2. All contours are shown at one (1) metre intervals. All elevations are related to NAD83, UTM Zone 17.

## 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.
- 3. 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".

## 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 perfomance 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**;

## Existing Services

4

- 1. There is an existing overhead hydro line on the site, near the west property line, running in a north-south direction
- 2. 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.
- 3. There is an existing underground Bell telephone line on the site, near the south property line, running in an east-west direction.

## Site Preparation

- 1. 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
- 2. Setbacks established from the property line as part of the former limit of extraction are to remain undisturbed.
- 3. All swales and fill slope areas are to be topsoiled, hydroseeded, and maintained upon completion to control erosion.
- 4. Final grades will depend on the site design for the enclosed warehouse building.

## G. Fill Importation Sequence

- 1. Fill importation can take place within Area #1 and Area #2 at the same time.
- 2. 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 ±.
- 4. 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.

2. Areas to be Filled

11.9 ha 4.9 ha Area #2 16.8 ha **Total Fill Area** 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

## Drainage and Siltation Controls

On site drainage will be by overland flow in the direction indicated by the arrows on the Existing Features plan, the Proposed Imported Fill Placement and Drainage Systems plan, and through infiltration.

True North

- Overland flow will be directed from the imported fill areas to the adjacent Class "A" pit via perimeter drainage swales with rock check dams directing flow to rip rap lined channels on the fill slopes, to stilling basins at the base of the rip rap lined channels, prior to entering the pit.
- Silt controls are to be installed along the limits of Fill Area #1 and #2 as shown on drawing 9 of 11, prior to the importation of any fill material. If silt fencing is to be used, it shall be per Ontario Provincial Standard Drawing (OPSD) 219.110.
- All silt controls are to be inspected on a weekly basis while fill is being imported. The owner is to have a supply of additional silt control materials on hand in order to immediately address any required maintenance.
- 5. Silt controls are to remain in place until fill slopes have been vegetated.
- 6. Local area roads are to be kept clean of mud being tracked onto them by vehicles exiting the proposed fill site. If mud is tracked onto local area roads, the owner shall sweep them by the end of each working day (minimum), and more frequently if directed by Township of Uxbridge staff.

### **Dust Control**

## Dust will be mitigated on site.

2. Water or other approved dust suppressant will be applied to existing internal haul roads and fill placement areas as required to mitigate dust.

## Monitoring Imported Fill

- Fill monitoring practices described below are based on the Ministry of the Environment and Climate Change "Management of Excess Soil - A Guide for Best Management Practices".
- 2. The owner should retain a Qualified Person (Q.P.) as defined under Section 5 of Ontario Regulation (O. Reg.) 153/04, being either a Professional Engineer (P. Eng.) or Professional Geoscientist (P. Geo.) to establish baseline soil and groundwater conditions on the site, prior to the importation of any fill.
- Prior to placing any fill, samples are to be taken by a Q.P. at the fill source site and tested to ensure they will not cause adverse impact on the receiving site.
- 4. All incoming fill loads are to be accompanied by representative testing documentation indicating that the load is suitable for placement at the receiving
- 5. Soil testing is to be undertaken at laboratories bearing accreditation from either Standards Council of Canada (SCC), or Canadian Association for Laboratory Accreditation (CALA), and that have been accredited in accordance with International Standard ISO/IEC 17025 - General Requirement for the Competence of Testing and Calibration Laboratories.
- 6. All incoming fill loads should be visually and olfactory inspected by the receiving site owner, or their representative, to screen for visible staining of the soil, odour,
- Documentation is to be kept for all incoming fill loads, including (but not limited
- Date and time or arrival of the load;

at the expense of the owner of the source site.

- Name and location of the source site: Volume of fill received;
- Documentation from the source site signed by a Q.P. including representative
- Confirmation by the receiving site Q.P. acknowledging the acceptability of the
- Any details pertaining to loads that are rejected for placement at the receiving
- 8. A soil placement plan is to be kept at the receiving site indicating the approximate location that fill was placed on the site, as well as the approximate
- volume of fill that was placed, from each source site. 9. The owner of the receiving site, or their representative, reserves the right to reject any load of imported fill brought onto the site. If a load is rejected prior to its placement, the load is to be immediately removed from the receiving site and returned to the source site. If the load is rejected upon its placement, it is to be

excavated and removed from the receiving site, and returned to the source site,

# TREE PLANTING NOTES

## Site Preparation

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

- 1. Topsoil should be spread to a minimum depth of 150mm following the completion of grading. Add amendments if necessary and till to ensure
- 2. 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
- 3. Final grading and planting should not occur in the swale until the areas draining into the swale are stabilized.

to a depth of 300mm to break up any hard soil pan.

4. If possible, flow should not be directed into the swale once the banks are stabilized.

- 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
- 2. Seed Mix 1 and Seed Mix 2 shall both be sown at a rate of between 35 and 45
- Seed Mix 1 shall be applied only to enhanced vegetated swales. The remaining slopes, infiltration basins, and filter strips shall be planted with Seed
- 4. 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.
- 6. 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.

- 1. 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
- 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. 5. Mowing is not recommended in filter strip, slope, and infiltration pit areas.
- 6. Remove trash and debris from all areas as needed.

composition

- All plant material installed must meet Canadian Standards for Nursery Stock,
- 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 m<sup>2</sup>

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

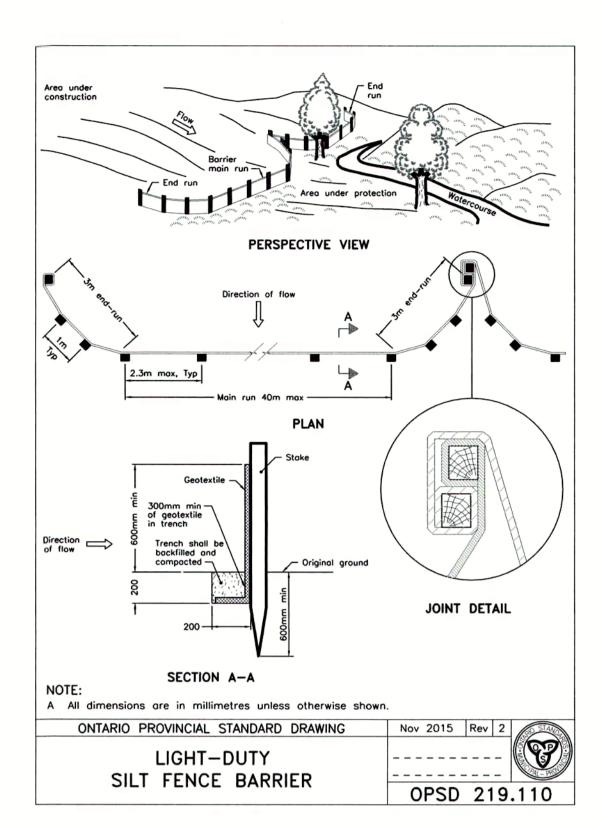
## Slopes, Filter Strips, & Infiltration (Seed Mix 2)

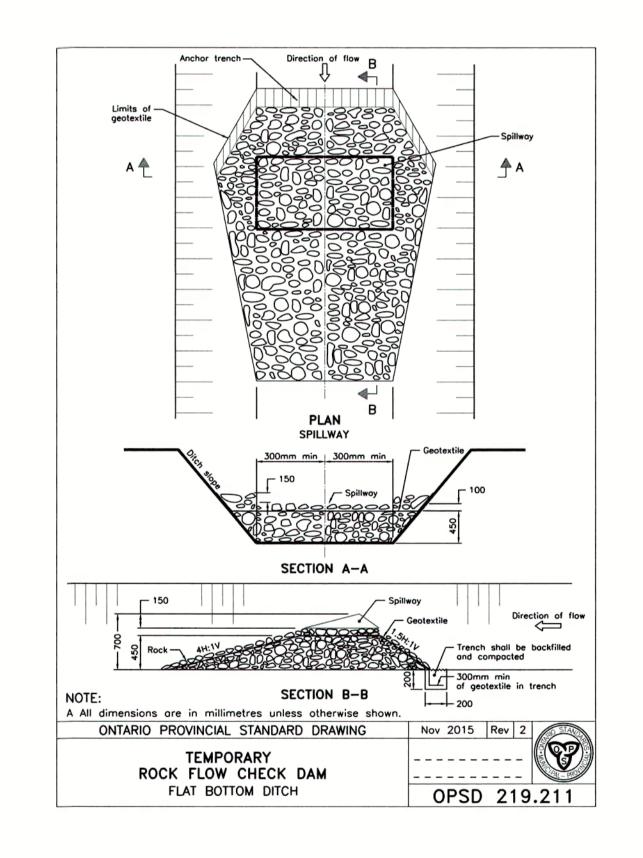
## Approximate coverage area: 61,700m<sup>2</sup>

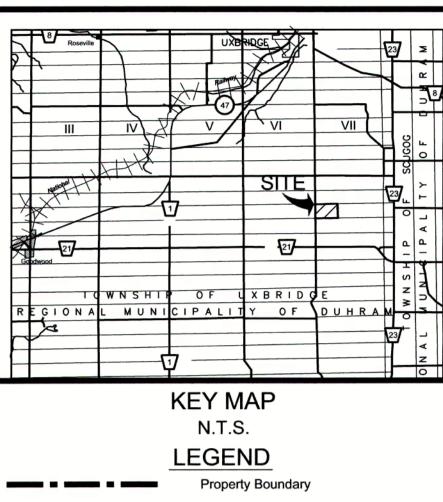
Genus composition	species	common name	mix	
Schizachyrium	scoparium	little bluestem	25%	
Sorghastrum	nutans	yellow Indian grass	22.5%	
Sporobolus	neglectus	small dropseed	22.5%	
Andropogon	gerardii	big bluestem	10%	
Elymus	canadensis	Canada wild-rye	10%	
Monarda	fistulosa	wild bergamot	3%	
Coreopsis	lanceolata	lance-leaved coreopsis	3%	
Rudbeckia	hirta	black-eyed Susan	4%	
Woody Plants (potted)				
Genus	species	common name	quantity	
Juniperus	communis	common juniper	~ 90	
Myrica	pensylvanica	bayberry	~ 90	
Prunus	pumila var. pumila	sand cherry	~ 90	
Rhus	typhina	stag horn sumac	~ 90	
Shepherdia	canadensis	buffalo-berry	~ 90	
Viburnum	rafinesquianum	downy arrowwood	~ 90	
Cover Crop Approximate cove	erage area: 74,700m²			

common name

cultivated oats







Internal Road Wooded Areas Overhead Hydro Lines \_\_\_\_ O/H \_\_\_\_ O/H \_\_\_\_ ——— GAS ——— GAS ——— Underground Gas Line —— в —— в —— Underground Bell Line Existing Post & Wire Fence \_\_\_ x \_\_\_ x \_\_\_ x \_\_\_ Existing Building / Concrete Pad /



Pit Entrance / Exit

Equipment Storage / Processing Area

Natural Drainage Proposed Fill Slope Grade

Stockpiled Material

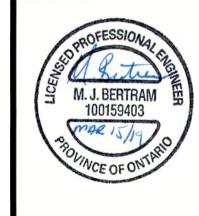
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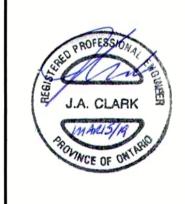
1 | 1 | 1 | 1

Rip Rap Channel

Bank Slope

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

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

Skelton Brumwell

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