CITY OF CAPE TOWN
ISIXEKO SASEKAPA
STAD KAAPSTAD

URBAN MOBILITY DIRECTORATE

Local Area Management Investigation at Silverlea Primary School, Zinnia Road, Silvertown
TNDS7414

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

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DOCUMENT APPROVAL

Name of Official	Capacity	Signature and Date
Tim de Villiers	Project Manager	

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

HHO Consulting Engineers

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TABLE OF CONTENT

1. INTRODUCTION

1.1 Background

HHO Consulting Engineers was appointed by the City of Cape Town (CoCT) to investigate local traffic management issues along Zinnia Road in the vicinity of Silverlea Primary School in Silvertown. The purpose of this report is to review the existing operational and safety conditions during school peak periods and determine whether improvements to traffic flow, pedestrian safety, and on-street activity are warranted. The locality map of the study area is illustrated in Figure 1.

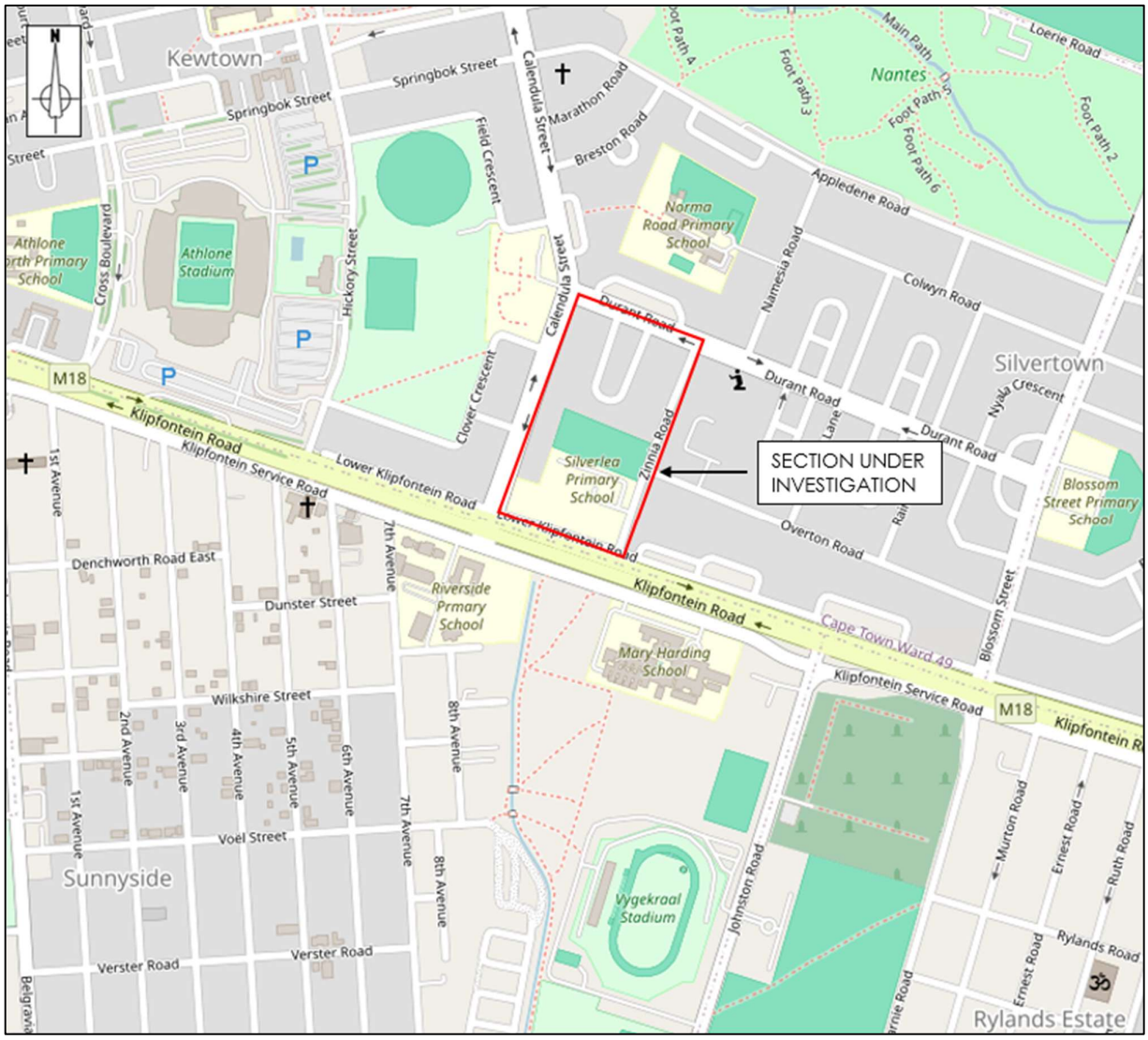


Figure 1: Locality Map

2. STATUS QUO

2.1 Existing Land Use

The land use surrounding the study area is predominantly single residential properties, community facilities and public open spaces as illustrated in the Zoning Scheme from the City of Cape Town Map Viewer (refer to Figure 2).

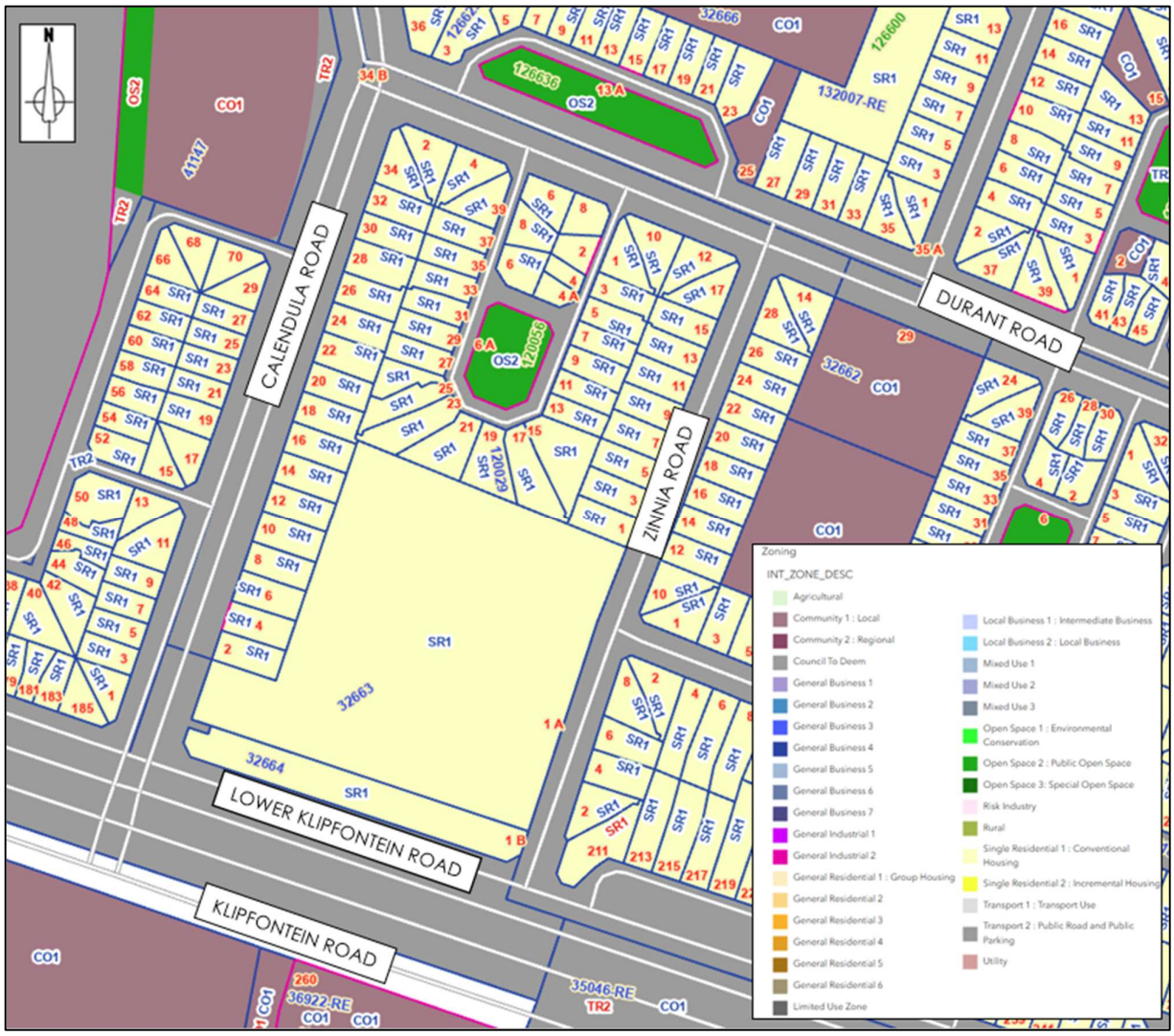


Figure 2: Land Use Schematic

2.2 Existing Road Network

The road classification is illustrated in Figure 3, as per the City of Cape Town's City Maps GIS information (2023), is shown in Figure 3.

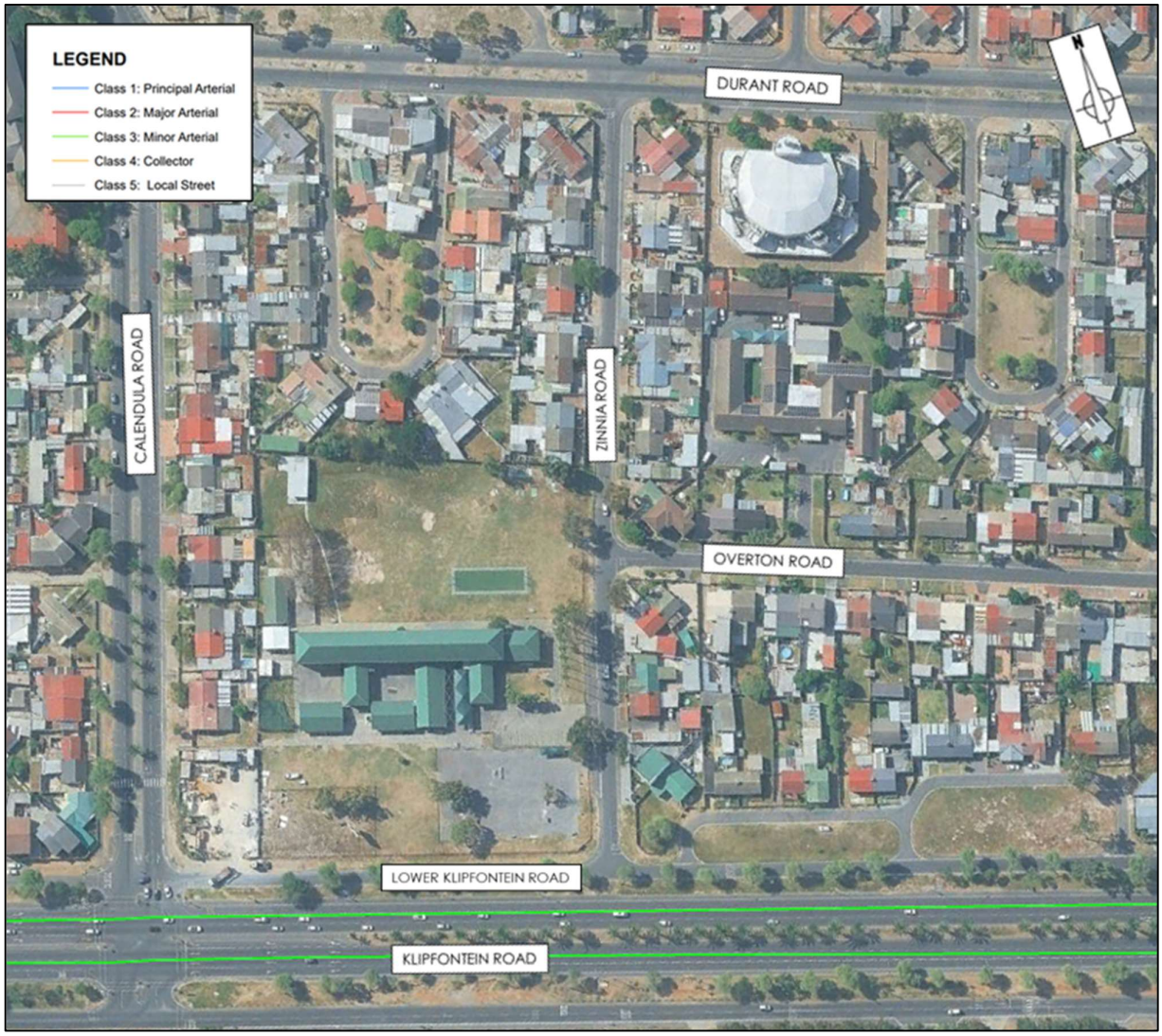


Figure 3: Existing Road Network

The road classification is highlighted as follows:

- Zinnia Road, Duran Road, Calendula Road and Lower Klipfontein Road are all classified as Class 5 local streets.
- Klipfontein Road is classified as a Class 3 minor arterial road.

2.3 Existing Geometry

The existing geometry for the roads in the vicinity of Silverlea Primary School has been illustrated in Figure 4 and are summarised as follows.

- Zinnia Road functions as a two-way roadway (northbound and southbound; one lane in each direction) with an approximate road width of 6m. There is a non-continuous sidewalk and embayments provided along the western edge of the road in the vicinity of the school. A continuous sidewalk is provided along the eastern edge of the road. There are two existing speed humps along Zinnia Road in the vicinity of the school – one to the north and one to the south of Overton Road. There are kerbs and channels provided along both sides of the road.
- Lower Klipfontein Road is a two-way roadway (eastbound and westbound; one lane in each direction) with an approximate road width of 5.5m. There are kerbs and channels provided along both sides of the road. There are no formal sidewalks provided along either side of Lower Klipfontein Road.
- Durant Road is a two-way roadway (eastbound and westbound) which has a median island that separates the opposing traffic travel lanes. The total roadway width is approximately 18.5m. There are dedicated cycle lanes, parking bays, kerbs and channels provided along both sides of the road. A sidewalk is only provided along the northern edge of Durant Road. A large grass verge with some paved portions exists along the southern side of the road.
- Calendula Road is a two-way roadway (northbound and southbound) which has a median island that separates the opposing traffic travel lanes. The total roadway width is approximately 18.2m. There is an existing pedestrian crossing on Calendula Road in close proximity to the school. There are sidewalks, dedicated cycle lanes, parking bays, kerbs and channels provided along both sides of the road.

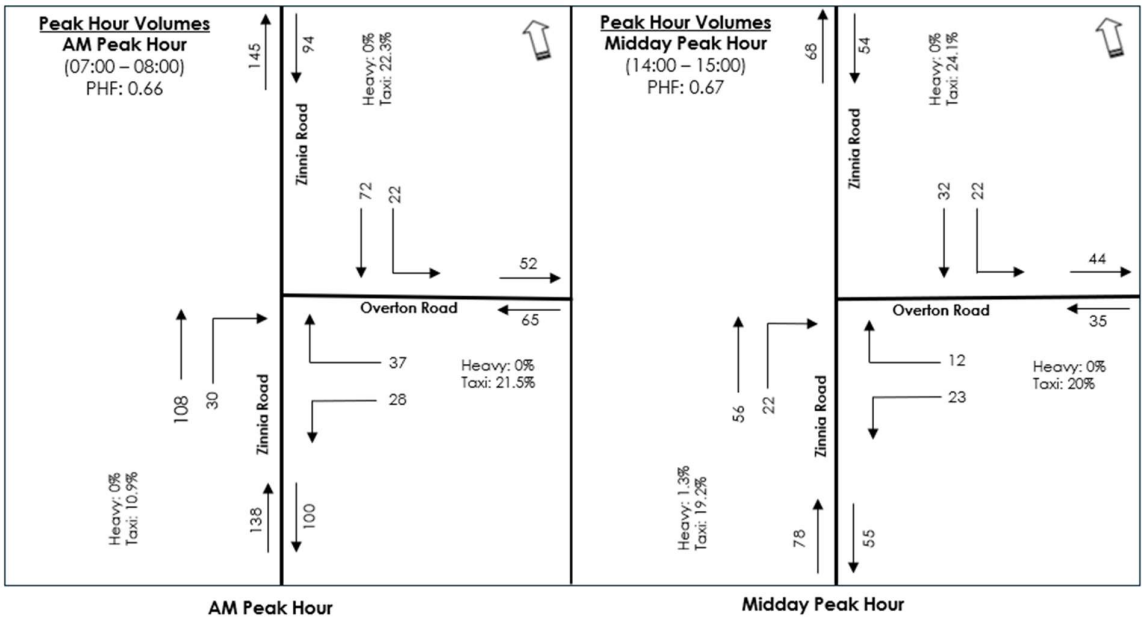
Figure 4: Existing Road Geometry

3. SURVEYS

All surveys were conducted during a typical weekday on Tuesday, the 26th of August 2025 at the intersection of Zinnia Road and Overton Road. The peak periods surveyed were from 06h15 – 08h15 and 13h00- 15h00 where the potential for vehicle/ pedestrian conflicts could be considered high or LOS at the intersection at its worst.

3.1 Traffic Volumes

Refer to **Annexure A** for the detailed survey results. These survey results are summarised below:



The main findings from the traffic flow data are summarised as follows:

- The highest traffic volumes travel northbound during the AM peak hour and the midday peak hour on Zinnia Road. Overall, the traffic volumes along Zinnia Road are low.
- Vehicle traffic on Overton Road generally turn right during the AM peak hour and left during the midday peak hour. Overall, the traffic volumes on Overton Road are low.

4. SITE OBSERVATIONS

Site observations were done on Tuesday, the 26th of October 2025 during the AM peak period (06h15 to 08h15) and midday peak period (13h00 to 15h00) to observe the current traffic operations when traffic flows are highest and vehicles are likely to be parked in the road dropping off or collecting scholars. The following observations were made at the location under investigation with site observation images attached under Annexure B.

- There are long queues observed in both directions of Zinnia Road during the school peak hours.
- Vehicles were observed parking illegally in the opposite direction of traffic along the side of the road (refer to Figure B1).
- The peak direction of travel along Zinnia Road is in the northbound direction.
- There are traffic calming measures (two speed humps) along Zinnia Road.
- Traffic officers were observed assisting with traffic management along Zinnia Road outside the school (refer to Figure B2).

5. CRASH DATA

A summary of the crash data that was received from the City of Cape Town for Zinnia Road, between Overton Road and Lower Klipfontein Road, between the period of 2019 – October 2024 (5 years and 10 months) is tabulated below in Table 1.

The total number of crashes recorded over the assessment period was one (1) crash at the intersection of Zinnia Road and Lower Klipfontein Road. The recorded crash was a pedestrian- related crash which resulted in one (1) slight injury. There were no fatal or serious injuries recorded. The crash occurred within typical daytime traffic hours.

Table 1: Summary of Crash Data

Crash Location	No.	Peds.	Type of Injury				
			Fatal	Serious	Slight	Not Injured	Unknown
Zinnia Road x Lower Klipfontein Road	1	1	0	0	1	0	1

The crash type experienced at the intersection is accident with pedestrian, hit and run (1).

6. SUMMARY

From the site observations, surveys and analysis, the following can be concluded:

- Long queues were observed on both approaches of Zinnia Road during school peak hours at the section under investigation.
- Vehicles were observed parking illegally alongside the edge of the school.
- Based on site observations and traffic counts, the peak direction of travel is northbound.
- Traffic officers were observed assisting with traffic management along Zinnia Road.
- Only one crash was recorded at Zinnia Road / Lower Klipfontein Road intersection, involving a pedestrian and resulting in one slight injury. No serious or fatal injuries were reported.

7. CONCLUSION AND RECOMMENDATIONS

Based on the site observations and analysis, traffic management during school peak periods could be improved by implementing a temporary northbound one-way system along Zinnia Road, which would help reduce conflicts and manage queuing more effectively. Additionally, given the wide verge along the western edge of the road, extending or formalising the existing parking embayment could increase parking capacity while still allowing the road to operate as a two-way system. However, ongoing monitoring of traffic flow and safety is recommended to determine the effectiveness of these measures. The conceptual layout of the proposed temporary one-way system, including the embayment extension is attached under Annexure C.

Annexure A

Detailed Traffic Count Data Sheets

TRAFFIC COUNT DATA SHEET

INTERSECTION NAME: Zinnia Road- Overton Road
TIME PERIOD ANALYSED: 06h15 - 08h15 Peak hour = 7:00 to 8:00
DAY AND DATE: Tuesday 26 August 2025

INTERVAL NO	Movement	1	2	3	4	5	6	7	8	9	10	11	12	FLOW	TOTAL
(15 minutes)	Direction	WB RT	WB TH	WB LT	EB RT	EB TH	EB LT	NB RT	NB TH	NB LT	SB RT	SB TH	SB LT		FLOW
	Cars	4		3				1	1			1	1	11	11
	Heavies													0	
1	Buses													0	
	Taxis													0	
	Cars	3		2				1	5			2	0	13	14
	Heavies													0	
2	Buses													0	
	Taxis											1		1	
	Cars	2		0				1	9			6	0	18	22
	Heavies													0	
3	Buses													0	
	Taxis			1								1	2	4	
	Cars	6		1				3	12			6	4	32	46
	Heavies													0	
4	Buses													0	
	Taxis	5		1					1			6	1	14	
	Cars	4		4				5	20			10	2	45	62
	Heavies													0	
5	Buses													0	
	Taxis	3		1					8			4	1	17	
	Cars	10		15				10	31			27	7	100	112
	Heavies													0	
6	Buses													0	
	Taxis	3							2			4	3	12	
	Cars	5		6				12	30			14	3	70	77
	Heavies													0	
7	Buses													0	
	Taxis	1							4			1	1	7	
	Cars	1		4				2	8			6	0	21	27
	Heavies													0	
8	Buses													0	
	Taxis			1					3			2		6	
	Cars	25	0	26	0	0	0	30	93	0	0	57	16	247	4 to 7
PEAK HOUR	Heavies	0	0	0	0	0	0	0	0	0	0	0	0	0	
FLOW	Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Taxis	12	0	2	0	0	0	0	15	0	0	15	6	50	
	TOTAL	37	0	28	0	0	0	30	108	0	0	72	22		297

DIRECTION	WESTBOUND	EASTBOUND	NORTHBOUND	SOUTHBOUND	OVERALL PHF
APPROACH FLOWS	65	0	138	94	
EXIT FLOWS	0	52	145	100	
PERCENTAGE HEAVY	0		0	0	
PEAK HOUR FACTOR	0.58		0.75	0.57	0.66

all vehicles

					239							**48**			
				145			94			27			21		
0			RT	TH	LT		52	0		RT	TH	LT		6	
			0	72	22					0	15	6			
LT	0							LT	0						
TH	0					37	RT	TH	0					12	RT
RT	0					0	TH	RT	0					0	TH
						28	LT							2	LT
		0	108	30						0	15	0			
0		LT	TH	RT			65	0		LT	TH	RT			14
0							**117**	**0**							**20**
		138			100					15			17		
			238								**32**				

taxis

					48										
				27			21								
0			RT	TH	LT		6								
			0	15	6										
LT	0														
TH	0						12	RT							
RT	0						0	TH							
							2	LT							
		0	15	0											
0		LT	TH	RT			14								
0							**20**								
		15			17										
			32												

buses

					0										
				0			0								
0			RT	TH	LT		0								
			0	0	0										
LT	0														
TH	0					0	RT								
RT	0					0	TH								
						0	LT								
		0	0	0						0	0	0			
0		LT	TH	RT			0			LT	TH	RT			0
0							**0**								**0**
		0			0					0			0		
			0								**0**				

heavies

					0										
				0			0								
0			RT	TH	LT		0								
			0	0	0										
LT	0														
TH	0					0	RT								
RT	0					0	TH								
						0	LT								
		0	0	0						0	0	0			
0		LT	TH	RT			0			LT	TH	RT			0
0							**0**								**0**
		0			0					0			0		
			0								**0**				

TRAFFIC COUNT DATA SHEET

INTERSECTION NAME: Zinnia Road- Overton Road
TIME PERIOD ANALYSED: 13h00 - 15h00 Peak hour = 14:00 to 15:00
DAY AND DATE: Tuesday 26 August 2025

INTERVAL NO	Movement	1	2	3	4	5	6	7	8	9	10	11	12	FLOW	TOTAL
(15 minutes)	Direction	WB RT	WB TH	WB LT	EB RT	EB TH	EB LT	NB RT	NB TH	NB LT	SB RT	SB TH	SB LT		FLOW
	Cars	0		2				4	6			1	2	15	19
	Heavies													0	
1	Buses													0	
	Taxis			1					3					4	
	Cars	1		3				3	5			3	4	19	21
	Heavies													0	
2	Buses													0	
	Taxis			1								1		2	
	Cars	1		1				5	4			1	1	13	13
	Heavies													0	
3	Buses													0	
	Taxis													0	
	Cars	2		1				3	3			2	2	13	16
	Heavies													0	
4	Buses													0	
	Taxis			1					1				1	3	
	Cars	3		2				8	14			5	4	36	39
	Heavies							1						1	
5	Buses													0	
	Taxis			2										2	
	Cars	0		5				3	7			1	4	20	29
	Heavies													0	
6	Buses													0	
	Taxis	1							4			4		9	
	Cars	3		4				2	11			6	1	27	37
	Heavies													0	
7	Buses													0	
	Taxis			2					4			3	1	10	
	Cars	3		8				8	9			8	12	48	62
	Heavies													0	
8	Buses													0	
	Taxis	2							7			5		14	
	Cars	9	0	19	0	0	0	21	41	0	0	20	21	131	5 to 8
PEAK HOUR	Heavies	0	0	0	0	0	0	1	0	0	0	0	0	1	
FLOW	Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Taxis	3	0	4	0	0	0	0	15	0	0	12	1	35	
	TOTAL	12	0	23	0	0	0	22	56	0	0	32	22		167

DIRECTION	WESTBOUND	EASTBOUND	NORTHBOUND	SOUTHBOUND	OVERALL PHF
APPROACH FLOWS	35	0	78	54	
EXIT FLOWS	0	44	68	55	
PERCENTAGE HEAVY	0		1	0	
PEAK HOUR FACTOR	0.67		0.81	0.54	0.67

all vehicles

				122								**31**			
			68			54				18			13		
0				RT	TH	LT		44	0			RT	TH	LT		1
				0	32	22						0	12	1	
LT	0								LT	0					
TH	0						12	RT	TH	0					3	RT
RT	0						0	TH	RT	0					0	TH
							23	LT							4	LT
		0	56	22							0	15	0			
0		LT	TH	RT			35	0		0	LT	TH	RT			7
0							**79**	**0**								**8**
		78			55						15			16		
				133								**31**			

taxis

buses

				0								**0**			
			0			0				0			0		
0				RT	TH	LT		0	0			RT	TH	LT		1
				0	0	0						0	0	0	
LT	0								LT	0					
TH	0						0	RT	TH	0					0	RT
RT	0						0	TH	RT	0					0	TH
							0	LT							0	LT
		0	0	0							0	0	1			
0		LT	TH	RT			0	0		0	LT	TH	RT			0
0							**0**	**0**								**1**
		0			0						1			0		
				0								**1**			

heavies

Annexure B

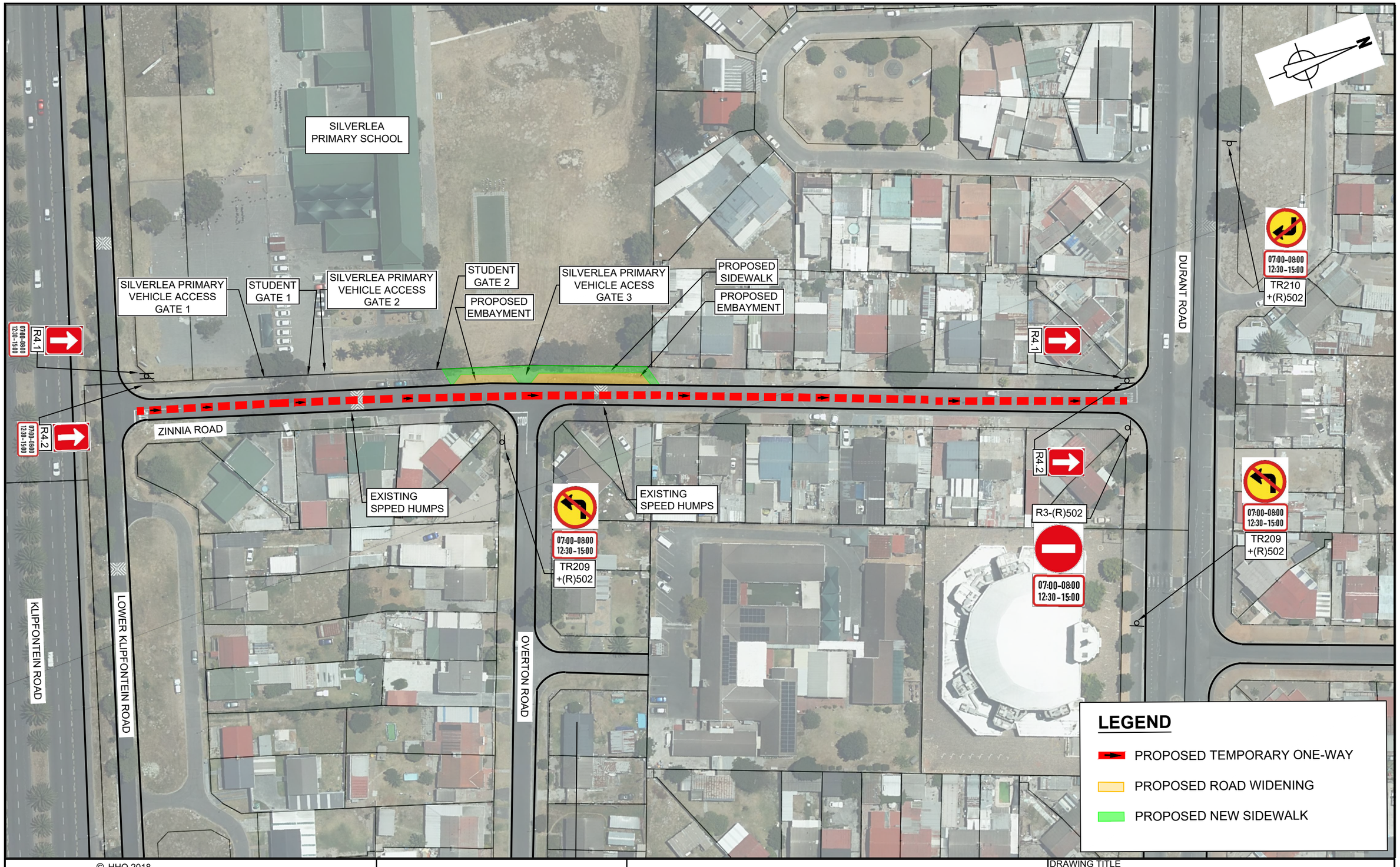
Site Observations

Figure B1: Vehicles were observed parking illegally in opposing directions within the parking area outside the school.

Figure B2: Traffic officers observed assisting with traffic management during school peak periods.

Annexure C

Conceptual Drawing



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288C TRAFFIC ENGINEERING SERVICES
SOUTH REGION

DRAWING TITLE

TNDS7414
SILVERLEA PRIMARY SCHOOL,
ZINNIA ROAD, SILVERTOWN
CONCEPTUAL DESIGN

SCALE	DATE	DRAWING NO.	REV
1: 1000 @ A3	08/01/2026	HHO-220040-206-4334	A

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