

March 26, 2026

PTRAN2024022

Adam Layton, MCIP, RPP
Associate Principal
Goldberg Group
Land Use Planning and Development
Toronto, Ontario M5M 4A8

Re: Redtail Winery Traffic Impact Study Report – Responses to Peer Review and County Comments

Dear Adam Layton,

TraffMobility Engineering Inc. (TraffMobility) prepared a Traffic Impact Study Report dated December 6, 2024 (December 2024 Report) in support of the site plan control process for the proposed Redtail Vineyard development on Loyalist Parkway, Prince Edward County (County), Ontario.

Paradigm Transportation Solutions Limited (Paradigm) was retained by the County to conduct a technical review of TraffMobility's December Report. Findings and recommendations from Paradigm's technical review, dated January 14, 2026 (January 2026 Review Letter) are documented in this letter along with our responses.

Responses to comments provided by the County on the December 2024 Report are also documented in this letter.

December 2024 Report Comments and Responses

Peer Review comments received on the December 2024 Report and corresponding responses are summarized below.

January 2026 Review Letter Comments

Comment #1

The type of planning application that the study is in support of is not entirely clear since there is only a reference to a site plan control process.

Response

The December 2024 Report was prepared to support the site plan control process only. Official Plan Amendment (OPA) and Zoning By-law Amendment (ZBA) related to the proposed uses and development standards were approved through a prior application process.

Comment #2

While the TIS does follow a standard approach for this type of study, there is no reference to any pre-consultation discussions with County staff regarding the scope.

Response

It is acknowledged that the typical practice is to submit a Terms of Reference (TOR) for a TIS to the municipality for review and approval. However, for this project it was TraffMobility's understanding that the TIS scope to support the site plan control process required the previously approved traffic study conducted by Greer Galloway dated October 8, 2021 (October 2021 Study) to be updated using recent traffic counts and to provide design input for the left turn lane and right turn taper design at the Loyalist

Parkway and Site Access. As noted in the comment, the standard TIS approach was followed in the December 2024 Report.

Comment #3

There is no discussion of parking requirements in the TIS whereas the architect’s site plan does include parking required and parking provided statistics on the site plan.

Response

According to the County’s Zoning By-Law No. 140-2025, the proposed developments can be categorized as “Winery”, “Restaurant”, and “Hotel”. Parking for the Phase 2 (Spa) is not included in the latest site plan statistics table.

Based on the By-law requirement, the parking supply for the proposed development as per the latest site statistics is summarized in **Table 1**. The total parking supply proposed for the development has a surplus of 111 spaces.

The barrier-free parking space requirement as per the County’s Zoning By-law is summarized in **Table 2**. The proposed barrier-free parking supply has a surplus of 29 spaces.

Table 1: Zoning By-law Parking Requirement

Land Use	GFA (m ²) / Room	By-law Requirement	Calculated Parking Supply per By-law	Proposed Parking Supply	Surplus (Deficiency)
Winery (Retail)	36.1	1 space per 20 m ² of GFA	2	331	-
Restaurant	417	1 space per 9 m ² of gross leasable area	47		
Hotel	148 bedrooms	1 space per guest room, plus 1 space for every 10m ² devoted to public use, but exclusive of any lobby	148		
	299.7		23		
Total			220	331	111

Note: Guest room means a room used or maintained for the accommodation of individuals to whom hospitality is extended for gain or profit.

Table 2: Zoning By-law Barrier-Free Parking Requirement

Required Parking Spaces	By-law Requirement	Calculated Parking Supply per By-law	Proposed Parking Supply	Surplus (Deficiency)
220	2% of the total required parking spaces if the total number of parking spaces is between 201 and 1000 spaces	Type A: 3 Type B: 2	Type A: 33 Type B: 1	Type A: 30 Type B: (1)
Total		5	34	29

Comment #4

The TIS included a robust summer 2024 traffic data collection exercise, which included 24-hour traffic, vehicle classification, and speed data. It did not include field observations, which can be helpful in verifying road and traffic conditions as well as other local characteristics. It is clear from the data collected that the subject section of Loyalist Parkway operates well within capacity during peak summer conditions. It is also evident that the observed travel speeds showed very low compliance with the posted 80 km/h maximum speed limit (less than 20% of observed traffic at or below 80 km/h).

Response

Noted. Field observations were not conducted since the approved October 2021 Study documented site conditions and the roadway alignment does not present any apparent sightline issues. However, in addition to conducting traffic counts TraffMobility also conducted the speed study to obtain an understanding of operating speeds along Loyalist Parkway.

Comment #5

The methodology used in forecasting 2034 horizon year traffic volumes was thorough and satisfactory. It should be noted that the methodology used to estimate the site traffic component results in a conservative estimate of the forecasts (errs on the higher side) since the potential synergy of the complementary on-site uses was not estimated. As well, the use of hotel/villa “rooms” as the independent variable for the consultant’s estimate of trip generation and hotel/villa “bedrooms” as the independent variable for the site architect’s calculation of parking requirements should be clarified.

Response

The proposed hotel/villa development consists of 134 units containing a total of 148 bedrooms. Trip generation presented in the December 2024 Report was calculated based on the number of bedrooms rather than the number of units. When compared to a unit-based calculation as summarized in **Table 3**, the bedroom-based approach results in approximately six (6) additional vehicle trips during the Friday and Saturday peak hours.

The ITE Trip Generation Manual 11th Edition for Resort Hotel (LU Code 310) indicates that the published trip rates and equations are derived from survey data reflecting an average occupancy rate of approximately 88%, rather than full occupancy. Accordingly, the additional six (6) trips resulting from the bedroom-based methodology represents a conservative approach and does not change the overall conclusions of the December 2024 Report.

Table 3: Resort Hotel Trip Generation Comparison

ITE Land Use	Parameter	December Report (74 rooms for each phase)	Revised Calculations (67 units for each phase)
Resort Hotel (ITE LU Code 330)	Equation	$T = 0.48 (X) + 8.67$	
	Phase 1 Vehicle Trips	44	41
	Phase 2 Vehicle Trips	44	41
Total Vehicle Trips		88	82

The County’s Zoning By-law requires the minimum parking supply to be calculated based on the number of guest rooms and gross floor area devoted to public use (excluding the lobby), as discussed in the response to **Comment #3**. Accordingly, the number of bedrooms was used to calculate the minimum parking supply requirement.

Comment #6

The operational analysis for the 2034 horizon year background and total traffic forecasts showed that the Loyalist Parkway/Site Access intersection would have more than sufficient capacity to accommodate the proposed development. From a safety and efficiency perspective, it was determined that intersection improvements would be required due to the proposed development, and these include a southbound left turn lane and a northbound right turn taper on Loyalist Parkway at the Site Access. The same improvements would be required for either the Phase 1 hotel/villa development (half of the proposed rooms) or at full buildout (all proposed hotel/villa rooms).

Response

Noted. The recommended southbound left-turn lane and northbound right-turn taper on Loyalist Parkway at the Site Access will be provided during Phase 1.

Comment #7

While acknowledged in the 2021 Traffic Brief for the initial development proposal for the subject site, the potential effect of the relatively steep Loyalist Parkway downhill grade to the north of the subject site was not accounted for in the current TIS.

Response

The design requirement for intersection sight distance for passenger cars from the TAC manual and the available sight distance from the site plan are summarized in **Table 4** with adjustment of 5% increase to account for the approach downslope grade between 3% and 4% for the stopping sight distance and left turn sight distance. The results show that the proposed site access has adequate sight distances for a design speed of 100 km/h when accounting for grade. The access sightline analysis is provided in **Attachment 1**.

Table 4: Sight Distance Verification Summary

Parameters	TAC Requirements for 100 km/hr Design Speed (m)		Available Distance (m)
	North Approach (@ 3-4% downgrade)	South Approach <3% downgrade)	
Minimum Stopping Sight Distance	185 x 1.05 = 194	185	>220
Minimum Left Turn Sight Distance	210 x 1.05 = 221	210	>220
Minimum Right Turn Sight Distance	N/A	185	>220

Comment #8

In review of the Loyalist Parkway/Site Access intersection improvement drawings prepared by Engage Engineering, it was found that the design dimensions for the recommended southbound left turn lane and northbound taper matched the recommendations contained in the TIS. It was also noted that the southbound left turn lane would be located adjacent to and immediately west of the existing centreline, which is the preferred type of design for this improvement since there is no effect on the alignment of the northbound through lane on Loyalist Parkway.

Response

Noted. No response required.

Comment #9

The Site Access and the internal site road network was shown to adequately provide for vehicle maneuvering for access to and circulation within the site for a front-loading waste collection truck and a pumper fire truck.

Response

Noted. No response required.

Comment #10

It was noted that the 2021 Traffic Brief did include a report section regarding emergency access and circulation requirements, but this was not included in the current TIS.

Response

The October 2021 Study included a list of Ontario Building Code (OBC) requirements for fire route access design through the site. The December 2024 Report demonstrated that the site plan can accommodate a pumper fire truck throughout the site in Section 6.2 and Appendix I.

Additional pumper fire truck swept paths are provided in **Attachment 2** which demonstrated that a fire truck can enter and exit the site at Loyalist Parkway.

January 2026 Review Letter Recommendations

Recommendation #1

The consultant should prepare a response to the various areas of the TIS that require clarification.

Response

This memo provides responses and clarifications to the identified areas of the Traffic Impact Study.

Recommendation #2

The intersection sight distance analysis and the design details (parallel lane and taper lengths) for the recommended southbound left turn lane at the Loyalist Parkway/Site Access intersection should be reviewed by the consultant to determine if the downhill grade on Loyalist Parkway to the north of the Site Access would have any effect on the feasibility of the design.

Response

As noted in the December 2024 Report, the proposed site access is located approximately 200 m south of the intersection of Partridge Hollow Road and Loyalist Parkway, and a left turn lane design extending beyond the existing intersection is not considered safe. The recommended left turn lane dimensions in the December 2024 Report are provided in **Table 5** which give an overall length of 190 m and the resulting left turn lane does not extend into the intersection of Partridge Hollow Road and Loyalist Parkway.

As discussed in **Comment #7** response, sufficient sight distances are available for the north approach when accounting for the effect of the downgrade; therefore, the recommended left turn lane design in the December 2024 Report is considered adequate for the location as sufficient length is provided and the left turn lane does not encroach into the intersection of Partridge Hollow Road and Loyalist Parkway.

Table 5: Left Turn Lane Recommended Lengths (December 2024 Report)

Future Condition	Storage Length Required (m)	Recommended Parallel Lane (m)	Recommended Taper Length (m)	Total Length (m)
Total (2034) – Phase 1	15	95	80	190
Total (2034) – Full Buildout	15	95	80	190

Recommendation #3

County staff should consider if there are any measures that may be feasible to encourage lower travel speeds and higher compliance with the posted maximum speed limit on the subject section of Loyalist Parkway.

Response

This recommendation is directed to County staff for consideration.

Recommendation #4

County staff should confirm the sufficiency of the proposed parking supply relative to the Zoning By-law and the adequacy of the proposed site plan as related to emergency access and circulation.

Response

This recommendation is directed to County staff for consideration. Additional pumper fire truck swept paths are provided in **Attachment 2** which demonstrated that a fire truck can enter and exit the site at Loyalist Parkway.

County Comments on December 2024 Report

County comments received on the December 2024 Report and corresponding responses are summarized below.

Comment #1

Please ensure that ground sign is outside of the sight triangle prescribed under the Zoning By-law.

Response

The ground sign is located outside the sight triangle as shown in **Attachment 1**.

Comment #2

Please provide additional rationale to justify use of 'resort hotel' factor to calculate trip generation which results in fewer vehicle trips than a non-resort hotel. Notably, the majority of the units are classified as non-resort in the servicing study calculations.

Additional clarification from County Staff (Feb 6, 2026): The resort factor has been applied in the TIS which would reduce the number of vehicle trips to the property whereas the bedroom hotel rate has been applied in the Hydrogeological Study which would result in a reduced water demand. I am thinking that these should be consistent but perhaps we can discuss further next week.

Response

The site trip generation approach used in the December 2024 Report is conservative as noted in the Peer Review **Comment #5**. Refer to Peer Review **Comment #5** response for additional details on the site trip generation approach used in the December 2024 Report.

Comment #3

Please verify whether the grade of Loyalist Parkway will impact sightlines and require changes to the cross section. If the entrance location/common element location changes as a result, this should be reflected on the Draft Plan of Condo.

Response

The grade of Loyalist Parkway will not impact sightlines and changes to the cross section are not required. Refer to Peer Review **Comment #7** response for additional details on sightlines.

Comment #4

Please indicate width of entrance on the cross section and verify that the entrance/internal road network can accommodate emergency services per within the Traffic Impact Study Addendum Letter. For reference, emergency service standards are outlined in By-law 3121-2012.

Response

The entrance width is 6 m and can accommodate a pumper fire truck. Additional pumper fire truck swept paths are provided in **Attachment 2** which demonstrated that a fire truck can enter and exit the site at Loyalist Parkway.

Please contact the undersigned should you have any questions.

Sincerely,

TraffMobility Engineering Inc.

Approved by:



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Attachments

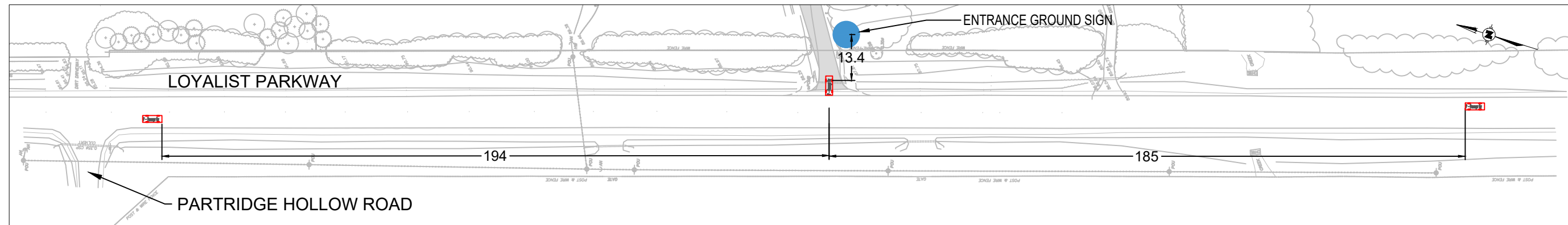
- Attachment 1:** Access Sightline Analysis
- Attachment 2:** Vehicle Manoeuvring Diagrams

Attachment 1

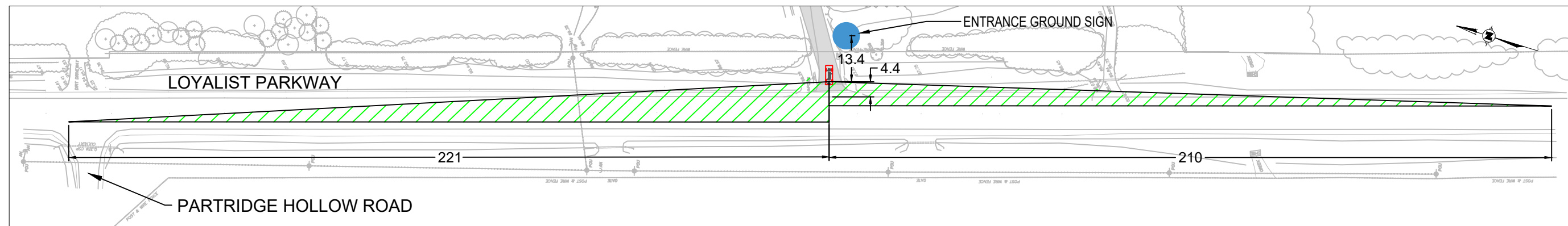
Access Sightline Analysis

NOTES:

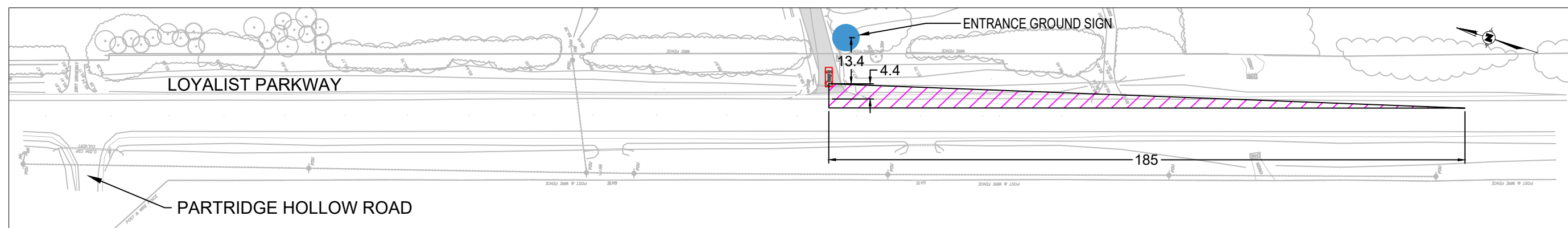
1. MEASUREMENTS SHOWN ARE IN METRES.
2. DESIGN SPEED: 100KM/H



MINIMUM STOPPING SIGHT DISTANCE (NORTH APPROACH) - 194m
 MINIMUM STOPPING SIGHT DISTANCE (SOUTH APPROACH) - 185m



MINIMUM LEFT TURNING SIGHT DISTANCE (NORTH APPROACH) - 221m
 MINIMUM LEFT TURNING SIGHT DISTANCE (SOUTH APPROACH) - 210m



MINIMUM RIGHT TURNING SIGHT DISTANCE - 185m

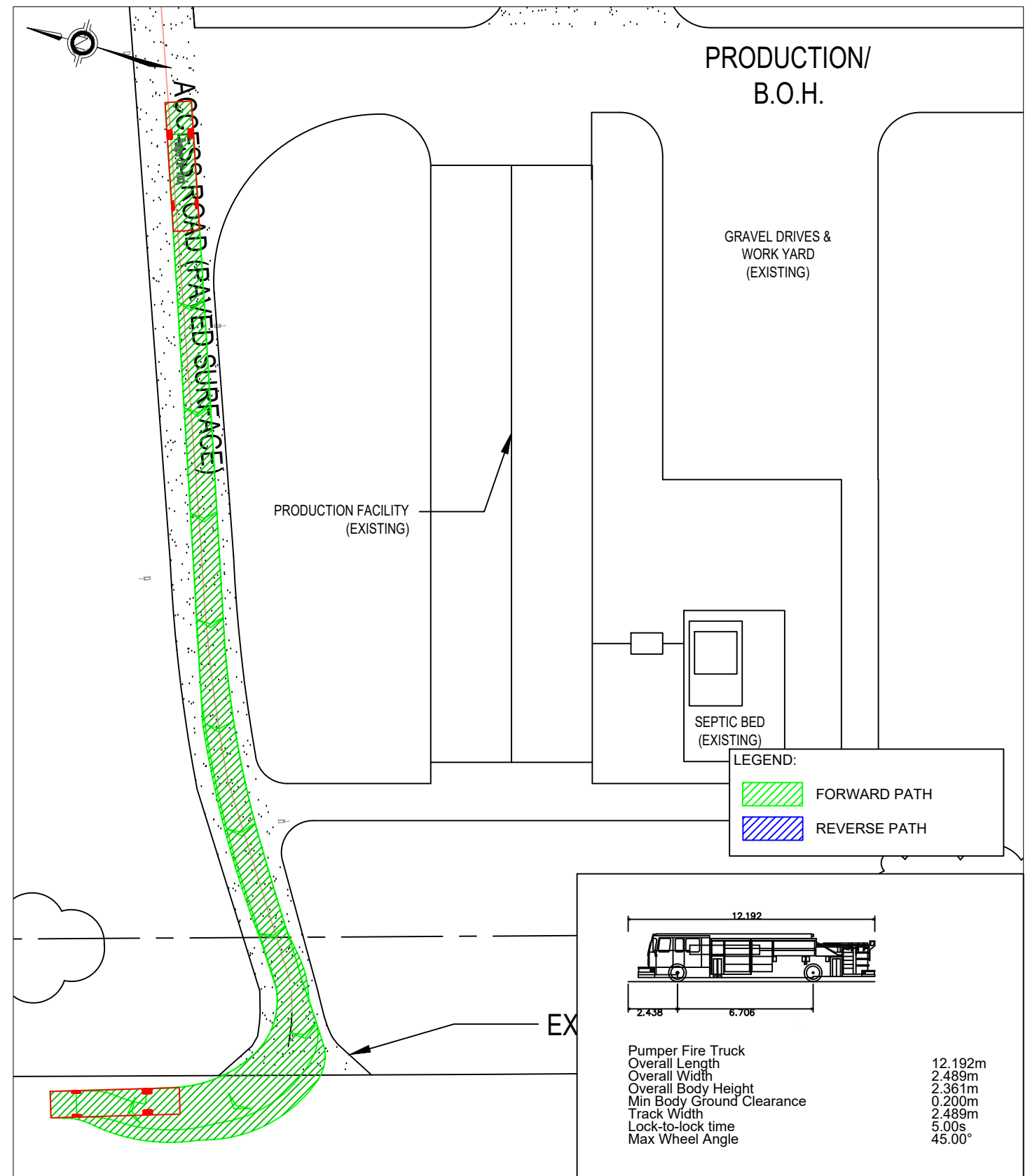
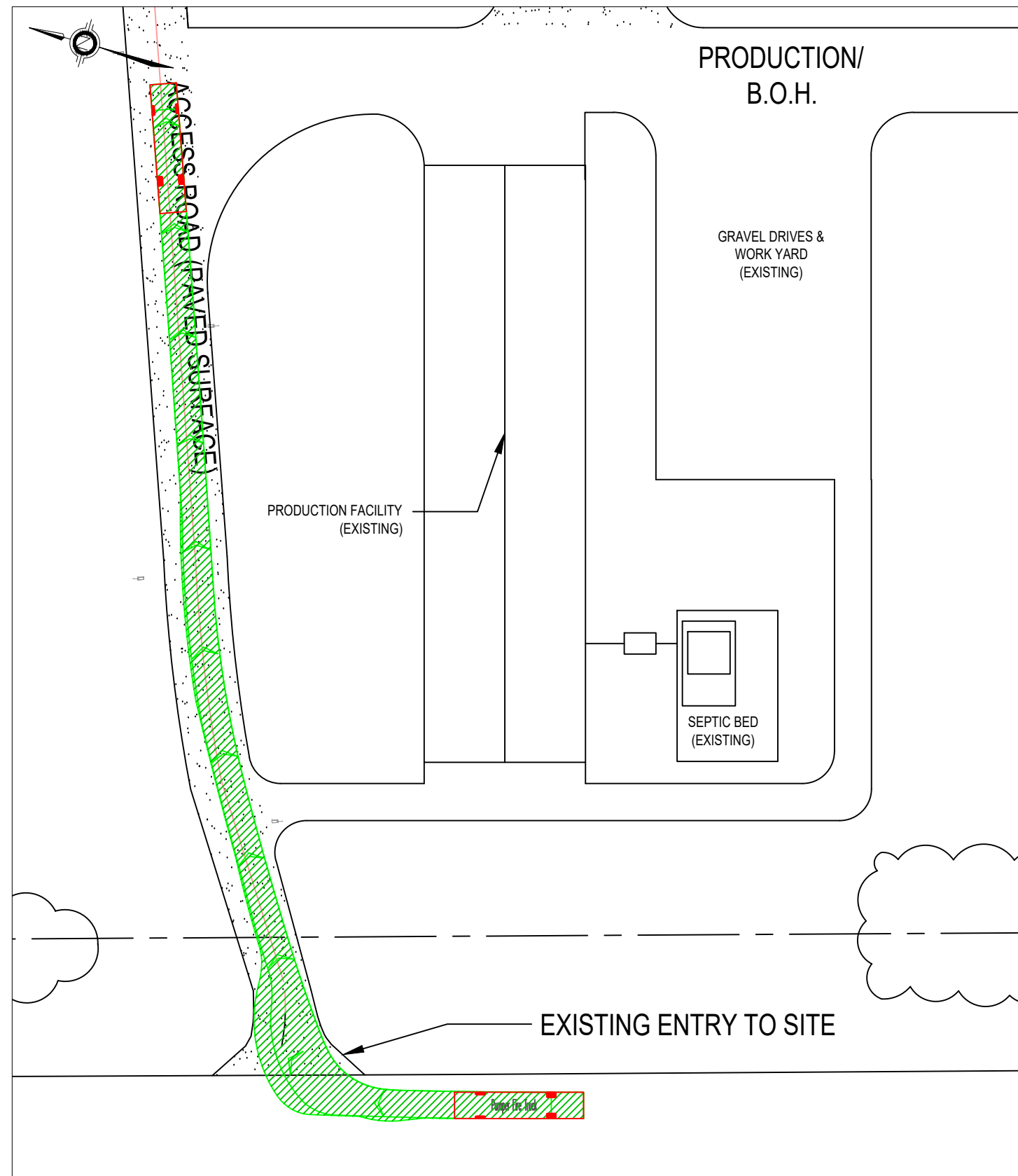
				REDTAIL WINERY TRAFFIC IMPACT STUDY									
						SIGHT LINE ANALYSIS		DESIGN	M.Y.	DRAWN	V.L.	CHECKED	M.Y.
C	THIRD SUBMISSION	03/17/2026	MY			SCALE:	1:1000		DRAWING NUMBER		SIGHT LINE ANALYSIS		
B	SECOND SUBMISSION	02/13/2026	MY			DATE:	MAR 17, 2026						
A	FIRST SUBMISSION	11/28/2024	MY										
REV.	SUBMISSION	DATE	INITIAL										

Attachment 2

Vehicle Manoeuvring Diagrams

INGRESS

EGRESS



REV.	SUBMISSION	DATE	INITIAL
B	SECOND SUBMISSION	24/03/2026	MY
A	FIRST SUBMISSION	11/28/2024	MY

REDTAIL WINERY
TRAFFIC IMPACT STUDY

SWEPT PATH ANALYSIS

TRAFFMOBILITY							
DESIGN	M.Y.	DRAWN	V.L.	CHECKED	M.Y.	CONTRACT No.	PTRAN2024022
SCALE:	1:500		DRAWING NUMBER		FIRE TRUCK 8		
DATE:	March 24, 2026						