



**re: Commentary – Landfill Impact Assessment Requirements
Proposed Residential Development – 6208 Renaud Road – Ottawa, Ontario**
to: Mr. Jordan Jackson – Novatech Engineering – j.jackson@novatech-eng.com
date: June 28, 2024
file: PG7213-MEMO.01

Further to your request, Paterson Group (Paterson) has prepared the following memorandum to discuss the requirements and exceptions for a landfill impact assessment study for the aforementioned site.

1.0 Background Information

Details of the proposed development were not finalized at the time of issuance of this report, but it is understood that it may be developed as a low-rise residential development. The lot is currently zoned for Development Reserve (DR) and is occupied by a one-storey dwelling with a detached garage. A zoning bylaw amendment has been submitted to the City of Ottawa and is pending evaluation to re-zone the subject site to be a Residential Fourth Density Subzone ZZ (R4ZZ). It is further understood that the City has requested a Landfill Impact Assessment Study due to the proximity of the subject site and the Waste Connections of Canada – Ottawa Landfill

2.0 Landfill Impact Assessment Study Requirements

Landfill Impact Assessment Studies are completed to determine the potential negative effects and hazards related to waste disposal sites at proposed developments. As defined in the City of Ottawa's Terms of Reference for Impact Assessment Study – Waste Disposal Sites/Former Landfill Sites, a Landfill Impact Assessment Study is required when:

- The proposed development is within 3 km of an active waste disposal site and within the influence area of the landfill;
- The proposed development is within 500 m of a former waste disposal site or an inactive landfill.

A landfill impact assessment study is not required when the following conditions are met:

- The water table of a solid waste disposal site water is not affected;
- Excavations shall not result in landfill gas migration or;
- Shall not result in removal of a visual screen buffering of the landfill from the public view.

This information has been obtained from the City of Ottawa's Terms of Reference for Impact Assessment Study – Waste Disposal Sites/Former Landfill Sites last modified by the City on May 23, 2023.





3.0 Commentary

The proposed development at 6208 Renaud Road is located approximately 700 m from the active landfill, when measured from the rear property line of 6208 Renaud Road and the berm surrounding the active landfill. Therefore, as per the original requirements of the Landfill Impact Assessment Study, this site is located within the 3 km radius and would trigger a Landfill Impact Assessment Study. However, upon further review, this site falls within the exception conditions and therefore will not require a Landfill Impact Assessment Study. Further detail on the exception conditions has been provided herein.

Water Table

A review of the local groundwater flow indicates flow in the area runs from north to south resulting in no leachate from the existing landfill to travel in the direction of 6208 Renaud Road. Therefore, any leachate from the existing landfill will not have an impact on 6208 Renaud Road.

As the subject site at 6208 Renaud Road is located approximately 700 m from the active landfill, any minor dewatering impacts noted due to the construction at 6208 Renaud Road will not impact the existing landfill.

Landfill Gas Mitigation

The geology of the WCC Waste Facility lands and surrounding area consists of a thick marine silty clay deposit overlain by silty sands and underlain by an escarpment which cuts through WCC lands. Bedrock of the escarpment consists of a shale from the Billings Bridge Formation.

Studies were completed during the approval process of the WCC Waste Facility expansion to determine the migration of landfill gas migration. Any transmission of the gas would be intercepted by the WCC's leachate collection perimeter trench, be blocked by the perimeter clay berms, or would dissipate towards the atmosphere through the waste and sand unit. No gas migration from the WCC lands is anticipated at 6208 Renaud Road.

Visual Screen Buffer

As this is a rezoning of a previously developed lot no change or removal to the existing visual buffers is anticipated. Currently the perimeter the WCC lands utilizes berms and landscaping to provide adequate visual barriers of the landfill site. No change in visual impact is expected at the proposed residential lot.



4.0 Conclusion

In conclusion, the proposed residential development at 6208 Renaud Road fulfills the exception clauses as outlined in the City of Ottawa's Terms of Reference for Impact Assessment Study – Waste Disposal Sites/Former Landfill Sites and does not require a Landfill Impact Assessment Study to be completed. The proposed residential development will not face additional adverse impacts from the existing Waste Connections of Canada – Ottawa Landfill nor will the landfill facility experience adverse affects from the proposed development.

We trust this information satisfies your immediate requirements.

Best Regards,

Paterson Group Inc.

Carly R. Ladd, B.Sc.



Stephanie A. Boisvenue, P.Eng.

