

April 11, 2015

Township of Puslinch  
Council  
7404 Wellington Road 34  
Guelph, Ontario, N1H 6H9

Attn: Mr. Dennis Lever, Mayor  
Councillors: Bulmer, Fielding, Roth, and Stokely

### **REGARDING SITE ALTERATION APPLICATION L04/REI**

I appreciate the opportunity to address Council with respect to the above matter, a proposed Site Alteration at 7827 Wellington Rd 36. I have reviewed Township Reports PD-2015-003, PD-2015-05 and PD-2015-007, and relevant background information. I attended the Township Public meeting on March 11, 2015 that dealt with this matter, and the Conservation Halton Board meeting on March 26, 2015 that discussed this matter. As a resident of Puslinch since 1981 I am concerned with how this Application has been presented to Council, and the implications for the Township.

#### ***Background***

The "Application" before the Township involves placing a large amount of fill, 69,484 m<sup>3</sup> (equivalent to approximately 7,000 large dump truck loads), at 7827 Wellington Road 36 in the Township of Puslinch. The relevant Township By-Law is Number 31/12, a "*by-law for prohibiting or regulating the alteration of property within the Township of Puslinch*" (underline added). Section 2 of the By-law states,

*"no Person shall Place or Dump, or cause or permit the Placing or Dumping of Fill on, nor alter or cause or permit the Alteration of the Grade of any land in the Township of Puslinch, nor remove or cause or permit the removal of any Topsoil from any land in the Township of Puslinch ...without having first obtained a site alteration Permit issued by the Chief Building Official."*

The By-law contains exemptions and exclusions. A specific exemption is Section 22, which exempts an *area* of land regulated under the Conservation Authorities Act.

A portion of the *area* of this proposed fill site is regulated by Conservation Halton (CH), because the site is adjacent to the Badenoch-Moffat Wetland Complex, a Provincially Significant Wetland (PSW) within the Bronte Creek watershed. The site is also within the Provincial Greenbelt, and is municipally zoned Agricultural.

The proposed site alteration at this location is complicated by the fact that it requires the permission of two parties, Conservation Halton *and* the Township of Puslinch.

Puslinch By-Law 31/12 does not allow placing or dumping of any fill, altering the grade, or removal of topsoil within the Township, without a Township Site Alteration Permit. CH Permit #4758 also advises it “*does not preclude any approvals required by any other existing law and regulation*”. However, fill is already being dumped on land at this site that is regulated by the Township, without a Permit.

### ***The Stated Purpose of the Fill***

The Grading Plan (Figure 1) indicates the total *area* to be filled is 29,223 m<sup>2</sup> (7.22 acres), and the total *volume* to be filled is 69,484 m<sup>3</sup>, (approximately 7,000 large dump truck loads). The average depth of fill is therefore  $69,484/29,233 = 2.38$  m, or 7’-10”. The *maximum* depth of the fill is approximately 5.9 m, or 19’-4”. Township of Puslinch Report PD-2015-05 advises the importation of this fill on this “*uneven land*” is because “*the owners must find farming efficiencies to increase the productivity of these fields*”.

In the Public meeting, the proponents advised the fields are intended for growing hay. However, the fields have been productively making hay for years, Figures 4 and 5. I began taking hay off similar nearby fields in Puslinch in 1981. The ability to significantly increase the production efficiency of the proponent’s fields by importing fill, to raise the field at least 19 feet, is in my opinion unproven, questionable, and marginal at best. The fields will be out of production for at least 2 years. Approximately 1.5 acres of the 7.22 acres to be filled could also be permanently lost for making hay safely, where the proposed grade is steep.

It is not clear how the Township satisfied itself that this Application would increase the hay making productivity of these fields. In the alternative, are words such as “*find farming efficiencies*” sufficient to allow any amount of fill to be dumped on any Agricultural land in Puslinch?

### ***The CH Regulated 30/120 Boundaries***

The proponents have advised they will ensure 0.4 m (16”) of topsoil (11,689 m<sup>3</sup>) will exist on the area they fill, when they are finished. Most will need to be imported. If the proponents had originally made an Application to import only topsoil, to ensure the field had 16” of topsoil, they could no doubt have achieved the hay making productivity they anticipate, without having to significantly raise the level of the land as proposed.

Alternatively, the proponents could have made an Application only to CH, to import enough fill to “*level*” only the land between the CH 30/120 regulated boundaries, including topsoil, to the slopes indicated in Figure 2. The total amount of fill required would then have been significantly reduced from what is presently proposed, and the Township would not have been involved. Figure 6 is from Figure 2, on which the dashed lines indicate a level of fill within the 30/120 boundaries regulated by CH, drawn parallel to the slopes submitted by the proponents and approved by CH. Only the fill below the dotted lines would be subject to CH approval. Fill above the dotted lines would not be required, and the Township of Puslinch would not be involved.

In the upper cross-section (A-A) on Figure 6, the amount of fill required would be approximately 8% of the total fill presently proposed. In the middle cross-section (B-B) only about 18% of the total fill proposed is required, and in the lower cross-section (C-C) only about 24%. The simple average is less than 20% of the presently proposed fill onto this site would be required, much of which would need to be imported topsoil.

Since a primary objective of Conservation Halton is the prevention of pollution and the conservation and enhancement of natural resources, it would seem the least amount of fill required to be imported onto a site, and the minimum risk of possible impact from the proposed dumping of fill, would be encouraged. There does not appear to be any reason why CH would have declined a proposal with a minimum amount of fill.

However, CH indicated in the Public meeting that they had no concern with the depth of fill within their regulated boundaries, and therefore the *volume* of fill that was being imported. Their concern was the hydrologic impact of the imported fill on the wetlands. By issuing Permit #4758 CH has therefore effectively created a table (the dashed lines) upon which the majority of the *volume* of fill for this site can be dumped, to whatever depth. CH have therefore, effectively, encouraged a commercial fill operation.

In Figure 6, the *volume* of fill above the land regulated by the Township of Puslinch is identified as "TOWNSHIP OF PUSLINCH". As discussed, the *volume* of fill proposed above the dashed lines above CH regulated land cannot be placed if there is no Township of Puslinch Permit, because the wall of fill at the 120 m boundary is 10 to 12 feet high and unsupported, as depicted in Figure 7.

The *area* that the proposed fill will sit on is approximately 7.22 acres. The *area* subject to CH regulation is approximately 5.5 acres, or 76% of the total. The *area* beyond the CH 120 boundary, subject to Township approval, is approximately 24% of the total. Of the 69,500 m<sup>3</sup> total *volume* of fill proposed for this site, Township of Puslinch Report PD-2015-05 characterizes the *volume* subject to CH permission as 54,349 m<sup>3</sup> (78%), and the *volume* subject to the Township approval as only 15,135 m<sup>3</sup> (22%), because it is beyond the CH 120 boundary. This is a misleading argument.

If the *area* subject to CH regulation was filled only to the CH 120 boundary as discussed, and not beyond, to the slopes approved by CH, less than approximately 14,000 m<sup>3</sup> of fill would be required at this site, much of which would be topsoil. Dumping 69,500 m<sup>3</sup> of fill onto this site is only possible if the Township issues a Site Alteration Permit. A Puslinch Site Alteration Permit therefore allows approximately 55,500 m<sup>3</sup> of additional commercial fill to be dumped on this site.

The decision before this Council is not about 15,135 m<sup>3</sup> of fill.

The decision before this Council is about permitting approximately 55,500 m<sup>3</sup> of additional and apparently unnecessary commercial fill to be dumped onto Agricultural land in Puslinch.

## ***Clean Fill***

CH Permit #4758 states the fill is to be “*clean*”, and is to be monitored. However, the CH representative indicated in the Township Public meeting, and in the CH Board meeting, that CH does not have the resources to monitor the filling effectively, and are relying upon the proponents to provide clean fill. The definition of clean fill is elusive.

Figures 8 and 9 are recent pictures of the field. In Figure 8, large boulders are present in the dumped fill, and the fill is being deposited directly on topsoil. In Figure 9, a variety of fill materials are visible, including large chunks of concrete, and reinforcing steel. It is difficult to understand why a farmer would want large boulders and demolition waste in a hayfield. The Conservation Authorities and Ministry of Natural Resources and Conservation Ontario Vision 2015 Conference, in March 2012 advised, “*fill could not be used for agriculture if it contained concrete, aggregate or subsoil*”.

Since the entire amount of fill proposed for this site is being dumped in the Township of Puslinch, since most of the fill is dependent upon a Permit being issued by the Township, and since co-mingling of the fill between the two regulated areas is inevitable, the quality of the fill required by the Township By-Law is relevant.

The Township By-law seems clear. It requires clean fill to comply with O. Reg. 153/04 and Table 1 of the “Soil Groundwater and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act.” Table 1 sets out “Full Depth Background Site Condition Standards” and lists upper limits on contaminants considered to occur naturally in soils province-wide that have not been previously contaminated by point sources. Puslinch Report PD-2015-05 also advises only clean topsoil and clean subgrade will be received at this site, meeting Table 1, with no construction or demolition waste.

The Clean Fill Control Plan submitted by the proponents in partial compliance with their Application to the Township for a Site Alteration Permit also advises the fill will be clean, to Table 1, and that no construction or demolition waste will be received at this site. At the Township Public meeting, the proponent’s agent described Table 1 as referring to material taken from depth that had not been previously disturbed or contaminated, and that was the only type of material that would be brought onto this site. Figures 8 and 9 do not support that commitment.

Since the quality of fill for this site is defined differently between CH Permit #4758 and the Township By-law, since most of the fill intended for this site hinges on permission being granted by the Township of Puslinch, and since the fill will inevitably be co-mingled, all fill arriving on this site should meet the Township requirements.

The LVM hydrological report on which the Township, and presumably CH rely, is dated November 29, 2013. LVM assumed the fill would be of “*similar composition to the native soils*”, and recommended, “*the imported fill be of relatively heterogeneous (till) composition (i.e. not clean sand/granular soil and not fine clay/silt soil) to more closely match the hydrogeological characteristics of the native sandy till soils*”.

Before issuing any Permit to alter this site, the Township should enquire of LVM whether the material already being dumped on this site is consistent with LVM's concept of native soils. It is also noted that the site plan before this Council (Figure 1) is not the same site plan that LVM was provided in 2013. Therefore, the grading plan before this Council (Figure 2) cannot be the same as what LVM assumed.

The Township should revisit CH and their Permit, regarding the CH understanding of "clean" fill. Further dumping should not be permitted at this site until this issue is resolved. This is only reasonable, and consistent with CH advising their Permit #4758 "does not preclude any approvals required by any other existing law and regulation". A consistent quality of fill throughout the site should also mitigate any future legal action, if contaminants are found at this site.

### ***Site Monitoring***

CH Permit #4758 states, "that site conditions be monitored", with no guidance regarding the type, extent, or frequency of monitoring. At the Public and Board meetings CH made it clear they do not have the resources to monitor the site effectively. They are relying on the proponents to act in good faith. It appears CH intends to respond to problems only if they are suspected, or confirmed. Unfortunately, human error, misunderstandings, or intentional contraventions can occur at any stage of any operation. Regular inspections and testing can identify issues before they escalate to problems.

Again, since the entire amount of fill is being dumped in Puslinch, and since most of the fill is dependent upon a Permit being issued by the Township, monitoring of the imported fill as required by the Township By-Law is relevant.

The Clean Fill Control Plan required by the Township includes, amongst other things: regular sampling of the groundwater; documentation from a Qualified Person that confirms the clean fill source site meets Table 1 acceptance criteria; only clean topsoil and clean subgrade material are to be accepted, free of garbage, foreign debris, and construction or demolition waste; ticketing of all truckloads to ensure the soil source is identified; visual inspection of each truckload; periodic auditing of the soil received on site; and, that the site be mapped to define the location where each load is dumped.

Since the definition of "monitoring" this site is quite different between CH Permit #4758 and the requirements of the Township By-law, since most of the fill intended for this site hinges on permission to fill being granted by the Township of Puslinch, and since some fill will ultimately be co-mingled, all fill arriving on this site should be monitored to meet the Township requirements.

Site monitoring should be consistent, co-ordinated, and effective, for all material being dumped on this site. If effective, demolition waste as recorded in Figure 9 should have never reached this site. Further dumping should not be permitted at this site until the issue of effective monitoring is resolved between CH and the Township of Puslinch.



## *Environmental Impact Study*

The issue of large-scale fill operations associated with the disposal of excess soil emanating in particular from construction, demolition, and infrastructure activity in the GTA has been recognised as an issue by the province, municipalities, and Conservation Authorities for years.

The province has produced a Provincial Policy Statement for protection of natural features such as PSW's and their ecological functions, Guidelines for Best Management Practices for managing excess soil, and an Environmental Assessment Act (EAA) for the betterment of the people of Ontario by providing for the protection, conservation, and wise management of the environment. The EAA considers the environment to be:

1. air, land or water,
2. plant and animal life, including human life, and
3. the social, economic and cultural conditions that influence the life of humans or a community,

amongst other things.

The subject property is within the Provincial Greenbelt, which is intended to protect the Agricultural land base of Ontario, and the ecological features and functions of the landscape. The subject property is effectively on an island surrounded by a Provincially Significant Wetland. The subject property is also zoned Agricultural.

The Township By-law advises the Township can require an Environmental Impact Assessment as a requirement of an Application. So can CH. Presently, it is not clear if either CH or the Township has required the impact of the proposed fill on the Environment to be studied and reported, or the extent of any such study within the full context of the EAA.

Changes in the historical use of this site should be considered. Figure 10 is a satellite image posted on Google Earth in 2004. All the fields in question were being farmed. Most of the fields were still being farmed in 2010, Figure 11. By 2013, about 2 acres of the main field in question had been stripped of topsoil and taken out of production, Figure 12. I understand this occurred in 2011. In Figure 13, a plan of the area now proposed to be filled is overlaid on the 2014 satellite image. The 120 boundary between CH and the Township is indicated. About 1/3 of the land already stripped lies within the 30/120 boundaries regulated by CH. About 2/3 of the already stripped land was regulated by the Township of Puslinch Site Alteration By-Law.

What damage has already been done by previously stripping this land that, which is now proposed to be buried under the 69,484 m<sup>3</sup> of fill? This site deserves an Environmental Impact Study before the Township considers issuing a Permit, and before any more fill is allowed to be dumped.

### ***Letter of Credit***

The owners of this property are ultimately responsible for the consequences of the fill they import. Because of the amount of fill proposed, a Township Site Alteration Permit requires a Site Alteration Agreement to be signed by the owners and the Township. The Agreement requires a Letter of Credit from a chartered Canadian bank, in an amount deemed sufficient by the Township to guarantee the satisfactory completion of the work, and that the material dumped is in compliance. The Township has decided that \$100,000 is “*sufficient to guarantee the works*”.

The ultimate cost to clean this site and the adjacent PSW, if contamination results from this large-scale commercial fill operation, will far exceed the amount stipulated. Signing this Agreement appears to put the Township at significant financial risk.

### **DISCUSSION AND SUMMARY**

The site proposed to be filled by Site Alteration Application L04/REI before this Council is adjacent to the Badenoch-Moffat Wetland Complex, a Provincially Significant Wetland within the Bronte Creek watershed. The site is also within the Provincially designated Greenbelt, and is zoned Agricultural.

This Application, and a concern that many similar Applications will soon follow, is a sensitive issue to the residents of Puslinch and their values, as demonstrated by the significant numbers that attended the recent Public meeting. Puslinch values are captured on the Township website which advises, “*Puslinch is an ideal place to call home...Puslinch has an endless amount of natural beauty for you to revel in and explore*”. Importing fill to change the landscape is not part of Puslinch’s natural beauty.

The proposed landfill is complicated by the fact that it requires a Permit from two regulating parties, Conservation Halton and the Township of Puslinch. The landfill cannot be completed as proposed, without both parties issuing a Permit. CH has issued a Permit and, unfortunately, on the basis of that Permit fill has already started to be dumped at this site. The Township of Puslinch has not issued a Permit. It is unclear why Conservation Halton would not require such a proposal to be based on minimal intrusion on natural features, which is more consistent with their objectives. It is also unclear why this large-scale fill proposal was even considered, as it is on Agricultural land.

The Application has been presented to Council as involving permission to dump only 15,135 m<sup>3</sup> of the total proposed amount of fill of 69,500m<sup>3</sup>. That argument is misleading.

Approximately 55,000 m<sup>3</sup> of the proposed commercial fill for this site cannot be dumped without the Township issuing a Permit. If the Township does not issue a Permit to dump fill beyond the CH 120 boundary, Conservation Halton Permit #4758 cannot be complied with, and CH will need to withdraw their Permit.

Since the entire amount of fill is being dumped in the Township of Puslinch, since most of the fill proposed for this site is dependent upon a Permit being issued by the Township, and since the fill will be co-mingled as it is dumped and spread, the requirements of the Township By-Law are relevant to the entire filling operation.

Presently there appears to be a significant difference between the quality of fill that Conservation Halton will allow to be dumped under their Permit #4758, and the quality of the fill that the Township of Puslinch will allow to be dumped under their By-law. Fill has already been dumped at this site that is not permitted by the Township. It is also questionable why fill containing demolition debris would be acceptable to a farmer in a hayfield, and to Conservation Halton.

That fill dumped on this site could contain demolition debris brings into question the accountability of the present monitoring at this site. The testing and inspection obligations required by the Township By-Law should have prevented demolition debris from even arriving at this site. The quality of fill to be dumped on this site, and the control methods to ensure that only the defined quality is being dumped on this site must be resolved and agreed upon before this Council considers issuing any Permit. In the meantime, dumping of fill at this site should cease.

The proponents have indicated the purpose of this Application is to find farming efficiencies, on presently uneven land. The field has been productive in the past. It is unclear how the Township has satisfied itself that the proposed fill will achieve the stated purpose. There is a considerable amount of uneven farmland in Puslinch. Are the words "find farming efficiency" sufficient to allow Puslinch to become a dumpsite for GTA fill, based on the present wording of our Site Alteration By-Law?

As municipalities neighbouring the GTA strengthen their By-laws to control this type of large-scale commercial filling operation, especially on Agricultural land, Puslinch will become the target of choice if our By-law is not revised. A moratorium on accepting Site Alteration Applications that exceed 250 m<sup>3</sup> of fill should be imposed in Puslinch until the implications of large-scale commercial filling operations are addressed.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "R. Southward", written in a cursive style.

Ralph Southward  
4347 Concession 11  
Township of Puslinch











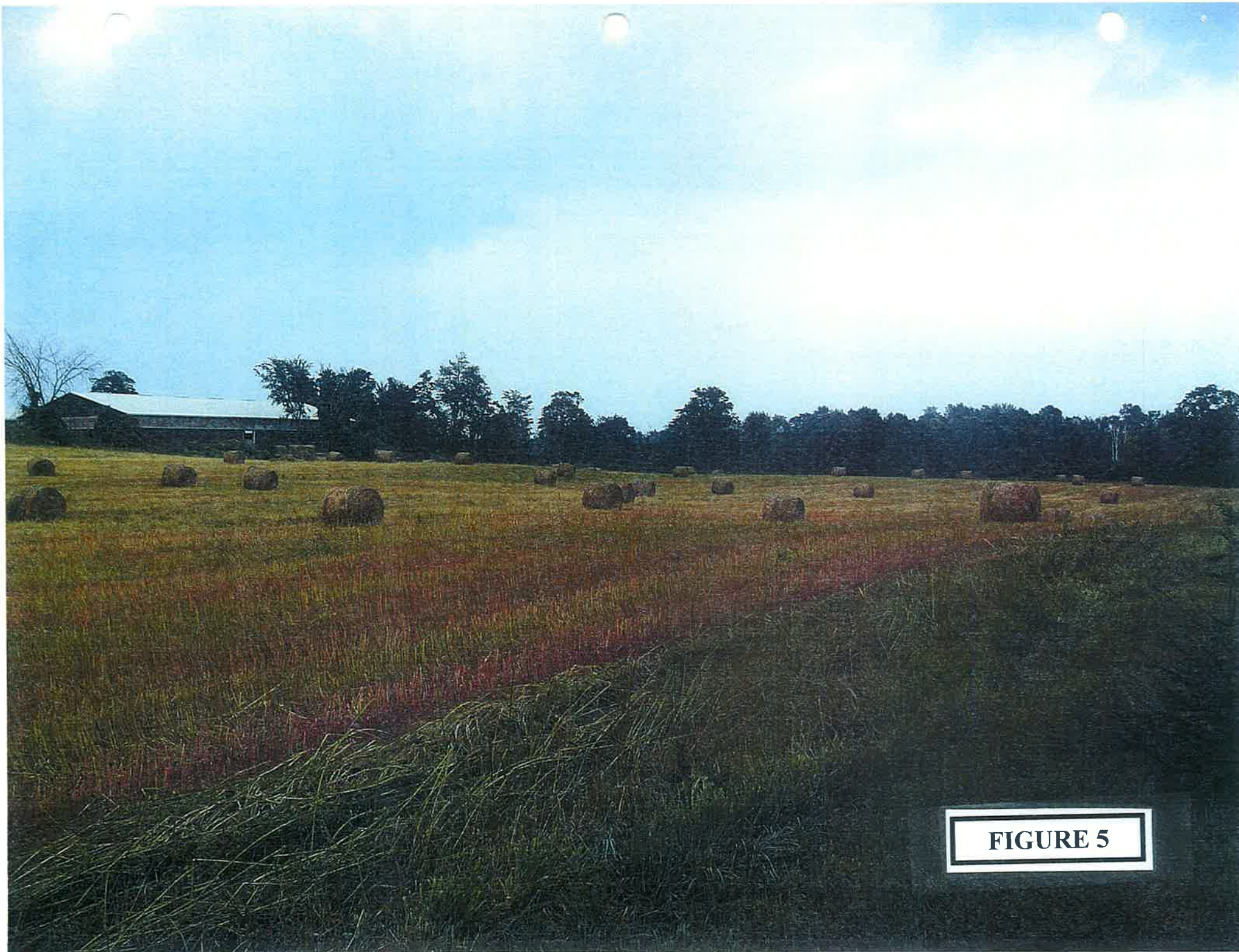




**FIGURE 4**

06/24/2004

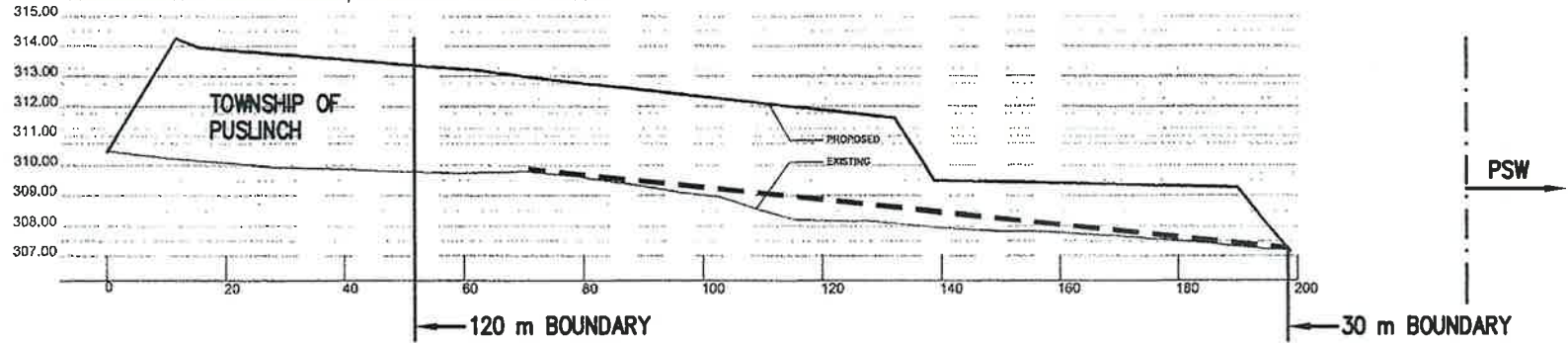




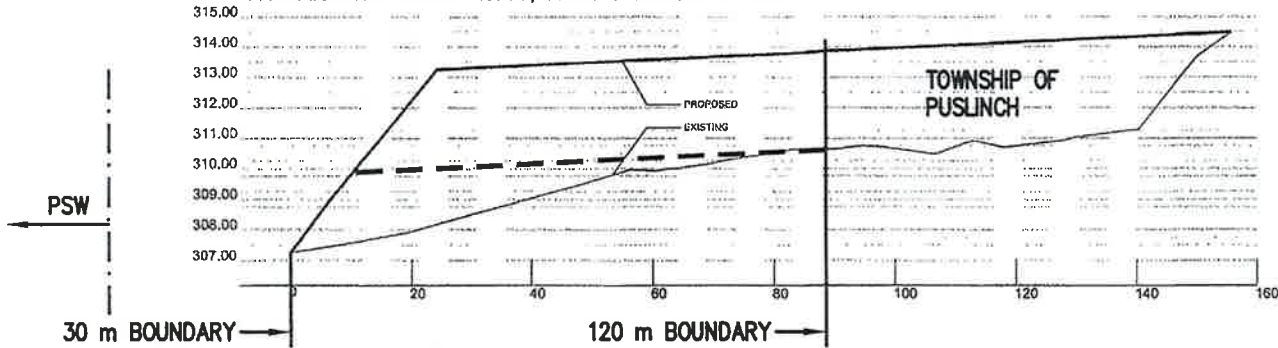
**FIGURE 5**



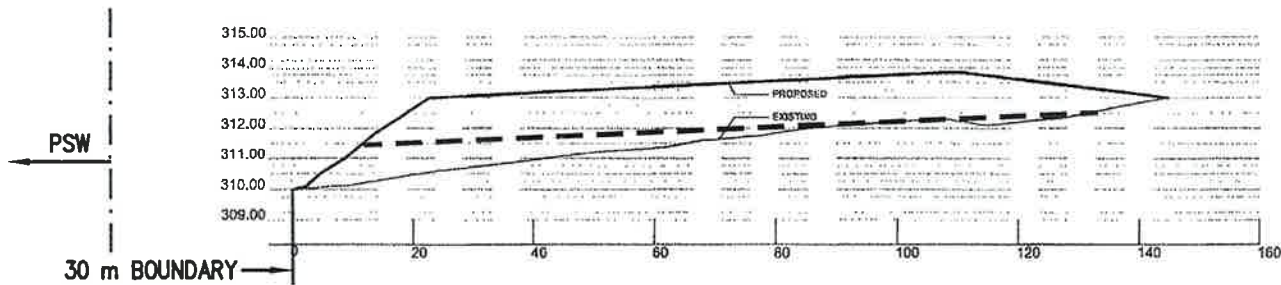
**CROSS-SECTION A-A'**  
HORIZONTAL SCALE 1:500, VERTICAL SCALE 1:100



**CROSS-SECTION B-B'**  
HORIZONTAL SCALE 1:500, VERTICAL SCALE 1:100

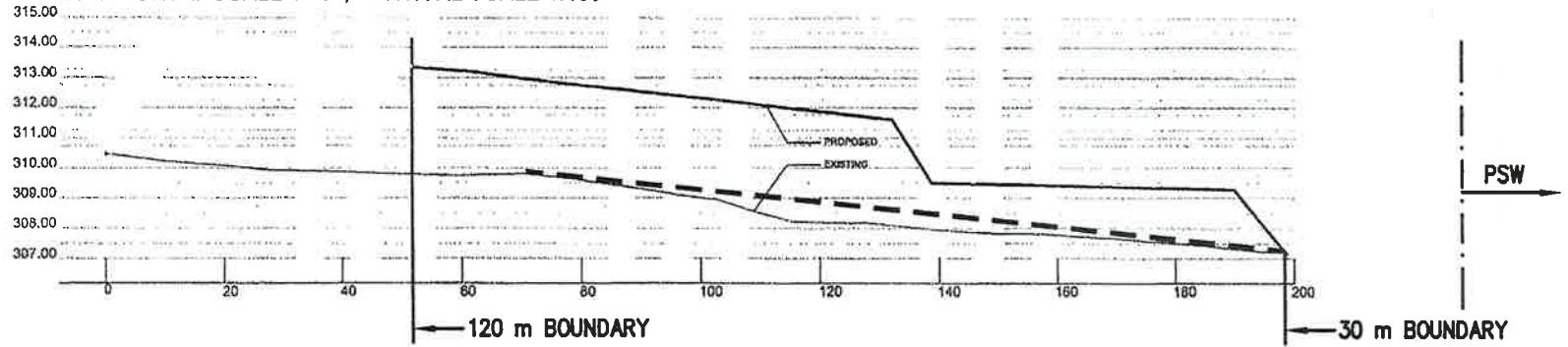


**CROSS-SECTION C-C'**  
HORIZONTAL SCALE 1:500, VERTICAL SCALE 1:100

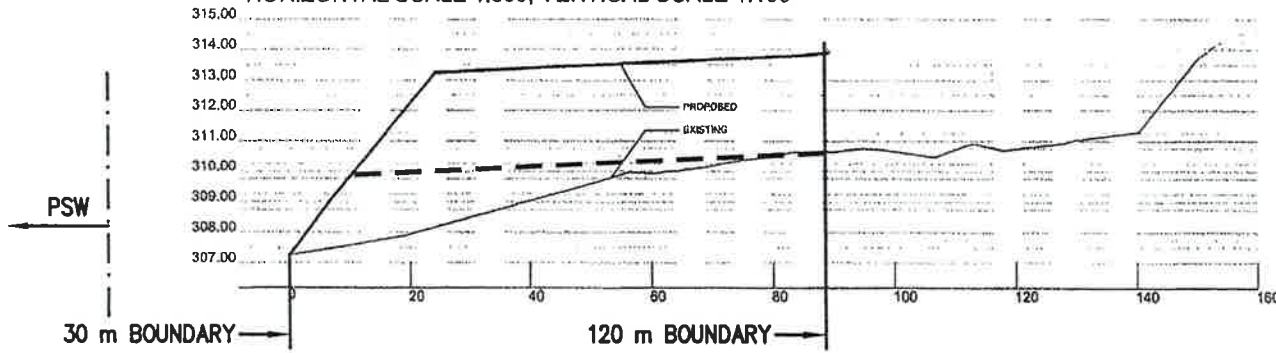


**FIGURE 6**

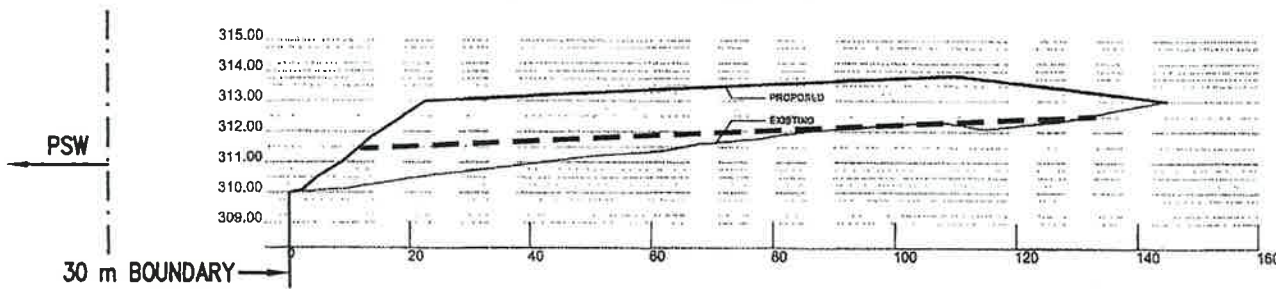
**CROSS-SECTION A-A'**  
HORIZONTAL SCALE 1:500, VERTICAL SCALE 1:100



**CROSS-SECTION B-B'**  
HORIZONTAL SCALE 1:500, VERTICAL SCALE 1:100



**CROSS-SECTION C-C'**  
HORIZONTAL SCALE 1:500, VERTICAL SCALE 1:100



**FIGURE 7**





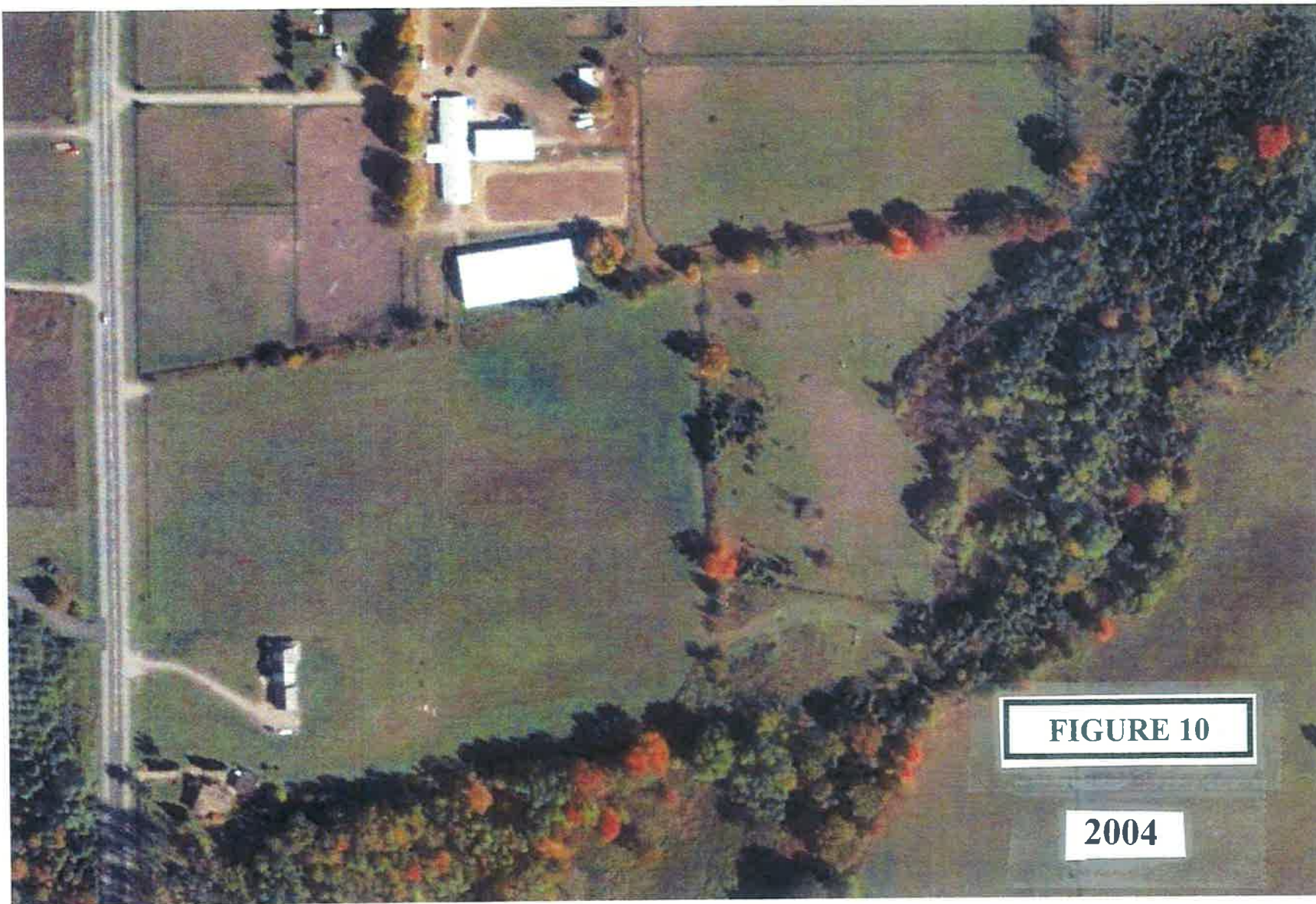
**FIGURE 8**





**FIGURE 9**

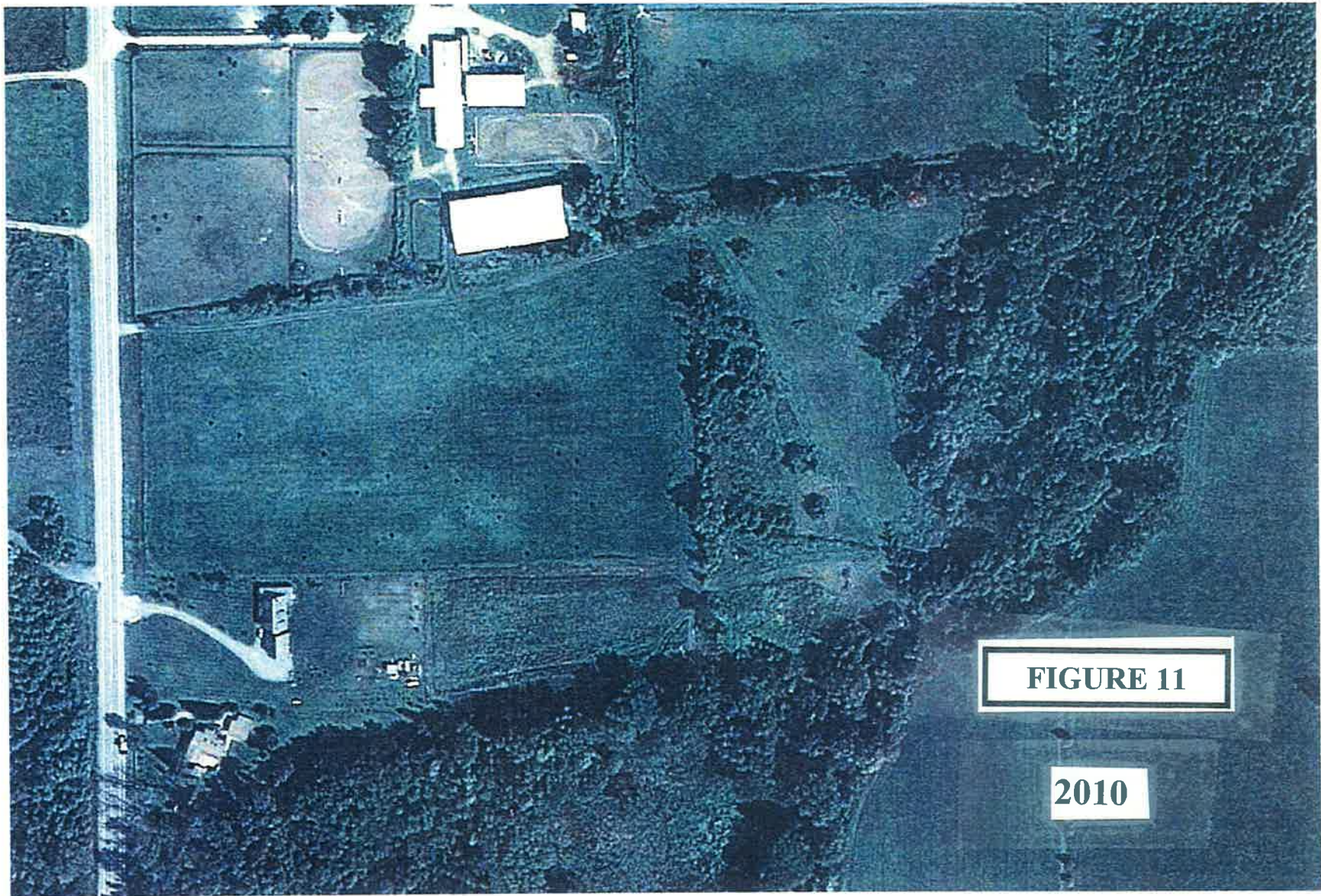




**FIGURE 10**

**2004**





**FIGURE 11**

**2010**





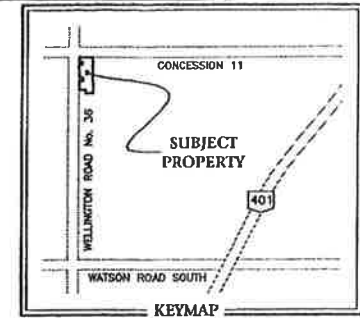
**FIGURE 12**

**2013**









**PROPERTY DESCRIPTION:**  
 PIN 71102-0136(LT)  
 PART OF LOT 31, CONCESSION 10  
 DESCRIBED IN INSTRUMENT No. R0759001 EXCEPT:  
 PART 3, 61R-8376; PART 1, 61R-9382  
 AND PART 2, 61R-11388  
 7827 WELLINGTON ROAD No. 36, RR#1  
 PUSLUNCH

- LEGEND**
- DENOTES SURVEY MONUMENT SET
  - DENOTES SURVEY MONUMENT FOUND
  - SIB DENOTES .025 x .025 x 1.20 STANDARD IRON BAR
  - IB DENOTES .015 x .015 x 0.60 IRON BAR
  - SSIB DENOTES .025 x .025 x 0.60 SHORT STANDARD IRON BAR
  - RP DENOTES .015 DIA. x 0.07 ROUND IRON BAR WITH STAMPED WASHER
  - PB DENOTES .025 x .025 x 0.30 PLASTIC BAR
  - CC DENOTES CILT CROSS
  - WT DENOTES WITNESS
  - OU DENOTES ORIGIN UNKNOWN
  - VH DENOTES VAN HARTEN SURVEYING INC., O.L.S.'s
  - P1 DENOTES DEPOSITED PLAN 43R-31085
- ➔ PROPOSED PRIMARY HAUL ROUTE
- ⊙ MW MONITORING WELL
- EXISTING GROUND CONTOURS
- (313.50) PROPOSED ELEVATIONS
- PROPOSED SILT FENCE
- ⊙ RIP RAP AS PER OPSD 810.010
- ⊙ ROCK FLOW CHECK DAM AS PER OPSD 219.210

**BEARING AND COORDINATE NOTE:**

- BEARINGS ARE GRID BEARINGS AND ARE DERIVED FROM GPS OBSERVATIONS AND ARE REFERRED TO THE UTM PROJECTION, ZONE 17, NAD 83 (CSRS-2002) ADJUSTMENT. DISTANCES SHOWN ON THIS PLAN ARE ADJUSTED GROUND DISTANCES AND CAN BE CONVERTED TO GRID DISTANCES BY MULTIPLYING BY AN AVERAGE CORRECTION SCALE FACTOR OF 0.999570
- COORDINATES ON THIS PLAN ARE UTM, ZONE 17, NAD83 (CSRS-2002) ADJUSTMENT AND ARE BASED ON GPS OBSERVATIONS FROM A NETWORK OF PERMANENT GPS REFERENCE STATIONS.

NO.	REVISION	BY	DATE
3	CONSERVATION HALTION COMMENTS	JLW	JAN 15/15
2	TOWN COMMENTS	JLW	NOV 13/14
1	SECOND SUBMISSION	JLW	SEPT 19/14

**PROPOSED CONTROL PLAN**  
 PART OF LOT 31, CONCESSION 10  
 TOWNSHIP OF PUSLUNCH  
 COUNTY OF WELLINGTON

PROJECT No. 21549-13  
 DRAWING SCALE 1 : 750

**METRIC:**  
 DISTANCES AND COORDINATES SHOWN ON THIS PLAN ARE IN METRES AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048.

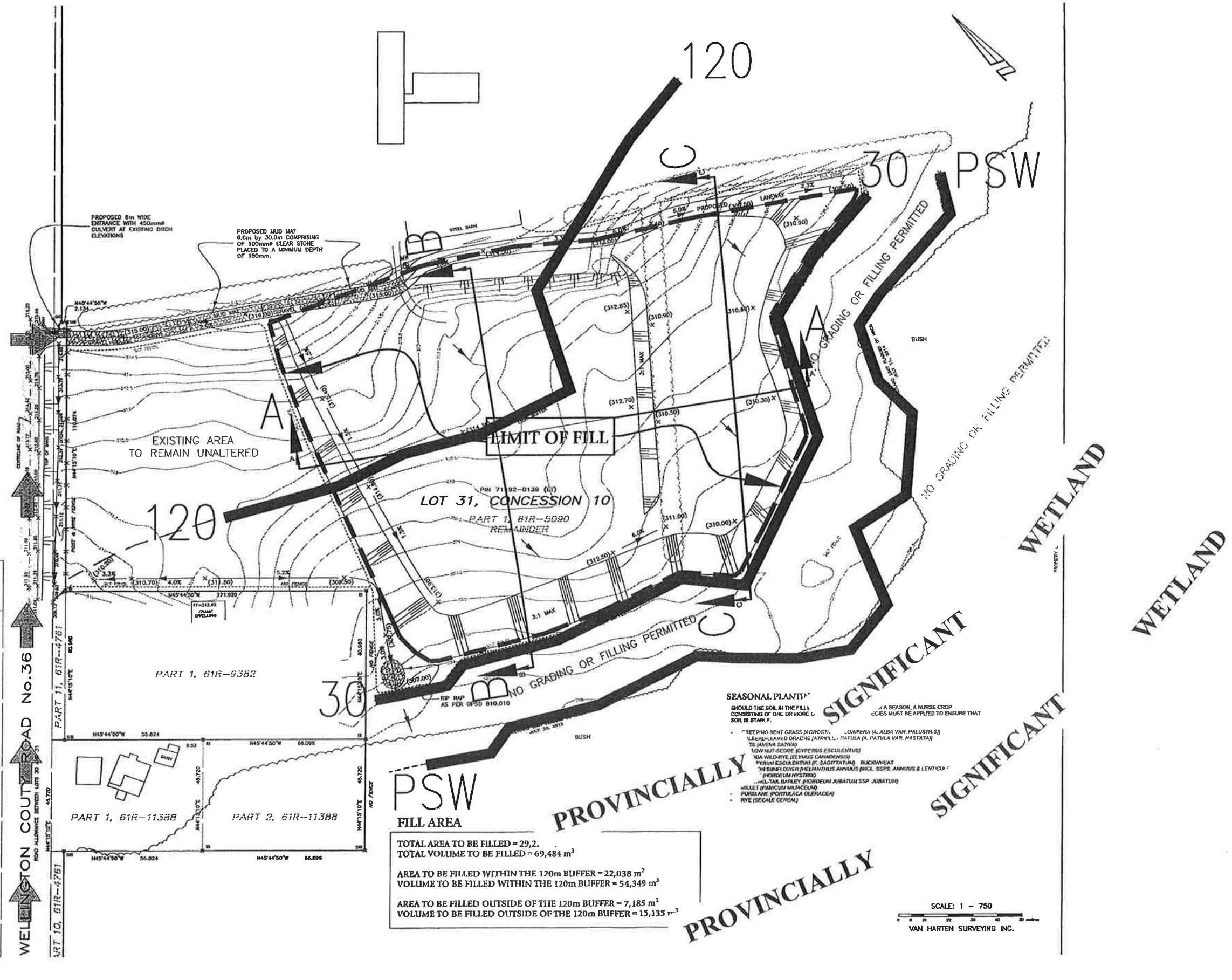
**GRADING PLAN**

SHEET 1 OF 2

**Van Harten SURVEYING INC.**  
 LAND SURVEYORS and ENGINEERS

423 WOODBINE STREET  
 GUELPH, ONTARIO, N1H 3K3  
 PHONE: (519) 821-2743  
 FAX: 821-2770  
 www.vanharten.com

650 BODELL ROAD, UNIT 1  
 ORANGEVILLE - ONTARIO, L9W 5G5  
 PHONE: (519) 840-4110  
 FAX: 312-840-4113  
 www.vanharten.com



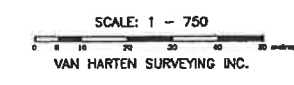
**PSW FILL AREA**

TOTAL AREA TO BE FILLED = 29,2  
 TOTAL VOLUME TO BE FILLED = 69,484 m<sup>3</sup>

AREA TO BE FILLED WITHIN THE 120m BUFFER = 22,038 m<sup>2</sup>  
 VOLUME TO BE FILLED WITHIN THE 120m BUFFER = 54,349 m<sup>3</sup>

AREA TO BE FILLED OUTSIDE OF THE 120m BUFFER = 7,185 m<sup>2</sup>  
 VOLUME TO BE FILLED OUTSIDE OF THE 120m BUFFER = 15,135 m<sup>3</sup>

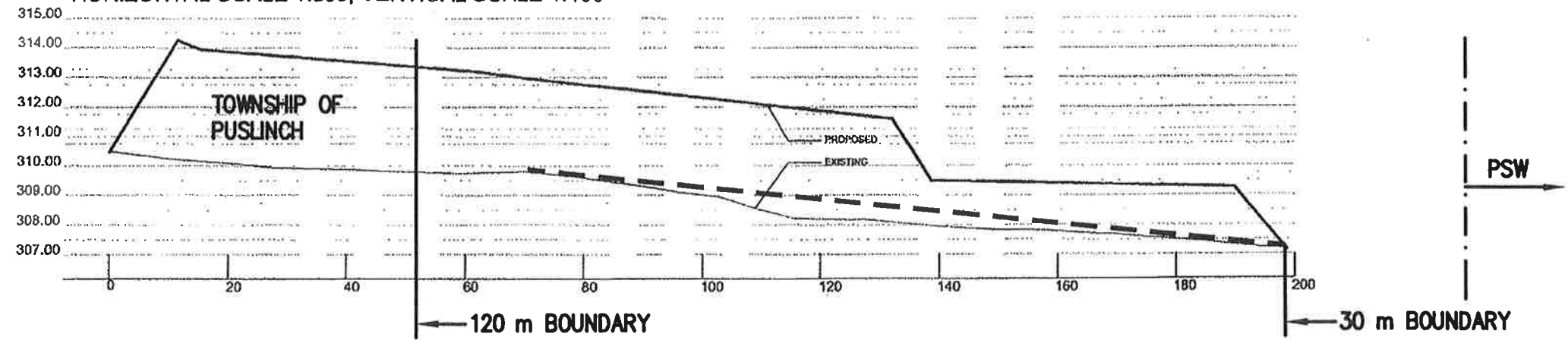
- SEASONAL PLANTS\***  
 SHOULD THE SOIL IN THE FILL CONSISTING OF ONE OR MORE OF SOIL #3 BE STABLE.
- \* REEPIING BENT GRASS (AGROSTIS...)
  - \* WILDERD-LEAVED ORACHE (ATROPIS... PATULA (A. PATULA VAR. HASTATA))
  - \* LOW-NUT-GEODE (CYPERUS ESCULENTUS)
  - \* WILD-RYE (ELYPHUS CANADENSIS)
  - \* PIRUUS ESCULENTUS P. SAGITTATUS BUCKWHEAT
  - \* THE SUNFLOWER (HELIANTHUS ANNUUS ANGL. SSSS. ANNUUS & LENTICUL / (HOREDEUM HYSTRIC))
  - \* WHEAT-BARSLEY (HORDEUM JUBATUM SSP. JUBATUM)
  - \* MILLET (Panicum URANCEUM)
  - \* PURSLANE (PORTULACA OLEVADEA)
  - \* RYE (SECALE CEREALE)
- \* A SEASON, A NURSE CROP \*CES MUST BE APPLIED TO ENSURE THAT



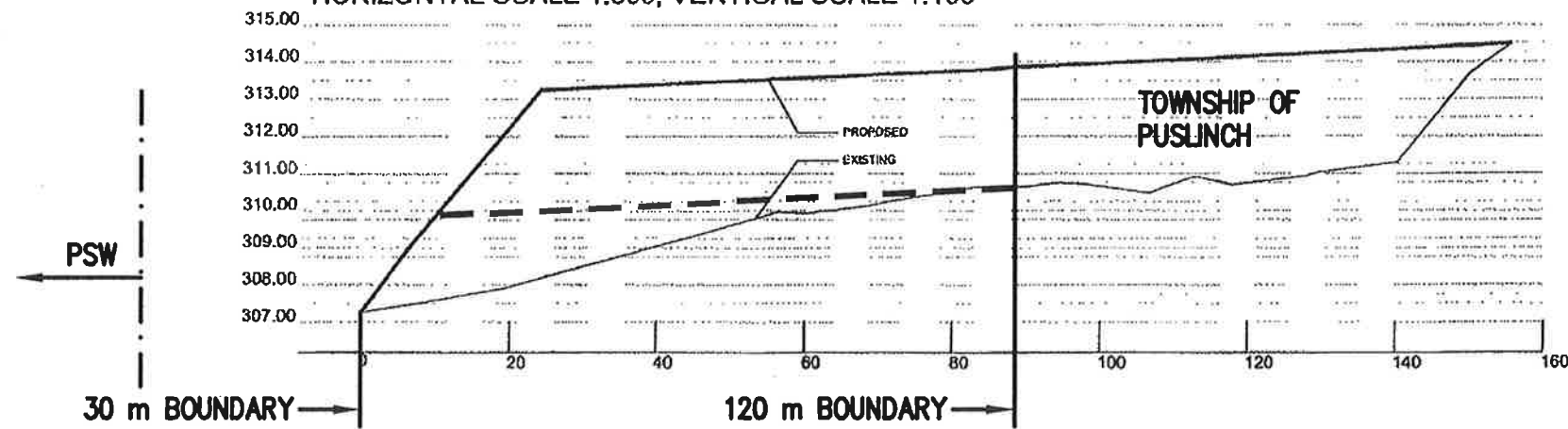
CONCESSION 10  
 LOT 30,  
 PART 1, 61R-7543  
 PART 2, 61R-11614

WELLINGTON COUNTY ROAD No. 36  
 ROAD ALIGNMENT BETWEEN LOTS 30 AND 31  
 PART 10, 61R-4761  
 PART 11, 61R-4761  
 PART 1, 61R-9382  
 PART 2, 61R-11388  
 PART 1, 61R-11388  
 PART 2, 61R-11388

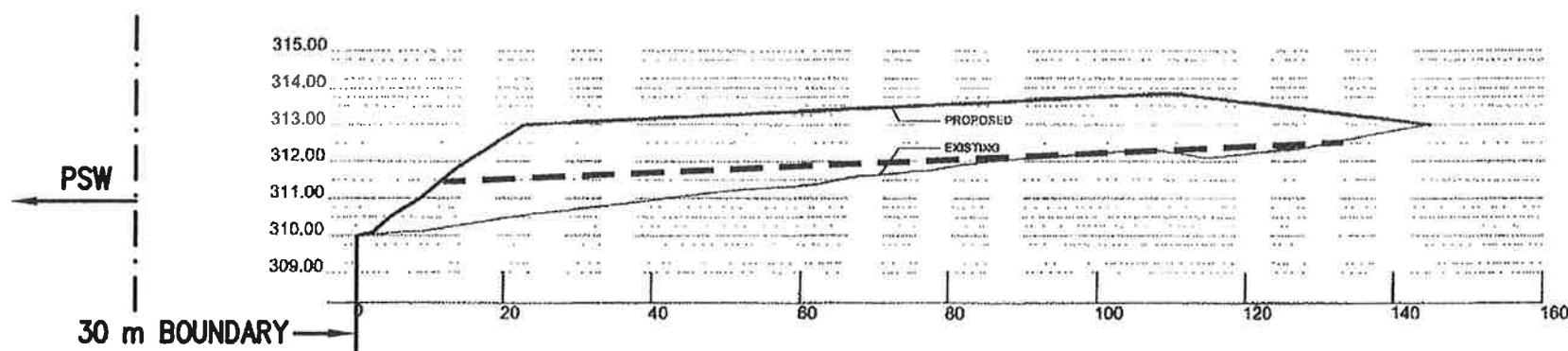
**CROSS-SECTION A-A'**  
HORIZONTAL SCALE 1:500, VERTICAL SCALE 1:100



**CROSS-SECTION B-B'**  
HORIZONTAL SCALE 1:500, VERTICAL SCALE 1:100

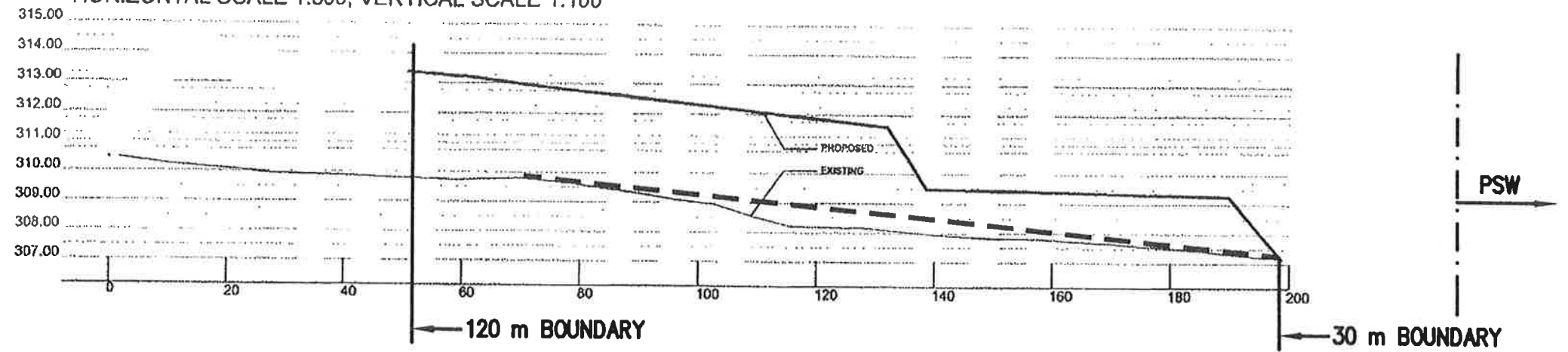


**CROSS-SECTION C-C'**  
HORIZONTAL SCALE 1:500, VERTICAL SCALE 1:100

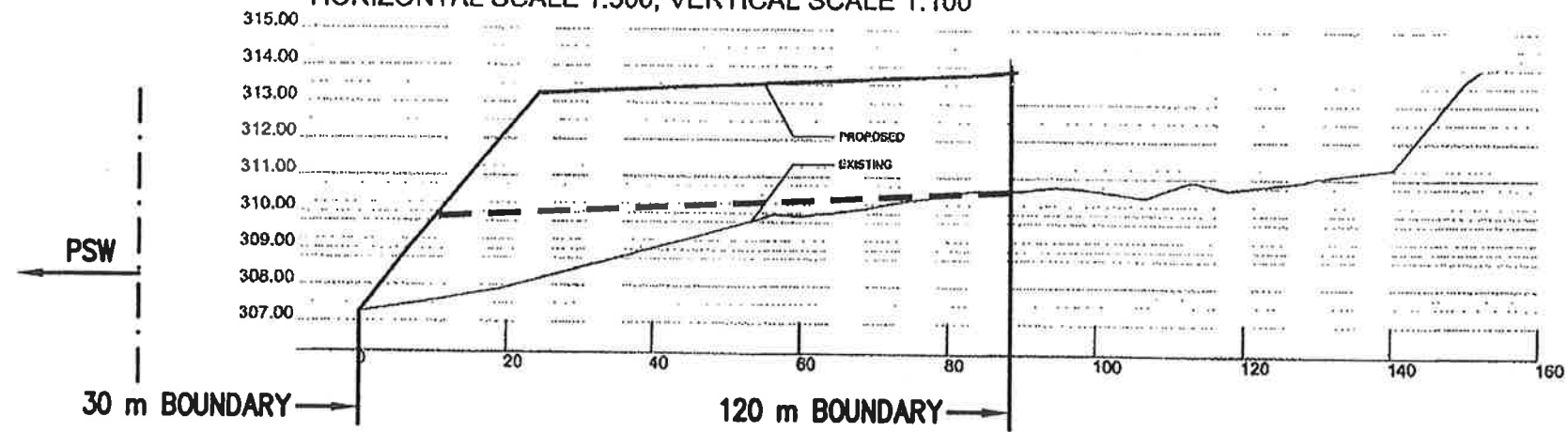




**CROSS-SECTION A-A'**  
HORIZONTAL SCALE 1:500, VERTICAL SCALE 1:100



**CROSS-SECTION B-B'**  
HORIZONTAL SCALE 1:500, VERTICAL SCALE 1:100



**CROSS-SECTION C-C'**  
HORIZONTAL SCALE 1:500, VERTICAL SCALE 1:100

