CITY OF CAPE TOWN
ISIXEKO SASEKAPA
STAD KAAPSTAD

URBAN MOBILITY DIRECTORATE

Local Traffic Management Investigation in the Vicinity of De Vrije Zee Primary School, Goodwood

Department: Urban Mobility Directorate - Transport Planning and Network Management (Northern Region)

Date: 2025/05/28

Version: 01

Making progress possible. Together.

DOCUMENT APPROVAL

Name of Official	Capacity	Signature and Date
Liesel Maakal	Project Manager	

Prepared for and on behalf of the Urban Mobility Directorate – Transport Planning and Network Management (Northern Region) by:

Innovative Transport Solutions (Pty) Ltd

This document was prepared as per the scope of contract number 288C/2021/22 for the Provision of Professional Services: Transport Engineering, Planning & Management.

Table of Contents

1. Introduction 4
2. Road Class and Cross-Section 4
2.1. Road Classification and Public Transport Routes 4
2.2. Access and Road Network Overview 5
3. Surveys and Data Collection 6
3.1. Dingle Road/Molteno Street Intersection Traffic Volumes 6
3.2. Voortrekker Road/Molteno Street Intersection Traffic Volumes 7
3.3. Traffic Volume Outcomes 8
3.4. Pedestrian Volumes 8
3.5. Parking Survey 9
4. Crash Data 11
4.1. Merriman Road 11
4.2. Molteno Street 11
4.3. Dingle Road/Molteno Street Intersection 11
5. Site Observations 11
6. Shoulder Sight Distance 14
7. Traffic Impact Assessment 14
8. Pedestrian Sight Distance 15
9. Pedestrian Levels-of-Service 15
10. SARTSM Pedestrian Crossing Warrants/Chart 17
11. Summary 17
12. Conclusion and Recommendations 18

1. Introduction

A previous investigation (TNDN3978) assessed the possible conversion of Dingle Road from a two-directional roadway to a one-way system. The investigation recommended implementing a one-way system in the westbound direction, along with the addition of seven parallel parking bays. However, as the proposal is still subject to public participation, its implementation is not expected to materialise anytime soon.

Subsequently, De Vrije Zee Primary School raised further concerns regarding traffic congestion and learner safety due to parking issues near the school, particularly given the proximity of the Goodwood Magistrates' Court and the Department of Labour office.

This report, therefore, summarises a local traffic management investigation focused on the area in and around De Vrije Zee Primary School in Goodwood. The investigation considers the following:

- The possible implementation of a one-way system with parking bays along Molteno Street, between Voortrekker Road and Dingle Road, near the Magistrates' Court and the Department of Labour office.
- The possible implementation of a midblock pedestrian crossing at one of the pedestrian access gates to De Vrije Zee Primary School along Dingle Road.
- The identification of possible short-term mitigation measures to improve learner safety and reduce congestion along Merriman Road, Molteno Street and Dingle Road, prior to the implementation of the previously proposed one-way system for Dingle Road.

Refer to **Figure 1** for a locality map.

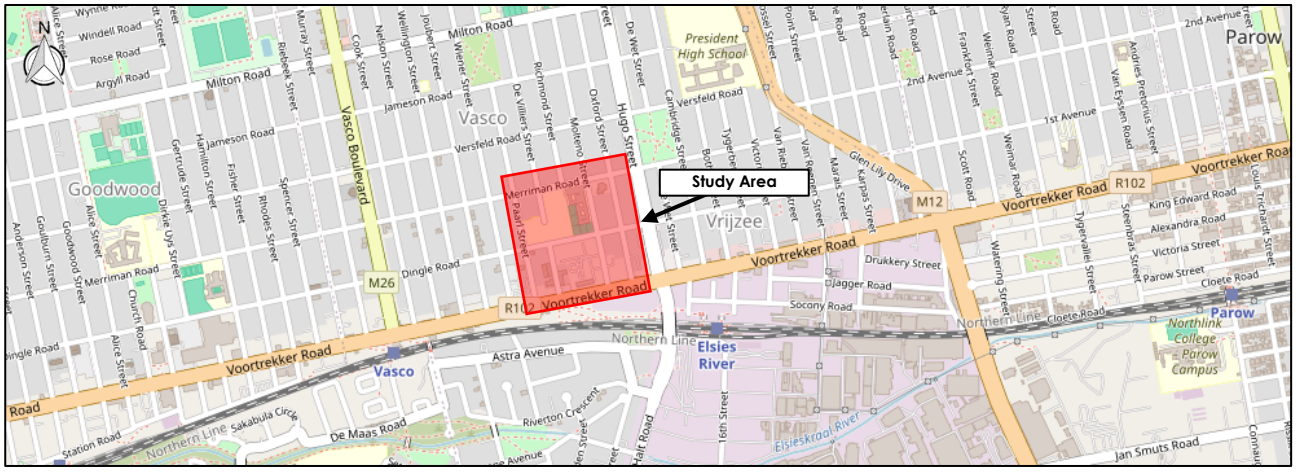


Figure 1: Locality Map – De Vrije Zee Primary School, Magistrates' Court and the Department of Labour Office

2. Road Class and Cross-Section

2.1. Road Classification and Public Transport Routes

Merriman Road, Molteno Street and Dingle Road are all classified as Class 5 Local Streets, according to the City of Cape Town (CCT) Public Right of Way Road network (Standards and Guidelines for Roads and Stormwater, Version 4, September 2024). Refer to **Figure 2** for an extract of these road classifications.

Only Merriman Road and Dingle Road currently form part of the CCT's public transport route for mini-bus taxis only, with none of the roads designated for bus routes. Refer to **Figure 3** for an extract of the public transport route in the site vicinity.

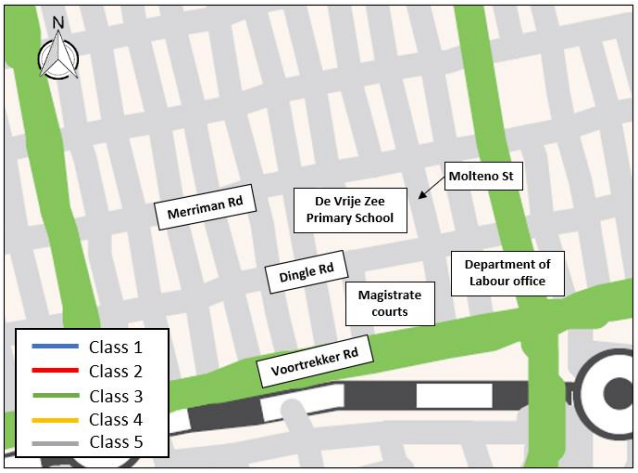


Figure 2: CCT Road Network

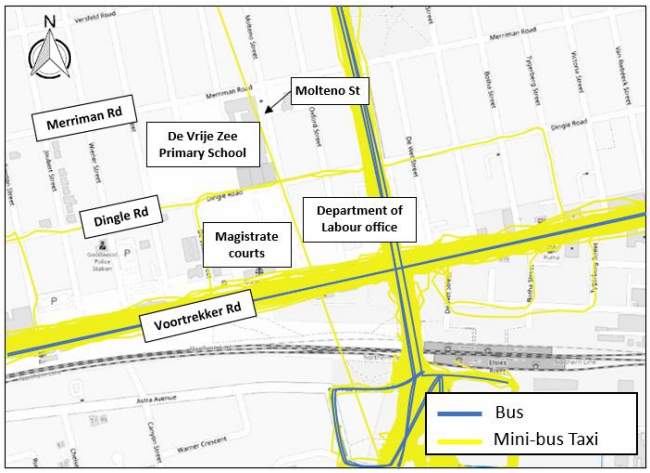


Figure 3: CCT Public Transport Network

2.2. Access and Road Network Overview

Vehicle and pedestrian access to De Vrije Zee Primary School is located along Merriman Road, Molteno Street and Dingle Road. However, the pedestrian gate 1 along Merriman Road is no longer used, and instead, a new pedestrian gate 2 has been recently implemented along Molteno Street. There is an existing pedestrian gate along Molteno Street, which is the school's main pedestrian entrance, and two pedestrian gates are located along Dingle Road, both are west of the Dingle Road/Molteno Street intersection.

The Merriman Road/Molteno Street and Dingle Road/Molteno Street intersections are currently all-way stop-controlled intersections. Merriman Road, Dingle Road and Molteno Street consist of single travel lanes (approximately 3.5 - 3.8 metres wide per direction) and sidewalks along both sides of the roadways. There are two speed humps and pedestrian crossing with flashing warning lights located along Merriman Road, near the previously used pedestrian gate 1 of the De Vrije Zee Primary School. One speed hump is located along Molteno Street, at the pedestrian gate 2 and one raised pedestrian crossing is located along Dingle Road, at the pedestrian gate 4.

The Voortrekker Road/Molteno Street intersection is a priority-controlled T-junction, with stop control along the Molteno Street approach. Voortrekker Road consists of a divided dual carriageway (approximately 3.5 metres travel lanes) with a central median and sidewalks along both sides of the roadway.

Refer to **Figure 4** for an illustration of the area layout.

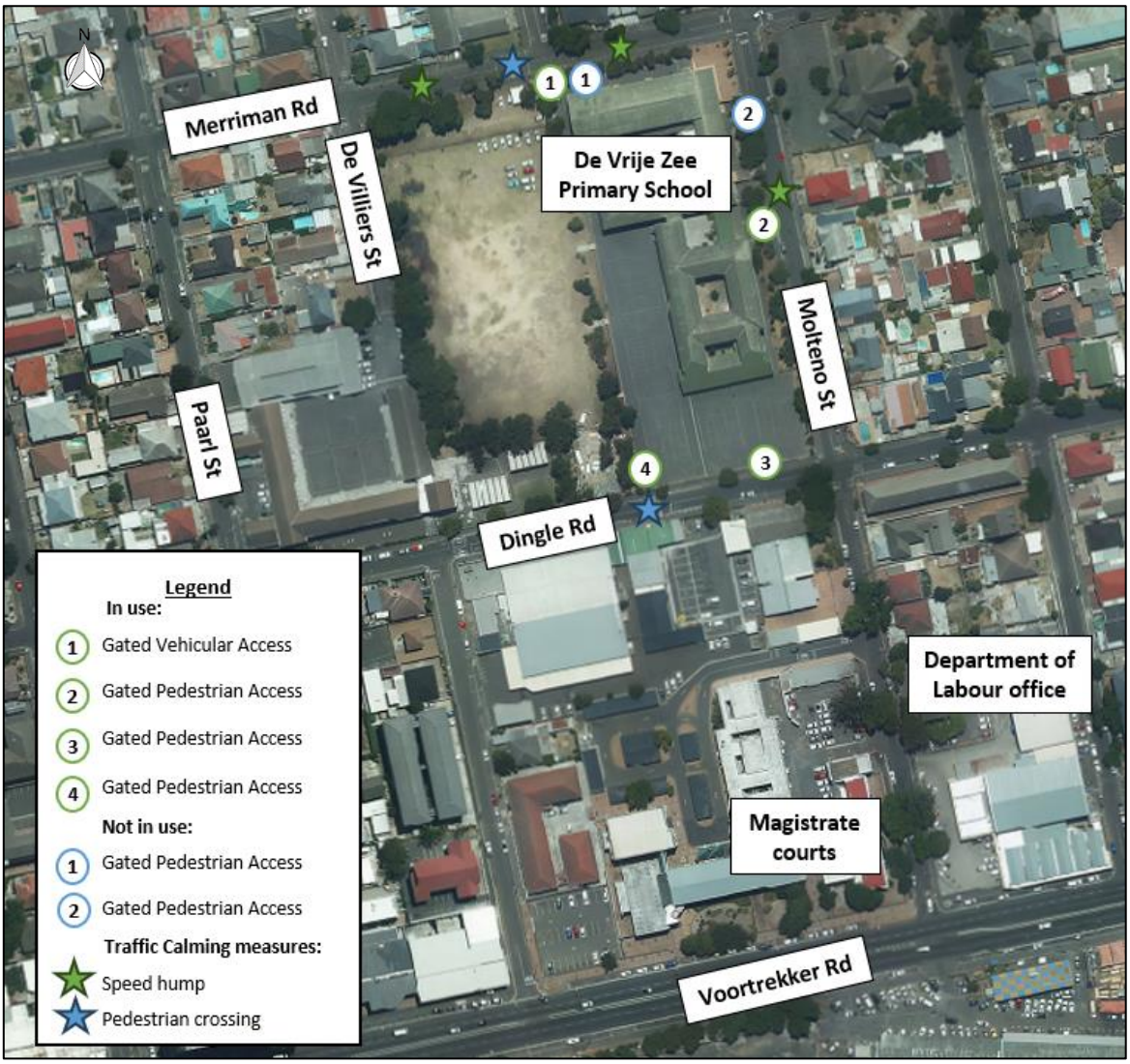


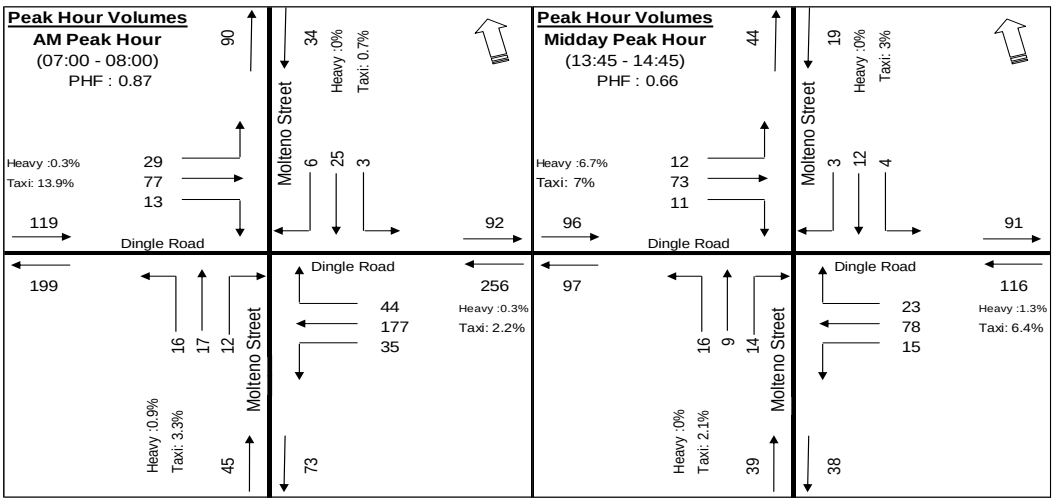
Figure 4: Area Layout (De Zee Vrije Primary School and Surrounding Road Network)

3. Surveys and Data Collection

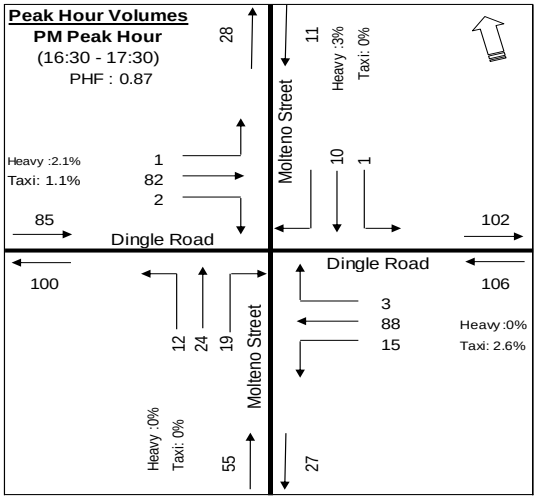
The traffic surveys, pedestrian volumes and parking surveys were conducted on a typical weekday on Thursday, 9 November 2023 and Thursday, 24 April 2025. The peak periods surveyed were from 06:00 to 09:00, 12:00 to 15:00 and 16:00 to 18:00. This is when the potential for vehicle/pedestrian conflicts could be considered high or LOS at the intersection at its worst.

3.1. Dingle Road/Molteno Street Intersection Traffic Volumes

The detailed survey results are provided in **Annexure A**. These survey results are summarised below:



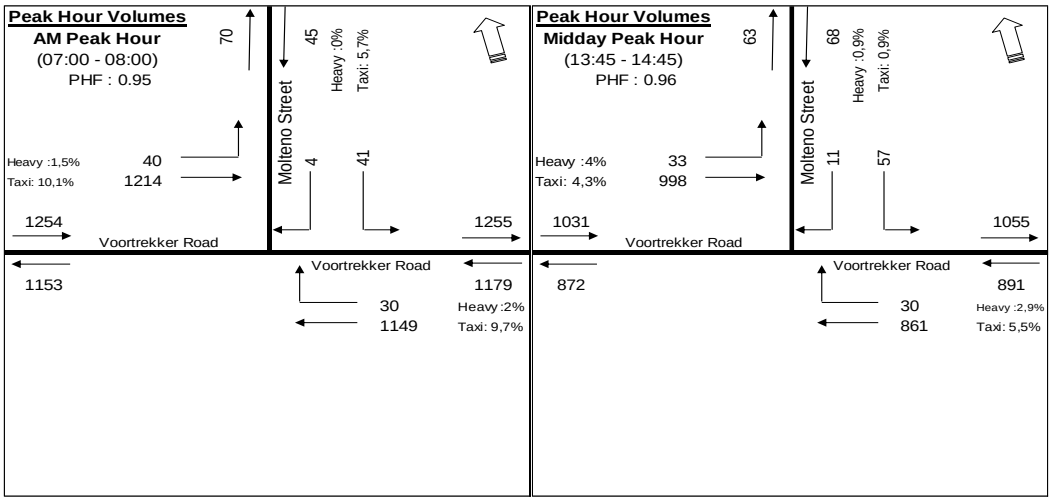
AM Peak Hour **Midday Peak Hour**



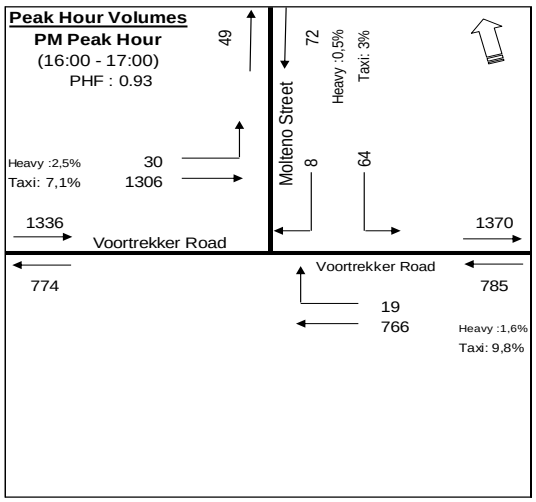
PM Peak Hour

3.2. Voortrekker Road/Molteno Street Intersection Traffic Volumes

The detailed survey results are provided in **Annexure A**. These survey results are summarised below:



AM Peak Hour **Midday Peak Hour**



PM Peak Hour

3.3. Traffic Volume Outcomes

The peak hour traffic volumes travelling along Molteno Street per direction are summarised in **Table 1**:

Table 1: Summary of Volumes

Traffic Surveys	Dingle Rd/Molteno St Intersection			Voortrekker Rd/Molteno St Intersection		
	AM	MIDDAY	PM	AM	MIDDAY	PM
Vehicles Entering	73	68	72	70	64	55
Vehicles Exiting	70	64	55	73	68	72

The vehicles entering and exiting Molteno Street at the Dingle Road/Molteno Street and Voortrekker Road/Molteno Street intersections are relatively similar in demand, indicating that there is no clear travel demand along Molteno Street.

3.4. Pedestrian Volumes

Pedestrians crossing Dingle Road near pedestrian access gate 3 and Molteno Street near pedestrian access gate 2 were also surveyed for the same peak periods as the traffic volume surveys. Refer to the pedestrian volumes in **Annexure A** for the classified pedestrian results. These survey results are also summarised in **Figure 5.**



Figure 5: Pedestrian Volumes at Surveyed Locations

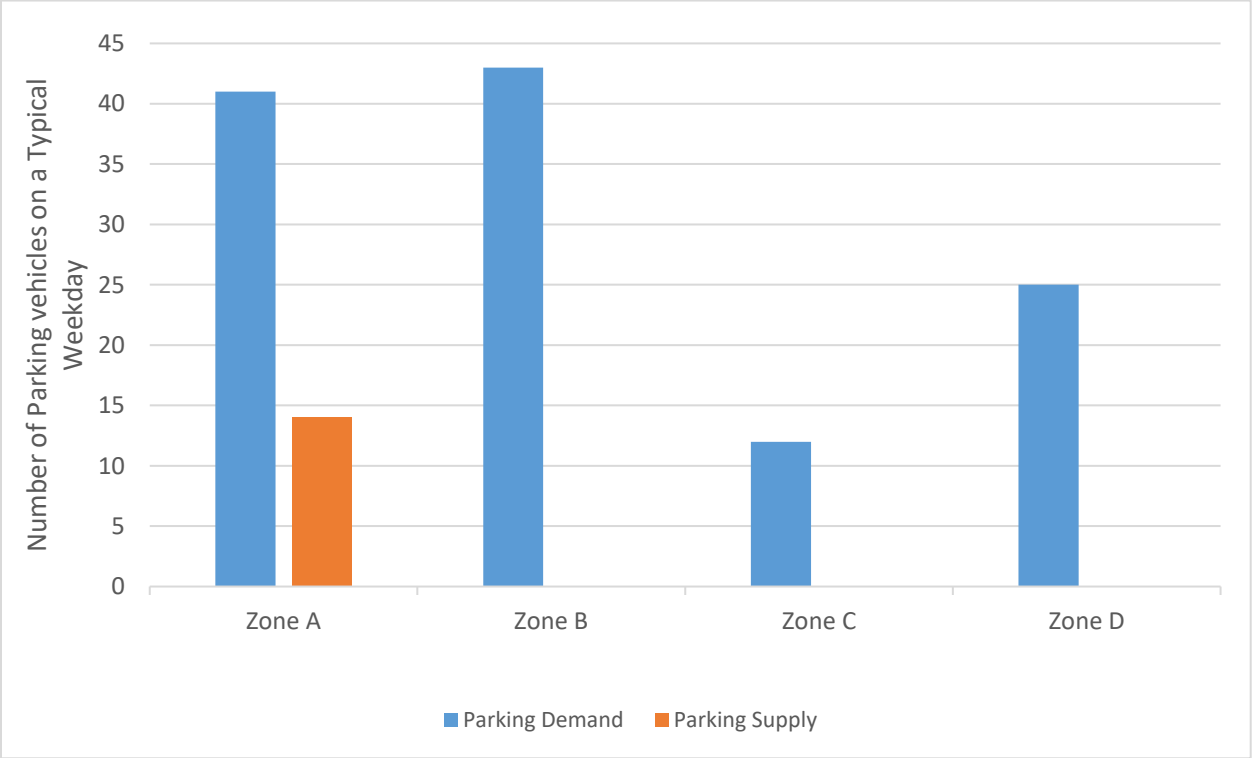
According to the summary above and the pedestrian counts in **Annexure A**, it is evident that pedestrian volumes at Location A, near pedestrian access gate 2 and Location B, near pedestrian access gate 3, are relatively high during the a.m. and midday peak hours.

3.5. Parking Survey

There are currently only 14 demarcated parking bays located along Dingle Road near De Vrije Zee Primary School, and 13 demarcated parking bays located along Voortrekker Road near the Magistrates' Court and the Department of Labour office. As part of this investigation, a parking survey was done to quantify the number of vehicles parked around De Vrije Zee Primary School, Magistrates' Court and the Department of Labour offices during a typical weekday. The parking demand survey zones can be seen in **Figure 6**. The detailed survey results per zone are provided in **Annexure A,** and a summary thereof is below**.**



Figure 6: Parking Survey Locations



Graph 1: Maximum Parking Utilisation in the Survey Area

Based on the results presented in **Graph 1**, it is evident that there is a demand for parking at De Vrije Zee Primary School, Magistrates' Court and the Department of Labour office during the peak parking period. While no formal parking bays exist at the surveyed locations along Molteno Street, a maximum of 68 vehicles were observed parked within the survey zones B and D. Along Dingle Road, a maximum of 53 vehicles were observed parked within survey zones A and C. Due to the demand for parking bays, it is recommended to implement parking bays along Molteno Street. Based on the previous investigation, 7 additional parking bays have been recommended along Dingle Road, therefore, the total parking bays along Dingle Road, near De Vrije Zee Primary School, would be 21. However, this is insufficient to meet to parking demand of 41 vehicles for survey zone A. Therefore, to allow parents to park safely and drop off learners, it is recommended to implement a eastbound one-way system along Merriman Road, between De Villiers Street and Molteno Street, during the De Vrije Zee Primary School start and finishing times.

4. Crash Data

Crash data along Merriman Road (between De Villiers Street and Molteno Street), Molteno Street (between Voortrekker Road and Dingle Road) and the Dingle Road/Molteno Street intersection were obtained from the City of Cape Town and represent data between January 2019 and June 2024. Crash data from 2020 was excluded due to insufficient data available.

4.1. Merriman Road

Based on the crash data received, a total of 4 crashes were recorded along Merriman Road during the 4.5-year period. One of which was a head/rear-end crash, and three were sideswipe in the same direction crashes, all of which resulted in no injuries.

4.2. Molteno Street

Based on the crash data received, no crashes were recorded along Molteno Street during the 4.5-year period.

4.3. Dingle Road/Molteno Street Intersection

Based on the crash data received, a total of 2 crashes were recorded at the Dingle Road/Molteno Street intersection during the 4.5-year period. One was a sideswipe in the same direction crash, and the other was a reversing crash, both of which no injuries being sustained.

5. Site Observations

A site visit was conducted on Friday, 14 March 2025, and the site observations are as follows:

- Many learners were observed standing on both sides of Dingle Road waiting until 7:15 for the De Vrije Zee Primary School gates to open. As an interim solution to improve the safety of learners and encourage parents to drop off learners earlier, it is recommended that the De Vrije Zee Primary School open the pedestrian access (Gate 4) along Dingle Road at 6:15.

- Learners from various schools, including De Vrije Zee Primary School, were observed crossing all approaches of both the Merriman Road/Molteno Street and Dingle Road/Molteno Street intersections. Refer to **Photo 1**. It is recommended to paint pedestrian crossing lines (RTM3) road markings along all approaches of the Merriman Road/Molteno Street and Dingle Road/Molteno Street intersections, to make motorists aware of pedestrian activity and provide dedicated locations to cross the roadways.





Photo 1: School children crossing the Merriman Road/Molteno St & Dingle Rd/Molteno St intersections

- There are existing flashing warning signals at the signalised midblock pedestrian crossing along Merriman Road. However, they are non-operational. Refer to **Photo 2**. It is recommended to replace the non-operational flashing warning signals.



Photo 2: Non-operational flashing warning signals

- Vehicles were observed stopping and parking along both sides of Dingle Road, between Oxford Street and Paarl Street, to drop off learners, leading to temporary congestion. This congestion was limited to the start and end times of the De Vrije Zee Primary School. Although these vehicles were not illegally parked, since there are no road markings restricting stopping or parking, all the vehicles parked hindered the two-way traffic flow. Refer to **Photo 3**. It is recommended that the De Vrije Zee Primary School allow certain grades to make use of selected pedestrian gates to distribute parents stopping and parking along Dingle Road and Merriman Road.

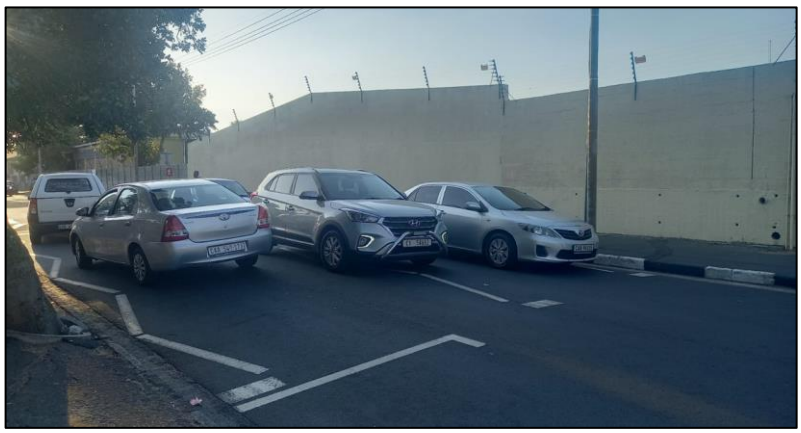


Photo 3: Vehicles stopping and parking along both sides of Dingle Road, leading to congestion

- Vehicles were observed parked along both sides of Molteno Street, between Voortrekker Road and Merriman Road, to either access the Magistrate's Court or the Department of Labour office, despite the presence of no-stopping lines along both sides of Molteno Street at the Voortrekker Road/Molteno Street intersection. Although some of these vehicles were not illegally parked, all the vehicles parked hindered the two-directional traffic flow. Refer to **Photos 4** & **5.**



Photo 4: Vehicles parked along both sides of Molteno St, between Voortrekker Rd & Dingle Rd



Photo 5: Vehicles parked along both sides of Molteno Street, causing congestion

- Learners and scholar patrol were observed using the existing speed hump, near the new pedestrian gate 2 along Molteno Street as a raised pedestrian crossing. It is recommended to convert the existing speed hump to a raised pedestrian crossing.

- Teachers and school officials were observed assisting learners with crossing the road and managing traffic congestion at the Dingle Road/Molteno Street intersection, the speed hump along Molteno Street and the raised pedestrian crossing along Dingle Road.

- The existing yield to pedestrians (R2.1) road sign along Dingle Road, at the raised pedestrian crossing, is not facing oncoming westbound vehicles, Additionally, there is no danger plate (W401) road sign at this location for westbound vehicles. Refer to **Photo 6**. It is recommended that the yield to pedestrians (R2.1) road sign be rotated to face westbound vehicles.



Photo 6: Existing yield to pedestrian (R2.1) road sign is not facing oncoming westbound vehicles

6. Shoulder Sight Distance

The shoulder sight distance (SSD) required for a 60 km/h roadway with a width of 17.5 metres is 160 metres (Urban Transport guidelines, UTG1, Page 49). The available shoulder sight distance (SSD) at the Voortrekker Road/Molteno Street intersection was investigated. It was observed that the available SSD along the Molteno Street approach is restricted to 45 metres in the eastbound direction and 60 metres in the westbound direction. Refer to **Photo 7**.



Molteno Street Northern Approach - Eastbound View	Molteno Street Northern Approach - Westbound View

Photo 7: Available Shoulder Sight Distances (Voortrekker Road/Molteno Street Intersection)

It is therefore recommended to convert Molteno Street to a northbound one-way road to alleviate the restricted SSD along the Molteno Street approach (southbound). Additionally, given the high parking demand along Molteno Street, it is recommended to paint parking bays along both sides of the roadway, between Voortrekker Road and Dingle Road.

7. Traffic Impact Assessment

One-way streets have been found to help regulate traffic flow in heavily congested areas however, it is necessary to ensure that the measure does not negatively impact the surrounding street network or the social equity of the residents along the street. One-way systems have a tendency to transfer traffic onto adjacent roads currently not impacted by through traffic. As a system, one-way streets can also increase the travel distances of motorists and create some confusion, especially for non-local residents. It is therefore necessary to determine the following:

- Whether there is an acceptable alternative for transferred traffic, and whether the volume of traffic that will be inconvenienced by the measure is acceptable,
- Whether the intersections in the vicinity of the proposed one-way have the capacity to carry additional transferred traffic.

Based on the existing traffic volumes, it is evident that traffic volumes along Molteno Street are relatively low during all three peak hours. It can be concluded that there is a suitable alternative for diverted traffic, including Oxford Street, and that the social impacts of a proposed one-way system will be minimal. In addition, due to the multiple alternative routes available within the surrounding road network, if the existing volumes are redistributed, the impacts on the nearby intersections will be minimal.

8. Pedestrian Sight Distance

According to the Guidelines for Human Settlement Planning and Design (CSIR, 2000, Volume 2, Chapter 7, Table 7.10), a pedestrian sight distance of 55 metres is required for a roadway with a 40 km/h design speed. The existing available shoulder sight distance along Molteno Street and Dingle Road, where the pedestrians cross, exceeds this requirement in all directions at the study locations. Additionally, pedestrians can walk across Molteno Street and Dingle Road (at surveyed locations) in one stage since there are no medians present.

9. Pedestrian Levels-of-Service

This investigation also includes an assessment of the Pedestrian Levels of Service (PLOS) for Pedestrian Crossings at the surveyed locations. Refer to **Table 2** and **Figure 7** For the definition and the analysis of the levels of service. These are based on the New Zealand Guidelines for PLOS.

Table 2: Levels of Service for Pedestrian Crossings (PLOS)

Average Pedestrian Delay (Sec)	Level of Service	Definition	Description	Appropriate Situation
< 5	A	Excellent	Pedestrians are able to cross almost immediately on arrival	Local Street Collector Road
5 to 10	B	Very Good	Most pedestrians are able to cross with little delay 95th percentile delay of approximately equal to 40 seconds.	
10 to 15	C	Satisfactory	Most able to cross with acceptable period, 95th percentile delay approximately equal to 60 seconds	Minor and Major Arterials
15 to 20	D	Some Concerns	Some pedestrians must wait longer than desirable for an acceptable gap period, 95th percentile delay approximately equal to 80 seconds.	
20 to 40	E	Major Concerns	Most pedestrians must wait longer than desirable for an acceptable gap, 95th percentile delay of approximately equal to 80 seconds.	Inappropriate All Situations
> 40	F	Unsatisfactory	Most pedestrians must wait longer than they desire for an acceptable gap, 95th percentile delay of approximately equal to 80 seconds.	

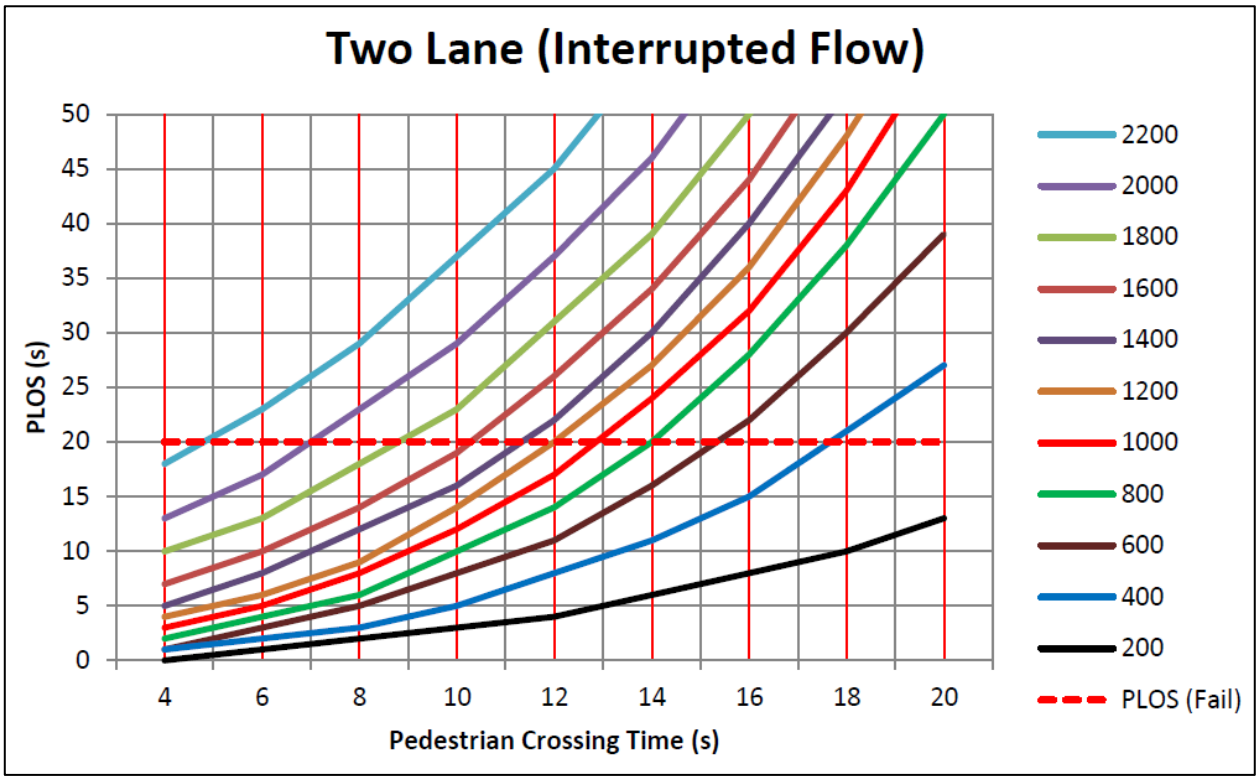


Figure 7: Average pedestrian delay for two-lane interrupted traffic flow

The width of the roadway at the surveyed Location A, for the pedestrians to cross, is approximately 7 metres and 7.6 metres at Location B. With an average walking speed of 1.2 m/s, it would take approximately 5.8 seconds for a pedestrian to cross the study roadway at Location A and 6.3 seconds at Location B. The following can be concluded based on the guidelines in **Table 2** and **Figure 7** above:

- At the surveyed location A
    - AM Peak Hour: 124 vehicles per hour – 1 second (PLOS = A)
    - PM Peak Hour: 63 vehicles per hour – 0 seconds (PLOS = A)
    - PM Peak Hour: 39 vehicles per hour – 0 seconds (PLOS = A)
- At the surveyed location B
    - AM Peak Hour: 318 vehicles per hour – 2 seconds (PLOS = A)
    - PM Peak Hour: 193 vehicles per hour – 1 second (PLOS = A)
    - PM Peak Hour: 185 vehicles per hour – 1 second (PLOS = A)

Based on the above PLOS analysis, the operations of pedestrians crossing the roadway have excellent (PLOS = A) at both Locations A and B.

Note that the PLOS methodology does not take the actual pedestrian volumes into account. In this instance, the pedestrian volume crossing Molteno Street during peak hours is between 6 and 212 pedestrians, while Dingle Road during peak hours is between 1 and 191 pedestrians. In the next section, the pedestrian volumes are taken into consideration in the warrant evaluation.

10. SARTSM Pedestrian Crossing Warrants/Chart

The South African Road Traffic Signs Manual (SARTSM) Volume 3 provides warrants for signalising intersections and pedestrian crossings. The warrants state that a traffic signal is warranted when:

- Warrant 1: The average length of ANY individual queue equals or exceeds four (4) over any one hour of a normal day.
- Warrant 2: The sum of the average lengths of all queues equals or exceeds six (6) over any one hour of a normal day.
- Warrant 3: The sum of the average lengths of all queues equals or exceeds four over each of any eight (8) hours of a normal day (the hours do not have to be consecutive, but they may not overlap).

There is no specific "crash warrant" in SARTSM Volume 3, and there is also no specific unsignalised or signalised mid-block pedestrian crossing warrant since it is argued that these are included in the queue length warrants. However, it is not always possible to survey queue lengths in areas where pedestrians cross a road at various locations, which was the case for this specific investigation. In areas where pedestrians are focused on specific locations, it is possible to survey pedestrian queues and apply for the above queue warrants. For this reason, the pedestrian/vehicle chart (SARTSM Volume 1.3 – Figure 6.26) was used to determine if an unsignalised or signalised mid-block pedestrian crossing is warranted.

Based on the guidelines provided in SARTSM Volume 1, an unsignalised or signalised mid-block pedestrian crossing is not warranted across either Molteno Street or Dingle Road, near De Vrije Zee Primary School, during any of the peak hours. Refer to Figures **TNDN5146/A** and **B** in **Annexure B**.

11. Summary

The following is based on site observations, surveys, and the findings within this report:

- The vehicles entering and exiting Molteno Street at the Dingle Road/Molteno Street and Voortrekker Road/Molteno Street intersections are relatively similar in demand, indicating that there is no clear travel demand along Molteno Street.
- Pedestrian volumes crossing Molteno Street and Dingle Road at the surveyed locations are relatively high during the a.m. and midday peak hours.
- The parking demand indicated that there is a parking demand along both Molteno Street and Dingle Road.
- There are only 14 demarcated parking bays located along Dingle Road, west of the Dingle Road/Molteno Street intersection and 13 demarcated parking bays located along Voortrekker Road near the Magistrates' Court and the Department of Labour office area.
- The maximum parking demand along Molteno Street and Dingle Road between the respective survey zones is between 53 and 68 vehicles.

12. Conclusion and Recommendations

Based on the findings of this report, the following conclusions and recommendations have been made as part of this investigation:

Request	Outcome	Recommendations
Convert Molteno Street, between Voortrekker Road and Dingle Road, from a two-directional roadway into a one-way system and implement parking bays at the Magistrates' Court.	There is insufficient SSD at the Voortrekker Road/Molteno Street intersection. Therefore, to improve the SSD, Molteno Street can be converted to a one-way street in the northbound direction. This will allow for sufficient space to accommodate additional parking bays along Molteno between Dingle Road and Voortrekker Road.	Implement the following road markings and signage: • A one-way roadway (R4.3) road sign at the Voortrekker Road/Molteno Street intersection. • A mandatory direction arrow (RM8.3) road marking along Molteno Street. • Implement 17 parallel parking bays along the eastern side of Molteno Street. • Implement no-stopping (RM12) road marking along the western side of Molteno Street. Refer to Drawing Number **4619/TNDN5146/01** in **Annexure C** for the proposed road markings and signage layout.
Implement a midblock pedestrian crossing at the pedestrian gate along Dingle Road.	Based on the pedestrian crossing warrants, neither an unsignalised nor a signalised mid-block pedestrian crossing is warranted across either Molteno Street or Dingle Road, at the De Vrije Zee Primary School during any of the peak hours.	It is recommended to close pedestrian access gate 3 and redirect learners to cross at the existing raised pedestrian crossing along Dingle Road. Implement the following road upgrades: • Convert the existing speed hump along Molteno Street to a raised pedestrian crossing. Refer to Drawing Number **4619/TNDN5146/02** in **Annexure C** for the proposed road markings and signage layout.

Short-term improvements to improve learner safety and reduce congestion along Merriman Road, Molteno Street and Dingle Road	Based on the site observations, many learners were observed waiting along Dingle Road until 7:15, when the pedestrian school gates opened. High volumes of parents travelled along Dingle Road and Molteno Street due to the existing pedestrian access gates. Many learners were observed crossing all the approaches of the Merriman Road/Molteno Street and Dingle Road/Molteno Street intersections.	To improve learner safety and encourage parents to drop off the learners earlier, De Vrije Zee Primary School should open the pedestrian access gate 4 at 6:15 am. It is recommended to open pedestrian access gate 1 at 6:15 am to encourage parents to drop learners off earlier. Thus, distributing the pick-up and drop-off locations along Dingle Road, Molteno Street and Merriman Road instead of only Dingle Road and Molteno Street. Additionally, due to the high parking demand, it is recommended to implement an eastbound one-way system along Merriman Road between De Villiers Street and Molteno Street, during the De Vrije Zee Primary School start and finishing times. It is also recommended that the De Vrije Zee Primary School allow certain grades to make use of selected pedestrian gates to distribute parents stopping and parking along Dingle Road, Molteno Street and Merriman Road. Refer to Drawing Number **4619/TNDN5146/02** and **03** in **Annexure C** for the proposed road markings layout and **Annexure D** for the signage detail. Implement the following road markings and signage: • Paint pedestrian crossing lines (RTM3) road markings along all approaches of the Merriman Road/Molteno Street and Dingle Road/Molteno Street intersections. Refer to Drawing Number **4619/TNDN5146/01** and **02** in **Annexure C** for the proposed road markings layout.

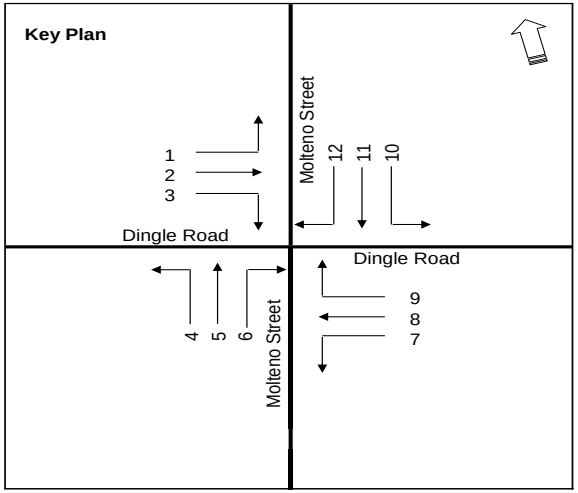
Additional improvements along Merriman Road and Dingle Road.	The existing flashing warning signals at the signalised midblock pedestrian crossing along Molteno Street are non-operational. The yield to pedestrian (R2.1) road sign is not facing oncoming westbound vehicles. There is no danger plate (W401/W402) road sign at the raised pedestrian crossing along Dingle Road facing westbound vehicles. This update has been proposed in the previous investigation, Drawing Numbers **4619/TNDN3978/01** and **02** in **Annexure C.**	Implement the following: • Replace the flashing warning signals at the midblock pedestrian crossing along Molteno Street. • Rotate the existing yield to pedestrian (R2.1) road sign along Dingle Road to face oncoming westbound vehicles. Refer to Drawing Number **4619/TNDN5146/01** and **03** in **Annexure C**.

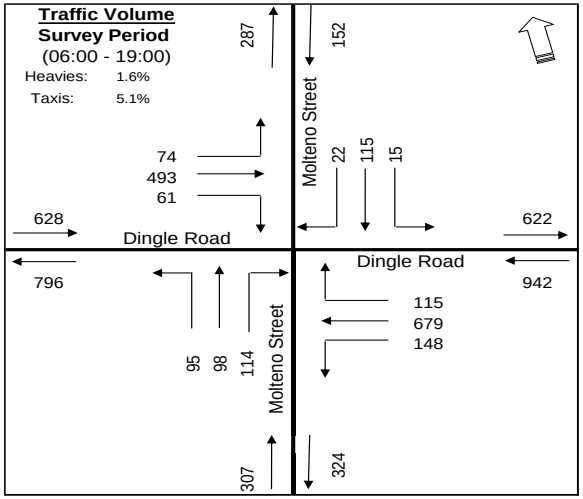
Annexure A - Surveys

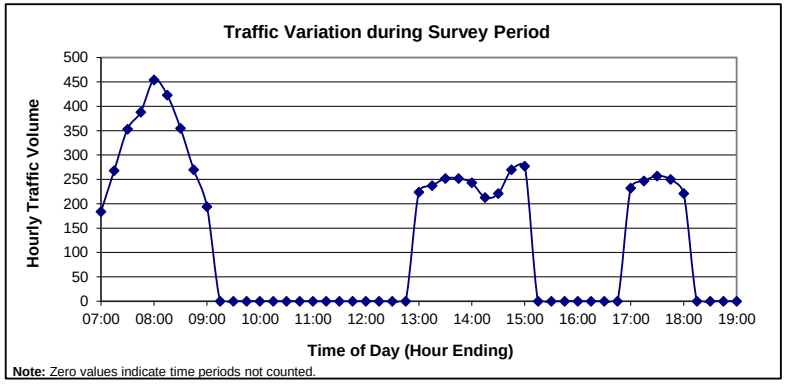
TRAFFIC COUNT

INTERSECTION: **Dingle Road/Molteno Street** **Intersection ID:** **4456**
PERIOD: **3 Hrs AM, 3 Hrs MD, 2 Hrs PM**
DATE: **09-Nov-23** **Area: Vasco**

Total Traffic															Hourly Totals
TIME		Traffic Movements													
Start	End	1	2	3	4	5	6	7	8	9	10	11	12	Total	
06:00	06:15		4	1			1	1	2					**9**	
06:15	06:30		5	1		2		4	7	2		4		**25**	
06:30	06:45	2	8	5	4	3	5	9	42	7	1	6	4	**96**	
06:45	07:00	1	2	1	6	1	1	14	18	8	1		1	**54**	**184**
07:00	07:15	4	8	4	6	5	3	8	39	11		3	2	**93**	**268**
07:15	07:30	6	28	3	3	4	3	3	43	15	2			**110**	**353**
07:30	07:45	7	17	5	2	3	3	13	49	13		17	2	**131**	**388**
07:45	08:00	12	24	1	5	5	3	11	46	5	1	5	2	**120**	**454**
08:00	08:15		12	2	4	2	2	12	14	4	1	8	1	**62**	**423**
08:15	08:30	1	14	1	1	4		2	13		1	5		**42**	**355**
08:30	08:45		7	3	4		4	3	19	3		3		**46**	**270**
08:45	09:00	1	13	4	4	2	4	2	12	2				**44**	**194**
09:00	09:15														
09:15	09:30														
09:30	09:45														
09:45	10:00														
10:00	10:15														
10:15	10:30														
10:30	10:45														
10:45	11:00														
11:00	11:15														
11:15	11:30														
11:30	11:45														
11:45	12:00														
12:00	12:15	5	14	3	2	3	8	3	14	1		4	2	**59**	
12:15	12:30		10		1	2	4	6	15	1		1		**40**	
12:30	12:45		15	1	2	1	4	2	27			2		**54**	
12:45	13:00	9	22	3	5	4	3	4	17			2	2	**71**	**224**
13:00	13:15	4	20		4	6	8	2	21	2	1	3	1	**72**	**237**
13:15	13:30	4	10	5	3		3	3	21	2		3	1	**55**	**252**
13:30	13:45	1	18		1	4	5	4	13	3		5		**54**	**252**
13:45	14:00	3	19	4	4	3	1	6	15	2	2	2	1	**62**	**243**
14:00	14:15		17		4	1	2		11	7				**42**	**213**
14:15	14:30	1	14	3	2	1	6	4	27	1	1	3		**63**	**221**
14:30	14:45	8	23	4	6	4	5	5	25	13	1	7	2	**103**	**270**
14:45	15:00	1	27			3	1	2	15	8	2	10		**69**	**277**
15:00	15:15														
15:15	15:30														
15:30	15:45														
15:45	16:00														
16:00	16:15		19	2	4	7	8	5	12			2		**59**	
16:15	16:30	2	10		2	2	6	2	20			5		**49**	
16:30	16:45		12		5	6	7	3	22	1	1	3		**60**	
16:45	17:00	1	21	2	2	3	2	7	23	2		1		**64**	**232**
17:00	17:15		25		5	8	5	5	20			6		**74**	**247**
17:15	17:30		24			7	5		23					**59**	**257**
17:30	17:45		15	3	3	2	2	1	25			2		**53**	**250**
17:45	18:00	1	16		1			2	9	2		3	1	**35**	**221**
18:00	18:15														
18:15	18:30														
18:30	18:45														
18:45	19:00														
TOTAL		74	493	61	95	98	114	148	679	115	15	115	22	2029	
EST. 24 HR		**89**	**592**	**73**	**114**	**118**	**137**	**178**	**815**	**138**	**18**	**138**	**26**	**2435**	





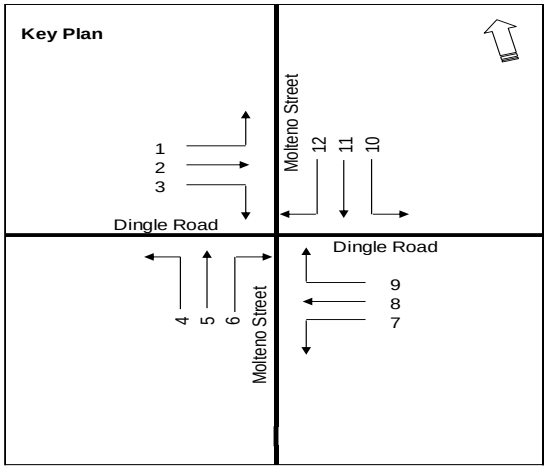


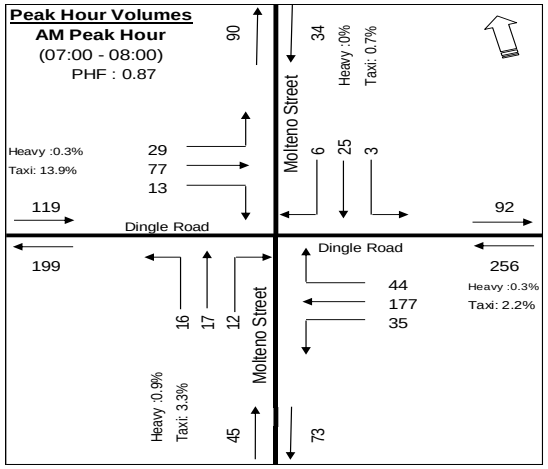
Note: Zero values indicate time periods not counted.

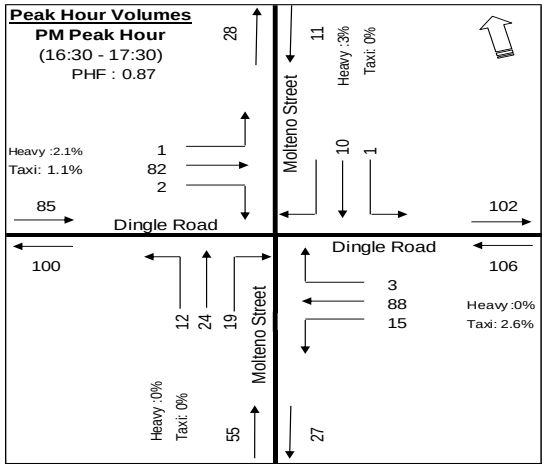
TRAFFIC COUNT

INTERSECTION: **Dingle Road/Molteno Street** **Intersection ID:** **4456**
PERIOD: **3 Hrs AM, 3 Hrs MD, 2 Hrs PM**
DATE: **09-Nov-23** **Area: Vasco**

Total Traffic															Hourly
TIME		Traffic Movements													
Start	End	1	2	3	4	5	6	7	8	9	10	11	12	Total	Totals
06:00	06:15		4	1			1	1	2					**9**	**9**
06:15	06:30		5	1		2		4	7	2		4		**25**	**34**
06:30	06:45	2	8	5	4	3	5	9	42	7	1	6	4	**96**	**130**
06:45	07:00	1	2	1	6	1	1	14	18	8	1		1	**54**	**184**
07:00	07:15	4	8	4	6	5	3	8	39	11		3	2	**93**	**268**
07:15	07:30	6	28	3	3	4	3	3	43	15	2			**110**	**353**
07:30	07:45	7	17	5	2	3	3	13	49	13		17	2	**131**	**388**
07:45	08:00	12	24	1	5	5	3	11	46	5	1	5	2	**120**	**454**
08:00	08:15		12	2	4	2	2	12	14	4	1	8	1	**62**	**423**
08:15	08:30	1	14	1	1	4		2	13		1	5		**42**	**355**
08:30	08:45		7	3	4		4	3	19	3		3		**46**	**270**
08:45	09:00	1	13	4	4	2	4	2	12	2				**44**	**194**
09:00	09:15														**132**
09:15	09:30														**90**
09:30	09:45														**44**
09:45	10:00														
10:00	10:15														
10:15	10:30														
10:30	10:45														
10:45	11:00														
11:00	11:15														
11:15	11:30														
11:30	11:45														
11:45	12:00														
12:00	12:15	5	14	3	2	3	8	3	14	1		4	2	**59**	**59**
12:15	12:30		10		1	2	4	6	15	1		1		**40**	**99**
12:30	12:45		15	1	2	1	4	2	27			2		**54**	**153**
12:45	13:00	9	22	3	5	4	3	4	17			2	2	**71**	**224**
13:00	13:15	4	20		4	6	8	2	21	2	1	3	1	**72**	**237**
13:15	13:30	4	10	5	3		3	3	21	2		3	1	**55**	**252**
13:30	13:45	1	18		1	4	5	4	13	3		5		**54**	**252**
13:45	14:00	3	19	4	4	3	1	6	15	2	2	2	1	**62**	**243**
14:00	14:15		17		4	1	2		11	7				**42**	**213**
14:15	14:30	1	14	3	2	1	6	4	27	1	1	3		**63**	**221**
14:30	14:45	8	23	4	6	4	5	5	25	13	1	7	2	**103**	**270**
14:45	15:00	1	27			3	1	2	15	8	2	10		**69**	**277**
15:00	15:15														**235**
15:15	15:30														**172**
15:30	15:45														**69**
15:45	16:00														
16:00	16:15		19	2	4	7	8	5	12			2		**59**	**59**
16:15	16:30	2	10		2	2	6	2	20			5		**49**	**108**
16:30	16:45		12		5	6	7	3	22	1	1	3		**60**	**168**
16:45	17:00	1	21	2	2	3	2	7	23	2		1		**64**	**232**
17:00	17:15		25		5	8	5	5	20			6		**74**	**247**
17:15	17:30		24			7	5		23					**59**	**257**
17:30	17:45		15	3	3	2	2	1	25			2		**53**	**250**
17:45	18:00	1	16		1			2	9	2		3	1	**35**	**221**
18:00	18:15														**147**
18:15	18:30														**88**
18:30	18:45														**35**
18:45	19:00														
TOTAL		74	493	61	95	98	114	148	679	115	15	115	22	2029	
EST. 24 HR															



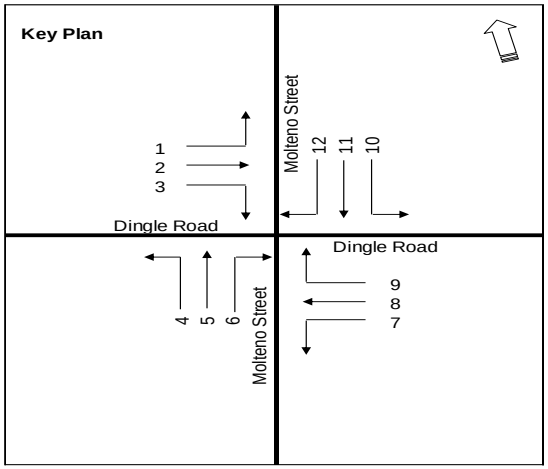


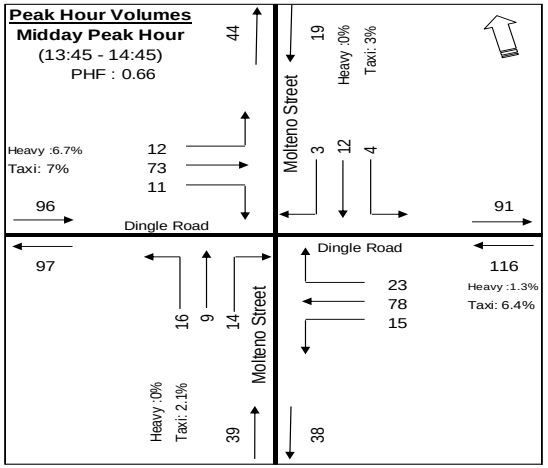


TRAFFIC COUNT

INTERSECTION: **Dingle Road/Molteno Street** **Intersection ID:** **4456**
PERIOD: **3 Hrs AM, 3 Hrs MD, 2 Hrs PM**
DATE: **09-Nov-23** **Area: Vasco**

Total Traffic														Hourly
TIME		Traffic Movements												Totals
Start	End	1	2	3	4	5	6	7	8	9	10	11	12	Total	
06:00	06:15		4	1			1	1	2					**9**	**9**
06:15	06:30		5	1		2		4	7	2		4		**25**	**34**
06:30	06:45	2	8	5	4	3	5	9	42	7	1	6	4	**96**	**130**
06:45	07:00	1	2	1	6	1	1	14	18	8	1		1	**54**	**184**
07:00	07:15	4	8	4	6	5	3	8	39	11		3	2	**93**	**268**
07:15	07:30	6	28	3	3	4	3	3	43	15	2			**110**	**353**
07:30	07:45	7	17	5	2	3	3	13	49	13		17	2	**131**	**388**
07:45	08:00	12	24	1	5	5	3	11	46	5	1	5	2	**120**	**454**
08:00	08:15		12	2	4	2	2	12	14	4	1	8	1	**62**	**423**
08:15	08:30	1	14	1	1	4		2	13		1	5		**42**	**355**
08:30	08:45		7	3	4		4	3	19	3		3		**46**	**270**
08:45	09:00	1	13	4	4	2	4	2	12	2				**44**	**194**
09:00	09:15														**132**
09:15	09:30														**90**
09:30	09:45														**44**
09:45	10:00														
10:00	10:15														
10:15	10:30														
10:30	10:45														
10:45	11:00														
11:00	11:15														
11:15	11:30														
11:30	11:45														
11:45	12:00														
12:00	12:15	5	14	3	2	3	8	3	14	1		4	2	**59**	**59**
12:15	12:30		10		1	2	4	6	15	1		1		**40**	**99**
12:30	12:45		15	1	2	1	4	2	27			2		**54**	**153**
12:45	13:00	9	22	3	5	4	3	4	17			2	2	**71**	**224**
13:00	13:15	4	20		4	6	8	2	21	2	1	3	1	**72**	**237**
13:15	13:30	4	10	5	3		3	3	21	2		3	1	**55**	**252**
13:30	13:45	1	18		1	4	5	4	13	3		5		**54**	**252**
13:45	14:00	3	19	4	4	3	1	6	15	2	2	2	1	**62**	**243**
14:00	14:15		17		4	1	2		11	7				**42**	**213**
14:15	14:30	1	14	3	2	1	6	4	27	1	1	3		**63**	**221**
14:30	14:45	8	23	4	6	4	5	5	25	13	1	7	2	**103**	**270**
14:45	15:00	1	27			3	1	2	15	8	2	10		**69**	**277**
15:00	15:15														**235**
15:15	15:30														**172**
15:30	15:45														**69**
15:45	16:00														
16:00	16:15		19	2	4	7	8	5	12			2		**59**	**59**
16:15	16:30	2	10		2	2	6	2	20			5		**49**	**108**
16:30	16:45		12		5	6	7	3	22	1	1	3		**60**	**168**
16:45	17:00	1	21	2	2	3	2	7	23	2		1		**64**	**232**
17:00	17:15		25		5	8	5	5	20			6		**74**	**247**
17:15	17:30		24			7	5		23					**59**	**257**
17:30	17:45		15	3	3	2	2	1	25			2		**53**	**250**
17:45	18:00	1	16		1			2	9	2		3	1	**35**	**221**
18:00	18:15														**147**
18:15	18:30														**88**
18:30	18:45														**35**
18:45	19:00														
TOTAL		74	493	61	95	98	114	148	679	115	15	115	22	2029	
EST. 24 HR															

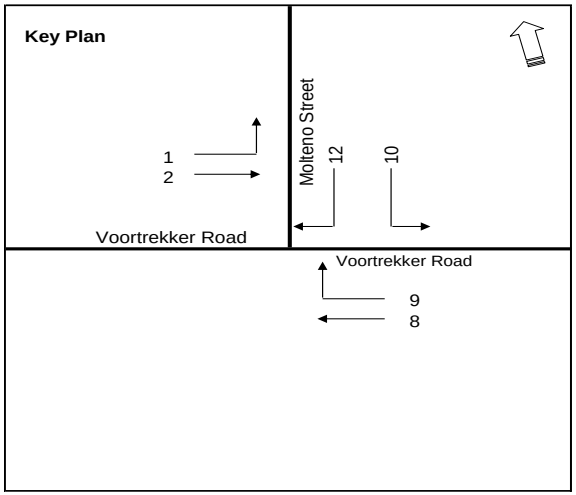


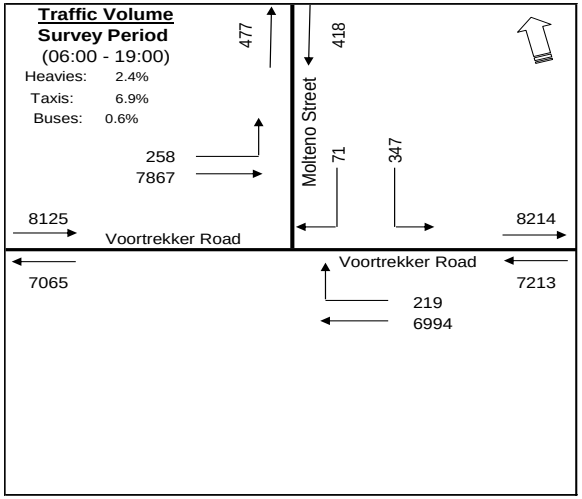


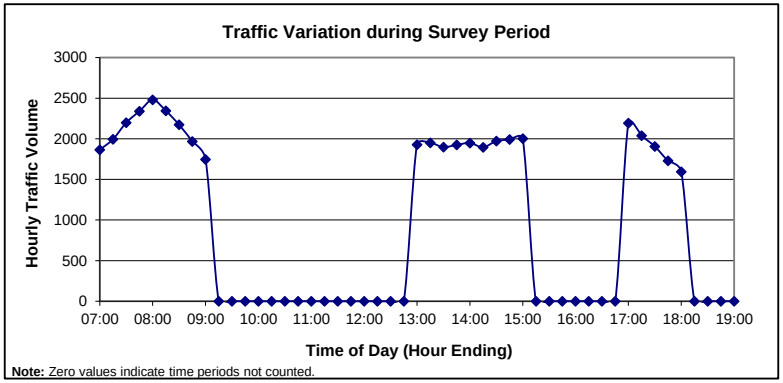
TRAFFIC COUNT

INTERSECTION: **Voortrekker Road //Molteno Street** **Intersection ID:** **4769**
PERIOD: **3 Hrs AM, 3 Hrs MD, 2 Hrs PM**
DATE: **24-Apr-25** **Area: Elsies River**

TIME		Total Traffic — Traffic Movements													Hourly Totals
Start	End	1	2	3	4	5	6	7	8	9	10	11	12	Total	
06:00	06:15	5	121						286	10	6		3	**431**	
06:15	06:30	3	118						289	16	5			**431**	
06:30	06:45	8	174						312	9	6		2	**511**	
06:45	07:00	4	185						289	5	6		2	**491**	**1864**
07:00	07:15	9	254						282	9	7		1	**562**	**1995**
07:15	07:30	12	317						291	3	8		3	**634**	**2198**
07:30	07:45	14	308						301	14	16			**653**	**2340**
07:45	08:00	5	335						275	4	10			**629**	**2478**
08:00	08:15	4	184						225	4	7		4	**428**	**2344**
08:15	08:30	12	206						223	11	6		4	**462**	**2172**
08:30	08:45	8	210						203	10	14		3	**448**	**1967**
08:45	09:00	5	204						175	9	12		4	**409**	**1747**
09:00	09:15														
09:15	09:30														
09:30	09:45														
09:45	10:00														
10:00	10:15														
10:15	10:30														
10:30	10:45														
10:45	11:00														
11:00	11:15														
11:15	11:30														
11:30	11:45														
11:45	12:00														
12:00	12:15	7	249						214	7	12		2	**491**	
12:15	12:30	2	259						215	5	10		3	**494**	
12:30	12:45	6	240						190	6	6		4	**452**	
12:45	13:00	4	252						215	7	11		3	**492**	**1929**
13:00	13:15	11	273						205	7	13		3	**512**	**1950**
13:15	13:30	10	213						203	9	7			**442**	**1898**
13:30	13:45	12	254						192	9	8		3	**478**	**1924**
13:45	14:00	7	266						225	11	6		1	**516**	**1948**
14:00	14:15	7	237						199	6	7		4	**460**	**1896**
14:15	14:30	11	253						232	7	11		3	**517**	**1971**
14:30	14:45	8	242						205	6	33		3	**497**	**1990**
14:45	15:00	4	303						202	4	14		2	**529**	**2003**
15:00	15:15														
15:15	15:30														
15:30	15:45														
15:45	16:00														
16:00	16:15	8	364						188	5	23		3	**591**	
16:15	16:30	6	312						184	8	14			**524**	
16:30	16:45	7	335						207	1	18		1	**569**	
16:45	17:00	9	295						187	5	9		4	**509**	**2193**
17:00	17:15	11	247						163		12		2	**435**	**2037**
17:15	17:30	16	219						140	2	14		1	**392**	**1905**
17:30	17:45	11	228						139	3	8		3	**392**	**1728**
17:45	18:00	12	210						138	7	8			**375**	**1594**
18:00	18:15														
18:15	18:30														
18:30	18:45														
18:45	19:00														
TOTAL		258	7867						6994	219	347		71	15756	
EST. 24 HR		**310**	**9440**						**8393**	**263**	**416**		**85**	**18907**	







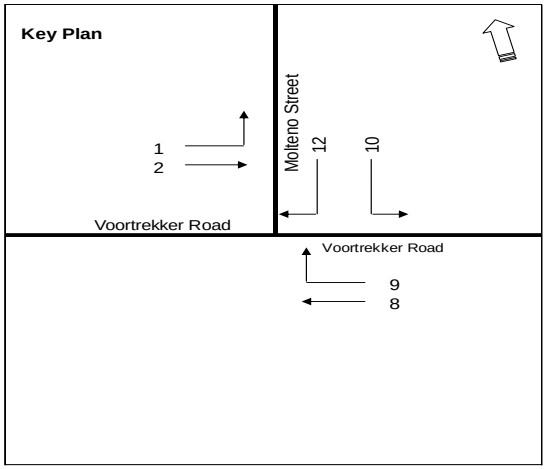
Note: Zero values indicate time periods not counted.

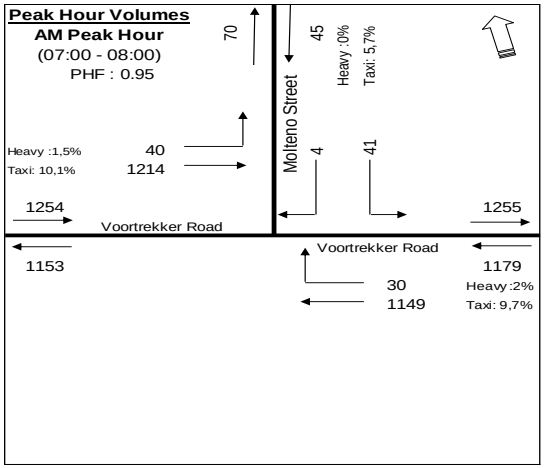
G:\4619 CCT Transport Engineering North\21 TSM\TNDN5146\9 Data Collection and Site Visits\Traffic Counts\[4769_Voortrekker Rd_Molten

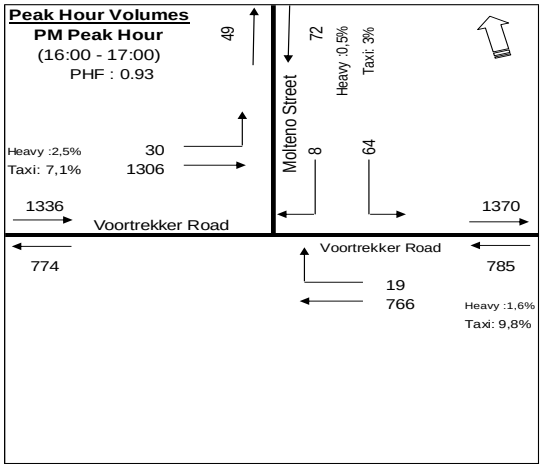
TRAFFIC COUNT

INTERSECTION: **Voortrekker Road //Molteno Street** **Intersection ID: 4769**
PERIOD: **3 Hrs AM, 3 Hrs MD, 2 Hrs PM**
DATE: **24-Apr-25** **Area: Elsies River**

Total Traffic															Hourly
TIME		Traffic Movements													
Start	End	1	2	3	4	5	6	7	8	9	10	11	12	Total	Totals
06:00	06:15	5	121						286	10	6		3	**431**	**431**
06:15	06:30	3	118						289	16	5			**431**	**862**
06:30	06:45	8	174						312	9	6		2	**511**	**1373**
06:45	07:00	4	185						289	5	6		2	**491**	**1864**
07:00	07:15	9	254						282	9	7		1	**562**	**1995**
07:15	07:30	12	317						291	3	8		3	**634**	**2198**
07:30	07:45	14	308						301	14	16			**653**	**2340**
07:45	08:00	5	335						275	4	10			**629**	**2478**
08:00	08:15	4	184						225	4	7		4	**428**	**2344**
08:15	08:30	12	206						223	11	6		4	**462**	**2172**
08:30	08:45	8	210						203	10	14		3	**448**	**1967**
08:45	09:00	5	204						175	9	12		4	**409**	**1747**
09:00	09:15														**1319**
09:15	09:30														**857**
09:30	09:45														**409**
09:45	10:00														
10:00	10:15														
10:15	10:30														
10:30	10:45														
10:45	11:00														
11:00	11:15														
11:15	11:30														
11:30	11:45														
11:45	12:00														
12:00	12:15	7	249						214	7	12		2	**491**	**491**
12:15	12:30	2	259						215	5	10		3	**494**	**985**
12:30	12:45	6	240						190	6	6		4	**452**	**1437**
12:45	13:00	4	252						215	7	11		3	**492**	**1929**
13:00	13:15	11	273						205	7	13		3	**512**	**1950**
13:15	13:30	10	213						203	9	7			**442**	**1898**
13:30	13:45	12	254						192	9	8		3	**478**	**1924**
13:45	14:00	7	266						225	11	6		1	**516**	**1948**
14:00	14:15	7	237						199	6	7		4	**460**	**1896**
14:15	14:30	11	253						232	7	11		3	**517**	**1971**
14:30	14:45	8	242						205	6	33		3	**497**	**1990**
14:45	15:00	4	303						202	4	14		2	**529**	**2003**
15:00	15:15														**1543**
15:15	15:30														**1026**
15:30	15:45														**529**
15:45	16:00														
16:00	16:15	8	364						188	5	23		3	**591**	**591**
16:15	16:30	6	312						184	8	14			**524**	**1115**
16:30	16:45	7	335						207	1	18		1	**569**	**1684**
16:45	17:00	9	295						187	5	9		4	**509**	**2193**
17:00	17:15	11	247						163		12		2	**435**	**2037**
17:15	17:30	16	219						140	2	14		1	**392**	**1905**
17:30	17:45	11	228						139	3	8		3	**392**	**1728**
17:45	18:00	12	210						138	7	8			**375**	**1594**
18:00	18:15														**1159**
18:15	18:30														**767**
18:30	18:45														**375**
18:45	19:00														
TOTAL		258	7867						6994	219	347		71	15756	
EST. 24 HR															



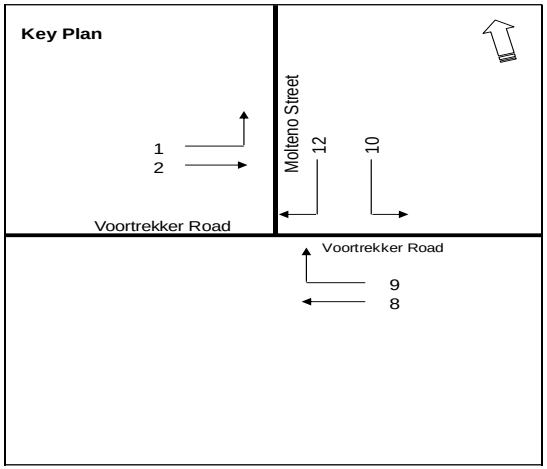


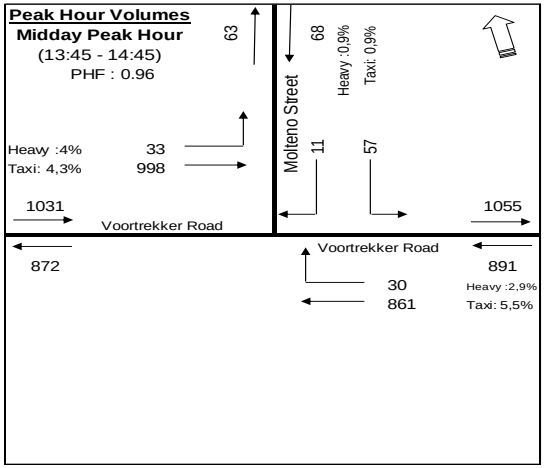


TRAFFIC COUNT

INTERSECTION: **Voortrekker Road //Molteno Street** **Intersection ID:** **4769**
PERIOD: **3 Hrs AM, 3 Hrs MD, 2 Hrs PM**
DATE: **24-Apr-25** **Area: Elsies River**

Total Traffic															Hourly
TIME		Traffic Movements													
Start	End	1	2	3	4	5	6	7	8	9	10	11	12	Total	Totals
06:00	06:15	5	121						286	10	6		3	**431**	**431**
06:15	06:30	3	118						289	16	5			**431**	**862**
06:30	06:45	8	174						312	9	6		2	**511**	**1373**
06:45	07:00	4	185						289	5	6		2	**491**	**1864**
07:00	07:15	9	254						282	9	7		1	**562**	**1995**
07:15	07:30	12	317						291	3	8		3	**634**	**2198**
07:30	07:45	14	308						301	14	16			**653**	**2340**
07:45	08:00	5	335						275	4	10			**629**	**2478**
08:00	08:15	4	184						225	4	7		4	**428**	**2344**
08:15	08:30	12	206						223	11	6		4	**462**	**2172**
08:30	08:45	8	210						203	10	14		3	**448**	**1967**
08:45	09:00	5	204						175	9	12		4	**409**	**1747**
09:00	09:15														**1319**
09:15	09:30														**857**
09:30	09:45														**409**
09:45	10:00														
10:00	10:15														
10:15	10:30														
10:30	10:45														
10:45	11:00														
11:00	11:15														
11:15	11:30														
11:30	11:45														
11:45	12:00														
12:00	12:15	7	249						214	7	12		2	**491**	**491**
12:15	12:30	2	259						215	5	10		3	**494**	**985**
12:30	12:45	6	240						190	6	6		4	**452**	**1437**
12:45	13:00	4	252						215	7	11		3	**492**	**1929**
13:00	13:15	11	273						205	7	13		3	**512**	**1950**
13:15	13:30	10	213						203	9	7			**442**	**1898**
13:30	13:45	12	254						192	9	8		3	**478**	**1924**
13:45	14:00	7	266						225	11	6		1	**516**	**1948**
14:00	14:15	7	237						199	6	7		4	**460**	**1896**
14:15	14:30	11	253						232	7	11		3	**517**	**1971**
14:30	14:45	8	242						205	6	33		3	**497**	**1990**
14:45	15:00	4	303						202	4	14		2	**529**	**2003**
15:00	15:15														**1543**
15:15	15:30														**1026**
15:30	15:45														**529**
15:45	16:00														
16:00	16:15	8	364						188	5	23		3	**591**	**591**
16:15	16:30	6	312						184	8	14			**524**	**1115**
16:30	16:45	7	335						207	1	18		1	**569**	**1684**
16:45	17:00	9	295						187	5	9		4	**509**	**2193**
17:00	17:15	11	247						163		12		2	**435**	**2037**
17:15	17:30	16	219						140	2	14		1	**392**	**1905**
17:30	17:45	11	228						139	3	8		3	**392**	**1728**
17:45	18:00	12	210						138	7	8			**375**	**1594**
18:00	18:15														**1159**
18:15	18:30														**767**
18:30	18:45														**375**
18:45	19:00														
TOTAL		258	7867						6994	219	347		71	15756	
EST. 24 HR															





Pedestrian Volumes

Weekday pedestrian volumes crossing at/near the intersection of Molteno St/Dingle Rd in Elsies River

Survey Date:24 April 2025

Per 15 Minute Intervals

Location		Adult only				Adult with learner				Learner only			
		A	B	C	D	A	B	C	D	A	B	C	D
06:00	06:15												
06:15	06:30				2						8	2	
06:30	06:45	1	1										
06:45	07:00									1		29	
07:00	07:15	1	3	1			40	9			1	27	3
07:15	07:30	2	4				50	36		55		1	
07:30	07:45	1	3				2	21			17	1	
07:45	08:00		2	1				5			6		
08:00	08:15			1				4			2		
08:15	08:30	1	1										
08:30	08:45	1											
08:45	09:00												
Total		**7**	**14**	**3**	**2**	**0**	**92**	**75**	**0**	**56**	**34**	**60**	**3**

12:00	12:15				1								
12:15	12:30		1										
12:30	12:45			1									
12:45	13:00		1	1									
13:00	13:15			4									
13:15	13:30		3										
13:30	13:45	1	5			1							
13:45	14:00			3			2						
14:00	14:15	1					3				2		
14:15	14:30	3	2	6									
14:30	14:45	13	2			6	1		55	146	3		4
14:45	15:00	3	2							11	2		4
Total		**21**	**16**	**15**	**1**	**7**	**6**	**0**	**55**	**157**	**7**	**0**	**8**

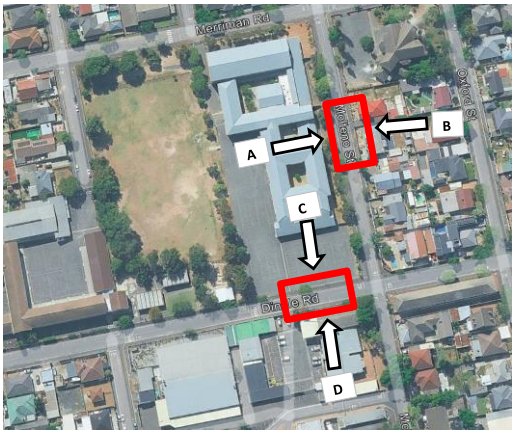
16:00	16:15												
16:15	16:30	5											
16:30	16:45												
16:45	17:00		1										
17:00	17:15		2										
17:15	17:30	2	3		1		2				1		
17:30	17:45	4											
17:45	18:00												
Total		**11**	**6**	**0**	**1**	**0**	**2**	**0**	**0**	**0**	**1**	**0**	**0**

Per Hour Intervals

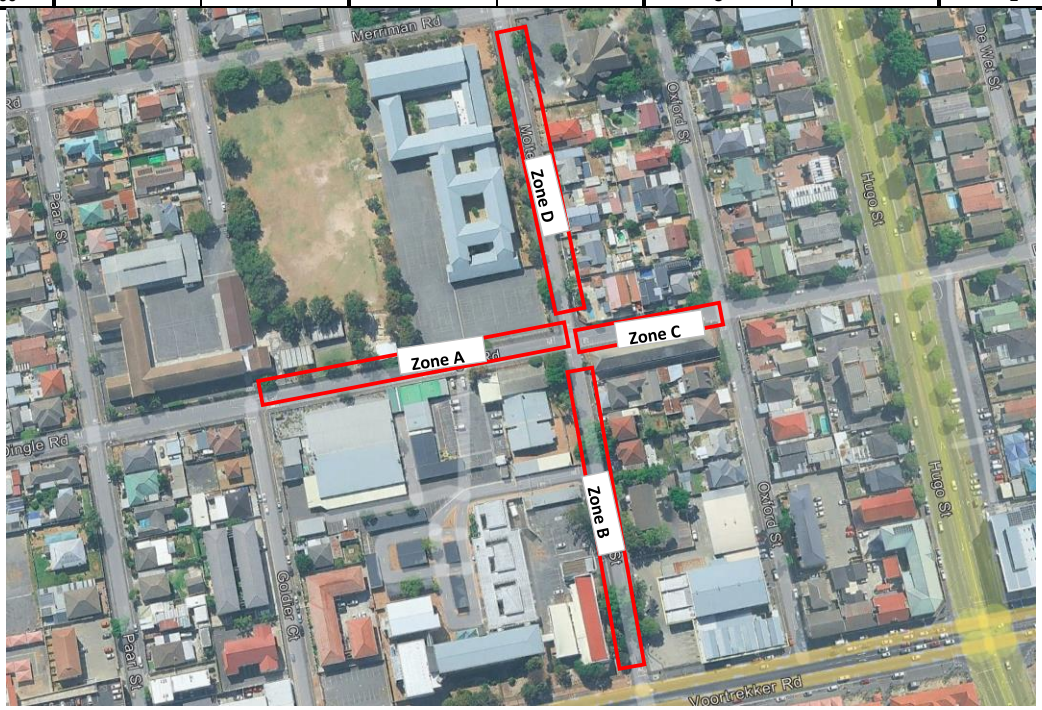
Location		Adult only				Adult with learner				Learner only			
		A	B	C	D	A	B	C	D	A	B	C	D
06:00	07:00	1	1	0	2	0	0	0	0	1	8	31	0
06:15	07:15	2	4	1	2	0	40	9	0	1	9	58	3
06:30	07:30	4	8	1	0	0	90	45	0	56	1	57	3
06:45	07:45	4	10	1	0	0	92	66	0	56	18	58	3
07:00	08:00	4	12	2	0	0	92	71	0	55	24	29	3
07:15	08:15	3	9	2	0	0	52	66	0	55	25	2	0
07:30	08:30	2	6	2	0	0	2	30	0	0	25	1	0
07:45	08:45	2	3	2	0	0	0	9	0	0	8	0	0
08:00	09:00	2	1	1	0	0	0	4	0	0	2	0	0

12:00	13:00	0	2	2	1	0	0	0	0	0	0	0	0
12:15	13:15	0	2	6	0	0	0	0	0	0	0	0	0
12:30	13:30	0	4	6	0	0	0	0	0	0	0	0	0
12:45	13:45	1	9	5	0	1	0	0	0	0	0	0	0
13:00	14:00	1	8	7	0	1	2	0	0	0	0	0	0
13:15	14:15	2	8	3	0	1	5	0	0	0	2	0	0
13:30	14:30	5	7	9	0	1	5	0	0	0	2	0	0
13:45	14:45	17	4	9	0	6	6	0	55	146	5	0	4
14:00	15:00	20	6	6	0	6	4	0	55	157	7	0	8

16:00	17:00	5	1	0	0	0	0	0	0	0	0	0	0
16:15	17:15	5	3	0	0	0	0	0	0	0	0	0	0
16:30	17:30	2	6	0	1	0	2	0	0	0	1	0	0
16:45	17:45	6	6	0	1	0	2	0	0	0	1	0	0
17:00	18:00	6	5	0	1	0	2	0	0	0	1	0	0

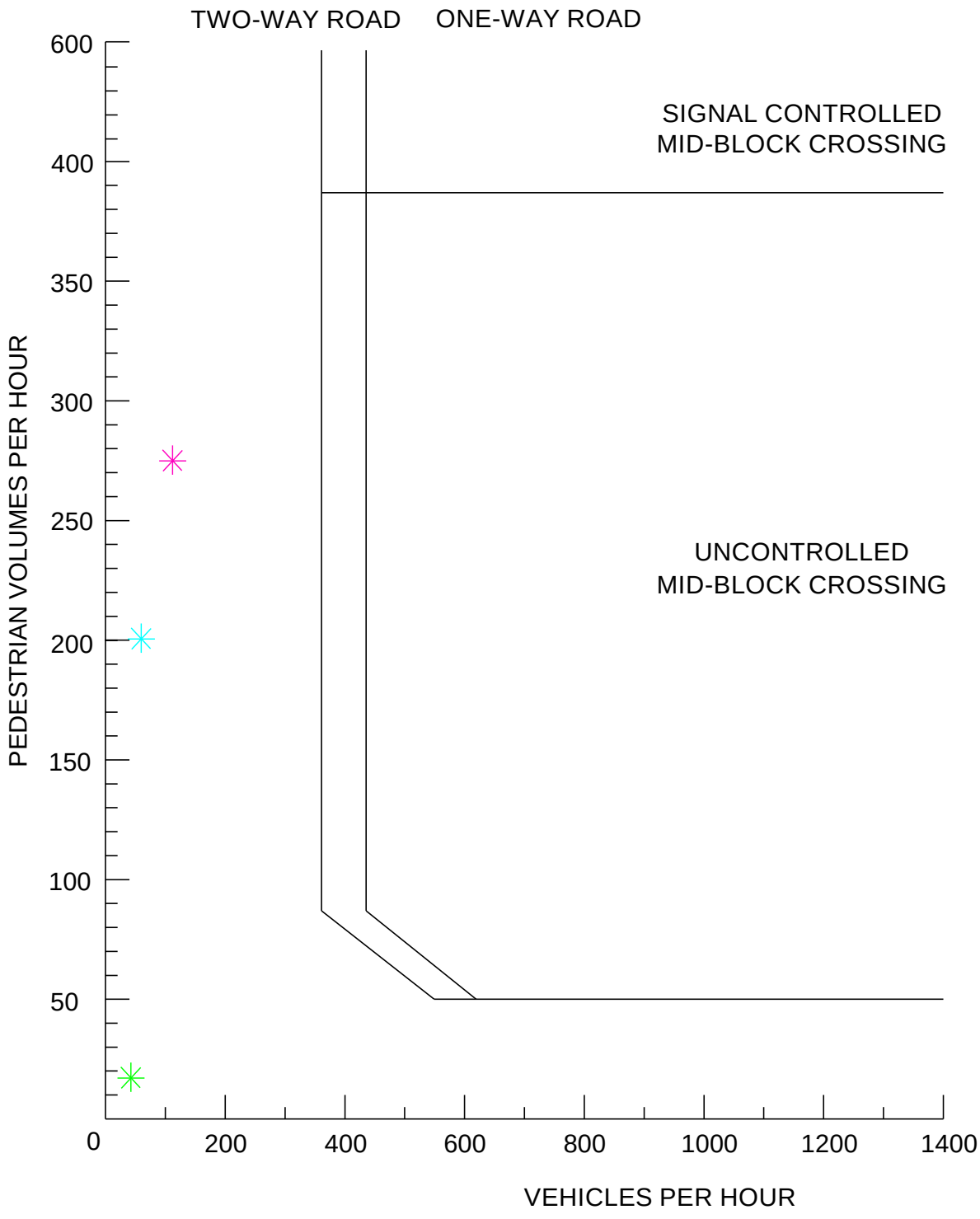


Parking Profile at various parking points at De Vrije Zee Primary School in Elsies River								
Time Ending	Zone A		Zone B		Zone C		Zone D	
	Cars parked at start: **4**	Cars parked at end: **0**	Cars parked at start: **31**	Cars parked at end: **0**	Cars parked at start: **8**	Cars parked at end: **3**	Cars parked at start: **10**	Cars parked at end: **2**
	North	South	West	East	North	South	West	East
06:15		4	17	14	8		4	6
06:30	2	7	22	19	8	4	6	9
06:45	1	9	24	20	10	5	6	10
07:00	1	9	24	21	9	6	7	10
07:15	3	13	23	24	9	5	12	12
07:30	3	11	23	21	8	6	13	12
07:45	4	10	27	21	7	5	12	12
08:00	3	9	24	23	6	5	10	14
08:15	33	8	23	20	7	5	10	15
08:30	2	9	22	21	7	5	10	15
08:45	2	9	23	18	7	5	9	16
09:00	1	8	22	19	6	3	10	13
09:15								
12:15		1	13	8	4	1	6	4
12:30	1	2	10	10	3	1	4	4
12:45	2	3	13	9	3	1	5	4
13:00	3	6	10	7	3	1	5	4
13:15		2	9	8	3	1	4	4
13:30	1	1	8	8	4	1	3	5
13:45	2	3	7	7	3	1	5	6
14:00	2	5	12	10	4	1	5	8
14:15	4	7	11	9	4	1	6	18
14:30	4	15	13	14	6	6	14	22
14:45	5	14	11	10	4		3	5
15:00			9	11	4		3	4
12:30								
16:15			2	1	3		2	
16:30				2	4		3	
16:45	1				3		3	
17:00					3		3	
17:15			1		3		3	1
17:30					4		2	
17:45					4		2	
18:00					3		2	



Annexure B – Pedestrian Crossing Warrants

Fig. 6.26 Warrants for Typical Pedestrian Crossing
7m Effective Width of Road, 60km/h Speed Limit

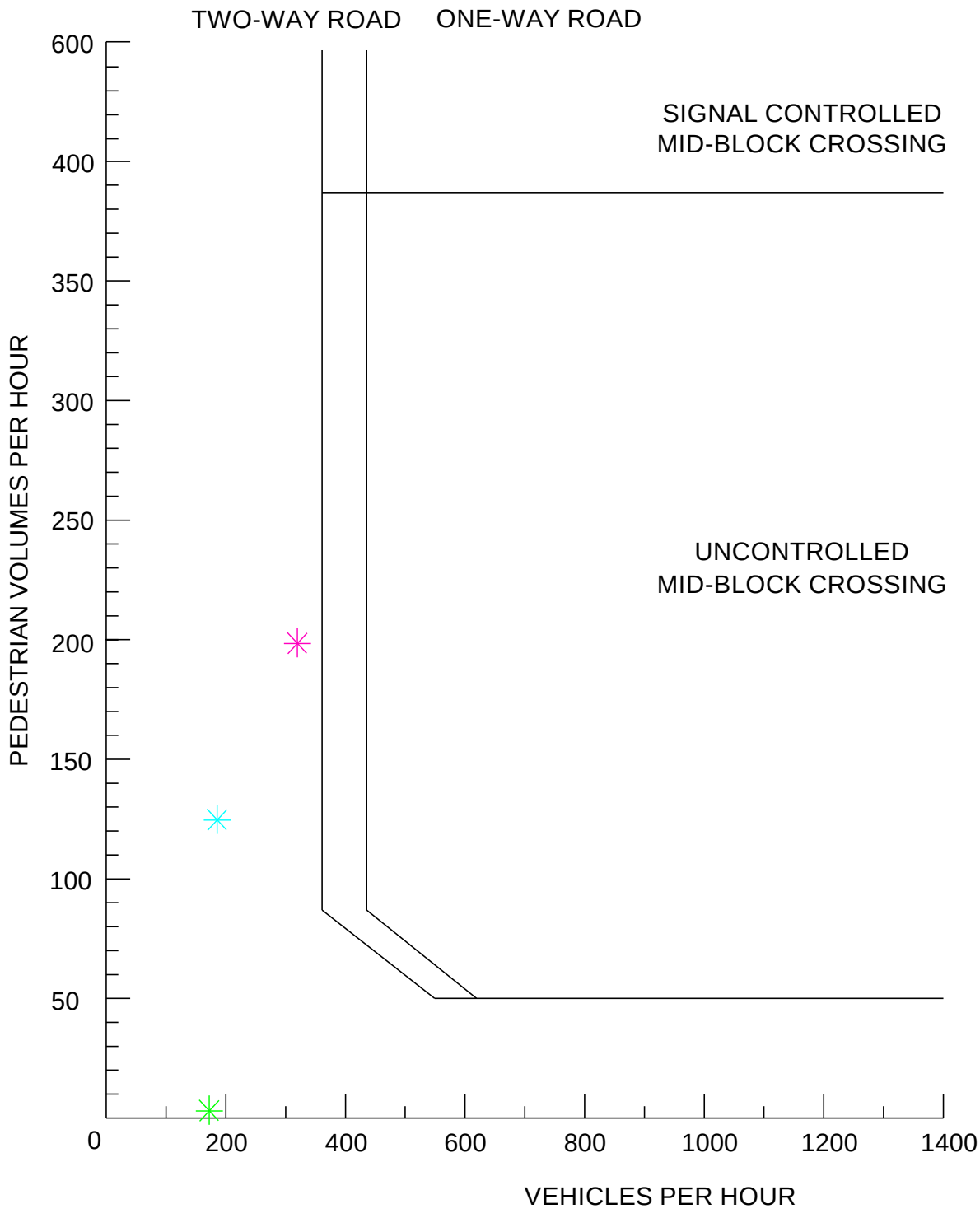


LEGEND:

- AM PEAK HOUR
- MIDDAY PEAK HOUR
- PM PEAK HOUR

PROJECT:	FIGURE:	NUMBER:
Provision of Professional Services Transport Engineering	Pedestrian Warrant along Molteno Street, Goodwood	TNDN5146/A

Fig. 6.26 Warrants for Typical Pedestrian Crossing
7m Effective Width of Road, 60km/h Speed Limit

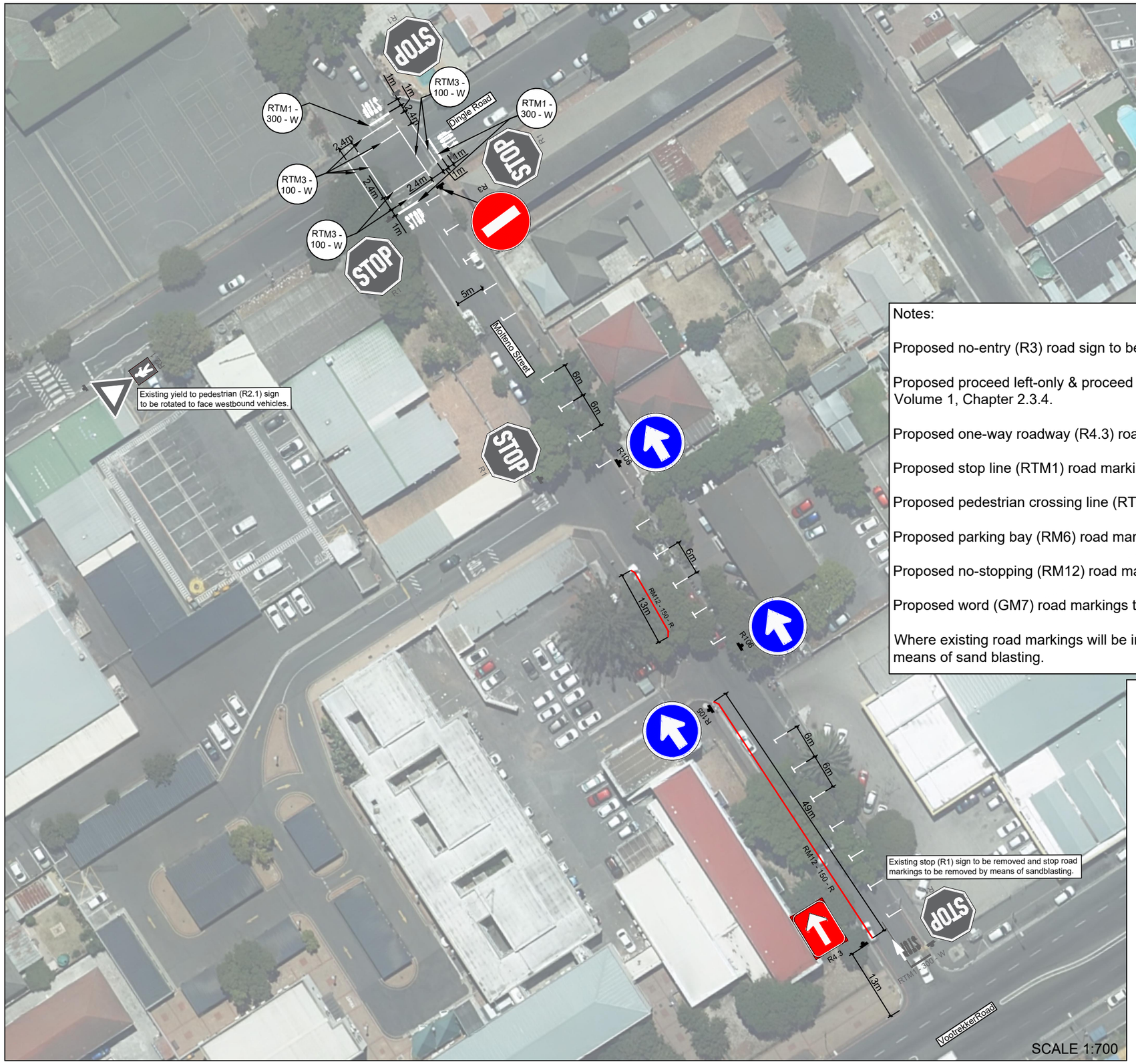


LEGEND:

- AM PEAK HOUR
- MIDDAY PEAK HOUR
- PM PEAK HOUR

PROJECT:	FIGURE:	NUMBER:
Provision of Professional Services Transport Engineering	Pedestrian Warrant along Dingle Road, Goodwood	TNDN5146/B

Annexure C – Drawings



CONCEPTUAL LAYOUT

Notes:

Proposed no-entry (R3) road sign to be implemented according to SARTSM Volume 1, Chapter 2.2.5.

Proposed proceed left-only & proceed right only (R105 & R106) road signs to be implemented according to SARTSM Volume 1, Chapter 2.3.4.

Proposed one-way roadway (R4.3) road sign to be implemented according to SARTSM Volume 1, Chapter 2.2.6.

Proposed stop line (RTM1) road markings to be painted according to SARTSM Volume 1, Chapter 7.2.1.

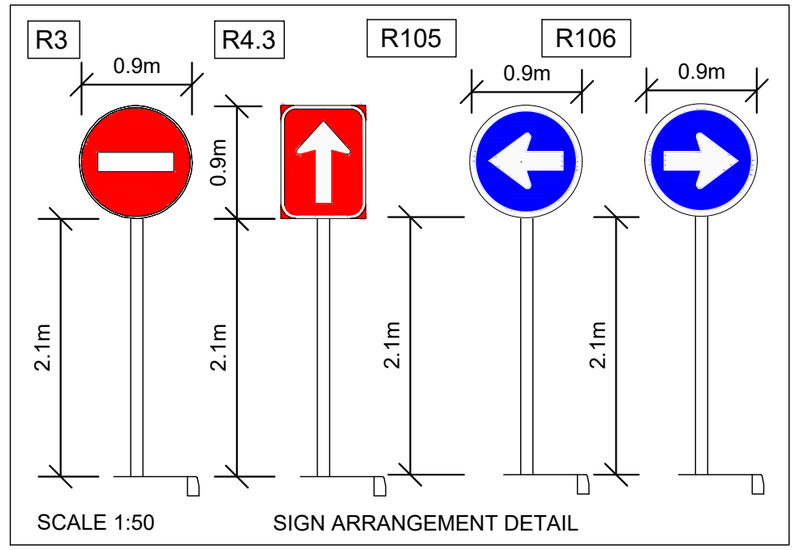
Proposed pedestrian crossing line (RTM3) road markings to be painted according to SARTSM Volume 1, Chapter 7.2.3.

Proposed parking bay (RM6) road markings to be painted according to SARTSM Volume 1, Chapter 7.2.10.

Proposed no-stopping (RM12) road markings to be painted according to SARTSM Volume 1, Chapter 7.2.16.

Proposed word (GM7) road markings to be painted according to SARTSM Volume 1, Chapter 7.4.7.

Where existing road markings will be in conflict with any new markings the old markings must first be removed by means of sand blasting.



ITS INNOVATIVE TRANSPORT SOLUTIONS
5th Floor
Imperial Bank Terraces
Carl Cronje Drive
Tyger Waterfront,Bellville
7530
Tel: (021) 914 6211
capetown@itsglobal.co.za
www.itsglobal.co.za

CLIENT: CITY OF CAPE TOWN ISIXEKO SASEKAPA STAD KAAPSTAD
Making progress possible. Together.

APPROVED - AS BUILTS	APPROVED - CONSTRUCTION
Name : -	Name : -
Prof. Reg. No. : -	Prof. Reg. No. : -
Date : -	Date : -

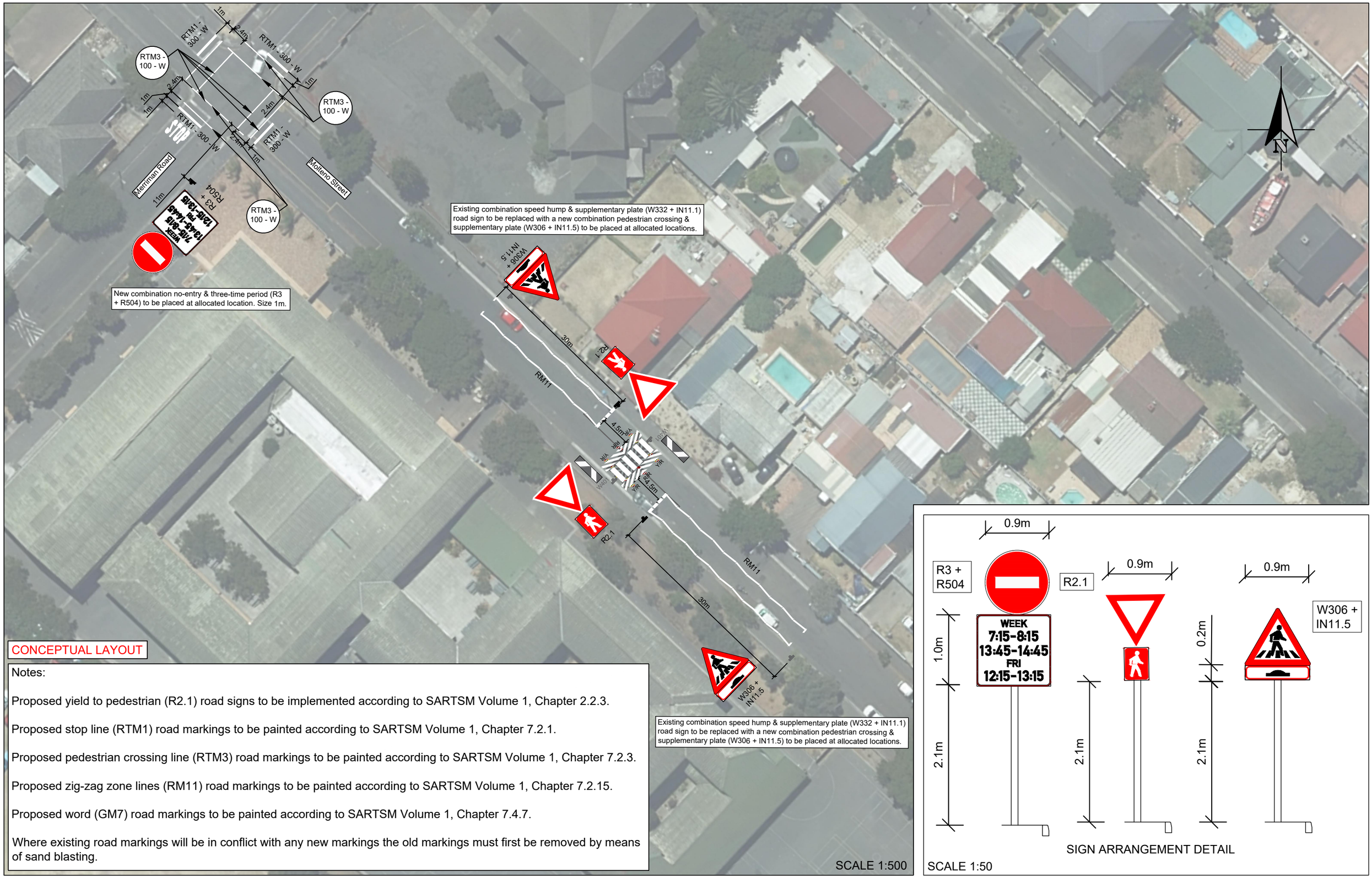
NO	DATE	REVISION	SIGNED
-	----/--/--	-	

DESIGNED: NAME: J Gamieldien
REVIEWED: NAME: C Krogscheepers
DRAWN: M Domingo
SIGNED: SIGNATURE:
PR NO: 920021
DATE: 2025-05-28

COPYRIGHT RESERVED

PROJECT: De Vrije Zee Primary School, Goodwood
DRAWING TITLE: Road Markings and Signage Layout
SCALE: AS SHOWN @ A3
REV: -
DATE: 2025/05/28
DRAWING NUMBER: 4619 / TNDN5146 / 01

G:\4619 CCT Transport Engineering North\21 TSM\TNDN5146\11 Drawings, Figures and GIS\CAD\4619_TNDN5146_De Vrije Zee Primary School_MD_2025-05-28.dwg



CONCEPTUAL LAYOUT

Notes:

Proposed yield to pedestrian (R2.1) road signs to be implemented according to SARTSM Volume 1, Chapter 2.2.3.

Proposed stop line (RTM1) road markings to be painted according to SARTSM Volume 1, Chapter 7.2.1.

Proposed pedestrian crossing line (RTM3) road markings to be painted according to SARTSM Volume 1, Chapter 7.2.3.

Proposed zig-zag zone lines (RM11) road markings to be painted according to SARTSM Volume 1, Chapter 7.2.15.

Proposed word (GM7) road markings to be painted according to SARTSM Volume 1, Chapter 7.4.7.

Where existing road markings will be in conflict with any new markings the old markings must first be removed by means of sand blasting.

INNOVATIVE TRANSPORT SOLUTIONS

5th Floor
Imperial Bank Terraces
Carl Cronje Drive
Tyger Waterfront,Bellville
7530

Tel: (021) 914 6211

capetown@itsglobal.co.za
www.itsglobal.co.za

CLIENT: CITY OF CAPE TOWN ISIXEKO SASEKAPA STAD KAAPSTAD
Making progress possible. Together.

APPROVED - AS BUILTS	APPROVED - CONSTRUCTION
Name : -	Name : -
Prof. Reg. No. : -	Prof. Reg. No. : -
Date : -	Date : -

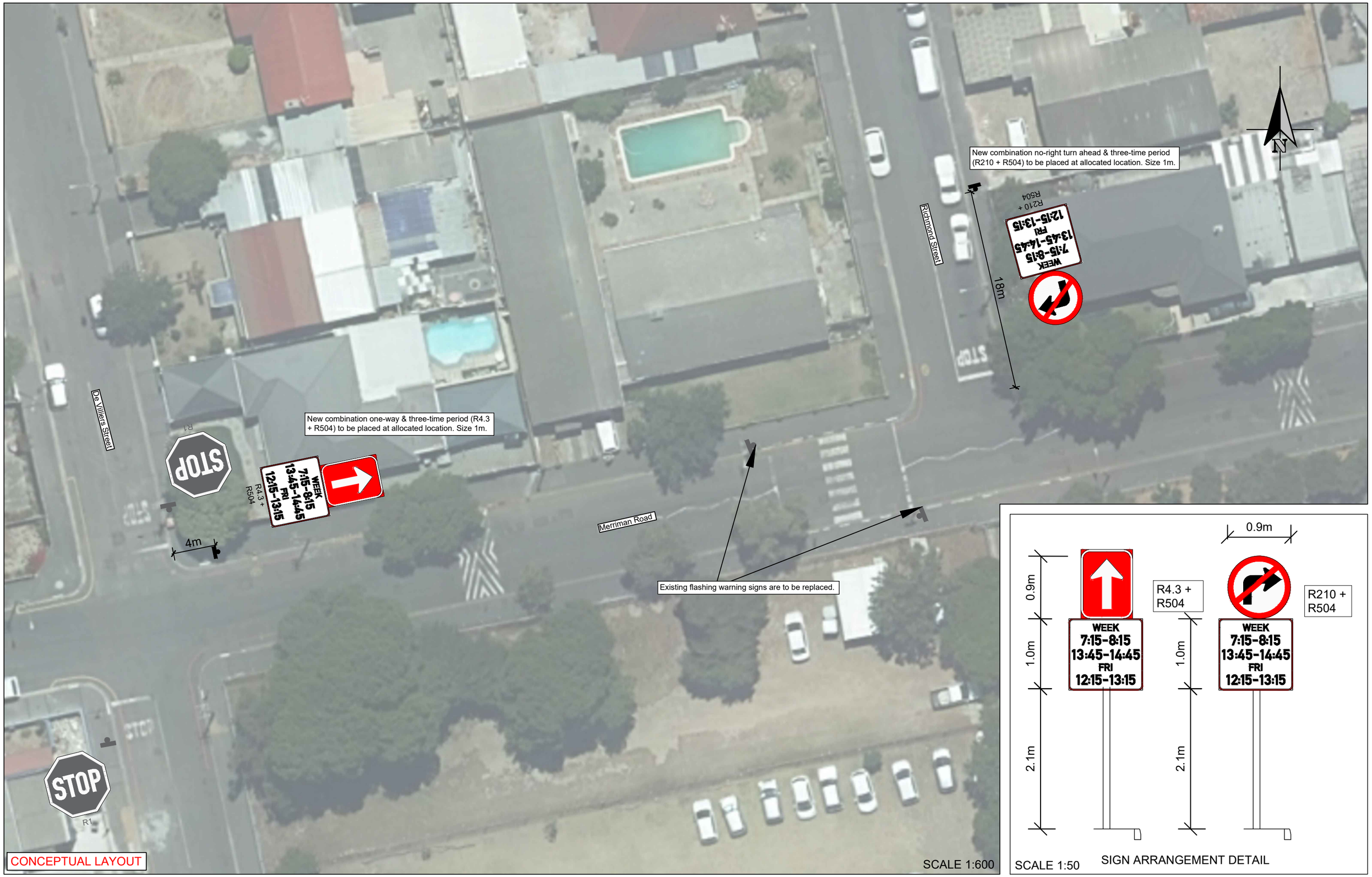
NO	DATE	REVISION	SIGNED
-	----/--/--	-	

DESIGNED: NAME: J Gamieldien
REVIEWED: NAME: C Krogscheepers
DRAWN: M Domingo
SIGNED: SIGNATURE:
PR NO: 920021
DATE: 2025-05-28

COPYRIGHT RESERVED

PROJECT: De Vrije Zee Primary School, Goodwood
DRAWING TITLE: Road Markings and Signage Layout
SCALE: AS SHOWN @ A3
REV: -
DATE: 2025/05/28
DRAWING NUMBER: 4619 / TNDN5146 / 02

G:\4619 CCT Transport Engineering North\21 TSM\TNDN5146\11 Drawings, Figures and GIS\CAD\4619_TNDN5146_De Vrije Zee Primary School_MD_2025-05-28.dwg



INNOVATIVE TRANSPORT SOLUTIONS

5th Floor
Imperial Bank Terraces
Carl Cronje Drive
Tyger Waterfront,Bellville
7530

Tel: (021) 914 6211

capetown@itsglobal.co.za
www.itsglobal.co.za

CLIENT: CITY OF CAPE TOWN ISIXEKO SASEKAPA STAD KAAPSTAD
Making progress possible. Together.

APPROVED - AS BUILTS	APPROVED - CONSTRUCTION
Name : -	Name : -
Prof. Reg. No. : -	Prof. Reg. No. : -
Date : -	Date : -

NO	DATE	REVISION	SIGNED
-	----/--/--	-	

DESIGNED: NAME: J Gamieldien
REVIEWED: NAME: C Krogscheepers
DRAWN: M Domingo
SIGNED: SIGNATURE:
PR NO: 920021
DATE: 2025-05-28

COPYRIGHT RESERVED

PROJECT: De Vrije Zee Primary School, Goodwood
DRAWING TITLE: Signage Layout
SCALE: AS SHOWN @ A3
REV: -
DATE: 2025/05/28
DRAWING NUMBER: 4619 / TNDN5146 / 03

G:\4619 CCT Transport Engineering North\21 TSM\TNDN5146\11 Drawings, Figures and GIS\CAD\4619_TNDN5146_De Vrije Zee Primary School_MD_2025-05-28.dwg

Notes:

Proposed Information Arrow (GM4.1) road markings to be painted according to SARTSM, Volume 1 Chapter 7.4.4.

Proposed Yield Control Ahead (WM5) road marking to be painted according to SARTSM, Volume 1 Chapter 7.3.5.

Proposed Yield Line (RTM2) road marking to be painted according to SARTSM, Volume 1 Chapter 7.2.2.

Proposed One-Way Roadway (R4.1 & R4.2) road signs to be implemented, according to SARTSM, Volume 1 Chapter 2.2.6.

Proposed Danger Plates (W401 & W402) road signs to be implemented, according to SARTSM, Volume 1 Chapter 3.5.1.

N

Existing stop (R1) sign to be replaced by a one-way roadway (R4.2) sign

Existing stop line (RTM1) and no overtaking line (RTM2) road markings to be removed by means of sandblasting

Molteno Street

Relocate existing R2.1 sign

Existing yield line (RM2) road marking to be extended to opposite end of the roadway

Proposed parallel parking bays (RM6)

Remove existing no stopping line (RM12) road marking

Remove existing yield (WM5) and zig-zag zone (RM11) road markingS by means of sandblasting and repaint the WM5 road marking in the centre of the roadway

Proposed one-way roadway (R4.1) sign to be placed on existing stop sign pole

R1

STOP

R4.2

R4.1

6m

2.5m

GM4.1

W402

W401

R2.1

RTM2 - 300 - W

Dingle Road

GM4.1

W401

W402

R2.1

Remove existing yield (WM5), zig zag zone (RM11), and yield (RM2) road markings by means of sandblasting

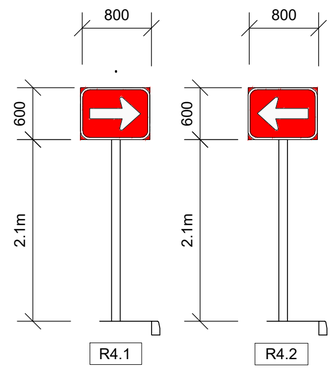
Remove existing danger plate (W401) sign and install W402 sign

Remove existing danger plate (W402) sign and install W401 sign

Existing R4.2 sign to remain

Proposed informationl arrow (GM4.1) road marking

SCALE 1:250



SIGN ARRANGEMENT DETAIL

INNOVATIVE TRANSPORT SOLUTIONS

5th Floor
Imperial Bank Terraces
Carl Cronje Drive
Tyger Waterfront,Bellville
7530

Tel: (021) 914 6211

capetown@itsglobal.co.za
www.itsglobal.co.za

CLIENT: CITY OF CAPE TOWN ISIXEKO SASEKAPA STAD KAAPSTAD — Making progress possible. Together.

APPROVED - AS BUILTS	APPROVED - CONSTRUCTION
Name : -	Name : -
Prof. Reg. No. : -	Prof. Reg. No. : -
Date : -	Date : -

NO	DATE	REVISION	SIGNED
-	CCCC/MM/DD	-	

DESIGNED: NAME: C Kleynhans
REVIEWED: NAME: C Krogscheepers
DRAWN: C Kleynhans
SIGNED: SIGNATURE:
PR NO: 32767
DATE: 2024-02-09

COPYRIGHT RESERVED

PROJECT: One-Way Street Investigation along Dingle Road between Molteno Road and Paarl Street, Goodwood

DRAWING TITLE: Recommended One-Way Street Layout

SCALE: 1:250 @ A2

REV: -

DATE: 2024/02/09

DRAWING NUMBER: 4619 / TNDN3978 / 01

G:\4619 CCT Transport Engineering North\21 TSM\TNDN3978\11 Drawings Figures & GIS\CAD\TNDN3978_CCT_Dingle Road_Proposed One-Way_YR_2024-01-25.dwg

Notes:

Proposed Information Arrow (GM4.1) road markings to be painted according to SARTSM, Volume 1 Chapter 7.4.4.

Proposed Yield Control Ahead (WM5) road marking to be painted according to SARTSM, Volume 1 Chapter 7.3.5.

Proposed Stop Line (RTM1) road marking to be painted according to SARTSM, Volume 1 Chapter 7.2.1.

Proposed One-Way Roadway (R4.1) road signs to be implemented, according to SARTSM, Volume 1 Chapter 2.2.6.

Proposed Danger Plates (W402) road sign to be implemented, according to SARTSM, Volume 1 Chapter 3.5.1.

Proposed Yield Line (RTM2) road marking to be painted according to SARTSM, Volume 1 Chapter 7.2.2.

Proposed No Entry (R3) road sign to be implemented according to SARTSM, Volume 1 Chapter 2.2.5.

N

Existing yield to pedestrian (R2.1) to be relocated

Existing yield line (RM2) road marking to be extended to opposite end of the roadway

Remove existing yield (WM5) and zig-zag zone (RM11) road markings by means of sandblasting and repaint the WM5 road marking in the centre of the roadway

Proposed information arrow (GM4.1) road marking

Proposed informationl arrow (GM4.1) road marking

Proposed one way roadway (R4.1) sign to be placed on existing yield to pedestrians (R4.2) sign pole

Proposed no entry (R3) signs

Extend existing stop line (RTM1) road marking

Remove existing no overtaking line (RTM1) road marking by means of sandblasting

R2.1

R4.1

W402

GM4.1

3m

R3

RTM1 - 300 -W

Dingle Road

STOP

R1

R3

W401

R2.1

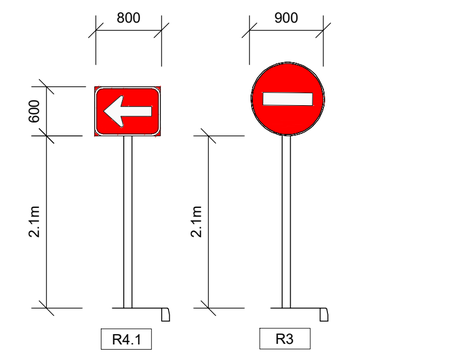
Remove existing yield (WM5), zig zag zone (RM11), and yield (RM2) road markings by means of sandblasting

Proposed danger plate (W402) sign

Existing stop (R1) sign to remain as is

Existing yield to pedestrian (R4.2) and danger plate (W401) signs to remain

SCALE 1:250



SIGN ARRANGEMENT DETAIL

INNOVATIVE TRANSPORT SOLUTIONS

5th Floor
Imperial Bank Terraces
Carl Cronje Drive
Tyger Waterfront,Bellville
7530

Tel: (021) 914 6211

capetown@itsglobal.co.za
www.itsglobal.co.za

CLIENT: CITY OF CAPE TOWN ISIXEKO SASEKAPA STAD KAAPSTAD

Making progress possible. Together.

APPROVED - AS BUILTS	APPROVED - CONSTRUCTION
Name : -	Name : -
Prof. Reg. No. : -	Prof. Reg. No. : -
Date : -	Date : -

NO	DATE	REVISION	SIGNED
-	CCCC/MM/DD	-	

DESIGNED: NAME: C Kleynhans
REVIEWED: NAME: C Krogscheepers
DRAWN: C Kleynhans
SIGNED: SIGNATURE:
PR NO: 32767
DATE: 2024-02-09

COPYRIGHT RESERVED

PROJECT: One-Way Street Investigation along Dingle Road between Molteno Road and Paarl Street, Goodwood

DRAWING TITLE: Recommended One-Way Street Layout

SCALE: 1:250 @ A2

REV: -

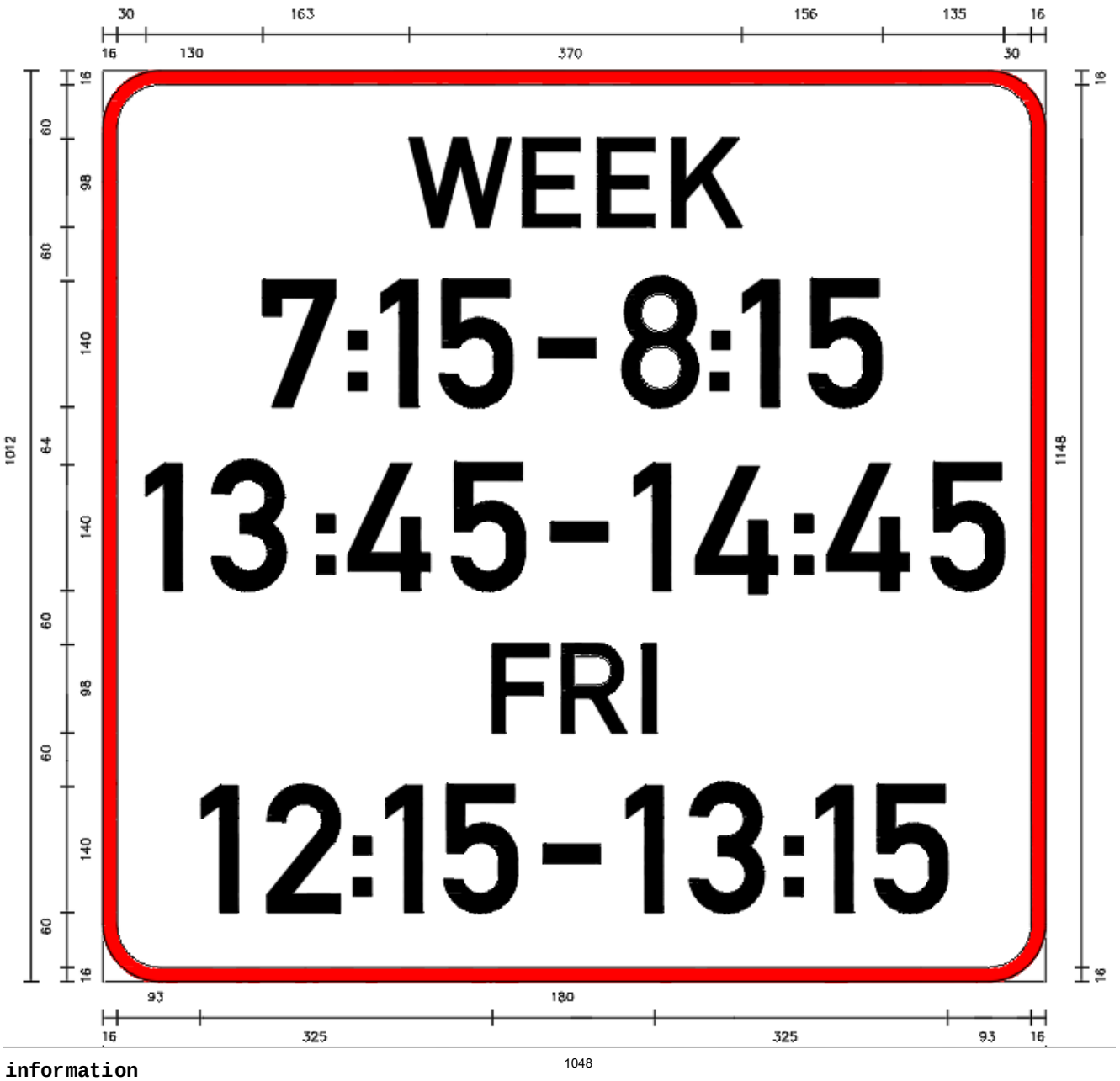
DATE: 2024/02/09

DRAWING NUMBER: 4619 / TNDN3978 / 02

G:\4619 CCT Transport Engineering North\21 TSM\TNDN3978\11 Drawings Figures & GIS\CAD\TNDN3978_CCT_Dingle Road_Proposed One-Way_YR_2024-01-25.dwg

Annexure D – Signage Detail

Signface Design: RSD File Name: 4619_TNDN5146_Merriman Rd_Time Limit Sign_MD_2025-05-26 |



Sign information

Border Radius:	64 mm	**Color:**	Red	**Material:**	Class 3
Length:	1048 mm	**Height:**	1012 mm	**Area:**	1.06 m²

Stack colors and arrow types

1	Stack	**Background:**	White	**Material:**	Class 1 (Standard)	**Arrow:**	None Black Class 3-Standard

NOTES ALL MATERIALS TO COMPLY WITH SABS 1519 STANDARDS

Sign RSD File Name: 4619_TNDN5146_Merriman Rd_Time Limit Sign_MD_2025-05-26 | RSC Sign ID: RSC-000-CJHPH
Company
Address , , ,

Contact **Tel** **Email**

This design was created by Road Signs Designs Unlimited 22.2 (build 0.0)

Distance from left edge: 339 mm	**Length** 369 mm	**Distance from bottom edge:** 839	**Text Height** 98 mm
Route Number Text color N/A	**Route Number Material** N/A	**Destination Text Color** Black	**Destination Text Material** Class 3

DIN B

WEEK

Spacing	**126**	**83**	**83**	**77**
Accumulative	465	548	631	708

Distance from left edge: 143 mm	**Length** 722 mm	**Distance from bottom edge:** 639	**Text Height** 140 mm
Route Number Text color N/A	**Route Number Material** N/A	**Destination Text Color** Black	**Destination Text Material** Class 3

DIN B

7:15-8:15

Spacing	93	37	**73**	**100**	97	**100**	39	103	80
Accumulative	236	273	346	446	543	643	682	785	865

Distance from left edge: 59 mm	**Length** 934 mm	**Distance from bottom edge:** 432	**Text Height** 140 mm
Route Number Text color N/A	**Route Number Material** N/A	**Destination Text Color** Black	**Destination Text Material** Class 3

DIN B

13:45-14:45

Spacing	**73**	98	35	117	108	93	70	107	36	117	80
Accumulative	132	230	265	382	490	583	653	760	796	913	993

Distance from left edge: 432 mm	**Length** 182 mm	**Distance from bottom edge:** 277	**Text Height** 98 mm
Route Number Text color N/A	**Route Number Material** N/A	**Destination Text Color** Black	**Destination Text Material** Class 3

DIN B

FRI

Spacing	**77**	**90**	**15**
Accumulative	509	599	614

Distance from left edge: 55 mm	**Length** 840 mm	**Distance from bottom edge:** 77	**Text Height** 140 mm
Route Number Text color N/A	**Route Number Material** N/A	**Destination Text Color** Black	**Destination Text Material** Class 3

DIN B

12:15-13:15

Spacing	**73**	**118**	37	**73**	**100**	93	**100**	**73**	38	**62**	**73**
Accumulative	128	246	283	356	456	549	649	722	760	822	895

Sign RSD File Name: 4619_TNDN5146_Merriman Rd_Time Limit Sign_MD_2025-05-26 | RSC Sign ID: RSC-000-CJHPH
Company
Address , , ,
Contact **Fax**
This design was created by Road Signs Designs Unlimited 22.2 (build 0.0)