



# Town of East Gwillimbury

## **18725 McCowan Rd. (RICE / Holt Pit)** **Fact Sheet**

### **Project Justification:**

- MECP has recently (2019) overhauled its regulations regarding excess soil including classifying soil as a resource and not a waste as well as updating the testing requirements and oversight/management of excess soil to reflect best practices.
- The regulation changes will make it easier for the industry to reuse more excess soil locally, limit the amount of soil being sent to landfills, lower greenhouse gas emissions from the sector, and improve the enforcement of illegal dumping.
- The Town has been working closely with the MECP on the above revisions and the Towns Qualified Person/peer review consultant has incorporated these new standards and best practices into this application to ensure the plan being proposed is technically sound and in keeping with the requirements of the MECP.
- With the recent development boom, and now with the country/world trying to stabilize and rebound from Covid-19 there is a need more than ever to have efficiently located and well-run fill sites in order to support the construction industry
- The Towns fill by-law was created in response to the demand for fill sites locally and to ensure the Town was well positioned to properly evaluate, approve and monitor small scale site alterations up to and including commercial fill sites as well as to provide a mechanism to mitigate unpermitted fill importation (illegal dumping).
- By accepting applications and issuing permits, the Town can mandate regulatory standards, best management practices, enforcement protocols, risk management, and general oversight. If the Town refused to operate a fill permit program, all material importation would be in the form of illegal dumping. No regulatory standards, best management practices, enforcement protocols, risk management, or general oversight would be imposed resulting in potential hazards to the environment and human health.
- In the absence of a permit the property owner may seek court approval for the works and likely without the level of public and Town involvement that is afforded through the Town's standard process.
- The proposed end land use for this project is to restore the property back to the original grades/contours and use it for agricultural purposes.

## Traffic/Road Safety/Enforcement:

- McCowan Road is a north-south arterial road under the jurisdiction control of York Region. It has two (2) travel lanes, and it maintains a posted speed limit of 60 km/h from Mount Albert Road to a point approximately 1.1 km south of Mount Albert and 50km/h from this point to Davis Drive.
- Historical and present traffic studies provide the following:
  - Average daily traffic on McCowan Road between Herald Road and Mount Albert Road is approximately 900 vehicles daily with approximately 5-15% of those vehicles being truck traffic and well below the road's capacity.
  - Both the Region and the Traffic Impact Study indicate that adding a maximum of 150 inbound trucks and 150 outbound trucks to the existing traffic on McCowan Road will have little impact on the road traffic operations and is well below the traffic capacity of the road.
  - Speed studies found the average vehicular speed is between 53-65 km/h.
  - Speed studies found the average truck speed is between 40-53 km/h.
  - York Region Police (YRP) ticket and accident records for McCowan Road between Davis Drive and Mount Albert Road over a 3 year period, identified that 133 speeding tickets were issued to passenger vehicles, with 1 issued to a Commercial Vehicle/Pick-up.
  - Of the 17 accidents reported to YRP between March 2017 and March 2020, 1 was noted as a Commercial Vehicle/Tri-axle not related to area fill operations (oil truck). There was a further accident on Davis Drive at McCowan Road August 2020.
  - Results indicate that trucks are generally following the posted speed limit on McCowan Road and speeding is more of a concern for passenger vehicles.
- YRP will continue to work with the Town to enforce speed limits and traffic violations (Only YRP can issues tickets for moving violations).
- The proposed northbound right-turn taper into the site will further reduce the site traffic impact on the McCowan Road traffic operations.
- Temporary radar boards have been installed in both directions along McCowan Road and will be replaced at the fill operator's expense with radar boards which include cameras to take photos of speeders license plates and can be cross referenced with the trucks attending this fill site, resulting in appropriate disciplinary actions and can monitor traffic volumes and speeds on a continuous basis.
- Traffic cameras are proposed to be placed at the entrance of the site to monitor the condition of the road, ensure trucks are travelling in and out of the site via the approved route, and ensure trucks are not blocking traffic on McCowan Road at the entrance.

### Road Improvements/Condition

- The Region has assessed the structural capacity of McCowan Road and deemed that it is sufficient for year-round use without load restrictions.
- As part of this application the following road improvements will be required/implemented at the developers cost for road safety:
  - Northbound right-turn taper on McCowan Road into the site.
  - Eastbound and Westbound left-turn lanes at Davis Drive and McCowan Road.
- A four-way stop was installed at the intersection of Herald Road and McCowan Road in response to concerns raised by members of the public and the Town of East Gwillimbury. The Region assessed the intersection of McCowan Rd and Herald Rd and deemed that an All-Way Stop would provide enhanced safety for both roadways given area road conditions including the vertical geometry and sight distance.
- The Region has a policy for establishing speed limits on it's roads based on the Transportation Association of Canada (TAC) guidelines. In addition to the road geometry (horizontal and vertical curves), there are other factors that are considered such as number of access driveways, visibility, properties fronting the roadway, and pedestrian & cyclist exposure. The Region has confirmed that the speed limits on McCowan Rd are appropriate for the cars and trucks using the roadway and there are no plans for revisions of the existing posted speed limit according to the Region's policy.
- A sensitivity analysis was completed for the rail crossing and found that the roadway can support the queuing length at the crossing without significant negative impacts. The distance between the rail crossing and Davis Drive is 1.2km. As the approximate length of a tri-axle dump truck is 10m, 120 trucks would need to be stopped at the train crossing before they reached Davis Dr. The distance between the rail crossing and Herald Road is 800m, allowing for approximately 80 trucks to be stopped before reaching Herald Road. In general terms, trucks travel in platoons to and from the fill site and conservatively are not likely to exceed 10 trucks on either side of the crossing at any one time. Based on this there is more than sufficient capacity for queuing at the rail crossing.
- As an additional safety measure, the Town asked the Region to conduct a safety audit on McCowan Road from Davis Drive to Mount Albert Road. The Region completed the audit in December 2020 and reviewed speeds, vehicle classification, and traffic volumes and noted the following:
  - This section of McCowan Road is a low volume road and has sufficient capacity, even with increase in trucks
  - Operating Speed Study conducted in September 2020 and results confirm that the current posted speed limit is appropriate (60 km/h north of Mill Road and 50 km/h south of Mill Road)
  - McCowan Road between Davis Drive and Mount Albert Road has been upgraded to accommodate year round truck traffic without load restrictions.

- In November 2019, the Region converted McCowan Road and Herald Road intersection to an all way stop including the implementation of pavement markings and additional signage to improve intersection control awareness and compliance, and later installed an overhead flashing beacon.
- Conducted a railway crossing assessment and improved signage including:
  - Advisory speed (40 km/h) signs in both direction in advance of approaching the railway crossing
  - Advisory speed (30 km/h) tab beneath the railway crossing signs in both directions approaching railway crossing
- Recommended improvements on McCowan Road between Mount Albert Road and Herald Road
  - In August 2020, the Region recommended roadside improvements including replacement of the existing guiderail on McCowan Road (south of Mill Road). This project is pending prioritization and budget.
  - In November 2020, the Region installed School Bus Stop Ahead signs on McCowan Road in both directions approaching the Community of Holt.
  - The Region has installed other signage in the past such as “Horse with Rider” and deer sign

## **Fill Management:**

### Fill Quality/Enforcement

- All fill material imported to the site will meet or exceed Table 2 agricultural standards presented in “Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the *Environmental Protection Act*”.
- The Fill Management Plan is compliant with existing regulations including the new excess soil regulations that came into effect in 2020.
- There are a number of measures and backup measures in place to manage soil quality and confirm its quality:
  - The soil at the source site is characterized and tested by a Qualified Person in accordance with the requirements of the MECP. The Fill site QP assesses the source site and soil test results and if accepted provides to the Towns QP for audit/inspection.
  - The soil in each truck is visually screened at the gate house before entering the fill site.
  - Soil from each source site is stockpiled at the fill site and once again tested in accordance with the requirements of the MECP. Once the test results confirm the soil meets MECP specifications, the soil is placed in the pit. The Towns peer review QP audits the soil results from the fill site QP.
  - The Town may take random samples from time to time in addition to the sampling by the Fill site QP.
  - Soil placed in the pit is logged by GPS so its location within the pit is known in the unlikely case there are remediation issues/requirements

- As a backup measure, monitoring wells at the perimeter of the site are used to obtain water samples and confirm that no contaminants have been introduced via the imported fill and leaving the site.
- As an added backup measure, a monitoring well is to be installed in the center of the pit to provide quick and advance notice of any contaminants as the pit is being filled.
- If the Fill Site is found to be importing contaminated fill or not operating within the parameters of the Fill Management Plan, the site will be shut down until the contaminated soil is addressed/removed and the site returns to being in compliance with the Fill Management Plan.

#### Impact on Wells/Groundwater

- Given the rigorous screening and fill management protocols, the site is well positioned to be filled without adverse impacts to the environment.
- The water table is approximately 2 meters below the base of the former pit. Since groundwater at the site flows in an easterly direction, the site is located down gradient from all private wells and thus the site will not impact the wells which are upstream - i.e. west of the site.
- Groundwater quality and groundwater levels will be monitored throughout operation at monitoring wells onsite and included in monitoring reports provided to the Town.
- An assessment of existing residential wells within 500 m of the Site was completed in August 2019. If hydrogeological well testing results reveals contamination caused by the placement of fill (which is essentially impossible as the private wells are upstream of the fill site), corrective action will include subsurface investigations (i.e., drilling) to confirm source and remedial actions or risk management measures. Fill operations may be suspended depending on the contaminant.

### **Noise, Dust and Odour:**

#### Hours of Operation

- Proposed normal working hour for accepting fill will be Monday to Friday 7:00 am – 5:00 pm with flexibility to extend hours to 6:00pm due to delays from traffic, weather, etc. Trucks carrying fill will not be permitted into the site outside of these hours.
- There may be occasions where maintenance and/or delivery of equipment is required outside of normal operating hours but will not be permitted beyond Monday to Saturday 7:00 am – 7:00 pm.

#### Tailgate Banging

- The Site will implement an administrative control policy to completely restrict the banging of tailgates by any vehicle entering the Site.
- Drivers disregarding this control policy will be required to leave and will be banned from the site in accordance with the Fill Management Plan.

#### On-Site Dust and Mud Controls

- In order to mitigate and control dust during the fill operations, a series of controls will be implemented at the site including a full time on-site sweeper, water truck, asphalt driveway and a gravel pathway.
- Limiting the working areas and stabilizing areas that are not being worked on within a prescribed period of time will further prevent the generation of dust.
- Prior to exiting the site, trucks will travel on a paved surface and be required to drive over a rip rap vibration path and steel shaker racks to remove excess mud.
- Should there be more than nominal/acceptable mud tracking onto the roadway and/or dust migration from the site, the site shall be shut down until the condition is rectified in accordance with the Fill Management Plan.

#### Diesel Fumes

- Truck operators will be expected to operate their vehicles in accordance with all applicable legislation to minimize emissions.
- This includes mandatory vehicle emissions testing for older heavy-duty diesel vehicles under the Environmental Protection Act and emissions-related inspections undertaken by the Ministry of the Environment, Conservation and Park's Vehicle Emissions Enforcement Unit.
- Trucks that do not meet these standards will not be permitted on the site.