Attachment F Minutes from Public Meeting

~~Councillor J. Pfenning noted that her comment on the Benefit Breakfast sentence was incomplete.~~

8. PUBLIC MEETINGS

8.1 REPORT NO. DS 2020-002
Zone Change Application 08/19
Jackson Harvest Farms Ltd.
1894-1922 Witmer Road

Resolution No. 2020-004

Moved by: Councillor B. Fisher Seconded by: Councillor J. Gerber

THAT Report DS 2020-002 be received for information.

CARRIED.

Councillor C. Gordijk declared a conflict of interest and left the room.

Mayor Armstrong declared the public meeting open and stated that Council would hear all interested parties who wished to speak. He indicated that if the decision of Council is appealed to the Local Planning Appeal Tribunal, the Tribunal has the power to dismiss an appeal if individuals do not speak at the public meeting or make written submissions before the by-law is passed.

Mayor Armstrong stated that persons attending as delegations at this meeting are required to leave their names and addresses which will become part of the public record and advised that this information may be posted on the Township's official website along with email addresses, if provided.

The Manager of Planning / EDO outlined the report.

Mr. David Sisco, IBI Group, provided a detailed presentation of the Zone Change Application on behalf of the applicate Mr. Rick Esbaugh. Mr. Sisco introduced the professionals involved in the project.

Mr. Sisco noted there are two applications for this particular property, relating to two separate Acts, requesting extraction of sand and gravel in the Hallman Pit. Mr.Sisco noted that each process is separate. He noted the first request is the Zone Change, which falls under the authority of Township Council which is the reason for the meeting on this date. Township Council can approve the application, deny the application or chose to not make a decision at all, known as a refusal to make a decision. He noted

that in any of the mentioned scenarios, the applicant or any member of the public can choose to appeal that decision to LPAT.

The second application is for the gravel pit license, noting that that application is under the Ministry of Natural Resources and Forestry. The license application is the responsibility of the applicant, noting that the applicant is responsible for notification, and is required to follow detailed process as outlined by the Ministry of Natural Resources and Forestry. Mr. Sisco noted that the process required the applicant to provide notices to property owners and several agencies for formal comment. Mr. Sisco noted that the Ministry of Natural Resources and Forestry will not approve an aggregate license until the applicant has secured a zone change approval and successfully completed all requirements as set out by the Ministry. These requirements include a mandatory public engagement process hosted by the applicant.

Mr. Sisco noted that in terms of the Zone Change Application, requirement of what an applicant is mandatory to do is set out in the Regional Official Plan, Township Official Plan and the Provincial Aggregate Resources Act. As a requirement of those agencies, a pre-consultation was held. He noted that the applicant has submitted all documentation that was required to fulfill the obligations set out by these agencies, for technical comments.

Mr. Sisco provided a detailed overview of the aspects of the proposed pit, as outlined in his slide presentation, attached as Appendix A.

Mayor L. Armstrong asked if Council had any questions of a technical nature. There were none.

Mayor L. Armstrong asked if anyone wished to address Council on this matter, and the following delegations spoke.

Mr. David Donnelly, 276 Carla St, Toronto.

Mr. Donnelly advised that his firm represents the Citizen's for Safe Ground Water. He advised that the primary purpose of his submission was to provide Council with information on what other municipalities are doing with similar applications. He noted that, he will be presenting, on behalf of his client, a proposal for an Interim Control By-law relating to this matter. Mr. Donnelly advised that the Citizen's for Safe Groundwater has hired several experts to review the proposed pit as well. He outlined details on licensed quarries within Ontario, including locations and future need for aggregate. He advised that there are over 7,000 pits in Ontario to fill projected needs for aggregate currently. He noted that aggregate has several impacts to land and that historically, rehabilitation efforts have not been successful. He suggested that the Township rethink how land is being used. Mr. Donnelly made reference to the Ministry decision in regards to the Wellington County pit refusal, noting their reasons for such and that Council should take into consideration those reasoning's in this situation. Mr. Donnelly also suggest that Council consider an Air Quality By-law, similar to that of the City of

Burlington, which, he noted, can be commenced through an Interim Control By-law. Mr. Donnelly provided examples, as outlined in his slide presentation, attached as Appendix B, of initiatives other municipalities have undertaken in regards to gravel pits, to put in place policy surrounding approvals of gravel pits.

Mr. Wilf Ruland, P. Geo.

Mr. Ruland provided an overview of general hydrogeology concerns surrounding gravel pits and the impact on available groundwater resource. He noted that the Waterloo Moraine is an impressive source of water that should be protected. He advised that he is familiar with this area due to the work that he has done at the Wilmot Centre Well Field. Mr. Ruland noted that there were nitrate levels that were noted in the results of the drills that were done on site. He noted the application mentions aggregate washing without mention of key details in that particular operation. Mr. Ruland noted that the application fails to show how the site will protect the Wilmot Centre Well Field and does not show groundwater flow directions for the Wilmot Centre Well Field. He also noted that neighbouring wells appear to have not been taken into consideration as there is no prevention / mitigation measures in place. He raised concerns with the applicants proposal to monitor only one well. Mr. Ruland advised that in his professional view, Council decline or table the application until such time as groundwater impact assessments have been complete through a peer review. Mr. Ruland provided a handout to Council and is attached as Appendix C.

Councillor B. Fisher asked if Mr. Ruland could expand on Bill 132 and Mr. Ruland advised that he was unable to speak to that.

Richard Stevenson, 2125 Bleams Road, Shingletown

Mr. Stevenson presented to Council his concerns with the proposed pit. He noted that the Township of Wilmot Official Plan states that, noise, dust, vibration studies demonstrating the proposed operation is appropriately designed to prevent adverse effects, he stated, that after reading the applicants documents, he found causes for concern. He outlined that there was not a vibration study completed, and he was unsure as to why this is not a requirement, considering the operations of the facility. He proposed that Council require a vibration study be complete prior to any approvals. He also noted that there are 3 houses within the set back and he is asking for clarification regarding those setbacks, and what affect those setbacks will have on those properties and proper enjoyment. Mr. Stevenson advised that the noise study does show concerns on how data collection and calculations were done, including the hours that the noise studies where completed in comparison with the proposed hours of operation. He raised concerns with the proposal of water usage to control dust and the affects that road salt may have on the site during winter months.

Robert Gebotys, 2052 Sandhills Road, Baden

Mr. Gebotys, spoke of the general plans of Municipal and Provincial plans, such as the Golden Horseshoe, Morraine Plans etc., and noted that those plans all have the health and welfare of residents in mind. Mr. Gebotys provided a slide presentation, attached as Appendix D, in regards to various aspects of the application. He advised that the traffic report and the perceived contradiction with numbers, as well as the road usages for the trucks. He advised that the noise report and levels of decibels in terms of pain threshold and noted that a crusher is close to that threshold. He discussed the noise study and the errors in prediction that were not included in that study. Mr. Gebotys also noted that the vibration analysis for the crusher was not included in the reports. He mentioned that the Government of Canada has a safety data sheet for sand and gravel and the health concerns of those substances. Mr. Gebotys also noted that the agricultural report outlines the different classes of soil of the subject property and that the sample size in the report should be expanded. Mr. Gebotys noted that the water report, identifies the risk to the ground water.

Patricia Chevalier, 2062 Bleams Road

Ms. Chevalier noted that her particular interest is in preventative strategies for mental health concerns. She noted that when the mapping is reviewed the setback goes into people's properties and the impact that has on mental health and fine particulate matter. She discussed the carbon emissions and relationship to dust from the carbon itself. Ms. Chevalier referenced a study done that reviewed adverse health effects from these dust particles, and the various impacts of exposure. Ms. Chevalier provided statistics on noise pollution and its impact on health as well. Ms. Chevalier advised Council that she recommends they wait until the impact these exposure have on health is better understood. Ms. Chevalier's presentation is attached as Appendix E.

Mark Gordon, 2062 Bleams Road, Shingletown

Mr. Gordon advised that the proposed pit, would have an impact on the residents, noise pollution, air pollution to name a few. He spoke of the quality of living that will change as a result of the gravel pit that the residents in other Township communities will not be impacted by. Mr. Gordon advised that the environmental impacts, lost farmland, and the risk to the water supply need to be considered. He advised that the operations of the gravel pit will directly impact the climate emergency that Township Council declared in 2019. He noted that if the gravel pit is approved, it will be the first gravel pit approved in a Source Water Protection Area.

Douglas Huber, 157 St. George St., St. Thomas

Mr. Huber noted that he has friends and family that live in the area and that he has not been compensated for his time or expenses, rather he reviewed and is commenting as a Professional Geoscientist. Mr. Huber noted that based on the reports, the individual wells will potentially be impacted. Mr. Huber provided a background of his professional experience. Mr. Huber outlined Ontario Government Policy statements regarding Surface Water Quality Management, noting that existing wells are not to be impacted. He noted that the well on his brother's property has seen an increase in the nitrates in the well and currently use bottled water for drinking and cooking and that their neighours well has higher levels of nitrates. Mr. Huber discussed that in this professional opinion, the heavy levels of previous farming activities have created these problems. He noted that hydrogeological report is a best guess of what is truly happening and that it is not an exact science. He noted that the groundwater chloride concentrations in the monitoring wells show variations in levels in each of those wells, as well as, the report states some of these wells show groundwater contamination.

Councillor J. Pfenning thanked Mr. Huber for his presentation and asked what methods can be used to trace water preference in a well, noting that in her experience with her well, which is an artesian well, that the water would be coming from a great distance and asked if he was aware of any mapping. He noted that he has experience with surface water, which would include dyes that would not be done in drinking water and it is hard to compare.

Linda Laepple, 2298 Bleams Road

Ms. Laepple noted she has concerns with the hydrological assessment and the agricultural impact. She provided a detailed overview of her slide presentation, which is attached as Appendix F, providing statistics and identifying where she feels information is missing. Ms. Laepple advised that she recommends denial of the rezoning application and that the Township work with the stakeholders in efforts of de-commissioning the contaminated former feed lot site and rehabilitate the land.

Councillor J. Pfenning asked if a copy of the slide presentation could be forwarded to Council and the Director of Information and Legislative Services advised that all presentations received after the Council packages were distributed will be made available to Council and on the website.

Christina Harnack, 2158 Bleams Rd

Ms. Harnack presented her concerns, as outlined in her slide presentation, attached as Appendix G, she noted that she appreciated the opportunity to speak regarding her concerns for the rezoning of the property. Ms. Harnack outlined why she objects to the proposed pit such as, water safety, toxic pollution, contamination, climate change and negative effects on the environment. Ms. Harnack outlined the concerns for ground water protection as the Region of Waterloo relies almost entirely on ground water as its water source. She noted that the proposed site is currently zoned as prime agriculture and is protected under the Protected Countryside Policy, the Clean Water Act and Source (Water) Protection Policy. Ms. Harnack noted that she is proposed to the proposed location of the pit, she noted several examples of worldwide initiatives that are being done to protect the environment and recognize the impacts these have on the climate emergency, she noted that this is our responsibility and is interested in the peer review from the GRCA.

Ann Dupej, 2122 Bleams Rd

Ms. Dupej presented her concerns in regards to the proposed aggregate site. Ms. Dupej noted that through her research, the rehabilitation plan in the Region of Waterloo is at 20%, she noted that Regional staff have been quoted as questioning the monitoring of submitted reports. She advised that the goal of rehabilitation is to return the lands to their former natural environment, the Township of Wilmot policy states that the rehabilitation must be maximized back to the same quality; however, the Waterloo Federation of Agriculture has stated it is impossible to rehabilitated farm land back to its previous productivity. Ms. Dupej noted that the elevations on 3 sides of the property varies, and that the proposal to rehabilitate is to bring in Ministry approved fill, totalling 55,000 truckloads of fill, Ms. Dupej is questioning where this soil is coming from and is there risk for contamination and who is responsible for monitoring this activity, she noted the contamination that was recognized at the Sandhills Pit last year. She noted she would like to see further studies by an agricultural expert regarding the rehabilitation to farmable land. She expressed her concerns regarding the loss of farmland relating to the depth of extraction terms in the Official Plan. Ms. Dupej noted that the other concerns she holds are the number of pits in the Township, namely 13 current sites with extractions and another 9 sites within a kilometer abutting the Township and there is no study on the combined impact of all pits. Ms. Dupej noted that this needs to be thoroughly investigated and she urged Council to take their time and ensure they have all the answers.

Ed Dupej, 2122 Bleams Road

Mr. Dupej spoke on 2 of the reports on the pit, the geotechnical and transportation studies. Mr. Dupej provided an overview of the recommendations that CMT identified in their study of the existing Witmer Road. He advised there is no mention of heavy truck traffic westboard from the pit entrance to Sandhills Road and raised concerns on the abilities of the roads to have the standards enough to carry that type of traffic. Mr. Dupeji noted that the peak traffic counts for gravel trucks is concentrated in a 6-month period and not truly year round numbers. He questioned the school bus safety, impacts to emergency service vehicles, and dangerous blind hills on Witmer Road that have not been addressed. He noted there is a lack of study on the impact of all local roads, increased traffic impact on all residents. Mr. Dupej suggested that the internal haul route of the existing Cattle Lands Agreement should be followed.

Rory Farnan, 1481 Mannheim Road

Mr. Farnan provided a slide presentation outlining his concerns for the proposed pit. He advised that he attended a small presentation on the gravel pit proposal and became involved due to his concerns regarding the protection of the ground water and agricultural land. He agreed that the concerns expressed by the previous delegations. Mr. Farnan questioned how this application supports the Source Water Protection Area, the Climate Emergency, and infrastructure costs. Mr. Farnan noted that the applicant has a responsibility to show there are no negative impacts as a result of the application, noting that has not been done, he noted there are no benefits or enhancements to the quality of life for the entire community as a result of this application. Mr. Farnan asked that Council vote against the application.

Mayor L. Armstrong call Registered Delegation Ingrid Rosner, Council was advised she left the meeting.

Michelle Lemire, 1470 Mannheim Road

Ms. Lemire agreed with all of the previous speakers. Ms. Lemire questioned why this is being proposed, as it does not fill a need in the community. She advised that it appears to be a positive proposal; however, felt that the complex nature of the gravel pit does not guarantee that contamination would not happen. She advised that she and her clients use Witmer Road to run and with the increased truck traffic puts users at risk.

Samantha Lernout, 1790 Witmer Road

Ms. Lernout acknowledged the difficult task of the decision making process; she noted there is a lack of clarity in the application and advised that Council has an obligation to protect the citizens. She noted that as highlighted by previous delegations, there are potential negative impacts. She noted that she recognizes the need for aggregate but noted that clean water is needed. Ms. Lernout noted that the Wilmot Official Plan purpose is to protect residents and the community and that as stated earlier the expert's reviews are incomplete in addressing residential impacts. She noted that the Township Official Plans states that a Hydrogeological study must prove no negative impacts to the quality and quantity of the water. She noted that Grand River Environmental Network identifies the Region of Waterloo having crucial protection of the ground water. She advised of the concerns that the Region of Waterloo has with the application on the potential impact of the ground water. Ms. Lernout advised that it is of the utmost importance that the Township consider the far reaching impacts. She advised that she would like to know more about levels of atrazine on this site. Ms. Lernout commended Tri-City for the response to the alleged near miss spill on their site today with the alleged fuel truck and containing of that alleged incident. Ms. Lernout provided images from Google on other pits in the Township and questioned the contamination, she also provided a slide of the pit she alleges had a close to catastrophic spill today on Snyder's Road showing the accessory uses. She discussed the permit to draw water from the Region of Waterloo and if the impact has been addressed for these permits with the projected growth and demand in the Region. She raised concerns she has over the wetlands on the property and the topography protection of the site. Ms. Lernout's presentation is attached as Appendix H.

Louisette Lanteigne, 700 Star Flower Ave. Waterloo

Ms. Lanteigne referenced the Bible in relation to value of water. Ms. Lanteigne noted that she has been an advocate of environment protection for 20 years. She advised to not squander the water supply and the obligation to protect the land. Ms. Lanteigne noted that the Ministry of Natural Resources and Forestry are responsible for issuing licenses and indicated that there is a conflict of interest considering the largest consumer of aggregates in Ontario is the Ontario Ministry of Transportation. Ms. Lanteigne identified violations of the Haldimand Tract Agreement and Treaties within the location of the application. Ms. Lanteigne went through her slide presentation outlining lost revenues, and the perceived risks to the Township to approve the application. Her presentation is attached as Appendix I.

Dave Bricker, 1768 Witmer Road

Mr. Bricker advised that he has submitted written objection to this application. He advised that he is concerned of the property value loss, truck traffic, well water quality, destruction of agricultural land and soils. Mr. Bricker also noted that enjoyment of his property is also at risk and this is not wanted in their area.

Yvonne Fernandes

Ms. Fernandes advised she is in attendance as a former City Councillor with Kitchener and advised that she is speaking as a previous member of the steering committee for the OMB reform which presented a paper to the Province on the changes from the OMB to LPAT, putting the power back to the Municipalities. She advised that Councillors listened to their constituents at that forum to protect their official plans. She acknowledged the comments and information that Council has heard and that those are difficult decisions to make, she reminded them that as a Council they will always be held responsible to the development community and the constituents; however, advised Council to take into consideration the expert comments and the residents comments. Ms. Fernandes noted that aggregate companies can change site plans as they see fit and that should be taken into consideration as well.

Jennifer Lauzon, 2144 Bleams Road

Ms. Lauzon advised that she learned many things as a result of this application; however, she noted that the most important thing she learned is the strength and bravery of the residents of Wilmot Township to object to the application. She advised this process has been a journey of friendship, loyalty and determination. She advised everyone has come together as one to fight for what is right to protect the environment, the water and keep the community safety, clean and vibrant for all generations.

Paula Brown, 37 Country Creek Drive, Baden

Ms. Brown advised that they have enjoyed a superior quality of life provided by Wilmot Township and has concerns that quality of life will be jeopardized. Ms. Brown noted that in the 2019-2022 Strategic Plan update is asking residents for feedback on what makes Wilmot Township a caring community and she feels that voting against this zone change will show that caring community.

Ruth Rosner, 2161 Bleams Road

Ms. Rosner acknowledged the amount of information that Council needs to consider. Ms. Rosner noted that there is a working aggregate operation directly across the road from this proposed site and that owner has stated there is sufficient gravel at that site for the foreseeable future and to approve another gravel pit seems ridiculous. She noted that as read in the 2019 Official Plan for the Township, extraction should not be permitted if it does not benefit the general public, the applicant is the only one to benefit. She noted the loss of agricultural land should the application be approved. Ms. Rosner noted that in 2019, Council declared a Climate Emergency and that there is an obligation to honour that declaration and respect resident objections. Ms. Rosner noted that an aggregate operation is permitted because it is for an interim use of the land, she has not found a definition of interim to mean a 35-year span, rather, interim is for a short time. Ms. Rosner asked that Council oppose this application and vote no.

Ann Goss, 2143 Bleams Road

Ms. Goss advised that the proposed gravel pit is directly behind their home. She advised that they have a private well that raises concerns, along with the noise and dust. She noted that if the proposed pit is approved, their investments and financial losses to tax payers will result in losses to the Township as well. She noted that the wells that supply 70% of the Regional water are of close proximity to the proposed pit, putting that supply at risk. The proposed pit is also directly behind a growing residential community, which is not a good location. Ms. Goss noted of the requirements of mandatory inspections of septic tanks in areas of the Source Water Protection, at the home owners expense; however, this application is going to affect the ground water. Ms. Goss asked that Council refuse the application. She advised that the Region is the largest jurisdiction in Canada that relies on ground water, and it needs to be protected.

Christine Grey, 2153 Bleams Road

Ms. Grey advised that all of her concerns have been raised; however, the residents of Shingletown and members of the Citizens for Safe Drinking Water have all come together on this matter. She advised that there is still signs available and if any wishes to have more information visit safeh2o.com

Sherri Witzel, 2031 Bleams Road

Ms. Witzel she advised that they share the wetland and own the vast majority of that wetland. She noted that she grew up at that property and knows the history of that

property with the cattle operation. Ms. Witzel noted that they are opposed to the gravel pit and they are concerned about the quality and quantity of the ground water. She noted that the other concern is the 20 foot right of way and how the mix of farm equipment and dump trucks will navigate that right of way.

Marlin Swartzentruber, 1785 Witmer Road

Mr. Swartzentruber rents a home in the centre of a gravel pit that is leased to Steed and Evans. He noted he has an observation, he advised that Dino Trucking approached him 5 years ago to assist with the workload and a common practice in a gravel pit is to scratch the bed after a heavy rainfall to quickly remove the water. He noted that he believes the subject property had a request in the past for a gravel pit and was declined. Mr. Swartzentruber advised that his cousin informed him that allegedly Tri-City Trucking had a load of diesel fuel from Boucher and Jones delivered and the driver was unable to judge the road and got stuck. He advised that the correct measures were taken, a wrecker was brought in to stabilize the truck, brought in another truck to off load and this situation could have occurred for Dino Trucking as well. He suggested another 10 feet and the truck could have tipped over and he was bringing this up to point out the various scenarios of the situation. What needs to be recognized is there is a resource on top of a resource with this property and he advised he is glad there are smarter people that can figure this out.

Calvin Wood, 2155 Bleams Road

Mr. Wood advised that he moved into Shingletown to retire and is disappointed to find out that the Township of Wilmot has had an application in process for years and has never been caught in the position that he is in, despite doing background checks on the property. He noted that his walkway on his country home is not going to be used as intended if the gravel pit is approved. Mr. Wood advised that he has been declined a well on his property. Mr. Wood acknowledged the situation that Council is in for the decision making on this application. He noted that he purchased his home on a protected ground source protection area to avoid this type of situation.

Mayor L. Armstrong asked if there was anyone else that would like to address Council on this matter.

Mayor L. Armstrong asked if there was a timeframe to expect this to come back to Council and the Manager of Planning / EDO advised that there is no date set as of yet.

Mayor L. Armstrong asked 3 times if anyone else wished to address Council on this matter. There were none and the public meeting was declared closed.

Mayor L. Armstrong noted that according to the Procedural By-law we need a resolution to continue beyond 11:00

Councillor J. Gerber advised he would make a recommendation to extend the Council meeting to deal with only those items that need to be. Seconded by Councillor J. Pfenning, all in favor, carried.

9. PRESENTATIONS/DELEGATIONS

10. CONSENT AGENDA

10.1 REPORT NO. DS 2020-01

Release of Easement WR420624

Temporary Turning Circle / Emergency Access

Activa MDS Lands – Part 8 58R-15446

10.2 REPORT NO. ILS 2020-03

Information and Legislative Services Quarterly Report

10.3 REPORT NO. ILS 2020-04

Community Safety and Crime Prevention Engagement Committee

Committee Appointments

Resolution No. 2020-005

Moved by: Councillor C. Gordijk Seconded by: Councillor A. Hallman

THAT Report Nos. DS 2020-01, ILS 2020-03 and ILS 2020-04 be approved.

CARRIED.

11. REPORTS

11.1 CLERKS

Jackson Harvest Farms Ltd.
Hallman Pit

Introductions

- Project Co-ordination and Registered Professional Planner:

  David Sisco (IBI Group)

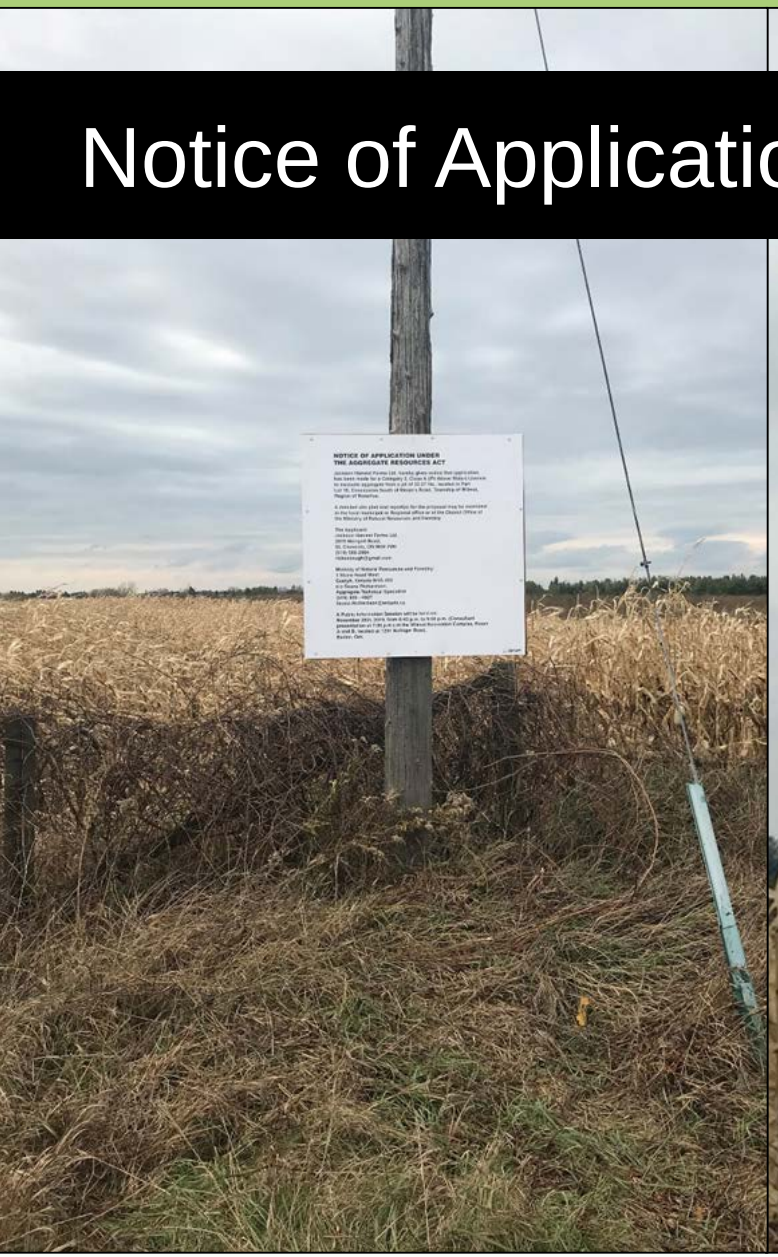
- Landowner and applicant:

  Rick Esbaugh (Jackson Harvest Farms Ltd.)

Introductions

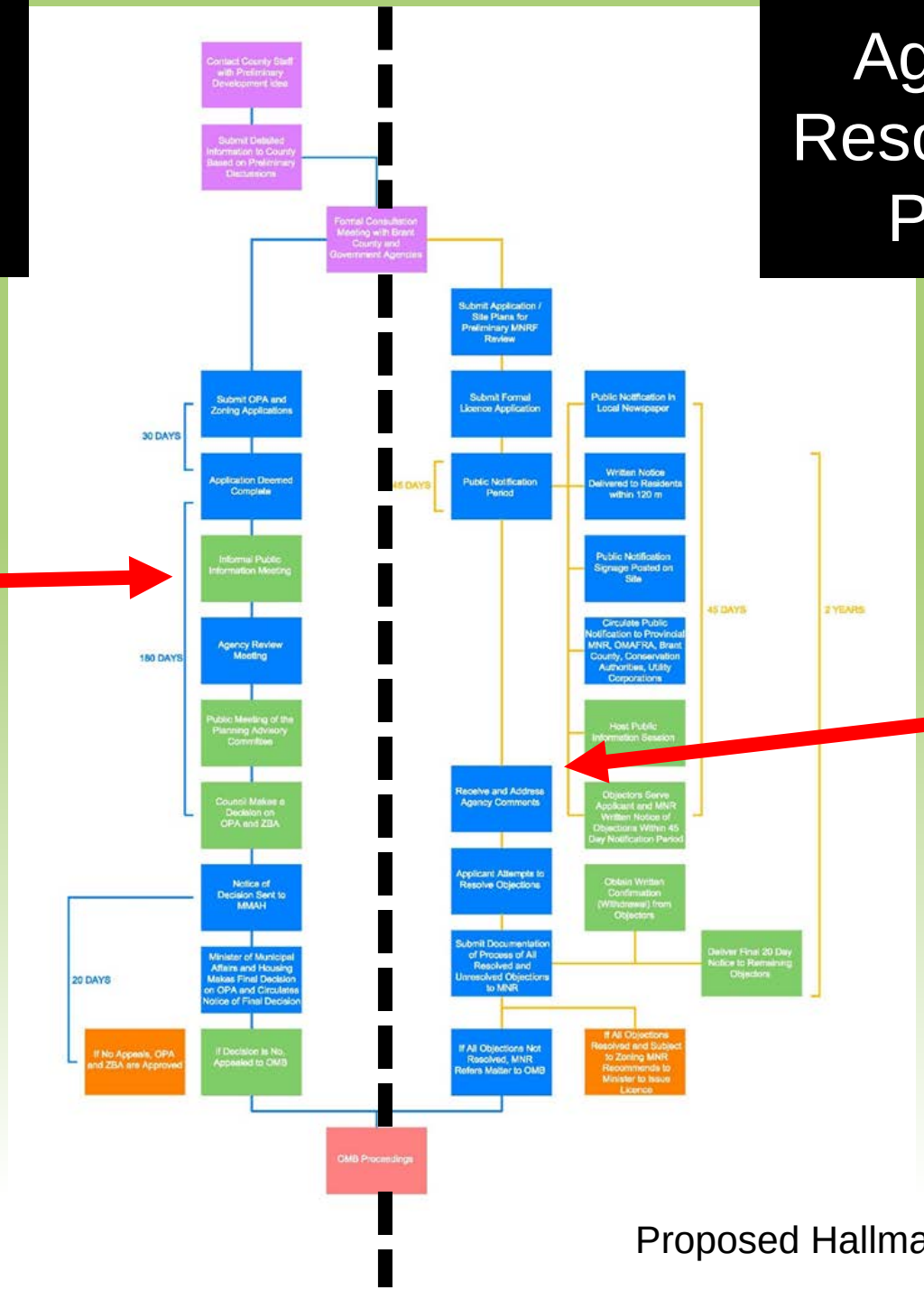
- Hydrogeologist / Groundwater Engineer:
  Stan Denhoed (Harden Environmental Ltd.)
- Acoustical Engineer:
  Mandy Chan (HGC Engineering)
- Ecologist:
  Ken Dance (Dance Environmental Inc.)
- Transportation Engineer
  Matt Brouwer (Paradigm)

Notice of Application



Planning Act Process

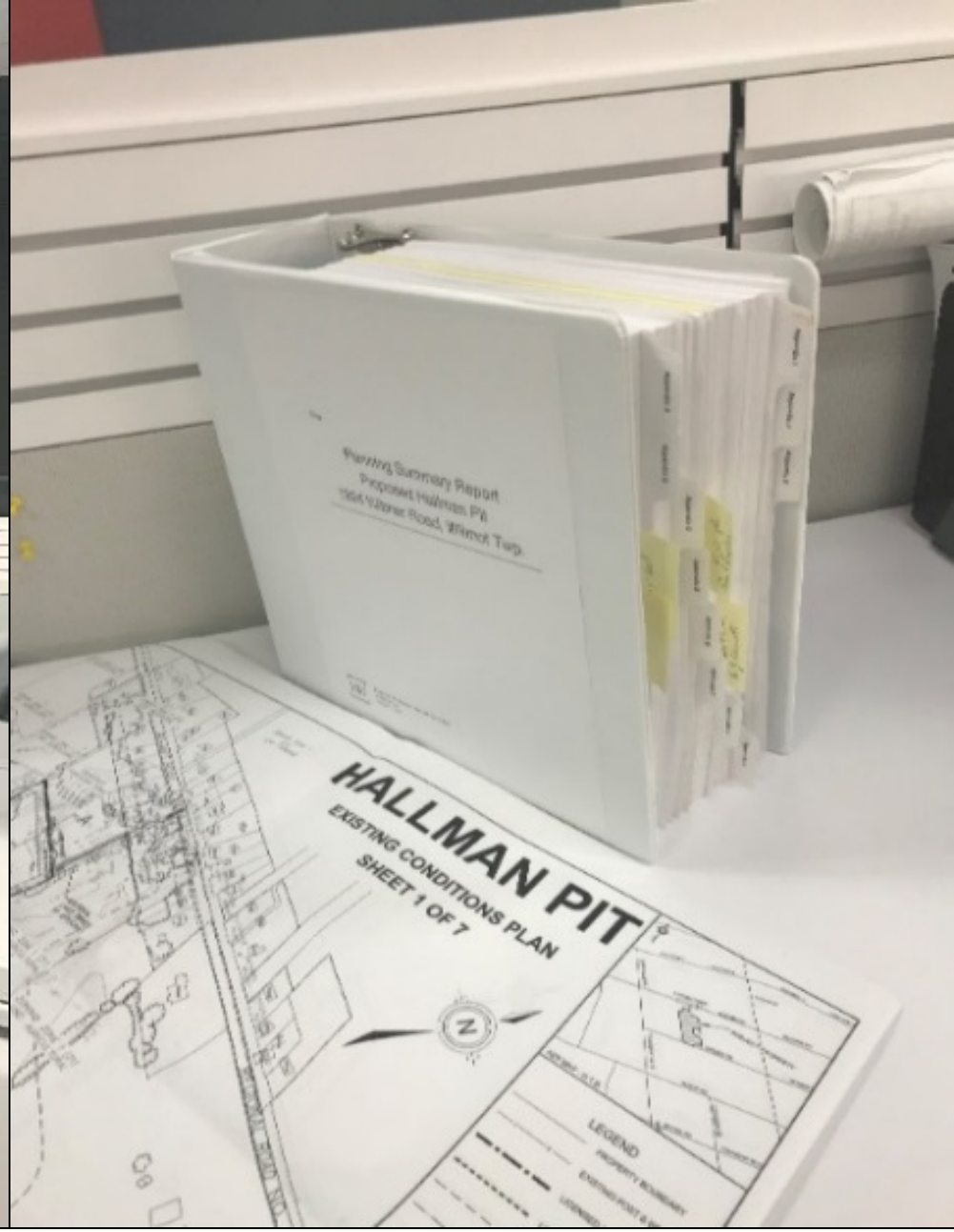
Aggregate Resources Act Process



We are here

We are here

Reports and Supporting Documents



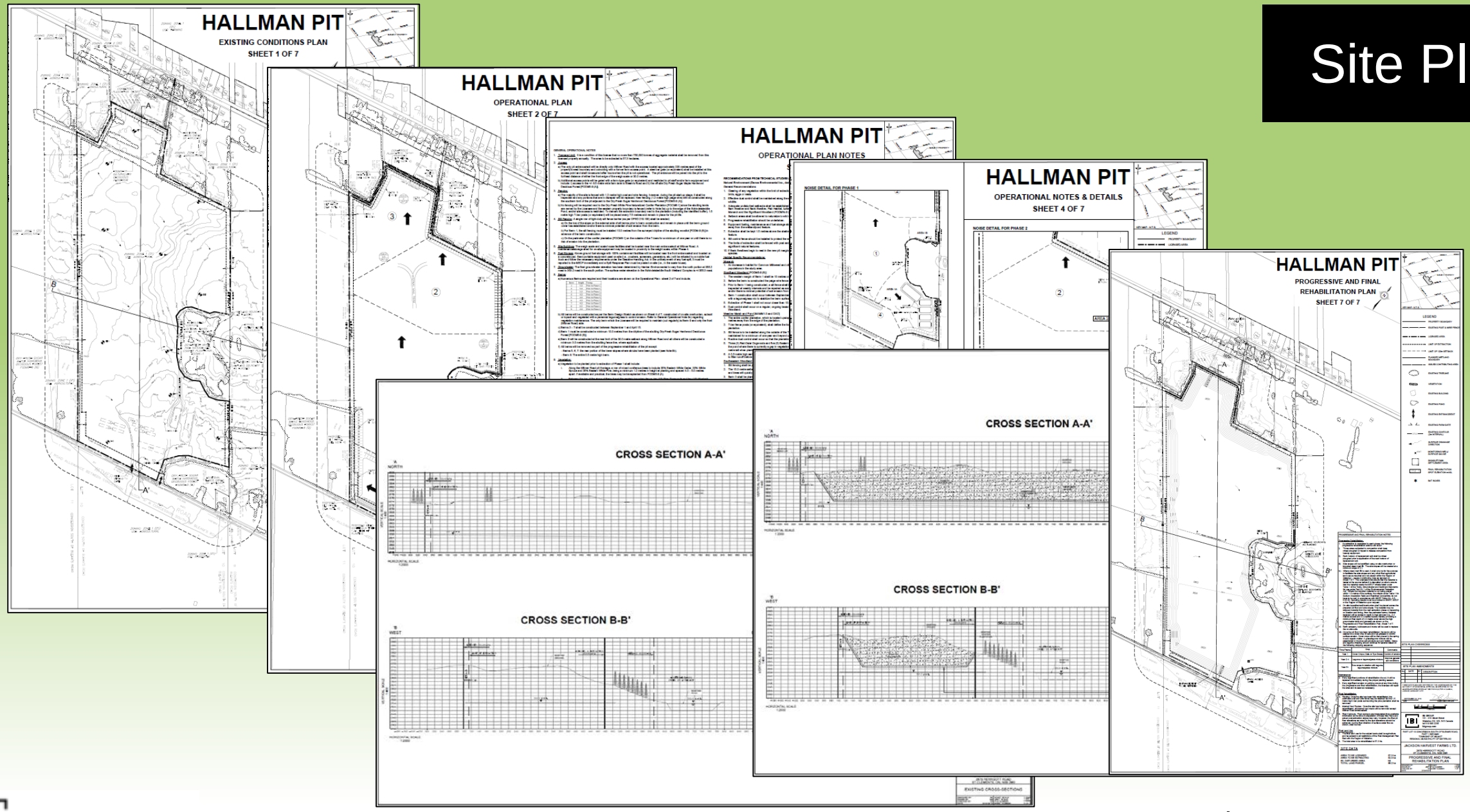
1. **The lands are appropriately zoned**

2. **Complete the ARA public notification / engagement process**

3. **Completed within two years**

4. **Document the process and submitted to MNRF.**

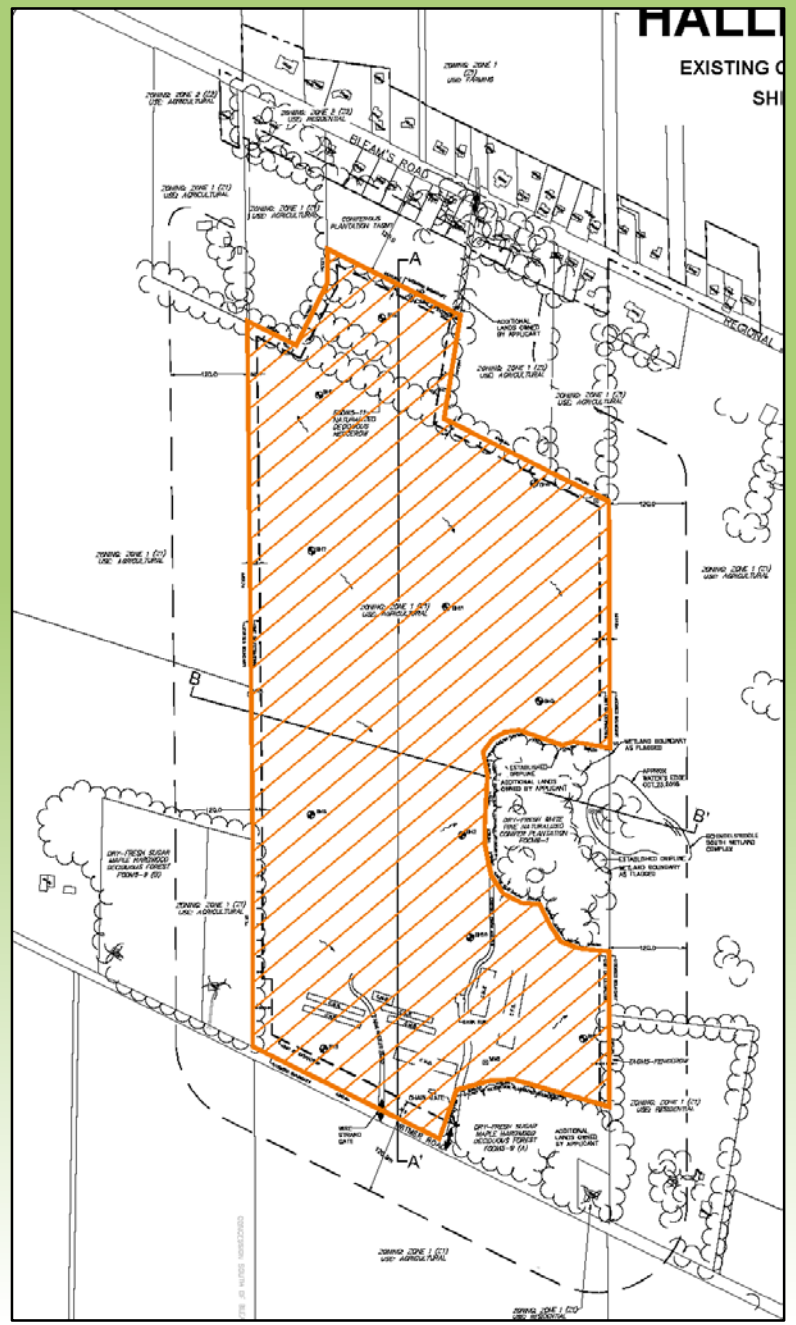
Site Plans


HALLMAN PIT
EXISTING CONDITIONS PLAN
SHEET 1 OF 7
HALLMAN PIT
OPERATIONAL PLAN
SHEET 2 OF 7
HALLMAN PIT
OPERATIONAL PLAN NOTES
HALLMAN PIT
OPERATIONAL NOTES & DETAILS
SHEET 4 OF 7
HALLMAN PIT
PROGRESSIVE AND FINAL
REHABILITATION PLAN
SHEET 7 OF 7
CROSS SECTION A-A'
CROSS SECTION B-B'
CROSS SECTION A-A'
CROSS SECTION B-B'

Existing Conditions Plan

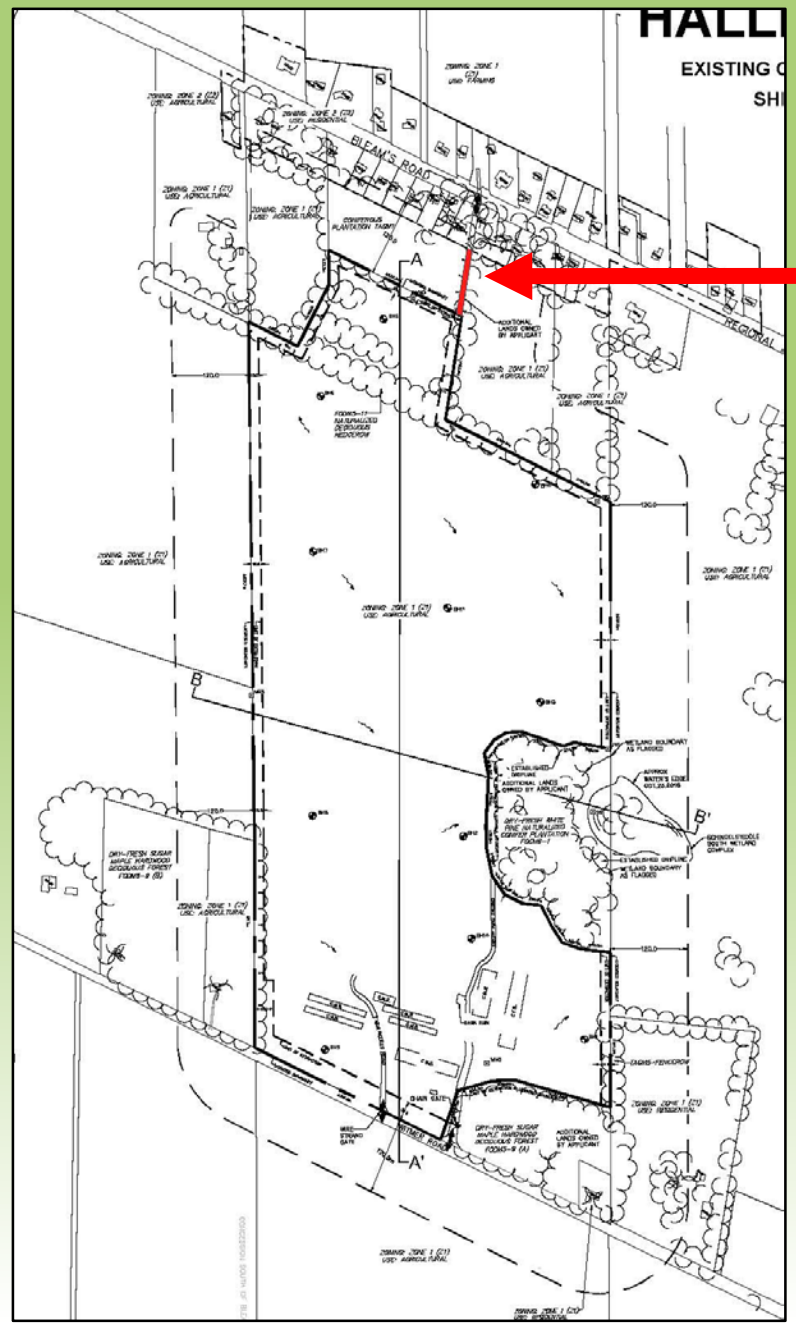
Existing Conditions Plan

Sheet 1 of 7



Existing Conditions Plan

Sheet 1 of 7



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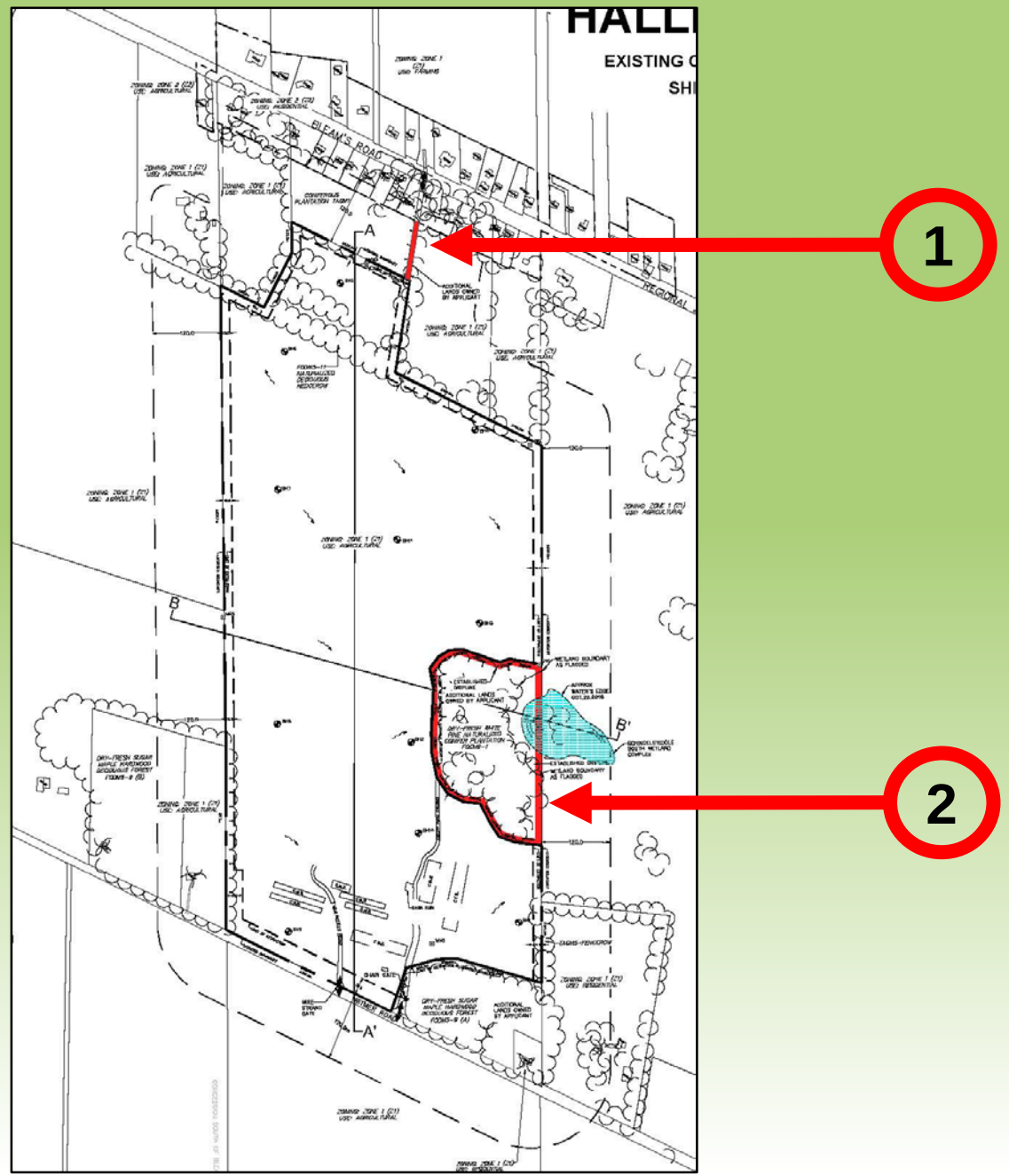
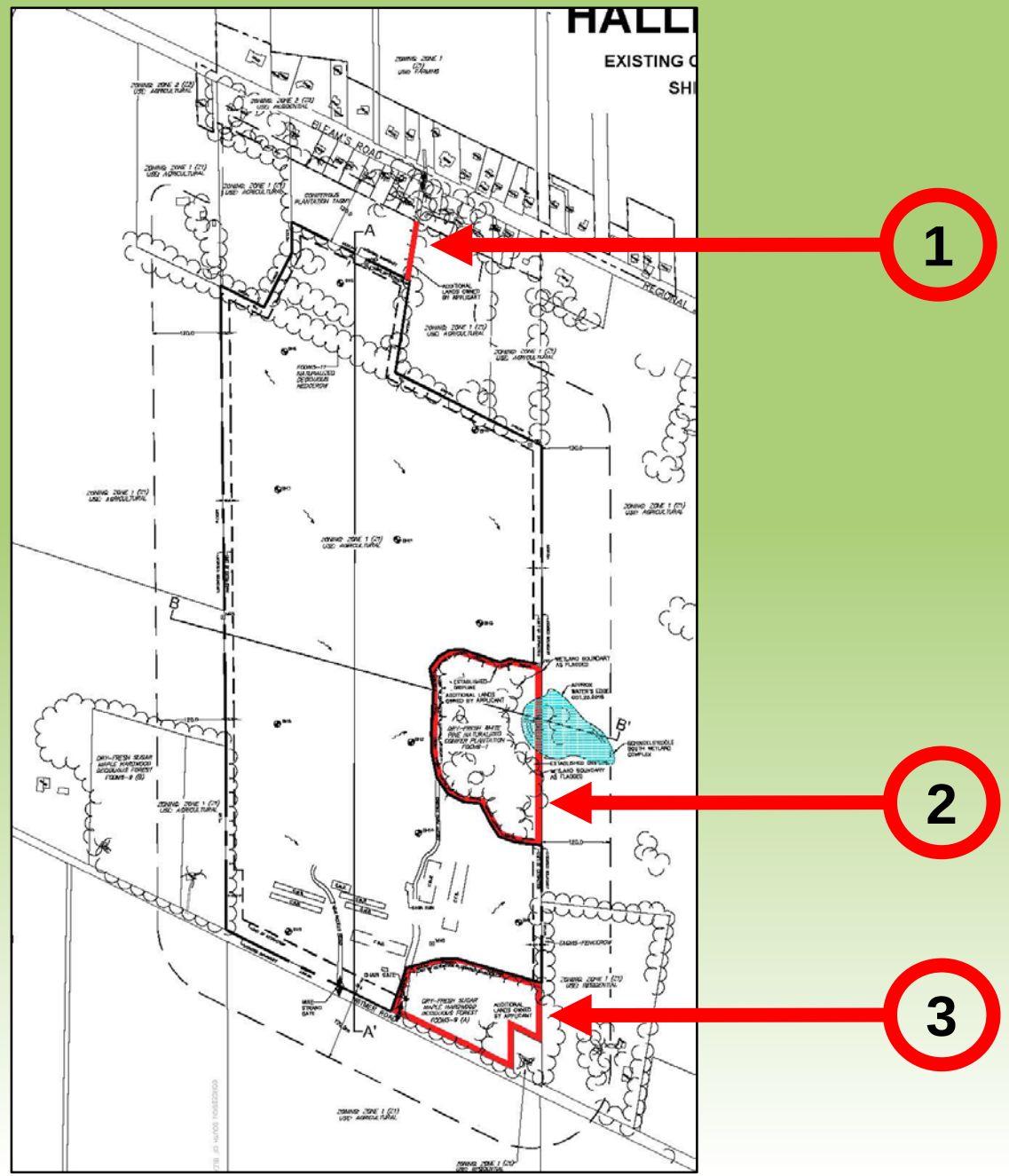
Existing Conditions Plan

Sheet 1 of 7



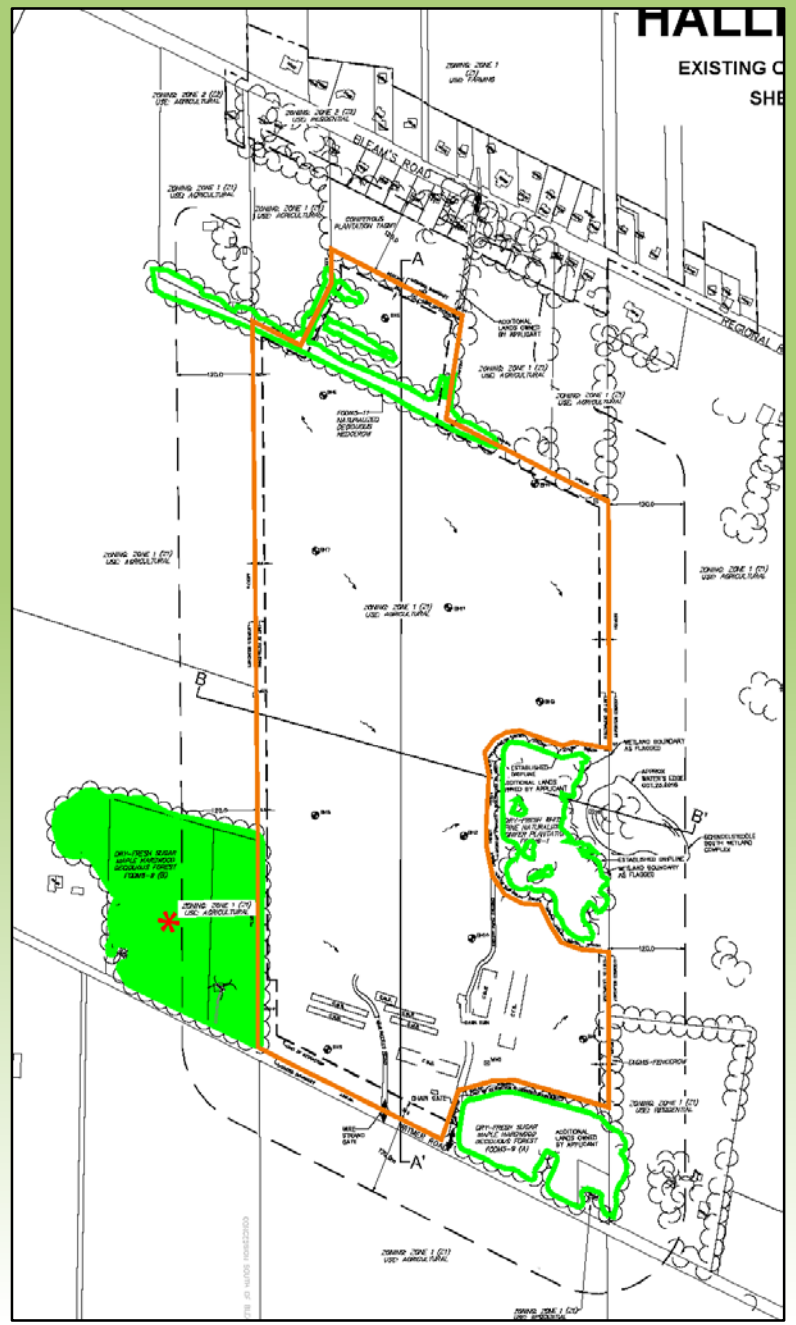
Existing Conditions Plan

Sheet 1 of 7



Existing Conditions Plan

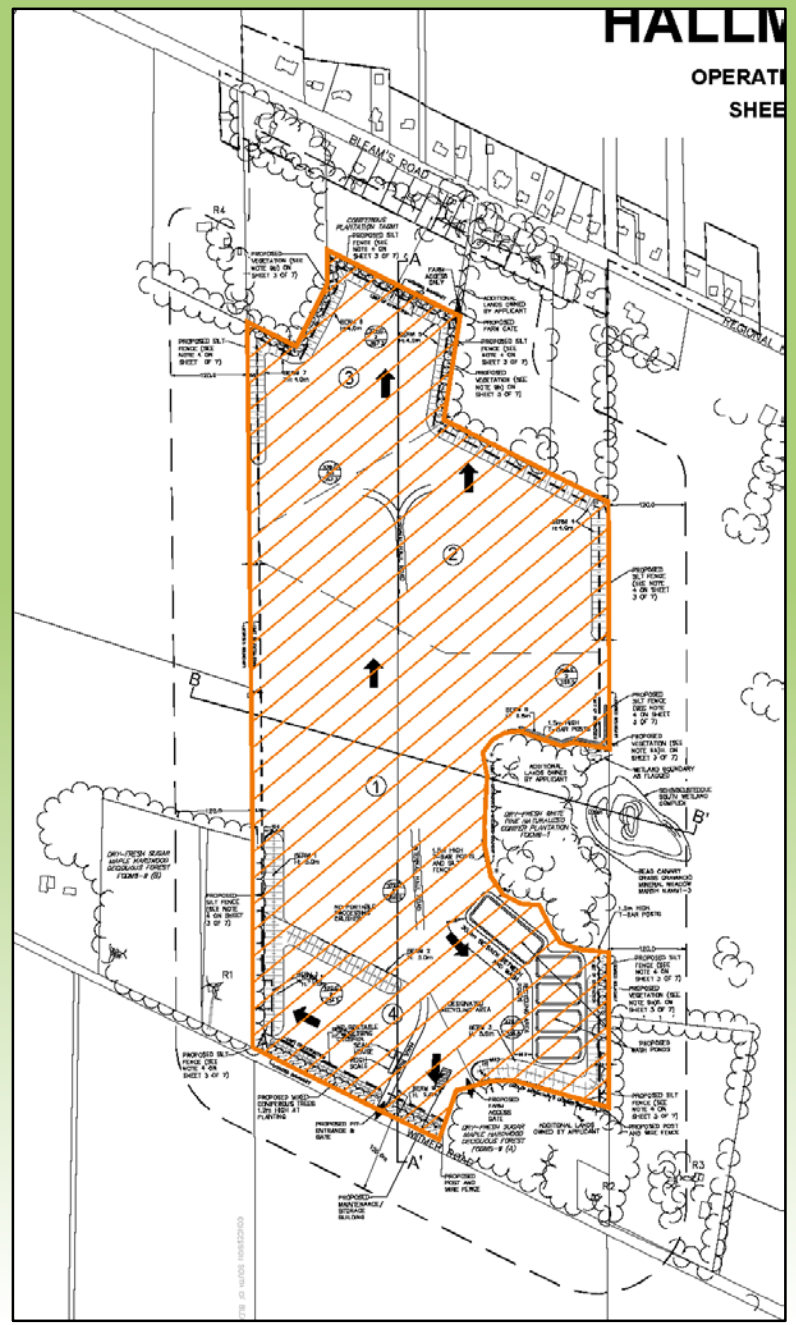
Sheet 1 of 7



Operational Plan

Operational Plan

Sheet 2 of 7

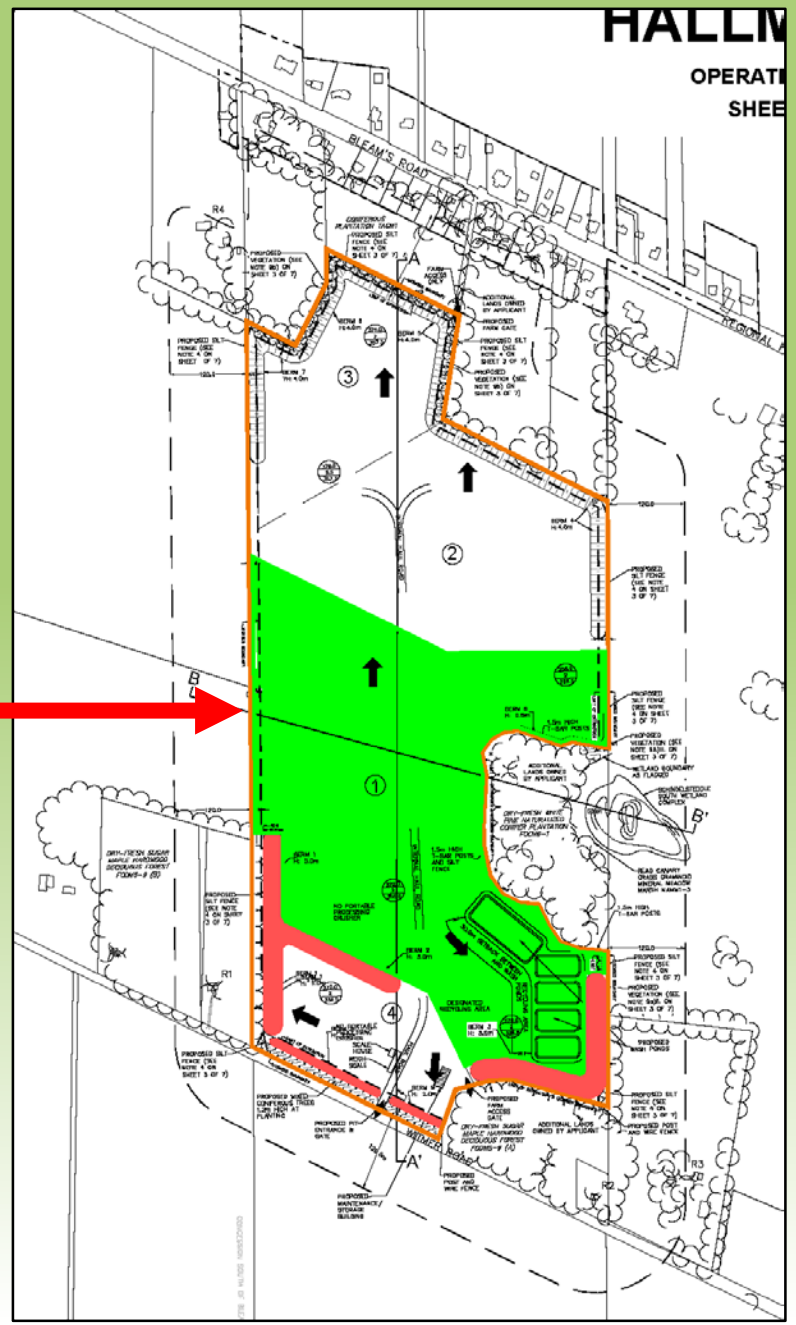


SCALE

Operational Plan

Sheet 2 of 7

Phase 1

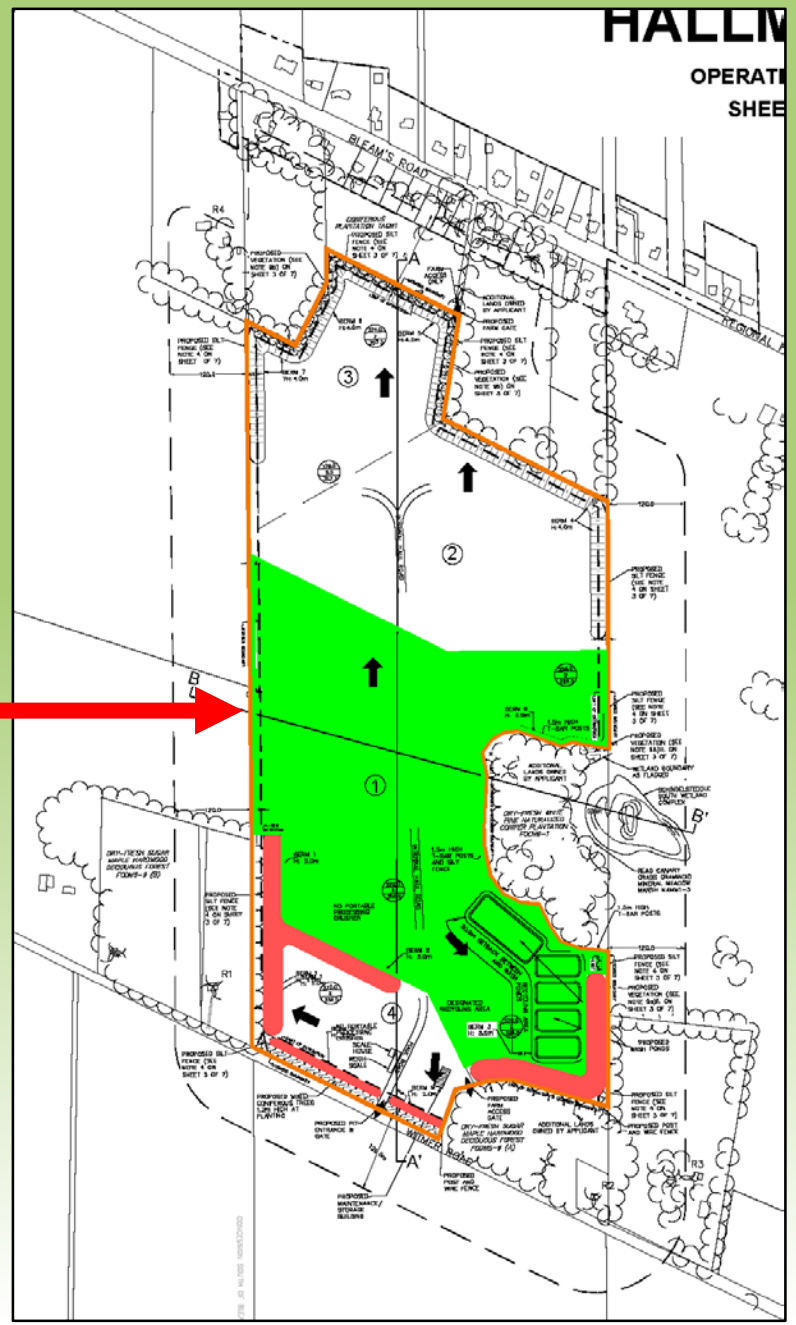


Processing Operation with Wash Plant

Operational Plan

Sheet 2 of 7

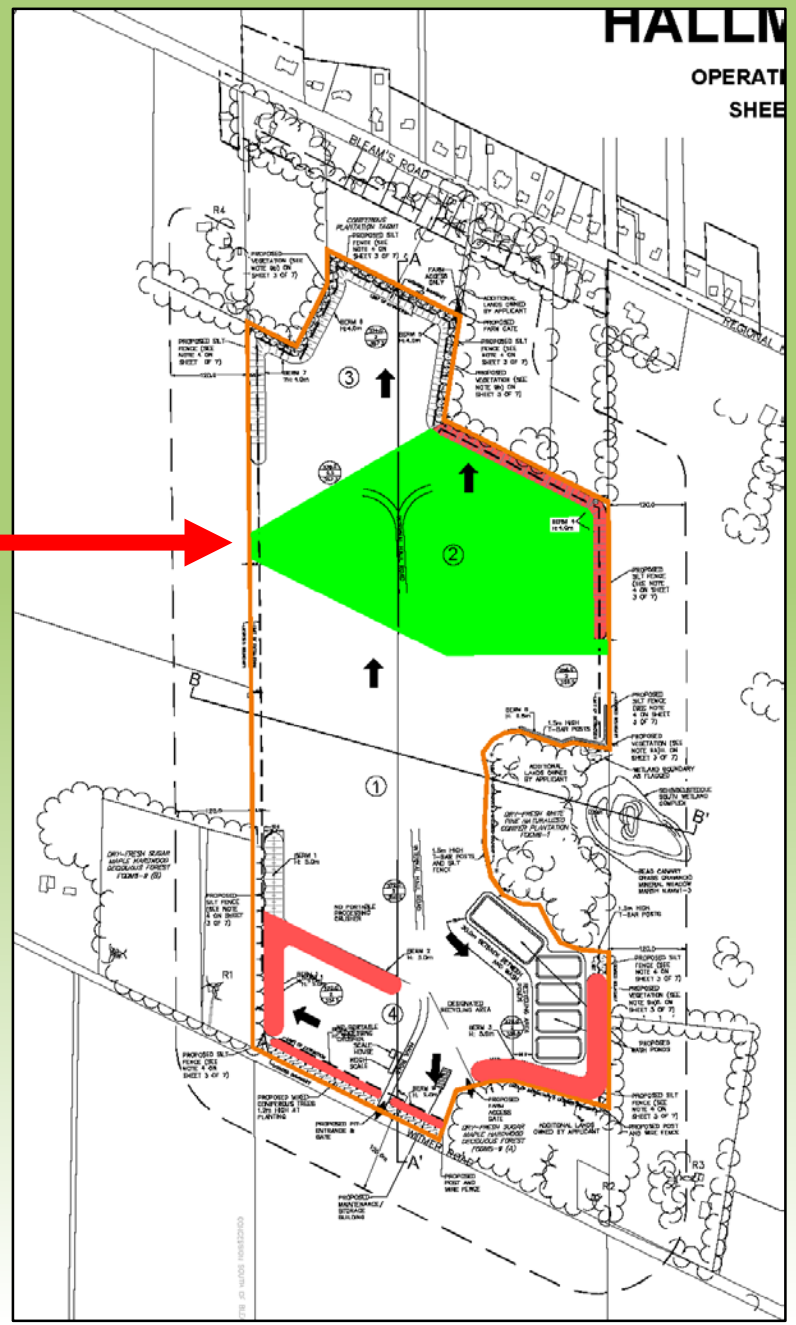
Phase 1



Operational Plan

Sheet 2 of 7

Phase 2

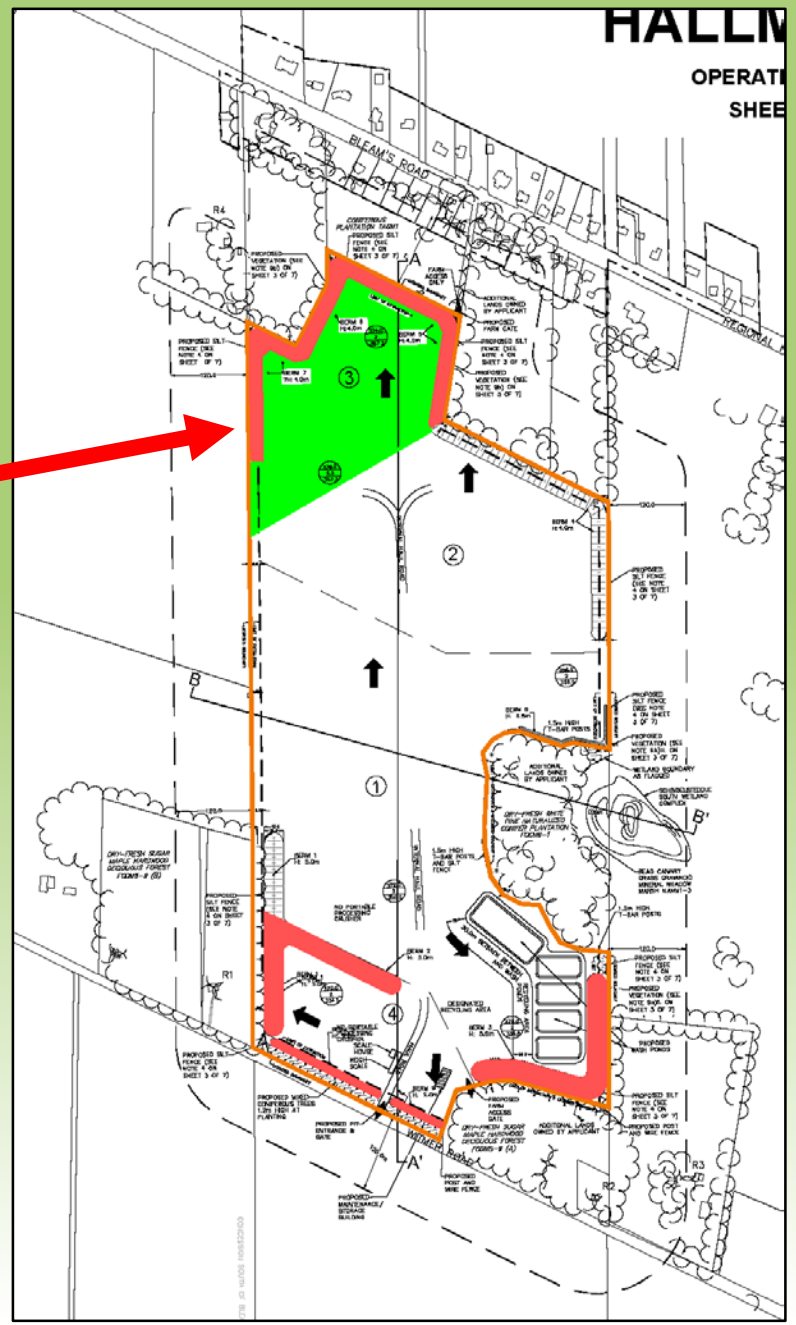


MACK
12
DEERE

Operational Plan

Sheet 2 of 7

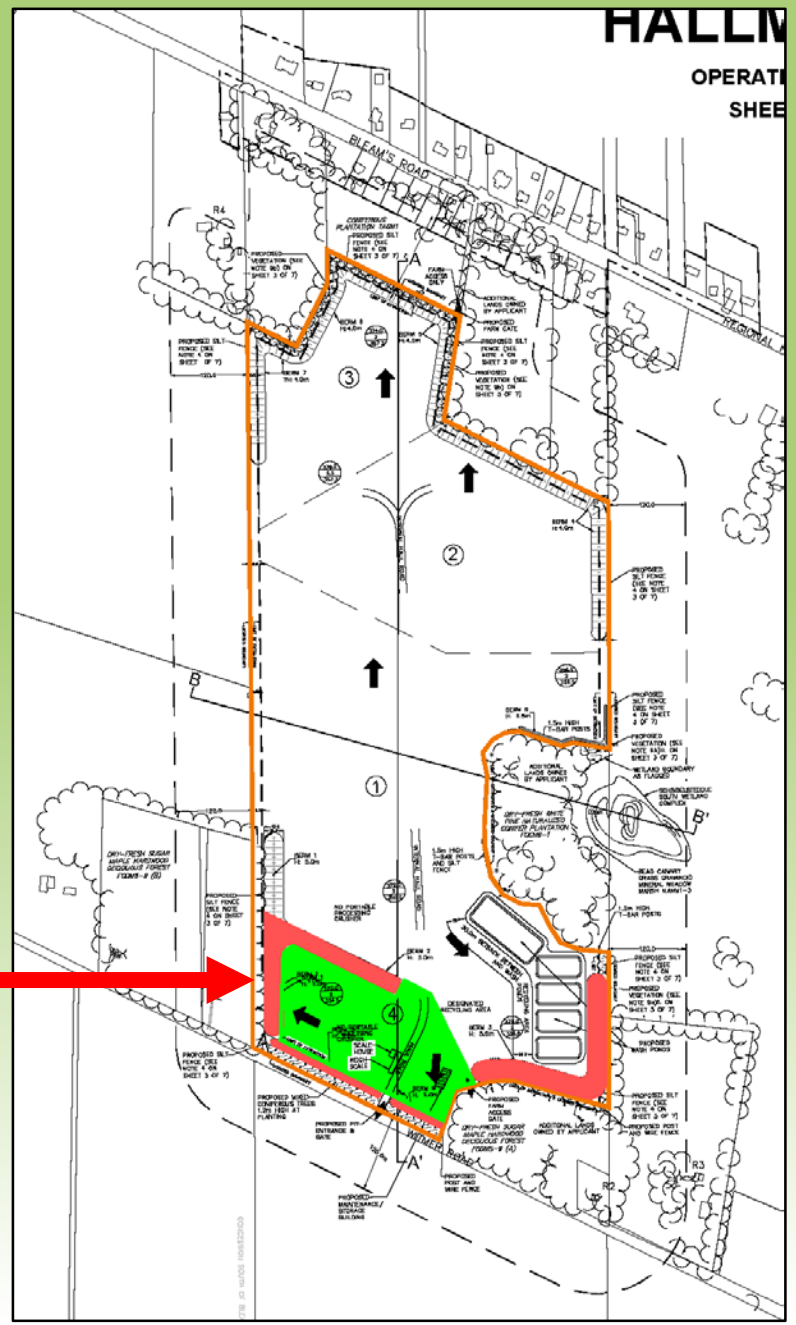
Phase 3



Operational Plan

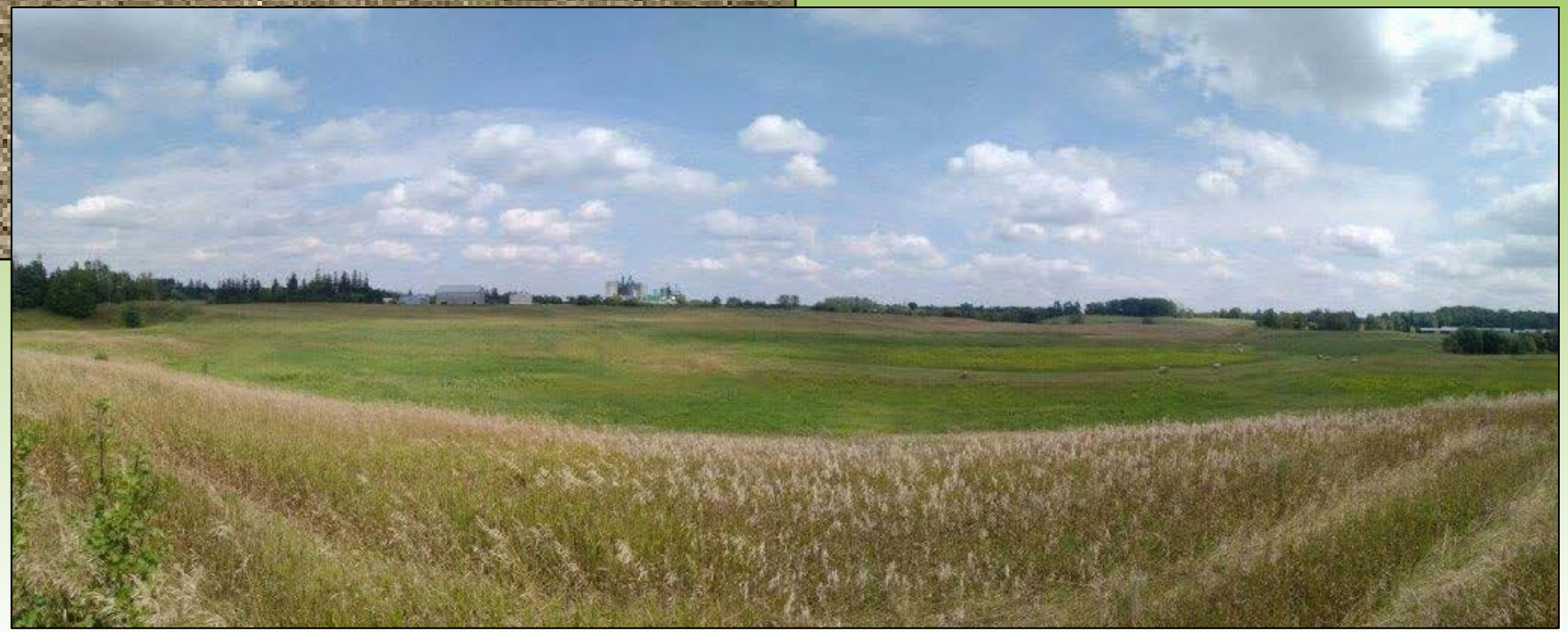
Sheet 2 of 7

Phase 4



Progressive Rehabilitation

Examples of Rehabilitation



Fugitive Dust

Water Truck

Hydrogeology

Groundwater Monitoring Equipment

Example of a Monitoring Well

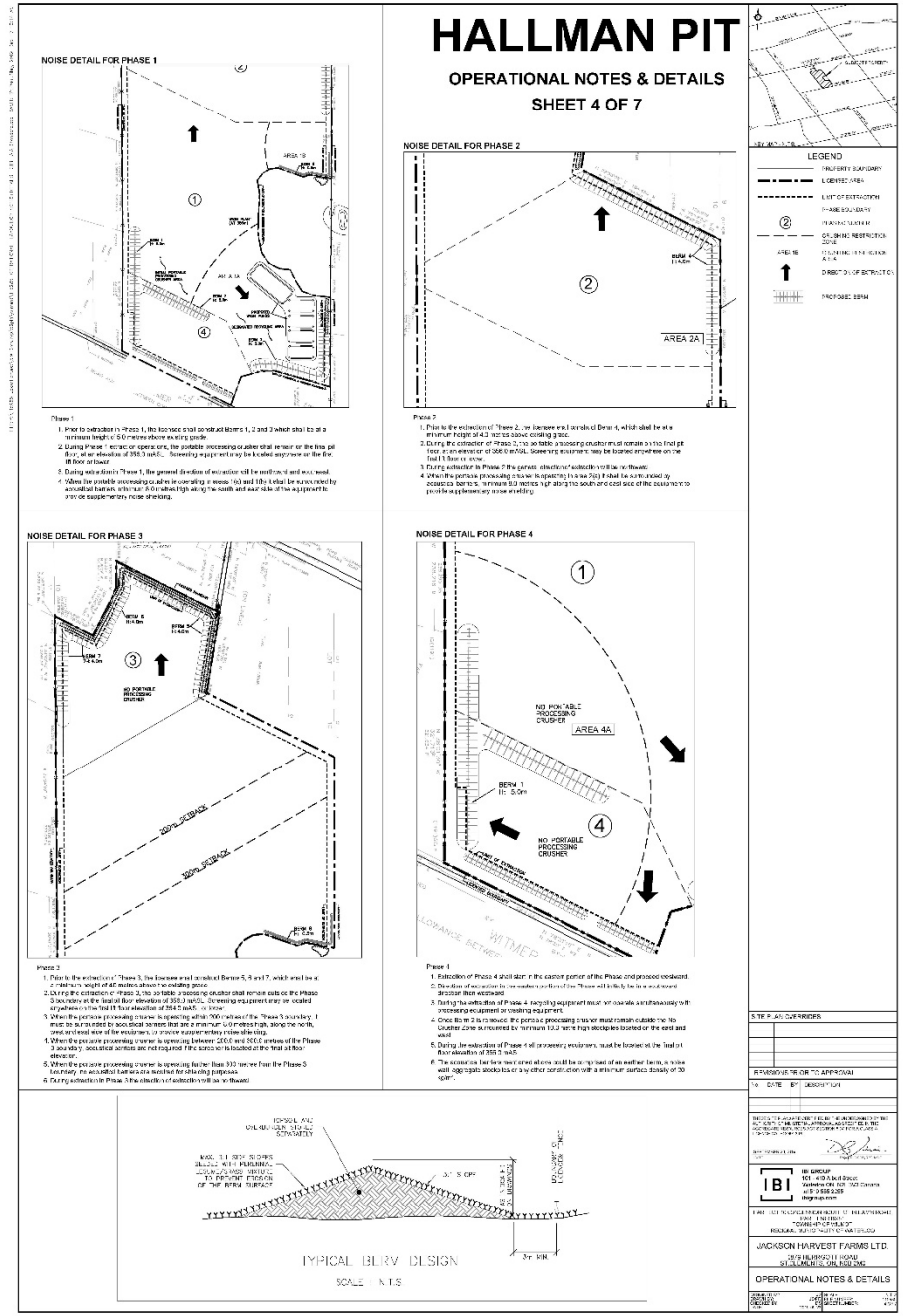
Groundwater Monitoring Equipment

Example of Groundwater Testing

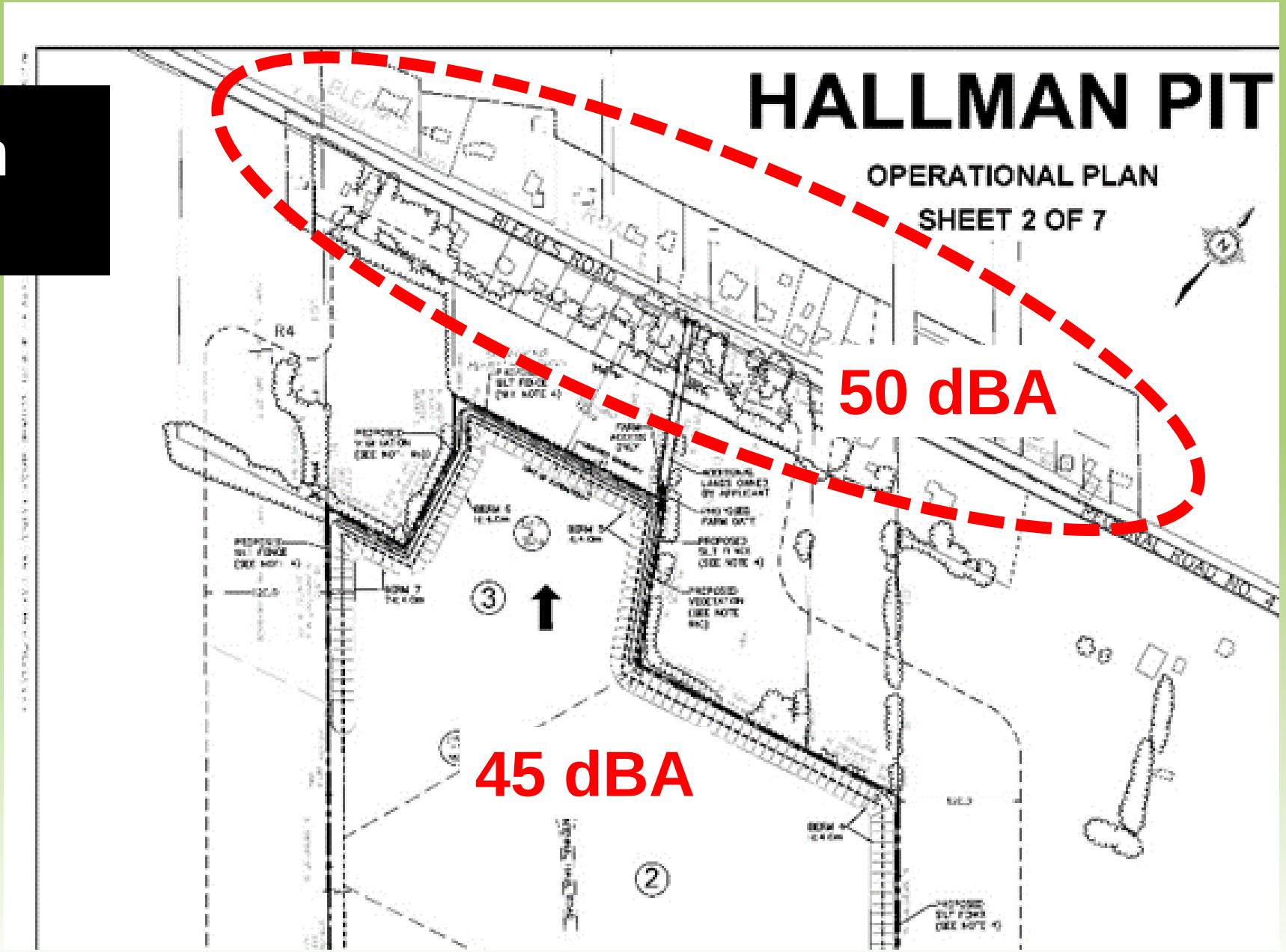
Noise Impacts

Operational Notes & Details

Sheet 4 of 7



Operational Plan
Sheet 2 of 7



Archaeology

Archaeology

Archaeology

Image 29: Lithic Artifacts

Archaeology

Image 30: Indigenous Pottery
(Pottery Body Sherd, Site 1, Record 6)

Archaeology

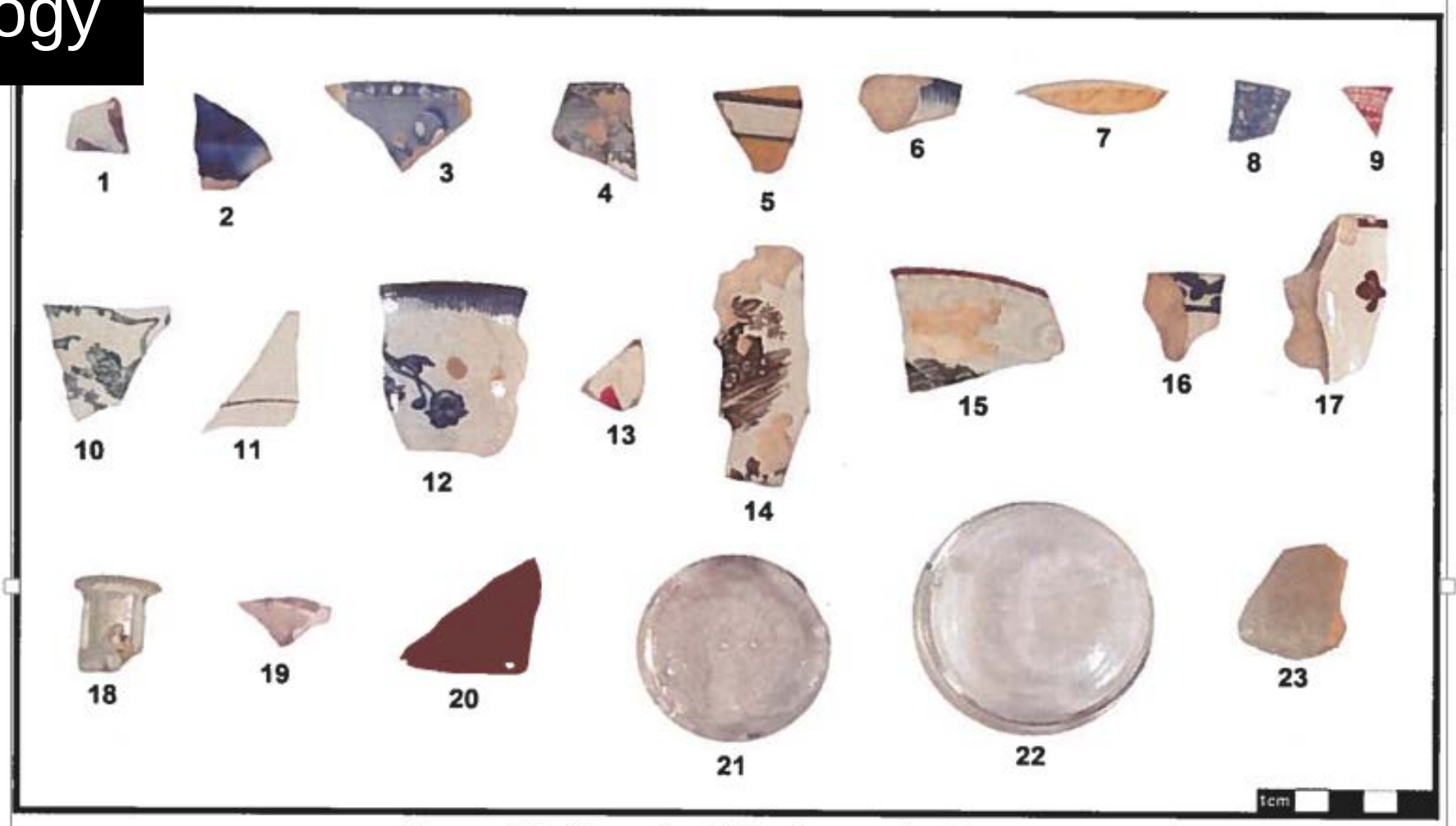


Image 32: Sample of Foodways Artifacts

Natural Environment / Ecology

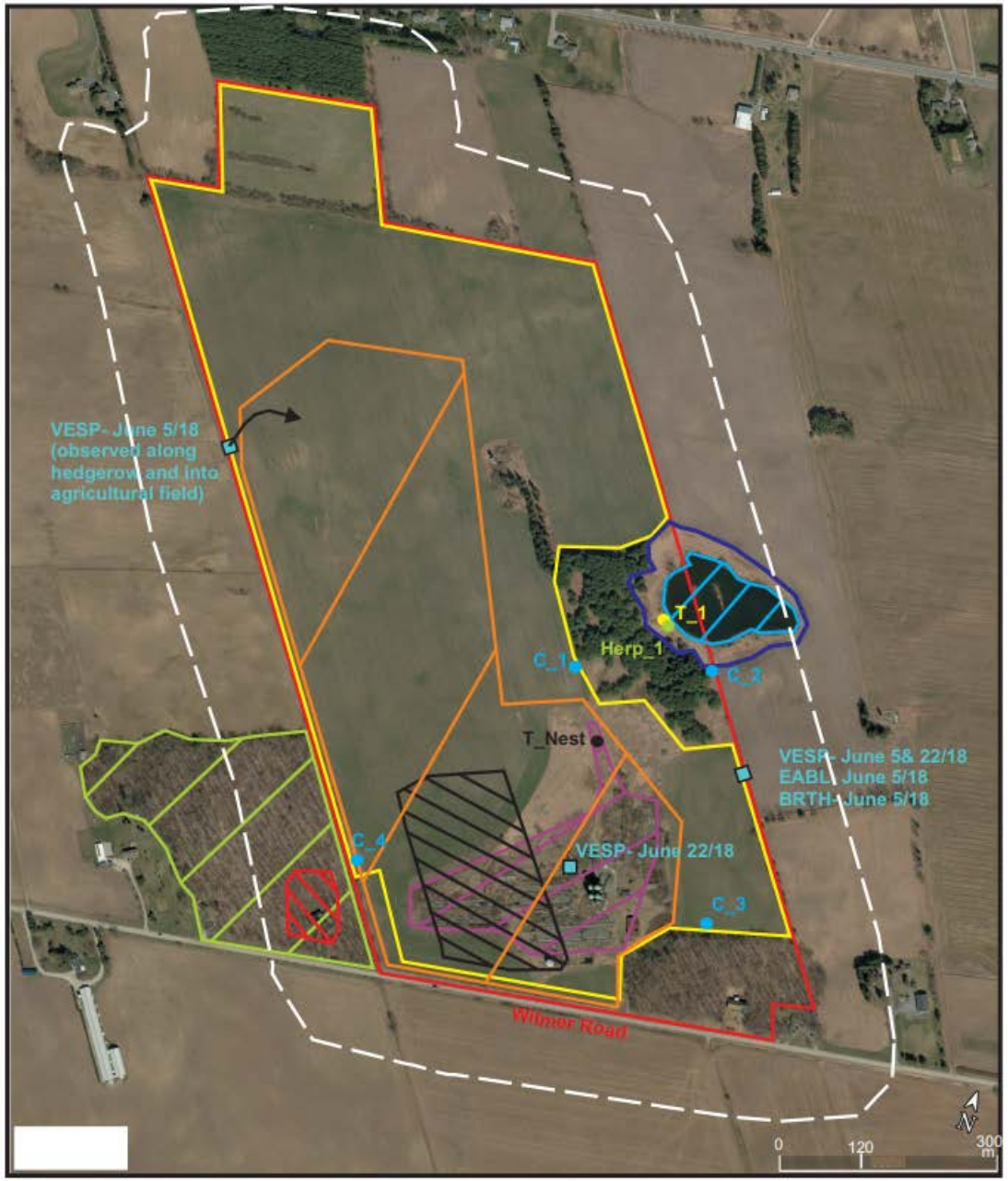


Figure 1. Study Area Boundaries, Locations of Survey Stations, SWH, and SAR Observations, Proposed Hallman Pit.

LEGEND

- Approximate Proposed Limit of Extraction Boundary.
- Approximate Site Boundary.
- Limit of 120m Off Site Study Area
- Significant Woodland(Core Env. Feature)/ Eastern Wood-pewee (SWH)
- Wintering Turtle Habitat (SWH) & Fish Habitat.
- Monarch (SWH) -Special Concern Species
- Area Searched for Potential Snake Hibernacula.
- T_Nest — Painted Turtle Nest.
- Regionally Rare Birds (VESP =Vesper Sparrow, BRTH =Brown Thrasher, EABL =Eastern Bluebird)

Areas within which SAR species were observed

- Approximate Area Where Eastern Wood-Pewee Was Heard During Breeding Season 2018.
- Approximate Area Where Barn Swallows Were Observed (foraging/perching).
- Approximate Area Where a Bank Swallow Was Observed Foraging.

Survey Station Locations, 2018

- T_1 — Turtle Count Location.
- C_1 — Crepuscular Bird Survey Station Location.
- Herp_1 — Herpetofauna Survey Station (MMP).

DANCE ENVIRONMENTAL INC.

DE-428

Sept. 3, 2019

Enforcement

Ontario

Operational Plan Notes

Sheet 3 of 7

Traffic

Traffic

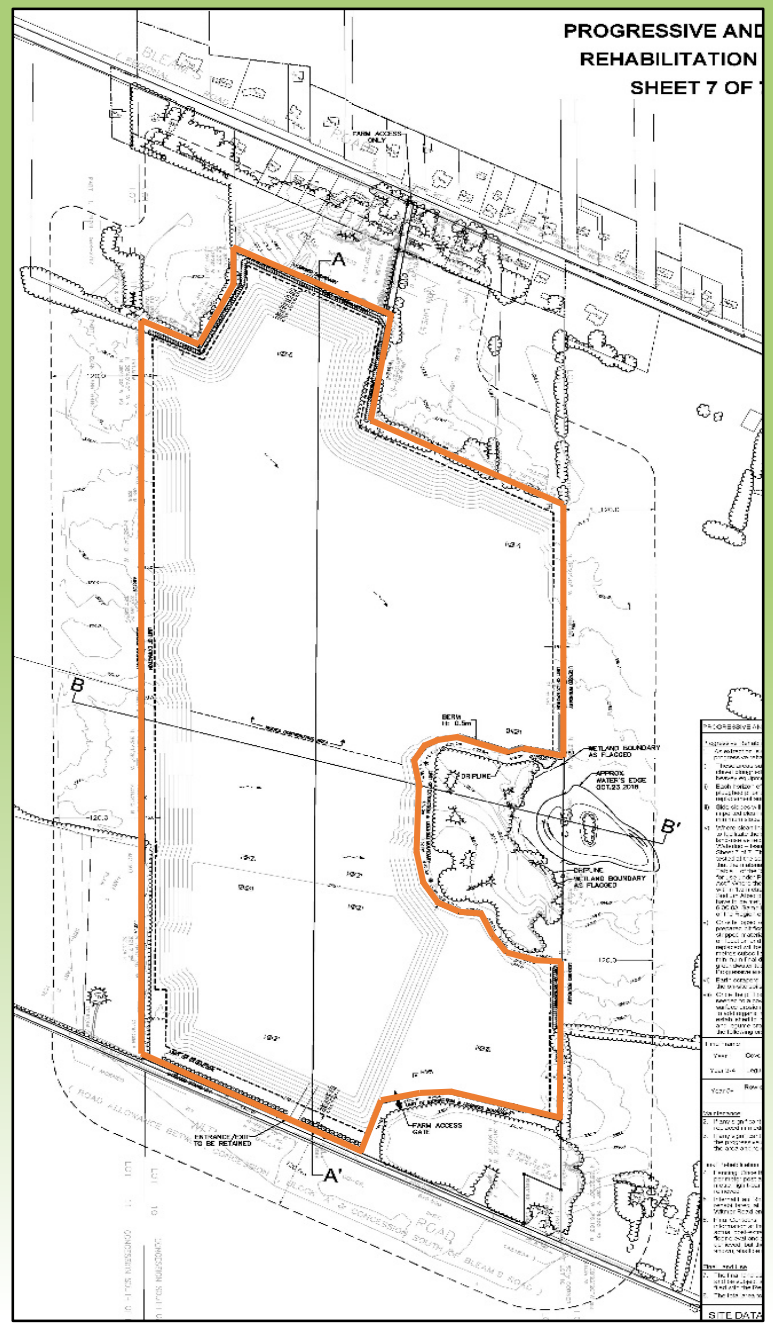
Witmer Road

Traffic

Progressive and Final Rehabilitation Plan

Progressive & Final Rehabilitation Plan

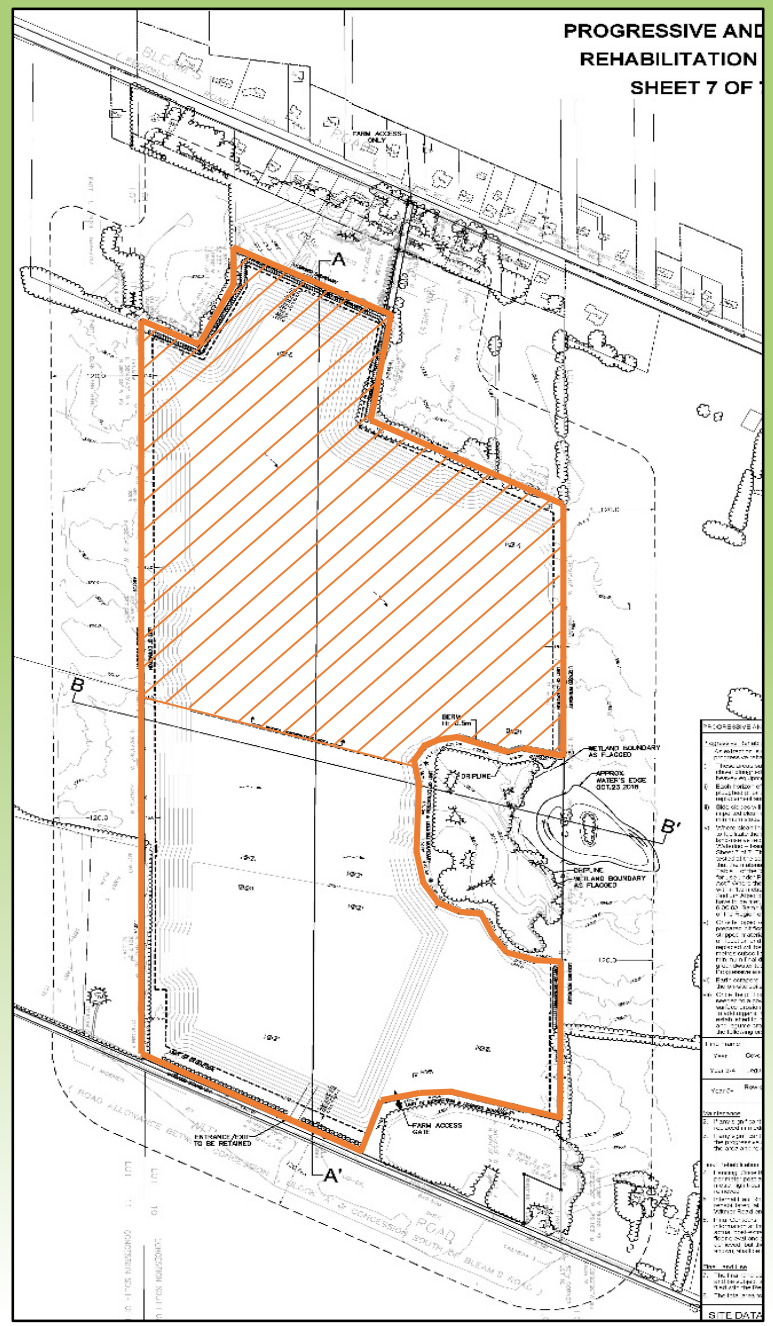
Sheet 7 of 7



RJ Trucks
12
Regional Fleet Service

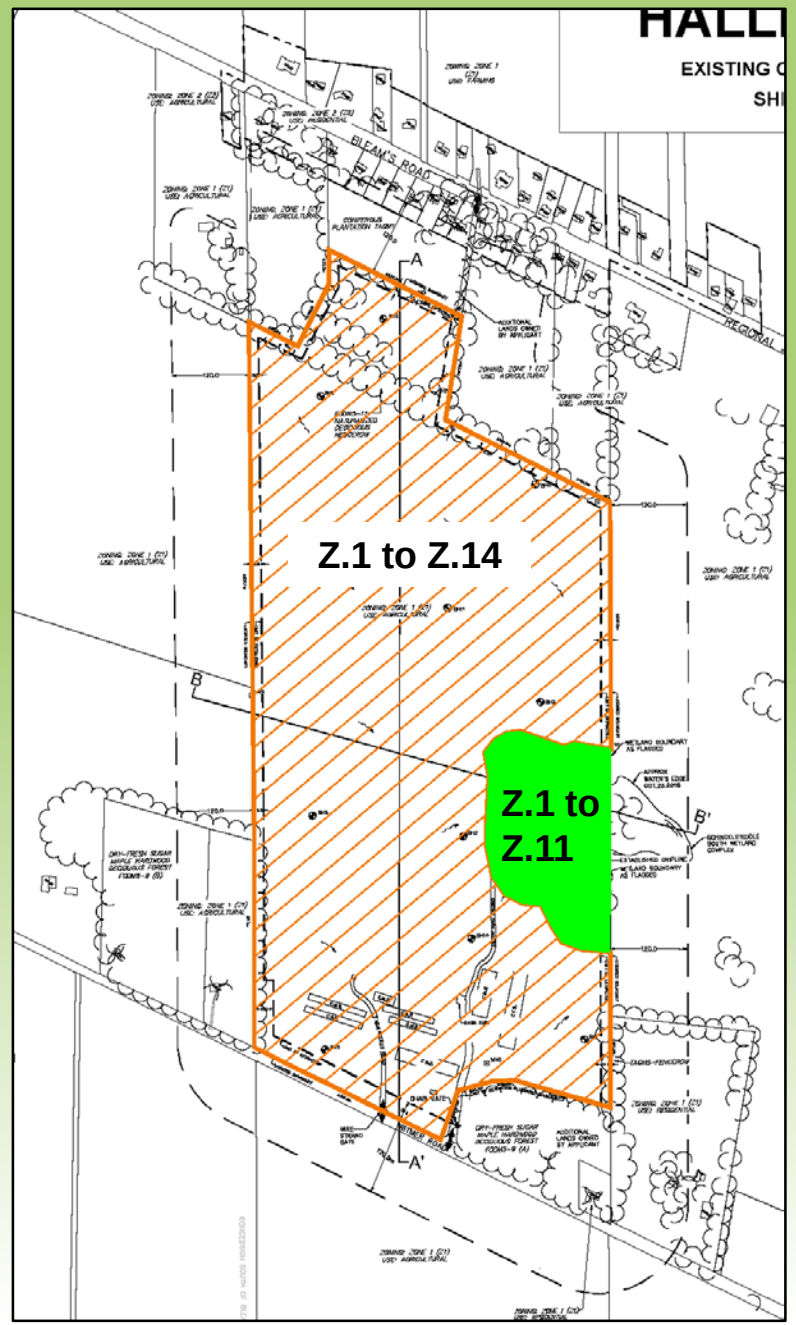
Progressive & Final Rehabilitation Plan

Sheet 7 of 7



Zoning

Zoning Map


HALL
EXISTING C
SH
BLEAM'S ROAD
REGIONAL
Z.1 to Z.14
Z.1 to Z.11
A
A'
B
B'

Region of Waterloo

- Agricultural Impact Assessment
- Noise / Dust
- Hydrogeology
- Environmental Impact Studies (EIS)

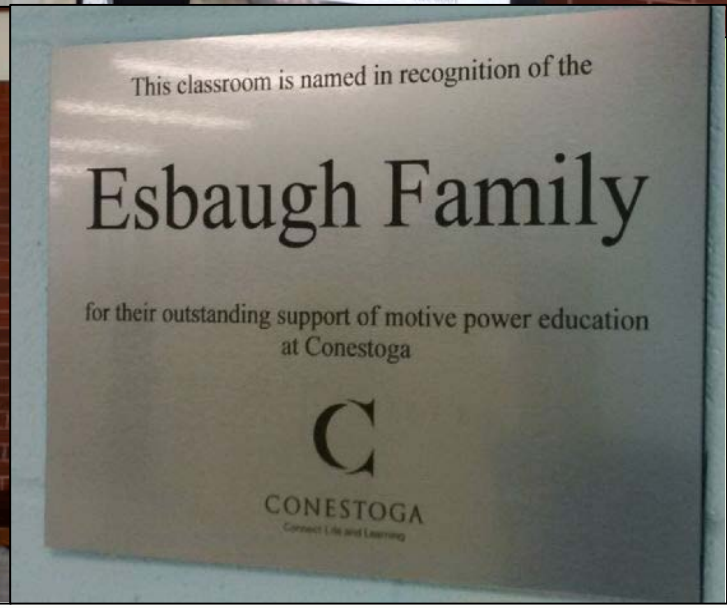
Region of Waterloo

Township of Wilmot

- Peer Reviews of Traffic / Geotechnical

TOWNSHIP OF WILMOT

The annual Tri City Golf Tournament has **raised a total of $328,625.15 since 2010 towards the Grand River Regional Cancer Centre and Local Charities!**

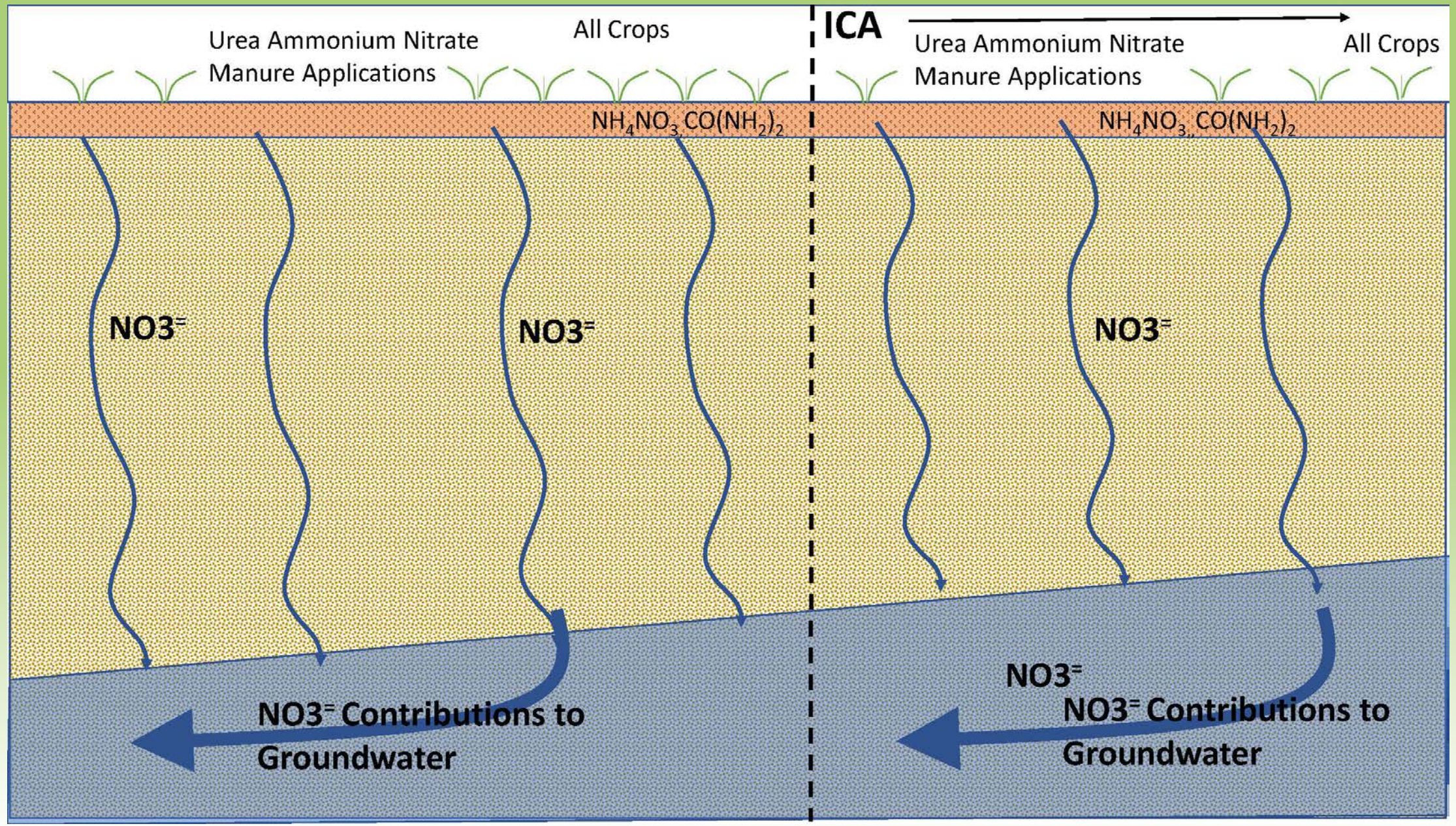


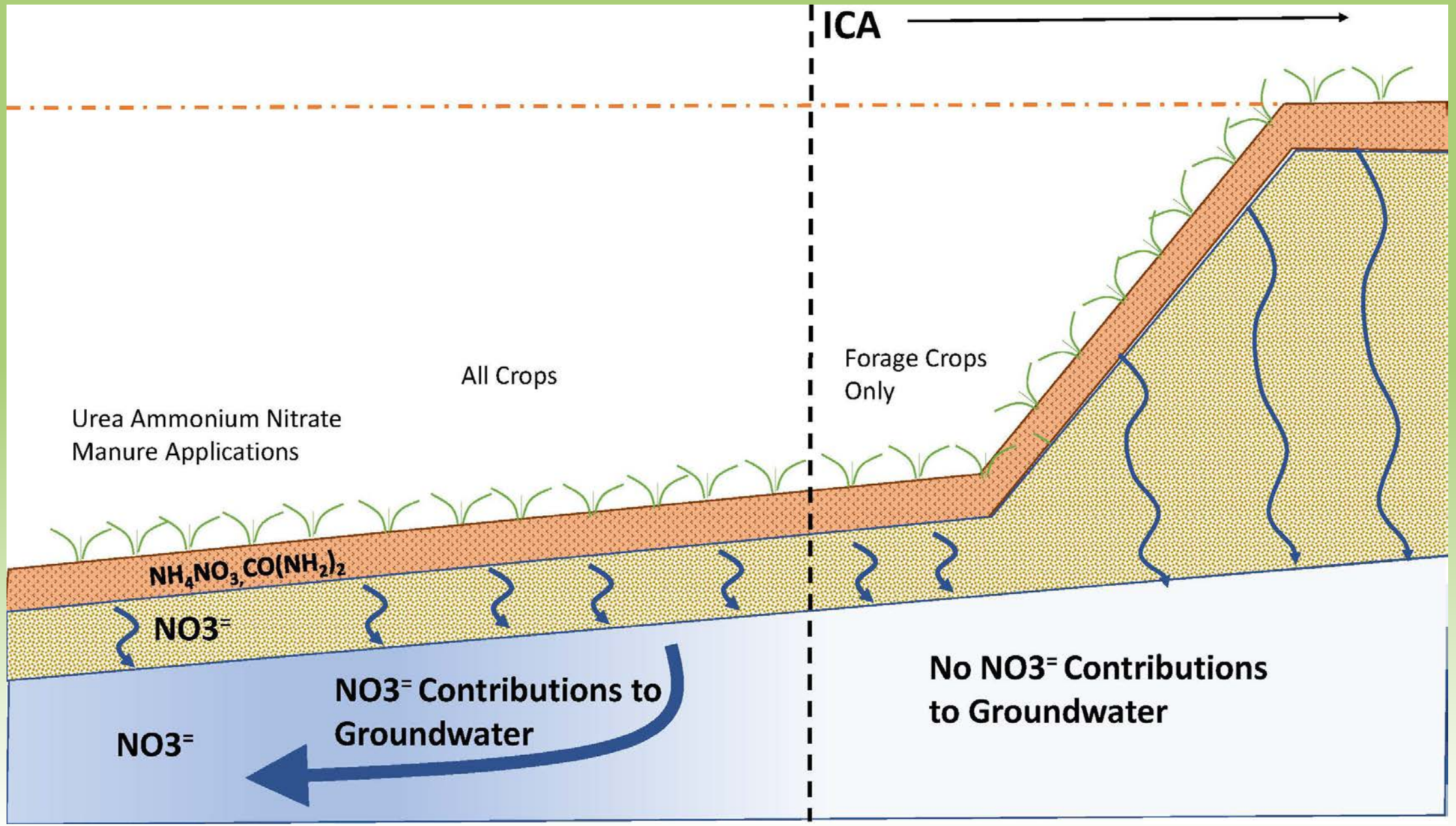
Q & A

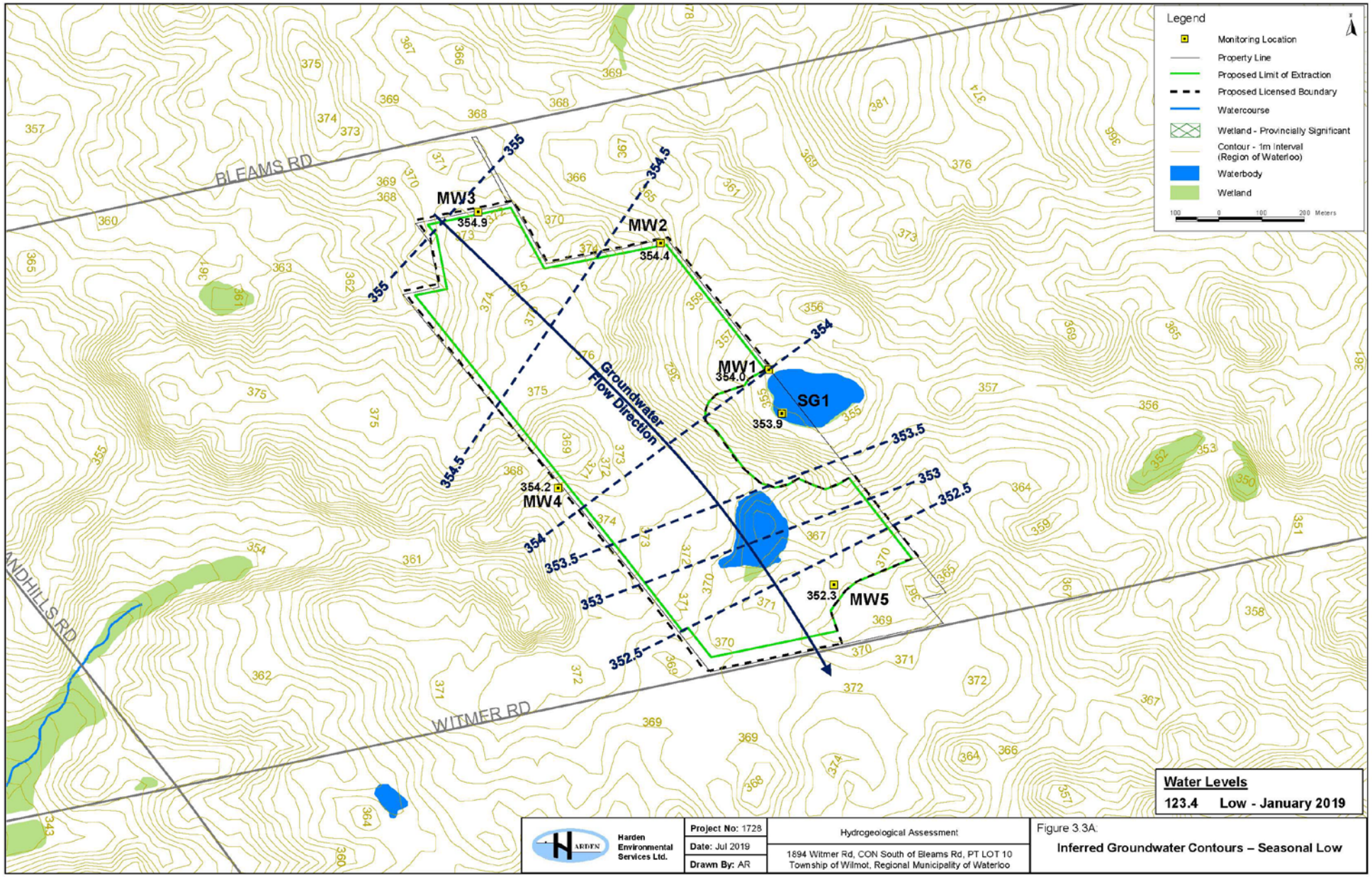
Questions and Answers

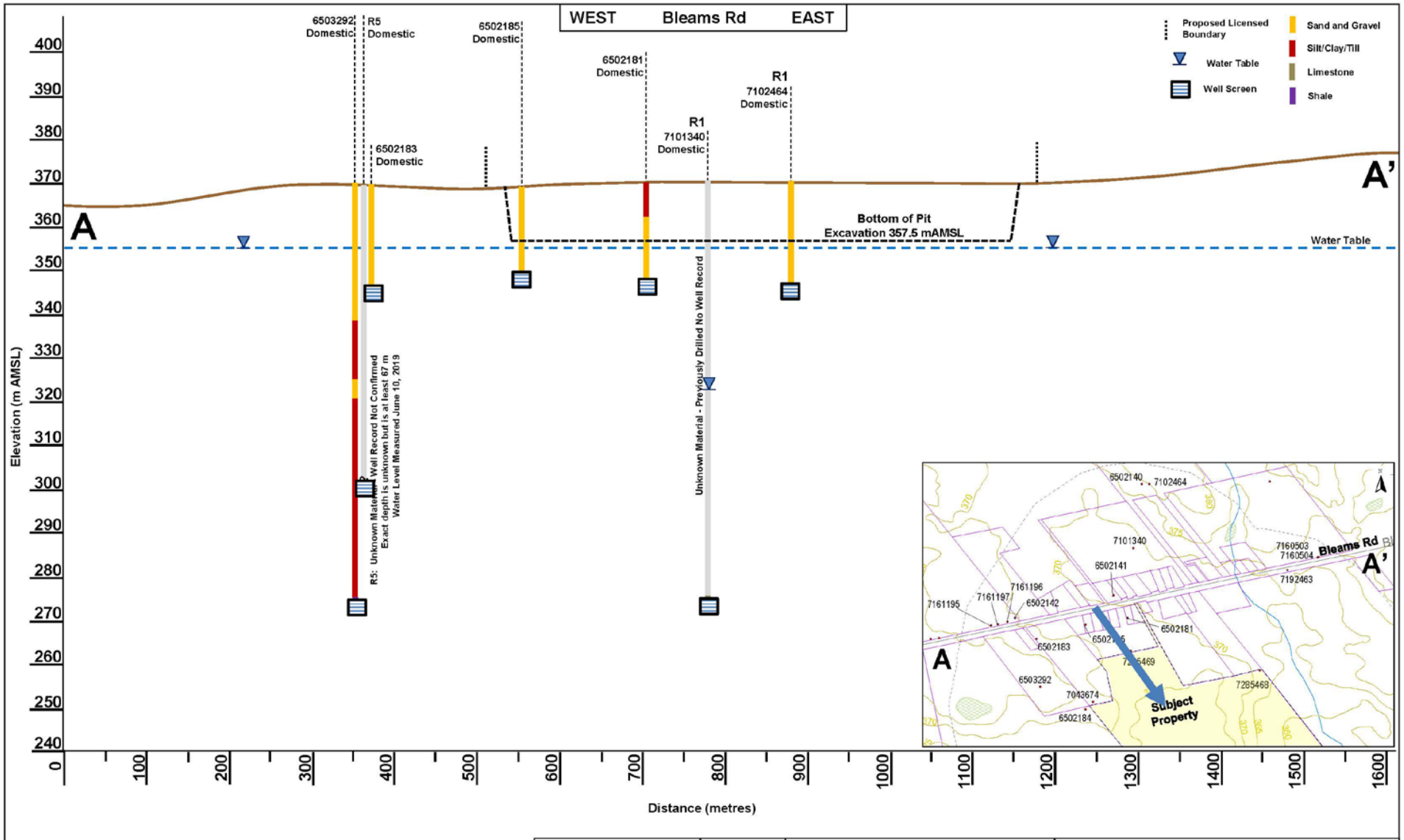
- Project Co-ordination / Planner:
  David Sisco
- Landowner / applicant:
  Rick Esbaugh
- Hydrogeologist:
  Stan Denhoed
- Acoustical Engineer:
  Mandy Chan
- Ecologist:
  Ken Dance
- Traffic Engineer:
  Matt Brouwer

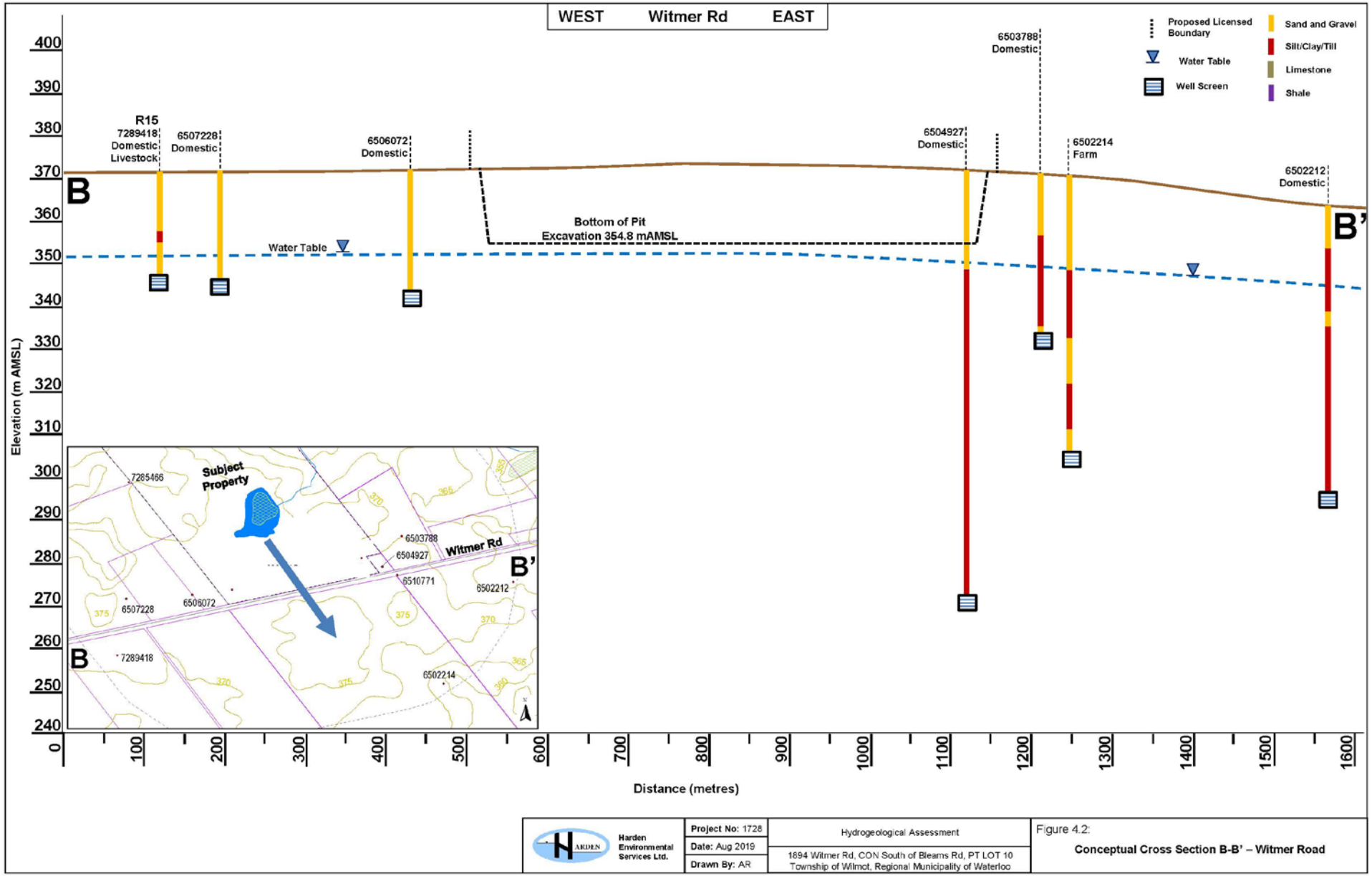
Issue Contributing Area (ICA) (7,876,237 m²)
Subject Lands (652,726 m²)
Field within ICA (5,406,733 m²)
Fields within ICA within Subject Lands - 211,552 m²
*ICA within Subject Lands - 220,723 m²
SNYDER'S RD E
HWY 8
QUEEN ST/RR12
BLEAMS RD
SANDHILLS RD
SUBJECT LANDS
WITMER RD
HURON RD

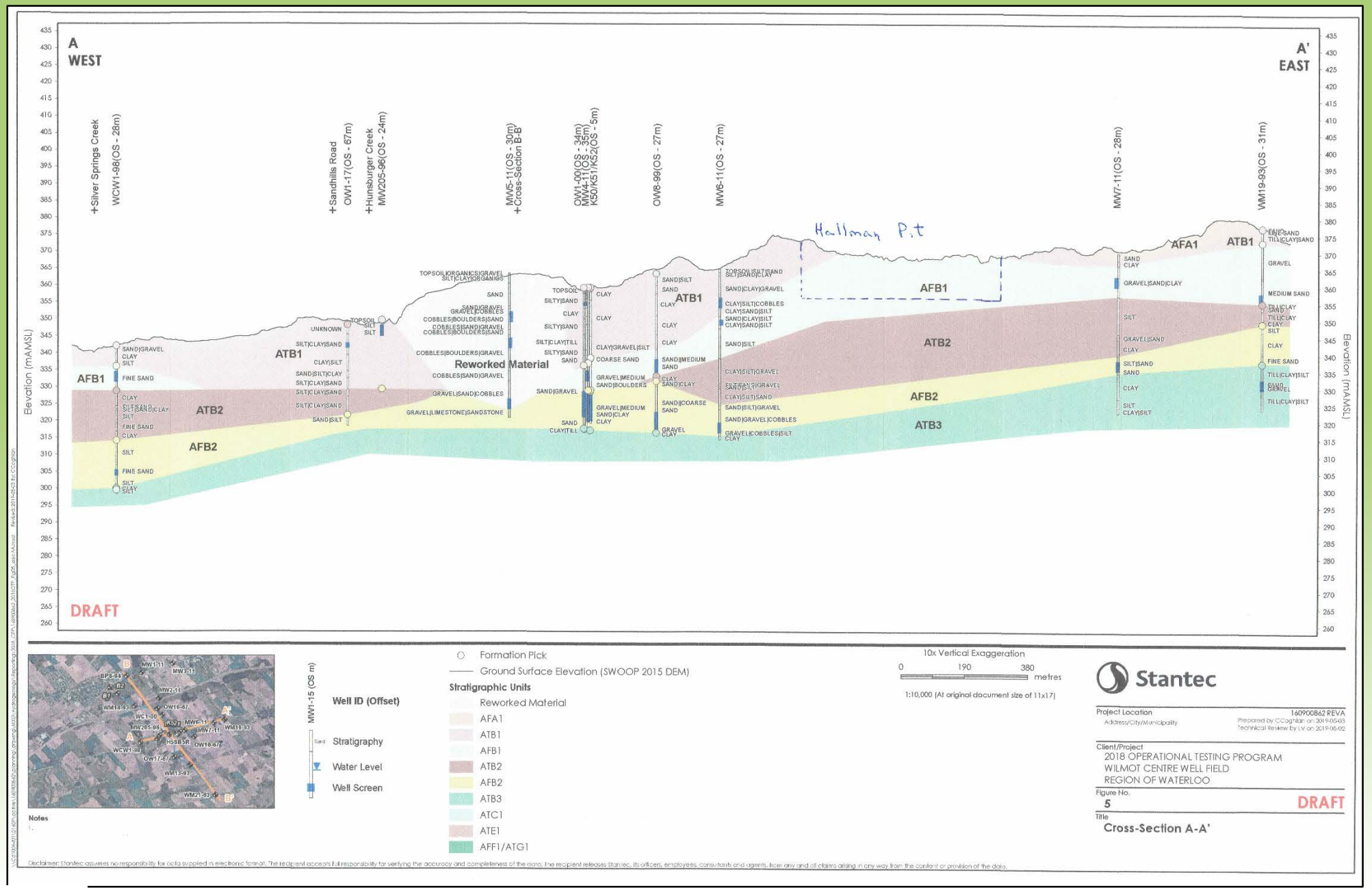

Urea Ammonium Nitrate
Manure Applications
All Crops
ICA
Urea Ammonium Nitrate
Manure Applications
All Crops
NH_4NO_3, $CO(NH_2)_2$
NH_4NO_3, $CO(NH_2)_2$
$NO3^=$
$NO3^=$
$NO3^=$
$NO3^=$
$NO3^=$ Contributions to Groundwater
$NO3^=$ Contributions to Groundwater


ICA
All Crops
Urea Ammonium Nitrate
Manure Applications
Forage Crops
Only
NH_4NO_3, $CO(NH_2)_2$
$NO3^=$
$NO3^=$ Contributions to
Groundwater
$NO3^=$
No $NO3^=$ Contributions
to Groundwater


Legend
Monitoring Location
Property Line
Proposed Limit of Extraction
Proposed Licensed Boundary
Watercourse
Wetland - Provincially Significant
Contour - 1m Interval (Region of Waterloo)
Waterbody
Wetland
BLEAMS RD
WITMER RD
ANDHILLS RD
MW1
354.0
MW2
354.4
MW3
354.9
MW4
354.2
MW5
352.3
SG1
353.9
Groundwater Flow Direction
355
354.5
354
353.5
353
352.5
Water Levels
123.4 Low - January 2019
Harden Environmental Services Ltd.
Project No: 1728
Date: Jul 2019
Drawn By: AR
Hydrogeological Assessment
1894 Witmer Rd, CON South of Bleams Rd, PT LOT 10
Township of Wilmot, Regional Municipality of Waterloo
Figure 3.3A:
Inferred Groundwater Contours – Seasonal Low


WEST
Bleams Rd
EAST
Proposed Licensed Boundary
Water Table
Well Screen
Sand and Gravel
Silt/Clay/Till
Limestone
Shale
6503292 Domestic
R5 Domestic
6502185 Domestic
6502181 Domestic
R1 7102464 Domestic
R1 7101340 Domestic
6502183 Domestic
A
A'
Bottom of Pit Excavation 357.5 mAMSL
Water Table
R5: Unknown Material - Well Record Not Confirmed Exact depth is unknown but is at least 67 m Water Level Measured June 10, 2019
Unknown Material - Previously Drilled No Well Record
Elevation (m AMSL)
Distance (metres)
Subject Property
Harden Environmental Services Ltd.
Project No: 1728
Date: Aug 2019
Drawn By: AR
Hydrogeological Assessment
1894 Wilmer Rd, CON South of Bleams Rd, PT LOT 10 Township of Wilmot, Regional Municipality of Waterloo
Figure 4.1:
Conceptual Cross Section A-A' – Bleams Road


WEST
Witmer Rd
EAST
Proposed Licensed Boundary
Water Table
Well Screen
Sand and Gravel
Silt/Clay/Till
Limestone
Shale
R15
7289418
Domestic
Livestock
6507228
Domestic
6506072
Domestic
6504927
Domestic
6503788
Domestic
6502214
Farm
6502212
Domestic
B
B'
Water Table
Bottom of Pit
Excavation 354.8 mAMSL
Elevation (m AMSL)
Distance (metres)
Subject Property
7285466
6503788
6504927
Witmer Rd
6510771
6502212
6507228
6506072
7289418
6502214
Harden Environmental Services Ltd.
Project No: 1728
Date: Aug 2019
Drawn By: AR
Hydrogeological Assessment
1894 Witmer Rd, CON South of Bleams Rd, PT LOT 10
Township of Wilmot, Regional Municipality of Waterloo
Figure 4.2:
Conceptual Cross Section B-B' – Witmer Road


A
WEST
A'
EAST
Elevation (mAMSL)
Silver Springs Creek
WCW1-98(OS - 28m)
Sandhills Road
OW1-17(OS - 67m)
Hunsburger Creek
MW205-96(OS - 24m)
MW5-11(OS - 30m)
Cross-Section B-B'
OW1-00(OS - 34m)
MW4-11(OS - 35m)
K50/K51/K52(OS - 5m)
OW8-99(OS - 27m)
MW6-11(OS - 27m)
MW7-11(OS - 28m)
WM19-93(OS - 31m)
Hallman Pit
AFB1
ATB1
ATB2
AFB2
ATB3
AFA1
Reworked Material
DRAFT
Formation Pick
Ground Surface Elevation (SWOOP 2015 DEM)
Stratigraphic Units
Reworked Material
AFA1
ATB1
AFB1
ATB2
AFB2
ATB3
ATC1
ATE1
AFF1/ATG1
Well ID (Offset)
Stratigraphy
Water Level
Well Screen
MW1-15 (OS m)
10x Vertical Exaggeration
0
190
380
metres
1:10,000 (At original document size of 11x17)
Stantec
Project Location
Address/City/Municipality
1609008842 REVA
Prepared by CCoghlan on 2019-05-03
Technical Review by LV on 2019-05-02
Client/Project
2018 OPERATIONAL TESTING PROGRAM
WILMOT CENTRE WELL FIELD
REGION OF WATERLOO
Figure No.
5
DRAFT
Title
Cross-Section A-A'
Notes
Disclaimer: Stantec assumes no responsibility for data supplied in electronic format. The recipient accepts full responsibility for verifying the accuracy and completeness of the data. The recipient releases Stantec, its officers, employees, consultants and agents, from any and all claims arising in any way from the content or provision of the data.

DANCE ENVIRONMENTAL INC.

DE-428
November 21, 2019

SAR Screening Request to MECP
for
Aggregate Licence Application
Part Lot 10, German Block South of Bleams Road,
Township of Wilmot
Regional Municipality of Waterloo.
Proposed Hallman Pit

Prepared for:
Jackson Harvest Farms,
St. Clements, ON
% IBI Group, Waterloo, ON.

Prepared by:
Dance Environmental Inc.
519-463-6156
% Kevin Dance, M.E.S.,
Senior Terrestrial Biologist and Partner

1. Site Location

The location of the proposed Hallman Pit is provided in Figure 1. The site is located on the north side of Witmer Road. The small Hamlet of Shingletown is located to the north of the site on Bleams Road, Waterloo Region.

The use of the term "site" in this letter refers to the licence area for the proposed pit. The term "study area" refers to the site and offsite (within 120m) areas combined.

2. Proposed Undertaking

The applicant is applying for a Category 3 Aggregate Licence. The study area is shown on Figure 1. The licence is proposed to cover 57.27ha. The maximum annual tonnage is proposed to be 750,000 tonnes.

A Natural Environment Level 1 & 2 Technical Report and E.I.S., has been prepared to accompany the licence application, and is available upon request.

A Terms of Reference for the scoped EIS for the proposed aggregate pit was prepared at the request of the GRCA and Region of Waterloo staff. The Terms of Reference was provided to and approved by the Waterloo Region EACC in 2019.

1

The proposed area of extraction is currently in active agricultural use, and a small section of hedgerow at the north end of the site is proposed to be removed. Trees in the hedgerow are primarily Manitoba Maple with a few scattered Black Cherry.

Timing of land clearing (section of hedgerow) would occur so that bird breeding and bat maternity impacts would be avoided.

3. Existing Information Sources Researched

A) **MNRF:** Tara McKenna at the MNRF Guelph District was sent an Information Request Form along with a request for information letter on May 1, 2018, and Management Biologist Graham Buck responded on June 1, 2018. The June 1, 2018 response letter included a list of SAR species known from Wilmot Township.

The Wilmot SAR list (which included Special Concern species) included: 2 insects, 13 birds, and 3 herpetofauna species. No mammal SAR were on the Wilmot Township list provided by MNRF.

B) **GRCA:** A request for information was sent to Kaitlyn Rosebrugh at the Grand River Conservation Authority (GRCA) by Dance Environmental Inc., on May 1, 2018. Beth Brown from the GRCA responded to the request for information on September 7, 2018. The GRCA did not identify any known Species at Risk for the study area in their response letter.

C) **OHA:** A search for historical records from the Ontario Herptofauna Atlas (OHA) was completed on April 25, 2018 for square 17NJ30. The Atlas data indicated 15 different species with records for the square, with no records of Threatened or Endangered species being reported from 1998 to 2018.

D) **OBA:** The Ontario Butterfly Atlas (OBA) was searched for historical records for square 17NJ30 on July 29, 2019. The data for butterflies within the square showed 13 butterfly species records, with no records of Threatened or Endangered species.

E) **OBBA:** Information from the second Ontario Breeding Bird Atlas (OBBA) was obtained on April 25, 2018 for historical bird records for square 17NJ30. The Atlas data indicated records of 5 species which are ranked provincially as Threatened or Endangered, including: Common Nighthawk, Bank Swallow, Barn Swallow, Bobolink and Eastern Meadowlark.

There is no meadow habitat present for Bobolink or Eastern Meadowlark, and they were not heard or observed in 2018 within the study area

F) NHIC Make a Map data were retrieved on April 25, 2018 for squares 17NJ3203 and 17NJ3103. The only result listed for the two squares was: Natural Area – Schindelsteddle South Wetland Complex. No SAR records were noted.

4. Site Inventory to Date

Detailed surveys at the study site were completed in 2018. The dates, times, weather, purposes of site visits and staff present, are provided in Table 1.

To identify whether any Threatened or Endangered species of wildlife/vegetation were present a variety of inventories were undertaken including: Breeding bird surveys, Crepuscular bird surveys, winter owl surveys, herp surveys (using Marsh Monitoring Protocol), snake searches, turtle count surveys, turtle nest searches, Odonata and Lepidoptera inventories, ELC and plant species identification, Butternut searches, and incidental mammal observation.

The herp surveys, snake searches, and turtle counts did not result in any Threatened or Endangered herpetofauna being confirmed to be present, only common species were confirmed to be present.

No insects, herbaceous vegetation or mammal species were found to be present which are listed provincially as Threatened or Endangered.

The ELC communities were identified using Harold Lee's 2008 update to ELC vegetation community types and community codes. The ELC polygons for the study area are provided in Figure 2. No plants were found which are listed provincially as Threatened or Endangered. No Butternut trees or seedlings were found, and searches were undertaken by Ken Dance and Kevin Dance (BHA #486).

The bird species which were observed during the 2018 site visits are listed in Table 2.

No Common Nighthawk or any other SAR bird species were found to be present during the crepuscular bird surveys. No SAR owl species were found to be present during the winter owl surveys (Great Horned Owl and Eastern Screech Owl were confirmed).

There were two Threatened or Endangered bird species which were confirmed to be present within the study area during the 2018 surveys within the study area, Barn Swallow and Bank Swallow.

Confirmed SAR at the study area:

Barn Swallow: During the breeding season and post-breeding Barn Swallows were observed foraging over the proposed extraction area. There were no Barn Swallow nests on the site, nor immediately adjacent.

Figure 1 shows where off site barns and sheds are located relative to the study area. All of these barns are more than 120m away from proposed extraction. This means that the present study site is a Habitat Category 3 area: habitat used for rearing, feeding and resting.

Bank Swallow: A single Bank Swallow was seen foraging over the proposed extraction area on a single date, May 23, 2018. No nesting sites are present on the site where currently there is only flat farmland. No June or July breeding season occurrences were observed so there probably is no nesting of this species within 120m. An existing

licenced pit to the east and south of the study area may potentially be where nesting for this species exists in the near vicinity, but none is present in the study area.

Please complete a SAR screening of this project and provide comments.

Thank you.
Kevin Dance

Kevin Dance, M.E.S.
Senior Terrestrial Ecologist
And Partner
Dance Environmental Inc.

TABLE 1. Dates, Times and Weather, 2018 and 2019 Site Visits at Proposed Hallman Pit.

DATE	START (24hrs)	END (24hrs)	WEATHER	STAFF	PURPOSES OF VISIT
April 21/18	19:20	21:05	5.2^{0}C, <5% cloud, no precip.; Beauf. 0	KWD, JLD	Herp survey #1
April 22/18	11:50	13:56	16^{0}C, 30-40% cloud, no precip.; Beauf. 1	KSD	Snake surveys, incl. Birds, Turtle count
April 30/18	12:50	16:48	20^{0}C, 0% cloud, no precip.; Beauf. 2	KWD JLD	Snake surveys, incl. Birds,
May 1/18	13:36	15:29	25^{0}C, <5% cloud, no precip.; Beauf. 2	KSD	Snake surveys, incl. Birds, Turtle count
May 8/18	13:40	15:50	22^{0}C, <5% cloud, no precip.; Beauf. 1	KSD	Snake surveys, incl. Birds, Turtle count
	21:00	21:30	22^{0}C, <5% cloud, no precip.; Beauf. 0	KSD	Herp survey #2
May 15/18	13:55	15:30	18^{0}C, 60% cloud, no precip.; Beauf. 0	KWD	Snake surveys, incl. Birds, plants
May 23/18	11:34	13:02	20^{0}C, <5% cloud, no precip.; Beauf. 2	KSD	Snake surveys, incl. Birds, Turtle count & nesting area search
May 29/18	20:58	22:06	21.5^{0}C, 10% cloud, no precip.; Beauf. 2	KWD JLD	Herp survey #3, Crepuscular birds
June 5/18	06:30	09:20	14^{0}C, 30% cloud, no precip.; Beauf. 2	KSD	Breeding bird survey, turtle nesting area search, incidental wildlife & Butternut searches
June 22/18	05:12	07:42	23^{0}C, 20% cloud, no precip.; Beauf. 1	KSD	Breeding bird survey, turtle nesting area search, incidental wildlife& Butternut searches
June 26/18	22:09	22:55	16^{0}C, 50-80% cloud, no precip.; Beauf. 2	KSD	Crepuscular bird survey, turtle nesting area search
July 5/18	08:40	10:10	27^{0}C, 10% cloud, no precip.; Beauf. 1	KSD	Turtle nesting area search, incidental wildlife, insects, Butternut searches
Sept 17/18	09:48	14:48	19^{0}C, 10% cloud, no precip.; Beauf. 1	KSD	ELC polygon ID/vegetation list, Wetland boundary delineation, and confirmation with GRCA staff, Butternut searches
Sept 20/18	10:40	14:30	16^{0}C, 60% cloud, no precip.; Beauf. 1	KSD	ELC polygon ID/vegetation list,

5

					Butternut searches
Feb 5/19	19:40	21:10	-6^{0}C, 40% cloud, no precip.; Beauf. 1	KSD	Evening Owl Survey
Feb 19/19	14:10	16:10	-7^{0}C, 15% cloud, periodic light snow, Beauf. 1	KSD	Winter Wildlife
Mar 6/19	14:10	16:10	-15^{0}C, 30% cloud, no precip. Beauf. 3	KSD	Winter Wildlife
April 22/19	21:38	23:40	14^{0}C, 10% cloud, no precip. Beauf. 0-1	KSD	Evening Owl Survey
May 9/19	09:00	10:08	7^{0}C, 80% cloud, no precip. Beauf. 3	KSD	Vegetation and wildlife
May 23/19	11:40	13:58	17^{0}C, 85% cloud, no precip. Beauf. 2	KSD	Check for fish at pond

LEGEND

KWD = Ken Dance, M.Sc.
KSD = Kevin Dance, M.E.S.
JLD = Janet Dance

6

Table 2. Hallman Pit, Wilmot
Avian Species Observed and Known from Study Area

Scientific Name	Common Name	CODE	Dance Environmental Biologist Observations						GRANK	SRANK	COSEWIC	SARO	Region of Waterloo Significant Breeding Birds
			(FOCMS-1)	(IAG)	(MAMM1-3 & OAO)	(FODHS-11)	(TAGHS)	(FODHS-9 A & B)					
	Ducks, Geese & Swans												
Branta canadensis	Canada Goose	CAGO		B(o)	S, B, P				G5	S5			
Aix sponsa	Wood Duck	WODU			S				G5	S5			√*
Anas americana	American Wigeon	AMWI			S				G5	S4			√
Anas platyrhynchos	Mallard	MALL		B(o)	S, B, P				G5	S5			
Aythya collaris	Ring-necked Duck	RNDU			S				G5	S5			√
Bucephala albeola	Bufflehead	BUFF			S				G5	S4			
	Partridges, Grouse & Turkeys												
Meleagris gallopavo	Wild Turkey	WTU	S	S					G5	S5			
	GREBES												
Podilymbus podiceps	Pied-billed Grebe	PBGR			S, B, P				G5	S4B, S4N			√
	HERONS & BITTERNS												
Ardea herodias	Great Blue Heron	GBHE	B(o)	B(o)			B(o)		G5	S4B			√
	VULTURES												
Cathartes aura	Turkey Vulture	TUVU		S, B(o), P(o)		P(o)		S(o)	G5	S5B			√
	HAWKS, KITES & EAGLES												
Accipiter striatus	Sharp-shinned Hawk	SSHA		P(o)					G5	S5		NAR	√
Accipiter cooperii	Cooper's Hawk	COHA		W(o)					G5	S4	NAR	NAR	√
Buteo jamaicensis	Red-tailed Hawk	RTHA		S(o), B(o), W(o)			B(o)	S, B	G5	S5	NAR	NAR	
	CARACARAS & FALCONS												
Falco sparverius	American Kestrel	AMKE		S					G5	S4			
	PLOVERS												
Charadrius vociferus	Killdeer	KILL		S	S(o)		B		G5	S5B, S5N			
	SANDPIPERS & PHALAROPES												
Actitis macularia	Spotted Sandpiper	SPSA			B				G5	S5			
	GULLS, TERNS & SKIMMERS												
Larus delawarensis	Ring-billed Gull	RBGU			S				G5	S5B, S4N			
Hydroprogne caspia	Caspian Tern	CATE			P				G5	S3B	NAR	NAR	√
	PIGEONS & DOVES												
Columba livia	Rock Pigeon	ROPI		S, B					G5	SNA			
Zenaida macroura	Mourning Dove	MODO		B(o), P		B, P	P		G5	S5			
	TYPICAL OWLS												
Otus asio	Eastern Screech-Owl	EASO						W	G5	S4	NAR	NAR	
Bubo virginianus	Great Horned Owl	GHOW	S, P	S(o)				S	G5	S4			
	WOODPECKERS												
Melanerpes carolinus	Red-bellied Woodpecker	RBWO						S, P	G5	S4			√
Picoides pubescens	Downy Woodpecker	DOWO	P				B	S, B, P, W	G5	S5			
Picoides villosus	Hairy Woodpecker	HAWO	B						G5	S5			
Colaptes auratus	Northern Flicker	NOFL		S				S, B, P	G5	S4B			
	TYRANT FLYCATCHERS												
Contopus virens	Eastern Wood-Pewee	EAWP						B	G5	S4B	SC	SC	
Sayornis phoebe	Eastern Phoebe	EAPH		S, B					G5	S5B			
Myiarchus crinitus	Great Crested Flycatcher	GCFL						S, B	G5	S4B			
Tyrannus tyrannus	Eastern Kingbird	EAKI	B		S, B		B	B	G5	S4B			
	VIREOS												
Vireo olivaceus	Red-eyed Vireo	REVI						S, B, P	G5	S5B			
	CROWS & JAYS												
Cyanocitta cristata	Blue Jay	BLJA	P	B(o), P(o)		P		S, B, P, W	G5	S5			
Corvus brachyrhynchos	American Crow	AMCR	B, P, W(o)	B(o), P(o), W	S	B, P	B, P(o)	S, B, W	G5	S5B			
	LARKS												
Eremophila alpestris	Horned Lark	HOLA		S, B			B		G5	S5B			
	SWALLOWS												
Tachycineta bicolor	Tree Swallow	TRES		S(o)	S, B				G5	S4B			
Riparia riparia	Bank Swallow	BANS		S					G5	S4B			
Hirundo rustica	Barn Swallow	BARS	S(o)	S(o), B(o), P			B(o)		G5	S4B	T	THR	
	CHICKADEES & TITMICE												
Poecile atricapillus	Black-capped Chickadee	BCCH	S, B, P, W		S			S, B	G5	S5			
	NUTHATCHES												
Sitta carolinensis	White-breasted Nuthatch	WBNU						S	G5	S5			
	WRENS												
Troglodytes aedon	House Wren	HOWR		B		B		S, B, P	G5	S5B			
	KINGLETS												
Regulus satrapa	Golden-crowned Kinglet	GCKI	S					S	G5	S5B			√
Regulus calendula	Ruby-crowned Kinglet	RCKI	S						G5	S4B			√
	THRUSHES												
Sialia sialis	Eastern Bluebird	EABL					B		G5	S5B	NAR	NAR	√
Catharus guttatus	Hermit Thrush	HETH						S	G5	S5B			
Turdus migratorius	American Robin	AMRO	S	S, B		B, P	P	B	G5	S5B			

Scientific Name	Common Name	CODE	(FOCM5-1)	(IAG)	(MAMM1-3 & OAO)	(FODIVE-11)	(TAGIM)	(FODIVE-9 A & B)	GRANK	SRANK	COSEWIC	SARO	Region of Waterloo Significant Breeding Bir
	MOCKINGBIRDS & THRASHERS												
Dumetella carolinensis	Gray Catbird	GRCA						B	G5	S4B			
Toxostoma rufum	Brown Thrasher	BRTH					B		G5	S4B			√
	STARLINGS												
Sturnus vulgaris	European Starling	EUST		S, B		P	P	S, B	G5	SNA			
	WAXWINGS												
Bombycilla cedrorum	Cedar Waxwing	CEDW	B						G5	S5B			
	WOOD-WARBLERS												
Dendroica petechia	Yellow Warbler	YWAR	B						G5	S5B			
Dendroica pinus	Pine Warbler	PIWA	S						G5	S5B			√
	SPARROWS												
Spizella arborea	American Tree Sparrow	ATSP		W					G5	S4B			
Spizella passerina	Chipping Sparrow	CHSP	S, B, P	B	S		B	B	G5	S5B			
Pooecetes gramineus	Vesper Sparrow	VESP		B, P			B, P		G5	S4B			√
Passerculus Sandwichensis	Savannah Sparrow	SAVS		B		B			G5	S4B			
Melospiza melodia	Song Sparrow	SOSP	S, B, P	S, B, P	S, P	B	B	S, B, P	G5	S5B			
Zonotrichia albicollis	White-throated Sparrow	WTSP	S, P				P	P	G5	S5B			√
Junco hyemalis	Dark-eyed Junco	DEJU		W					G5	S5B			
	CARDINALS & ALLIES												
Cardinalis cardinalis	Northern Cardinal	NOCA	S, B, P			B	B	S, B	G5	S5			
Passerina cyanea	Indigo Bunting	INBU	B	B		B	B	S, B	G5	S4B			
	BLACKBIRDS												
Agelaius phoeniceus	Red-winged Blackbird	RWBL	S, B	S, B	S, B, P		B, P		G5	S4			
Quiscalus quiscula	Common Grackle	COGR		S, B(o), P(o)	S	B		S, P	G5	S5B			
Molothrus ater	Brown-headed Cowbird	BHCO		S, B	S		B	B	G5	S4B			
Icterus galbula	Baltimore Oriole	BAOR		B(c)		B		S, B	G5	S4B			
	FINCHES												
Carduelis flammea	Common Redpoll	CORE		W					G5	S4B			
Carduelis tristis	American Goldfinch	AMGO	S, B	B(o), P(c)	S	B	B, P	S, B, P	G5	S5B			
	OLD WORLD SPARROWS												
Passer domesticus	House Sparrow	HOSP						S	G5	SNA			

LEGEND

Season of Observion

S= Spring 2018 (April 21, 22, 30; May 1, 8, 15, 23, 29)
B= Breeding season 2018 (June 5 and 22)
P= Post-breeding season 2018 (July 5; Sept 17, 20)
W=Winter 2019 (Feb 5, 19, March 6)

G-Rank (Global Rank)

G4- Apparently Secure — Uncommon but not rare; some cause for long-term concern due to declines or other factors.
G5- Secure — Common, widespread and abundant.

S-Rank (Provincial Rank)

S3- Vunerable — Vulnerable in the nation or state/province due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors making it vulnerable to extirpation.
S4- Apparently Secure — Uncommon but not rare; some cause for long-term concern due to declines or other factors.
S5- Secure — Common, widespread, and abundant in the nation or state/province.
SNA- Not Applicable — A conservation status rank is not applicable because the species is not a suitable target for conservation activities.

COSEWIC (National Status)

T (Threatened) — A wildlife species that is likely to become endangered if nothing is done to reverse the factors leading to its extirpation or extinction.
SC (Special Concern) — A wildlife species that may become threatened or endangered because of a combination of biological characteristics and identified threats.
NAR (Not at Risk) — A wildlife species that has been evaluated and found to be not at risk of extinction given the current circumstances.

SARO (Provincial Status)

THR =Threatened — A species that is at risk of becoming endangered in Ontario if limiting factors are not reversed.
SC =Special Concern — A species with characteristics that make it sensitive to human activities or natural events.

Waterloo Region:

√ Regionally Significant
√* Significant only when nesting in natural circumstances

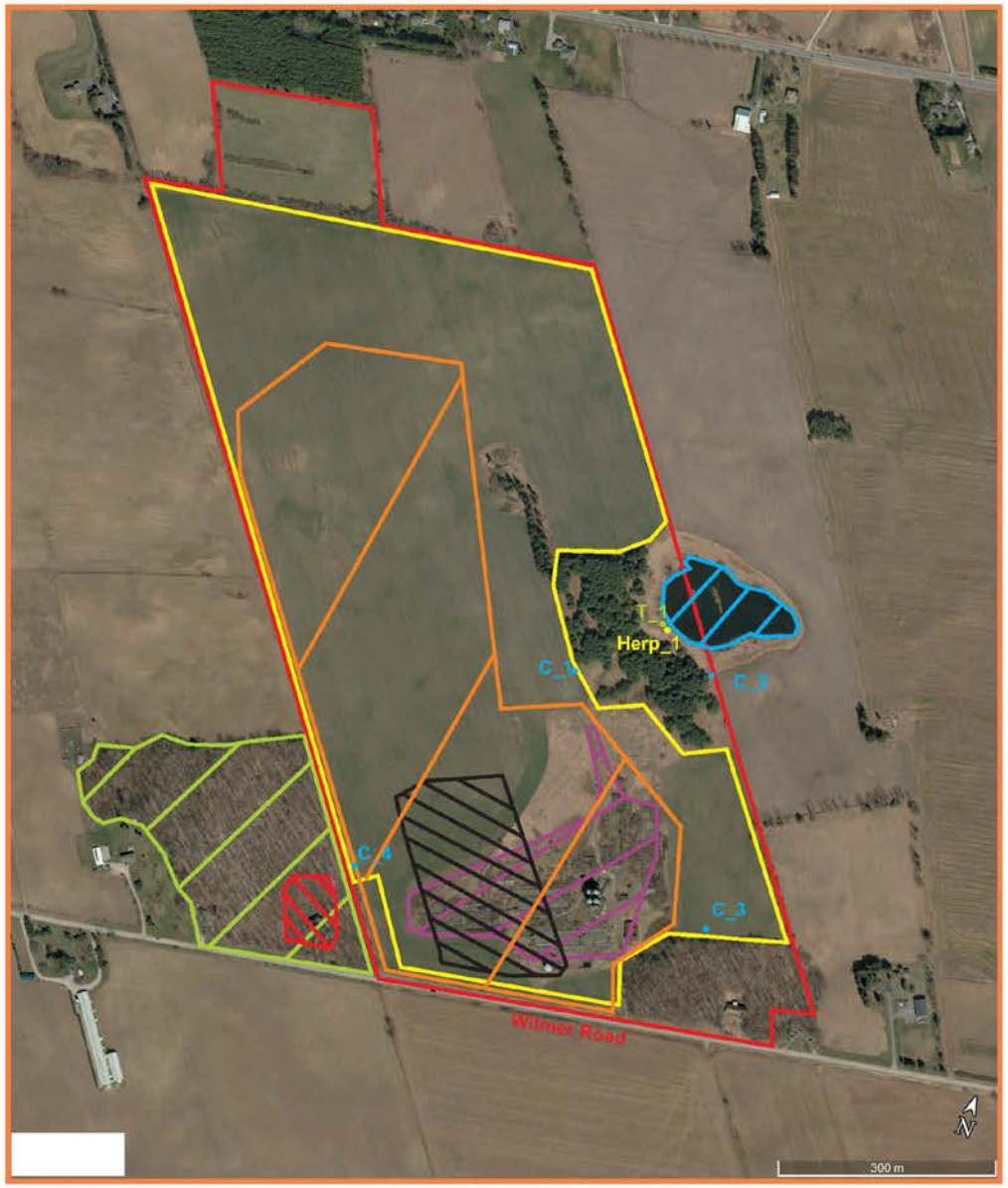


Figure 1. Study Area Boundaries and Survey Station Locations, Proposed Pit, Wilmot.

LEGEND

- Approximate Proposed Limit of Extraction Boundary
- Approximate Study Area Boundary
- Significant Woodland (Waterloo Region O.P., 20-15)
- Wintering Turtle Habitat
- Area Searched for Potential Snake Hibernacula

Areas within which SAR species were observed

- Approximate area where Eastern Wood-pewee were heard during Breeding season 2018.
- Approximate area where Barn Swallows were observed (foraging/perching).
- Approximate area where Bank Swallow were observed foraging.

Survey Station Locations, 2018

- T_1 Turtle count location.
- C_1 Crepuscular bird survey station location.
- Herp_1 Herpetofauna survey station (MMP).

DANCE ENVIRONMENTAL INC.

DE-428
Nov. 21, 2018

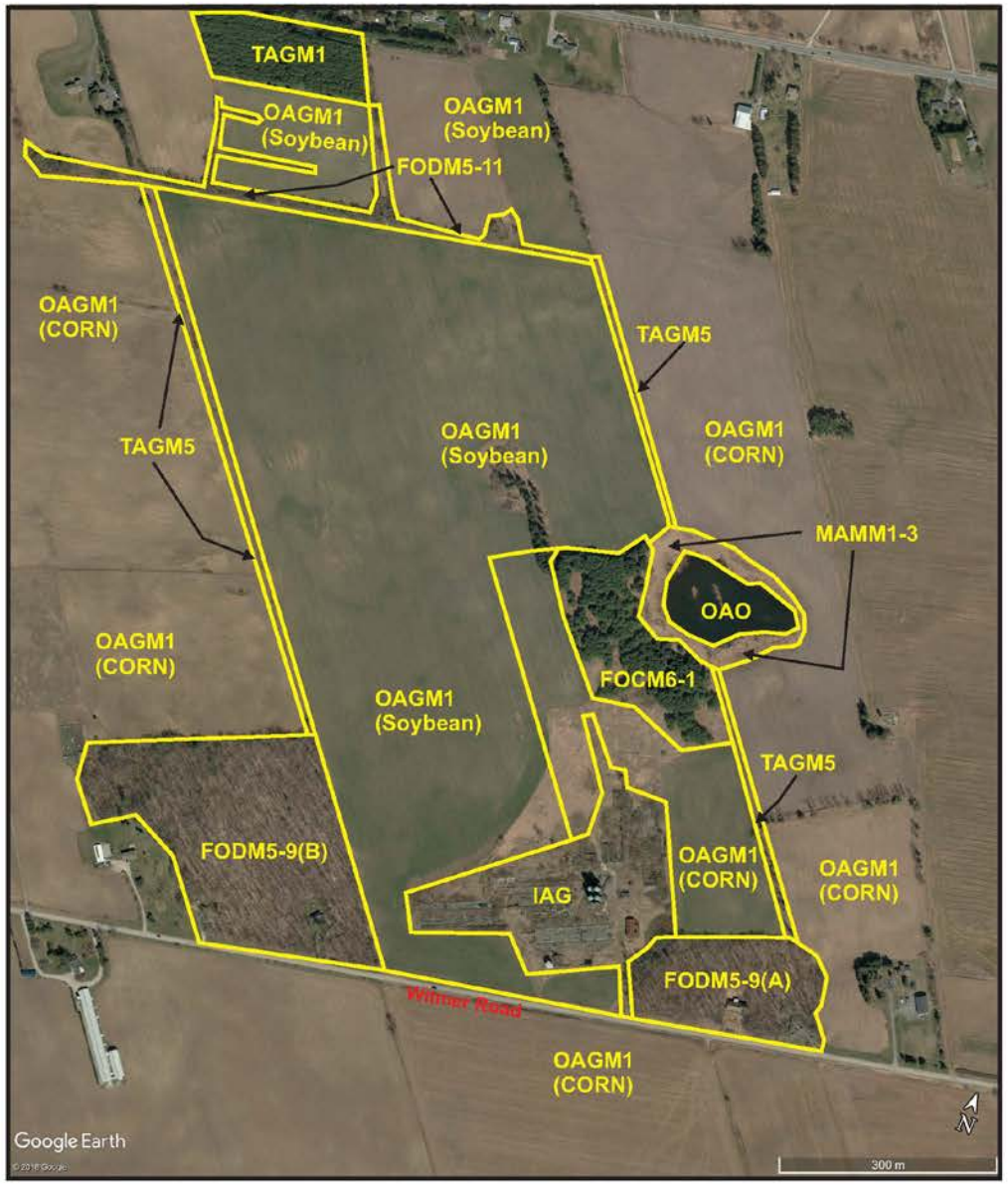


Figure 2. ELC Vegetation Community Polygons, Proposed Hallman Pit, Wilmot.

LEGEND

On Site

ELC Code	Name
OAGM1	Annual Row Crops (2018)
IAG	Agricultural Infrastructure
TAGM5	Fencerow
FODM5-11	Naturalized Deciduous Hedgerow

Off Site

FODM5-9	Dry-Fresh Sugar Maple -Hardwood Deciduous Forest
OAGM1	Annual Row Crops (2018)
FOCM6-1	Dry-Fresh White Pine Naturalized Conifer Plantation
MAMM1-3	Reed-Canary Grass Graminoid Mineral Meadow Marsh
OAO	Open Aquatic
TAGM1	Coniferous Plantation
	Approximate ELC Community Polygon Boundary

DANCE ENVIRONMENTAL INC.

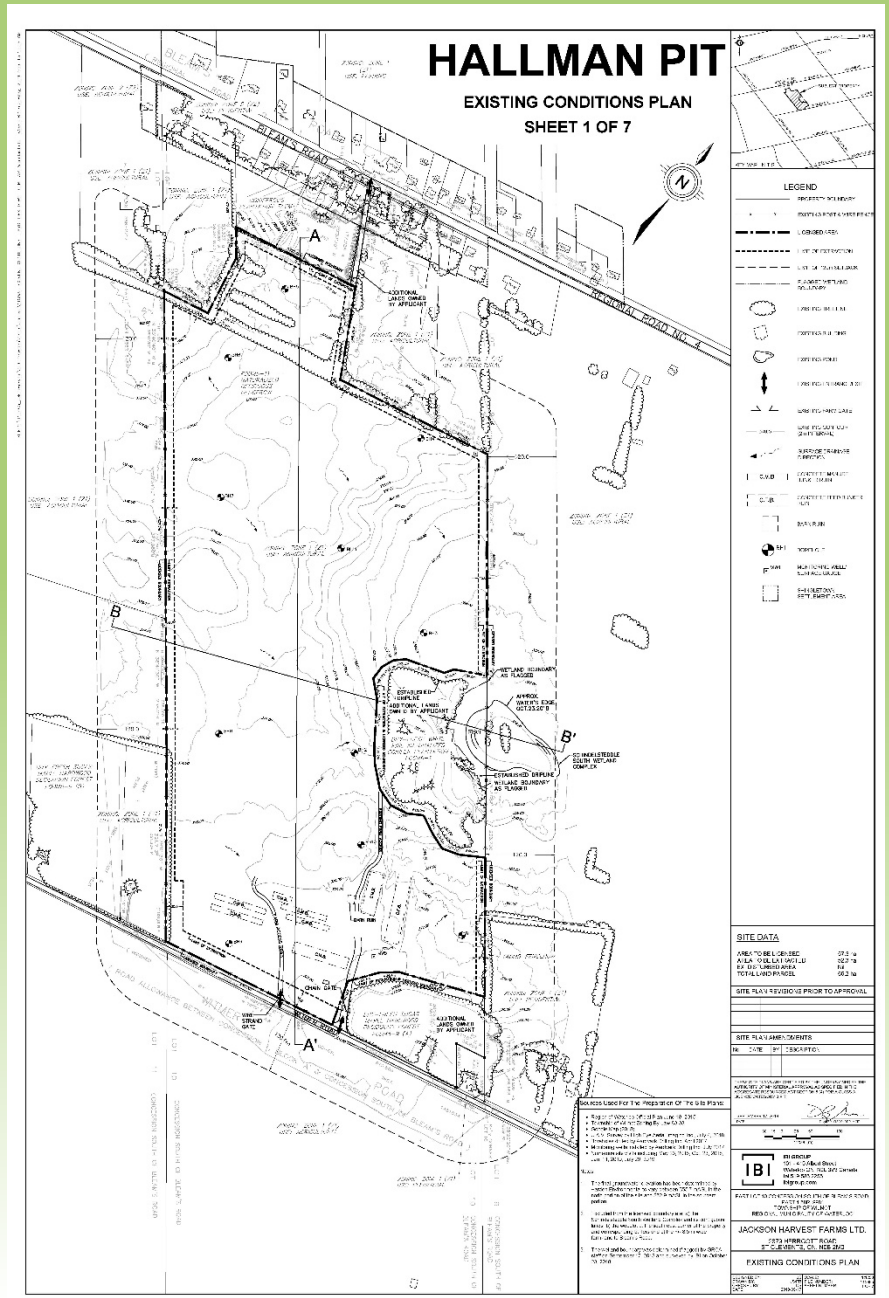
DE-428

September 6, 2019.

Wilmot Rd
Hallman Rd
.5km

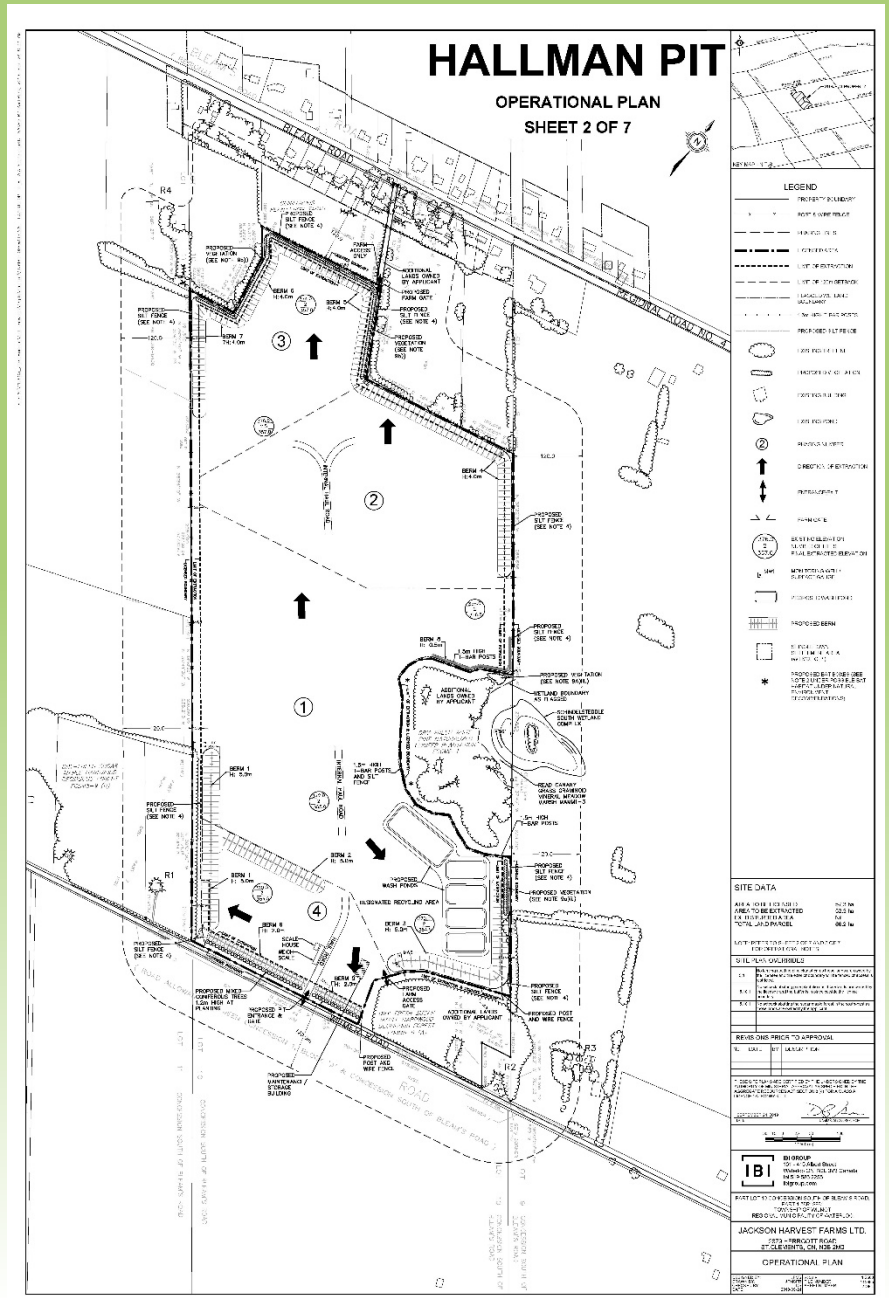
Existing Conditions Plan

Sheet 1 of 7



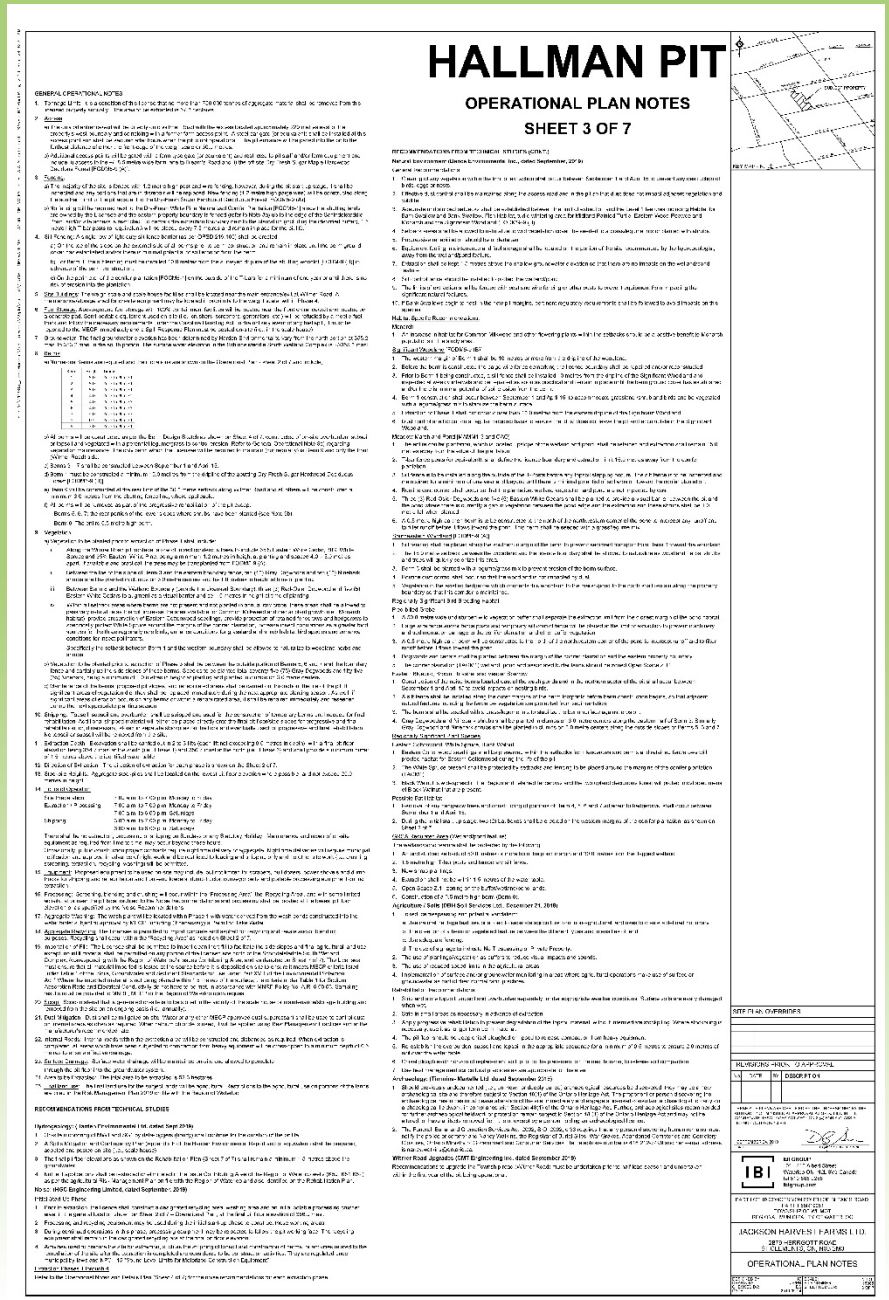
Operational Plan

Sheet 2 of 7



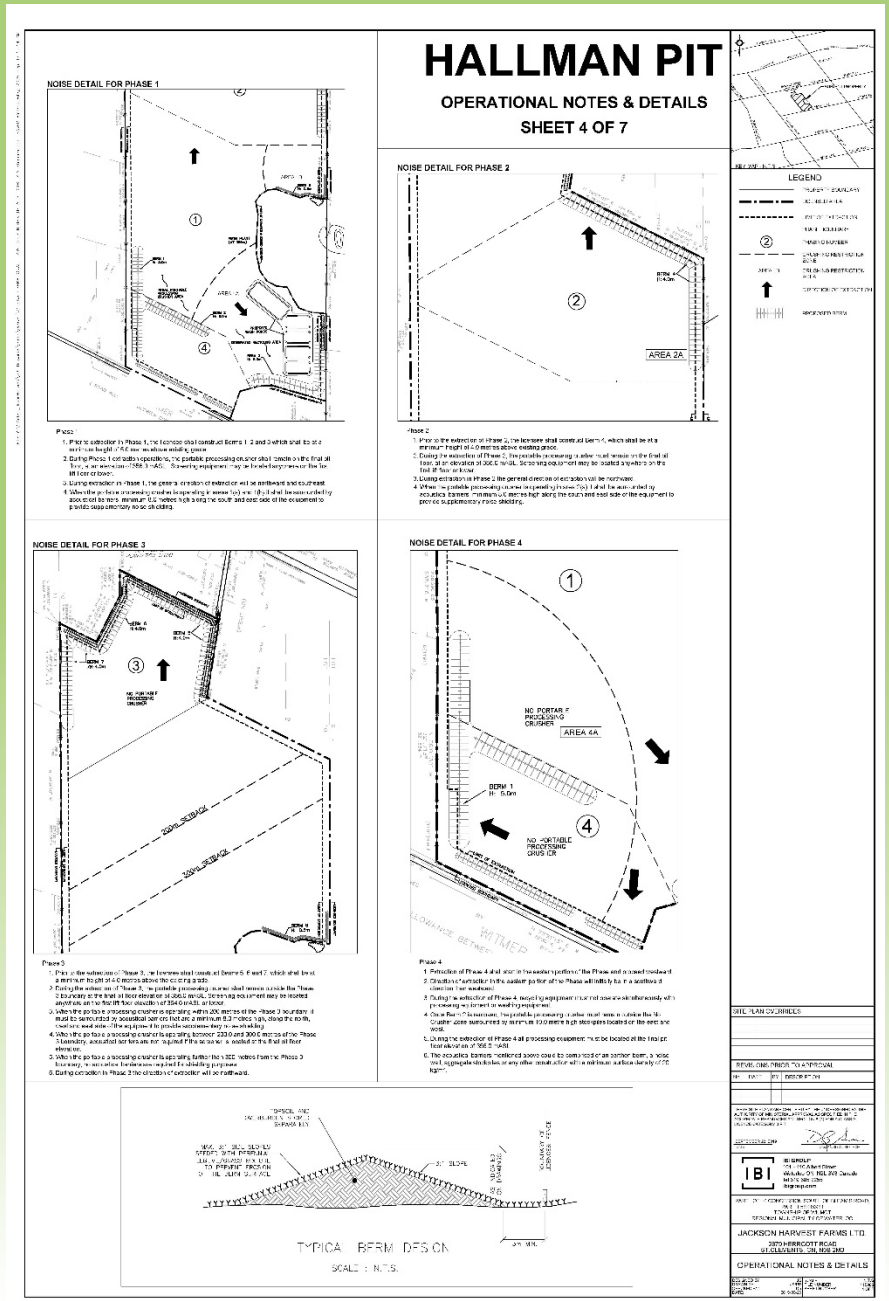
Operational Plan Notes

Sheet 3 of 7



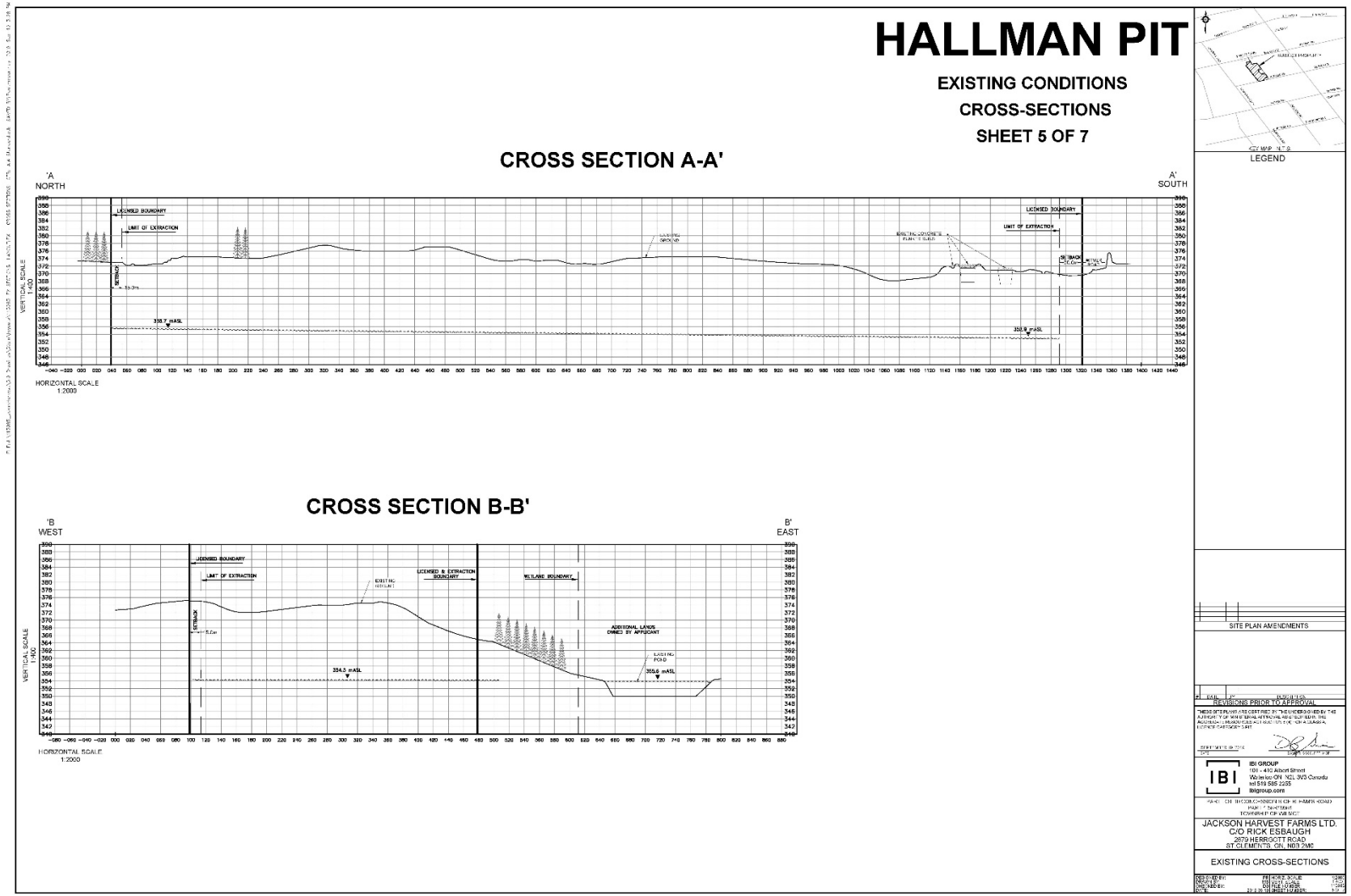
Operational Notes & Details

Sheet 4 of 7



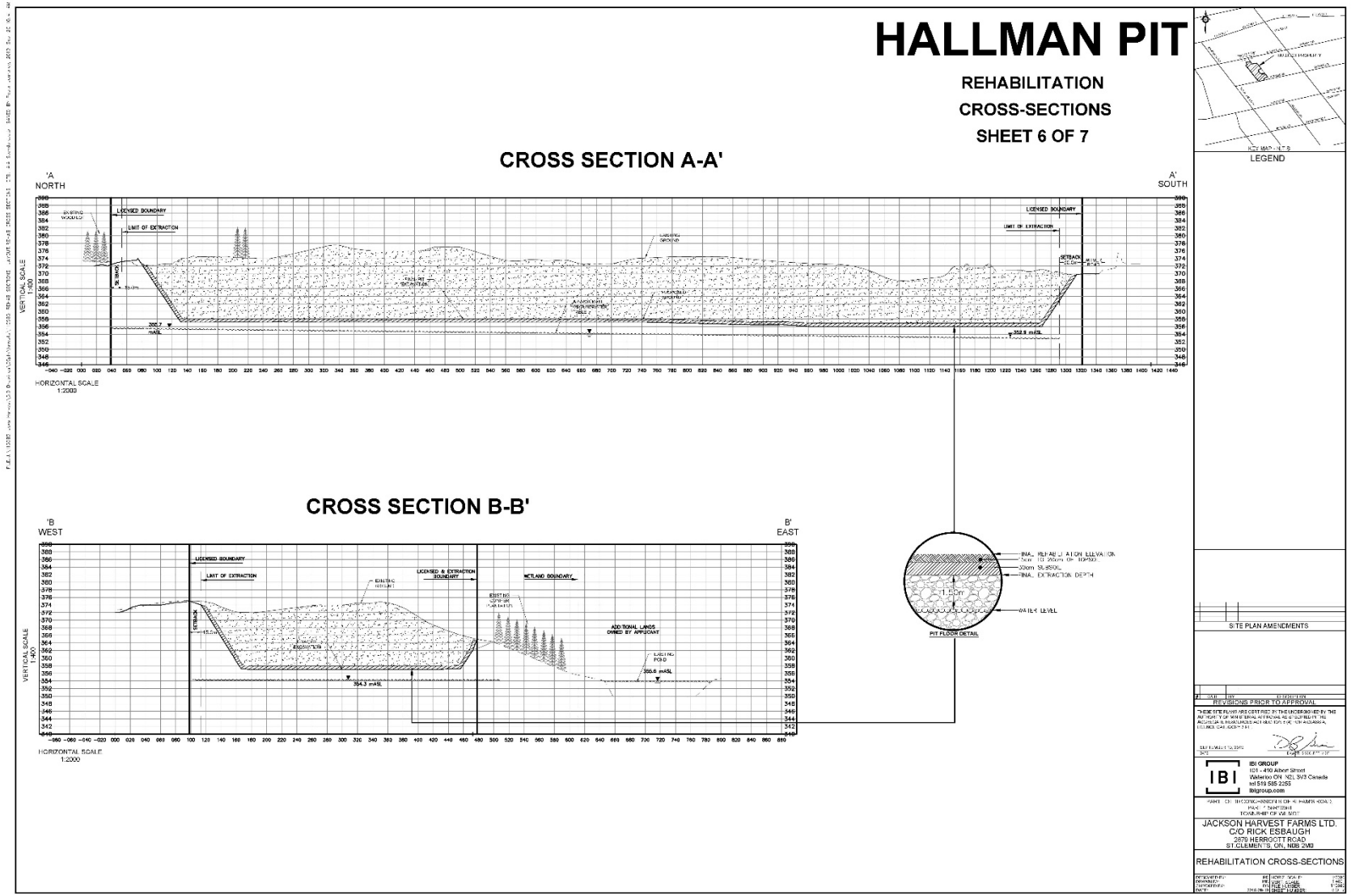
Existing Conditions Cross-Sections

Sheet 5 of 7



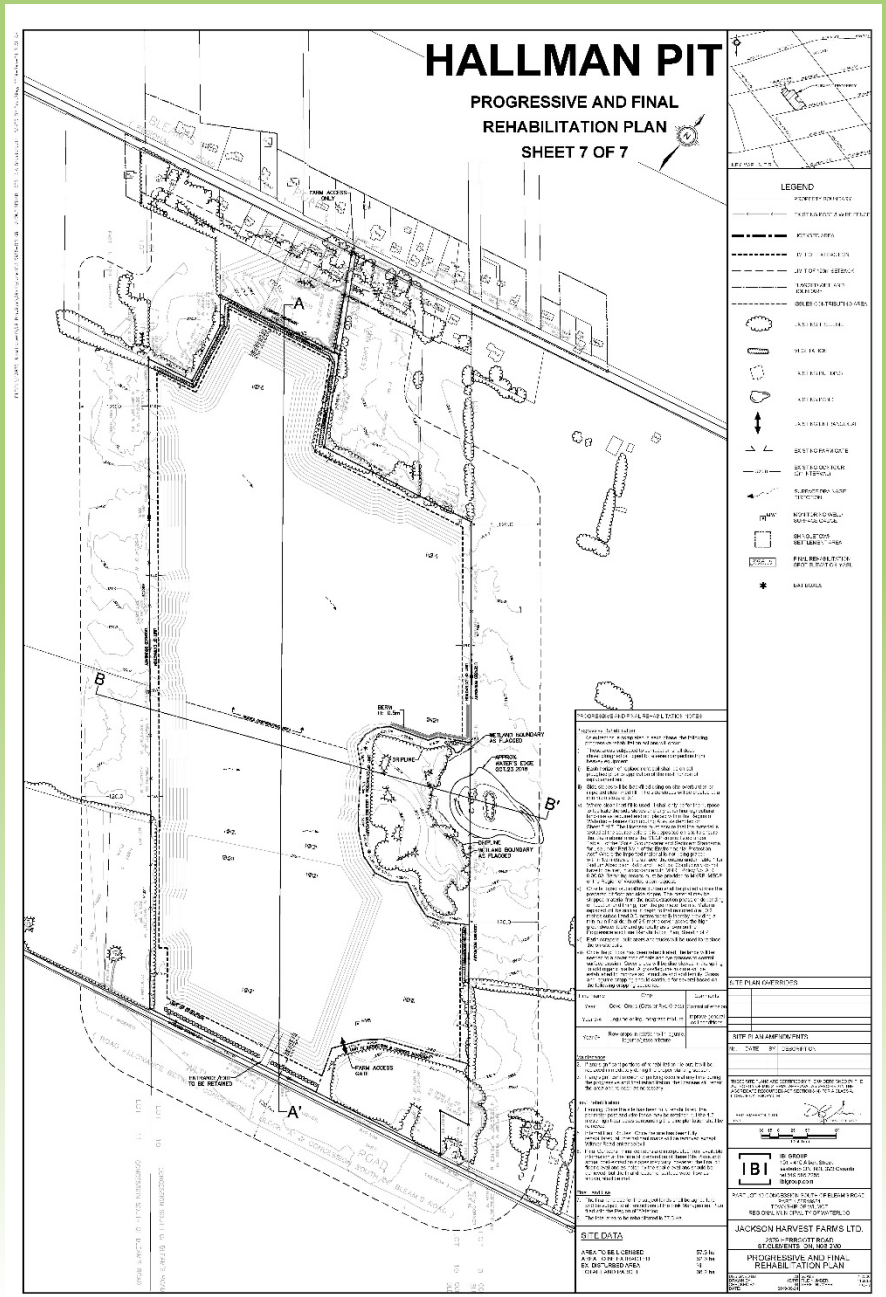
Rehabilitation Cross-Sections

Sheet 6 of 7



Progressive & Final Rehabilitation Plan

Sheet 7 of 7



Citizens for Safe Ground Water

David Donnelly

January 13, 2019

- Wilmot, Ontario

David Donnelly

- David Donnelly is one of Canada's leading environmental lawyers and an award-winning advocate for smart growth. He has represented numerous public interest groups, ratepayers, and First Nations in many of Ontario's key environmental battles in court and before environmental tribunals.
- He represented the Safe Drinking Water Coalition at the Walkerton Inquiry.
- David is a founding member of some of Ontario's most important environmental campaigns, including the Greenbelt, *Oak Ridges Moraine Conservation Plan*, *Lake Simcoe Protection Act*, and *Green Energy Act*

Jackson Harvest Farms – Hallman Pit

- Location – 1922 Witmer Road
- A large portion (approx. 30% of the property) is in a Source Water Protected area.
  - Potential impacts on quantity of available groundwater
  - Potential impacts on groundwater quality
- The proposed haul route is on a narrow hilly township road. There are no shoulders and no line of sight. This road was determined to be insufficient for hauling aggregate in 1922 in the "Cattlelands Agreement" with Lafarge.

The Current Situation in Ontario

"There are 7,125 licensed quarries in the province, a little fewer than half of those on Crown land and presumably under government control.

But there doesn't seem to be the political will to hold quarry operators accountable for the scars they're leaving on the landscape.

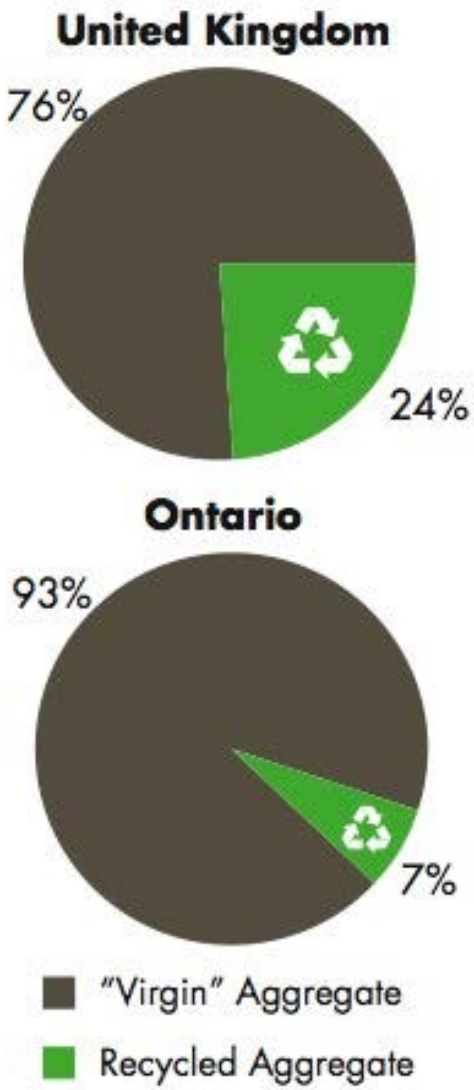
That's the amount of gravel, sand and stone, approximately 1.5 billion tonnes, that TEA estimates will be used by the GTA over the next 25 years to build roads, buildings and sidewalks."

- *Toronto's love of concrete*, NOW Magazine, April 17, 2009

"While the study estimates potential remaining reserves of 2,792 MT might be available in 123 selected licensed pits there is quite a high degree of uncertainty associated with this estimate and the results should not be taken as a very realistic indication of what resource may actually be proven and made available from these licensed sites.

On a per capita basis, aggregate consumption has been on a longer-term decline and this downward trend is expected to continue going forward."

- *Supply and Demand of Aggregate Resources 2016*, MNRF



- 19.8 cents royalty in Canada
- $3.22 royalty in the United Kingdom

1) Dust (Puslinch Township)

"…the Board finds possible discharges of fine particulate matter and crystalline silica in excess of MOE guidance documents…The Board's finding is that health concerns may result inconsistent with policy 1.1.1(c) of the PPS.

…[this is] not good planning and [is not] in the public interest."

- *Capital Paving Inc. v. Wellington (County)*

2) Aggregate (Ramara)

"Ramara Township Council rejected [Fowler]'s application that would have allowed for an additional 6.9 hectares of extraction in a 5-2 vote, leading Fowler to file an LPAT appeal. Ramara Mayor Basil Clarke said township officials have had their first discussions with legal staff and will soon meet with the township planner to continue preparations. A group of locals known as the Ramara Legacy Alliance is also working to create a case against Fowler with their lawyer David Donnelly.

2) Aggregate (Ramara)

Ramara Ward 1 Councillor David Snutch at a community meeting in Floral Park on Aug. 29. Photo courtesy of Joan Mizzi-Fry

"It's granite and there's millions of hectares of Canadian Shield, so this is not a stone that's in short supply," Clarke said. "I'm sure the quarry will tell you it's special, everybody's rock is special to them." Clarke said the area wasn't zoned for aggregate extraction because of its proximity to cottages and homes, which is one of the primary concerns shared by the Ramara Legacy Alliance. The alliance is a citizen group that came together to fight Fowler's proposal, which would allow for a new quarry about 70 metres from the closest residence.

- *Ramara Township And Citizen Group Prepare For Fowler Quarry Appeal* – Muskoka 411, September 6, 2019

2) Aggregate (Ramara)

Best Aggregate Media Quote Ever

"You mined the rock you said you were going to mine. We've honoured that deal. Goodbye."

- Mayor of Ramara Township,

Basil Clarke

2) Aggregate (Muskoka Lakes)

"In June 2017, Muskoka Lakes council voted unanimously against the passing of a rezoning application and official plan amendment that could have seen the quarry produce up to 200,000 tonnes of sand, gravel and bedrock from 26.4 hectares of land, about half the 54.6-hectare lot, when it was operational."

2) Aggregate (Muskoka Lakes)

"The township's official plan says it does not permit new rock-crushing operations within two kilometres of the boundary of an urban centre or a waterfront designation."

- *Muskoka Lakes residents rally against Lippa Quarry as applicant appeals council* – MuskokaRegion.com, December 3, 2019

3) Truck Traffic (Trent Lakes)

"The Tribunal had no evidence of the willingness or preparedness of the Municipality to allow the reconstruction of either of these roads or the introduction of these significant noise mitigation features within the road allowance. The Municipality is the owner of the road allowances and is under no compulsion to subject those road allowances to features that it may not wish to have located within them that are not otherwise prescribed by law. On this front then as well, it is a matter of speculation whether the Municipality will agree to these works."

3) Truck Traffic

"Mr. Ewart did indicate that the concern or issue for the Municipality was the design of the noise mitigation works and that they were here to listen. The Tribunal did not have the benefit of any response from the Municipality."

3) Truck Traffic

"Having come to the conclusion that there is insufficient evidence at the present time to be assured that there will be efficacious noise mitigation to the affected sensitive receptors on Ledge Road and Quarry Road, and that policy compliance requires such assurance, the Tribunal cannot, in the public interest, authorize the use of the Site for quarry purposes. The Zoning Amendment cannot be approved at this time."

- *Anderson v. Trent Lakes (Municipality),* 2018 CarswellOnt 6484 at paras 59-60

4) Water (Caledon)

The precautionary principle requires that decisions to approve long-term or even permanent impacts on the landscape must not be made without a high degree of certainty that the impacts will be mitigated. It is important to err on the side of caution, when water resources and environmental integrity are threatened.

- James Dick Construction Ltd. v. Caledon (Town)

5) Hydrogeology (Burlington)

Nelson Aggregate Co., Re

"For both known breeding ponds, the AMP also requires telemetric monitoring gauges to be placed in the breeding ponds. Since neither breeding pond is on the Nelson lands, the requirement in the AMP is qualified repeatedly by the phrase "subject to landowner permission".
There is no landowner permission for Nelson to place monitoring gauges in the breeding ponds that are not on the Nelson lands.

The AMP goes on to suggest that if an unanticipated draw-down occurs, Nelson is to undertake an assessment to determine the cause. If Nelson finds that quarrying is the cause, then quarrying is to cease and appropriate mitigation measures satisfactory to MNR are to be implemented.
With no landowner permission for Nelson to place gauges in the known breeding ponds, the question arises: how will Nelson, and subsequently MNR, know that there has been a drawdown of water in the breeding ponds that may endanger the Jefferson Salamander?"

Steps of an LPAT Appeal

1) File an Appeal to LPAT (Appellant Form A1).

2) LPAT conducts a preliminary screening of the Appeal per LPAT Rules of Practice and Procedure, Rule 26.05

3) Once the Appellant is notified that their Appeal is Valid (Letter of Validity), the Appellant must submit an Appeal Record and Case Synopsis within 20 days of the date of the Letter of Validity, per Rule 26.11

4) The Responding municipality must advise the LPAT of their intention to file responding material within 10 days of receipt of the Appeal Record and Case Synopsis. If the municipality intends to file responding materials they must do so within 20 days of receipt of the Appeal Record and Case Synopsis per Rule 26.14.

5) Once LPAT has received all material they will direct the parties to participate in a Case Management Conference, per Rule 26.17.

6) At the Case Management Conference parties and issues are identified and a hearing may be scheduled.

Thank you.

Good evening.

Summary of Concerns re Proposed Hallman Pit in Wilmot Township

1) Introduction
- Wilf Ruland (P. Geo.), 30+ years experience as a hydrogeologist
- have done Peer Reviews of many aggregate applications around the province

2) General Hydrogeology Concerns about Gravel Pits
- impacts on quantity of available groundwater (due to pumping for washing operations)
- impacts on groundwater quality (due to contaminants associated with aggregate/washing operations and/or fuel and oil spills/leaks)

3) Regional Hydrogeology
- the proposed pit would be situated on the Waterloo Moraine, one of Canada's greatest groundwater resources
- Waterloo Moraine is an impressive "**aquifer**" and can exceed 100 meters in thickness, contains massive layers of permeable sand and gravel
- groundwater quality on the Waterloo Moraine is variable, with local contamination issues due to nitrate from agriculture and from various contaminant point sources (eg. fuel spills and leaks, contaminated industrial sites, landfills etc.)
- protection of aquifer provided in some areas by low-permeability "**aquitard**" layers, but these are not consistently present and are absent in some areas

4) Local Hydrogeology in Area of Proposed Hallman Pit
- Waterloo Moraine is about 60-100 meters thick in this area
- Wilmot Centre Well Field (highly productive Regional water supply wells) less than 1 km from north end of proposed pit
- proponent drilled 5 shallow wells on-site, average depth is 16.5 meters and deepest well is about 23 meters - all that was found when drilling wells was sand and gravel
- no aquitard layers encountered in proponent's 5 wells, so it is unknown if there is any protection for the deeper aquifer units on-site
- aquitard layers are often missing in area around the Wilmot Centre Well Field

5) Nitrate Contamination in Area of Proposed Hallman Pit
- site was formerly intensively farmed, and there is heavy nitrate contamination in the new shallow on-site wells (some will be coming from upgradient sources, and some will be due to on-site farming practices)
- nitrate levels in some on-site wells are unsafe to drink (above the Ontario Drinking Water Quality Standard of 10 mg/L), and in other wells are just below the ODWQS
- there is an on-site pond/wetland feature which acts to replenish groundwater flow system (much of the centre of the property slopes steeply toward the pond)
- pond water quality was tested once, water quality was good (no nitrate)

6) Hallman Pit Proposal
- above the water table pit (maximum depth should be > 1.5 meters above water table)
- up to 750,000 tonnes of aggregate production per year
- aggregate washing is planned

7) Key Issues for this Application

a) assessing potential for Regional aquifer contamination due to aggregate washing activities or fuel/oil spills
b) protection of Wilmot Centre Well Field
c) assessing potential impacts on neighbours' wells
d) having monitoring program protective of aquifer, and neighbours' and Regional wells

8) Potential Impacts of Aggregate Washing Activities

- hydrogeological evaluation mentions that aggregate washing will occur, but does not describe or assess potential impacts of aggregate washing (siltation of aquifer)
- clients of mine have suffered major siltation impacts on their wells for 11 years, resulting in repeated massive costs for filtration units and replacement of equipment

9) Potential Impacts on Wilmot Centre Well Field

- very little work done to evaluate potential threat to Wilmot Centre Well Field (WCWF)
- more wells are needed to properly assess potential impacts, and wells need to go much deeper
- no geological cross-sections showing WCWF and site
- no records of historical WCWF pumping rates provided
- no discussion of planned step-wise increases in pumping of WCWF, and the likelihood that the expanding drawdown cone from the WCWF will draw more water from proposed site
- map of groundwater flow directions prepared for Hallman Pit property only, no effort made to prepare broader map showing flow directions between site and WCWF

10) Potential Impacts on Neighbours' Wells

- keys to impact prevention/mitigation are establishing baseline water quality in neighbours' wells, committing to a Well Water Protection Program, and developing a solid and precautionary site monitoring program
- none of these key impact prevention/mitigation measures are in place at present

11) Proposed Site Monitoring Program

- proponent only proposes to monitor the clean on-site pond and adjacent 6 meter deep well
- proposal is bizarre, and utterly inadequate to assess potential impacts of aggregate operation

12) Overall Main Shortcomings of Proposal

- many reassuring claims made which are not backed up by data or analyses in the report
- most significant potential groundwater impacts (silt contamination of groundwater from aggregate washing) not mentioned or dealt with in report
- inadequate information and analysis of potential threat to Wilmot Centre Well Field
- potential impacts on neighbouring wells not satisfactorily addressed
- proposed monitoring program is utterly inadequate

13) Recommendation

I recommend that the Township either turn down the application for the proposed Hallman Pit aggregate operation, or table the application until such time as groundwater quality impact assessments have been properly completed and passed professional Peer Review.

All plans municipal , provincial include
Health, Safety, Well being of community as primary goals

by Robert Gebotys
cgebotys@uwaterloo.ca

All trucks enter , exit via Queen St
73 trucks day,5.6 hr,70% tractor trailer(40 ton)
assume 90%(contradiction).... go where profit is

5.2 Agricultural Equipment

The use of agricultural equipment is prevalent in this area. The Agricultural Impact Assessment (AIA) Guidance Document[3], requires aggregate trucks to take the shortest possible route to major roads to reduce the impacts on agricultural vehicles. The direct route to Queen Street for the proposed pit is consistent with the AIA guidelines and will minimize impact on agricultural vehicles.

We have reviewed the preliminary TIS scope for the above noted site location and request the following items are included and reviewed as part of the traffic impact study. It is understood that access to and the use of Sandhills Road for the purpose of the pit operation and its haul route is not being proposed.

Hours operation same as Township…M-F 8hrs Closed Sat,Sun,Holidays no night work

7.1.2 Extraction Operation

The hours of operation for the pit will be as follows:

Site Preparation:	7:00 a.m. to 7:00 p.m. Monday to Friday
Extraction / Processing:	7:00 a.m. to 7:00 p.m. Monday to Friday
	7:00 a.m. to 6:00 p.m. Saturdays
Shipping:	6:00 a.m. to 7:00 p.m. Monday to Friday
	6:00 a.m. to 6:00 p.m. Saturdays

There shall be no extraction, processing or shipping on Sundays or any Statutory Holiday. Maintenance and repair of on-site equipment as required from time to time, may occur beyond these hours.

Occasionally, public construction project contracts require night time delivery of aggregate. Night

To consider the worst case hourly operational scenarios, the following assumptions were made:

- All extraction, processing, and loading could occur simultaneously at the closest possible location to each receptor;
- All equipment will be located on the pit floor (approximately 356 mASL) or at the floor of

the first lift, approximately 8 m below existing grade.

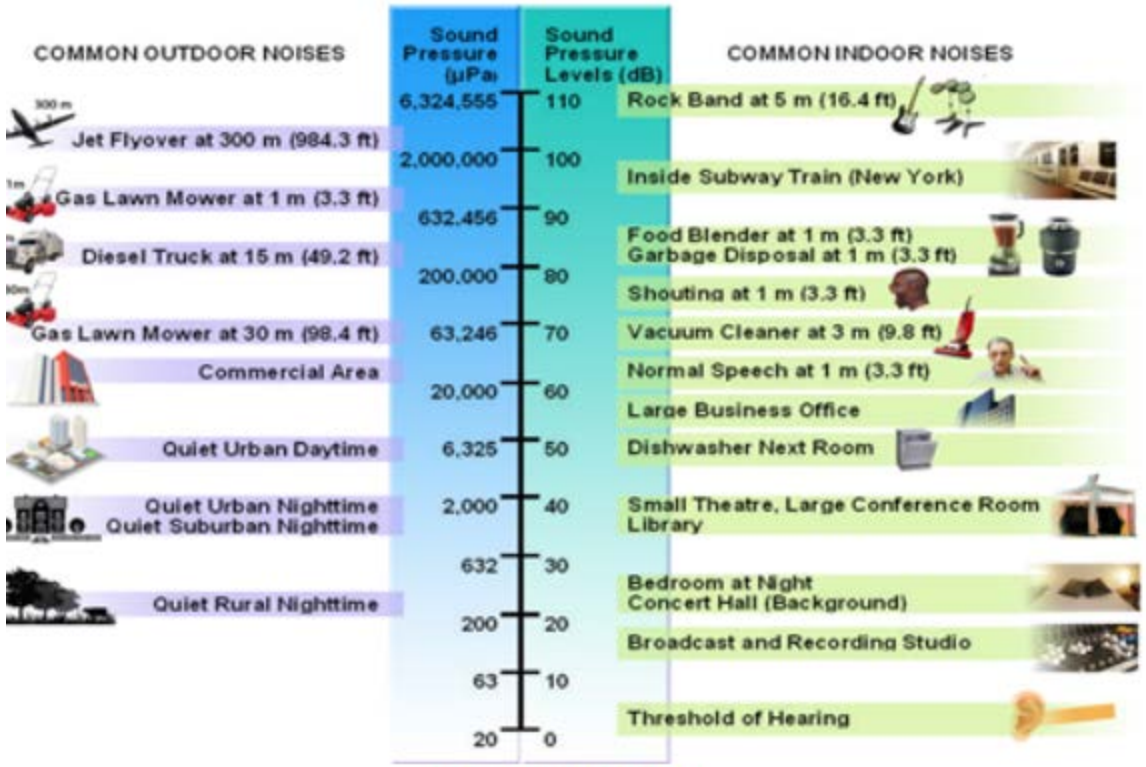
- 34 haul trucks pick up a load of aggregate (arrive and depart) for shipment off-site.

Criteria ….at limit 45 approaching 50 db
Modeling assumptions ,Errors estim prediction

Table 3: Predicted Sound Levels at the Residential Receptors [dBA] During Worst-Case Operational Scenarios (With Noise Mitigation)

Receptor	Daytime Criteria (dBA)	Predicted Sound Level (dBA)
R1	45	45
R2		45
R3		45
R4		45
R5	50	45
R6		40
R7		44
R8		46
R9		45

120 db pain. 100-110 rockband, jet flyover



Source: FHWA

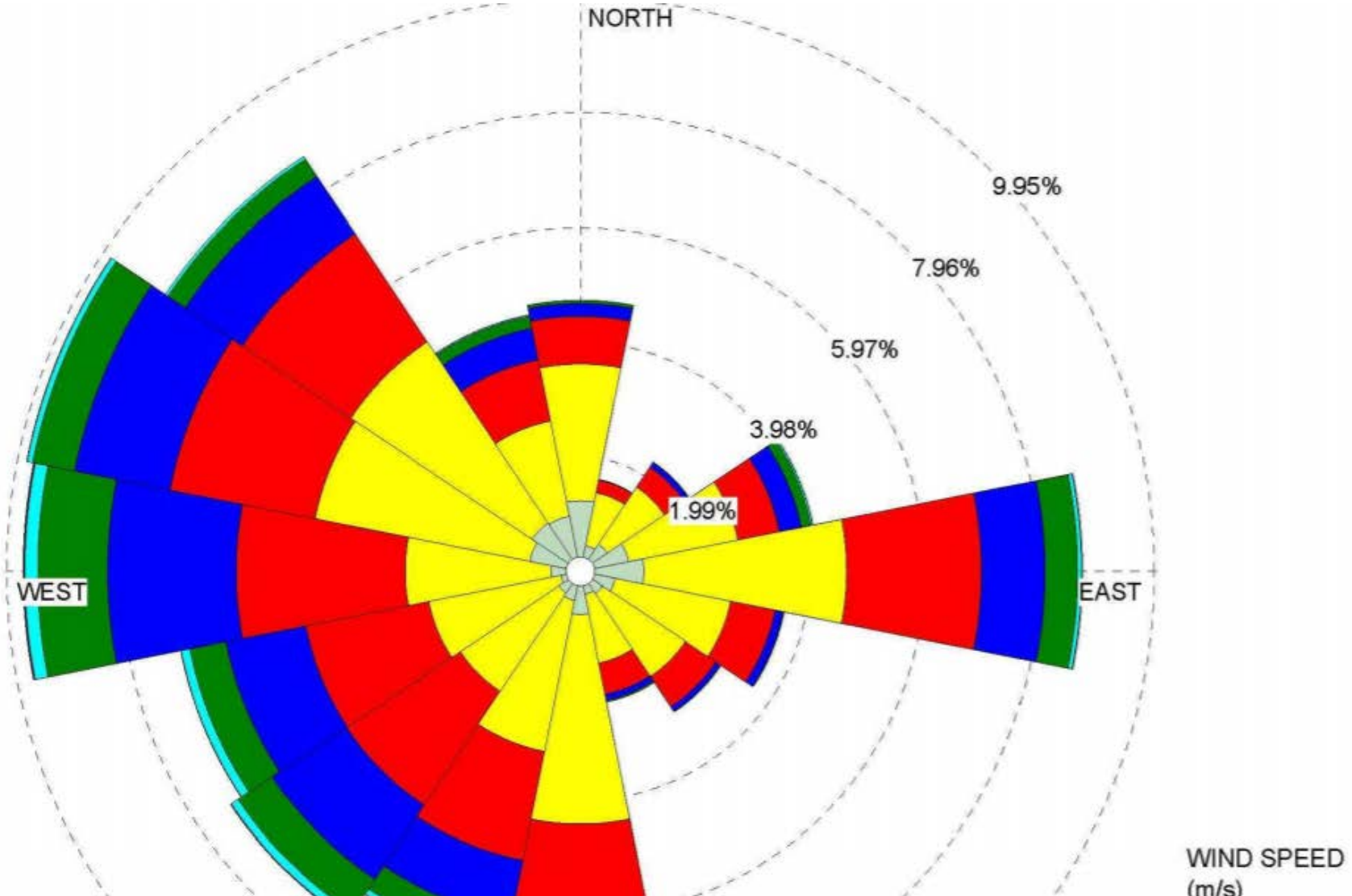
Figure 1-1: Common Sound Levels

Assume tractor trailer 40 ton is 102 db enter exit pit. Much more than 45,50 criteria. Vibration analysis none

Table 2 – Reference Sound Power Levels of Process

Equipment	Sound Power Level dBA re: 10^{-12} W
A Screening Plant with an associated loader	110
A Portable Crushing Plant with an associated loader	117
A Permanent Crushing Plant (Recycling), with an associate loader	117
A Permanent Wash Plant, with an associate loader	108
One Additional Loader	107
Highway Trucks	102

Dust..no partical analysis,spread by wind…etc wind in all directions



Conforms to HazCom 2012/United States

Lehigh Hanson
HEIDELBERGCEMENT Group

Safety Data Sheet Sand and Gravel

Section 1. Identification

GHS product identifier:	Sand and Gravel
Other means of identification:	Aggregate, Manufactured Sand, Natural Stone, Crushed Stone
Relevant identified uses of the substance or mixture and uses advised against:	Sand and Gravel aggregate may be used in the manufacture of bricks, mortar, cement, concrete, plasters, paving materials, and other construction materials. Sand and Gravel aggregate may be distributed in bags, totes, and bulk shipments. No known recommended restrictions.
Supplier's details:	300 E. John Carpenter Freeway, Suite 1645 Irving, TX 75062 (972) 653-5500
Emergency telephone number (24 hours):	**CHEMTREC: (800) 424-9300**

Section 2. Hazards Identification

GHS Classification:	CARCINOGENICITY – Category 1A SPECIFIC TARGET ORGAN TOXICITY – Category 2 REPEATED EXPOSURE SKIN CORROSION/IRRITATION – Category 2 EYE DAMAGE/IRRITATION – Category 2A

Section 2. Hazards Identification

GHS Classification:

CARCINOGENICITY – Category 1A
SPECIFIC TARGET ORGAN TOXICITY – Category 2
REPEATED EXPOSURE
SKIN CORROSION/IRRITATION – Category 2
EYE DAMAGE/IRRITATION – Category 2A

GHS label elements

Hazard pictograms:

Signal word: Danger

Hazard statements:

May cause cancer
May cause damage to organs (lung) through prolonged or repeated exposure
Causes skin irritation
Causes serious eye irritation

Precautionary statements:

Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wash any exposed body parts. Wear protective gloves/protective clothing/eye protection/face protection.

Response: If exposed or concerned: Get medical advice/attention.If on skin: Wash with plenty of water. Take off contaminated clothing and wash it before reuse. If in eyes: Rinse continuously with water for several minutes. Remove contact lenses, if present and easy to do.

Dust and Potential Health Problems

Why is dust a concern?

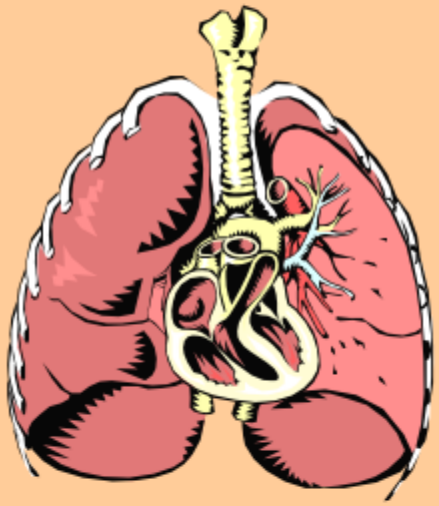
EPA health research tells us that dust can cause health problems. People with heart and lung disease and those with breathing problems can be impacted when inhaling dust. Even healthy people can have short term irritation when breathing dust. Dust is a nuisance, it settles on your tables, your coffee cup, your subsistence foods, and salmon drying racks.

Dust has been around for generations. Winds have been blowing dust off glaciers and dry river banks forever. We have lived with dust for thousands of years, but that doesn't make dust healthy to breathe. Now, we help throw dust back into the air with our four wheelers, trucks and cars.

In the past three years the Alaska Department of Environmental Conservation (ADEC) received dust complaints from over

Health Impacts

ADEC has heard there is an increase in respiratory problems in the villages. Health studies indicate breathing problems are either somewhat worse or higher than expected in rural Alaska



Health problems associated with dust:

- Aggravates existing heart and lung disease
- Damages lung tissue
- Mostly impacts children, seniors, people with asthma, people with heart conditions

Dust destinations in community function wind

Calculations for 5 µm Particles:

Dust of this size falls within the respirable dust range as specified by the EPA. Respirable dust refers to those dust particles that are small enough to penetrate the nose and upper respiratory system and deep into the lungs. Particles that penetrate deep into the respiratory system are generally beyond the body's natural clearance mechanisms of cilia and mucous and are more likely to be retained

The terminal velocity of this size of particle is calculated to be 1.91E-03 m/s using Stokes Law for Fluid-Particle Forces, in the conditions specified previously.

It will therefore take 2,612 seconds for these particles to fall from a height of 5 meters (16.4 feet).

Wind Speed	Travel Distance
5 km/h (3.1 mph)	3.6 km (2.2 miles)
10____(6.2 mph)	7.3 (4.5 miles)
20____(12.4 mph)	14.5 (9 miles)
40____(24.8 mph)	29.0 (18 miles)
60____(37.3 mph)	43.5 (27 miles)
80____(49.7 mph)	58.1 (36.1 miles)

Conclusion:

Using EPA inhalable dust and Stokes Law for Fluid Particle Forces definitions and calculations, by varying the dust particulate particle size, wind speed, and release height, respirable dust can, and will, impact areas just about anywhere directionally downwind from a gravel pit's operational activities, unquestionably posing health risks and bearing an impact on adjacent properties, including to

HAZARD REVIEW

HEALTH EFFECTS OF OCCUPATIONAL EXPOSURE TO ASPHALT

Contributors:
Mary Ann Butler, Ph.D.
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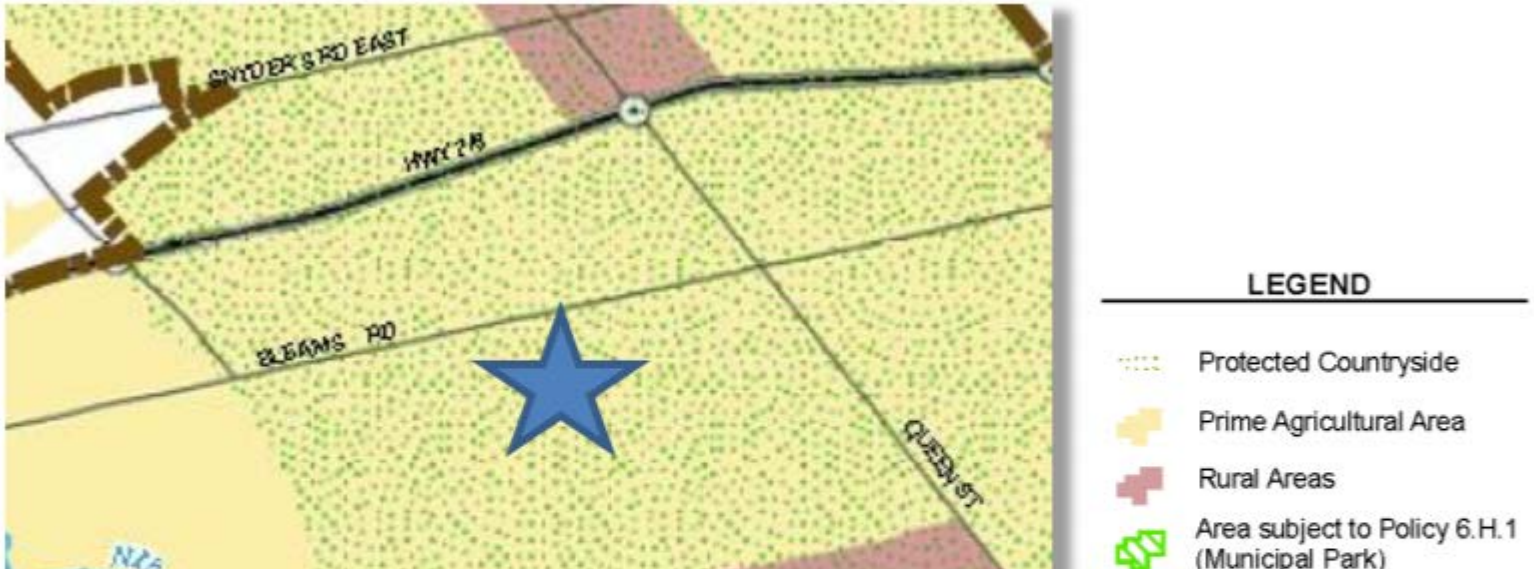
Marie Haring Sweeney, Ph.D.
Alexander Teass, Ph.D.

Asphalt many studies consistent results..example below of one…what about a spill? Cement similar

Milham 1997, United States, road graders, pavers, machine operators, excavators, operating engineers	7,266	1950-1989	Respiratory system	614	PMR 1.1	$P<0.01$
			Bronchus, trachea, lung cancer (ICD 162)	558	PMR 1.20	$P<0.01$
operating engineers, only			Respiratory system cancer	136	PMR 1.21	$P<0.05$
			Bronchus, trachea, lung (ICD 162)	122	PMR 1.21	$P<0.05$
			Bronchus, lung (ICD 162.1, 163)	76	PMR 1.42	$P<0.01$
			Asthma	5	PMR 1.60	NS
			Lymphatic, hematopoietic cancer	43	PMR 1.42	$P<0.05$
			Reticulosarcoma	7	PMR 1.37	NS
			Lymphosarcoma	6	PMR 1.88	NS
			Hodgkins disease	4	PMR 1.58	NS
			Other lymphomas	10	PMR 2.00	$P<0.05$
			Motor vehicle accidents	47	PMR 1.59	$P<0.01$
road graders, pavers, machine operators, and excavators.			Bronchus, lung cancer (ICD 162.1, 163)	288	PMR 1.24	$P<0.01$
			Motor vehicle accidents	249	PMR 1.39	$P<0.01$

Protected Prime Agricultural

provide a framework for managing growth. These four provincial land use plans: Greenbelt Plan (2017); the Oak Ridges Moraine Conservation Plan (2017); the Niagara Escarpment Plan (2017); and the Growth Plan for the Greater Golden Horseshoe(GGH) (2017) support the long term protection of farmland The four provincial land use plans have policy plans that require



Land rated Class 1 (best) through 7(worst) scale

The Subject Lands comprise approximately 75.7 percent Canada Land Inventory (CLI) capabil of Class 1 – 3. Approximately 13.0 percent of the Subject Lands is considered Canada Land Inventory (CLI) class 4 - 7 soils, with the remaining 11.2 percent as Not Rated.

11.2% unrated so 75.7/(100-11.2)=84% rated

"Class 1 - Soils in this class have no significant limitations in use for crops. Soils in Class 1 are level to nearly level, deep, well to imperfectly drained and have good nutrient and water holding capacity. They can be managed and cropped without difficulty. Under good management they are moderately high to high in productivity for the full range of common field crops

Class 2 - Soils in this class have moderate limitations that reduce the choice of crops, or require moderate conservation practices. These soils are deep and may not hold moisture and nutrients as well as Class 1 soils. The limitations are moderate and the soils can be managed and cropped with little difficulty. Under good management they are moderately high to high in productivity for a wide range of common field crops.

Class 3 - Soils in this class have moderately severe limitations that reduce the choice of crops or require special conservation practices. The limitations are more severe than for Class 2 soils. They affect one or more of the following practices: timing and ease of tillage; planting and harvesting; choice of crops; and methods of conservation. Under good management these soils are fair to moderately high in productivity for a wide range of common field crops.

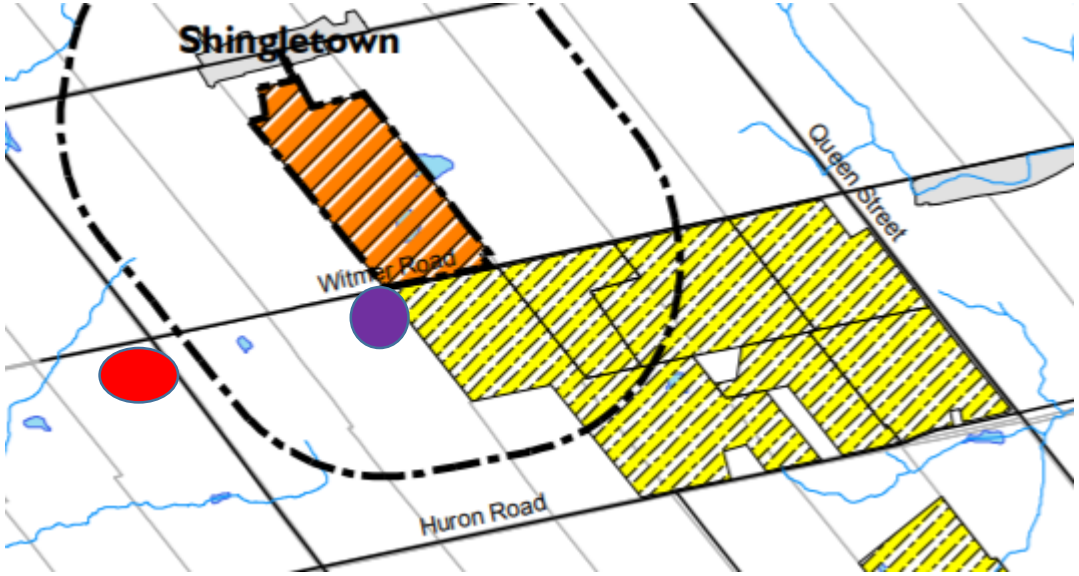
Crops change as does investment Agriculture outstanding..investment,soil,etc

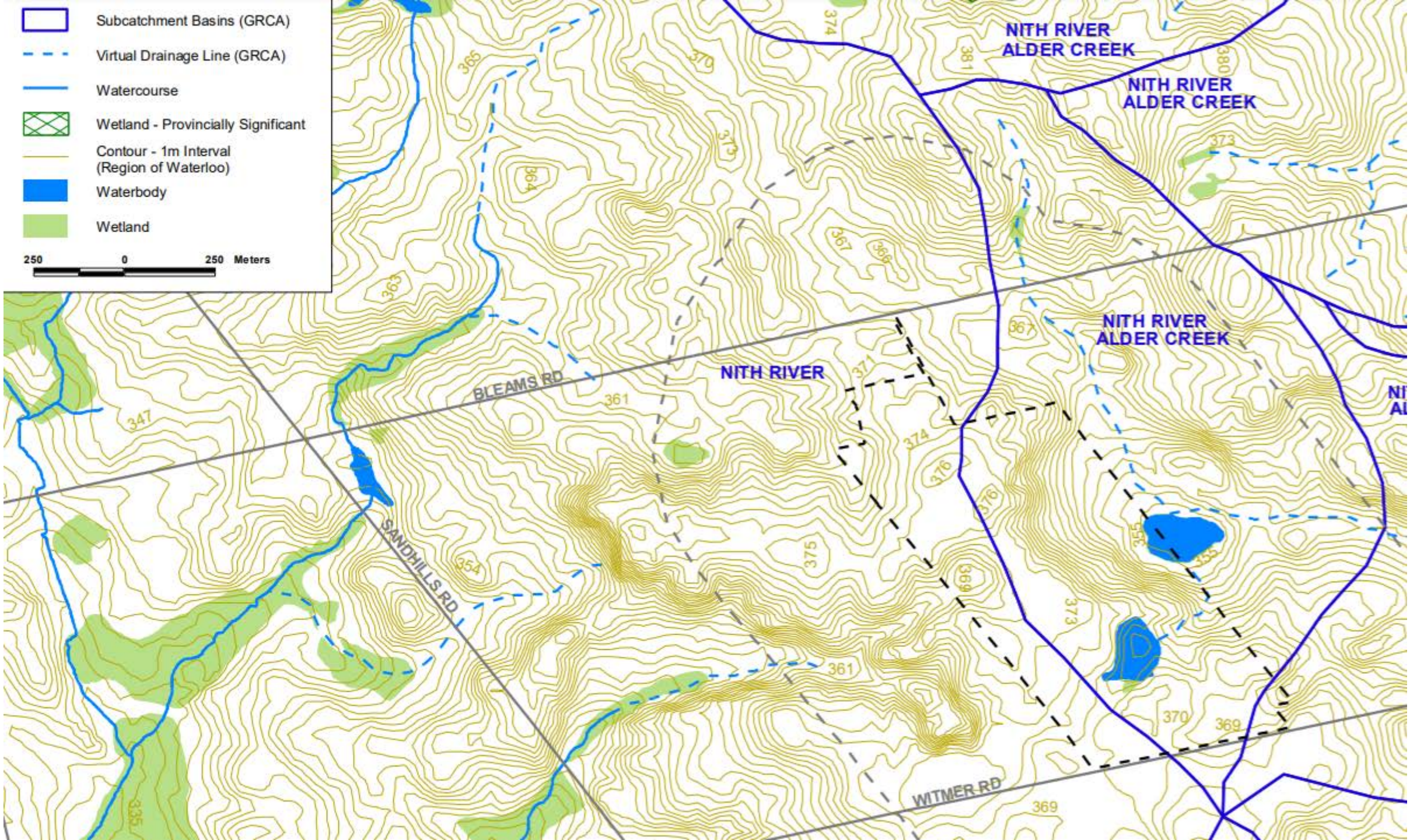
Neither the Subject Lands nor the Study Area is located within a designated Specialty Crop Area.

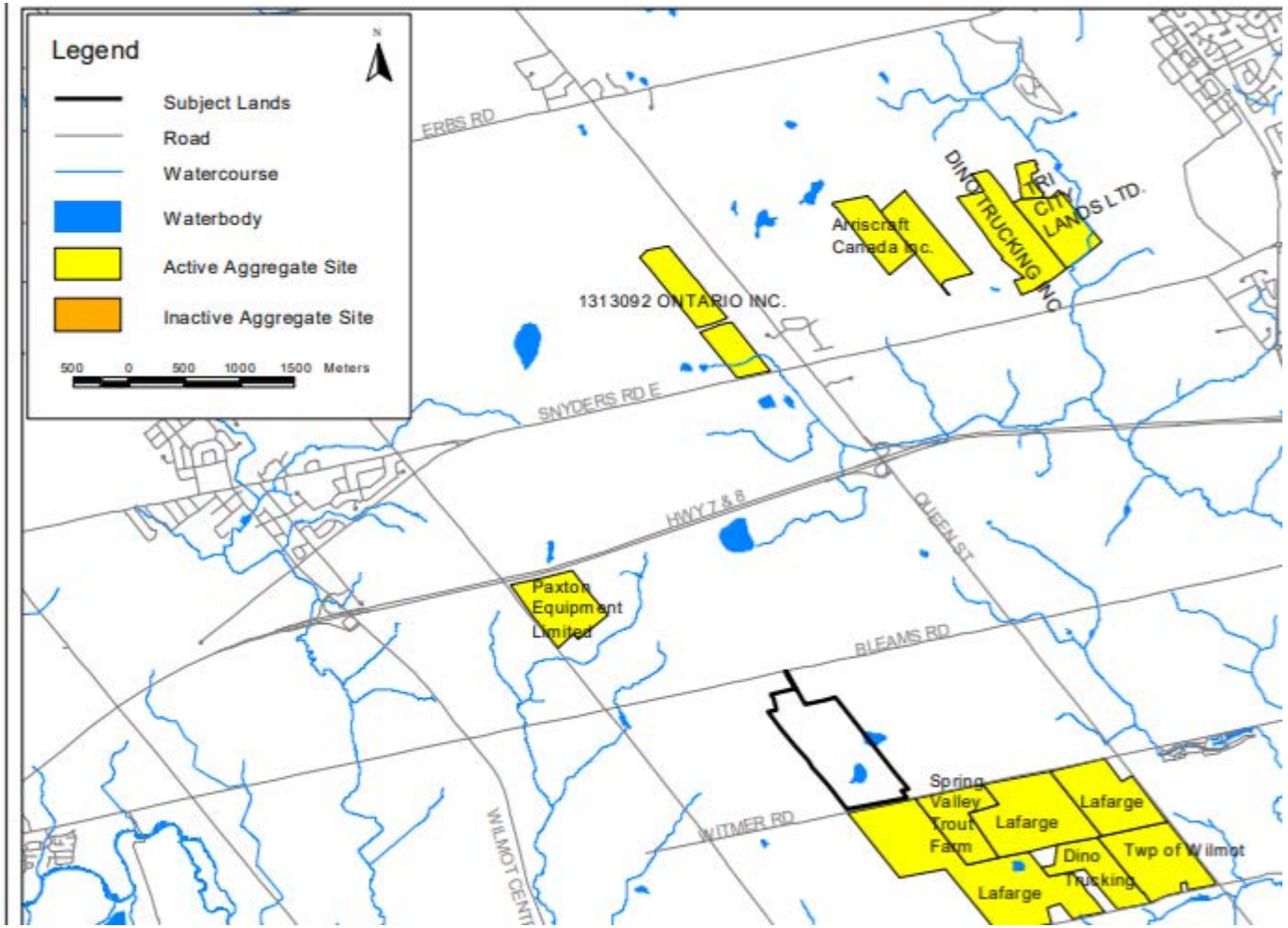
There is limited investment in agricultural buildings and structures within the Study Area.

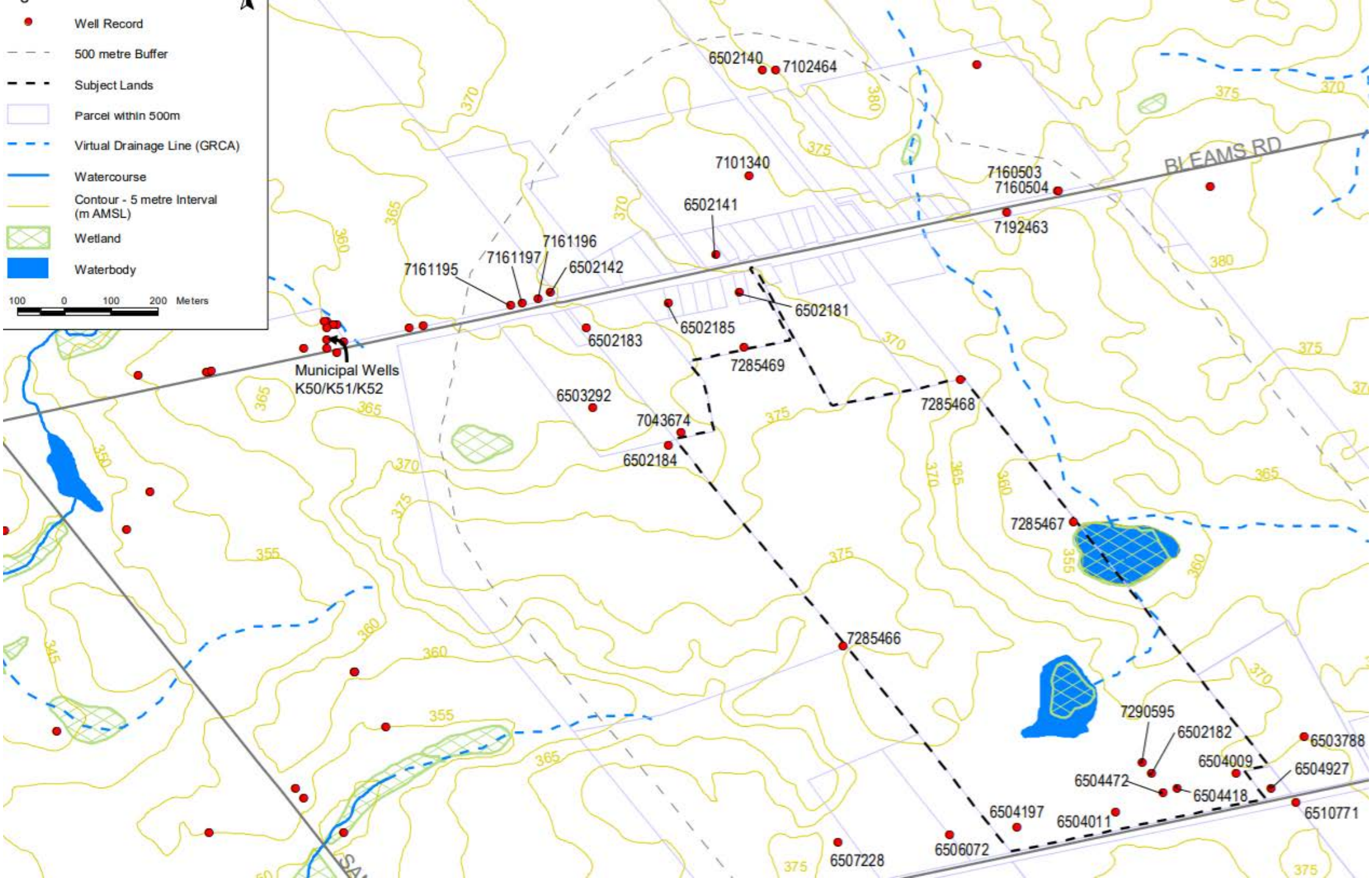
Witmer chicken barn, Sandhills chicken barn Millions dollars of investment in Agriculture

This minimum 1000 m (1.0 km) area of potential impact outside the Subject Lands is used to allow for characterization of the agricultural community and the assessment of impacts adjacent to and in the immediate vicinity of the Subject Lands.




Subcatchment Basins (GRCA)
Virtual Drainage Line (GRCA)
Watercourse
Wetland - Provincially Significant
Contour - 1m Interval
(Region of Waterloo)
Waterbody
Wetland
250
0
250 Meters
NITH RIVER
ALDER CREEK
NITH RIVER
ALDER CREEK
NITH RIVER
ALDER CREEK
NITH RIVER
BLEAMS RD
SANDHILLS RD
WITMER RD


Legend
Subject Lands
Road
Watercourse
Waterbody
Active Aggregate Site
Inactive Aggregate Site
500 0 500 1000 1500 Meters
ERBS RD
SNYDERS RD E
HWY 7 & 8
QUEEN ST
BLEAMS RD
WITMER RD
WILMOT CENTRE
1313092 ONTARIO INC.
Airscraft Canada Inc.
DINO TRUCKING INC.
TRI CITY LANDS LTD.
Paxton Equipment Limited
Spring Valley Trout Farm
Lafarge
Lafarge
Dino Trucking
Twp of Wilmot
Lafarge


Well Record
500 metre Buffer
Subject Lands
Parcel within 500m
Virtual Drainage Line (GRCA)
Watercourse
Contour - 5 metre Interval (m AMSL)
Wetland
Waterbody
100 0 100 200 Meters
BLEAMS RD
Municipal Wells
K50/K51/K52
6502140
7102464
7101340
6502141
7160503
7160504
7192463
7161196
7161197
7161195
6502142
6502181
6502185
6502183
7285469
7285468
6503292
7043674
6502184
7285467
7285466
7290595
6502182
6503788
6504009
6504927
6504472
6504418
6510771
6504197
6504011
6506072
6507228

Wetlands seasonally covered by shallow water(grca)

4.2 Regulated Area

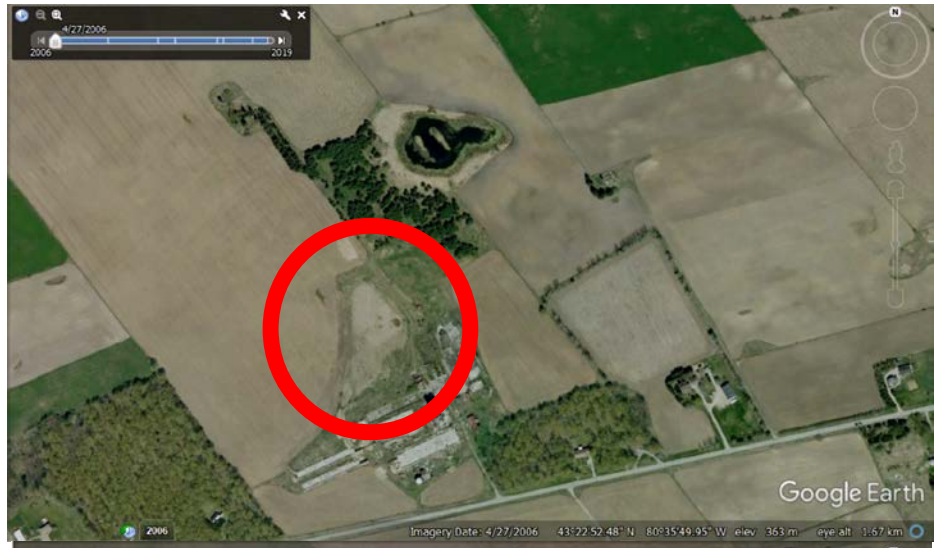
As was noted previously there is regulated area around the open water pond located centrally on the eastern study site boundary.

The historical GRCA mapping (2018) showed a wetland with regulation limit in the central part of the southern portion of the site. This area was reviewed and examined on site by Tony Zammit with Dance Environmental Inc. staff on September 17, 2018. It was indicated by GRCA staff on that site visit that the GRCA mapping was not accurate regarding that feature (due to a lack of key wetland feature characteristics being present). It was therefore deemed appropriate that based on the on site review, the GRCA would remove inaccuracy from their mapping as no wetland was present. GRCA has since

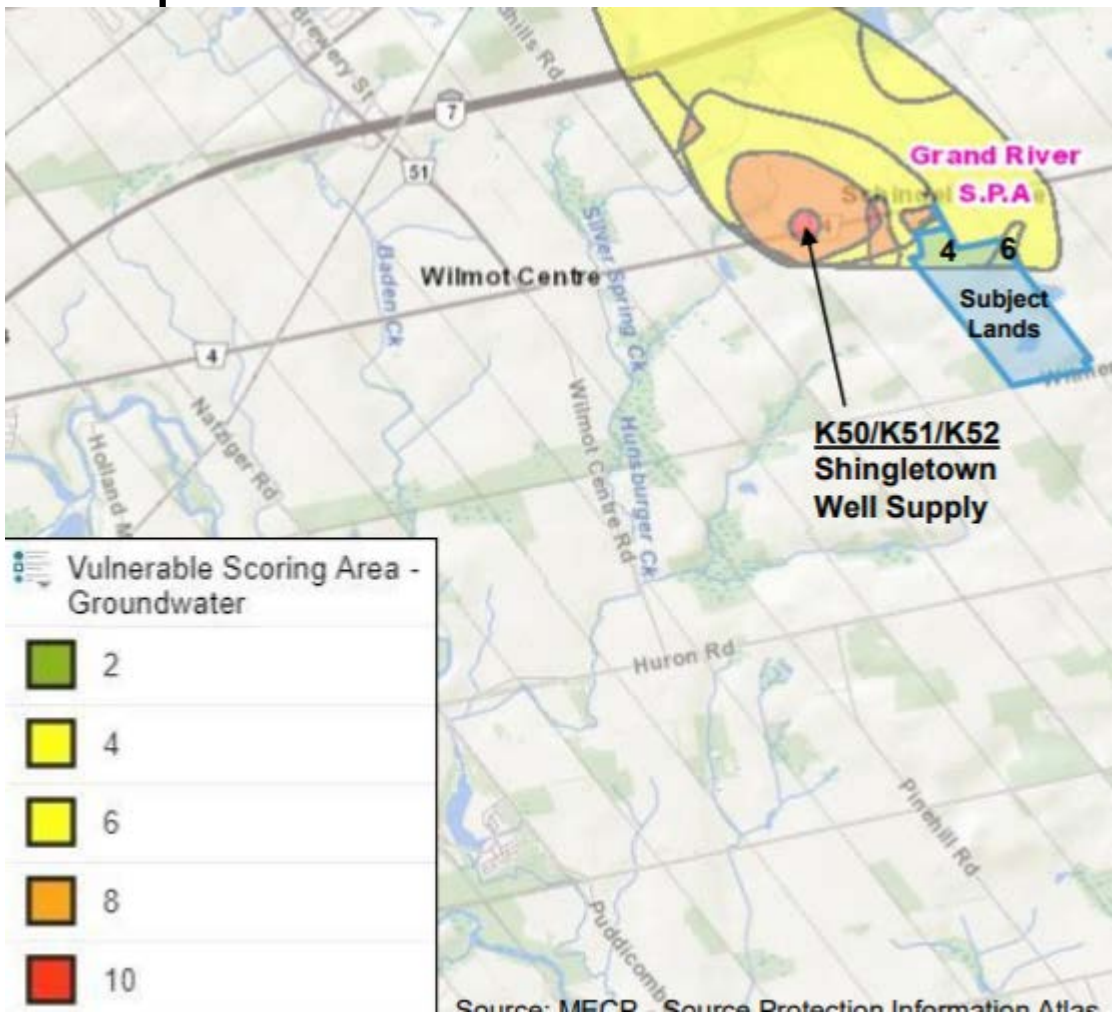
Environmental Impact Study Guidelines and Submission Standards for Wetl
Grand River Conservation Authority - 2005

Wetlands are lands that are seasonally or permanently covered by shallow water, as well as lands where the water table is close to or at its surface. In either case the presence of abundant water has caused the formation of hydric soils and has favoured the dominance of either hydrophytic plants or water tolerant plants. The four major types of wetlands are swamps, marshes, bogs and fens. Periodically soaked or wet lands being used for agricultural purposes which no longer exhibit a wetland characteristic are not considered to be wetlands for the purposes of this definition (Provincial Policy Statement, 2005, page 37).

2006-2018 wetlands existed
2019 – wetland classification gone



Five points, 2(best),4,6,8,10(worst)
Have 6 one step to high risk for water
remove soil for pit score increases



67,000m3 27 Olympic pools of water
assumption what if incorrect? Double?
Hot dry summer,little snow,have couple years

Figure 4.6 shows that the vulnerability score of the portion of the site within the WHPA is either 4 or 6. The reduction in overburden thickness will increase the vulnerability score, however:

a) there will be a reduction of nutrients applied within the WHPA and Issue Contributing Area thus improving groundwater quality,

b) groundwater is flowing away from the municipal wells in the shallow groundwater regime beneath the site,

c) aggregate extraction activities are not a threat to drinking water and

d) aggregate extraction is permitted in Well Head Protection Areas.

within the context of Ontario, the cumulative effects of multiple aggregate operations located within a particular geographic area, such as a watershed, has been raised as an issue of concern (e.g. Binstock & Carter-Whitney, 2011; Grand River Conservation Authority, 2010). However,

little research has been conducted on this issue and Peckenham, Thorton, & Whalen (2009) affirm that the effects of aggregate mining on aquifers systems, including water quality and quantity, are not well documented and are largely unknown.

Fecal coliform, nitrite ,chlorides ,sulphates all significantly higher in gravel extraction areas than natural areas

Future Groundwater Resources at Risk (Proceedings of the Helsinki Conference, June 1994).
IAHS Publ. no. 222, 1994.

Effect of gravel extraction on groundwater

TUOMO HATVA
National Board of Waters and the Environment PO Box 250, SF-00101 Helsinki, Finland

Abstract Gravel extraction causes changes in seepwater and groundwater quality as well as in the elevation of the groundwater table and its variation. Acid rain flushes the soil, increasing the quantity of dissolved salts and seepwater and groundwater quality variations. The composition of water in groundwater ponds varies in the same way as that of surface water, seasonally. The great variations in the quality of pond water increase the variations in groundwater quality. Gravel extraction increases the pollution risk of groundwater and may cause difficulties in the treatment of the water abstracted from a groundwater intake. Post-extraction maintenance is recommended.

Now at least 1.5 meter(minimum) research recommends 4-6 meters(minimum)

a protection layer of 4-6 m should be left on top of the maximum groundwater table.

In order to guarantee the supply of good groundwater with stable quality it its recommended that gravel extraction be directed to areas where the adverse effects and risks are as small as possible. Gravel extraction and the restrictions put on it are managed through a zoning system based on the need to protect groundwater intakes.

Pit Rehabilatation History Waterloo Region
U of W ,Catlin Port, Environmental Planning Dept.

proposed extraction projects. This public contempt towards the aggregate industry is largely due to a legacy of poorly managed operations and countless number of abandoned, un-rehabilitated sites that have resulted in social and environmental impacts (Environmental Commissioner of Ontario [ECO], 2005; Pichette, 1995), such as dust, noise, increased truck traffic, and lowered property values.

Table 5: Summary of Rehabilitation Statistics for the Guelph MNR Manager

Date Range	Average original disturbed area (in ha per year)	Average new disturbed area (in ha per year)	Average new rehabilitated area (in ha per year)	Average proportion of the original disturbed area rehabilitated	
1992-2001	4,192	196	102	2.4%	
2002-2011	4,651	192	142	3.1%	
1992-2011	4,498	194	122	2.7%	

Table 6: Summary of Rehabilitation Statistics for the Province of On

Date Range	Average original disturbed area (in ha per year)	Average new disturbed area (in ha per year)	Average new rehabilitated area (in ha per year)	Average proportion of the original disturbed area rehabilitated	
1992-2001	22,094	1,056	461	2.1%	
2002-2011	26,428	960	691	2.6%	
1992-2011	24,983	1,008	567	2.3%	

Bond 2 million dollars, Regular inspections, performance reviews, enforcement , timelines

significant (p=0.67). This more rigorous statistical analysis of the difference between the two time periods, indicates that that the rate of rehabilitation in the Guelph MNR District has not significantly improved over the past 19 years.

"The theory is out there, but in reality, if it's going to cost the operator money to rehabilitate, they won't do it because it eats into their profits. And that's why – again, in theory, it would be nice to have financial assurances where money is put up, but small operators and mid-sized operators may not just have the cash or the means to put up a letter of credit or a bond."

"And in terms of quality, I think it depends on the regulations that are in place, the level of enforcement by the MNR – and by enforcement, somebody going out on-site and saying, "What's being done? Are you achieving any progressive rehabilitation? Are you doing it properly?"

No Responsibility. Time and cost.
Caution, Uncertainty ,High Risk to Health

conditions in connection with a property. Performance of a standardized environmental Site assessment protocol is intended to reduce, but not eliminate, uncertainty regarding the potential for recognized environmental conditions in connection with the property, given reasonable limits of time and cost. This assessment was carried out using historical data and a Site walkover. Intrusive testing is not part of the scope of this assessment.

[1] In no way will the ministry be liable for any harm, damages, costs, expenses, losses, claims or actions that may result: (a) if the Report(s) or its recommendations are discovered to be inaccurate, incomplete, misleading or fraudulent; or (b) from the issuance of this letter. Further measures may need to be taken in the event that additional artifacts or archaeological sites are identified or the Report(s) is otherwise found to be inaccurate, incomplete, misleading or fraudulent.

Public comments: Hallman Pit

REZONING FARMLAND TO AGGREGATE

Comments on Hydrological Study

and

Agricultural Impact Study

by Linda Laepple 2298 Bleams Rd

Rezoning Agricultural Land
- in the protected Countryside
- the Source water protected area
- in a Source water recharge area

Comments
Hydrological assessment

- 1. There is key information missing in the report such as:
- 1.1 The number of existing wells situated within the Jackson Harvest farm property.
- 1.2 Figure 4.2. Conceptual cross section showing area wells, does not include the boundaries of the proposed aggregate site only the pit.
- 1.3 The current state of these 10 wells is not investigated or described
- 1.4 No water samples were taken from any of these wells
- 1.5 Water level within these wells not monitored or recorded
- 1.6 There is no decommission plan or future use mentioned for those wells (some over 100 meter /330 feet deep)

2.) There is an unsupported notion throughout the study that the Regional wells draw water from a “very deep aquafer”,
but publicly available records show well depth at K50 and 51 of 130 and 131 feet, where they hit clay.

2.1 The wells are located 360m AMSL and Water level about 17m below at 343m AMSL.

The water table in the pit was established at 355m AMSL.

- The study still concluded a water flow north to south away from the Regional wells. A difference of about 12 meter. Uphill !

3. General Information on the Regional wells K50 K51 and K52 is missing:

- 3.1 There is no mention at what level the Regional wells are drawing water from.
- 3.2 No mention of the volume pumped throughout different seasons at the Regional wells.
- 3.3 No mention how the volume pumped could affect the underground lake and river flow in relation to the water under the proposed pit.
- 3.4 Available well records where not used to establish a geological cross-section of the Regional well field or the area between the proposed gravel pit and the well field.

Current Policies

- Currently, any operator licensed for an above-water-table pit can apply to extend extraction down into the water table.
- All that is required to extend the depth of extraction is a site plan amendment approved by the Ministry of Natural Resources and Forestry (MNRF).
- Such an amendment is typically circulated by the MNRF to affected municipalities, but municipalities have only a limited commenting role in the process and no right of appeal if they have any groundwater concerns.

Source: Regional Response to Provincial Policy Statement Review (ERO Posting No. 019-0279)

4. Proposed Water quality monitoring

- 4.1 In the study it is only proposed to monitor the already clean well next to the pond

- 4.2 There is no well Water Protection Program or monitoring suggested to protect the private wells of local residents.

5. The importance of the ecological function of pond on the east side of the property is not recognized.

- ***The fact that monitoring wells in the study area have shown elevated nitrate levels but in and around the pond 0 Nitrate, is proof that the ecosystem this pond represents has the amazing filter capability of cleaning hundreds of thousands of cubic meter of water, not just from Nitrates, before it feeds an underground waterbody.***

6. The Risk mitigation plan in the study from oil spills states:

- If the spill is over 80 litres of oils or 40 litres of fuel, degreasing agents, coolants or solvents, the MECP and the Region of Waterloo will be informed immediately.

The current telephone number for the MECP Spills Action Centre is 1-800-268-6060 (24 hrs) and the Region of Waterloo is 911 or 519-575-4400. Attached is the Region of Waterloo Spills Response Fact Sheet.

6.1 There is fuel storage and storage of other hazardous material mentioned in the study but no fuel storage area identified nor any mention of quantity.

- Fact is: One liter of hydraulic oil can contaminate 0ne million liter / 1000 cubic meter of groundwater.

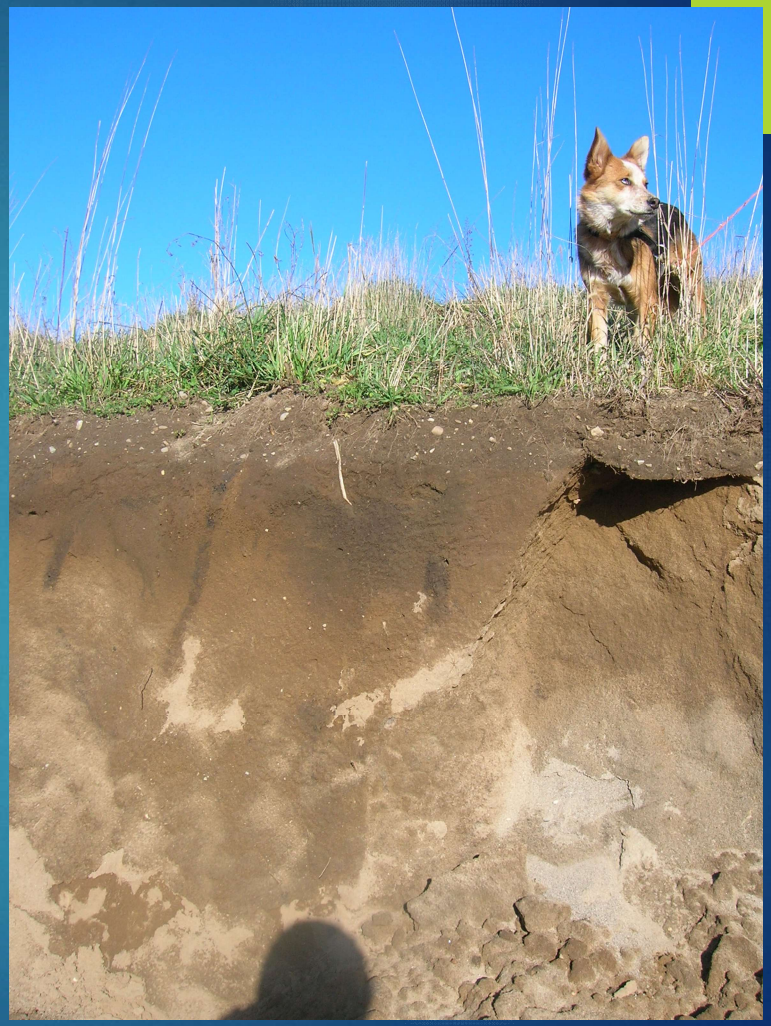
Source: British Columbia used oil management association

- Conclusion:
- **Are 79000 cubic meter of oil contaminated groundwater are really not worth reporting?**

- Footnote: In Germany motor vehicles operating in groundwater protected areas are mandated to use vegetable oil only and no onsite fuel storage or refueling is permitted.

Other missing information:

- -Timeline of operational plan, only a timeline of rehabilitation efforts once a certain area is completed.
- -A detailed cleanup plan of the existing feedlot site
- -Soil tests for hazardous substances at the existing feedlot site
- -A study how much nitrate will be released from the aggregate thru the washing process
- -Wash ponds are below water table indicate no control of hazardous liquids or leachates to go into the groundwater



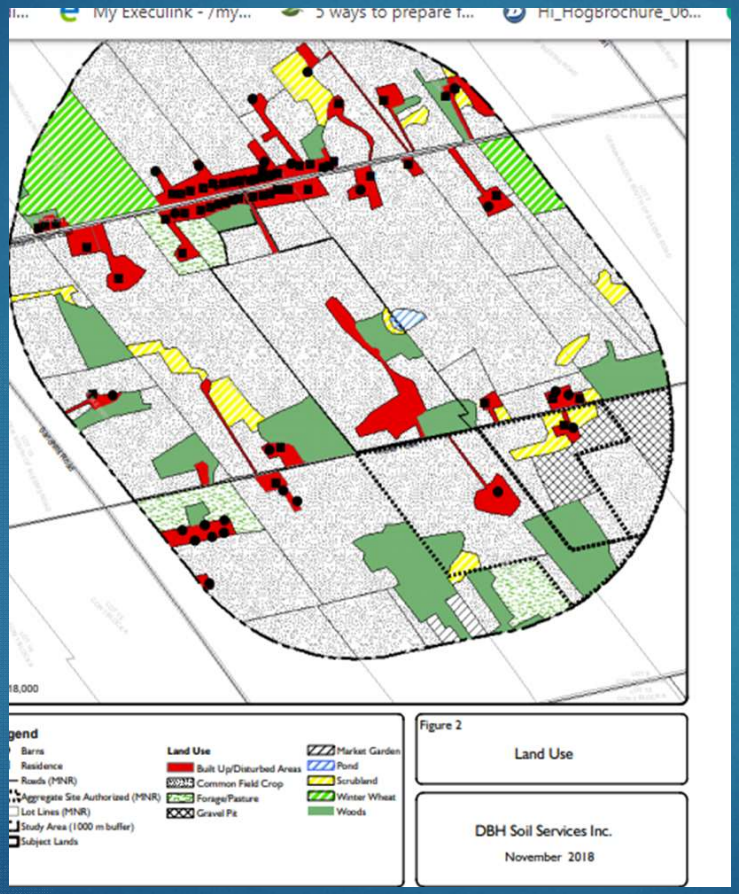
Farmland is a very limited resource

- This thin layer of productive soil is the only thing that allows for us humans to live on this planet.

B.Comments on the Agricultural impact assessment

- General comment: There is an unscientific notion echoed thru out the application assuming farming is a more harmful activity that aggregate extraction.
- Farmland is being viewed as a simple input output spread sheet.
- Farmland is not regarded as the life supporting base of mankind that we are privileged to govern over as a community here today, for just a very short time in the span of history.
- There is no mention or consideration given to new and alternative farming practices such as: Ecological farming, Regenerative farming, Organic farming or Bio-Dynamic farming,

B.1 The crop map shows obvious errors.



The crop map copied from the study shows winter wheat for my entire farm within the study area along 2298 Bleams Road. This is simply not true as we do no monoculture and anyone driving Bleams Rd can attest that the majority of my land is in forage particular next to the Regional Wells.
There was never winter wheat from Shingletown all the way to the wells in the past 25 years.

- The crop survey states:
- A windshield survey identified the types of land uses.
- Agricultural cropping patterns were identified and mapped. Corn and soybean crops were
- mapped as 'common field crops'. Small grains are typically characterized as including winter
- wheat, barley, spring wheat, oats and rye, but for the Study Area only winter wheat was
- observed. Forage crops may include mixed grasses, clovers and alfalfa. Other areas used for
- pasture, haylage or hay were mapped as 'forage/pasture'.

Main shortcomings of Agricultural Impact assessment:

- Incorrect map
- Little research on existing environmental impact from past feedlot operation
- Underground liquid manure distribution systems not mentioned or location identified
- Fallout from exploded Biogas plant and Protein recovery experiment using processed manure foam as a feed source not researched
- State of agricultural ruins and onsite wells drilled prior the study period not mentioned

Recommendation:

- All maps and assumptions made in the application need to be verified for accuracy.

B.2 Rehabilitation

a. Provincial Policies regarding rehabilitation are very vague

- Source: Provincial Policy book:
- 2.5.4 Extraction in Prime Agricultural Areas
- 2.5.4.1 In prime agricultural areas, on prime agricultural land, extraction of mineral aggregate
- resources is permitted as an interim use provided that the site will be rehabilitated back to an
- agricultural condition.
- **Complete rehabilitation to an agricultural condition is not required if:**
- a) outside of a specialty crop area, **there is a substantial quantity of mineral aggregate resources below the water table warranting extraction,** or the depth of planned extraction in a quarry makes restoration of pre- extraction agricultural capability unfeasible;
- b) in a specialty crop area, there is a substantial quantity of high quality mineral aggregate
- resources below the water table warranting extraction, and the depth of planned extraction
- makes restoration of pre- extraction agricultural capability unfeasible;

C Final overall Risks identified:

- 1. Economic failure due to aggregate oversupply, bankruptcy and abandonment of the pit.
- 2. Human error in identifying and judging oil spills and errors in the cleanup phases.
- 3. Wash pond location, planned to sit below water table near the already contaminated area of the former manure storage and bunk silo sites.
- 4. Well water contamination of private and public wells.
- 5. Future permits to expand. Example: A permit from the Province could be granted in the future (not requiring local approval under current policies) to dig below the Water table.
- 6. The risk of ownership transfer to a more aggressive operator.

Final Recommendation:

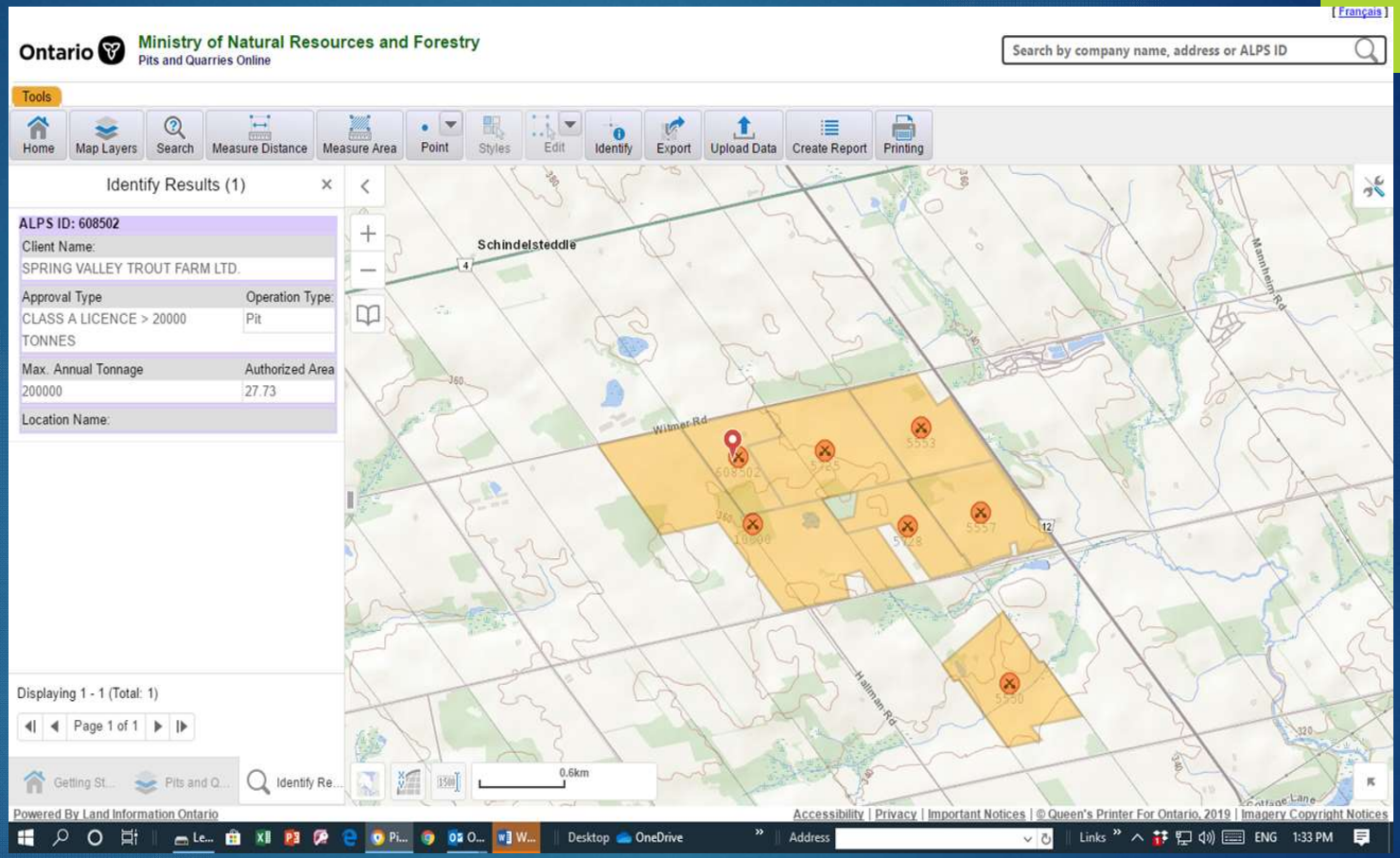
- I recommend that the Township turn down the rezoning application from agriculture to aggregate extraction that would allow the development of the proposed Hallman Pit and:
- As a current policy committee member of the Ontario Farmland Trust and having served in recent years as President of the Waterloo Wellington Local of the National Farmers Union and Women's advisor for the NFU-Ontario:
- I further recommend that the Township work with the Universities and other stakeholder in efforts to research and document the de-commissioning of the contaminated former feed lot site and support efforts to rehabilitate the abused lot to turn the land once again into an active, vibrant and educational farm as the Company name Jackson Harvest Farm suggests.

The question to take home:

- Who gave us the right to treat this Planet the way we do?
- The right to extract its resources at a speed as if there is NO tomorrow?

End of former presentation

Local Demand?



There are a combined 1.979 Million annual tonnage licensed on Wittmer road alone. This fact does not demonstrate a need for more.

Land use planning policies in Ontario protect a great deal of farmland. The reality, however, is that we continue to **lose 175 acres of farmland every day in Ontario**, and we're losing our best, most productive agricultural soils the fastest.

In fact, between 1976 and 2016 Ontario lost 20% of its farmland.

Source:

Ontario Farmland Trust
c/o University of Guelph
School of Environmental Design & Rural Development
Guelph, ON, Canada N1G 2W1

Statistics Canada, Census of Agriculture – 1976-2006
Statistics Canada, Census of Agriculture – 1996-2016

Existing Ontario Government Policies
Surface Water Quality Management - Areas with Water Quality Not Meeting the Objectives (3.2.2)
Policy 2
"Water quality which presently does not meet the Provincial Water Quality Objectives shall not be degraded further and all practical measures shall be taken to upgrade the water quality to the Objectives."
Evaluations of existing conditions in problem areas shall be conducted and all reasonable and practical measures shall be taken to upgrade water quality to the Provincial Water Quality Objectives. Where new or expanded discharges are proposed, no further degradation will be permitted and all practical measures shall be undertaken to upgrade water quality.

The Stantec report finds that aquifers AFB1 and AFB2 beneath the Hallman Pit are separated by aquitard ATB2. However, ATB2 is absent in the vicinity of K51/K52/K50 and the two aquifers beneath the Hallman Pit are geologically connected to the water producing zone in the wellfield.

Value of Wilmot Center Well field

– 150l/s 3 million cubic a year

- Waterloo Region Residents pay about $ 6 Million every year for Water coming from this Wellfield
- The volume pumped is equal to the flow rate of the Ninth River at the Ninthburg GRCA monitoring station on a average summer day.
- The hydrological study does not consider the flow rate or direction near the WCWF

Will there be demand for gravel ?

What are the risks of oversupply?

Was the site chose mainly due to the availability of an abundant water supply and the ability to wash gravel in the water table ?

Are there any alternatives to gravel ?

We need growth
Economic and otherwise

We do need development, just like any human body that will grow up, grow mature and grow wise.
But uncontrolled, unguided, unnatural development is called cancer and applies to body of our community just as well.

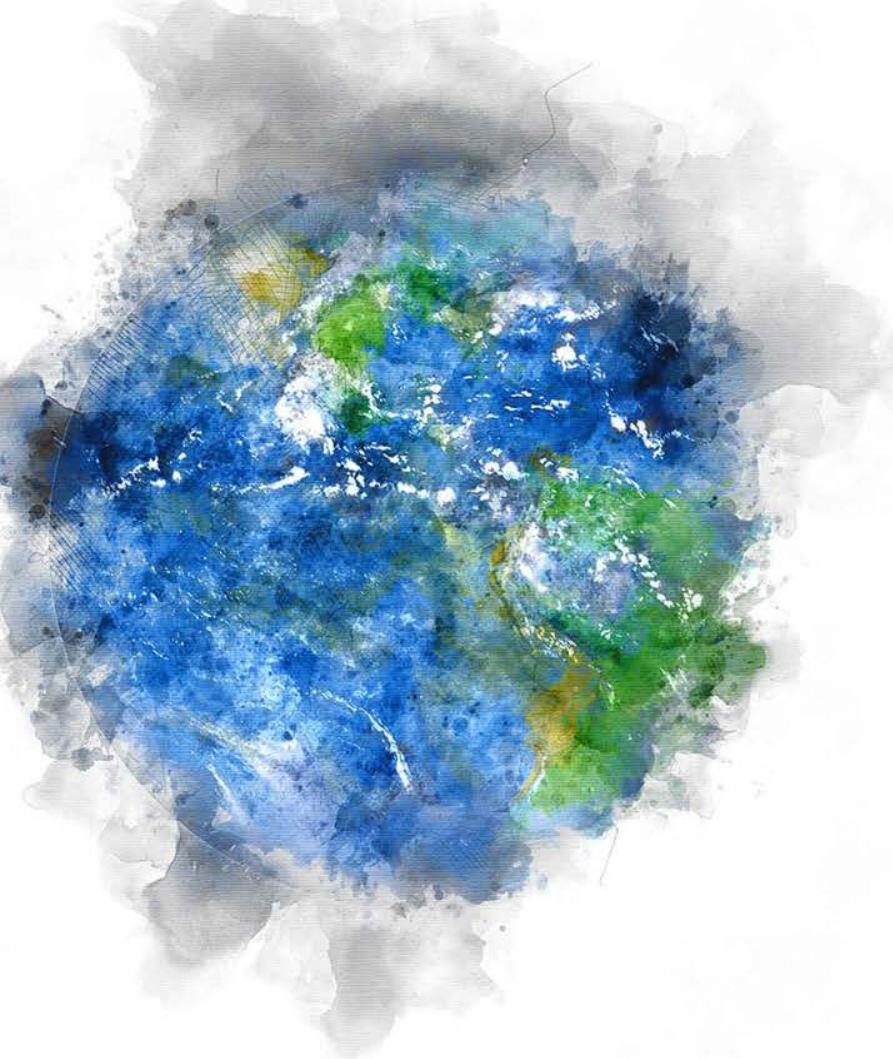
Are we willing to risk cancerous developments when nature and science offer alternative technology ?

WOOD
CUBE

Just because the experts, hired by the applicant, only had a mandate to look at certain areas within their expertise, doesn't mean the shareholders of Jackson Harvest can't see the whole picture and realize the potential of the property beyond gravel.

Hallman pit lands potential for the benefit of our community, the agricultural sector and aiding ground water protection efforts.

- As a farm, an educational farm
- A regenerative demonstration farm
- A research site documenting decommissioning of a large feedlot
- A research site for concrete recycling
- A site to grow food and much more



A presentation in objection to The Hallman Pit and for the Protection of Our Community

Christina Harnack January 2020

Welcome to the Township of WILMOT

A-Z Services | Feedback

I'd Like to... | What are you looking for?

Living Here | Things to Do | Doing Business | Township Office

Council Accountability

More

A A A | SHARE

Home / ... / Council and Committees / Council / Council Accountability

The Council of The Township of Wilmot acknowledges that it is responsible to provide good government in an accountable and transparent manner by:

- Encouraging public access and participation so that decision making is responsive to the needs of the citizens and receptive to their opinions;
- Delivering high quality services to our residents and business owners, and;
- Promoting the efficient use of public resources.

Accountability, transparency and openness are achieved through the municipality adopting measures ensuring, to the best of its ability, that all activities and services are undertaken using a process that is open and accessible.

Quick Links

- A-Z Services
- Applications, Licences and Permits
- Council and Committees
- News and Public Notices
- Message from the Mayor
- Taxes
- What We Do

I object to the Hallman pit for several reasons.

I am concerned about:

- Our Water Safety
- Toxic Pollution
- Contamination
- Negative Effects on the Environment
- Climate Change

Wilmot Region: Our community for generations to come

TOWNSHIP OF WILMOT

MEDIA RELEASE

Wilmot Township Council Approves Climate Emergency Declaration

Baden, ON - At the September 23rd Council meeting, the Township of Wilmot took another solid step forward in continuing its efforts to promote sustainability by joining government agencies in the declaration of a climate emergency.

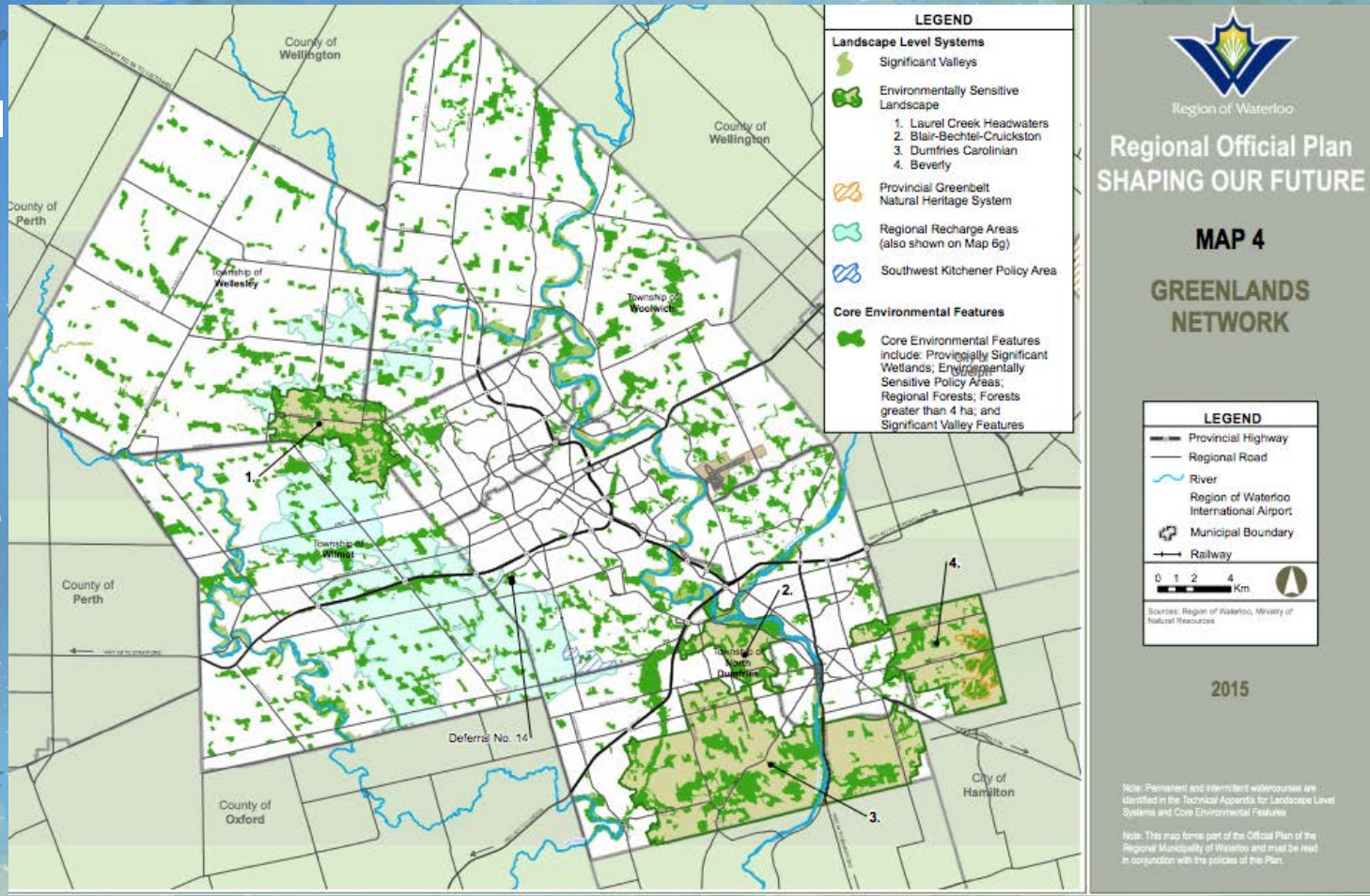
Over the past few months, Kai Reimer-Watts and Andreas Fuentes from the Climate Emergency Declaration Group Waterloo Region have been working with area municipalities on formulating resolutions in support of the Climate Emergency Declaration.

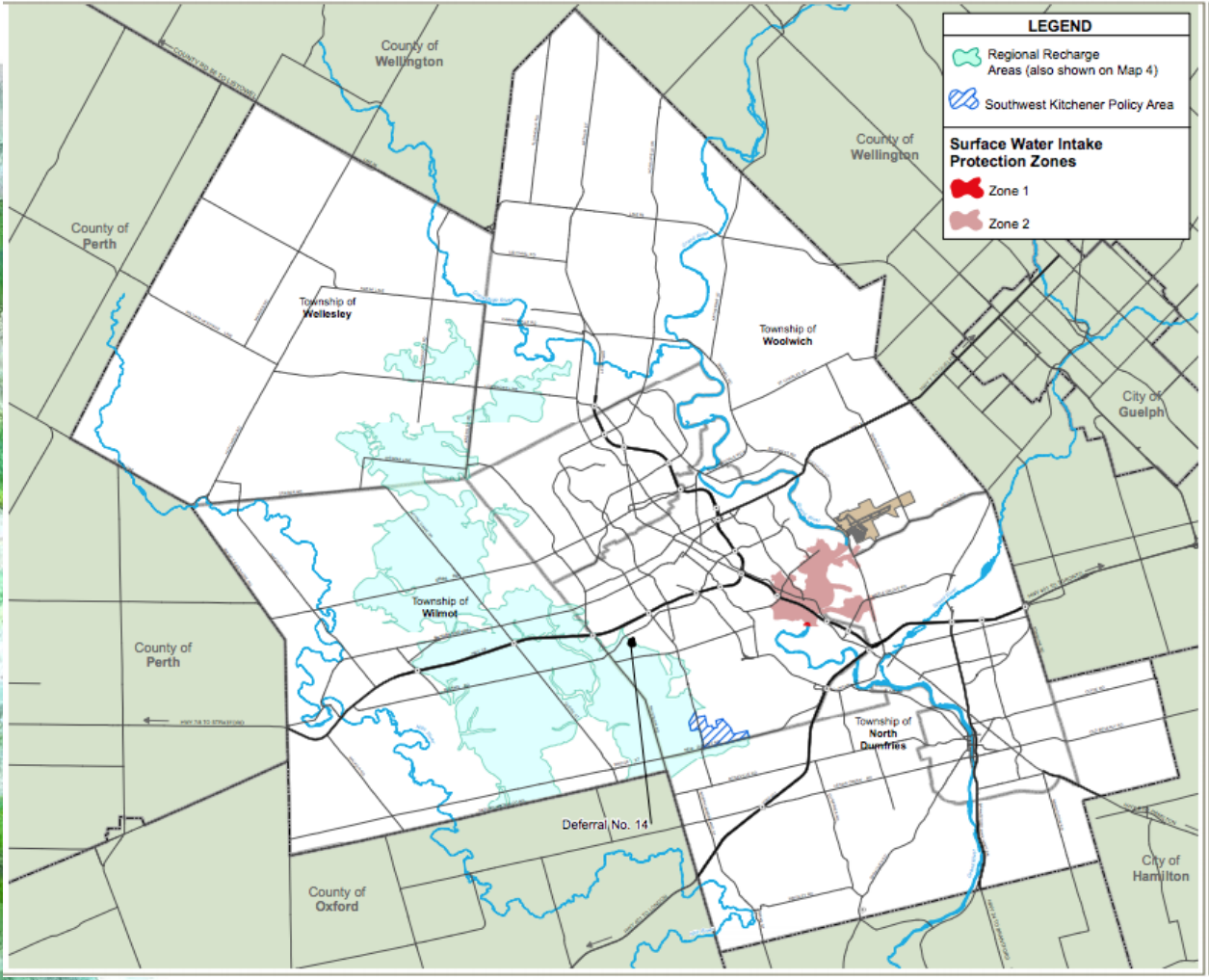
Data provided by Mr. Reimer-Watts and Mr. Fuentes indicates that municipalities are significant contributors to climate change, consuming more than 2/3 of the world's energy and accounting for more than 70% of its carbon emissions.

The Township of Wilmot has an absolute Green House Gas (GHG) emissions target reduction of 25% from 2012 levels by 2027, and has already reduced its GHG emissions by approximately 19.6% or 330 tons since 2012.

Regional Official Plan:

Wilmot Region is identified as Regional Recharge Area





Region of Waterloo

Regional Official Plan
SHAPING OUR FUTURE

MAP 6g

OTHER SOURCE WATER PROTECTION AREAS

LEGEND

- Provincial Highway
- Regional Road
- River
- Region of Waterloo International Airport
- Municipal Boundary
- Railway

0 1 2 4 Km

Sources: Region of Waterloo

2015

Note: This map forms part of the Official Plan of the Regional Municipality of Waterloo and must be read in conjunction with the policies of this Pan.

Regional Official Plan

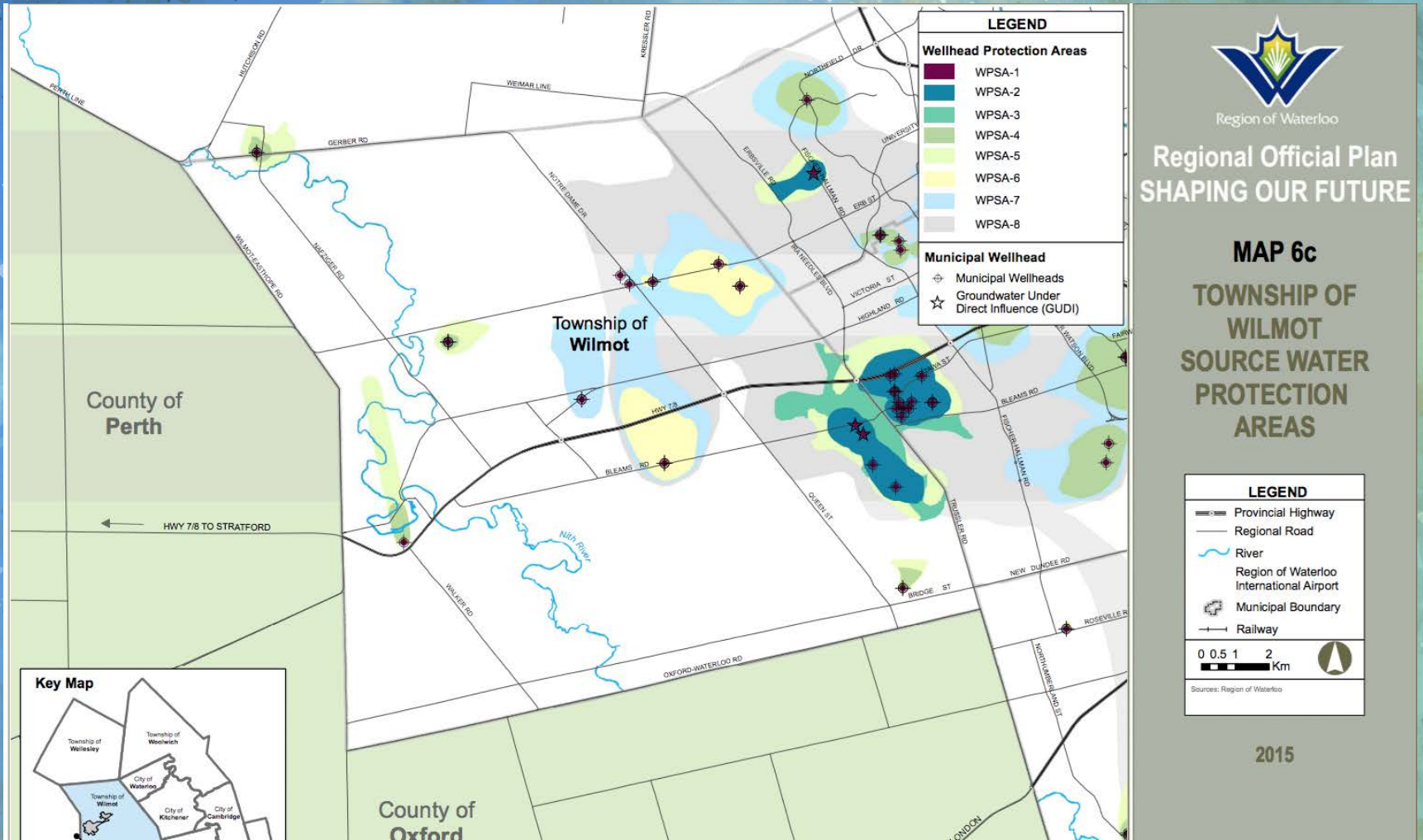
8. Source Water Protection

Waterloo Region is unique in Ontario in that it is the largest urban municipality to rely almost exclusively on groundwater supplies for its drinking-water. Approximately three quarters of all the region's drinking-water comes from the over one hundred municipal wells, many of which tap into rich aquifers sustained by the Waterloo Moraine. The remaining quarter of the region's drinking-water is drawn from the Grand River. Protecting these valuable water resources from contamination and from land uses that could hinder groundwater recharge is essential to maintaining human health, economic prosperity and a high quality of life in the region.

Def. No. 1

The *Province* has recently emphasized the importance of protecting the *municipal drinking-water supply system* by way of land use planning decisions, through changes to the Provincial Policy Statement. The importance of protecting the *municipal drinking-water supply system* is also underscored by the enactment of the Safe Drinking Water Act and the Clean Water Act. The Region's role in implementing Provincial policy, places an obligation on the Region to make land use planning decisions consistent with the Provincial Policy Statement's direction to protect the quality and quantity of drinking-water resources in the region, and to limit *development* and *site alteration* that could adversely affect drinking-water supplies drawn from both the Grand River and groundwater resources. Waterloo Region's continued long-term reliance on groundwater resources necessitates a high priority be placed on protecting this valuable resource through land use management.

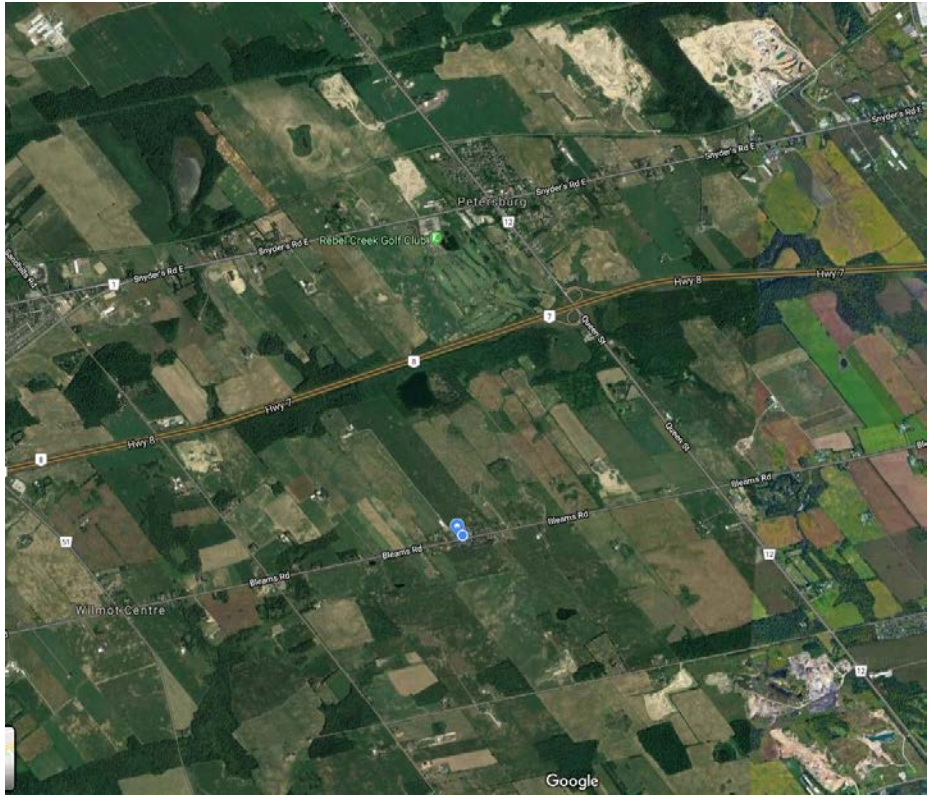
Wellhead Protected Areas



“The Township of Wilmot has an absolute Greenhouse Gas (GHG) emissions target reduction of 25% from 2012 levels by 2027”.

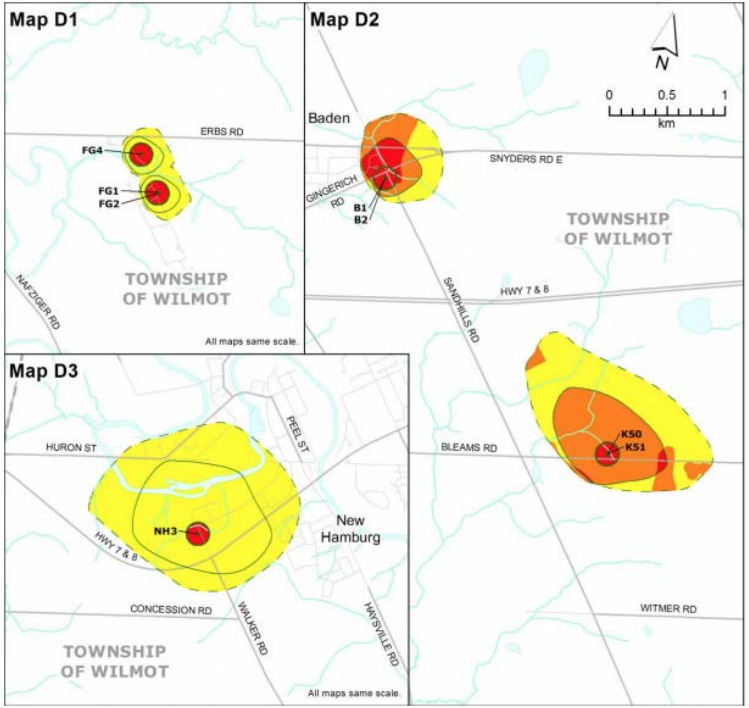
How will rezoning this property for industrial extraction help the Township meet this target? Or rather, how will this gravel pit prevent the Township from meeting this target?

Satellite image of some of Wilmot Region's existing Gravel Pits



Drinking Water Source Protection Plan

10.10 Schedule E: Regional Municipality of Waterloo: Township of Wilmot Well Fields Maps D1, D2 and D3



DRINKING WATER SOURCE PROTECTION
ACT FOR CLEAN WATER

Significant Drinking Water Threat Policy Applicability

	Significant Drinking Water Threat Policy Categories	Vulnerability Scores on Map		
		10	8	2,4,6
1.	Waste Disposal			
2.	Sewage Systems			
3, 4.	Agricultural Source Material			
6, 7.	Non-Agricultural Source Material*			
8, 9.	Commercial Fertilizer*			
10, 11.	Pesticide			
12, 13.	Road Salt*			
14.	Storage of Snow			
15.	Fuel			
16.	DNAPLs			
17.	Organic Solvents			
18.	Aircraft De-icing			
21.	Livestock Area			
Local Threat	Oil Pipelines			

Note: This table provides a summary of the activities listed in the Clean Water Act (2006) that apply as Prescribed Drinking Water Threats (PDWT) within the Non-GUDI Wellhead Protection Zones shown on this map. For details refer to the text of the Source Protection Plan and the Ministry of the Environment Drinking Water Threats Tables.
*Application of Commercial Fertilizer, Non-Agricultural Source Material, and Road Salt may not be a significant drinking water threat in some areas due to the % managed land, livestock density, and/or % impervious surface calculations for these areas. See the text of the plan for further details.

- Well
- Main Road
- Minor River
- Lake / Main River
- Lower Tier Boundary

Wellhead Protection Zones:
- WHPA-A
- WHPA-B
- WHPA-C

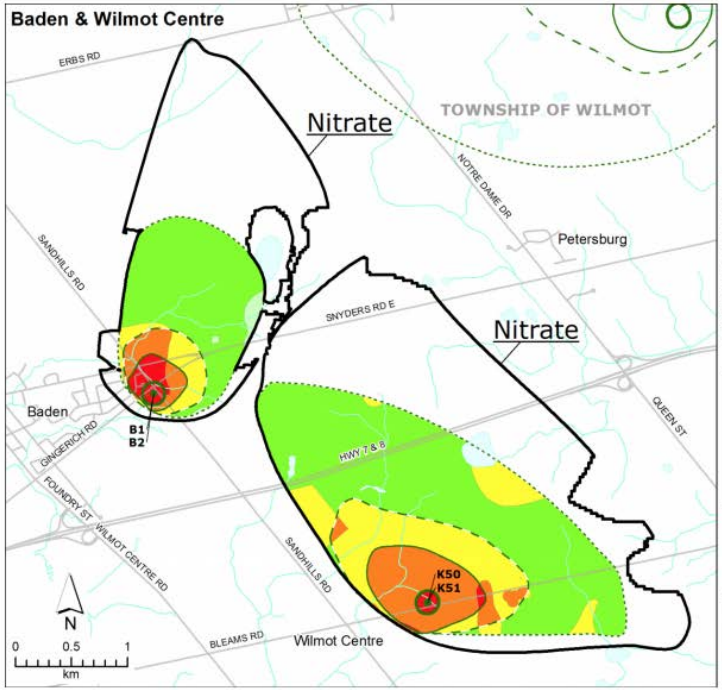
Ontario

Grand River Conservation Authority

1. Updated November 6, 2014
2. Larger scale mapping of some map layers, including roads and vulnerability scores, is available at www.sourcewater.ca.
3. This map is for illustrative purposes only. Information contained hereon is not a substitute for professional review or a site survey and is subject to change without notice. The Grand River Conservation Authority takes no responsibility for, nor guarantees, the accuracy of the information contained on this map. Any interpretations or conclusions drawn from this map are the sole responsibility of the user.

Significant Drinking Water Threat Policy Applicability

10.21 Schedule P: Regional Municipality of Waterloo: Baden and Wilmot Centre Issue Contributing Areas



DRINKING WATER SOURCE PROTECTION
ACT FOR CLEAN WATER

Significant Drinking Water Threat Policy Applicability

Significant Drinking Water Threat Policy Categories	Identified Issue			
	Chloride	Nitrate	Sodium	TCE
1. Waste Disposal		✓		✓
2. Sewage Systems	✓	✓	✓	✓
3, 4. Agricultural Source Material		✓		
6, 7. Non-Agricultural Source Material		✓		
8, 9. Commercial Fertilizer		✓		
12, 13. Road Salt	✓		✓	
14. Storage of Snow	✓	✓	✓	
16. DNAPLs				✓
21. Livestock Area		✓		

Note: This table provides a summary of the activities listed in the Clean Water Act (2006) that apply as Prescribed Drinking Water Threats (PDWT) in the Issue Contributing Area(s) shown on this map. For details refer to the text of the Source Protection Plan and the Ministry of the Environment Drinking Water Threats Tables.

Well with Identified Issue(s)
Roads
Minor Rivers
Lakes / Main Rivers
Baden & Wilmot Centre Issue Contributing Areas

Zone Type: A B C D

Vulnerability Score: 2 4 6 8 10

Issue — Associated Issue Parameter

Ontario

Grand River Conservation Authority

1. Updated November 7, 2014
2. Larger scale mapping of some map layers, including roads and vulnerability scores, is available at www.sourcewater.ca.
3. This map is for illustrative purposes only. Information contained hereon is not a substitute for professional review or a site survey and is subject to change without notice. The Grand River Conservation Authority takes no responsibility for, nor guarantees, the accuracy of the information contained on this map. Any interpretations or conclusions drawn from this map are the sole responsibility of the user.

The site for the Hallman pit is currently zoned as “Prime agriculture” and is protected under the “Protected Countryside Policy”, the “Clean Water Act”, and “Source (Water) Protection Policy”.

Mr. Esbaugh cannot prove beyond a reasonable doubt that he will have no negative impact on our water, environment, roads, mental health, community or on Greenhouse Gas Emissions. The approval of this rezoning has great stakes and is not worth the risks.

I am asking that you be bold, and take action on climate change in very tangible ways. In this case, this is not allowing 1922 Witmer road to be rezoned for aggregate extraction. I am asking that you be accountable, creative, responsible, curious, and a leader towards a healthier and more sustainable future for Wilmot region.

We are able to make responsible decisions in protecting our Source Water Protected areas and our environment in response to the Township's declaration of a Climate Emergency. This is important today and for generations to come.

Thank you

#StoptheHallmanPit

Extended Press Coverage

RECORD

MONDAY, AUGUST 12, 2019

SERVING KITCHENER, WATERLOO, CAMBRIDGE AND THE TOWNSHIPS

The Record.com — INVESTIGATE. REPORT. EFFECT CHANGE. — WATERLOO REGION'S TRUSTED NEWS SOURCE FOR OVER 140 YEARS | EST. 1878

Residents fear proposed gravel pit could threaten drinking water

Traffic and noise would transform quiet area, group says

CATHERINE THOMPSON
Waterloo Region Record

WILMOT TOWNSHIP — A group of Wilmot Township residents say they're worried a proposed gravel pit could threaten two wells that are part of the region's drinking water supply.

A landowner notified the neighbours earlier this year that he intends to apply for permits to extract gravel from an 81-hectare lot he owns along Witmer Road, a township road south of Petersburg.

Residents say they're not opposed to gravel pits — there are a couple of others operating on the south side of the same road.

But they fear this new proposal

Wilmot residents Rory Farnan and his son Michael Farnan, David Bricker and

A wall full of memories of those far away

Memorial reflects changing nature of First Mennonite congregation, members say

CATHERINE THOMPSON
Waterloo Region Record

KITCHENER — It's a quiet corner outside First Mennonite Church, with a multitude of flowers, a stone bench for sitting and re-

570 NEWS

CTV NEWS KITCHENER

New Hamburg Independent.ca

MUCH MORE ONLINE ANYTIME. NewHamburgIndepend

IMPACTING YOUR COMMUNITY

'ONE GUY'S GOING TO BENEFIT, NO ONE ELSE'

NAMISH MODI
nmodi@waterloochronicle.ca

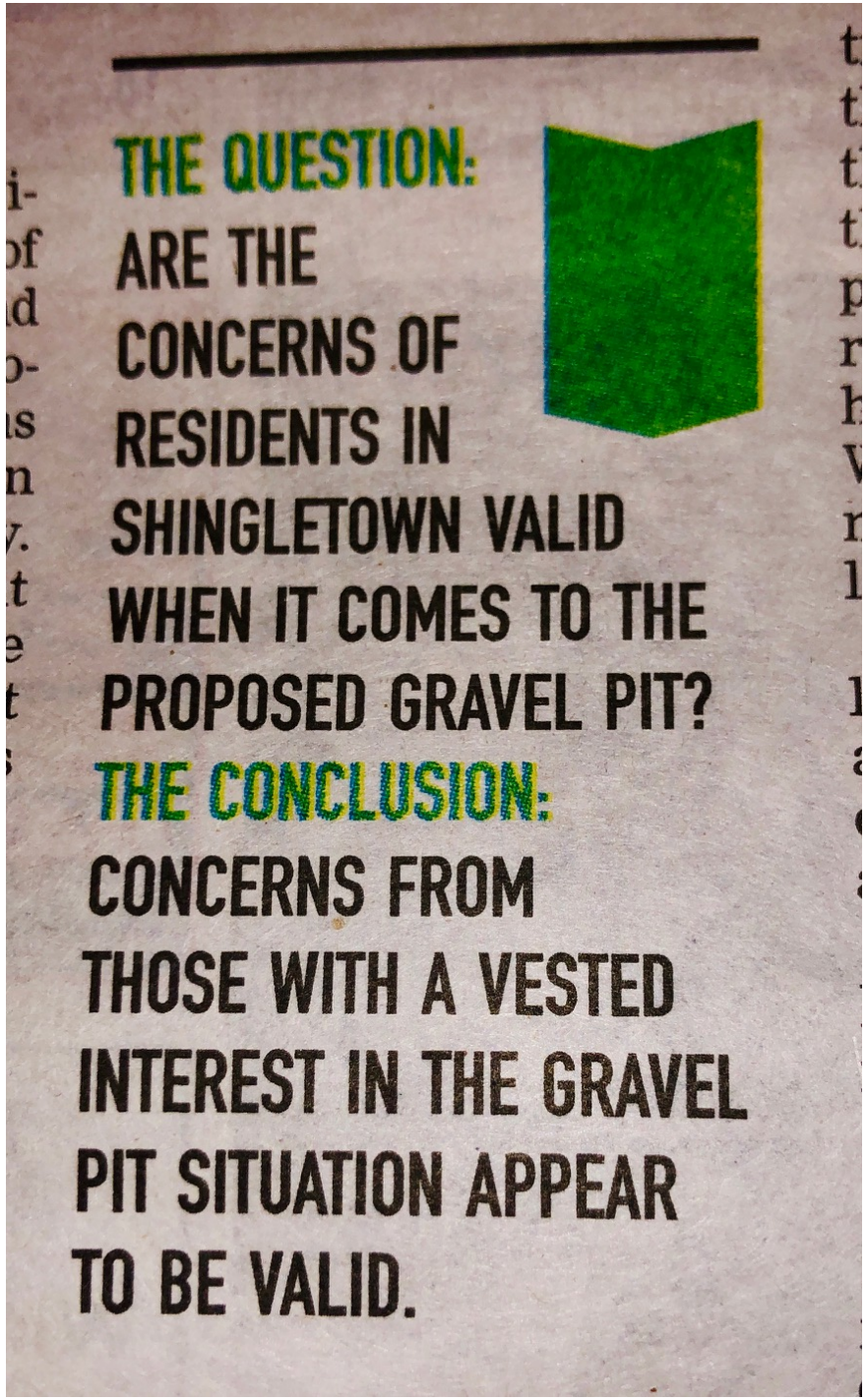
On a lengthy list of concerns, Linda Laepple cites drinking water and road safety as most pressing when it comes to the potential for a large gravel pit in Shingletown.

Laepple and her family have owned Laepple Organic Farm at 298 Bleams Rd. for the past 21 years after immigrating from Germany, and they are heavily opposed to the notion of a gravel pit that would be just under two kilometres southeast of their 187-acre property.

The landowner of 1894-1922 Witmer Rd., Jackson Harvest Farms, officially filed for a zone change from agricultural to aggregate in early November. Rick Asbaugh, president of aggregate supplier company Tri-City Materials in Petersburg, filed the application.

Aggregates are a non-renew-

Linda Laepple, whose family has owned



THE QUESTION:

ARE THE CONCERNS OF RESIDENTS IN SHINGLETOWN VALID WHEN IT COMES TO THE PROPOSED GRAVEL PIT?

THE CONCLUSION:

CONCERNS FROM THOSE WITH A VESTED INTEREST IN THE GRAVEL PIT SITUATION APPEAR TO BE VALID.

Ours to Protect!

Waterloo Region Record Cover Story

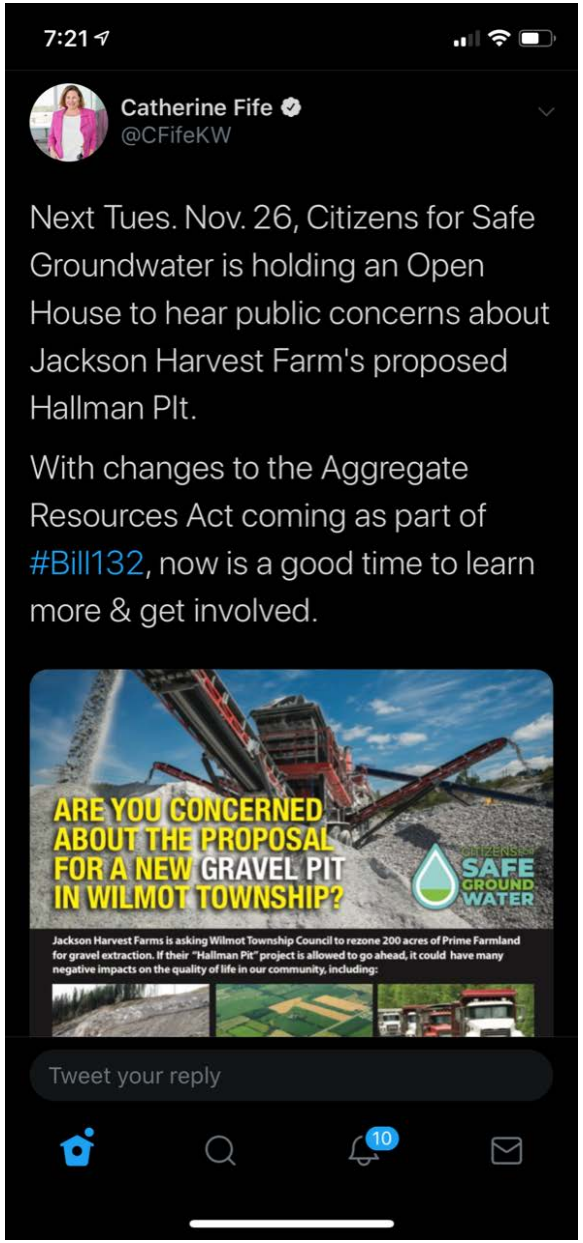
Meeting with Mike Harris Jr.

Speaking at Regional Council

GRCA Meeting

Citizen Meeting at the WRC

Standing Committee on Bill 132 London Delta Armories



Applicant's Public Meeting

This Is Wilmot?

New Hamburg Independent Poll

BUILDING A SURE FOUNDATION

Outline

1. Water
2. Need
3. Conclusion

The picture can't be displayed.

While recognizing the need for aggregate, I believe that the protection of our environment and water supply is top priority.

“Yes, we need aggregate. But more than that, we need clean water.”

Emil Frend, Phd, MSc, BSc

Distinguished Professor, Groundwater, University of Waterloo

Images from google maps

Wilmot Official Plan

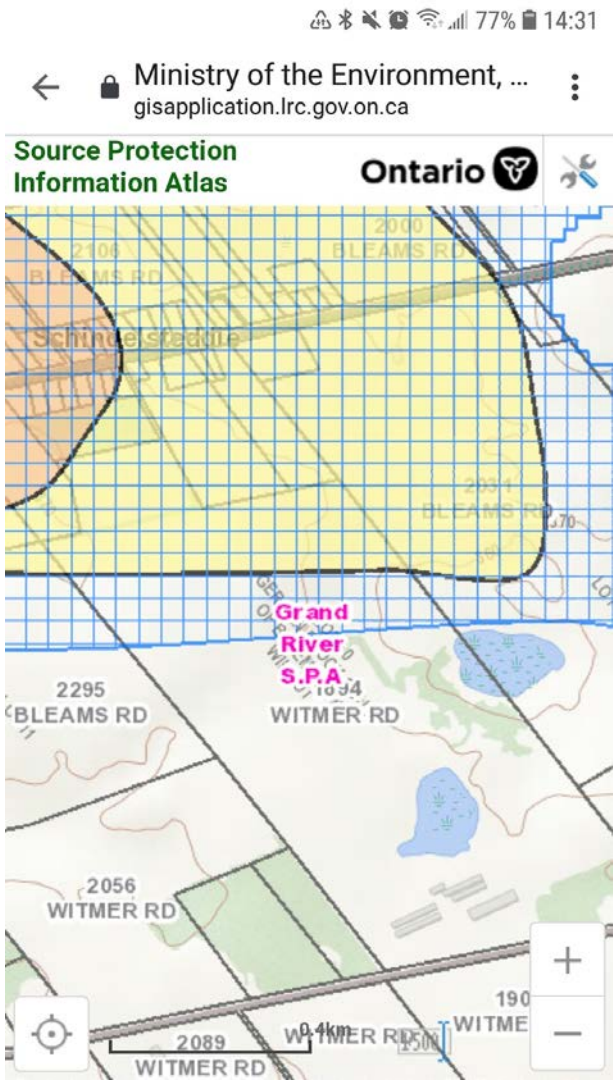
“a hydrogeological study in accordance with the provisions of the Regional Implementation Guideline for Source Water Protection Studies, demonstrating, to the satisfaction of the Region, that the proposed operation will have **no negative impacts** on the **quality and quantity of water;”**

Municipal Wells (K-50, K-51)

Responsibility of applicant
to ensure there are
NO NEGATIVE IMPACTS
to

1. Water quantity
2. Water quality and safety

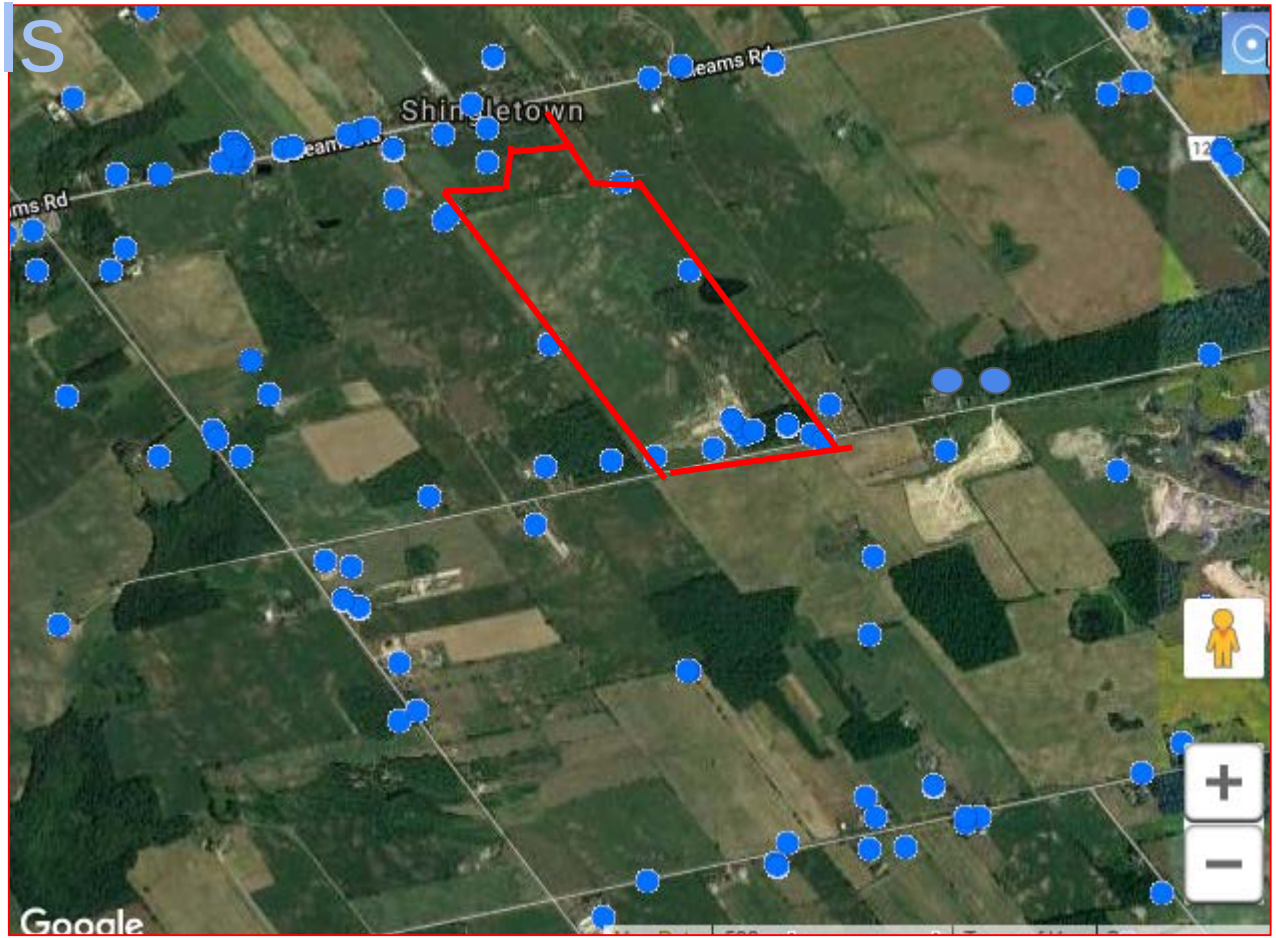
- **Region of Waterloo** Internal Review ***in progress*** to assess impact to municipal wells (K-50, K-51)
  - protective clay layer
  - Location/depth of well
  - Pumping tests
  - More years of data collection



Private Wells

Responsibility of applicant to ensure there are NO NEGATIVE IMPACTS

1. Water quantity
2. Water quality and safety



Water Quality and Safety

Illustration of the filter

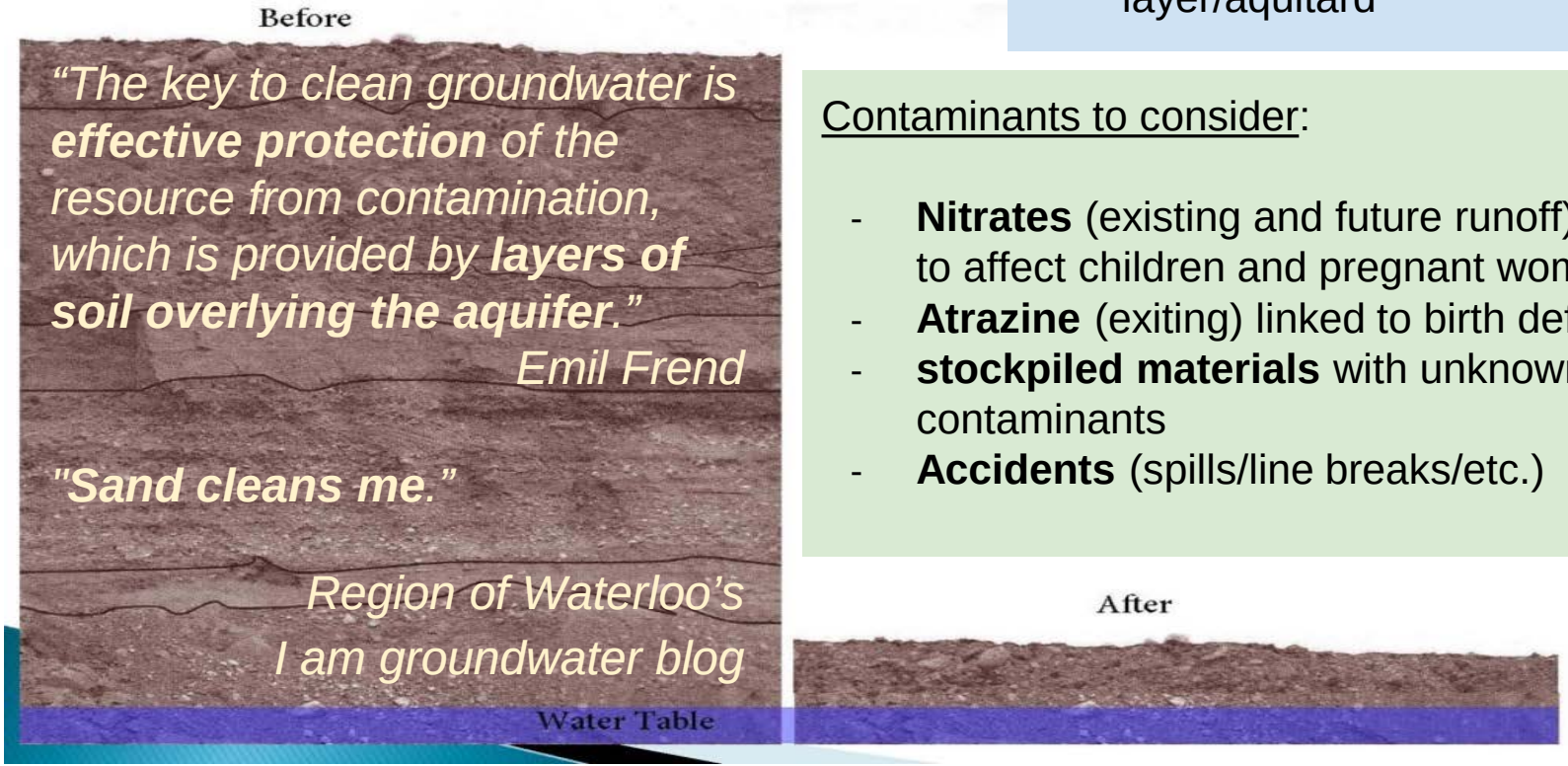


Image for illustrative purposes only. We are in the process of investigating the layers of this property, from CCBC

Concerns

1. Reduced (natural capital) filtration
2. Increased transfer rate
3. Risk of breaking through protective clay layer/aquitard

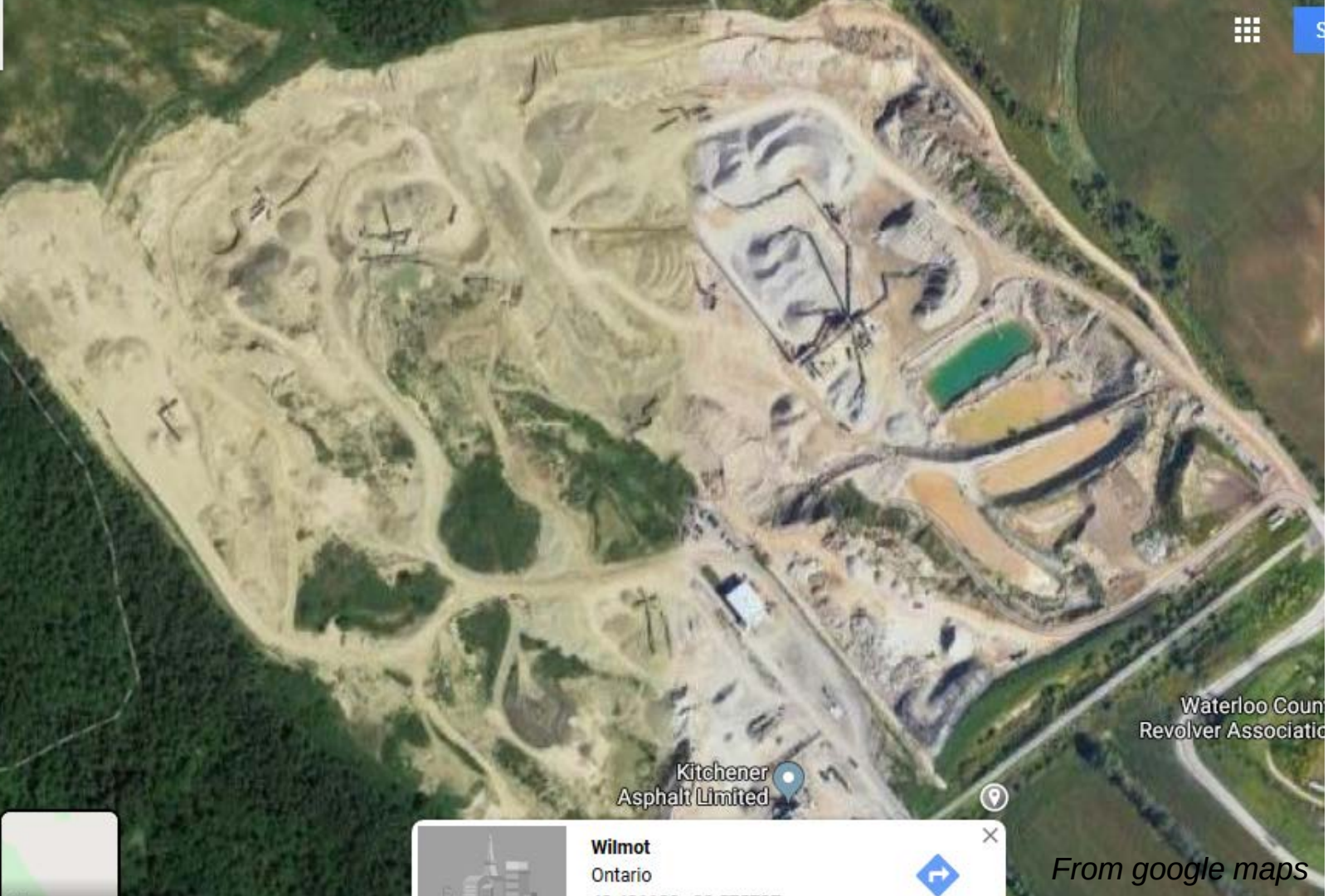
Contaminants to consider:

- **Nitrates** (existing and future runoff) recognized to affect children and pregnant women
- **Atrazine** (exiting) linked to birth defects
- **stockpiled materials** with unknown possible contaminants
- **Accidents** (spills/line breaks/etc.)

From google maps

From google maps

Accessory uses

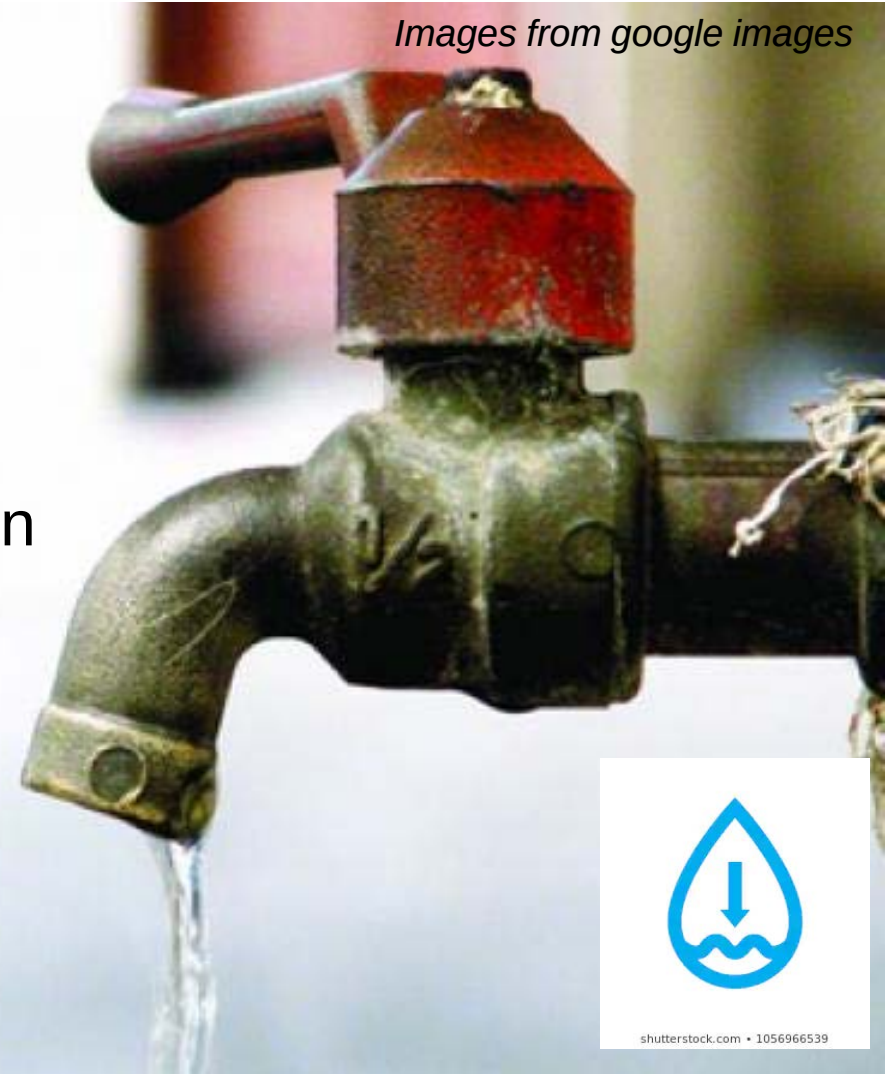


From google maps

Images from google images

Permit to Draw Water

- Region has **reduced** per capita water use by **50%**
- The average **household** in Waterloo uses **0.7**m3/day
- Region's **demand** for groundwater will **grow**
- **'Climate Emergency'**



Images from google images

Permit to Draw Water

- **Wash ponds** use ***277**m3/day
- **Dust mitigation** uses **?**

=396

=?

Has this impact been addressed with projected growth and demand considered?

https://www.groundwater.org/get-informed/groundwater/overuse.html

*estimated consumption of 66,750 m3 of water per year pg.16, based on water use during April-November operational season, 7 days a week

Surface Water

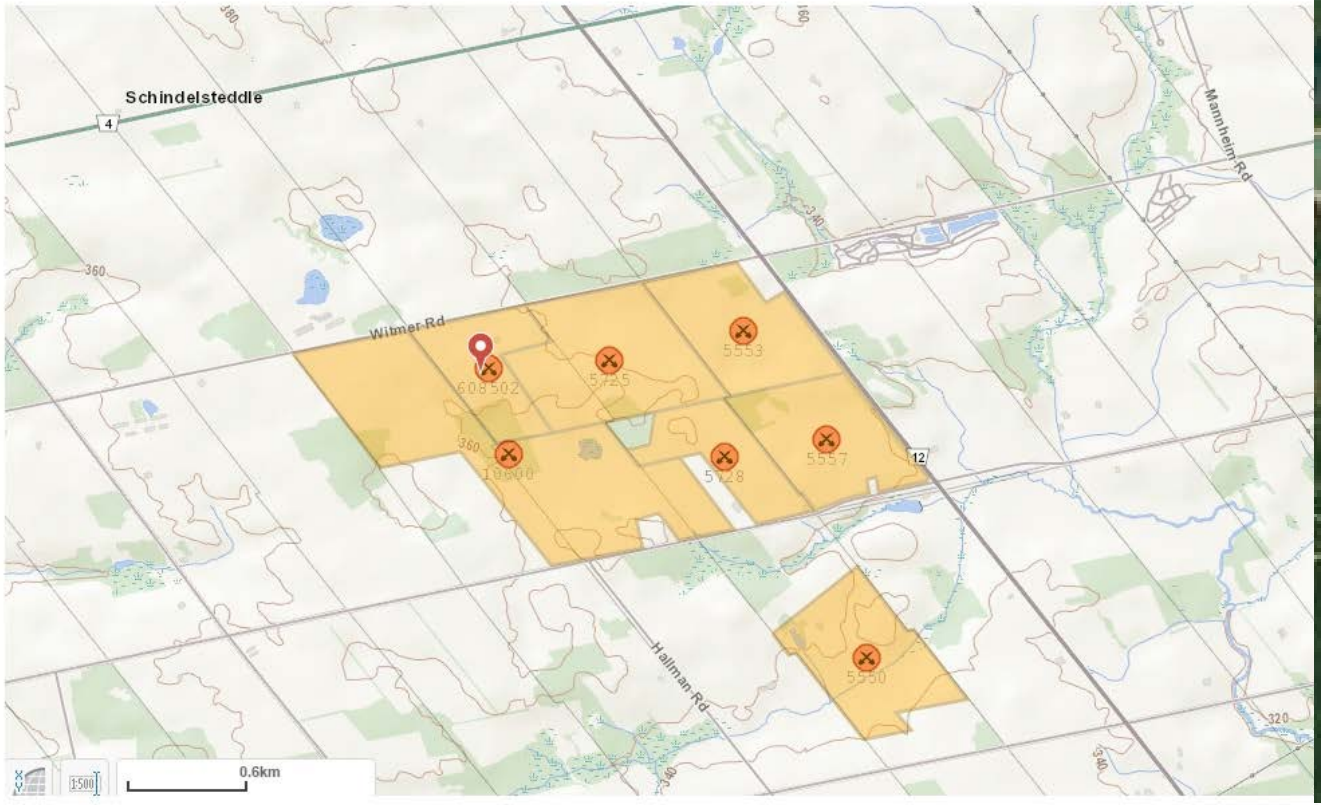
Provincially Significant Wetland

6.2 POTENTIAL LONG-TERM WATER BALANCE CHANGES The proposed aggregate extraction will alter the topography of the site including the catchment area of the on-site wetland.

What about DURING the operation of the pit?

Cumulative Impacts

to Water Quality and Safety, Dust and Noise **7.2.4.3**



What if groundwater is contaminated?

"The fig leaf of remediation is not enough – often remediation is NOT economically feasible, so nothing is done." *Emil Frend*

Precautionary Principle

- **No acceptable risk** when it comes to **water**

Climate Emergency

"Somebody must take responsibility for any decision made about the long term term (50 – 100 years) groundwater quality"

Douglas Huber (P.Geo)

Image from google images

“The MNRF does not have the time or resources to enforce the industry and in the lack of enforcement, there is a breakdown in the system and the regulations.”

Sue Foxton (Mayor of North Dumfries, Co-chair of TAPMO/OSSGA Committee)

BILL 132

Takes away more precautionary controls from municipalities in respect to groundwater protection*

Images from google images

A Time of Need

Provincial Need?

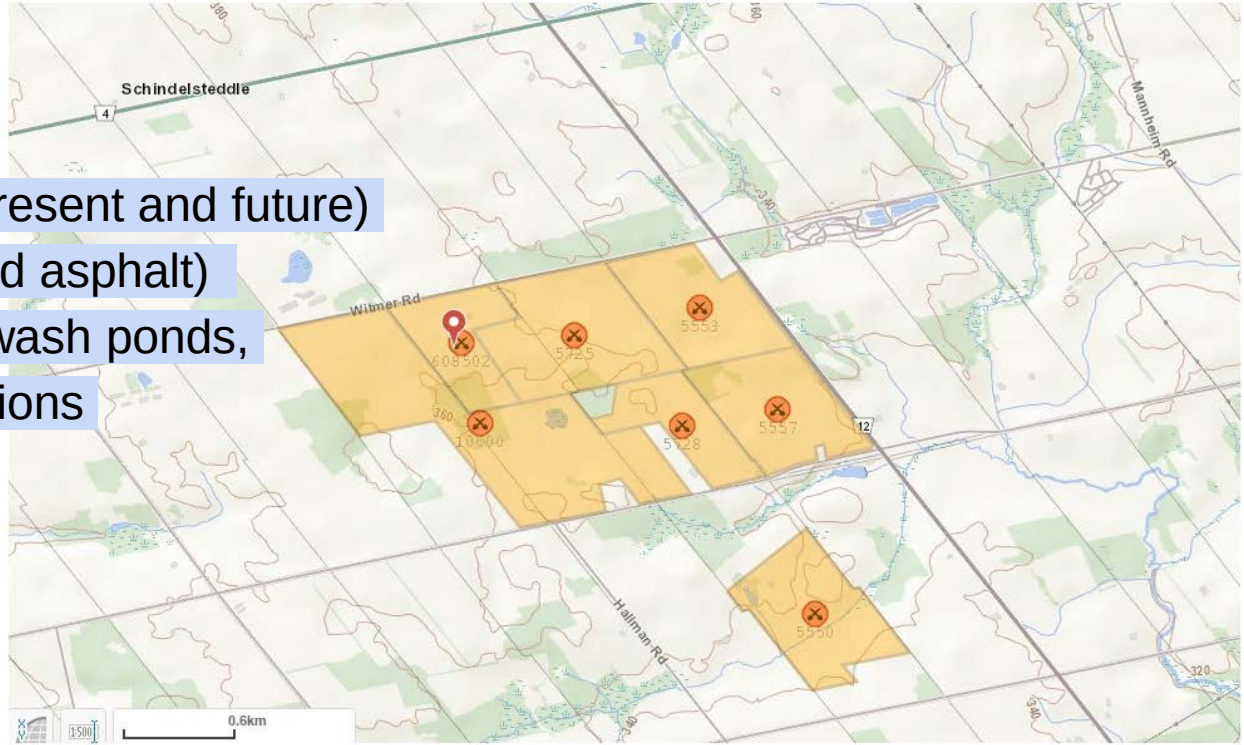
- Price of aggregate has decreased (Michael Harris Jr.)
- no overall shortage
- dormant or under-utilized gravel pits

Images from google images

A Time of Need

Wilmot Township Need?

- Aggregate available (present and future)
- Recycling (concrete and asphalt)
- No need for auxiliary (wash ponds, recycling, night) operations
- Wilmot OP Policy 7.1.1.7



A Time of Need

‘Climate Emergency’ and Need for Protection of our Resources !

- Precautionary Principle with water
- Would this zone change be made for the greater good?

Images from google images

A final thought

"There is no question that source protection planning is complicated, inconvenient and expensive. However, this should not be allowed to eclipse the sheer **importance of the program** of not only ensuring a **safe drinking water** supply but just as important, of instilling **public confidence** in it. The suffering that happened in **Walkerton** in 2000 should be a constant reminder that the benefits to human health and the environment that come from **protecting** the province's aquatic resources are **priceless**."

The Environmental Commissioner of Ontario statement in its 2010/11 Annual Report.

For more information ot to show your support please contact:

CITIZENS FOR SAFE GROUND WATER

“Citizens for Safe Water” on Facebook
www.safeH2O.ca
wilmotgroundwater@gmail.com

Policy and Aggregate

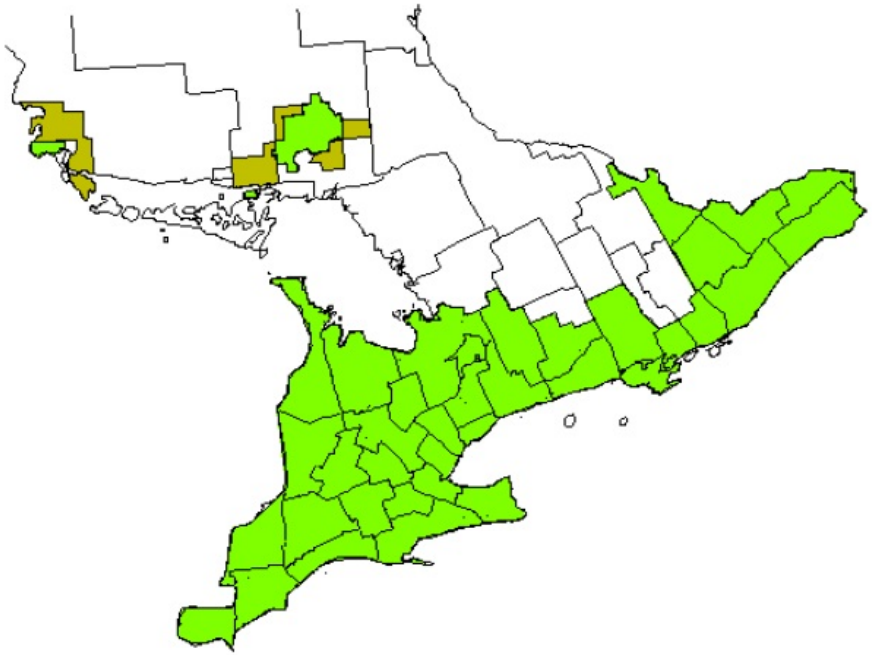
1. Source (Water) Protection Plan
2. Protected Countryside Policy
3. GRCA
4. MNRF Enforcement

Jan.13 2020 presentation to Wilmont Township re: Hallman Pit.

By Louisette Lanteigne
700 Star Flower Ave. Waterloo Ont. N2V 2L2

Aggregate Resource Act 1990

85% of Ontario's aggregates are taken from Southern Ontario.



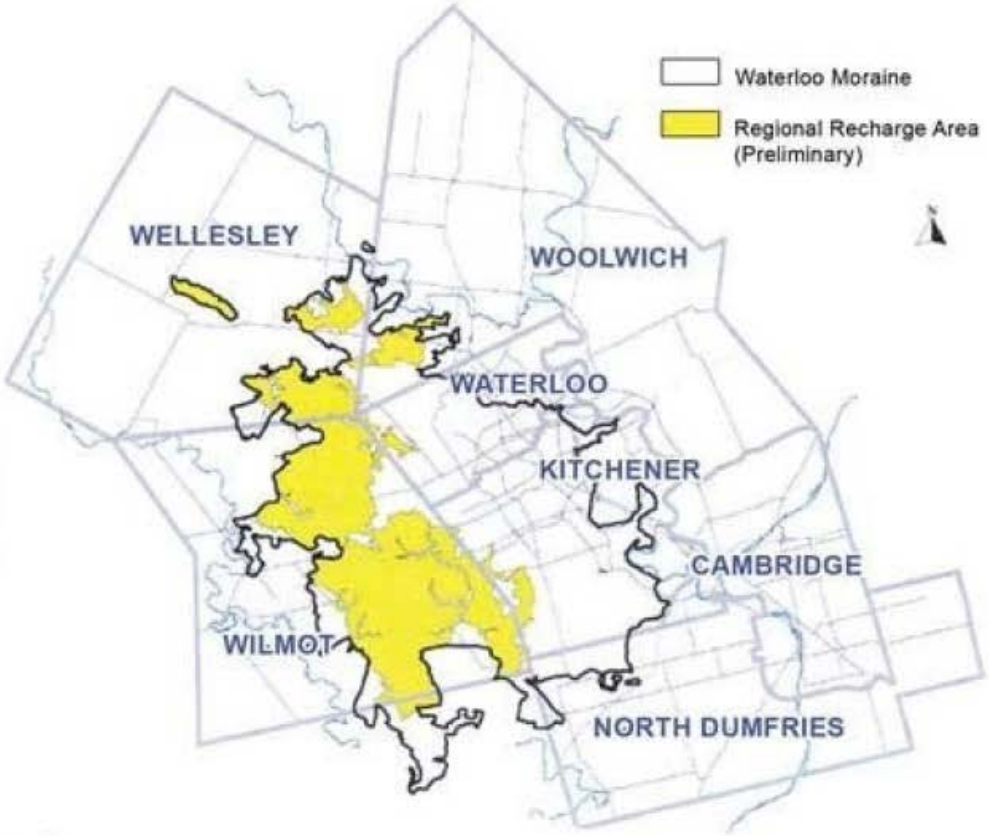
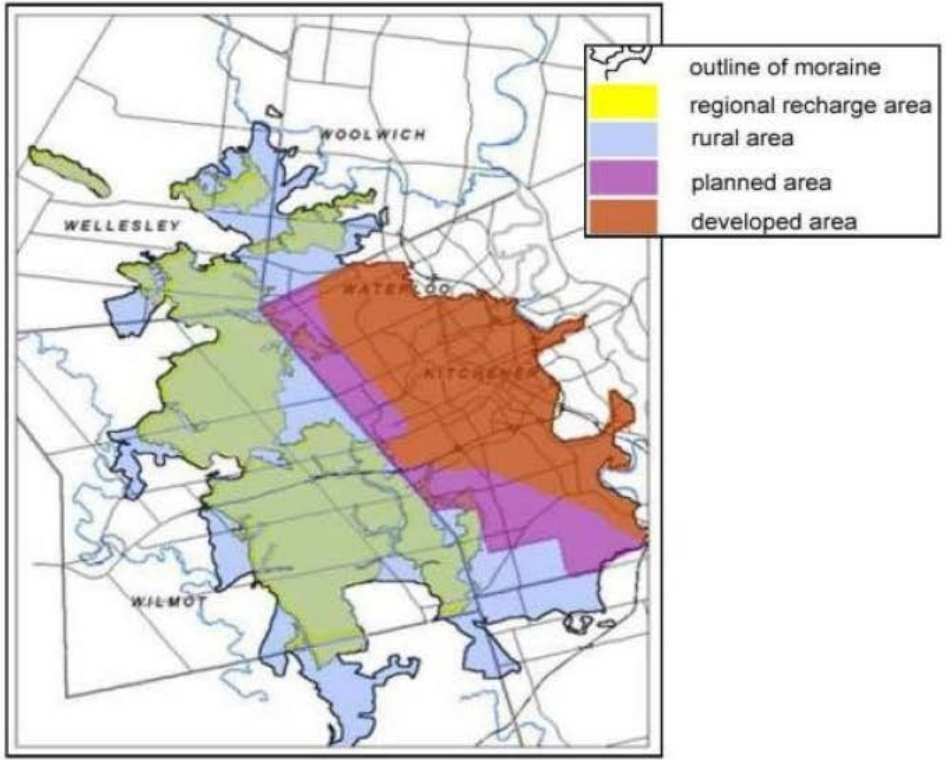


FIGURE 1 - Preliminary Regional Recharge Area Mapping

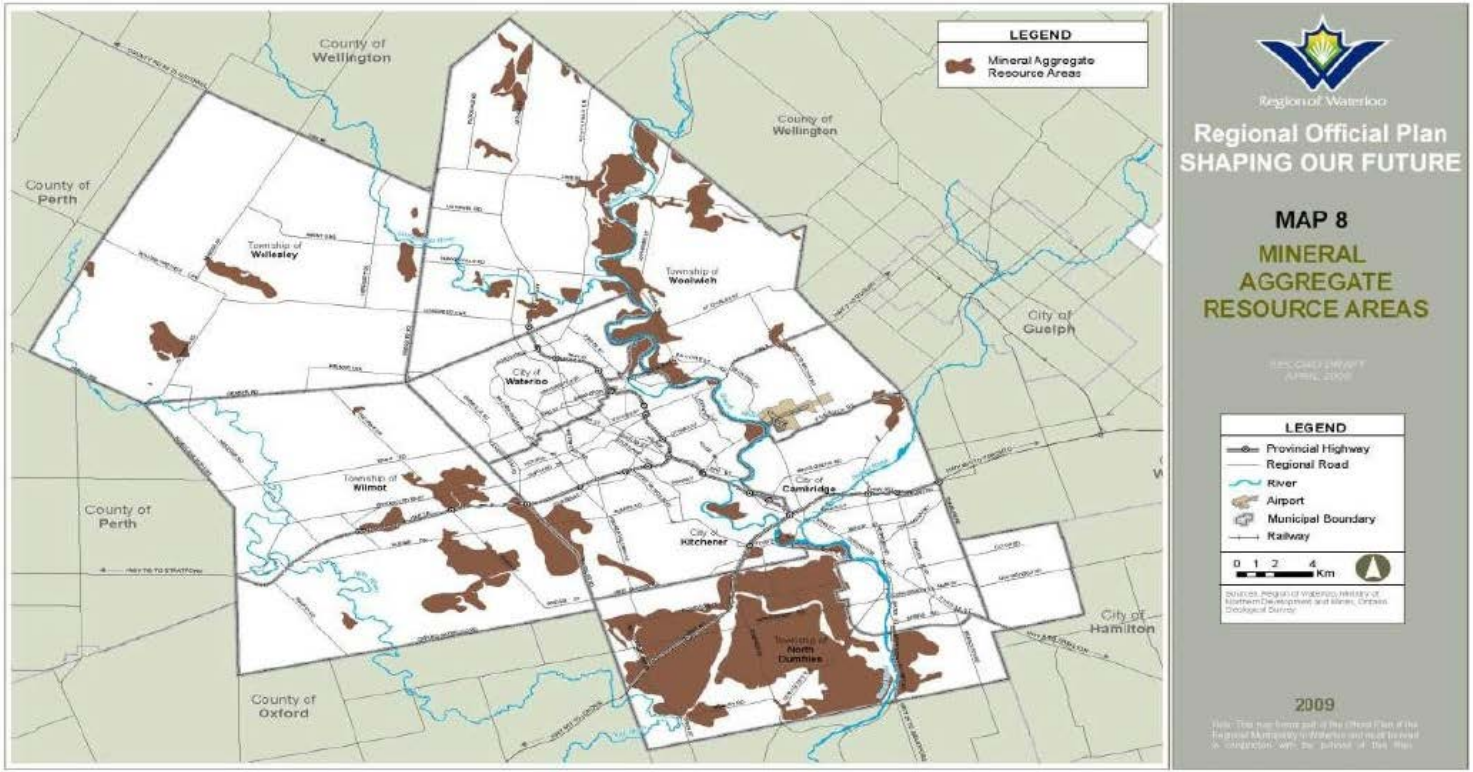
Planning, Housing and Community Services

Development Encroaching!

Figure 9 Water Resource Protection Strategy and the Waterloo Moraine

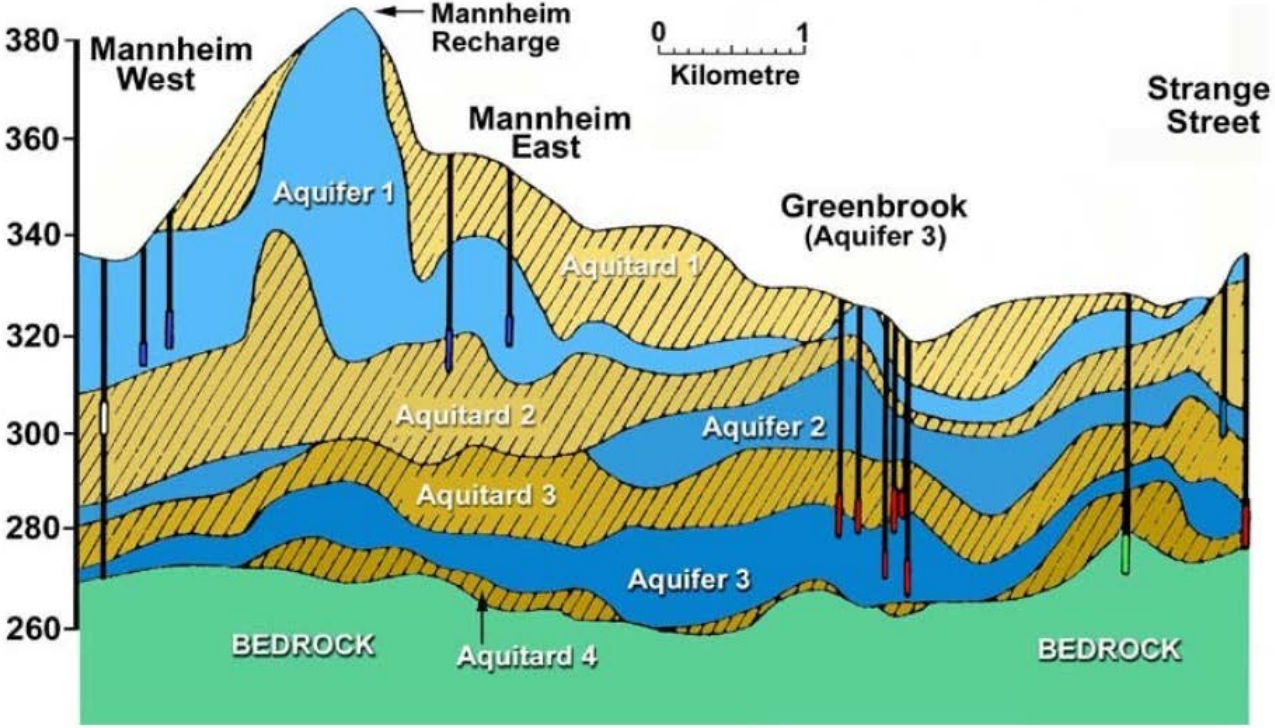


Gravel Pits Encroaching!

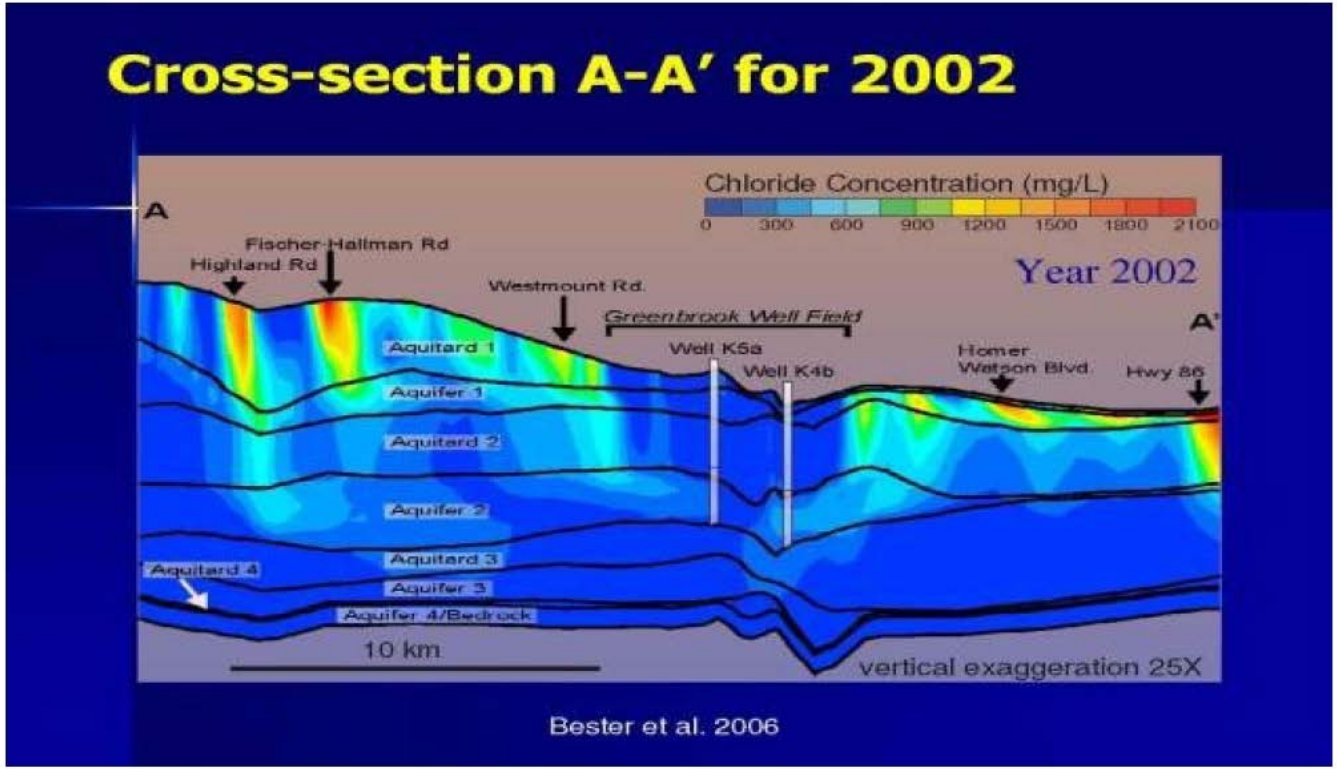


Topography isn't enough to delineate watersheds or prevent water risks.

(cross section of the Waterloo Moriane)



What goes in the ground will head to wells with draw down effects regardless of topography. Professor Mike Stone: chloride loadings to Waterloo Regional wells reveals this fact.



1% of the Waterloo Region's water, at 1 cent per litre = $18,184 per day, Annually: $6,637,160

Source: Expert data as used in EBR request for Review for a Waterloo Moraine Protection Act

Table 1. Summary of predicted cost per day of water volumes lost due to construction on the Waterloo Moraine. These predictions reflect a base pumping rate of 40.000 million gallons per day (equal to 181.840 million litres per day) in the Region during 2004. The predicted volume losses range from 1 – 10% and cost range from 1 to 3 cents per litre per day.

Volume lost per day (%)	Total volume lost per day (million litres)	Total cost of water lost per day ($)		
		0.01 $ / litre	0.02 $ / 1	0.03 $ / 1
1	1.8184	18,184	36,368	54,552
2	3.6368	36,368	72,736	109,104
5	9.092	90,920	181,840	272,760
10	18.184	181.840	363.680	545,520