



SMEC INTERNAL REF. C3321

Traffic Impact Assessment

Proposed Residential Development on Erf 14796, Dana Bay

Reference No. C3321

Prepared for Costa Zervas Projects

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1 Introduction

SMEC South Africa (Pty) Ltd was appointed by Costa Zervas Projects to conduct a Traffic Impact Assessment for the proposed Monquini Beach Development on Erf 14796, Dana Bay, Western Cape. The site is bounded by Fishermans Village Drive to the north. A locality plan is shown in **Figure 1-1**.

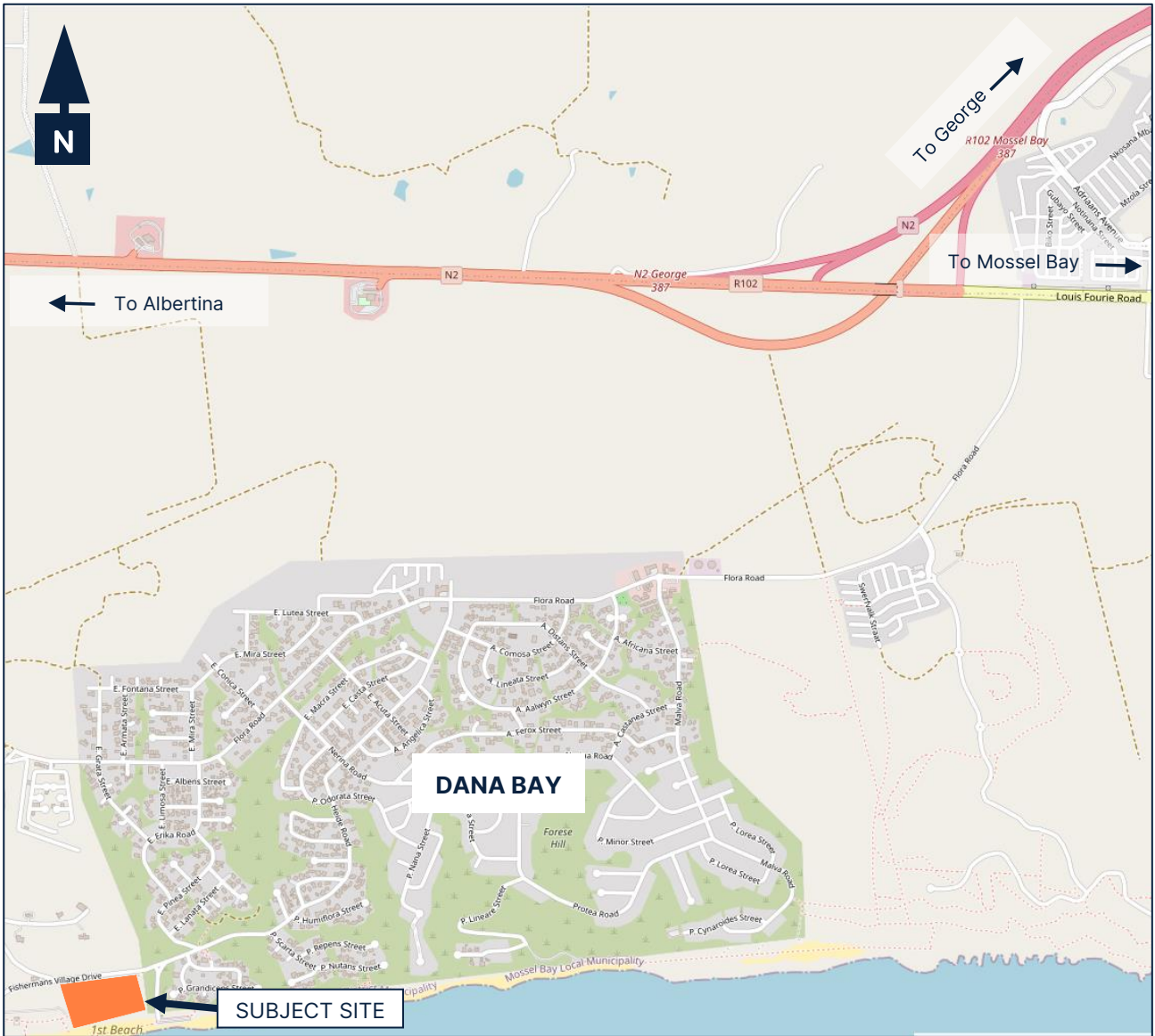


Figure 1-1: Locality Plan (Source: OpenStreetMap)

The subject site measures approximately 4.6 hectares in extent and will comprise of 144 apartments with a communal clubhouse and pool area. The development layout and phasing plan 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).

2 Background Information

2.1 Existing Roads

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

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

Fishermans Village Drive is classified as a Class 4b Residential Collector Street providing access to a private residential estate. 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

There are no pedestrian sidewalks along the existing roads in the vicinity of the site.

2.4 Site Access

The access spacing requirements were derived from the Western Cape Government (WCG) Access Management Guidelines (2020). The minimum spacing requirement for a Class 4 Road within a suburban roadside development environment is as follows:

- 115 m from an unsignalized full intersection to an unsignalized full intersection along a Class 4b Collector Road

It is planned for the development to be served by a single access along Fishermans Village Drive ~ 130 metres west of the unsignalized full intersection with Heide Road and ~ 260 metres to the east of the nearest internal road within Fisherman’s Village Coastal Estate, the latter being permanently closed. Also to consider is that there is a security access gate serving Fisherman’s Village Coastal Estate directly to the east of the proposed Site Access. Refer to **Figure 2-2**.



Figure 2-2: Proposed Site Access (Source: OpenStreetMap)

The proposed access is classified as an Equivalent Collector (thus the junction is seen as an unsignalized full intersection), as it is anticipated to serve between 60 - 500 vehicles per hour per direction. It is our submission that the proposed development access conforms to the WCG access spacing requirements.

Road users entering and exiting Fisherman's Village Coastal Estate will bring their vehicles to a standstill when approaching the security access gate, with limited queuing anticipated along each approach. It would therefore be advantageous to provide a Box Junction road marking (RM10) to prevent motorists from obstructing the site access.

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 thereto, 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. Hence, a 2023 Base Year and a 2028 Design Year was used for this TIA.

3.2 Assessment Hours

The assessment has been undertaken considering the periods during which the combined effect of background and development traffic would result in the highest traffic demand. Hence, it was deemed suitable to assess the Weekday AM and PM 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 Heide Road and Flora Road
- Counting Station 2: Intersection of Heide Road and Nerina Road
- Counting Station 3: Intersection of Heide Road, Pinea Road, and Cordata Road

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 27 September 2023
- Day Weekday AM and Weekday PM
- Congestion levels Moderate
- Enumerator SMEC South Africa (Pty) Ltd

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

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

- Weekday AM Peak Hour 07h00 – 08h00
- Weekday PM Peak Hour 16h15 – 17h15

The 2023 Base Year traffic flows are shown in **Figure 3-2**.

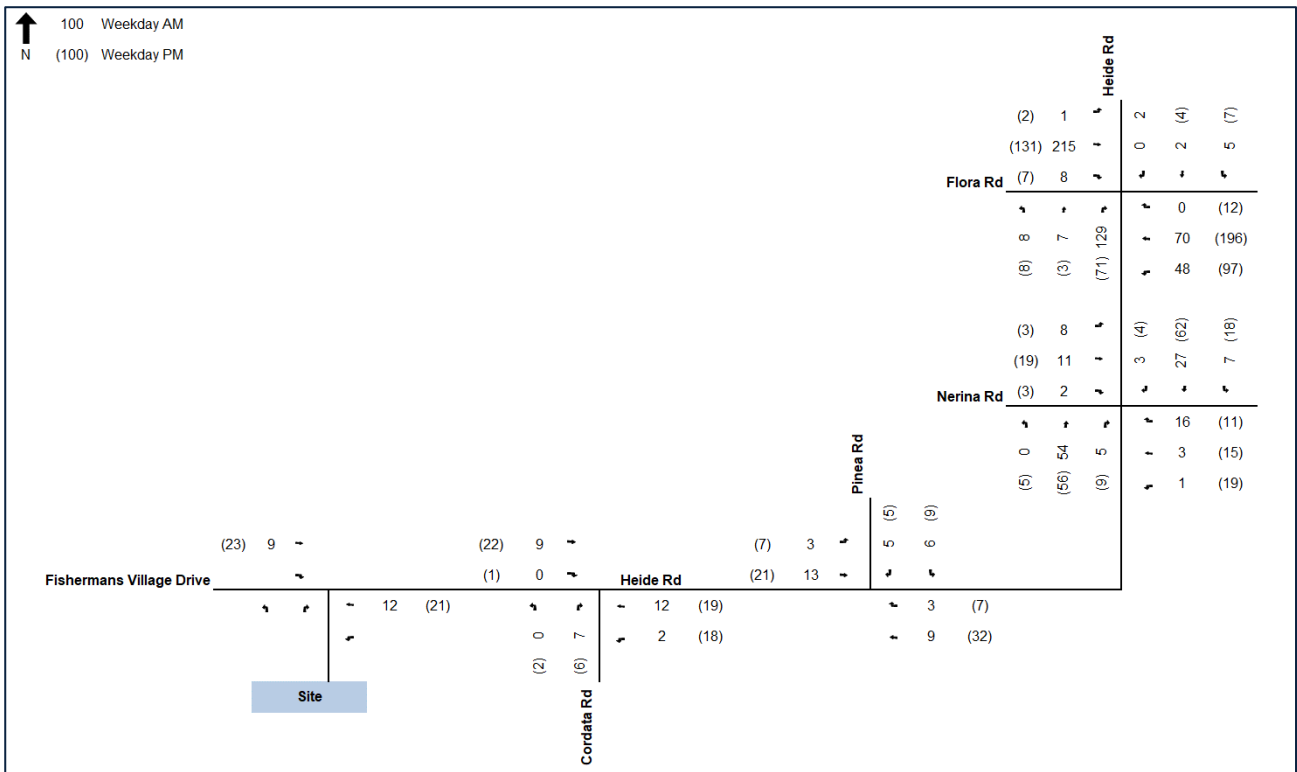


Figure 3-2: 2023 Base Year Peak Hour Traffic Flows

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 Areas	6% - 8%
Exceptionally High Growth	> 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 2023 Background Traffic in order to derive the 2028 Design Year traffic flows. The 2028 Forecast Year traffic flows are shown in **Figure 3-3**.

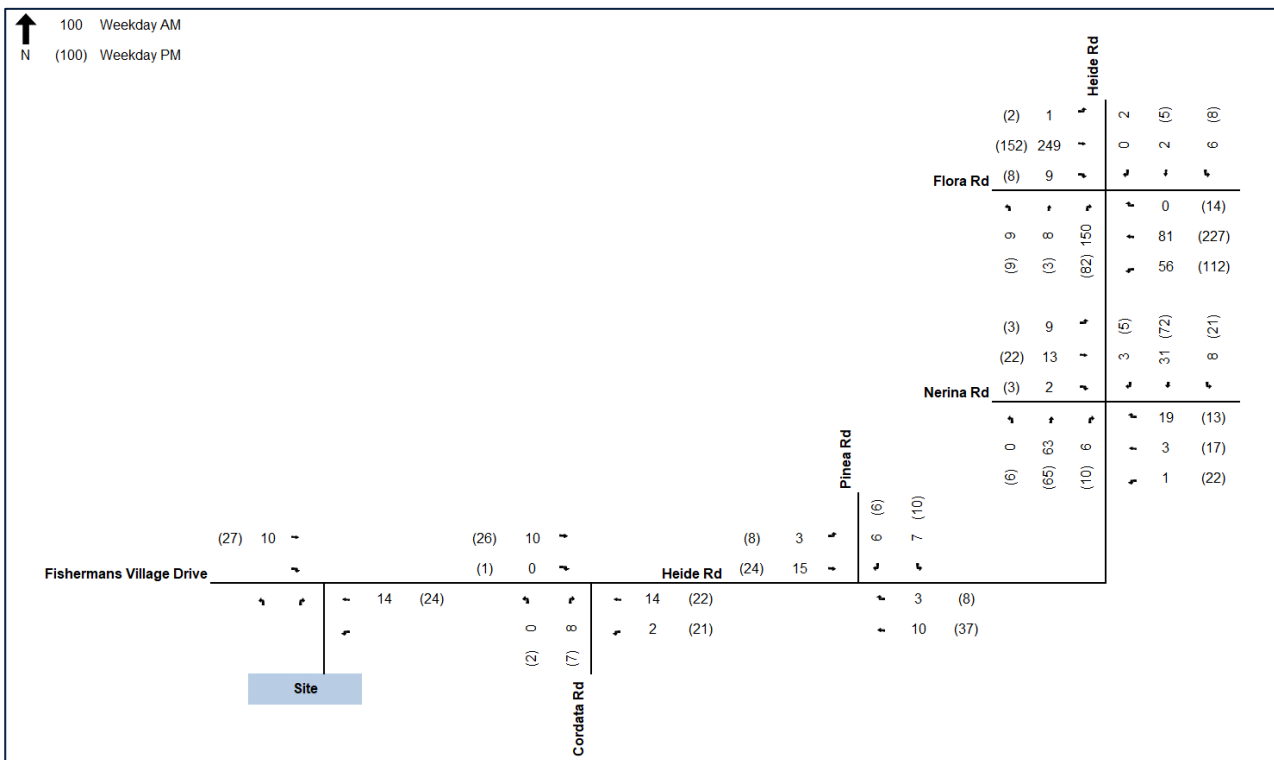


Figure 3-3: 2028 Forecast Year Traffic Flows

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.

4.1.1 Moqini Development

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

Table 4-1: Proposed Development Trip Generation

Land Use	Quantity	Trip Generation Rates		Traffic Generation (vph)			
		Weekday		Weekday		Weekday	
		Weekday		AM		PM	
		AM	PM	IN	OUT	IN	OUT
Apartments	144 units	0.65	0.65	24	71	66	29
New Trips				95		95	

It is anticipated that the proposed development would generate 95 new vehicular trips during both the Weekday AM and PM Peak Hours.

4.1.2 Other Development Trip Generation

Other developments in the area must be considered in the estimation of future background traffic. As a result, the future trip generation potential of Fisherman’s Village Coastal Estate was taken into consideration. Refer to **Table 4-2**.

Table 4-2: Other Development Trip Generation

Land Use	Quantity	Trip Generation Rates		Traffic Generation (vph)			
		Weekday		Weekday		Weekday	
		Weekday		AM		PM	
		AM	PM	IN	OUT	IN	OUT
Single Dwelling Units	25 Units	1.00	1.00	7	19	18	8
New Trips				26		26	

It is anticipated that the Fisherman’s Village Coastal Estate would generate a further 26 new vehicular trips during both the Weekday AM and PM Peak Hours once fully developed.

4.2 Trip Distribution

Trip distribution was estimated manually based on existing traffic flows, the land use of the surrounding areas and the development access location. The trip distribution figures provided are as follows:

- Figure 4-1: Trip Distribution (New Trips - Moquini Development)
- Figure 4-2: Trip Distribution (New Trips – Other Developments)

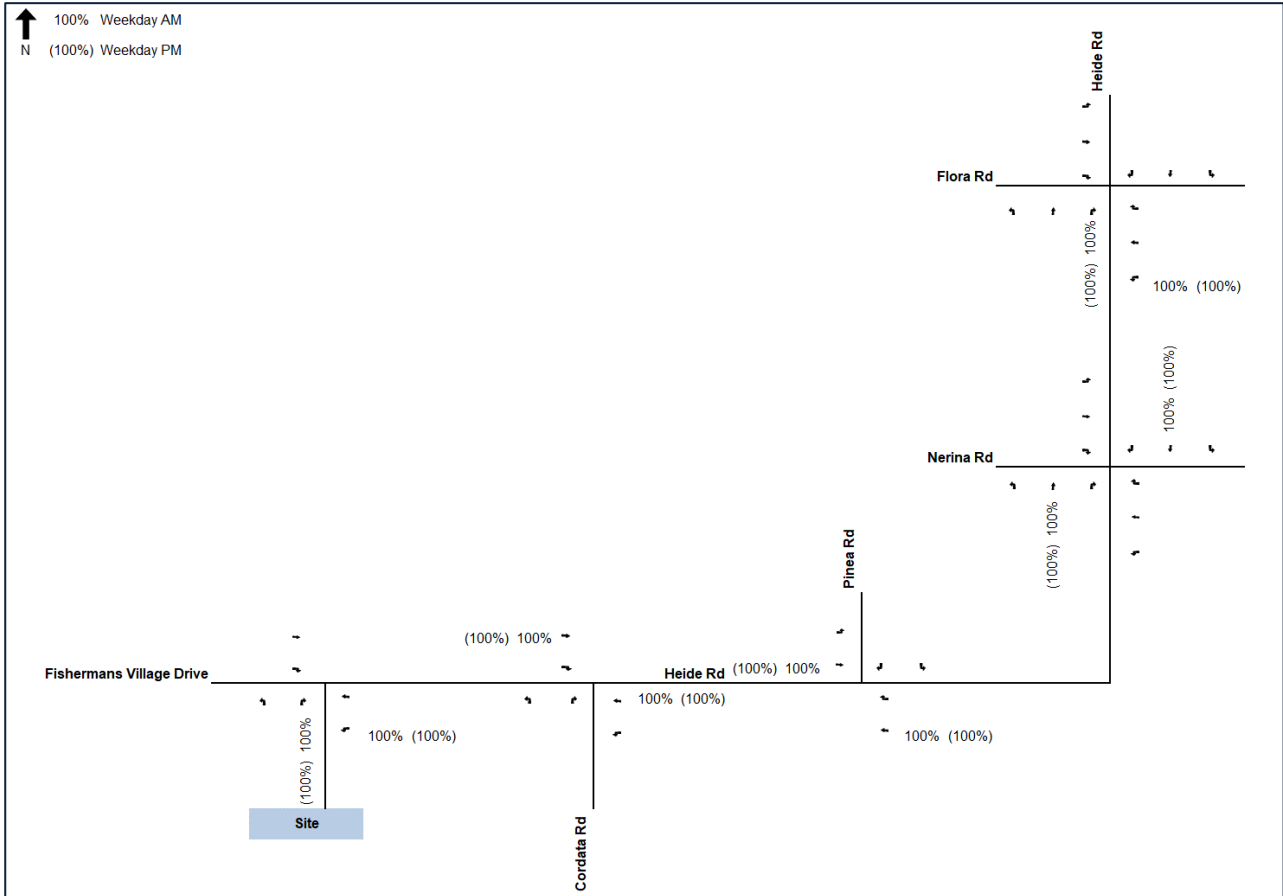


Figure 4-1: Trip Distribution (New Trips - Moquini Development)

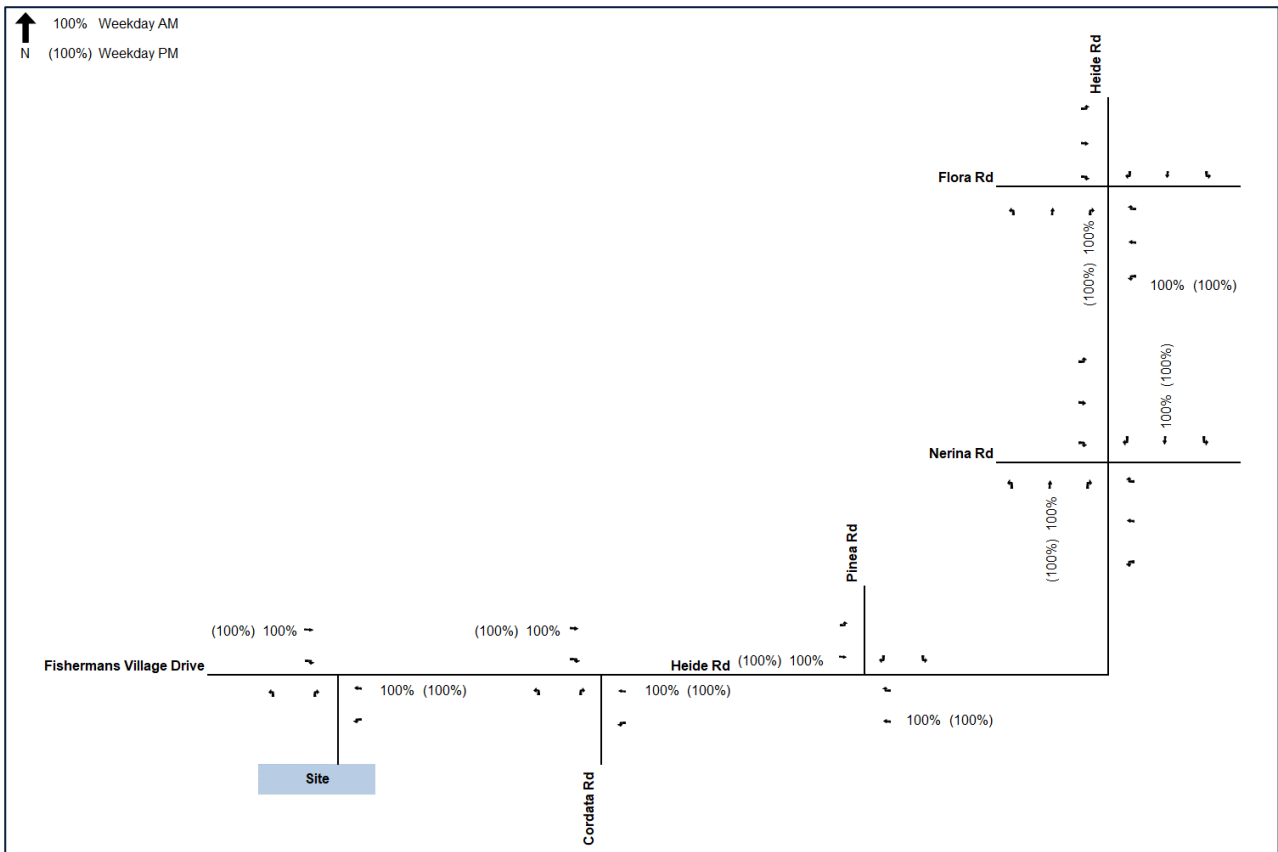


Figure 4-2: Trip Distribution (New Trips – Other Developments)

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 4-3: Traffic Assignment (New Trips - Moquini Development)
- Figure 4-4: Traffic Assignment (New Trips – Other Developments)

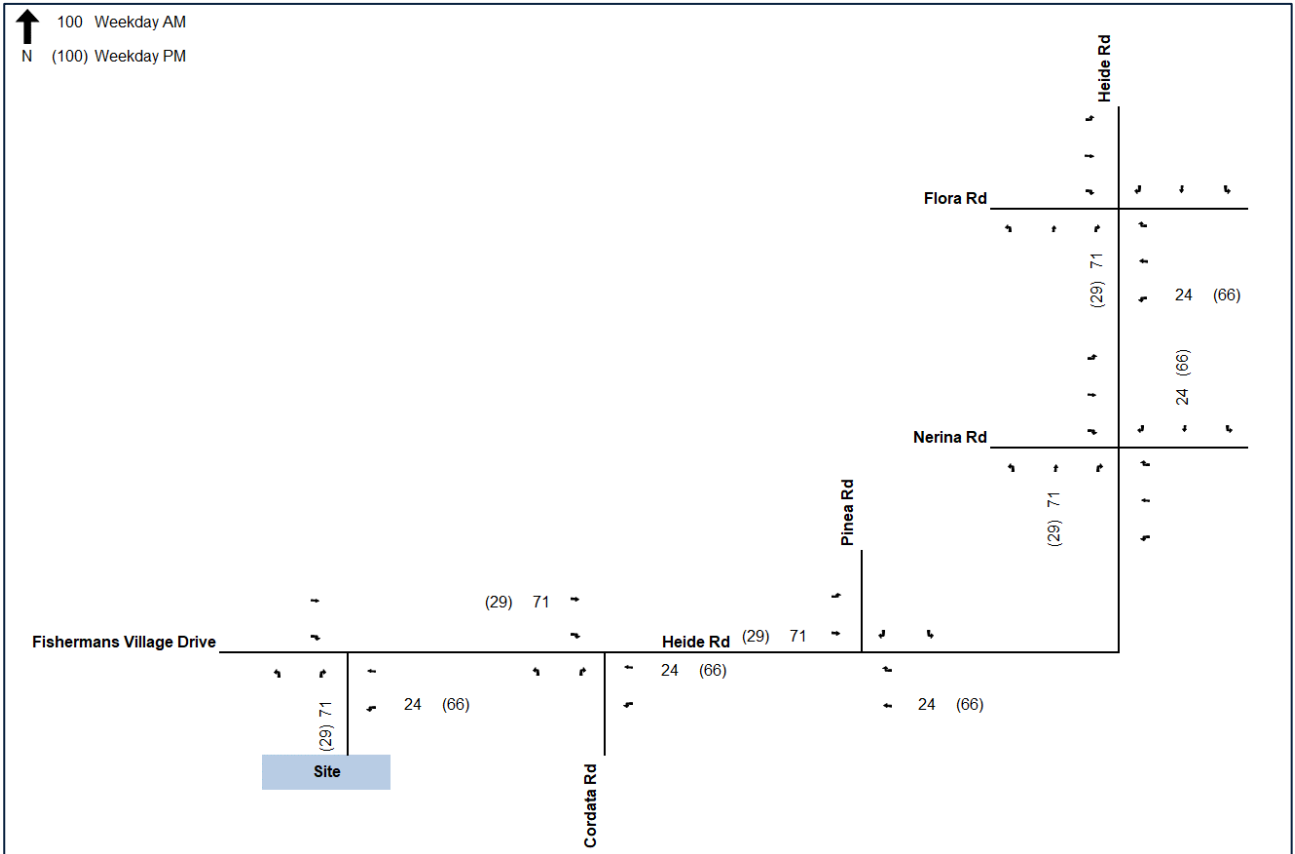


Figure 4-3: Traffic Assignment (New Trips - Moquini Development)

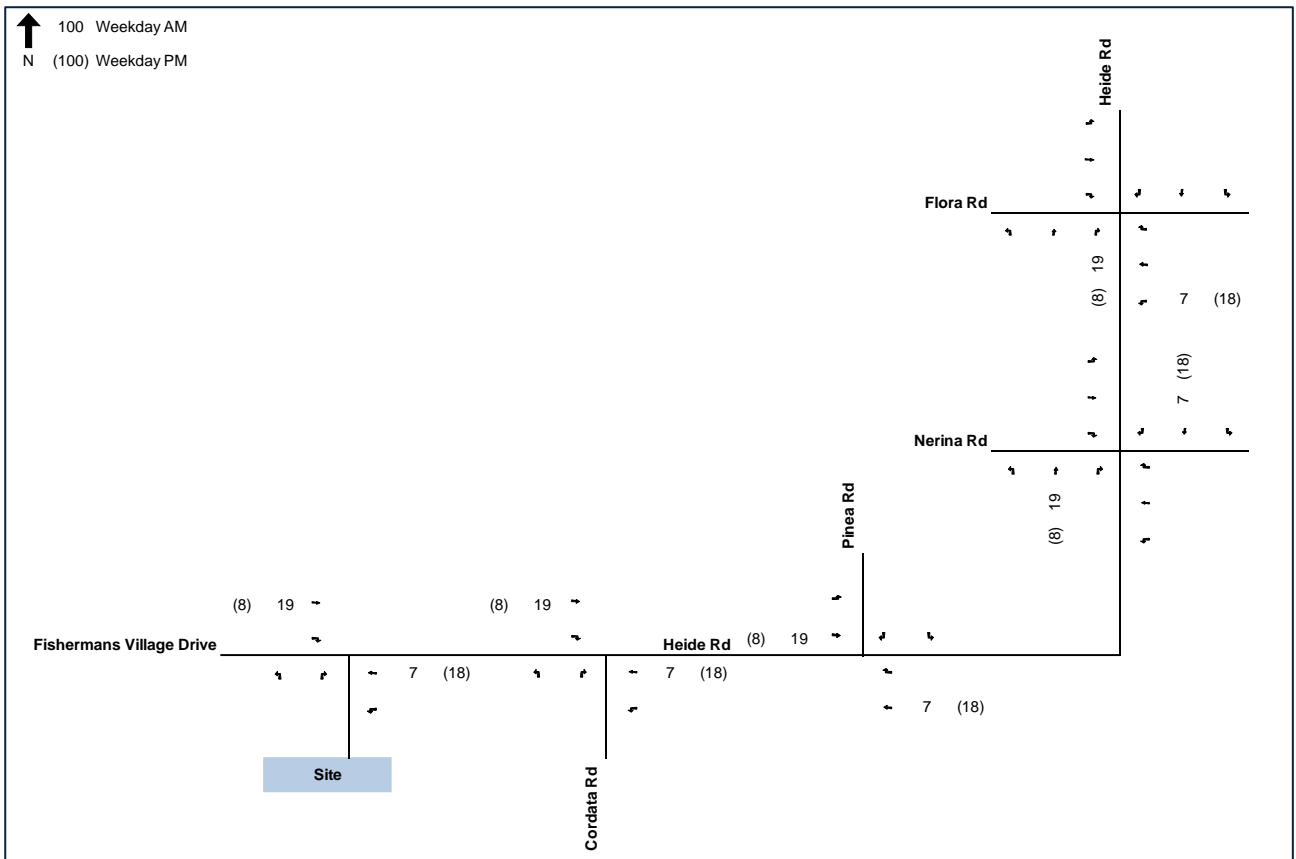


Figure 4-4: Traffic Assignment (New Trips – Other Developments)

5 Traffic Analysis

Intersection capacity analyses were undertaken to determine the anticipated operational performance of the site access and surrounding road network, taking into consideration the implementation of the development and associated development trips. The state-of-the-art traffic engineering software package, SIDRA Intersection 9.0 software, was used. The intersections analysed for the development are listed below:

- Heide Road and Flora Road Intersection
- Heide Road and Nerina Road Intersection
- Heide Road and Pinea Road Intersection
- Heide Road and Cordata Road Intersection
- Fishermans Village Drive and the Proposed Site Access

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

- 2023 Base Year
- 2023 Base Year + Development Trips
- 2028 Forecast Year + Development Trips
- 2028 Forecast Year + Development Trips + Other 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 are 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	$d \leq 10$	$d \leq 10$	$d \leq 10$	F
B	$10 < d \leq 20$	$10 < d \leq 20$	$10 < d \leq 15$	F
C	$20 < d \leq 35$	$20 < d \leq 35$	$15 < d \leq 25$	F
D	$35 < d \leq 55$	$35 < d \leq 50$	$25 < d \leq 35$	F
E	$55 < d \leq 80$	$50 < d \leq 70$	$35 < d \leq 50$	F
F	$80 < d$	$70 < d$	$50 < d$	F

Detailed SIDRA outputs are contained in **Annexure B**.

5.1 Heide Road and Flora Road Intersection

The existing intersection of Heide Road and Flora Road takes the form of a four-way stop. All approaches comprise of a single lane serving all movements. Refer to **Figure 5-1**.

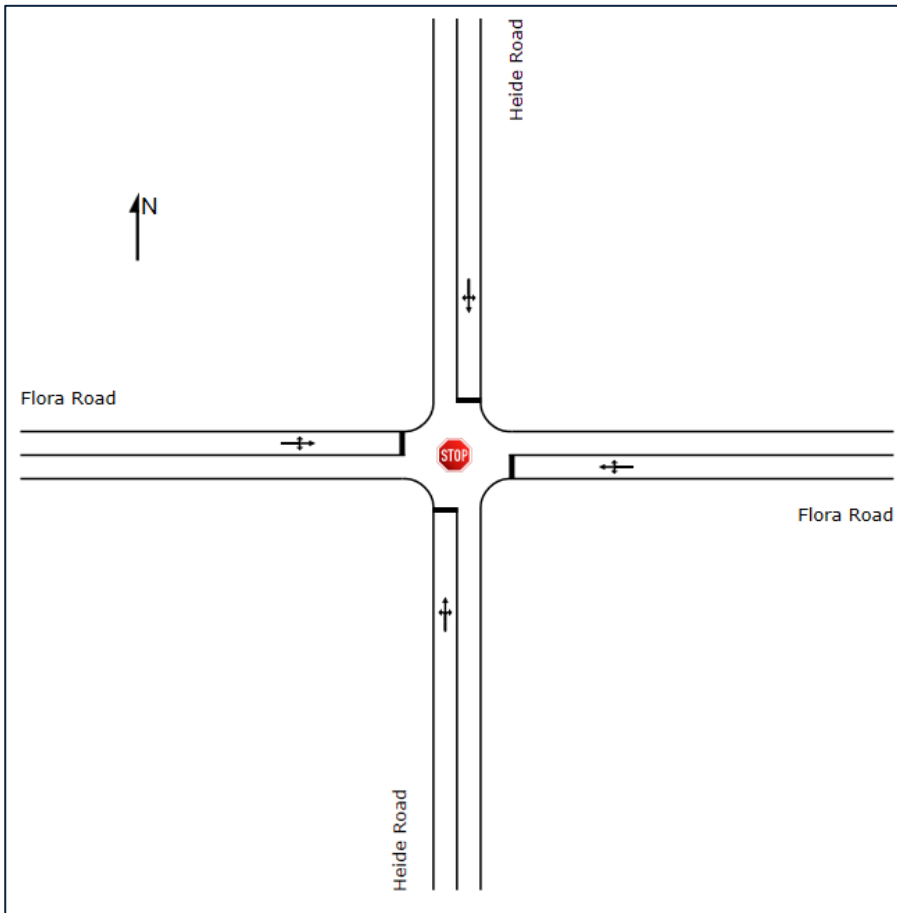


Figure 5-1: Existing Intersection Layout: Heide Road and Flora Road

2023 Base Year Traffic Flows

Taking into consideration the existing intersection layout as well as the 2023 Base Year Traffic flows, the intersection is currently operating at an overall Level of Service C during the Weekday AM and PM Peak Hours, with an average delay of approximately 17 and 18 seconds respectively. The north approach, however, operates at an unacceptable Level of Service E and F during the Weekday AM and PM Peak Hours, with an average delay of approximately 50 and 118 seconds respectively.

It is therefore our submission to convert the existing four-way stop to a two-way stop, with stop control along the north and south approaches. Refer to **Figure 5-2**.

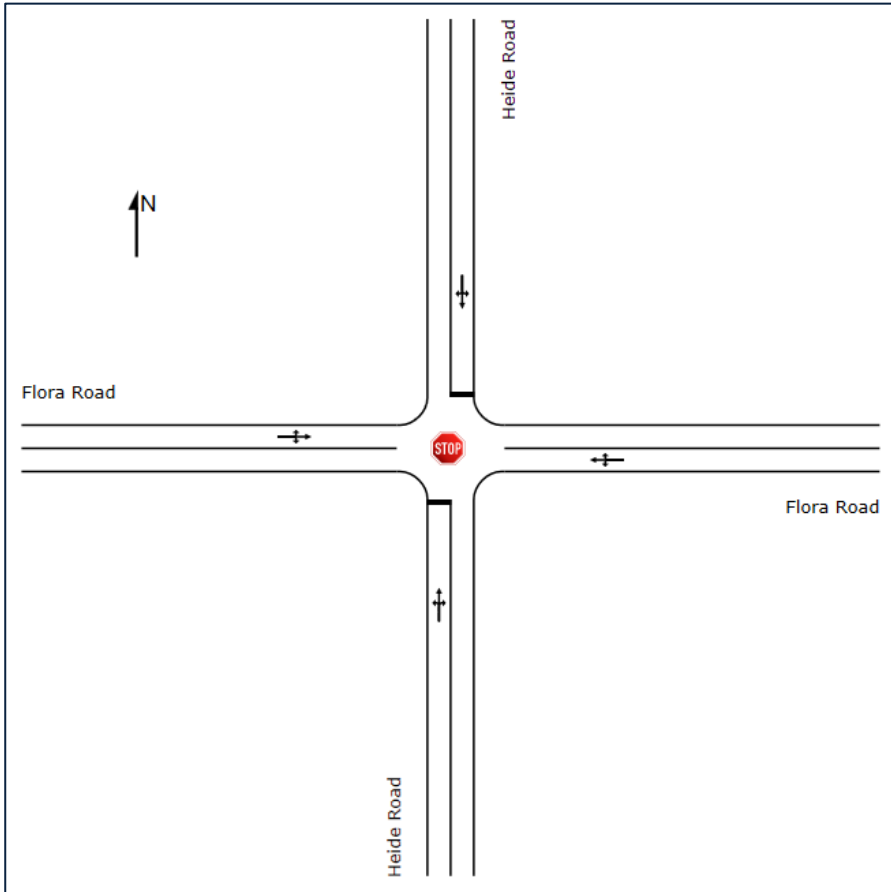


Figure 5-2: Proposed Intersection Layout: Heide Road and Flora Road

2023 Base Year Traffic Flows + Upgrades

Taking into consideration the proposed intersection layout as well as the 2023 Base Year traffic flows, the critical movements under stop control are anticipated to operate at a Level of Service B during both the Weekday AM and PM Peak Hours, with an average delay of approximately 10 seconds.

2023 Base Year + Development Trips

Taking into consideration the proposed intersection layout as well as the 2023 Base Year traffic flows plus the anticipated development trips, the critical movements under stop control are anticipated to operate at a Level of Service B during both the Weekday AM and PM Peak Hours, with an average delay of approximately 11 seconds.

2028 Forecast Year + Development Trips

Taking into consideration the proposed intersection layout as well as the 2028 Forecast Year traffic flows plus the anticipated development trips, the critical movements under stop control are anticipated to operate at a Level of Service B during both the Weekday AM and PM Peak Hours, with an average delay of approximately 12 seconds.

2028 Forecast Year + Development Trips + Other Development Trips

Taking into consideration the proposed intersection layout as well as the 2028 Forecast Year traffic flows plus the anticipated development trips plus other development trips, the critical movements under stop control are anticipated to operate at a Level of Service B during both the Weekday AM and PM Peak Hours, with an average delay of approximately 12 seconds.

5.2 Heide Road and Nerina Road Intersection

The existing intersection of the Heide Road and Nerina Road takes the form of a four-way stop. All approaches comprise of a single lane serving all movements. Refer to **Figure 5-3**.

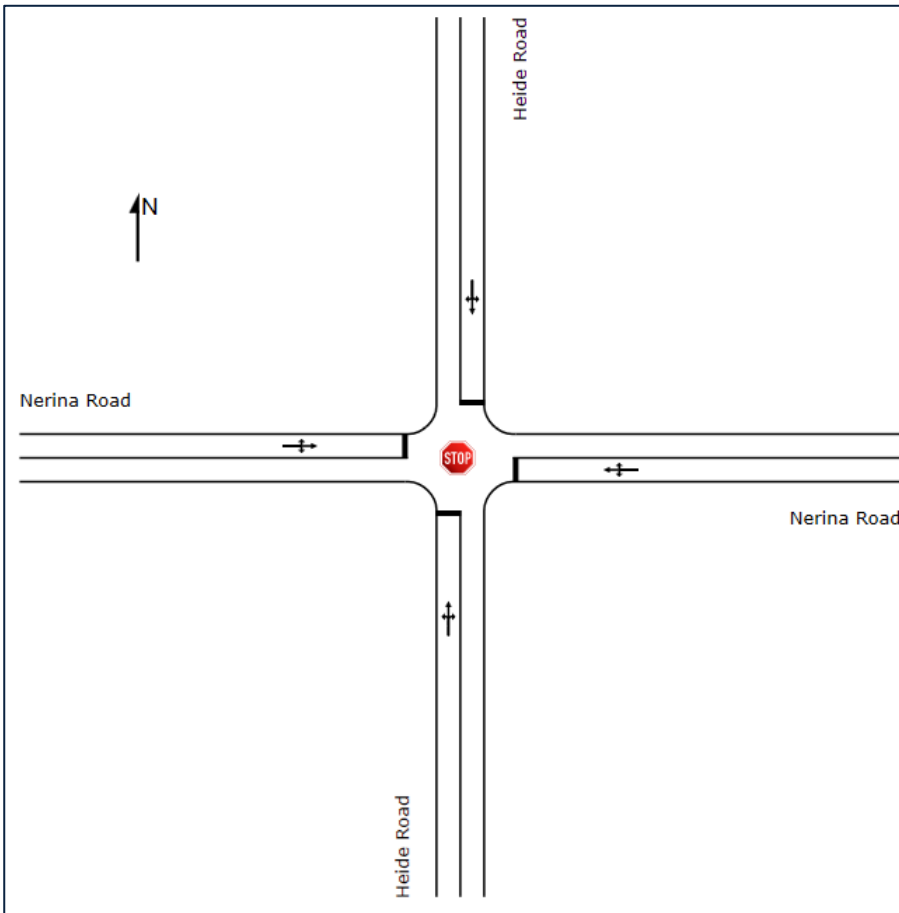


Figure 5-3: Existing Intersection Layout: Heide Road and Nerina Road

2023 Base Year Traffic Flows

Taking into consideration the 2023 Base Year traffic flows, the intersection is currently operating at an overall Level of Service C and B during the Weekday AM and PM Peak Hours, with an average delay of approximately 17 and 13 seconds respectively. The west approach, however, operates at an unacceptable Level of Service E and C during the Weekday AM and PM Peak Hours, with an average delay of approximately 42 and 17 seconds respectively.

It is therefore our submission to convert the existing four-way stop to a two-way stop, with stop control applied along the east and west approach to the intersection. Refer to **Figure 5-4**.

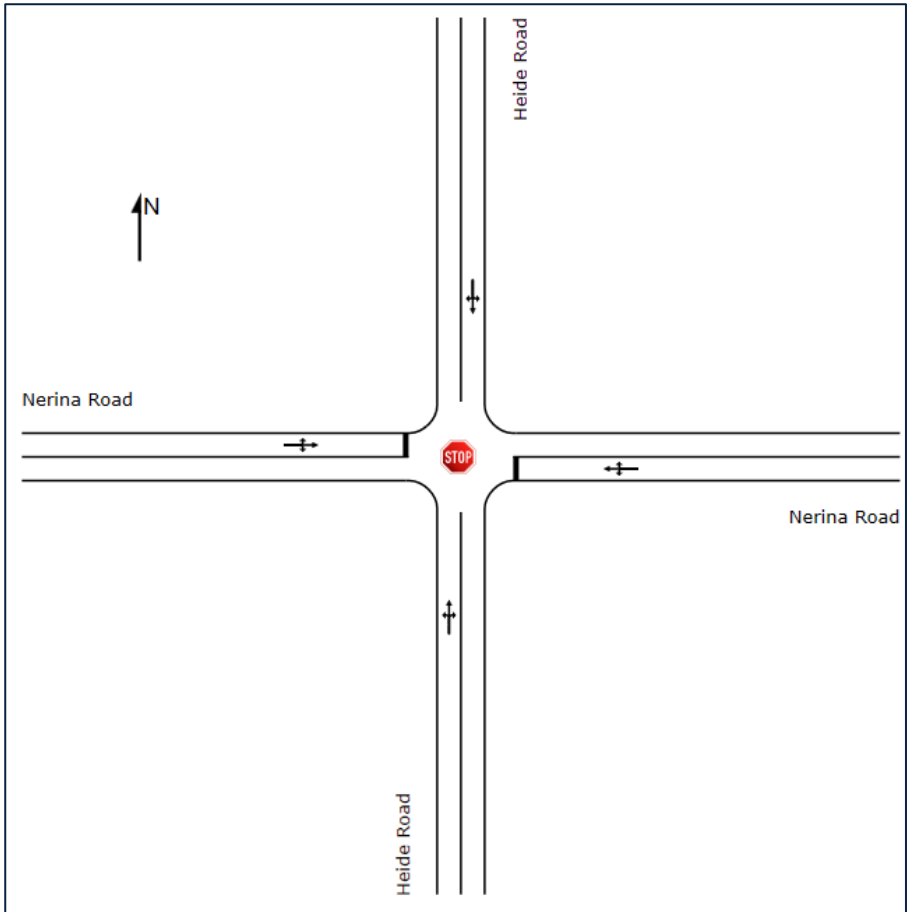


Figure 5-4: Proposed Intersection Layout: Heide Road and Nerina Road

2023 Base Year Traffic Flows

Taking into consideration the proposed intersection layout as well as the 2023 Base Year traffic flows, the critical movements under stop control are anticipated to operate at Level of Service A during both the Weekday AM and PM Peak Hours, with an average delay of approximately 8 and 9 seconds respectively.

2023 Base Year + Development Trips

Taking into consideration the proposed intersection layout as well as the 2023 Base Year traffic flows plus the anticipated development trips, the critical movements under stop control are anticipated to operate at Level of Service A during both the Weekday AM and PM Peak Hours, with an average delay of approximately 9 seconds.

2028 Forecast Year + Development Trips

Taking into consideration the proposed intersection layout as well as the 2028 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 both the Weekday AM and PM Peak Hours, with an average delay of approximately 9 seconds.

2028 Forecast Year + Development Trips + Other Development Trips

Taking into consideration the proposed intersection layout as well as the 2028 Forecast Year traffic flows plus the anticipated development trips plus other development trips, the critical movements under stop control are anticipated to operate at a Level of Service A during both the Weekday AM and PM Peak Hours, with an average delay of approximately 9 and 10 seconds respectively.

5.3 Heide Road and Pinea Road Intersection

The existing intersection of Heide Road and Pinea Road takes the form of a priority-controlled T-junction with all approaches under stop control. The north approach comprises of one lane serving all movements. The east approach comprises of a shared through-and-right-turn lane. The west approach comprises of a shared left-and-through lane. Refer to **Figure 5-5**.

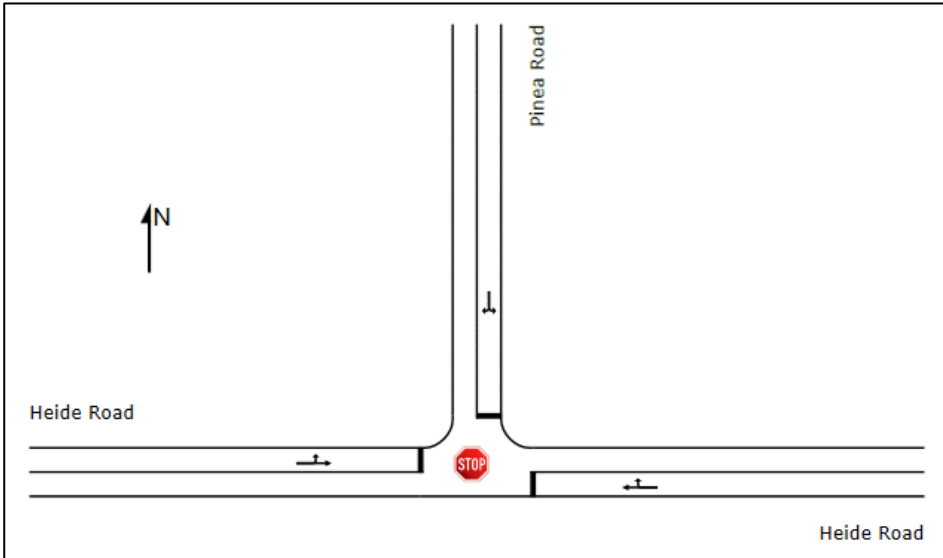


Figure 5-5: Existing Intersection Layout: Heide Road and Pinea Road

2023 Base Year Traffic Flows

Taking into consideration the 2023 Base Year traffic flows, the intersection is currently operating at an overall Level of Service B during both the Weekday AM and PM Peak Hours, with an average delay of approximately 12 and 11 seconds respectively.

2023 Base Year + Development Trips

Taking into consideration the 2023 Base Year traffic flows the plus anticipated development trips, the intersection is anticipated to operate at an overall Level of Service B during both the Weekday AM and PM Peak Hours, with an average delay of approximately 11 seconds.

2028 Forecast Year + Development Trips

Taking into consideration the 2028 Forecast Year traffic flows plus the anticipated development trips, the intersection is anticipated to operate at a Level of Service B during both the Weekday AM and PM Peak Hours, with an average delay of approximately 11 seconds.

2028 Forecast Year + Development Trips + Other Development Trips

Taking into consideration the 2028 Forecast Year traffic flows plus the anticipated development trips plus other development trips, the intersection is anticipated to operate at a Level of Service B during both the Weekday AM and PM Peak Hours, with an average delay of approximately 11 seconds respectively.

5.4 Heide Road and Cordata Road Intersection

The existing intersection of Heide Road and Cordata Road takes the form of a priority-controlled T-junction with the south approach being under yield control. The south approach comprises of one lane serving all movements. The east approach comprises of a shared through-and-left-turn lane. The west approach comprises of a shared through-and-right-turn lane. Refer to **Figure 5-6**.

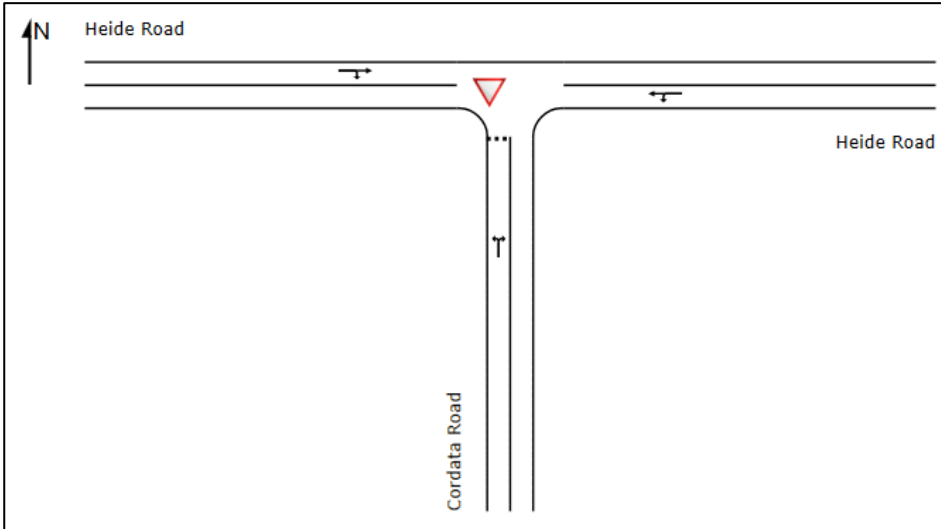


Figure 5-6: Existing Intersection Layout: Heide Road and Cordata Road

2023 Base Year Traffic Flows

Taking into consideration the 2023 Base Year traffic flows, the priority-controlled side road is currently operating at Level of Service A during both the Weekday AM and PM Peak Hours, with an average delay of approximately 6 seconds.

2023 Base Year + Development Trips

Taking into consideration the 2023 Base Year traffic flows plus the anticipated development trips, the priority-controlled side road is anticipated to operate at Level of Service A during both the Weekday AM and PM Peak Hours, with an average delay of approximately 6 seconds.

2028 Forecast Year + Development Trips

Taking into consideration the 2028 Forecast Year traffic flows plus the anticipated development trips, the priority-controlled side road is anticipated to operate at Level of Service A during both the Weekday AM and PM Peak Hours, with an average delay of approximately 6 seconds.

2028 Forecast Year + Development Trips + Other Development Trips

Taking into consideration the 2028 Forecast Year traffic flows plus the anticipated development trips plus other development trips, the priority-controlled side road is anticipated to operate at Level of Service A during both the Weekday AM and PM Peak Hours, with an average delay of approximately 6 seconds.

5.5 Fishermans Village Drive and Proposed Site Access

The intersection of Fishermans Village Drive and Proposed Site Access is proposed to take the form of a priority-controlled T-junction with the south approach being under stop control. The south approach comprises of one lane serving all movements. The east approach comprises of a shared through-and-left-turn lane. The west approach comprises of a shared through-and-right-turn lane. Refer to **Figure 5-7**.

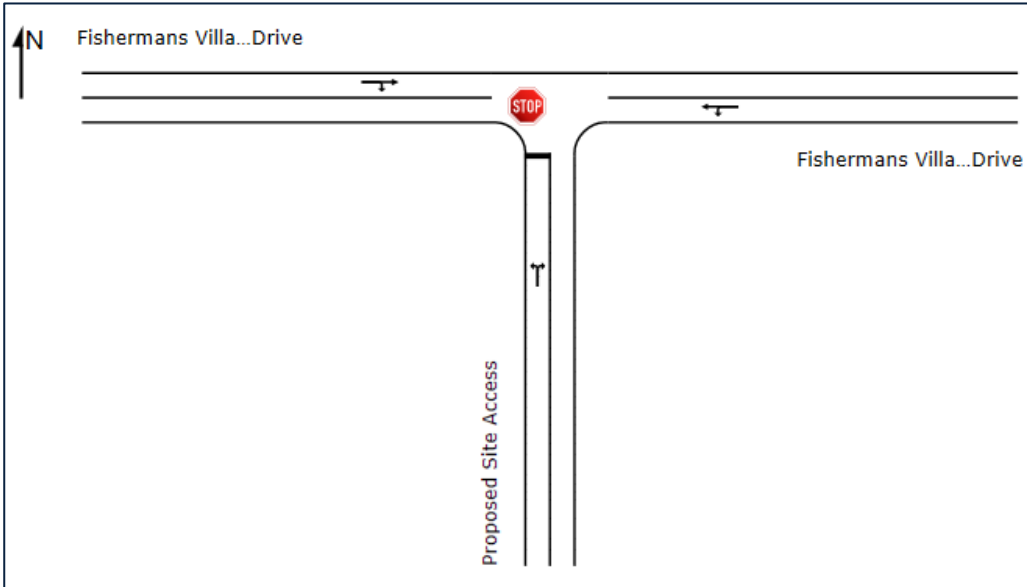


Figure 5-7: Existing Intersection Layout: Fishermans Village Drive and Proposed Site Access

2023 Base Year + Development Trips

Taking into consideration the 2023 Base Year traffic flows, the stop-controlled side road is anticipated to operate at Level of Service A during both the Weekday AM and PM Peak Hours, with an average delay of approximately 8 seconds.

2028 Forecast Year + Development Trips

Taking into consideration the 2028 Forecast Year traffic flows plus the anticipated development trips, the priority-controlled side road is anticipated to operate at Level of Service A during both the Weekday AM and PM Peak Hours, with an average delay of approximately 8 seconds.

2028 Forecast Year + Development Trips + Other Development Trips

Taking into consideration the 2028 Forecast Year traffic flows plus the anticipated development trips plus other development trips, the priority-controlled side road is anticipated to operate at Level of Service A during both the Weekday AM and PM Peak Hours, with an average delay of approximately 8 seconds.

5.6 Analysis Summary

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

Table 5-2: Analysis Summary

Intersection	2023 Base Year	2023 Base Year + Upgrades	2023 Base Year + Development Trips	2028 Forecast Year + Development Trips
Heide Road and Flora Road	C / C	B / B*	B / B*	B / B*
Heide Road and Nerina Road	C / B	A / A*	A / A*	A / A*
Heide Road and Pinea Road	B / B	-	B / B	B / B
Heide Road and Cordata Road	A / A*	-	A / A*	A / A*
Fishermans Village Drive and Proposed Site Access	-	-	A / A*	A / A*

* Critical Priority Controlled Movement 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 bellmouth 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 road network 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 Mossel Bay Municipality Zoning Scheme By-Law (2021) was used to ascertain the applicable parking requirements. For the purpose of determining parking requirements, the Moquini Beach Development is taken to fall within a Normal Area. Refer to **Table 6-1**.

Table 6-1: Parking Requirements

Land Use	Quantity	Minimum Parking Ratio	Parking Requirement (bays)
Apartments	144 units	1 bay per dwelling 0.25 bays/unit for visitors	144 for residents 36 for visitors
Total			180

The SDP provides 180 parking bays for residents and 35 for visitors. It is therefore concluded that the development adequately accommodates the parking bay requirements for residents, however, one additional parking bay should be provided for visitors to satisfy visitors parking bay requirement.

6.3 Loading

The Mossel Bay Municipality Zoning Scheme By-Law (2021) was used to ascertain the loading bay requirements to be adhered to. Taking into consideration the planned land uses, no loading bays would be required for the 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).

Considering the priority control access onto a Class 4b Residential Collector Street, the minimum requirement for both ingress and egress throat lengths is 15 metres.

Allowing for the provision of a security-controlled access to Moquini Residential Development, a queue length analysis was undertaken to assess the operational performance thereof. The following assumptions were made:

- The ingress would have one lane for residents and one lane for visitors
- The egress would have one lane serving all vehicles
- A service rate of 240 and 60 vehicles per hour for residents and visitor's lanes respectively
- 20% 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 6-2**.

Table 6-2: Queue Length Analysis

Intersection	Units	Ingress		Egress
		Residents	Visitors	Residents and Visitors
Number of service lanes	lanes	1	1	1
Service rate	veh/h/lane	240	60	240
Arrival distribution per lane	%	80%	20%	100%
Arrival rate per lane	veh/h/lane	53	13	71
95th percentile queue per lane	veh	1.8	1.8	2.3
95th percentile queue length per lane	metres	12	12	18

Taking the above into consideration, a minimum ingress and egress throat length of 12 and 18 metres, respectively, is required to serve the development. It is, however, recommended that both an ingress and egress throat length of 18 metres be provided to accommodate a truck accessing the development. The access road should be designed in such a way to ensure that both access lanes are accessible with consideration of the anticipated queue lengths.

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:

2023 Base Year

- New development access along Fishermans Village Drive approximately 130 metres to the west of the intersection of Fishermans Village Drive and Heide Road.
- Provide a Box Junction road marking (RM10) along Fishermans Village Drive at the development access.
- Convert the Heide Road and Flora Road four-way stop intersection to a two-way stop intersection with stop control on the north and south approaches (Heide Road).
- Convert the Heide Road and Nerina Road four-way stop intersection to a two-way stop intersection with stop control on the east and west approaches (Nerina Road).

2028 Forecast Year

- No further road capacity improvements would be required as part of the planned development.

8 Conclusion and Recommendations

SMEC South Africa (Pty) Ltd was appointed by Costa Zervas Projects to conduct a Traffic Impact Assessment for the proposed Moquini Beach Development on Erf 14796, Dana Bay, Western Cape.

The subject site measures approximately 4.6 hectares in extent and will comprise of 144 apartments with a communal clubhouse and pool area.

It is planned for the development to be served by a single access along Fishermans Village Drive ~ 130 metres west of the unsignalised full intersection with Heide Road and ~ 260 metres to the east of the nearest internal road junction. It is our submission that the proposed development access conforms to the WCG access spacing requirements.

It is anticipated that the development would generate 95 new vehicular trips during both the Weekday AM and PM Peak Hours, respectively.

The SDP provides 180 parking bays for residents and 35 for visitors. It is therefore concluded that the development adequately accommodates the parking bay requirements for residents however an additional parking bay should be allocated to visitors to satisfy visitor parking bay requirements.

Taking into consideration the planned land uses, no loading bays would be required for the development.

It is our submission that a minimum ingress and egress throat length of 18 metres be provided in order to accommodate a truck accessing the development. The access road should be designed in such a way to ensure that both access lanes are accessible with consideration of the anticipated queue lengths.

Following our assessment, the following capacity improvements are required as part of the planned development:

2023 Base Year

- New development access along Fishermans Village Drive approximately 130 metres to the west of the intersection of Fishermans Village Drive and Heide Road.
- Provide a Box Junction road marking (RM10) along Fishermans Village Drive at the development access.
- Convert the Heide Road and Flora Road four-way stop intersection to a two-way stop intersection with stop control on the north and south approaches (Heide Road).
- Convert the Heide Road and Nerina Road four-way stop intersection to a two-way stop intersection with stop control on the east and west approaches (Nerina Road).

2028 Forecast Year

- No further road capacity improvements would be required as part of the planned development.

Taking the above into consideration, it is concluded that this development is supported from a traffic engineering perspective, provided that the site-specific requirements are implemented as per the applicable design standards.

Annexure B Detailed SIDRA Analysis Outputs

Heide Road and Flora Road Intersection

2023 Base Year Weekday AM Peak Hour

MOVEMENT SUMMARY

 Site: 1.1 [2023 Weekday AM (Site Folder: 1. Heide Rd / Flora Rd)]

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		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total	HV]	[Total	HV]				[Veh.	Dist]				
			veh/h	%	veh/h	%	v/c	sec		veh	m				km/h
South: Heide Road															
1	L2	All MCs	8	0.0	8	0.0	0.286	15.5	LOS C	1.1	7.4	0.85	1.23	2.21	47.5
2	T1	All MCs	7	0.0	7	0.0	0.286	15.1	LOS C	1.1	7.4	0.85	1.23	2.21	47.5
3	R2	All MCs	136	0.0	136	0.0	0.286	14.9	LOS B	1.1	7.4	0.85	1.23	2.21	47.3
Approach			152	0.0	152	0.0	0.286	15.0	LOS B	1.1	7.4	0.85	1.23	2.21	47.3
East: Flora Road															
4	L2	All MCs	51	2.1	51	2.1	0.303	18.4	LOS C	1.2	8.4	0.91	1.24	2.29	45.8
5	T1	All MCs	74	4.3	74	4.3	0.303	18.3	LOS C	1.2	8.4	0.91	1.24	2.29	45.7
6	R2	All MCs	1	0.0	1	0.0	0.303	17.7	LOS C	1.2	8.4	0.91	1.24	2.29	45.6
Approach			125	3.4	125	3.4	0.303	18.3	LOS C	1.2	8.4	0.91	1.24	2.29	45.7
North: Heide Road															
7	L2	All MCs	5	20.0	5	20.0	0.092	51.4	LOS F	0.3	2.5	1.00	1.19	2.00	32.7
8	T1	All MCs	2	0.0	2	0.0	0.092	46.5	LOS E	0.3	2.5	1.00	1.19	2.00	33.1
9	R2	All MCs	1	0.0	1	0.0	0.092	46.3	LOS E	0.3	2.5	1.00	1.19	2.00	33.0
Approach			8	12.5	8	12.5	0.092	49.6	LOS E	0.3	2.5	1.00	1.19	2.00	32.8
West: Flora Road															
10	L2	All MCs	1	0.0	1	0.0	0.416	16.7	LOS C	1.7	12.3	0.87	1.31	2.51	46.9
11	T1	All MCs	226	0.9	226	0.9	0.416	16.4	LOS C	1.7	12.3	0.87	1.31	2.51	46.9
12	R2	All MCs	8	0.0	8	0.0	0.416	16.1	LOS C	1.7	12.3	0.87	1.31	2.51	46.7
Approach			236	0.9	236	0.9	0.416	16.4	LOS C	1.7	12.3	0.87	1.31	2.51	46.8
All Vehicles			521	1.4	521	1.4	0.416	17.0	LOS C	1.7	12.3	0.87	1.27	2.36	46.4

2023 Base Year Weekday PM Peak Hour

MOVEMENT SUMMARY

 Site: 1.1 [2023 Weekday PM (Site Folder: 1. Heide Rd / Flora Rd)]

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		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total	HV]	[Total	HV]				[Veh.	Dist]				
			veh/h	%	veh/h	%	v/c	sec		veh	m				km/h
South: Heide Road															
1	L2	All MCs	8	0.0	8	0.0	0.225	18.1	LOS C	0.8	5.7	0.91	1.20	2.16	46.0
2	T1	All MCs	3	0.0	3	0.0	0.225	17.7	LOS C	0.8	5.7	0.91	1.20	2.16	46.0
3	R2	All MCs	75	0.0	75	0.0	0.225	17.5	LOS C	0.8	5.7	0.91	1.20	2.16	45.8
Approach			86	0.0	86	0.0	0.225	17.6	LOS C	0.8	5.7	0.91	1.20	2.16	45.8
East: Flora Road															
4	L2	All MCs	102	0.0	102	0.0	0.494	16.7	LOS C	2.3	16.0	0.86	1.36	2.74	46.8
5	T1	All MCs	206	1.0	206	1.0	0.494	16.4	LOS C	2.3	16.0	0.86	1.36	2.74	46.7
6	R2	All MCs	13	0.0	13	0.0	0.494	16.2	LOS C	2.3	16.0	0.86	1.36	2.74	46.6
Approach			321	0.7	321	0.7	0.494	16.5	LOS C	2.3	16.0	0.86	1.36	2.74	46.7
North: Heide Road															
7	L2	All MCs	7	0.0	7	0.0	0.318	118.4	LOS F	1.1	8.0	1.00	1.23	2.07	20.3
8	T1	All MCs	4	0.0	4	0.0	0.318	118.1	LOS F	1.1	8.0	1.00	1.23	2.07	20.3
9	R2	All MCs	2	0.0	2	0.0	0.318	117.9	LOS F	1.1	8.0	1.00	1.23	2.07	20.3
Approach			14	0.0	14	0.0	0.318	118.2	LOS F	1.1	8.0	1.00	1.23	2.07	20.3
West: Flora Road															
10	L2	All MCs	2	0.0	2	0.0	0.239	13.6	LOS B	0.8	6.0	0.79	1.24	2.07	48.7
11	T1	All MCs	138	3.1	138	3.1	0.239	13.5	LOS B	0.8	6.0	0.79	1.24	2.07	48.6
12	R2	All MCs	7	0.0	7	0.0	0.239	13.0	LOS B	0.8	6.0	0.79	1.24	2.07	48.5
Approach			147	2.9	147	2.9	0.239	13.4	LOS B	0.8	6.0	0.79	1.24	2.07	48.6
All Vehicles			568	1.1	568	1.1	0.494	18.3	LOS C	2.3	16.0	0.85	1.30	2.47	45.6

2023 Base Year Weekday AM Peak Hour with Upgrades

MOVEMENT SUMMARY

 Site: 1.1v [2023 Weekday AM: 2-way stop (Site Folder: 1. Heide Rd / Flora Rd)]

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		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total	HV]	[Total	HV]				[Veh.	Dist]				
			veh/h	%	veh/h	%	v/c	sec		veh	m				km/h
South: Heide Road															
1	L2	All MCs	8	0.0	8	0.0	0.212	8.3	LOS A	0.8	5.6	0.43	0.91	0.43	50.2
2	T1	All MCs	7	0.0	7	0.0	0.212	9.8	LOS A	0.8	5.6	0.43	0.91	0.43	50.2
3	R2	All MCs	136	0.0	136	0.0	0.212	10.2	LOS B	0.8	5.6	0.43	0.91	0.43	49.9
Approach			152	0.0	152	0.0	0.212	10.1	LOS B	0.8	5.6	0.43	0.91	0.43	50.0
East: Flora Road															
4	L2	All MCs	51	2.1	51	2.1	0.064	5.6	LOS A	0.0	0.1	0.01	0.24	0.01	55.3
5	T1	All MCs	74	4.3	74	4.3	0.064	0.0	LOS A	0.0	0.1	0.01	0.24	0.01	57.8
6	R2	All MCs	1	0.0	1	0.0	0.064	6.1	LOS A	0.0	0.1	0.01	0.24	0.01	55.2
Approach			125	3.4	125	3.4	0.064	2.3	NA	0.0	0.1	0.01	0.24	0.01	56.7
North: Heide Road															
7	L2	All MCs	5	20.0	5	20.0	0.009	9.9	LOS A	0.0	0.3	0.36	0.87	0.36	50.0
8	T1	All MCs	2	0.0	2	0.0	0.009	9.5	LOS A	0.0	0.3	0.36	0.87	0.36	50.7
9	R2	All MCs	1	0.0	1	0.0	0.009	9.5	LOS A	0.0	0.3	0.36	0.87	0.36	50.5
Approach			8	12.5	8	12.5	0.009	9.8	LOS A	0.0	0.3	0.36	0.87	0.36	50.2
West: Flora Road															
10	L2	All MCs	1	0.0	1	0.0	0.116	5.5	LOS A	0.1	0.4	0.02	0.03	0.02	57.2
11	T1	All MCs	226	0.9	226	0.9	0.116	0.0	LOS A	0.1	0.4	0.02	0.03	0.02	59.7
12	R2	All MCs	8	0.0	8	0.0	0.116	5.9	LOS A	0.1	0.4	0.02	0.03	0.02	56.9
Approach			236	0.9	236	0.9	0.116	0.2	NA	0.1	0.4	0.02	0.03	0.02	59.6
All Vehicles			521	1.4	521	1.4	0.212	3.7	NA	0.8	5.6	0.15	0.35	0.15	55.6

2023 Base Year Weekday PM Peak Hour with Upgrades

MOVEMENT SUMMARY

 Site: 1.1v [2023 Weekday PM: 2-way stop (Site Folder: 1. Heide Rd / Flora Rd)]

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		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total	HV]	[Total	HV]				[Veh.	Dist]				
			veh/h	%	veh/h	%	v/c	sec		veh	m				km/h
South: Heide Road															
1	L2	All MCs	8	0.0	8	0.0	0.132	8.9	LOS A	0.5	3.2	0.47	0.94	0.47	49.9
2	T1	All MCs	3	0.0	3	0.0	0.132	10.2	LOS B	0.5	3.2	0.47	0.94	0.47	49.9
3	R2	All MCs	75	0.0	75	0.0	0.132	10.7	LOS B	0.5	3.2	0.47	0.94	0.47	49.7
Approach			86	0.0	86	0.0	0.132	10.5	LOS B	0.5	3.2	0.47	0.94	0.47	49.7
East: Flora Road															
4	L2	All MCs	102	0.0	102	0.0	0.161	5.5	LOS A	0.1	0.9	0.04	0.22	0.04	55.6
5	T1	All MCs	206	1.0	206	1.0	0.161	0.0	LOS A	0.1	0.9	0.04	0.22	0.04	58.0
6	R2	All MCs	13	0.0	13	0.0	0.161	6.6	LOS A	0.1	0.9	0.04	0.22	0.04	55.3
Approach			321	0.7	321	0.7	0.161	2.0	NA	0.1	0.9	0.04	0.22	0.04	57.1
North: Heide Road															
7	L2	All MCs	7	0.0	7	0.0	0.015	8.5	LOS A	0.1	0.4	0.33	0.86	0.33	50.6
8	T1	All MCs	4	0.0	4	0.0	0.015	10.3	LOS B	0.1	0.4	0.33	0.86	0.33	50.6
9	R2	All MCs	2	0.0	2	0.0	0.015	9.9	LOS A	0.1	0.4	0.33	0.86	0.33	50.4
Approach			14	0.0	14	0.0	0.015	9.3	LOS A	0.1	0.4	0.33	0.86	0.33	50.6
West: Flora Road															
10	L2	All MCs	2	0.0	2	0.0	0.075	5.5	LOS A	0.1	0.5	0.06	0.07	0.06	56.9
11	T1	All MCs	138	3.1	138	3.1	0.075	0.0	LOS A	0.1	0.5	0.06	0.07	0.06	59.4
12	R2	All MCs	7	0.0	7	0.0	0.075	8.4	LOS A	0.1	0.5	0.06	0.07	0.06	56.6
Approach			147	2.9	147	2.9	0.075	0.5	NA	0.1	0.5	0.06	0.07	0.06	59.2
All Vehicles			568	1.1	568	1.1	0.161	3.1	NA	0.5	3.2	0.11	0.30	0.11	56.2

2023 Base Year Weekday AM Peak Hour + Development trips

MOVEMENT SUMMARY

 Site: 1.1 [2023 Weekday AM + Dev Trips: 2-way stop (Site Folder: 1. Heide Rd / Flora Rd)]

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		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total veh/h]	[HV %]	[Total veh/h]	[HV %]				[Veh. veh]	[Dist m]				
South: Heide Road															
1	L2	All MCs	8	0.0	8	0.0	0.324	8.6	LOS A	1.4	10.1	0.49	0.93	0.53	49.8
2	T1	All MCs	7	0.0	7	0.0	0.324	10.4	LOS B	1.4	10.1	0.49	0.93	0.53	49.8
3	R2	All MCs	209	0.0	209	0.0	0.324	10.8	LOS B	1.4	10.1	0.49	0.93	0.53	49.6
Approach			225	0.0	225	0.0	0.324	10.7	LOS B	1.4	10.1	0.49	0.93	0.53	49.6
East: Flora Road															
4	L2	All MCs	75	2.1	75	2.1	0.076	5.6	LOS A	0.0	0.1	0.01	0.30	0.01	54.9
5	T1	All MCs	74	4.3	74	4.3	0.076	0.0	LOS A	0.0	0.1	0.01	0.30	0.01	57.3
6	R2	All MCs	1	0.0	1	0.0	0.076	6.0	LOS A	0.0	0.1	0.01	0.30	0.01	54.7
Approach			149	3.2	149	3.2	0.076	2.8	NA	0.0	0.1	0.01	0.30	0.01	56.1
North: Heide Road															
7	L2	All MCs	5	20.0	5	20.0	0.009	9.9	LOS A	0.0	0.3	0.36	0.87	0.36	49.9
8	T1	All MCs	2	0.0	2	0.0	0.009	9.7	LOS A	0.0	0.3	0.36	0.87	0.36	50.7
9	R2	All MCs	1	0.0	1	0.0	0.009	9.5	LOS A	0.0	0.3	0.36	0.87	0.36	50.5
Approach			8	12.5	8	12.5	0.009	9.8	LOS A	0.0	0.3	0.36	0.87	0.36	50.2
West: Flora Road															
10	L2	All MCs	1	0.0	1	0.0	0.117	5.5	LOS A	0.1	0.5	0.03	0.03	0.03	57.2
11	T1	All MCs	226	0.9	226	0.9	0.117	0.0	LOS A	0.1	0.5	0.03	0.03	0.03	59.7
12	R2	All MCs	8	0.0	8	0.0	0.117	6.2	LOS A	0.1	0.5	0.03	0.03	0.03	56.9
Approach			236	0.9	236	0.9	0.117	0.2	NA	0.1	0.5	0.03	0.03	0.03	59.6
All Vehicles			619	1.3	619	1.3	0.324	4.8	NA	1.4	10.1	0.19	0.43	0.21	54.6

2023 Base Year Weekday PM Peak Hour + Development trips

MOVEMENT SUMMARY

 **Site: 1.1 [2023 Weekday PM + Dev Trips: 2-way stop (Site Folder: 1. Heide Rd / Flora Rd)]**

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		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total veh/h]	[HV %]	[Total veh/h]	[HV %]				[Veh. veh]	[Dist m]				
South: Heide Road															
1	L2	All MCs	8	0.0	8	0.0	0.189	8.9	LOS A	0.7	4.7	0.50	0.95	0.50	49.6
2	T1	All MCs	3	0.0	3	0.0	0.189	10.7	LOS B	0.7	4.7	0.50	0.95	0.50	49.5
3	R2	All MCs	104	0.0	104	0.0	0.189	11.3	LOS B	0.7	4.7	0.50	0.95	0.50	49.3
Approach			116	0.0	116	0.0	0.189	11.1	LOS B	0.7	4.7	0.50	0.95	0.50	49.4
East: Flora Road															
4	L2	All MCs	172	0.0	172	0.0	0.196	5.5	LOS A	0.1	0.9	0.03	0.28	0.03	55.1
5	T1	All MCs	206	1.0	206	1.0	0.196	0.0	LOS A	0.1	0.9	0.03	0.28	0.03	57.4
6	R2	All MCs	13	0.0	13	0.0	0.196	6.5	LOS A	0.1	0.9	0.03	0.28	0.03	54.8
Approach			391	0.5	391	0.5	0.196	2.6	NA	0.1	0.9	0.03	0.28	0.03	56.3
North: Heide Road															
7	L2	All MCs	7	0.0	7	0.0	0.016	8.5	LOS A	0.1	0.4	0.34	0.86	0.34	50.5
8	T1	All MCs	4	0.0	4	0.0	0.016	11.0	LOS B	0.1	0.4	0.34	0.86	0.34	50.5
9	R2	All MCs	2	0.0	2	0.0	0.016	9.9	LOS A	0.1	0.4	0.34	0.86	0.34	50.3
Approach			14	0.0	14	0.0	0.016	9.5	LOS A	0.1	0.4	0.34	0.86	0.34	50.5
West: Flora Road															
10	L2	All MCs	2	0.0	2	0.0	0.075	5.5	LOS A	0.1	0.5	0.06	0.08	0.06	56.9
11	T1	All MCs	138	3.1	138	3.1	0.075	0.0	LOS A	0.1	0.5	0.06	0.08	0.06	59.4
12	R2	All MCs	7	0.0	7	0.0	0.075	9.3	LOS A	0.1	0.5	0.06	0.08	0.06	56.6
Approach			147	2.9	147	2.9	0.075	0.5	NA	0.1	0.5	0.06	0.08	0.06	59.2
All Vehicles			667	0.9	667	0.9	0.196	3.8	NA	0.7	4.7	0.13	0.37	0.13	55.4

2028 Forecast Year Weekday AM Peak Hour + Development trips

MOVEMENT SUMMARY

 Site: 1.1v [2028 Weekday AM + Dev Trips: 2-way stop (Site Folder: 1. Heide Rd / Flora Rd)]

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		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Heide Road															
1	L2	All MCs	9	0.0	9	0.0	0.385	9.1	LOS A	2.0	13.7	0.55	0.97	0.67	49.1
2	T1	All MCs	8	0.0	8	0.0	0.385	11.4	LOS B	2.0	13.7	0.55	0.97	0.67	49.1
3	R2	All MCs	232	0.0	232	0.0	0.385	12.0	LOS B	2.0	13.7	0.55	0.97	0.67	48.9
Approach			249	0.0	249	0.0	0.385	11.9	LOS B	2.0	13.7	0.55	0.97	0.67	48.9
East: Flora Road															
4	L2	All MCs	83	2.1	83	2.1	0.086	5.6	LOS A	0.0	0.1	0.01	0.29	0.01	55.0
5	T1	All MCs	85	4.3	85	4.3	0.086	0.0	LOS A	0.0	0.1	0.01	0.29	0.01	57.3
6	R2	All MCs	1	0.0	1	0.0	0.086	6.2	LOS A	0.0	0.1	0.01	0.29	0.01	54.8
Approach			169	3.2	169	3.2	0.086	2.8	NA	0.0	0.1	0.01	0.29	0.01	56.1
North: Heide Road															
7	L2	All MCs	6	20.0	6	20.0	0.011	10.2	LOS B	0.0	0.3	0.39	0.87	0.39	49.8
8	T1	All MCs	2	0.0	2	0.0	0.011	10.1	LOS B	0.0	0.3	0.39	0.87	0.39	50.6
9	R2	All MCs	1	0.0	1	0.0	0.011	9.9	LOS A	0.0	0.3	0.39	0.87	0.39	50.3
Approach			9	13.3	9	13.3	0.011	10.1	LOS B	0.0	0.3	0.39	0.87	0.39	50.0
West: Flora Road															
10	L2	All MCs	1	0.0	1	0.0	0.135	5.5	LOS A	0.1	0.5	0.03	0.03	0.03	57.2
11	T1	All MCs	262	0.9	262	0.9	0.135	0.0	LOS A	0.1	0.5	0.03	0.03	0.03	59.7
12	R2	All MCs	9	0.0	9	0.0	0.135	6.4	LOS A	0.1	0.5	0.03	0.03	0.03	56.9
Approach			273	0.9	273	0.9	0.135	0.2	NA	0.1	0.5	0.03	0.03	0.03	59.6
All Vehicles			701	1.3	701	1.3	0.385	5.1	NA	2.0	13.7	0.21	0.44	0.26	54.4

2028 Forecast Year Weekday PM Peak Hour + Development trips

MOVEMENT SUMMARY

 Site: 1.1v [2028 Weekday PM + Dev Trips: 2-way stop (Site Folder: 1. Heide Rd / Flora Rd)]

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		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total veh/h]	[HV %]	[Total veh/h]	[HV %]				[Veh. veh]	[Dist] m				
South: Heide Road															
1	L2	All MCs	9	0.0	9	0.0	0.230	9.2	LOS A	0.8	5.9	0.55	0.97	0.55	49.0
2	T1	All MCs	3	0.0	3	0.0	0.230	11.4	LOS B	0.8	5.9	0.55	0.97	0.55	49.0
3	R2	All MCs	116	0.0	116	0.0	0.230	12.2	LOS B	0.8	5.9	0.55	0.97	0.55	48.8
Approach			128	0.0	128	0.0	0.230	12.0	LOS B	0.8	5.9	0.55	0.97	0.55	48.8
East: Flora Road															
4	L2	All MCs	187	0.0	187	0.0	0.222	5.5	LOS A	0.2	1.1	0.04	0.28	0.04	55.2
5	T1	All MCs	239	1.0	239	1.0	0.222	0.0	LOS A	0.2	1.1	0.04	0.28	0.04	57.4
6	R2	All MCs	15	0.0	15	0.0	0.222	7.0	LOS A	0.2	1.1	0.04	0.28	0.04	54.9
Approach			441	0.6	441	0.6	0.222	2.6	NA	0.2	1.1	0.04	0.28	0.04	56.4
North: Heide Road															
7	L2	All MCs	8	0.0	8	0.0	0.019	8.6	LOS A	0.1	0.5	0.38	0.85	0.38	50.3
8	T1	All MCs	5	0.0	5	0.0	0.019	11.7	LOS B	0.1	0.5	0.38	0.85	0.38	50.3
9	R2	All MCs	2	0.0	2	0.0	0.019	10.4	LOS B	0.1	0.5	0.38	0.85	0.38	50.1
Approach			16	0.0	16	0.0	0.019	9.9	LOS A	0.1	0.5	0.38	0.85	0.38	50.3
West: Flora Road															
10	L2	All MCs	2	0.0	2	0.0	0.088	5.5	LOS A	0.1	0.6	0.07	0.08	0.07	56.9
11	T1	All MCs	160	3.1	160	3.1	0.088	0.0	LOS A	0.1	0.6	0.07	0.08	0.07	59.4
12	R2	All MCs	8	0.0	8	0.0	0.088	10.1	LOS B	0.1	0.6	0.07	0.08	0.07	56.6
Approach			171	2.9	171	2.9	0.088	0.6	NA	0.1	0.6	0.07	0.08	0.07	59.2
All Vehicles			756	1.0	756	1.0	0.230	3.9	NA	0.8	5.9	0.14	0.36	0.14	55.4

2028 Forecast Year Weekday AM Peak Hour + Development trips + Other Development Trips

MOVEMENT SUMMARY

 Site: 1.1v [2028 Weekday AM + Dev Trips: + Other Trips 2-way stop (Site Folder: 1. Heide Rd / Flora Rd)]

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		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed	
			[Total	HV]	[Total	HV]				[Veh.	Dist]					
			veh/h	%	veh/h	%	v/c	sec			veh	m				km/h
South: Heide Road																
1	L2	All MCs	9	0.0	9	0.0	0.420	9.3	LOS A	2.3	16.0	0.56	0.99	0.73	48.8	
2	T1	All MCs	8	0.0	8	0.0	0.420	11.8	LOS B	2.3	16.0	0.56	0.99	0.73	48.8	
3	R2	All MCs	253	0.0	253	0.0	0.420	12.4	LOS B	2.3	16.0	0.56	0.99	0.73	48.6	
Approach			271	0.0	271	0.0	0.420	12.3	LOS B	2.3	16.0	0.56	0.99	0.73	48.6	
East: Flora Road																
4	L2	All MCs	92	2.1	92	2.1	0.091	5.6	LOS A	0.0	0.1	0.01	0.31	0.01	54.9	
5	T1	All MCs	85	4.3	85	4.3	0.091	0.0	LOS A	0.0	0.1	0.01	0.31	0.01	57.2	
6	R2	All MCs	1	0.0	1	0.0	0.091	6.1	LOS A	0.0	0.1	0.01	0.31	0.01	54.7	
Approach			178	3.1	178	3.1	0.091	2.9	NA	0.0	0.1	0.01	0.31	0.01	56.0	
North: Heide Road																
7	L2	All MCs	6	20.0	6	20.0	0.011	10.2	LOS B	0.0	0.3	0.39	0.87	0.39	49.8	
8	T1	All MCs	2	0.0	2	0.0	0.011	10.1	LOS B	0.0	0.3	0.39	0.87	0.39	50.5	
9	R2	All MCs	1	0.0	1	0.0	0.011	9.9	LOS A	0.0	0.3	0.39	0.87	0.39	50.3	
Approach			9	13.3	9	13.3	0.011	10.1	LOS B	0.0	0.3	0.39	0.87	0.39	50.0	
West: Flora Road																
10	L2	All MCs	1	0.0	1	0.0	0.135	5.5	LOS A	0.1	0.5	0.03	0.03	0.03	57.2	
11	T1	All MCs	262	0.9	262	0.9	0.135	0.0	LOS A	0.1	0.5	0.03	0.03	0.03	59.7	
12	R2	All MCs	9	0.0	9	0.0	0.135	6.5	LOS A	0.1	0.5	0.03	0.03	0.03	56.9	
Approach			273	0.9	273	0.9	0.135	0.2	NA	0.1	0.5	0.03	0.03	0.03	59.6	
All Vehicles			731	1.3	731	1.3	0.420	5.5	NA	2.3	16.0	0.23	0.46	0.29	54.1	

2028 Forecast Year Weekday PM Peak Hour + Development trips + Other Development Trips

MOVEMENT SUMMARY

 Site: 1.1v [2028 Weekday PM + Dev Trips + Other Trips: 2-way stop (Site Folder: 1. Heide Rd / Flora Rd)]

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		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total HV]	%	[Total HV]	%				[Veh.]	Dist]				
			veh/h	%	veh/h	%	v/c	sec		veh	m				km/h
South: Heide Road															
1	L2	All MCs	9	0.0	9	0.0	0.251	9.3	LOS A	1.0	6.7	0.56	0.99	0.59	48.8
2	T1	All MCs	3	0.0	3	0.0	0.251	11.7	LOS B	1.0	6.7	0.56	0.99	0.59	48.8
3	R2	All MCs	125	0.0	125	0.0	0.251	12.6	LOS B	1.0	6.7	0.56	0.99	0.59	48.6
Approach			138	0.0	138	0.0	0.251	12.3	LOS B	1.0	6.7	0.56	0.99	0.59	48.6
East: Flora Road															
4	L2	All MCs	206	0.0	206	0.0	0.231	5.5	LOS A	0.2	1.1	0.03	0.29	0.03	55.1
5	T1	All MCs	239	1.0	239	1.0	0.231	0.0	LOS A	0.2	1.1	0.03	0.29	0.03	57.3
6	R2	All MCs	15	0.0	15	0.0	0.231	6.9	LOS A	0.2	1.1	0.03	0.29	0.03	54.8
Approach			460	0.5	460	0.5	0.231	2.7	NA	0.2	1.1	0.03	0.29	0.03	56.2
North: Heide Road															
7	L2	All MCs	8	0.0	8	0.0	0.020	8.6	LOS A	0.1	0.5	0.38	0.85	0.38	50.3
8	T1	All MCs	5	0.0	5	0.0	0.020	11.9	LOS B	0.1	0.5	0.38	0.85	0.38	50.3
9	R2	All MCs	2	0.0	2	0.0	0.020	10.4	LOS B	0.1	0.5	0.38	0.85	0.38	50.0
Approach			16	0.0	16	0.0	0.020	10.0	LOS A	0.1	0.5	0.38	0.85	0.38	50.2
West: Flora Road															
10	L2	All MCs	2	0.0	2	0.0	0.088	5.5	LOS A	0.1	0.6	0.07	0.09	0.07	56.9
11	T1	All MCs	160	3.1	160	3.1	0.088	0.0	LOS A	0.1	0.6	0.07	0.09	0.07	59.4
12	R2	All MCs	8	0.0	8	0.0	0.088	10.4	LOS B	0.1	0.6	0.07	0.09	0.07	56.6
Approach			171	2.9	171	2.9	0.088	0.6	NA	0.1	0.6	0.07	0.09	0.07	59.2
All Vehicles			784	0.9	784	0.9	0.251	4.1	NA	1.0	6.7	0.14	0.38	0.15	55.2

Heide Road and Nerina Road Intersection

2023 Base Year Weekday AM Peak Hour

MOVEMENT SUMMARY

 Site: 1.2 [2023 Weekday AM (Site Folder: 2. Heide Rd / Nerina Rd)]

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		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total	HV]	[Total	HV]				[Veh.	Dist]				
			veh/h	%	veh/h	%	v/c	sec		veh	m				km/h
South: Heide Road															
1	L2	All MCs	1	0.0	1	0.0	0.095	12.0	LOS B	0.3	2.0	0.72	1.20	1.81	49.7
2	T1	All MCs	57	0.0	57	0.0	0.095	11.6	LOS B	0.3	2.0	0.72	1.20	1.81	49.7
3	R2	All MCs	5	0.0	5	0.0	0.095	11.5	LOS B	0.3	2.0	0.72	1.20	1.81	49.4
Approach			63	0.0	63	0.0	0.095	11.6	LOS B	0.3	2.0	0.72	1.20	1.81	49.6
East: Nerina Road															
4	L2	All MCs	1	0.0	1	0.0	0.054	15.5	LOS C	0.2	1.3	0.87	1.16	1.90	47.3
5	T1	All MCs	3	0.0	3	0.0	0.054	15.2	LOS C	0.2	1.3	0.87	1.16	1.90	47.3
6	R2	All MCs	17	6.3	17	6.3	0.054	15.5	LOS C	0.2	1.3	0.87	1.16	1.90	46.9
Approach			21	5.0	21	5.0	0.054	15.5	LOS C	0.2	1.3	0.87	1.16	1.90	47.0
North: Heide Road															
7	L2	All MCs	7	0.0	7	0.0	0.069	12.7	LOS B	0.2	1.5	0.77	1.19	1.83	49.1
8	T1	All MCs	28	7.4	28	7.4	0.069	12.9	LOS B	0.2	1.5	0.77	1.19	1.83	48.8
9	R2	All MCs	3	0.0	3	0.0	0.069	12.1	LOS B	0.2	1.5	0.77	1.19	1.83	48.9
Approach			39	5.4	39	5.4	0.069	12.8	LOS B	0.2	1.5	0.77	1.19	1.83	48.9
West: Nerina Road															
10	L2	All MCs	8	0.0	8	0.0	0.182	41.0	LOS E	0.7	4.8	1.00	1.20	2.11	35.5
11	T1	All MCs	12	9.1	12	9.1	0.182	42.4	LOS E	0.7	4.8	1.00	1.20	2.11	35.3
12	R2	All MCs	2	0.0	2	0.0	0.182	40.4	LOS E	0.7	4.8	1.00	1.20	2.11	35.4
Approach			22	4.8	22	4.8	0.182	41.7	LOS E	0.7	4.8	1.00	1.20	2.11	35.4
All Vehicles			145	2.9	145	2.9	0.182	17.1	LOS C	0.7	4.8	0.80	1.19	1.87	46.2

2023 Base Year Weekday PM Peak Hour

MOVEMENT SUMMARY

 Site: 1.2 [2023 Weekday PM (Site Folder: 2. Heide Rd / Nerina Rd)]

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		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total	HV]	[Total	HV]				[Veh.	Dist]				
			veh/h	%	veh/h	%	v/c	sec		veh	m				
South: Heide Road															
1	L2	All MCs	5	0.0	5	0.0	0.101	11.5	LOS B	0.3	2.1	0.68	1.21	1.78	49.9
2	T1	All MCs	59	0.0	59	0.0	0.101	11.1	LOS B	0.3	2.1	0.68	1.21	1.78	49.9
3	R2	All MCs	9	11.1	9	11.1	0.101	11.7	LOS B	0.3	2.1	0.68	1.21	1.78	49.3
Approach			74	1.4	74	1.4	0.101	11.2	LOS B	0.3	2.1	0.68	1.21	1.78	49.8
East: Nerina Road															
4	L2	All MCs	20	0.0	20	0.0	0.122	16.6	LOS C	0.4	2.9	0.89	1.17	2.00	46.8
5	T1	All MCs	16	0.0	16	0.0	0.122	16.2	LOS C	0.4	2.9	0.89	1.17	2.00	46.8
6	R2	All MCs	12	0.0	12	0.0	0.122	16.0	LOS C	0.4	2.9	0.89	1.17	2.00	46.6
Approach			47	0.0	47	0.0	0.122	16.3	LOS C	0.4	2.9	0.89	1.17	2.00	46.8
North: Heide Road															
7	L2	All MCs	19	0.0	19	0.0	0.127	11.9	LOS B	0.4	2.7	0.71	1.21	1.84	49.7
8	T1	All MCs	65	0.0	65	0.0	0.127	11.5	LOS B	0.4	2.7	0.71	1.21	1.84	49.6
9	R2	All MCs	4	0.0	4	0.0	0.127	11.4	LOS B	0.4	2.7	0.71	1.21	1.84	49.4
Approach			88	0.0	88	0.0	0.127	11.6	LOS B	0.4	2.7	0.71	1.21	1.84	49.6
West: Nerina Road															
10	L2	All MCs	3	0.0	3	0.0	0.071	16.1	LOS C	0.2	1.7	0.89	1.18	1.94	47.0
11	T1	All MCs	20	10.5	20	10.5	0.071	16.8	LOS C	0.2	1.7	0.89	1.18	1.94	46.6
12	R2	All MCs	3	0.0	3	0.0	0.071	15.6	LOS C	0.2	1.7	0.89	1.18	1.94	46.8
Approach			26	8.0	26	8.0	0.071	16.5	LOS C	0.2	1.7	0.89	1.18	1.94	46.7
All Vehicles			236	1.3	236	1.3	0.127	13.0	LOS B	0.4	2.9	0.76	1.20	1.86	48.8

2023 Base Year Weekday AM Peak Hour with Upgrades

MOVEMENT SUMMARY

 Site: 1.2v [2023 Weekday AM: 2-way stop (Site Folder: 2. Heide Rd / Nerina Rd)]

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		Arrival Flows		Deg. Satn	Aver. Delay sec	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
			[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Heide Road															
1	L2	All MCs	1	0.0	1	0.0	0.031	5.5	LOS A	0.0	0.2	0.02	0.06	0.02	56.9
2	T1	All MCs	57	0.0	57	0.0	0.031	0.0	LOS A	0.0	0.2	0.02	0.06	0.02	59.4
3	R2	All MCs	5	0.0	5	0.0	0.031	5.5	LOS A	0.0	0.2	0.02	0.06	0.02	56.6
Approach			63	0.0	63	0.0	0.031	0.6	NA	0.0	0.2	0.02	0.06	0.02	59.1
East: Nerina Road															
4	L2	All MCs	1	0.0	1	0.0	0.023	8.1	LOS A	0.1	0.6	0.21	0.90	0.21	51.2
5	T1	All MCs	3	0.0	3	0.0	0.023	8.1	LOS A	0.1	0.6	0.21	0.90	0.21	51.2
6	R2	All MCs	17	6.3	17	6.3	0.023	8.4	LOS A	0.1	0.6	0.21	0.90	0.21	50.7
Approach			21	5.0	21	5.0	0.023	8.4	LOS A	0.1	0.6	0.21	0.90	0.21	50.8
North: Heide Road															
7	L2	All MCs	7	0.0	7	0.0	0.020	5.5	LOS A	0.0	0.2	0.04	0.16	0.04	56.0
8	T1	All MCs	28	7.4	28	7.4	0.020	0.0	LOS A	0.0	0.2	0.04	0.16	0.04	58.3
9	R2	All MCs	3	0.0	3	0.0	0.020	5.7	LOS A	0.0	0.2	0.04	0.16	0.04	55.7
Approach			39	5.4	39	5.4	0.020	1.5	NA	0.0	0.2	0.04	0.16	0.04	57.7
West: Nerina Road															
10	L2	All MCs	8	0.0	8	0.0	0.020	8.2	LOS A	0.1	0.5	0.18	0.94	0.18	51.2
11	T1	All MCs	12	9.1	12	9.1	0.020	8.6	LOS A	0.1	0.5	0.18	0.94	0.18	50.8
12	R2	All MCs	2	0.0	2	0.0	0.020	8.0	LOS A	0.1	0.5	0.18	0.94	0.18	51.0
Approach			22	4.8	22	4.8	0.020	8.4	LOS A	0.1	0.5	0.18	0.94	0.18	51.0
All Vehicles			145	2.9	145	2.9	0.031	3.1	NA	0.1	0.6	0.08	0.34	0.08	56.0

2023 Base Year Weekday PM Peak Hour with Upgrades

MOVEMENT SUMMARY

 Site: 1.2v [2023 Weekday PM: 2-way stop (Site Folder: 2. Heide Rd / Nerina Rd)]

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		Arrival Flows		Deg. Satn	Aver. Delay sec	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
			[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Of Queue Dist] m				
South: Heide Road															
1	L2	All MCs	5	0.0	5	0.0	0.038	5.5	LOS A	0.1	0.5	0.07	0.13	0.07	56.3
2	T1	All MCs	59	0.0	59	0.0	0.038	0.0	LOS A	0.1	0.5	0.07	0.13	0.07	58.7
3	R2	All MCs	9	11.1	9	11.1	0.038	6.3	LOS A	0.1	0.5	0.07	0.13	0.07	55.5
Approach			74	1.4	74	1.4	0.038	1.2	NA	0.1	0.5	0.07	0.13	0.07	58.1
East: Nerina Road															
4	L2	All MCs	20	0.0	20	0.0	0.044	8.2	LOS A	0.2	1.1	0.21	0.91	0.21	51.1
5	T1	All MCs	16	0.0	16	0.0	0.044	8.4	LOS A	0.2	1.1	0.21	0.91	0.21	51.1
6	R2	All MCs	12	0.0	12	0.0	0.044	8.5	LOS A	0.2	1.1	0.21	0.91	0.21	50.9
Approach			47	0.0	47	0.0	0.044	8.3	LOS A	0.2	1.1	0.21	0.91	0.21	51.1
North: Heide Road															
7	L2	All MCs	19	0.0	19	0.0	0.044	5.5	LOS A	0.0	0.2	0.02	0.16	0.02	56.1
8	T1	All MCs	65	0.0	65	0.0	0.044	0.0	LOS A	0.0	0.2	0.02	0.16	0.02	58.5
9	R2	All MCs	4	0.0	4	0.0	0.044	5.7	LOS A	0.0	0.2	0.02	0.16	0.02	55.8
Approach			88	0.0	88	0.0	0.044	1.5	NA	0.0	0.2	0.02	0.16	0.02	57.8
West: Nerina Road															
10	L2	All MCs	3	0.0	3	0.0	0.027	8.2	LOS A	0.1	0.7	0.25	0.94	0.25	51.1
11	T1	All MCs	20	10.5	20	10.5	0.027	9.0	LOS A	0.1	0.7	0.25	0.94	0.25	50.7
12	R2	All MCs	3	0.0	3	0.0	0.027	8.5	LOS A	0.1	0.7	0.25	0.94	0.25	50.9
Approach			26	8.0	26	8.0	0.027	8.8	LOS A	0.1	0.7	0.25	0.94	0.25	50.8
All Vehicles			236	1.3	236	1.3	0.044	3.6	NA	0.2	1.1	0.10	0.39	0.10	55.6

2023 Base Year Weekday AM Peak Hour + Development trips

MOVEMENT SUMMARY

 Site: 1.2v [2023 Weekday AM + Dev Trips: 2-way stop (Site Folder: 2. Heide Rd / Nerina Rd)]

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		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total	HV]	[Total	HV]				[Veh.	Dist]				
			veh/h	%	veh/h	%	v/c	sec		veh	m				km/h
South: Heide Road															
1	L2	All MCs	1	0.0	1	0.0	0.067	5.5	LOS A	0.0	0.3	0.02	0.03	0.02	57.2
2	T1	All MCs	131	0.0	131	0.0	0.067	0.0	LOS A	0.0	0.3	0.02	0.03	0.02	59.7
3	R2	All MCs	5	0.0	5	0.0	0.067	5.6	LOS A	0.0	0.3	0.02	0.03	0.02	56.9
Approach			137	0.0	137	0.0	0.067	0.3	NA	0.0	0.3	0.02	0.03	0.02	59.5
East: Nerina Road															
4	L2	All MCs	1	0.0	1	0.0	0.026	8.2	LOS A	0.1	0.6	0.30	0.89	0.30	50.9
5	T1	All MCs	3	0.0	3	0.0	0.026	8.6	LOS A	0.1	0.6	0.30	0.89	0.30	50.9
6	R2	All MCs	17	6.3	17	6.3	0.026	9.1	LOS A	0.1	0.6	0.30	0.89	0.30	50.4
Approach			21	5.0	21	5.0	0.026	9.0	LOS A	0.1	0.6	0.30	0.89	0.30	50.5
North: Heide Road															
7	L2	All MCs	7	0.0	7	0.0	0.032	5.5	LOS A	0.0	0.2	0.04	0.11	0.04	56.5
8	T1	All MCs	53	7.4	53	7.4	0.032	0.0	LOS A	0.0	0.2	0.04	0.11	0.04	58.9
9	R2	All MCs	3	0.0	3	0.0	0.032	6.4	LOS A	0.0	0.2	0.04	0.11	0.04	56.2
Approach			63	6.2	63	6.2	0.032	1.0	NA	0.0	0.2	0.04	0.11	0.04	58.5
West: Nerina Road															
10	L2	All MCs	8	0.0	8	0.0	0.022	8.5	LOS A	0.1	0.6	0.27	0.91	0.27	51.0
11	T1	All MCs	12	9.1	12	9.1	0.022	9.2	LOS A	0.1	0.6	0.27	0.91	0.27	50.7
12	R2	All MCs	2	0.0	2	0.0	0.022	8.6	LOS A	0.1	0.6	0.27	0.91	0.27	50.8
Approach			22	4.8	22	4.8	0.022	8.8	LOS A	0.1	0.6	0.27	0.91	0.27	50.8
All Vehicles			243	2.5	243	2.5	0.067	2.0	NA	0.1	0.6	0.07	0.20	0.07	57.5

2023 Base Year Weekday PM Peak Hour + Development trips

MOVEMENT SUMMARY

Site: 1.2v [2023 Weekday PM + Dev Trips: 2-way stop (Site Folder: 2. Heide Rd / Nerina Rd)]

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		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total veh/h]	[HV %]	[Total veh/h]	[HV %]				[Veh. veh]	[Dist m]				
South: Heide Road															
1	L2	All MCs	5	0.0	5	0.0	0.053	5.5	LOS A	0.1	0.6	0.07	0.11	0.07	56.5
2	T1	All MCs	88	0.0	88	0.0	0.053	0.0	LOS A	0.1	0.6	0.07	0.11	0.07	59.0
3	R2	All MCs	9	11.1	9	11.1	0.053	7.1	LOS A	0.1	0.6	0.07	0.11	0.07	55.7
Approach			103	1.0	103	1.0	0.053	0.9	NA	0.1	0.6	0.07	0.11	0.07	58.5
East: Nerina Road															
4	L2	All MCs	20	0.0	20	0.0	0.048	8.5	LOS A	0.2	1.2	0.30	0.89	0.30	50.9
5	T1	All MCs	16	0.0	16	0.0	0.048	8.9	LOS A	0.2	1.2	0.30	0.89	0.30	50.9
6	R2	All MCs	12	0.0	12	0.0	0.048	9.2	LOS A	0.2	1.2	0.30	0.89	0.30	50.7
Approach			47	0.0	47	0.0	0.048	8.8	LOS A	0.2	1.2	0.30	0.89	0.30	50.9
North: Heide Road															
7	L2	All MCs	19	0.0	19	0.0	0.078	5.5	LOS A	0.0	0.3	0.02	0.09	0.02	56.7
8	T1	All MCs	135	0.0	135	0.0	0.078	0.0	LOS A	0.0	0.3	0.02	0.09	0.02	59.1
9	R2	All MCs	4	0.0	4	0.0	0.078	5.7	LOS A	0.0	0.3	0.02	0.09	0.02	56.4
Approach			158	0.0	158	0.0	0.078	0.8	NA	0.0	0.3	0.02	0.09	0.02	58.8
West: Nerina Road															
10	L2	All MCs	3	0.0	3	0.0	0.030	8.3	LOS A	0.1	0.8	0.32	0.93	0.32	50.8
11	T1	All MCs	20	10.5	20	10.5	0.030	9.6	LOS A	0.1	0.8	0.32	0.93	0.32	50.4
12	R2	All MCs	3	0.0	3	0.0	0.030	9.1	LOS A	0.1	0.8	0.32	0.93	0.32	50.6
Approach			26	8.0	26	8.0	0.030	9.4	LOS A	0.1	0.8	0.32	0.93	0.32	50.5
All Vehicles			335	0.9	335	0.9	0.078	2.7	NA	0.2	1.2	0.10	0.28	0.10	56.7

2028 Forecast Year Weekday AM Peak Hour + Development trips

MOVEMENT SUMMARY

Site: 1.2v [2028 Weekday AM + Dev Trips: 2-way stop (Site Folder: 2. Heide Rd / Nerina Rd)]

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		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total	HV]	[Total	HV]				[Veh.	Dist]				
			veh/h	%	veh/h	%	v/c	sec		veh	m				km/h
South: Heide Road															
1	L2	All MCs	1	0.0	1	0.0	0.072	5.5	LOS A	0.0	0.3	0.02	0.03	0.02	57.2
2	T1	All MCs	140	0.0	140	0.0	0.072	0.0	LOS A	0.0	0.3	0.02	0.03	0.02	59.6
3	R2	All MCs	6	0.0	6	0.0	0.072	5.6	LOS A	0.0	0.3	0.02	0.03	0.02	56.9
Approach			147	0.0	147	0.0	0.072	0.3	NA	0.0	0.3	0.02	0.03	0.02	59.5
East: Nerina Road															
4	L2	All MCs	1	0.0	1	0.0	0.031	8.2	LOS A	0.1	0.7	0.32	0.89	0.32	50.8
5	T1	All MCs	3	0.0	3	0.0	0.031	8.7	LOS A	0.1	0.7	0.32	0.89	0.32	50.8
6	R2	All MCs	20	6.3	20	6.3	0.031	9.2	LOS A	0.1	0.7	0.32	0.89	0.32	50.3
Approach			24	5.2	24	5.2	0.031	9.1	LOS A	0.1	0.7	0.32	0.89	0.32	50.4
North: Heide Road															
7	L2	All MCs	8	0.0	8	0.0	0.035	5.5	LOS A	0.0	0.2	0.04	0.11	0.04	56.5
8	T1	All MCs	57	7.4	57	7.4	0.035	0.0	LOS A	0.0	0.2	0.04	0.11	0.04	58.9
9	R2	All MCs	3	0.0	3	0.0	0.035	6.5	LOS A	0.0	0.2	0.04	0.11	0.04	56.2
Approach			68	6.2	68	6.2	0.035	1.0	NA	0.0	0.2	0.04	0.11	0.04	58.4
West: Nerina Road															
10	L2	All MCs	9	0.0	9	0.0	0.025	8.5	LOS A	0.1	0.7	0.29	0.91	0.29	51.0
11	T1	All MCs	14	9.1	14	9.1	0.025	9.3	LOS A	0.1	0.7	0.29	0.91	0.29	50.6
12	R2	All MCs	2	0.0	2	0.0	0.025	8.7	LOS A	0.1	0.7	0.29	0.91	0.29	50.8
Approach			25	4.9	25	4.9	0.025	8.9	LOS A	0.1	0.7	0.29	0.91	0.29	50.8
All Vehicles			265	2.5	265	2.5	0.072	2.1	NA	0.1	0.7	0.08	0.21	0.08	57.4

2028 Forecast Year Weekday PM Peak Hour + Development trips

MOVEMENT SUMMARY

 Site: 1.2v [2028 Weekday PM + Dev Trips: 2-way stop (Site Folder: 2. Heide Rd / Nerina Rd)]


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		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total veh/h]	[HV %]	[Total veh/h]	[HV %]				[Veh. veh]	[Dist m]				
South: Heide Road															
1	L2	All MCs	6	0.0	6	0.0	0.058	5.5	LOS A	0.1	0.6	0.08	0.12	0.08	56.5
2	T1	All MCs	98	0.0	98	0.0	0.058	0.0	LOS A	0.1	0.6	0.08	0.12	0.08	58.9
3	R2	All MCs	11	10.0	11	10.0	0.058	7.2	LOS A	0.1	0.6	0.08	0.12	0.08	55.7
Approach			115	0.9	115	0.9	0.058	1.0	NA	0.1	0.6	0.08	0.12	0.08	58.5
East: Nerina Road															
4	L2	All MCs	23	0.0	23	0.0	0.057	8.6	LOS A	0.2	1.5	0.32	0.89	0.32	50.9
5	T1	All MCs	18	0.0	18	0.0	0.057	9.1	LOS A	0.2	1.5	0.32	0.89	0.32	50.9
6	R2	All MCs	14	0.0	14	0.0	0.057	9.4	LOS A	0.2	1.5	0.32	0.89	0.32	50.6
Approach			55	0.0	55	0.0	0.057	8.9	LOS A	0.2	1.5	0.32	0.89	0.32	50.8
North: Heide Road															
7	L2	All MCs	22	0.0	22	0.0	0.085	5.5	LOS A	0.0	0.3	0.02	0.10	0.02	56.6
8	T1	All MCs	145	0.0	145	0.0	0.085	0.0	LOS A	0.0	0.3	0.02	0.10	0.02	59.1
9	R2	All MCs	5	0.0	5	0.0	0.085	5.9	LOS A	0.0	0.3	0.02	0.10	0.02	56.3
Approach			173	0.0	173	0.0	0.085	0.9	NA	0.0	0.3	0.02	0.10	0.02	58.6
West: Nerina Road															
10	L2	All MCs	3	0.0	3	0.0	0.033	8.4	LOS A	0.1	0.9	0.34	0.93	0.34	50.8
11	T1	All MCs	23	9.1	23	9.1	0.033	9.7	LOS A	0.1	0.9	0.34	0.93	0.34	50.4
12	R2	All MCs	2	0.0	2	0.0	0.033	9.3	LOS A	0.1	0.9	0.34	0.93	0.34	50.5
Approach			28	7.4	28	7.4	0.033	9.5	LOS A	0.1	0.9	0.34	0.93	0.34	50.5
All Vehicles			371	0.9	371	0.9	0.085	2.8	NA	0.2	1.5	0.11	0.28	0.11	56.6

2028 Forecast Year Weekday AM Peak Hour + Development trips + Other Development Trips

MOVEMENT SUMMARY

 Site: 1.2v [2028 Weekday AM + Dev Trips + Other Trips: 2-way stop (Site Folder: 2. Heide Rd / Nerina Rd)]

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		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed	
			[Total HV]	%	[Total HV]	%				[Veh.]	Dist]					
			veh/h	%	veh/h	%	v/c	sec			veh	m				km/h
South: Heide Road																
1	L2	All MCs	1	0.0	1	0.0	0.083	5.5	LOS A	0.0	0.3	0.02	0.03	0.02	57.2	
2	T1	All MCs	161	0.0	161	0.0	0.083	0.0	LOS A	0.0	0.3	0.02	0.03	0.02	59.7	
3	R2	All MCs	6	0.0	6	0.0	0.083	5.6	LOS A	0.0	0.3	0.02	0.03	0.02	56.9	
Approach			168	0.0	168	0.0	0.083	0.2	NA	0.0	0.3	0.02	0.03	0.02	59.6	
East: Nerina Road																
4	L2	All MCs	1	0.0	1	0.0	0.032	8.2	LOS A	0.1	0.8	0.34	0.89	0.34	50.7	
5	T1	All MCs	3	0.0	3	0.0	0.032	8.8	LOS A	0.1	0.8	0.34	0.89	0.34	50.7	
6	R2	All MCs	20	6.3	20	6.3	0.032	9.5	LOS A	0.1	0.8	0.34	0.89	0.34	50.2	
Approach			24	5.2	24	5.2	0.032	9.3	LOS A	0.1	0.8	0.34	0.89	0.34	50.3	
North: Heide Road																
7	L2	All MCs	8	0.0	8	0.0	0.040	5.5	LOS A	0.0	0.2	0.04	0.10	0.04	56.6	
8	T1	All MCs	65	7.4	65	7.4	0.040	0.0	LOS A	0.0	0.2	0.04	0.10	0.04	59.0	
9	R2	All MCs	3	0.0	3	0.0	0.040	6.7	LOS A	0.0	0.2	0.04	0.10	0.04	56.3	
Approach			77	6.3	77	6.3	0.040	0.9	NA	0.0	0.2	0.04	0.10	0.04	58.6	
West: Nerina Road																
10	L2	All MCs	9	0.0	9	0.0	0.026	8.6	LOS A	0.1	0.7	0.31	0.91	0.31	50.9	
11	T1	All MCs	14	9.1	14	9.1	0.026	9.4	LOS A	0.1	0.7	0.31	0.91	0.31	50.6	
12	R2	All MCs	2	0.0	2	0.0	0.026	8.9	LOS A	0.1	0.7	0.31	0.91	0.31	50.7	
Approach			25	4.9	25	4.9	0.026	9.1	LOS A	0.1	0.7	0.31	0.91	0.31	50.7	
All Vehicles			295	2.5	295	2.5	0.083	1.9	NA	0.1	0.8	0.07	0.19	0.07	57.6	

2028 Forecast Year Weekday PM Peak Hour + Development trips + Other Development Trips

MOVEMENT SUMMARY

 Site: 1.2v [2028 Weekday PM + Dev Trips + Other Trips: 2-way stop (Site Folder: 2. Heide Rd / Nerina Rd)]

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		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total	HV]	[Total	HV]				[Veh.	Dist]				
			veh/h	%	veh/h	%	v/c	sec			veh	m			km/h
South: Heide Road															
1	L2	All MCs	6	0.0	6	0.0	0.063	5.5	LOS A	0.1	0.7	0.08	0.11	0.08	56.6
2	T1	All MCs	107	0.0	107	0.0	0.063	0.0	LOS A	0.1	0.7	0.08	0.11	0.08	59.0
3	R2	All MCs	11	10.0	11	10.0	0.063	7.5	LOS A	0.1	0.7	0.08	0.11	0.08	55.8
Approach			124	0.8	124	0.8	0.063	0.9	NA	0.1	0.7	0.08	0.11	0.08	58.6
East: Nerina Road															
4	L2	All MCs	23	0.0	23	0.0	0.059	8.6	LOS A	0.2	1.5	0.34	0.89	0.34	50.8
5	T1	All MCs	18	0.0	18	0.0	0.059	9.3	LOS A	0.2	1.5	0.34	0.89	0.34	50.8
6	R2	All MCs	14	0.0	14	0.0	0.059	9.6	LOS A	0.2	1.5	0.34	0.89	0.34	50.6
Approach			55	0.0	55	0.0	0.059	9.1	LOS A	0.2	1.5	0.34	0.89	0.34	50.7
North: Heide Road															
7	L2	All MCs	22	0.0	22	0.0	0.094	5.5	LOS A	0.0	0.3	0.02	0.09	0.02	56.7
8	T1	All MCs	164	0.0	164	0.0	0.094	0.0	LOS A	0.0	0.3	0.02	0.09	0.02	59.1
9	R2	All MCs	5	0.0	5	0.0	0.094	5.9	LOS A	0.0	0.3	0.02	0.09	0.02	56.4
Approach			192	0.0	192	0.0	0.094	0.8	NA	0.0	0.3	0.02	0.09	0.02	58.8
West: Nerina Road															
10	L2	All MCs	3	0.0	3	0.0	0.036	8.4	LOS A	0.1	0.9	0.37	0.93	0.37	50.7
11	T1	All MCs	23	9.1	23	9.1	0.036	9.9	LOS A	0.1	0.9	0.37	0.93	0.37	50.3
12	R2	All MCs	3	0.0	3	0.0	0.036	9.6	LOS A	0.1	0.9	0.37	0.93	0.37	50.4
Approach			29	7.1	29	7.1	0.036	9.7	LOS A	0.1	0.9	0.37	0.93	0.37	50.4
All Vehicles			400	0.8	400	0.8	0.094	2.6	NA	0.2	1.5	0.11	0.27	0.11	56.8

Heide Road and Pinea Road Intersection

2023 Base Year Weekday AM Peak Hour

MOVEMENT SUMMARY



Site: 1.3.2 [2023 Weekday AM (Site Folder: 3.2 Heide Rd / Pinea Rd)]

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		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total	HV]	[Total	HV]				[Veh.	Dist]				
			veh/h	%	veh/h	%	v/c	sec		veh	m				
East: Heide Road															
5	T1	All MCs	9	0.0	9	0.0	0.017	10.5	LOS B	0.0	0.3	0.64	1.20	1.65	50.3
6	R2	All MCs	3	0.0	3	0.0	0.017	10.3	LOS B	0.0	0.3	0.64	1.20	1.65	50.1
Approach			13	0.0	13	0.0	0.017	10.4	LOS B	0.0	0.3	0.64	1.20	1.65	50.3
North: Pinea Road															
7	L2	All MCs	6	0.0	6	0.0	0.024	13.7	LOS B	0.1	0.5	0.81	1.15	1.82	48.5
9	R2	All MCs	5	0.0	5	0.0	0.024	13.1	LOS B	0.1	0.5	0.81	1.15	1.82	48.3
Approach			12	0.0	12	0.0	0.024	13.4	LOS B	0.1	0.5	0.81	1.15	1.82	48.4
West: Heide Road															
10	L2	All MCs	3	0.0	3	0.0	0.025	11.5	LOS B	0.1	0.5	0.69	1.19	1.71	50.0
11	T1	All MCs	14	0.0	14	0.0	0.025	11.1	LOS B	0.1	0.5	0.69	1.19	1.71	49.9
Approach			17	0.0	17	0.0	0.025	11.2	LOS B	0.1	0.5	0.69	1.19	1.71	49.9
All Vehicles			41	0.0	41	0.0	0.025	11.6	LOS B	0.1	0.5	0.71	1.18	1.72	49.6

2023 Base Year Weekday PM Peak Hour

MOVEMENT SUMMARY

 Site: 1.3.2 [2023 Weekday PM (Site Folder: 3.2 Heide Rd / Pinea Rd)]

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		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total	HV]	[Total	HV]				[Veh.	Dist]				
			veh/h	%	veh/h	%	v/c	sec		veh	m				
East: Heide Road															
5	T1	All MCs	34	0.0	34	0.0	0.043	9.6	LOS A	0.1	0.8	0.53	1.22	1.56	50.8
6	R2	All MCs	7	0.0	7	0.0	0.043	9.4	LOS A	0.1	0.8	0.53	1.22	1.56	50.6
Approach			41	0.0	41	0.0	0.043	9.6	LOS A	0.1	0.8	0.53	1.22	1.56	50.7
North: Pinea Road															
7	L2	All MCs	9	0.0	9	0.0	0.040	16.1	LOS C	0.1	0.9	0.88	1.15	1.90	47.0
9	R2	All MCs	5	0.0	5	0.0	0.040	15.5	LOS C	0.1	0.9	0.88	1.15	1.90	46.8
Approach			15	0.0	15	0.0	0.040	15.9	LOS C	0.1	0.9	0.88	1.15	1.90	47.0
West: Heide Road															
10	L2	All MCs	7	0.0	7	0.0	0.036	10.6	LOS B	0.1	0.7	0.61	1.20	1.64	50.4
11	T1	All MCs	22	0.0	22	0.0	0.036	10.3	LOS B	0.1	0.7	0.61	1.20	1.64	50.4
Approach			29	0.0	29	0.0	0.036	10.3	LOS B	0.1	0.7	0.61	1.20	1.64	50.4
All Vehicles			85	0.0	85	0.0	0.043	10.9	LOS B	0.1	0.9	0.62	1.20	1.65	49.9

2023 Base Year Weekday AM Peak Hour + Development trips

MOVEMENT SUMMARY

 Site: 1.3.2 [2023 Weekday AM + Dev Trips (Site Folder: 3.2 Heide Rd / Pinea Rd)]

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		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
			[Total	HV]	[Total	HV]				[Veh.	Dist]				
			veh/h	%	veh/h	%	v/c	sec		veh	m				
East: Heide Road															
5	T1	All MCs	34	0.0	34	0.0	0.043	10.1	LOS B	0.1	0.8	0.59	1.22	1.62	50.6
6	R2	All MCs	3	0.0	3	0.0	0.043	9.9	LOS A	0.1	0.8	0.59	1.22	1.62	50.3
Approach			37	0.0	37	0.0	0.043	10.0	LOS B	0.1	0.8	0.59	1.22	1.62	50.5
North: Pinea Road															
7	L2	All MCs	6	0.0	6	0.0	0.041	19.2	LOS C	0.1	0.9	0.93	1.14	1.94	45.3
9	R2	All MCs	5	0.0	5	0.0	0.041	18.7	LOS C	0.1	0.9	0.93	1.14	1.94	45.1
Approach			12	0.0	12	0.0	0.041	19.0	LOS C	0.1	0.9	0.93	1.14	1.94	45.2
West: Heide Road															
10	L2	All MCs	3	0.0	3	0.0	0.096	10.3	LOS B	0.3	1.9	0.55	1.24	1.65	50.6
11	T1	All MCs	87	0.0	87	0.0	0.096	9.9	LOS A	0.3	1.9	0.55	1.24	1.65	50.6
Approach			91	0.0	91	0.0	0.096	9.9	LOS A	0.3	1.9	0.55	1.24	1.65	50.6
All Vehicles			139	0.0	139	0.0	0.096	10.7	LOS B	0.3	1.9	0.60	1.22	1.67	50.1

2023 Base Year Weekday PM Peak Hour + Development trips

MOVEMENT SUMMARY

 Site: 1.3.2 [2023 Weekday PM + Dev Trips (Site Folder: 3.2 Heide Rd / Pinea Rd)]

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		Arrival Flows		Deg. Satn	Aver. Delay sec	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
			[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Of Queue Dist] m				
East: Heide Road															
5	T1	All MCs	103	0.0	103	0.0	0.107	9.6	LOS A	0.3	2.0	0.50	1.25	1.61	50.8
6	R2	All MCs	7	0.0	7	0.0	0.107	9.4	LOS A	0.3	2.0	0.50	1.25	1.61	50.5
Approach			111	0.0	111	0.0	0.107	9.5	LOS A	0.3	2.0	0.50	1.25	1.61	50.7
North: Pinea Road															
7	L2	All MCs	9	0.0	9	0.0	0.053	19.6	LOS C	0.2	1.2	0.94	1.15	1.96	45.1
9	R2	All MCs	5	0.0	5	0.0	0.053	19.0	LOS C	0.2	1.2	0.94	1.15	1.96	44.9
Approach			15	0.0	15	0.0	0.053	19.4	LOS C	0.2	1.2	0.94	1.15	1.96	45.0
West: Heide Road															
10	L2	All MCs	7	0.0	7	0.0	0.065	10.3	LOS B	0.2	1.2	0.57	1.22	1.62	50.6
11	T1	All MCs	52	0.0	52	0.0	0.065	9.9	LOS A	0.2	1.2	0.57	1.22	1.62	50.6
Approach			59	0.0	59	0.0	0.065	10.0	LOS A	0.2	1.2	0.57	1.22	1.62	50.6
All Vehicles			184	0.0	184	0.0	0.107	10.5	LOS B	0.3	2.0	0.55	1.23	1.64	50.2

2028 Forecast Year Weekday AM Peak Hour + Development trips

MOVEMENT SUMMARY

 Site: 1.3.2 [2028 Weekday AM + Dev Trips (Site Folder: 3.2 Heide Rd / Pinea Rd)]

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		Arrival Flows		Deg. Satn	Aver. Delay sec	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
			[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Of Queue Dist] m				
East: Heide Road															
5	T1	All MCs	35	0.0	35	0.0	0.045	10.1	LOS B	0.1	0.9	0.60	1.22	1.63	50.5
6	R2	All MCs	3	0.0	3	0.0	0.045	10.0	LOS A	0.1	0.9	0.60	1.22	1.63	50.3
Approach			38	0.0	38	0.0	0.045	10.1	LOS B	0.1	0.9	0.60	1.22	1.63	50.5
North: Pinea Road															
7	L2	All MCs	7	0.0	7	0.0	0.046	18.8	LOS C	0.2	1.1	0.93	1.15	1.95	45.5
9	R2	All MCs	6	0.0	6	0.0	0.046	18.3	LOS C	0.2	1.1	0.93	1.15	1.95	45.3
Approach			14	0.0	14	0.0	0.046	18.6	LOS C	0.2	1.1	0.93	1.15	1.95	45.4
West: Heide Road															
10	L2	All MCs	3	0.0	3	0.0	0.100	10.3	LOS B	0.3	2.0	0.56	1.24	1.66	50.6
11	T1	All MCs	89	0.0	89	0.0	0.100	10.0	LOS A	0.3	2.0	0.56	1.24	1.66	50.6
Approach			93	0.0	93	0.0	0.100	10.0	LOS B	0.3	2.0	0.56	1.24	1.66	50.6
All Vehicles			144	0.0	144	0.0	0.100	10.8	LOS B	0.3	2.0	0.61	1.22	1.68	50.0

2028 Forecast Year Weekday PM Peak Hour + Development trips

MOVEMENT SUMMARY


 **Site: 1.3.2 [2028 Weekday PM + Dev Trips (Site Folder: 3.2 Heide Rd / Pinea Rd)]**
 **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		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total veh/h]	[HV %]	[Total veh/h]	[HV %]				[Veh. veh]	[Dist m]				
East: Heide Road															
5	T1	All MCs	108	0.0	108	0.0	0.115	9.6	LOS A	0.3	2.2	0.51	1.25	1.63	50.7
6	R2	All MCs	8	0.0	8	0.0	0.115	9.5	LOS A	0.3	2.2	0.51	1.25	1.63	50.5
Approach			117	0.0	117	0.0	0.115	9.6	LOS A	0.3	2.2	0.51	1.25	1.63	50.7
North: Pinea Road															
7	L2	All MCs	11	0.0	11	0.0	0.059	19.4	LOS C	0.2	1.4	0.93	1.15	1.96	45.2
9	R2	All MCs	6	0.0	6	0.0	0.059	18.9	LOS C	0.2	1.4	0.93	1.15	1.96	45.0
Approach			17	0.0	17	0.0	0.059	19.2	LOS C	0.2	1.4	0.93	1.15	1.96	45.1
West: Heide Road															
10	L2	All MCs	8	0.0	8	0.0	0.071	10.4	LOS B	0.2	1.4	0.58	1.22	1.64	50.5
11	T1	All MCs	55	0.0	55	0.0	0.071	10.0	LOS B	0.2	1.4	0.58	1.22	1.64	50.5
Approach			63	0.0	63	0.0	0.071	10.1	LOS B	0.2	1.4	0.58	1.22	1.64	50.5
All Vehicles			197	0.0	197	0.0	0.115	10.6	LOS B	0.3	2.2	0.57	1.23	1.66	50.1

2028 Forecast Year Weekday AM Peak Hour + Development trips + Other Development Trips

MOVEMENT SUMMARY

 Site: 1.3.2 [2028 Weekday AM + Dev Trips + Other Trips (Site Folder: 3.2 Heide Rd / Pinea Rd)]


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		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] m				
East: Heide Road															
5	T1	All MCs	43	0.0	43	0.0	0.054	10.1	LOS B	0.1	1.0	0.59	1.22	1.64	50.5
6	R2	All MCs	3	0.0	3	0.0	0.054	9.9	LOS A	0.1	1.0	0.59	1.22	1.64	50.3
Approach			46	0.0	46	0.0	0.054	10.1	LOS B	0.1	1.0	0.59	1.22	1.64	50.5
North: Pinea Road															
7	L2	All MCs	7	0.0	7	0.0	0.049	19.6	LOS C	0.2	1.1	0.94	1.15	1.96	45.1
9	R2	All MCs	6	0.0	6	0.0	0.049	19.0	LOS C	0.2	1.1	0.94	1.15	1.96	44.9
Approach			14	0.0	14	0.0	0.049	19.3	LOS C	0.2	1.1	0.94	1.15	1.96	45.0
West: Heide Road															
10	L2	All MCs	3	0.0	3	0.0	0.120	10.3	LOS B	0.3	2.4	0.56	1.24	1.68	50.6
11	T1	All MCs	111	0.0	111	0.0	0.120	10.0	LOS A	0.3	2.4	0.56	1.24	1.68	50.5
Approach			114	0.0	114	0.0	0.120	10.0	LOS B	0.3	2.4	0.56	1.24	1.68	50.5
All Vehicles			174	0.0	174	0.0	0.120	10.8	LOS B	0.3	2.4	0.60	1.23	1.69	50.0

2028 Forecast Year Weekday PM Peak Hour + Development trips + Other Development Trips

MOVEMENT SUMMARY

 Site: 1.3.2 [2028 Weekday PM + Dev Trips + Other Trips (Site Folder: 3.2 Heide Rd / Pinea Rd)]

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		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total veh/h]	[HV %]	[Total veh/h]	[HV %]				[Veh. veh]	[Dist m]				
East: Heide Road															
5	T1	All MCs	127	0.0	127	0.0	0.132	9.7	LOS A	0.4	2.6	0.51	1.25	1.65	50.7
6	R2	All MCs	8	0.0	8	0.0	0.132	9.5	LOS A	0.4	2.6	0.51	1.25	1.65	50.5
Approach			136	0.0	136	0.0	0.132	9.7	LOS A	0.4	2.6	0.51	1.25	1.65	50.7
North: Pinea Road															
7	L2	All MCs	11	0.0	11	0.0	0.061	19.9	LOS C	0.2	1.4	0.94	1.15	1.97	44.9
9	R2	All MCs	6	0.0	6	0.0	0.061	19.4	LOS C	0.2	1.4	0.94	1.15	1.97	44.7
Approach			17	0.0	17	0.0	0.061	19.7	LOS C	0.2	1.4	0.94	1.15	1.97	44.8
West: Heide Road															
10	L2	All MCs	8	0.0	8	0.0	0.081	10.4	LOS B	0.2	1.6	0.57	1.23	1.65	50.5
11	T1	All MCs	64	0.0	64	0.0	0.081	10.0	LOS B	0.2	1.6	0.57	1.23	1.65	50.5
Approach			73	0.0	73	0.0	0.081	10.1	LOS B	0.2	1.6	0.57	1.23	1.65	50.5
All Vehicles			225	0.0	225	0.0	0.132	10.6	LOS B	0.4	2.6	0.56	1.24	1.67	50.1

Heide Road and Cordata Road Intersection

2023 Base Year Weekday AM Peak Hour

MOVEMENT SUMMARY

Site: 1.3.3v [2023 Weekday AM (Site Folder: 3.3 Heide Rd / Cordata Rd)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

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

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total	HV]	[Total	HV]				[Veh.	Dist]				
			veh/h	%	veh/h	%	v/c	sec		veh	m				km/h
South: Cordata Road															
1	L2	All MCs	1	0.0	1	0.0	0.006	5.6	LOS A	0.0	0.1	0.07	0.57	0.07	52.7
3	R2	All MCs	7	0.0	7	0.0	0.006	5.5	LOS A	0.0	0.1	0.07	0.57	0.07	52.5
Approach			8	0.0	8	0.0	0.006	5.5	LOS A	0.0	0.1	0.07	0.57	0.07	52.5
East: Heide Road															
4	L2	All MCs	2	0.0	2	0.0	0.007	5.5	LOS A	0.0	0.0	0.00	0.09	0.00	56.8
5	T1	All MCs	13	0.0	13	0.0	0.007	0.0	LOS A	0.0	0.0	0.00	0.09	0.00	59.2
Approach			15	0.0	15	0.0	0.007	0.8	NA	0.0	0.0	0.00	0.09	0.00	58.9
West: Heide Road															
11	T1	All MCs	9	0.0	9	0.0	0.005	0.0	LOS A	0.0	0.0	0.02	0.06	0.02	59.4
12	R2	All MCs	1	0.0	1	0.0	0.005	5.5	LOS A	0.0	0.0	0.02	0.06	0.02	56.6
Approach			11	0.0	11	0.0	0.005	0.5	NA	0.0	0.0	0.02	0.06	0.02	59.1
All Vehicles			34	0.0	34	0.0	0.007	1.9	NA	0.0	0.1	0.02	0.20	0.02	57.2

2023 Base Year Weekday PM Peak Hour

MOVEMENT SUMMARY

Site: 1.3.3v [2023 Weekday PM (Site Folder: 3.3 Heide Rd / Cordata Rd)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

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

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total	HV]	[Total	HV]				[Veh.	Dist]				
			veh/h	%	veh/h	%	v/c	sec		veh	m				km/h
South: Cordata Road															
1	L2	All MCs	2	0.0	2	0.0	0.006	5.6	LOS A	0.0	0.1	0.10	0.56	0.10	52.6
3	R2	All MCs	6	0.0	6	0.0	0.006	5.6	LOS A	0.0	0.1	0.10	0.56	0.10	52.4
Approach			8	0.0	8	0.0	0.006	5.6	LOS A	0.0	0.1	0.10	0.56	0.10	52.5
East: Heide Road															
4	L2	All MCs	19	0.0	19	0.0	0.019	5.5	LOS A	0.0	0.0	0.00	0.29	0.00	55.1
5	T1	All MCs	20	0.0	20	0.0	0.019	0.0	LOS A	0.0	0.0	0.00	0.29	0.00	57.4
Approach			39	0.0	39	0.0	0.019	2.7	NA	0.0	0.0	0.00	0.29	0.00	56.3
West: Heide Road															
11	T1	All MCs	23	0.0	23	0.0	0.012	0.0	LOS A	0.0	0.0	0.01	0.03	0.01	59.7
12	R2	All MCs	1	0.0	1	0.0	0.012	5.5	LOS A	0.0	0.0	0.01	0.03	0.01	56.9
Approach			24	0.0	24	0.0	0.012	0.2	NA	0.0	0.0	0.01	0.03	0.01	59.6
All Vehicles			72	0.0	72	0.0	0.019	2.2	NA	0.0	0.1	0.02	0.23	0.02	56.9

2023 Base Year Weekday AM Peak Hour + Development trips

MOVEMENT SUMMARY

Site: 1.3.3v [2023 Weekday AM + Dev Trips (Site Folder: 3.3 Heide Rd / Cordata Rd)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

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

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total veh/h]	[HV %]	[Total veh/h]	[HV %]				[Veh. veh]	[Dist m]				
South: Cordata Road															
1	L2	All MCs	1	0.0	1	0.0	0.007	5.6	LOS A	0.0	0.2	0.17	0.56	0.17	52.5
3	R2	All MCs	7	0.0	7	0.0	0.007	5.8	LOS A	0.0	0.2	0.17	0.56	0.17	52.2
Approach			8	0.0	8	0.0	0.007	5.8	LOS A	0.0	0.2	0.17	0.56	0.17	52.2
East: Heide Road															
4	L2	All MCs	2	0.0	2	0.0	0.019	5.5	LOS A	0.0	0.0	0.00	0.03	0.00	57.2
5	T1	All MCs	37	0.0	37	0.0	0.019	0.0	LOS A	0.0	0.0	0.00	0.03	0.00	59.7
Approach			39	0.0	39	0.0	0.019	0.3	NA	0.0	0.0	0.00	0.03	0.00	59.6
West: Heide Road															
11	T1	All MCs	83	0.0	83	0.0	0.041	0.0	LOS A	0.0	0.0	0.00	0.01	0.00	59.9
12	R2	All MCs	1	0.0	1	0.0	0.041	5.5	LOS A	0.0	0.0	0.00	0.01	0.00	57.1
Approach			84	0.0	84	0.0	0.041	0.1	NA	0.0	0.0	0.00	0.01	0.00	59.9
All Vehicles			132	0.0	132	0.0	0.041	0.5	NA	0.0	0.2	0.01	0.05	0.01	59.2

2023 Base Year Weekday PM Peak Hour + Development trips

MOVEMENT SUMMARY

▽ Site: 1.3.3v [2023 Weekday PM + Dev Trips (Site Folder: 3.3 Heide Rd / Cordata Rd)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

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

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Cordata Road															
1	L2	All MCs	2	0.0	2	0.0	0.007	5.8	LOS A	0.0	0.2	0.20	0.55	0.20	52.3
3	R2	All MCs	6	0.0	6	0.0	0.007	5.9	LOS A	0.0	0.2	0.20	0.55	0.20	52.1
Approach			8	0.0	8	0.0	0.007	5.9	LOS A	0.0	0.2	0.20	0.55	0.20	52.2
East: Heide Road															
4	L2	All MCs	19	0.0	19	0.0	0.053	5.6	LOS A	0.0	0.0	0.00	0.10	0.00	56.6
5	T1	All MCs	89	0.0	89	0.0	0.053	0.0	LOS A	0.0	0.0	0.00	0.10	0.00	59.0
Approach			108	0.0	108	0.0	0.053	1.0	NA	0.0	0.0	0.00	0.10	0.00	58.6
West: Heide Road															
11	T1	All MCs	53	0.0	53	0.0	0.026	0.0	LOS A	0.0	0.0	0.01	0.01	0.01	59.8
12	R2	All MCs	1	0.0	1	0.0	0.026	5.6	LOS A	0.0	0.0	0.01	0.01	0.01	57.1
Approach			54	0.0	54	0.0	0.026	0.1	NA	0.0	0.0	0.01	0.01	0.01	59.8
All Vehicles			171	0.0	171	0.0	0.053	0.9	NA	0.0	0.2	0.01	0.10	0.01	58.6

2028 Forecast Year Weekday AM Peak Hour + Development trips

MOVEMENT SUMMARY

▽ Site: 1.3.3v [2028 Weekday AM + Dev Trips (Site Folder: 3.3 Heide Rd / Cordata Rd)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

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

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Cordata Road															
1	L2	All MCs	1	0.0	1	0.0	0.008	5.6	LOS A	0.0	0.2	0.17	0.56	0.17	52.4
3	R2	All MCs	8	0.0	8	0.0	0.008	5.8	LOS A	0.0	0.2	0.17	0.56	0.17	52.2
Approach			9	0.0	9	0.0	0.008	5.8	LOS A	0.0	0.2	0.17	0.56	0.17	52.2
East: Heide Road															
4	L2	All MCs	2	0.0	2	0.0	0.020	5.5	LOS A	0.0	0.0	0.00	0.03	0.00	57.2
5	T1	All MCs	39	0.0	39	0.0	0.020	0.0	LOS A	0.0	0.0	0.00	0.03	0.00	59.7
Approach			41	0.0	41	0.0	0.020	0.3	NA	0.0	0.0	0.00	0.03	0.00	59.6
West: Heide Road															
11	T1	All MCs	84	0.0	84	0.0	0.041	0.0	LOS A	0.0	0.0	0.00	0.01	0.00	59.9
12	R2	All MCs	1	0.0	1	0.0	0.041	5.5	LOS A	0.0	0.0	0.00	0.01	0.00	57.1
Approach			85	0.0	85	0.0	0.041	0.1	NA	0.0	0.0	0.00	0.01	0.00	59.9
All Vehicles			136	0.0	136	0.0	0.041	0.5	NA	0.0	0.2	0.01	0.05	0.01	59.2

2028 Forecast Year Weekday PM Peak Hour + Development trips

MOVEMENT SUMMARY

▽ Site: 1.3.3v [2028 Weekday PM + Dev Trips (Site Folder: 3.3 Heide Rd / Cordata Rd)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

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

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Cordata Road															
1	L2	All MCs	2	0.0	2	0.0	0.008	5.8	LOS A	0.0	0.2	0.21	0.56	0.21	52.3
3	R2	All MCs	7	0.0	7	0.0	0.008	6.0	LOS A	0.0	0.2	0.21	0.56	0.21	52.1
Approach			9	0.0	9	0.0	0.008	5.9	LOS A	0.0	0.2	0.21	0.56	0.21	52.1
East: Heide Road															
4	L2	All MCs	22	0.0	22	0.0	0.056	5.6	LOS A	0.0	0.0	0.00	0.11	0.00	56.5
5	T1	All MCs	93	0.0	93	0.0	0.056	0.0	LOS A	0.0	0.0	0.00	0.11	0.00	58.9
Approach			115	0.0	115	0.0	0.056	1.1	NA	0.0	0.0	0.00	0.11	0.00	58.5
West: Heide Road															
11	T1	All MCs	57	0.0	57	0.0	0.028	0.0	LOS A	0.0	0.0	0.01	0.01	0.01	59.9
12	R2	All MCs	1	0.0	1	0.0	0.028	5.6	LOS A	0.0	0.0	0.01	0.01	0.01	57.1
Approach			58	0.0	58	0.0	0.028	0.1	NA	0.0	0.0	0.01	0.01	0.01	59.8
All Vehicles			182	0.0	182	0.0	0.056	1.0	NA	0.0	0.2	0.01	0.10	0.01	58.5

2028 Forecast Year Weekday AM Peak Hour + Development trips + Other Development Trips

MOVEMENT SUMMARY

Site: 1.3.3v [2028 Weekday AM + Dev Trips + Other Trips (Site Folder: 3.3 Heide Rd / Cordata Rd)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

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

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Cordata Road															
1	L2	All MCs	1	0.0	1	0.0	0.008	5.7	LOS A	0.0	0.2	0.20	0.56	0.20	52.4
3	R2	All MCs	8	0.0	8	0.0	0.008	5.9	LOS A	0.0	0.2	0.20	0.56	0.20	52.1
Approach			9	0.0	9	0.0	0.008	5.9	LOS A	0.0	0.2	0.20	0.56	0.20	52.2
East: Heide Road															
4	L2	All MCs	2	0.0	2	0.0	0.024	5.5	LOS A	0.0	0.0	0.00	0.03	0.00	57.3
5	T1	All MCs	47	0.0	47	0.0	0.024	0.0	LOS A	0.0	0.0	0.00	0.03	0.00	59.8
Approach			49	0.0	49	0.0	0.024	0.2	NA	0.0	0.0	0.00	0.03	0.00	59.6
West: Heide Road															
11	T1	All MCs	105	0.0	105	0.0	0.052	0.0	LOS A	0.0	0.0	0.00	0.01	0.00	59.9
12	R2	All MCs	1	0.0	1	0.0	0.052	5.5	LOS A	0.0	0.0	0.00	0.01	0.00	57.1
Approach			106	0.0	106	0.0	0.052	0.1	NA	0.0	0.0	0.00	0.01	0.00	59.9
All Vehicles			165	0.0	165	0.0	0.052	0.4	NA	0.0	0.2	0.01	0.04	0.01	59.3

2028 Forecast Year Weekday PM Peak Hour + Development trips + Other Development Trips

MOVEMENT SUMMARY

Site: 1.3.3v [2028 Weekday PM + Dev Trips + Other Trips (Site Folder: 3.3 Heide Rd / Cordata Rd)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

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

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total	HV]	[Total	HV]				[Veh.	Dist]				
			veh/h	%	veh/h	%	v/c	sec			veh	m			km/h
South: Cordata Road															
1	L2	All MCs	2	0.0	2	0.0	0.008	5.8	LOS A	0.0	0.2	0.23	0.56	0.23	52.3
3	R2	All MCs	7	0.0	7	0.0	0.008	6.1	LOS A	0.0	0.2	0.23	0.56	0.23	52.0
Approach			9	0.0	9	0.0	0.008	6.0	LOS A	0.0	0.2	0.23	0.56	0.23	52.1
East: Heide Road															
4	L2	All MCs	22	0.0	22	0.0	0.065	5.6	LOS A	0.0	0.0	0.00	0.10	0.00	56.7
5	T1	All MCs	112	0.0	112	0.0	0.065	0.0	LOS A	0.0	0.0	0.00	0.10	0.00	59.1
Approach			134	0.0	134	0.0	0.065	0.9	NA	0.0	0.0	0.00	0.10	0.00	58.7
West: Heide Road															
11	T1	All MCs	66	0.0	66	0.0	0.033	0.0	LOS A	0.0	0.0	0.01	0.01	0.01	59.9
12	R2	All MCs	1	0.0	1	0.0	0.033	5.6	LOS A	0.0	0.0	0.01	0.01	0.01	57.1
Approach			67	0.0	67	0.0	0.033	0.1	NA	0.0	0.0	0.01	0.01	0.01	59.8
All Vehicles			211	0.0	211	0.0	0.065	0.9	NA	0.0	0.2	0.01	0.09	0.01	58.7

Fishermans Village Drive and Proposed Site Access Intersection

2023 Base Year Weekday AM Peak Hour + Development trips

MOVEMENT SUMMARY

 Site: 1.4 [2023 Weekday AM + Dev Trips (Site Folder: 4. Fishermans Village Drive / Site Access)]

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		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total	HV]	[Total	HV]				[Veh.	Dist]				
			veh/h	%	veh/h	%	v/c	sec		veh	m				
South: RoadName															
1	L2	All MCs	1	0.0	1	0.0	0.066	8.1	LOS A	0.2	1.5	0.10	0.93	0.10	51.4
3	R2	All MCs	74	0.0	74	0.0	0.066	7.6	LOS A	0.2	1.5	0.10	0.93	0.10	51.2
Approach			75	0.0	75	0.0	0.066	7.6	LOS A	0.2	1.5	0.10	0.93	0.10	51.2
East: RoadName															
4	L2	All MCs	24	0.0	24	0.0	0.019	5.5	LOS A	0.0	0.0	0.00	0.39	0.00	54.4
5	T1	All MCs	13	0.0	13	0.0	0.019	0.0	LOS A	0.0	0.0	0.00	0.39	0.00	56.6
Approach			37	0.0	37	0.0	0.019	3.6	NA	0.0	0.0	0.00	0.39	0.00	55.1
West: RoadName															
11	T1	All MCs	9	0.0	9	0.0	0.005	0.0	LOS A	0.0	0.0	0.03	0.06	0.03	59.4
12	R2	All MCs	1	0.0	1	0.0	0.005	5.5	LOS A	0.0	0.0	0.03	0.06	0.03	56.6
Approach			11	0.0	11	0.0	0.005	0.6	NA	0.0	0.0	0.03	0.06	0.03	59.1
All Vehicles			122	0.0	122	0.0	0.066	5.8	NA	0.2	1.5	0.06	0.69	0.06	52.9

2023 Base Year Weekday PM Peak Hour + Development trips

MOVEMENT SUMMARY

Site: 1.4 [2023 Weekday PM + Dev Trips (Site Folder: 4. Fishermans Village Drive / Site Access)]

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		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total	HV]	[Total	HV]				[Veh.	Dist]				
			veh/h	%	veh/h	%	v/c	sec		veh	m				km/h
South: RoadName															
1	L2	All MCs	1	0.0	1	0.0	0.069	8.1	LOS A	0.2	1.6	0.17	0.91	0.17	51.4
3	R2	All MCs	74	0.0	74	0.0	0.069	7.8	LOS A	0.2	1.6	0.17	0.91	0.17	51.1
Approach			75	0.0	75	0.0	0.069	7.8	LOS A	0.2	1.6	0.17	0.91	0.17	51.1
East: RoadName															
4	L2	All MCs	69	0.0	69	0.0	0.046	5.6	LOS A	0.0	0.0	0.00	0.44	0.00	53.9
5	T1	All MCs	22	0.0	22	0.0	0.046	0.0	LOS A	0.0	0.0	0.00	0.44	0.00	56.1
Approach			92	0.0	92	0.0	0.046	4.2	NA	0.0	0.0	0.00	0.44	0.00	54.4
West: RoadName															
11	T1	All MCs	24	0.0	24	0.0	0.012	0.0	LOS A	0.0	0.0	0.02	0.03	0.02	59.7
12	R2	All MCs	1	0.0	1	0.0	0.012	5.7	LOS A	0.0	0.0	0.02	0.03	0.02	56.9
Approach			25	0.0	25	0.0	0.012	0.2	NA	0.0	0.0	0.02	0.03	0.02	59.6
All Vehicles			192	0.0	192	0.0	0.069	5.1	NA	0.2	1.6	0.07	0.57	0.07	53.7

2028 Forecast Year Weekday AM Peak Hour + Development trips

MOVEMENT SUMMARY

Site: 1.4 [2028 Weekday AM + Dev Trips (Site Folder: 4. Fishermans Village Drive / Site Access)]

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		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total	HV]	[Total	HV]				[Veh.	Dist]				
			veh/h	%	veh/h	%	v/c	sec		veh	m				km/h
South: RoadName															
1	L2	All MCs	1	0.0	1	0.0	0.066	8.1	LOS A	0.2	1.6	0.11	0.93	0.11	51.4
3	R2	All MCs	74	0.0	74	0.0	0.066	7.6	LOS A	0.2	1.6	0.11	0.93	0.11	51.2
Approach			75	0.0	75	0.0	0.066	7.6	LOS A	0.2	1.6	0.11	0.93	0.11	51.2
East: RoadName															
4	L2	All MCs	24	0.0	24	0.0	0.020	5.5	LOS A	0.0	0.0	0.00	0.37	0.00	54.5
5	T1	All MCs	15	0.0	15	0.0	0.020	0.0	LOS A	0.0	0.0	0.00	0.37	0.00	56.8
Approach			39	0.0	39	0.0	0.020	3.4	NA	0.0	0.0	0.00	0.37	0.00	55.4
West: RoadName															
11	T1	All MCs	11	0.0	11	0.0	0.006	0.0	LOS A	0.0	0.0	0.02	0.06	0.02	59.4
12	R2	All MCs	1	0.0	1	0.0	0.006	5.5	LOS A	0.0	0.0	0.02	0.06	0.02	56.6
Approach			12	0.0	12	0.0	0.006	0.5	NA	0.0	0.0	0.02	0.06	0.02	59.1
All Vehicles			125	0.0	125	0.0	0.066	5.7	NA	0.2	1.6	0.07	0.67	0.07	53.1

2028 Forecast Year Weekday PM Peak Hour + Development trips

MOVEMENT SUMMARY

Site: 1.4 [2028 Weekday PM + Dev Trips (Site Folder: 4. Fishermans Village Drive / Site Access)]

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		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total	HV]	[Total	HV]				[Veh.	Dist]				
			veh/h	%	veh/h	%	v/c	sec		veh	m				km/h
South: RoadName															
1	L2	All MCs	1	0.0	1	0.0	0.070	8.1	LOS A	0.2	1.6	0.17	0.90	0.17	51.4
3	R2	All MCs	74	0.0	74	0.0	0.070	7.8	LOS A	0.2	1.6	0.17	0.90	0.17	51.1
Approach			75	0.0	75	0.0	0.070	7.8	LOS A	0.2	1.6	0.17	0.90	0.17	51.1
East: RoadName															
4	L2	All MCs	69	0.0	69	0.0	0.048	5.6	LOS A	0.0	0.0	0.00	0.43	0.00	54.0
5	T1	All MCs	25	0.0	25	0.0	0.048	0.0	LOS A	0.0	0.0	0.00	0.43	0.00	56.2
Approach			95	0.0	95	0.0	0.048	4.1	NA	0.0	0.0	0.00	0.43	0.00	54.6
West: RoadName															
11	T1	All MCs	28	0.0	28	0.0	0.015	0.0	LOS A	0.0	0.0	0.02	0.02	0.02	59.7
12	R2	All MCs	1	0.0	1	0.0	0.015	5.6	LOS A	0.0	0.0	0.02	0.02	0.02	56.9
Approach			29	0.0	29	0.0	0.015	0.2	NA	0.0	0.0	0.02	0.02	0.02	59.6
All Vehicles			199	0.0	199	0.0	0.070	4.9	NA	0.2	1.6	0.07	0.55	0.07	53.9

2028 Forecast Year Weekday AM Peak Hour + Development trips + Other Development Trips

MOVEMENT SUMMARY

 Site: 1.4 [2028 Weekday AM + Dev Trips + Other Trips (Site Folder: 4. Fishermans Village Drive / Site Access)]


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		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total HV]	%	[Total HV]	%				[Veh.	Dist]				
			veh/h	%	veh/h	%	v/c	sec		veh	m				km/h
South: RoadName															
1	L2	All MCs	1	0.0	1	0.0	0.069	8.1	LOS A	0.2	1.6	0.15	0.91	0.15	51.4
3	R2	All MCs	75	0.0	75	0.0	0.069	7.7	LOS A	0.2	1.6	0.15	0.91	0.15	51.2
Approach			76	0.0	76	0.0	0.069	7.7	LOS A	0.2	1.6	0.15	0.91	0.15	51.2
East: RoadName															
4	L2	All MCs	25	0.0	25	0.0	0.024	5.5	LOS A	0.0	0.0	0.00	0.32	0.00	54.9
5	T1	All MCs	22	0.0	22	0.0	0.024	0.0	LOS A	0.0	0.0	0.00	0.32	0.00	57.2
Approach			47	0.0	47	0.0	0.024	3.0	NA	0.0	0.0	0.00	0.32	0.00	56.0
West: RoadName															
11	T1	All MCs	31	0.0	31	0.0	0.016	0.0	LOS A	0.0	0.0	0.01	0.02	0.01	59.8
12	R2	All MCs	1	0.0	1	0.0	0.016	5.5	LOS A	0.0	0.0	0.01	0.02	0.01	57.0
Approach			32	0.0	32	0.0	0.016	0.2	NA	0.0	0.0	0.01	0.02	0.01	59.7
All Vehicles			155	0.0	155	0.0	0.069	4.7	NA	0.2	1.6	0.07	0.55	0.07	54.2

2028 Forecast Year Weekday PM Peak Hour + Development trips + Other Development Trips

MOVEMENT SUMMARY

 Site: 1.4 [2028 Weekday PM + Dev Trips + Other Trips (Site Folder: 4. Fishermans Village Drive / Site Access)]

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		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total HV]	%	[Total HV]	%				[Veh.]	Dist]				
			veh/h	%	veh/h	%	v/c	sec		veh	m				km/h
South: RoadName															
1	L2	All MCs	1	0.0	1	0.0	0.030	8.2	LOS A	0.1	0.7	0.20	0.89	0.20	51.4
3	R2	All MCs	31	0.0	31	0.0	0.030	7.9	LOS A	0.1	0.7	0.20	0.89	0.20	51.1
Approach			32	0.0	32	0.0	0.030	7.9	LOS A	0.1	0.7	0.20	0.89	0.20	51.1
East: RoadName															
4	L2	All MCs	69	0.0	69	0.0	0.057	5.6	LOS A	0.0	0.0	0.00	0.36	0.00	54.6
5	T1	All MCs	44	0.0	44	0.0	0.057	0.0	LOS A	0.0	0.0	0.00	0.36	0.00	56.8
Approach			114	0.0	114	0.0	0.057	3.4	NA	0.0	0.0	0.00	0.36	0.00	55.4
West: RoadName															
11	T1	All MCs	37	0.0	37	0.0	0.019	0.0	LOS A	0.0	0.0	0.02	0.02	0.02	59.8
12	R2	All MCs	1	0.0	1	0.0	0.019	5.7	LOS A	0.0	0.0	0.02	0.02	0.02	57.0
Approach			38	0.0	38	0.0	0.019	0.2	NA	0.0	0.0	0.02	0.02	0.02	59.7
All Vehicles			183	0.0	183	0.0	0.057	3.5	NA	0.1	0.7	0.04	0.38	0.04	55.4