



6659 Franktown Road

Planning Rationale
Zoning By-law Amendment
December 22, 2024



Prepared for 2800544 Ontario Inc.

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1.0

Introduction

Fotenn Planning + Design has been retained by 2800544 Ontario Inc. (the owner) to prepare a Planning Rationale in support of a Zoning By-law Amendment application for the lands known as 6659 Franktown Road (the “subject property”).

The intent of this Planning Rationale is to assess the proposed development against the applicable policy and regulatory framework and determine if the proposed development is appropriate for the subject site and compatible with adjacent land uses and the surrounding context.

1.1 Purpose of Application

The purpose of this application is to amend the performance standards related to home-based businesses in the RU zone to permit the existing well drilling business on the subject property. Additionally, an amendment is being sought to realign the existing EP3 zone with the revised Provincially Significant Wetland (PSW) extents to better reflect the existing site conditions and environmental mapping.

The existing business known as Air Rock Drilling has existed on the subject property since 2003 and recently the dwelling and business have been sold to a relative of the original owner. The land is used for a home-based office for operations and the outbuildings are used for the maintenance and overnight storage of well drilling equipment. The nature of the existing home-based business is that equipment is stored on-site overnight and taken off-site daily by employees to conduct drilling operations at client sites. The owner/operator of the business lives on site in the existing detached dwelling.

The purpose of this application is to permit and formalize the existing home-based business in a manner that is compatible with adjacent land uses and compliant with the zoning by-law.

2.0

Subject Property and Surrounding Context

2.1 Subject Property

The subject property is located in the City's rural area, west of the village of Richmond. The subject property has a total area of approximately 40.23 hectares with a frontage of 90 metres on Franktown Road to the south. The front portion of the property includes a residential dwelling and associated home-based business while the rear of the property is comprised of natural lands.

The subject property is situated within an area characterised by mixed rural residential and agricultural uses approximately 1.2 kilometres west of the Village of Richmond.

The subject property is currently occupied by a 1.5 storey detached dwelling, 320 square metre garage, and 500 square metre cover-all. The front portion of the property abutting Franktown Road includes trees and landscaping with a driveway that leads to the cover-all, and garage.

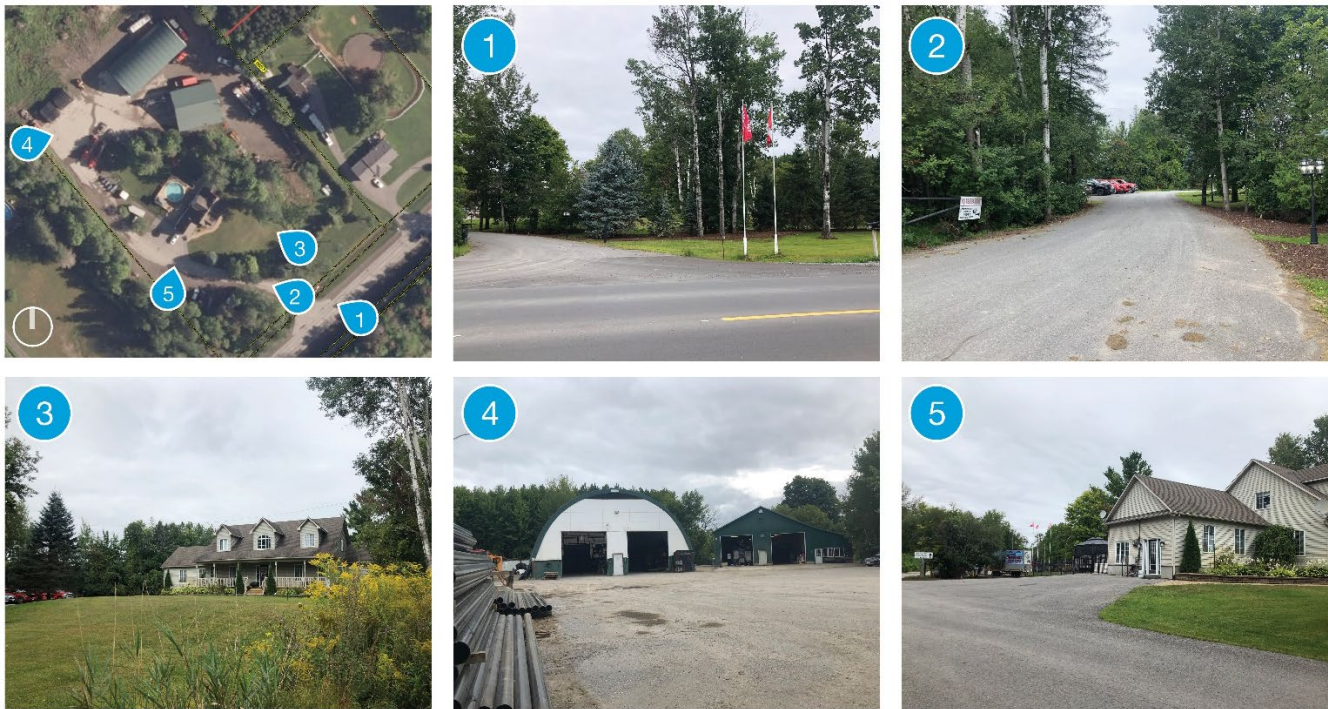


Figure 1: Site Photos of the subject property showing the existing dwelling and home-based business



Figure 2: Site Photos of the subject property showing the existing dwelling and home-based business

2.2 Surrounding Context

North: North of the subject property are undeveloped natural lands.

East: Immediately east of the subject property is a rural residential property at 6653 Franktown Road. Further east are additional rural residential properties that front onto Franktown Road. The Village of Richmond is approximately 1.2 kilometres east of the subject property.

South: The subject property fronts onto Franktown Road to the south. South of Franktown Road is a place of worship at 6688 Franktown Road. Further south are undeveloped natural lands.

West: Immediately west of the subject property is a rural residential property at 6685 Franktown Road. Further west there are two vacant lots. Approximately 250 metres west of the subject property runs a natural gas pipeline.

2.3 Transportation Context

2.3.1 Road Network

The subject property fronts onto Franktown Road, which is identified as a Collector Road on *Schedule C9 – Rural Road Network* in the City of Ottawa Official Plan. Rural Collector Roads provide connection to Arterials Roads and Provincial freeways and are intended to accommodate a wider range of traffic including private vehicles and trucks.

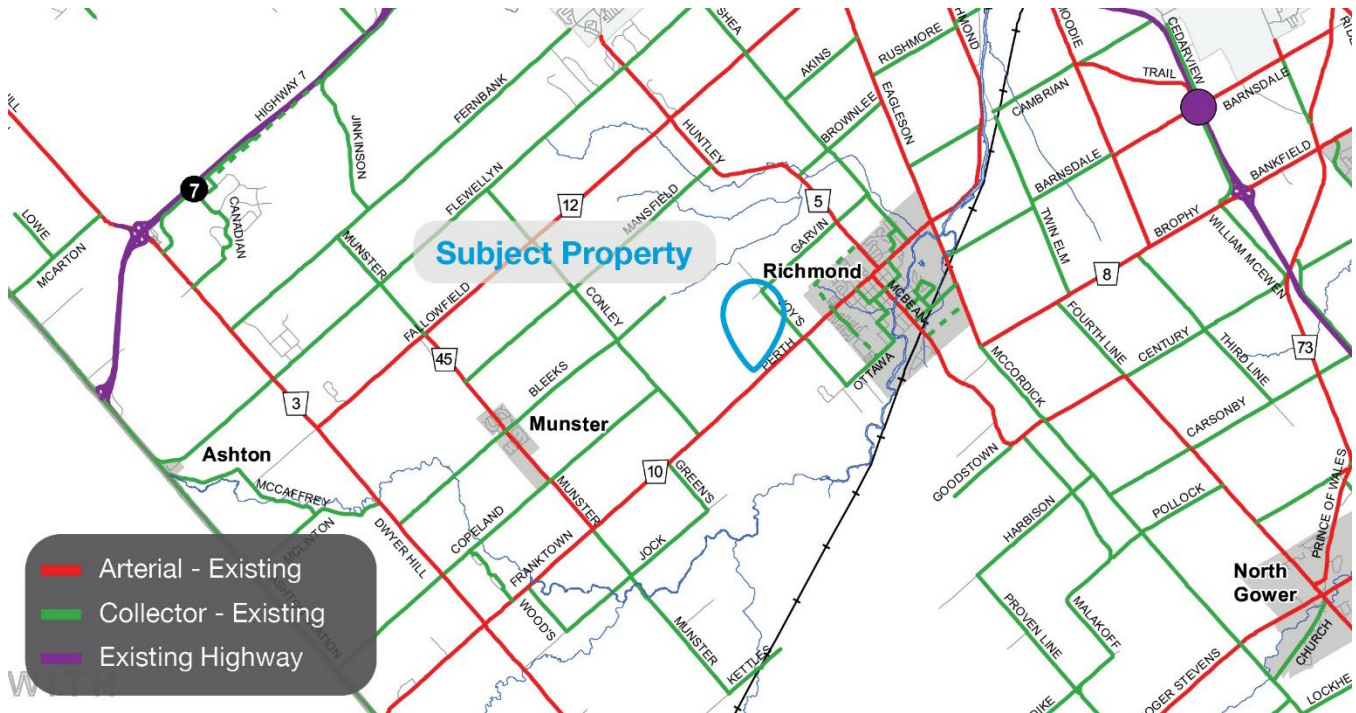


Figure 3: Schedule C9 - Rural Road Network

Franktown Road is identified as a full load Heavy road as in Schedule 2 “Rural Truck Route Map” of the City of Ottawa Traffic and Parking By-law (2017-301). Heavy vehicles (any vehicle having a gross vehicle weight in excess of four and one-half (4.5) tonnes) are obliged to travel on truck routes. Red truck routes can carry full loads all year.

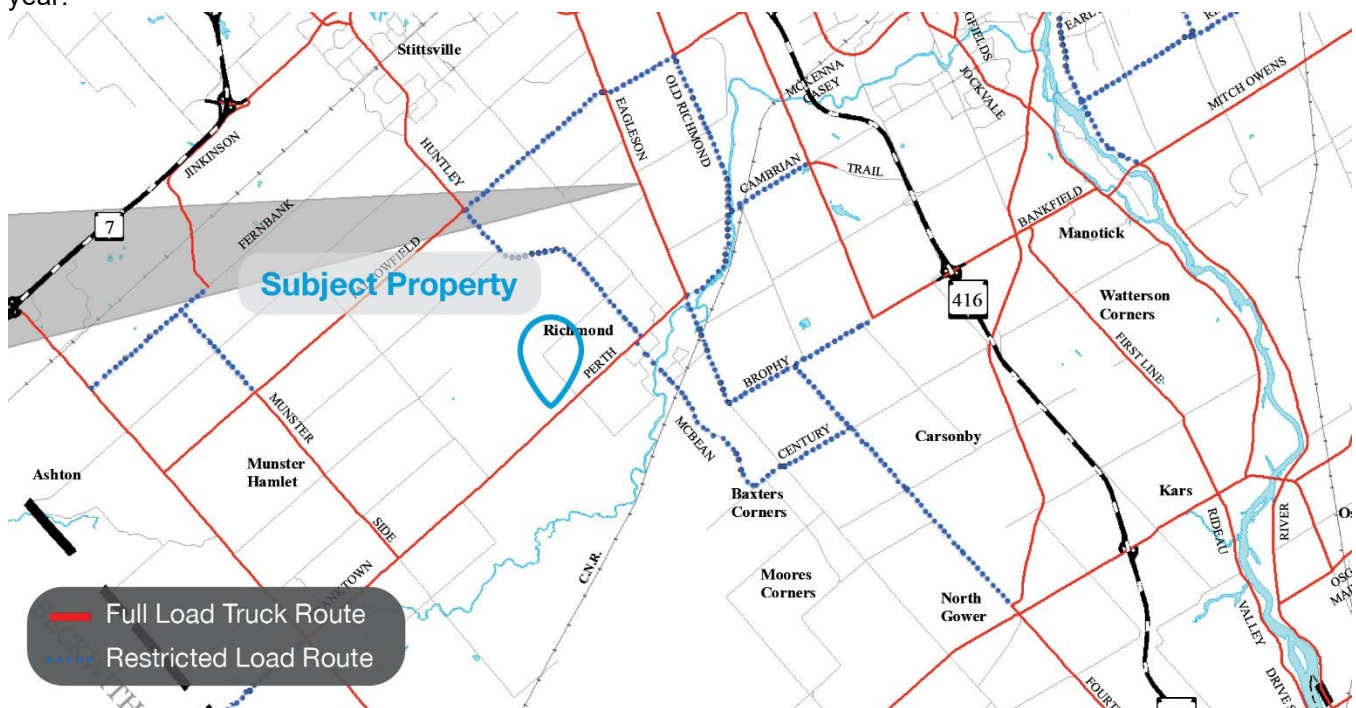


Figure 4: City of Ottawa - Rural Truck Routes, March 1, 2022

3.0 Policy and Regulatory Review

3.1 Provincial Planning Statement (2024)

The Provincial Planning Statement (PPS) provides policy direction on matters of provincial interest related to land uses planning and development in Ontario. The PPS is a policy statement issued under Section 3 of the Planning Act and came into effect on October 20, 2024. It replaces the Provincial Policy Statement (2020). Section 3 of the Planning Act requires that decisions affecting planning matters be “consistent with” policy statements issued under the Act.

Section 2.1 of the PPS provides policy direction for planning for people and homes. Policy 6 provides direction to support the achievement of complete communities by:

- a) Accommodating an appropriate range and mix of land uses, housing options, transportation options with multimodal access, employment, public service facilities, and other institutional uses, recreation, parks and open space, and other uses to meet long-term needs;
- b) Improving accessibility for people of all ages and abilities by addressing land use barriers which restrict their full participation in society; and
- c) Improving social equity and overall quality of life for people of all ages, abilities, and incomes, including equity-deserving groups.

Section 2.5 of the PPS establishes the following policies for Rural Areas within Municipalities.

Policy 2.5.1 states that healthy, integrated and viable rural areas should be supported by:

- a) Build upon rural character, and leveraging rural amenities and assets;
- b) Promoting regeneration, including the redevelopment of brownfield sites;
- c) Accommodating an appropriate range and mix of housing in rural settlement areas;
- d) Using rural infrastructure and public service facilities efficiently;
- e) Promoting diversification of the economic base and employment opportunities through goods and services, including value-added products and sustainable management of use of resources;
- f) providing opportunities for sustainable and diversified tourism, including leveraging historical, cultural, and natural assets;
- g) conserving biodiversity and considering the ecological benefits provided by nature;
- h) providing opportunities for economic activities in *prime agricultural areas*, in accordance with policy 4.3.

Section 2.6 of the PPS establishes the following policies for Rural Lands within municipalities

Policy 2.6.1 states that on rural lands located in municipalities, permitted uses are:

- a) the management or use of resources;
- b) resource-based recreational uses (including recreational dwellings not intended as permanent residences);
- c) residential development, including lot creation, where site conditions are suitable for the provision of appropriate sewage and water services;
- d) agricultural uses, agriculture-related uses, on-farm diversified uses and normal farm practices, in accordance with provincial standards;
- e) home occupations and home industries;
- f) cemeteries; and
- g) other rural land uses.

Policy 2.6.2 states that development that can be sustained by rural service levels should be promoted.

Policy 2.6.3 states that development shall be appropriate to the infrastructure which is planned or available, and avoid the need for the uneconomical expansion of this infrastructure.

Policy 2.6.4 states that planning authorities should support a diversified rural economy by protecting agricultural and other resource-related uses and directing non-related development to areas where it will minimize constraints on these uses.

Section 2.8.1 of the PPS establishes the following policies to support a modern economy.

Policy 2.8.1.1 states that planning authorities shall promote economic development and competitiveness by:

- a) providing for an appropriate mix and range of employment, institutional, and broader mixed uses to meet long-term needs;
- b) providing opportunities for a diversified economic base, including maintaining a range and choice of suitable sites for employment uses which support a wide range of economic activities and ancillary uses, and take into account the needs of existing and future businesses;
- c) identifying strategic sites for investment, monitoring the availability and suitability of employment sites, including market-ready sites, and seeking to address potential barriers to investment;
- d) encouraging *intensification* of employment uses and compatible, compact, mixed-use development to support the achievement of *complete communities*; and
- e) addressing land use compatibility adjacent to *employment areas* by providing an appropriate transition to *sensitive land uses*.

The subject property is appropriate for the continued use of a home-based business as it will continue to utilize the existing rural road network and private water and wastewater infrastructure. The current land use promotes the diversification of the economic base and employment opportunities in the rural area by providing an essential service to rural property owners that rely on private wells for potable water. The existing land use is consistent with the Provincial Planning Statement (2024).

3.2 City of Ottawa Official Plan (2022, as amended)

The Official Plan for the City of Ottawa was approved on November 4, 2022. The Plan provides a framework for the way that the City will develop until 2046 when it is expected that the City's population will surpass 1.4 million people. The Official Plan directs how the city will accommodate this growth over time and sets out the policies to guide the development and growth of the City.

3.2.1 Economic Development

Per Section 2.2.2 of the Official Plan, the role of the Official Plan in economic development is to establish through land use policies a framework that will contribute to the sustainability, resiliency, diversification and growth of the local economy. The land use policies should support existing and emerging industries, businesses and services at all scales and within all geographic areas of the City, rural, suburban and urban.

Per Policy 9 of Section 2.2.2 of the Official Plan, Ottawa's rural area plays an important economic function in Ottawa and is dominated by high-value industries such as agriculture, construction, mineral extraction, manufacturing and warehousing. By providing greater flexibility in land uses throughout the general area while ensuring protection of prime agricultural lands, the City will encourage the growth of businesses which support the rural community.

The economic activities in the rural area are varied and provide an important function to the city. It is critical to protect important resources as well as strategic locations for current and future use while allowing for innovation and flexibility for complementary uses in order to support growth and a sustainable rural economy. Industry jobs such as agriculture and resource extraction primarily occur in the rural areas and are protected as Agricultural Resource Areas, Bedrock

Resource Areas and Sand and Gravel Resource Areas. While these employment sectors may not be dense employment areas, they comprise a significant land area.

The existing home-based business on the subject property, with the implementation of the proposed mitigation measures, represents an appropriate land use within Ottawa's rural transect. This use advances economic activity in the area while remaining compatible with adjacent residential land uses.

The business is suitably scaled for the rural countryside and aligns with the character of the area. However, it does not align with the policy direction for the Rural Industrial and Logistics Area, which is designated as an employment area under the Provincial Policy Statement (PPS) and the Planning Act. According to Section 1(1) of the Planning Act, the definition of "employment area" prohibits standalone commercial uses unless they are directly associated with primary employment activities, such as manufacturing, research and development, or warehousing.

As the existing land use does not involve manufacturing, research and development, or warehousing, it is therefore inappropriate for an employment area. Instead, it is more suitably located within the rural countryside, where it provides an essential service to the rural community.

3.2.2 Transect and Land Use Designation

The subject property is located within the Rural Transect Area and is designated Rural Countryside as identified on *Schedule B9-Rural Transect* of the Official Plan. The Rural Transect Area accounts for approximately 80 percent of the City's total land area. The use of land in this transect area varies in intensity from untouched natural areas and cultivated farmland, to more intense development within villages and commercial industrial areas. The Rural Transect areas provide for a range of social and economic activity and the policies are intended to ensure the responsible use of resources for the protection of public health and the environment while supporting economic development for rural businesses in recognition of their valuable contributions to the regional economy.

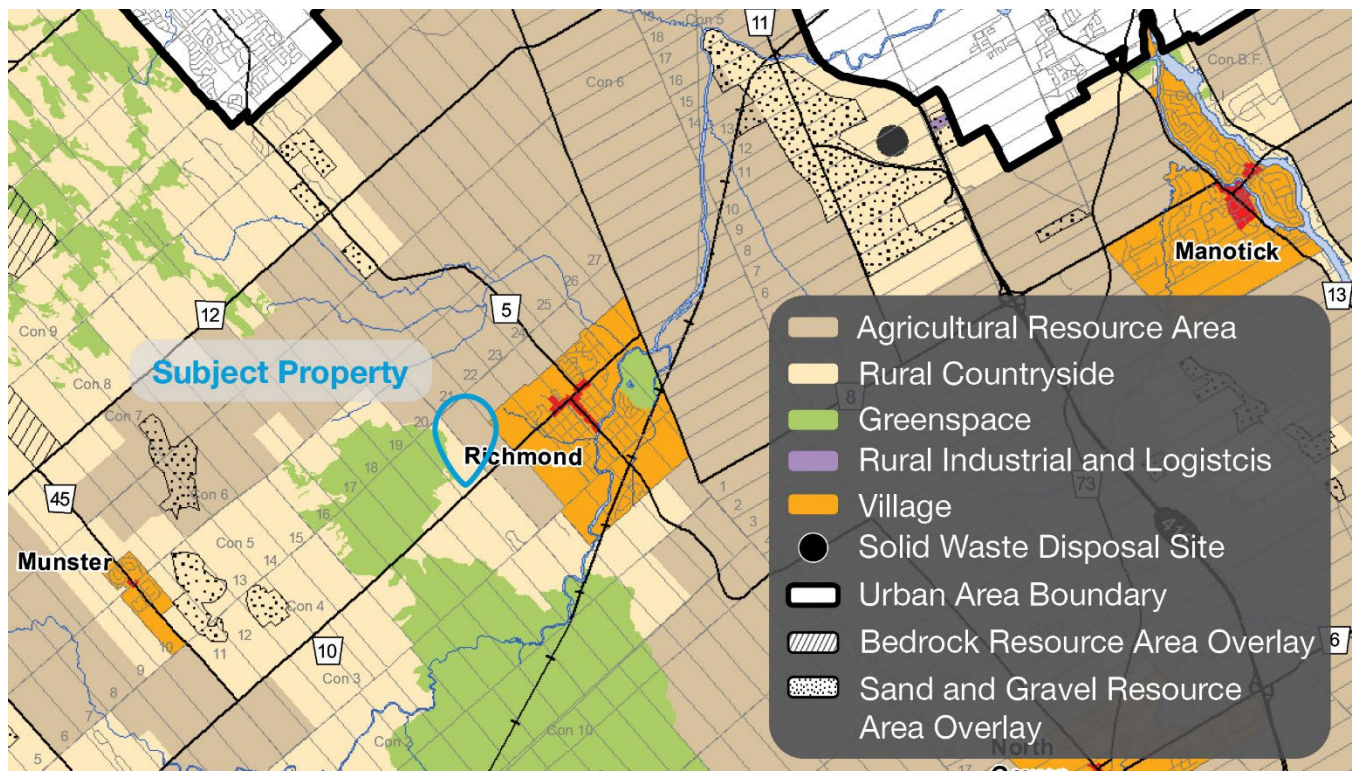


Figure 5: Schedule B9 - Rural Transect

The following Rural Transect policies apply to the subject property:

Policy 1 in Section 5.5.1 states that the built form in the Rural Transect area, where development is permitted shall be low-rise.

- b) Outside Villages, where development is permitted, built form and site design shall be premised on maintaining the rural character, image and identity; and
- c) Outside of Villages, sites shall be designed to locate surface parking, storage and paved area far from the road frontage, and access to such areas shall be designed to maintain rural character. The frontage along the road shall be landscaped and treed in a way that respects the rural landscape and enhances the green edge of rural roads. Elements such as low fences, hedges or landscape-based ornaments may be used to enhance the site frontage.

The subject property features significant landscaping and mature trees along the road frontage, respecting the rural character of the area. The residential dwelling is located at the front of the property, with the home-based business in the rear, accessed via the driveway. The rural streetscape along Franktown road is maintained and enhanced.

The Rural Countryside designation is made up of a variety of low-intensity uses such as farming, small-scale industries and outdoor recreation and tourism supportive uses such as golf courses, vacation properties or bed and breakfasts. The Rural Countryside also contains clusters of low-density residential units which pre-date this plan. The intent of this designation is to accommodate a variety of land uses that are appropriate for a rural location, limiting the amount of residential development and support industries that serve local residents and the travelling public, while ensuring that the character of the rural area is preserved.

Policy 1 in Section 9.2.2 states that the following land uses may be permitted within the Rural Countryside designation:

- a) Forestry, conservation and natural resource management activities;
- b) Agriculture, agriculture-related and on-farm diversified uses;
- c) Residential uses according to the policies of this plan;
- d) Animal services boarding, breeding and training and equestrian establishments;
- e) Bed and breakfasts;
- f) Utility Installations;
- g) Cemeteries; and
- h) Sand and gravel pits.

The list is not intended to be exhaustive; additional uses may be permitted where appropriate, as outlined in Policy 2 of Section 9.2.2, discussed below.

Policy 2 of Section 9.2.2 states that the following uses are permitted by this Plan where permitted by the underlying zoning, furthermore such uses may be permitted subject to a Zoning By-law amendment or, when the process is enacted, a Community Planning Permit.

b) small scale light industrial and commercial uses may be permitted through a Zoning By-law amendment where all of the following criteria are met:

- i) uses are necessary to serve the local rural community or the travelling public, such as restaurant, gas station, private medical or medical related-clinics, veterinary services, personal service or motel;

The existing well drilling business has operated on this property for 20+ years and is specifically located to service the local rural area, where wells are needed.

- ii) The lands are within 200 metres of an arterial or collector road and can be safely accessed;

The subject property is located on Franktown Road (Perth Street in the Village of Richmond), identified as an arterial road on Schedule C9 – Rural Road Network of the Official Plan. Further, Franktown Road is identified as a “Full Load” rural truck route on the City of Ottawa’s Rural Truck Routes Schedule (dated March 1, 2022).

- iii) The lands are located beyond 1 kilometre of an Urban or Village boundary, or where located less than 1 kilometre from a Village boundary, it can be demonstrated that there is insufficient opportunity for these types of uses to be established within the Village;

The subject property is located approximately 1.2 kilometres from the Village boundary of the Village of Richmond. Therefore, the subject property is not subject to the criteria above. However, it is noted that the well drilling business operates as a home-based business that supports the local rural economy, and does not propose the fragmentation of rural lands nor the alteration of the rural character. The business has been designed to operate in the rear of the property to minimize any visibility from the road, and the Site Plan process, in consultation with Staff, allows for meaningful changes that will minimize any perceived impacts from the business.

- iv) The lands are not adjacent to lands designated as Agricultural Resource Area;

The subject property is designated Rural Countryside and is not adjacent to any lands designated as Agricultural Resource Area.

- v) The development can be supported by services available according to applicable provincial regulations;

The home-based business has operated on the subject lands for 20+ years and no servicing issues have been identified. Further, a Risk Management Plan has been completed with the City of Ottawa, following the MECP process.

- vi) The scale of the development is suitable for a rural context and where the size of each commercial occupancy will not exceed 300 square metres of gross leasable floor area; and

The proposal does not seek to establish multiple commercial occupancies, such as a multi-tenant industrial building. The proposal is to permit the continued use of the rural property for the existing home-based business, which utilizes a portion of the main house (occupied by the business owners as their primary residence) and accessory structures for the operation of the business. As a home-based business, there is no calculation of gross leasable area – the business is intimately tied to the residential portion of the lands.

- vii) The proposed development is designed to minimize hazards between the road on which it fronts and its vehicular points of access, mitigate incompatibilities with adjacent residential uses and to integrate appropriately with rural character and landscape.

The existing driveway is designed to shelter the business behind soft landscaping, sensitively integrating into the rural nature of the road, while allowing for a wider ingress/egress at the road for safe truck turning movements. Franktown Road is an Arterial Road and also a Rural Trucking Route, and no hazards are anticipated as a result of the continued operation of the business.

3.2.3 Home Based Business

Policy 5 of Section 4.2.1 of the Official Plan states that: where the Zoning By-law permits a dwelling, a home-based business shall also be permitted. The provisions of the Zoning By-law shall contain regulations to ensure appropriate

integration so that home-based businesses do not adversely impact neighbouring properties by virtue of their appearance or function or by attracting large volumes of automobile traffic.

The existing home-based business and proposed mitigation measures represent an appropriate land use within Ottawa's rural transect. This use advances economic activity in the area while remaining compatible with adjacent residential land uses. Further, the application proposes additional mitigation measures following professional reports, including the Risk Management Plan and the Noise Study prepared in support of the application.

3.2.4 Protection of Health and Safety

Section 10 of the Official Plan provides policies for the Protection of Health and Safety. One of the main objectives of these policies is to minimize incompatible land uses. Section 10.2 of the Official Plan provides direction for the review of development applications to achieve this objective.

Section 10.2.1 of the Official Plan outlines policies for environmental noise control. 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.

Policy 1 of section 10.2.1 states that all development shall comply with the City's Environmental Noise Control Guidelines which are based on the applicable Provincial noise guidelines [currently NPC – 300, MOEE 2013].

Policy 2 of section 10.2.1 states that all noise studies prepared in support of development shall be consistent with the City's Environmental Noise Control Guidelines and shall include noise mitigation and a warning clause where necessary, as a condition of approval.

State of the Art Acoustik was retained by Air Rock Drilling to complete an Environmental Noise Assessment for the subject property. The report determines whether this site complies with the City of Ottawa's sound level limits outlined when in use.

The City of Ottawa has classified Air Rock Drilling Headquarters and the surrounding environment as being a Class 3 area. Therefore, to comply with the City of Ottawa's ENCG, the facility must meet the MECP limits for Class 3 daytime permissible Sound Pressure Levels (SPL) at nearby noise-sensitive areas. The area around 6659 Franktown Road must meet noise limits of 45 dBA during the day (07:00 to 19:00 hours) and 40 dBA during the evening and night (19:00 to 07:00 hours).

As part of the analysis, two locations were selected as Points of Reception (PORs). POR-1 was identified as the nearest window on the residential building at 6685 Franktown Road and POR-2 was identified as the closest residential building at 6653 Franktown Road.

The model determines that Air Rock Drilling Headquarters currently does not meet the acoustic requirements of the City of Ottawa at 6685 Franktown Road (POR-1) at any time of day. Therefore, an acoustical barrier is required between the subject property and 6685 Franktown Road. The location of this barrier is identified in Figure 4.1 of their report. It must a minimum of 4.5m-tall and 45m in length.

With the proposed acoustical mitigation measures, both PORs are within acceptable noise limits.

3.2.5 Water Resources

Section 4.9 of the Official Plan outlines policies to protect, improve or restore the quality and quantity of surface water features and groundwater features; keep watercourses in a natural state while managing erosion, slope stability and flooding concerns; and, restrict or limit development and site alteration near surface water and groundwater features.

Policy 4.9.4 2) states that the protection of groundwater features and their hydrologic functions will occur in the following ways:

- a) Preparing and implementing the recommendations of watershed plans, subwatershed plans and site-specific groundwater assessments consistent with Council-approved direction;
- b) Development or site alteration shall only be permitted in or near groundwater features where it has been demonstrated, to the satisfaction of the City, that these features and their related hydrologic functions shall be protected and, where possible, improved or restored; and
- c) Development and site alteration shall be consistent with the conclusions and recommendations of an approved hydrogeological and terrain analysis report.

Policy 4.9.5 1) states that any activity or use within designated vulnerable areas shown on Schedule C15, that is considered a significant drinking water threat, shall conform with all applicable approved Source Protection Plan policies and may be prohibited, restricted or otherwise regulated. Related municipal decisions shall conform with the mapping and policies contained within the most recent version of the applicable Source Protection Plan.

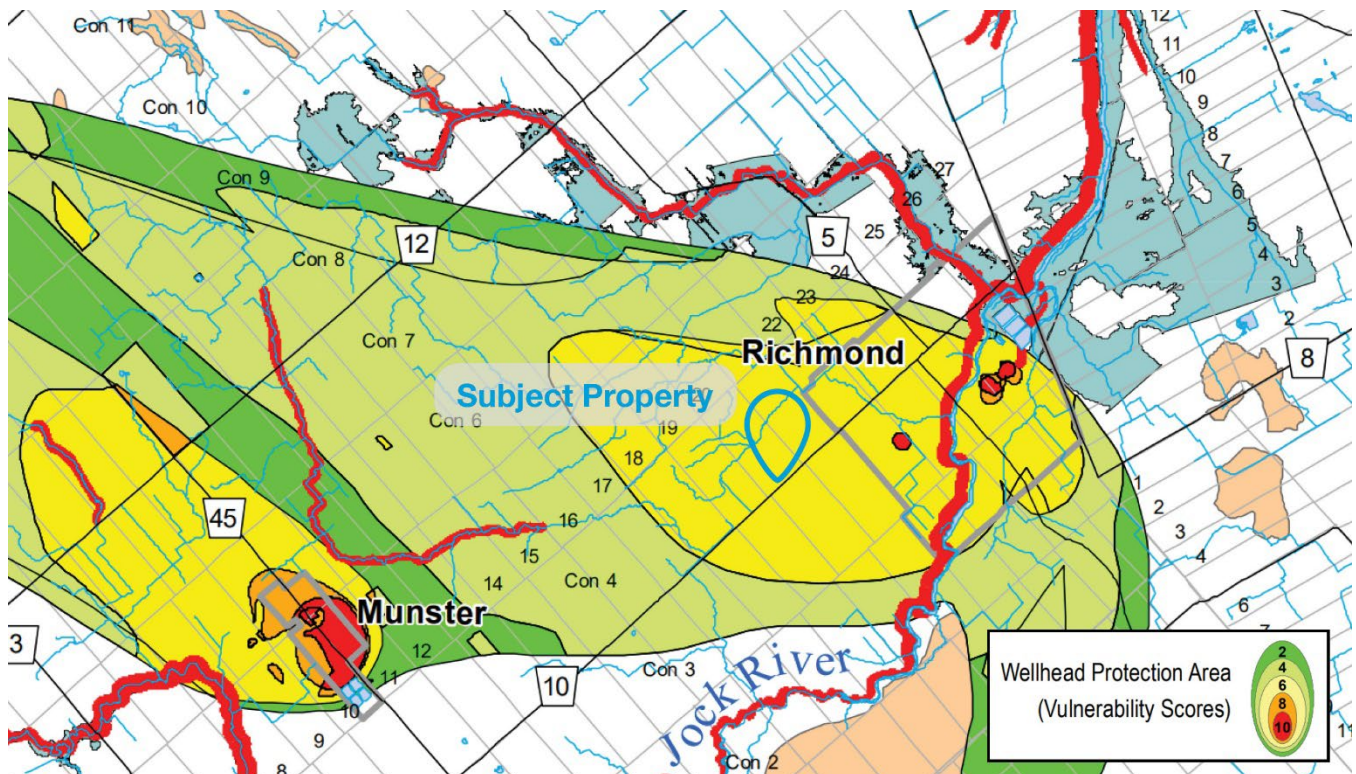


Figure 6: Schedule C15 - Environmental Constraints

As detailed in the Hydrogeological and Terrain Analysis prepared by Paterson Group, dated December 20, 2024, the subject site and surrounding areas have been designated as a Highly Vulnerable Aquifer (HVA), and Wellhead Protection Area B (score of 6). As per the Paterson Report, "This rating prohibits the storage of Dense Non-aqueous Phase Liquids (DNAPLs) and a Risk Management Plan is required for the storage of Liquid Fuels, which Air Rock has completed with the Risk Management Official with the City of Ottawa. There are no current outstanding comments related to Source Water Protection. The existing site usage pre-

dates the municipal supply wells constructed for the Fox Run development and surrounding area with associated extensive modeling and approvals.

3.3 Rural Economic Development Strategy and Action Plan (2019)

The Rural Economic Development Strategy (REDS) was developed to address the unique characteristics of the city of Ottawa. Actions within the REDS align with five key priorities; A Supportive Business Environment; A Vibrant Rural Lifestyle; A Strengthened Rural Tourism Position; Innovation in Agriculture and Agri-food Production; and Advocating for Rural Priorities. Together, these five priorities are designed to help achieve the mission:

“Rural Ottawa is recognized for the significant economic contribution that it provides to the city. Businesses, entrepreneurs and communities in Ottawa’s rural areas are supported with programming and resources that assist them to thrive and grow sustainably.”

The RED included recommendations to reduce barriers for small businesses and broaden the scope of what is considered a home-based business.

3.4 City of Ottawa Comprehensive Zoning By-law (2008-250)

The front portion of the subject property, where the dwelling and home based business are located is zoned Rural Countryside -RU. The rear portion of the subject property is zoned Environmental Protection Zone, Subzone 3 – EP3.



Figure 7: Zoning Map as taken from GeoOttawa

The purpose of the Rural Countryside Zone is to:

- / accommodate agricultural, forestry, country residential lots created by severance and other land uses characteristic of Ottawa's countryside;
- / recognize and permit this range of rural-based land uses which often have large lot or distance separation requirements; and
- / regulate various types of development in manners that ensure compatibility with adjacent land uses and respect the rural context.

Within the RU zone the following land uses are permitted:

- | | |
|--------------------------------|---|
| / Agricultural use | / Equestrian establishment |
| / Agricultural related use | / Environmental preserve and education area |
| / Animal care establishment | / Forestry operation |
| / Animal hospital | / Group home |
| / Artist studio | / Home-based business |
| / Bed and breakfast | / Home-based day care |
| / Cannabis production facility | / Kennel |
| / Cemetery | / On-farm diversified use |
| / Detached dwelling | / Retirement home, converted |

The RU Zone permits a range of rural land uses including a dedicated dwelling and home based business

Table 1: RU Zone Provisions

Zoning Mechanism	Provision	Provided	Compliance
Minimum lot width Table 227	50 metres	90 metres	Yes
Minimum lot Area Table 227	0.8 hectares	40 hectares	Yes
Minimum front yard setback Table 227	10 metres	>40 metres	Yes
Minimum rear yard setback Table 227	10 metres	>1,000 metres	Yes
Minimum interior side yard setback Table 227	5 metres	14.7 metres	Yes
Maximum lot coverage Table 227	20%	Less than 1%	Yes

Table 2: Provisions for Home-Based Businesses

Zoning Mechanism	Provision	Provided	Compliance
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Number of on-site employees S.128 (2)	a maximum of three, on-site, non-resident employees are permitted.	Three, on-site non-resident employees work in the office.	Yes
Maximum area of a home-based business S.128 (3)	150 m ² , excluding outdoor storage associated with the home-based business	670 m ²	No
Maximum area of a home-based business within a dwelling unit s.127(9)	The cumulative size of all home-based businesses per dwelling unit or additional dwelling unit must not exceed 25% of the unit's gross floor area or 28 m ² whichever is the greater. Maximum area of home-based business within a dwelling unit: 320 m ² * 0.25 = 80 m ²	Area of Dwelling: 320 m ² No area associated within the Home-based business is located within the dwelling unit.	Yes
Minimum required setback for a garage or accessory building used for a home-based business from a lot line abutting a residential use S.128 (9)	No part of any garage or accessory building used for a home-based business may be located closer than 10 metres to any residential use on another lot, or to the side lot line if the neighbouring lot is not developed with a residential use.	Setback 14.7 m	Yes
Outdoor Storage S.128 (10)	A maximum cumulative 5% of the lot area or 100 m ² , whichever is the lesser is permitted to be used for outdoor storage associated with all of the home-based businesses combined.	150 m ²	No
Location of Outdoor Storage S.128(11)	The permitted outdoor storage is restricted to the rear yard or to an interior yard adjacent to the rear yard.	Outdoor storage is limited to the rear yard.	Yes
S.128(12)	The outdoor storage is not to be located within 10 metres of any side lot line.	24 metres from the side lot line	Yes
Screening of Outdoor Storage S.128(13)	The outdoor storage must be screened from view from any abutting public street, or abutting property, with an	A 1.4 metre high fence is proposed surrounding the outdoor storage.	Yes

	opaque screen or fence, with a minimum height of 1.4 metres.		
On-Site Storage of Hazardous material S.128(14)	On-site storage of hazardous chemicals or explosives is prohibited.	Coloured diesel is proposed to be stored on site in accordance with O. Reg. 217/01 (Liquid Fuels).	No

Table 3: Maximum number of heavy vehicles permitted to be parked (Section 126)

Type of Vehicle		Provision	Provided	Compliance
If greater than 6 m in length	Heavy vehicles that consists of a recreational vehicle, or trailer for camping or a boat	Maximum of three vehicles.	0 personal vehicles or trailer (removed off-site)	Yes
	a heavy vehicle other than above, or a trailer other than a trailer for camping or a boat	Maximum of two vehicles.	Three drill trucks, three service trucks, and one tractor (telehandler) Total: 7	No
Cumulative number of heavy vehicles and trailers permitted per lot.		no person shall park a total of more than three trailers and heavy vehicles on a lot	7	No

4.0

Proposed Zoning By-law Amendment

The purpose of this application is to amend the performance standards related to home-based businesses in the RU and AG zones to permit the existing well drilling business on the subject property.

The following amendments are proposed to permit the continued operation of the home-based business:

4.1 Increase the Maximum Area of a home-based business from 150 square metres to 670 square metres.

A significant portion of the indoor space associated with the existing home-based business is used for storing materials and parking vehicles. This indoor storage ensures that materials and heavy vehicles are securely stored out of sight and protected from the elements. The area used for office purposes, where on-site employees work, is limited to 80 square metres of the total business space.

4.2 Increased area of Outdoor Storage from 100 square metres to 150 square metres.

While most storage will occur within the existing buildings, 150 square metres have been allocated for outdoor storage. This represents approximately 0.0375% of the total lot area. The outdoor storage area will primarily be used for well-casing pipes needed during the well-drilling process. These materials do not produce odors, noise, or other nuisances and will be stored in the rear yard, screened by a 1.4-metre-high fence.

4.3 Permit the storage of coloured diesel on site for the fueling of vehicles

Although diesel is classified as a “hazardous material,” its storage is common on residential properties throughout the City, especially for fueling backup generators. In rural areas, coloured diesel is frequently stored on agricultural properties for farm equipment. Similarly, propane, another “hazardous material,” is permitted in residential areas for heating and cooking purposes.

The diesel fuel tanks on the subject property comply with Ontario Regulation 217/01 and have been installed following the TSSA Liquid Fuels Handling Code. While zoning provisions for home-based businesses prohibit the storage of “hazardous materials,” the diesel fuel tanks serve a similar function to residential fuel storage for private use.

Phase I and II environmental assessments (conducted by EXP in August 2023) identified the fuel storage tanks as an Area of Potential Environmental Concern (APEC). However, groundwater sampling from three on-site monitoring wells revealed no groundwater exceedances, and no further environmental investigations were deemed necessary.

It is our professional opinion that the continued on-site storage of diesel fuel for vehicle refueling is appropriate for the subject property and consistent with the scale of the home-based business.

4.4 Permit the parking of Seven (7) Heavy Vehicles on site

The proposal includes the parking of seven heavy vehicles on the subject property, comprising:

- / Three (3) service trucks
- / Three (3) well-drilling rigs
- / One (1) telehandler

Due to the nature of the well-drilling business, these vehicles (aside from the telehandler) are typically parked on-site only when not in active use at job sites across the rural area. Drilling trucks are not returned to the business every day – they are often left on-site for days at a time, as per the nature of the work.

4.5 Realign the the existing EP3 zoning to reflect the revised Provincially Significant Wetland (PSW)

As detailed in the Environmental Impact Statement, prepared by Gemtec, the Provincially significant Wetland boundary does not correspond with the EP3 zoning boundary. It is proposed that the EP3 zoning boundary be revised to reflect the actual extent of the provincially significant wetland. As detailed in figure X below, the Conservation Authority limit which represents a 30-metre setback from the Provincially Significant Wetland, does not align with the boundary of the EP3 Zone or the edge of the wooded area.

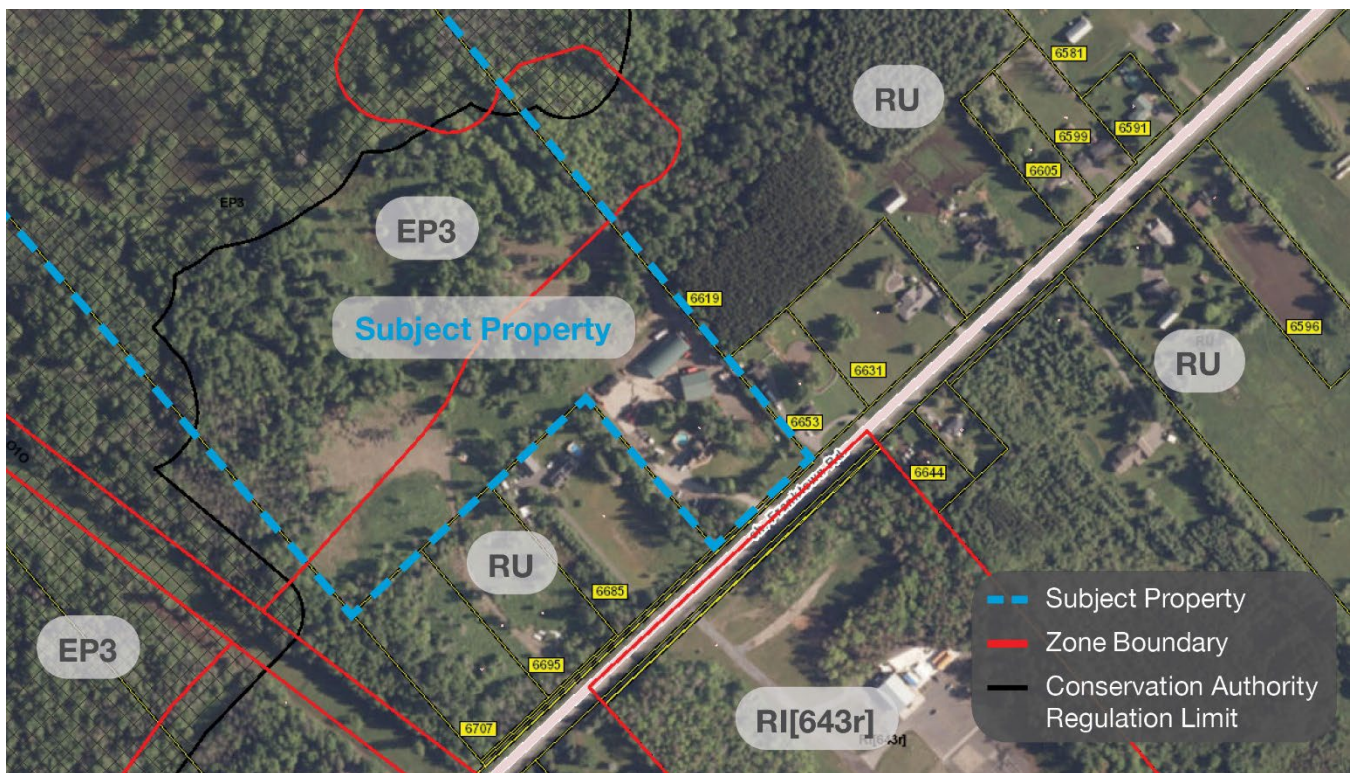


Figure 8: Zoning Map as taken from GeoOttawa, showing the Conservation Authority Limit

5.0 Supporting Plans and Studies

5.1 Phase One Environmental Site Assessments, Prepared by EXP Services Inc., dated August 9, 2023

EXP Services Inc. (EXP) was retained by the owner of Air Rock Drilling to complete a Phase I Environmental Site Assessment (ESA).

A Phase One ESA is a systematic qualitative process to assess the environmental condition of a site based on its historical and current uses. This Phase One ESA was conducted in accordance with the Phase One ESA standard as defined by Ontario Regulation 153/04, as amended, and in accordance with generally accepted professional practices. Subject to this standard of care, EXP makes no express or implied warranties regarding its services and no third-party beneficiaries are intended. Limitation of liability, scope of report and third-party reliance are outlined in Section 9 of this report.

The purpose of this Phase One ESA is to determine if past or present site activities have resulted in actual or potential contamination at the Phase One property. It is understood that the report will be used to support a site plan application with the City of Ottawa.

The Phase One property is located on the north side of Franktown Road, at 6659 Franktown Road in Ottawa. The Phase One property has an area of approximately 1.22 hectares and is currently occupied by one residential structure, one workshop / office building and a Quonset hut all associated with the on Site well drilling company (Air Rock Drilling Company Ltd.).

Based on a review of historical aerial photographs, historical maps, and other records, the Phase One property was first developed with the residential structure some time around 2000, and the outbuildings were constructed sometime around 2005.

The subject property is in a rural countryside zoned area. The local groundwater flow direction is unknown, although based on regional topography, groundwater flow is anticipated to be southeast toward the Jock River.

The following PCAs were identified on the Phase One property:

- / PCA #10 – Commercial autobody shop
- / On site – 6659 Franktown Road (Air Rock Drilling Ltd.)
- / PCA #28 – Gasoline and associated products storage in fixed tanks
- / On site – 6659 Franktown Road (Air Rock Drilling Ltd.)

No off-site PCAs were identified.

The Qualified Person who oversaw this work, Mark McCalla, P.Geo., recommends that a Phase Two ESA be conducted to address the APEC identified.

The Qualified Person can confirm that the Phase One Environmental Site Assessment was conducted per the requirements of Ontario Regulation 153/04, as amended, and in accordance with generally accepted professional practices.

5.2 Phase Two Environmental Site Assessment, Prepared by EXP Services Inc., dated August 11, 2023

EXP Services Inc. (EXP) was retained by Air Rock Drilling to conduct a Phase Two Environmental Site Assessment (ESA) at 6659 Franktown Road in Ottawa, Ontario (hereinafter referred to as the 'Phase Two Property'). At the time of the investigation the Phase Two property was occupied by one (1) residential structure, one workshop / office building and a Quonset Hut associated with the on-Site well drilling company (Air Rock Drilling Company Ltd.).

The objective of the Phase Two ESA investigation was to assess the quality of the soil and groundwater conditions within the areas of potential environmental concern (APEC) identified in a Phase One ESA prepared by EXP. EXP understands that this report is being conducted in support of a zoning amendment and will not be used to submit a Record of Site Condition (RSC).

The Phase Two property is located on the north side of Franktown Road, at 6659 Franktown Road in Ottawa. The Phase Two property has an area of approximately 1.22 hectares and is currently occupied by one residential structure, one workshop / office building and a Quonset hut all associated with the on site well drilling company (Air Rock Drilling Company Ltd.). The residential structure was constructed some time around 2000, and the outbuildings were constructed sometime around 2005. The Phase Two property is in a rural countryside zoned area. The local groundwater flow direction is unknown, although based on regional topography, groundwater flow is anticipated to be southeast toward the Jock River. The Phase Two property is legally described as CON 4 E PT LOT 19 RP;4R-14477 PART 2. The PIN for the Phase Two property is 044390239. EXP completed a draft Phase One ESA for the property in July 2023 and the following on-site potentially contaminating activities (PCA) were identified:

- / PCA #10 – Commercial autobody shops
 - On-site repair garage – active repair garage
- / PCA #28 – Gasoline and associated products storage in fixed tanks
 - 2 AST in east part of Phase One property
 - 4 AST in west part of Phase One property

No off-site PCA were identified.

Ontario Regulation 153/04 defines an APEC as an area on a property where one or more contaminants are potentially present.

The following APEC were identified on the Phase Two property, as shown in Table EX-1:

Table EX-1: Areas of Potential Environmental Concern

Area of Potential Environmental Concern (APEC)	Location of APEC on Phase One Property	Potentially Contaminating Activity (PCA)	Location of PCA (On-Site or Off-Site)	Contaminants of Potential Concern	Media Potentially Impacted (Groundwater, Soil and/or Sediment)
APEC #1	Workshop shop sump discharge (sump discharges to ground just outside workshop building, south side)	PCA #10 – Gasoline and Associated Products Storage in Fixed Tanks	On-site	Benzene, toluene, ethylbenzene, xylene (BTEX), and petroleum hydrocarbons (PHC), metals	Soil and groundwater
APEC #2	Above ground storage tanks for furnace oil and fuel	PCA #28 – Gasoline and Associated Products Storage in Fixed Tanks	On-site	BTEX and PHC	Soil and groundwater

Phase I and II ESA was conducted by EXP in 2017 for due diligence purposes. The property owner at the time of the investigation indicated that the site was first developed in the 2000s with a residence and workshop and office building, as well as a Quonset hut. Three potentially contaminating activities (PCA) resulting in areas of potential environmental concern (APEC) were identified and an additional site investigation was recommended. Nine (9) test pits (TP1 to TP9) were excavated in the areas of the sump pit discharge (APEC 1) and the above ground storage tanks (APEC 2 and 3) performed on the site and soil samples were collected for laboratory analysis of the contaminants of concern. In addition, three (3) monitoring wells were advanced at the APECs and groundwater samples were collected for laboratory analysis of the contaminants of concern. Based on the laboratory analyses, the concentrations of PHC, BTEX and metals measured in the analysed soil and groundwater samples were less than the MOECC 2011 Table 2 SCS, with the exception of the sample collected from TP5, which was found to have soil exceedances of the Table 2 SCS for PHC F1 and PHC F2. The impacts at TP5 were delineated in all four cardinal directions. No elevated PHC and / or BTEX concentrations were detected from any of the three water samples collected and the water results were less than the Table 2 SCS. Therefore, the minor soil impact from TP5 had not impacted the groundwater at MW3 (which was located immediately next to TP5).

The current site investigative activities consisted of collecting groundwater samples from the three on-site monitoring wells. Three groundwater samples, one field duplicate, one field blank, and one trip blank were submitted for chemical analysis of BTEX and PHC were taken July 11, 2023. There were no exceedances of the MECP Table 2 SCS for any of the parameters analyzed in the groundwater samples from the monitoring wells (MW-1 to MW-3), with the exception of PHC F3 and F4 in the sample collected from MW3. The elevated PHC concentrations were due to sediment in the groundwater sample. A second groundwater sample was taken from MW3 on July 14, 2023 and PHC was not detected in the sample and the concentrations therefore did not exceed the Table 2 SCS.

A variety of physical, chemical and biochemical mechanisms affect the fate and transport of the potential COC in soil and groundwater, the contribution of which is dependent on the soil and groundwater conditions at the Phase Two property, as well as the chemical/physical properties of the COC. Relevant fate and transport mechanisms are natural attenuation mechanisms, including advection mixing, mechanical dispersion/molecular diffusion, phase partitions (i.e. sorption and volatilization), and possibly abiotic or biotic chemical reactions, which effectively reduce COC concentrations. No groundwater exceedances were identified on the Phase Two property.

The Qualified Person can confirm that the Phase Two Environmental Site Assessment was conducted per the requirements of Ontario Regulation 153/04, as amended, and in accordance with generally accepted professional practices. No further environmental investigations are deemed to be warranted.

5.3 Environmental Noise Assessment, Prepared by State of the Art Acoustik Inc., dated September 5, 2022

State of the Art Acoustik was retained by Air Rock Drilling to complete an Environmental Noise Assessment for the subject property. The report determines whether this site complies with the City of Ottawa's sound level limits outlined when in use.

The City of Ottawa has classified Air Rock Drilling Headquarters and the surrounding environment as being a Class 3 area. Therefore, to comply with the City of Ottawa's ENCG, the facility must meet the MECP limits for Class 3 daytime permissible Sound Pressure Levels (SPL) at nearby noise-sensitive areas. The area around 6659 Franktown Road must meet noise limits of 45 dBA during the day (07:00 to 19:00 hours) and 40 dBA during the evening and night (19:00 to 07:00 hours).

As part of the analysis, two locations were selected as Points of Reception (PORs). POR-1 was identified as the nearest window on the residential building at 6685 Franktown Road and POR-2 was identified as the closest residential building at 6653 Franktown Road.

The model determines that Air Rock Drilling Headquarters currently does not meet the acoustic requirements of the City of Ottawa at 6685 Franktown Road (POR-1) at any time of day. Therefore, an acoustical barrier is required between the subject property and 6685 Franktown Road. The location of this barrier is identified in Figure 4.1 of their report. It must be a minimum of 4.5m-tall and 45m in length.

The barrier must meet one of the following criteria:

1. Surface mass density of at least 20 kg/m².
2. Lab STC Rating of 20 or more, per ASTM-E90 testing (test report required)
3. Historic Noise Reduction in the Field of STC 30 or greater.

With the proposed acoustical mitigation measures, both PORs are within acceptable noise limits.

5.4 Environmental Impact Statement, Prepared by Gemtec, dated August 7, 2024

GEMTEC Consulting Engineers and Scientists Limited (GEMTEC) was retained by Air Rock Drilling to complete an Environmental Impact Statement (EIS) for the subject property. Based on the City of Ottawa Official Plan an EIS is required demonstrating that the proposed zoning amendment and corresponding site use will not negatively impact potential natural heritage features, which may be present within the study area. The study area is defined as the property boundary and the adjacent lands encompassing an area of 120 m beyond the property boundary.

Based on the results of the impact analysis, impacts to the natural environment are anticipated to be minimal. Provided that mitigation measures recommended in Section 7 are implemented as proposed, no significant residual negative impacts are anticipated from the proposed project.

Following review of the information pertaining to the natural heritage features of the site, the following general conclusions are provided by GEMTEC regarding the Environmental Impact Statement.

- / No significant impacts to natural heritage features identified on-site, including provincially significant wetlands, significant woodlands, candidate significant wildlife habitat, habitat of species at risk and fish habitat, are anticipated due to the proposed project.
- / The proposed project complies with the natural heritage policies of the Provincial Policy Statement.
- / The proposed development complies with the natural heritage policies of the City of Ottawa Official Plan.

5.5 Hydrogeological Report and Terrain Analysis, prepared by Paterson Group, dated December 20, 2024

Paterson Group was retained to conduct a Hydrogeological Report and Terrain Analysis in support of a Zoning By-Law Amendment for the subject property. The report concludes as follows:

1. The water supply aquifer intercepted by the existing well is considered to be adequate to support the water quantity demands for the existing development.
2. The well construction is considered to meet O.Reg 903 requirements based on visual inspection by Paterson and previous review by others.

3. The preferred water supply intercepted by TW22-1 contains a water supply that is potable, and contains only elevated concentrations of hardness, colour, and turbidity. Colour and turbidity were below limits in field testing. The noted parameters can be treated with current readily available water conditioning equipment if desired by the owner.
4. A residential grade water softener is recommended to facilitate the reduction of the hardness concentration. If a water softener is in use for the existing residence, the owner should be made aware that additional sodium will be added to the water to reduce hardness. If desired, a point-of-use reverse osmosis system can be also used to provide a drinking tap source.
5. The sodium concentration was measured to be above the 20 mg/L reporting limit and, as such, the Medical Officer of Health for the City of Ottawa should be informed to assist area physicians in the treatment of local residents on sodium reduced diets.
6. The site is not considered hydrogeologically sensitive due to the available overburden in excess of 2 m.
7. The predicted nitrate concentrations at the property boundary is calculated to be well below the required 10 mg/L threshold when a conventional sewage system is used.
8. Paterson completed a sewage system design to support the site plan application. The sewage system application will be completed at the time of the Site Plan application due to the costs and permit expiry timeline. Due to the available space on site, there will be no issues receiving an approval for the designed system.
9. The results of the Hydrogeological Assessment and Terrain Analysis have provided satisfactory evidence that the subject site can support the proposed redevelopment with respect to water quality, quantity and sewage system impact assessment.

Public Consultation Strategy

In partnership with the City of Ottawa, all public engagement activities will comply with *Planning Act* requirements, including circulation of notices and the Statutory Public Meeting. The following Public Engagement steps and activities have already been undertaken, or will be taken, in preparation of this application submission or will be undertaken in the following months after the application has been submitted.

- / Pre-Application Consultation Meetings with the City of Ottawa.
 - Multiple pre-application consultation meetings were held with City city staff, the development team, and the RVCA.
- / Committee meeting advertisement and report mail out to public (City of Ottawa)
- / Statutory Public Meeting - Planning Committee - The statutory public meeting will take place at the City of Ottawa Planning Committee.

Conclusion

It is our professional planning opinion that the proposed minor zoning by-law amendment application represents good planning and is in the public interest, as the continued use of the subject property as a home-based business for a well-drilling business is:

- / consistent with the Provincial Planning Statement (2024);
- / conforms with the City of Ottawa Official Plan (2022, as amended);
- / complies with the zoning provisions for the RU zone and the majority of the provisions for Home-Based businesses;
- / supported by technical studies submitted as part of this application.

Sincerely,



Thomas Freeman, RPP, MCIP
Planner



Jacob Bolduc, RPP, MCIP
Associate