



TRAFFIC IMPACT ASSESSMENT IN SUPPORT OF THE PROPOSED TOWNSHIP ESTABLISHMENT ON THE REMAINING EXTENT OF PORTION 46, PORTION 58 AND 59 OF THE FARM ELANDSHEUWEL 436-IQ

JB MARKS LOCAL MUNICIPALITY



TRAFFIC IMPACT ASSESSMENT (TIA) - DRAFT

October 2025

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Quality Control

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Project number	C1584-251124	
File reference	X:\C1584-251124 - Rem Ext of Ptn 46, Ptn 58 & 59 Elandsheuwel 436 IQ\2. TRAFFIC\06 Reports	

Certification

It is herewith certified that this Traffic Impact Assessment has been prepared according to requirements of the South African Traffic Impact and Site Traffic Assessment Manual.

Signatory : Date : 15 October 2025 ECSA no: 20170023

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Quality checklist

Items	Initial
Project take on form	✓
Report & Figures reviewed	✓
Authorisation for distribution	✓



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1 Introduction

1.1 BACKGROUND AND SITE LOCATION

CHRISEN CONSULTING (PTY) LTD Traffic and Transportation Engineers has been appointed to undertake a Traffic Impact Assessment in support of the proposed Township Establishment on the Remaining extent of Portion 46, Portion 58 and 59 of the Farm Elandsheuwel 436-IQ. The study site is located southwest of the R53 on Herman Street and falls within the JB Marks Local Municipality area of Jurisdiction.

Remaining extent of Portion 46, Portion 58 and 59 have a combined extent of 85,2225 hectares, currently vacant land and are surrounded by residential land uses to the north and vacant land to the south, west and east. The intention of the client is to establish a township on the Remaining extent of Portion 46, Portion 58 and 59 of the Farm Elandsheuwel 436-IQ which will comprises of a mixed-use development that consists of "Residential 1," "Residential 2," "Institutional," "Business 1," "Business 2," "Municipal." "Public Open Space" and "Public Roads" land uses. Refer to **Appendix A** containing the Site Development Plan and **Figures 1a and 1b** illustrating the site locality plan.

1.2 PURPOSE OF THE REPORT

The purpose of this Traffic Impact Assessment is to illustrate the proposed developments' impact on the surrounding road network and possible mitigation of the anticipated traffic impact. This report also comments on the proposed site accesses, non-motorised and public transport aspects. Individual traffic impact assessments will be done for each development during the site development stage.

1.3 APPROVAL OF SUBMISSION

This report will be submitted to the following road authorities for their comments and approval:

- JB Marks Local Municipality



2 Study Area and Surrounding Road Network

2.1 STUDY AREA

In determining the site area TMH 16 volume 1 recommends the following:

- *“Class 4 and 5 roads in the vicinity of the development up to the first Class 1 to 3 roads that can be reached by the Class 4 and 5 road networks from the development, up to and including the first connection(s) on the Class 1 to 3 roads.*
- *The elements shall be restricted to those within a maximum distance of 1.5km from the accesses to the site, measured along the shortest routes to the accesses, provided that there is at least one intersection within this distance. Where there is no such intersection, the distance will be extended to include at least one intersection.”*

TMH 16 also states that judgement should be used in selecting the intersections considered and therefore specific elements like extent of the development were also considered. A larger development will by its nature require a wider study area to be considered while for a smaller development the opposite will be true.

2.2 EXISTING SURROUNDING ROAD NETWORK

The following roads bordering the application site are regarded as relevant to this study:

- **N12:** This road is classified as a Class 1 dual carriageway road with two lanes in each direction that runs in a west-east alignment north of the site.
- **R53:** This road is classified as a Class 2 single carriageway road with one lane in each direction that runs in a north-south alignment northeast of the site.
- **Erica Street:** This road is classified as a Class 4 road with one lane in each direction that runs in a north-south alignment north of the site.
- **Herman Street:** This road is classified as a Class 5 road with one lane in each direction that runs in a north-south alignment towards the site. Herman Street will provide access to the development site.

The North West Province GIS Road Network Map in relation to the site is attached as **Appendix A**.



3 Approach and Methodology

3.1 GENERAL

The application will be undertaken according to the South African Traffic Impact and Site Traffic Assessment Manual (TMH 16, 2012). This assessment also discusses non-motorised and public transport and provides the necessary requirements. The horizon year for the purpose of the assessment for the impact on the transport system is 2025 and 2030.

3.2 RELEVANT PEAK HOURS

From the observation of existing traffic and trip generation volumes, the Weekday AM and PM peak hour that is critical for capacity analysis purposes will be determined following the traffic data collection. This will be when the existing network background traffic together with the development traffic will represent a worst-case scenario in terms of critical traffic flow.

3.3 DATA COLLECTION

3.3.1 Site Visit

During June 2024, a site visit was undertaken for this study and the following was confirmed:

- Layouts of intersections considered in the study
- Appropriateness of recommended site accesses
- Intersection control for relevant intersections
- Presence of existing public transport and non-motorised transport facilities

3.3.2 Traffic Count Data

A three (3) hour classified morning (06:00 – 09:00) and three (3) hour classified afternoon (15:00 – 18:00) vehicle survey was commissioned by CHRISEN on Tuesday 3rd June 2025 at the following intersections:

- Herman Street and Papawer Street (Intersection 1)
- Herman Street and Erica Street (Intersection 2)
- R53 and Road A (Intersection 3)



From the traffic count, a common peak hour will be determined (as the busiest hour) for each counted period.

3.4 ANALYSIS SCENARIOS

The Weekday AM and PM peak hour trip generation of the development was analysed. The critical peak hour analysis was considered for the following scenario:

- Scenario 1: 2025 peak hour traffic volumes
- Scenario 2: 2025 background plus development generated peak hour traffic volumes
- Scenario 3: 2030 background plus development generated peak hour traffic volumes

This is in line with the TMH 16 requirement for scenarios to be considered in a Traffic Impact Assessment.

3.5 TRIP DISTRIBUTION AND ASSIGNMENT

Assumptions with respect to the expected trip distribution were based on the location of the site access in relation to the surrounding road network; the existing traffic volumes, travel patterns as well as the land use nature of the proposed development.



4 Existing Traffic Volumes

4.1 GENERAL

From the traffic count a common peak hour will be determined (the busiest hour) for each counted period. The existing intersection layouts are attached in **Appendix C**.

4.2 HERMAN STREET AND PAPAWE STREET (INTERSECTION 1)

This intersection comprises of a Two-Way Stop control intersection has approximately TBC vph and TBC vph during the AM and PM Peak hours respectively.

4.3 HERMAN STREET AND ERICA STREET (INTERSECTION 2)

This intersection comprises of a Two-Way Stop control T-junction intersection has approximately TBC vph and TBC vph during the AM and PM Peak hours respectively.

4.4 R53 AND ROAD A (INTERSECTION 3)

This intersection comprises of a Two-Way Stop control T-junction intersection has approximately TBC vph and TBC vph during the AM and PM Peak hours respectively.



5 Extent of the Development

The intention of the client is to establish a township on the Remaining extent of Portion 46, Portion 58 and 59 of the Farm Elandsheuwel 436-IQ which comprises of the following:

- Site Extent = 85,2225 ha
 - Residential 1
 - Single Dwelling Units = 409 units
 - Residential 2
 - Townhouse = 119 units
 - Residential 3
 - Flats = 737 units
 - Institutional
 - Creche / Day Care Centre = 100 Students
 - Place of Worship = 100 Seats
 - Primary School = 700 students
 - Secondary School = 600 Students
 - Business 1
 - Shops = 1500 m²
 - Business 2
 - Medical Centre = 3000 m²
 - Municipal
 - Multipurpose Centre = 3700 m²
 - Public Open Space
 - Public Roads

The Site Plan is contained in **Appendix B**.



6 Development Trip Generation

6.1 ADJUSTMENT FACTORS

Various trip adjustment factors have been introduced into the COTO document to allow for trip reductions. These adjustment factors are discussed briefly below.

6.1.1 Mixed Use Development (Mud)

According to the COTO manual “mixed use developments are defined as developments in an area that consist of two or more single-use developments between which trips can be made by means of non-motorised modes of transport (such as walking). This has the net effect of reducing the vehicle trip generation in the area.” A mixed-use reduction factor has been applied, See **Table 1** below. Note, P_m = Reduction factor for mixed-use development.

6.1.2 Low Vehicle Ownership (LVO)

According to COTO “the vehicle ownership in areas with high levels of vehicle ownership varies between one or two per household. In areas with a low level of vehicle ownership, the majority of households (more than 50%) does not own a vehicle and relies on public transport for transportation. In areas with very low level of vehicle ownership, nearly all households (more than 90%) do not own a vehicle and rely on public transportation.”

A very low vehicle ownership reduction factor has been applied, see **Table 1** below. Note, P_v = Reduction factor for vehicle ownership.

Table 1: Adjustment factors applied for trip reductions

TRIP CODE	LAND USE	P_m	P_v	P_T
210	Single Dwelling Units	10%	40%	0%
220	Apartments and Flats	15%	30%	0%
231	Townhouses	15%	30%	0%
520	Public Primary School	0%	50%	0%
530	Public Secondary School	0%	50%	0%
560	Places of Public Worship	10%	0%	0%
565	Pre-School (Day Care Centre)	0%	50%	0%
710	Offices	20%	30%	0%
720	Medical Centre	10%	0%	0%
820	Shopping Centre	10%	0%	0%



6.2 TRIP SUMMARY

6.2.1 Development Generated trips

The South African Trip Data Manual, (TMH17 version 1.01, September 2013) was used to estimate the trip generation for the proposed township. The TMH17 document recommends the following trip generation and splits in **Table 2a** below.

Table 2a: Trip Generation Rates

TMH 17 CODE	Land Use	Unit	Trip rates				Split	
			AM Rate	PM Rate	AM Rate (Reduced)	PM Rate (Reduced)	AM IN : OUT	PM IN : OUT
210	Single Dwelling Units	1 D/Unit	1,00	1,00	0,60	0,60	25:75	70:30
220	Apartments & Flats	1 D/Unit	0,65	0,65	0,46	0,46	25:75	70:30
231	Townhouses	1 D/Unit	0,85	0,85	0,60	0,60	25:75	70:30
520	Public Primary School	1 Student	0,85	0,30	0,43	0,15	50:50	50:50
530	Public Secondary School	1 Student	0,75	0,25	0,38	0,13	50:50	50:50
560	Place of Worship (wknd)	1 Seat	0,05	0,05	0,05	0,05	50:50	50:50
565	Pre-School (Day Care Centre)	1 Student	1,00	0,80	0,50	0,40	50:50	50:50
710	Offices	100 m ² GLA	2,10	2,10	1,18	1,18	85:15	20:80
720	Medical Consulting Rooms	100 m ² GLA	8,00	8,00	7,20	7,20	55:45	45:55
820	Shopping Centre	100 m ² GLA	0,60	3,40	2,81	3,06	65:35	50:50

The analysis will be conducted for the weekday AM and PM peak hours. The expected development generated trips for the weekday AM and PM peak hours are indicated in **Table 2b** below. **Table 2b** shows that the proposed development is expected to generate approximately **2117 trips** and **1398 trips** during the weekday AM and PM peak hours respectively. The trips are based on the reduced factors applied together with the ***Peak Hour Factor (PHF)**. The PHF is applicable to the Public Primary School, Public Secondary School and The Pre-School (Day Care Centre). The detailed trip generation calculation is contained in **Appendix C**.



Table 2b: Expected development generated trips (considering Trip Reduction Factors)

TMH 17 CODE	Land Use	Extent	AM PEAK			PM PEAK		
			In	Out	Total	In	Out	Total
210	Single Dwelling Units	409 Units	92	276	368	258	110	368
220	Apartments & Flats	737 Units	102	305	407	285	122	407
231	Townhouses	119 Units	21	64	86	60	26	86
*520	Public Primary School	700 Students	270	270	541	53	53	105
*530	Public Secondary School	500 Students	170	170	341	31	31	63
560	Place of Worship (wknd)	300 Seats	7	6	14	7	7	14
*565	Pre-School (Day Care Centre)	100 Students	29	29	59	25	25	50
710	Offices	3700 m ²	37	7	44	9	35	44
720	Medical Consulting Rooms	3000 m ²	119	97	216	97	119	216
820	Shopping Centre	1500 m ²	27	15	42	23	23	46
<u>TOTAL</u>			876	1241	<u>2117</u>	<u>847</u>	<u>550</u>	<u>1398</u>

6.3 GROWTH RATE

TMH 16 Volume 1 requires that a five-year horizon be considered for developments that generate more than 50 trips. TMH 17 recommends growth rates for developments as shown in **Table 3**.

Table 3: Typical traffic growth rates

DEVELOPMENT AREA	GROWTH RATES
Low growth areas	0 – 3%
Average growth areas	3 – 4%
Above average growth areas	4 – 6%
Fast growing areas	6 – 8%
Exceptionally high growth areas	>8%

To determine the 2030 background traffic volumes, a growth rate of 3,0% per annum will be applied to the 2025 weekday traffic volumes.



6.4 TRAFFIC VOLUME SCENARIOS

The existing 2025 peak hour traffic volumes (see **Figure 2**) were thus subjected to a 3,0% growth rate over five years; this is in line with the average growth rate as given in **Table 3**. The 2030 background peak hour traffic volumes are presented on **Figure 3**.

The following scenarios will be analysed in this study:

- Scenario 1: 2025 peak hour traffic volumes
- Scenario 2: 2025 background plus development generated peak hour traffic volumes
- Scenario 3: 2030 background plus development generated peak hour traffic volumes



7 Site Accesses

7.1 PROPOSED ACCESS ROAD

The Traffic Study provides a framework and ensures that the proposed development is sustainable from a traffic engineering point of view. The proposed development will have one access point off the external road network. The following access points will be provided:

- **Herman Street Access:** the proposed development will take access off this road approximately 800 m west of the intersection of Herman Street and Erica Street.

Refer to **Drawings CC01 - CC02** illustrating the proposed access position.



8 Traffic Impact and Capacity Analyses

8.1 SCENARIOS ANALYSED

The weekday AM and PM peak hour trip generation of the development will be analysed. The critical peak hour analysis will be considered for the following scenarios:

- Scenario 1: 2025 Existing peak hour traffic volumes
- Scenario 2: 2025 background plus development generated peak hour traffic volumes
- Scenario 3: 2030 background plus development generated peak hour traffic volumes

This is in line with TMH16 document requirement for scenarios to be considered in a Traffic Impact Assessment. The SIDRA analysis results are attached as **Appendix D**.

8.2 CAPACITY ANALYSIS

The capacity analysis results will be updated following analysis of the traffic data to be received.



9 Non-motorised and Public Transport

9.1 BACKGROUND

In terms of the National Land Transport Act 5 of 2009, Section 38, it is a requirement that an assessment of the public transport be included in a Traffic Study.

9.2 EXISTING PUBLIC TRANSPORT SERVICES

9.2.1 Existing Public Transport Modes used within the Study Area

Minibus taxis and buses were observed operating along the surrounding road network.

9.2.2 Existing Public Facilities within the Study Area

The study area is located within an agricultural area and no public transport facilities within the study area are provided. There is a taxi rank in Potchefstroom CBD which is approximately 3,5 km northwest of the study site.

9.3 PROPOSED / NEW TRANSPORT FACILITIES

9.3.1 Paved Sidewalks:

In order to ease and formalise the movement of pedestrians, it is proposed that 2,0 m wide paved (or dust free) sidewalks be constructed along both sides of the internal roads within the proposed development. Refer to **Drawings CC01** and **CC02** illustrating the proposed sidewalks.



10 Proposed Road Improvements / Upgrades

10.1 GENERAL

The proposed Road improvements and Upgrades are in accordance to the *Department of Transport: Non-Motorised Transport Facility Guideline, 2014* and the *National Land Transport Strategic Framework Notice 823 of 2015, Sections 5.4 and 5.5*.

10.2 PROPOSED / NEW TRANSPORT FACILITIES

10.2.1 Paved Sidewalks:

In order to ease and formalise the movement of pedestrians, it is proposed that 2,0 m wide paved (or dust free) sidewalks be constructed along both sides of the internal roads within the proposed development.

Refer to **Drawings CC01** and **CC02** illustrating the proposed facilities within the proposed development

10.3 PROPOSED ROAD UPGRADES

In order to improve vehicle movement along Herman Street, it is proposed that the 360 m section of Herman Street from the development access be widened to accommodate two lanes, allowing for bidirectional traffic flow. Refer to Image 1 below indicating the section of Herman Street to be upgraded.



Image 1: Section of Herman to be upgraded to Two-lanes



11 Conclusions and Recommendations

The following conclusions and recommendations can be made based on the findings of this report:

- This report pertains to the Traffic Impact Assessment in support of the proposed Township Establishment on the Remaining extent of Portion 46, Portion 58 and 59 of the Farm Elandsheuwel 436-IQ. The study site is located southwest of the R53 on Herman Street and falls within the JB Marks Local Municipality area of Jurisdiction.
- Remaining extent of Portion 46, Portion 58 and 59 have a combined extent of 85,2225 hectares, currently vacant land and are surrounded by residential land uses to the north and vacant land to the south, west and east.
- The intention of the client is to establish a township on the Remaining extent of Portion 46, Portion 58 and 59 of the Farm Elandsheuwel 436-IQ which will comprises of “Residential 1,” “Residential 2,” “Institutional,” “Business 1,” “Business 2,” “Municipal.” “Public Open Space” and “Public Roads” land uses.
 - Site Extent = 85,2225 ha
 - Residential 1
 - Single Dwelling Units = 409 units
 - Residential 2
 - Flats = 737 units
 - Townhouse = 119 units
 - Institutional
 - Creche / Day Care Centre = 80 Students
 - Place of Worship = 100 Seats
 - Primary School = 700 students
 - Secondary School = 600 Students
 - Business 1
 - Shops = 1500 m²
 - Business 2
 - Medical Centre = 3000 m²



- Municipal
 - Multipurpose Centre = 3700 m²
 - Public Open Space
 - Public Roads
- The proposed development is expected to generate approximately **2117 trips and 1398 trips** during the weekday AM and PM peak hours respectively.
- The Traffic Study provides a framework and ensures that the proposed development is sustainable from a traffic engineering point of view. The proposed development will have various access points off the external road network, refer to **Drawings CC01 - CC03** illustrating the proposed access positions.
- Minibus taxis and busses were observed operating along surrounding roads in relation to the development site.
- In order to ease and formalise the movement of pedestrians, it is proposed that 2,0 m wide paved (or dust free) sidewalks be constructed along both sides of the internal roads within the proposed development.
- In order to improve vehicle movement along Herman Street, it is proposed that the 360 m section of Herman Street from the development access be widened to accommodate two lanes, allowing for bidirectional traffic flow.

It is therefore recommended that the Township Establishment on Remaining extent of Portion 46, Portion 58 and 59 of the Farm Elandsheuwel 436-IQ be approved from a traffic engineering point of view.



12 References

1. TMH 16 Volume 2, South African Traffic Impact and Site Traffic Assessment Standards and Requirements Manual, Version 1.0, Committee of Transport Officials (COTO) August 2012.
2. TMH 17 Volume 1, South African Trip Data Manual, Version 1.01, Committee of Transport Officials (COTO) September 2013.
3. TRH 26, South African Road Classification and Access Management Manual, Version 1.0, Committee of Transport Officials (COTO) August 2012.



Figures

Figure 1a Locality plan

Figure 1b Locality plan



CHRISEN CONSULTING
CIVIL • STRUCTURAL • TRANSPORT • ENGINEERS

Project: C1584-251124

PROPOSED TOWNSHIP ESTABLISHMENT ON REMAINING EXTENT OF PORTION 46,
PORTION 58 AND 59 OF THE FARM ELANDSHEUWEL 436-IQ

Figure Description:

LOCALITY PLAN

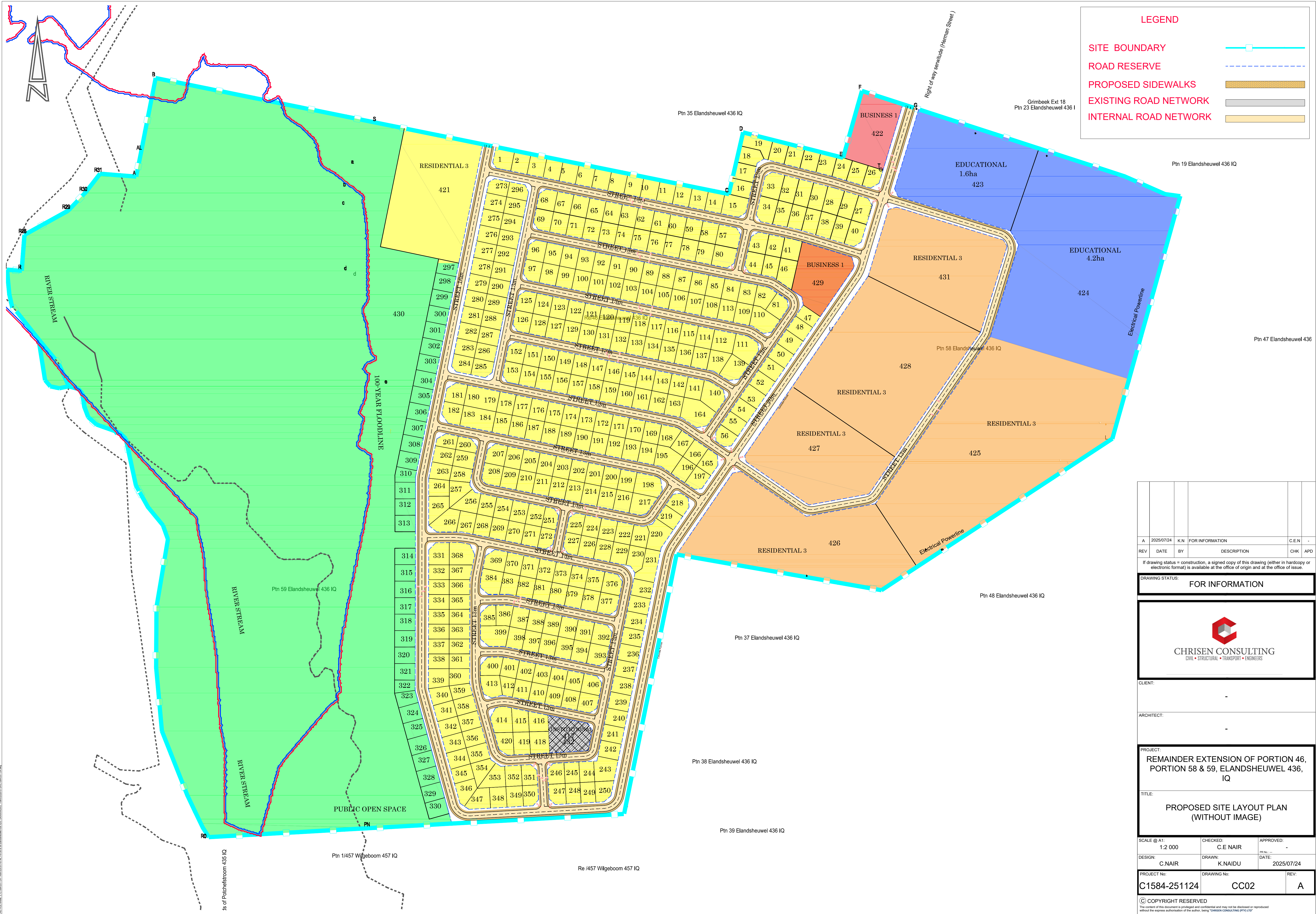
1a





Drawings

- Drawing CC01 Proposed Site Access Layout Plan
- Drawing CC02 Proposed Site Access Layout Plan (Without Image)
- Drawing CC03 Existing Intersection





LEGEND

SERVE

ROAD NETWORK

[illegible]

DRAWING STATUS: FOR INFORMATION



CLIENT:

ARCHITECT:

PROJECT:
REMAINDER EXTENSION OF PORTION 46,
PORTION 58 & 59, ELANDSHEUWEL 436,
IQ

TITLE: EXISTING INTERSECTION

SCALE @ A1: 1:1 250	CHECKED: C.E NAIR	APPROVED: -
DESIGN: C.NAIR	DRAWN: K.NAIDU	DATE: 2025/07/24
PROJECT No: C1584-251124	DRAWING No: CC03	REV: A

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Appendix A

- North West Province GIS Road Network Map

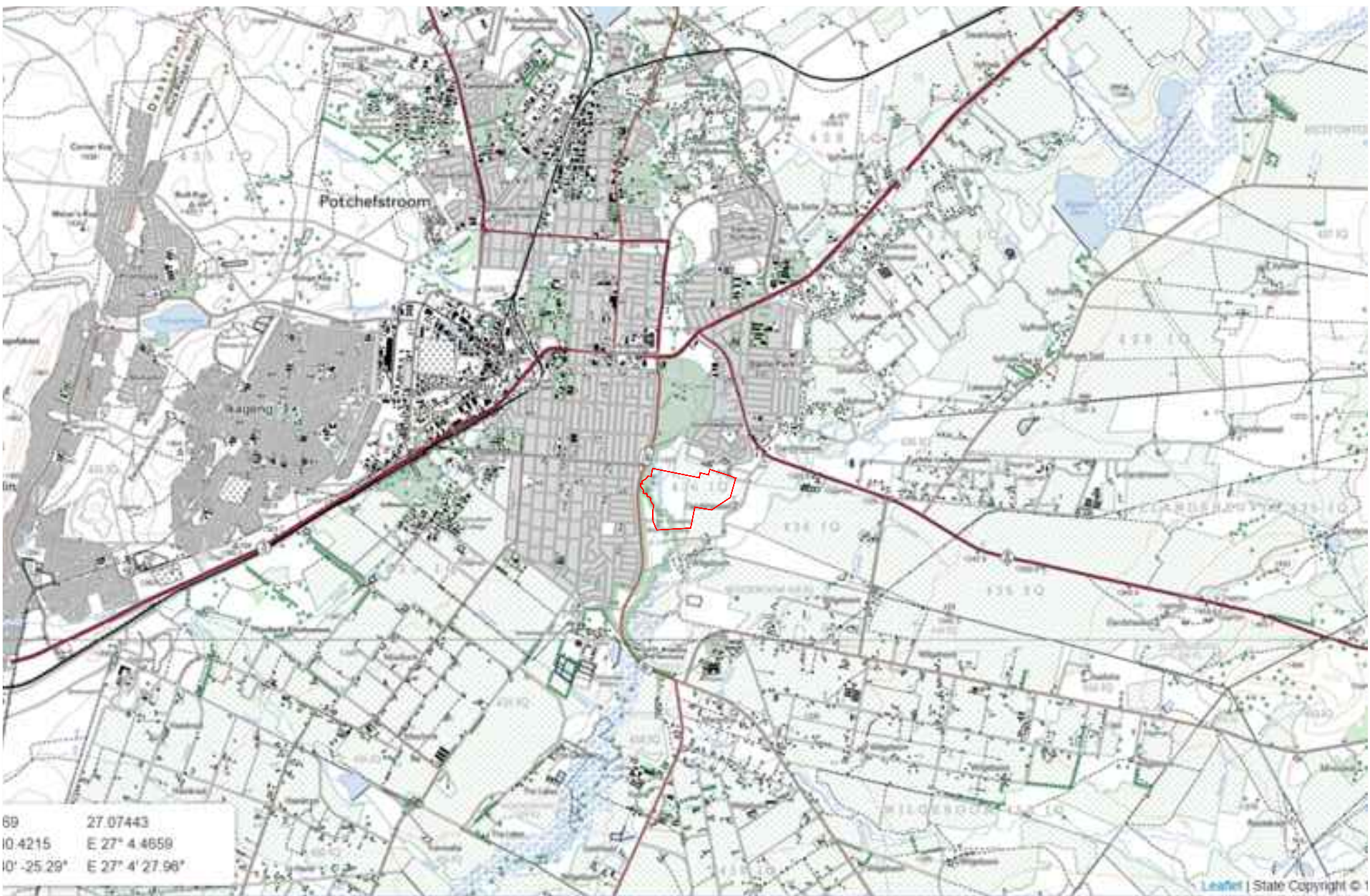


Appendix B

- Site Development Plan
- SG Diagrams

Proposed Township Layout Plan

LOCALITY MAP



LAND USE TABLE

ZONING	LAND USES	NO. OF ERVEN	AREA (HA)	AREA (%)	NOTATION
Residential 1	Single Dwelling Units	409	12.6705	15.04	
Residential 2	Townhouse/Semi detached	3 (approx. 119 units @25 per ha)	9.5583	11.34	
Residential 3	Flats/Apartments	11 (approx. 737 units @122 per ha)	12.0904	14.35	
Institutional	Creche/Day Care Centre	2	0.3263	0.39	
Institutional	Places of Worship	1	0.1279	0.15	
Institutional	Primary School	1	1.9150	2.27	
Institutional	Secondary School	1	3.8997	4.63	
Business 1	Shops/Retail	1	0.4327	0.51	
Business 2	Medical Centre	1	0.7935	0.94	
Municipal	Multi-purpose Centre	1	0.7595	0.90	
Public Open Space	Recreational	1	30.7524	36.51	
Public Roads	Streets		11.6163	13.79	

TOTAL DEVELOPABLE AREA	429	84.2225	100	
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LEGEND

Proposed Erven
Project Area Boundary
Subject Farm Portions

SCALE

1: 2000 (A0 Format)
1: 4000 (A1 Format)
1: 8000 (A2 Format)
1: 16000(A3 Format)

PREPARED BY: Vhuluvhi Group	PREPARED FOR: HDA
---------------------------------------	-----------------------------



Designed By (Town Planner): Professional Reg. No: Signature:.....	Date: 06 October 2025 Drawing No: Grim/001Rev2
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MUNICIPAL APPROVAL	GEOTECHNICAL CERTIFICATION	FLOODLINE CERTIFICATION	SURVEY CERTIFICATION & DETAILS
Approved By: Signature..... Director: Signature..... Date:.....	It is hereby certified that the Phase 1 Geotechnical investigation for the project area was undertaken by a qualified Geotechnical Engineer in line with the NHBRC Guidelines: Name Registration No Signature Date	In terms of Section 114 of the National Water Act, the project area is affected by flood water within the 1:100 year period from the streams/rivers as indicated in the floodline report. As a result development must be done outside the identified floodlines: Name Registration No Signature Date	Contour Intervals: 0.5m Coordinate Reference System: World Geodetic System 1984 Name Registration No Signature Date



Appendix C

- Trip Generation Table

Project No.: C1584-251124

Date: 2025/10/16 10:41
Author: Christopher E Nair

PROPOSED TOWNSHIP ESTABLISHMENT ON REMAINING EXTENT OF
PORTION 46, PORTION 58 AND 59 OF THE FARM ELANDSHEUWEL
DEVELOPMENT TRIP GENERATION TABLE

Trip Code	Land Use	Development	Size (m ²)	Unit of Measurement	COTO Peak Hour Base Trip Generation Rates (veh/h)						Trip Reduction Factors (%)				Adjusted Peak Hour Trip Rate (veh/h)		Total Expected Peak Hour Trip Generation (Veh/h)						
					AM PEAK	SPLIT		PM PEAK	SPLIT		Mixed-use (Pm)	Vehicle Ownership (Pv)	Transit Nodes or Corridors (Pt)	Total (Pc)	AM PEAK	PM PEAK	AM PEAK			PM PEAK			
						IN	OUT		IN	OUT							In	Out	TOTAL	In	Out	TOTAL	
210	Single Dwelling Units	Single Dwelling Units		409	1 D/Unit	1,00	25%	75%	1,00	70%	30%	10%	0%	0%	10,0%	0,90	0,90	92	276	368	258	110	368
220	Apartments & Flats	Apartments & Flats		737	1 D/Unit	0,65	25%	75%	0,65	70%	30%	15%	0%	0%	15,0%	0,55	0,55	102	305	407	285	122	407
231	Townhouses (Simplex/Duplex)	Townhouses (Simplex/Duplex)		119	1 D/Unit	0,85	25%	75%	0,85	70%	30%	15%	0%	0%	15,0%	0,72	0,72	21	64	86	60	26	86
520	Public Primary School	Public Primary School		700	1 Student	0,85	50%	50%	0,30	50%	50%	0%	50%	0%	50,0%	0,43	0,15	270	270	541	53	53	105
530	Public Secondary School	Public Secondary School		500	1 Student	0,75	50%	50%	0,25	50%	50%	0%	50%	0%	50,0%	0,38	0,13	170	170	341	31	31	63
560	Places of Public Worship (Wknd)	Places of Public Worship (Wknd)		300	1 Seat	0,05	55%	45%	0,05	50%	50%	10%	0%	0%	10,0%	0,05	0,05	7	6	14	7	7	14
565	Pre-School (Day Care Centre)	Pre-School (Day Care Centre)		100	1 Student	1,00	50%	50%	0,80	50%	50%	0%	50%	0%	50,0%	0,50	0,40	29	29	59	25	25	50
710	Offices		3700,00	37	100m² GLA	2,10	85%	15%	2,10	20%	80%	20%	30%	0%	44,0%	1,18	1,18	37	7	44	9	35	44
720	Medical Consulting Rooms	Medical Consulting Rooms	3000,00	30	100m² GLA	8,00	55%	45%	8,00	45%	55%	10%	0%	0%	10,0%	7,20	7,20	119	97	216	97	119	216
820	Shopping Centre	Shopping Centre	1500,00	15	100m² GLA	0,60	65%	35%	3,40	50%	50%	10%	0%	0%	10,0%	2,81	3,06	27	15	42	23	23	46
TOTAL DEVELOPMENT GENERATED TRIPS:																		876	1241	2117	847	550	1398



Appendix D

- SIDRA Analysis Results