE OF GRASSES AND LEGUMES THAT MAY INCLUDE THE FOLLOWING AT A RATE OF 125 KG/HA: BUCKWHEAT, RED CLOVER, WHITE CLOVER, TALL FESCUE, AND ANNUAL RYE.
MEADOW AND SIDE SLOPES SHALL BE SEEDING WITH AVAILABLE SEED SOURCES THAT HAVE BEEN USED IN THE LOCAL AREA EXCLUDING INVASIVE AND NON-NATIVE SPECIES.
- POND AND WETLAND REHABILITATION INFORMATION**
AREAS SHALL BE REHABILITATED TO WETLAND HABITAT AS FOLLOWS:
- UNDERWATER SLOPES WILL BE FORMED WITH ON-SITE FILL
- UNDERWATER SLOPES SHALL BE A MAXIMUM OF 2:1
- RESTORATION OF THE NEARSHORE, SHALLOW WETLAND ZONE AS SHOWN ON THE TYPICAL SHALLOW SHORELINE SECTION BELOW 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 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 ±30m 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	PUSSY WILLOW	SILVER MAPLE	LARCH
WHITE CEDAR	CHOKO CHERRY	SMOOTH SERVICEBERRY	
COMMON NINEBARK	GRAY DOGWOOD	COMMON ELDERBERRY	
RED OSIER DOGWOOD	STAGHORN SUMAC	SPECKLED ALDER	

6. 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	COONTAIL
BROAD LEAVED ARROWHEAD	PICKERELWEED
COMMON WOOLY BULRUSH	SOFTSTEM BULRUSH
GREEN-FRUITED BURREED	RIVER BULRUSH
BROAD LEAVED ARROWHEAD	DARK GREEN BULRUSH
SWAMP MILKWEED	WATER-LILY

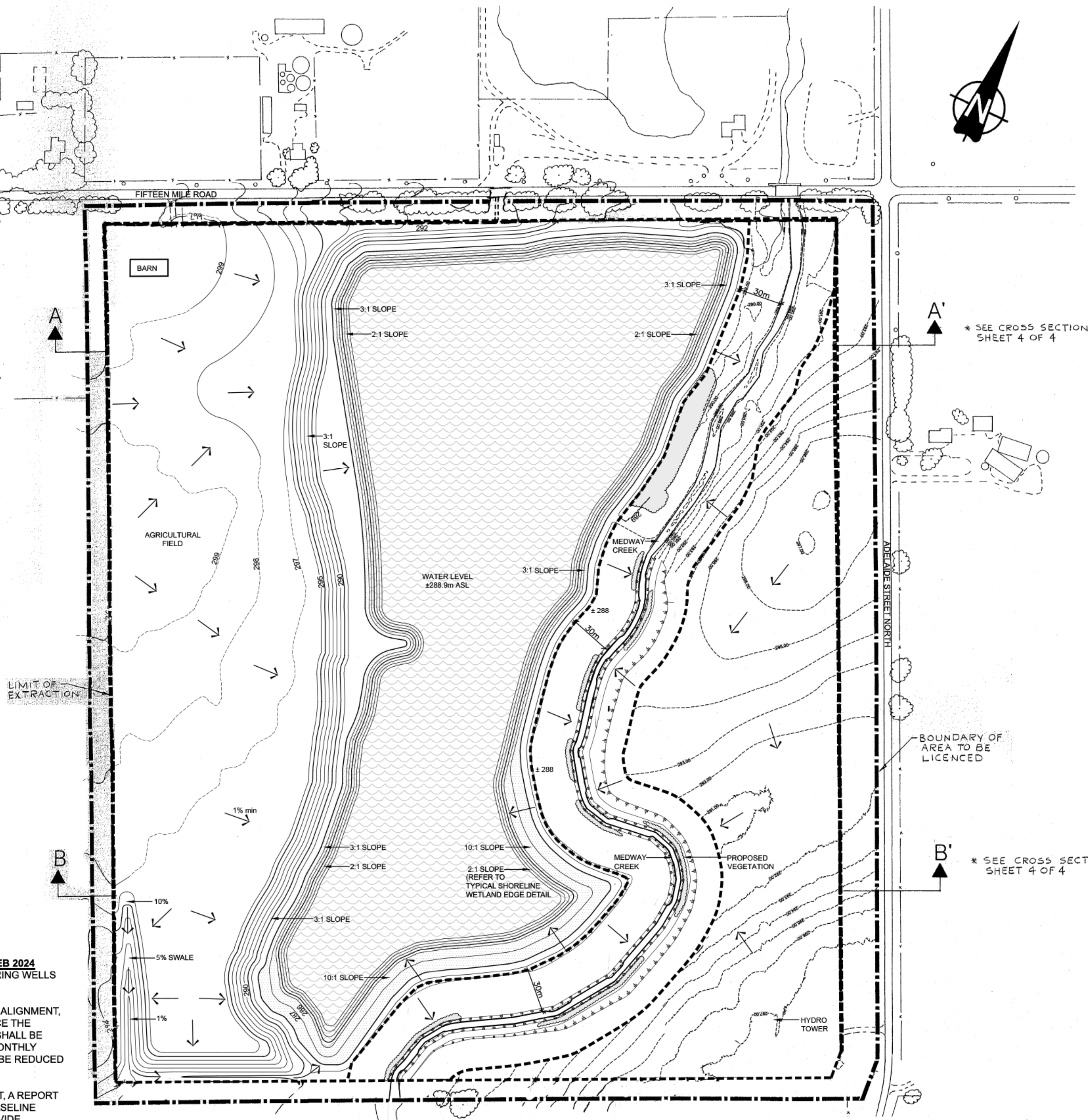
7. **IMPORTATION OF FILL INFORMATION**
a. EXCESS SOIL, AS DEFINED IN ONTARIO REGULATION 244/97 MAY BE IMPORTED TO THIS SITE TO FACILITATE THE FOLLOWING REHABILITATION:
i. CREATION OF 3:1 SLOPES (OR SLOPING RATIO OTHERWISE DESCRIBED ON THE FINAL REHABILITATION PAGE)
ii. TOP DRESSING TO ESTABLISH VEGETATION
b. LIQUID SOIL, AS DEFINED BY ONTARIO REGULATION 406/19 UNDER THE ENVIRONMENTAL PROTECTION ACT, IS NOT AUTHORIZED FOR IMPORTATION INTO THE SITE.
c. THE QUALITY OF EXCESS SOIL IMPORTED TO THE SITE FOR FINAL PLACEMENT MUST BE EQUIVALENT TO OR MORE STRINGENT THAN THE APPLICABLE EXCESS SOIL QUALITY STANDARDS AS DETERMINED IN ACCORDANCE WITH ONTARIO REGULATION 244/97 AS AMENDED FROM TIME TO TIME AND MUST BE CONSISTENT WITH THE SITE CONDITIONS AND THE END USE IDENTIFIED IN THE APPROVED REHABILITATION PLAN.
d. WHERE A QUALIFIED PERSON IS RETAINED OR REQUIRED TO BE RETAINED IN ACCORDANCE WITH ONTARIO REGULATION 244/97, THE QUALITY, STORAGE, AND FINAL PLACEMENT OF EXCESS SOILS SHALL BE DONE ACCORDING TO THE ADVICE OF THE QUALIFIED PERSON.
e. EXCESS SOIL IMPORTED TO FACILITATE REHABILITATION AS DESCRIBED ON THIS SITE PLAN SHALL BE UNDERTAKEN IN ACCORDANCE WITH ONTARIO REGULATION 244/97 UNDER THE AGGREGATE RESOURCES ACT, AS AMENDED FROM TIME TO TIME.
f. THE CUMULATIVE TOTAL AMOUNT OF EXCESS SOIL THAT MAY BE IMPORTED TO THIS SITE FOR REHABILITATION PURPOSES IS 175,000 m³.

LEGEND

- LOT AND CONCESSION LINES
- SPOT ELEVATION
- CONTOUR LINES
- - - EXISTING DITCH
- DEPRESSION
- - - APPROXIMATE LIMIT OF DEPOSIT
- - - FENCE
- - - ENTRANCE & EXIT GATE
- - - MUNICIPAL ROADS
- - - OTHER ROADS (PRIVATE)
- EXISTING TREES/BUSH (D-DECIDUOUS) (C-CONIFEROUS)
- EXISTING BUILDING & STRUCTURES
- - - BOUNDARY OF AREA TO BE LICENCED
- - - LIMITS OF EXTRACTION
- WELL (DEPTH TO WATER TABLE)
- UTILITY POLE
- OPEN WATER
- WETLAND
- PROPOSED VEGETATION
- DIRECTION OF DRAINAGE

TECHNICAL RECOMMENDATIONS

- HYDROGEOLOGICAL REPORT- NOVATERRA ENVIRONMENTAL LTD., FEB 2024**
- WATER LEVELS SHALL BE MEASURED IN SEVEN ONSITE MONITORING WELLS (MW1 TO MW7, INCLUSIVE) ON A QUARTERLY BASIS.
 - UPON COMMENCEMENT OF EARTHWORKS FOR THE CHANNEL REALIGNMENT, MONITORING FREQUENCY SHALL CHANGE TO A MONTHLY BASIS. ONCE THE REALIGNED CHANNEL IS ESTABLISHED, TEMPORARY STAFF GAUGES SHALL BE INSTALLED IN THE NEW CHANNEL OPPOSITE MW5, MW6, AND MW7. MONTHLY MONITORING SHALL THEN CONTINUE FOR ONE FULL YEAR AND THEN BE REDUCED TO A QUARTERLY BASIS THEREAFTER.
 - AFTER ONE YEAR OF MONTHLY MONITORING POST-REALIGNMENT, A REPORT SHALL BE PREPARED BY A QUALIFIED PROFESSIONAL TO PRESENT BASELINE CONDITIONS OF THE REALIGNED CHANNEL. THE REPORT SHALL PROVIDE RECOMMENDATION FOR FUTURE MONITORING AND SHALL ACT AS A BASELINE FOR FUTURE COMPARISON.
 - ANNUAL MONITORING REPORTS SHALL BE PREPARED BY A QUALIFIED PROFESSIONAL TO ASSESS WHETHER PIT OPERATIONS HAVE ADVERSELY AFFECTED GROUNDWATER CONDITIONS AT THE SITE. THE REPORTS SHALL BE SUBMITTED TO THE MNRF IN AYLMER AND TO THE MECPL IN LONDON.
 - IF ANY WATER WELL IS ENCOUNTERED ONSITE DURING AGGREGATE EXTRACTION, SUCH WELL SHALL BE DECOMMISSIONED IN ACCORDANCE WITH O.REG. 903. MONITORING WELLS MW2, MW3, AND MW4 ARE PLANNED TO BE DECOMMISSIONED AS AGGREGATE EXTRACTION ENCLOSES UPON THEM.
 - THE REMAINING ONSITE MONITORING WELLS SHALL BE PRESERVED FOR THE LIFE OF THE LICENCE AND MAY BE DECOMMISSIONED IN ACCORDANCE WITH O.REG. 903 ONCE FINAL REHABILITATION IS COMPLETED AND APPROVED.

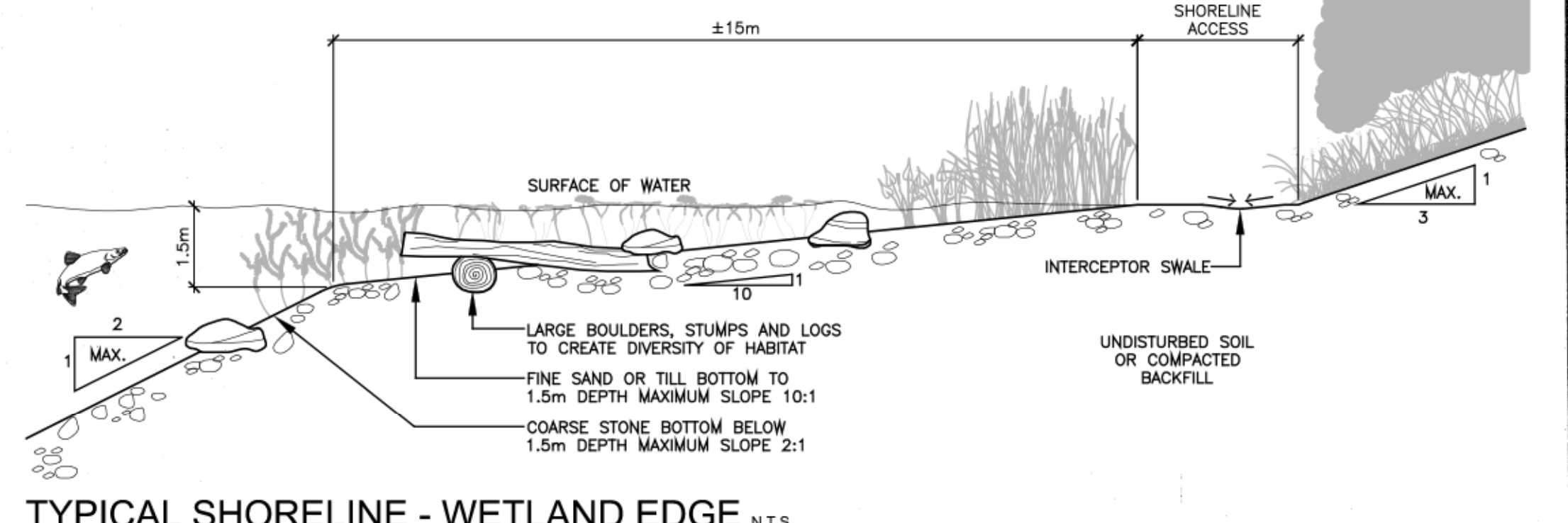


HM AMENDMENT BOX

1. UPDATED PLAN TO REFLECT CREEK REALIGNMENT.	JULY 2024	SB
No.	Revision	Date
Revisions made by Harrington McAvan Ltd. dating from FEB 2024 only.		

Harrington McAvan Ltd. 41 Main Street Unit 102, Uxbridge, Ontario L3R 2E3. Tel: 905-244-0252 Fax: 905-244-7123. www.harringtonmcan.com

Stamp: ONTARIO ASSOCIATION OF LANDSCAPE ARCHITECTS MEMBER



DESIGNED	NO.	REVISION	DATE	BY
RJM	1	REVISED AS PER MNR REQUEST	15 APR 2024	RJM
RJM/CAH	2	NORTH SETBACK REDUCED TO 14'	14/09/2024	WAS
RJM	3	DRY HYDRANT ADDED	14/09/2024	WAS
DWP				
DATE: 23 DEC. 1981				

ORIGINAL PLANS BY:
Huron-Middlesex Engineering Ltd.
PREVIOUSLY STAMPED BY D. W. PLETCH

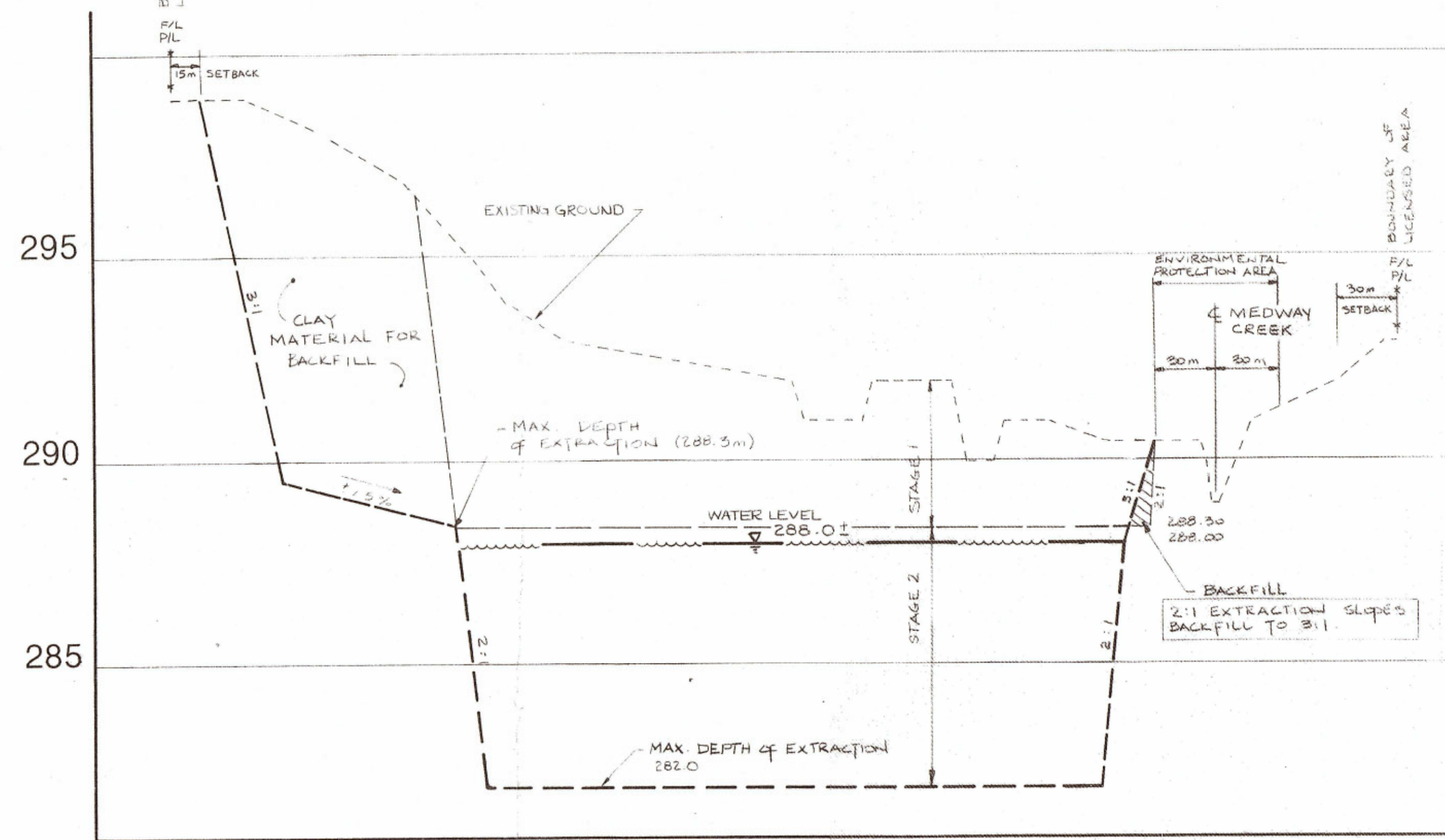
McCann Redi-Mix
69478 Bronson Line
R. R. #3
Dashwood, Ontario

SCALE: 1:2000
20m 0 40m

REHABILITATION PLAN
STANLEY PIT
NORTH HALF LOT 13, CONCESSION 14
TOWNSHIP OF LONDON
COUNTY OF MIDDLESEX

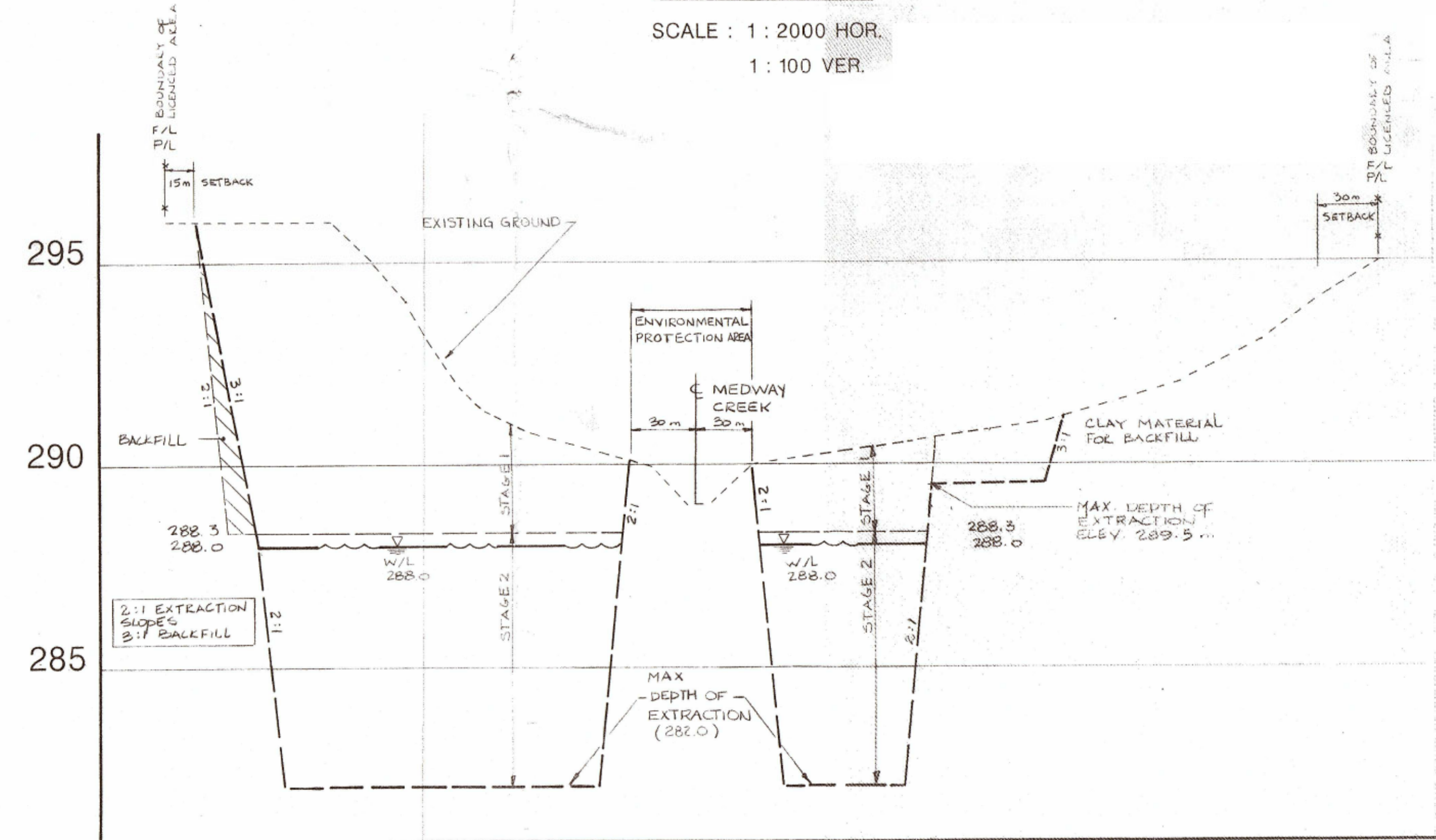
PROJECT NO. 87 - 10
SHEET NO. 3 OF 4
PLAN FILE NO.

OPERATIONAL



SECTION A-A'

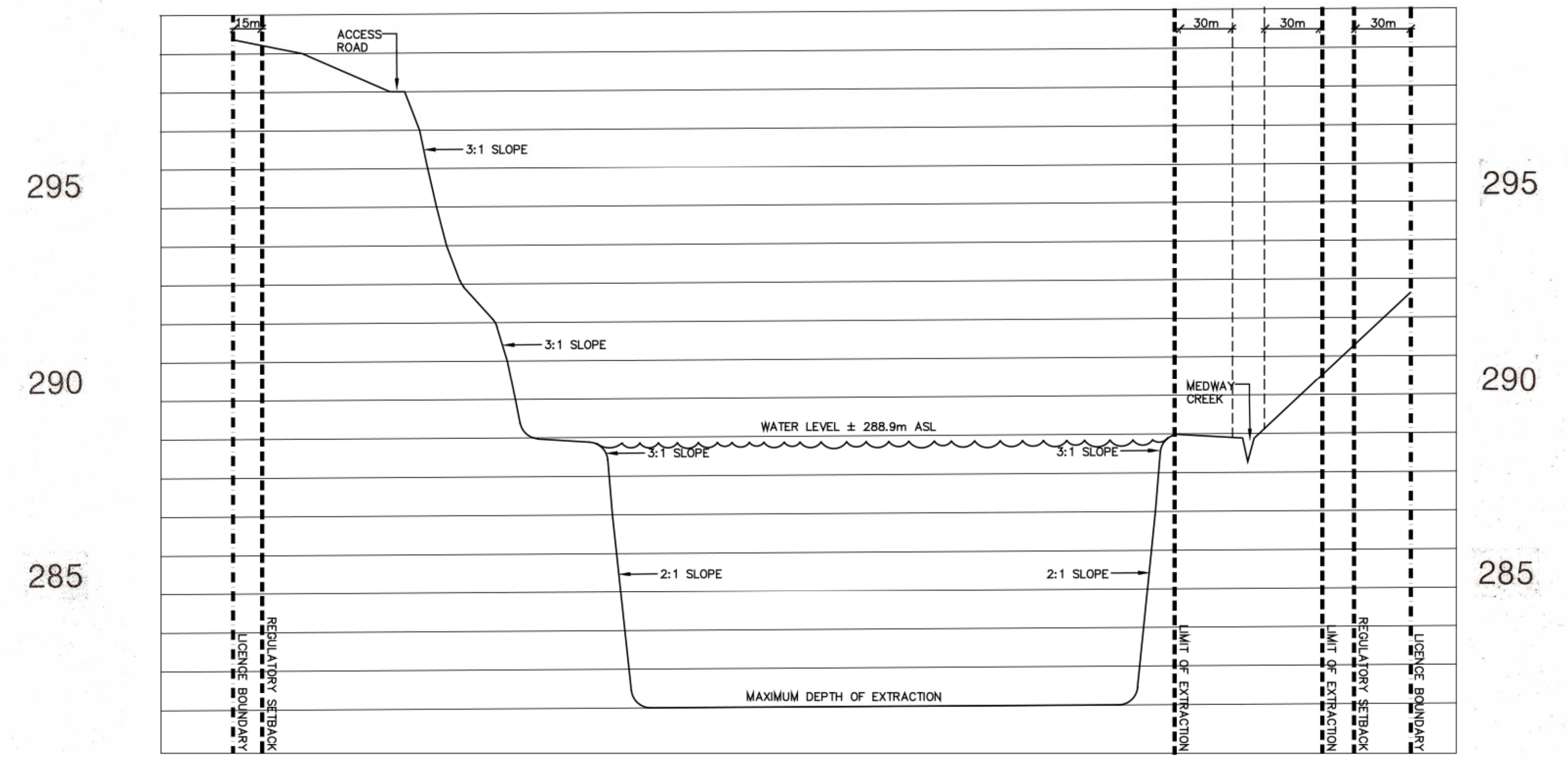
SCALE : 1 : 2000 HOR.
1 : 100 VER.



SECTION B-B'

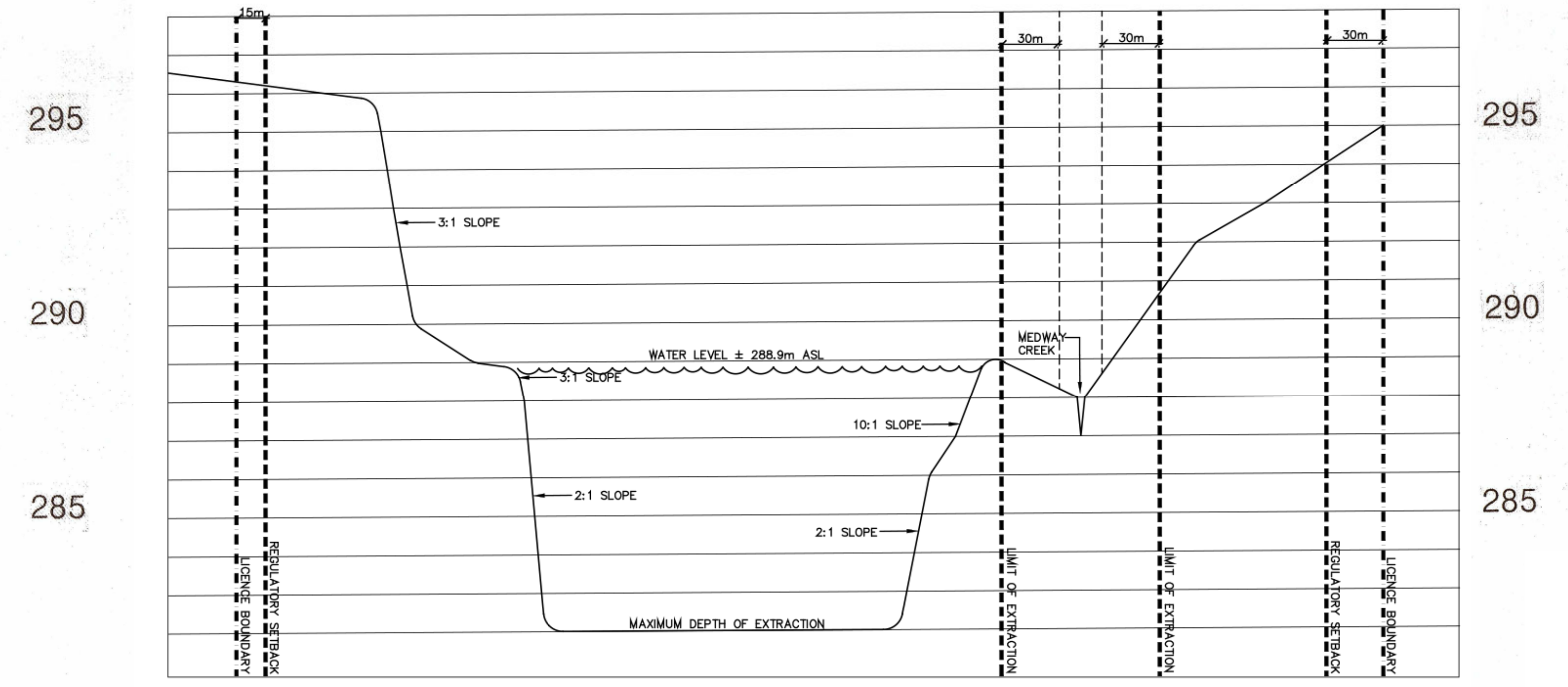
SCALE : 1 : 2000 HOR.
1 : 100 VER.

REHABILITATION



SECTION A-A'

SCALE : 1 : 2000 HOR.
1 : 100 VER.



SECTION B-B'

SCALE : 1 : 2000 HOR.
1 : 100 VER.

DESIGNED	NO	SITE PLAN AMENDMENTS	DATE	BY
RJM	1	EXTRACTION SLOPES REVISED	15 APR '88	JM
CHKD	2	UPDATE TO EXIST CONDITIONS	19.12.15	EM
CHKD	3	REVISED AS PER MHE		
APPROVED	4	MARKED DATED 94.04.14	94.04.14	EM
DATE	23 DEC 1987			



ORIGINAL PLANS STAMPED BY D.W. PLETCH

McCann Redi-Mix
69478 Bronson Line
R. R. #3
Dashwood, Ontario

HM AMENDMENT BOX

No.	Revision	Date	Initial
1	UPDATED TO REFLECT REALIGNMENT OF MEDWAY CREEK.	JULY 2024	SB

Revisions made by Harrington McAvan Ltd. dating from March 2024 only.



SCALE
AS SHOWN

CROSS SECTIONS
STANLEY PIT
NORTH HALF LOT, 13, CONCESSION 14
MUNICIPALITY OF MIDDLESEX CENTRE
(FORMERLY TOWNSHIP OF LONDON),
COUNTY OF MIDDLESEX

PROJECT NO.
93-16
SHEET NO.
4 OF 4
PLAN FILE NO.
OCT 25 1994