Traffic Impact Assessment Report

Mixed Use Development – Portion 50 of the Farm 202 Hansmoeskraal, Pacaltsdorp

Prepared for Delplan Consulting
4 December 2025
Client Reference No. 50/202 Pacaltsdorp

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SMEC Company Details

Approved by	Emile Jordaan
Address	65 Riebeek Street, Cape Town, 8001
Phone	+27 21 417 2900
Email	Emile.Jordaan@smec.com
Website	www.smec.com
Signature	

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1. Introduction

SMEC South Africa (Pty) Ltd was appointed by Delplan Consulting to conduct a Traffic Impact Assessment for the proposed mixed-use development on Portion 50 of the Farm 202 Hansmoeskraal, Pacaltsdorp, Western Cape. The site is bounded by Hibiscus Street to the north and Beach Road to the west. A Locality plan is shown in Figure 1-1.

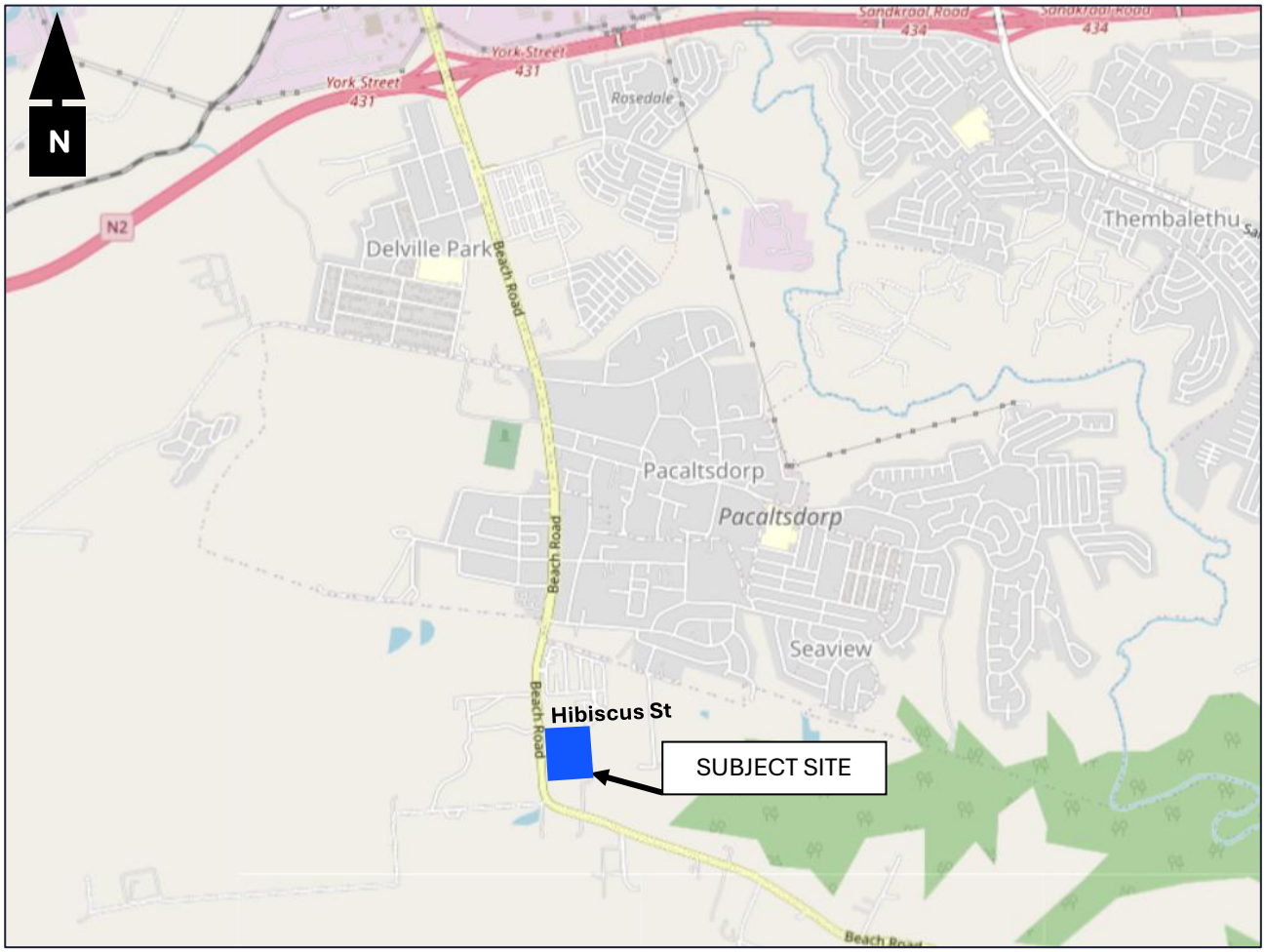

Figure 1-1: Locality Plan (Source: OpenStreetMap)

The subject site measures approximately 3.4 hectares in extent and will comprise of 51 townhouses and a 3 718 square metre GLA Shopping Centre. The site development plan for the proposed development is shown in Figure 1-2.

The purpose of the Traffic Impact Assessment is to quantify the anticipated impact of the development traffic on the surrounding road network, and recommend remedial measures as required. The study was conducted in accordance with The Committee of Transport Officials South African Traffic Impact and Site Traffic Assessment Manual (COTO, TMH 16 Volume 1).

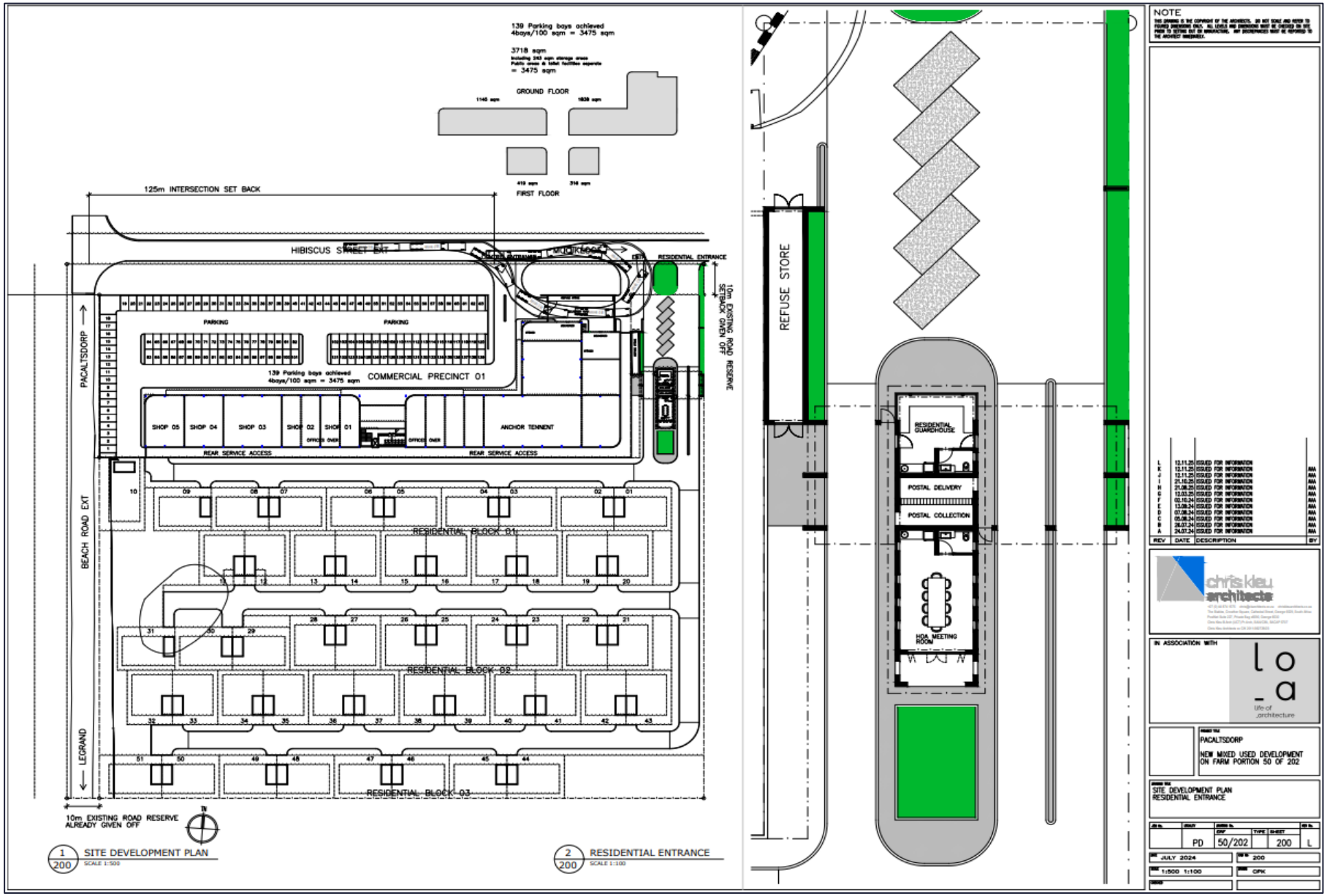

Figure 1-2: Site Development Plan (chris kleu architects, September 2024)

2. Background Information

2.1 Existing Roads

Beach Road is classified as a Class 3 Minor Arterial. It comprises of one lane per direction in the vicinity of the site and experiences low traffic flows during peak hours.

Heather Street is classified as a Class 4 Collector Road providing access to the surrounding residential area. It comprises of one lane per direction and experiences low traffic flows during peak hours.

Hibiscus Street is classified as a Class 5 Local Street terminating in a cul-de-sac to the east of the subject site. It provides access to erven in the surrounding residential area. It comprises of one lane per direction and experiences low traffic flows during peak hours.

Refer to Figure 2-1.

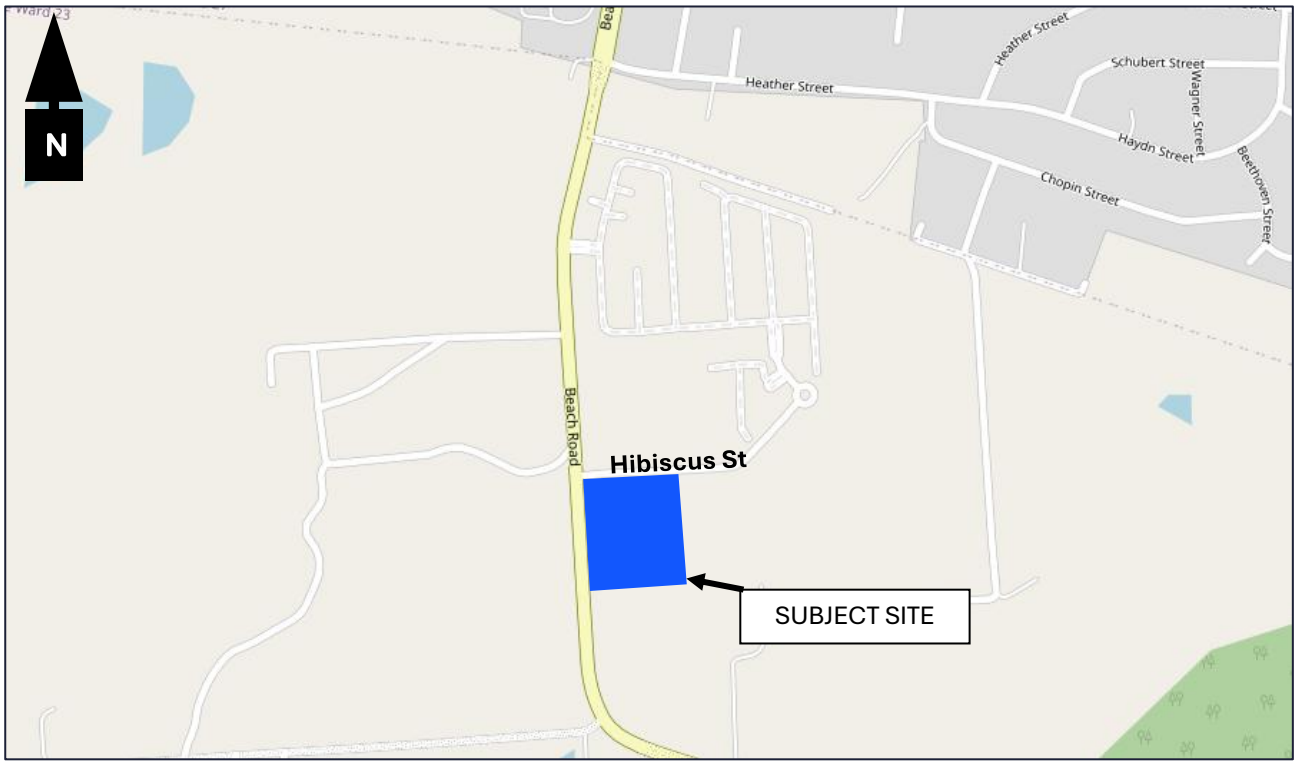

Figure 2-1: Existing Road Network (Source: OpenStreetMap)

2.2 Public Transport Facilities

There are no public transport lay-byes in the vicinity of the site.

2.3 Non-motorised Transport Facilities

Paved pedestrian walkways are provided along the eastern side of Beach Road from Hibiscus Street northward and along the northern side of Hibiscus Street. Refer to Figure 2-2.

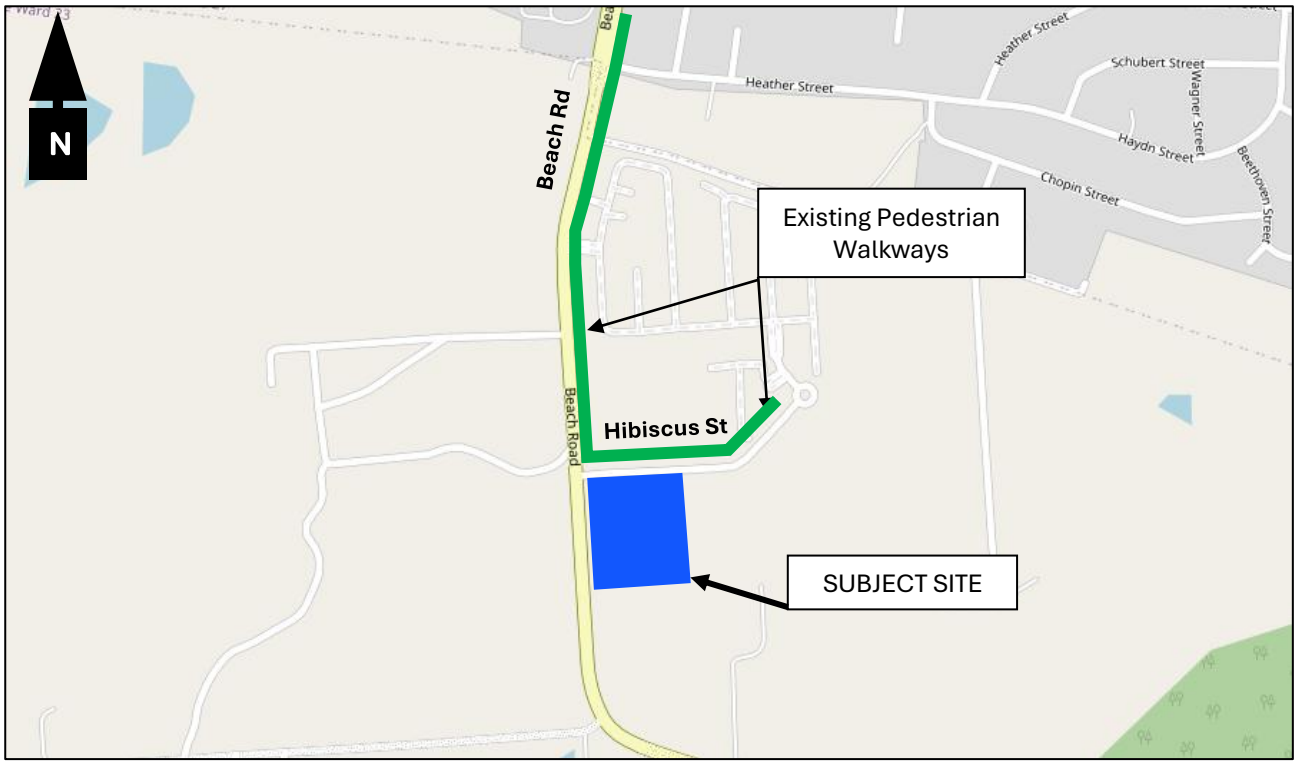

Figure 2-2: Non-motorised Transport Facilities

The commercial component of the development would attract pedestrian traffic thereto. It is therefore recommended that a pedestrian access be provided to the site, allowing patrons to reach the shop frontages safely. It is also recommended that a pedestrian walkway be provided to the south of Hibiscus Street along the extent of the property boundary in an aim to serve the anticipated pedestrian traffic.

2.4 Site Access

It is planned for the development to be served by two accesses along Hibiscus Street. Access 1 will be located ~125 metres to the east of the unsignalized full intersection with Beach Road and Access 2 to be ~50 metres the east Access 1. Refer to Figure 2-3.

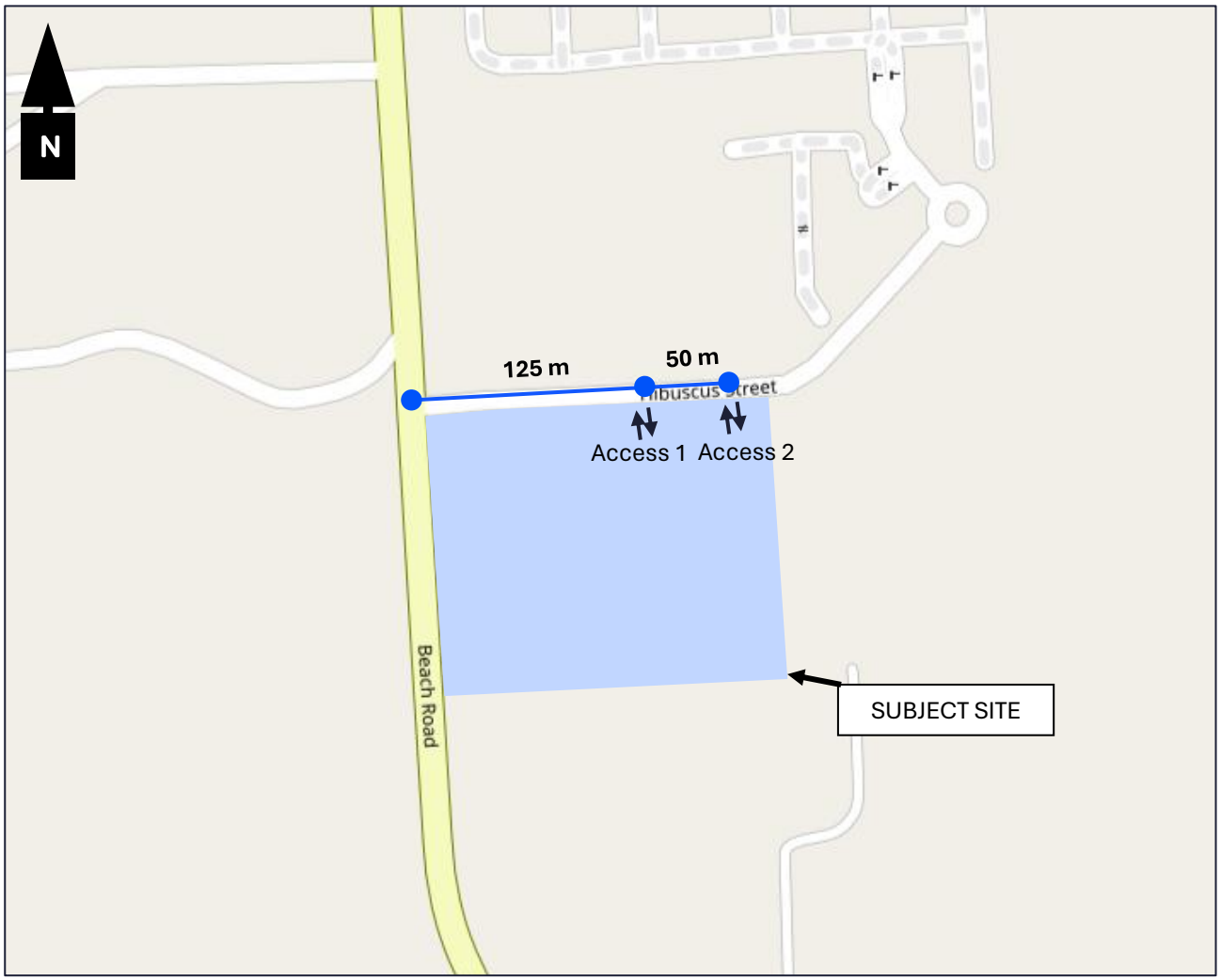

Figure 2-3: Proposed Site Access

The access spacing requirements were derived from the Western Cape Government (WCG) Access Management Guidelines (2020).

Access 1 is classified as an equivalent collector driveway as it is anticipated to serve 100 – 625 vehicles per hour per direction, whereas Access 2 is classified as a low-volume driveway as it is anticipated to serve 5 – 30 vehicles per hour per direction.

The minimum spacing requirement for a Class 5 Road within an intermediate roadside development environment are as follows:

- 125 metres from an unsignalized full intersection (equivalent collector driveway) to an unsignalized full intersection
- 40 metres from the second last driveway (Access 2) to the last driveway (Access 1)

Taking the above into consideration, it is our submission that the spacing of Access 1 and Access 2 does conform to the WCG access spacing requirements.

3. Traffic Demand Estimation

3.1 Assessment Years

A base year assessment was undertaken to identify shortcomings in the road-based capacity in the short term, if any. In addition, it is required to grow traffic flows to an acceptable forecast year in order to ensure that the proposed road network would be able to operate satisfactorily once the development traffic is added to the surrounding road network.

TMH 16 Volume 1 Version 1.0 states that transportation improvements for developments must be designed for a forecast year of 5 years. Taking the above into consideration, a 2025 Base Year and a 2030 Forecast Year was used for this study.

3.2 Assessment Hours

The assessment has been undertaken considering the periods during which development traffic would result in the highest traffic demand. Taking into consideration the planned land use rights associated with the development, it was deemed suitable to assess the Weekday AM, Weekday PM, and Saturday Peak Hours.

3.3 Traffic Counts

Taking into consideration the location and extent of the proposed development with relation to the surrounding road network, the following traffic count surveys were undertaken as part of this project assignment:

- Counting Station 1: Intersection of Beach Road and Hibiscus Street
- Counting Station 2: Intersection of Beach Road and Heather Street

Traffic count locations are shown in Figure 3-1.

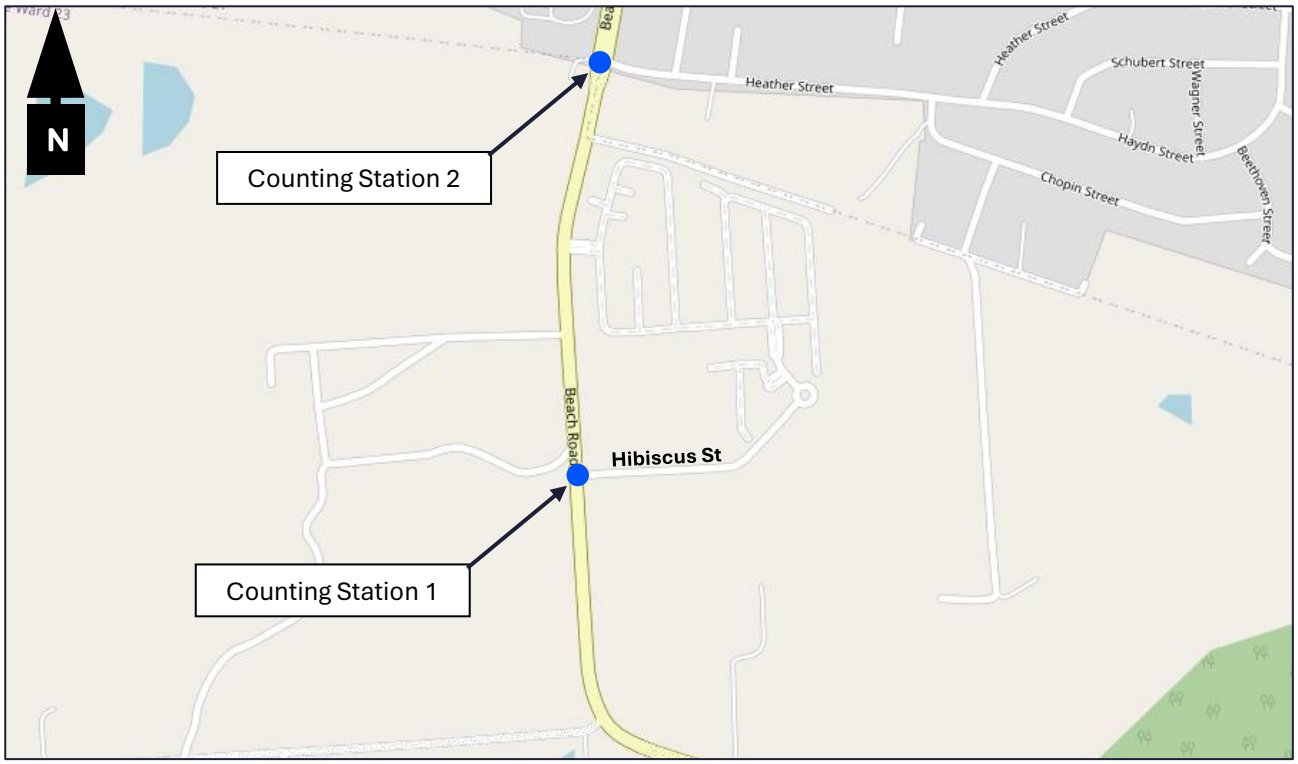

Figure 3-1: Traffic Count Locations

Details of the traffic survey are provided below:

- Date counted 16 and 17 August 2024
- Day Weekday AM, Weekday PM, and Saturday Midday counts
- Congestion levels Low
- Enumerator SMEC South Africa (Pty) Ltd

The detailed traffic survey data is provided in Appendix A**.**

Typical peak hours for the intersections under discussion are as follows:

- Weekday AM Peak Hour 06h45 – 07h45
- Weekday PM Peak Hour 17h00 – 18h00
- Weekend MD Peak Hour 11h15 – 12h15

The 2024 Traffic Survey Counts were grown by 3% to represent 2025 Base Year peak hour traffic flows. The 2025 Base Year peak hour traffic flows are shown in Figure 3-2.

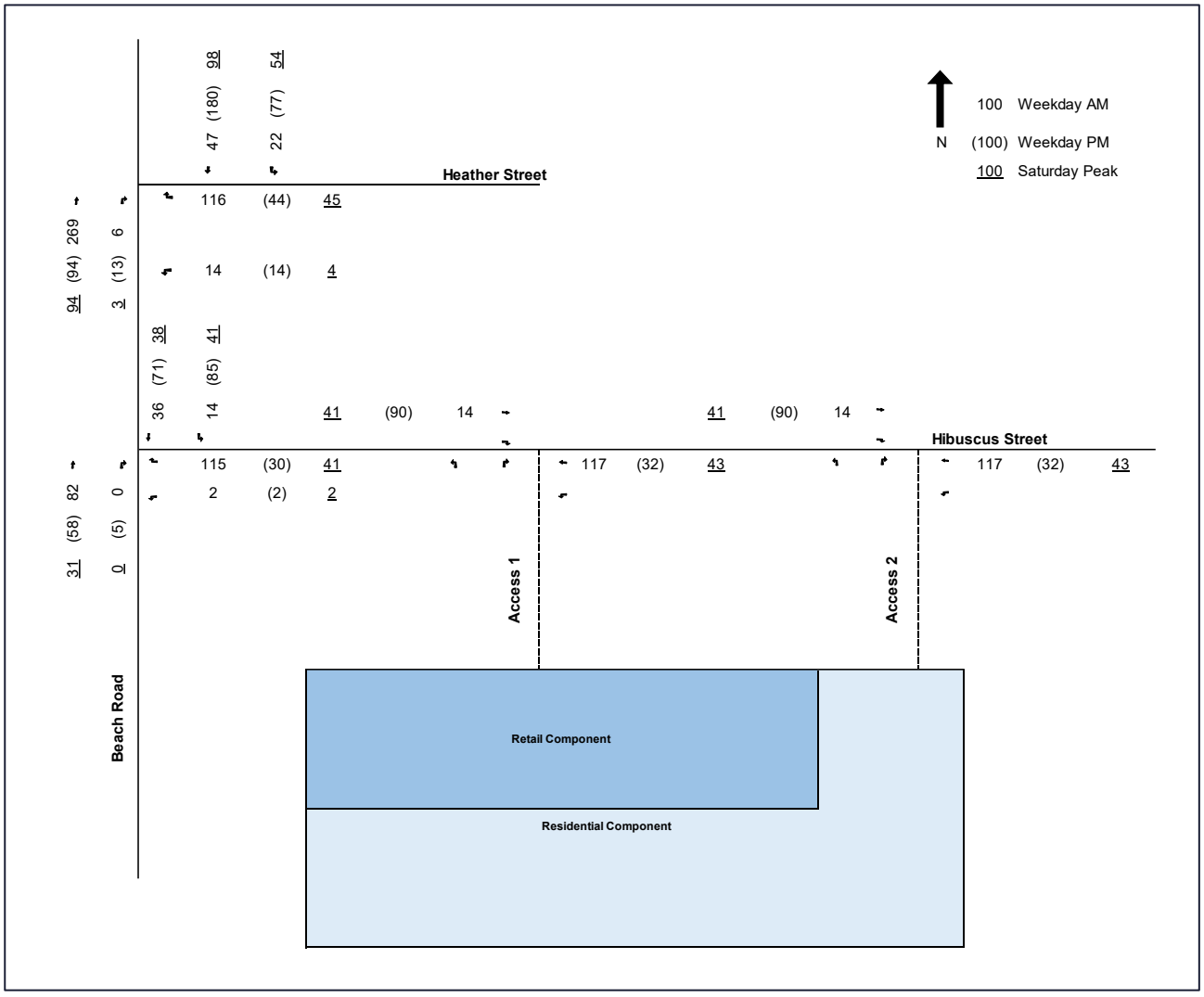

Figure 3-2: 2025 Base Year Peak Hour Traffic Flows

3.4 Traffic Growth Rates

A traffic growth rate is applied to background traffic in order to determine the anticipated growth in this traffic besides that relating to planned and new developments. The Committee of Transport Officials Trip Data Manual (COTO, TMH 17 Volume 1 Version 1.01) provides typical growth rates to be used for growth areas based on the existing/anticipated rate of growth. Refer to Table 3-1.

Table 3-1: Typical Growth Rates

Development Area	Growth Rate
Low Growth Areas	0% - 3%
Average Growth Areas	3% - 4%
Above Average Growth Areas	4% - 6%
Fast Growing Ares	6% - 8%
Exceptionally High Growth Areas	> 8%

Taking into consideration the nature and extent of development within this area, an annual compounded traffic growth rate of 3.0% was applied to the 2025 Background traffic flows in order to derive the 2030 Forecast Year traffic flows.

The 2030 Forecast Year traffic flows are shown in Figure 3-3.

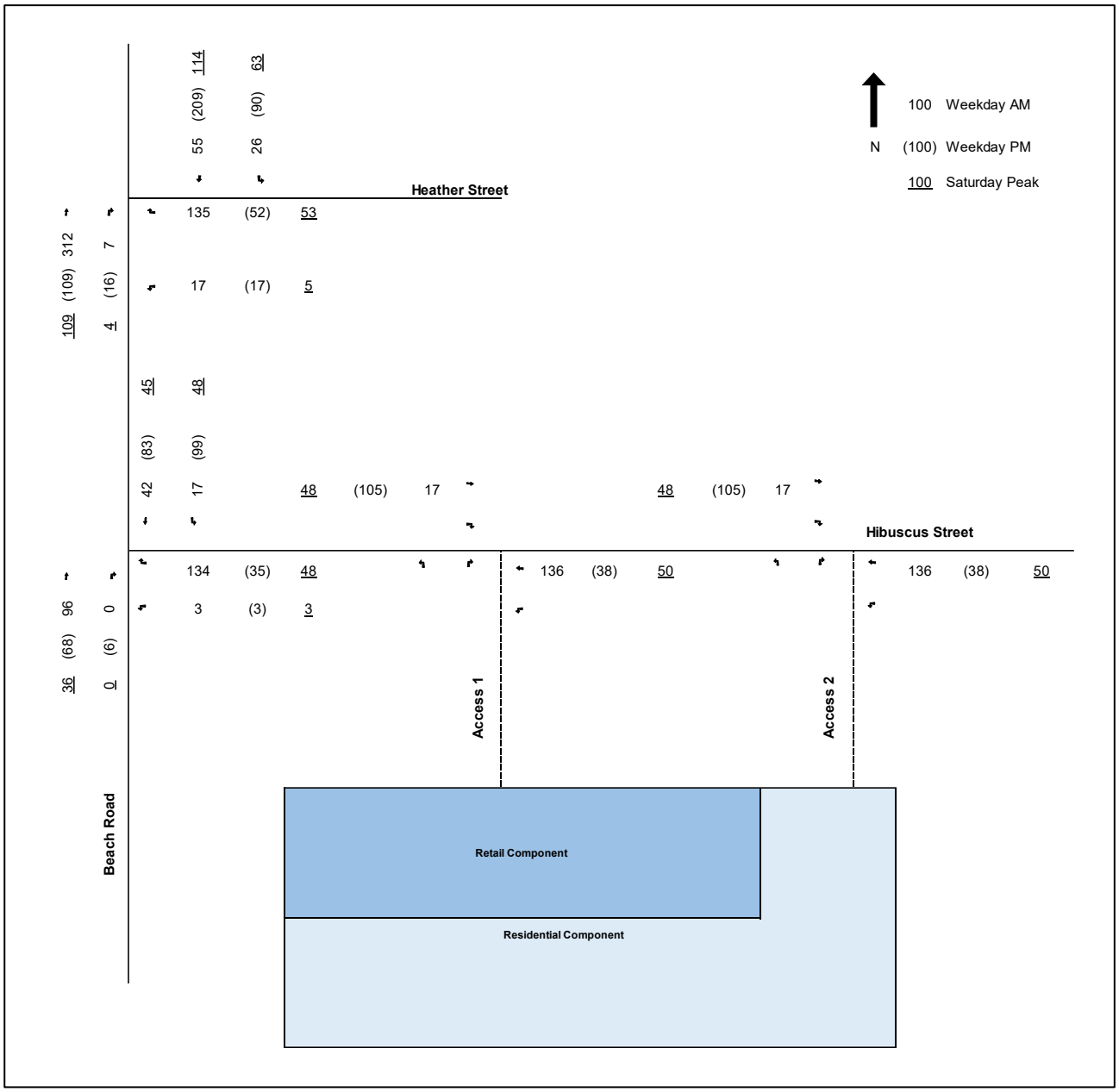

Figure 3-3: 2030 Forecast Year Traffic Flows

4. Trip Generation, Distribution and Assignment

4.1 Trip Generation

The Trip Generation Rates for the land use types forming part of the development were obtained from the COTO TMH 17 South African Trip Data Manual dated September 2013.

The trip generation of the proposed development is shown in Table 4-1.

Table 4-1: Proposed Development Trip Generation

TMH17 Land Use	Quantity	Trip Generation Rates			Adjustment Factors (Mixed-use Development)	Traffic generation (vph)					
		Weekday		Saturday		Weekday				Saturday	
						AM		PM			
		AM	PM			IN	OUT	IN	OUT	IN	OUT
Townhouses (Simplexes & Duplexes)	51 units	0.85	0.85	0.45	15%	9	28	26	11	10	10
Shopping Centre	3 718 m^2	0.6	3.4	4.5	0%	57	31	247	247	327	327
Shopping Centre: New						57	31	235	235	319	319
Shopping Centre: Pass-By						0	0	12	12	8	8
ALL Trips						66	59	273	258	337	337
ALL New Trips						**66**	**59**	**261**	**246**	**329**	**329**
						125		**507**		**658**	

It is anticipated that the proposed development would generate 125, 507 and 658 new vehicular trips during the Weekday AM, Weekday PM, and Saturday peak hours respectively.

4.2 Trip Distribution

Trip distribution was estimated manually based on existing traffic flows, traffic generators in the surrounding areas and the development access locations. The trip distribution figures provided are as follows:

- Figure 4-1 Trip Distribution: New Trips: Retail Component
- Figure 4-2 Trip Distribution: New Trips: Residential Component
- Figure 4-3 Trip Distribution: Pass-by Trips

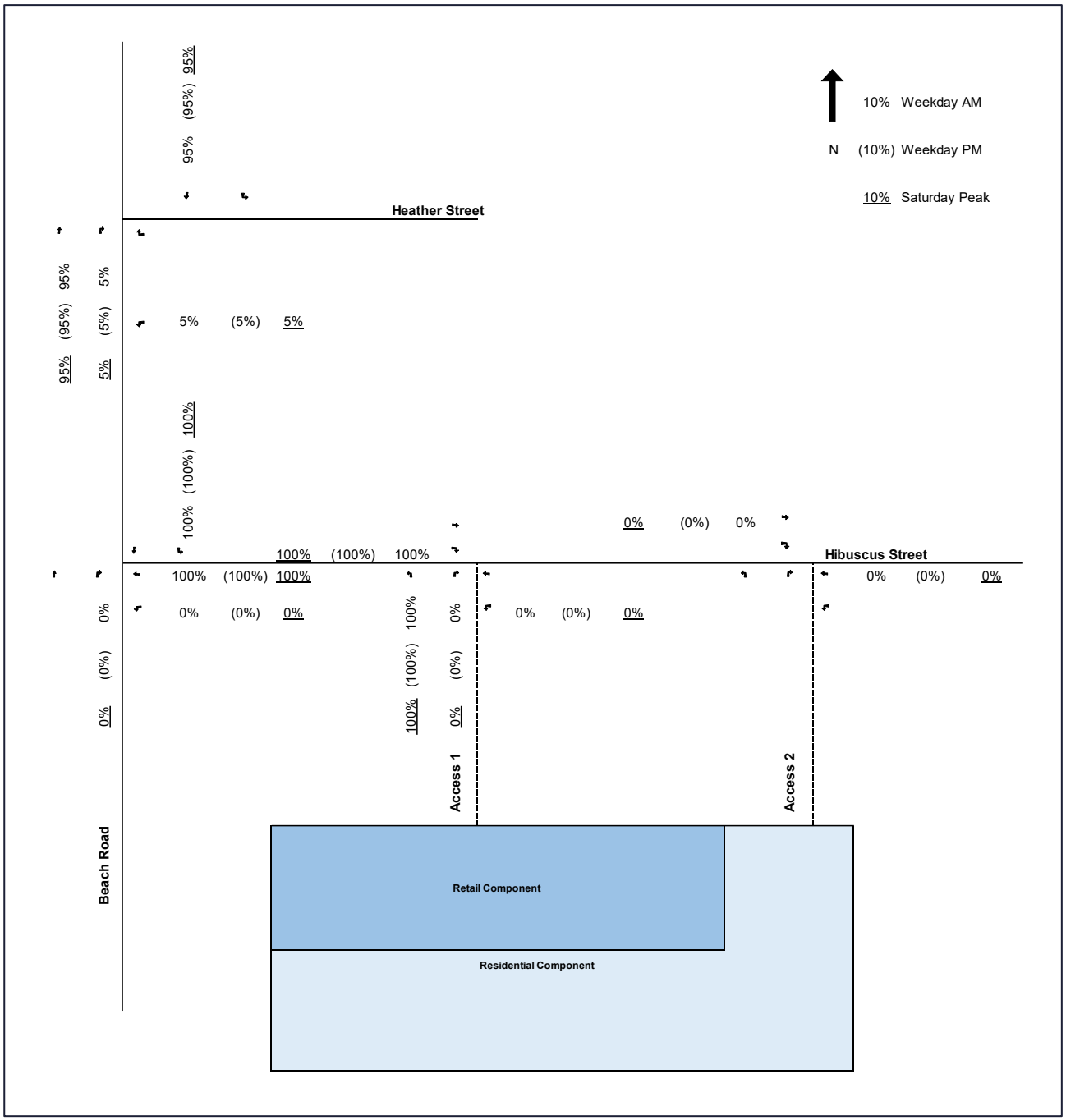

Figure 4-1: Trip Distribution: New Trips: Retail Component

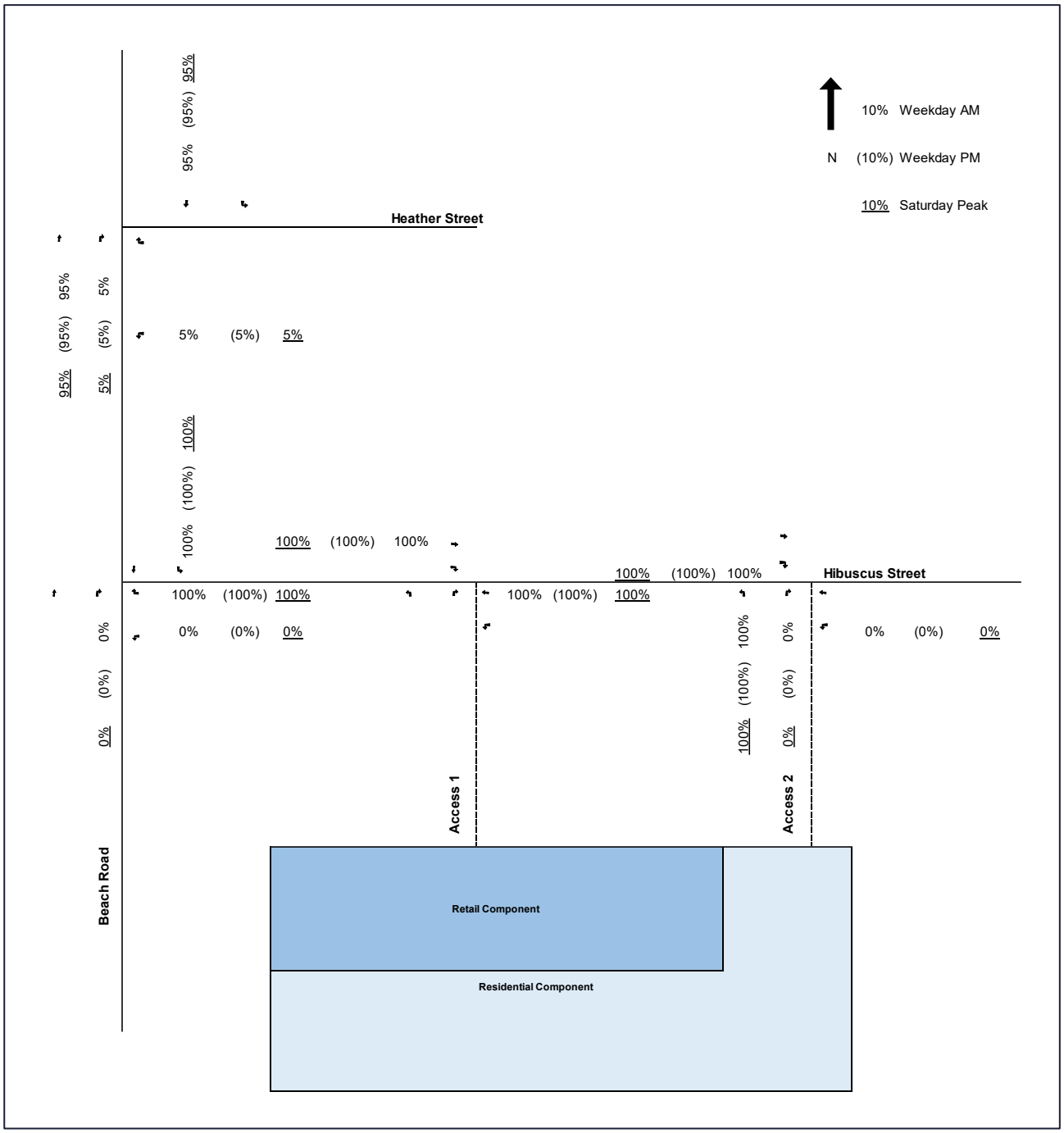

Figure 4-2: Trip Distribution: New Trips: Residential Component

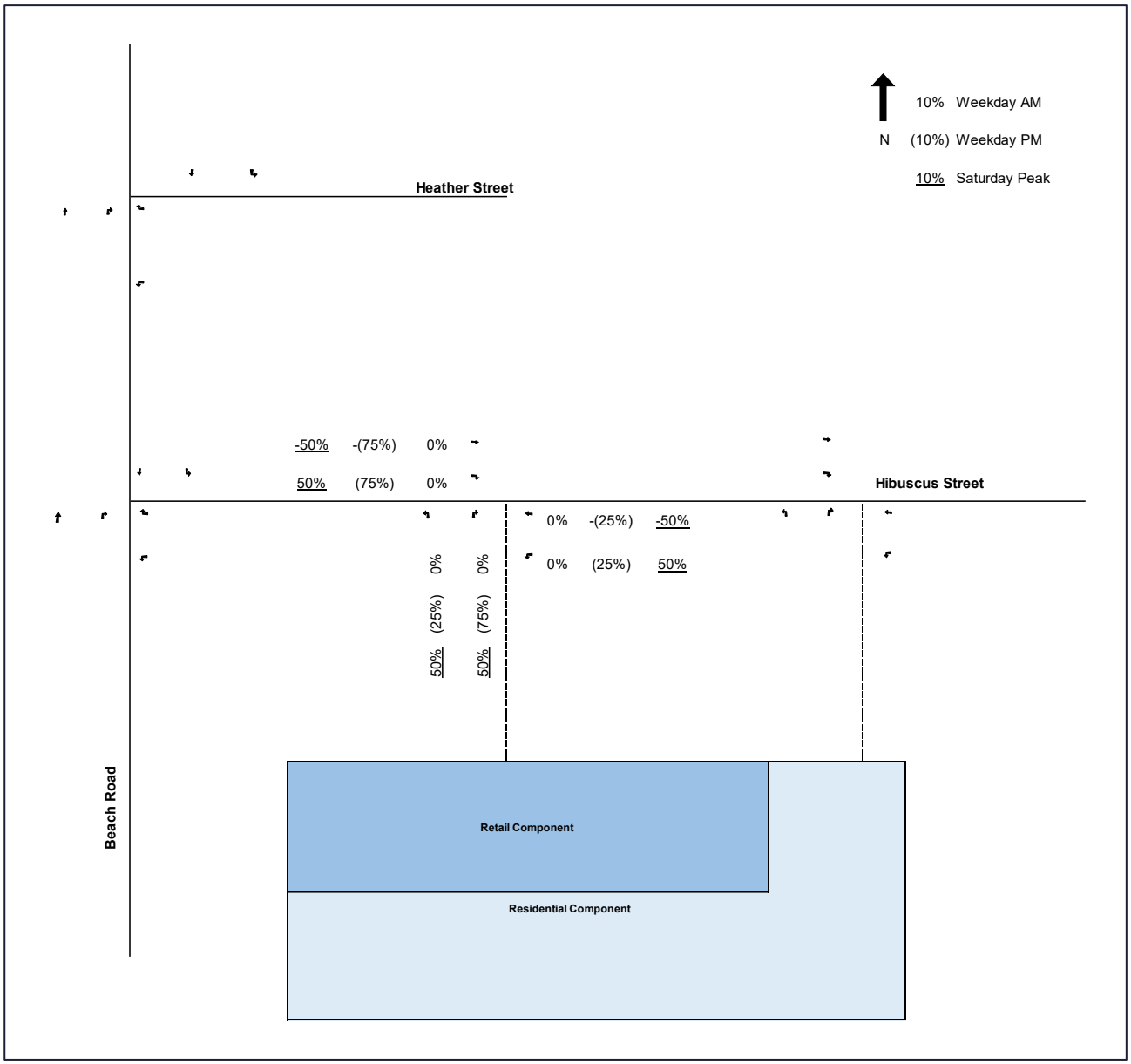

Figure 4-3: Trip Distribution: Pass-by Trips

4.3 Traffic Assignment

Traffic assignment involves determining the amount of traffic that will use specific routes in the network based on the associated trip distribution. The traffic assignment figures provided are as follows:

- Figure 4-4 Traffic Assignment: New Trips
- Figure 4-5 Traffic Assignment: Pass-by Trips

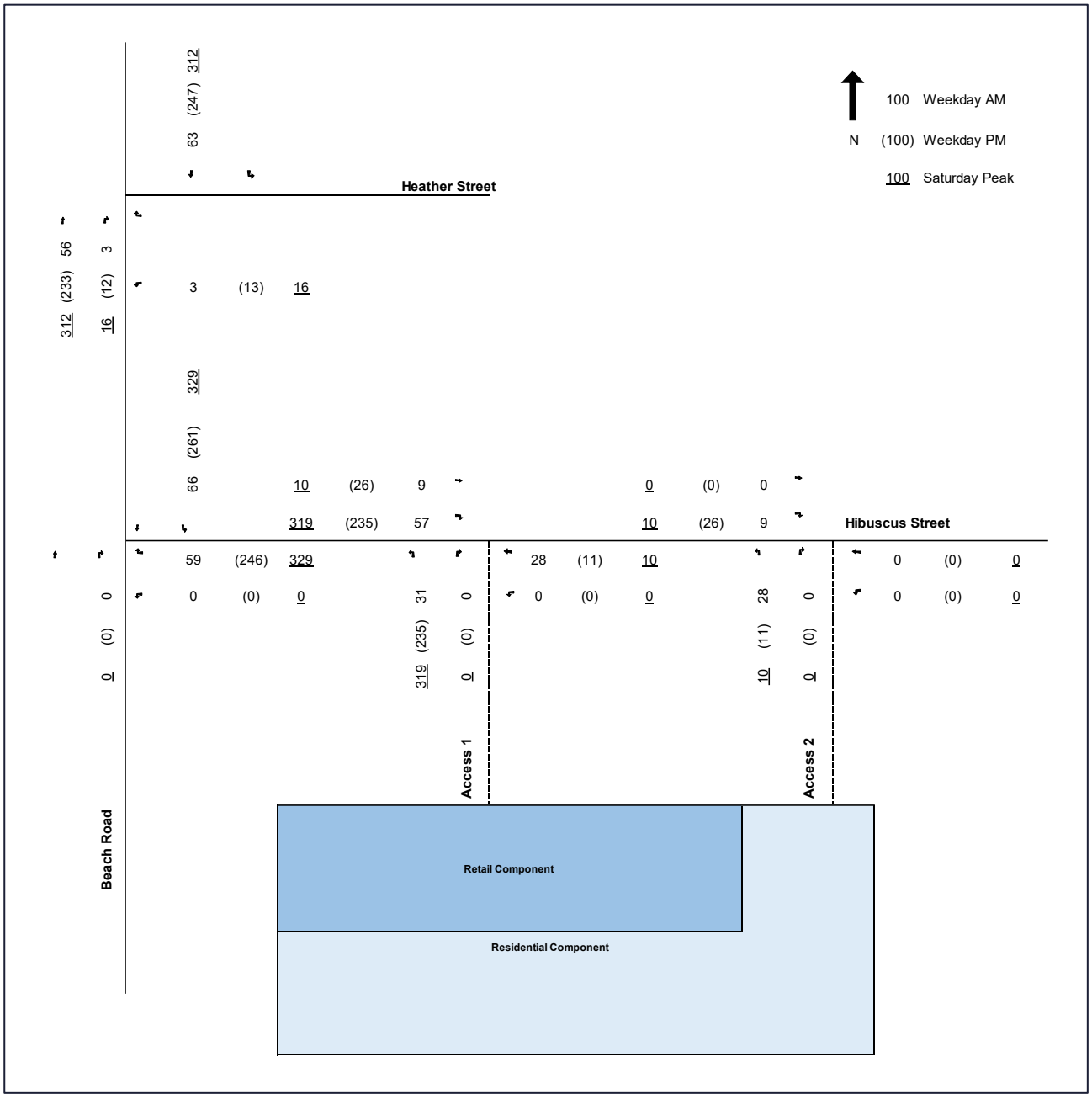

Figure 4-4: Traffic Assignment: New Trips

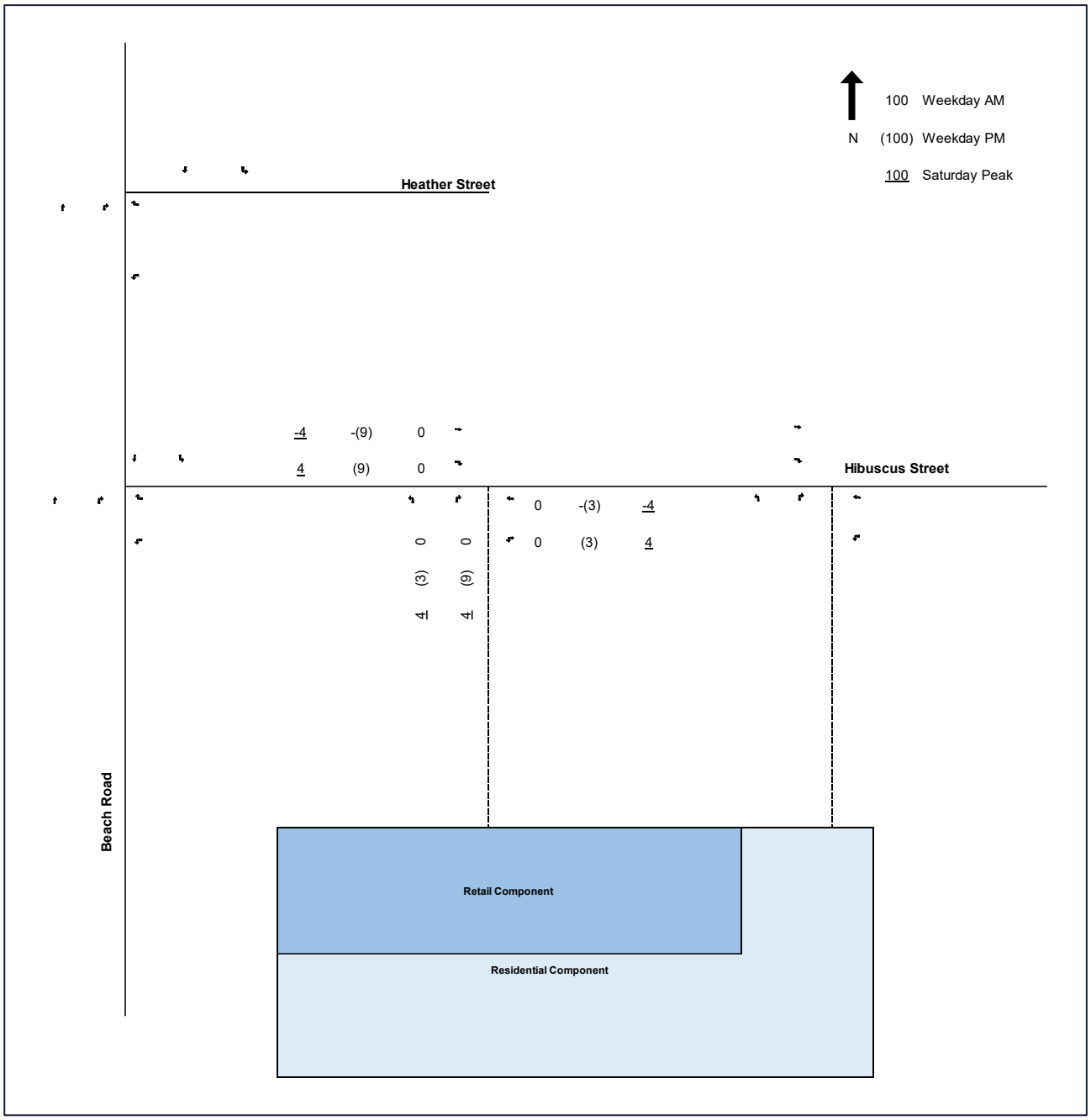

Figure 4-5: Traffic Assignment: Pass-by Trips

4.4 Total Traffic Demand

Total traffic demand figures are provided for each forecast year forming part of the study, as follows:

- Figure 4-6 2025 Base Year Traffic Flows + Development Trips
- Figure 4-7 2030 Forecast Year Traffic Flows + Development Trips

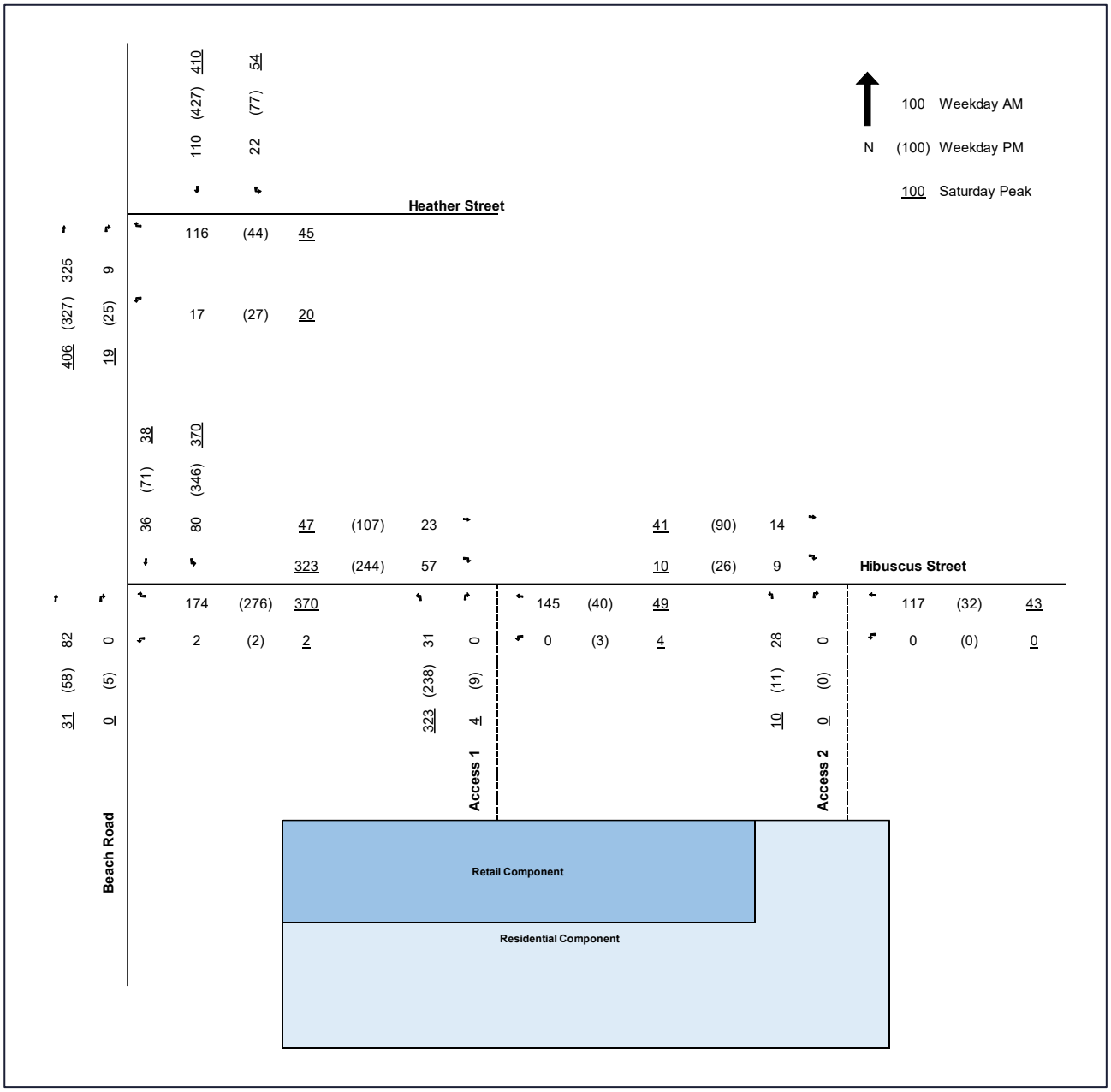

Figure 4-6: 2025 Base Year Traffic Flows + Development Trips

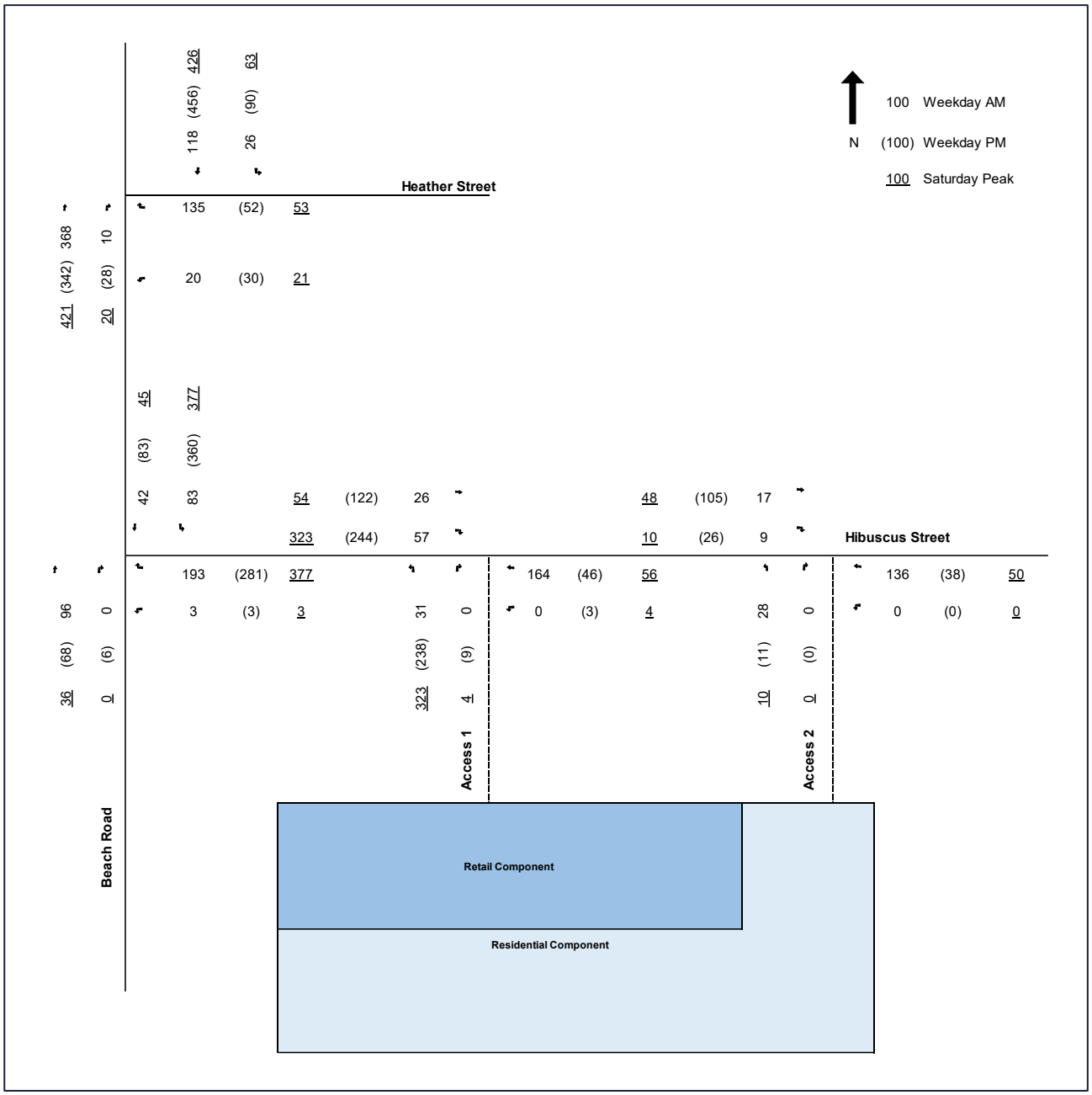

Figure 4-7: 2030 Forecast Year Traffic Flows + Development Trips

5. Traffic Analyses

Intersection capacity analyses were undertaken to determine the anticipated operational performance of the site access and surrounding road network, taking into consideration the anticipated development trips. The state-of-the-art traffic engineering software package, SIDRA Intersection 9.1 software, was used. The intersections analysed for the development are listed below:

- Beach Road and Heather Street
- Beach Road and Hibiscus Street
- Hibiscus Street and Proposed Access 1
- Hibiscus Street and Proposed Access 2

The following scenarios were analysed as part of this project assignment:

- 2025 Base Year
- 2025 Base Year + Development Trips
- 2030 Forecast Year + Development Trips

The operational performance of an intersection is typically quantified in terms of Level of Service as defined by the SIDRA Intersection User Guide Ver. 8 (2018). These definitions relate average delays at intersections (for individual turning movements, for each approach and for the overall intersection) to a level of service ranging from A to F, as shown in Table 5-1.

Table 5-1: Intersection-Based Level of Service Criteria

Level of Service	Control Delay per Vehicle in Seconds (d)			LOS for V/C Ratio
	Signals	Roundabouts	Stop Signs and Yield Signs	V/C > 1
A	d ≤ 10	d ≤ 10	d ≤ 10	F
B	10 <d ≤ 20	10 < d ≤ 20	10 <d ≤ 15	F
C	20 < d ≤ 35	20 < d ≤ 35	15 < d ≤ 25	F
D	35 < d ≤ 55	35 < d ≤ 50	25 < d ≤ 35	F
E	55 < d ≤ 80	50 < d ≤ 70	35 < d ≤ 50	F
F	80 < d	70 < d	50 < d	F

Detailed SIDRA outputs are contained in Appendix B.

5.1 Beach Road and Heather Street

The existing intersection of Beach Road and Heather Street takes the form of a priority-controlled (all way a stop-controlled) T-junction. The northern approach comprises of a through lane and a left-turn lane. The eastern and southern approaches comprise of a single lane serving all movements. Refer to Figure 5-1.

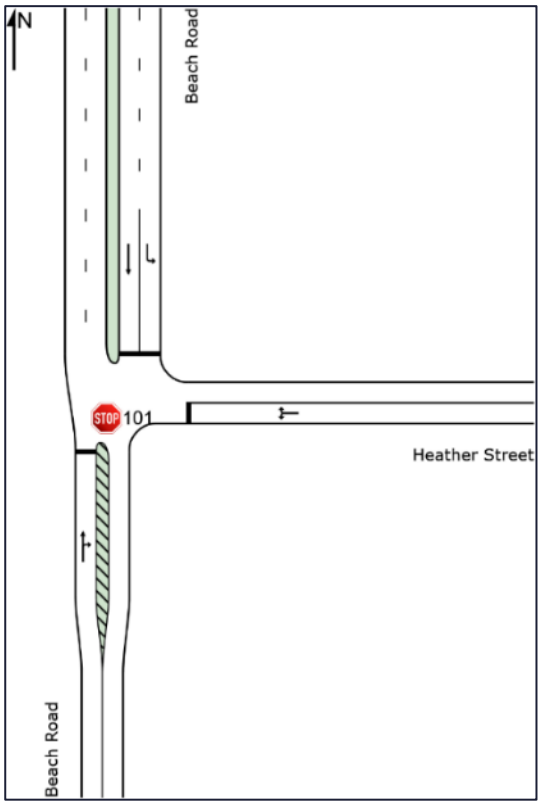

Figure 5-1: Existing Intersection Layout: Beach Road and Heather Street

2025 Base Year Traffic Flows

Taking into consideration the 2025 Base Year traffic flows, the intersection is currently operating at a Level of Service C during the Weekday AM, Weekday PM, and Saturday Peak Hours, with an average delay of approximately 19, 17 and 16 seconds respectively.

2025 Base Year + Development Trips

Taking into consideration the 2025 Base Year traffic flows plus the anticipated development trips, the intersection is anticipated to operating at a Level of Service C, C and D during the Weekday AM and Weekday PM and Saturday Peak Hours with an average delay of approximately 22, 24 and 25 seconds respectively.

2030 Forecast Year + Development Trips

Taking into consideration 2030 Forecast Year traffic flows plus the anticipated development trips, the intersection is anticipated to operating at a Level of Service D, E and E during the Weekday AM, Weekday PM, and Saturday Peak Hours, with an average delay of approximately 31, 44 and 46 seconds respectively.

It is concluded that the existing intersection configuration is not able to accommodate the 2030 Forecast Year traffic flows plus the anticipated development trips at an acceptable Level of Service.

The proposed intersection of Beach Road and Heather Street will take the form of a priority-controlled (all way a stop-controlled) T-junction. The northern approach will comprise of a through lane and a shared through and left-turn lane. The eastern and southern approaches comprise of a single lane serving all movements. In addition, a short lane will be added to the southern Exit. Refer to Figure 5-1.

5.2 Beach Road and Hibiscus Street

The existing intersection of Beach Road and Hibiscus Street takes the form of a priority-controlled T-junction, with the east approach subject to stop control. The northern approach comprises of a through lane and a short left-turn lane. The eastern and southern approaches comprise of a single lane serving all movements. Refer to Figure 5-2.

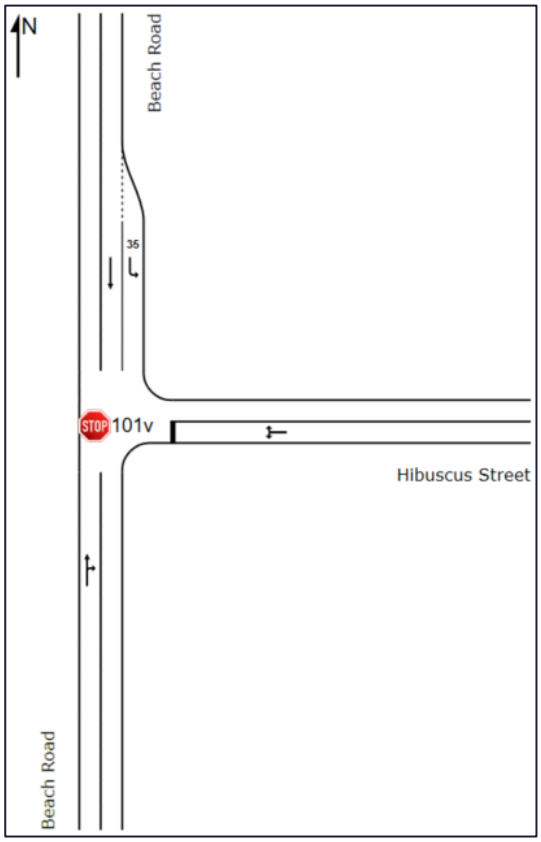

Figure 5-2: Existing Intersection Layout: Beach Road & Hibiscus Street

2025 Base Year Traffic Flows

Taking into consideration the 2025 Base Year traffic flows, the critical movements under stop control are currently operating at a Level of Service A during the Weekday AM, Weekday PM, and Saturday Peak Hours, with an average delay of approximately 8 seconds.

2025 Base Year + Development Trips

Taking into consideration the 2025 Base Year traffic flows plus the anticipated development trips, the critical movements under stop control are anticipated to operate at a Level of Service A during the Weekday AM, Weekday PM, and Saturday Peak Hours, with an average delay of approximately 10 seconds.

2030 Forecast Year + Development Trips

Taking into consideration the 2030 Forecast Year traffic flows plus the anticipated development trips, the critical movements under stop control is anticipated to operate at a Level of Service A, B and B during the Weekday AM, Weekday PM, and Saturday Peak Hours, with an average delay of approximately 9, 10 and 10 seconds respectively.

It is concluded that the existing intersection configuration is able to accommodate the 2030 Forecast Year traffic flows plus the anticipated development trips at an acceptable Level of Service.

5.3 Hibiscus Street and Proposed Site Access 1

It is proposed that the proposed Site Access 1 along Hibiscus Street take the form of a priority-controlled T-junction, with the south approach subject to stop control. It is proposed that all approaches comprise of a single lane serving all movements. Refer to Figure 5-3.

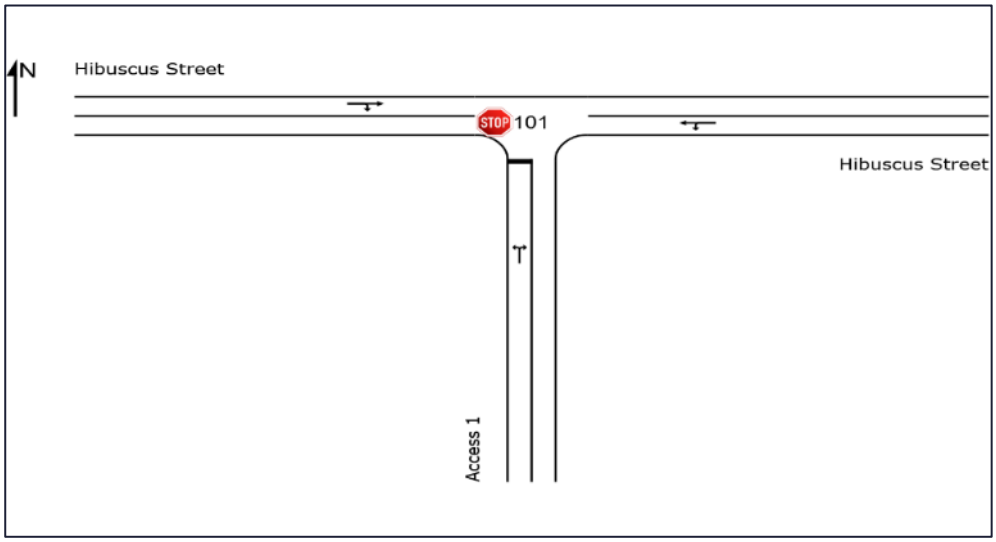

Figure 5-3: Proposed Site Access 1

2025 Base Year + Development Trips

Taking into consideration the 2025 Base Year traffic flows plus the anticipated development trips, the critical movements under stop control are anticipated to operate at a Level of Service A during the Weekday AM, Weekday PM, and Saturday Peak Hours, with an average delay of approximately 9 seconds.

2030 Forecast Year + Development Trips

Taking into consideration the 2030 Forecast Year traffic flows plus the anticipated development trips, the critical movements under stop control are anticipated to operate at a Level of Service A during the Weekday AM, Weekday PM, and Saturday Peak Hours, with an average delay of approximately 9 seconds.

It is concluded that the proposed intersection configuration would be able to accommodate the 2030 Forecast Year traffic flows plus the anticipated development trips at an acceptable Level of Service.

5.4 Hibiscus Street and Proposed Site Access 2

It is proposed that the proposed Site Access 2 along Hibiscus Street take the form of a priority-controlled T-junction, with the south approach subject to stop control. It is proposed that all approaches comprise of a single lane serving all movements. Refer to Figure 5-4.

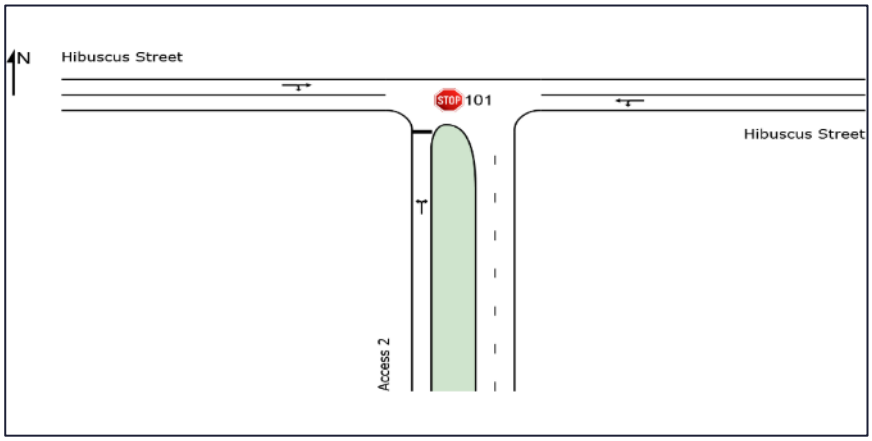

Figure 5-4: Proposed Site Access 2

2025 Base Year + Development Trips

Taking into consideration the 2025 Base Year traffic flows plus the anticipated development trips, the critical movements under stop control are anticipated to operate at a Level of Service A during the Weekday AM, Weekday PM, and Saturday Peak Hours, with an average delay of approximately 9 seconds.

2030 Forecast Year + Development Trips

Taking into consideration the 2030 Forecast Year traffic flows plus the anticipated development trips, the critical movements under stop control are anticipated to operate at a Level of Service A during the Weekday AM, Weekday PM, and Saturday Peak Hours, with an average delay of approximately 9 seconds.

It is concluded that the proposed intersection configuration would be able to accommodate the 2030 Forecast Year traffic flows plus the anticipated development trips at an acceptable Level of Service.

5.5 Analysis Summary

A summary of the analysis outputs is provided in Table 5-2.

Table 5-2: Analysis Summary

Intersection	2025 Base Year	2025 Base Year + Development Trips	2030 Forecast Year + Development Trips
Beach Road and Heather Street	C / C / C	C / C / D	C / D / D
Beach Road and Hibiscus Street	A / A / A*	A / A / A*	A / B / B*
Hibiscus Street and Access 1	-	A / A / A*	A / A / A*
Hibiscus Street and Access 2	-	A / A / A*	A / A / A*

* Worst approach LOS

6. Site Impact Assessment

A site traffic impact assessment was undertaken to evaluate internal operations, parking and loading bay requirements as well as the access throat length. Where necessary, suitable mitigation measures are proposed.

6.1 Internal Operations

The internal layout of the planned development should be designed in such a way to promote ease of movement. A minimum 12-metre bell mouth radius is recommended for use at all internal road junctions. The access and internal road layout should be such to allow for the swept path of fire trucks. Should the internal roads not be designed to cater for moving company vehicles, suitable provision should be made outside the development, in the direct vicinity of the access.

6.2 Parking

Parking provision is an important consideration of any development and would ultimately ensure that vehicular traffic is accommodated on-site in its entirety. Insufficient parking provision would have dire consequences on the operational performance of the site and surrounding public roads, as well as on road safety.

The George Integrated Zoning Scheme By-Law (2023) was used to ascertain the parking requirements applicable to the development. Taking into consideration the planned roll-out of the GoGeorge bus network into Pacaltsdorp, it is our submission that the subject site falls within a PT1 Area, i.e., areas where the use of public transport is to be promoted, but where the Council considers the provision of public transport to be inadequate.

The parking requirements associated with the residential component of the planned development are provided in Table 6-1.

Table 6-1: Parking Requirements: Residential Land Use

Land Use	Quantity	Minimum Parking Ratio	Parking Requirement (bays)
Town Housing	51 Units	1 bay per dwelling unit 0.25 bays/unit for visitors	51 for residents 13 for visitors

It is concluded that 64 parking bays would need to be provided to serve the residential component of the development.

The commercial component of the planned development was taken to coincide with the land use type “Neighbourhood Shop” from the George Integrated Zoning Scheme By-Law (2023). The parking requirements of the commercial component of the planned development are provided in Table 6-2.

Table 6-2: Parking Requirements: Commercial Land Use

Land Use	Quantity	Minimum Parking Ratio	Parking Requirement (bays)
Shopping Centre	3 718 m^2 GLA	3 bays per 100 sqm GLA	112

It is concluded that 91 parking bays would need to be provided for the commercial component of the development, of which 2 parking bays would need to be accessible to the physically disabled.

The Site Development Plan makes provision for 139 parking bays for the commercial component of the development; therefore, sufficient provision is made to meet the requirements.

6.3 Loading

The George Integrated Zoning Scheme By-Law (2023) was used to ascertain the loading bay requirements to be adhered to. Taking into consideration the planned floor area of the shopping centre, three (3 No.) loading bays would be required to serve the development.

It is our submission that the three (3 No.) loading bays on the Site Development Plan would be sufficient for the requirements of the commercial component of the proposed development.

6.4 Throat Length

Adequate throat length provision is essential in ensuring efficient operation of a development access and preventing possible spill-back onto the surrounding public road. The throat length requirements were derived from the Committee of Transport Officials South African Traffic Impact and Site Traffic Assessment Standards and Requirements Manual (COTO, TMH 16 Volume 2).

Site Access 1 will take the form of a priority-controlled access onto a Class 5b Residential Local Street. The minimum requirement for an ingress throat length is 10 metres and for an egress throat length is 15 metres.

Site Access 2 will be served by a security-controlled access to the residential component of the planned development. As such, a queue length analysis was undertaken to assess the operational performance thereof. The following assumptions were made:

- The ingress would have two lanes, one lane for residents and one lane for visitors
- The egress would have one lane serving all vehicles.
- An ingress service rate of 360 and 60 vehicles per hour for residents and visitors' lanes respectively
- An egress service rate of 360 vehicles per hour for both the residents and visitors' lanes
- 10% of vehicles arriving/departing during the respective critical Weekday Peak Hour would be visitors

Taking the above into consideration, the queue length analysis results are provided in Table 6-3.

Table 6-3: Queue Length Analysis

Intersection	Units	Ingress (PM In)		Egress (AM Out)	
		Residents	Visitors	Residents	Visitors
Number of service lanes	lanes	2		1	
Service rate	veh/h/lane	360	60	360	360
Arrival distribution per lane	%	90%	10%	90%	10%
Arrival rate	veh/h	26		28	
95th percentile queue per lane	veh	1.2		1.3	
95th percentile queue length per lane	metres	12		12	

Taking the above into consideration, a minimum ingress and egress throat length of 12 metres is required for the proposed Site Access 2. It is, however, recommended that a minimum ingress and egress throat length of 18 metres be provided to accommodate a truck accessing the development. The access road for the residential component of the development should be designed in such a way to ensure that all access lanes are accessible with consideration of the anticipated queue lengths.

It is our submission that the throat lengths provided for Access 1 and Access 2 meet the minimum requirements.

7. Proposed Capacity Improvements

The following transport improvements are proposed as part of the planned development, to be implemented at the cost of the developer:

2025 Base Year:

- A pedestrian access to the site, allowing patrons to reach the shop frontages safely. It is also recommended that a pedestrian walkway be provided to the south of Hibiscus Street along the extent of the property boundary in an aim to serve the anticipated pedestrian traffic.

2030 Forecast Year:

- None

8. Conclusions and Recommendations

SMEC South Africa (Pty) Ltd was appointed by Delplan Consulting to conduct a Traffic Impact Assessment for the proposed mixed-use development on Portion 50 of the Farm 202 Hansmoeskraal, Pacaltsdorp, Western Cape. The subject site measures approximately 3.4 hectares in extent and will comprise of 51 townhouses and a 3 718 square metre GLA Shopping Centre.

It is planned for the development to be served by two accesses along Hibiscus Street. Access 1 will be located ~125 metres to the east of the unsignalized full intersection with Beach Road and Access 2 to be ~50 metres the east Access 1. It is our submission that the spacing of Access 1 and Access 2 does conform to the WCG access spacing requirements.

It is anticipated that the proposed development would generate 125, 507 and 658 new vehicular trips during the Weekday AM, Weekday PM, and Saturday peak hours respectively.

The George Integrated Zoning Scheme By-Law (2023) was used to ascertain the parking requirements applicable to the development. It is concluded that 64 parking bays would need to be provided to serve the residential component of the development. The Site Development Plan makes provision for 139 parking bays for the commercial component of the development; therefore, sufficient provision is made to meet the requirements. It is our submission that the three (3 No.) loading bays on the Site Development Plan would be sufficient for the requirements of the commercial component of the proposed development.

It is our submission that the throat lengths provided for Access 1 and Access 2 meet the minimum requirements.

The following transport improvements are proposed as part of the planned development, to be implemented at the cost of the developer:

2025 Base Year:

- A pedestrian access to the site, allowing patrons to reach the shop frontages safely. It is also recommended that a pedestrian walkway be provided to the south of Hibiscus Street along the extent of the property boundary in an aim to serve the anticipated pedestrian traffic.

2030 Forecast Year:

- None.

This development is supported from a traffic engineering perspective, provided that the site-specific requirements are implemented as per the applicable design standards.

Appendix A Detailed Traffic Counts

Beach Road and Heather Street

LOCATION	1	PACALTSDORP-Mooiklof	Date: 16/08/2024
12 HOUR COUNT		TOTAL VEHICLES	Day: Friday
AM PEAK	06:30 07:30		PM PEAK 16:15 17:15

Beach Road

					382	0	28	25	53			
						0	0	0				
					155	0	167	70	237			
					OUT	9	8	7	IN			
					2	IN		OUT	30		76	
		0	0	0	10			6	103	0	46	
		0	0	2	11			5	0	0	0	Heather Road
		0	0	0	12			4	11	0	9	
					2	OUT		IN	114		55	
					IN	1	2	3	OUT			
					284	0	279	5	39			
						0	0	0				
					115	2	109	4	176			

Time	South			East			North			West			Hourly	
	1	2	3	4	5	6	7	8	9	10	11	12		
05:00														05:00
05:15														05:15
05:30														05:30
05:45													26	05:45
06:00		13				5	5	3					115	06:00
06:15		50	2	2		20	8	7					308	06:15
06:30		128		2		49	7	7					406	06:30
06:45		65	1	2		18	8	4					451	06:45
07:00		36	2	5		16	2	10					457	07:00
07:15		32	2	4		29	4	24					353	07:15
07:30		35	4	1		14	12	23					337	07:30
07:45		31	2	4		7	7	31					343	07:45
08:00		38	1	1	1	8	5	23					313	08:00
08:15		30	1	1		7	4	22					281	08:15
08:30		30			1	3	7	16		1			257	08:30
08:45		23	1			7	9	17					180	08:45
09:00													115	09:00
09:15													58	09:15
09:30														09:30
09:45														09:45
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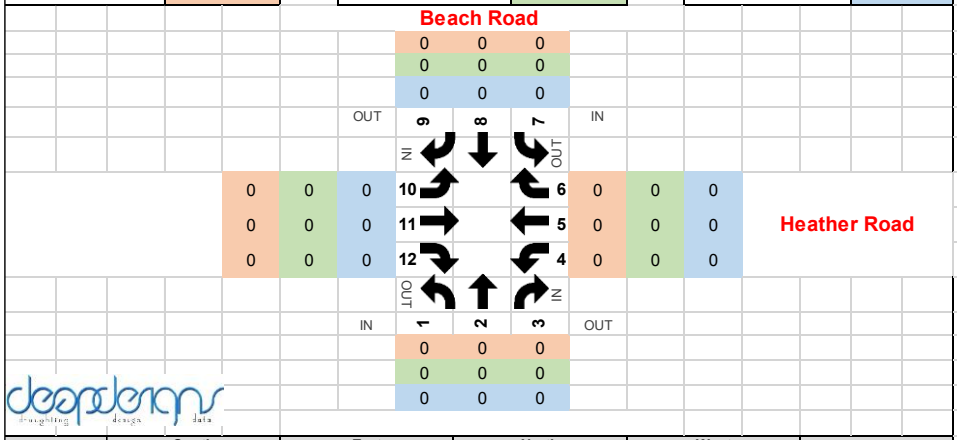
14:15														14:15
14:30														14:30
14:45													81	14:45
15:00		19	1			13	20	28					177	15:00
15:15		23	3	2		10	18	38				2	265	15:15
15:30	1	22	2	2		9	10	42					330	15:30
15:45		17	3			12	7	25				1	335	15:45
16:00	2	36	2	1		12	13	20					339	16:00
16:15		20		3		9	21	45			2		349	16:15
16:30		19	1	2		13	19	44					409	16:30
16:45		34	1	3		12	17	58					416	16:45
17:00		18	5	2		10	17	40	1				419	17:00
17:15		21	4	5		11	20	40	1	1			410	17:15
17:30		19	2	3		9	20	36					382	17:30
17:45		15	2	1	1	20	20	38					289	17:45
18:00													186	18:00
18:15													97	18:15
18:30														18:30
18:45														18:45
19:00														19:00
19:15														
19:30														
19:45														
Total	**3**	**774**	**42**	**46**	**3**	**323**	**280**	**641**	**2**	**2**	**2**	**3**	**2121**	
AM PEAK		**279**	**5**	**11**		**103**	**25**	**28**					**451**	
PM PEAK	**2**	**109**	**4**	**9**		**46**	**70**	**167**			**2**		**409**	

LOCATION	1	PACALTSDORP-Mooiklof	Date: 17/08/2024
12 HOUR COUNT		TOTAL VEHICLES	Day: Saturday
AM PEAK	06:30 07:30		PM PEAK 16:15 17:15



Time	South			East			North			West			Hourly	
	1	2	3	4	5	6	7	8	9	10	11	12		
05:00														
05:15														
05:30														
05:45														05:00
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11:00														10:15
11:15		22	1			13	8	27				1	72	10:30
11:30	1	29	1			8	14	27				1	153	10:45
11:45		20		2		12	18	22				1	228	11:00
12:00	2	20		1		10	12	19			1	2	295	11:15
12:15		14	1	1	1	13	18	22					293	11:30
12:30		18		4		17	13	28					292	11:45
12:45	1	20	2			8	12	31	1		1		293	12:00
13:00		19		1		14	11	22					293	11:15
13:15		21	1	2		1	12	15		1			276	11:30
13:30		16	2			10	13	22			1		260	11:45
13:45		18				9	7	23					241	13:00
14:00		22	1	1		10	19	25				1	253	13:15
14:15													200	13:30
14:30													136	13:45
14:45													79	14:00
15:00														14:15
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19:45														19:00
Total	**4**	**239**	**9**	**12**	**1**	**125**	**157**	**283**	**1**	**1**	**3**	**6**	**841**	
AM PEAK														
PM PEAK														

Beach Road and Hibiscus Street

LOCATION	1	PACALTSDORP: Beach & Mooiklof	Date: 16/08/2024
12 HOUR COUNT		TOTAL VEHICLES	Day: Friday
AM PEAK	06:30 07:30		PM PEAK 16:15 17:15

Beach Road

						207	0	19	11	30					
							0	0	0						
						85	0	56	63	119					
						OUT	9	8	7	IN					
							IN		OUT	11		65			
			0	0	0	10			6	123	0	22			
			0	0	0	11			5	0	0	0	Mooi Kloof		
			0	0	0	12			4	0	0	1			
							OUT		IN	123		23			
						IN	1	2	3	OUT					
						84	0	84	0	19					
							0	0	0						
						65	0	63	2	57					

Time	South			East			North			West			Hourly	
	1	2	3	4	5	6	7	8	9	10	11	12		
05:00														05:00
05:15														05:15
05:30														05:30
05:45														05:45
06:00														06:00
06:15		9				2	2	2					15	06:15
06:30		19				30	2	2					68	06:30
06:45		38				43	4	4					157	06:45
07:00		13				33	3	2					208	07:00
07:15		14				17	2	11					237	07:15
07:30		14		1		18	4	17					238	07:30
07:45		15				15	3	22					204	07:45
08:00		12				13	6	14					198	08:00
08:15		17				9	6	16					202	08:15
08:30		17				9	1	19					194	08:30
08:45		17				13	6	13					188	08:45
09:00		10				3	3	9					168	09:00
09:15													120	09:15
09:30													74	09:30
09:45													25	09:45
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15:30		9		1		6	11	18					78	15:30
15:45		14				7	12	14					125	15:45
16:00		13				5	9	12					164	16:00
16:15		17		1		2	7	8					166	16:15
16:30		17				3	17	16					174	16:30
16:45		10				3	15	13					168	16:45
17:00		19	2			14	24	19					207	17:00
17:15		13				1	22	14					222	17:15
17:30		15	1	1		5	14	24					229	17:30
17:45		10	1			9	22	11					241	17:45
18:00		8				4	14	10					199	18:00
18:15													149	18:15
18:30													89	18:30
18:45													36	18:45
19:00														19:00
19:15														19:15
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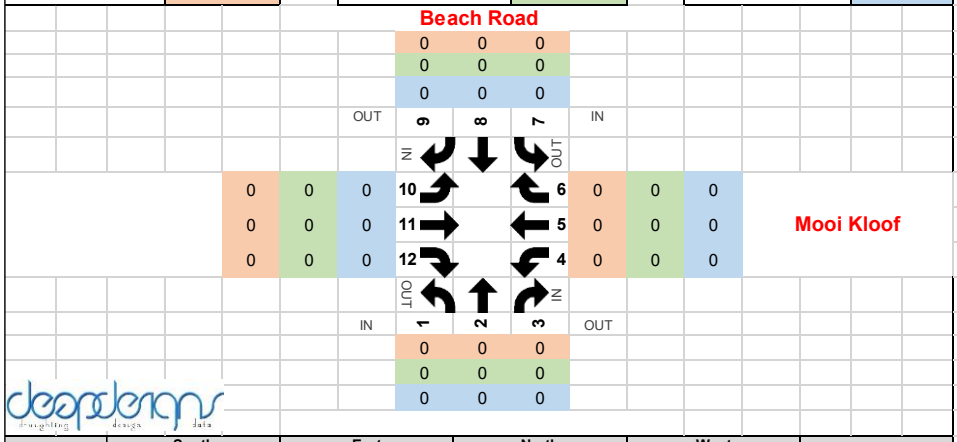
19:45														19:45
Total		**350**	**4**	**4**		**267**	**217**	**302**					**1144**	
AM PEAK		**84**				**123**	**11**	**19**					**237**	
PM PEAK		**63**	**2**	**1**		**22**	**63**	**56**					**207**	

LOCATION	1	PACALTSDORP: Beach & Mooiklof	Date: 17/08/2024
12 HOUR COUNT		TOTAL VEHICLES	Day:Saturday
AM PEAK	06:30 07:30		PM PEAK 16:15 17:15



Time	South			East			North			West			Hourly
	1	2	3	4	5	6	7	8	9	10	11	12	
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11:00													10:15
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11:30		8				10	12	4					89 10:45
11:45		7				9	8	7					120 11:00
12:00		4				6	8	7					145 11:15
12:15		3				13	7	13					126 11:30
12:30		7				5	11	13					128 11:45
12:45		10				5	12	9					133 12:00
13:00		9				5	10	11					143 11:15
13:15		12				7	5	8					139 11:30
13:30		9		1		11	15	13					152 11:45
13:45		6				3	8	3					136 13:00
14:00		8				7	9	10					135 13:15
14:15													103 13:30
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19:45													19:00
Total		**94**		**2**		**95**	**116**	**116**					**423**
AM PEAK													
PM PEAK													

Appendix B Detailed SIDRA Outputs

Beach Road and Heather Street

2025 Base Year

MOVEMENT SUMMARY

Site: 101 [Beach and Heather 2025 Base Year AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

New Site
Site Category: (None)
Stop (All-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Beach Road															
2	T1	All MCs	283	0.0	283	0.0	0.568	21.3	LOS C	2.9	20.5	0.94	1.41	3.08	44.2
3	R2	All MCs	6	0.0	6	0.0	0.568	21.3	LOS C	2.9	20.5	0.94	1.41	3.08	44.1
Approach			289	0.0	289	0.0	0.568	21.3	LOS C	2.9	20.5	0.94	1.41	3.08	44.2
East: Heather Street															
4	L2	All MCs	15	8.0	15	8.0	0.282	16.8	LOS C	1.0	7.4	0.87	1.23	2.22	46.6
6	R2	All MCs	122	1.0	122	1.0	0.282	16.2	LOS C	1.0	7.4	0.87	1.23	2.22	46.8
Approach			137	1.8	137	1.8	0.282	16.3	LOS C	1.0	7.4	0.87	1.23	2.22	46.8
North: Beach Road															
7	L2	All MCs	23	0.0	23	0.0	0.082	19.9	LOS C	0.3	1.9	0.94	1.15	1.99	44.8
8	T1	All MCs	49	4.0	49	4.0	0.154	19.0	LOS C	0.5	3.8	0.93	1.19	2.07	45.4
Approach			73	2.7	73	2.7	0.154	19.3	LOS C	0.5	3.8	0.93	1.18	2.05	45.2
All Vehicles			499	0.9	499	0.9	0.568	19.6	LOS C	2.9	20.5	0.92	1.32	2.69	45.0

MOVEMENT SUMMARY

Site: 101 [Beach and Heather 2025 Base Year PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

New Site
Site Category: (None)
Stop (All-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Beach Road															
2	T1	All MCs	99	0.0	99	0.0	0.193	13.3	LOS B	0.6	4.5	0.79	1.22	2.01	48.7
3	R2	All MCs	14	0.0	14	0.0	0.193	13.3	LOS B	0.6	4.5	0.79	1.22	2.01	48.5
Approach			113	0.0	113	0.0	0.193	13.3	LOS B	0.6	4.5	0.79	1.22	2.01	48.7
East: Heather Street															
4	L2	All MCs	15	0.0	15	0.0	0.157	16.9	LOS C	0.5	3.8	0.89	1.18	2.05	46.5
6	R2	All MCs	46	2.0	46	2.0	0.157	17.0	LOS C	0.5	3.8	0.89	1.18	2.05	46.4
Approach			61	1.5	61	1.5	0.157	17.0	LOS C	0.5	3.8	0.89	1.18	2.05	46.4
North: Beach Road															
7	L2	All MCs	81	0.0	81	0.0	0.187	16.2	LOS C	0.6	4.5	0.87	1.19	2.07	46.9
8	T1	All MCs	189	0.0	189	0.0	0.412	18.7	LOS C	1.7	12.2	0.92	1.29	2.54	45.6
Approach			271	0.0	271	0.0	0.412	18.0	LOS C	1.7	12.2	0.90	1.26	2.40	46.0
All Vehicles			444	0.2	444	0.2	0.412	16.6	LOS C	1.7	12.2	0.87	1.24	2.25	46.7

MOVEMENT SUMMARY

Site: 101 [Beach and Heather 2025 Base Year Sat (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

New Site
Site Category: (None)
Stop (All-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Beach Road															
2	T1	All MCs	99	0.0	99	0.0	0.203	14.6	LOS B	0.7	4.9	0.84	1.22	2.07	47.9
3	R2	All MCs	3	0.0	3	0.0	0.203	14.6	LOS B	0.7	4.9	0.84	1.22	2.07	47.8
Approach			102	0.0	102	0.0	0.203	14.6	LOS B	0.7	4.9	0.84	1.22	2.07	47.9
East: Heather Street															
4	L2	All MCs	4	0.0	4	0.0	0.121	15.6	LOS C	0.4	2.8	0.87	1.17	1.98	47.2
6	R2	All MCs	47	0.0	47	0.0	0.121	15.6	LOS C	0.4	2.8	0.87	1.17	1.98	47.2
Approach			52	0.0	52	0.0	0.121	15.6	LOS C	0.4	2.8	0.87	1.17	1.98	47.2
North: Beach Road															
7	L2	All MCs	57	0.0	57	0.0	0.153	17.4	LOS C	0.5	3.7	0.90	1.18	2.05	46.2
8	T1	All MCs	103	3.0	103	3.0	0.258	17.8	LOS C	1.0	6.8	0.91	1.23	2.21	46.1
Approach			160	1.9	160	1.9	0.258	17.7	LOS C	1.0	6.8	0.91	1.21	2.15	46.1
All Vehicles			314	1.0	314	1.0	0.258	16.3	LOS C	1.0	6.8	0.88	1.21	2.09	46.9

2025 Base Year + Development Trips

MOVEMENT SUMMARY

Site: 101 [Beach and Heather 2025 Base Year +Devel AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

New Site
Site Category: (None)
Stop (All-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Beach Road															
2	T1	All MCs	342	0.0	342	0.0	0.673	25.1	LOS D	4.1	29.0	0.97	1.53	3.67	42.2
3	R2	All MCs	9	0.0	9	0.0	0.673	25.1	LOS D	4.1	29.0	0.97	1.53	3.67	42.1
Approach			352	0.0	352	0.0	0.673	25.1	LOS D	4.1	29.0	0.97	1.53	3.67	42.2
East: Heather Street															
4	L2	All MCs	18	8.0	18	8.0	0.328	19.0	LOS C	1.3	9.1	0.91	1.24	2.34	45.4
6	R2	All MCs	122	1.0	122	1.0	0.328	18.3	LOS C	1.3	9.1	0.91	1.24	2.34	45.6
Approach			140	1.9	140	1.9	0.328	18.4	LOS C	1.3	9.1	0.91	1.24	2.34	45.6
North: Beach Road															
7	L2	All MCs	23	0.0	23	0.0	0.074	18.3	LOS C	0.2	1.7	0.92	1.15	1.97	45.7
8	T1	All MCs	116	4.0	116	4.0	0.325	20.6	LOS C	1.3	9.3	0.94	1.25	2.36	44.5
Approach			139	3.3	139	3.3	0.325	20.2	LOS C	1.3	9.3	0.94	1.23	2.29	44.7
All Vehicles			631	1.2	631	1.2	0.673	22.6	LOS C	4.1	29.0	0.95	1.40	3.07	43.5

MOVEMENT SUMMARY

Site: 101 [Beach and Heather 2025 Base Year +Devel PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

New Site
Site Category: (None)
Stop (All-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Beach Road															
2	T1	All MCs	344	0.0	344	0.0	0.517	15.8	LOS C	2.4	17.0	0.83	1.39	2.81	47.2
3	R2	All MCs	26	0.0	26	0.0	0.517	15.8	LOS C	2.4	17.0	0.83	1.39	2.81	47.0
Approach			371	0.0	371	0.0	0.517	15.8	LOS C	2.4	17.0	0.83	1.39	2.81	47.2
East: Heather Street															
4	L2	All MCs	28	0.0	28	0.0	0.255	22.2	LOS C	1.0	6.7	0.96	1.20	2.24	43.6
6	R2	All MCs	46	2.0	46	2.0	0.255	22.4	LOS C	1.0	6.7	0.96	1.20	2.24	43.5
Approach			75	1.2	75	1.2	0.255	22.3	LOS C	1.0	6.7	0.96	1.20	2.24	43.6
North: Beach Road															
7	L2	All MCs	81	0.0	81	0.0	0.166	14.8	LOS B	0.6	3.9	0.84	1.19	2.01	47.7
8	T1	All MCs	449	0.0	449	0.0	0.856	39.3	LOS E	8.0	56.1	1.00	1.98	5.57	36.3
Approach			531	0.0	531	0.0	0.856	35.6	LOS E	8.0	56.1	0.98	1.86	5.02	37.7
All Vehicles			976	0.1	976	0.1	0.856	27.0	LOS D	8.0	56.1	0.92	1.63	3.97	41.3

MOVEMENT SUMMARY

Site: 101 [Beach and Heather 2025 Base Year +Devel Sat (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

New Site
Site Category: (None)
Stop (All-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Beach Road															
2	T1	All MCs	427	0.0	427	0.0	0.646	19.6	LOS C	3.8	26.4	0.90	1.52	3.50	45.1
3	R2	All MCs	20	0.0	20	0.0	0.646	19.5	LOS C	3.8	26.4	0.90	1.52	3.50	44.9
Approach			447	0.0	447	0.0	0.646	19.6	LOS C	3.8	26.4	0.90	1.52	3.50	45.1
East: Heather Street															
4	L2	All MCs	21	0.0	21	0.0	0.245	22.9	LOS C	0.9	6.4	0.97	1.20	2.23	43.3
6	R2	All MCs	47	0.0	47	0.0	0.245	22.8	LOS C	0.9	6.4	0.97	1.20	2.23	43.3
Approach			68	0.0	68	0.0	0.245	22.8	LOS C	0.9	6.4	0.97	1.20	2.23	43.3
North: Beach Road															
7	L2	All MCs	57	0.0	57	0.0	0.124	14.9	LOS B	0.4	2.8	0.85	1.18	1.96	47.6
8	T1	All MCs	432	3.0	432	3.0	0.866	42.2	LOS E	8.3	59.4	1.00	2.02	5.66	35.3
Approach			488	2.7	488	2.7	0.866	39.1	LOS E	8.3	59.4	0.98	1.92	5.23	36.4
All Vehicles			1004	1.3	1004	1.3	0.866	29.3	LOS D	8.3	59.4	0.94	1.69	4.25	40.3

2030 Forecast Year + Development Trips

MOVEMENT SUMMARY

Site: 101 [Beach and Heather 2030 Horizon Year +Devel AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

New Site
Site Category: (None)
Stop (All-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Beach Road															
2	T1	All MCs	387	0.0	387	0.0	0.764	30.7	LOS D	5.7	39.6	1.00	1.69	4.43	39.7
3	R2	All MCs	11	0.0	11	0.0	0.764	30.6	LOS D	5.7	39.6	1.00	1.69	4.43	39.6
Approach			398	0.0	398	0.0	0.764	30.7	LOS D	5.7	39.6	1.00	1.69	4.43	39.7
East: Heather Street															
4	L2	All MCs	21	8.0	21	8.0	0.375	19.6	LOS C	1.5	10.9	0.92	1.27	2.45	45.1
6	R2	All MCs	142	1.0	142	1.0	0.375	19.0	LOS C	1.5	10.9	0.92	1.27	2.45	45.3
Approach			163	1.9	163	1.9	0.375	19.1	LOS C	1.5	10.9	0.92	1.27	2.45	45.2
North: Beach Road															
7	L2	All MCs	27	0.0	27	0.0	0.088	18.7	LOS C	0.3	2.0	0.92	1.16	1.99	45.5
8	T1	All MCs	124	4.0	124	4.0	0.352	21.3	LOS C	1.4	10.3	0.95	1.26	2.41	44.2
Approach			152	3.3	152	3.3	0.352	20.8	LOS C	1.4	10.3	0.95	1.24	2.34	44.4
All Vehicles			713	1.1	713	1.1	0.764	25.9	LOS D	5.7	39.6	0.97	1.50	3.53	41.8

MOVEMENT SUMMARY

Site: 101 [Beach and Heather 2030 Horizon Year +Devel PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

New Site
Site Category: (None)
Stop (All-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Beach Road															
2	T1	All MCs	360	0.0	360	0.0	0.553	16.8	LOS C	2.7	19.2	0.85	1.42	2.97	46.6
3	R2	All MCs	29	0.0	29	0.0	0.553	16.7	LOS C	2.7	19.2	0.85	1.42	2.97	46.5
Approach			389	0.0	389	0.0	0.553	16.8	LOS C	2.7	19.2	0.85	1.42	2.97	46.6
East: Heather Street															
4	L2	All MCs	32	0.0	32	0.0	0.287	22.5	LOS C	1.1	7.8	0.96	1.22	2.30	43.5
6	R2	All MCs	55	2.0	55	2.0	0.287	22.6	LOS C	1.1	7.8	0.96	1.22	2.30	43.4
Approach			86	1.3	86	1.3	0.287	22.6	LOS C	1.1	7.8	0.96	1.22	2.30	43.4
North: Beach Road															
7	L2	All MCs	95	0.0	95	0.0	0.196	15.2	LOS C	0.7	4.7	0.85	1.20	2.06	47.5
8	T1	All MCs	480	0.0	480	0.0	0.926	49.9	LOS E	10.6	74.4	1.00	2.29	6.80	32.8
Approach			575	0.0	575	0.0	0.926	44.2	LOS E	10.6	74.4	0.98	2.11	6.02	34.6
All Vehicles			1051	0.1	1051	0.1	0.926	32.2	LOS D	10.6	74.4	0.93	1.78	4.58	39.0

MOVEMENT SUMMARY

Site: 101 [Beach and Heather 2030 Horizon Year +Devel Sat (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

New Site
Site Category: (None)
Stop (All-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Beach Road															
2	T1	All MCs	443	0.0	443	0.0	0.687	21.5	LOS C	4.4	30.6	0.93	1.57	3.80	44.0
3	R2	All MCs	21	0.0	21	0.0	0.687	21.5	LOS C	4.4	30.6	0.93	1.57	3.80	43.9
Approach			464	0.0	464	0.0	0.687	21.5	LOS C	4.4	30.6	0.93	1.57	3.80	44.0
East: Heather Street															
4	L2	All MCs	22	0.0	22	0.0	0.271	23.0	LOS C	1.0	7.2	0.97	1.21	2.27	43.2
6	R2	All MCs	56	0.0	56	0.0	0.271	22.9	LOS C	1.0	7.2	0.97	1.21	2.27	43.2
Approach			78	0.0	78	0.0	0.271	23.0	LOS C	1.0	7.2	0.97	1.21	2.27	43.2
North: Beach Road															
7	L2	All MCs	66	0.0	66	0.0	0.147	15.3	LOS C	0.5	3.4	0.86	1.18	2.00	47.4
8	T1	All MCs	448	3.0	448	3.0	0.917	50.4	LOS F	10.1	72.4	1.00	2.23	6.51	32.7
Approach			515	2.6	515	2.6	0.917	45.9	LOS E	10.1	72.4	0.98	2.10	5.93	34.0
All Vehicles			1057	1.3	1057	1.3	0.917	33.5	LOS D	10.1	72.4	0.96	1.80	4.72	38.5

Beach Road and Hibiscus Street

2025 Base Year

MOVEMENT SUMMARY

Site: 101v [Beach and Hibuscus 2025 Base AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

New Site
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Beach Road															
2	T1	All MCs	86	0.0	86	0.0	0.043	0.0	LOS A	0.0	0.0	0.00	0.01	0.00	59.9
3	R2	All MCs	1	0.0	1	0.0	0.043	5.5	LOS A	0.0	0.0	0.00	0.01	0.00	57.1
Approach			87	0.0	87	0.0	0.043	0.1	NA	0.0	0.0	0.00	0.01	0.00	59.9
East: Hibuscus Street															
4	L2	All MCs	2	0.0	2	0.0	0.124	8.2	LOS A	0.4	3.1	0.24	0.89	0.24	51.1
6	R2	All MCs	121	0.0	121	0.0	0.124	8.5	LOS A	0.4	3.1	0.24	0.89	0.24	51.0
Approach			123	0.0	123	0.0	0.124	8.4	LOS A	0.4	3.1	0.24	0.89	0.24	51.0
North: Beach Road															
7	L2	All MCs	15	0.0	15	0.0	0.008	5.5	LOS A	0.0	0.0	0.00	0.58	0.00	52.9
8	T1	All MCs	38	6.0	38	6.0	0.019	5.0	LOS A	0.0	0.0	0.00	0.57	0.00	53.1
Approach			53	4.3	53	4.3	0.019	5.1	NA	0.0	0.0	0.00	0.57	0.00	53.0
All Vehicles			263	0.9	263	0.9	0.124	5.0	NA	0.4	3.1	0.11	0.53	0.11	54.1

MOVEMENT SUMMARY

Site: 101v [Beach and Hibuscus 2025 Base PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

New Site
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Beach Road															
2	T1	All MCs	61	0.0	61	0.0	0.033	0.0	LOS A	0.0	0.3	0.05	0.07	0.05	59.3
3	R2	All MCs	5	0.0	5	0.0	0.033	6.6	LOS A	0.0	0.3	0.05	0.07	0.05	56.6
Approach			66	0.0	66	0.0	0.033	0.5	NA	0.0	0.3	0.05	0.07	0.05	59.1
East: Hibuscus Street															
4	L2	All MCs	2	0.0	2	0.0	0.037	8.3	LOS A	0.1	0.9	0.27	0.89	0.27	51.0
6	R2	All MCs	32	7.0	32	7.0	0.037	9.0	LOS A	0.1	0.9	0.27	0.89	0.27	50.6
Approach			34	6.6	34	6.6	0.037	9.0	LOS A	0.1	0.9	0.27	0.89	0.27	50.6
North: Beach Road															
7	L2	All MCs	89	0.0	89	0.0	0.046	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	52.9
8	T1	All MCs	75	0.0	75	0.0	0.036	4.9	LOS A	0.0	0.0	0.00	0.57	0.00	53.3
Approach			164	0.0	164	0.0	0.046	5.3	NA	0.0	0.0	0.00	0.57	0.00	53.1
All Vehicles			264	0.8	264	0.8	0.046	4.5	NA	0.1	0.9	0.05	0.49	0.05	54.1

MOVEMENT SUMMARY

Site: 101v [Beach and Hibuscus 2025 Base SAT (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

New Site
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Beach Road															
2	T1	All MCs	33	4.0	33	4.0	0.017	0.0	LOS A	0.0	0.0	0.01	0.02	0.01	59.8
3	R2	All MCs	1	0.0	1	0.0	0.017	5.6	LOS A	0.0	0.0	0.01	0.02	0.01	57.0
Approach			34	3.9	34	3.9	0.017	0.2	NA	0.0	0.0	0.01	0.02	0.01	59.7
East: Hibuscus Street															
4	L2	All MCs	2	0.0	2	0.0	0.044	8.2	LOS A	0.1	1.0	0.18	0.90	0.18	51.2
6	R2	All MCs	43	0.0	43	0.0	0.044	8.2	LOS A	0.1	1.0	0.18	0.90	0.18	51.1
Approach			45	0.0	45	0.0	0.044	8.2	LOS A	0.1	1.0	0.18	0.90	0.18	51.1
North: Beach Road															
7	L2	All MCs	43	0.0	43	0.0	0.022	5.5	LOS A	0.0	0.0	0.00	0.58	0.00	52.9
8	T1	All MCs	40	7.0	40	7.0	0.020	5.0	LOS A	0.0	0.0	0.00	0.57	0.00	53.0
Approach			83	3.4	83	3.4	0.022	5.3	NA	0.0	0.0	0.00	0.57	0.00	53.0
All Vehicles			162	2.5	162	2.5	0.044	5.0	NA	0.1	1.0	0.05	0.55	0.05	53.7

2025 Base Year + Development Trips

MOVEMENT SUMMARY

Site: 101v [Beach and Hibuscus 2025 Base + DEV AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

New Site
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Beach Road															
2	T1	All MCs	86	0.0	86	0.0	0.043	0.0	LOS A	0.0	0.1	0.01	0.01	0.01	59.9
3	R2	All MCs	1	0.0	1	0.0	0.043	5.6	LOS A	0.0	0.1	0.01	0.01	0.01	57.1
Approach			87	0.0	87	0.0	0.043	0.1	NA	0.0	0.1	0.01	0.01	0.01	59.9
East: Hibuscus Street															
4	L2	All MCs	2	0.0	2	0.0	0.194	8.2	LOS A	0.7	5.1	0.29	0.89	0.29	51.0
6	R2	All MCs	183	0.0	183	0.0	0.194	8.7	LOS A	0.7	5.1	0.29	0.89	0.29	50.9
Approach			185	0.0	185	0.0	0.194	8.7	LOS A	0.7	5.1	0.29	0.89	0.29	50.9
North: Beach Road															
7	L2	All MCs	84	0.0	84	0.0	0.043	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	52.9
8	T1	All MCs	38	6.0	38	6.0	0.019	5.0	LOS A	0.0	0.0	0.00	0.57	0.00	53.1
Approach			122	1.9	122	1.9	0.043	5.4	NA	0.0	0.0	0.00	0.57	0.00	52.9
All Vehicles			395	0.6	395	0.6	0.194	5.8	NA	0.7	5.1	0.14	0.60	0.14	53.3

MOVEMENT SUMMARY

Site: 101v [Beach and Hibuscus 2025 Base + DEV PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

New Site
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Beach Road															
2	T1	All MCs	61	0.0	61	0.0	0.034	0.0	LOS A	0.0	0.3	0.10	0.11	0.10	59.2
3	R2	All MCs	5	0.0	5	0.0	0.034	9.5	LOS A	0.0	0.3	0.10	0.11	0.10	56.4
Approach			66	0.0	66	0.0	0.034	0.8	NA	0.0	0.3	0.10	0.11	0.10	58.9
East: Hibuscus Street															
4	L2	All MCs	2	0.0	2	0.0	0.362	8.7	LOS A	1.7	12.1	0.47	0.93	0.53	50.1
6	R2	All MCs	291	0.0	291	0.0	0.362	10.4	LOS B	1.7	12.1	0.47	0.93	0.53	50.0
Approach			293	0.0	293	0.0	0.362	10.3	LOS B	1.7	12.1	0.47	0.93	0.53	50.0
North: Beach Road															
7	L2	All MCs	364	0.0	364	0.0	0.187	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	52.8
8	T1	All MCs	75	0.0	75	0.0	0.036	4.9	LOS A	0.0	0.0	0.00	0.57	0.00	53.3
Approach			439	0.0	439	0.0	0.187	5.5	NA	0.0	0.0	0.00	0.57	0.00	52.9
All Vehicles			798	0.0	798	0.0	0.362	6.9	NA	1.7	12.1	0.18	0.67	0.20	52.2

MOVEMENT SUMMARY

Site: 101v [Beach and Hibuscus 2025 Base + DEV SAT (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

New Site
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Beach Road															
2	T1	All MCs	33	4.0	33	4.0	0.017	0.0	LOS A	0.0	0.1	0.04	0.04	0.04	59.7
3	R2	All MCs	1	0.0	1	0.0	0.017	9.3	LOS A	0.0	0.1	0.04	0.04	0.04	56.9
Approach			34	3.9	34	3.9	0.017	0.3	NA	0.0	0.1	0.04	0.04	0.04	59.6
East: Hibuscus Street															
4	L2	All MCs	2	0.0	2	0.0	0.458	8.8	LOS A	2.8	19.4	0.48	0.93	0.58	50.0
6	R2	All MCs	389	0.0	389	0.0	0.458	10.5	LOS B	2.8	19.4	0.48	0.93	0.58	49.9
Approach			392	0.0	392	0.0	0.458	10.5	LOS B	2.8	19.4	0.48	0.93	0.58	49.9
North: Beach Road															
7	L2	All MCs	389	0.0	389	0.0	0.199	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	52.8
8	T1	All MCs	40	7.0	40	7.0	0.020	5.0	LOS A	0.0	0.0	0.00	0.57	0.00	53.0
Approach			429	0.7	429	0.7	0.199	5.5	NA	0.0	0.0	0.00	0.57	0.00	52.9
All Vehicles			855	0.5	855	0.5	0.458	7.6	NA	2.8	19.4	0.22	0.72	0.27	51.7

2030 Forecast Year + Development Trips

MOVEMENT SUMMARY

Site: 101v [Beach and Hibuscus 2030 Horizon + DEV AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

New Site
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Beach Road															
2	T1	All MCs	101	0.0	101	0.0	0.050	0.0	LOS A	0.0	0.1	0.01	0.01	0.01	59.9
3	R2	All MCs	1	0.0	1	0.0	0.050	5.6	LOS A	0.0	0.1	0.01	0.01	0.01	57.1
Approach			102	0.0	102	0.0	0.050	0.1	NA	0.0	0.1	0.01	0.01	0.01	59.9
East: Hibuscus Street															
4	L2	All MCs	3	0.0	3	0.0	0.221	8.2	LOS A	0.8	5.9	0.32	0.89	0.32	50.9
6	R2	All MCs	203	0.0	203	0.0	0.221	8.9	LOS A	0.8	5.9	0.32	0.89	0.32	50.8
Approach			206	0.0	206	0.0	0.221	8.9	LOS A	0.8	5.9	0.32	0.89	0.32	50.8
North: Beach Road															
7	L2	All MCs	87	0.0	87	0.0	0.045	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	52.9
8	T1	All MCs	44	6.0	44	6.0	0.022	5.0	LOS A	0.0	0.0	0.00	0.57	0.00	53.1
Approach			132	2.0	132	2.0	0.045	5.4	NA	0.0	0.0	0.00	0.57	0.00	53.0
All Vehicles			440	0.6	440	0.6	0.221	5.8	NA	0.8	5.9	0.15	0.59	0.15	53.3

MOVEMENT SUMMARY

Site: 101v [Beach and Hibuscus 2030 Horizon + DEV PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

New Site
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Beach Road															
2	T1	All MCs	72	0.0	72	0.0	0.041	0.0	LOS A	0.1	0.4	0.11	0.11	0.11	59.1
3	R2	All MCs	6	0.0	6	0.0	0.041	9.9	LOS A	0.1	0.4	0.11	0.11	0.11	56.4
Approach			78	0.0	78	0.0	0.041	0.8	NA	0.1	0.4	0.11	0.11	0.11	58.9
East: Hibuscus Street															
4	L2	All MCs	3	0.0	3	0.0	0.382	8.9	LOS A	1.9	13.4	0.50	0.95	0.58	49.8
6	R2	All MCs	296	0.0	296	0.0	0.382	10.8	LOS B	1.9	13.4	0.50	0.95	0.58	49.7
Approach			299	0.0	299	0.0	0.382	10.8	LOS B	1.9	13.4	0.50	0.95	0.58	49.7
North: Beach Road															
7	L2	All MCs	379	0.0	379	0.0	0.194	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	52.8
8	T1	All MCs	87	0.0	87	0.0	0.043	4.9	LOS A	0.0	0.0	0.00	0.57	0.00	53.3
Approach			466	0.0	466	0.0	0.194	5.5	NA	0.0	0.0	0.00	0.57	0.00	52.9
All Vehicles			843	0.0	843	0.0	0.382	6.9	NA	1.9	13.4	0.19	0.66	0.22	52.2

MOVEMENT SUMMARY

Site: 101v [Beach and Hibuscus 2030 Horizon + DEV SAT (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

New Site
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Beach Road															
2	T1	All MCs	38	4.0	38	4.0	0.020	0.0	LOS A	0.0	0.1	0.03	0.04	0.03	59.7
3	R2	All MCs	1	0.0	1	0.0	0.020	9.6	LOS A	0.0	0.1	0.03	0.04	0.03	56.9
Approach			39	3.9	39	3.9	0.020	0.3	NA	0.0	0.1	0.03	0.04	0.03	59.6
East: Hibuscus Street															
4	L2	All MCs	3	0.0	3	0.0	0.476	9.0	LOS A	3.0	21.0	0.50	0.94	0.63	49.8
6	R2	All MCs	397	0.0	397	0.0	0.476	10.8	LOS B	3.0	21.0	0.50	0.94	0.63	49.7
Approach			400	0.0	400	0.0	0.476	10.8	LOS B	3.0	21.0	0.50	0.94	0.63	49.7
North: Beach Road															
7	L2	All MCs	397	0.0	397	0.0	0.203	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	52.8
8	T1	All MCs	47	7.0	47	7.0	0.024	5.0	LOS A	0.0	0.0	0.00	0.57	0.00	53.0
Approach			444	0.7	444	0.7	0.203	5.5	NA	0.0	0.0	0.00	0.57	0.00	52.9
All Vehicles			883	0.5	883	0.5	0.476	7.7	NA	3.0	21.0	0.23	0.72	0.29	51.6

Hibiscus Street and Access 1

2025 Base Year + Development Trips

MOVEMENT SUMMARY

Site: 101 [Hibiscus and Access 1 2025 Base + Development Am (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

New Site
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Access 1															
1	L2	All MCs	33	0.0	33	0.0	0.027	8.6	LOS A	0.1	0.7	0.26	0.87	0.26	51.0
3	R2	All MCs	1	0.0	1	0.0	0.027	8.5	LOS A	0.1	0.7	0.26	0.87	0.26	50.8
Approach			34	0.0	34	0.0	0.027	8.6	LOS A	0.1	0.7	0.26	0.87	0.26	51.0
East: Hibuscus Street															
4	L2	All MCs	1	0.0	1	0.0	0.075	5.6	LOS A	0.0	0.0	0.00	0.00	0.00	57.4
5	T1	All MCs	153	0.0	153	0.0	0.075	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Approach			154	0.0	154	0.0	0.075	0.1	NA	0.0	0.0	0.00	0.00	0.00	59.9
West: Hibuscus Street															
11	T1	All MCs	24	0.0	24	0.0	0.050	0.0	LOS A	0.2	1.7	0.26	0.43	0.26	55.5
12	R2	All MCs	60	0.0	60	0.0	0.050	6.1	LOS A	0.2	1.7	0.26	0.43	0.26	53.1
Approach			84	0.0	84	0.0	0.050	4.3	NA	0.2	1.7	0.26	0.43	0.26	53.8
All Vehicles			272	0.0	272	0.0	0.075	2.4	NA	0.2	1.7	0.11	0.24	0.11	56.7

MOVEMENT SUMMARY

Site: 101 [Hibiscus and Access 1 2025 Base + Development PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

New Site
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Access 1															
1	L2	All MCs	251	0.0	251	0.0	0.193	8.2	LOS A	0.9	6.2	0.14	0.91	0.14	51.1
3	R2	All MCs	9	0.0	9	0.0	0.193	10.2	LOS B	0.9	6.2	0.14	0.91	0.14	50.8
Approach			260	0.0	260	0.0	0.193	8.3	LOS A	0.9	6.2	0.14	0.91	0.14	51.1
East: Hibuscus Street															
4	L2	All MCs	3	0.0	3	0.0	0.022	5.5	LOS A	0.0	0.0	0.00	0.04	0.00	57.1
5	T1	All MCs	42	0.0	42	0.0	0.022	0.0	LOS A	0.0	0.0	0.00	0.04	0.00	59.6
Approach			45	0.0	45	0.0	0.022	0.4	NA	0.0	0.0	0.00	0.04	0.00	59.4
West: Hibuscus Street															
11	T1	All MCs	113	0.0	113	0.0	0.205	0.0	LOS A	1.1	7.8	0.14	0.40	0.14	56.0
12	R2	All MCs	257	0.0	257	0.0	0.205	5.7	LOS A	1.1	7.8	0.14	0.40	0.14	53.5
Approach			369	0.0	369	0.0	0.205	3.9	NA	1.1	7.8	0.14	0.40	0.14	54.3
All Vehicles			675	0.0	675	0.0	0.205	5.4	NA	1.1	7.8	0.13	0.57	0.13	53.3

MOVEMENT SUMMARY

Site: 101 [Hibiscus and Access 1 2025 Base + Development SAT (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

New Site
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Access 1															
1	L2	All MCs	340	0.0	340	0.0	0.253	8.3	LOS A	1.2	8.7	0.17	0.89	0.17	51.1
3	R2	All MCs	4	0.0	4	0.0	0.253	10.7	LOS B	1.2	8.7	0.17	0.89	0.17	50.8
Approach			344	0.0	344	0.0	0.253	8.3	LOS A	1.2	8.7	0.17	0.89	0.17	51.1
East: Hibuscus Street															
4	L2	All MCs	4	0.0	4	0.0	0.027	5.5	LOS A	0.0	0.0	0.00	0.05	0.00	57.1
5	T1	All MCs	52	0.0	52	0.0	0.027	0.0	LOS A	0.0	0.0	0.00	0.05	0.00	59.6
Approach			56	0.0	56	0.0	0.027	0.4	NA	0.0	0.0	0.00	0.05	0.00	59.4
West: Hibuscus Street															
11	T1	All MCs	49	0.0	49	0.0	0.223	0.0	LOS A	1.2	8.6	0.17	0.50	0.17	55.1
12	R2	All MCs	340	0.0	340	0.0	0.223	5.7	LOS A	1.2	8.6	0.17	0.50	0.17	52.7
Approach			389	0.0	389	0.0	0.223	5.0	NA	1.2	8.6	0.17	0.50	0.17	53.0
All Vehicles			789	0.0	789	0.0	0.253	6.1	NA	1.2	8.7	0.16	0.64	0.16	52.5

2030 Forecast Year + Development Trips

MOVEMENT SUMMARY

Site: 101 [Hibiscus and Access 1 2030 Horizon+ Development AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

New Site
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Access 1															
1	L2	All MCs	33	0.0	33	0.0	0.028	8.7	LOS A	0.1	0.8	0.28	0.86	0.28	51.0
3	R2	All MCs	1	0.0	1	0.0	0.028	8.6	LOS A	0.1	0.8	0.28	0.86	0.28	50.8
Approach			34	0.0	34	0.0	0.028	8.7	LOS A	0.1	0.8	0.28	0.86	0.28	51.0
East: Hibuscus Street															
4	L2	All MCs	1	0.0	1	0.0	0.085	5.6	LOS A	0.0	0.0	0.00	0.00	0.00	57.4
5	T1	All MCs	173	0.0	173	0.0	0.085	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Approach			174	0.0	174	0.0	0.085	0.1	NA	0.0	0.0	0.00	0.00	0.00	59.9
West: Hibuscus Street															
11	T1	All MCs	27	0.0	27	0.0	0.053	0.0	LOS A	0.2	1.7	0.28	0.43	0.28	55.6
12	R2	All MCs	60	0.0	60	0.0	0.053	6.2	LOS A	0.2	1.7	0.28	0.43	0.28	53.2
Approach			87	0.0	87	0.0	0.053	4.3	NA	0.2	1.7	0.28	0.43	0.28	53.9
All Vehicles			295	0.0	295	0.0	0.085	2.3	NA	0.2	1.7	0.11	0.23	0.11	56.9

MOVEMENT SUMMARY

Site: 101 [Hibiscus and Access 1 2030 Horizon + Development PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

New Site
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Access 1															
1	L2	All MCs	251	0.0	251	0.0	0.195	8.2	LOS A	0.9	6.2	0.16	0.90	0.16	51.1
3	R2	All MCs	9	0.0	9	0.0	0.195	10.4	LOS B	0.9	6.2	0.16	0.90	0.16	50.8
Approach			260	0.0	260	0.0	0.195	8.3	LOS A	0.9	6.2	0.16	0.90	0.16	51.1
East: Hibuscus Street															
4	L2	All MCs	3	0.0	3	0.0	0.025	5.5	LOS A	0.0	0.0	0.00	0.04	0.00	57.2
5	T1	All MCs	48	0.0	48	0.0	0.025	0.0	LOS A	0.0	0.0	0.00	0.04	0.00	59.7
Approach			52	0.0	52	0.0	0.025	0.3	NA	0.0	0.0	0.00	0.04	0.00	59.5
West: Hibuscus Street															
11	T1	All MCs	128	0.0	128	0.0	0.214	0.0	LOS A	1.2	8.1	0.16	0.39	0.16	56.1
12	R2	All MCs	257	0.0	257	0.0	0.214	5.7	LOS A	1.2	8.1	0.16	0.39	0.16	53.6
Approach			385	0.0	385	0.0	0.214	3.8	NA	1.2	8.1	0.16	0.39	0.16	54.4
All Vehicles			697	0.0	697	0.0	0.214	5.2	NA	1.2	8.1	0.14	0.55	0.14	53.4

MOVEMENT SUMMARY

Site: 101 [Hibiscus and Access 1 2030 Horizon + Development SAT (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

New Site
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Access 1															
1	L2	All MCs	340	0.0	340	0.0	0.255	8.3	LOS A	1.2	8.7	0.18	0.89	0.18	51.1
3	R2	All MCs	4	0.0	4	0.0	0.255	10.9	LOS B	1.2	8.7	0.18	0.89	0.18	50.8
Approach			344	0.0	344	0.0	0.255	8.3	LOS A	1.2	8.7	0.18	0.89	0.18	51.1
East: Hibuscus Street															
4	L2	All MCs	4	0.0	4	0.0	0.031	5.5	LOS A	0.0	0.0	0.00	0.04	0.00	57.2
5	T1	All MCs	59	0.0	59	0.0	0.031	0.0	LOS A	0.0	0.0	0.00	0.04	0.00	59.6
Approach			63	0.0	63	0.0	0.031	0.4	NA	0.0	0.0	0.00	0.04	0.00	59.5
West: Hibuscus Street															
11	T1	All MCs	57	0.0	57	0.0	0.228	0.0	LOS A	1.3	8.8	0.18	0.49	0.18	55.1
12	R2	All MCs	340	0.0	340	0.0	0.228	5.7	LOS A	1.3	8.8	0.18	0.49	0.18	52.7
Approach			397	0.0	397	0.0	0.228	4.9	NA	1.3	8.8	0.18	0.49	0.18	53.1
All Vehicles			804	0.0	804	0.0	0.255	6.0	NA	1.3	8.8	0.17	0.62	0.17	52.6

Hibiscus Street and Access 2

2025 Base Year + Development Trips

MOVEMENT SUMMARY

Site: 101 [Hibiscus and Access 2 2025 Base + Development Am (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

New Site
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Access 2															
1	L2	All MCs	29	0.0	29	0.0	0.024	8.5	LOS A	0.1	0.6	0.22	0.87	0.22	51.1
3	R2	All MCs	1	0.0	1	0.0	0.024	9.0	LOS A	0.1	0.6	0.22	0.87	0.22	51.2
Approach			31	0.0	31	0.0	0.024	8.5	LOS A	0.1	0.6	0.22	0.87	0.22	51.1
East: Hibiscus Street															
4	L2	All MCs	1	0.0	1	0.0	0.061	5.6	LOS A	0.0	0.0	0.00	0.01	0.00	57.5
5	T1	All MCs	123	0.0	123	0.0	0.061	0.0	LOS A	0.0	0.0	0.00	0.01	0.00	59.9
Approach			124	0.0	124	0.0	0.061	0.1	NA	0.0	0.0	0.00	0.01	0.00	59.9
West: Hibiscus Street															
11	T1	All MCs	15	0.0	15	0.0	0.013	0.0	LOS A	0.1	0.4	0.18	0.25	0.18	57.2
12	R2	All MCs	9	0.0	9	0.0	0.013	6.2	LOS A	0.1	0.4	0.18	0.25	0.18	55.0
Approach			24	0.0	24	0.0	0.013	2.4	NA	0.1	0.4	0.18	0.25	0.18	56.3
All Vehicles			179	0.0	179	0.0	0.061	1.8	NA	0.1	0.6	0.06	0.19	0.06	57.7

MOVEMENT SUMMARY

Site: . [Hibiscus and Access 2 2025 Base + Development PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

New Site
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Access 1															
1	L2	All MCs	12	0.0	12	0.0	0.009	8.1	LOS A	0.0	0.2	0.11	0.92	0.11	51.0
3	R2	All MCs	1	0.0	1	0.0	0.009	9.0	LOS A	0.0	0.2	0.11	0.92	0.11	51.2
Approach			13	0.0	13	0.0	0.009	8.2	LOS A	0.0	0.2	0.11	0.92	0.11	51.1
East: Hibiscus Street															
4	L2	All MCs	1	0.0	1	0.0	0.017	5.5	LOS A	0.0	0.0	0.00	0.02	0.00	57.4
5	T1	All MCs	34	0.0	34	0.0	0.017	0.0	LOS A	0.0	0.0	0.00	0.02	0.00	59.8
Approach			35	0.0	35	0.0	0.017	0.2	NA	0.0	0.0	0.00	0.02	0.00	59.8
West: Hibiscus Street															
11	T1	All MCs	95	0.0	95	0.0	0.062	0.0	LOS A	0.2	1.1	0.05	0.13	0.05	58.6
12	R2	All MCs	27	0.0	27	0.0	0.062	5.7	LOS A	0.2	1.1	0.05	0.13	0.05	56.3
Approach			122	0.0	122	0.0	0.062	1.3	NA	0.2	1.1	0.05	0.13	0.05	58.0
All Vehicles			169	0.0	169	0.0	0.062	1.6	NA	0.2	1.1	0.05	0.17	0.05	57.8

MOVEMENT SUMMARY

Site: . [Hibiscus and Access 2 2025 Base + Development SAT (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

New Site
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Access 1															
1	L2	All MCs	11	0.0	11	0.0	0.009	8.2	LOS A	0.0	0.2	0.13	0.91	0.13	51.0
3	R2	All MCs	1	0.0	1	0.0	0.009	8.8	LOS A	0.0	0.2	0.13	0.91	0.13	51.2
Approach			12	0.0	12	0.0	0.009	8.2	LOS A	0.0	0.2	0.13	0.91	0.13	51.1
East: Hibiscus Street															
4	L2	All MCs	1	0.0	1	0.0	0.023	5.5	LOS A	0.0	0.0	0.00	0.01	0.00	57.4
5	T1	All MCs	45	0.0	45	0.0	0.023	0.0	LOS A	0.0	0.0	0.00	0.01	0.00	59.9
Approach			46	0.0	46	0.0	0.023	0.1	NA	0.0	0.0	0.00	0.01	0.00	59.8
West: Hibiscus Street															
11	T1	All MCs	43	0.0	43	0.0	0.027	0.0	LOS A	0.1	0.4	0.06	0.12	0.06	58.7
12	R2	All MCs	11	0.0	11	0.0	0.027	5.8	LOS A	0.1	0.4	0.06	0.12	0.06	56.4
Approach			54	0.0	54	0.0	0.027	1.1	NA	0.1	0.4	0.06	0.12	0.06	58.2
All Vehicles			112	0.0	112	0.0	0.027	1.5	NA	0.1	0.4	0.04	0.16	0.04	58.0

2030 Forecast Year + Development Trips

MOVEMENT SUMMARY

Site: . [Hibiscus and Access 2 2030 Horizon+ Development AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

New Site
Site Category: (None)
Hibiscus and Access 2 2030 Horizon+ Development PM]

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Access 1															
1	L2	All MCs	29	0.0	29	0.0	0.025	8.5	LOS A	0.1	0.7	0.25	0.87	0.25	51.0
3	R2	All MCs	1	0.0	1	0.0	0.025	9.1	LOS A	0.1	0.7	0.25	0.87	0.25	51.2
Approach			31	0.0	31	0.0	0.025	8.6	LOS A	0.1	0.7	0.25	0.87	0.25	51.1
East: Hibiscus Street															
4	L2	All MCs	1	0.0	1	0.0	0.070	5.6	LOS A	0.0	0.0	0.00	0.00	0.00	57.5
5	T1	All MCs	143	0.0	143	0.0	0.070	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Approach			144	0.0	144	0.0	0.070	0.1	NA	0.0	0.0	0.00	0.00	0.00	59.9
West: Hibiscus Street															
11	T1	All MCs	18	0.0	18	0.0	0.015	0.0	LOS A	0.1	0.4	0.18	0.23	0.18	57.4
12	R2	All MCs	9	0.0	9	0.0	0.015	6.4	LOS A	0.1	0.4	0.18	0.23	0.18	55.2
Approach			27	0.0	27	0.0	0.015	2.2	NA	0.1	0.4	0.18	0.23	0.18	56.7
All Vehicles			202	0.0	202	0.0	0.070	1.6	NA	0.1	0.7	0.06	0.16	0.06	57.9

MOVEMENT SUMMARY

Site: . [Hibiscus and Access 2 2030 Horizon+ Development PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

New Site
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Access 1															
1	L2	All MCs	12	0.0	12	0.0	0.009	8.1	LOS A	0.0	0.3	0.12	0.91	0.12	51.0
3	R2	All MCs	1	0.0	1	0.0	0.009	9.1	LOS A	0.0	0.3	0.12	0.91	0.12	51.2
Approach			13	0.0	13	0.0	0.009	8.2	LOS A	0.0	0.3	0.12	0.91	0.12	51.1
East: Hibiscus Street															
4	L2	All MCs	1	0.0	1	0.0	0.020	5.5	LOS A	0.0	0.0	0.00	0.02	0.00	57.4
5	T1	All MCs	40	0.0	40	0.0	0.020	0.0	LOS A	0.0	0.0	0.00	0.02	0.00	59.9
Approach			41	0.0	41	0.0	0.020	0.1	NA	0.0	0.0	0.00	0.02	0.00	59.8
West: Hibiscus Street															
11	T1	All MCs	111	0.0	111	0.0	0.070	0.0	LOS A	0.2	1.1	0.06	0.12	0.06	58.7
12	R2	All MCs	27	0.0	27	0.0	0.070	5.8	LOS A	0.2	1.1	0.06	0.12	0.06	56.4
Approach			138	0.0	138	0.0	0.070	1.1	NA	0.2	1.1	0.06	0.12	0.06	58.2
All Vehicles			192	0.0	192	0.0	0.070	1.4	NA	0.2	1.1	0.05	0.15	0.05	58.0

MOVEMENT SUMMARY

Site: . [Hibiscus and Access 2 2030 Horizon+ Development SAT (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

New Site
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Access 1															
1	L2	All MCs	11	0.0	11	0.0	0.009	8.2	LOS A	0.0	0.2	0.14	0.90	0.14	51.0
3	R2	All MCs	1	0.0	1	0.0	0.009	8.9	LOS A	0.0	0.2	0.14	0.90	0.14	51.2
Approach			12	0.0	12	0.0	0.009	8.2	LOS A	0.0	0.2	0.14	0.90	0.14	51.1
East: Hibiscus Street															
4	L2	All MCs	1	0.0	1	0.0	0.026	5.5	LOS A	0.0	0.0	0.00	0.01	0.00	57.4
5	T1	All MCs	53	0.0	53	0.0	0.026	0.0	LOS A	0.0	0.0	0.00	0.01	0.00	59.9
Approach			54	0.0	54	0.0	0.026	0.1	NA	0.0	0.0	0.00	0.01	0.00	59.8
West: Hibiscus Street															
11	T1	All MCs	51	0.0	51	0.0	0.031	0.0	LOS A	0.1	0.4	0.06	0.11	0.06	58.8
12	R2	All MCs	11	0.0	11	0.0	0.031	5.8	LOS A	0.1	0.4	0.06	0.11	0.06	56.5
Approach			61	0.0	61	0.0	0.031	1.0	NA	0.1	0.4	0.06	0.11	0.06	58.4
All Vehicles			126	0.0	126	0.0	0.031	1.3	NA	0.1	0.4	0.04	0.14	0.04	58.2

SMEC South Africa

65 Riebeek Street
Cape Town, Western Cape, 8001

Phone: +27 21 417 2900

Email: capetown@smec.com

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