

SUPPLEMENTAL MINERAL RESOURCE IMPACT ASSESSMENT

For a Severance and Zoning Amendment for 5360 Bank Street, City of Ottawa.

- **Prepared for** Percy Pyper (1997) Ltd. and Bredon Developments Inc. in support of an application for a consent application to sever lands and rezone the Bank Street Frontage parcel, to Light Industrial Use.



Location of site: 5360 Bank Street,
City of Ottawa

Prepared By: Gary McLaren

June 25, 2024

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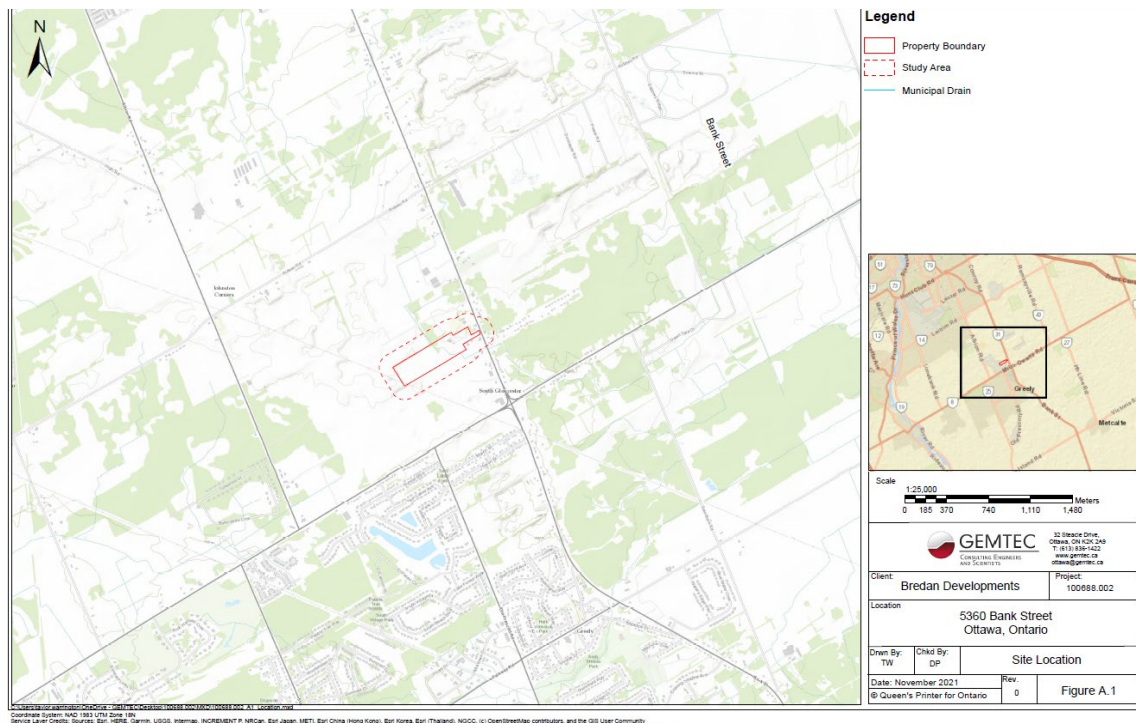
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1.0 Introduction:

Percy Pyper (1997) Limited, retained Milestone Aggregate Consulting Services Inc. to prepare a Supplemental Mineral Resource Impact Assessment (MRIA) in support of a severance and rezoning application to the City of Ottawa for lands located on Pt. Lot 29, Concession IV, geographic municipality of Gloucester, City of Ottawa with a civic address of 5360 Bank Street.

There was a Preliminary MRIA Report prepared by the Paterson Group in 2014 to assess the sand and gravel quality on the east side of the Moffatt Pit, 5310 Bank St. Licence No. 4064 and east of the Pyper Pit, 5360 Bank St., licence No. 4049, prior to the re-zoning application for the 5360 Bank Street property, owned by Percy Pyper (1997) Ltd.

Figure 1 – Key Map



The purpose of the Paterson Report was to conduct a preliminary assessment of the viability of the remaining reserves in the east end of the Moffatt Pit licence and lands located east of Pyper Pit, and east of the municipal drain. The Moffatt pit licence is currently zoned ME2 while the Pyper lands east of the drain are currently zoned RU, with an application to rezone these lands for light industrial use and the retained lands for Pyper pit (licenced and abandoned pit) remain zoned ME2.

1.1 Study Scope

The purpose of this Supplemental Report is to:

1. Review the earlier “Preliminary” MRIA prepared by the Paterson Group dated August 2014 to see if it satisfies the requirements for a more recent Terms of Reference for MRIA’s prepared by the City of Ottawa in 2023, and
2. To assess whether the rezoning application would negatively impact the current adjacent land uses including the pit operation to the west and the quarry to the east.

2.0 Provincial Policy Statement (PPS).

The PPS provides the framework for land use planning and development policies in the local Official Plan. In the case of the city of Ottawa, there is no upper tier Official Plan but rather one tier to the O.P.

Section 2.5 of the 2020 Provincial Policy Statement discusses how Minerals Aggregate Resources should be protected for long-term use. The policy statements relevant to this report are;

- 1. As much of the mineral aggregate resources as realistically possible should be preserved as close to market as possible (2.5.2.1);*
- 2. Mineral aggregate operations shall be protected from development and activities that would preclude or hinder their expansion or continued use or which would be incompatible for reasons of public health, public safety or environmental impact (2.5.2.4);*
- 3. In known deposits of mineral aggregate resources and on adjacent lands, development and activities which would preclude or hinder the establishment of new operations or access to the resources shall only be permitted if:*
 - a) Resource use would not be feasible; or*
 - b) The proposed land use or development serves a greater long-term public interest; and*
 - c) Issues of public health, public safety and environmental impact are addressed (2.5.2.5).*

These policies are reflected in the current City of Ottawa Official Plan policies and by a map schedule showing a sand and gravel resource over-lay which protects mineral aggregates from encroachment of incompatible development.

2.1 City of Ottawa Official Plan

The subject site under consideration, front on a rural area of Bank street beyond the urban boundary in the old geographic city of Gloucester, now the city of Ottawa. The subject

lands are designated Rural Countryside on the **Schedule B9, Rural Transect Map**, (Overlay) Appendix 2

There are six pit operations in the parcel of land between Bank Street and Albion Road and Mitch Owens Road and Rideau Road. The only sand and gravel resource indicated on the City's overlay map for this block of land, is the eastern end of the Moffat Pit. The Paterson Report indicates there is no viable sand and gravel in the licenced area shown as sand and gravel resource area on **Schedule B9, Rural Transect Plan**.

Section 5.6.3 of the Official Plan speaks to protection of Aggregate Resource areas using an overlay map to identify the locations of legally operating pits and quarries and significant sand and gravel and bedrock resource areas for future development/extraction. The overlay mapping that pertains to this policy is shown on **Schedule B9, Rural Transect Plan**.

The intent of policy 5.6.3 is to protect aggregate resource areas Section by evaluating impacts between a sand and gravel or bedrock resource area and sensitive receptors. The minimum separation distance or "influence area" regarding sand and gravel deposits is 300 metres and for bedrock quarries the influence area is 500 metres. A similar policy exists under the Aggregate Resources Act when pits and quarries are being proposed near sensitive receptors. The Noise study prepared for the Tomlinson quarry expansion, was influenced by the mobile home park to the south. The configuration of the quarry licence boundary and setback on the ARA licence site plan was determined by the noise study to ensure noise, dust and vibration from the quarry operation could meet provincial guidelines and conditions of the licence. Since there are no sensitive receptors permitted in the light industrial zoning application being proposed for the subject lands, the proposed application would be in conformity with the Official Plan.

The following text in *italics* are excerpts from Policy 5.6.3.2 of the O.P.:

- 4) *New development may be approved within 500 metres of an existing licensed bedrock quarry or within 300 metres of an existing sand and gravel pit if it can be demonstrated that the existing mineral aggregate operation, and potential future expansion of the operation in depth or extent, will not be affected by the development.*

Another pertinent O.P. policy area relating to pit and quarry extraction is found under **section 10, Health and Safety** more specifically, the **Environmental Noise control** policy section of the O.P. Below is the pre-amble under section 10.2.1. and the pertinent sub-section of the policy dealing with influence area distances between new development and pit and quarry (sand and gravel and bedrock) resource areas and other pertinent sections dealing with aggregate resource policies:

10.2.1 Environmental noise control

Environmental noise is characteristic of many human activities, and the proliferation of this noise has potential to negatively affect quality of life and human health.

The goal of environmental noise control is to provide guidance between land uses that are noise sensitive and land uses that are sources of noise such as roads, railways, employment areas and equipment for building facilities.

The objective of environmental noise control is to provide for improved and more liveable and healthy environments in the planning of new neighbourhoods, in development and intensification of older neighbourhoods.

3) Development proposals for a new or expanded noise sensitive land-use shall require a noise feasibility study and/or detailed noise study pursuant to the Environmental Noise Control Guidelines in the following locations:

a) Within 100 metres of:

- i) The right of way of an existing or proposed arterial road or collector or major Collector Street identified on Schedules C4; or*
- ii) The right-of-way of a rapid transit or transit priority corridor identified on Schedule C2; or*
- iii) Lands designated as Industrial and Logistics or Mixed Industrial identified on the B-series of schedules, or lands zoned for industrial use; or*
- iv) from an existing stationary noise source described in provincial certificate of approval under the Environmental Protection Act.*

b) Within 250 metres of:

- i) The right-of-way of an existing or proposed provincial highway, of Ottawa Highway 174, or of a secondary main railway line.*

c) Within 300 metres of a pit licensed under the Aggregate Resources Act or lands with a Sand and Gravel Resource Overlay; and

d) Within 500 metres from the right-of-way of:

- i) A 400-series Provincial highway; or***
- ii) A Principal Main railway line; or***
- iii) A quarry licensed under the Aggregate Resources Act; or***
- iv) Lands with a Bedrock Resource Overlay.***

The Patterson Report 2014, concludes that no viable aggregate resources are available in the sand and gravel overlay map **Schedule B9**. There are also no sensitive receptors proposed for the subject re-zoning, therefore the O.P. policies dealing with “influence areas” intended for sensitive land uses do not apply. The proposed application is therefore in conformity with the O.P.

2.2 City of Ottawa Zoning By-Law 2008-50

The zoning for the subject site (Bank Street parcel) is shown as **Rural (R15)** with Mineral Extraction (ME2 on the retained parcel (Pyper Pit) and Moffatt Pit and Spratt Pit lands described as on the City of Ottawa Geoportal (Teranet Enterprises Inc. 2022) (See Appendix 2). The zoning applies to this discussion only in the way that it must conform to the Official Plan designation and the land use. There is a Mineral Extraction (ME2) zone to the south east of the proposed building envelope (See **Appendix 2**). The ME2 zone and the pit licence boundary have the same northern limit. The zoning by-law adopts a setback restriction of 150 metres between a ME2 zone and a proposed residential dwelling which aligns with requirements for a noise study for a new pit operation near a sensitive receptor (sleeping quarters, residences) under the Aggregate Resources Act, Provincial Standards (150 metres) and with the NPC – 300 Noise by-law (O.P., section 10.2.1 Environmental Noise Control 1).

The following are excerpts from the zoning by-law with pertinent policies bolded to highlight this particular consent application:

ME – Mineral Extraction Zone (Sections 213-214)

Purpose of the Zone

The purpose of the ME – Mineral Extraction Zone is to:

- (1) *permit licensed mineral extraction operations in areas mainly designated as **Sand and Gravel Resource Area** or **Limestone Resource Area** in the Official Plan;*
- (2) *allow a limited range of permitted uses which are related to or compatible with mineral extraction operations, as well as interim uses that would not sterilize the potential of future mineral extraction operation on the lands within the ME zones;*
- (3) *impose regulations to minimize the impact of mineral extraction operations on the surrounding area.*

213. *In the ME Zone:*

Permitted Uses

- (1) *The following uses are permitted subject to:*
 - (a) *the provisions of subsections 213(3) and (4);*
agricultural use, see Part 2, Section 62
agriculture-related use, see Part 3, Section 79B (By-law 2021-222)
environmental preserve and educational area
equestrian establishment
forestry operation

kennel, see Part 3, Section 84

on-farm diversified use, see Part 3, Section 79A (By-law 2019-41) (By-law 2021-222)

leaf and yard waste composting facility

mineral extraction operation

(2) *The following conditional uses are permitted subject to the following:*

(a) *the provisions of subsections 213(3) and (4);*

(b) *the use is located on the same lot as an operating **mineral extraction operation**;*

(c) *the use mobile home is for a security guard or caretaker;*

(d) *the waste processing and transfer facility is limited to inert construction materials such as concrete and asphalt;
one mobile home
waste processing and transfer facility*

ME SUBZONES

214. *In the ME Zone, the following subzones apply:*

ME1 SUBZONE – MINERAL EXTRACTION OPERATION WITH DETACHED DWELLING

(1) *In the ME1 Subzone:*

(a) *the following are additional permitted uses:*

one detached dwelling

home-based business, see Part 5, Section 127

(b) *Despite the regulations of Table 213, in the ME1 subzone the detached dwelling must provide a minimum front yard setback of 15 m and a maximum front yard setback of 45 m. The purpose of these setbacks is to ensure that the detached dwelling is located near the road to minimize encroachment onto potential mineral aggregate resources in order to permit mineral extraction on other portions of the lands not located in close proximity to the dwelling.*

ME2 SUBZONE – MINERAL EXTRACTION OPERATION - PIT ONLY

Section 67 of the Zoning By-law contains provisions a) and b) where the residential building envelope for a proposed new development should be shown in this particular case, as a minimum 150 meters to property zoned ME2.

a. *“Despite any other provisions to the contrary, in the AG, EP3, and RU zones no new building consisting of a dwelling, dwelling units or rooming units may*

be constructed any closer than: (a) 150 metres to an ME2 or ME3 - Mineral Extraction Pit Only subzones, or an MR - Mineral Aggregate Reserve zone boundary, or (b) 210 metres to an ME zone.”

The rezoning application on the subject lands does not include sensitive receptors in the list of proposed light industrial zone, land uses. The 150 metre and 210 metre separation distances from operating pits and sand and gravel resources would not apply for the subject application. The closest extraction area to the any buildings is approximately 200 metres from the Moffatt Pit operation (see Appendix 2). The proposed zoning amendment would be in conformity with the Zoning By-law.

3.0 Mineral Aggregate Resource Mapping

Provincial aggregate resource mapping, is a tool prepared by the Province to assist Municipalities in applying the Provincial policies for the protection of aggregate resources for construction needs. The significant aggregate resources for protection in this part of southern Ontario focuses mainly on primary and secondary sand and gravels and quality limestone bedrock. In areas that where these higher quality materials are not abundant or have been previously extracted, tertiary sand and gravel deposits and lower quality bedrock may require further consideration.

The current mapping, the **Aggregate Resource Inventory Paper 191 (Lee, V. F. 2013)** shows no sand and gravel in the area at the east end of the Moffatt pit which was verified by the Paterson 2014 Report. the O.P. There is a small tertiary deposit of granular fill east of the municipal on the Pyper lands. Due to the depletion of the abandoned Pyper Pond to the east, the location and setbacks to the municipal drain and the location and density of buildings on the subject rezoning lands, it would not be viable to licence this small area for extraction.

ARIP 191 (Lee V.F. 2013) is a further refinement of the Gorrell Resource Investigations (GRI) mapping of 1993 done in preparation of the 1995 aggregate resource policy O.P. review for the City of Ottawa, previously the Regional Municipality of Ottawa-Carleton. The only tertiary sand and gravel deposits mapped on the O.P. overlay is a small area on the east side of the Moffatt Pit that are contained within the existing licenced pit operation. This sand and gravel overlay would not be impacted by a light industrial land use. A further analysis of this deposit, east of the municipal drain is described below.

3.1 Surficial Sand and Gravel Resource

The Paterson Report determined, through a soil sampling and gradation analysis of the sand and gravel located on the side of the licenced boundary of the “Moffatt Pit” as tertiary material (low quality granular fill). The Aggregate Assessment Mapping for Ottawa done in 2013 shows no resource on the licence area east of the John Boyce Municipal Drain. The

EIS done by GEMTEC in 2021 shows organic soils in the area of the municipal drain which runs through the licenced site just east of the current pit face. The below water table abandoned pit south of the “Moffatt Pit” and east for the existing “Pyper Pit” licence was previously depleted of resource between 1960 and 1972. When provincial licencing requirements came into effect in the old geographic Township of Gloucester in 1972, the depleted portion of the excavated pond at the east end of the ME2 zone was not included on the licence and site plan for the “Pyper Pit”, Lic. No.4049. This depleted pit pond and the licenced pit are located on the retained lands west of the subject severance and zoning amendment. The licence and abandoned pit make up the ME2 zone on the retained lands are east of the John Boyce Municipal Drain. The abandoned pit was exhausted of all quality reserves up to the west setback of the municipal drain. The subject lands east of the depleted Pyper pit pond and municipal drain contain no quality aggregate resources, is too small of an area to licence if there were aggregate materials available and are further sterilized by the existing municipal drain applicable setbacks and the light industrial buildings located on this portion of the subject application. The Paterson report concluded that there were no viable sand and gravel reserves east of the municipal drain where organic soils were encountered adjacent to the drain. (see Paterson, **Surficial Soil Map Appendix 6**).

Upon further review of the Moffatt Pit site plans, extraction east of the Boyce municipal drain is limited to a shallow sand deposit above the water table while areas to the west of the drain within the licence area are permitted to extract below water table. The presence of organic materials in the vicinity of the drain, lack of deposit identified in the ARIP 191, combined with the removal of trees during grubbing and stripping operations, setback distances from the drain and shallowness of the extraction lift shown on the site plan, makes the viability of future extraction east of the drain economically unfeasible. This area would not be impacted by a light industrial zone land use and will likely not be extracted in the future.

3.2 Bedrock Resource

There are 2 quarries operated by R.W. Tomlinson Ltd. located north east of Bank street within the 500-metre influence area which is a policy to protect against social impacts to sensitive receptors. These quarries are located in the Oxford Limestone formation.

There is a site plan that regulates the quarry operation to mitigate social and environmental impacts to surrounding land uses. The proposed zoning amendment does not permit residential development in the proposed light industrial zone. Since there are no sensitive receptors proposed, technically a MRIA is not required for this type of development. As a matter of interest, a Noise study was prepared at the time of the quarry expansion which provided technical direction to configure the licence boundary and setback for the Operating Site Plan to ensure operations did not negatively impact the adjacent mobile home park. Based on the noise assessment, and the mitigation measures applied to the regulatory site plan, social impacts to adjacent homes, primarily noise and

dust from equipment and processing plants and vibration and overpressure from quarry drilling and blasting will meet Provincial noise and vibration guidelines and ARA regulations.

4.0 Proposed Rezoning and land use:

The site to be re-zoned has a history of both rural and light industrial uses dating back to the 1960's. The site contains a heavy equipment maintenance building, several road salt and sand storage sheds, temporary construction office with drainage pipe storage yard and quasit shed, a farm shed, and security parking storage for heavy equipment and transport truck trailers. Most of these building obtained building permits or contain a legal non-conforming status. The reason for the re-zoning application is to acknowledge the current land uses which have been ancillary uses to the sand and gravel and construction operations existing to the west of the subject lands. The land uses for the proposed industrial zone are a further refinement of the list for the light industrial zone listed in the **Official Plan or Zoning By-law** and are restricted to the following:

- Retail store (as stated, for sale of agricultural, construction, gardening or landscape related products, equipment or supplies)
- Heavy equipment and vehicle sales, rental and servicing
- Light industrial uses
- Service and repair shop
- Storage yard
- Warehouse

5.0 Summary

The subject site has been used for rural and light industrial purposes for servicing, maintenance and storage of farm and heavy construction equipment (relating to pit extraction), sand and salt dome storage (for winter road safety), and a construction office and storage yard, since the 1960's.

After review of the Paterson MRIA report 2014 and the applicable figures, particularly the soils mapping and soil analysis, the Aggregate Assessment Mapping (ARIP 191 for the City of Ottawa, 2013, by the Ontario Geological Survey), the author would agree with the conclusions of the earlier report. Upon further review of the location of the licence sites from Pits and Quarries On Line, the site plans for the licenced pits (Moffatt, Pyper and Spratt Pits to the west) and Tomlinson quarries to the east of the subject application site, the applicable policies of the O.P. and Zoning Bylaw for the City of Ottawa, and since no sensitive receptors are permitted in this proposed light industrial zone, the author finds that the proposed severance and zoning amendment to the limited light industrial uses listed in the application would have no negative impact on the adjacent pits and quarry operations.

6.0 Recommendation:

It has been determined that the light industrial zone application would have no negative impact on the sand and gravel pits to the west and quarries to the east. Since no sensitive receptors are permitted in the proposed light industrial zone, the pits and quarries as well, would have no negative impact on the light industrial uses proposed in the application. I would recommend unconditional approval of the the severance and zoning amendment application.

Yours sincerely,

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7.0 References

Paterson Group Preliminary Aggregate Resource Study, Bank Street Ottawa Ontario, Greely Sand and Gravel, August 21, 2014

[Paterson Preliminary MRIA 2014](#)

GEMTEC Environmental Impact Statement, Land Severance Application, for Bredon Developments, February 2, 2022

[Gemtec EIS February 2021](#)

City of Ottawa Official Plan

[3.7.4 Mineral Resource Policies](#)

[City of Ottawa Official Plan Rural Land Use Schedule Map](#)

Fletcher, T.W. and M.A. Klugman. 1979. Aggregate Assessment of the Regional Municipality of Ottawa Carleton, Ontario Canada. Regional Municipality of Ottawa/Carleton and Ontario Ministry of Natural Resources. 44 pp. 4 maps 1:100,000.

Lee, V .L. 2013. Aggregate Resources Inventory for the City of Ottawa, Southern Ontario; Ontario Geological Survey, Aggregate Resources Inventory Paper 191.

[ARIP191 Ottawa](#)

Aggregate Resources Act Ontario Regulation 244/97

[ARA Ontario Regulation 244/97](#)

[ARA of Ontario Technical Reports and Information Standards](#)

[ARA of Ontario Site Plan Standards](#)

Ministry of Natural Resources Mineral Aggregate Resources Reference Manual 2001

[Aggregate Resources Policies and Procedures](#)

geoOttawa Satellite Map and City of Ottawa Geoportal (Teranet Enterprises Inc. 2020).

[geoOttawa Satellite Map](#)

Pits and Quarries on line provincial mapping tool (MNR)

[Pits and Quarries Online](#)

ARA Site Plans for the following:

Base Mapping Co. Ltd. Pit Site Plan **“Moffatt Pit” ARA Lic. No. 4064**

Base Mapping Co. Ltd. Pit Site Plan **“Pyper Pit” ARA Lic. No. 4049**

Base Mapping Co. Ltd. Pit Site Plan **“Spratt Pit” ARA Lic. No. 4072**

MHBC Planning, R.W. Tomlinson **“Rideau Road Expansion Quarry” Lic. No. 4209**

Google Earth Satellite Images April 2020
[Google Earth 5360 Bank Street, Ottawa, Ontario](#)

Ministry of Environment, Conservation & Parks Noise Guidelines – NPC/300
[NPC/300 Provincial Noise Guidelines](#)

Note of particular interest is the following;

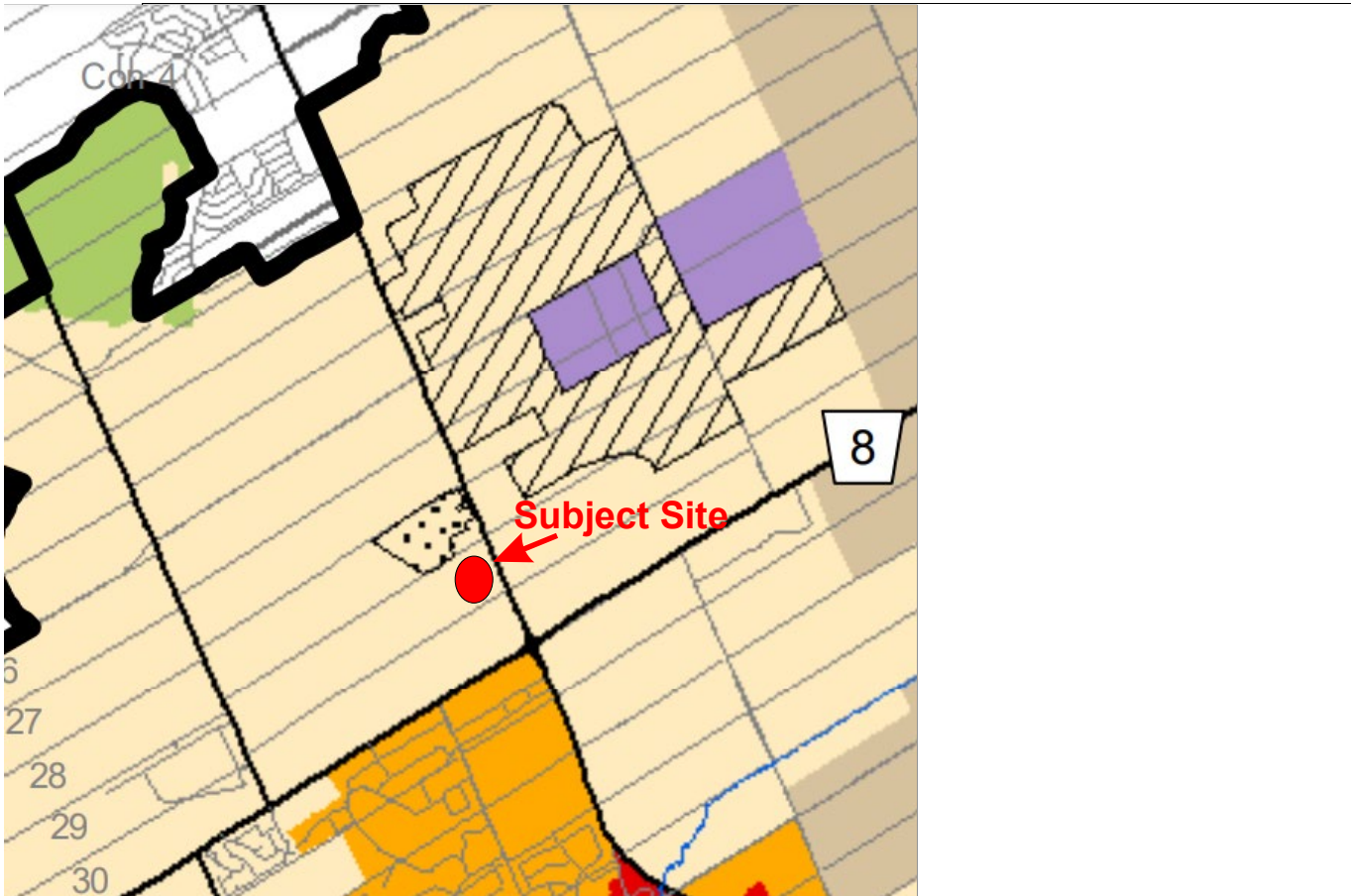
C7.1 Noise control Measures;

C7 .6 Stationary Source Control Measures

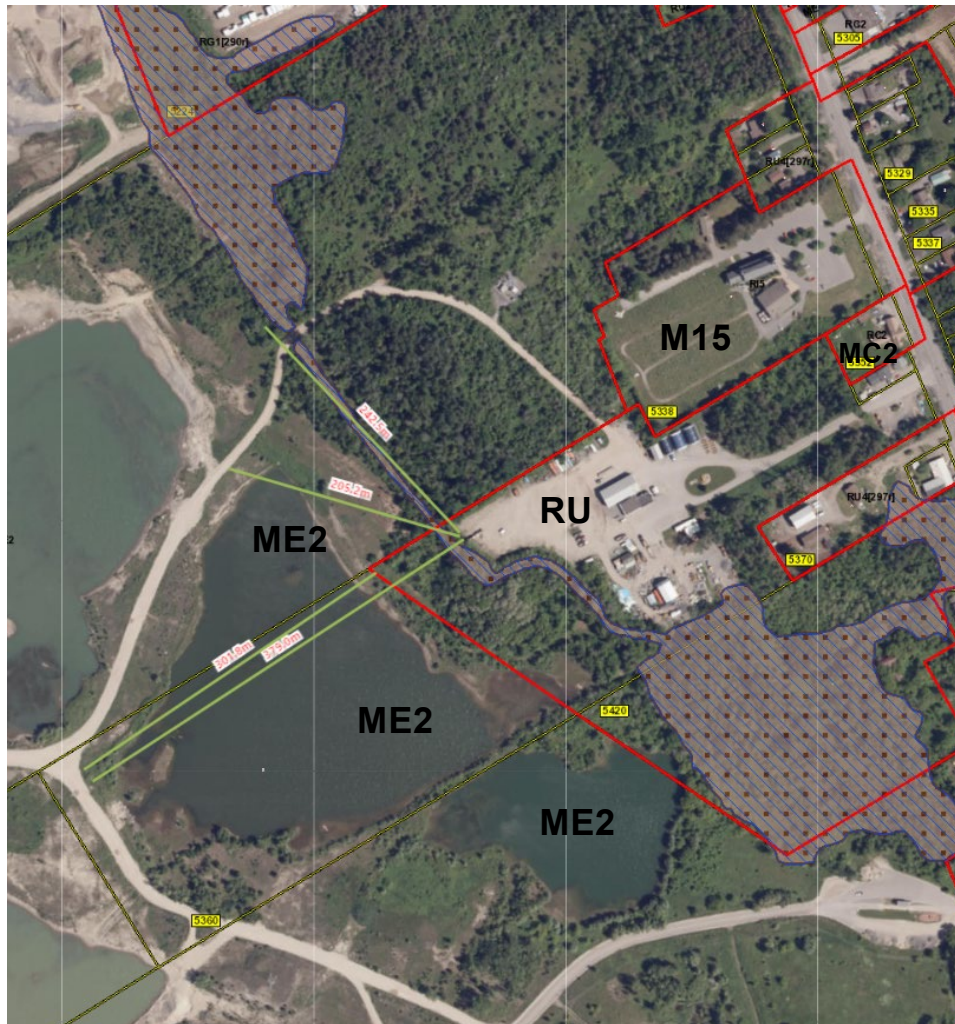
C7.7 Combination of Transportation and Stationary Sources of noise.

8.0 List of Appendices

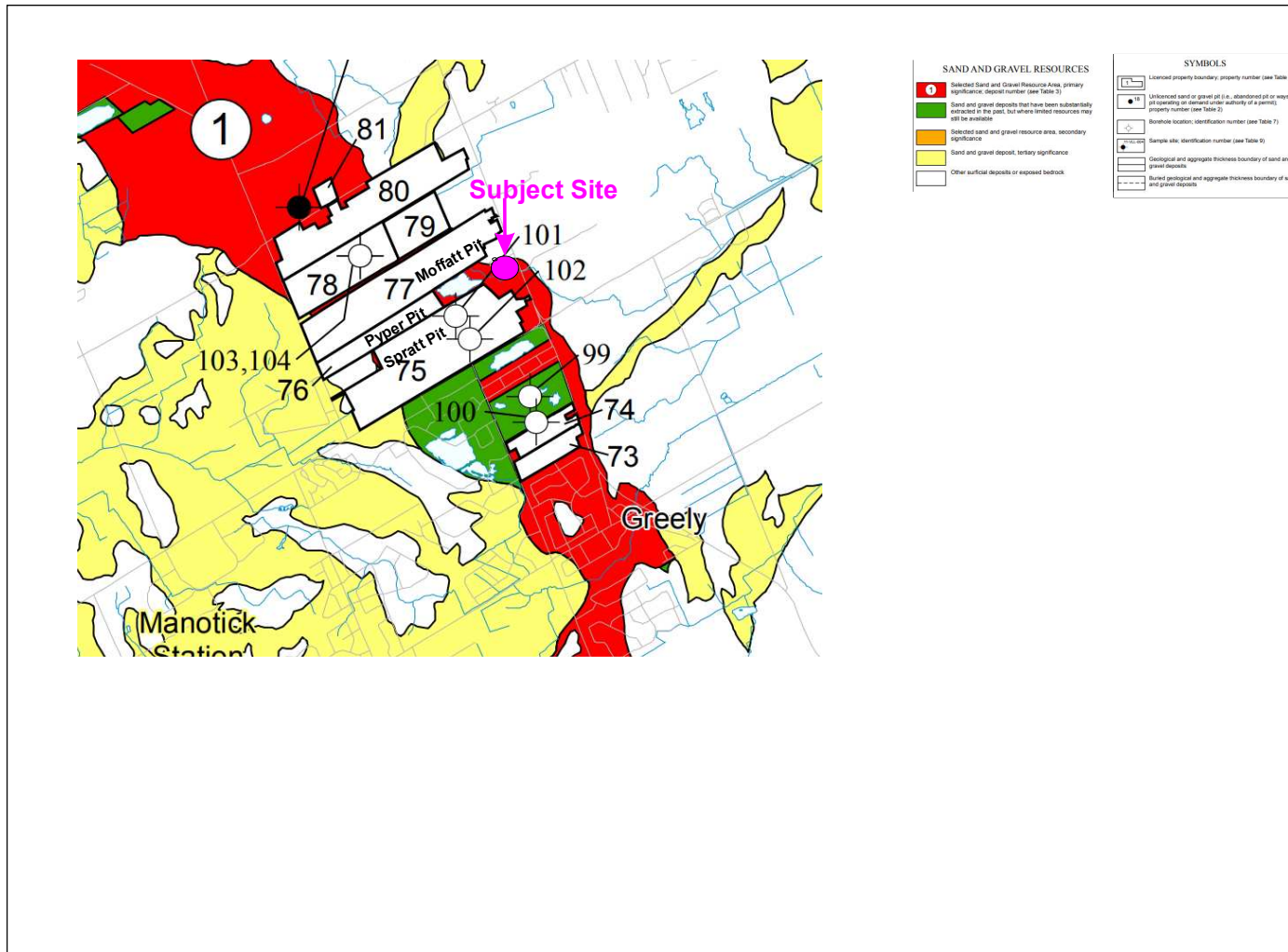
Appendix 1 – City of Ottawa Official Plan – Schedule B9 – Rural Tran sect



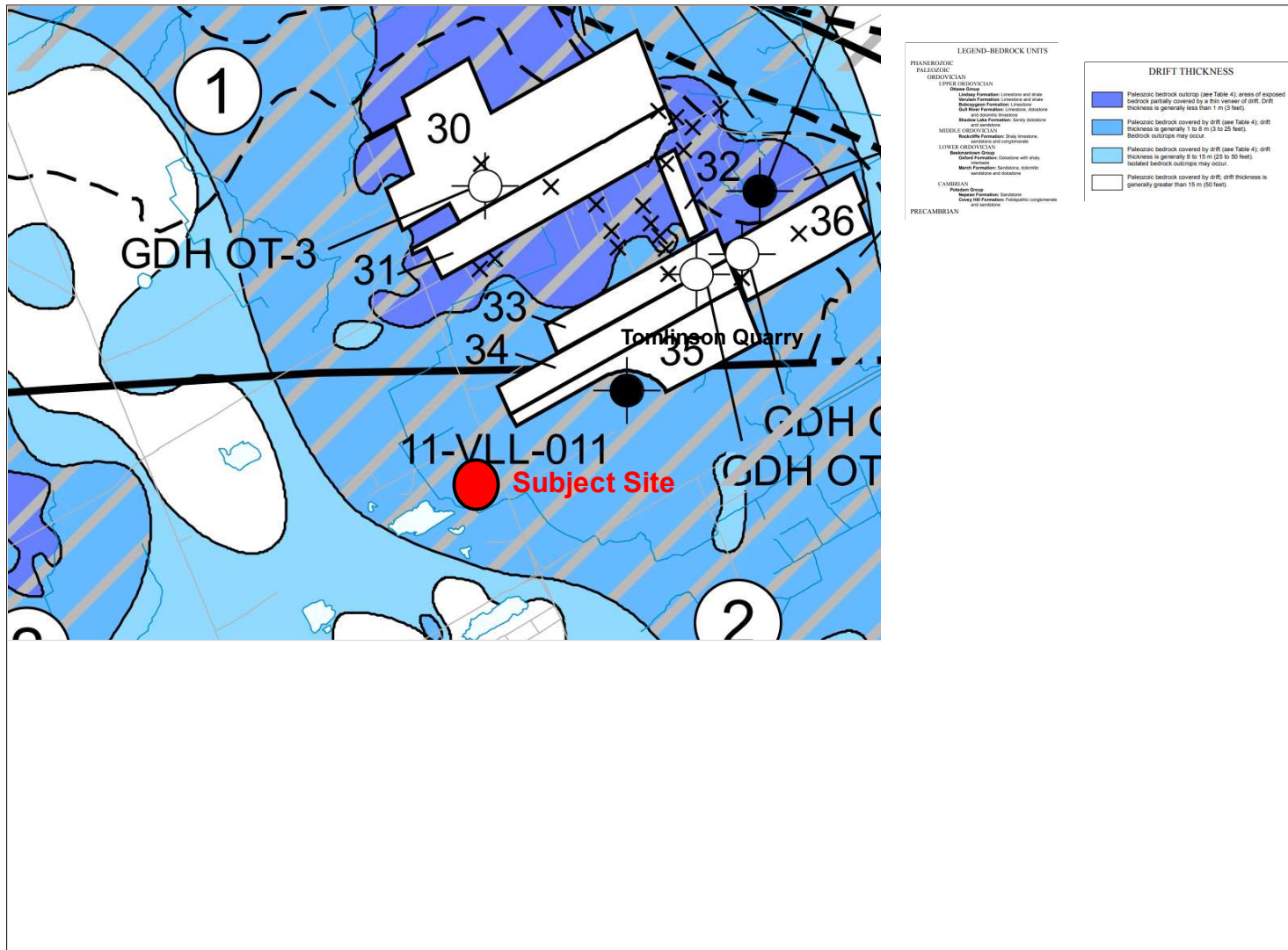
Appendix 2 – City of Ottawa geoOttawa 2022 Zoning Map



Appendix 3 – ARIP 191 – Sand & Gravel Resources for the City of Ottawa



Appendix 4 – ARIP 191 – Bedrock Resources for the City of Ottawa

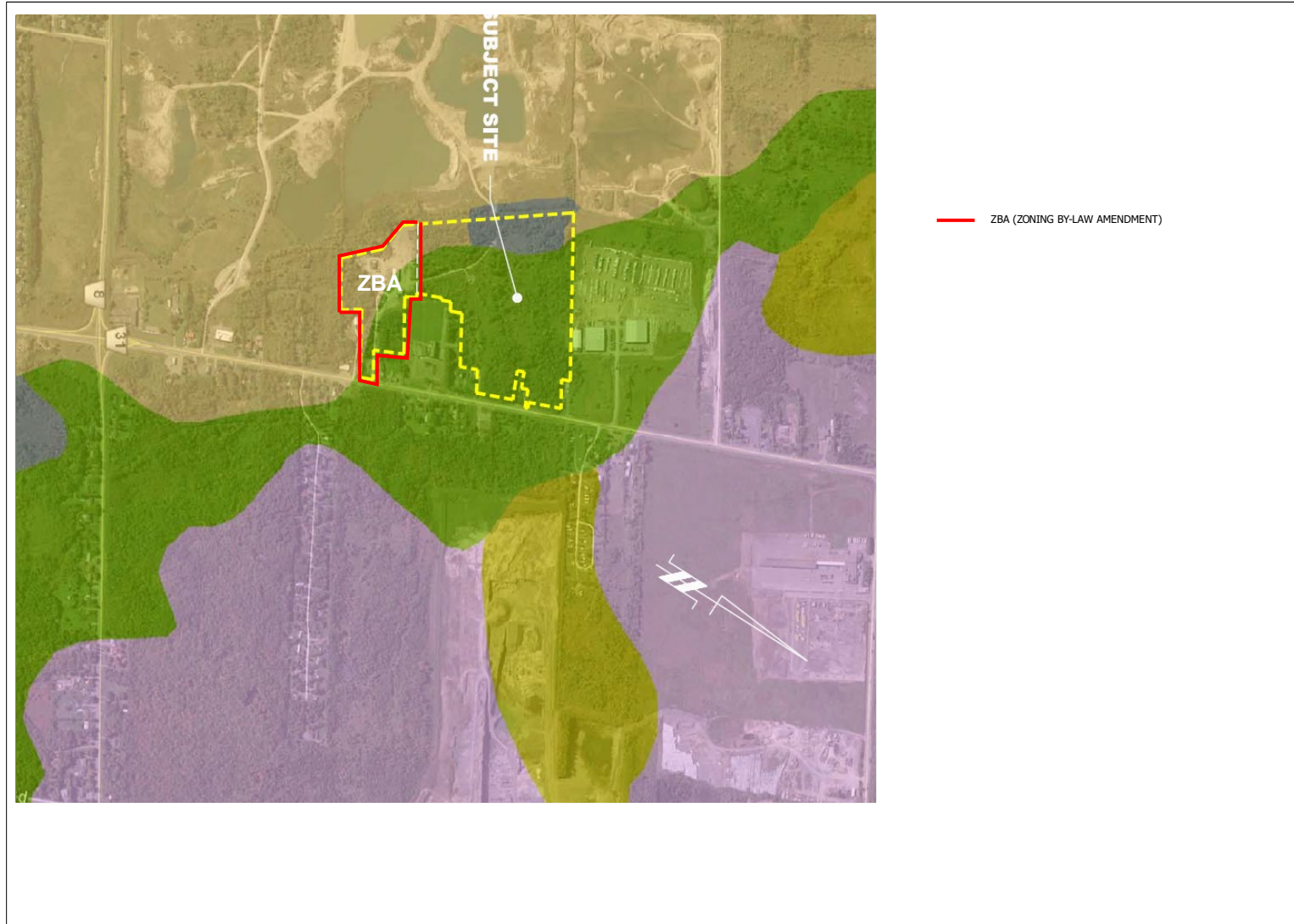


The map displays the Johnston Corners area in South Gloucester. The 'Subject Site' is highlighted with a red circle and an arrow. Surrounding properties are marked with red symbols indicating the presence of pits or quarries. The symbols are defined in the legend:

- Pit
- Quarry
- Both (Pit and Quarry)

Properties marked with the 'Both' symbol include 4058, 4311, 4053, 4064, 4049, 4072, 4054, 626486, 626323, 4203, and 4179. Properties marked with the 'Pit' symbol include 4055, 4056, 4057, 4059, 4060, 4061, 4062, 4063, 4064, 4065, 4066, 4067, 4068, 4069, 4070, 4071, 4072, 4073, 4074, 4075, 4076, 4077, 4078, 4079, 4080, 4081, 4082, 4083, 4084, 4085, 4086, 4087, 4088, 4089, 4090, 4091, 4092, 4093, 4094, 4095, 4096, 4097, 4098, 4099, 4100, 4101, 4102, 4103, 4104, 4105, 4106, 4107, 4108, 4109, 4110, 4111, 4112, 4113, 4114, 4115, 4116, 4117, 4118, 4119, 4120, 4121, 4122, 4123, 4124, 4125, 4126, 4127, 4128, 4129, 4130, 4131, 4132, 4133, 4134, 4135, 4136, 4137, 4138, 4139, 4140, 4141, 4142, 4143, 4144, 4145, 4146, 4147, 4148, 4149, 4150, 4151, 4152, 4153, 4154, 4155, 4156, 4157, 4158, 4159, 4160, 4161, 4162, 4163, 4164, 4165, 4166, 4167, 4168, 4169, 4170, 4171, 4172, 4173, 4174, 4175, 4176, 4177, 4178, 4179, 4180, 4181, 4182, 4183, 4184, 4185, 4186, 4187, 4188, 4189, 4190, 4191, 4192, 4193, 4194, 4195, 4196, 4197, 4198, 4199, 4200, 4201, 4202, 4203, 4204, 4205, 4206, 4207, 4208, 4209, 4210, 4211, 4212, 4213, 4214, 4215, 4216, 4217, 4218, 4219, 4220, 4221, 4222, 4223, 4224, 4225, 4226, 4227, 4228, 4229, 4230, 4231, 4232, 4233, 4234, 4235, 4236, 4237, 4238, 4239, 4240, 4241, 4242, 4243, 4244, 4245, 4246, 4247, 4248, 4249, 4250, 4251, 4252, 4253, 4254, 4255, 4256, 4257, 4258, 4259, 4260, 4261, 4262, 4263, 4264, 4265, 4266, 4267, 4268, 4269, 4270, 4271, 4272, 4273, 4274, 4275, 4276, 4277, 4278, 4279, 4280, 4281, 4282, 4283, 4284, 4285, 4286, 4287, 4288, 4289, 4290, 4291, 4292, 4293, 4294, 4295, 4296, 4297, 4298, 4299, 4300, 4301, 4302, 4303, 4304, 4305, 4306, 4307, 4308, 4309, 4310, 4311, 4312, 4313, 4314, 4315, 4316, 4317, 4318, 4319, 4320, 4321, 4322, 4323, 4324, 4325, 4326, 4327, 4328, 4329, 4330, 4331, 4332, 4333, 4334, 4335, 4336, 4337, 4338, 4339, 4340, 4341, 4342, 4343, 4344, 4345, 4346, 4347, 4348, 4349, 4350, 4351, 4352, 4353, 4354, 4355, 4356, 4357, 4358, 4359, 4360, 4361, 4362, 4363, 4364, 4365, 4366, 4367, 4368, 4369, 4370, 4371, 4372, 4373, 4374, 4375, 4376, 4377, 4378, 4379, 4380, 4381, 4382, 4383, 4384, 4385, 4386, 4387, 4388, 4389, 4390, 4391, 4392, 4393, 4394, 4395, 4396, 4397, 4398, 4399, 4400, 4401, 4402, 4403, 4404, 4405, 4406, 4407, 4408, 4409, 4410, 4411, 4412, 4413, 4414, 4415, 4416, 4417, 4418, 4419, 4420, 4421, 4422, 4423, 4424, 4425, 4426, 4427, 4428, 4429, 4430, 4431, 4432, 4433, 4434, 4435, 4436, 4437, 4438, 4439, 4440, 4441, 4442, 4443, 4444, 4445, 4446, 4447, 4448, 4449, 4450, 4451, 4452, 4453, 4454, 4455, 4456, 4457, 4458, 4459, 4460, 4461, 4462, 4463, 4464, 4465, 4466, 4467, 4468, 4469, 4470, 4471, 4472, 4473, 4474, 4475, 4476, 4477, 4478, 4479, 4480, 4481, 4482, 4483, 4484, 4485, 4486, 4487, 4488, 4489, 4490, 4491, 4492, 4493, 4494, 4495, 4496, 4497, 4498, 4499, 4500, 4501, 4502, 4503, 4504, 4505, 4506, 4507, 4508, 4509, 4510, 4511, 4512, 4513, 4514, 4515, 4516, 4517, 4518, 4519, 4520, 4521, 4522, 4523, 4524, 4525, 4526, 4527, 4528, 4529, 4530, 4531, 4532, 4533, 4534, 4535, 4536, 4537, 4538, 4539, 4540, 4541, 4542, 4543, 4544, 4545, 4546, 4547, 4548, 4549, 4550, 4551, 4552, 4553, 4554, 4555, 4556, 4557, 4558, 4559, 4560, 4561, 4562, 4563, 4564, 4565, 4566, 4567, 4568, 4569, 4570, 4571, 4572, 4573, 4574, 4575, 4576, 4577, 4578, 4579, 4580, 4581, 4582, 4583, 4584, 4585, 4586, 4587, 4588, 4589, 4590, 4591, 4592, 4593, 4594, 4595, 4596, 4597, 4598, 4599, 4600, 4601, 4602, 4603, 4604, 4605, 4606, 4607, 4608, 4609, 4610, 4611, 4612, 4613, 4614, 4615, 4616, 4617, 4618, 4619, 4620, 4621, 4622, 4623, 4624, 4625, 4626, 4627, 4628, 4629, 4630, 4631, 4632, 4633, 4634, 4635, 4636, 4637, 4638, 4639, 4640, 4641, 4642, 4643, 4644, 4645, 4646, 4647, 4648, 4649, 4650, 4651, 4652, 4653, 4654, 4655, 4656, 4657, 4658, 4659, 4660, 4661, 4662, 4663, 4664, 4665, 4666, 4667, 4668, 4669, 4670, 4671, 4672, 4673, 4674, 4675, 4676, 4677, 4678, 4679, 4680, 4681, 4682, 4683, 4684, 4685, 4686, 4687, 4688, 4689, 4690, 4691, 4692, 4693, 4694, 4695, 4696,

Appendix 6 – Surficial Soil Delineation Mapping



Appendix 7 Curriculum Vitae

GARY D. MCLAREN

EDUCATION

Secondary School Graduation Diploma, 1977
Napanee District Secondary School

OTHER SPECIAL QUALIFICATIONS

Ontario Police College Law Enforcement Certificate Course – Aylmer (MNR-Level 1)
Pits and Quarries Inspection Certificate (Ministry of the Environment)
Pits and Quarries Enforcement (Ministry of Natural Resources)
Aggregates/Petroleum Resources Enforcement and Compliance (MNR)
Lands and Waters Certificate
Restricted Radio Operator's Certificate
Transportation of Dangerous Goods Basic Emergency Management Training Course
Temperate Wetlands Restoration Training Course
Small Non-Pleasure Vessel Basic Safety
CCG Pleasure Craft Operators Certificate
Occupational Health and Safety Certification Course (Level one, basic and level two, site specific)

EMPLOYMENT HISTORY

President of Milestone Aggregate Consulting Services Inc. (2015 to present)

Over the past 8 years my company has provided the following services to the aggregate industry in Eastern and South-Central Ontario:

- Provided compliance monitoring and reporting (completion and submission of annual Compliance Reports for licensees under ARA), and prepared comprehensive compliance strategies for licensees based on site audits;
- Project Management services for complex pit licence applications under the Aggregate Resources Act (ARA);
- Facilitated licence and site plan amendment approvals under the ARA, the Planning Act, the Environmental Registry, and the Water Resources Act, and various other related legislation, policies and guidelines intended to develop mining and sand and gravel operations and protect significant features of a provincial interest;
- Provide credible planning advice to support the protection of Aggregate Resource areas pursuant to the Provincial Policy Statement (PPS). Preparation of 25 Mineral Resource Impact Assessment Reports to support planning applications (severances, minor variances, building permits) near active pit and quarry operations and designated aggregate resource areas across eastern Ontario (City of Ottawa, Counties of Lanark, Renfrew and Leeds and Greville);

- Act as an approvals liaison representative for the industry when seeking licence, permit, approvals and amendments from local and upper tier municipalities, provincial government agencies, non-government organizations, stakeholders and the general public;
- Contracted to represent MNRF Aggregate Program Inspectors with a job specification special case presentation to Provincial Government and union task teams;
- Contracted to develop and facilitate an MNRF Issues Management scoping list for Ontario Stone, Sand and Gravel Association (OSSGA);
- Commented on Government initiatives (Blue Print for Change – Aggregate Resources and Mining Modernization Act);
- Member of working Group for OSSGA East Region Committee reviewing several draft documents for submission to provincial initiatives (e.g. Prov. Gov. Red tape Review, MNRF Scoping Issues Report, preparation for Meeting with MNRF regarding proposed regulations under the Aggregate Resources Act);

Senior Program Adviser, Aggregates (MNR) – September 2014 to December 2014

- Lead an Operations Division working group to scope potential delivery mechanisms resulting from the 2013 Aggregate Resources Act Review;
- Develop a performance matrix for provincial aggregate inspectors; and
- Develop and deliver training for a risk-based compliance program for supervisors and inspectors.

Aggregate Resources Coordinator (MNR) – January 2008 to September 2013

- Provide advice and leadership for all matters related to the Ministry's Aggregate Resources program to operations division;
- Provide leadership and direction to regional directors and assistant deputy minister in the resolution of highly complex issues;
- Collaborate with others in the preparation of Ministry (and Inter-Ministry) policy initiatives related to aggregate resources and the Aggregate Resources Act and regulations;
- Provide expert advice and assistance on all matters related to the Aggregate Resources program;
- Act as expert witness at provincial tribunals (Ontario Municipal Board hearings and Mining Lands Commissioner);
- Contribute to and deliver training packages to Ministry staff as required;
- Lead and participates on planning policy teams identifying and developing provincial policy initiatives and issues relating to Aggregate Resources;
- Consult and liaise on a regular basis with other ministries, industry, non-government organizations and stakeholders;
- Promote cooperative partnerships and develop and implement strategies to achieve aggregate resources program goals and objectives; and
- Develop an approvals template for Inspectors following the 2011 change in Delegation of Authority under the Aggregate Resources Act.

Mineral Resource Administrator and Pits and Quarries Inspector (MNR) – April 1977 to December 2008.min

- Implement, administer and enforce the Aggregate Resources Act, regulations and related Ministry policies and guidelines;
- Provide advice on Aggregate Resource deposit areas, license properties and other planning matters to Ministry front line field staff responsible for plan input and review;
- Coordinate the implementation of abandoned pit and quarry rehabilitation projects for the area office;
- Monitor and inspect on a regular basis aggregate extraction sites under licence or permit to assess compliance with the Aggregate Resources Act, regulations, provincial operational standards, and conditions of the license and the site plan;
- Investigate complaints and provide direction on remedial action and recommend enforcement action where warranted;
- Coordinate pit and quarry license and permit applications as well as site plan amendment approvals in accordance with the Aggregate Resources Act policy and procedures manual; and
- Consider other related federal, provincial and municipal legislation as part of compliance monitoring and approval processes using current inspection techniques. (e.g. Environmental Protection Act, Water Resources Act, Environmental Bill of Rights, Occupational Health and Safety regulations for Mining and Mining Plants, Planning Act, Municipal Act, etc.).

AFFILIATIONS, ACCREDITATIONS AND ACCOMPLISHMENTS:

- Associate Member of the Ontario Stone, Sand and Gravel Association (OSSGA) Active since 2017
- Member of the OSSGA Eastern Region Committee and working Group;
- Received Approval from MNRF to prepare site plans under the Aggregate Resources Act (Mar. 2017);
- Member of Aggregate Resources Program Policy and Procedures Manual 2006;
- Member of Aggregate Resources Program Policy, Procedures Manual Apr. 1986;
- Co-chair of Non-Renewable Resources task team for the 2010 Provincial Policy Statement review;
- Co-chair of the Southern Region Aggregate Inspector Task Team and the Lands, Aggregates and Waters NE Regional Forum and lead Inspector task teams with development of annual work plans, performance measures and annual reports;
- MNR Member of the City of Ottawa Steering Committee, for the 1993-95 Aggregate Resource Mapping and O.P. Policy Review;
- Lead the Planning exercise for the development and approval of the Mississippi River Water Management Plan;
- Prepared and monitored Southern and Northeast region Aggregate Program work plans, performance measures and annual reports;
- As a member of one of MNR's Southern Region Operational Forums (Safety and Health forum) MNR's southern region was presented with the Canada Award for Excellence for achievements in quality, customer service and a healthy workplace;
- Member of inter-ministerial committee (federal provincial and local government) responsible for the development of the Cornwall Sediment Strategy to protect the Cornwall water front;
- Member of the Health and Safety committee for the Nepean Relay for Life (Cancer Fundraiser);
- Chair of Joint health and Safety Committee Kemptville MNR office and member of JHSC MNR Peterborough Robinson Place;
- Acting District Planner, member for Inter-ministerial committee reviewing comprehensive municipal official plans;
- Peer reviewer, MNR member for eastern Ontario Source Water Protection Plans; and
- Tracking and tagging moose calves in Algonquin Park

PUBLICATIONS AND PRESENTATIONS

- Working Group member for the Risk Based Compliance Handbook for Aggregate Inspectors;
- Co-authored the Aggregate Resources Program Administration Manual 2005 and the previous ARA Administration Manual 1986;
- Co-authored the Kemptville District Health and Safety Plan;
- Strategic Operations Report for Aggregate Resources Kemptville District – 1998;
- Co-authored with Stacy Robertson, Background Report for Mineral Extraction Policy Areas in Drummond Township – 1991;
- Co-authored with Amarjit Sandhu and Stacey Robertson, Aggregate Resources Annual Review, 1988 and 1990, MNR Carleton Place District;
- Guest lecturer for the Ministry of Natural Resources, Land and Waters Certificate Course on the Aggregate Resources Act, 1989;
- Guest lecturer on the Aggregate Resources Act, 1989 for the Ministry of Transportation's Municipal Update Course;
- Co-authored with S.M. Thatcher and M. McMaster, Hazard Mine Inventory, Tweed and Napanee Districts, 1986; and
- Co-authored with S.M. Thatcher and M. McMaster, Abandoned Pits and Quarries Inventory Reports for Tweed District (Middle Hastings County) 1983 and Abandoned Pits and Quarries Inventory Report for Napanee District (Prince Edward County) 1985;

PRIOR ONTARIO MUNICIPAL BOARD EXPERIENCE

I have been qualified by the Board to provide opinion evidence for matters under the Aggregate Resources Act and the Provincial Policy Statement including the following examples:

- 2023 prepared witness statement for OLT hearing for zoning referral to Crain Construction Pit Application under the Planning Act;
- 1996 – Hostile licence transfer under the ARA (Secaspina, Polowin, Wilson), West Carleton Twp.;
- 1995 - Environmental, Social and Economic impacts relating to a Quarry Licence application referral under ARA in Montague Township, Lanark County;
- 1992 - Dust, noise, ground vibration and air overpressure impacts, truck traffic and other environmental, social, economic impacts in an MNR appeal to a severance application under the Planning Act Goulbourn Township (Leubert);
- 1991 - Environmental, social, and economic criteria for identifying and protecting bedrock reserve areas in a municipal official plan, Aggregate Producers Association of Ontario and Dechan Construction appeal to Beckwith Township Official Plan;
- 1990 - Dust, noise, truck traffic, ground vibration and air overpressure impacts of an operating quarry on lands adjacent to proposed residential development – MNR appeal of severance application under P.A. in Pakenham Township, Lanark county (Kennedy);
- 1989 - Acting as Agent for the appellant in a land consent appeal (severance application). Prepared all background evidence, e.g. photographs, aerial photos, O.M.B. maps, pertinent O.P. policies, Provincial legislation, zoning by-laws, influence areas, etc.; and
- 1982 - Haul route impacts on nearby residents during referral of a pit licence application under the Pits and Quarries Control Act (PQCA) in Hungerford Township, Hastings county.

PRIOR COURT EXPERIENCE

On ten occasions, I have provided opinion evidence as an investigating officer and also as a witness for charges in cases of non-compliance with the Aggregate Resources Act and the Pits and Quarries Control Act. Evidence included the auditing of production figures, truck box measurement, site plan interpretation, calculation of disturbed areas, digital and paper photographs, sketches, etc.

I have prepared Crown Briefs, Information's, Subpoenas, Supplemental Information documents, Guilty Plea Synopsis for convictions with recommended deterrents. I have prepared recommendations for fines and court orders for restoration and rehabilitation to bring sites back into conformity with regulations, site plans and conditions of the licence.

Prepared by:



Gary McLaren

President

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