



Engineers

# ***Waterfall Investment Company***

## **Traffic Impact Study**

### **Comet Extension 8**

**(Portion 406 of the farm Driefontein 85 IR)**

***May 2013***

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**Title:** Traffic Impact Study – Proposed Comet Extension 8

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**Report Status:** Draft Report

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# **TRAFFIC IMPACT STUDY**

## **COMET EXTENSION 8**

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	Description	Refer to Appendix
<b>1. Introduction</b>	<p>A new development, which consist of residential land uses is proposed on Portion 406 of the Farm Driefontein 85 –IR, located in Boksburg.</p> <p>The previous application for industrial, commercial and business 2 to be developed on erven 100, 101 and 102 will no longer be pursued and it is proposed to rezone the above erven to residential only.</p> <p>The residential development will generate less peak hour trips than the previous application and it is therefore necessary to re-analyse the intersections to determine the extent of road network upgrading required for this development.</p>	
<b>2. Locality</b>	<p>The development is situated on Portion 406 of the Farm Driefontein 85 -IR, which is located east of the K90 (Rondebult Road between K106 (Main Reef Road) and Commissioner Road. Refer to <b>Figure 1</b>.</p>	Appendix B, Figure 1
<b>3. Proposed Development</b>	<p>The development will consist of the following:</p> <ul style="list-style-type: none"> <li>➤ 123 units Residential 1 (stands)</li> <li>➤ 122 units Residential 4 (60u/ha)</li> </ul>	
<b>4. Latent Rights</b>	<p>The following development was included as latent rights in this study (based on the information received from Council and previous studies):</p> <ul style="list-style-type: none"> <li>➤ Comet X14 situated on Portion 403 of the Farm Driefontein 85. Holding 7, land use rights consist of Industrial.</li> </ul> <p>Comet X14 is 70% operational, therefore it is assumed that this development traffic is included in the traffic volumes counted on the 5<sup>th</sup> March 2013. An additional 30% of the Comet X14 development traffic will be added as latent development traffic to the network.</p> <p>The expected 30% (119vph) of Comet X14 as latent rights is shown in <b>Table 2</b> and the trip assignment is shown in <b>Figure 3a</b></p>	Appendix A, Table 2, Appendix B, Figure 3a
<b>5. Trip Generation</b>	<p>The proposed development will generate 270 trips during both the weekday AM and PM peak hours. Refer</p>	Appendix A, Table

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Description		Refer to Appendix
	to <b>Table 1</b> for the trip generation.	1
<b>6. Expected Trip Distribution</b>	The additional development traffic is expected to distributed as follows: ±20% to the East on K106 (Main Reef Rd) ±10% to the West on K106 (Main Reef Rd) ±15% to the North on K90 (Rondebult Rd) ±25% to the South on Commissioner Rd ±15% to the West on K106 (Main Reef Rd) ±5% to the North on Pretoria Rd ±10% to the South on Middel Rd	Appendix B, Figure 4a
<b>7. Trip Assignment</b>	The expected trip assignment is shown in <b>Figures 4b and 4c</b> , Appendix B.	Appendix B, Figure 4b & 4c
<b>8. Access to the Development</b>	The proposed residential development will have three access points. The main access will be from a proposed traffic circle at the corner of Comet and Palm Street. Two additional access points will be provided via Ash/Pine Streets and Beech Street.	Appendix B, Figure 8
<b>9. Study Area &amp; existing intersection layouts</b>	The following intersections were included in the study area of this study: 1. K106 (Main Reef Rd) / Pretoria Rd; 2. K106 (Main Reef Rd) / K90 (Rondebult Rd); 3. K90 (Rondebult Rd) / Pretoria Rd / Comet St; 4. K90 (Rondebult Rd) / Comet Rd 5. K90 (Rondebult Rd) / Middel Rd 6. Palm St / Comet St	

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	Description	Refer to Appendix
<p><b>10. Adjacent Road Network</b></p>	<p>The local road network south of the development can be considered as Class 4 and Class 5a Municipal Roads and include:</p> <ul style="list-style-type: none"> <li>➤ Comet St</li> <li>➤ Palm St</li> <li>➤ Pine St</li> <li>➤ Ash St</li> <li>➤ Beech St</li> <li>➤ Acacia St</li> </ul> <p>It is also envisaged that development traffic will be distributed to the major road network which includes the following:</p> <ul style="list-style-type: none"> <li>➤ <b>K90 (Rondebult Rd)</b> part of <b>R21</b> (Class 2): is a Provincial road located on the western side of the development that links the Boksburg area with the N12 and N17. It is a four-lane dual carriageway.</li> <li>➤ <b>K106 Main Reef Rd (R29)</b> (Class 2): is a four-lane dual carriageway; with a east/west direction. Situated north of the proposed development.</li> <li>➤ <b>Pretoria Road</b> is a Class 3 road, running in an north/south direction. It intersects with Main Reef Road (R29) and Rondebult Road (R21).</li> </ul>	
<p><b>11. Background Volumes</b></p>	<p>Traffic surveys were conducted by ITS Engineers during the AM and PM peak on Tuesday on the 5<sup>th</sup> of March 2013. A growth rate of 3% per annum was used to estimate the year 2018 traffic demand.</p>	<p>Appendix B, Figure 2a &amp; 6a</p>
<p><b>12. Analysis Scenarios</b></p>	<p><b>Scenario 0:</b> 2013 Traffic volumes (Existing Geometry)</p>	<p>Appendix B, Figure 2a</p>

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Description		Refer to Appendix
	<p><b>Scenario 1:</b> 2013 Traffic volumes with Latent Rights (Existing Geometry)</p> <p><b>Scenario 2:</b> 2013 Traffic volumes plus Latent Rights and Development traffic (Existing Geometry)</p> <p><b>Scenario 2u:</b> 2013 Traffic volumes plus Latent Rights and Development traffic (Proposed Geometry)</p> <p><b>Scenario 3:</b> 2018 Future traffic volumes with Latent Rights (Existing Geometry)</p> <p><b>Scenario 3u:</b> 2018 Future traffic volumes with Latent Rights (Proposed Geometry)</p> <p><b>Scenario 4:</b> 2018 Future traffic volumes with Latent Rights and Development traffic (Proposed Geometry)</p>	<p>Appendix B, Figure 3b</p> <p>Appendix B, Figure 5a</p> <p>Appendix B, Figure 5b</p> <p>Appendix B, Figure 6a</p> <p>Appendix B, Figure 6b</p> <p>Appendix B, Figure 7</p>
<b>13. Capacity analyses</b>	<p>The capacity analyses for this study were conducted using the Highway Capacity Manual 2000 intersection analysis methodologies for signalised and unsignalised intersections.</p> <p>The results of the capacity analyses are discussed below:</p> <p>In <b>Scenario 0, 1 &amp; 4</b> all the existing intersections operate at an acceptable level of service (LOS).</p> <p><b>Scenario 2:</b> 2013 Traffic volumes plus Latent Rights and Development traffic</p> <p>The following intersections operate at an unacceptable level of service during the AM and PM peak hour.</p> <ul style="list-style-type: none"> <li>➤ <b>Intersection 1</b> Pretoria Rd and Main Reef Rd</li> <li>➤ <b>Intersection 6</b> Comet St and Palm St</li> </ul> <p><b>Scenario 3:</b> 2018 Future traffic volumes with Latent Rights</p> <p>The following intersections operate at an unacceptable level of service during the AM and PM peak hour.</p>	<p>Appendix A, Table 5 and Appendix D, Drawing 2278.2-GL-01</p> <p>Appendix B, Figure 2a, 3b, 5a, 5b, 6a, 6b and 7.</p>

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	Description	Refer to Appendix
	<ul style="list-style-type: none"> <li>➤ <b>Intersection 2</b> Rondebult Rd and Main Reef Rd</li> <li>➤ <b>Intersection 4</b> Rondebult Rd and Comet Rd</li> <li>➤ <b>Intersection 5</b> Rondebult Rd and Middel Rd</li> </ul> <p>With the proposed upgrades in place (Scenario 2u and 3u), all the intersections are expected to operate at an acceptable levels of service.</p>	
14. <b>Expected road upgrades</b>	<p>With reference to Table 4 the following upgrades were proposed:</p> <p><b>Latent Development Rights:</b></p> <ul style="list-style-type: none"> <li>➤ Pretoria Rd and Main Reef Rd: Provide an exclusive left turn lane on the southern approach, a through left turn lane on the northern approach and a through right turn lane on the eastern and western approaches.</li> </ul> <p><b>Latent Development Rights and Background:</b></p> <ul style="list-style-type: none"> <li>➤ Rondebult Rd and Middel Rd: Provision of an additional through lane on eastern approach.</li> <li>➤ Rondebult Rd and Main Reef Rd: Provision of an additional through lane on southern and northern approaches.</li> </ul> <p><b>Developer of Comet x8:</b></p> <ul style="list-style-type: none"> <li>➤ Rondebult Rd and Comet Rd: Provision of an additional through lane on northern approach and conversion of a through lane to a through right turn lane on the eastern approach.</li> <li>➤ Comet Rd and Palm St: Should be upgraded to a traffic circle.</li> </ul>	Appendix A, Table 4 and Appendix B, Figure 8
15. <b>Parking</b>	According to Ekurhuleni Metropolitan Municipality Development Planning guidelines.	
16. <b>Public Transport</b>	The proposed development will result in an increase in the number of public transport users on K90. Provision should be made to accommodate public transport vehicles safely. The construction of public transport lay-	



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	Description	Refer to Appendix
	by at Rondebult Road / Comet Road intersection is therefore recommended.	
<b>17. Cost Estimate</b>	Estimated cost of road upgrades <b>R 2 539 000</b> (excluding VAT).	Appendix A, Table 4
<b>18. Conclusions</b>	<p>Given the findings of this report, the following are concluded:</p> <ul style="list-style-type: none"> <li>➤ The proposed development will consist of residential land uses.</li> <li>➤ It is expected that the development will generate an additional 270 development trips during the AM and PM peak hour.</li> <li>➤ The 30% of Comet X14 development traffic is considered as Latent development traffic. The additional 119 Latent development trips were added to the road network.</li> <li>➤ The existing road network is currently operating close to capacity with limited spare capacity.</li> <li>➤ Given the road upgrading proposed in this document, the proposed development trips can be accommodated at an acceptable level of service during the 2018 horizon year.</li> <li>➤ The estimated cost to upgrade the external road network to accommodate the 2018 traffic demand of Comet X8 is R2,539 000; excluding VAT, engineering design fees, contingencies, the relocation of major services or the expropriation of land. In addition, a traffic circle is to be implemented at the intersection of Comet Road/ Palm Avenue.</li> <li>➤ The road network will have sufficient capacity to accommodate the trips generated by the proposed development if the road upgrading proposed in this document is implemented.</li> <li>➤ The road upgrading should be designed by a registered professional engineer with sufficient roads design experience.</li> <li>➤ The cost of the road upgrading proposed in this document should be shared amongst the Comet X14 and X8 development. The distribution of cost should be negotiated amongst the relevant</li> </ul>	

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<b>Traffic Impact Study Comet Extension 8 (Portion 406 of the farm Driefontein 85 IR)</b>	
<b>Description</b>	<b>Refer to Appendix</b>
	developers.
<b>19. Recommendations</b>	The proposed development is supported from a traffic engineering point of view provided that the road upgrading recommended in this document are implemented.

## APPENDIX A

### TABLES AND ADDITIONAL INFORMATION

Table 1: Expected trip generation of the proposed development

Table 2 Trip generation for the latent rights

Table 3: Required road network upgrades

Table 4: External road upgrades cost estimate for the proposed development

# COMET EXTENTION 8

## APPENDIX A

**Table 1** Expected trip generation of the proposed development

Development	Area (m <sup>2</sup> )	Area of stands & Streets (m <sup>2</sup> )	Land Use	Erf No	Number Units	Trip Rate	Dist % in	Dist % out	Total Trips in	Total Trips out	Total Trips
<b>Weekday AM Peak Hour</b>											
Comet X8	54 300	33 900	Residential 1	3 - 40 & 42 - 126	123	1.1	25%	75%	34	101	135
		20 400	Residential 4 (60u/ha)	1 & 2	122	1.1	25%	75%	34	101	135
<b>Total</b>									<b>68</b>	<b>202</b>	<b>270</b>
<b>Weekday PM Peak Hour</b>											
Comet X8	54 300	33 900	Residential 1	3 - 40 & 42 - 126	123	1.1	75%	25%	101	34	135
		20 400	Residential 4 (60u/ha)	1 & 2	122	1.1	75%	25%	101	34	135
<b>Total</b>									<b>202</b>	<b>68</b>	<b>270</b>

**Table 2:** Trip generation for latent rights

No.	Development	Land Use	Extent	Trip Rate	Rate	Trip Generation (vph) (100% Trips)			Trip Generation (vph) (30% Trips)		
						In	Out	Total	In	Out	Total
<b>Weekday AM Peak</b>											
1	Comet X14	Industrial	10 704 m <sup>2</sup>	0.6	vph/100m <sup>2</sup>	316	80	396	95	24	119
<b>Weekday PM Peak</b>											
1	Comet X14	Industrial	10 704 m <sup>2</sup>	0.6	vph/100m <sup>2</sup>	80	316	396	24	95	119

**Table 3: Required road network upgrades**

<i>Intersection</i>	<i>Intersection</i>	<i>Types of control</i>	<i>Approach</i>	<i>Upgrades</i>	<i>Responsibility</i>
1	Pretoria Road and Main Reef Road	Signalised	Eastern	Construct an additional through right turn lane	Latent Rights (Comet X14)
			Western	Construct an additional through right turn lane	
			Northern	Convert the left turn lane to a through left turn lane.	
			Southern	Construct an exclusive left lane	
2	Rondebult Road and Main Reef Road	Signalised	Southern & Northern	Construct one additional through lane per approach	Latent Rights and Background
4	Rondebult Road and Comet Road	Signalised	Eastern	Convert the through lane to a through right turn lane.	Developer (Comet X8)
			Northern	Construct an additional through lane	
5	Rondebult Road and Middel Road	Signalised	Eastern	Construct one additional through lane	Latent Rights and Background
6	Comet Street and Palm Street	Traffic Circle	Provide a traffic circle		Developer (Comet X8)

**Note:** The developer of Comet x8 will only upgrade intersection 4 and 6 because of the low distribution on intersections 2, 3 and 5.

**Table 4: External road upgrades cost estimate for the proposed development**

<i>Intersection</i>	<i>Intersection name</i>	<i>Extent</i>	<i>Area (m<sup>2</sup>)</i>	<i>Total (R)</i>
4	Rondebult Road and Comet Road	Road widening on north approach	1546	R 1 546 000
6	Comet Street and Palm Street	Construct a traffic circle	993	R 993 000
<b>Total (excluding VAT)</b>				<b>R 2 539 000</b>

Please note that the above cost estimate was based on a unit rate approach, which exclude professional fees, contingencies, the relocation of major services and VAT. The estimate was also based a conceptual layout, which was done without detailed services information being available at the time of the study. The cost estimate does not include the acquisition of land required to construct access roads.

- R1000.00 per sqm of a road.

**COMET EXTENTION 8  
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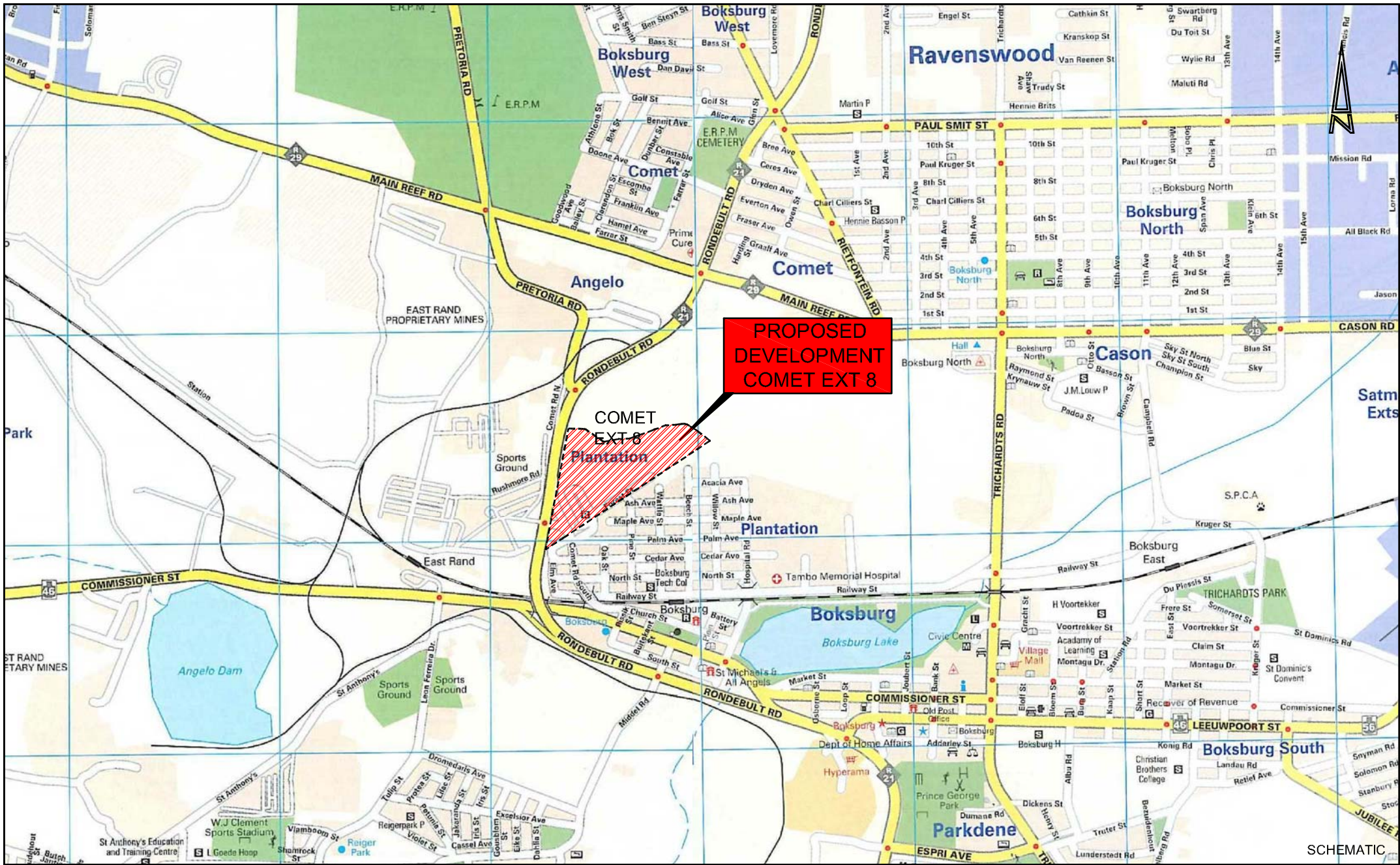
**APPENDIX B  
FIGURES**

## APPENDIX B

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- Figure 6a:** Scenario 3 – Horizon 2018 traffic volumes AM and PM Peak Hour with Latent Rights traffic & analysis results
- Figure 6b:** Scenario 3u – Horizon 2018 traffic volumes AM and PM Peak Hour plus Latent Rights traffic with upgrades & analysis results
- Figure 6c:** Scenario 3 – Intersection geometry
- Figure 7:** Scenario 4 – Horizon 2018 traffic volumes AM and PM Peak Hour, Latent Rights traffic plus development traffic & analysis results
- Figure 8:** General layout and proposed road upgrades





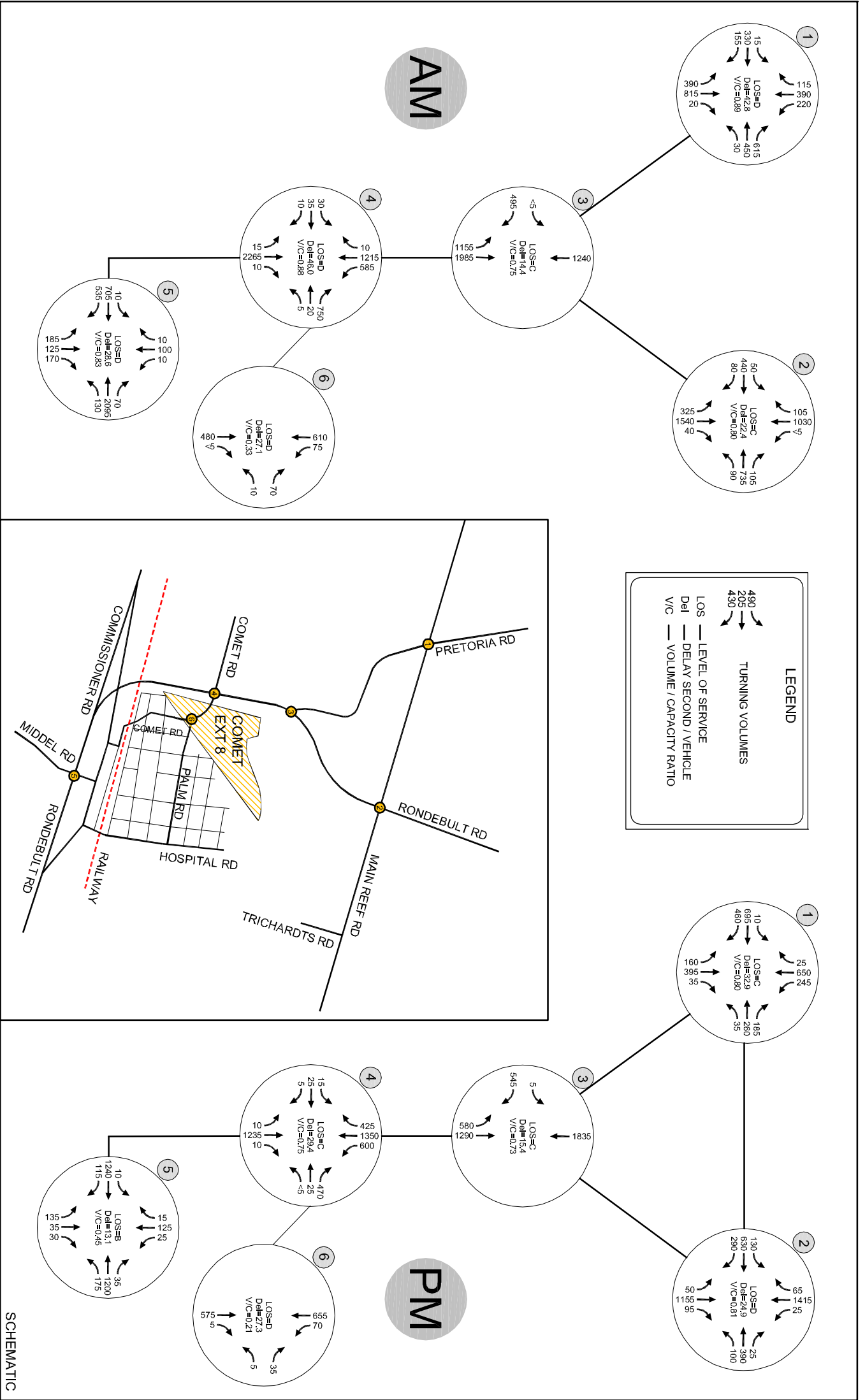
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<p>FIGURE:</p> <p>COMET EXTENSION 8 TIS</p>	<p>FIGURE:</p> <p>LOCALITY PLAN</p>	<p>NUMBER:</p> <p>1</p>
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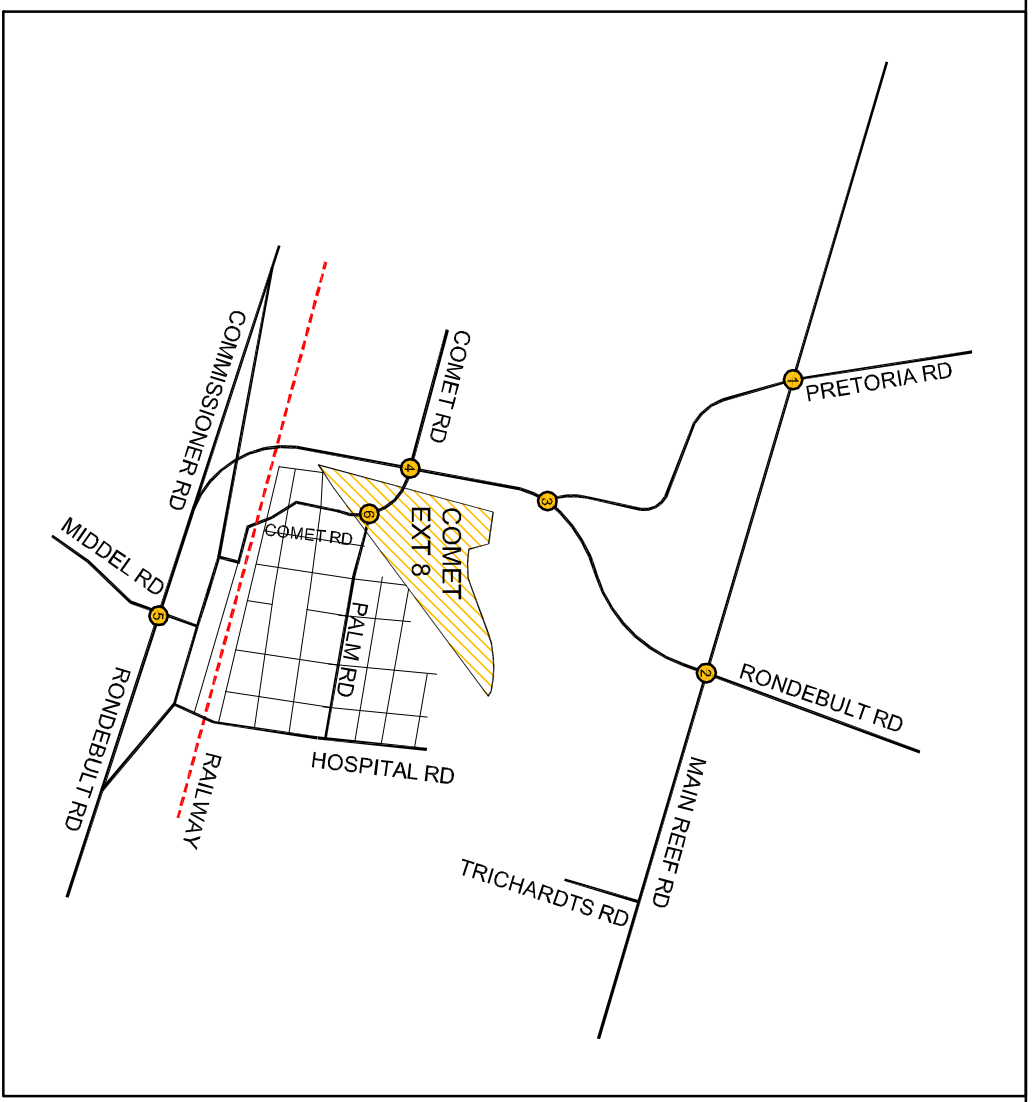
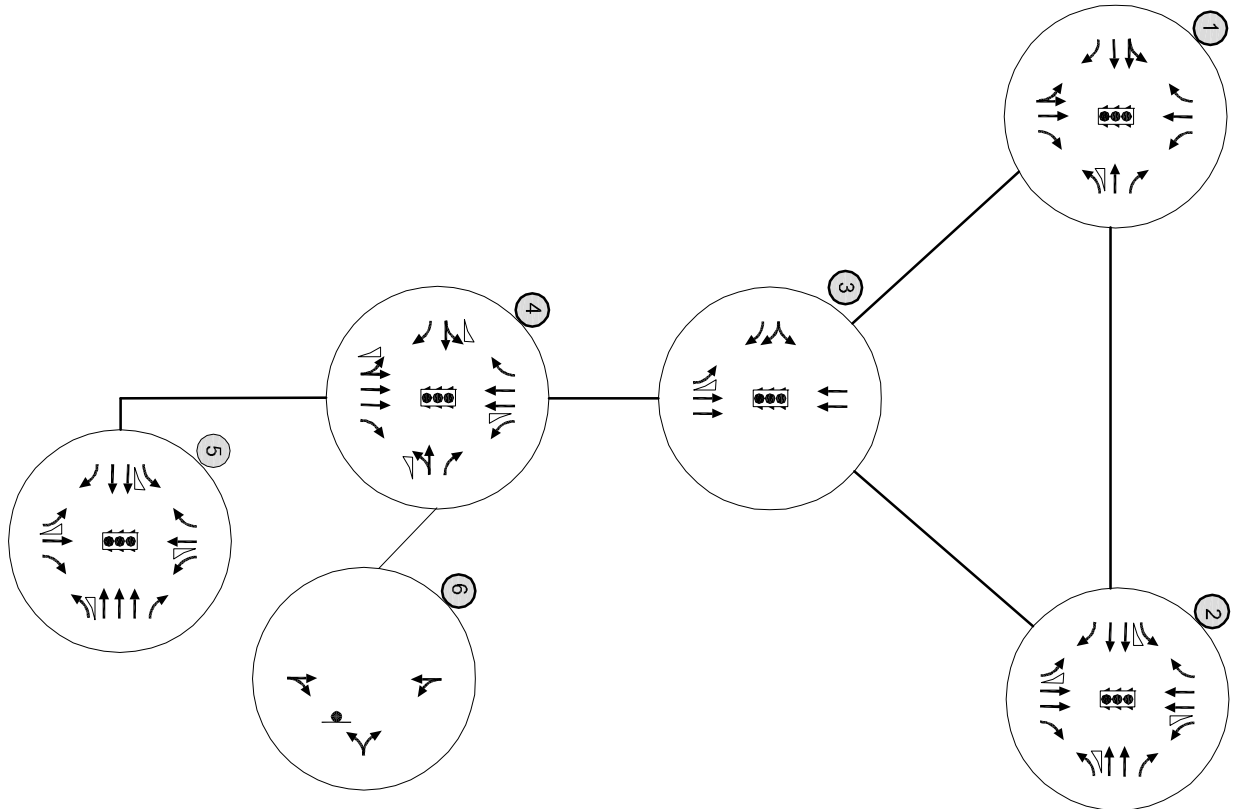
Comet X8

FIGURE:

Scenario 0: 2013 Existing Intersection  
Geometry

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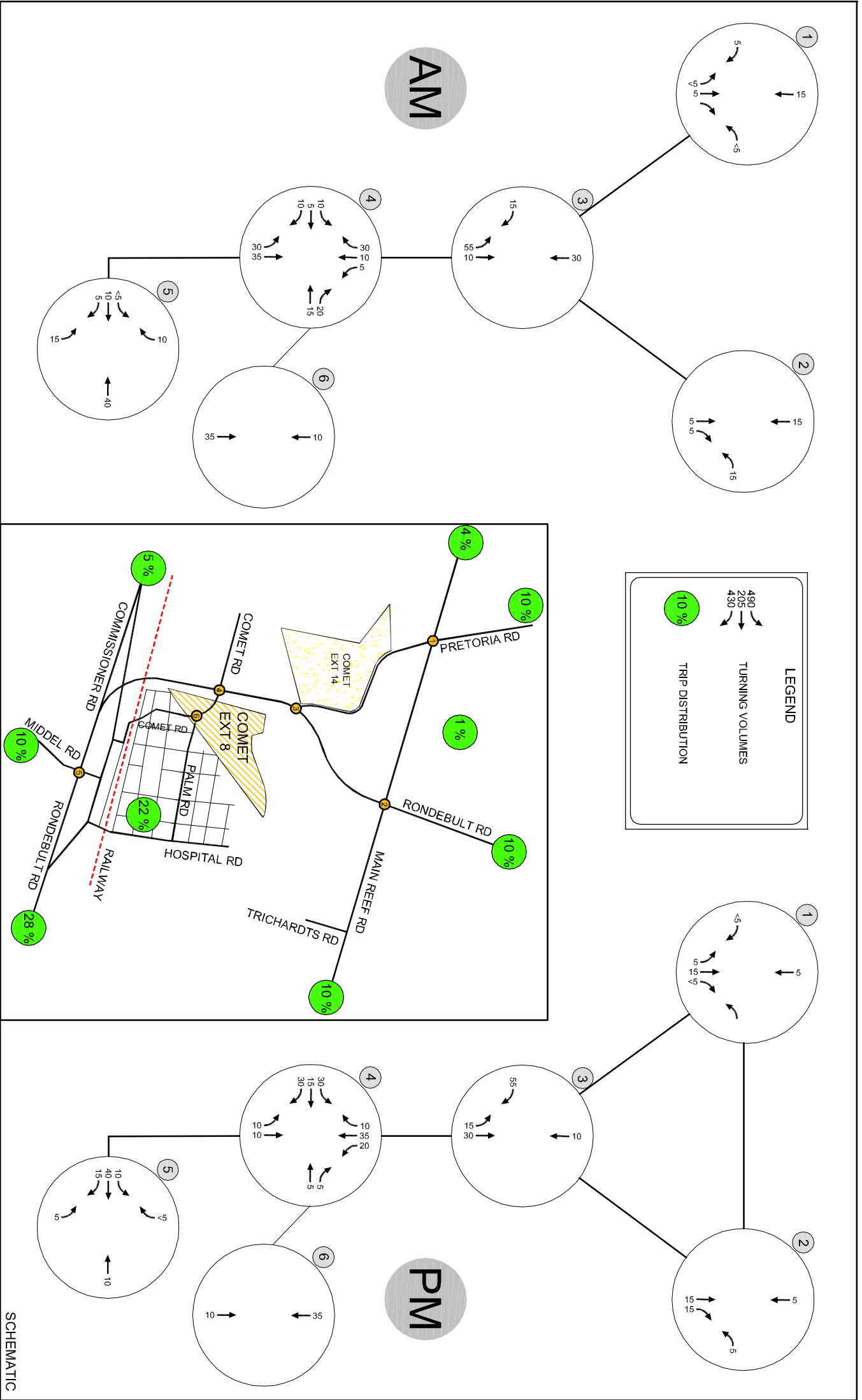
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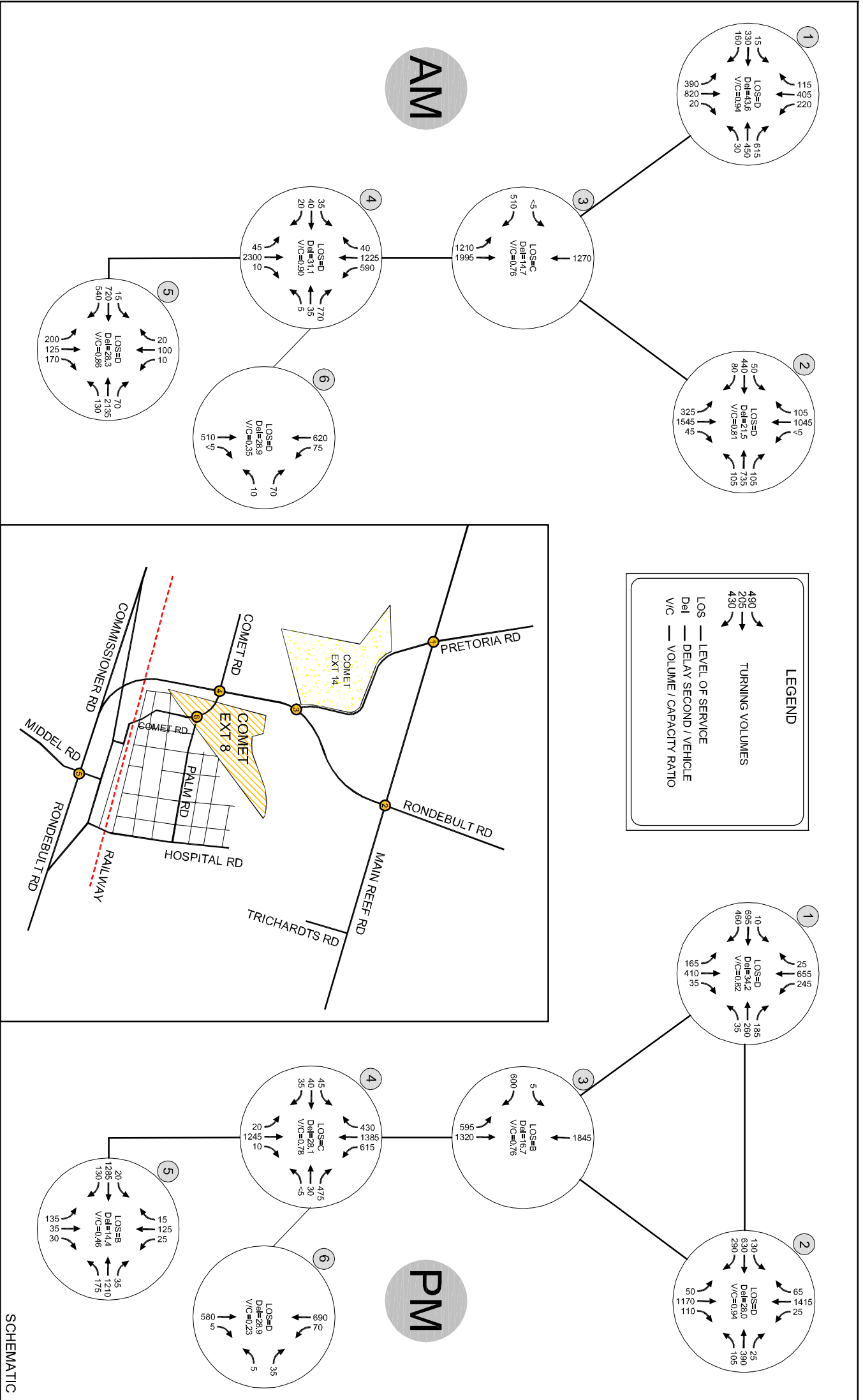


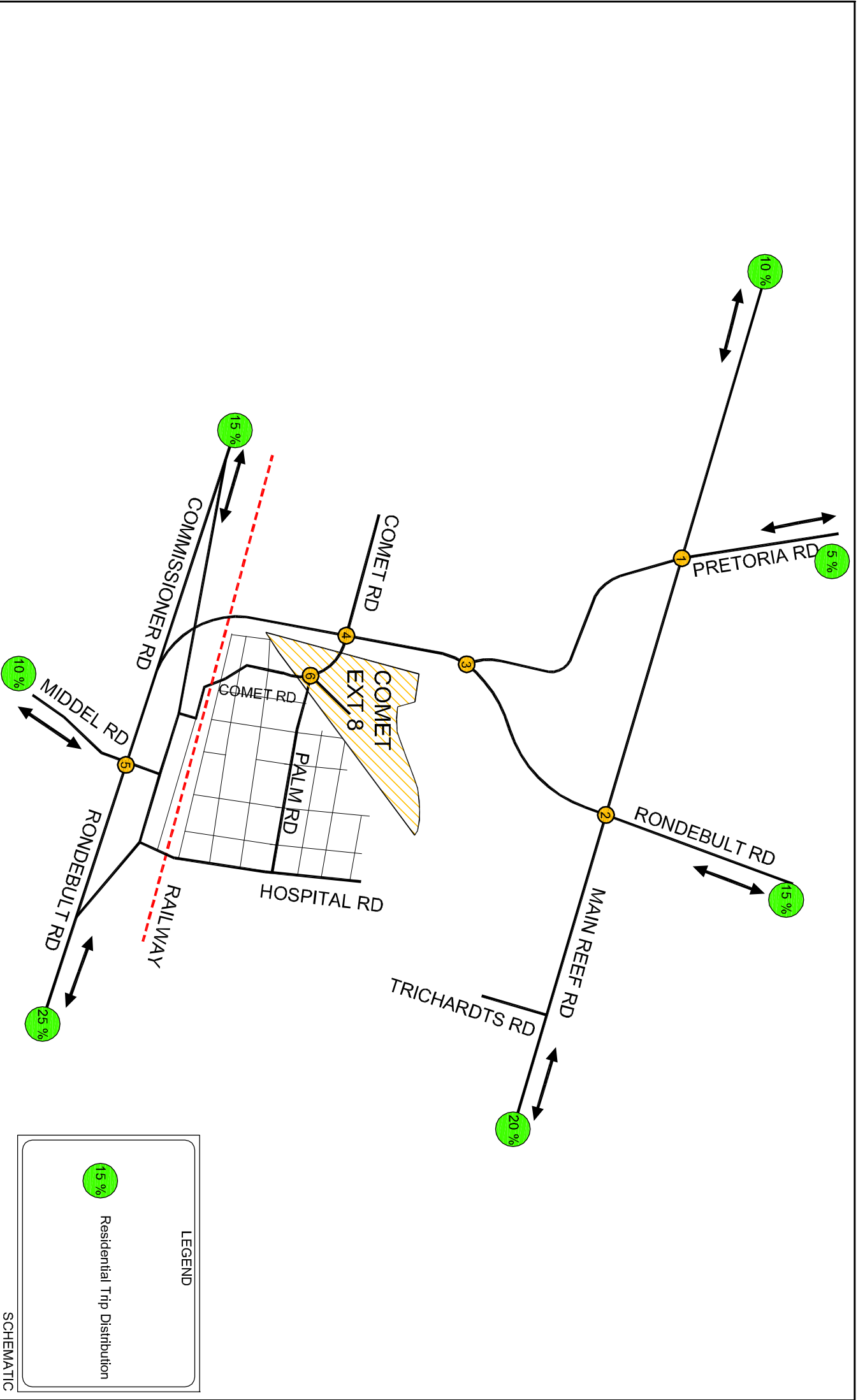
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	TRAFFIC SIGNAL
	STOP CONTROLLED
	EXCLUSIVE LEFT LANE
	THROUGH LANE
	EXCLUSIVE RIGHT LANE
	SHARED LANE
	TRAFFIC CIRCLE
	SLIP LANE

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Comet X8

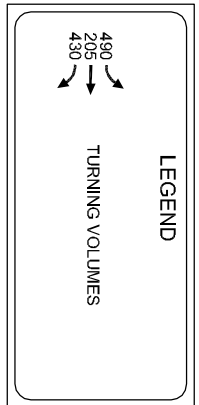
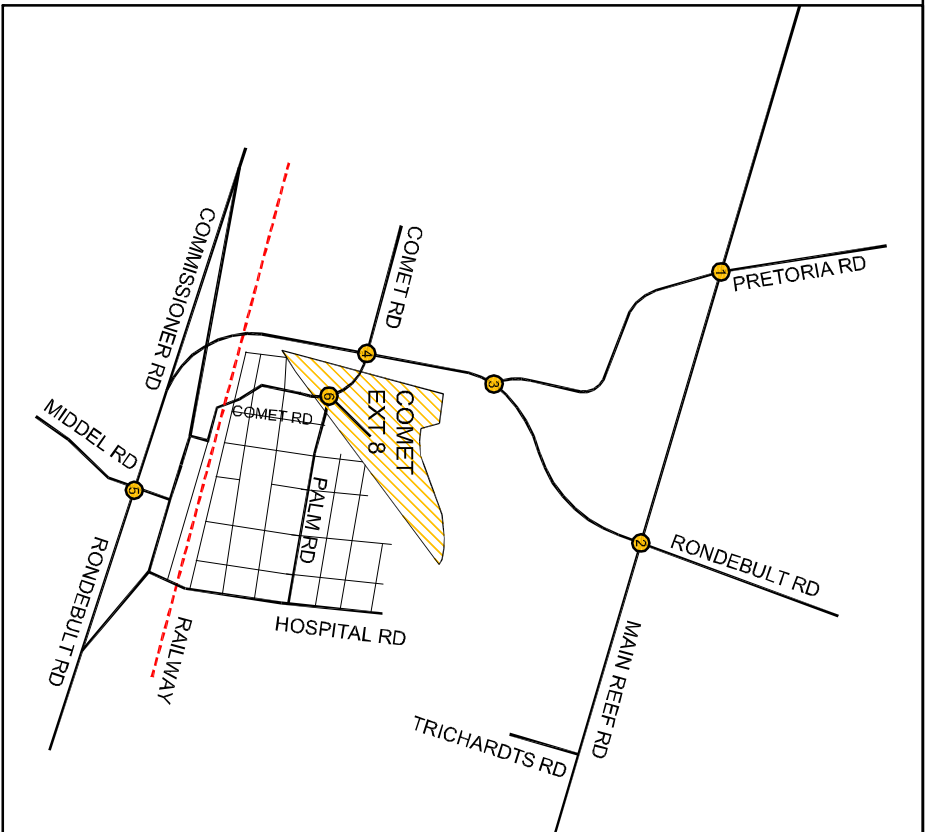
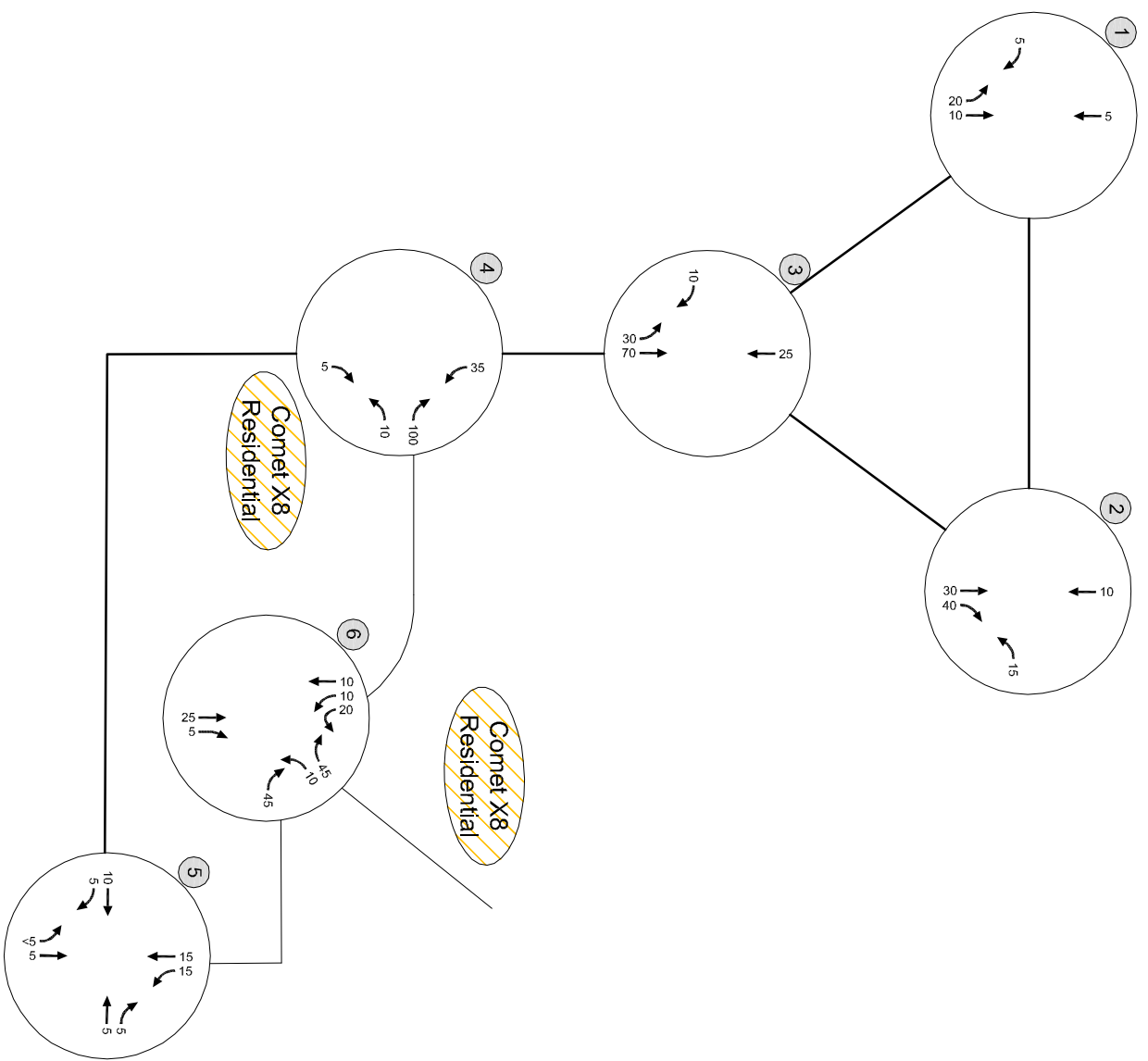
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Trip Assignment  
AM Peak Hour

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Comet X8

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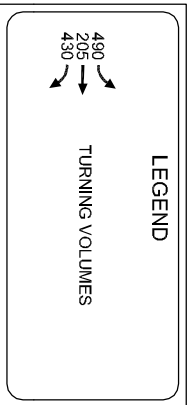
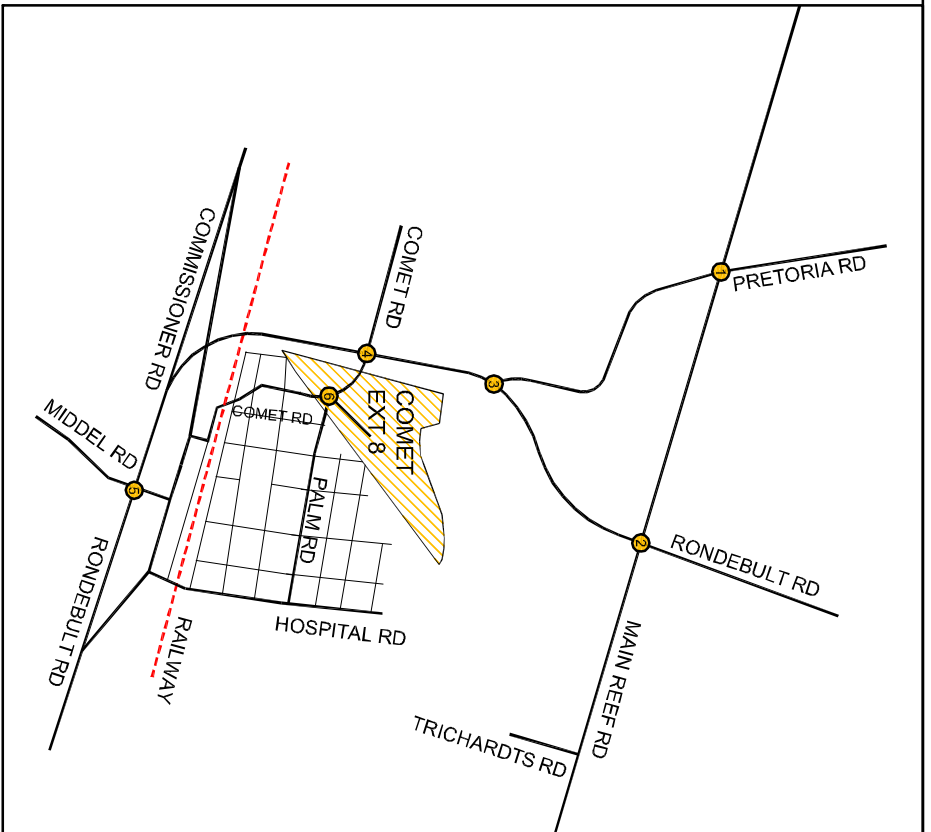
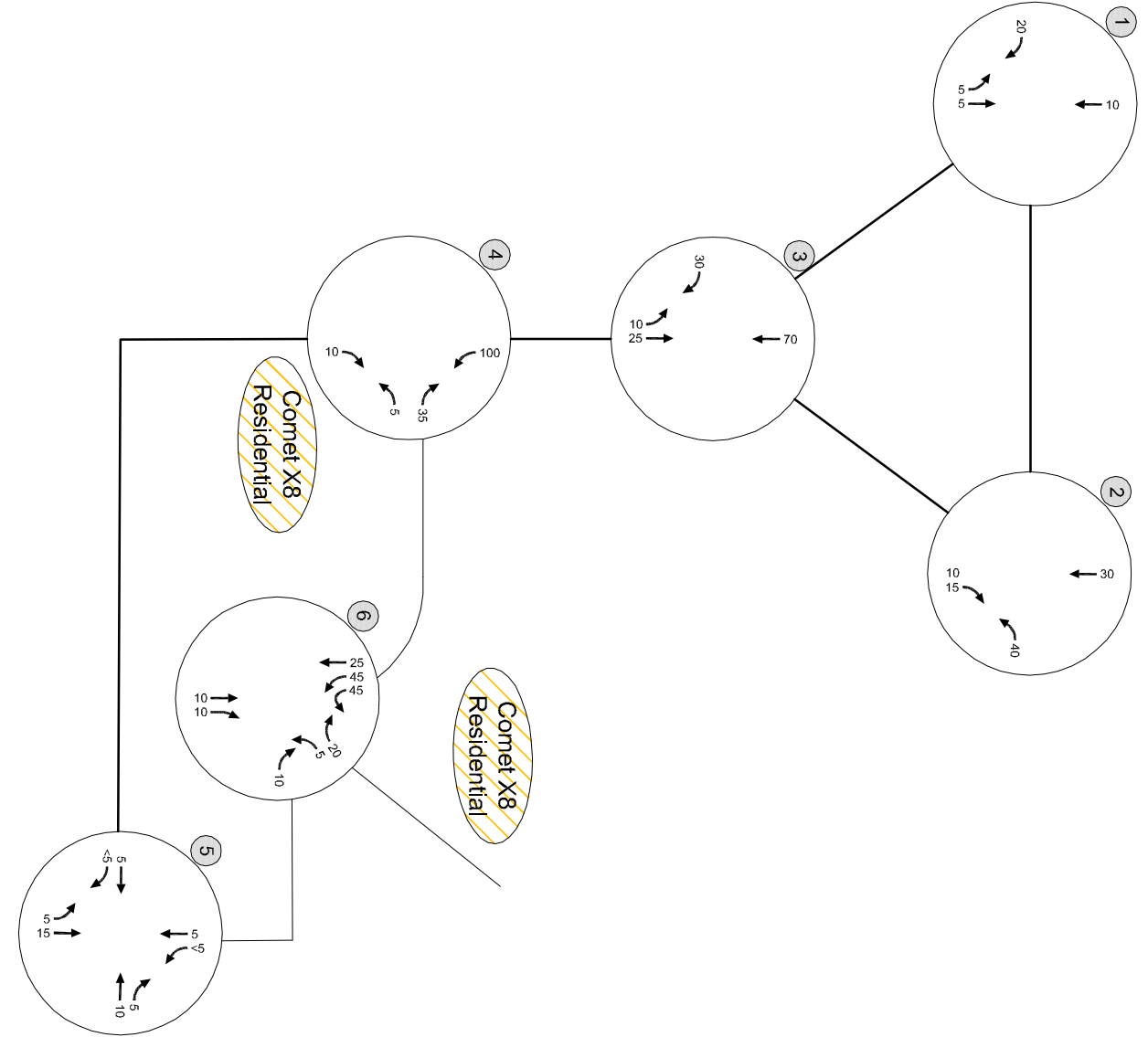
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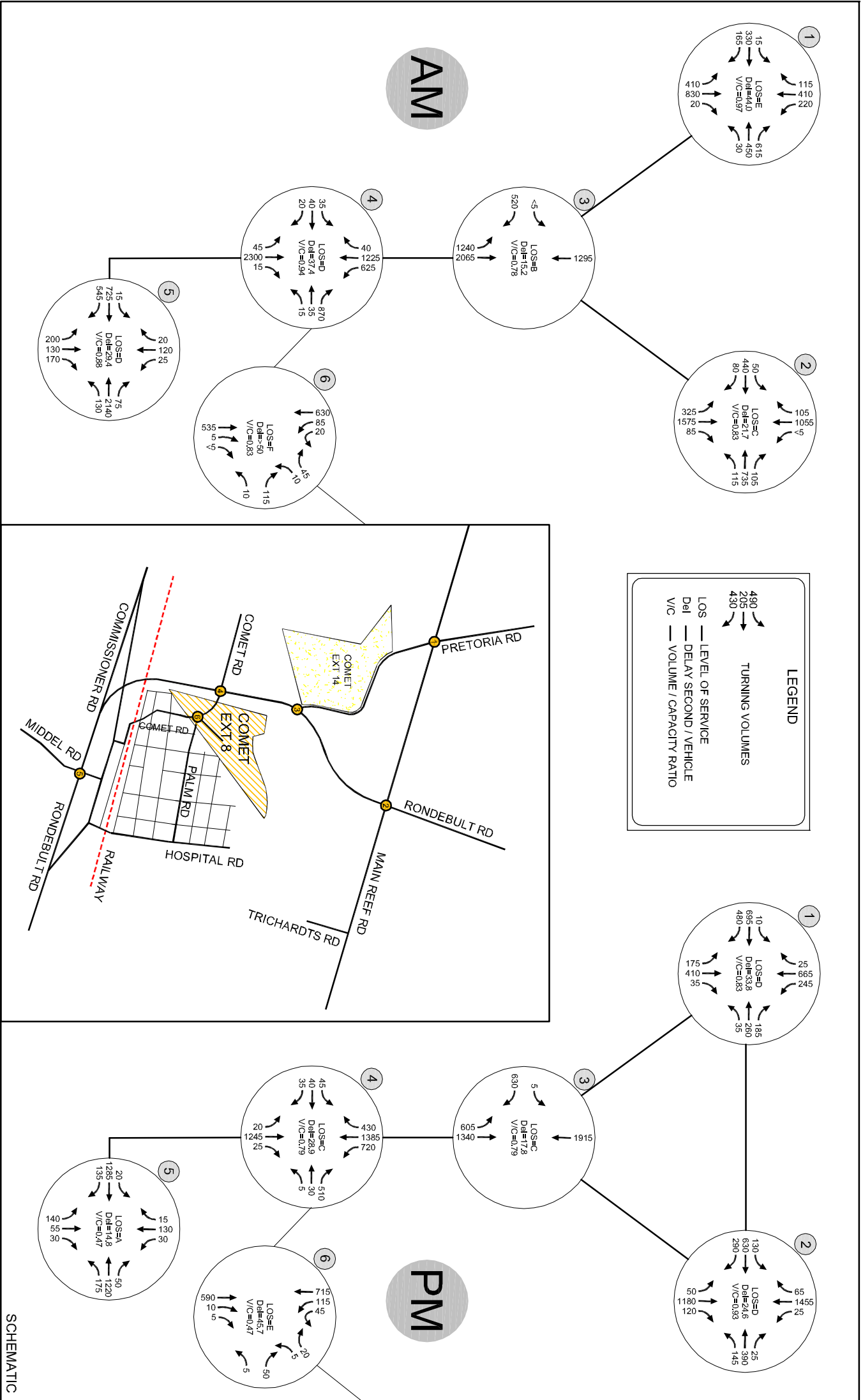
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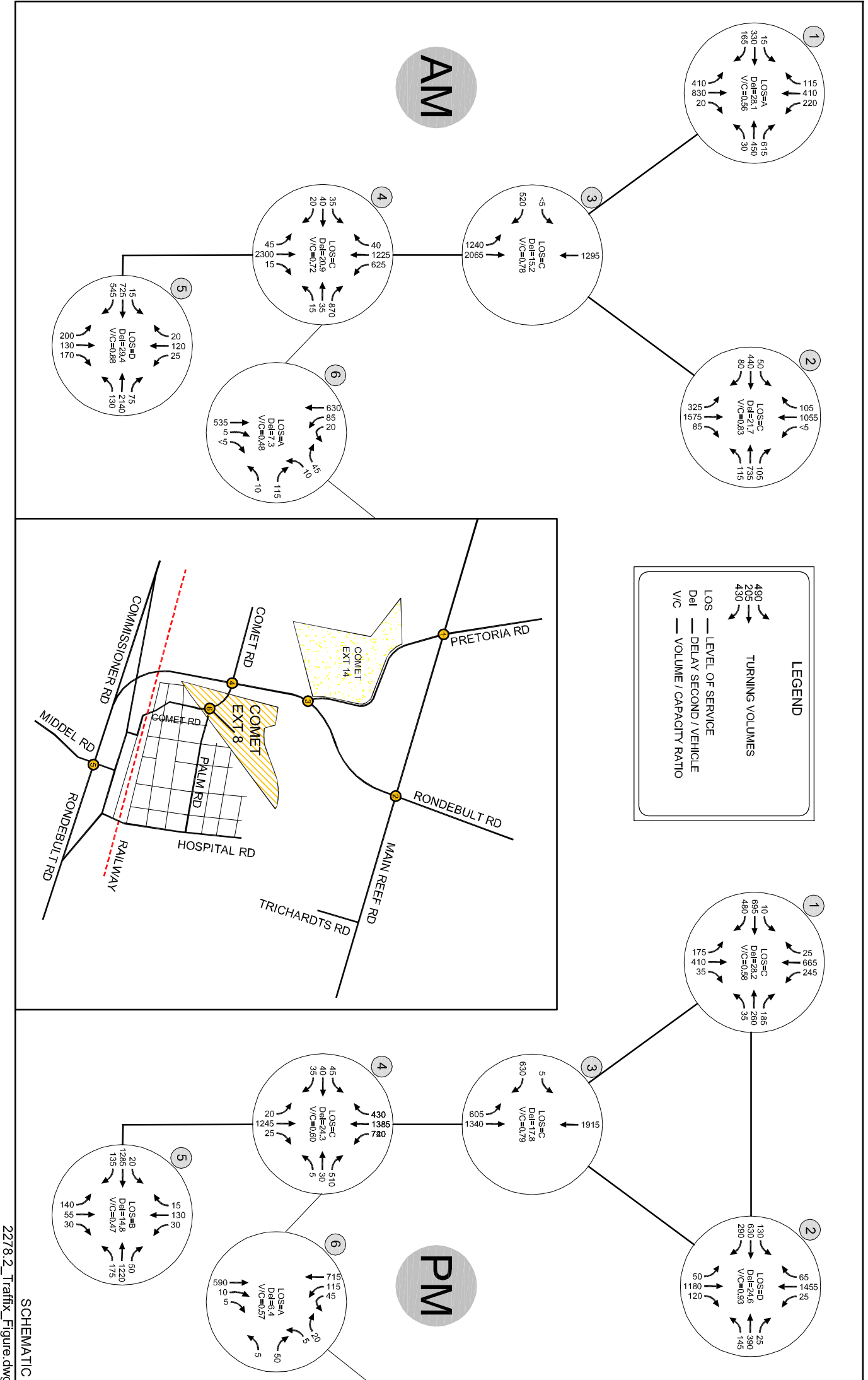




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Comet X8

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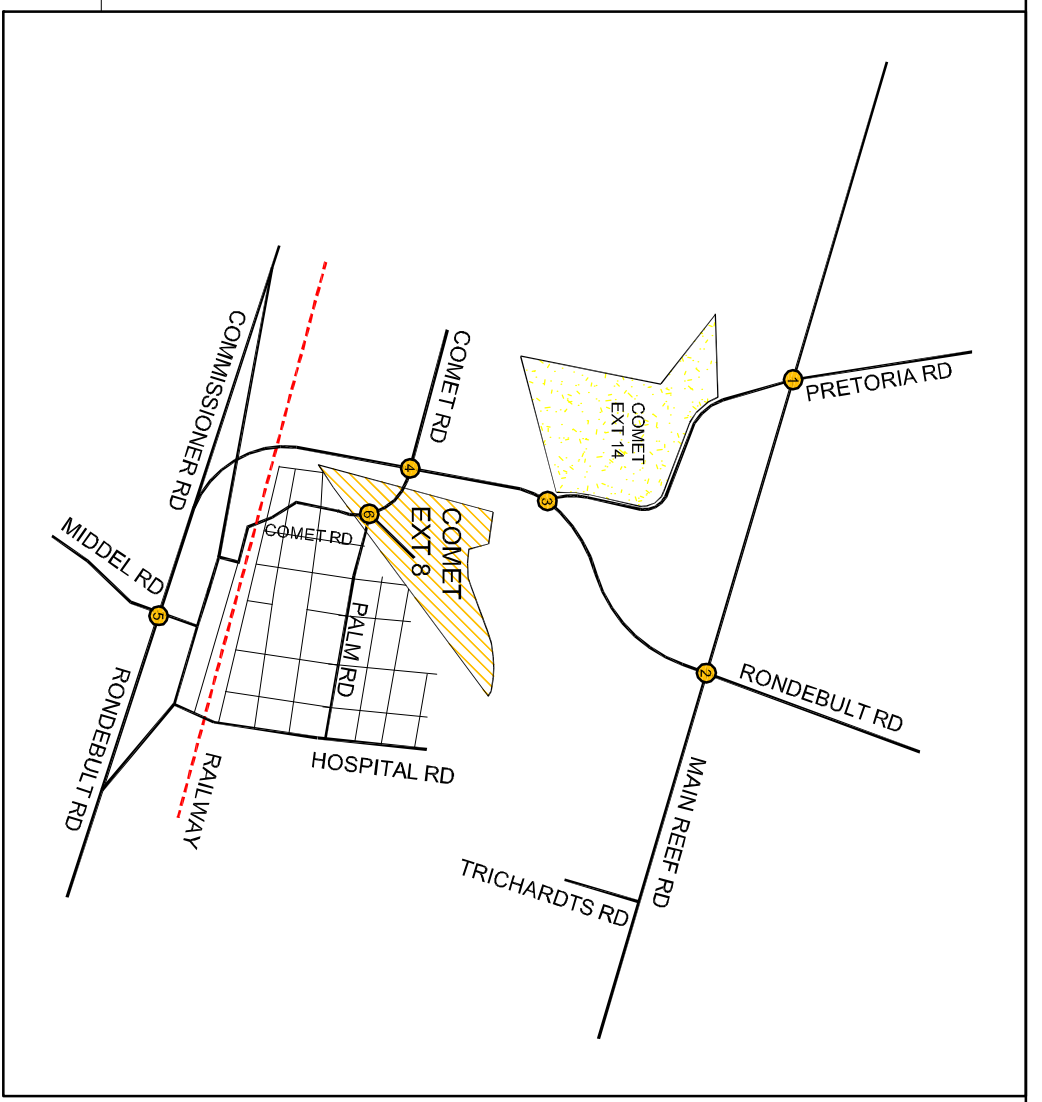
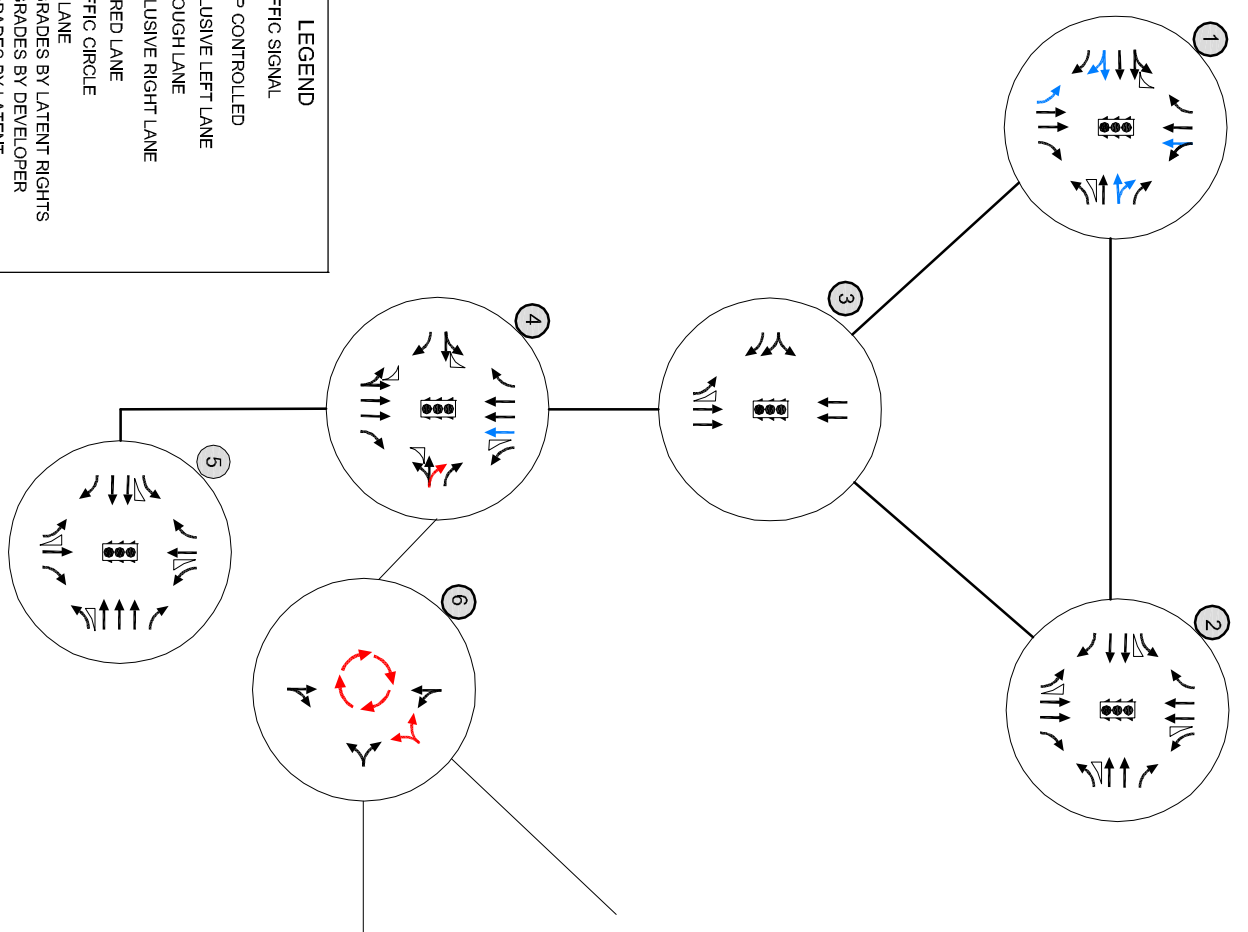
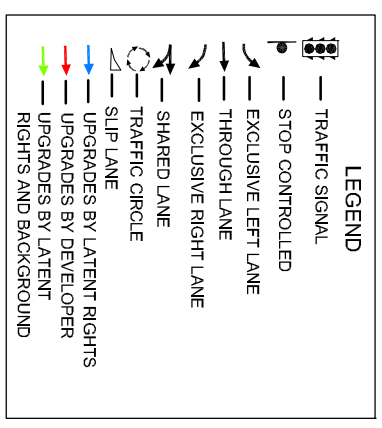
Scenario 2: Proposed Intersection  
Geometry

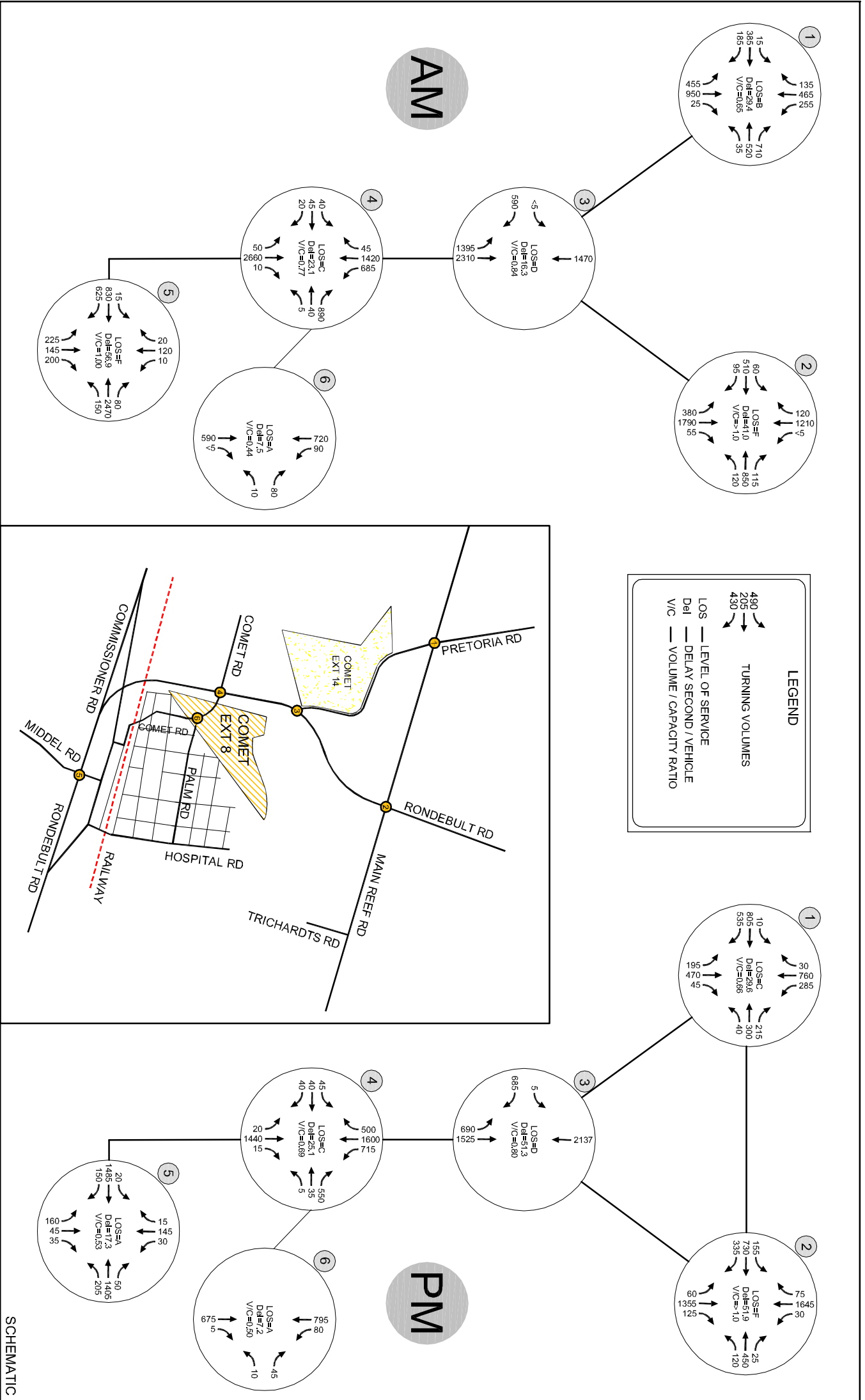
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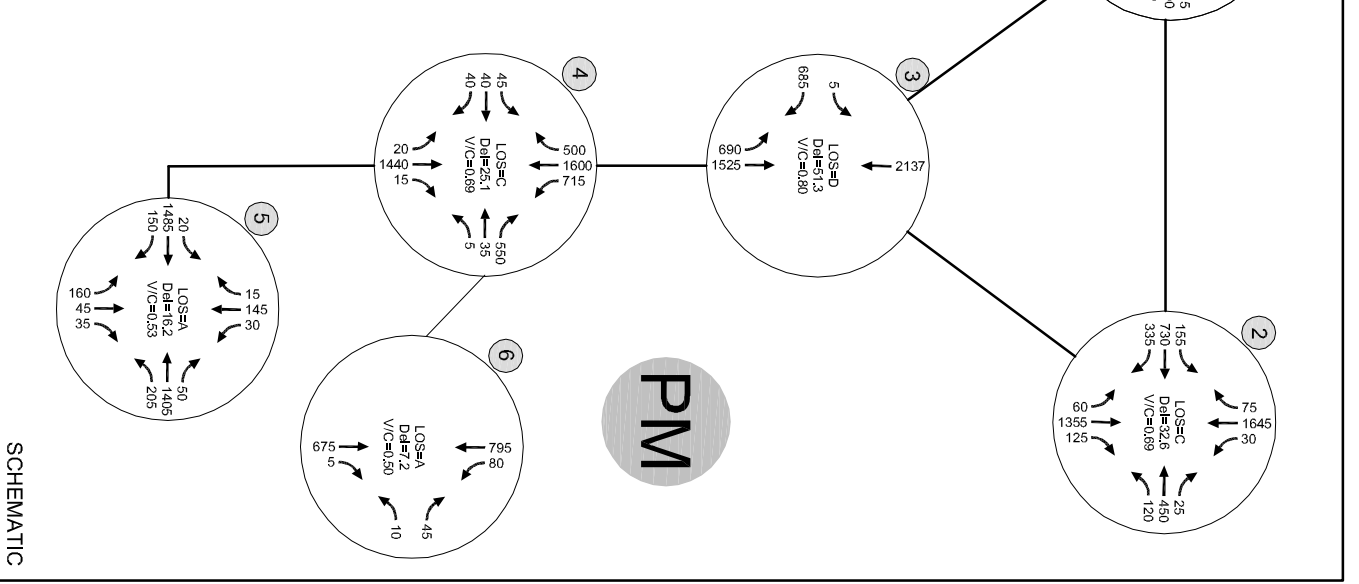
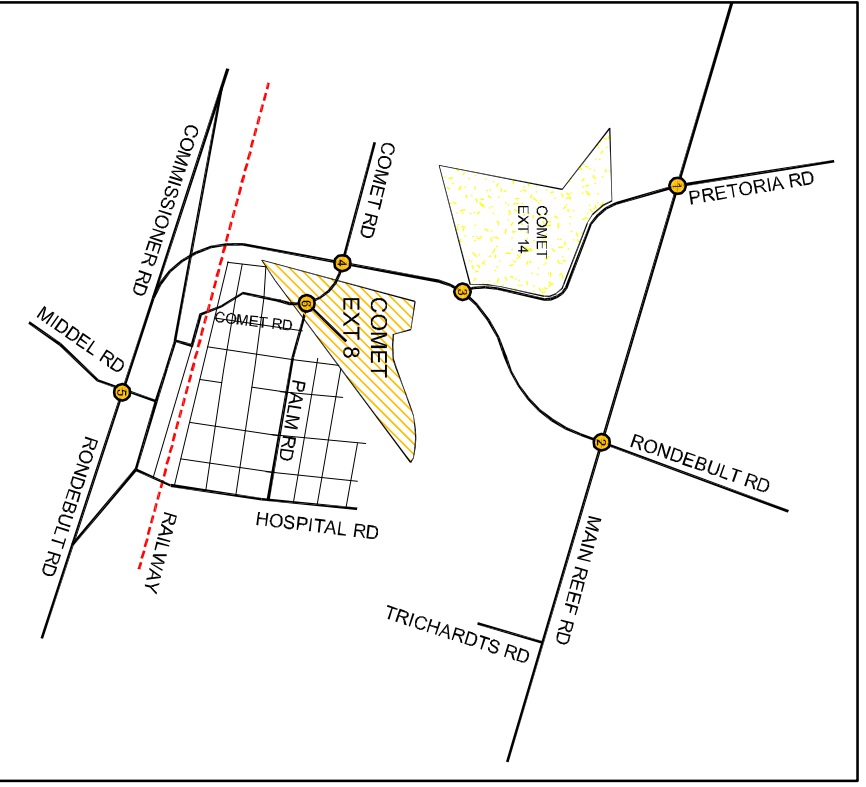
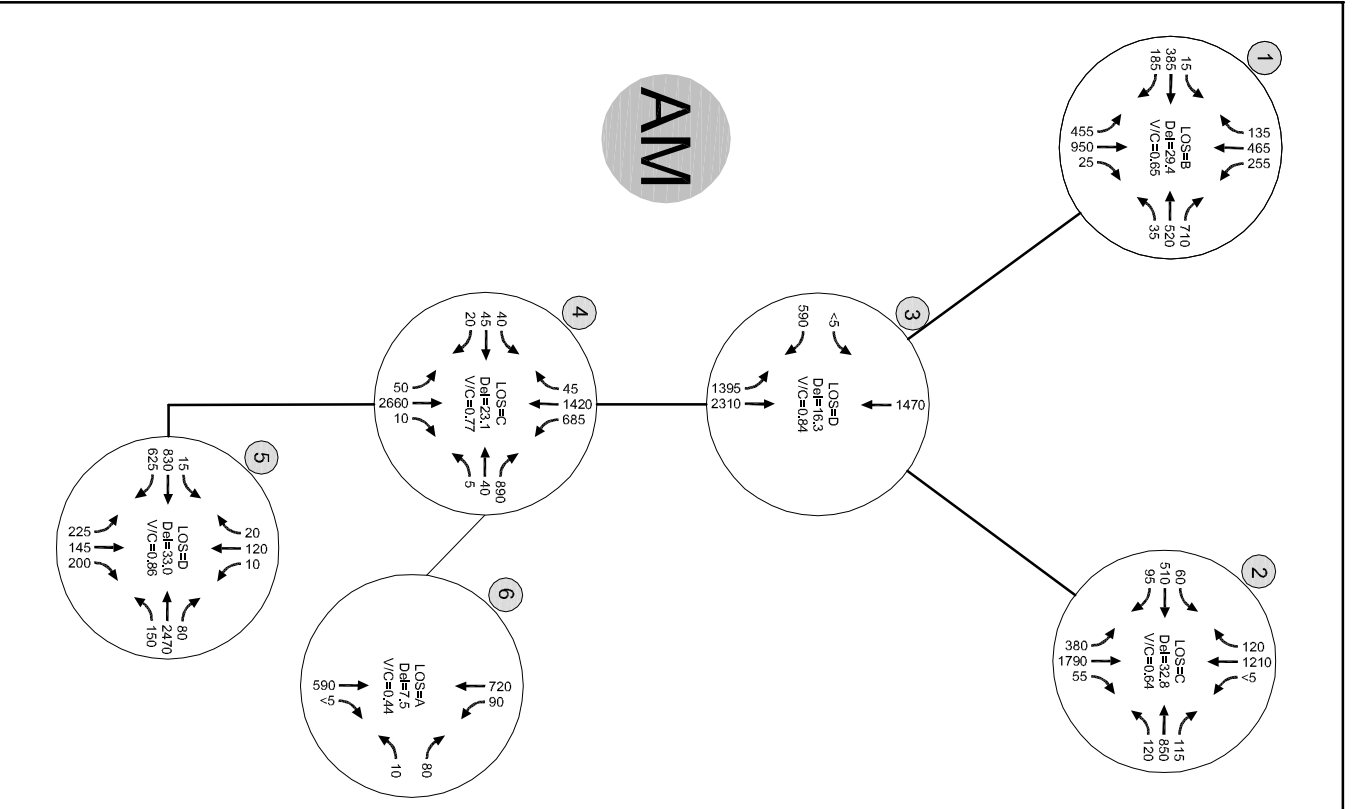
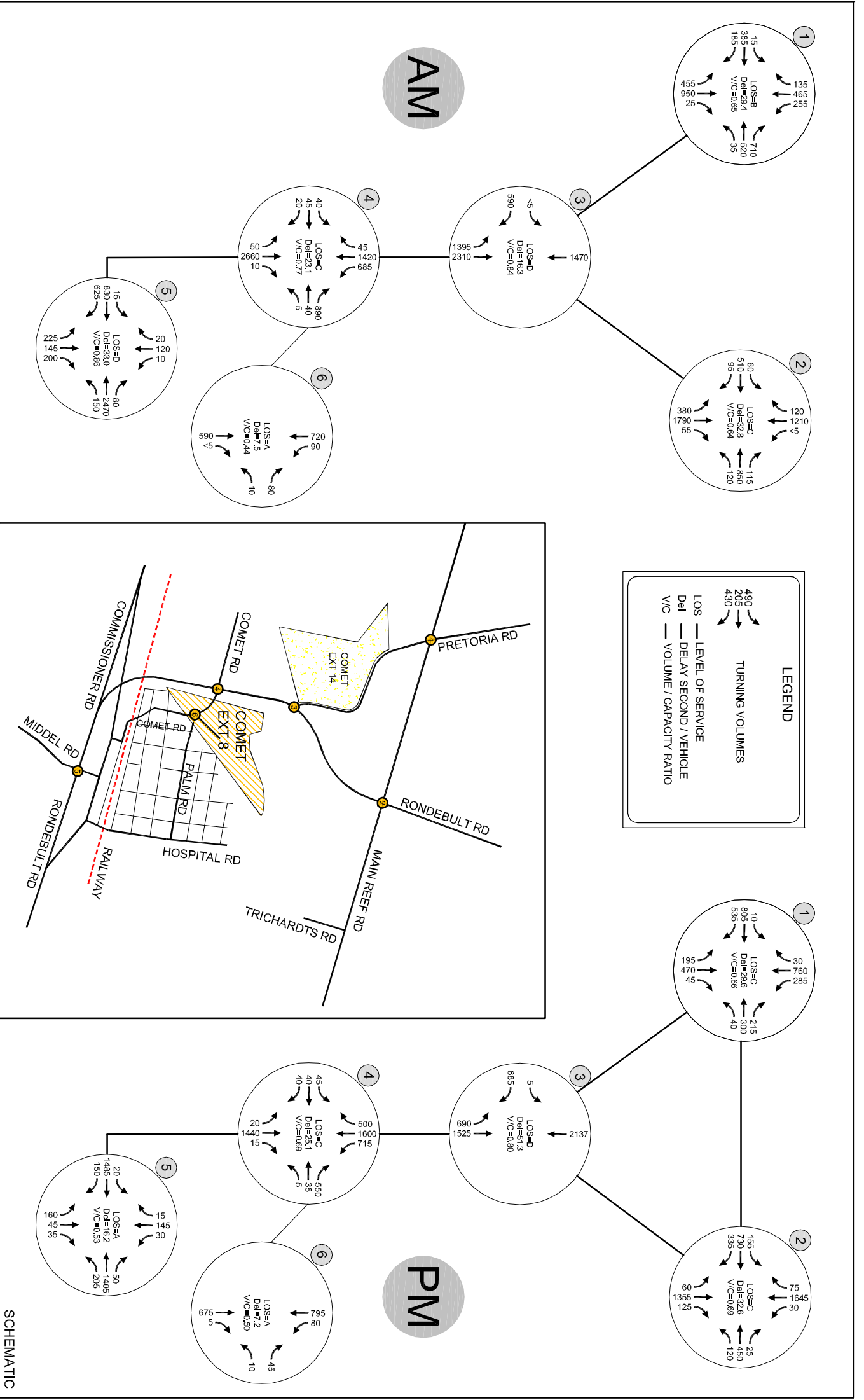
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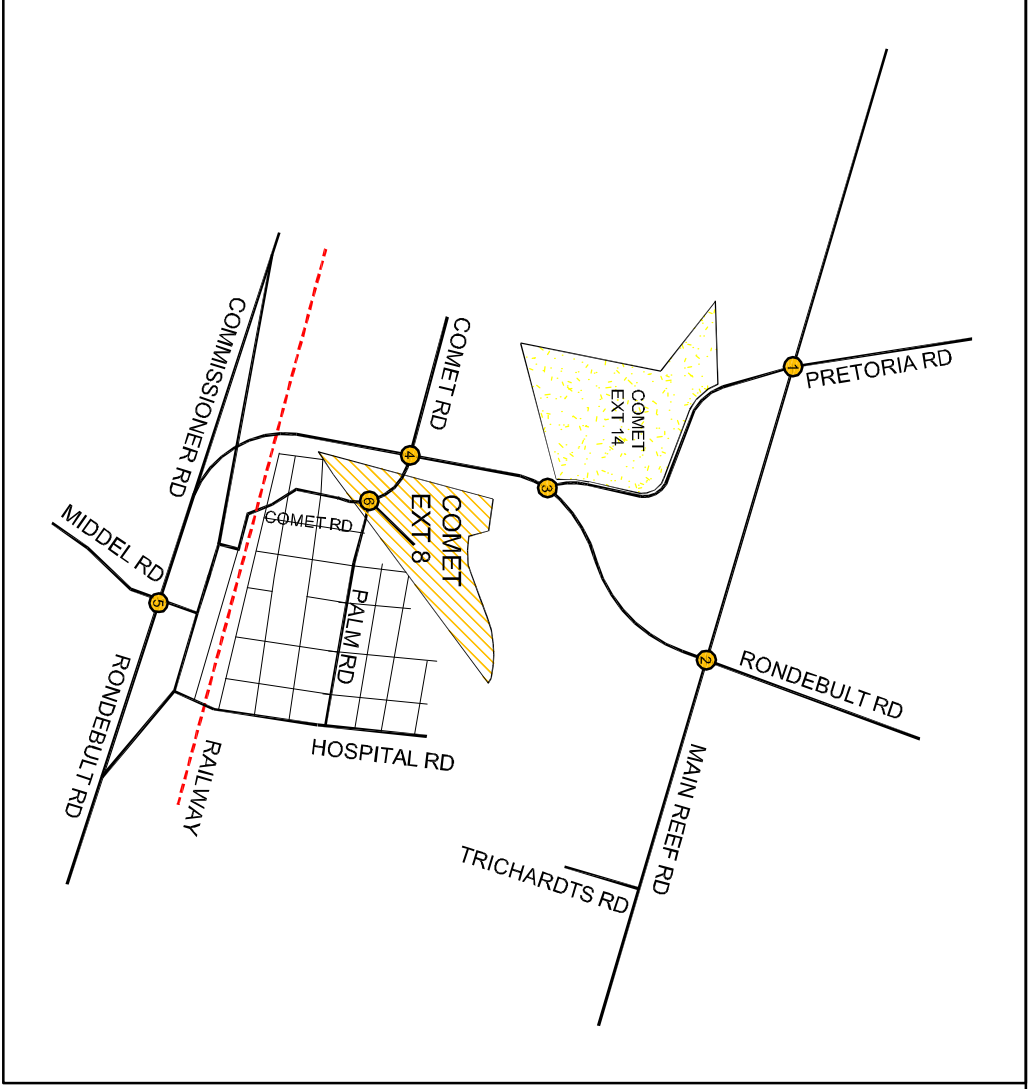
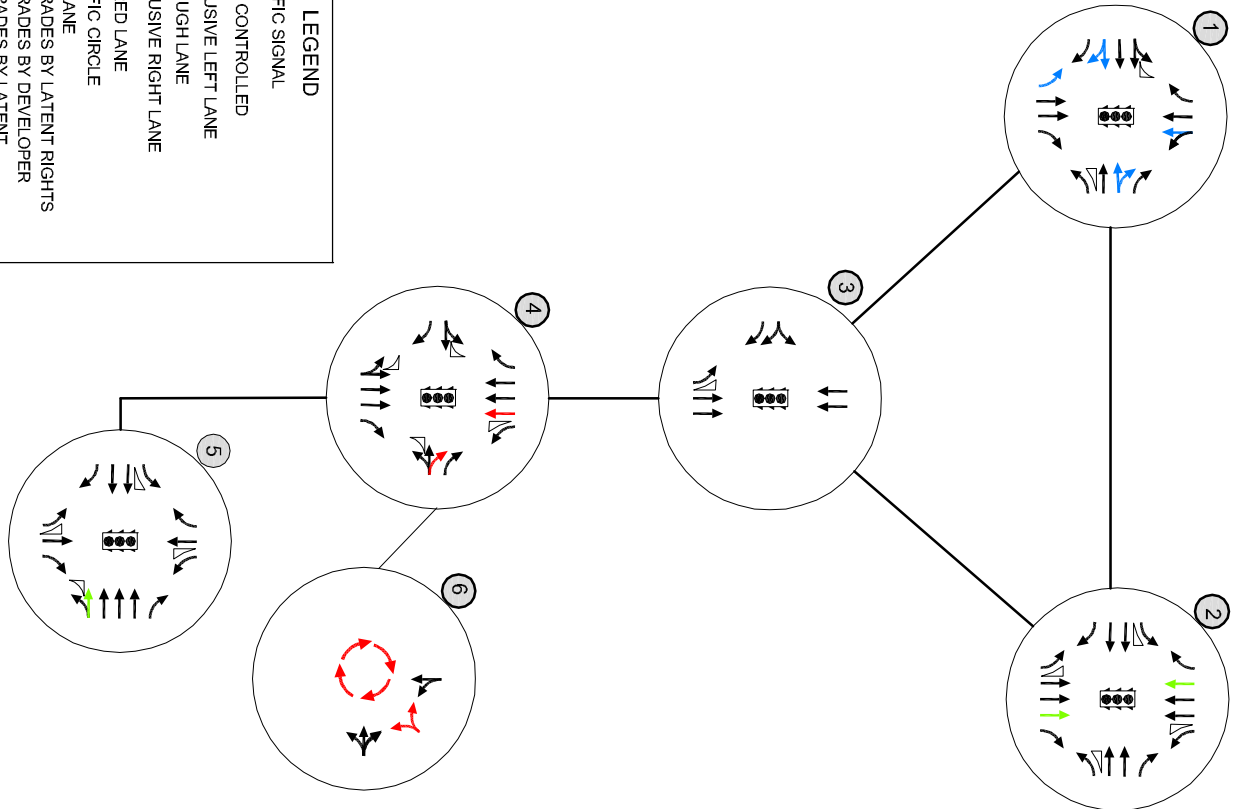
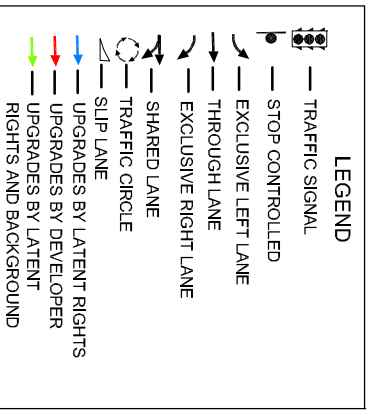
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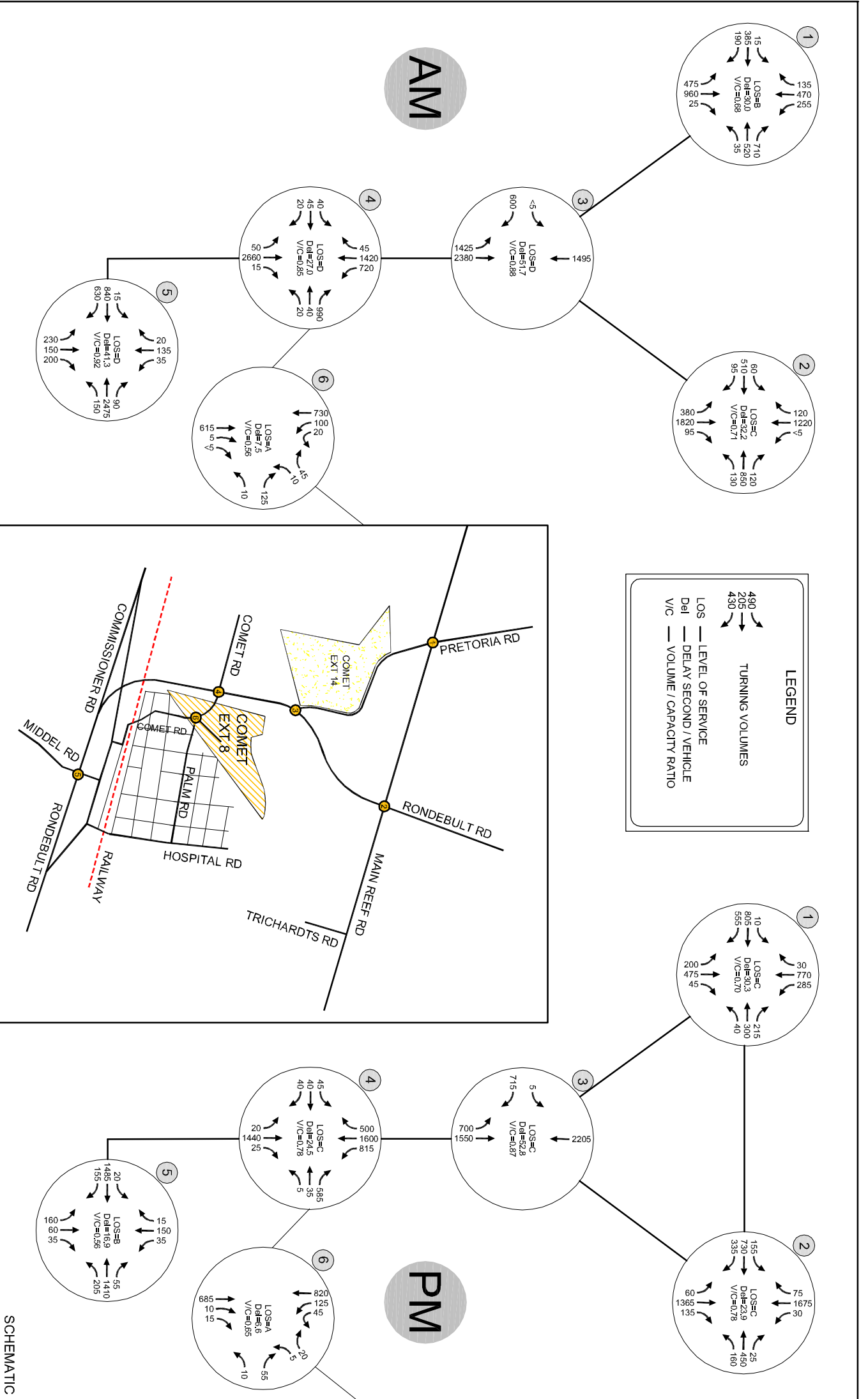
Scenario 3: Proposed Intersection  
Geometry

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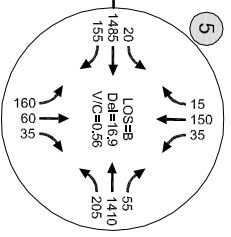
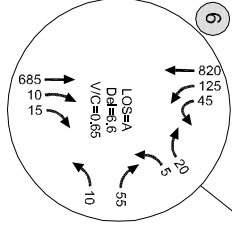
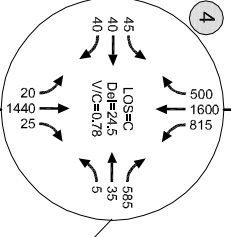
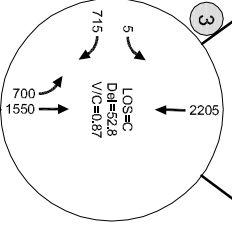
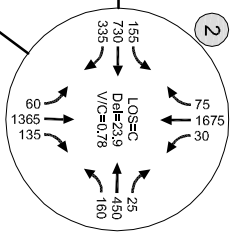
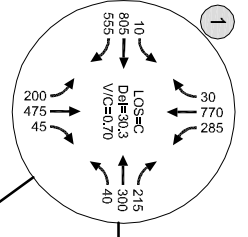
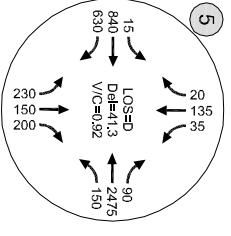
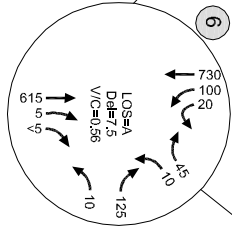
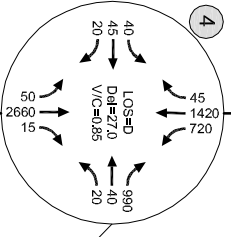
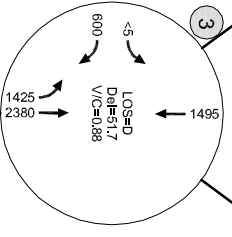
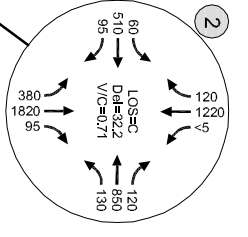
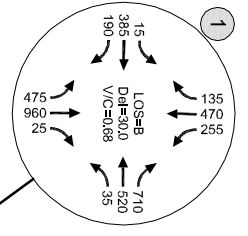
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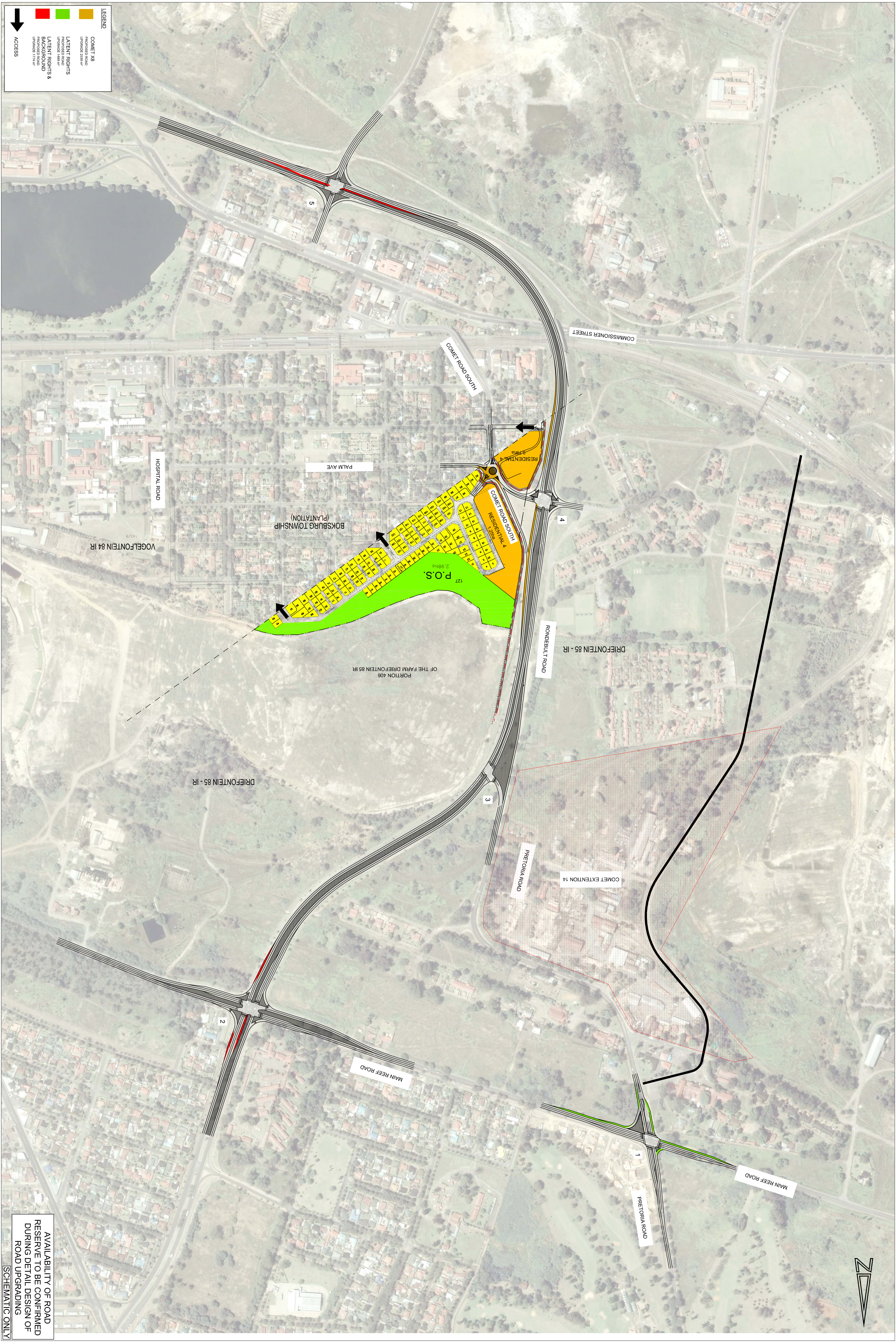


**LEGEND**

- LOS — LEVEL OF SERVICE
- Del — DELAY SECOND / VEHICLE
- V/C — VOLUME / CAPACITY RATIO
- TURNING VOLUMES







**LEGEND**

<span style="color: yellow;">■</span>	COMET 78 PROPOSED ROAD UPGRADE 253M
<span style="color: green;">■</span>	LATENT RIGHTS UPGRADE 448M
<span style="color: red;">■</span>	LATENT RIGHTS & BACKGROUND UPGRADE 519M
	ACCESS

**its**  
Infrastructure  
Solutions

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Pretorius Street, Pretoria  
0001  
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Fax: (012) 246 8806  
www.its.co.za

**Waterfall**  
Investment Company

CLIENT		APPROVED	
Project No.	0000	Board	
Project Name		Date	
Project Manager		No.	
Project Engineer		Date	
Project Designer		No.	
Project Checker		Date	
Project Approver		No.	
Project Sign-off		Date	

DATE	BY	REVISION

**COMET EXTENSION 8 TIS**

**GENERAL LAYOUT AND PROPOSED ROAD UPGRADES**

SCALE: 1:2500

DATE: 2013/06/05

FIGURE 8

AVAILABILITY OF ROAD  
RESERVE TO BE CONFIRMED  
DURING DETAIL DESIGN OF  
ROAD UPGRADE

SCHEMATIC ONLY



**COMET EXTENTION 8  
(PORTION 406 OF THE FARM DRIEFONTEIN 85 IR)**

**APPENDIX C  
PROPOSED TOWNSHIP LAYOUT**



# EAST RAND PROPRIETARY MINES

R/85  
DRIEFONTEIN 85 - IR



PROPOSED ACCESS FROM PROVINCIAL ROUTE

RONDEBULT ROAD

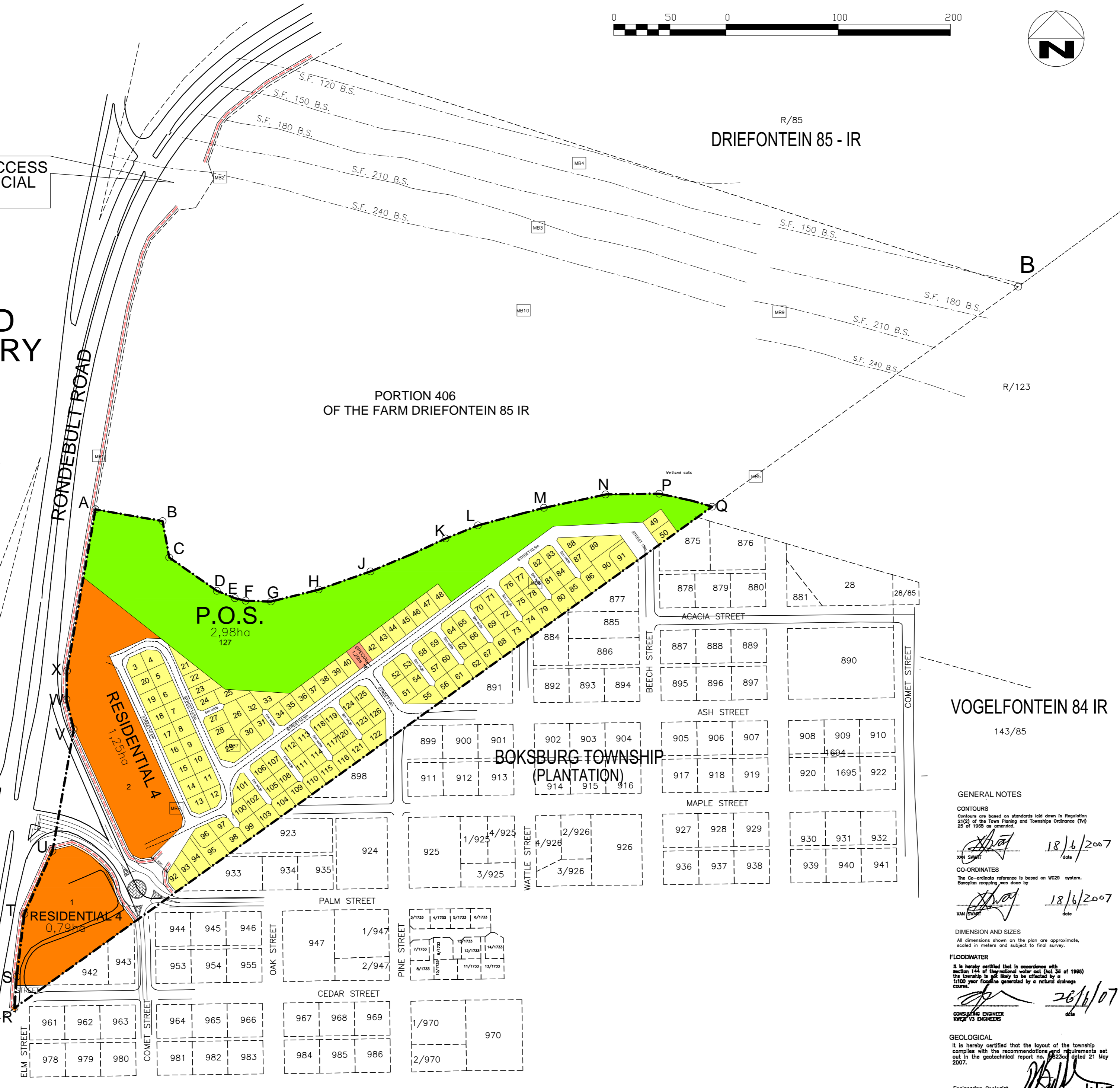
R/85  
DRIEFONTEIN 85 - IR

PORTION 406  
OF THE FARM DRIEFONTEIN 85 IR

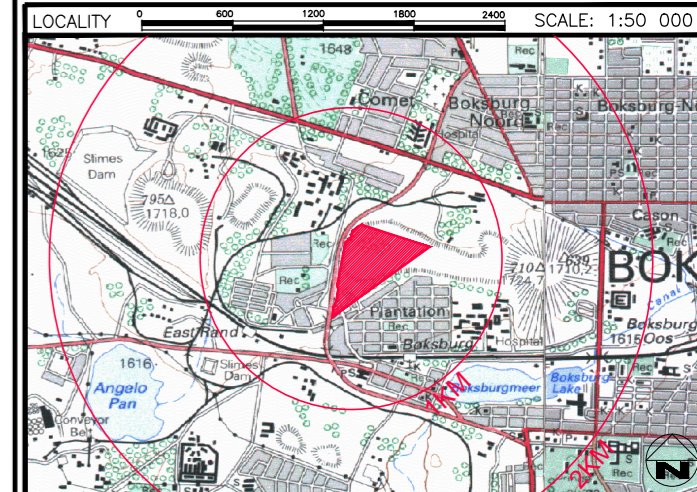
R/123

VOGELFONTEIN 84 IR  
143/85

BOKSBURG TOWNSHIP  
(PLANTATION)



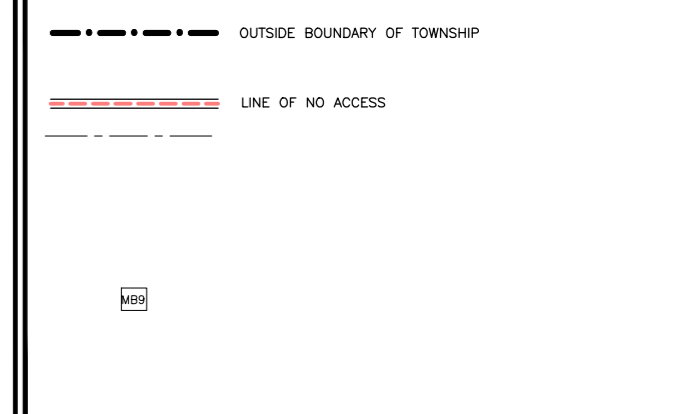
**PROJECT**  
PROPOSED TOWNSHIP  
**COMET EXTENSION 8**  
SITUATED ON PART OF PORTION 406 OF THE FARM DRIEFONTEIN No. 85 I.R.  
LOCAL AUTHORITY : EKURHULENI METRO MUNICIPALITY  
DISTRICT : BOKSBURG  
GEODETICAL SYSTEM : WG 29°



**LAND USE**

ZONING	LAND USE	ERF NUMBERS	No. OF STANDS	AREA OF STANDS	% OF AREA
RESIDENTIAL 1	DETACHED HOUSES 240m <sup>2</sup> ERVEN	3-40,42-126	123	3,39	32,31
RESIDENTIAL 4	RESIDENTIAL DWELLING UNITS 60u/ha	1-2	2	2,04	19,44
SPECIAL	CONSERVATION	41	1	1,25	11,91
P.O.S.	PARK	127	1	2,98	28,4
STREETS				0,83	7,94
TOTAL			127	10,49	100%

**GENERAL NOTES**  
THE FIGURE ABCDEFGHIJKLMNOPQRSTUVWXYZ REPRESENTS OUTSIDE BOUNDARY OF THE PROPOSED TOWNSHIP Comet Extension 8 BEING APPROXIMATELY 10,49 ha IN EXTENT.



**GENERAL NOTES**

**CONTOURS**  
Contours are based on standards laid down in Regulation 21(2) of the Town Planning and Townships Ordinance (No) 25 of 1985 as amended.

*[Signature]* 18/6/2007  
date

**CO-ORDINATES**  
The Co-ordinate reference is based on WGS 84 system. Basepoint mapping was done by

*[Signature]* 18/6/2007  
date

**DIMENSION AND SIZES**  
All dimensions shown on the plan are approximate, scaled in meters and subject to final survey.

**FLOODWATER**  
It is hereby certified that in accordance with section 144 of the national water act (Act 36 of 1996) the contours are not likely to be affected by a 1:100 year floodline generated by a natural drainage course.

*[Signature]* 26/6/07  
date  
CONSULTING ENGINEER  
NICEP 03 ENGINEER

**GEOLOGICAL**  
It is hereby certified that the layout of the township complies with the recommendations and requirements set out in the geotechnical report no. 28230c dated 21 May 2007.

Engineering Geologist.....  
Firm INTRACONSULT

**AMENDMENTS**

1. CONTOURS ADDED.	07.02.2007	D. vd Merwe
2. NEW GEOLOGICAL ZONES ADDED.	23.05.2007	D. vd Merwe
3. ERVEN AMENDED.	24.05.2007	D. vd Merwe
4. GEOTECHNICAL ZONATION AMENDED	19.06.2007	D. vd Merwe
5. AMENDMENTS FROM TRAFFIC ENGINEER	12.07.2007	D. vd Merwe
6. SUBSTATION FOR ELECTRICAL SERVITUDE	12.07.2007	D. vd Merwe
7. TRAFFIC CIRCLE ADDED, AMEND RES. ERVEN	17.10.2007	D. vd Merwe
8. INCORPORATE COMMENTS FROM CLIENT	30.10.2007	D. vd Merwe
9. AMENDMENT TO LAYOUT	05.08.2008	C. Bloye
10. CLIENT NAME AMENDED.	07.10.2008	C. Putter
11. WETLANDS ADDED ON LAYOUT.	17.11.2009	C. Putter
12. RE-LAYOUT TO KEEP EXISTING ROAD STRUCTURE	05.02.2010	C. Putter

**CLIENT**  
**SOUTHNET**

TOWN PLANNER: D. vd Merwe  
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SCALE 1:2 500  
DRAWING No. Comet8Lay  
C12/05.02.10  
LAYOUT PLAN STATUS: CIRCULATION

**URBAN DYNAMICS**  
TOWNSHIP & REGIONAL PLANNERS

37 EMPIRE ROAD  
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TEL: (+27 11) 482-9959  
E-MAIL: danie@urbandynamics.co.za

**COMET EXTENTION 8  
(PORTION 406 OF THE FARM DRIEFONTEIN 85 IR)**

**APPENDIX D  
PREVIOUS COMMENTS**





**Ekurhuleni**  
METROPOLITAN MUNICIPALITY

Messrs Kwezi V3 Engineers  
P O Box 36155  
MENLO PARK  
0102

**Fax No : (012) 425 6300**

Attention : Mr J.G Zandberg

Enquiries : Johann Marx  
Tel : (011) 874 6971  
Fax : (011) 874 6682  
Our ref : 15/3/3 (JM 11.24)  
Date : 07 January 2009

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c/o Queen & Spilsbury Street  
**GERMISTON**

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**GERMISTON**  
1400

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[www.ekurhuleni.com](http://www.ekurhuleni.com)

Dear Sir

**SERVICES REPORT FOR THE PROPOSED DEVELOPMENT COMET EXTENTION 8**

Your letter, 219270 dated 29 October 2008, has reference.

Kindly, however, take note that Rondebult Road (K 90) was constructed entirely by the erstwhile Boksburg City Council and therefore belongs to Ekurhuleni Metropolitan Municipality and not Gautrans as mentioned in your report. Similarly the maintenance of Main Reef Road was carried over to Council by Gautrans long ago.

Your proposal to do the construction according to Gautrans standards is however acceptable.

This Directorate would like to have the impact of this development on Rietfontein/Pretoria to the north of the development up to the N12 Freeway and Rondebult Road to the south of the development to the N17 Freeway modelled and the improvement that need to be done to improve the level of service pointed out in order to plan and budget therefor.

It is incomprehensible why the improvements to the Rondebult/Middle Road intersection are necessary and this Directorate wishes to know what impact this Development will have on Comet Road South.

It is further difficult to understand the reasoning for the widening of Rondebult between intersections 3 and 4 only. Why is it not necessary to widen Rondebult Road beyond these two intersections?. Further comment will be given on receipt of an amended report.

Yours faithfully

  
**G J STRYDOM (Pr Eng)**  
**REGIONAL DIRECTOR: SOUTH**  
**INFRASTRUCTURE SERVICES:**  
**ROADS, TRANSPORT AND CIVIL WORKS**  
/mr



**Ekurhuleni**  
METROPOLITAN MUNICIPALITY

**Regional Office: South**

**Infrastructure Services:**  
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Messrs ITS  
29 De Havilland Crescent  
Pro Park  
Building 1  
PERSEQUOR PARK  
0020

**Attention: Dr P Pretorius**

**Fax: 012 349 1665**

Enquiries : Rethabile Rapiletsa  
Tel : 011 8746628  
Fax : 011 8746682  
Our ref : 17/5/3/3 (RR 11.278)  
Date : 11 December 2008

Dear Sirs


**TRAFFIC IMPACT STUDY (REVISION 1) : COMET EXTENSION 8**

Your report dated September 2008 has reference.

The contents of the traffic impact study for the proposed Comet Extension 8 is found to be in order, but this Directorate would have expected to have the Main Reef / Trichardts intersection modelled as well.

Please update the study in this regard, for submission and further comments and/or approval by this Directorate.

Yours faithfully

  
**G J STRYDOM (Pr Eng)**  
**REGIONAL DIRECTOR: SOUTH**  
**INFRASTRUCTURE SERVICES:**  
**ROADS, TRANSPORT AND CIVIL WORKS**

Copy: Urban Dynamics  
**Attention: D Van Der Merwe**  
**Fax: 011 482 4131**

## REFERENCES

- Department of Transport, *South African Trip Generation Rates Manual*
- Institute of Transportation Engineers. *Trip Generation, 8<sup>th</sup> Edition. 2008.*
- Transportation Research Board. *Highway Capacity Manual, 2010*