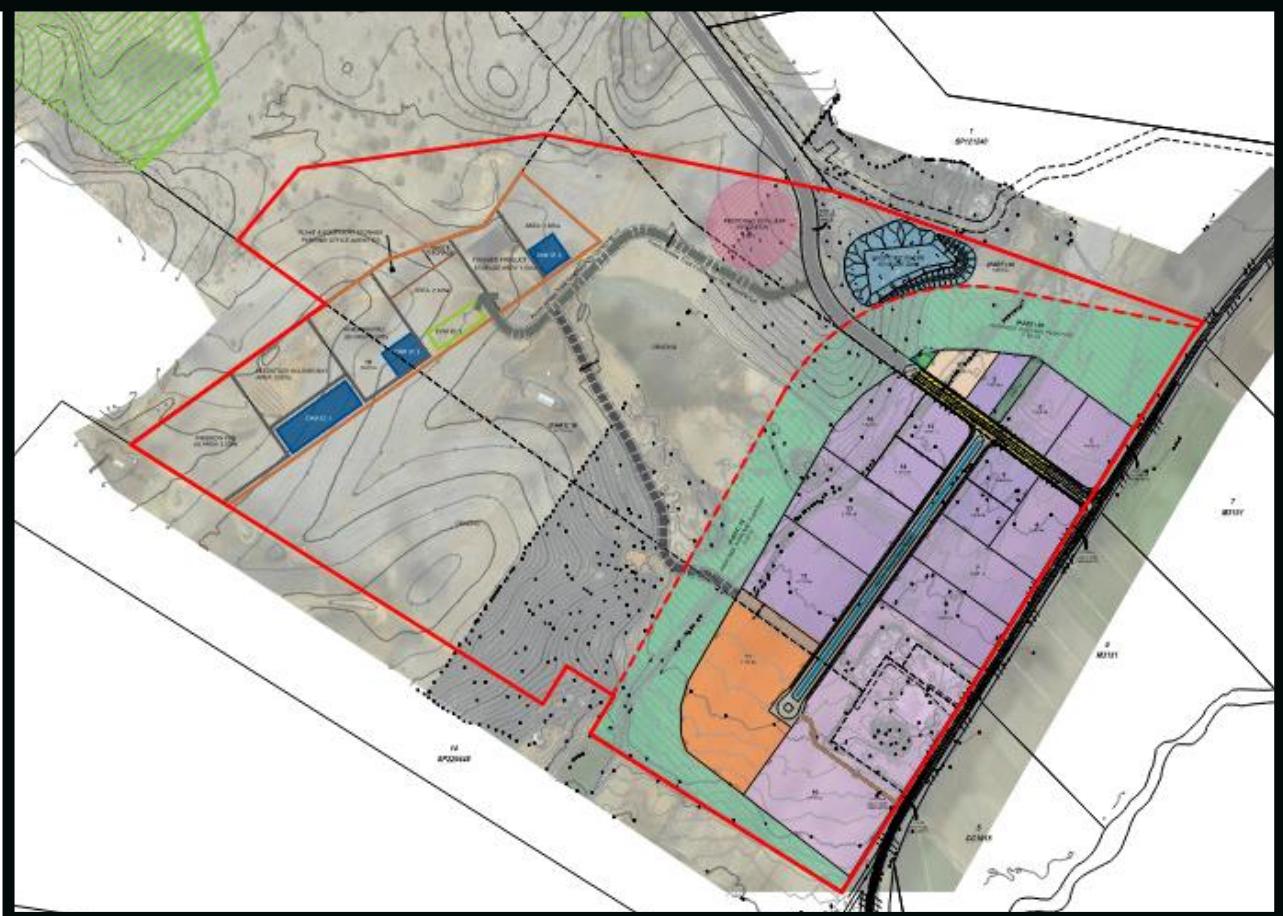


Appendix B.7.1 Updated Pavement Impact Assessment



PAVEMENT IMPACT ASSESSMENT

Scenic Rim Agricultural Industrial Precinct

Prepared for
KALFRESH PTY LTD
22 September 2023

URBIS

URBIS STAFF RESPONSIBLE FOR THIS REPORT WERE:

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Project Code	P0048179
Report Number	1

Urbis acknowledges the important contribution that Aboriginal and Torres Strait Islander people make in creating a strong and vibrant Australian society.

We acknowledge, in each of our offices, the Traditional Owners on whose land we stand.

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1. BACKGROUND

Urbis has been engaged by Kalfresh Pty Limited to prepare an updated Pavement Impact Assessment for the proposed expansion of the existing Kalfresh site located 4km west of Kalbar as part of the Scenic Rim Agricultural Industrial Precinct (SRAIP). A Road Impact Assessment (RIA), including a Traffic Impact Assessment (TIA), Pavement Impact Assessment (PIA) and Road Safety Assessment was completed by Cardno in April 2020.

A Request for Further Information (RFI) was first issued by the Office of the Co-ordinator General (OCG) in October 2020, to which a response was provided (dated 30 October 2020) which included an updated report to address the issues. The Pavement Impact Assessment was prepared on the basis of a staged approach given the lengthy and uncertain development timeframes for non-Kalfresh operated lots. At the time, engagement with TMR officers was undertaken to discuss the pavement assessment methodology with calculations shared to allow for transparency and collaboration.

Following submission of the response, a second information request was issued in June 2023. The traffic-related item of the second RFI, issued by the Department of Transport and Main Roads (TMR) is reproduced below.

Issue:

The pavement impact calculations provided within Appendix B.7 of the revised draft IAR incorporate the traffic volumes from the previous stages of the SRAIP as background traffic for each new lot as the come ‘online’. The DTMR have stated that this method significantly understates the future pavement impacts to the state-controlled road, being the Cunningham Highway.

To allow the pavement impact contributions to DTMR to be accurately calculated, the proponent is requested to provide precinct wide assumptions (Kalfresh and non-Kalfresh lots). Once this information is provided, OCG can facilitate further discussions between the proponent and DTMR during the condition negotiation stage to confirm a reasonable approach to apportioning the contribution costs over the life of the development.

Action:

Based on the traffic data currently available, amend Appendix B.7 to provide:

- (a) *Traffic assumptions to inform the Standard Axel Repetitions (SAR’s) for the entire SRAIP*
- (b) *An estimate of the total pavement impact contribution for the entire SRAIP development (including the working to demonstrate how the estimate was calculated).*

This Pavement Impact Assessment addresses the item by presenting an updated assessment to account for the most recent version of the lot plan, reviewing the vehicle generation assumptions to reflect more likely operations across the precinct and assessing the cumulative impacts of the whole SRAIP site.

1.1. UPDATES FROM PREVIOUS ASSESSMENT

The previous Pavement Impact Assessment undertaken by Cardno in 2020 included a number of differences in assumptions and methodology compared to what has been undertaken in this assessment. These differences include:

- The previous assessment assumed that any operations traffic from each stage would be assessed in isolation to determine that stage’s impacts and would then be included in the background SARs for the following stages. This updated assessment has assumed cumulative impacts of the Kalfresh and Non-Kalfresh lots for the construction and operations traffic from 2024 to 2035.
- The previous assessment assumed that a non-Kalfresh lot would become online each year from 2022 to 2031, based on a best estimate at the time of the timed delivery of lots. As the construction and operations staging of the non-Kalfresh lots is unknown, for this updated assessment it has been assumed that the development traffic would be uniformly averaged across the construction period with full development from 2034 onwards.
- Construction and operations traffic for the Kalfresh, non-Kalfresh, Joint Venture and Digester and Composter lots (refer to section 3.2) have been updated from the previous assessment following consultation with the client to reflect more accurate operations.

2. DEVELOPMENT DETAILS

2.1. LAND USES

The proposed expansion of the Kalfresh site includes Kalfresh owned lots, non-Kalfresh owned lots and ancillary sites, summarised in Table 1 and shown in Figure 1. Full development plans are provided in Appendix A.

As outlined in the original TIA, the on-site Digester / Energy Site and Drainage / Bio Basin are ancillary uses to the overall development.

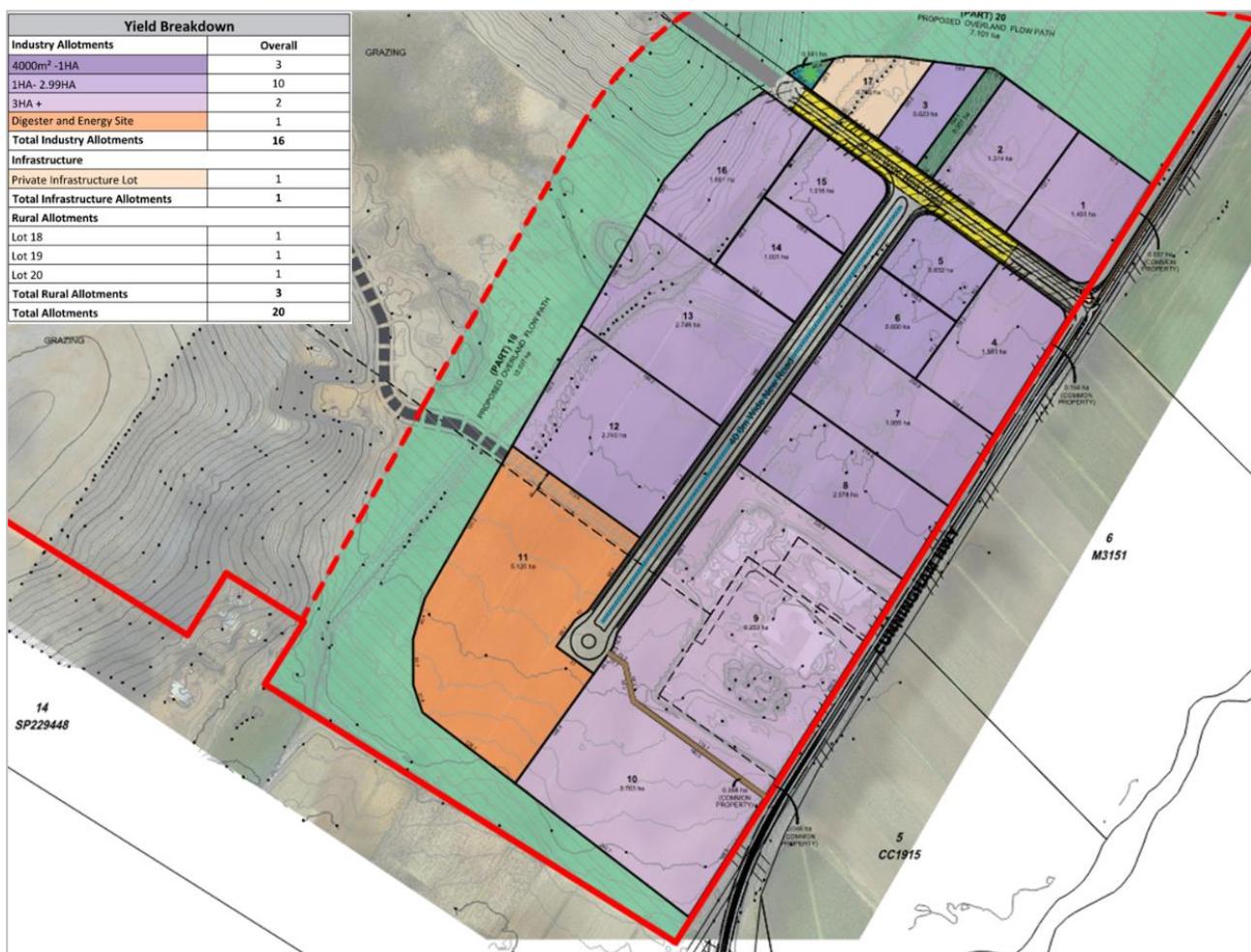
Following recent discussions with OCG, the provision of a service station and transport depot are proposed for lots 4, 5 and 6. These uses are intended to service the SRAIP development, rather than attract external traffic. This has been encouraged by sleeving the service station behind the transport depot such that it is not visible from the road frontage.

Table 1: Development Site Areas

Lot	Land Use	Area
Lot 1	Non-Kalfresh	14,030m ²
Lot 2	Non-Kalfresh	13,740m ²
Lot 3	Non-Kalfresh	6,230m ²
Lot 4	Transport Depot (ancillary)	15,830m ²
Lot 5	Service Station (ancillary)	8,320m ²
Lot 6	Service Station (ancillary)	8,000m ²
Lot 7	Non-Kalfresh	19,550m ²
Lot 8	Kalfresh	20,780m ²
Lot 9	Kalfresh	62,530m ²
Lot 10	Non-Kalfresh	37,630m ²
Lot 11	Digester (ancillary)	51,200m ²
Lot 12	Non-Kalfresh / Joint venture	27,450m ²
Lot 13	Non-Kalfresh	27,490m ²
Lot 14	Non-Kalfresh	10,010m ²
Lot 15	Non-Kalfresh	10,160m ²
Lot 16	Non-Kalfresh	16,810m ²

Source: RPS

Figure 1: Proposed Development Breakdown



Source: RPS

3. TRAFFIC ASSUMPTIONS

3.1. CONSTRUCTION TRAFFIC

The construction traffic of the development has been sourced from the Cardno report dated October 2020 and confirmed with consultation with the client. During construction, it was anticipated that Phase 3, involving construction activities relating to the import of earthworks would be the most intensive in terms of construction heavy vehicle trips to/from the development.

It is noted that the site earthworks are anticipated to utilise the Frasers quarry for haulage of fill material, with only the trucks arriving at the start of the day and departing at the end of the day having an impact on the external road network.

The assumptions, heavy vehicle numbers, directional distribution and traffic generation as per the previous PIA have been reproduced in the following tables.

Table 2 Construction Trip Assumptions – Heavy Vehicles

Construction Phase	Activity	Assumption	Truck Type	Truck Capacity
Phase 3: Groundworks and Construction	Earthworks Fill Delivery and/or Cut Removal	Vehicles arriving in the morning, and leaving in the afternoon	B-Double AV	N/A
	Deliveries (general)	1-2 tonnes per day	Class 4	13 tonnes
	Refuse Collection	3-4 tonnes per day	Class 5	15 tonnes

Table 3 Construction Trips – Heavy Vehicles

Construction Phase	Activity	Trip Generation		
		AM	PM	Daily
Phase 3: Groundworks and Construction	Earthworks Fill Delivery and/or Cut Removal	6 vph	6 vph	12 vpd
	Deliveries (general)	1 vph	1 vph	9 vpd
	Refuse Collection	1 vph	1 vph	1 vpd

Table 4 Construction Trips – Directional Distribution

Construction Phase	Activity	Directional Distribution	
		Daily In	Daily Out
Phase 3: Groundworks and Construction	Earthworks Fill Delivery and/or Cut Removal	50%	50%

Construction Phase	Activity	Directional Distribution	
		Daily In	Daily Out
	Deliveries (general)	50%	50%
	Refuse Collection	50%	50%

Table 5 Construction Trips – Directional Traffic Generation

Construction Phase	Activity	Directional Distribution	
		Daily In	Daily Out
Phase 3: Groundworks and Construction	Vehicles arriving in the morning, and leaving in the afternoon	6	6
Deliveries	1-2 tonnes per day in Class 4 truck	9	9
Refuse Collection	3-4 tonnes per day in Class 5 truck	1	1

Table 6 Construction Trip – Directional Distribution

Direction	Distribution		
	Phase 3: Groundworks and Construction	Deliveries	Refuse Collection
North	100%	-	100%
North-east	-	100%	-
South	-	-	-
South-east	-	-	-
Total	100%	100%	100%

3.2. OPERATIONS TRAFFIC

3.2.1. Kalfresh Operations Traffic

Proposed Operations traffic is based on the anticipated movement numbers required for the different produce being processed on site (beans, carrots, sweetcorn and onions). The anticipated yearly produce outputs, as well as anticipated truck numbers for each produce type is shown in Table 7.

It is noted that the produce will not be harvested and processed year round, rather each produce will be seasonally processed. However, as this assessment is based on annual trips and SAR impacts, the annualised produce has been used to inform the trip numbers.

Table 7: Kalfresh Proposed Operations Yields

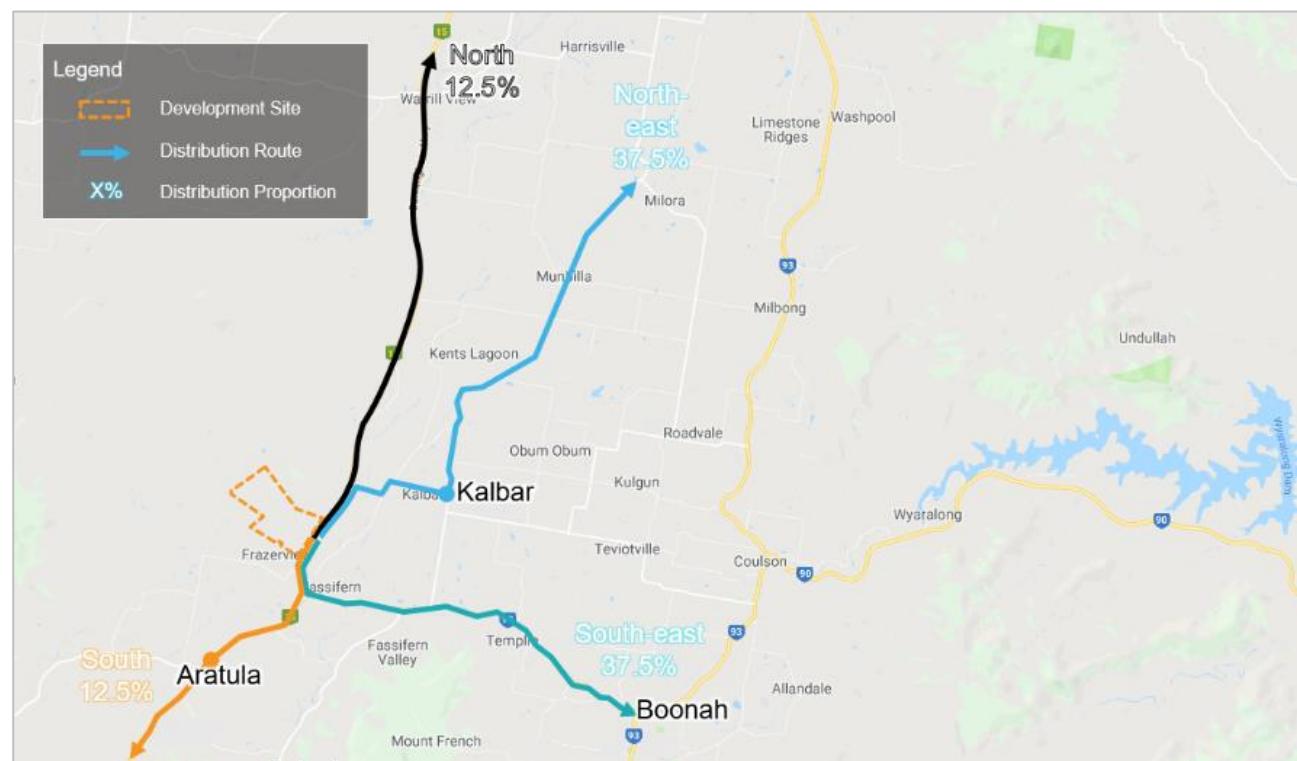
Produce	Yearly Output	Tonnes / # produce per truck	Yearly Trucks	Daily Trucks *	Daily Trips	Vehicle Class
Beans	2,600 tonnes	7 tonnes	371	1.0	2.0	Class 5
Carrots	17,600 tonnes	20 tonnes	880	2.4	4.8	Class 5
Sweetcorn	5,520 tonnes †	20 tonnes	276	0.8	1.5	Class 5
Onion	10,000 tonnes	22.5 tonnes	444	1.2	2.4	Class 9

* daily trips averaged across 365 days / year, †13.8 million cobs per year assuming 2.5 cobs per kilogram

The anticipated traffic generation of the site for the Kalfresh expansion as per consultation with the client, including deliveries to the site, from the site, and total operations traffic have been presented in Table 8, Table 9, and Table 10, respectively.

The directional distribution for vehicles arriving at site to deliver unprocessed produce remains the same as the Cardno assessment, as illustrated in Figure 2.

Figure 2 Directional Distribution



Source: Cardno

Processed produce will leave the site towards distribution centres located at Brisbane and Gatton, which will involve all trucks arriving from and departing to the north via the Cunningham Highway.

Table 8: Proposed Operations Distribution – Arriving at Site

Origin	Destination	Vehicle	Adopted Daily Trips
Class 5 Vehicle			
North (towards Brisbane via Cunningham Highway)	Kalfresh site	Class 5	9 vpd
North East (towards Kalbar)	Kalfresh site	Class 5	2 vpd
East (towards Boonah)	Kalfresh site	Class 5	2 vpd
South (towards Aratula via Cunningham Highway)	Kalfresh site	Class 5	2 vpd
Class 9 Vehicle			
North (towards Brisbane via Cunningham Highway)	Kalfresh site	Class 9	3 vpd
North East (towards Kalbar)	Kalfresh site	Class 9	1 vpd
East (towards Boonah)	Kalfresh site	Class 9	1 vpd
South (towards Aratula via Cunningham Highway)	Kalfresh site	Class 9	1 vpd
Total	-		23 vpd

Table 9 Proposed Operations Distribution – Departing Site

Origin	Destination	Vehicle	Daily Trucks	Adopted Daily Trips
Kalfresh Site	Brisbane	Class 9	10	20
Kalfresh Site	Nolans (Gatton) interstate freight	Class 9	10	20
Total	20 trucks per day			40 vpd

Table 10: Proposed Operations Distribution – Kalfresh Operations

Origin	Destination	Vehicle	Daily Trips
Deliveries from Site			

Origin	Destination	Vehicle	Daily Trips
Kalfresh Site	Brisbane	Class 9	20 vpd
Kalfresh Site	Nolans (Gatton) interstate freight	Class 9	20 vpd
Deliveries to Site			
North (towards Brisbane via Cunningham Highway)	Kalfresh site	Class 5	9 vpd
		Class 9	3 vpd
North East (towards Kalbar)	Kalfresh site	Class 5	2 vpd
		Class 9	1 vpd
East (towards Boonah)	Kalfresh site	Class 5	2 vpd
		Class 9	1 vpd
South (towards Aratula via Cunningham Highway)	Kalfresh site	Class 5	2 vpd
		Class 9	1 vpd
Total			61 vpd

3.2.2. Non Kalfresh Operations Traffic

The non Kalfresh operations traffic were estimated in the previous PIA under the assumption that each lot would operate as general industry, with trip rates informed from general industry uses. Kalfresh has advised that the non-Kalfresh lots will most likely operate as agricultural precincts similar to the Kalfresh operations with the distribution patterns and origin / destinations also following similar routes. As such, the Kalfresh assumptions were used to determine heavy vehicle trip rates per hectare for the different classes of vehicles and trip types, and applied to the non-Kalfresh operations directional distributions. These are summarised below in Table 11.

Table 11: Traffic Generation Rates and Traffic –Non-Kalfresh Operations

Origin	Destination	Vehicle	Trips per Hectare Rate	Non-Kalfresh Daily Trips per Year of Construction	Non-Kalfresh Daily Trips at Full Development
From Site (Class 9 Vehicle)					
Kalfresh Site	Brisbane	Class 9	0.60 vpd / ha	1.04 vpd	9.34 vpd
Kalfresh Site	Nolans (Gatton) interstate freight	Class 9	0.60 vpd / ha	1.04 vpd	9.34 vpd
To Site (Class 5 Vehicle)					

Origin	Destination	Vehicle	Trips per Hectare Rate	Non-Kalfresh Daily Trips per Year of Construction	Non-Kalfresh Daily Trips at Full Development
North (towards Brisbane via Cunningham Highway)	Kalfresh site	Class 5	0.63 vpd / ha	1.09 vpd	9.77 vpd
North East (towards Kalbar)	Kalfresh site	Class 5	0.13 vpd / ha	0.22 vpd	1.95 vpd
East (towards Boonah)	Kalfresh site	Class 5	0.13 vpd / ha	0.22 vpd	1.95 vpd
South (towards Aratula via Cunningham Highway)	Kalfresh site	Class 5	0.13 vpd / ha	0.22 vpd	1.95 vpd
To Site (Class 9 Vehicle)					
North (towards Brisbane via Cunningham Highway)	Kalfresh site	Class 9	0.18 vpd / ha	0.32 vpd	2.84 vpd
North East (towards Kalbar)	Kalfresh site	Class 9	0.04 vpd / ha	0.06 vpd	0.57 vpd
East (towards Boonah)	Kalfresh site	Class 9	0.04 vpd / ha	0.06 vpd	0.57 vpd
South (towards Aratula via Cunningham Highway)	Kalfresh site	Class 9	0.04 vpd / ha	0.06 vpd	0.57 vpd
Total				4.32 vpd	38.86 vpd

Note: trips have been averaged from annualised activity to a daily rate assuming 365 days / year, due to seasonality peaks and troughs occurring at different times through the year

3.2.3. Digester and Composter Operations Traffic

Lot 11 is earmarked for construction and operation of a Digester to produce fertiliser for nearby farms while the parcels north-west of the Digester will accommodate the on-site composter. The by-product from these uses (digestate, compost, etc.) will partly be used for the SRAIP lots and partly be distributed off-site by third parties purchasing the by-product. These trips are estimated to be completed by a combination of Class 5 and Class 9 vehicles. The assumed by-product movements have been provided by Kalfresh based on the assessment prepared for the digester and composter, as summarised in Table 12.

Table 12: Digester and Composter Product

Product	Tonne per year leaving site	Truck capacity	Daily trucks *
Digester			
Digestate	31,390 tonnes	32 tonnes (Class 9)	2.7
Maize silage	21,900 tonnes	15 tonnes (Class 5)	4.0
Paunch	15,300 tonnes	32 tonnes (Class 9)	1.3
Chicken litter	2,000 tonnes	32 tonnes (Class 9)	0.2
Composter			
Green waste	46,000 tonnes	32 tonnes (Class 9)	3.9
Mushroom waste	5,500 tonnes	32 tonnes (Class 9)	0.5
Total Digester and Composter			12.6 trucks / day
			25 trips / day (two way)

* daily trips averaged across 365 days / year,

The digester and composter have been assumed to begin operation in 2025, with the anticipated operations traffic shown in Table 13.

Table 13: Digester Operations Traffic

Origin	Destination	Class 5 Daily Trips	Class 9 Daily Trips
Lot 11	North (towards Brisbane via Cunningham Highway)	5 vpd	11 vpd
Lot 11	North East (towards Kalbar)	1 vpd	2 vpd
Lot 11	East (towards Boonah)	1 vpd	2 vpd
Lot 11	South (towards Aratula via Cunningham Highway)	1 vpd	0.22 vpd
Total		8 vpd	17 vpd

3.2.4. Joint Venture Operations Traffic

Lot 12 of the SRAIP has been listed as a potential joint venture lot between Kalfresh and an external company. Should this venture be successful, the operational traffic for Lot 12 was assumed to be the same as the Kalfresh lots (lots 8 and 9 combined). Based on an estimate of approval timeframes, agreements with a joint venture partner and construction period, it was assumed that Lot 12 would be operational in 2030 at the earliest.

3.3. DEVELOPMENT STAGING

Development staging has been determined in consultation with the client, with the relevant construction and operation timings for the Kalfresh and Non-Kalfresh lots shown in Table 14 and Table 15, respectively. Additionally, it has been assumed that the Digester will be operation in 2025, and the Joint Venture (Lot 12) will begin operation in 2030, for a conservative assessment.

Table 14: Kalfresh Staging

Phase	Approximate Timeline
Start of Construction	2024
End of Construction	2025
Start of Operations	2025
End of Assessment (20 years after year of opening)	2045

Table 15: Non Kalfresh Staging

Phase	Approximate Timeline
Start of Construction	2025
End of Construction	2034
Start of Operations	2034
End of Assessment (20 years after year of opening)	2054

4. PAVEMENT IMPACT ASSESSMENT

Pavement impacts of the TMR roads have been assessed according to GTIA Practice Notes: Pavement Impact Assessment, published in December 2018. Road pavement data was provided by TMR's Road Asset Division on 24th July 2023, including the most recent Annual Average Daily Traffic (AADT), Existing SAR4, and Marginal Cost information for the Cunningham Highway, Boonah-Fassifern Road and Kalbar Connection Road in 100m segments.

The impact assessment area analysed, as per the previously prepared PIA is listed in Table 16.

Table 16: State Controlled Road Assessed

Road ID	Road Name	Start Chainage	End Chainage
17B	Cunningham Highway	0.00	128.6
2102	Kalbar Connection Road	0.00	6.6
214	Boonah – Fassifern Road	0.00	11.447

The pavement types listed in the road asset data for the assessed network is outlined in Table 17.

Table 17 Pavement Type Descriptions

TMR Pavement Type	FAMLIT Pavement Type	Load Damage Exponent
Sprayed seal over flexible pavement, including cement modified and lime stabilised layer types C4 and C5	GN	4
Sprayed seal or Asphalt over flexible pavement with bitumen stabilised pavement	AC	5
Asphalt over flexible pavement, including cement modified and lime stabilised layer types C4 and C5	AC	5
Sprayed seal over semi rigid/semi rigid composite pavement	CS	12
Asphalt over semi rigid/semi rigid composite pavement	CS	12

Table 18: Design Vehicle SARs

Vehicle Type	Vehicle Class	SAR4		SAR5		SAR12	
		Loaded SAR	Unloaded SAR	Loaded SAR	Unloaded SAR	Loaded SAR	Unloaded SAR
Class 4 Truck	Class 4	3.57	0.5	4.14	0.41	12.08	0.11
Class 5 Truck	Class 5	4.09	0.46	4.89	0.37	17.07	0.09
Class 9	Class 9	4.93	0.51	5.61	0.41	14.63	0.11
Class 11	Class 11	8.34	0.55	9.53	0.43	25.71	0.11

The total SARs have been identified for each 100m segment based on the costing pavement type provided by TMR in-both the gazettal and anti-gazettal directions. The detailed calculations are provided in Appendix B.

4.1. PAVEMENT CONTRIBUTIONS

Pavement impacts and the resulting contributions have been assessed in accordance with TMR's GTIA. The GTIA calculation for cost contributions is reproduced in Figure 3.

Figure 3: Pavement Contribution Calculation

$$\text{Pavement contribution} = \sum_{i=1}^n [(C + O)_i \times MC_i \times L_i]$$

where:

- I is each road segment triggered
- C is construction period SARs
- O is operational period SARS for the impact mitigation period
- MC is the relevant marginal cost (per SAR-km) prescribed in the department's database for each road segment
- L is the length of road section in km
- N is the number of road segments triggered in the impact assessment area.

Source: TMR

As the site reaches full operations in 2034, the pavement impacts have been assessed to 2054 to adhere with the GTIA's 20 years of operation requirement. Full detailed calculations for the Development SARs and the marginal cost per SAR per km for each 100m segment of road are included in Appendix B.

Development contributions for each state-controlled road from the Kalfresh and Non-Kalfresh lots is shown in Table 19.

Table 19: Pavement Contributions

Lot	ID	Road Name	Cost
Kalfresh, Digester, Composter and Joint Venture (Lots 8, 9, 11 and 12)			
Lots 8, 9, 11 and 12	17B	Cunningham Highway	-
	2102	Kalbar Connection Road	\$13,590
	214	Boonah – Fassifern Road	-
Non Kalfresh (Lots 1, 2, 3, 7, 10, 13, 14, 15 and 16)			
Lots 1, 2, 3, 7, 10, 13, 14, 15 and 16	17B	Cunningham Highway	\$235,058
	2102	Kalbar Connection Road	\$53,366
	214	Boonah – Fassifern Road	-
Total			\$302,014

4.2. SUMMARY

The pavement impact contributions have been calculated in accordance with the GTIA based on the cumulative construction and operations traffic for the Scenic Rim Agricultural Industrial Precinct, including 20 year assessment from full development operations.

A total pavement contribution for the overall SRAIP is **\$302,014**, comprised of **\$13,590** for the Kalfresh lots (including the digester, composter and potential joint venture lot) and **\$288,424** for the non-Kalfresh lots/tenancies. The terms and final sums of any potential contribution payment should be the subject of further negotiations between the client and State Government (OCG and TMR).

As the high level assessment included a number of assumptions relating to the non-Kalfresh operational trips, it is recommended that a pavement impact assessment is undertaken before the construction of each non-Kalfresh lot to assure a more accurate assessment is undertaken at the time of application.

It is acknowledged that the methodology adopted in this assessment has been based on cumulative impacts for the SRAIP development, to address the TMR information request outlined in section 1. However, it is the opinion of Urbis that the original assessment methodology whereby each staged lot was assessed for its own impacts is a valid and reasonable approach. Urbis are open to discussing this further with TMR and OCG.

DISCLAIMER

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All surveys, forecasts, projections and recommendations contained in or associated with this report are made in good faith and on the basis of information supplied to Urbis at the date of this report, and upon which Urbis relied. Achievement of the projections and budgets set out in this report will depend, among other things, on the actions of others over which Urbis has no control.

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This report has been prepared with due care and diligence by Urbis and the statements and opinions given by Urbis in this report are given in good faith and in the reasonable belief that they are correct and not misleading, subject to the limitations above.

APPENDIX A

DEVELOPMENT PLANS

Legend

- Site Boundary
- SRAIP Precinct Boundary
- Existing Contours (1 metre)
- Existing Boundaries
- Existing Easement
- Proposed Stormwater Infrastructure (Common Property)
- Proposed Overland Flow (Easements, Part of Lot 18 and Lot 20)
- Proposed Cunningham Highway Frontage Common Property (3 metres wide)
- Proposed Utilities Common Property (4 metres wide)
- Proposed Bio Basin
- Proposed Water Storage Dam
- Proposed Effluent Irrigation
- Proposed Composting Lot
- Leachate Pond
- Proposed Composter Lot Access Track
- Proposed Plant & Equipment
- Proposed Windrow & Finished Product
- Proposed Stormwater Basin
- Proposed Wagner Quarry Access - (not part of the SRAIP proposal and subject to separate development approval)
- Significant Vegetation Area
- Access Track Connection to Composter Area
- Access Easement for Wagners Road Alignment
- Access Easement for Lot 19
- Access Easement for Composter (Digester)
- Swale
- Volumetric Lot - Lot 80 (1 metre below ground surface)



Note:
All Lot Numbers, Dimensions and Areas are approximate only, and are subject to survey and Council approval.
Dimensions have been rounded to the nearest 0.1 metres.
Areas have been rounded down to the nearest 5m².

The boundaries shown on this plan should not be used for final detailed engineers design.

Source Information:
Site boundaries: DCDB
Adjoining information: DCDB.
Contours: RPS Survey
Aerial photography: RPS Survey
Overland Flow Path: Aurecon
KRA Boundary: Scenic Rim Planning Scheme 2020

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rps

**SRAIP CONCEPT
LAYOUT PLAN**

PLAN REF: 142489 - 05

Rev No: AC

DATE: 23 FEBRUARY 2023

CLIENT: KALFRESH

DRAWN BY: NV

CHECKED BY: JC / PHE

Legend

- Site Boundary
- Existing Contours (1 metre)
- Existing Boundaries
- Existing Easement
- Proposed Stormwater Infrastructure (Common Property)
- Proposed Overland Flow (Easements, Part of Lot 18 and Lot 20)
- Proposed Cunningham Highway Frontage Common Property (3 metres wide)
- Proposed Utilities Common Property (4 metres wide)
- Proposed Bio Basin
- Proposed Water Storage Dam
- Proposed Effluent Irrigation
- Proposed Composting Lot
- Leachate Pond
- Proposed Composter Lot Access Track
- Proposed Plant & Equipment
- Proposed Windrow & Finished Product
- Proposed Stormwater Basin
- Proposed Wagner Quarry Access - All part of the SRAIP proposal and subject separate development approval
- Significant Vegetation Area
- Access Track Connection to Composter Area
- Access Easement for Wagners Road Alignment
- Access Easement to Lot 19 (Composter) within Lot 11 (Digester)
- Swale
- Volumetric Lot - Lot 80 (1 metre below ground surface)

Note:
All Lot Numbers, Dimensions and Areas are approximate only, and are subject to survey and Council approval.

Dimensions have been rounded to the nearest 0.1 metres.
Areas have been rounded down to the nearest 5m².

The boundaries shown on this plan should not be used for final detailed engineers design.

Source Information:
Site boundaries: DCDB
Addressing information: DCDB.
Contours: RPS Survey.
Aerial photography: RPS Survey.
Overland Flow Path: Aurecon.

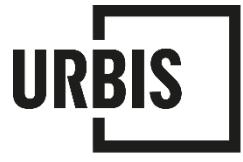


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APPENDIX B

PAVEMENT IMPACT ASSESSMENT CALCULATIONS

Annual Average Daily Traffic data for sealed segments of the selected road sections

RoadName	ROAD_SECTION_ID	SUPERSET_CWAY	Direction	TdistStart	TdistEnd	SURFACE_TYPE_LABEL	AADT	AADT_YEAR	GROWTH_PC_5YR	AADT_NONHV	PERCENT_NONHV	AADT_HV
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 A	0.000	5.460	SEALED	23279	2022	5.3	19396	83.32	3883
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 G	0.000	5.460	SEALED	20743	2022	2.51	16854	81.25	3889
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 A	5.460	10.010	SEALED	20196	2022	2.79	17859	88.43	2337
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 G	5.460	10.010	SEALED	20145	2022	3.98	17945	89.08	2200
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 A	10.010	10.730	SEALED	7023	2022	-9.64	5335	75.97	1688
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 G	10.010	10.730	SEALED	8263	2022	-4.95	6543	79.19	1720
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 A	10.730	12.320	SEALED	7023	2022	-9.64	5335	75.97	1688
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 G	10.730	12.320	SEALED	8263	2022	-4.95	6543	79.19	1720
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 A	12.320	12.710	SEALED	7023	2022	-9.64	5335	75.97	1688
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 G	12.320	12.710	SEALED	8263	2022	-4.95	6543	79.19	1720
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 A	12.710	12.870	SEALED	7023	2022	-9.64	5335	75.97	1688
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 G	12.710	12.870	SEALED	8263	2022	-4.95	6543	79.19	1720
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 A	12.870	13.730	SEALED	7023	2022	-9.64	5335	75.97	1688
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 G	12.870	13.730	SEALED	8263	2022	-4.95	6543	79.19	1720
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 A	13.730	14.080	SEALED	7023	2022	-9.64	5335	75.97	1688
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 G	13.730	14.080	SEALED	8263	2022	-4.95	6543	79.19	1720
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 A	14.080	14.220	SEALED	10662	2022	1	9084	85.2	1578
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 G	14.080	14.220	SEALED	10652	2022	1.13	9473	88.93	1179
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 A	14.220	15.700	SEALED	10662	2022	1	9084	85.2	1578
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 G	14.220	15.700	SEALED	10652	2022	1.13	9473	88.93	1179
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 A	15.700	18.230	SEALED	10662	2022	1	9084	85.2	1578
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 G	15.700	18.230	SEALED	10652	2022	1.13	9473	88.93	1179
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 A	18.230	18.380	SEALED	10662	2022	1	9084	85.2	1578
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 G	18.230	18.380	SEALED	10652	2022	1.13	9473	88.93	1179
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 A	18.380	18.610	SEALED	3322	2022	1.16	2507	75.46	815
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 G	18.380	18.610	SEALED	3367	2022	2.44	2630	78.11	737
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 A	18.610	28.790	SEALED	3322	2022	1.16	2507	75.46	815
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 G	18.610	28.790	SEALED	3367	2022	2.44	2630	78.11	737
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 A	28.790	39.670	SEALED	2944	2022	2.01	2132	72.41	812
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 G	28.790	39.670	SEALED	2914	2022	1.97	2024	69.46	890
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 A	39.670	51.830	SEALED	2796	2022	2.42	2181	78.01	615
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 G	39.670	51.830	SEALED	2828	2022	2.55	2215	78.34	613
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 A	51.830	53.130	SEALED	2796	2022	2.42	2181	78.01	615
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 G	51.830	53.130	SEALED	2828	2022	2.55	2215	78.34	613
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 A	53.130	55.610	SEALED	2796	2022	2.42	2181	78.01	615
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 G	53.130	55.610	SEALED	2828	2022	2.55	2215	78.34	613
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 A	55.610	80.030	SEALED	3722	2022	3.06	2835	76.17	887
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 G	55.610	80.030	SEALED	3280	2022	-0.7	2467	75.22	813
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 A	80.030	114.530	SEALED	1763	2022	-3.28	1148	65.14	615
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 G	80.030	114.530	SEALED	1755	2022	-3.14	1155	65.84	600
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 A	114.530	114.820	SEALED	1763	2022	-3.28	1148	65.14	615
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 G	114.530	114.820	SEALED	1755	2022	-3.14	1155	65.84	600
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 A	114.820	115.210	SEALED	2930	2022	-3.66	2238	76.37	692
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 G	114.820	115.210	SEALED	2992	2022	-3.07	2382	79.61	610
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 A	115.210	124.960	SEALED	2930	2022	-3.66	2238	76.37	692
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 G	115.210	124.960	SEALED	2992	2022	-3.07	2382	79.61	610
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 A	124.960	125.320	SEALED	3820	2022	-4.75	3148	82.42	672
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 G	124.960	125.320	SEALED	4746	2022	-1.36	3833	80.76	913
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 A	125.320	127.020	SEALED	6441	2022	-0.48	5495	85.32	946
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 G	125.320	127.020	SEALED	6374	2022	-0.82	5107	80.13	1267
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 A	127.020	127.720	SEALED	5527	2022	0.51	4640	83.95	887
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 G	127.020	127.720	SEALED	4023	2022	-1.07	3178	79	845
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 A	127.720	128.640	SEALED	4936	2022	-3.68	4010	81.24	926
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 G	127.720	128.640	SEALED	5777	2022	0.28	4585	79.36	1192
KALBAR CONNECTION ROAD	2102		1 A	0.000	6.600	SEALED	1018	2022	-0.71	811	79.64	207
KALBAR CONNECTION ROAD	2102		1 G	0.000	6.600	SEALED	987	2022	-1.31	890	90.18	97
BOONAH - FASSIFERN ROAD	214		1 A	0.000	7.287	SEALED	1809	2022	-0.52	1590	87.87	219
BOONAH - FASSIFERN ROAD	214		1 G	0.000	7.287	SEALED	1862	2022	-0.26	1523	81.79	339
BOONAH - FASSIFERN ROAD	214		1 A	7.287	7.527	SEALED	1809</					

Background SAR4 per day

PERCENT_HV	ExistingSAR	2054 BG SAR4	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
16.68	12425.6	20377.984	18.88	109.8053202	115.2526267	120.6999333	126.1472398	131.5945463	163.2823665	168.7296731	174.1769796	179.6242861	185.0715926
18.75	12444.8	20409.472	1.99	26.87860312	30.4060761	33.93354909	37.46102207	40.98849505	61.50834818	65.03582116	68.56329414	72.09076713	75.61824011
11.57	7478.4	12264.576	18.88	109.8053202	115.2526267	120.6999333	126.1472398	131.5945463	163.2823665	168.7296731	174.1769796	179.6242861	185.0715926
10.92	7040	11545.6	1.99	26.87860312	30.4060761	33.93354909	37.46102207	40.98849505	61.50834818	65.03582116	68.56329414	72.09076713	75.61824011
24.03	5401.6	8858.624	18.88	109.8053202	115.2526267	120.6999333	126.1472398	131.5945463	163.2823665	168.7296731	174.1769796	179.6242861	185.0715926
20.81	5504	9026.56	1.99	26.87860312	30.4060761	33.93354909	37.46102207	40.98849505	61.50834818	65.03582116	68.56329414	72.09076713	75.61824011
24.03	5401.6	8858.624	18.88	109.8053202	115.2526267	120.6999333	126.1472398	131.5945463	163.2823665	168.7296731	174.1769796	179.6242861	185.0715926
20.81	5504	9026.56	1.99	26.87860312	30.4060761	33.93354909	37.46102207	40.98849505	61.50834818	65.03582116	68.56329414	72.09076713	75.61824011
24.03	5401.6	8858.624	18.88	109.8053202	115.2526267	120.6999333	126.1472398	131.5945463	163.2823665	168.7296731	174.1769796	179.6242861	185.0715926
20.81	5504	9026.56	1.99	26.87860312	30.4060761	33.93354909	37.46102207	40.98849505	61.50834818	65.03582116	68.56329414	72.09076713	75.61824011
24.03	5401.6	8858.624	18.88	109.8053202	115.2526267	120.6999333	126.1472398	131.5945463	163.2823665	168.7296731	174.1769796	179.6242861	185.0715926
20.81	5504	9026.56	1.99	26.87860312	30.4060761	33.93354909	37.46102207	40.98849505	61.50834818	65.03582116	68.56329414	72.09076713	75.61824011
24.03	5401.6	8858.624	18.88	109.8053202	115.2526267	120.6999333	126.1472398	131.5945463	163.2823665	168.7296731	174.1769796	179.6242861	185.0715926
20.81	5504	9026.56	1.99	26.87860312	30.4060761	33.93354909	37.46102207	40.98849505	61.50834818	65.03582116	68.56329414	72.09076713	75.61824011
24.03	5401.6	8858.624	18.88	109.8053202	115.2526267	120.6999333	126.1472398	131.5945463	163.2823665	168.7296731	174.1769796	179.6242861	185.0715926
20.81	5504	9026.56	1.99	26.87860312	30.4060761	33.93354909	37.46102207	40.98849505	61.50834818	65.03582116	68.56329414	72.09076713	75.61824011
24.03	5401.6	8858.624	18.88	109.8053202	115.2526267	120.6999333	126.1472398	131.5945463	163.2823665	168.7296731	174.1769796	179.6242861	185.0715926
20.81	5504	9026.56	1.99	26.87860312	30.4060761	33.93354909	37.46102207	40.98849505	61.50834818	65.03582116	68.56329414	72.09076713	75.61824011
24.03	5401.6	8858.624	18.88	109.8053202	115.2526267	120.6999333	126.1472398	131.5945463	163.2823665	168.7296731	174.1769796	179.6242861	185.0715926
20.81	5504	9026.56	1.99	26.87860312	30.4060761	33.93354909	37.46102207	40.98849505	61.50834818	65.03582116	68.56329414	72.09076713	75.61824011
14.8	5049.6	8281.344	18.88	109.8053202	115.2526267	120.6999333	126.1472398	131.5945463	163.2823665	168.7296731	174.1769796	179.6242861	185.0715926
11.07	3772.8	6187.392	1.99	26.87860312	30.4060761	33.93354909	37.46102207	40.98849505	61.50834818	65.03582116	68.56329414	72.09076713	75.61824011
14.8	5049.6	8281.344	18.88	109.8053202	115.2526267	120.6999333	126.1472398	131.5945463	163.2823665	168.7296731	174.1769796	179.6242861	185.0715926
11.07	3772.8	6187.392	1.99	26.87860312	30.4060761	33.93354909	37.46102207	40.98849505	61.50834818	65.03582116	68.56329414	72.09076713	75.61824011
14.8	5049.6	8281.344	18.88	109.8053202	115.2526267	120.6999333	126.1472398	131.5945463	163.2823665	168.7296731	174.1769796	179.6242861	185.0715926
11.07	3772.8	6187.392	1.99	26.87860312	30.4060761	33.93354909	37.46102207	40.98849505	61.50834818	65.03582116	68.56329414	72.09076713	75.61824011
24.54	2608	4277.12	18.88	109.8053202	115.2526267	120.6999333	126.1472398	131.5945463	163.2823665	168.7296731	174.1769796	179.6242861	185.0715926
21.89	2358.4	3867.776	1.99	26.87860312	30.4060761	33.93354909	37.46102207	40.98849505	61.50834818	65.03582116	68.56329414	72.09076713	75.61824011
24.54	2608	4277.12	18.88	109.8053202	115.2526267	120.6999333	126.1472398	131.5945463	163.2823665	168.7296731	174.1769796	179.6242861	185.0715926
21.89	2358.4	3867.776	1.99	26.87860312	30.4060761	33.93354909	37.46102207	40.98849505	61.50834818	65.03582116	68.56329414	72.09076713	75.61824011
27.59	2598.4	4261.376	18.88	109.8053202	115.2526267	120.6999333	126.1472398	131.5945463	163.2823665	168.7296731	174.1769796	179.6242861	185.0715926
30.54	2848	4670.72	1.99	26.87860312	30.4060761	33.93354909	37.46102207	40.98849505	61.50834818	65.03582116	68.56329414	72.09076713	75.61824011
21.99	1968	3227.52	18.88	109.8053202	115.2526267	120.6999333	126.1472398	131.5945463	163.2823665	168.7296731	174.1769796	179.6242861	185.0715926
21.66	1961.6	3217.024	1.99	26.87860312	30.4060761	33.93354909	37.46102207	40.98849505	61.50834818	65.03582116	68.56329414	72.09076713	75.61824011
21.99	1968	3227.52	23.38	126.4870213	132.0003632	137.5137051	143.0270471	148.540389	180.6123474	186.1256893	191.6390312	197.1523732	202.6657151
21.66	1961.6	3217.024	34.12										

Annual Average Daily Traffic data for sealed segments of the selected road sections

RoadName	ROAD_SECTION_ID	SUPERSET_CWAY	Direction	TdistStart	TdistEnd	SURFACE_TYPE_LABEL	AADT	AADT_YEAR
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 A	0.000	5.460	SEALED	23279	2022
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 G	0.000	5.460	SEALED	20743	2022
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 A	5.460	10.010	SEALED	20196	2022
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 G	5.460	10.010	SEALED	20145	2022
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 A	10.010	10.730	SEALED	7023	2022
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 G	10.010	10.730	SEALED	8263	2022
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 A	10.730	12.320	SEALED	7023	2022
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 G	10.730	12.320	SEALED	8263	2022
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 A	12.320	12.710	SEALED	7023	2022
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 G	12.320	12.710	SEALED	8263	2022
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 A	12.710	12.870	SEALED	7023	2022
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 G	12.710	12.870	SEALED	8263	2022
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 A	12.870	13.730	SEALED	7023	2022
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 G	12.870	13.730	SEALED	8263	2022
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 A	13.730	14.080	SEALED	7023	2022
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 G	13.730	14.080	SEALED	8263	2022
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 A	14.080	14.220	SEALED	10662	2022
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 G	14.080	14.220	SEALED	10652	2022
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 A	14.220	15.700	SEALED	10662	2022
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 G	14.220	15.700	SEALED	10652	2022
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 A	15.700	18.230	SEALED	10662	2022
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 G	15.700	18.230	SEALED	10652	2022
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 A	18.230	18.380	SEALED	10662	2022
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 G	18.230	18.380	SEALED	10652	2022
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 A	18.380	18.610	SEALED	3322	2022
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 G	18.380	18.610	SEALED	3367	2022
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 A	18.610	28.790	SEALED	3322	2022
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 G	18.610	28.790	SEALED	3367	2022
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 A	28.790	39.670	SEALED	2944	2022
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 G	28.790	39.670	SEALED	2914	2022
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 A	39.670	51.830	SEALED	2796	2022
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 G	39.670	51.830	SEALED	2828	2022
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 A	51.830	53.130	SEALED	2796	2022
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 G	51.830	53.130	SEALED	2828	2022
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 A	53.130	55.610	SEALED	2796	2022
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 G	53.130	55.610	SEALED	2828	2022
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 A	55.610	80.030	SEALED	3722	2022
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 G	55.610	80.030	SEALED	3280	2022
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 A	80.030	114.530	SEALED	1763	2022
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 G	80.030	114.530	SEALED	1755	2022
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 A	114.530	114.820	SEALED	1763	2022
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 G	114.530	114.820	SEALED	1755	2022
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 A	114.820	115.210	SEALED	2930	2022
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 G	114.820	115.210	SEALED	2992	2022
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 A	115.210	124.960	SEALED	2930	2022
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 G	115.210	124.960	SEALED	2992	2022
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 A	124.960	125.320	SEALED	3820	2022
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 G	124.960	125.320	SEALED	4746	2022
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 A	125.320	127.020	SEALED	6441	2022
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 G	125.320	127.020	SEALED	6374	2022
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 A	127.020	127.720	SEALED	5527	2022
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 G	127.020	127.720	SEALED	4023	2022
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 A	127.720	128.640	SEALED	4936	2022
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1 G	127.720	128.640	SEALED	5777	2022
KALBAR CONNECTION ROAD	2102		1 A	0.000	6.600	SEALED	1018	2022
KALBAR CONNECTION ROAD	2102		1 G	0.000	6.600	SEALED	987	2022
BOONAH - FASSIFERN ROAD	214		1 A	0.000	7.287	SEALED	1809	2022
BOONAH - FASSIFERN ROAD	214		1 G	0.000	7.287	SEALED	1862	2022
BOONAH - FASSIFERN ROAD	214		1 A	7.287	7.527	SEALED	1809	2022
BOONAH - FASSIFERN ROAD	214		1 G	7.287	7.527	SEALED	1862	2022
BOONAH - FASSIFERN ROAD	214		1 A	7.527	11.447	SEALED	1809	2022
BOONAH - FASSIFERN ROAD	214		1 G	7.527	11.447	SEALED	1862	2022

Background SAR4 per day

Annual Average Daily Traffic data for sealed segments of the selected road sections

RoadName	ROAD_SECTION_ID	SUPERSET_CWAY	Direction	TdistStart	TdistEnd	SURFACE_TYPE_LABEL	AADT	AADT_YEAR	GROWTH_PC_5YR
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1A	0.000	5.460	SEALED	23279	2022	5.3
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1G	0.000	5.460	SEALED	20743	2022	2.51
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1A	5.460	10.010	SEALED	20196	2022	2.79
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1G	5.460	10.010	SEALED	20145	2022	3.98
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1A	10.010	10.730	SEALED	7023	2022	-9.64
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1G	10.010	10.730	SEALED	8263	2022	-4.95
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1A	10.730	12.320	SEALED	7023	2022	-9.64
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1G	10.730	12.320	SEALED	8263	2022	-4.95
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1A	12.320	12.710	SEALED	7023	2022	-9.64
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1G	12.320	12.710	SEALED	8263	2022	-4.95
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1A	12.710	12.870	SEALED	7023	2022	-9.64
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1G	12.710	12.870	SEALED	8263	2022	-4.95
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1A	12.870	13.730	SEALED	7023	2022	-9.64
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1G	12.870	13.730	SEALED	8263	2022	-4.95
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1A	13.730	14.080	SEALED	7023	2022	-9.64
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1G	13.730	14.080	SEALED	8263	2022	-4.95
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1A	14.080	14.220	SEALED	10662	2022	1
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1G	14.080	14.220	SEALED	10652	2022	1.13
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1A	14.220	15.700	SEALED	10662	2022	1
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1G	14.220	15.700	SEALED	10652	2022	1.13
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1A	15.700	18.230	SEALED	10662	2022	1
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1G	15.700	18.230	SEALED	10652	2022	1.13
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1A	18.230	18.380	SEALED	10662	2022	1
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1G	18.230	18.380	SEALED	10652	2022	1.13
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1A	18.380	18.610	SEALED	3322	2022	1.16
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1G	18.380	18.610	SEALED	3367	2022	2.44
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1A	18.610	28.790	SEALED	3322	2022	1.16
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1G	18.610	28.790	SEALED	3367	2022	2.44
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1A	28.790	39.670	SEALED	2944	2022	2.01
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1G	28.790	39.670	SEALED	2914	2022	1.97
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1A	39.670	51.830	SEALED	2796	2022	2.42
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1G	39.670	51.830	SEALED	2828	2022	2.55
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1A	51.830	53.130	SEALED	2796	2022	2.42
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1G	51.830	53.130	SEALED	2828	2022	2.55
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1A	53.130	55.610	SEALED	2796	2022	2.42
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1G	53.130	55.610	SEALED	2828	2022	2.55
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1A	55.610	80.030	SEALED	3722	2022	3.06
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1G	55.610	80.030	SEALED	3280	2022	-0.7
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1A	80.030	114.530	SEALED	1763	2022	-3.28
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1G	80.030	114.530	SEALED	1755	2022	-3.14
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1A	114.530	114.820	SEALED	1763	2022	-3.28
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1G	114.530	114.820	SEALED	1755	2022	-3.14
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1A	114.820	115.210	SEALED	2930	2022	-3.66
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1G	114.820	115.210	SEALED	2992	2022	-3.07
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1A	115.210	124.960	SEALED	2930	2022	-3.66
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1G	115.210	124.960	SEALED	2992	2022	-3.07
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1A	124.960	125.320	SEALED	3820	2022	-4.75
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1G	124.960	125.320	SEALED	4746	2022	-1.36
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1A	125.320	127.020	SEALED	6441	2022	-0.48
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1G	125.320	127.020	SEALED	6374	2022	-0.82
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1A	127.020	127.720	SEALED	5527	2022	0.51
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1G	127.020	127.720	SEALED	4023	2022	-1.07
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1A	127.720	128.640	SEALED	4936	2022	-3.68
CUNNINGHAM HIGHWAY (IPSWICH - WARWICK)	17B		1G	127.720	128.640	SEALED	5777	2022	0.28
KALBAR CONNECTION ROAD	2102		1A	0.000	6.600	SEALED	1018	2022	-0.71
KALBAR CONNECTION ROAD	2102		1G	0.000	6.600	SEALED	987	2022	-1.31
BOONAH - FASSIFERN ROAD	214		1A	0.000	7.287	SEALED	1809	2022	-0.52
BOONAH - FASSIFERN ROAD	214		1G	0.000	7.287	SEALED	1862	2022	-0.26
BOONAH - FASSIFERN ROAD	214		1A	7.287	7.527	SEALED	1809	2022	-0.52
BOONAH - FASSIFERN ROAD	214		1G	7.287	7.527	SEALED	1862	2022	-0.26
BOONAH - FASSIFERN ROAD	214		1A	7.527	11.447	SEALED	1809	2022	-0.52
BOONAH - FASSIFERN ROAD	214		1G	7.527	11.447	SEALED	1862	2022	-0.26

Background SAR4 per day

Marginal cost data for sealed segments of the selected road sections

TOTAL 0 6817.22608 6903.28682 6989.37563 7075.408303 5438.041257 15155.04472 55934.55881 57828.62452 59722.69023 61618.75594 6177.613033 6177.613033 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0