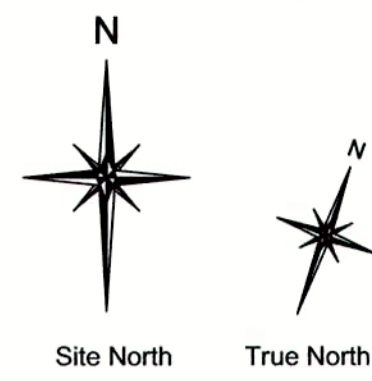


LOT 18, CONCESSION 7
GEOGRAPHIC TOWNSHIP OF UXBRIDGE
REGIONAL MUNICIPALITY OF DURHAM



2412 - 11 of 11

A. General

- Contour mapping provided by J.D. Barnes Limited, dated August 5, 2015. All existing features are shown to scale.
- All contours are shown at one (1) metre intervals. All elevations are related to NAD83, UTM Zone 17.

B. Site Description

- The site is located at the northeast corner of the intersection of Reid Road and Concession Road 7, in the Township of Uxbridge. The site is located adjacent to an existing Class "A" Pit owned by Miller Paving Ltd., and licensed under the Aggregate Resources Act, Licence No. 6578.
- The total area under site plan control, including the fill areas, is approximately 33.4 hectares. Bearings and dimensions for the site are as noted on this plan.
- The site is to be accessed through the existing access at Concession Road 7.

C. Fill Permit Design

- Design of the imported Fill Permit Plans has been completed in accordance with the Corporation of the Township of Uxbridge By-law 2010-084, "A site alteration by-law to prohibit or regulate the removal of topsoil, the placing or dumping of fill and the alteration of the grade of land in areas of the Township of Uxbridge".

D. Hours of Operation

- In accordance with the Township of Uxbridge Site Alteration By-law 2010-084, Fill operations are permitted from 7:00 AM to 7:00 PM Monday to Friday inclusive, and from 8:00 AM to 3:00 PM on Saturdays. No person shall perform a site alteration or permit the performance of a site alteration under the following circumstances:

- Anytime on a Sunday or a Statutory Holiday;
- During any period in which a wind warning for the area has been issued by Environment Canada;

E. Existing Services

- There is an existing overhead hydro line on the site, near the west property line, running in a north-south direction.
- There is an existing underground gas service through the approximate mid-line of the site, running in an east-west direction, at an elevation of approximately 325 masl ±, feeding the existing on-site asphalt plant.
- There is an existing underground Bell telephone line on the site, near the south property line, running in an east-west direction.

F. Site Preparation

- Existing trees, brush, and stumps are to be removed from the site, disposed of by burying or burning with applicable permits, or chipped and stockpiled for future use.
- Setbacks established from the property line as part of the former limit of extraction are to remain undisturbed.
- All swales and fill slope areas are to be topsoiled, hydroseeded, and maintained upon completion to control erosion.
- Final grades will depend on the site design for the enclosed warehouse building.

G. Fill Importation Sequence

- Fill importation can take place within Area #1 and Area #2 at the same time.
- Fill Area #1, Lift #1, will proceed in the direction shown by the arrows on drawing 2412 - 2 of 11. The interim perimeter drainage swale and rip rap channels shall be constructed to an elevation of 338 masl ±, once Lift #1 is completed to an elevation of 339 masl ±, then Lift #2 can proceed.
- Fill Area #1, Lift #2, will proceed in the direction shown by the arrows on drawing 2412 - 2 of 11. The perimeter drainage swale shall be constructed, and rip rap lined channels shall be extended from 338 masl ± to 348 masl ±, once Lift #2 is completed at 349 masl ±.
- Fill Area #2, Lift #1, will proceed in the direction shown by the arrows on drawing 2412 - 2 of 11. The interim perimeter drainage swale and rip rap channels shall be constructed to 340 masl ± once Lift #1 is completed at 341 masl ±, and the Lift #2 will proceed.
- Fill Area #2, Lift #2, will proceed in the direction shown by the arrows on drawing 2412 - 2 of 11. The perimeter drainage swale shall be constructed and rip rap lined channels shall be extended from 340 masl ± to 345 masl ±, once Lift #2 is completed at 346 masl ±.

H. Fill Importation

- There are two (2) areas proposed to be filled on the site. The first area is bounded to the north by the adjacent licensed pit, to the east and south by the internal haul road for the site and adjacent pit, and to the west by the existing top of bank near the west property line. The second area is bounded to the north and east by the adjacent licensed pit, to the west by the internal haul road for the site and adjacent pit, and to the south by the south property line.
- Areas to be Filled

Area #1	11.9 ha
Area #2	4.9 ha
Total Fill Area	16.8 ha
Total Unfilled Area	20.0 ha
Total Area	36.8 ha
- The volume of fill proposed for the site is approximately 1,039,000 cubic metres.
- The site is to be accessed by the existing main access for the adjacent Class "A" Pit, which is off of Concession Road 7.
- The existing gate at Concession Road 7 is to be kept closed and locked during hours of non-operation.

TREE PLANTING NOTES

Site Preparation

This section applies to all enhanced grass swales, slopes, infiltration basins, and filter strips.

- Topsoil should be spread to a minimum depth of 150mm following the completion of grading. Add amendments if necessary and till to ensure adequate mixing.
- All infiltration, swale, and filter strip areas should be clearly demarcated prior and during construction. To protect infiltration capacity, construction traffic and storage of materials shall not occur in these areas. If compaction of some areas from construction is unavoidable, the compacted areas should be tilled to a depth of 300mm to break up any hard soil pan.
- Final grading and planting should not occur in the swale until the areas draining into the swale are stabilized.
- If possible, flow should not be directed into the swale once the banks are stabilized.

Seeding

- Seeding shall occur immediately after final grading is complete. Hydroseeding is the preferred method to reduce the chance of erosion and maximize germination. Hydroseeding should occur in the spring and fall of every importation season as lifts are graded to minimize the amount of unstabilized soil.
- Seed Mix 1 and Seed Mix 2 shall both be sown at a rate of between 35 and 45 kg/ha.
- Seed Mix 1 shall be applied only to enhanced vegetated swales. The remaining slopes, infiltration basins, and filter strips shall be planted with Seed Mix 2.
- A cover crop of *Avena sativa* shall be added to both Seed Mix 1 and 2. The cover crop application rate shall be 22 kg/ha in addition to the 35 to 45 kg/ha for Seed Mix 1 and 2 (total application 57 to 67 kg/ha).
- Irrigation may be required while vegetation is becoming established during dry periods, depending on rainfall.
- An approximately 1/3, 1/3, 1/3 mix of burr oak (*Quercus macrocarpa*), shagbark hickory (*Carya ovata*), and common hackberry (*Celtis occidentalis*) seeds should be hand sown during late autumn in the year following the seeding of grasses. The seeds should only be sown on slope areas and should be sown at a rate of roughly 1000 viable seeds per hectare.

Maintenance

- Inspect for vegetation density (density should be at least 80%), quarterly for the first two years and twice annually thereafter.
- Regularly inspect swales for erosion and rills, regrade and replant if necessary. Any damage due to sediment removal or erosion must be repaired and requires immediate re-seeding.
- Scrape out and remove sediment when deposits exceed 25mm in depth and revegetate as required.
- Mowing within swales is necessary to maintain optimal function. Mowing should be done frequently enough to maintain grasses at an appropriate height (75 to 150mm), and to promote vigorous growth and pollutant uptake. Grass clippings should be removed offsite to remove nutrients and pollutants.
- Mowing is not recommended in filter strip, slope, and infiltration pit areas.
- Remove trash and debris from all areas as needed.

Planting

- All plant material installed must meet Canadian Standards for Nursery Stock, Ninth Edition.
- All specified woody plant material should be container grown and between 60 and 80 cm in height at the time of installation.
- Woody plant material shall be planted the year following seeding of the slopes. Nodes of approximately 5 to 6 m in diameter consisting of 3 of each of the 6 listed woody plants (18 plants in total per node) shall be planted on the slopes. Approximately 25 - 30 nodes should be evenly distributed throughout the slopes, avoiding the rip-rap channels and enhanced vegetation swales.

Enhanced Vegetated Swale (Seed Mix 1)

Approximate coverage area: 13,000 m²

Genus composition	species	common name	mix
<i>Danthonia</i>	<i>spicata</i>	poverty oatgrass	35%
<i>Sorghastrum</i>	<i>nutans</i>	yellow Indian grass	35%
<i>Andropogon</i>	<i>gerardii</i>	big bluestem	10%
<i>Carex</i>	<i>pensylvanica</i>	Pennsylvania sedge	10%
<i>Elymus</i>	<i>canadensis</i>	Canada wild-rye	10%

Slopes, Filter Strips, & Infiltration (Seed Mix 2)

Approximate coverage area: 61,700m²

Genus composition	species	common name	mix
<i>Schizachyrium</i>	<i>scoparium</i>	little bluestem	25%
<i>Sorghastrum</i>	<i>nutans</i>	yellow Indian grass	22.5%
<i>Sporobolus</i>	<i>neglectus</i>	small dropseed	22.5%
<i>Andropogon</i>	<i>gerardii</i>	big bluestem	10%
<i>Elymus</i>	<i>canadensis</i>	Canada wild-rye	10%
<i>Monarda</i>	<i>fistulosa</i>	wild bergamot	3%
<i>Coreopsis</i>	<i>lanceolata</i>	lance-leaved coreopsis	3%
<i>Rudbeckia</i>	<i>hirta</i>	black-eyed Susan	4%

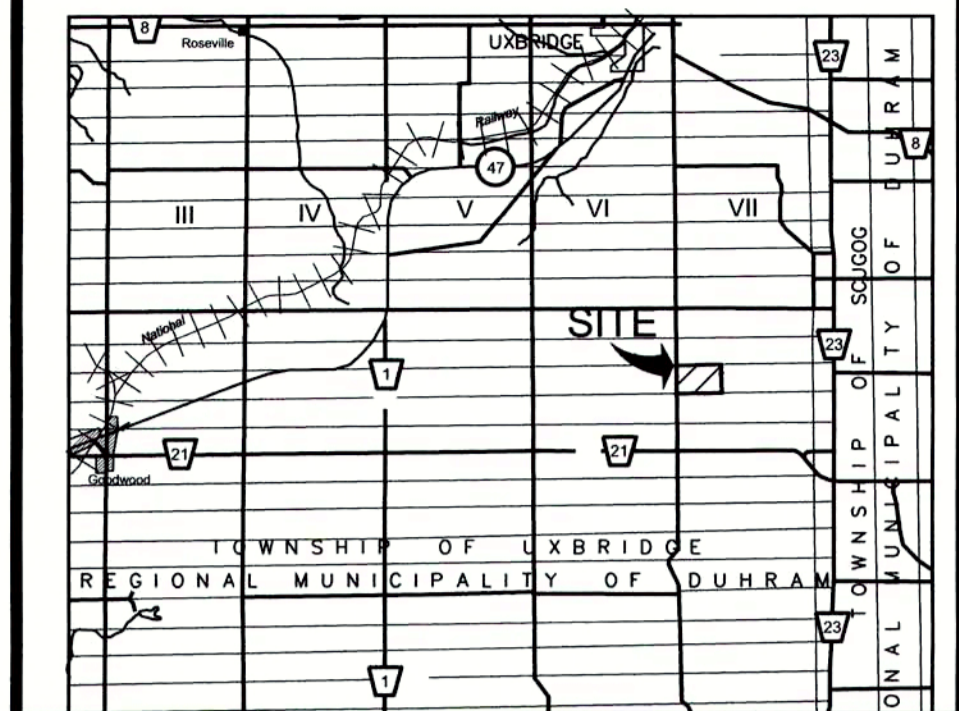
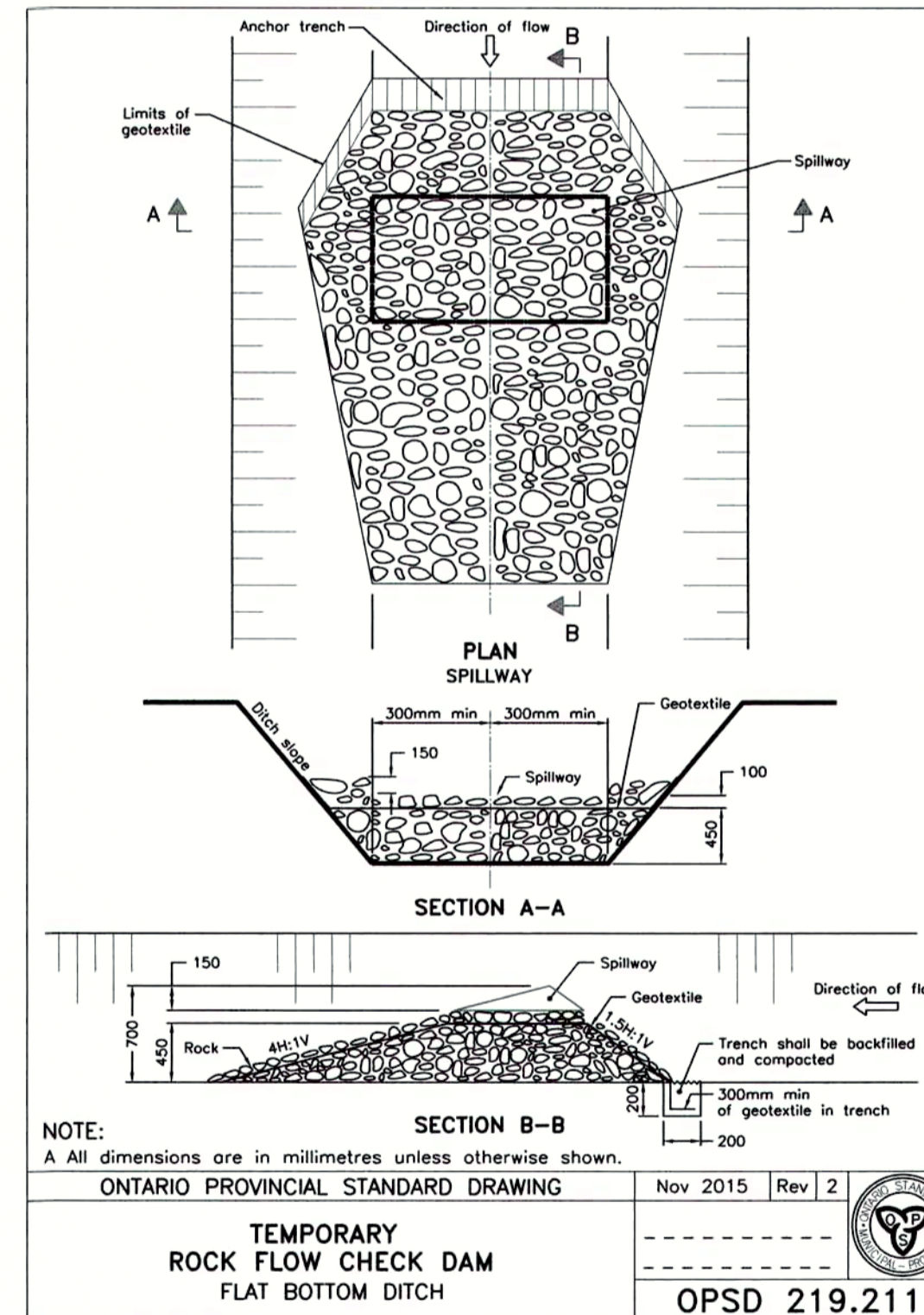
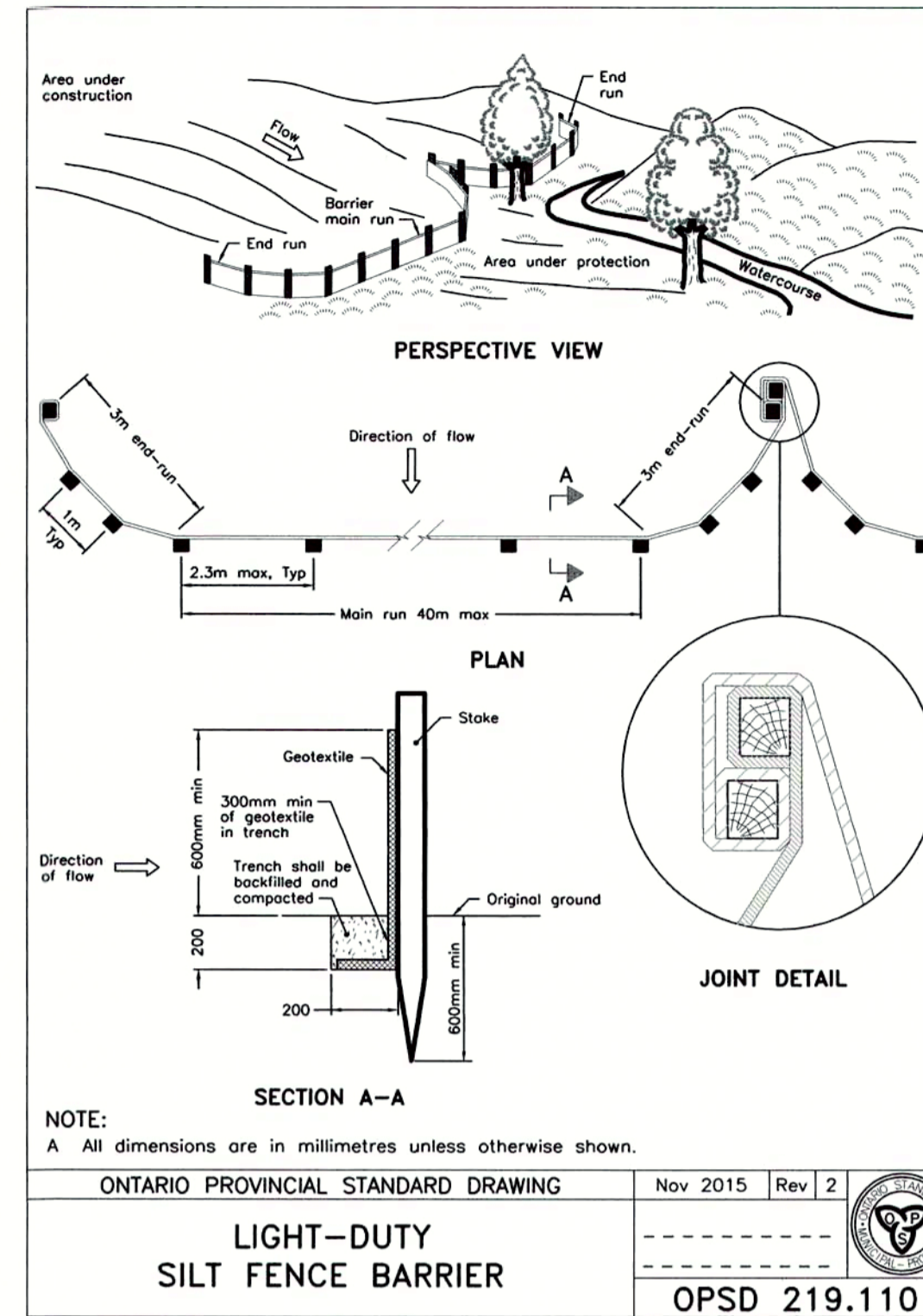
Woody Plants (potted)

Genus composition	species	common name	quantity
<i>Juniperus</i>	<i>communis</i>	common juniper	- 90
<i>Myrica</i>	<i>pensylvanica</i>	bayberry	- 90
<i>Prunus</i>	<i>pumila var. pumila</i>	sand cherry	- 90
<i>Rhus</i>	<i>typhina</i>	stag horn sumac	- 90
<i>Shepherdia</i>	<i>canadensis</i>	buffalo-berry	- 90
<i>Viburnum</i>	<i>rafinesquianum</i>	downy arrowwood	- 90

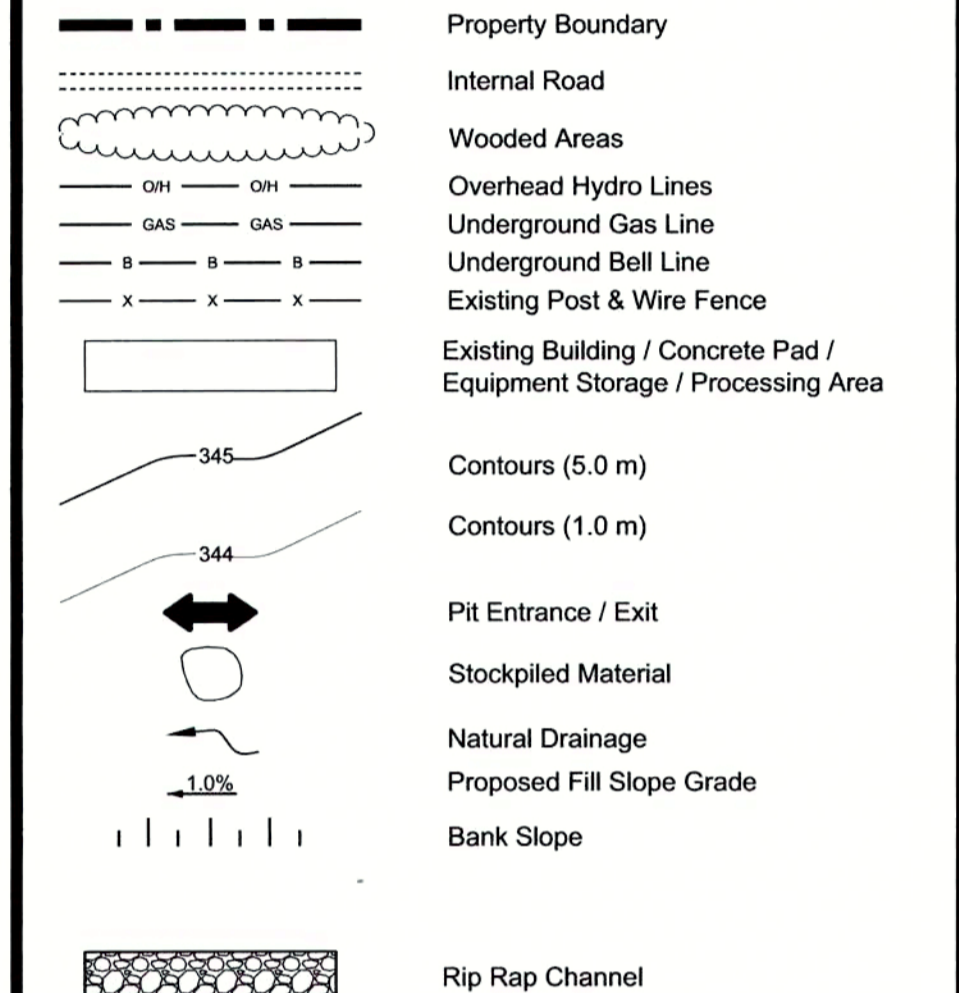
Cover Crop

Approximate coverage area: 74,700m²

Genus composition	species	common name	mix
<i>Avena</i>	<i>sativa</i>	cultivated oats	100%



KEY MAP
N.T.S.
LEGEND



SCHEDULE OF REVISIONS

NO.	DATE	DESCRIPTION	CHECKED

MILLER PAVING LIMITED
BOYINGTON PIT #3
FILL IMPORTATION UNDER SITE PLAN CONTROL
4499-4589 CONCESSION ROAD 7
TOWNSHIP OF UXBRIDGE

NOTES AND DETAILS

PROJECT NO. 10 - 2412	DRWG NO. 2412 - 11 of 11
DATE: MARCH 2019	SCALE: AS NOTED
DRAWN: MJB	CHECKED: APPROVED:

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