



**TOWNSHIP OF WOOLWICH
ENGINEERING & PLANNING SERVICES**

REPORT: E61-2011

MEETING DATE: August 9, 2011

TITLE: Hunder Gravel Pit Application

MEETING TIME: 7:00 p.m.

FILE ID: D 15 ZC 13/2008 E

LOCATION: Council Chambers
24 Church Street West, Elmira

PREPARED BY: Dan Kennaley

REVIEWED BY: SMT

DATE REVIEWED BY MANAGEMENT TEAM: July 25, 2011

C.A.O.: _____ (signature not required if reviewed by SMT)

RECOMMENDATION

THAT the Council of the Township of Woolwich take the position before the Ontario Municipal Board that Official Plan Amendment application 1/2011 and Zone Change Application 8/2009 by C.G Snyder Limited and Ronon Farms Inc. for the proposed Hunder Gravel Pit should be denied for the reasons outlined in this report, E61-2011.

BACKGROUND

The Township of Woolwich received a zone change application from C.G. Snyder Limited and Ronon Farms Inc (Hunder Developments Ltd.) on April 7, 2009. The purpose of the application is to change the zoning on the portion of the subject lands from Agricultural to Extractive to permit an above groundwater table mineral aggregate extraction operation. The proposed licenced area of the gravel pit would total 88.3 hectares within which the proposed extractive area would total approximately 62.1 hectares. In addition to the extraction of mineral aggregates, the applicant is also proposing the recycling of concrete and asphalt as an accessory use within the proposed Phase 1 extraction area which is located on the Ronon Farms lands north of Hunsberger Road.

The applicants have also submitted an application to the Ministry of Natural Resources for Category 3, Class "A" above water table gravel pit under the Aggregate Resources Act ("ARA"). This application was circulated to the Township for comment. On May 19, 2009, Council objected to the ARA application indicating that, until such time as Council is in a position to make a decision with respect to the Planning Act application, substantive comments by the Township cannot be made with respect to the ARA application.

Through 2009 the Township obtained peer reviews of various reports submitted by the applicant in support of the application. These peer reviews included reviews of the applicant's hydro-geological report, dust study, acoustical assessment, traffic study, and visual impact information.

In the case of transportation impacts, the applicant also submitted an addendum traffic report in February of 2010.

On May 4, 2010 a public meeting was held with regards to the proposed zone change application for the Hunder Gravel Pit. Numerous concerns from the public were expressed about land use compatibility, impacts on agricultural land, social and economic impacts, dust and air quality, noise, hydro-geological impacts, traffic impacts, impacts on cultural heritage resources, visual impacts, cumulative impacts, and rehabilitation.

During the course of the Township's review and evaluation of the zone change application it was determined that the application also required an official plan amendment. This determination flowed from Section 11.3.4 of the Township Official Plan which states:

"11.3.4 - Rezoning to permit the making or establishment of pits and quarries in area other than those defined as Mineral Aggregate Resource Areas on Map Number 5 of the Regional Official Policies Plan shall only be considered following amendment to this Plan".

On October 18, 2010 C.G Snyder Limited and Ronon Farms made an official plan amendment application to permit the proposed Hunder Gravel Pit and on January 11, 2011 a public meeting was held in regards to the this official plan amendment application. The same types of concerns were expressed with the proposed gravel pit as had been expressed at the public meeting on May 4, 2010 in regards to the rezoning application.

By letters dated May 3, 2011 the applicant filed Notices of Appeal pursuant to Section 22(7) of and Section 34(11) of the Planning Act regarding the refusal or neglect of the Township of Woolwich to pass the proposed official plan amendment and zoning by-law amendment for the Hunder Gravel Pit.

By letter dated May 30, 2011 the Township of Woolwich received reporting letters/peer reviews on behalf of the Conestogo Winterbourne Residents Association expressing concerns with the proposed Hunder Gravel Pit. These reporting letters/peer reviews were with respect to land use planning (Warren Sorensen, Sorenson Gravely Lowes Planning Associates Inc.), the quality and quantity of gravel present on the subject lands (George Fournier and Rebecca Walker, exp Services Inc.), noise (R.L. Scott Penton, Novus Environmental Inc.), dust (Nigel M. Taylor, Novus Environmental Inc.), and agriculture and soils (Richard J. Heck).

Policy Framework

The governing policy framework which guides the decision making process associated with the application for rezoning is as follows:

Provincial Policy

The Provincial Policy Statement ("PPS") indicates that as much of the mineral aggregate resources as is realistically possible shall be made available as close to markets as possible. However, the PPS also indicates that mineral aggregate extraction shall be undertaken in a manner which minimizes social and environmental impacts. Accordingly, in evaluating mineral aggregate applications, a balance must be struck between what are frequently, competing requirements within the PPS.

The PPS policies also require progressive rehabilitation of aggregate operations, and on prime agricultural land, rehabilitation of the site so that substantially the same areas and same average soil quality for agriculture is restored.

In addition, the PPS policies indicate that “demonstration of need for mineral aggregate resources, including any type of supply/demand analysis, shall not be required”.

Regional Official Policies Plan and New Regional Official Plan

The Region of Waterloo Official Policies Plan (ROPP) in effect at the time the Hunder Gravel Pit applications were made maps out areas of potential aggregate extraction and identifies these areas as Mineral Aggregate Resource Areas. Although the majority of the subject lands are outside of a Mineral Aggregate Resource Area, the ROPP indicates that “it is not the intent of this Plan to limit mineral aggregate extraction to the Mineral Aggregate Resource Areas”. The Regional Official Policies Plan also indicates that Regional support for a zone change or approval of an Area Municipal Official Plan amendment will depend on whether noise, vibration, dust-related, hydrogeological, transportation, archaeological, environmental and rehabilitation concerns have been addressed.

It should be noted that the Region has also recently adopted a new Regional Official Plan (ROP) which has been appealed to the Ontario Municipal Board. Generally, the policies of the new ROP are concerned with the same potential impacts from mineral aggregate extraction operations as the ROPP is, but, in addition, require that a rezoning to permit an expansion to, or a new operation must limit the depth of extraction to that which is specified on the site plan.

Township Official Plan

Most of the Township Official Plan polices applicable to zone change applications for mineral aggregate operations were added to the Official Plan by Official Plan Amendment 13 (“OPA” 13). The OPA 13 policies require studies on geological resource, transportation, environment, visual, cultural heritage, water resources, noise, dust/air quality and land use which includes social impact. The OPA 13 policies also describe, in a general way, what these various studies need to address and the policies create tests—that there will be no unacceptable impacts—that have to be met in the case of each of the studies. Furthermore, the OPA 13 policies also require applicants to address cumulative impacts and monitoring.

In addition, the Township Official Plan policies require:

- a) an applicant for mineral aggregate extraction in a Prime Agricultural Area to demonstrate to Council’s satisfaction that there are no alternatives sites that avoid Prime Agricultural Areas and that rehabilitation will return the land to agriculture quickly;
- b) An official plan amendment for applications outside of Mineral Aggregate Resource Areas as defined on Map Number 5 of the ROPP;
- c) that the character, location and size of nearby communities be taken into account;
- d) that adequate buffer space and screening is provided to protect adjacent land uses which would be adversely affected by the proposed pit or quarry; and
- e) that adequate provisions will be made for the fencing and security of the pit or quarry property.

COMMENTS

Geological Resource

In accordance with the Township's Official Plan, an applicant for a mineral aggregate extraction operation must submit a Geological Resource Study which demonstrates that the proposal will not have any unacceptable impacts. The Geological Resource Study must identify the nature, extent and location of the mineral aggregate resources on the subject land and must be based on sufficient sampling and testing.

The applicant submitted a report by Mitz and Associates Ltd. (compiled by PEIL) entitled Aggregate Resource Inventory. That inventory report estimated that there was between 3.875 and 4.736 million tonnes of aggregate on the Hunsberger lands and approximately 2.471 million tonnes on the Snyder lands. The inventory report also concluded that the quality of the deposit will meet a variety of road construction specifications including Granular B.

The peer review conducted by exp Services Inc. on behalf of the CWRA and submitted to the Township on May 30, 2011, however, raised new concerns with respect to the quality and quantity of mineral aggregates on the subject lands north of Hunsberger Road. The peer review report noted that:

- a) there are no representative laboratory grain size analyses available to classify the possible aggregate located north of Hunsberger Road and that this analyses is necessary to accurately determine the quality of the aggregate;
- b) the additional testing to determine the quality of the aggregate should also include Petrographic Analyses;
- c) no groundwater monitoring wells have been installed within the proposed extraction area and that these monitoring wells are needed to determine actual groundwater levels and the thickness of the till aquitard;
- d) there is a discrepancy between the actual data obtained from test pits and monitoring wells and the groundwater flow model;
- e) accurate evaluation of groundwater levels is required to determine the buffer zone for potential aggregate extraction;
- f) the removal of overburden material in the area of the perched water table may result in warming effects which could have potential impact on local watercourses and aquatic habitats which are sourced, in part, for shallow groundwater flow in the area.

It is Township's staff's intent to have the Township's hydro-geologic peer review consultant review the concerns identified by exp Services Inc. However, in the meantime, staff are unable to conclude that such concerns will not result in unacceptable impacts.

Transportation Impact

In accordance with the Township's Official Plan, an applicant for a mineral aggregate extraction operation must submit a Transportation Impact Study which demonstrates that the proposal will not have any unacceptable impacts. The Transportation Impact Study must identify the policy

framework which is aimed at addressing traffic impacts, must identify impacts on land uses, social attributes, cultural heritage, and environmental resources located along the proposed haul routes, must evaluate alternative haul routes, must identify the physical characteristics and constraints associated with haul routes, must identify the additional traffic that would be generated by the proposed operation, must identify the horizon year used in determining future impacts, must identify impacts of traffic generated by the proposed operation, and must identify improvements to the haul routes and the costs of such improvements.

The applicant submitted a Traffic Operational Review Study dated May 2008 with the application for rezoning in April of 2009. In February 2010, the applicant submitted a Traffic Operational Review Study Addendum Report. In March of 2010 the Township received a peer review from HDR /ITRANS which identified numerous concerns with the applicant's traffic study. Some of these concerns were addressed by the applicant's Addendum Report and by subsequent communication from the applicant's consultants, but significant traffic issues with the Hunder application remain unresolved including that peaking of gravel truck trip generation has not been accounted for, that safety and physical adequacy concerns with the proposed crossing of Hunsberger Road have not been adequately addressed, and that pedestrians, cyclists and buggy traffic has not been addressed.

In addition, the Region of Waterloo conducted a review of traffic impact studies ("the Regional Study") submitted by the three recent applications for new gravel pits in the Township of Woolwich (Hunder Gravel Pit, Jigs Hollow Road Gravel Pit, Montrose Gravel Pit). The Regional Study dated June 2010 examined the cumulative traffic impact of the three proposed gravel pits. The Regional Study concluded that mainline through capacity of the roadways to be used by gravel trucks from the three proposed operations is sufficient, and that trucks using the Sawmill Road and Katherine Street/Crowsfoot Road intersection ("the Crowsfoot intersection") will cause only marginal declines in levels of service. However, Township Staff have expressed concerns to Regional Staff with the Regional Study including that gravel truck trip generation associated with the proposed three pits has been underestimated, that peaking of trips has not been accounted for, that declines in level of service at the Crowsfoot intersection have will be more significant than described, that accident history has not been adequately accounted for, that pedestrians, cyclists and buggy traffic has not been taken into account, and that, in light of the application by the Murray Group for a Aggregate Resource Act licence near West Montrose, the Region should undertake additional modelling and analysis to address the Murray Group's application and the other concerns identified by Township Staff.

Due to the transportation concerns noted in this section of this report, Township Staff cannot conclude at this time that the application will not have any unacceptable transportation impacts.

Environmental Impact

In accordance with the Township's Official Plan, an applicant for a mineral aggregate extraction operation must submit a Environmental Impact Study which demonstrates that the proposal will not have any unacceptable impacts. The Environmental Impact Study must identify environmental features, the nature of impacts on those features, and whether and how impacts can be mitigated.

The applicant submitted a report by Dance Environmental Ltd. entitled Natural Environmental Level 1 & 2 dated April 3, 2009 in support of the proposed gravel pit. The Dance report did not identify any important natural features within the pit footprint and indicated that, provided the mitigation measures described in the report are implemented, no significant negative impacts are expected to affect the natural features located near the pit footprint.

Township staff relied on the Grand River Conservation Authority's review of the application and did not require a peer review of the applicant's environmental report. The GRCA has advised that they have no objection to the approval of the application. In light of the GRCA's advice, Township Staff are at this time of the view that the application will not have any unacceptable environmental impacts.

As well as seeking to ensure the protecting the environmental features, the Township and Region have requested that the applicant consider enhancing the connection between the woodlots on both sides of Hunsberger Road to the Grand River for environmental purposes.

Visual Impact

In accordance with the Township's Official Plan, an applicant for a mineral aggregate extraction operation must submit a Visual Impact Study which demonstrates that the proposal will not have any unacceptable impacts. The Visual Impact Study must identify significant views and how they might be impacted.

The applicant submitted visual impact information as part of a Planning Summary Report prepared by the IBI Group and dated April 3, 2009. The applicant's visual impact information was peer reviewed on behalf of the Township by Walker, Nott, Dragicevic Associates Limited. The peer review identified significant deficiencies in the applicant's visual impact information. The applicant's consultant submitted additional information on May 10, 2010 which has not been peer reviewed. Township staff will communicate with the applicant to obtain additional peer review funds in accordance with the Township's peer review provisions in our fees and charges by-law to enable this subsequent peer review to take place. However, at the moment, given the significant deficiencies in the applicant's initial visual impact information, Township staff are unable to conclude from a visual impact perspective that the proposed Hunder Gravel Pit will not have any unacceptable impacts.

Cultural Heritage Impact

In accordance with the Township's Official Plan, an applicant for a mineral aggregate extraction operation must submit a Cultural Heritage Impact Study that demonstrates that the proposal will not have any unacceptable impacts. The Cultural Heritage Impact Study must identify all cultural heritage resources, including built heritage resources, archaeological resources and cultural heritage resources which may be impacted by the proposed operation, the nature of the impacts and how the impacts can be mitigated.

The applicant submitted two reports from Archaeological Resources Ltd., entitled Stage 1-2 Archaeological Assessment, dated January 2008, and Cultural Heritage Assessment, dated March 2009. The Archaeological Assessment deals with archaeological resources. The Cultural Heritage Assessment is actually an assessment of cultural heritage landscapes in the area around the proposed gravel pit. This cultural heritage landscape assessment identifies four cultural heritage landscapes; the Grand River, Winterbourne, Conestogo and Rural Woolwich Township which the report indicates have the potential for conservation in the planning process. But, the report also says that the proposed gravel pit lands do not appear to comprise a significant part of any of these cultural heritage landscapes. Staff did review this information, and agreed that the application does not appear to impact any potential cultural heritage landscape.

Water Resources

In accordance with the Township's Official Plan, an applicant for a mineral aggregate extraction operation must that proposes above water table extraction must submit a Water Resources Impact

Study which demonstrates that the proposal will not have any unacceptable impacts. The Water Resources Impact Study must identify the water resources, including surface water and ground water which may be impacted by the proposed operation. The study must, in addition, determine the appropriate water table and buffer for the purposes of determining depth of extraction. Furthermore, the study must identify mitigation measures for impacts associated with matters such as fuel storage and handling systems, impacts on natural features and impacts on domestic wells, municipal water supplies and municipal test wells.

The applicant submitted a Hydro-geological Assessment Report prepared by AMEC Geomatrix Limited dated February, 2009. This report was peer reviewed on behalf of the Township by WESA. The Region's Water Services Department has also been extensively involved in the hydro-geological review of the applicant's Hydro-geological Assessment Report. The initial peer review by WESA identified significant deficiencies with regards to the Hydro-geological Assessment Report. Two addendum documents were prepared by AMEC and provided to the Township and the Region on September 20, 2010 and October 21, 2010. These addendum documents have also been peer reviewed by WESA on the Township's behalf. The latest peer review by WESA continues to identify hydrogeological related concerns with the Hunder application. These concerns include:

- a) potential for nitrate concentrations in excess of the Ontario Drinking Water Standard in some monitoring wells;
- b) the need to use shallower dug wells to monitor impacts of extraction activities;
- c) insufficient sampling of private wells in the vicinity of the proposed gravel pit lands in order to establish sufficient background data prior to the start of excavation;
- d) the need for additional chemistry data for private wells in the vicinity the proposed gravel pit lands;
- e) disagreement concerning the groundwater flow direction figures which has implications for the depth of extraction;
- f) the need for additional chemistry data associated with the seep sampling;
- g) the need to use high water table figures and not average water table figures to determine the depth of extraction;
- h) the need for door to door survey information about certain private wells to be correlated with the Ministry of the Environment database; and
- i) the need for the monitoring program to be incorporated in the operational plans.

In light of these hydrogeological concerns, Township Staff are unable at this time to conclude that there will not be unacceptable impacts.

Noise Impact

In accordance with the Township's Official Plan, an applicant for a mineral aggregate extraction operation must submit a Noise Impact Study which demonstrates that the proposal will not have any unacceptable impacts. The Noise Impact Study must identify noise sources and receptors and must identify noise impacts and how these noise impacts can be mitigated.

The applicant submitted an Acoustical Assessment prepared by IBI Group and dated October, 2008 in support of the application. This Acoustical Assessment was peer reviewed on the Township's behalf by Valcoustics Canada Ltd. A number of concerns and deficiencies with the applicant's Acoustical Assessment were identified in this initial peer review. As a result, the applicant's consultant provided a response dated May 26, 2010 intended to address Valcoustics initial comments. Valcoustics considered this response, but continues to have concerns with the applicant's noise information. These concerns include the following:

- a) there continues to be a disagreement concerning whether certain receptors (B, C, and D) are in a Class 2 Area, where that noise level that must be met by the gravel pit is 50 dBA daytime and 45 dBA evenings, or in a Class 3 Area, where the noise level that must be met the gravel pit is 45 dBA daytime and 40 dBA evenings;
- b) analysis at Receptor B must be provided to confirm that with the new 3.0 metre berm MOE noise guideline limits will be met;
- c) addressing the cumulative impacts of this operation combined with the Kuntz pit;
- d) confirmation must be provided that existing residences on the site will be occupied by the applicant or used for non noise sensitive uses such as offices;
- e) clarification is required with respect to whether on site truck movements, idling of trucks at the scale house and equipment at the re-fueling area have been included in the noise impact assessment;
- f) a proper noise impact assessment of the alternative haul routes is required;
- g) provision for noise monitoring reports to be provided to the Township of Woolwich must be made; and
- h) adequate information must be provided to confirm the appropriateness of the sound exposure calculations.

The applicant has submitted additional noise impact information dated January 11, 2011, which has not been peer reviewed. Township staff will communicate with the applicant to obtain additional peer review funds in accordance with the peer review provisions in our fees and charges by-law to enable this subsequent peer review to take place. However, at the moment, due to continuing concerns with noise impacts, Township staff are unable to conclude that there will not be any unacceptable impacts. In addition, it should be noted that, with respect to the characterization of the noise environment at receptors B, C, and D, there continues to be fundamental disagreement between the Township and the applicant.

Dust and Air Quality Impact

In accordance with the Township's Official Plan, an applicant for a mineral aggregate extraction operation must submit a Dust and Air Quality Impact Study that demonstrates that the proposal will not have any unacceptable impacts. The Dust and Air Quality Impact Study must assess background levels of dust and model additional dust contributions that can be expected from the proposed operation. The Dust and Air Quality Impact Study must also identify impacts from dust and how such impacts can be mitigated.

The applicant submitted a Dust Assessment Report prepared by SENES Consultants Limited and dated January 2009. The SENES report was peer reviewed on behalf of the Township by AMEC.

AMEC's initial peer review identified a number of concerns and deficiencies with the SENES report. SENES provided additional information on May 26, 2010 and August 13, 2010 which was peer reviewed each time by AMEC. Many of the concerns expressed by AMEC have been satisfactorily addressed, however there is still an unresolved issue concerning dust suppression on shoulders of nearby roads. In light of this unresolved issue, Township Staff are unable to conclude that there will not be any unacceptable impacts.

Land Use

In accordance with the Township's Official Plan, an applicant for a mineral aggregate extraction operation must submit a Land Use Study which demonstrates that the proposal will not have any unacceptable impacts. The Land Use Study must provide a detailed description of surrounding land uses and permitted land uses and must provide a synthesis of all impacts including, where appropriate, social impacts. The Land Use Study must also assess whether impacts can be mitigated so as to achieve land use compatibility.

The applicant submitted land use information and addressed the issue of land use compatibility in the Planning Summary Report prepared by IBI and dated April 3, 2009. However, the concerns expressed elsewhere in this report that have prevented Township staff in being able to conclude that there will not be any unacceptable impacts demonstrate that the proposed Hunder Gravel Pit will not be compatible with surrounding land uses.

Other Township Policies

The applicant has not provided information which addresses Section 11.1(f)(i) of the Township's Official Plan concerning whether there are viable alternative sites where the required mineral aggregate resources can be obtained in areas not considered to be Prime Agricultural Areas.

Other Comments:

The Region of Waterloo requires that a vertical zoning be implemented to ensure that depth of extraction is set. Township staff agrees and supports such a requirement for vertical zoning.

CONCLUSION

Concerns relating to geological resources, transportation impacts, visual impacts, water resources impacts, noise impacts, dust impacts, and land use compatibility have caused staff to be unable to conclude that there will not be unacceptable impacts associated with the proposed Hunder Gravel Pit. Accordingly, staff are recommending that Council recommend that the Ontario Municipal Board deny the Hunder application.

FINANCIAL IMPLICATIONS

Cost of defending Council's position at the Ontario Municipal Board.

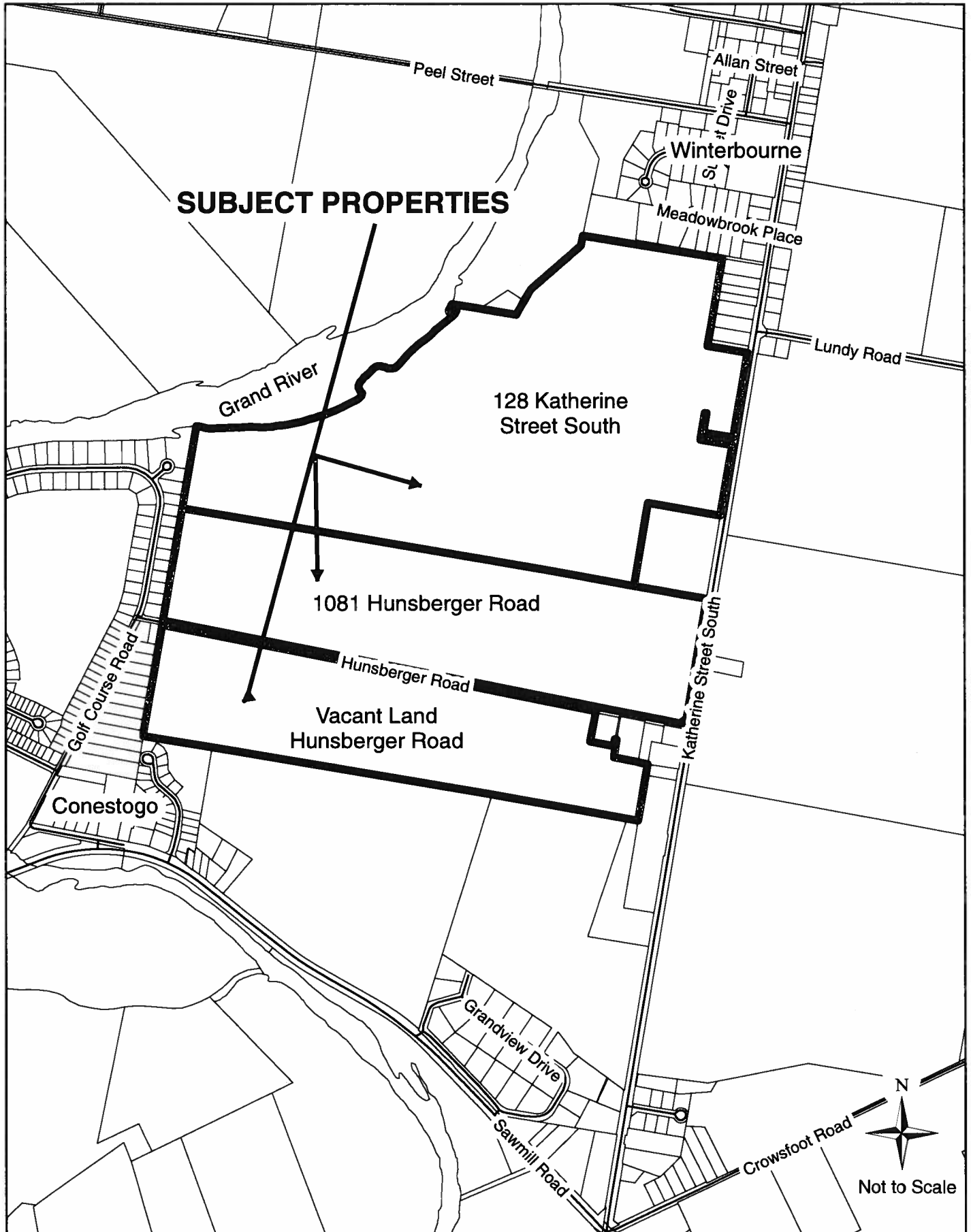
OTHER DEPARTMENT IMPLICATIONS

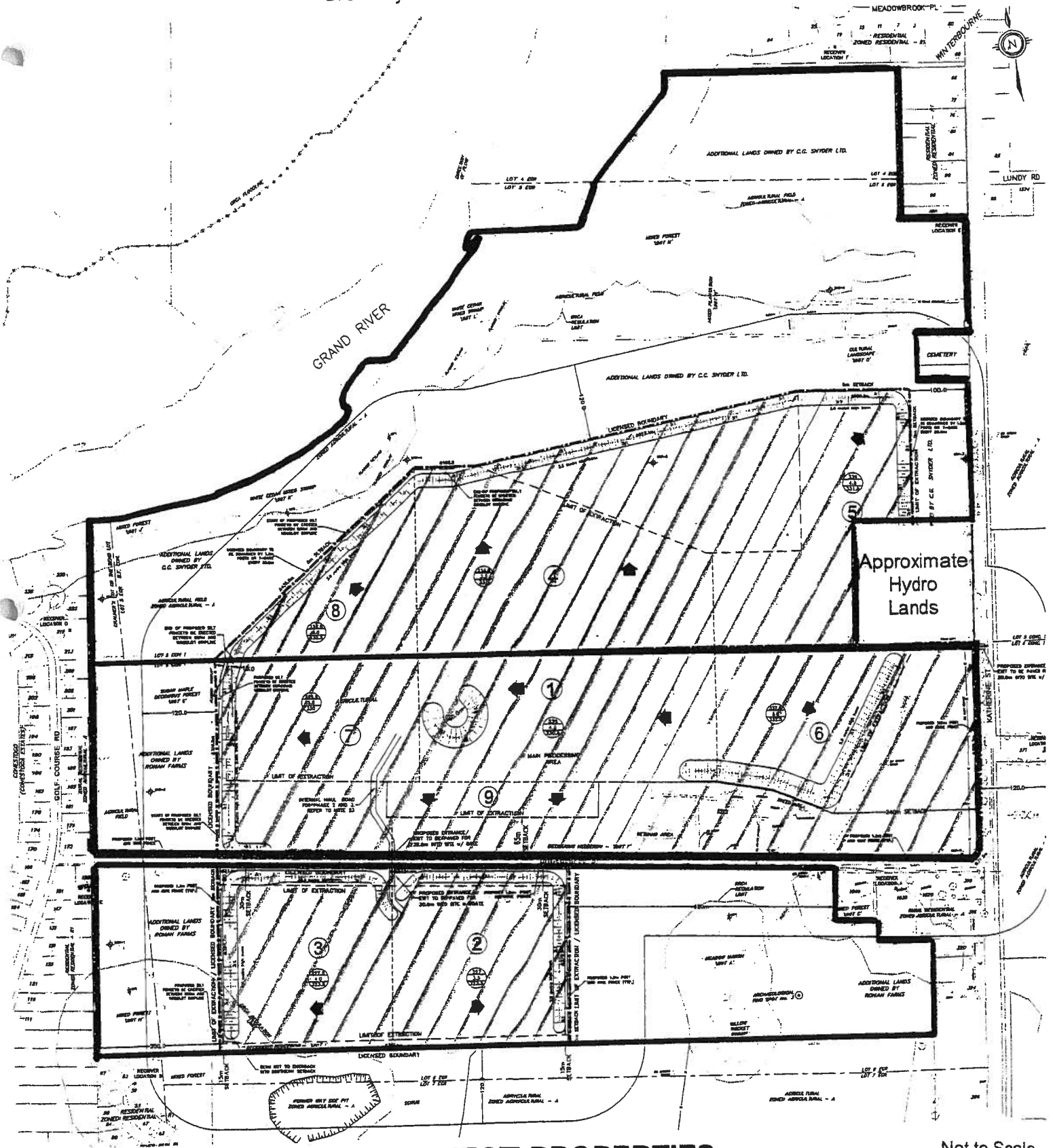
None

LIST OF ATTACHMENTS

Appendix A – Location Map
Appendix B – Site Plan

C.G. Snyder Limited and Ronon Farms Inc.





SUBJECT PROPERTIES
PORTION OF LANDS
PROPOSED TO BE REZONED
FROM AGRICULTURAL TO
EXTRACTIVE

Not to Scale

