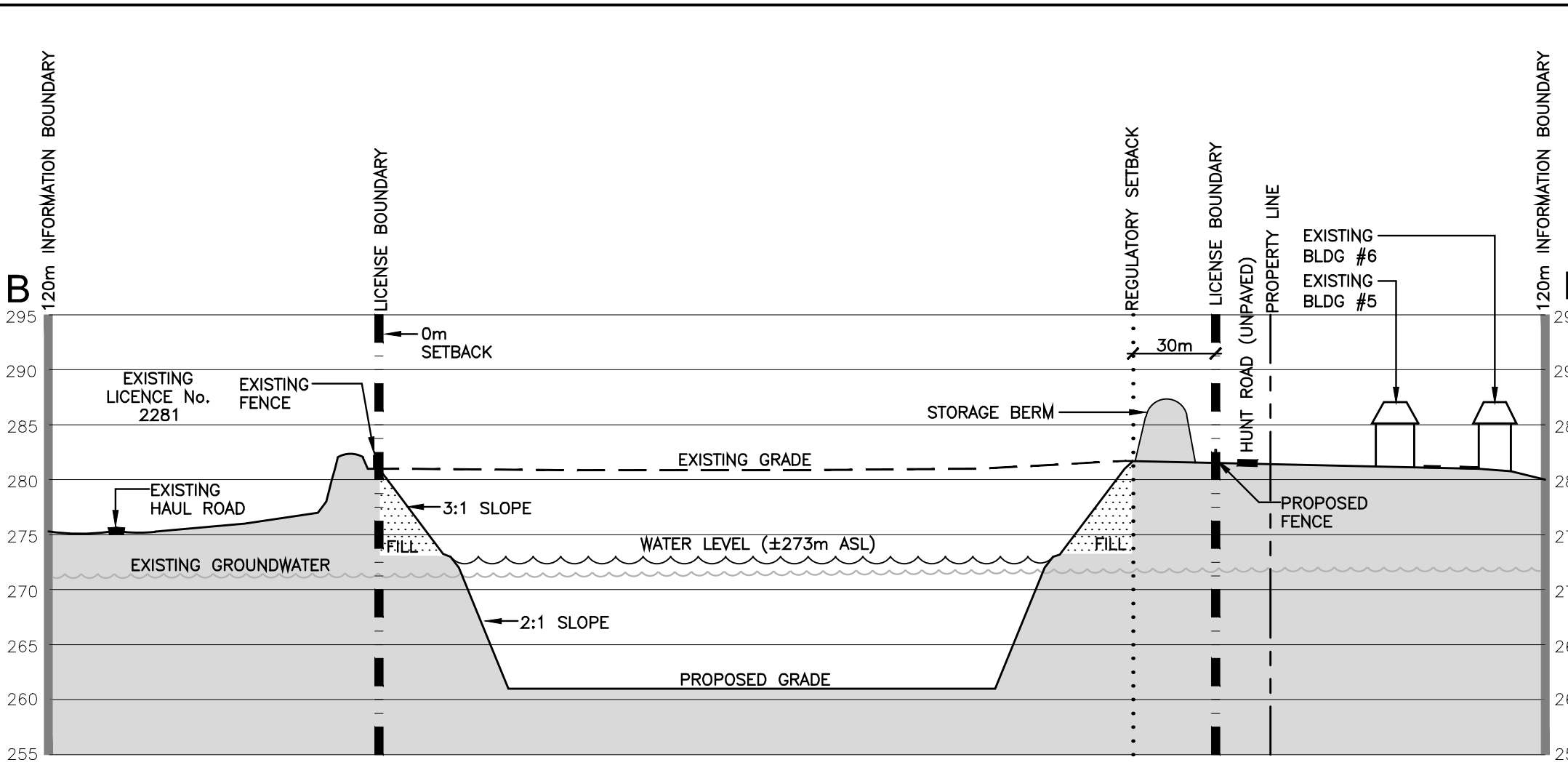


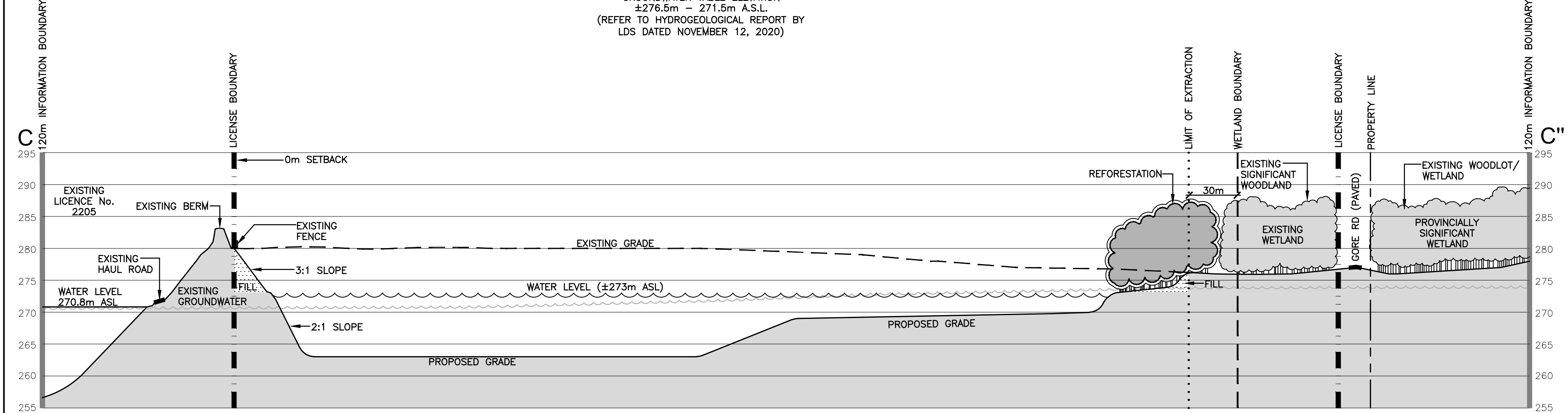
SECTION A-A'

VERTICAL SCALE 1:500
HORIZONTAL SCALE 1:2000



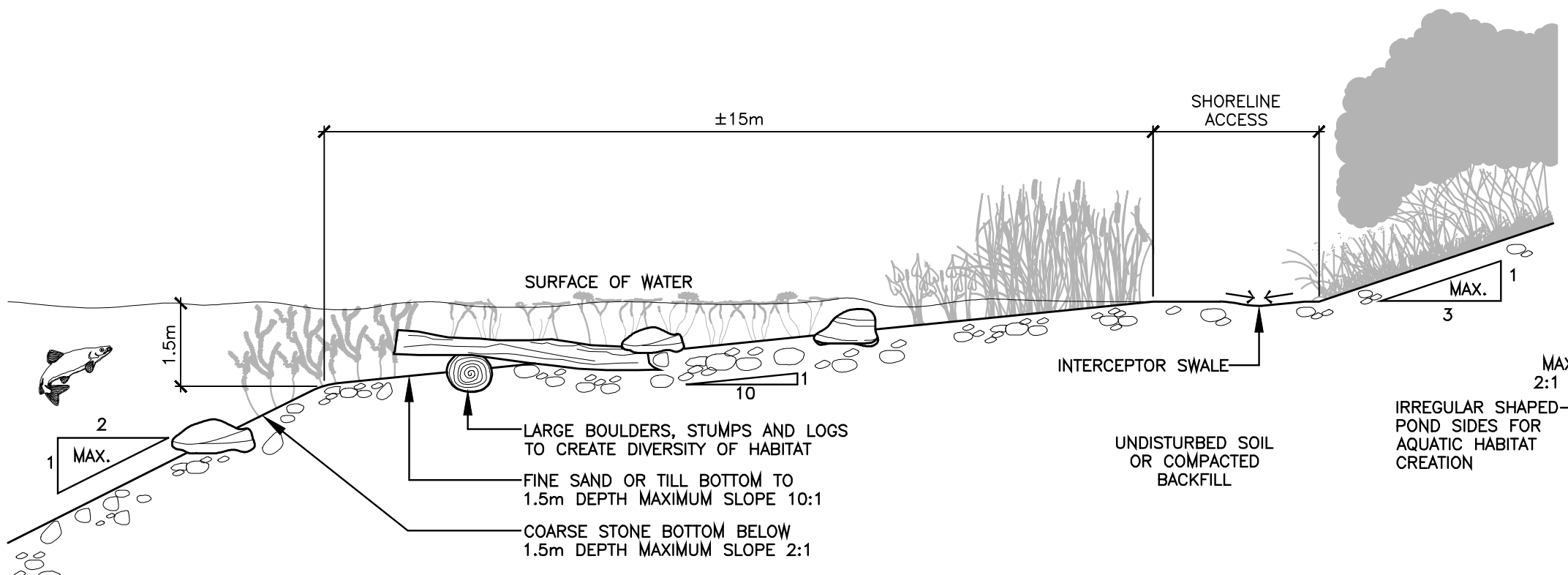
SECTION B-B'

VERTICAL SCALE 1:500
HORIZONTAL SCALE 1:2000

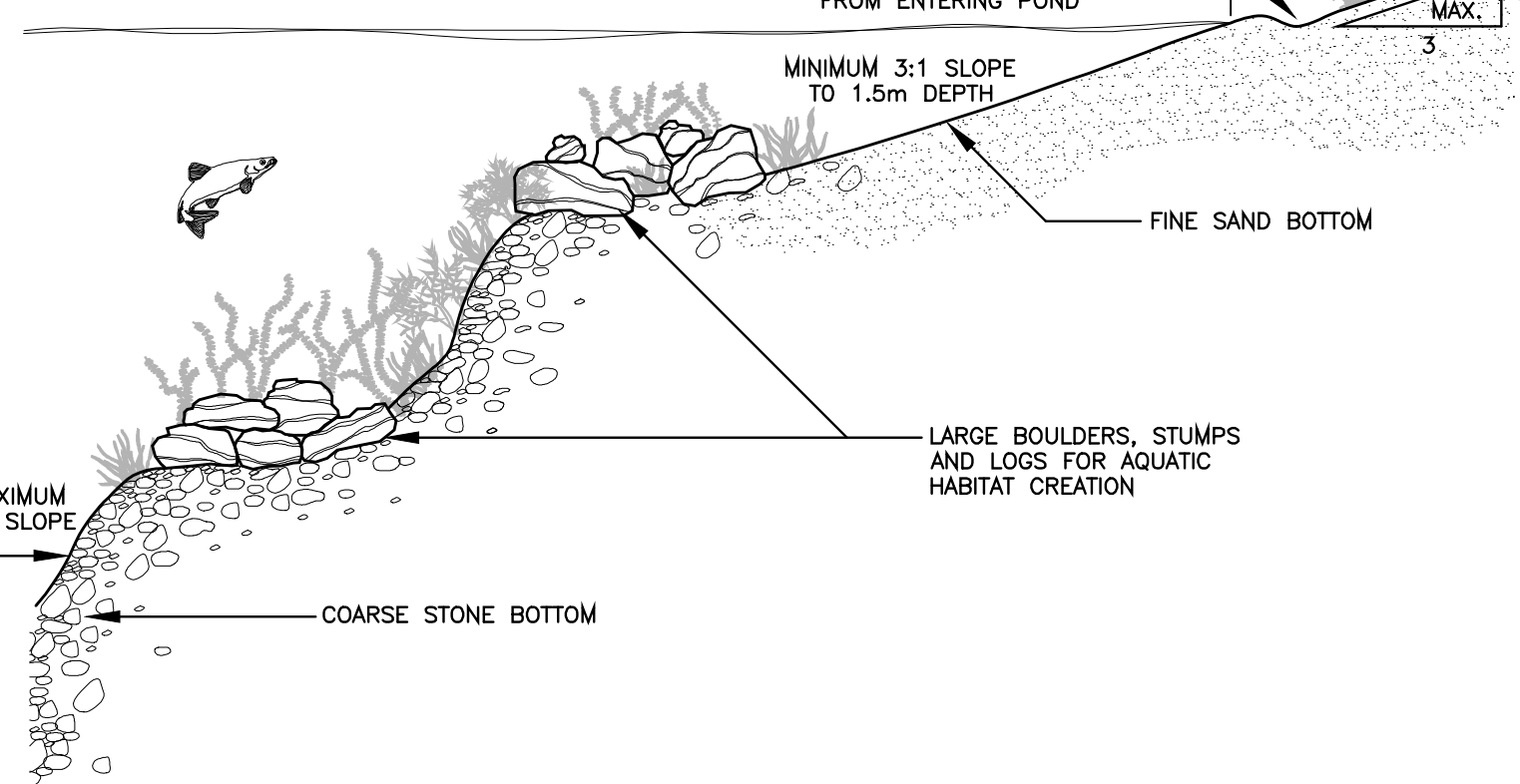


SECTION C-C'

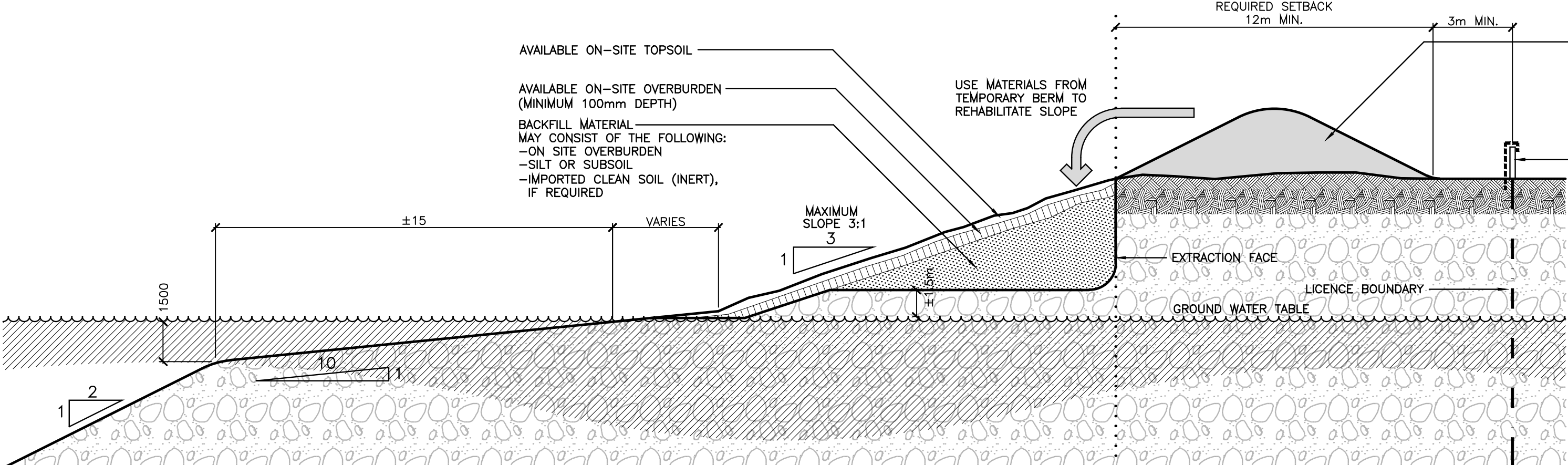
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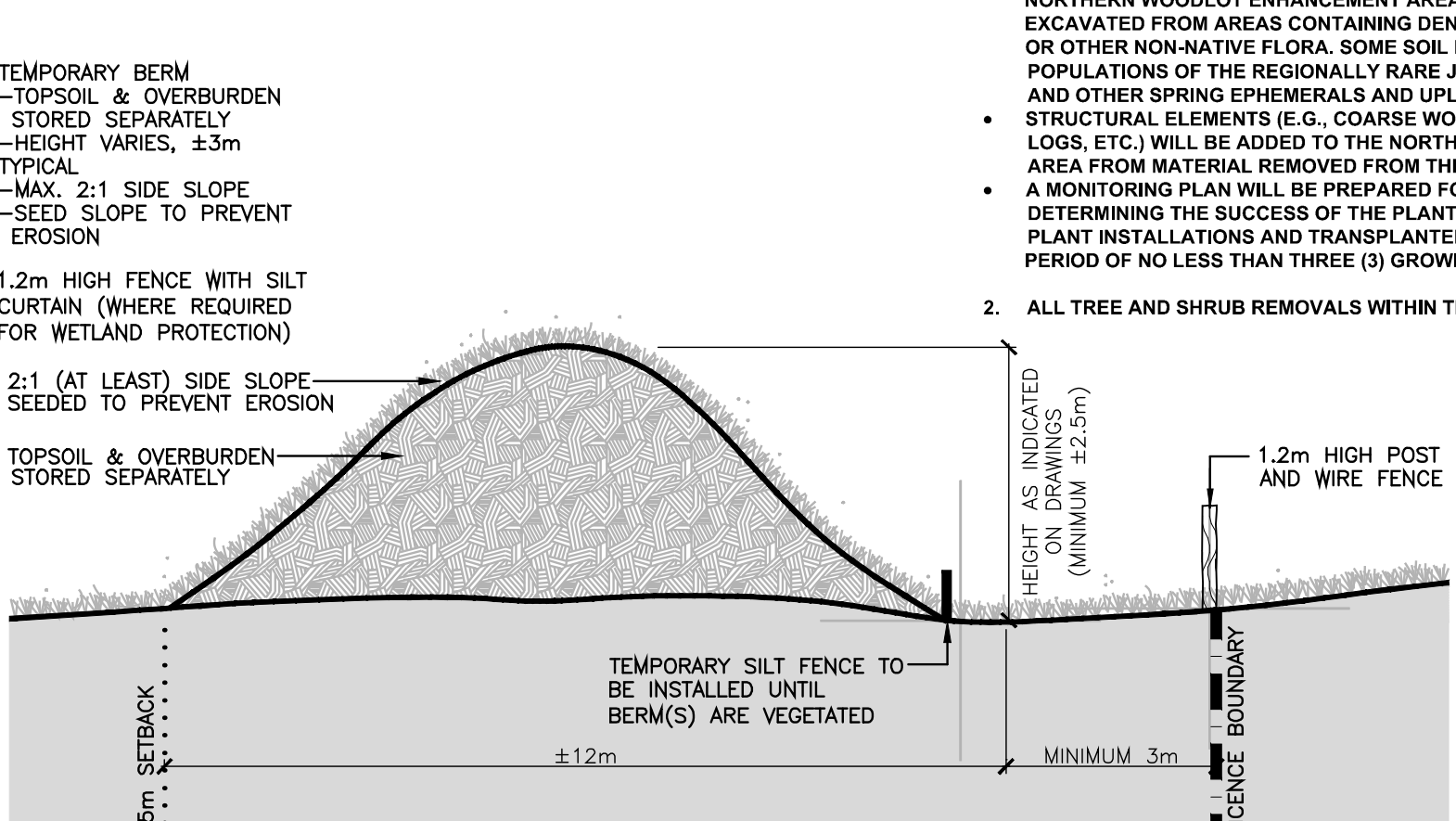
TYPICAL SHORELINE - WETLAND EDGE N.T.S.



TYPICAL SHORELINE - DEEP SECTION N.T.S.

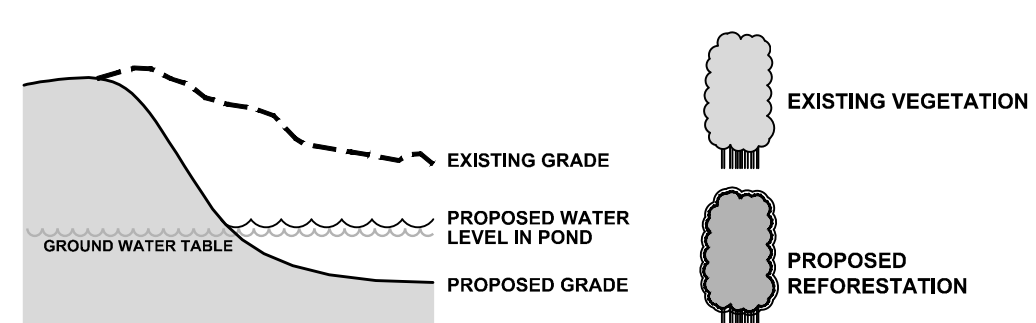


TYPICAL SIDESLOPE REHABILITATION BY BACKFILLING N.T.S.



TYPICAL BERM SECTION N.T.S.

- LEGEND**
- BOUNDARY OF AREA TO BE LICENCED
 - 120m INFORMATION BOUNDARY
 - REGULATORY SETBACK AND EXTRACTION LIMIT LINE
 - PROPERTY LINE
 - WETLAND BOUNDARY



SECTION NOTES
GENERAL INFORMATION

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

COMPLETED OUTSIDE THE PRIMARY BIRD NESTING AND BAT ACTIVITY PERIODS (I.E., TO BE COMPLETED BETWEEN OCTOBER 1 AND MARCH 31).

3. ANY NECESSARY LIGHTING TO SUPPORT PIT OPERATIONS WILL BE DIRECTED AWAY FROM THE NORTHERN WOODLOT TO THE EXTENT PRACTICAL.

TECHNICAL RECOMMENDATIONS

THE FOLLOWING ARE THE TECHNICAL RECOMMENDATIONS FROM ALL OF THE EXPERTS' REPORTS AS OF FEBRUARY 2019. ADDITIONAL RECOMMENDATIONS MAY BE INCLUDED AS A RESULT OF THE LICENCE REVIEW PROCESS.

ACOUSTIC ASSESSMENT - HGC ENGINEERING - DATED DECEMBER, 2020

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.

REFERENCE SOUND POWER LEVELS OF PROCESSING EQUIPMENT	
EQUIPMENT	SOUND POWER LEVEL dBA re: 10 ⁻¹² W
A CRUSHING AND SCREENING PLANT WITH AN ASSOCIATED LOADER	118
EXCAVATOR	108
TRUCKS	103

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 5.0 M HIGH PERIMETER BERM (ABOVE EXISTING GRADE) SHALL BE CONSTRUCTED ALONG THE EASTERN BOUNDARY OF THE PIT PRIOR TO THE COMMENCEMENT OF EXTRACTION OR PROCESSING ACTIVITIES IN AREAS 1 AND 2. ONCE PROCESSING AND EXTRACTION IS COMPLETE IN AREA 1 AND ALL ACTIVITIES ARE MOVED INTO AREA 2, THE BERM ADJACENT TO AREA 1 SHALL NO LONGER BE REQUIRED. PRIOR TO THE COMMENCEMENT OF EXTRACTION OR PROCESSING ACTIVITIES IN AREA 3, THE MINIMUM 5.0 M HIGH PERIMETER BERM (ABOVE EXISTING GRADE) SHALL BE CONSTRUCTED ALONG THE EASTERN BOUNDARY OF THE PIT, ADJACENT TO AREA 3. THE 5.0 M HIGH PERIMETER BERM ALONG AREA 2 SHALL REMAIN AFTER ALL ACTIVITIES ARE MOVED INTO AREA 3.

3. A MINIMUM 8.0 M HIGH ACOUSTICAL BARRIER SHALL BE CONSTRUCTED AND MAINTAINED ON THE PIT FLOOR BESIDE THE CRUSHING AND SCREENING PLANT IN THE DIRECTION OF R1.

4. THE CRUSHING AND SCREENING PLANT SHALL NOT BE OPERATED WITHIN 350 M OF R1.

5. THE OWNER OF R1 ALSO OWNS THE LANDS TO BE LICENSED FOR AGGREGATE EXTRACTION. THEY HAVE SIGNED AN AGREEMENT THAT GRANTS THE PIT OPERATOR RELIEF FROM IMPLEMENTING THE NOISE MITIGATION MEASURES AS RECOMMENDED ABOVE IN ITEMS #2, #3 AND #4 WITH REGARD TO R1. SHOULD THE OWNERSHIP OF R1 CHANGE, A SIMILAR AGREEMENT WILL HAVE TO BE REACHED WITH THE NEW OWNERS OR THE MITIGATION AS RECOMMENDED ABOVE IN ITEMS #2, #3 AND #4 SHALL BE IMPLEMENTED WITH RESPECT TO R1.

6. A MINIMUM 8.0 M HIGH ACOUSTICAL BARRIER SHALL BE CONSTRUCTED AND MAINTAINED ON THE PIT FLOOR BESIDE THE CRUSHING AND SCREENING PLANT IN THE DIRECTION OF R2 WHEN OPERATING WITHIN AREAS 2 AND 3.

7. THE ACOUSTICAL BARRIER MENTIONED ABOVE CAN BE COMPRISED OF THE PIT FACE, 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 EXTRACTION, SUCH AS THE STRIPPING OF TOPSOIL AND CONSTRUCTION OF BERMS, OR ACTIVITIES RELATED TO THE REMEDIATION OF THE SITE AFTER THE EXTRACTION IS COMPLETED ARE CONSIDERED TO BE CONSTRUCTION ACTIVITIES. THEY ARE REGULATED UNDER MUNICIPAL BYLAWS AND NPC-115 "SOUND LEVEL LIMITS FOR MOTORIZED CONSTRUCTION EQUIPMENT".

NATURAL ENVIRONMENT ASSESSMENT - TERRASTORY - DECEMBER 2020

1. THE NORTHERN WOODLOT ENHANCEMENT AREA IS TO BE REMOVED FROM CULTIVATION AND PLANTED WITH NATIVE SPECIES DURING (OR BEFORE) REMOVAL OF THE SOUTHERN WOODLOT. A NORTHERN WOODLOT ENHANCEMENT PLAN IS TO BE PREPARED PRIOR TO REMOVAL OF THE SOUTHERN WOODLOT WHICH INCLUDES THE FOLLOWING ELEMENTS (MINIMUM):
 - COMPOSITION, DENSITY, AND SIZING OF WOODY PLANT MATERIAL. ALL PLANT INSTALLATIONS ARE TO BE NATIVE TO MIDDLESEX COUNTY.
 - MEASURES TO TRANSPLANT NATIVE SAPLINGS (E.G. SUGAR MAPLE, BITTERNUT HICKORY, ETC.) FROM THE SOUTHERN WOODLOT TO THE NORTHERN WOODLOT ENHANCEMENT AREA.
 - MEASURES TO TRANSPLANT SOILS MATS (CONTAINING NATIVE HERBACEOUS FLORA, MYCORRHIZAL FUNGI, ETC.) FROM THE SOUTHERN WOODLOT TO THE NORTHERN WOODLOT ENHANCEMENT AREA. SOIL MATS WILL NOT BE EXCAVATED FROM AREAS CONTAINING DENSE COVERAGE OF GARLIC MUSTARD OR OTHER NON-NATIVE FLORA. SOME SOIL MATS ARE TO CONTAIN POPULATIONS OF THE REGIONALLY RARE JAMES' SEDGE (CAREX JAMESII) AND OTHER SPRING EPHEMERALS AND UPLAND SEDGES.
 - A MONITORING PLAN WILL BE PREPARED FOR THE PURPOSES OF DETERMINING THE SUCCESS OF THE PLANTINGS (INCLUDING THE NEW PLANT INSTALLATIONS AND TRANSPLANTED FLORA/SOIL MATS) FOR A PERIOD OF NO LESS THAN THREE (3) GROWING SEASONS.
2. ALL TREE AND SHRUB REMOVALS WITHIN THE SOUTHERN WOODLOT WILL BE

NO.	DATE	REVISIONS	OWNER	HA	MAN
1	JAN 2021	PER MNRF COMMENTS			

Pre Licence Review

Site Plan Amendments

Harrington
hmc
Avan Ltd

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www.harringtonmcanavan.com

Project Name

**Thames Valley
Aggregates Inc.
PIKE PIT**

LICENCE No.
PART LOT 18, CONCESSION 3
MUNICIPALITY OF THAMES CENTRE (FORMERLY TOWNSHIP
OF NORTH DORCHESTER, COUNTY OF MIDDLESEX

Scale	AS SHOWN	North	Stamp
Drawing Status	SUBMITTED TO MNRF FOR APPROVAL		
Drawn	RM/SB	Checked MH	Issue Date JAN 2021
Drawing Title	SECTIONS AND DETAILS		Project Number 20-23
			Drawing Number 4 OF 5