



To **Jim Teefy, AECOM**
Colleen Goodchild, Region of
Durham
Jennifer Beer

From: **Michael Dowdall, TYLin**

Address: **AECOM Canada**
105 Commerce Valley Dr W,
Markham, ON L3T 7W3

Date: **April 11, 2025.**

CC: **Caitlin Port, MHBC Planning**
Chris Galway, Lafarge Canada

Region of Durham
605 Rossland Road East
Whitby ON L1N 6A3

Township of Uxbridge
51 Toronto Street
Uxbridge ON L9P 1T1

Re: **Application to Amend the Township of Uxbridge Official Plan and**
Zoning By-Law. File OPA 72 & ZBA 2024-02. Response to 1st Circulation
Comments (Transportation)

MEMORANDUM

TYLin was retained by Lafarge Canada to provide responses to the transportation comments from the Region of Durham and Peer Review Comments (AECOM) received on the "Goodwood Pit Extension Scoped Transportation Impact Study (TIS)" submitted by TYLin in April 2023. This TIS is an update of the April 2023 study.

Region of Durham Transportation Items

Item 1: The Region notes that there has been a notable increase in the number of complaints from residents of Goodwood regarding truck traffic on Goodwood Road - Regional Road 21 (RR21). Please evaluate the potential for implementing a left turn lane at the proposed site access from Durham Regional Highway 47 for westbound traffic. This measure could help address the noted increase in complaints from Goodwood residents



regarding truck traffic levels on RR21. Please refer to Figures 2-3 and 2-4 of the TIS report for context.

TYLin

Response 1:

*Implementation of an eastbound left-turn lane into the site would result in an increase in truck traffic on Regional Road 47 travelling through Goodwood village. Additionally, per the Lafarge Goodwood Pit Entrance onto Hwy 47 letter dated June 18, 2015 (see **Attachment 1**), it is our understanding the Township agreed to permit the trucks returning to Goodwood pit from Stouffville pit to travel via Wagg Road and prohibited eastbound left-turn movement into the site via pit entrance/exit at Highway 47. Furthermore, an eastbound left-turn lane would potentially generate additional conflict points at the access, that is not advisable from a safety perspective. The existing Goodwood Pit haul route that prohibits eastbound left-turning trucks into the pit was negotiated with the Township and Region several decades ago. The objective of the existing haul route is to reduce trucks travelling through the Goodwood village and lessen impacts on residents. The proposed pit extension will not result in an increase or change in current haulage patterns from the existing pit.*

*Therefore, TYLin does not recommend an eastbound left-turn lane at the site access on Regional Road 47. To address the complaints from the Goodwood residents, traffic safety measures like a pedestrian control device, automated speed enforcement and data collection device are proposed to be implemented, which have been discussed and agreed between Lafarge Canada and the Region of Durham as per Traffic Mitigation Measures & Truck Distribution in Goodwood cost sharing agreement letter dated September 28, 2022 (see **Attachment 2**). These measures aim at reducing the truck traffic on Regional Road 21 and Regional Highway 47.*

Item 2:

A dedicated left turn lane would allow [westbound] trucks to directly enter the site from Durham Regional Hwy 47, eliminating the need to continue further west and loop back to access the site from the opposite direction.

TYLin

Response 2:

See TYLin Response 1 above.



Item 3: Please include an evaluation of the proposed left turn lane in an addendum to the TIS report, considering both the potential benefits and drawbacks. If recommending the improvement, please provide functional geometric design specifications. Please refer to the Left Turn Lane Design Guideline – Typical (drawing S-300.040) for guidance on schematic representation.

TYLin *Please refer to section 3.6.1 of the updated TIS.*

Response 3:

Item 4: Please address and document the strategies and measures implemented to mitigate resident complaints regarding increased truck traffic on Goodwood Road (RR21). This includes an overview of safety measures discussed with Lafarge Canada Inc. and their consultant on September 14, 2022, aiming to reduce truck movement impacts on local traffic and enhance community relations. The safety measures discussed were:

- Pedestrian Control Device: Installation at Concession Road 3 on the west approach of Goodwood Road to facilitate safe crossings for pedestrians and cyclists amidst increased truck traffic. The estimated cost is \$170,000.
- Automated Speed Enforcement: Placement of a semi-permanent speed camera on Goodwood Road to maintain speed compliance. Total cost for installation and 8-year operation is \$340,000.
- Data Collection Device: Installation of a side-fire radar device to monitor truck volumes and classifications, aiding in public inquiries and traffic management. The estimated cost is \$15,000.

TYLin *These safety measures have been discussed and agreed between Lafarge*

Response 4: *Canada and Region of Durham as per letter dated September 28, 2022.*

Peer Review Comments

Item 1: As requested by the road authorities during the pre-consultation stage, the TIS report should clearly indicate that the existing farm access off Concession 4 Road would not be used as an access for aggregate haulage.



TYLin Response

1:

Noted and confirmed from the client - Lafarge Canada. The Concession Road 4 entrance will not be used for aggregate haulage. This restriction is implemented on the Aggregate Resource Act Site Plan.

Item 2:

As shown in Figure 12 (Haul Route Map) of “Planning Justification Report and Aggregate Resources Act Summary Statement” (January 2024) as well as Figures 2-2, 2-3, and 2-4 of the TIS report (April 2023), there are multiple haul routes that run through the intersection of Brock Road (Regional Road #1) and Goodwood Road (Regional Road #21) – trucks travelling straight through, making a right-turn movement, and making a left-turn movement at the intersection. There is also a haul route going through the intersection of Concession 3 Road and Wagg Road at which trucks making an eastbound right-turn movement from Wagg Road onto Concession 3 Road. However, these two intersections have not been included in the study area. It is recommended that the TIS report be revised to describe the rationale for excluding the above-noted intersections.

TYLin Response

2:

Region of Durham confirmed study area intersections during pre-consultation. Therefore, intersection of Regional Road 1 and Goodwood Road and Wagg Road onto Concession 3 Road were not included in this analysis. Additionally, there is minimal traffic performing eastbound right turn movement at the Wagg Road onto Concession Road 3 (31 vehicles in the am peak and 21 vehicles in the pm peak), as shown in Figure 2-5 of the updated TIS. Since, it is minor intersection, it is not expected to be critical, therefore the number of trips performing eastbound right turns is minimal and it will have nominal impact on the intersection.

Item 3:

The stretch of York-Durham Line within the study area is under the jurisdiction of Region of Durham, not Region of York. So, it is recommended that the wording in Section 2.4 of the TIS report is updated to reflect this matter.

TYLin Response

3:

Section 2.4 of the updated TIS has been revised to indicate that the stretch of York-Durham Line within study area is under the jurisdiction of Region of Durham.

Item 4:

Regional Highway 47 within the study area, except for the section within the Hamlet of Goodwood and where the site's access driveway is located has a higher posted speed than 50 km/h - there is a short section of that Regional Highway 47, west of the Hamlet of Goodwood, with a posted speed limit of 60 km/h and the remainder of Regional Highway 47 within the study area has a posted speed limit of 80 km/h. This is whereas in Section 2.4 of the TIS report, it is stated that Regional Highway 47 has a posted speed limit of 50 km/h. It is recommended that the TIS report be revised to include the additional information on the posted speed limit of Regional Highway 47.

**TYLin Response
4:**

Section 2.4 of the updated TIS has been revised as per the comment received.

Item 5:

Regarding the stretch of Regional Highway 47 within the study area, as per the latest version of the Region of Durham's Official Plan (2023), the section between York-Durham Line and Goodwood Road (Regional Road 21) is classified as Type "A" Arterial but the section east of Goodwood Road (Regional Road 21) is classified as Type "B" Arterial. Additionally, while the stretch of Regional Highway 47 within the study area generally has a rural two-lane cross-section with one lane for each direction of travel, there is a short section of Regional Highway 47 within the Hamlet of Goodwood that has an urban cross-section and also there is a relatively longer section of Regional Highway 47 located, west of the intersection of Goodwood Road (Regional Road 21) that has a passing lane in the westbound direction of travel – with two lanes of travel in the westbound direction and one lane of travel in the eastbound direction of travel. Moreover, the section of Regional Highway 47 within the Hamlet of Goodwood is designated as a Community Safety Zone where there is a permanent speed camera is installed. Furthermore, there are signs currently installed to inform drivers of trucks travelling eastbound on approach to the Hamlet of Goodwood that they are to take Goodwood Road (Regional Road 21) and not through the Hamlet of Goodwood. Hence, it is recommended that Section 2.4 of the TIS report also speak to these additional items.



TYLin Response 5: *Section 2.4 of the updated TIS has been revised as per the comment received.*

Item 6: As per the street-view images from Google, the section of Wagg Road within the study area (i.e., between York-Durham Line and Concession 3 Road) has a posted speed limit of 70 km/h. In Section 2.4 of the TIS report, it is stated that the posted speed limit is 80 km/h. So, it is recommended that the wording in Section 2.4 of the TIS report is updated to reflect this matter.

TYLin Response 6: *Section 2.4 of the updated TIS has been revised as per the comment received.*

Item 7: The southern section of Concession 3 Road within the Hamlet of Goodwood, during school hours have a reduced speed limit of 40 km/h. It is recommended that the TIS report be revised to include the additional information on the posted speed limit of Concession 3 Road.

TYLin Response 7: *Section 2.4 of the updated TIS has been revised as per the comment received.*

Item 8: Goodwood Road (Regional Road 21) within the study area, except for the westernmost section between Regional Highway 47 and Ridge Road (within the Hamlet of Goodwood) has a higher posted speed than 50 km/h - there is a short section of Goodwood Road (Regional Road 21), east of the Hamlet of Goodwood (between Ridge Road and Stonestrow Crescent) as well as the section of the road within the Hamlet of Coppin's Corners, with a posted speed limit of 60 km/h and the remainder of Regional Road 21 within the study area has a posted speed limit of 80 km/h. This is whereas in Section 2.4 of the TIS report, it is stated that Regional Road 21 has a posted speed limit of 50 km/h. It is recommended that the TIS report be revised to include the additional information on the posted speed limit of Regional Road 21.

TYLin Response 8: *Section 2.4 of the updated TIS has been revised as per the comment received.*

TYLin

Item 9: Regarding the stretch of Goodwood Road (Regional Road 21) within the study area, the section between Regional Highway 47 and Stonestrow Crescent including the section within the Hamlet of Goodwood is designated as a Community Safety Zone where there is a permanent speed camera is installed. Hence, it is recommended that Section 2.4 of the TIS report also speak to this additional item.

TYLin Response 9: *Section 2.4 of the updated TIS has been revised as per the comment received.*

Item 10: The section of Brock Road between Regional Highway 47 and Goodwood Road (Regional Road 21) is also part of the haul route. However, the noted section of Brock Road is not described in Section 2.4 of the TIS report.

TYLin Response 10: *Section 2.4 of the updated TIS has been revised as per the comment received.*

Item 11: In the first paragraph in Section 2.5 (Baseline 2022 Traffic Volumes) of the TIS report, it is stated that on August 24, 2021 – the date at which traffic counts were collected at most of the study area intersections – there was a minor incident at the intersection of York-Durham Line and Aurora Road that compromised the counts collected at the noted intersection. However, there is no indication in the TIS report on if / how that incident could have impacted traffic counts at other adjacent intersections within the study area such as the intersection of Wagg Road and York-Durham Line. Note that Figure 2-9 of the TIS report shows higher volumes of vehicles on York-Durham Line that were entering / leaving the intersection of York-Durham Line and Aurora Road as compared the volumes of vehicles on York-Durham Line, entering / leaving the intersection of York-Durham Line and Wagg Road during both the AM and PM peak hours by 9 and 42 vehicles (per hour), respectively.

TYLin Response 11: *No trucks from/to the subject site have been assigned to the intersection of Aurora Road and York Durham Line as trucks are expected to travel east-west along Regional Highway 47. Refer to figure 2-6, 2-7 and 2-8 of the updated TIS. It is expected that only some local deliveries will go north on York Durham Line through the intersection of Aurora Road and York*

Durham Line. In TYLin's opinion, the impact of the incident did not have any effect on the study intersections.

Item 12: While it is acknowledged that month of August is a peak operating month for the pits, it is the time of year that schools are closed, and people take vacations. In addition, in Section 2.5 of the TIS report it is stated that "for undetermined reasons, traffic surveyed at the Goodwood Pit access were almost nil as part of the August 24, 2021 data". Hence, it is recommended that the TIS report is updated to provide a convincing reason that the traffic counts collected in the morning and afternoon peak hours of August 24 and 26 in 2021 represent the most conservative traffic conditions in the study area overall

TYLin Response 12: *Noted. At the intersection of York and Durham Line and Regional Highway 47, morning and evening peak hour counts collected on August 24 and 26, 2021 were compared with peak hour counts obtained from Region of Durham website collected during the year 2022. It was observed that August 2021 counts were higher than September 2022 counts during both peak hours (by 8% during am peak hour and 6% during peak hour). Therefore, the surveyed counts used in the analysis are a conservative estimate. Additionally, although the traffic surveyed at the Goodwood pit access was almost nil, it will not have any impact on the analysis as counts at the pit site access would have been zeroed out to account for trips generated by the Goodwood Pit in the analysis.*

Item 13: In Section 2.5.1.2 (Transfer Truck Route between Stouffville and Goodwood Pits) of the TIS report, the truck capacity is assumed to be 40 tonnes. It is recommended that the TIS report also speaks to the type(s) of truck assumed because triaxle trucks could only carry up to 25 tonnes.

TYLin Response 13: *Lafarge Canada confirmed that tri-axle dump trucks can carry up to 25 tonnes and with a pony trailer can carry up to 15 tonnes will be used for delivery operations at the site. Therefore, total capacity of the truck is equal to 40 tonnes as stated in section 2.5.1.2 of the updated TIS.*

Item 14: In Section 2.5.1.4 (Truck Hourly Distribution), it is stated that the Consultant was provided by the "project team" with detailed hourly breakdowns of the aggregate truck generation for the nearby Stouffville Pit surveyed in July, August, and September of 2020 and that they were

TYLin

also advised by the “project team” that the surveyed average hourly breakdown distribution would be applicable to all truck routes for both Stouffville and Goodwood pits”. It is recommended to conduct a due diligence review of the information provided by the “project team” through the collection of some new traffic data in the field - the number of vehicles (including trucks) entering / exiting the site in every 15 minutes on a typical day during a peak month of both Stouffville and Goodwood pits. It is also recommended to define the “project team” is that referring to a team from the owner (Lafarge).

TYLin

Response 14:

“Project team” has been replaced with Lafarge Canada in the updated TIS.

The old data was based on haulage records provided by Lafarge Canada which identified peak activity at the site, and peak hourly distribution.

Drivers arrive early morning between 8:00-9:00 am to maximize deliveries which is regarded as the peak hour. Furthermore, drivers will complete the deliveries in the evening peak hour so the percentage hourly distribution decreases from 12% in morning to 2% in the evening peak hour (4:00-5:00 pm) as stated in section 2.4.1.4 of the updated TIS.

Item 15:

As laid out in Section 2.5.1.5 (Goodwood Pit Aggregate and Transfer Truck Hourly Trips), it appears that the Consultant assumed that truck trips are distributed evenly through any given week, and through any given month between April and mid-November with no provision for possible variations / surges in daily, weekly, and monthly number of truck trips. This is whereas in Section 2.5 (Baseline 2022 Traffic Volumes) of the TIS report, it is stated that the month of August is a peak operating month for the pits. Therefore, for the purpose of the traffic analysis, it is recommended that the Consultant conduct a “sensitivity analysis” to assess the impact of variations / surges on daily, weekly, and monthly number of truck trips in / out of the two pits.

TYLin

Response 15:

As stated in section 2.5.1.4 of the TIS, predominantly there is high traffic volume observed during the month of August compared to the rest of the year as people tend to travel more through this area to reach their seasonal destination spots. It is TYLin’s opinion that a sensitivity analysis is not required as this study has been done considering number of trucks operating during the peak hours of the day and during the most congested time of the year as a conservative estimate. Therefore, operation of trucks

during non-peak hours and non-peak months of the year is not considered significant and would not impact the results presented in this TIS report.

Item 16: Table 2-2 of the TIS report shows the distribution of aggregate truck trip distributions to the north, south, east, and west in percentage points. However, it is not clear how these percentage points have been estimated / calculated and / or which source of information has been consulted. It is recommended that the TIS report include this additional information.

TYLin
Response 16: *Lafarge Canada confirmed the approximate percentage distribution of aggregate truck traffic to be 25% in the east and 75% in the west direction.*

Item 17: In Section 3.3 (Background Development Traffic) of the TIS report, it is stated that the background development trip assignment information is all included in Appendix C, which meant to be Appendix B. In addition, Appendix B does not include the trip assignment information pertaining to the Stouffville Pit Reclamation project as one of the three background developments that were taken into consideration.

TYLin
Response 17: *Section 3.3 of the updated TIS has been revised to Appendix B instead of Appendix C. Appendix B includes the trip assignment information pertaining to the Stouffville Pit Reclamation project.*

Item 18: In both Section 2.5.2 (Growth Adjustment for 2021 Volumes) and Section 3.4 (Future Traffic Growth), it is stated that a 2% growth rate was applied on all turning movement volumes at the intersection of York-Durham Line and Bloomington Road / Regional Highway 47 intersection. However, it appears that the noted annual growth factor of 2% was not applied to estimate turning movement volumes in 2028 and 2033 that are shown in Figure 3-2 and Figure 3-3 of the TIS report, respectively. It is recommended that the Consultant revisit the noted turning movement volumes and make necessary revision to the TIS report. As a result of this specific review finding, the Synchro model outputs pertaining to horizon years of 2028 and 2033 as well as the relevant sections in the main body of the TIS report (e.g., Sections 4.2 and 4.3 plus the relevant portion of Section 5 on "Traffic Queuing Operations") have not yet been reviewed.

TYLin

TYLin

Response 18:

A 2% growth rate has been applied to all of the movements at the intersection of York-Durham Line and Bloomington Road / Regional Highway 47.

Item 19:

In Table 5-1 of the TIS report, the available storage for the northbound right-turn lane at the intersection of York-Durham Line and Regional Highway 47 is reported as 40 meters whereas as per Google Map, this lane appears to have a longer storage distance.

TYLin

Response 19:

A 40m storage appears to be correct as per Google Map aerials. Synchro accounts for additional storage on the curb 40m ahead of the channelized right turn. The channelized right turn provides storage length of 140m. Synchro does not identify the additional storage as it is a part of radius. Therefore, no changes have been made to the storage length of northbound right turn lane.

Item 20:

In addition, the reported average and 95th percentile queue length on the eastbound left-turn lane at the intersection of York-Durham Line and Aurora Road during the PM peak hour (as shown in Table 5-1 of the TIS report) do not match those shown in the SimTraffic output files included in Appendix "C" of the TIS report.

TYLin

Response 20:

Table 5-1 has been updated to match the Sim-Traffic output shown in Appendix C of the updated TIS.

Item 21:

The TIS report does not include any assessment of available departure and stopping sight distances at the site's access driveways off Regional Highway 47 and Concession 3 Road.

TYLin

Response 21:

A horizontal sightline assessment has been carried out at both site accesses on Highway 47 and Concession Road 3 as discussed in Section 6 of the updated TIS. The available stopping and intersection sight distance meets the minimum required stopping and intersection sight distances as per the TAC standards at both site accesses.

Item 22:

The turning movement counts included in Appendix "A" show the detailed information / statistics (e.g., PHF, percentage of heavy vehicles, etc.) only for the PM peak hour, not the AM peak hour. It is

recommended that the similar detailed information / statistics are shown for the AM peak hour at each intersection within the study area.

TYLin

Appendix A of the updated TIS includes the detailed information / statistics

Response 22:

for the AM peak hour as well.

Item 23:

Last but not least, the findings from the review of the Synchro output files included in Appendix C of the report are as follows:

i. At the signalized intersection of York-Durham Line and Bloomington Road, there are some slight differences between the information shown in the actual signal timing plan included in Appendix "A" and those input into the Synchro model for the PM peak hour in the Existing Conditions (2022):

1. The splits for the eastbound left-turn and westbound left-turn movements should be 14 seconds, as opposed to the 11 seconds input into the model,
2. The splits for the eastbound through and westbound through movements should be 65 seconds, as opposed to the 62 seconds input into the model, and
3. The splits for the southbound through and northbound through movements splits should be 41 seconds, as opposed to the 47 seconds input into the model.

ii. In the Synchro models, the lane configuration on the northbound approach to the intersection of York-Durham Line and Aurora Road is different from what is shown in Google Map. Google

Map shows a separate left-turn lane, a separate through lane, and a separate right-turn lane, whereas in the Synchro models, there is a shared through / right-turn lane plus a separate left-turn lane.

iii. It appears that for the following turning movement volumes of the intersection of York-Durham Line and Regional Highway 47, the saturation flow rate of 2,000 vehicles per hour per lane was input into the Synchro models for both the AM and PM peak hours. However, the TIS report does not include any field measurements in support of the increase in the saturation flow rate from the default value of 1,900 vehicles per hour:

1. Eastbound left-turn movement
2. Eastbound through movement
3. Eastbound right-turn movement
4. Northbound left-turn movement
5. Northbound through movement
6. Northbound right-turn movement

TYLin

Response 23:

- i) *Noted. The signal timings for the existing condition PM peak hour Synchro model have been revised as below:*
1. *The splits for the eastbound left-turn and westbound left-turn movements have been updated to 12 seconds instead of 14 seconds. This is because, as per the signal timing plan, the minimum split is 11 seconds (sum of minimum initial, amber and all red) which can be extended by 3 seconds i.e., 14 seconds. Therefore, 12 seconds have been applied which is between the range of 11 and 14 seconds.*
 2. *The splits for the eastbound through and westbound through movements applied in the Synchro model is 65 seconds.*
 3. *The splits for the southbound through and northbound through movements splits have been updated to 43 seconds instead of 41 seconds. This is because an extra 2 seconds which was not provided to eastbound left-turn and westbound left-turn movements gets added to the northbound and southbound through movements splits. As a result, split timings have been increased from 41 to 43 seconds in the Synchro model.*
- ii) *The lane configuration at the intersection of York-Durham Line and Aurora Road has been updated as per the Google Maps.*



- iii) *The saturation flow at the intersection of York-Durham Line and Regional Highway 47 has been updated to 1900 vehicles per hour per lane in the Synchro model for both AM and PM peak hours.*

Please refer to Appendix C of the updated TIS for the all the above-mentioned updates to the Synchro model.

We trust the above reply and revised report is sufficient for your needs, but please do not hesitate to contact the undersigned should you require any additional assistance.

Sincerely,

TYLin

A handwritten signature in black ink, reading 'Michael Dowdall'. The signature is fluid and cursive, with a small dot at the end.

Michael Dowdall, C.E.T., MITE
Director | michael.dowdall@tylin.com



Attachment 1

Lafarge Goodwood Pit Entrance onto Hwy 47 letter dated June 18, 2025



June 18, 2015

Mayor Gerri Lynn O'Connor
Township of Uxbridge
51 Toronto Street South, P.O. Box 190
Uxbridge, ON
L9P 1T1

Dear Mayor O'Connor:

Re: Lafarge Goodwood Pit Entrance onto Hwy 47

Further to our meeting on May 11, 2015, and ongoing discussions with the Township and Region of Durham, Lafarge would like to formally request that the existing entrance/exit from its Goodwood Pit onto Highway #47 allow for westbound egress turning movements year round and not just during half-load season as currently permitted.

This request is to address the safety issue of trucks hauling aggregate from the Goodwood Pit west on Wagg Road and having to turn south on Durham Road 30 and climb the large hill. Our haulers have raised concerns about the safety of the left hand turn movement at Wagg Rd and Durham Rd 30, and the safety of trucks that are travelling well below the posted speed limit on Durham Rd 30 as they climb the hill with passenger vehicles trying to pass. Trucks returning to the Goodwood Pit would travel via Durham Rd 30 to Wagg Rd then to the pit entrance on Concession Rd #3, and not by turning left into the pit at the entrance/exit on Highway #47.

Based on our discussions, Lafarge is prepared to make the following improvements at the Goodwood Pit entrance/exit onto Highway #47:

- Move the scale from its current location to a location closer to the entrance/exit that is paved, subject to any approvals required from the Ministry of Natural Resources and/or the Township; and
- Install grizzly bars at the scale to shake and capture loose dirt from the trucks

Both of these measures will assist in minimizing the track out of loose dirt from the entrance/exit. These measures are in addition to recent measures Lafarge has already undertaken to improve the situation, including extensive paving of the haul road at the entrance/exit of the Goodwood Pit and washing/sweeping the entrance/exit on a regular basis. Based on our capital planning process, Lafarge would commit to make these improvements before year end 2016.

We appreciate the Township's support to consider this request and work with Lafarge to find a solution that will improve the entrance at the Goodwood Pit and create a safer haul route for trucks hauling aggregate westbound from the Goodwood Pit. Please do not hesitate to contact me if you have any questions or require further clarification.

Sincerely,

Chris McGuckin
Director, Land Management
Lafarge Canada Inc.

LAFARGE CANADA INC. / EASTERN REGION
6509 Airport Road, Mississauga, Ontario L4V 1S7
Office: (905) 738-7070 Fax: (905) 738-0224



Attachment 2

Durham Traffic Mitigation Measures & Truck Distribution in Goodwood letter dated September 28, 2022



**Works
Department**

Interoffice Memorandum

DATE: September 28, 2022

TO: Glyn Reedman
Transportation Infrastructure

FROM: Michael Prevedel
Traffic Engineering & Operations

RE: Traffic Mitigation Measures & Truck Distribution in
Goodwood - Site Alteration Permit Application (Aug 2022)
Lafarge Canada Inc.
14204 Regional Road 30
Township of Uxbridge

YOUR FILE: 2021-U-012

OUR FILE: D21- 003358

The Region of Durham met with Lafarge Canada Inc. and their consultant on September 14th, 2022, to discuss traffic safety measures to address the increase in truck traffic related to the proposed fill site operations on Regional Road 30 (York Durham Line), Regional Highway 47, and Regional Road 21 (Goodwood Road). Below is a detailed breakdown of safety measures and their associated costs to ensure safety is maintained for all road users in the community of Goodwood:

Pedestrian Control Device

1. To facilitate the safe crossing of pedestrians and cyclists across Goodwood Road combined with the increase of truck traffic, a pedestrian control device is recommended at Concession Road 3 in the west approach. The estimated cost associated with this treatment is \$170,000.00.

Automated Speed Enforcement (ASE)

2. To address speeds and ensure good compliance with the posted speed limit, the Region suggests that a semi permanent automated speed enforcement camera be installed on Goodwood Road in the community of Goodwood. The estimated cost associated with this treatment is \$40,000.00. Operating and maintenance fees of the speed camera equipment would also need be covered for an 8-year term at an estimated cost of \$300,000. 8 years is the expected restoration period (at maximum truck volumes) for the site, as set out in the Site Alteration and Fill Management Plan, Golder, August 2022.

Data Collection Device

3. To monitor the volume and classification of trucks travelling on Goodwood Road by time of day, the Region recommends purchasing and installing a side fire radar device. This device will be used to help address enquiries from the public and address questions with regards to truck traffic in general. The estimated cost associated with this treatment is \$15,000.00.

The costs have been summarized for the above noted improvements in the table below as well as the associated funding contributions required by LaFarge Canada Inc. The 30 percent contribution has been based on the Updated Transportation Impact Study, (TMIG, July 2022), which is Appendix G of the Site Alteration and Fill Management Plan. In the Updated Transportation Impact Study, Table 4.1 sets out the predicted 1000 daily truck trips and Table 4.3 shows the predicted 30% (300 daily truck trips) going to and from the east. Existing truck volumes are based on counts taken in weekly batches throughout May and June in 2022, indicating an average daily truck volume between 550 and 600 vehicles. With the addition of 300 daily trucks noted above, the percentage breakdown was between 33% and 35%. This percentage was reduced to 30% to be conservative and round the numbers down for the cost breakdown below:

Safety Measure	Total Cost	LaFarge Funding Contribution	Durham Funding Contribution*
Pedestrian Control Device	\$170,000.00	\$51,000.00	\$119,000.00
Automated Speed Enforcement	\$340,000.00	\$102,000.00	\$238,000.00
Side Fire Radar Device	\$15,000.00	\$4,500	\$10,050
Total	\$525,000.00	\$157,500.00	\$367,500.00*

*Note – Durham costs have not been accounted for in the Regional Budget and will be required to accommodate impacts associated with this development.

MAP/KB/AS/SDK