



KITCHENER  
WOODBRIDGE  
LONDON  
KINGSTON  
BARRIE  
BURLINGTON

## DRAFT FOR DISCUSSION

October 22, 2018

Town of Mono  
347209 Mono Centre Road  
Mono, ON L9W 6S3  
Att: David Trotman/Director of Planning

Dear Mr. D. Trotman:

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**RE: Greenwood Aggregates Proposed Violet Hill Pit Peer Review Visual Assessment  
OUR FILE 1767'B'**

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We have completed a further review of the remaining items listed in the Ferris and Associates correspondence dated February 18, 2018. This response has been jointly prepared by Rollings Hyland Consulting and MHBC Planning. MHBC Planning was retained by Greenwood Construction to assist with responding to the peer review comments. We have conducted additional analysis and prepared revised related materials in response to the peer review comments.

We are providing this as a draft response because we anticipate that further discussion with a reviewer may be required to completely resolve remaining matters.

### **Item 1- Methodology Clarifications**

We have confirmed that the original methodology has been used in other VIA projects for pits and quarries and we understand that the reviewer has agreed the methodology is acceptable.

We can confirm that there have been adjustments made to acoustic berms and tree screens as a result of the visual impact review. These are outlined in the original report, for example:

- early construction of screening berm for R1 plus additional tree screen
- additional tree screen for R2
- additional tree screen for R3, R4 and R5
- retaining berm for R8 for the life of the pit
- additional tree screen for R10
- additional tree screen for R16

We can also confirm that views from upper levels of existing homes have been considered as noted on the Visual Assessment Table. Note that this has been updated since the original report was completed (see enclosures).

#### **Item 2- Visual Screening for R3**

The conclusion of the original Visual Assessment (VA) report with respect to R3 was that views are "slight" at the 5 metre berm height and blocked once the berm is raised to 10 metres. To be more specific, this reflects the sight line assessment which suggested a small portion of the upper pit face might be visible at a distance of approximately 600 metres with the lower berm elevation. The pit floor operations or products stock piles would not be visible. The possible exposure of the upper pit face would be short-term given the location of this pit face and the requirement for progressive rehabilitation. However, the operational phasing dictates that the berm must be raised to 10 metres prior to the extraction of Areas B and C that results in the creation of the partially exposed pit face. Accordingly, the higher berms, that effectively block the view, will be in place before the potentially exposed pit face is created.

Accordingly, we do not think additional mitigation is required for R3. Regardless, Greenwood is proposing vegetation plantings along the fence line in front of R3, R4 and R5 that will further mitigate any potential views of the pit face.

#### **Item 3- Pit Floor**

There may be some confusion occurring as a result of the wording used in the original VA conclusions. The intent was to point out that there were some potential views of upper portions of the pit edges and that operations on the pit floor, including stock piles, would not be visible (distance is also a mitigating factor that was not discussed in the original report). The cross sections have been reviewed and should better support the report conclusions in this regard.

#### **Item 4- Relocated Pit Entrance**

We have enclosed a site plan enlargement that shows the layout and contours for the proposed Third Line East access. There will be no views into the pit as a result of the horizontal and vertical alignments of the entrance driveway. The views are blocked by the grade of the road and surrounding topography. The conclusions are not relying on vegetation screening at this location.

#### **Item 5- Stock Piles and Equipment**

We have added additional information on stockpiles to the cross sections for your consideration. The stock pile height is 10 metres and this is noted on the site plans. All the equipment is lower than the stock piles.

#### **Item 6- Tree Screens**

R3- R5- The original VA found that there was potential/slight views when the proposed berm is at 5 metres but the views are blocked at the 10 metre high berm. The recommendation is for a tree screen on the property line to provide additional mitigation.

It should also be recognized the distance is a significant mitigating factor for the Area A views when the 5 metre berm is in place. The processing area is 750-1000 metres away from the residences. The 10 metre berm will be in place before extraction moves towards the residents and the intervening existing land (which includes farm fields and hedge row vegetation is removed). As a result, the recommendation for the additional tree screens is abundantly cautious as there is very little visual impact for those receptors or public travelling on 4th Line East.

## **R1**

The VA found that views are effectively screened with the 7.5 metre berm. Therefore, the plan was amended to show the berm in position throughout the life of the pit.

The tree screen under consideration is proposed on the front of the berm where the top elevation is expected to drop as it follows the topography along the extraction setback. The potential for significant visual impact as a result of the lower top of berm elevation is marginal due to:

- View over 7.5 metre berm is not the pit floor or stockpiles.
- The top of a distant working face might be visible.
- There is vegetation around the residence itself.
- The angle of view is limited to the corner of Area C.
- The direction of extraction is towards the residence.
- The hedge row in Area C is likely to be retained to the last stages of extraction in this area.

## **R10**

The VA identified potential for slight views with a 7.5 metre berm in place and states that it is important to screen these views of the working face. A 4 metre tree screen on top of the berm is proposed.

The pit floor operations are not expected to be visible from this residence.

Distance is less of a factor as the top portions of the open pit face are less than 500 metres away and the working face is moving away from the residents (therefore, potentially visible for longer periods of time).

Although this is a minor impact, a tree screen on the berm could help mitigate the visual impact. It is recommended that the site plan builds in flexibility so that the preferences of the land owner can be taken into account when the tree screen is implemented.

### **Item 7- 30 Side Road Entrances**

The entrance design has been revised to include additional offset/overlap of the berm to better mitigate the views into the pit. Please see attached plan. Additional sections have been prepared to demonstrate the effectiveness of the 3 metre high berms.

### **Item 8- Truck Visibility**

As noted above, the overlap has been increased to provide effect screening into the pit operations.

Trucks will indeed be visible as they cross the road. This is in keeping with the rural nature of this area which has been identified and protected for aggregate extraction. The inclusion of the resource south of 30 Side Road in this proposed operation, as opposed to development of a separate stand alone pit, will reduce truck traffic on local roads.

#### **Item 9- Contingency Berm Adjustment**

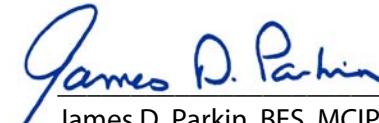
To clarify, Greenwood is not relying on the adjustment clause to support the conclusions of the report. This is a contingency should there be any unexpected areas where there are views of the pit operations. Adjustments could be required to berm elevations or augmented tree screens. The intent is to retain a degree of flexibility so that preferences of adjacent residents' can be taken into account.

#### **Item 10- Butternut**

Butternut trees must be dealt with to the satisfaction of the MNRF.

In closing, we trust this additional information is responsive to the reviewer's comments and we would welcome further discussion on any unresolved issues.

Yours truly,  
MHBC PLANNING



James D. Parkin, BES, MCIP, RPP  
JDP/jb

Rollings Hyland Consulting

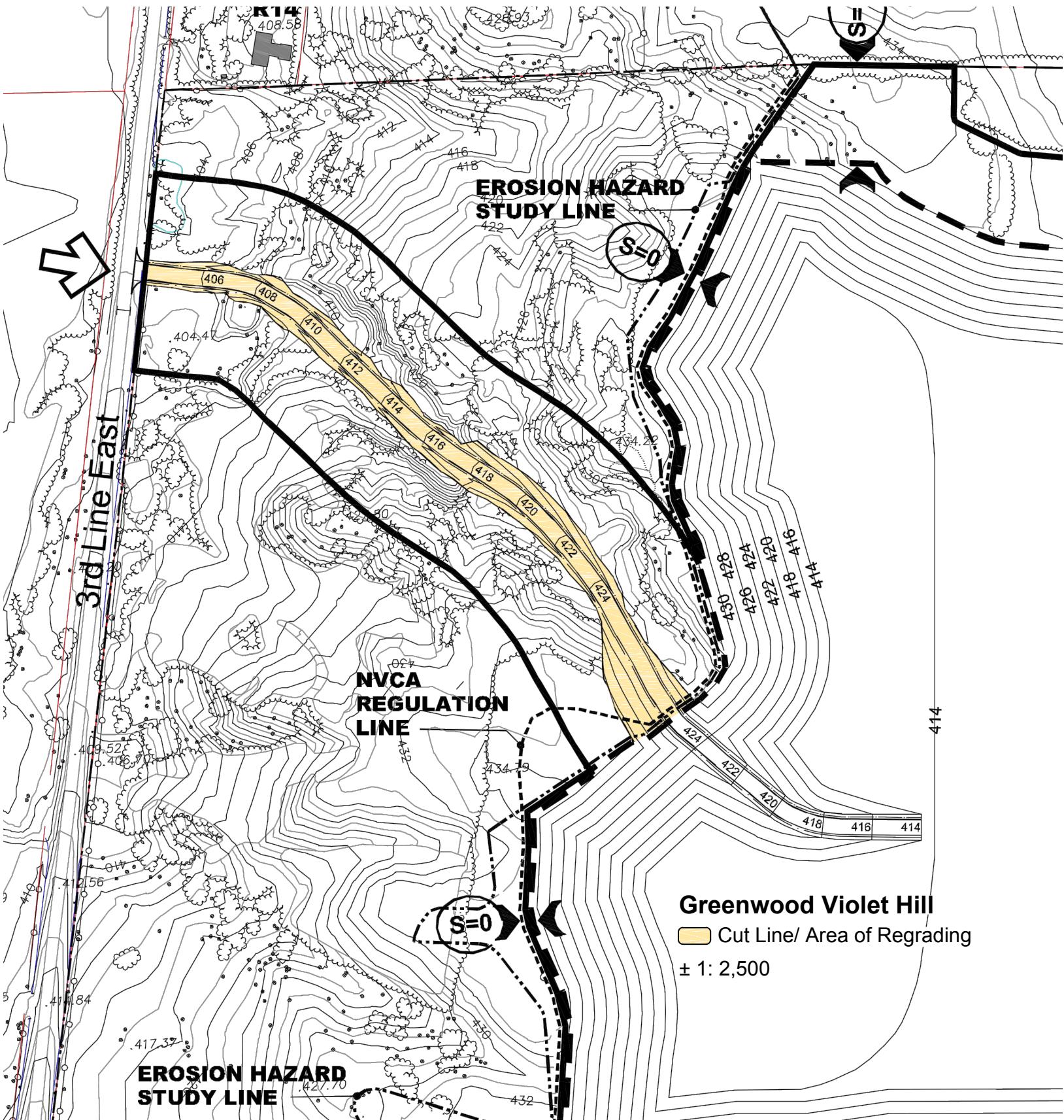


Jeff Rollings

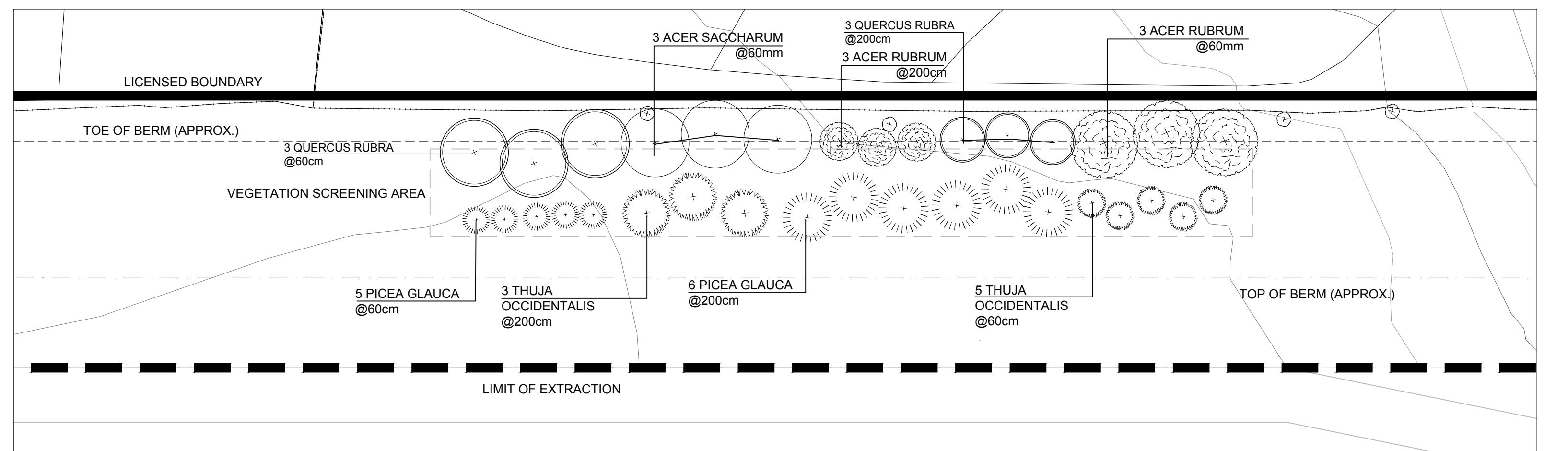
Attach.

Enclosures

1. Updated Visual Assessment Cross Sections – 3 page package
2. Pit Entrance Third Line East – site plan enlargement showing areas of regrading
3. MHBC Landscape Plan (tree screen specifics)
4. Revised ARA site plans



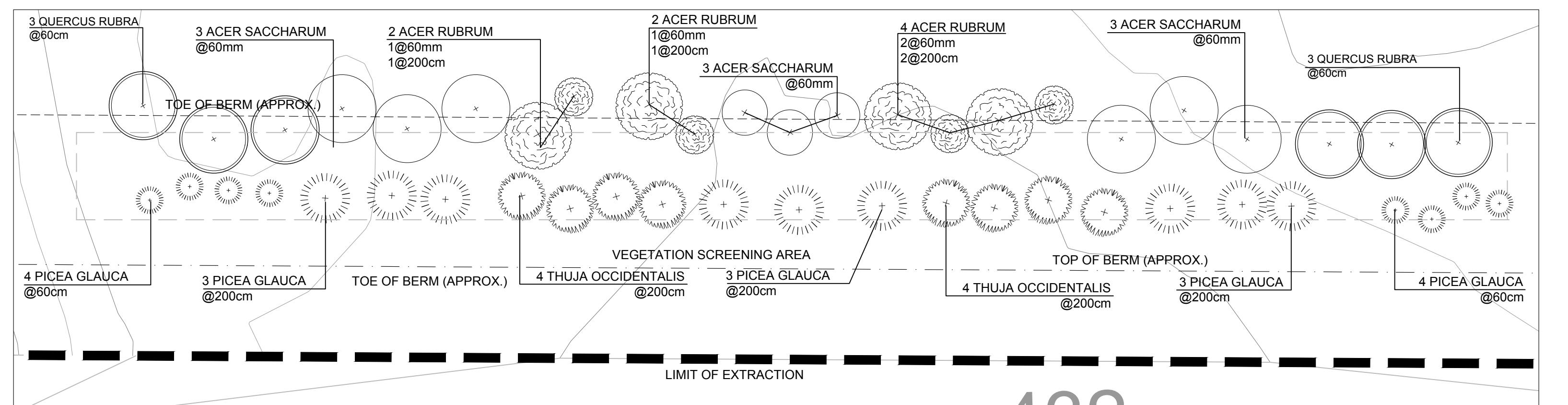
LEGAL DESCRIPTION:  
PART LOTS 30, 31 AND 32  
CONC. 4 EHS.  
TOWN OF MONO  
DUFFERIN COUNTY



1 PROPOSED BERM AND BUFFER SCREENING - DETAIL AREA A  
L1 1:400

PLANT SCHEDULE - 1/L1

QTY	BOTANICAL NAME	COMMON NAME	SIZE	ROOT	MATURE HT	MATURE SPR.	GROWTH RATE	SPACING O.C.	5 Year SPR.	5 Year HT	10 Year SPR.	10 Year HT
<b>DECIDUOUS TREES</b>												
3	ACER RUBRUM	RED MAPLE	60mm	WB	15m	12m	MODERATE TO FAST (330mm / year)	5.0	4m	8m	8m	12m
3	ACER RUBRUM	RED MAPLE	200cm	15 GAL	15m	12m	MODERATE TO FAST (330mm / year)	5.0	2m	5m	4m	8m
3	ACER SACCHARUM	SUGAR MAPLE	60mm	WB	30m	18m	MODERATE TO FAST (330mm / year)	6.5m	6m	10m	12m	15m
0	ACER SACCHARUM	SUGAR MAPLE	200cm	15 GAL	30m	18m	MODERATE TO FAST (330mm / year)	6.5m	3m	5m	6m	10m
3	QUERCUS RUBRA	RED OAK	60mm	WB	22m	20m	FAST (600mm / year)	6.5m	8m	12m	10m	18m
3	QUERCUS RUBRA	RED OAK	200cm	15 GAL	22m	20m	FAST (600mm / year)	6.5m	4m	7m	8m	12m
<b>CONIFEROUS TREES</b>												
6	PICEA GLAUCA	WHITE SPRUCE	200cm	WB	25m	8m	Moderate (330mm / year)	6.0m	2m	6m	6m	15m
5	PICEA GLAUCA	WHITE SPRUCE	60cm	3 GAL	25m	8m	Moderate (330mm / year)	6.0m	1m	4m	3m	12m
3	THUJA OCCIDENTALIS	EASTERN WHITE CEDAR	200cm	WB	12m	4m	Moderate (330mm / year)	3.5m	2m	6m	3m	12m
5	THUJA OCCIDENTALIS	EASTERN WHITE CEDAR	60cm	3 GAL	12m	4m	Moderate (330mm / year)	3.5m	1m	4m	2m	8m



2 PROPOSED BERM AND BUFFER SCREENING - DETAIL AREA B  
L1 1:400

PLANT SCHEDULE - 2/L1

QTY	BOTANICAL NAME	COMMON NAME	SIZE	ROOT	MATURE HT	MATURE SPR.	GROWTH RATE	SPACING O.C.	5 Year SPR.	5 Year HT	10 Year SPR.	10 Year HT
<b>DECIDUOUS TREES</b>												
4	ACER RUBRUM	RED MAPLE	60mm	WB	15m	12m	MODERATE TO FAST (330mm / year)	5.0	4m	8m	8m	12m
4	ACER RUBRUM	RED MAPLE	200cm	15 GAL	15m	12m	MODERATE TO FAST (330mm / year)	5.0	2m	5m	4m	8m
6	ACER SACCHARUM	SUGAR MAPLE	60mm	WB	30m	18m	MODERATE TO FAST (330mm / year)	6.5m	6m	10m	12m	15m
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0	QUERCUS RUBRA	RED OAK	200cm	15 GAL	22m	20m	FAST (600mm / year)	6.5m	4m	7m	8m	12m
<b>CONIFEROUS TREES</b>												
9	PICEA GLAUCA	WHITE SPRUCE	200cm	WB	25m	8m	Moderate (330mm / year)	6.0m	2m	6m	6m	15m
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8	THUJA OCCIDENTALIS	EASTERN WHITE CEDAR	200cm	WB	12m	4m	Moderate (330mm / year)	3.5m	2m	6m	3m	12m
0	THUJA OCCIDENTALIS	EASTERN WHITE CEDAR	60cm	3 GAL	12m	4m	Moderate (330mm / year)	3.5m	1m	4m	2m	8m



KEY PLAN  
NTS

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ARRANGE FOR LOCATES AND TO VERIFY THE EXACT LOCATION OF ALL UTILITIES, SERVICES AND STRUCTURES WHETHER ABOVE OR BELOW GRADE BEFORE COMMENCING WORK AND TO ENSURE ALL WORK IS TO COMPLY WITH TECHNICAL STANDARDS & SAFETY AUTHORITY (TSSA) STANDARDS.

2 September 27, 2018 ISSUED FOR SITE PLAN NZ  
1 August 31, 2018 ISSUED FOR REVIEW NZ

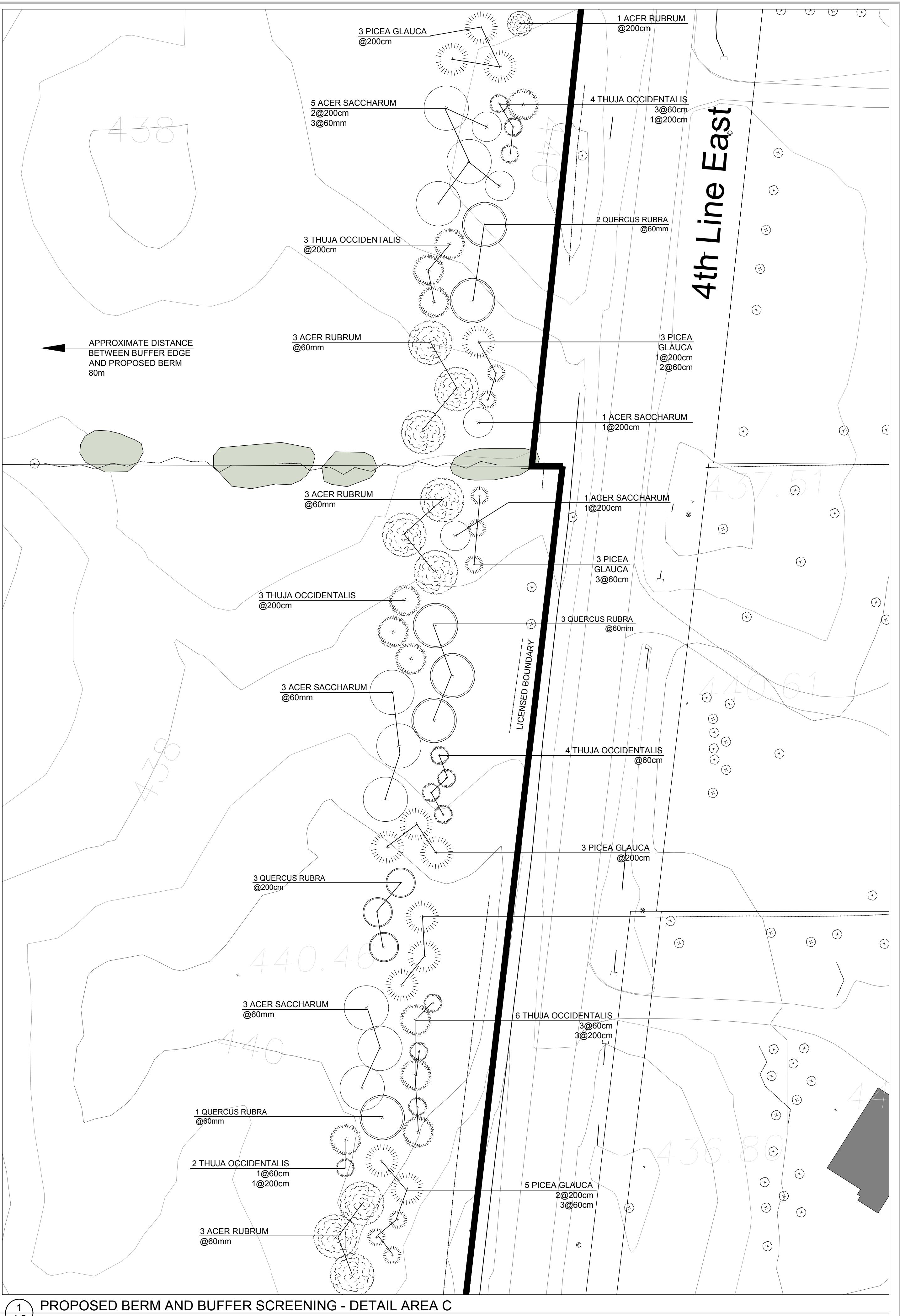
Revision No. Date Issued / Revision By

Seal	August 27, 2018
Drawn By	NZ
Plan Scale	AS NOTED
File No.	1767B
Client	GREENWOOD AGGREGATES LIMITED
Project	VIOLET HILL PIT VEGETATION BUFFER SCREENING
Dwg Name	L1 LANDSCAPE PLAN
Dwg No.	L1

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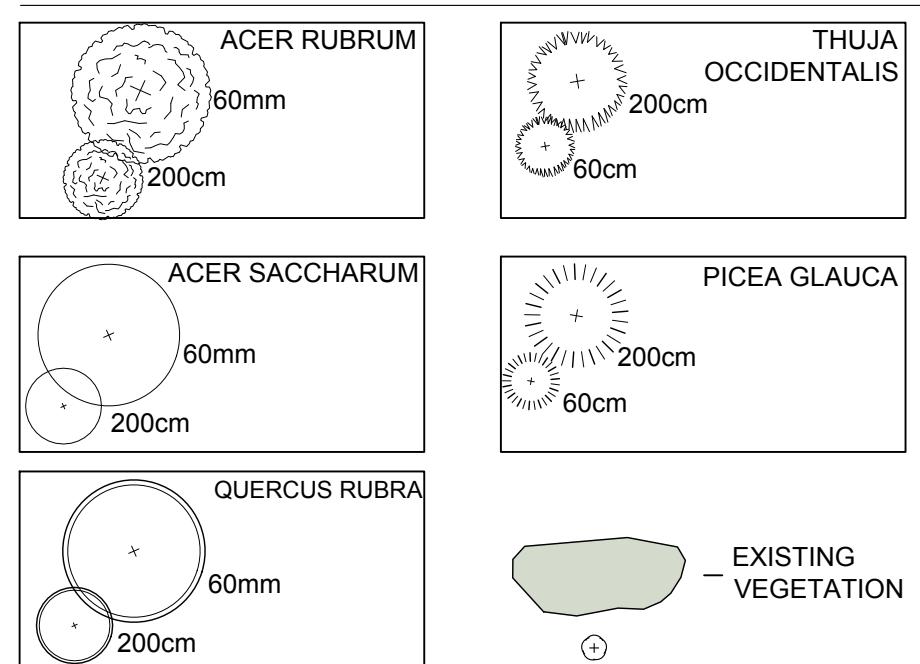
## PLANT SCHEDULE - 1/L2

QTY	BOTANICAL NAME	COMMON NAME	SIZE	ROOT	MATURE HT	MATURE SPR.	GROWTH RATE	SPACING O.C.	5 Year SPR.	5 Year HT	10 Year SPR.	10 Year HT
<b>DECIDUOUS TREES</b>												
9	ACER RUBRUM	RED MAPLE	60mm	WB	15m	12m	MODERATE TO FAST (330mm / year)	5.0	4m	8m	8m	12m
1	ACER RUBRUM	RED MAPLE	200cm	15 GAL	15m	12m	MODERATE TO FAST (330mm / year)	5.0	2m	5m	4m	8m
9	ACER SACCHARUM	SUGAR MAPLE	60mm	WB	30m	18m	MODERATE TO FAST (330mm / year)	6.5m	6m	10m	12m	15m
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<b>CONIFEROUS TREES</b>												
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11	THUJA OCCIDENTALIS	EASTERN WHITE CEDAR	200cm	WB	12m	4m	MODERATE (330mm / year)	3.5m	2m	6m	3m	12m
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LEGAL DESCRIPTION:  
PART LOTS 30, 31 AND 32  
CONC. 4 EHS.  
TOWN OF MONO  
DUFFERIN COUNTY

## LEGEND:



## NOTES:

1. TREE PLANTINGS TO BE INSPECTED ANNUALLY AND MAINTAINED. ANY DEAD TREES TO BE REPLACED ACCORDINGLY.
2. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXACT LOCATION OF ALL UTILITIES, SERVICES OR STRUCTURES WHETHER ABOVE OR BELOW GRADE BEFORE COMMENCING WORK.
3. UNLESS OTHERWISE SPECIFIED, ALL UNDEVELOPED AREAS SHALL BE UNDISTURBED AND KEPT FREE AND CLEAR OF DEBRIS AND MAINTAINED.
4. ANY AREAS DISTURBED BY CONSTRUCTION ARE TO BE RESTORED TO THE OWNERS SATISFACTION AT COST TO THE CONTRACTOR.

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ARRANGE FOR LOCATES AND TO VERIFY THE EXACT LOCATION OF ALL UTILITIES, SERVICES AND STRUCTURES WHETHER ABOVE OR BELOW GRADE BEFORE COMMENCING WORK AND TO ENSURE ALL WORK IS TO COMPLY WITH TECHNICAL STANDARDS & SAFETY AUTHORITY (TSSA) STANDARDS.

2	September 27, 2018	ISSUED FOR SITE PLAN	NZ
1	August 31, 2018	ISSUED FOR REVIEW	NZ

Revision No.	Date	Issued / Revision	By
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<b>MHBC</b> PLANNING URBAN DESIGN & LANDSCAPE ARCHITECTURE <small>200-540 BINGEMANS CENTRE DR. KITCHENER, ON, N2B 3X9   P: 519.576.3650   F: 519.576.0121   WWW.MHBCPLAN.COM</small>			
Seal	Date	August 27, 2018	
Drawn By		NZ	
Plan Scale		AS NOTED	
File No.		1767B	

Client	Checked By	JL	
Other			

GREENWOOD AGGREGATES LIMITED VIOLET HILL PIT VEGETATION BUFFER SCREENING			
Dwg Name	Dwg No.	L2	

LANDSCAPE PLAN <small>R:\projects\in progress\1767B\concept\Landscape Screening Plan -1767B - September 27, 2018.dwg</small>			
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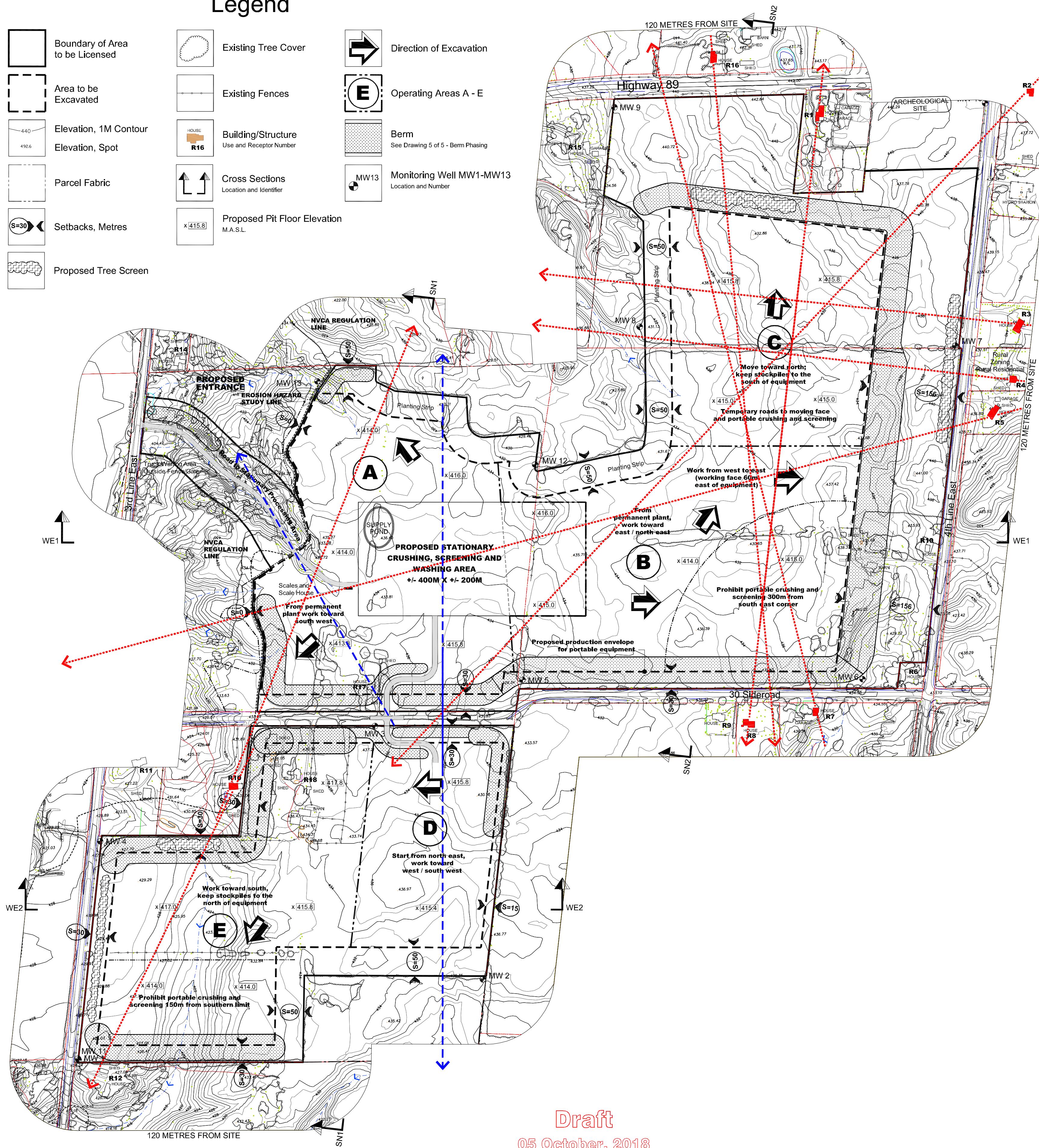
# VIOLET HILL PIT

Part Lots 30, 31 & 32, Conc. 4 E.H.S.  
Town of Mono  
Dufferin County

Page 1 of 3

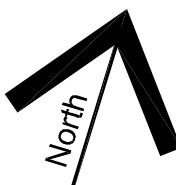
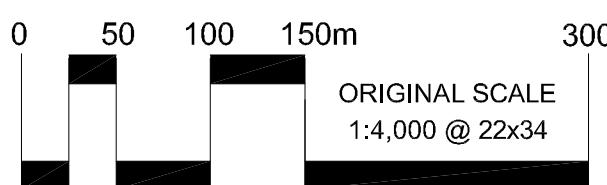
# VISUAL SECTION LOCATIONS

## Notes



# Draft

## 05 October, 2018

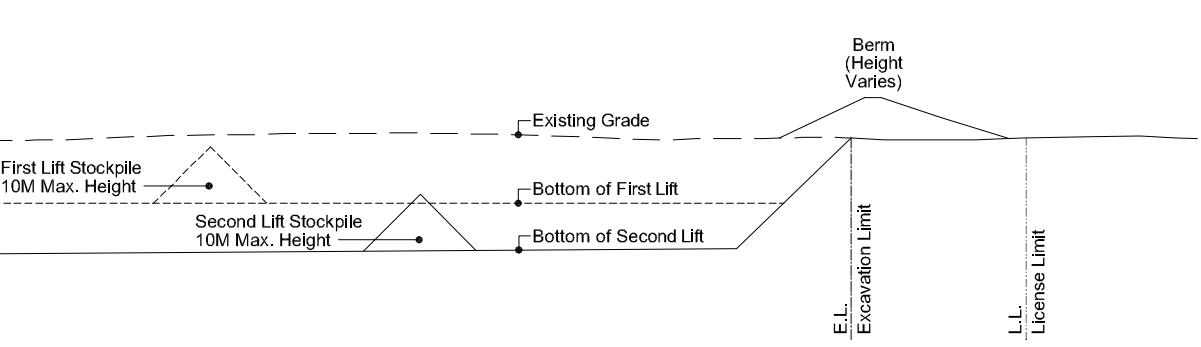
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APPROVED:	S.G.	
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PLOTTED:	<b>05 Oct. 2018</b>	
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No.	DATE	DESCRIPTION
<b>Amendments</b>		
		 ORIGINAL SCALE 1:4,000 @ 22x34
 <b>ROLLINGS HYLAND CONSULTING</b> Orangeville, Ontario 519.942.1961		
CERTIFIED TO PREPARE SITE PLANS UNDER SECTION 8(4) OF THE AGGREGATE RESOURCES ACT		

## VIOLET HILL PIT

Part Lots 30, 31 & 32, Conc. 4 E.H.S.  
Town of Mono  
Dufferin County

# Page 2 of 3 VISUAL ASSESSMENT

### Legend



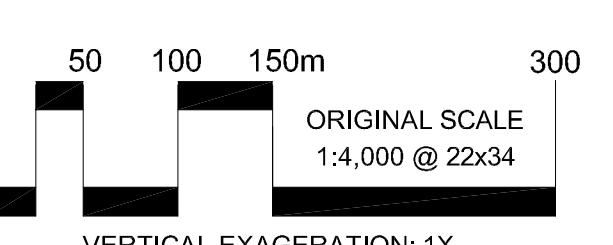
### Visual Assessment Table

Receptor Number	Number of Storeys	Ground Elevation	View Elevation	Top of Adjacent Berm	Difference	Sight Line Section
R1	2	443	447	445	-3	Yes
R2	2	439	443	None		Yes
R3	1	440	442	441	-1	Yes
R4	2	441	445	441	-4	Yes
R5	1	440	442	441	-1	Yes
R6	2	433	437	439	2	
R7	2	435	439	440	1	Yes
R8	2	433	437	436	-1	Yes
R9	1	434	436	440	4	
R10	2	434	438	437	-1	Yes
R11	1	429	431	436	5	
R12	1	427	429	435	6	
R13	2	410	414	434	20	
R14	2	408	412	431	19	
R15	1	435	437	442	5	
R16	2	443	447	439	-8	Yes
R17	2	Owned by Applicant				
R18	2	Owned by Applicant				
R19	2	Owned by Applicant				

**Draft**  
05 October, 2018

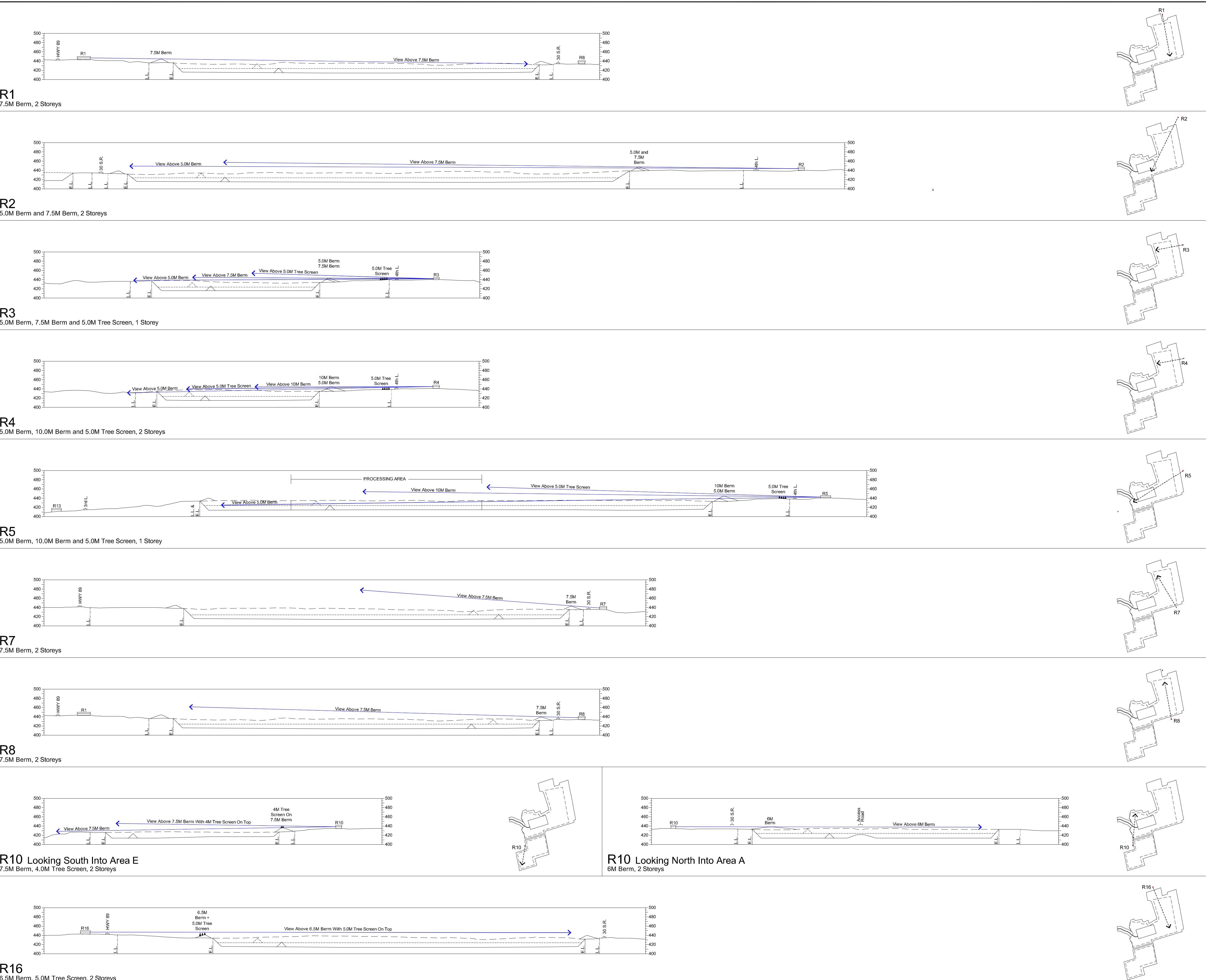
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APPROVED: S.G.  
FILE: Sep 2018 Site Plans.dwg  
PLOTTED: 05 Oct. 2018  
AMENDMENT NO.

No.	DATE	DESCRIPTION	APP'D
Amendments			



**R** ROLLINGS HYLAND CONSULTING  
Orangeville, Ontario 519.942.1961

CERTIFIED TO PREPARE SITE PLANS UNDER SECTION 8(4) OF THE AGGREGATE RESOURCES ACT

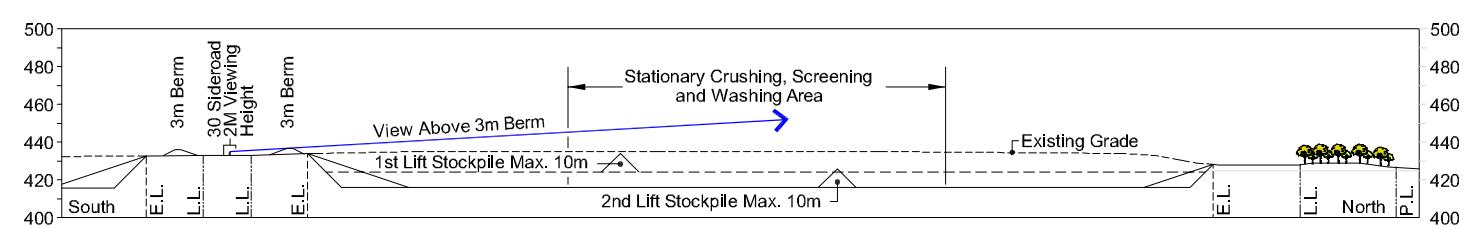


## VIOLET HILL PIT

Part Lots 30, 31 & 32, Conc. 4 E.H.S.  
Town of Mono  
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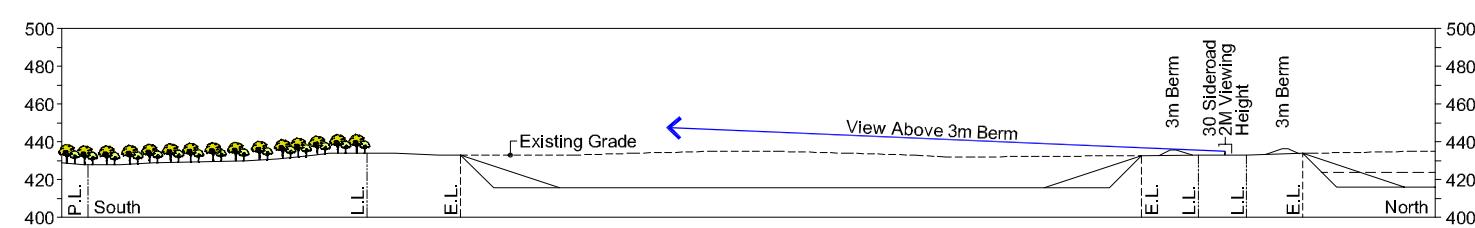
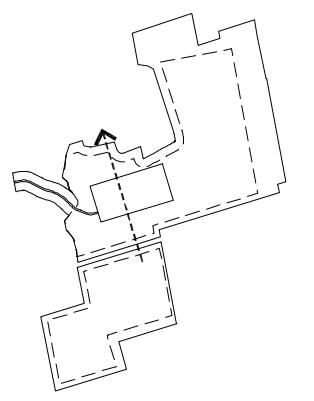
### Page 3 of 3 **SUPPLEMENTAL VISUAL SECTIONS**

Draft  
05 October, 2018



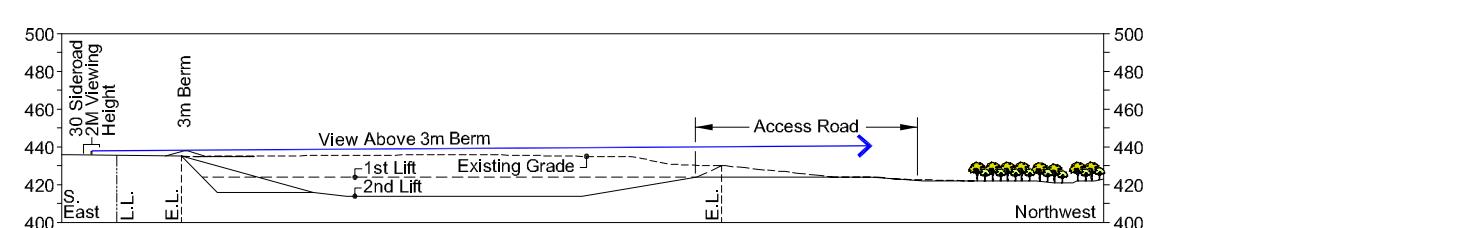
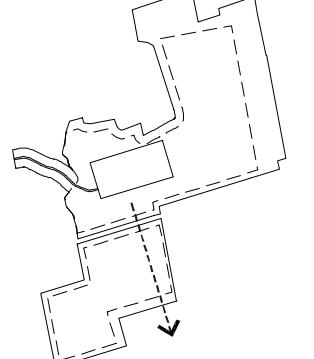
Looking North From 30 Sideroad

3 Metre Berm



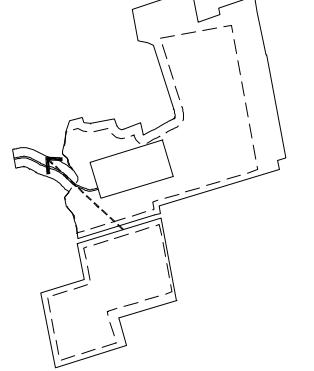
Looking South From 30 Sideroad

3 Metre Berm



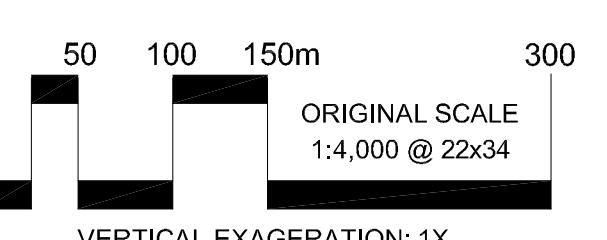
Looking Northwest From 30 Sideroad Toward Access Road

3 Metre Berm



DRAWN:	J.A.R.		
APPROVED:	S.G.		
FILE:	Sept 2018 Site Plans.dwg		
PLOTTED:	05 Oct. 2018		
AMENDMENT NO.	<input type="radio"/>		
No.	DATE	DESCRIPTION	APP'D

#### Amendments



ROLLINGS HYLAND CONSULTING  
Orangeville, Ontario 519.942.1961