

PLANNING JUSTIFICATION REPORT

OFFICIAL PLAN & ZONING BY-LAW AMENDMENT APPLICATIONS

LOT 217, PLAN M100

Township of Champlain United Counties of Prescott & Russell

Date:

March 15, 2016

Prepared for:

Colacem Canada Inc.

Prepared by:

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Our File 06128C

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1.0 INTRODUCTION

MHBC Planning was retained to act on behalf of Colacem Canada Inc. ('Colacem') to provide planning advice and submit Official Plan Amendment and Zoning By-law Amendment applications for the lands legally described as Lot 217, Plan M100, located on the north side of County Road 17, west of L'Orignal in the United Counties of Prescott and Russell (the "subject lands").

The subject lands comprise an area of approximately 55.85 hectares (138 acres) and are located in the rural area of the Township of Champlain. The subject lands are presently vacant agricultural land. It is proposed that the southern 39.9 hectares be developed with a cement plant and accessory structures.

In order to permit the proposed development, approval of amendments to the Prescott-Russell Official Plan and the Township of Champlain Zoning By-law are required. This planning report supports the planning applications and assesses the proposal in the context of the applicable planning framework. This Report also reviews and synthesizes other technical reports prepared in support of the proposed planning applications.

1.1 Complete Application

Pre-consultation comments from the Township of Champlain were received on July 21, 2011 (**Appendix A**). It has been confirmed with staff that the 2011 comments remain relevant for these applications. A further pre-submission meeting was held on October 20, 2015. The design of the proposed development and this report take into consideration the comments provided. The reports and documents that are required to form a complete application are:

- Official Plan Amendment:
- Zoning By-law Amendment;
- Planning Justification Report (addresses land use compatibility, Minimum Distance Separation and aggregate resource protection);
- Environmental Impact Study;
- Archaeology Study Phase 1; and
- Traffic Impact Assessment.

2.0 SITE DESCRIPTION & **SURROUNDING LAND USES**

The United Counties of Prescott and Russell is the easternmost county in Ontario. It borders the City of Ottawa to the west, the Province of Quebec to the east, the Ottawa River on the north and the United Counties of Stormont, Dundas and Glengarry on the south. There are eight local municipalities in the United Counties of Prescott and Russell. The subject lands are located in the northeastern part of the County in the Township of Champlain – west of the village of L'Orignal.

The subject lands are located in the rural area of the Township and are located on the north side of County Road 17. A location map is included as **Figure 1**.

Figure 1: Location Map



The immediate area is comprised of lands designated Rural Policy Area and Mineral Aggregate Policy Area. This area includes a range of rural and mineral aggregate type uses including hobby farms, residences, commercial, retail, religious institution uses and a guarry. Beyond the immediate area is the Agricultural Resource Policy Area, which plays a significant role in the local economy.

Generally, existing land uses within the vicinity of the subject lands include:

NORTH: North of the subject lands is vacant agricultural land and northwest of the subject lands is a significant woodlot.

EAST: North and east of the subject lands are a range of rural and agricultural lands

including residential dwellings.

SOUTH: South of the subject lands is County Road 17. South of County Road 17 is a range

of rural and agricultural lands including residential dwellings and a religious

institution (L'Orignal Christian Assembly).

WEST: The L'Orignal Quarry operated by Colacem abuts the western boundary of the

subject lands.

The closest residences are located south and east of the subject lands. The nearest residence is located approximately 10 metres from the southeast corner of the subject lands. In total, there are 6 residences within 215 metres of the property (all located to the south and east). The nearest settlement area is L'Orignal, which is located approximately 5 kilometres east along County Road 17. A Trade and Industry Policy Area, home of Ivaco Rolling Mills, is located approximately 2 kilometres east of the subject lands.

Further to the north there are residential lots backing on the Ottawa River. These properties are located more than 1 kilometer from the northeast corner of the subject lands and more than 1.5 kilometres from the area proposed to be developed.

A surrounding context map is included as **Figure 2**.

The subject lands have frontage on County Road 17, which is identified as a primary artery in the Official Plan. County Road 17 runs east-west across the United Counties of Prescott Russell and provides access to the City of Ottawa.



Figure 2

Context Map

Colacem Lot 217 Plan M100 County Road #17
Township of Champlain
United Counties of Prescott & Russell

LEGEND



Subject Lands



Existing Licence #5904 Owned by Applicant



Additional Lands
Owned by Applicant



L'Original Urban Policy Area

Source:
Air Photo: Google Maps

DATE: March 2016

SCALE: ±1:25,000

FILE: 06128C DRAWN: DGS



K:\06128C COLACEM CHAMPLAIN TOWNSHIP\RPT\Context Map.dwg



3.0 DESCRIPTON OF PROPOSED DEVELOPMENT

3.1 Cement Production in Ontario

Cement is a binder that when mixed with aggregate (sand and gravel) and water forms concrete; one of the world's oldest, most versatile and durable construction materials. In Canada, we use approximately 31.2 million cubic metres of concrete per year in a wide variety of construction projects. In Ontario, cement production was valued at \$635 million in 2008, over 40 per cent of the total value of cement produced in Canada.

Raw materials for cement manufacture include limestone, shale, silica sand, iron and bauxite. The raw materials are burned at approximately 1,500°C to produce clinker. The clinker is ground to a fine powder with gypsum and other additives, to produce portland cement. Cement is shipped in powdered form to ready-mix concrete plants where it is combined with aggregate and water to form concrete.

3.2 Colacem Canada Inc.

Colacem and its subsidiaries and associated companies in the cement industry generated revenues of over 504 million euro in 2014 with 2,130 employees. In Italy, Colacem's share of the market reached around 14% of the national production. The company branches out through Italy with 7 complete cycle plants, 1 lime production plant, 1 plant for pre-measured products, 3 port terminals, 1 grinding plant, 2 storage facilities and several local offices. Colacem's headquarters are in Gubbio, Italy.

Colacem also owns and operates plants in Tunisa, Dominican Republic, Kilmar-Grenville-sur-la-Rouge (Quebec), Albania, together with terminals in Spain, Jamaica, and a storage facility in Haiti to form an international organization that continues to grow. Colacem Canada's headquarters are located in Laval, Quebec.

3.3 **Proposed Development**

Colacem Canada Inc. (Colacem) is proposing to build and operate a cement plant west of L'Orignal, Ontario. The facility will have the capacity to produce 3,000 tonnes of clinker per day, with an estimated annual production of 1.16 Million tonnes of cement. It is anticipated that four

types of Portland cement will be produced at the plant: general use cement (GU), general use limestone cement (GUL), high early strength cement (HE) and blended general use silica fume cement (GUbSF).

The new cement plant would increase Colacem's Canadian capacity for cement production and increase the range of cement products that it can produce. The existing Canadian plant at Kilmar-Grenville-sur-la-Rouge has been operated by Colacem since 2007. The Kilmar facility was originally developed as a refractory for magnesite that was mined at the site beginning in 1907. Colacem has adapted the facility to manufacture cement using limestone from the L'Orignal Bertrand quarry (located adjacent to the subject lands). The decision to invest in a new plant beside the limestone quarry means the main raw material is immediately available, therefore, reducing transportation costs and impacts. The proposed site is located on a good County Road that is suitable for heavy truck traffic and is well connected to the highway system that is required to supply fuel and other raw materials as well as access to Colacem's markets for its' cement products. If the L'Orignal plant is approved the Kilmar facility would most likely continue to operate at reduced volumes for specific cement products.

The proposed cement plant will be located on a 55.85 hectare lot adjacent to an existing quarry, also owned and operated by Colacem. The area of the site to be developed is approximately 39.9 hectares of land located south of the Charlebois Drain. The facility will be comprised of 52 buildings/structures, including: raw material storage/silos, hoppers, conveyors, crushing and grinding systems, raw mill, preheater, rotary kiln, cooler and cooling tower, cement mill and administrative offices and control room. See **Figure 3** for a concept plan of the proposed cement plant.

The production of cement is a three-step process, as briefly described below:

- Raw material preparation: limestone and silica sand are analyzed, blended with additional
 mineral components such as bauxite, shale and iron depending on the type of limestone
 available then finely ground and dried in a mill for further processing;
- Clinker production: the materials are heated in a kiln reaching temperatures of 1,450°C producing a molten product called clinker which is then rapidly cooled; and
- Cement grinding and distribution: the clinker is mixed with gypsum and additional limestone, and supplementary materials such as fly ash and silica fume, depending on the type of cement being made, then ground to a fine powder.

All raw materials will be stored in enclosed structures to preserve the material's integrity and minimize impacts to the environment. Limestone will be sourced from the adjacent quarry and trucked or conveyed to the plant. Silica sand and shale will be sourced from local quarries (within 100 km) and trucked to site. Iron mill scale could be sourced from the Ivaco Rolling Mills steel producer located nearby in L'Orignal and trucked to site. Silica fume and fly ash will be transported by truck to the site. Bauxite and gypsum will be transported via ship to either the

Ports of Montreal, Contrecoeur or Valleyfield, all located in Quebec, and then trucked to site. The facility will use petcoke to fuel the plant. Petcoke is a solid carbon product that is produced in the oil refining process and commonly used as an efficient fuel for industrial applications. The fuel will be transported via ship to either the Port of Contrecoeur or Valleyfield then trucked to site and stored outdoors on a contained concrete pad.

Access to the facility will be provided via Highway 17. The combined fleet of trucks delivering raw material to the site and delivering the processed cement to third party users will generate an additional 55 trucks per hour (28 trucks entering and 28 trucks leaving the site). One new internal trucking route will be constructed between the adjacent quarry and the cement plant for the delivery of limestone.

An estimated 550 m³/day, or 180,000 m³/year, of water will be required to produce the cement. This water will be primarily sourced from the adjacent quarry, from sump water being pumped from the quarry pits. Preliminary calculations indicate that no well would be required to supply water to new installations. The cement plant is designed as a closed loop system, and consequently, there is no process water discharge from the plant. Excess water from the manufacturing process is released as water vapour. A stormwater management pond will be installed on the property to collect surface drainage from the developed areas of the site and to monitor water quality and control discharge flow to the Charlebois municipal drain.



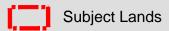
Figure 3

Site Plan

Colacem

Lot 217 Plan M100 County Road #17
Township of Champlain
United Counties of Prescott & Russell

LEGEND



Colacem ID	Building/Structure Name	Colacem ID	Building/Structure Name	
1	Hopper Bauxite and Conveying	27	Pet Coke Storage (Open Storage)	
2	Hopper Schist, Silica, Iron and Conveying	28	Pet Coke Hopper	
3	Hopper Gypsum and Conveying	29	Pet Coke Grinding Building	
4	Limestone Crusher and Conveyor	30	Central Control Room	
5	Raw Material Storage Building (Bauxite)	31	Director's Office	
6	Raw Material Storage Building (Limestone and Schist)	32	Industrial Water Closed Circle	
7	Raw Material Storage Building (Gypsum)	33	Mechanical and Electrical Workshop	
8	Raw Material Storage Building (Iron Ore)	34	Storage Warehouse	
9	Raw Material Storage Building (Silica)	35	Empty Bags Storage	
10	Conveyor Limestone, Gypsum and Additives to Cement Hoppers	36	Vehicle Scale	
11	Conveyor Bauxite, Limestone, Schist and Additives to Raw Mill	37	Electrical Room Packing	
12	Raw Mill	38	Car Park	
13	Homogenization Silo			
14	Waste Gas Treatment System for Kiln and Mill	40	Guardroom	
15	Preheater	41	Canteen	
16	Kiln Building	42	Changing Room	
17	Cooler Building	43	Kiln Inlet & Raw Elec Room	
18	Clinker Silo	44	Kiln Outlet, Cooler and Petcoke Mill Electrical Room	
19	Clinker Bulk Loading Structure	45	Electrical Room for Cement Mill	
20	Hopper Clinker and Additives of Cement Mill			
21	Silica and fly ash silo	47	Limestone Crusher	
22	Cement Mill	48	Electrical Substation	
23	Cement Packing Silos	49	Hopper Reception Clinker	
24	Cement Packing	50	Alternative Fuels Building	
25	Pallets Storage	51	Denox SNCR	
26	Air Compressor Station	52	Stormwater Basin	

Sources:
Site Layout: Map 3 - Facility Layout, Colacem L'Original Cement Plant
ECA, Golder Associates (January 2016)
Air Photo: vuMap (First Base Solutions) 2008

DATE: March 2016

SCALE: ±1:7,500

FILE: 06128C

DRAWN: DGS



K:\06128C COLACEM CHAMPLAIN TOWNSHIP\RPT\Site Plan.dwg



3.4 Technical Report Summaries

Stage 1 Archaeological Assessment (prepared by Golder Associates Ltd.)

Golder Associates Ltd. completed a Stage 1 Archaeological Assessment (AA) for the proposed cement plant. The Stage 1 AA determined that some of the subject property has archaeological potential as per the Ministry of Tourism, Culture and Sport (MCTS) Standards and Guidelines.

The assessment involved a review of documents pertaining to the study area including land registry records, historic maps and aerial photographs. The MTCS was contacted for current information on registered archaeological sites and previous archaeological assessments undertaken in the vicinity. A property inspection was completed on June 19, 2015 to identify potential areas of historic activity and areas of disturbance on the property. During the property inspection, a single celt (a prehistoric stone or metal implement) was observed within an agricultural field in the northwest corner of the subject property

Based on the background research and property inspection it was determined that some of the subject property has archaeological potential. The areas of archaeological potential are recommended for additional archaeological investigation. The Stage 1 Archaeological Assessment provided the following recommendations:

- 1. That a Stage 2 Archaeological Assessment be conducted by a licensed archaeologist using the test put survey and pedestrian survey method where appropriate within all areas of archaeological potential; and
- 2. Undertake intensified pedestrian survey at 1m intervals over a minimum of 20 m radius at the location of the celt recovered during the Stage 1 property inspection.

The celt was recovered in the northwest corner of the subject property, north of the Charlebois Drain. Colacem is not proposing to develop the land north of the Charlebois Drain. A Stage 2 AA will be conducted on the lands identified in the Stage 1 AA south of the Charlebois Drain, where development is proposed.

Environmental Impact Study (prepared by Golder Associates Ltd.)

Golder Associates Ltd. completed an Environmental Impact Study (EIS) for the proposed cement plant. The EIS concluded that there will be no residual negative impacts to the significant natural features and functions in the study area. A significant woodland was identified that overlaps the northwest corner of the site. The significant woodland is approximately 500 metres to the north of the proposed project area and no impact or disturbance to the significant woodland is anticipated. Significant fish habitat is identified on the subject lands. No anticipated negative impact to fish or fish habitat is anticipated within the Charlebois Drain. The removal of surface water features on site (e.g. pond and drainage ditches) will be conducted based on

recommendations from the Department of Fisheries and Oceans. No other significant features were identified on or adjacent to the subject lands.

Traffic Impact Study (prepared by CIMA+)

CIMA+ completed a Traffic Impact Study (TIS) to verify the anticipated development-related traffic on impacted roads will be in conformity to relevant policies and regulations. The TIS found that the amount of traffic from the plant (inbound and outbound) expected to impact on the Peak Daily Hour (PM) for County Road 17 is 110 vehicles per hour. This traffic is comprised of mostly heavy vehicles involved in the conveyance of raw materials good movement and production of cement to/from the market area.

The existing 2015 peak hour two-way volume is 688 vehicles per hour (PM Peak Hour) for County Road 17, which is well within the roadway two-way capacity of 2800 vehicles per hour for a Rural Arterial highway. Total traffic (due to background, new site traffic and 2% per annum increase) is expected to reach approximately 33% of County Road 17 capacity by 2023 (approximately 916 vehicles per hour in the peak afternoon hour from 4pm to 5pm.

In order to support safe conduct of left turns into the site from heavy vehicles traveling east, it is concluded that a left turn lane is warranted. To accommodate heavy truck movements into and out of the site and to reduce the spillage of gravel from the shoulder it is recommended that the site access from County Road 17 include a westbound right turn taper. The taper would be 80 metres. It is further recommended that the same standard be used west of the site access for the trucks leaving the site and turning right onto County Road 17.

Acoustic Assessment Report (prepared by Golder Associates Ltd.)

Golder Associates Ltd. completed an Acoustic Assessment Report (AAR) in support of the application for an Environmental Compliance Approval (ECA) considering Air and Noise emissions for the proposed cement plant. This AAR has been completed in accordance with the Ontario Ministry of the Environment and Climate Change (MOECC) publications NPC 233 and NPC 300. The purpose of the assessment is to evaluate the overall sound emissions of the facility with respect to MOECC guidelines.

Five locations have been identified as being representative of the most sensitive Point(s) of Reception (POR[s]) in the vicinity of the Facility in accordance with NPC 300 guidelines. Elevated background sound levels due to existing road traffic were investigated and applicable limits were established in accordance with MOECC accepted practices. Based on the results of this assessment, sound levels from the facility operations, on the surrounding PORs, are expected to be at or below the applicable MOECC sound level limits. Therefore, the facility can operate in compliance with the MOECC noise guidelines as specified in NPC 300.

Emission Summary and Dispersion Modelling Report (prepared by Golder Associates Ltd.)

Golder Associates Ltd. completed an Emission Summary and Dispersion Modelling (ESDM) Report in support of an application for an Environmental Compliance Approval (ECA) for air and noise. The ESDM Report satisfies the requirements of s.26 of Ontario Regulation 419/05. The Point of Impingement (POI) concentrations were compared against Provincial standards. At 71%, nitrogen oxide has the highest predicted POI concentration relative to the corresponding MOECC POI limit. Predicted concentrations of all contaminants with no MOECC POI limits were found to be below the corresponding Jurisdictional Screening Level or the de minimum limit. This ESDM Report demonstrates that the facility can operate in compliance with s.20 of O. Reg 419/05.

4.0 PLANNING POLICY ANALYSIS

This section assesses consistency and conformity with the applicable Provincial, County, and Municipal planning regulatory policies. There are two tiers of municipal government in the United Counties of Prescott and Russell. The Prescott-Russell Official Plan and the Township of Champlain Zoning By-law apply to the subject lands.

4.1 **Provincial Policy Statement**

The 2014 Provincial Policy Statement ("PPS") was issued by the Province of Ontario in accordance with Section 3 of the *Planning Act*. The 2014 PPS has an effective date of April 30, 2014. The 2014 PPS applies to all decisions in respect of the exercise of any authority that affects a planning matter made on or after April 30, 2014.

The PPS provides policy direction on matters of Provincial interest related to land use planning and development. The PPS is to be considered in all planning decisions. Planning decisions "shall be consistent with" the Policy Statement. The following is an analysis of the proposed development in the context of the policies in the PPS.

There are several main Provincial policy interests that must be considered as part of these applications: protection of mineral aggregate operations from development and activities that would preclude or hinder their expansion or continued use; protection of significant natural heritage features and ecological functions; protection of prime agricultural land; designing the

operation to ensure no adverse impacts on adjacent sensitive land uses and protecting cultural heritage and archaeological resources.

4.1.1 Employment

The PPS promotes economic development and competiveness. The proposed cement plant meets the criteria identified in Section 1.3.1 by:

- a) Introducing a new use to the County that will add to the mix and range of employment uses available.
- b) Bringing a new industry to the County and greater area that does not presently exist and help diversify the economic base. The proposed cement plant will complement the aggregate resource use and adds value to the raw materials extracted as well as provides a construction material close to market. Some of the raw materials that will be used to make the cement will be from local sources thereby supporting the local economy.
- c) Proposing an employment use that is compatible with surrounding land uses.
- d) Proposing development on lands where appropriate infrastructure exists for the use.

4.1.2 Land Use Compatibility

Section 1.1.1.c of the PPS states, healthy, liveable and safe communities are sustained by:

c) avoiding development and land use patterns which may cause environmental or public health and safety concerns.

Further, Section 1.2.6.1 of the PPS states, major facilities and sensitive land uses should be planned to ensure they are appropriately designed, buffered and/or separated from each other to prevent or mitigate adverse effects from odour, noise and other contaminants, minimize risk to public health and safety, and to ensure the long-term viability of major facilities.

The PPS defines 'adverse effects', as defined in the Environmental Protection Act, means one or more of:

- a) Impairment of the quality of the natural environment for any use that can be made of it;
- b) Injury or damage to property or plant or animal life;
- c) Harm or material discomfort to any person;
- d) An adverse effect on the health of any person;
- e) Impairment of the safety of any person;
- f) Rendering any property or plant or animal life unfit for human use;
- g) Loss of enjoyment of normal use of property; and
- h) Interference with normal conduct of business.

A cement plant is a 'major facility' and nearby residential and institutional uses are considered 'sensitive land uses' by the PPS. The PPS definition of a sensitive land use includes amenity areas and outdoor spaces where routine or normal activities occur at reasonably expected times and would experience one or more adverse effects from contaminant discharges generated by a nearby major facility.

There are various ways to prevent or mitigate adverse effects. Specifically, Section 1.2.6.1 of the PPS promotes the use of design, buffering and/or separation distance as appropriate methods to mitigate adverse effects between a major facility and sensitive land uses.

In addition to the PPS, adverse effects are addressed under the Environmental Protection Act, RSO 1990 (EPA). In 1995, the Ministry of the Environment (MoE) released the D-1 Guideline on Land Use Compatibility under Section 14 (1) of the EPA. This guideline is intended to be a planning tool used to separate incompatible land uses when a change in land use is proposed. The guideline is, however, over 20 years old and the MoE has not updated them since they were released.

The objective of the D-1 guideline is to minimize or prevent, through the use of buffers, the exposure of any person, property, plant or animal life to adverse effects associated with the operation of specified facilities. The preferred approach identified in Section 3.1 is for incompatible land uses to be protected from each other through the use of 'buffers' to prevent or minimize adverse effects. Buffers include separation distance, berms, walls, fences, vegetation and/or location and orientation of buildings and activity areas.

Therefore, the D-1 guideline permits the use of one or a combination of buffers to achieve the desired result similar to the PPS. The D-1 guideline is intended to be read in its' entirety and includes reference to specific applications including the D-6 guideline which deals with industrial facilities.

Guideline D-6 specifically addresses compatibility between industrial facilities and sensitive land uses. The objective of this guideline is to prevent or minimize the encroachment of sensitive land use upon industrial land use and vice versa as these two types of land uses are normally incompatible due to possible adverse effects on sensitive land use created by industrial operations. This guideline categorizes industrial facilities into three classes. The proposed cement plant is a Class III Industrial Facility which is defined as, a place of business for large scale manufacturing or processing characterized by: large physical size, outside storage of raw and finished products, large production volumes and continuous movement of products and employees during daily shift operations. It has frequent outputs of major annoyance and there is high probability of fugitive emissions.

The D-6 guideline recommends a 1,000 metre potential influence area for Class III facilities and the recommended minimum separation distance is identified as 300 metres. Table 1 summarizes

the potential influence areas and recommended minimum separation distances identified by the D-6 guideline.

Table 1: D-6 Guideline Potential Influence Area and Recommended Minimum Separation Distance

Class	Potential Influence Area (m)	Recommended Minimum Separation Distance (m)
I	70	20
II	300	70
III	1000	300

Section 4.4.2 describes that as a general rule the separation distance is measured from the property line of the industrial land use to the property line of the sensitive land use. Section 4.4.3, however, introduces an exception to the minimum separation distance being measured from the property line, stating:

• "Where site-specific zoning or site plan control precludes the use of the setback for any activity associated with the industrial use that could cause an adverse effect...then the setback can be included as part of the measurement, rather than measuring from the industrial property line."

Section 4.6 of the D-6 guideline also supports the proponent providing air quality studies for noise, dust and odour to demonstrate there are no significant adverse impacts on sensitive receptors. Studies can be used to help demonstrate that the proposed development will prevent or minimize adverse effects and meet the intent of the Ministry guidelines.

Colacem is proposing a combination of buffers, building design and separation distance to meet the intent of the Ministry Guidelines to minimize or prevent adverse effects. One barrier is proposed on the subject lands along the east property line at a height of 4.9 metres to help attenuate impacts on surrounding lands (see **Figure 3** for berm location). Other control measures have been incorporated into the site design including the use of shielding, the indoor transfer of materials and the installation of dust collectors. All building openings are directed away from the Points of Reception identified in the Acoustic Assessment Report (prepared by Golder Associates Ltd.) and/or are acoustically treated.

In addition to buffers and building design, mitigation is also proposed through separation distance. Site specific zoning and/or site plan control is proposed to regulate the land uses at the south end of the site. Uses associated with the processing of the raw materials and manufacturing of cement are proposed to be setback a minimum of 259 metres from the south property line (see **Figure 4**). Therefore, nearby residences will be setback from the closest area zoned to permit the cement plant by a minimum of approximately 300 metres in accordance with the recommended setback identified in the D-6 Guidelines. In addition, intervening land

uses proposed at the south end of the property between the cement plant and surrounding sensitive land uses will be limited through zoning to accessory uses which are not anticipated to create an adverse effect. Intervening land uses proposed include:

- Employee and visitor parking;
- Offices, cafeteria and employee lockers;
- quardroom;
- vehicle scale;
- Electrical sub-station;
- Berm; and the
- pond.

An Acoustic Assessment Report and an Emission Summary and Dispersion Modelling Report were both prepared by Golder Associates Inc. in support of the proposed cement plant to assess noise and dust impacts. Based on the proposed site design, the supporting studies demonstrate that the cement plant can operate in compliance with appropriate standards.

As a result of the proposed separation distances, buffering and mitigation measures as well as the supporting studies, the proposed cement plant is consistent with the PPS and meets the intent of the Ministry Guidelines by mitigating adverse effects from noise and other contaminants and maintaining a minimum separation distance of 300 metres between the zone that will permit the cement plant and adjacent sensitive land uses.

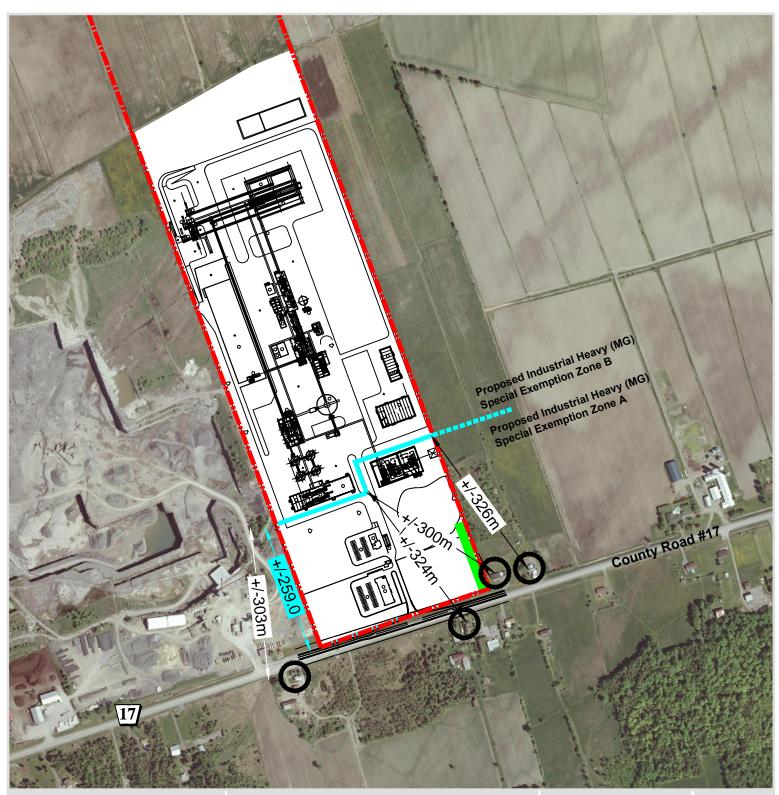


Figure 4

D Series Guideline Proposed Setback



Subject Lands



Points of Reception



4.9m High Acoustical Berm

Colacem

Lot 217 Plan M100 County Road #17 Township of Champlain United Counties of Prescott & Russell

Sources: Air Photo - vuMAP (First Base Solutions) 2008 Site Layout - provided by client, January 2016 Points of Reception - Golder (December 2015)

DATE: March 2016

SCALE: ±1:7,500

FILE: 06128C

DRAWN: DGS

K:\06128C COLACEM CHAMPLAIN TOWNSHIP\RPT\D SERIES GUIDELINES INVESTIGATION.DWG



4.1.3 Mineral Aggregate Resources

The PPS contains policies that aim to protect long term resource supply from incompatible activities that have the potential to directly sterilize a mineral aggregate deposit or indirectly hinder access to the aggregate resource (PPS Section 2.5.2.5). Typically, this policy would apply to "non aggregate" development such as residential severances or subdivisions.

The proposed cement plant is located on a bedrock resource area that has been identified as having potential to supply mineral aggregate resources. In 2014, the United Counties of Prescott and Russell completed an Aggregate Resources Inventory Master Plan. The Master Plan states that the Bobcaygeon Formation is about 20 to 25 metres thick in the region and is suitable for use as granular base and for use in asphalt and concrete. The adopted Official Plan (2015) incorporates the findings and recommendations from the Master Plan. The subject lands are identified as having Bedrock Resources on Schedule E – Mineral Aggregate Resource of the adopted Official Plan (2015).

Even though the proposed cement plant would meet the PPS definition of "development" (i.e. a change in land use) this is not a typical "non aggregate" development that was intended to be subject to the 2.5.2.5 policy that protects known deposits of mineral aggregate resources from development and activities that would preclude or hinder access to the aggregate resource.

The cement plant would rely on raw materials from the adjacent quarry (limestone is 80-90% of the raw materials used to manufacture cement). A cement plant is a use that adds value to the raw materials extracted at the quarry. It is a use that complements the extraction of the raw material at the quarry. In Ontario, other cement plants are either located next to a quarry source of raw material or are located on water with dock facilities that are linked with lakeside quarries allowing efficient bulk transportation of raw materials by boat.

The PPS defines a mineral aggregate operation as (bold added for emphasis):

- a) lands under license or permit, other than for wayside pits and quarries, issued in accordance with the Aggregate Resources Act;
- b) for lands not designated under the Aggregate Resources Act, established pits and quarries that are not in contravention of municipal zoning by-laws and including adjacent land under agreement with or owned by the operator, to permit continuation of the operation; and
- c) associated facilities used in extraction, transport, beneficiation, processing or recycling of mineral aggregate resources and derived products such as asphalt and concrete, or the production of secondary related products.

A cement plant is consistent with c) above as an associated facility to process a mineral aggregate resource and produce related products. Accordingly, a cement plant is defined in the PPS as part

of a mineral aggregate operation. Further, the cement plant would not hinder extraction on the adjacent mineral aggregate operation.

Locating a cement plant next to the source of raw material makes sense based on a number of sound planning principles. The locational association between extraction and production of related products means that facilities like cement plants will invariably be located in areas that have known deposits of mineral aggregate resources. It is a reasonable interpretation of the PPS that mineral aggregate operations or facilities that are associated with operations and benefit from a location on or adjacent to a mineral aggregate deposit should not be subject to the same policy restrictions on their location as would apply to incompatible non aggregate development that the PPS protection policies were intended to restrict.

4.1.4 Rural Areas in Municipalities

The PPS recognizes the importance of rural areas to the economic success of the Province and our quality of life. Rural areas are a system of lands that may include rural settlement areas, rural lands, prime agricultural areas, natural heritage features and areas, and other resource areas. Section 1.1.4.1 states that healthy, integrated and viable rural areas should be supported by a variety of principles including:

- Building upon rural character, and leveraging rural amenities and assets;
- Using rural infrastructure and public service facilities efficiently;
- Promoting diversification of the economic base and employment opportunities through goods and services, including value-added products and the sustainable management or use of resources; and
- Conserving biodiversity and considering the ecological benefits provided by nature.

The proposed development is consistent with these principles because:

- a cement plant is a mineral aggregate operation that uses limestone extracted in the area
 to produce a product used in construction. Mineral aggregate is a rural asset and the
 extraction of the resource and subsequent processing of the material (i.e. a cement plant)
 is a complimentary use producing a value-added product. Mineral aggregate operations
 are rural land uses.
- the subject lands are located on County Road 17, which is a Primary Artery identified by the Prescott-Russell Official Plan. A Traffic Impact Study prepared by CIMA+ has been submitted in support of the applications (see **Sections 3.4 and 4.2.7** for further information).
- the proposed cement plant will bring a new business to the United Counties of Prescott-Russell willing to create significant jobs. The cement plant will help diversify the economy by establishing the only cement plant in Ontario east of Kingston.

No impact or disturbance to the significant woodland is anticipated as a result of the
project and the significant fish habitat will be addressed through Provincial and Federal
approvals. An Environmental Impact Study (EIS) has been completed by Golder in
support of these planning applications (see Sections 3.4 and 4.1.6 for further
information).

Section 1.1.4.4 of the PPS permits municipalities to direct growth and development in the rural areas to rural lands. Rural lands are those which are located outside settlement areas and which are outside prime agricultural areas. Section 1.1.5.2 of the PPS permits a range of uses on rural lands including the management or use of resources, limited residential development, home occupations and home industries, and other rural land uses. The proposed cement plant is a mineral aggregate operation, which is permitted on and directed to rural lands.

4.1.5 Minimum Distance Separation Formulae

Section 1.1.5.9. of the PPS requires that new land uses on rural lands shall comply with the Minimum Distance Separation (MDS) formulae. MDS Formulae is a land use planning tool that determines a recommended separation distance between a livestock barn or manure storage and another land use. The objective of MDS is to prevent land use conflicts and minimize nuisance complaints from odour.

MDS I is applied at the time of planning and/or development review for proposed new development. MDS I formulae provides the minimum distance separation between proposed new development and existing livestock facilities and/or permanent manure storages located in areas where the keeping of livestock is permitted. The proposed cement plant is characterized as a Type A land use in accordance with Implementation Guideline #34. Implementation Guideline #6 requires MDS I be applied for livestock facilities within a 1000 metre radius (see **Figure 5**).

Analysis was completed to investigate all properties within 1000 metres of Lot 217, Plan M100 for livestock barns and/or manure storage. Most properties are residential in nature and do not contain barns. Table 2 summarizes the properties identified as having barns on them. Many of the barns identified through this analysis do not appear to house livestock; however, they are still included in this inventory as they may still be capable of housing livestock. Old barns or accessory structures that clearly are not used or capable of housing livestock are not included on this list.

Table 2: Properties Identified with a Barn

ID	Address	Size	Zoning
#	(Lot & Concession)	(approximate)	
1	2535 County Road 17	325m2	RU
	(Lot 174, Plan M100)		
2	2487 County Road 17	580 m2	RU-33
	(Lot 172, Plan M100)		
3	2231 County Road 17	615m2	RU

	(Lot 168, Plan M100)		
4	2189 County Road 17	230m2	RU
	(Lot 167, Plan M100)		
5	Pt Lot 166, Plan M100	330m2	Α
	PCL 166 RP 46R4872		
	Part 1		
6	Lot 219, Plan M100	1,650m2	A-3
7	2184 County Road 17	300m2	RU
	(Lot 218, Plan M100)		

Implementation Guideline #12 states, where there are four, or more, existing non-farm uses closer to the subject livestock facility and in immediate proximity to the current application, MDS I will not be applied. In the immediate vicinity of the subject property, the lands are designated Rural Policy Area, which permits a higher density of residential dwellings than normally observed in agricultural areas.

From the list of barns in Table 1, Implementation Guideline #12 applies to barns # 1, 2 & 5 as there are four or more existing non-farm uses closer to the potential livestock barn and in immediate proximity to the subject lands. Township Staff have also confirmed that the #6 buildings have been converted to storage and no livestock capacity exists. Further investigation has found that the remaining potential livestock barns (ID # 3, 4 & 7) do not appear to contain livestock.

As a result, the proposed development complies with the MDS formulae.

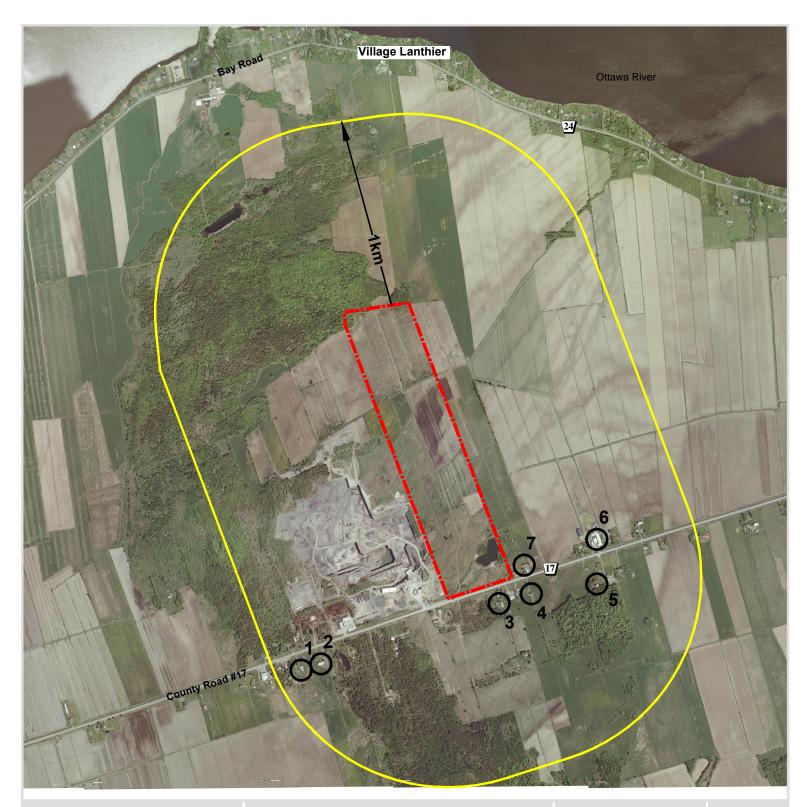


Figure 5

Minimum Distance Separation (MDS)

Barns Within 1000m Radius

Colacem

Lot 217 Plan M100 County Road #17 Township of Champlain United Counties of Prescott & Russell

LEGEND



Subject Lands



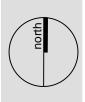
Properties Identified with a Barn

DATE: March 2016

SCALE: ±1:20,000

FILE: 06128C

DRAWN: DGS



K:\06128C COLACEM CHAMPLAIN TOWNSHIP\RPT\MDS ADJACENT BARNS.DWG



Source:
Air Photo: vuMap (First Base Solutions) 2008

4.1.6 Natural Heritage

The PPS requires that natural features and areas be protected for the long-term. An Environmental Impact Study (EIS) has been prepared by Golder Associates Ltd. to address the natural resources on the subject property. Significant natural heritage features found on the property include fish habitat and significant woodlands.

The PPS states in Section 2.1.6, development and site alternation shall not be permitted in fish habitat except in accordance with provincial and federal requirements. The EIS anticipates that there will be no negative impact to fish or fish habitat within the Charlebois Drain. The removal of surface water features on site (e.g. drainage ditches) will be conducted based on recommendations from the Department of Fisheries and Oceans.

The PPS only permits development and site alteration in significant woodlands when it has been demonstrated that there will be no negative impacts on natural features or their ecological functions. The EIS identifies a significant woodland in the study area and a small portion (i.e. <0.5 ha) overlaps the northwest corner of the site. The significant woodland is approximately 500 metres to the north of the footprint of the proposed cement plant and no impact or disturbance to the significant woodland is anticipated as a result.

Some significant wildlife habitat (deer winter congregation and bat maternity colonies) are associated within the significant woodland at the northwest portion of the site. Since the significant woodland will not be impacted by the project and no disturbance to the feature is anticipated, the EIS concludes that there is no negative impact.

No habitat of endangered or threatened species, significant wetlands, significant valleylands, significant areas of natural or scientific interest were identified by the EIS on the subject lands or within the study area.

4.1.7 Cultural Heritage & Archaeology

The PPS does not allow development or site alternation on lands containing archaeological resources or areas of archaeological potential unless significant archaeological resources have been conserved.

A Stage 1 Archaeological Assessment ('Stage 1 AA') has been prepared by Golder Associates Ltd. in support of these planning applications. The Stage 1 AA concluded that some of the subject property has archaeological potential as per the Ministry of Tourism, Culture and Sport Standards and Guidelines. A Stage 2 AA will be conducted on the lands identified in the Stage 1 AA south of the Charlebois Drain, where development is proposed. See **Section 3.4** for more information.

4.1.8 Protecting Public Health and Safety

Section 3.1.1 of the PPS states that, development shall generally be directed to areas outside of hazardous sites. Hazardous sites are defined in the PPS as, property or lands that could be unsafe for

development and site alteration due to naturally occurring hazards. These may be unstable soils (sensitive marine clays [leda], organic soils) or unstable bedrock (karst topography).

Both Official Plans identify organic soils on part of the subject property. Additional geotechnical investigations have been completed on the property. Bore holes were drilled in several locations to understand the bedrock depth. Most of the proposed buildings and structures are located in areas where the bedrock is approximately 0.6 to 7.6 metres below the surface. The foundations of the buildings and structures on the property will need to be upwards of 8 metres deep, therefore, they will all be located on the solid bedrock.

The bedrock is, however, found to be deeper underground in the northeastern corner of the site (approximately 8 to 12 metres below the surface). The solution to appropriately build in this area is to remove the organic soils to the bedrock and put several layers of limestone mixed with cement rolled and compacted to a depth of approximately 5 to 6 metres.

The PPS does not prohibit development in areas of organic soils but rather 'generally' directs development to other areas. Investigations have been completed to demonstrate that the proposed cement plant can be built on the bedrock.

In summary, the proposed Official Plan and Zoning By-law amendments are consistent with the 2014 Provincial Policy Statement, represents good planning and is in the public interest considering the economic, environmental and social factors that apply to this application.

4.2 United Counties of Prescott and Russell Official Plan

The Prescott-Russell Official Plan was adopted by the United Counties of Prescott and Russell ("the County") on June 22, 1999. A review of the Official Plan was adopted by the County on May 23, 2006 (the 'current (2006) Official Plan'). The current (2006) Official Plan is in full force and effect within the UCPR.

The UCPR recently completed a five-year review of their Official Plan. The Council of the UCPR adopted Official Plan Amendment (OPA) No. 27 on August 26, 2015 (the 'adopted (2015) Official Plan'). OPA No. 27 must still receive final approval by the Ministry of Municipal Affairs and Housing (MMAH).

Generally, applications are decided based on approved policies at the time of application, however, adopted but not approved policies are still relevant. The following sections will review the proposal in consideration of both the current (2006) and adopted (2015) Official Plans.

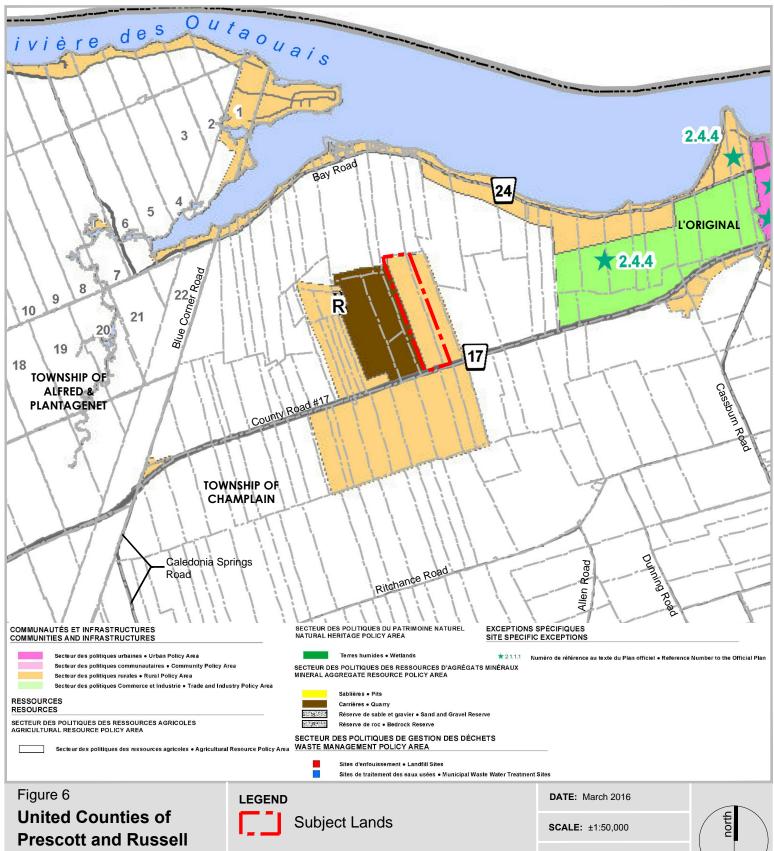
The Subject Lands are designated Rural Policy Area on Schedule A – Land Use Designation of the current (2006) and adopted (2015) Official Plans (**Figure 6**). Rural Policy Area lands are those located outside of the Urban Policy Area, Community Policy Area and Trade and Industry Policy

Area and lands which are not subject to the Resource policies or Natural Heritage Policies. The Official Plan Amendment proposes to designate the lands Trade and Industry Policy Area.

This application proposes to develop the lands for a cement plant. A cement plant is a large industrial use. In the pre-application comments provided, the UCPR confirmed that an amendment to the 2006 UCPR Official Plan is required "given that the proposed project is of a heavy industrial nature" (see **Appendix A**).

The Official Plan Amendment proposes to designate a portion of the lands Trade and Industry Policy Area. The Trade and Industry Policy Area is intended to provide for economic development opportunities in areas located outside of the Urban Policy Area and Community Policy Area and permits a variety of industrial uses including manufacturing, processing, warehousing of bulk products and open storage.

The area to be amended includes 39.9 hectares of land located south of the Charlebois Drain. The remaining lands located north of the Charlebois Drain are proposed to remain Rural Policy Area and are not proposed to be developed. See **Figure 7** for the area to be amended.



Official Plan (2006)

Land Use Designation

Colacem

Lot 217 Plan M100 County Road #17 Township of Champlain United Counties of Prescott & Russell FILE: 06128C

DRAWN: DGS

K:\06128C COLACEM CHAMPLAIN TOWNSHIP\RPT\OP LAND USE MAP.DWG



Source:

United Counties of Prescott & Russell Official Plan -Schedule A Land Use Designation (Last Modification - September 10, 2014)

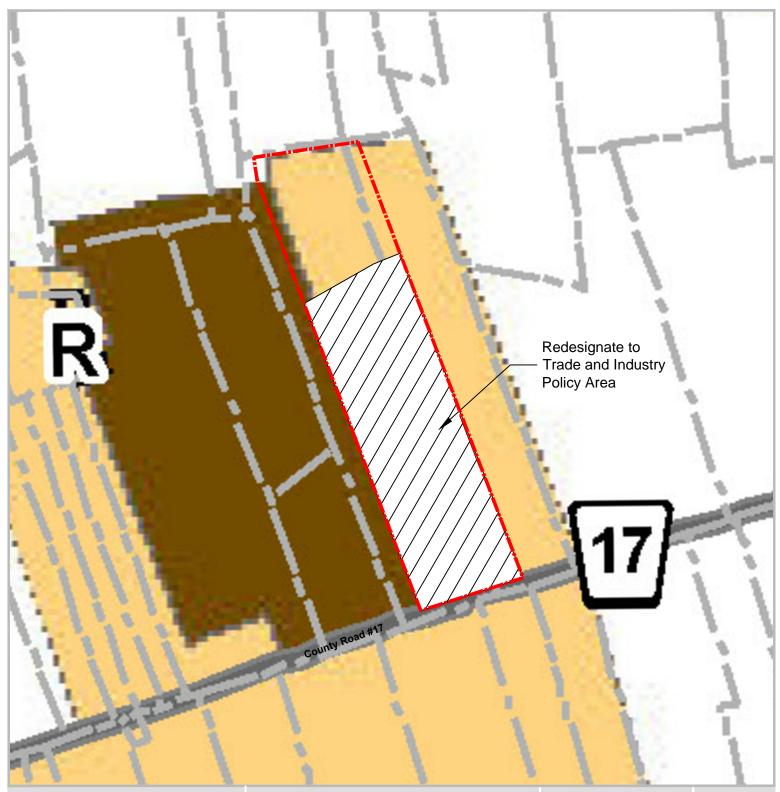


Figure 7

Official Plan Amendment

Proposed Area to be Amended

LEGEND



Subject Lands



Lands Subject to Amendment Redesignated from Rural Policy Area to Trade and Industry Policy Area

DATE: March 2016

SCALE: ±1:12,500

FILE: 06128C

DRAWN: DGS



Colacem

Lot 217 Plan M100 County Road #17 Township of Champlain United Counties of Prescott & Russell

Sources:
Air Photo: vuMap (First Base Solutions) 2008 Site Layout: provided by client, January 2016



4.2.1 Industrial Uses

There are eight land use designations in the UCPR Official Plans: Urban, Community, Rural, Trade and Industry, Agricultural Resource, Natural Heritage, Mineral Aggregate Resource and Waste Management Policy Areas. Within these designations of the current (2006) and adopted (2015) Official Plans, industrial uses are permitted in the:

- Urban policy area;
- Community policy area;
- Trade and industry policy area;
- Rural policy area; and the
- Agricultural resource policy area.

The current (2006) and adopted (2015) Official Plans direct industrial uses to the aforementioned designations, generally, based on servicing requirements. A significant amount of growth is intended to be directed to the Urban Policy Area; therefore, the Official Plan would direct the majority of industrial development to the settlement areas where full services exist.

The Community Policy Area consists of partially serviced and un-serviced Villages and Hamlets. The Official Plans permit industrial uses in the Community Policy Area but proposed uses have to be compatible with the surrounding community and have the ability to be appropriately serviced.

Development within the existing designation, the Rural Policy Area, will generally be on the basis of private individual services. Permitted uses include agriculture-related commercial and industrial uses and non-agricultural industrial and commercial uses which meet the needs of the travelling public, or which relate to local resources. Therefore, industrial uses related to local resources are currently permitted on the subject lands.

Full services are not required for the proposed development, therefore, lands outside of the Urban Policy Area can be considered in the location of the cement plant. In addition, a cement plant requires a significant amount of land that is not often available within settlement areas. Therefore, the current (2006) and adopted (2015) Official Plans direct industrial uses that require large areas of land to the Trade and Industry Policy Area. The Trade and Industry Policy Area is the most appropriate designation for the proposed cement plant. The County confirmed through the pre-consultation process that an Official Plan Amendment to the Trade and Industry Policy Area was necessary for the proposed development.

4.2.2 Trade and Industry Policy Area

Both the current (2006) and adopted (2015) Official Plans recognize the need for economic development opportunities in areas outside of the Urban Policy Area and the Community Policy Area. The Trade and Industry policies are intended to create a planning framework which will encourage and support mixed use employment areas which can accommodate serviced or unserviced commercial, industrial or tourism related uses.

Section 2.4.3 identifies the objectives of the Trade and Industry Policy Area. The proposed development conforms to these objectives by:

- a) Facilitating the development of an industrial use that requires a large amount of land;
- b) Proposing development on County Road No. 17, which is identified as a primary artery. County Road No. 17 provides access east-west across the UCRP to the City of Ottawa. The Traffic Impact Study prepared by CIMA+ found that total traffic on County No. 17 is expected to reach approximately 33% of the road's capacity by 2023.
- c) Proposing industrial development that is compatible with surrounding land uses in accordance with provincial guidelines. Further analysis of land use compatibility was analyzed in **Section 4.1.2**.
- d) Encouraging economic development opportunities in the UCRP. This will be the only cement plant located east of Kingston. Many of the raw materials used in the production of cement will be locally sourced thereby supporting other businesses in the area. The cement plant will provide significant new jobs in the community.

The adopted (2015) Official Plan has identified the Trade and Industry Policy Area as the employment lands as defined in the PPS. This designation shall be the focus of employment growth and development in the County, and shall accommodate a range of uses.

Both the current (2006) and adopted (2015) Official Plans permit the following commercial and industrial uses which require larger land areas in the un-serviced Trade and Industry Policy Areas:

- Manufacturing and processing
- Warehousing and wholesaling of bulk products
- Transportation depots
- Heavy equipment and recreational vehicle sales and service
- Open storage
- Automobile and commercial vehicle service centres

- Service commercial uses ancillary to the above
- Other commercial uses appropriate or compatible with an industrial/commercial mixed use area or business park.

A cement plant is a manufacturing use and a processing activity as cement is created by processing several raw materials. A cement plant is an industrial use and is permitted in the Trade and Industry Policy Areas of the current (2006) and adopted (2015) Official Plans.

Section 2.4.3 of the current (2006) Official Plan and Section 2.4.3.6 of the adopted (2015) Official Plan directs the Zoning By-law to regulate the permitted uses on the lands. Lands designated Trade and Industry Policy Area are typically zoned either Industrial Restricted (ML) or Industrial Heavy (MG) in the Township of Champlain Zoning By-law. The requested Zoning By-law amendment proposes to zone the lands MG, which permits a cement plant and a metal fabricating plant. Details of the proposed zone change are included in **Section 4.3**.

Section 2.4.3 of the current (2006) Official Plan and Section 2.4.3.9 of the adopted (2015) Official Plan requires that site plan control apply to new or expanded trade and industry uses to regulate the physical character of development and to ensure compatibility with established land uses. A site plan application will be submitted separately from the Official Plan and Zoning By-law Amendment applications but will be required prior to any development occurring on the subject lands.

4.2.3 Land Use Compatibility

The current (2006) Official Plan aims to prevent or minimize future land use conflicts which can arise when incompatible land uses develop in close proximity to one another. Section 6.9.3 requires the Ministry of the Environment guidelines on Land use Compatibility be applied during the planning process.

The adopted (2015) Official Plan aims to ensure the compatibility between industrial facilities and sensitive land uses. The adopted (2015) Official Plan considers a sensitive land use to be a residence or other land use, such as outdoor recreational activities, where humans or the natural environment may be adversely affected by emissions from industrial facilities. Separation distances "shall generally conform" to the Ministry of Environment and Climate Change's D-Series Guidelines. Section 6.9.3 of the adopted (2015) Official Plan permits compatibility to be achieved in many ways including through separation distance, other forms of buffering and/or intervening land uses.

Land use compatibility and the MOE guidelines have previously been addressed in **Section 4.1.2**.

4.2.4 Mineral Aggregate Resource Policy Area

The current (2006) and adopted (2015) Official Plans recognize the importance of aggregate resources to all facets of development in the UCPR as these materials are used in the construction of roads, water and sewer infrastructure, homes, schools and commercial buildings and landscaping projects. Both the current (2006) and adopted (2015) Official Plans recognize aggregate resources are a non-renewable resource; therefore, the intent of the Plans is to protect mineral aggregate resources from incompatible development.

The current (2006) Official Plan identifies licensed pits and quarries and mineral aggregate reserve areas on Schedule A (**Figure 6**). The subject lands are not identified as having any type of aggregate reserve. They are, however, located adjacent to a Mineral Aggregate Resource Area – Quarry – also operated by the owners of the subject lands.

The current (2006) Official Plan aims to restrict opportunities for incompatible development near lands designated Mineral Aggregate Resource Policy Area.

The adopted (2015) Official Plan also designates pits and quarries licensed under the Aggregate Resources Act on the land use plan. In addition, the adopted (2015) Official Plan includes a new schedule that maps mineral aggregate resource areas which are not currently licensed based on provincial information and the Aggregate Resources Inventory Master Plan. These areas are identified in the adopted Official Plan as they are deemed essential for the long term supply of aggregates and require protection.

The intent of the adopted (2015) Official Plan is to protect existing aggregate operations and potential aggregate operations from incompatible land uses.

The appropriateness of locating a cement plant on the subject lands has previously been reviewed in **Section 4.1.3**.

4.2.5 Minimum Distance Separation

Lands immediately to the east and south of the subject lands are designated Rural Policy Area. Beyond the Rural Policy Area, the lands are designated Agricultural Resource Policy Area. Agricultural uses are permitted in both of these land use designations. The current (2006) and adopted (2015) Official Plans require development conform to the province's Minimum Distance Separation (MDS) standards.

Section 4.1.5 demonstrates that the proposed cement plan conforms with the MDS formulae.

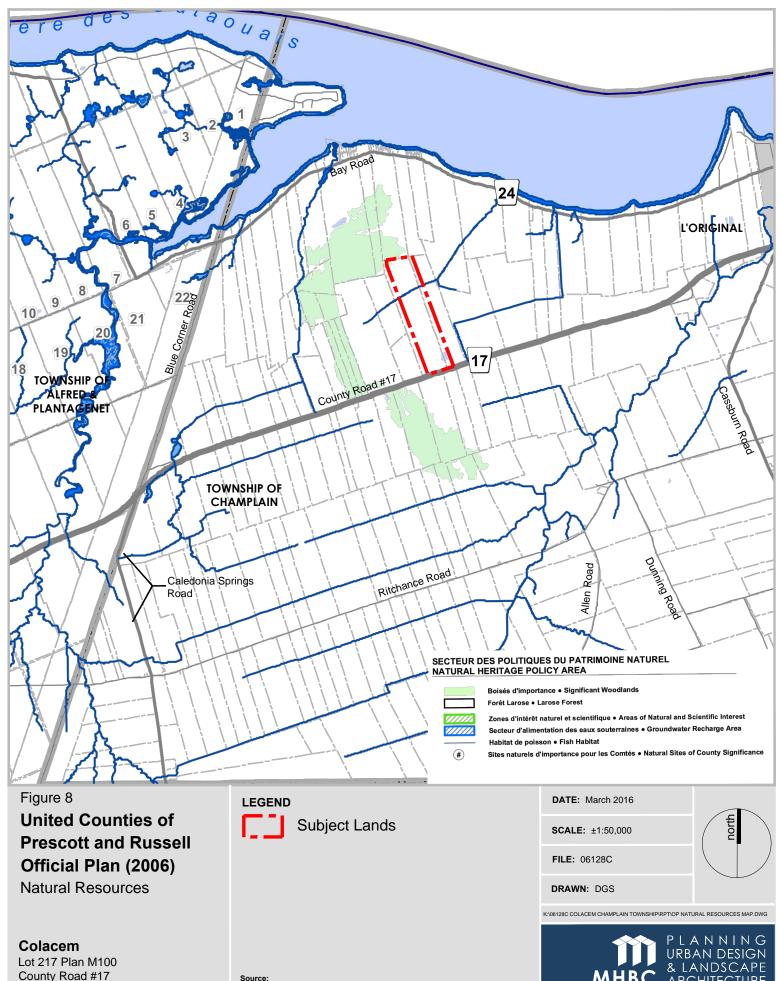
4.2.6 Natural Heritage

The current (2006) and adopted (2015) Official Plans primary means of protecting the County's natural heritage is through the designation of those features on Schedule A regulating where development is permitted. The current (2006) and adopted (2015) Official Plans also identify area

of natural heritage where development is to be controlled on Schedule B (**Figure 8**). Features identified on Schedule B include Areas of Natural or Scientific Interest (ANSI's), fish habitat, significant woodlands, shore lands along major waterways and ground water resources.

The propose development conforms to the natural heritage policies of the current (2006) and adopted (2015) Official Plans because:

- There are no provincially significant wetlands identified on or adjacent to the subject lands in either Official Plan.
- The proposed development is located approximately 500 metres away from the significant woodland located on the northwest corner of the property (approximately 0.5 ha) and on the lands adjacent (greater than 200 ha in size). The Golder EIS concludes that no impact or disturbance to the significant woodland is anticipated as a result of the project.
- The EIS anticipates that there will be no negative impact to fish or fish habitat within the Charlebois Drain. The removal of surface water features on site (e.g. drainage ditches) will be conducted based on recommendations from the Department of Fisheries and Oceans.
 A Fish collection permit will be obtained from the Ministry of Natural Resources and Forestry to relocate fish in the drainage ditches prior to commencement of construction activities on site.
- The EIS concluded that no negative impact to significant habitat on the site or within the study area is anticipated as a result of the project.
- No habitat of endangered or threatened species, significant wetlands, significant valleylands or significant areas of natural or scientific interest are located on the subject property or within the study area.



Source: United Counties of Prescott & Russell Official Plan -Schedule B Natural Resources (Last Modification - March 10, 2011)

Township of Champlain

United Counties of Prescott & Russell

4.2.7 Transportation

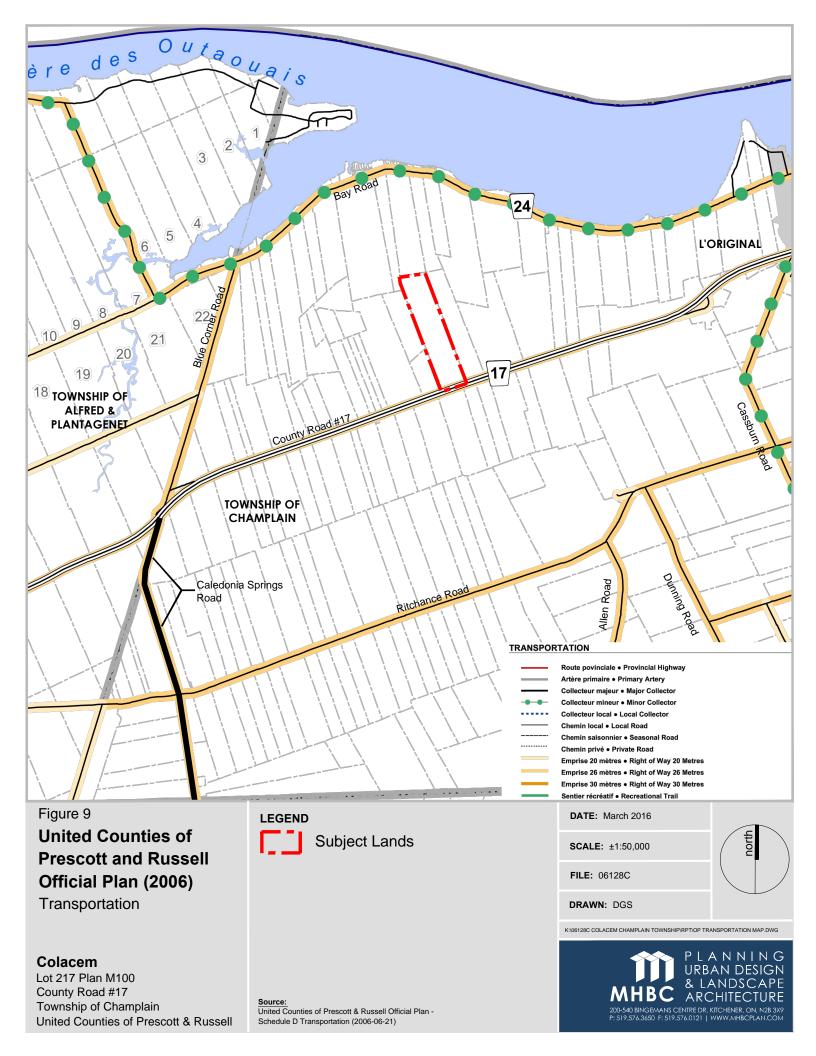
The transportation system in the UCPR is composed of Provincial highways, County roads, local public roads opened and maintained on a year round basis, seasonal roads which are not maintained during the winter maintenance season and local private roads. The current (2006) and adopted (2015) Official Plans identify Council's objective is to ensure that the road network within the UCPR will function in a cost effective, efficient and safe manner for the movement of people and goods.

The subject lands are located on County Road 17. The current (2006) and adopted (2015) Official Plans identify County Road 17 as the only primary artery in the UCPR (**Figure 9**). This artery, along with provincial Highway 417, is the main east-west link in Prescott and Russell.

The adopted (2015) Official Plan identifies that the County may require a Traffic Impact Study in order to demonstrate how the transportation impacts of the proposed development can be mitigated and addressed. The pre-consultation comments from the UCPR identify a Traffic Impact Study as a requirement for a complete application. Therefore, a Traffic Impact Study (TIS) was completed by CIMA+ in support of the development.

The purpose of the TIS was to verify that anticipated development-regulated traffic on impacted roads will be in conformity to relevant policies and regulations and include verification of minimum highway entrance geometrics requirements to provide for entrance and exit maneuvers at County Road 17. The TIS determined that the amount of traffic from the plant (inbound and outbound) expected to impact on the Peak Daily Hour (am or pm) for County Road 17 is 110 vehicles per hour. This traffic is comprised of mostly heavy vehicles providing transport of raw materials good movement and production of cement to/from the market area. Total traffic is expected to reach approximately 33% of County Road 17 capacity by 2023. Therefore, vehicle circulation is not anticipated to be adversely impacted as a result of the cement plant and traffic will continue to move in an efficient manner along Highway 17.

The proposed entrance to the cement plant is located approximately 330 metres from the existing Colacem quarry access to the west and approximately 145 metres from the nearest residence to the east. In order to support safe conduct of left turns into the subject lands from heavy vehicles, CIMA+ recommends that a left turn lane is warranted under traditional Ministry of Transportation Ontario guidelines for rural two-lane highways. The TIS recommends that the cement plant access should be planned to ensure a minimum separation distance of 290 metres between the proposed new site entrance and the existing quarry entrance to allow for an appropriate amount of storage, deceleration and taper. The location of the cement plant entrance reflects the safety considerations identified in the TIS.



4.2.8 Public Health and Safety

The current (2006) and adopted (2015) Official Plans acknowledge that the natural landscape and resources are constantly being shaped and reshaped by naturally occurring physical and ecological processes. These landscapes and resources only become a hazard when people and structures are located within them or are affected by them. Health and public safety hazards are shown on Schedule C of both Official Plans (**Figure 10**). A portion of the subject lands are identified as being organic soils. The suitability of the lands for development is discussed in **Section 4.1.8.**

The current (2006) and adopted (2015) Official Plans also identify abandoned pits and quarries on Schedule C. An abandoned pit and quarry is identified on the adjacent property to the east. Development on, abutting or adjacent to lands affected by former mineral resource operations may proceed in accordance with the underlying land use designation only if rehabilitation measures to address and mitigate known or suspected hazards are under-way or have been completed. The adjacent property is presently developed with a residence and accessory structures. The proposed cement plant will not aggravate any potential hazards as a result of the former pit and/or quarry.

It is entirely likely that the abandoned quarry shown on Schedule C of the Official Plan is intended to represent the pond located on the subject lands. As no development is proposed around the abandoned quarry, no rehabilitation is required as there are no known or expected hazards.

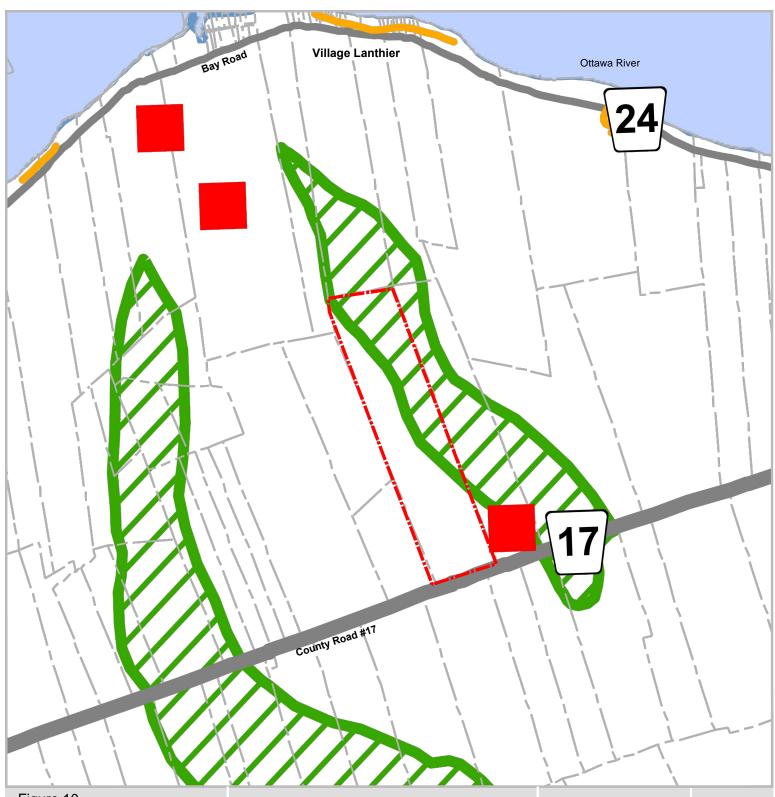


Figure 10

United Counties of Prescott and Russell Official Plan (2006)

Public Health and Safety

Colacem

Lot 217 Plan M100 County Road #17 Township of Champlain United Counties of Prescott & Russell



Subject Lands



Organic Soils



Unstable Slopes



Abandoned Pits and Quarries

Base Map Source:
United Counties of Prescott & Russell Official Plan Schedule B - Natural Resources (Last Modification - March10, 2011) DATE: March 2016

SCALE: ±1:20,000

FILE: 06128C

DRAWN: DGS

BC COLACEM CHAMPLAIN TOWNSHIP\RPT\PRESCOTT AND RUSSELL OP SCHEDULEC.DWG



4.2.9 Archaeology

In the pre-consultation letter from the UCPR dated July 21, 2011, staff identified the site as having archaeological potential and required that a Phase 1 Archaeological Assessment be undertaken. Archaeology has been addressed in **Section 4.1.7**.

In summary, the proposed cement plant conforms to the current (2006) United Counties of Prescott and Russell Official Plan relating to industrial operations, and the studies prepared in support of this application address the policies of the County. In addition, these applications have been considered in relation to Official Plan Amendment No. 27, which was adopted by the UCPR on August 26, 2015. The proposed cement plant also conforms to the intent of OPA No. 27.

4.3 Township of Champlain Zoning By-law 2000-75

The Township of Champlain approved Zoning By-law No. 2000-75 on August 1, 2000. The Zoning By-law is the implementing tool for the Official Plan and is deemed to conform. The subject lands are zoned Rural (RU) in the Zoning By-law (**Figure 11**). Section 11 of the Zoning By-law permits the following uses in the RU Zone:

- Agricultural use
- Conservation use
- Single dwelling
- Veterinary establishment
- Wayside pit
- Wayside quarry
- Dwelling accessory to an agricultural use, or veterinary establishment
- Hobby farm accessory to a single dwelling

The subject lands are presently used for agriculture. A cement plant is not permitted in the Rural Zone. A Zoning By-law amendment is necessary to permit the proposed cement plant, which is an industrial land use.

The Zoning By-law directs industrial uses to three industrial zones: Industrial Restricted (ML), Industrial Heavy (MG) and Industrial Rural (MR). The MG Zone permits the heaviest industrial uses. A cement plant is listed as a permitted use in the Industrial Heavy (MG) Zone.

The Zoning By-law Amendment proposes to zone the lands Industrial Heavy (MG). Permitted uses in the MG Zone include a cement plant and a metal fabricating plant. The remainder of the property is proposed to retain the RU Zoning. See **Figure 12** for the area to be amended. Two special exemption zones are proposed to implement the Trade and Industry Policy Area designation in the Official Plan (see Table 3). Special Exemption Zone A applies to the southern 259 metres of the subject lands identified as the 'intervening' land uses. This zone regulates the permitted uses to ensure compatibility with surrounding sensitive land uses.

Special Exemption Zone B applies to the lands between Special Exemption Zone A and the Charlebois Drain. The Special Exemptions requested in Zone B are for a reduced interior side yard and an increased maximum building height.

Table 3: Proposed Special Exemption Zones

MG – Special Exemption Zone A	MG – Special Exemption Zone B
 Prohibits a cement plant and a metal fabricating plant; Notwithstanding the permitted uses in Section 7.2.a of the Zoning By-law, the only uses permitted in the MG-Special Exemption Zone A are those uses accessory to a cement plant including: Employee and visitor parking; Offices, cafeteria and employee lockers; Guardroom; Vehicle scale Electrical sub-station; Berm; and the Pond. A west side yard setback of 0 m, where a minimum of 15 m is required 	 An interior side yard of 0 m, where a minimum of 15 m is required; and A maximum building height of 125 m, where a maximum of 18 m is required.

The proposed amendment conforms with the general intent and purpose of the Township of Champlain Zoning By-law because:

- Industrial uses are directed to three industrial zones (ML, MG, MR);
- A cement plant is a permitted use in the Industrial Heavy (MG) Zone;
- The site can be designed to appropriately separate and mitigate the industrial land use
 from surrounding sensitive land uses. The two-zone approach introduces intervening
 land uses at the southern portion of the site and directs the heavy industrial cement plant
 to the rear to mitigate impacts on neighbouring lands.
- A reduced side yard setback of 0 metres will not have any adverse impact as the adjacent land use to the west is a quarry and to the east is agricultural land.
- The requested maximum height of 125 metres is necessary for the operation of the cement plant, which is a permitted use in the MG Zone. Only one structure (the preheater) is proposed to be 125 metres and is located towards the rear of the developable area. A clinker silo is proposed to be to be 74.5 metres tall and located in the centre of the developable area and the raw mill will be 70.1 metres tall. The Zoning Bylaw normally exempts silos from the height requirements. All other buildings and structures will be less than 40 metres in height. The special exemption for height is not anticipated to have a negative impact on surrounding lands.



Figure 11

Township of Champlain Zoning By-law 2000-75

Colacem

Lot 217 Plan M100 County Road #17 Township of Champlain United Counties of Prescott & Russell

LEGEND



Subject Lands

A - Agriculture

AQ - Mineral Aggregate Quarry

RU - Rural

CH - Commercial Highway

CR - Commercial Rural

MR - Industrial Rural

Schedule A - Township of Champlain Zoning By-law 2000-75, Ward of Longueuil (2007)

DATE: March 2016

SCALE: ±1:15,000

FILE: 06128C

DRAWN: DGS



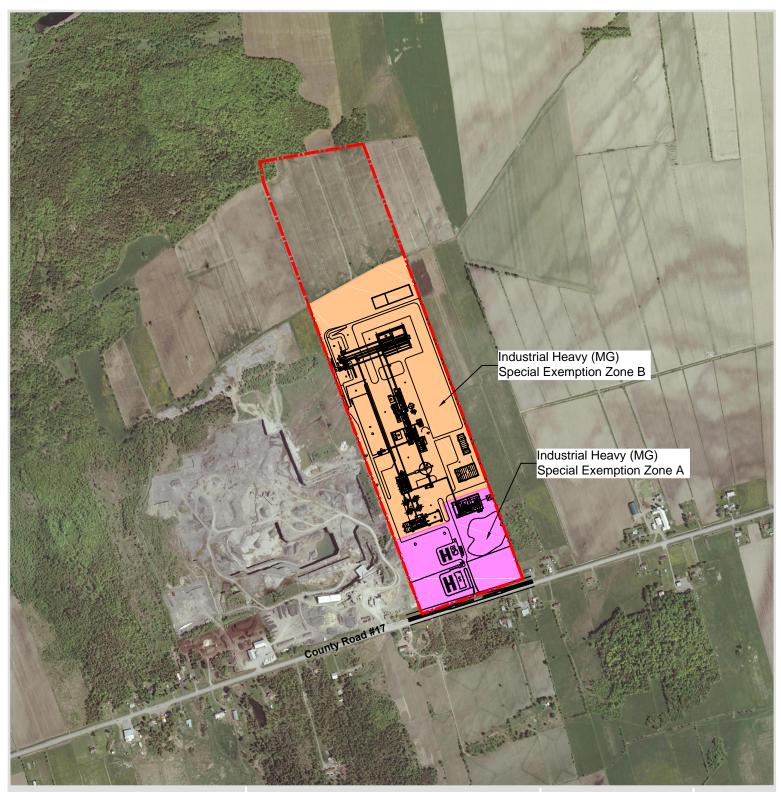


Figure 12

Zoning By-law Amendment

Proposed Area to be Amended

LEGEND



Subject Lands



Lands Subject to Amendment

DATE: March 2016

SCALE: ±1:12,500

FILE: 06128C

DRAWN: DGS



K:\06128C COLACEM CHAMPLAIN TOWNSHIP\RPT\ZBA SKETCH.DWG

Colacem

Lot 217 Plan M100 County Road #17 Township of Champlain United Counties of Prescott & Russell

<u>Sources:</u>
Air Photo: vuMap (First Base Solutions) 2008
Site Layout: provided by client January 2016



5.0 SUMMARY & CONCLUSIONS

It is our opinion, as outlined in this report together with the supporting technical reports, that the Official Plan and Zoning By-law Amendments should be considered for recommendation by staff and approved by Council as the applications have been shown to:

- Be consistent with the Provincial Policy Statement, 2014
- Conform to the policies and intent of the in-force 2006 UCPR Official Plan; and
- Represent good planning.

On behalf of Colacem Canada Inc., we request that this report and all supporting material related to the applications be deemed 'complete' and circulated for review.

We look forward to work with the County and agencies thorough the review and approvals process.

Respectfully submitted,

Mitchell Avis, MSc, BES Planner James D. Parkin, BES, MCIP, RPP Partner

APPENDIX A: Pre-Consultation Letter



CANTON DE CHAMPLAIN TOWNSHIP

BUREAU ADMINISTRATIF / ADMINISTRATION OFFICE 948 EST, CHEMIN PLEASANT CORNER ROAD EAST VANKLEEK HILL, ONTARIO (KOB I RO)

613-678-3003 / (FAX) 613-678-3363

July 21st, 2011

"By Email Only"

Mr. Moreno Capolli Chief Manager Colacem Canada 1235, chemin Kilmar Grenville-sur-la-rouge, Québec J0V 1B0

SUBJECT:

Proposed Industrial Project

Lot 217, Plan M100, County Road 17, Township of Champlain

Sir:

Thank you for the opportunity to participate in commenting the above noted project. Following the July 11th meeting, which provided the occasion to understand the proposed cement plant project, we offer the following comments.

The subject site is currently designated Rural under the Official Plan (OP) of the United Counties of Prescott and Russell (UCPR). The adjacent site, to the West, is currently designated Quarry under the OP of the UCPR. Please refer to the map attached hereto which illustrates the land uses and constraints of the OP of the UCPR.

The Planning and Forestry Department of the UCPR is of the opinion that an official plan amendment is required given that the proposed project is of a heavy industrial nature. Consequently, supportive studies will be required as additional information for Council to make a decision on the proposal. It is our understanding that the lands designated as Agriculture will not be part for the proposed project.

It is noted that a watercourse traverses the subject properties. In order to ensure consistency with Section 2 of the Provincial Policy Statement (PPS) and of Section 5.5.7 of the OP of the UCPR, we require an Environmental Impact Study as per Section 5.6 of the OP of the UCPR to ensure there are no negative impacts to the quality of water and fish habitat as a result of the proposed development. The Environmental Impact Study would also serve to ensure consistency with PPS 2.1.4 and of Section 5.5.6 of the OP of the UCPR as it is noted that the subject site is adjacent to identified significant woodlands. I also would like to underline the fact that the Endangered Species Act (2007) which is administered by the Ministry of Natural Resources (MNR) affects to this project.

CONSTRUCTION / BUILDING

925, CHEMIN DE COMTÉ / COUNTY ROAD 17 C.P. / Box 343 L'ORIGNAL, ONTARIO (KOB 1 KO)

613-675-4727 (FAX) 613-675-1050

SERVICES / DEPARTMENTS

RÈGLEMENT / BY-LAW ENFORCEMENT 925, CHEMIN DE COMTÉ / COUNTY ROAD 17 C.P. / Box 343 L'ORIGNAL, ONTARIO (KOB 1KO)

613-675-4727

(FAX) 613-675-1050

VOIRIE / ROADS 948 EST, CHEMIN PLEASANT CORNER RD E. VANKLEEK HILL, ONTARIO (KOB I RO) 613-678-2125 (FAX) 613-678-3363

As a watercourse traverses the site, the subject area is deemed as an area of archaeological potential in accordance with the Ministry of Tourism and Culture's criteria. In this regard, we require a Phase 1 Archaeological Study to be undertaken as supportive information to ensure consistency with PPS 2.6.2 and with Section 7.6.4 of the Op of the UCPR.

Furthermore, PPS 1.7.1(e) states that "Long-term economic prosperity should be supported by planning so that major facilities (such as airports, transportation/transit/rail infrastructure and corridors, intermodal facilities, waste management systems, oil and gas pipelines, industries and resource extraction activities) and sensitive land uses are appropriately designed, buffered and/or separated from each other to prevent adverse effects from odour, noise and other contaminants, and minimize risk to public health and safety." In this regard, we require a Land Use Compatibility Study to ensure consistency with the PPS and Section 6.9.3 of the OP of the UCPR and to ensure that the proposed use complies with the Ministry of the Environment's D-Series Guidelines.

The proposed site is adjacent to lands designated as Agriculture, we require a Minimum Distance Separation (MDS) calculation to be undertaken to ensure that the use does not hinder existing or future agricultural operations. This would ensure that the proposal is consistent with PPS 2.3.3.3 which states "New land uses, including the creation of lots, and new or expanding livestock facilities shall comply with the minimum distance separation formulae."

Since the proposed development will generate substantial trucking traffic, the UCPR requires a traffic impact analysis, pursuant to Section 3.3.3 of the OP of the UCPR, completed to the satisfaction of the Director of Public Works.

At a municipal level, a Zoning by-law application is required to change the zoning from "Rural Zone (RU)" to an "Industrial Heavy Zone (MG)". Moreover, prior to the issuance of a building permit a Site Plan Agreement is required to be concluded with the Municipality.

Our biggest concern refers to the current Aggregates Study underway by the UCPR. The subject site is identified as a potential aggregate resource in the current mapping efforts for the Aggregates Study, thus we recommend examining site suitability through various studies. The Township of Champlain and the UCPR must ensure that their decisions are consistent with the Provincial Policy Statement (2005) which includes the long term protection of the resource as well as protecting operations and designated areas from development activities that would preclude/hinder expansion, continued use or establishment of future operations of the aggregate on or adjacent to the site. Consequently, the UCPR must consider the long term resource access and the possible sterilization of the resource that would be located underneath the cement plant.

However, a cement plant would not likely be a non-compatible land use adjacent to a quarry. The studies are requested in order to get a better sense of matters as it relates to this particular site and adjacent lands. Therefore, we strongly advise that you contact MNR early on in the process in order to determine next steps as it relates to the Aggregate Resources Act.

I hope this information is helpful and please don't hesitate to contact me should you require further information or have any questions.

Sincerely,

Dominique Lefebvre, MCIP, RPP

Planner

Encl. C.c.

Mr. Pier Federico Baldinucci, Colacem Gruppo Financo

Mr. Anthony Ciccone, Golder Associates

Mr. James D. Parkin, MHBC Planning Urban Design & Landscape Architecture

Mrs. Lynne F. Groulx, Ministry of Economic Development and Trade

Mr. Gary J. Barton, Mayor

Mr. Jean Thériault, Chief Administrative Officer/Clerk-Treasurer