Cedar Woods

Glenside Development Code Amendment

TRANSPORTATION INVESTIGATION

WGA150244

WGA150244-RP-TT_0002_C

2 August 2024

Revision History

REV	DATE	ISSUE	ORIGINATOR	CHECKER	APPROVER
A	26/06/2024	Draft	AH	AK	JZ
B	05/07/2024	Final	AH	AK	JZ
C	23/07/2024	Final	AH	AK	JZ
D	02/08/2024	Final	AK	JZ	JZ

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1 EXECUTIVE SUMMARY

The Proponent, Cedar Woods, is proposing an amendment to the Planning and Design Code (Code) as it pertains to Certificate of Title – Volume 6290 Folio 638. The proposed Code Amendment seeks to increase the maximum building heights in a designated Affected Area to facilitate the development of gateway buildings.

This proposal is consistent with the 30-Year Plan for Greater Adelaide as it seeks to promote uplift, increase densities around key transport corridors, enhance connectivity and improve liveability more generally.

The proposal is envisaged to support the development of four buildings, one of which will be up to 20 levels in height. Through increased building heights, the proposal anticipates a modest increase in dwelling yields. Currently, the Glenside development is projected to yield 1,043 dwellings. Through this Code Amendment, the number of dwellings is expected to increase to 1,200 (+/-50), representing an approximate increase of 157 dwellings or 15%.

This report presents professional technical advice as it relates to the impacts this proposed increase in yield is anticipated to have upon signalised intersections abutting the development and how it can be accommodated.

The proposed Code Amendment is estimated to generate up to 62 additional peak hour trips. The distribution of these additional trips has been assigned consistently with the former rezoning plan for Glenside Development with the majority of traffic passing through the following intersections:

- Greenhill Road and Fullarton Road
- Fullarton Road and Mulberry Road, and

Traffic generated from the Code Amendment was assessed using SIDRA intersection modelling software. The overall impact of the additional traffic from the Glenside Development was found to result in a minor increase in average delay experienced by traffic at these intersections adjacent to the Glenside Development. However, the primary intersection in Greenhill and Fullarton Roads has up to 7,000 veh/ hour travelling through it during the AM peak period. The daily trips vary by up to 5% during peak hours with the proposed increase representing less than a 1% change. Considering this increase in trips falls within the daily stochastic variation of the traffic through this intersection, the impact on the intersection performance is not considered to result in any noticeable decline in service.

Fullarton Road and Mulberry Drive intersection performs well within an acceptable level of service and the proposed increase is catered for at this location.

The traffic analysis undertaken indicates that no intersection upgrades are warranted, with both signalised intersections on Fullarton Road at Greenhill Road and Mulberry Road estimated to operate within an acceptable level of service. The proposed Code Amendment is not considered to result in overloading of the arterial and local road network in the immediate vicinity of Development.

2 BACKGROUND

2.1 Glenside Development

The Glenside development site is located on Fullarton Road, southeast of the Adelaide central business district (CBD). The site is adjacent to the Adelaide Parklands and broadly bound by Greenhill Road (north), Fullarton Road (west), Glen Osmond Road (south) and Conyngham Street (east). The site falls under the City of Burnside Council area.

The Glenside Development is being developed in two stages, Stage 1 located south of Mulberry Road and Stage 2 located north of Mulberry Road.

The Glenside Development is currently estimated to be nearly 30% completed with 293 dwellings already occupied (as of December 2023) and an additional 262 dwellings (Townhouses and apartments) are under construction, slated for occupation towards mid to end of 2024. Once finished, the Glenside Development is expected to provide 1,043 dwellings (apartments and townhouses).

Stage 1 of the Glenside Development comprised of 61 townhouses and 358 apartments, a total of 419 dwellings. As of December 2023, 61 townhouses and 170 apartments in Stage 1 are currently occupied with the remaining 188 apartments under construction.

Stage 2 of the Glenside Development comprised of 157 townhouses and 467 apartments, a total of 624 dwellings. As of December 2023, 62 townhouses are currently occupied with 72 townhouses currently under construction.

The location of the Glenside Development has the following advantages.

- Proximity to the Adelaide CBD, just 2.6 kilometres away.
- Location along a key transit corridor with high-frequency public transport.
- Adjacency to the Adelaide Park Lands, offering ample recreation and relaxation opportunities.
- Nearby health, education, and recreation services.

Figure 1 Glenside Development Master Plan

The Planning and Design Code identifies that the Affected Area is within an Urban Corridor (Living) Zone with the following Overlays currently applying:

- Airport Building Heights (Regulated) (All structures over 45 metres)
- Advertising Near Signalised Intersections
- Affordable Housing
- Design
- Future Road Widening
- Heritage Adjacency
- Hazards (Flooding - Evidence Required)
- Major Urban Transport Routes
- Noise and Air Emissions
- Prescribed Wells Area
- Regulated and Significant Tree
- State Heritage Place (24960)
- State Heritage Place (24961)
- State Heritage Place (8384)
- State Heritage Place (8385)
- Traffic Generating Development
- Urban Transport Routes
- Water Resources

2.2 Adjacent Road Network

The major roads immediately adjacent to the Affected Area are Greenhill Road and Fullarton Road, with a future connection to Conyngham Street via Amber Woods Drive. Both Greenhill Road and Fullarton Road are significant arterial roads connecting the CBD which intersect at a major intersection immediately to the northwest of the Glenside development site.

Public Transport

Greenhill Road has bus services that connect the CBD with the eastern suburbs. The following bus routes service Greenhill Road near the Affected Area, 580, 820, 821 and 822.

2.3 Existing Traffic Generation

As mentioned in Section 2.1, about 30% of the Glenside Development is completed (293 out of forecast 1,043 dwellings) and another 25% of dwellings (262) are under construction.

The former rezoning for Glenside Development used the following peak hour trip generation rates:

- High density (apartment) = 0.3 trips / dwelling
- Medium-density (townhouses) = 0.5 trips / dwelling

The Glenside Development, with a forecast 1,043 dwellings was estimated to generate 357 peak hour trips.

Applying the trip generation rates from the Glenside DPA, the existing 293 dwellings were estimated to generate 113 peak hour trips.

It was assumed that one tradesperson vehicle is visiting the Glenside site for every two dwellings under construction. Thus, the 262 under construction dwellings were estimated to generate in the order of 130 peak hour trips.

Refer to table below for trip generation summary.

Table 1 Trip Generation – Existing Situation (December 2023)

TRIP GENERATOR	DWELLINGS	TRIP RATE (VEH TRIPS/DWELLING)	TOTAL PEAK HOUR TRIPS
Existing Situation			
High-Density (Apartments)	170	0.3	51
Medium-Density (Townhouses)	123	0.5	62
Tradespersons	262	0.5	130
Total	**555**		**243**

Under existing conditions, 293 occupied dwellings and 262 under construction dwellings, were estimated to generate up to 243 peak hour trips. Which represents nearly 66% of the total Glenside Development's traffic (357 peak hour trips).

Adopting a conservative approach, the existing Glenside development was assumed to generate 50% of the total traffic at full development (1,043 dwellings)

2.4 Traffic Distribution

The DPA traffic distribution broadly included the following:

- 75% of the development travelling to/from north on Fullarton Road (north of Greenhill Road)
- 10% of the development travelling to/from west on Greenhill Road (west of Fullarton Road)
- 10% of the development travelling to/from south on Fullarton Road (south of Mulberry Road)
- 5% of the development travelling to/from east on Greenhill Road (east of Conyngham Street)

The proposed distribution assumes 5% of the development traffic to use the internal road network (Cypress Crescent, Dahlia Lane and Amber Woods Drive) to access Conyngham Street to travel east on Greenhill Road.

However, due to construction activities in the northeastern corner of the Glenside Development site (Stage 2) access to Cypress Crescent and Dahlia Lane is currently not provided. Therefore, 5% of development traffic assumed to travel via Conyngham Street is rerouted via Mulberry Road, Fullarton Road and Greenhill Road. At the completion of the proposed development, the traffic currently rerouted via Mulberry Road and Fullarton Road will shift to Conyngham Street. Current traffic distribution is included in Figure 2.

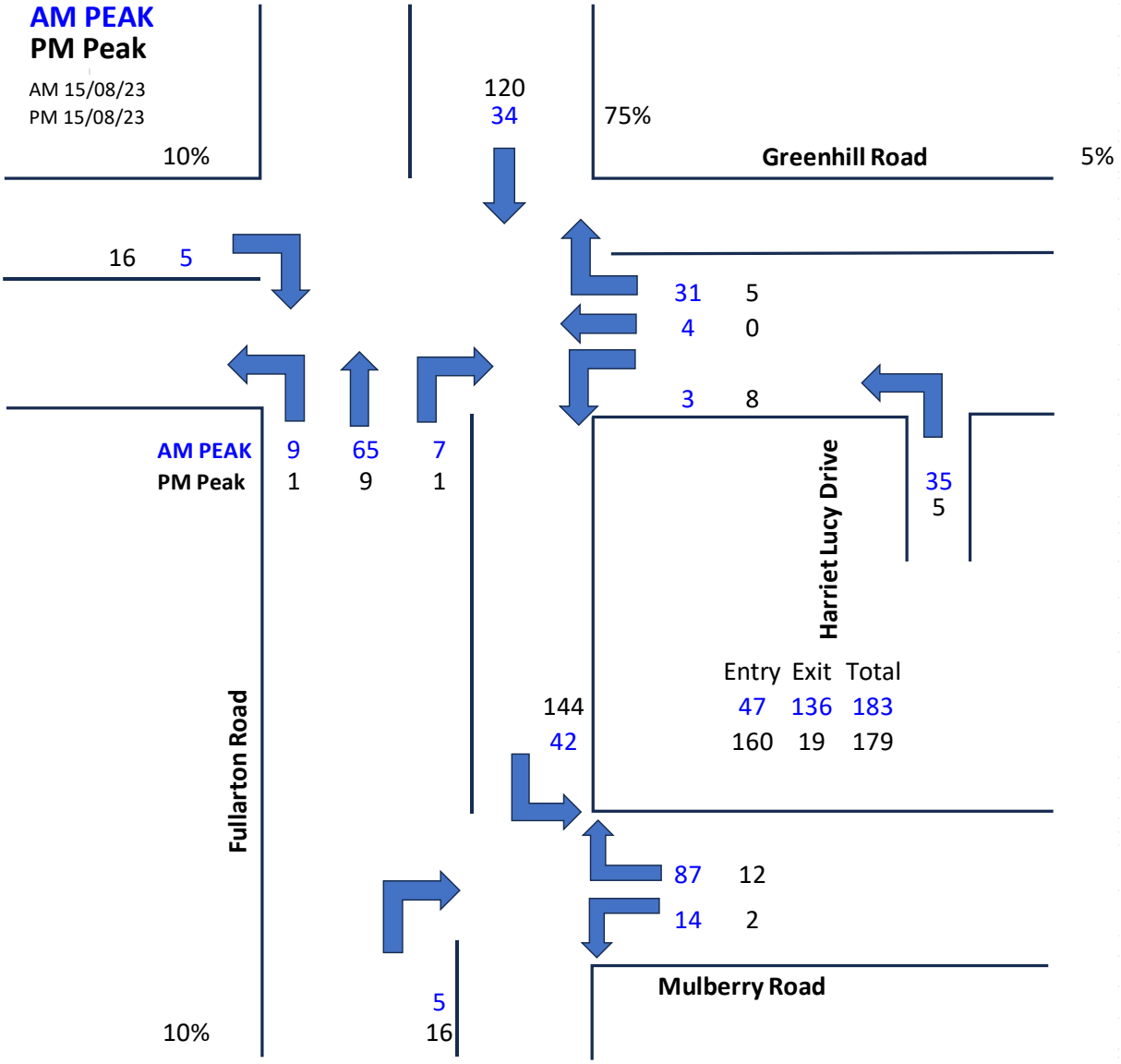


Figure 2 Existing (December 2023) Trip Distribution

2.5 Intersection Performance

Refer to Section 4.3 for intersection performance assessment undertaken using SIDRA intersection modelling software.

3 PROPOSED CODE AMENDMENT

3.1 Affected Area

The developer (Cedar Woods) is proposing to increase the height of the apartment buildings on parcels 6, 7, 8 and 9 located in Stage 2 of the Glenside Development. An increase in building height is undertaken through a Code Amendment process. Land parcels 6, 7, 8 and 9 and abutting roads (impacted by the proposal) are referred to as 'Affected Area' for the Code Amendment, as shown in Figure 3.

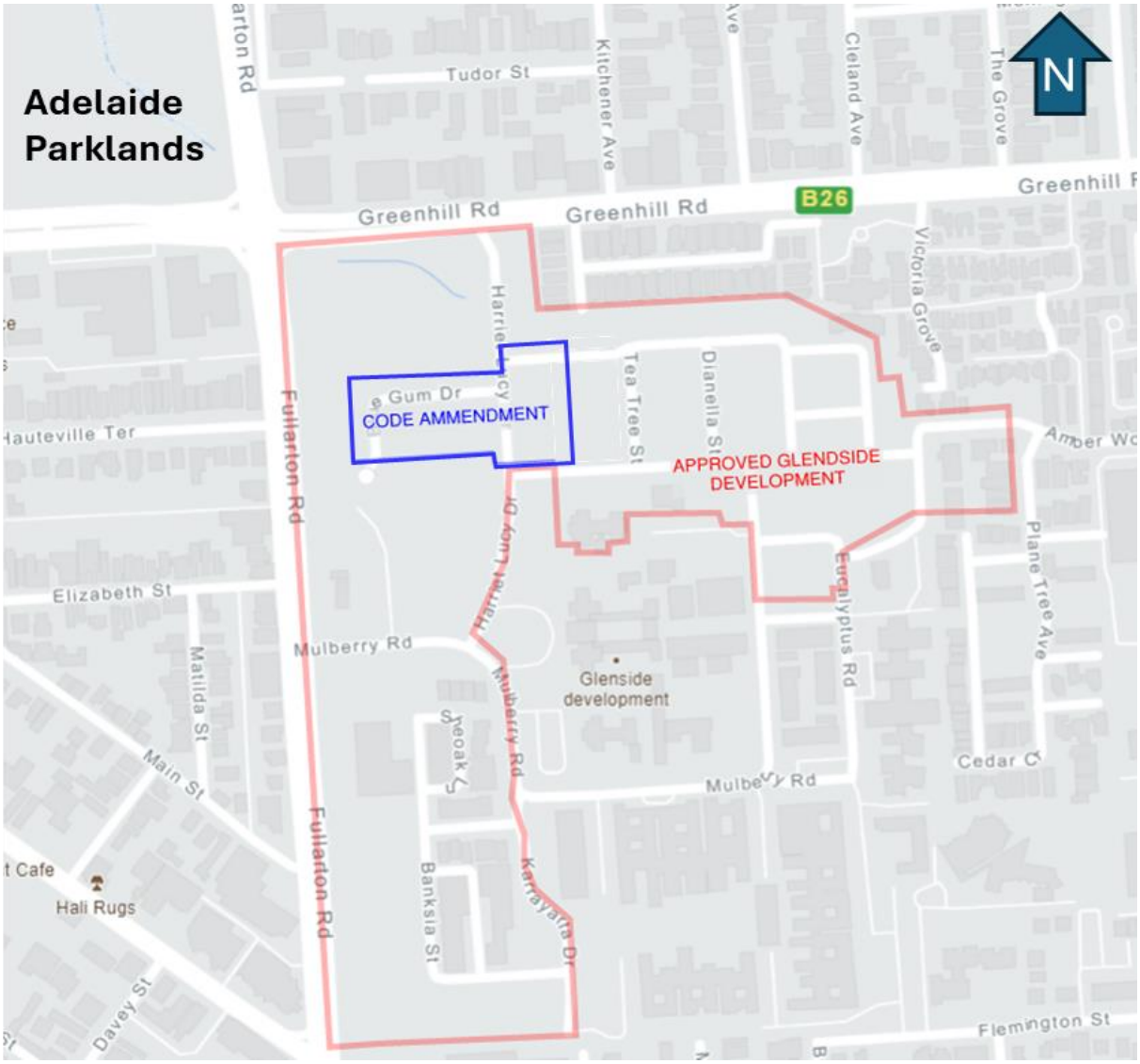


Figure 3 Affected Area – Location Details

The Affected Area is slated for construction of high-rise apartment buildings with a total of 309 apartments on parcels 6, 7, 8 & 9, as shown in Figure 4.

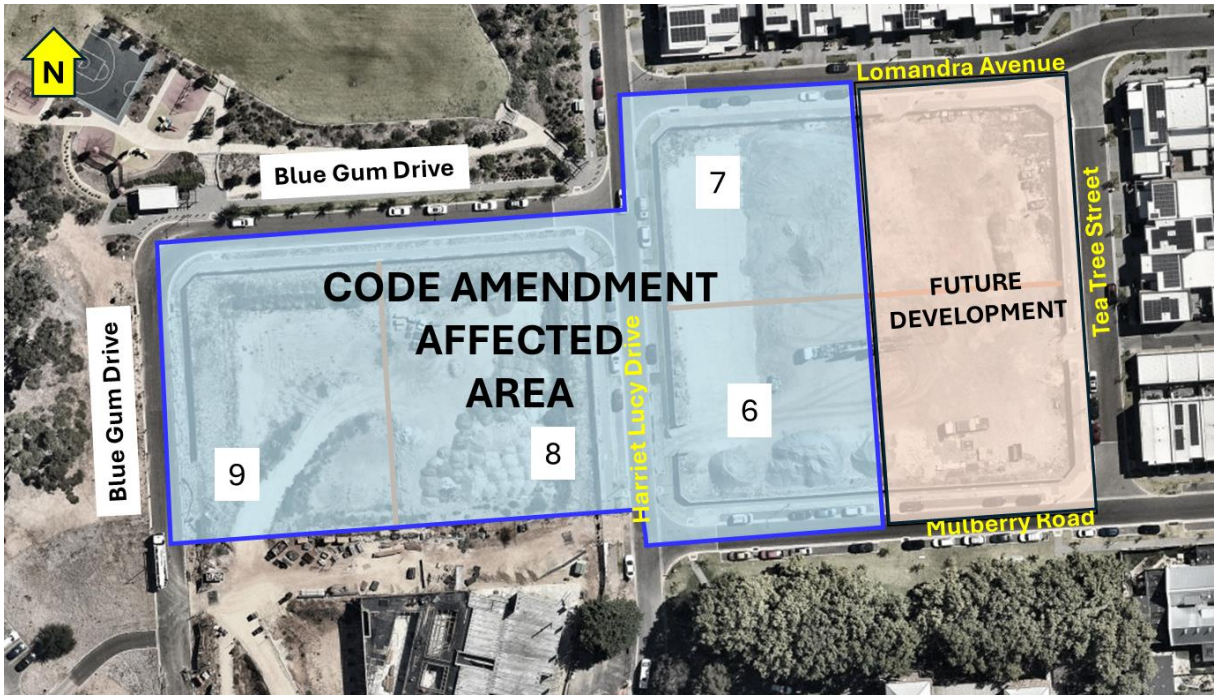


Figure 4 Affected Area – Land Parcel Details

The developer intends to increase the number of apartment units by 157 dwellings within the affected area as summarised in Table 2.

Table 2 Dwelling Numbers – Current Master Plan and Proposed Code Amendment

PARCEL NO	EXISTING NO DWELLINGS	PROPOSED CHANGE*	TOTAL DWELLINGS – CODE AMENDED
6, 7, 8 & 9	309	+157	466

The overall impact of the proposed Code Amendment on total dwellings in the development is summarised in Table 3.

Table 3 Dwelling Numbers – Glenside Development

STAGE	APPROVED DWELLINGS	PROPOSED CODE AMENDMENT	TOTAL DWELLINGS WITH CODE AMENDMENT
Stage 1	419	- (no change)	419
Stage 2	624	+157 (+/- 50)	781 (+/- 50)
Total	**1,043**	**+157 (+50 = 207)**	**1,200 (+50 = 1,250)**

3.2 Access Provisions

No changes to the external access arrangements to/from Glenside Development are proposed as part of this Code Amendment. Access provisions to/from Fullarton Road and Conyngham Street and egress-only access to Greenhill Road will remain unchanged.

Internal access arrangements for the land parcels within and adjacent to the Affected Area will be achieved from the local road network as summarised in Table 4.

Table 4 Access Arrangements

PARCEL NO	EXISTING ACCESS ARRANGEMENTS	PROPOSED CHANGE
8 & 9	1 x access from Harriet Lucy Drive 1 x access from Blue Gum Drive	No changes proposed
6 & 7	1 x access from Lomandra Avenue 1 x access from Mulberry Road	1 x access from Lomandra Avenue shifted to Harriet Lucy Drive No change to access from Mulberry Road

4 TRAFFIC ASSESSMENT

4.1 Traffic Generation – Code Amendment

The same peak hour traffic generation rates, as used in the DPA for the Glenside Development, have been applied to estimate the trip generation for the proposed code amendment. Adopting a conservative approach the AM peak hour trip rate was used for the PM Peak hour. Peak hour trips are generally estimated to be 10% of the daily volume.

Based on these rates the approved Glenside Development project is anticipated to have a total of 372 trips (for 1,043 dwellings) per peak hour, with the proposed Code Amendment the Glenside Development (with 1,250 dwellings) could generate approximately 416 peak hour trips, an increase of 62 trips per peak hour. An additional 50 dwellings were added to the analysis to assess capacity of the intersections with an upper limit of 1,250 dwellings within the development.

Table 5 Trip Generation: Code Amendment

TRAFFIC GENERATION	PERMISSIBLE DEVELOPMENT		CODE AMENDMENT		CHANGE	
	Dwellings	Peak Hour Trips	Dwellings	Peak Hour Trips	Dwellings	Peak Hour Trips*
Medium Density Dwellings (Townhouses)	218	109	218	109	-	-
High Density Dwellings (Apartments)	825	248	982 (+50 = 1,032)	310	157 (+50)	**62**
Total	**1,043**	**357**	**1,200 (1,250)**	**419**	**157 (+50)**	**62**

* Peak Hour Trips for the upper limit of 1,250 dwellings was used in intersection performance assessment

4.2 Traffic Distribution

Traffic distribution adopted for the DPA for the Glenside Development was used to distribute additional traffic from the development. The DPA traffic distribution broadly included the following:

- 75% of the development travelling to/from north on Fullarton Road (north of Greenhill Road)
- 10% of the development travelling to/from west on Greenhill Road (west of Fullarton Road)
- 10% of the development travelling to/from south on Fullarton Road (south of Mulberry Road)
- 5% of the development travelling to/from east on Greenhill Road (east of Conyngham Street)

It is assumed that the majority of moments (75%) generated by additional dwellings in the Affected Area would be travelling to the north in the AM peak and from the north to the site in the PM peak. Subsequently, the additional development traffic is forecasted to be distributed 10% to/from the south and west and the remaining 5% to/from the east.

Based on the above assumptions, an assessment has been made of the potential distribution of the additional future peak hour movements to/from these connections as illustrated in Figure 5.

The peak hour assessment has been based on Roads and Maritime Services trip generation rates, it recommends that 0.3 per medium density dwelling and 0.5% of daily trips occur in both the am and pm peak hours. Additionally, it has been assumed that 25% of the am peak hour volumes will be ingress movements and 75% egress movements and 90% of the pm peak hour volumes will be ingress movements and 10% egressing during the pm peak hour.

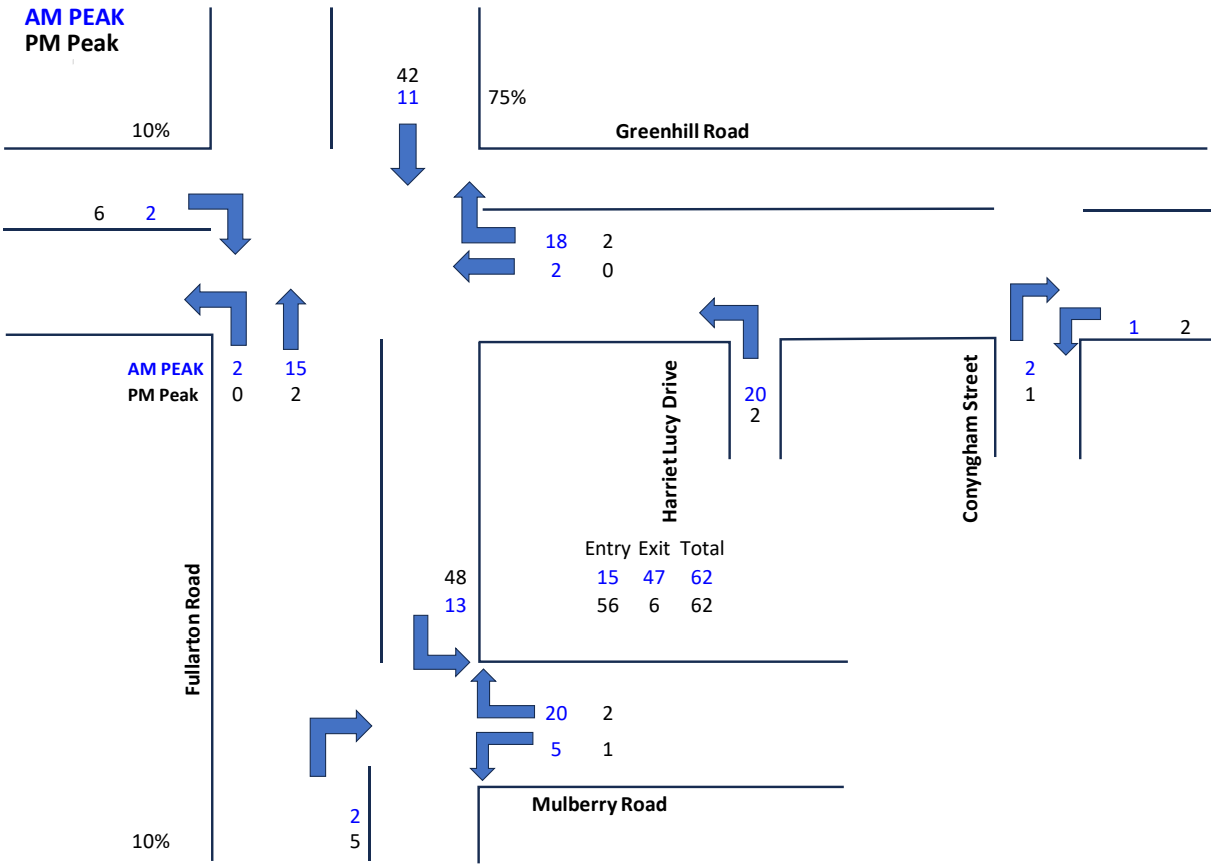


Figure 5 Forecast Distribution of Additional AM and PM Peak Hour Movements.

4.3 Traffic Impact

4.3.1 SIDRA Modelling

Based on the above forecasts, SIDRA modelling has been undertaken to determine the impact that the Affected Area will have traffic performance of the network. These two key intersections have been modelled with and without the adjustment to the volumes based on the potential Code Amendment change.

- Fullarton Road and Greenhill Road (TS070)
- Fullarton Road and Mulberry Road (TS577) – AM analysis only

4.3.2 Existing Traffic Demand

Traffic volumes for the TS070 – Fullarton Road and Greenhill Road intersection were estimated from the SCATS summary (for August 2023).

SCATS extracts were not readily available for TS577 – Fullarton Road and Mulberry Road, therefore WGA used traffic demand from the previous traffic report for Glenside Stage 2 Parking and Traffic Assessment[1]. These volumes were compared against north-south traffic demand on Fullarton Road (south of Greenhill Road) and it was found that the traffic volumes in the previous report were marginally higher than the 2023 estimates. Thus, adopting a conservative approach, traffic demand for TS577 from the previous report was used for this modelling exercise.

[1] WGA report Glenside Stage 2

4.3.3 SIDRA Modelling Scenarios

For both intersections, three scenarios were modelled for the purpose of this study.

- S1 – 2023 volumes, with 50% Glenside Development completion.
- S2 – 2023 volumes, with 100% Glenside Development completion.
- S3 - 2023 volumes, with 100% Glenside Development completed with Code Amendment

No calibration/validation was undertaken for the purposes of this modelling exercise – SIDRA's default values and saturation flows were adopted.

SIDRA outputs are included in Appendix A.

4.3.4 SIDRA Phase Sequence and Cycle Times

SCATS extracted phase sequence (refer to the image below) and cycle time (150 seconds) were used for TS070 – Fullarton Road and Greenhill Road intersection.

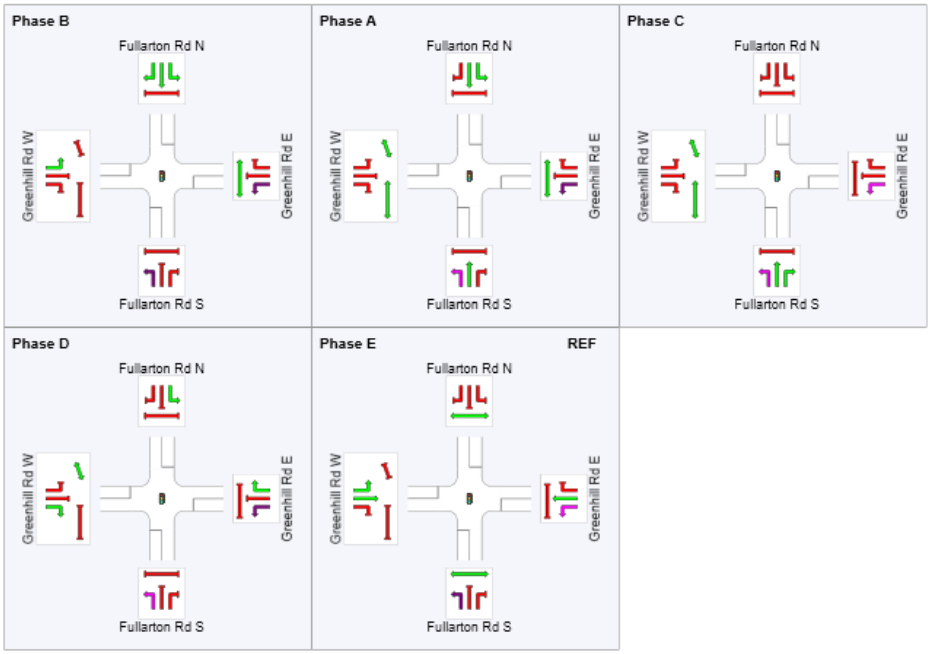


Figure 6: SCATS Extracted Phase Sequence – TS070

SCATS extract for TS577 – Fullarton Road and Mulberry Road were not available; therefore, WGA used a simple three-phase sequence with half the cycle time (75 seconds) of TS070 – Fullarton Road and Greenhill Road.

Phase	A	B	C
Phase Change Time (sec)	0	46	58
Green Time (sec)	40	6	11
Phase Time (sec)	46	12	17
Phase Split	61%	16%	23%

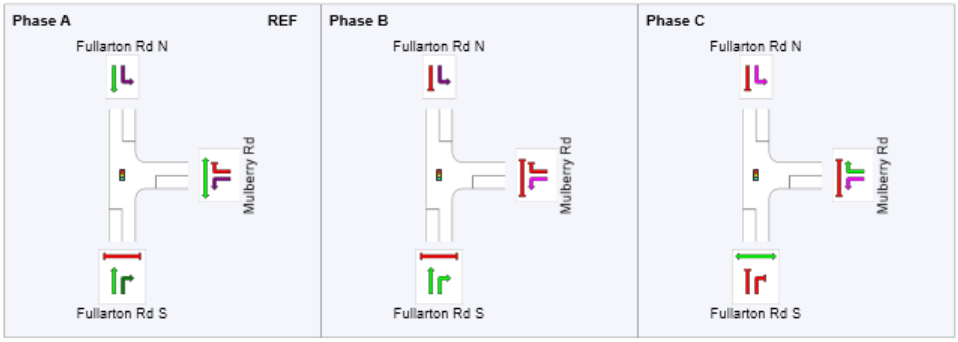


Figure 7 SIDRA Phase Sequence – TS577

SIDRA model outputs for the three scenarios are summarised in Table 6 and Table 7.

Table 6 SIDRA AM Intersection Results

INTERSECTION	DEGREE OF SATURATION			DELAY (SECONDS)			LEVEL OF SERVICE		
Scenario	S1	S2	S3	S1	S2	S3	S1	S2	S3
Fullarton Road Greenhill Road	1.027	1.058	1.063	78.5	87.6	89.9	F	F	F
Fullarton Road Mulberry Road	0.642	0.644	0.644	10.2	10.7	10.8	B	B	B

Table 7 SIDRA PM Intersection Results

INTERSECTION	DEGREE OF SATURATION			DELAY (SECONDS)			LEVEL OF SERVICE		
Scenario	S1	S2	S3	S1	S2	S3	S1	S2	S3
Fullarton Road Greenhill Road	0.922	1.003	1.012	52.0	58.9	61.0	D	E	E

As shown in Table 6 and Table 7, for Scenario 1 (existing conditions) Fullarton Road and Greenhill Road intersection was estimated to operate at Level of Service (LOS) F with an average delay of 78.5 seconds during AM Peak Hour.

When the forecast Glenside Development is complete (Scenario S2), the Fullarton Road and Greenhill Road intersection was estimated to continue to operate at LOS F with an increase of 8.1 seconds of average delay during AM Peak Hour.

With additional traffic generated by the proposed Code Amendment (scenario S3), the Fullarton Road and Greenhill Road intersection was estimated to continue to operate at LOS F with a marginal increase of 2.3 seconds of average delay during AM Peak Hour.

Overall, the intersection was estimated to continue operating at similar DOS, LOS and minor increase in average delay for all three scenarios modelled.

Similar findings were recorded for the PM Peak Hour for Fullarton Road and Greenhill Road intersection where minor delays are anticipated between the existing (S1) and Glenside Development complete (S2) scenario and negligible increase from S2 to S3.

Fullarton Road and Mulberry Road intersection was estimated to operate at LOS B with an average delay of 10.2 seconds under existing conditions (Scenario S1), increasing marginally by 0.5 seconds when Glenside Development is complete (Scenario S2) and with a further marginal increase of 1.1 seconds with the proposed Code Amendment traffic.

4.3.5 Changes to Phase Sequence and Fixed Phase Times

SIDRA model for TS070 – Fullarton Road and Greenhill Road intersection was run with a modified phase sequence for the AM Peak Hour and fixed phase times. An additional phase to service westbound traffic on Greenhill Road's east approach was introduced without changing the signal cycle length.

The modified phase sequence for the AM and PM Peak Hours are shown in Figure 8 and Figure 9 .

Phase	B	A	C	D	D2	E
Phase Change Time (sec)	117	0	38	53	66	82
Green Time (sec)	27	32	9	7	9	28
Phase Time (sec)	33	38	15	14	16	34
Phase Split	22%	25%	10%	9%	11%	23%

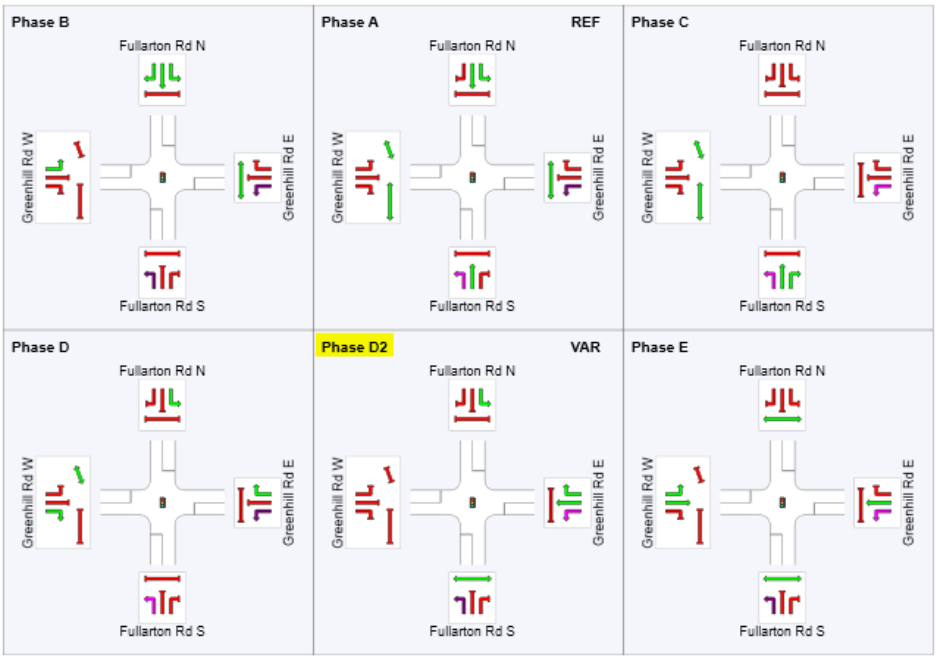


Figure 8 Modified Phase Sequence: AM Peak Hour – TS070

For the PM Peak Hour the existing 'SCATS' extracted phase sequence was used with fixed phase times to meet the demand on each approach. The signal cycle length, 150 seconds, was unchanged.

Adopted phase times and phase sequences for the three scenarios (S1 – S3) are included in Figure 9.

Phase	B	A	C	D	E
Phase Change Time (sec)	46	84	114	133	0
Green Time (sec)	32	24	13	11	39
Phase Time (sec)	38	30	19	18	45
Phase Split	25%	20%	13%	12%	30%

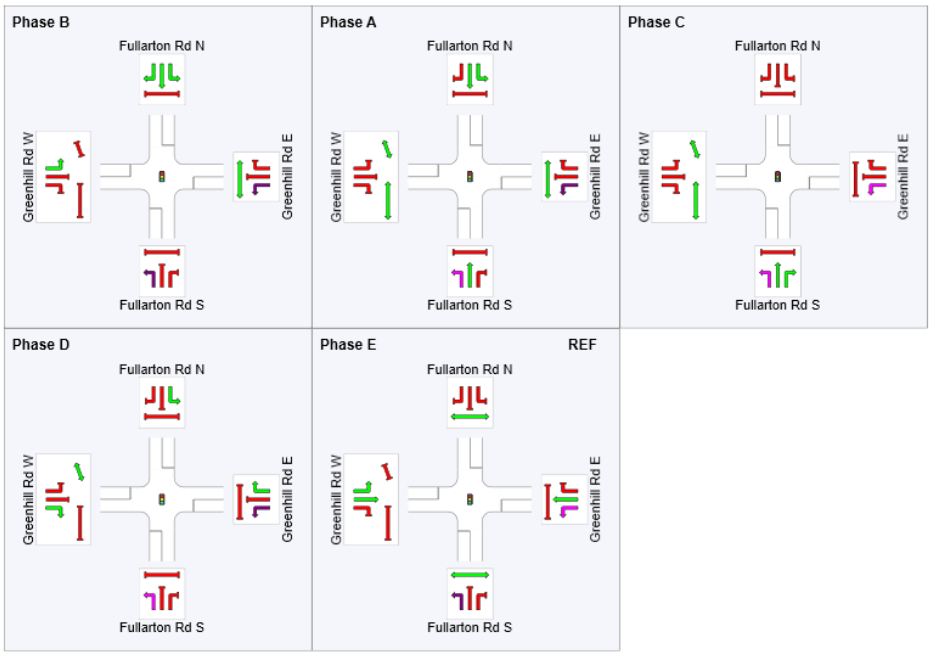


Figure 9 Adopted Phase Times: PM Peak Hour – TS070

SIDRA outputs with modified phase sequence for the AM Peak Hour and adopted phase times for the PM Peak Hour are summarised in Table 8 and Table 9 respectively.

Table 8 SIDRA AM Intersection Results – SCATS vs Modified Phase Time Comparison

Intersection	Degree of saturation			Delay (seconds)			Level of Service		
Scenario	S1	S2	S3	S1	S2	S3	S1	S2	S3
SCATS Phase Sequence	1.027	1.058	1.063	78.5	87.6	89.9	F	F	F
Modified Phase Sequence & Times	0.971	0.973	0.992	59.8	62.9	65.0	E	E	E

As shown in Table 8, modified phase sequence and time results in a reduction of 25 seconds in average intersection delay for scenario S3.

Table 9 SIDRA PM Intersection Results – SCATS vs Modified Phase Time Comparison

Intersection	Degree of saturation			Delay (seconds)			Level of Service		
Scenario	S1	S2	S3	S1	S2	S3	S1	S2	S3
SCATS Phase Sequence	0.922	1.003	1.012	52.0	58.9	61.0	D	E	E
Modified Phase Times	0.968	0.975	0.987	52.0	58.3	61.9	D	E	E

For the PM peak hour, modified (fixed) phase times result in a reduced Degree of Saturation with a negligible increase in intersection delay for Scenario S3.

Phase sequence modifications for TS577 – Fullarton Road and Mulberry Road intersection were not deemed warranted as the intersection was found to operate at LOS B with a Degree of Saturation (DOS) well below 0.7 indicating ample spare capacity for additional traffic demand in the future.

4.4 External Infrastructure

No external infrastructure upgrades are deemed warranted due to the additional traffic generated by the proposed Code Amendment.

4.5 Internal Infrastructure

Minor changes to internal road and on-street parking infrastructure will be required to accommodate relocated driveway crossovers for high-rise buildings. These can be addressed in the detailed design phase with minimal impacts on the on-street parking provision.

5 SUMMARY

The proposed code amendment is needed to allow Cedar Woods to increase dwelling supply within a strategic infill site (Glenside) by adding up to 157 (+/-50) apartments on land parcels 6, 7, 8, and 9 (Affected Area) through increased building heights.

The proposed Code Amendment will increase the total number of dwellings by up to 157 dwellings (apartments), increasing from the current forecast of 1,043 dwellings permissible under the approved Glenside Development to a potential 1,200 dwellings. This dwelling number was further increased by an additional 50 dwellings (1,043 + 207 = 1,250 dwellings) to ensure the validity of the assessment.

Additional 207 apartments proposed through this Code Amendment were estimated to generate up to 62 additional peak hour trips, beyond what was forecast for the Glenside Development.

These additional 62 trips were distributed across the surrounding road network and two signalised intersections were assessed using SIDRA software for impacts due to additional traffic from the development. Up to 52 peak hour trips were forecast to pass through the Fullarton Road intersection and Greenhill Road.

Up to 7,000 vehicles were estimated to pass through the Fullarton Road and Greenhill Road intersection (TS070) during the peak hour.

Research has shown that on a daily basis, traffic passing through an intersection can vary by up to 5%. The proposed code amendment generated traffic (52 peak hour trips) equates to less than 1% of total traffic passing through TS070 – Fullarton Road and Greenhill Road.

SIDRA modelling indicated that the additional traffic generated from the development would result in minor increases in the Degree of Saturation (DOS) and average delays in the AM Peak Hour. These increases are deemed within acceptable limits due to the stochastic nature of the traffic.

Based on the assessment, no infrastructure upgrades are deemed warranted due to traffic generated by the proposed code amendment and increased dwelling density in the Glenside Development as the increases fall within the typical daily variability of traffic through the area.

APPENDIX A
SIDRA OUTPUTS SUMMARY

USER REPORT FOR SITE

All Movement Classes

Project: Glenside Code Amendment_20240801

Template: Default Site User Report

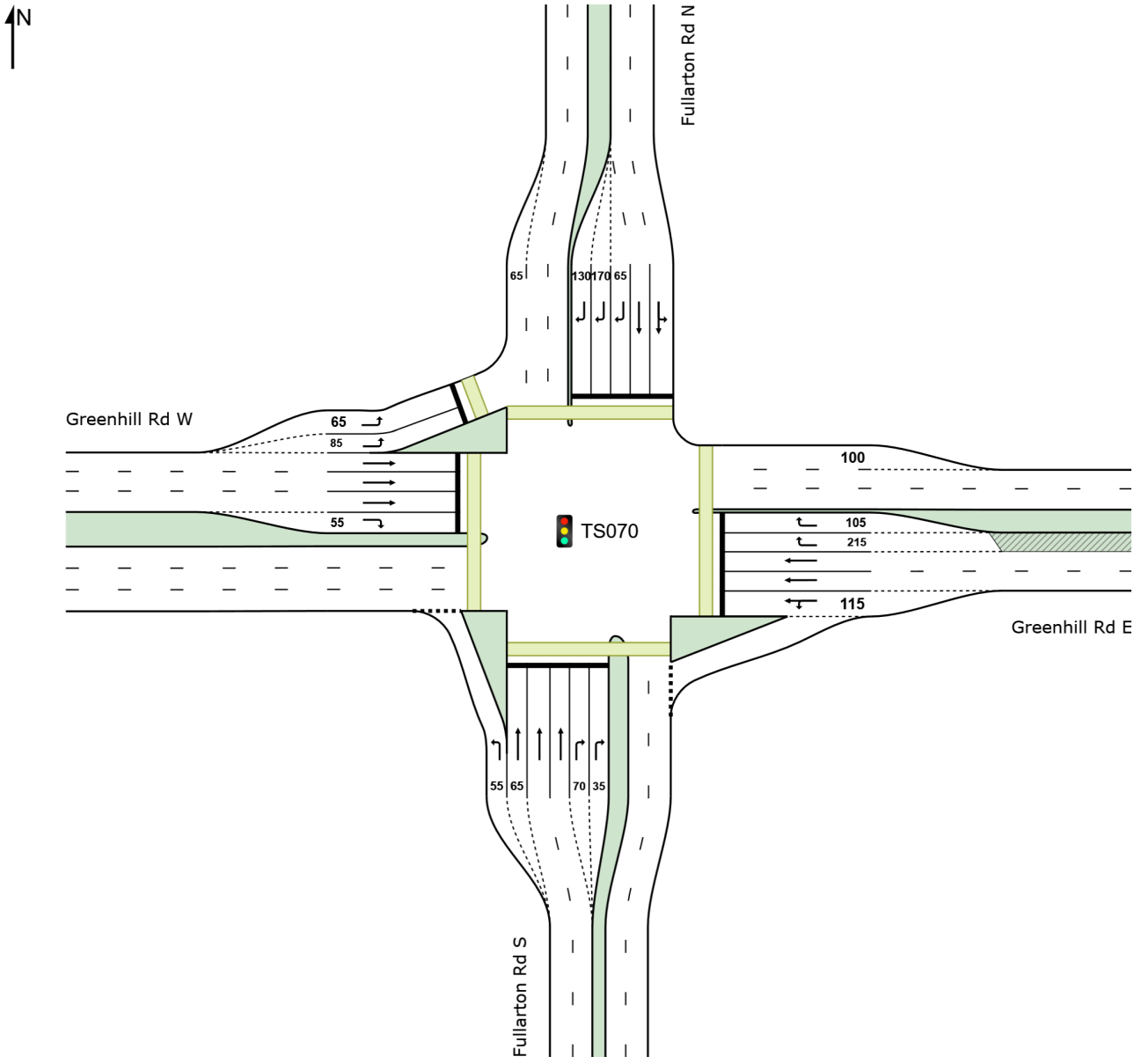
Site: TS070 [TS070-2023AM-Fullarton Rd Greenhill Rd - Existing (50% Glenside) (Site Folder: TS070 Greenhill Fullarton)]

Glenside 50% complete
Aug 2023 SCATS extract
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 150 seconds (Site User-Given Cycle Time)

Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: SCATS Extract - Import
Reference Phase: Phase E
Input Phase Sequence: B, A, C, D, E
Output Phase Sequence: B, A, C, D, E

Site Layout

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



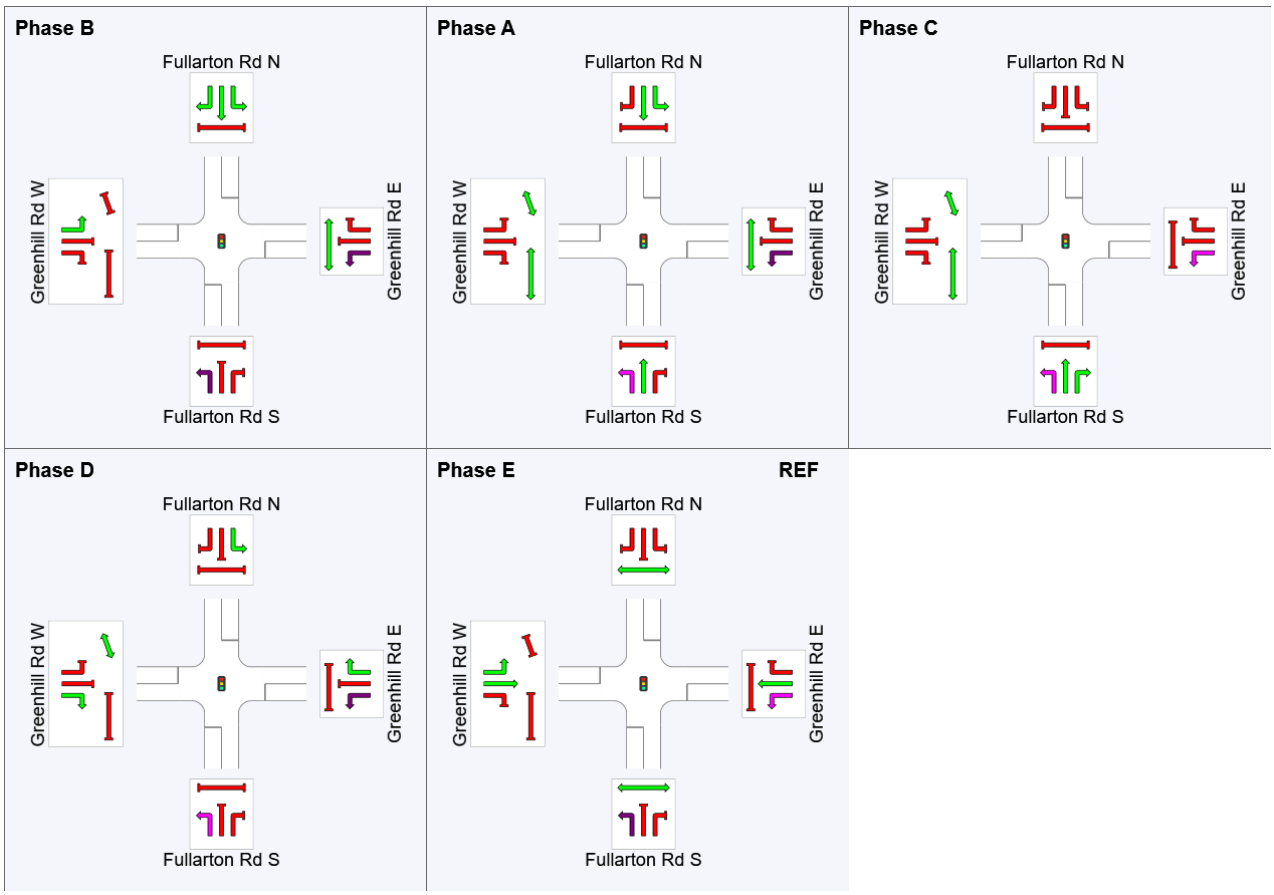
Lane Use and Performance

	DEMAND FLOWS [Total veh/h	HV] %	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh	Dist] m	Lane Config	Lane Length m	Cap. Adj. %	Prob. Block. %
South: Fullarton Rd S													
Lane 1	102	3.1	923	0.111	100	20.3	LOS C	2.6	18.7	Short	55	0.0	NA
Lane 2	248	3.0	524[1]	0.473	46[6]	50.6	LOS D	13.7	98.3	Short	65	0.0	NA
Lane 3	432	3.0	422[1]	1.024	100	118.0	LOS F	44.2	317.5	Full	315	0.0	5.7
Lane 4	490	3.0	478[1]	1.024	100	116.0	LOS F	50.5	362.5	Full	315	0.0	17.7
Lane 5	94	2.8	108	0.876	100	91.2	LOS F	7.6	54.3	Short	70	0.0	NA
Lane 6	94	2.8	108	0.876	100	91.2	LOS F	7.6	54.3	Short	35	0.0	NA
Approach	1460	3.0		1.024		95.6	LOS F	50.5	362.5				
East: Greenhill Rd E													
Lane 1	535	2.4	534	1.001	100	76.7	LOS E	37.9	270.9	Short	115	0.0	NA
Lane 2	422	2.5	422[1]	1.001	100	105.4	LOS F	41.0	293.4	Full	800	0.0	0.0
Lane 3	466	2.5	466	1.001	100	103.8	LOS F	45.5	325.4	Full	800	0.0	0.0
Lane 4	247	2.5	250	0.986	100	109.3	LOS F	23.0	164.2	Short (P)	215	0.0	NA
Lane 5	249	2.5	253	0.986	100	109.2	LOS F	23.2	165.8	Short	105	0.0	NA
Approach	1919	2.5		1.001		98.0	LOS F	45.5	325.4				
North: Fullarton Rd N													
Lane 1	605	2.1	754	0.802	100	45.0	LOS D	38.4	273.9	Full	840	0.0	0.0
Lane 2	585	2.8	729	0.802	100	44.1	LOS D	37.9	272.0	Full	840	0.0	0.0
Lane 3	266	2.5	259[1]	1.027	100	137.6	LOS F	28.6	204.5	Short	65	0.0	NA
Lane 4	266	2.5	259[1]	1.027	100	137.6	LOS F	28.6	204.5	Short	170	0.0	NA
Lane 5	307	2.5	299	1.027	100	135.6	LOS F	32.8	234.9	Short	130	0.0	NA
Approach	2028	2.5		1.027		82.7	LOS F	38.4	273.9				
West: Greenhill Rd W													
Lane 1	201	2.1	843	0.239	42[6]	18.9	LOS B	4.3	30.6	Short	65	0.0	NA
Lane 2	459	2.1	812	0.565	100	19.9	LOS B	14.1	100.4	Short	85	0.0	NA
Lane 3	211	2.0	465	0.454	62[6]	41.3	LOS D	11.2	79.5	Full	780	0.0	0.0
Lane 4	345	2.0	467	0.738	100	44.0	LOS D	21.4	152.5	Full	780	0.0	0.0
Lane 5	318	2.0	431[1]	0.738	100	43.3	LOS D	19.1	135.9	Full	780	0.0	0.0
Lane 6	57	1.9	255	0.223	100	61.1	LOS E	3.4	24.2	Short	55	0.0	NA
Approach	1592	2.1		0.738		34.0	LOS C	21.4	152.5				
Intersection	6999	2.5		1.027		78.5	LOS E	50.5	362.5				

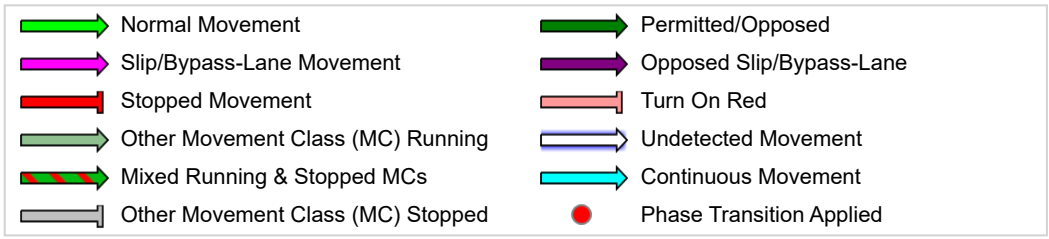
Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Lane LOS values are based on average delay per lane.
Intersection and Approach LOS values are based on average delay for all lanes.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

1 Reduced capacity due to a short lane effect. Short lane queues may extend into the full-length lanes. Some upstream delays at entry to short lanes are not included.
6 Lane under-utilisation due to downstream effects

Output Phase Sequence



REF: Reference Phase
VAR: Variable Phase



Phase Timing Summary

Phase	B	A	C	D	E
Phase Change Time (sec)	44	75	108	123	0
Green Time (sec)	25	27	9	21	37
Phase Time (sec)	31	33	15	28	43
Phase Split	21%	22%	10%	19%	29%

See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

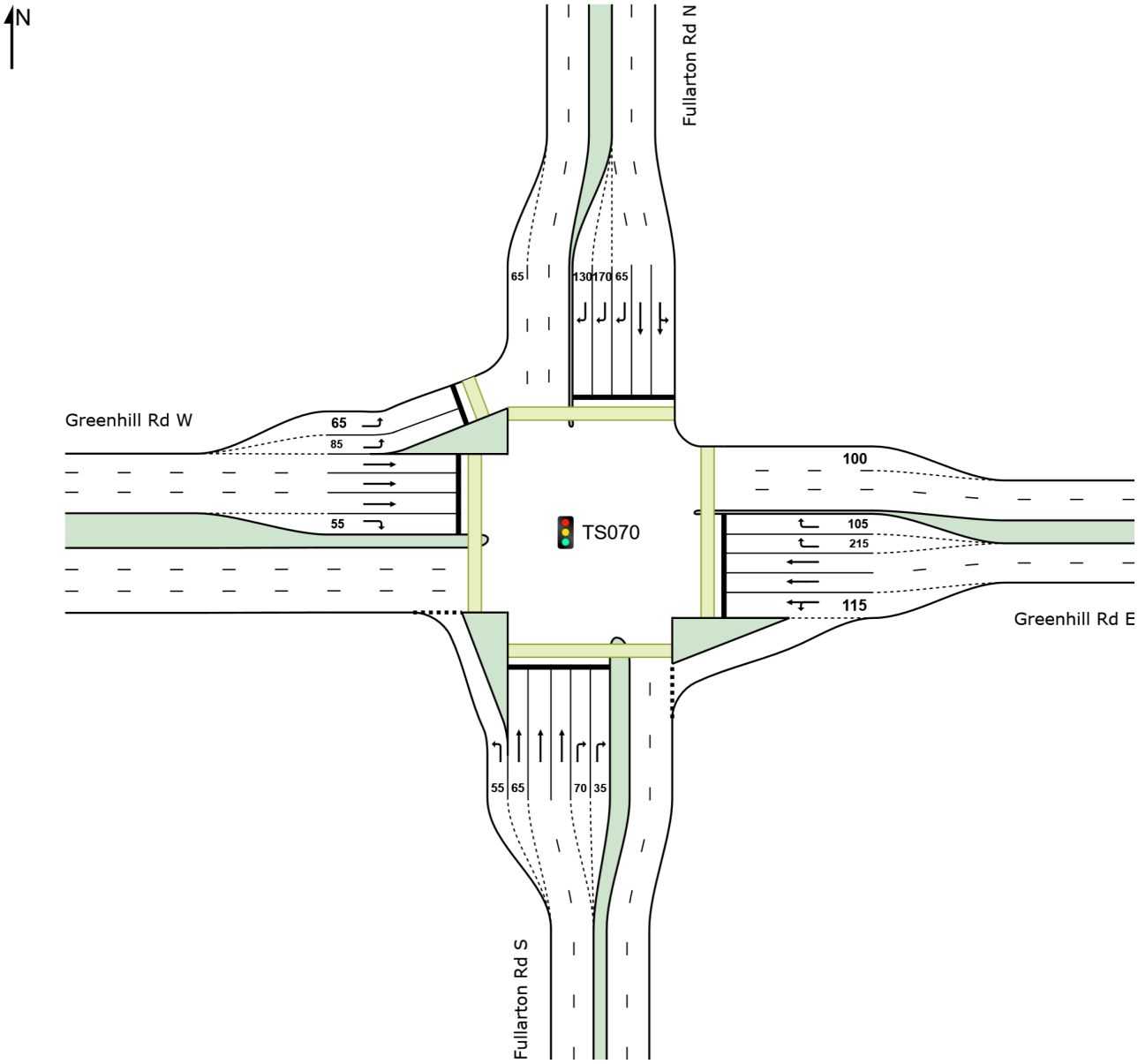
Site: TS070 [TS070-2023AM-Fullarton Rd Greenhill Rd - Existing (50% Glenside) (Site Folder: TS070 Greenhill Fullarton)]

Glenside 50% complete
Aug 2023 SCATS extract
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 150 seconds (Site User-Given Cycle Time)

Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: SCATS Extract - Import
Reference Phase: Phase E
Input Phase Sequence: B, A, C, D, E
Output Phase Sequence: B, A, C, D, E

Site Layout

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



Lane Use and Performance

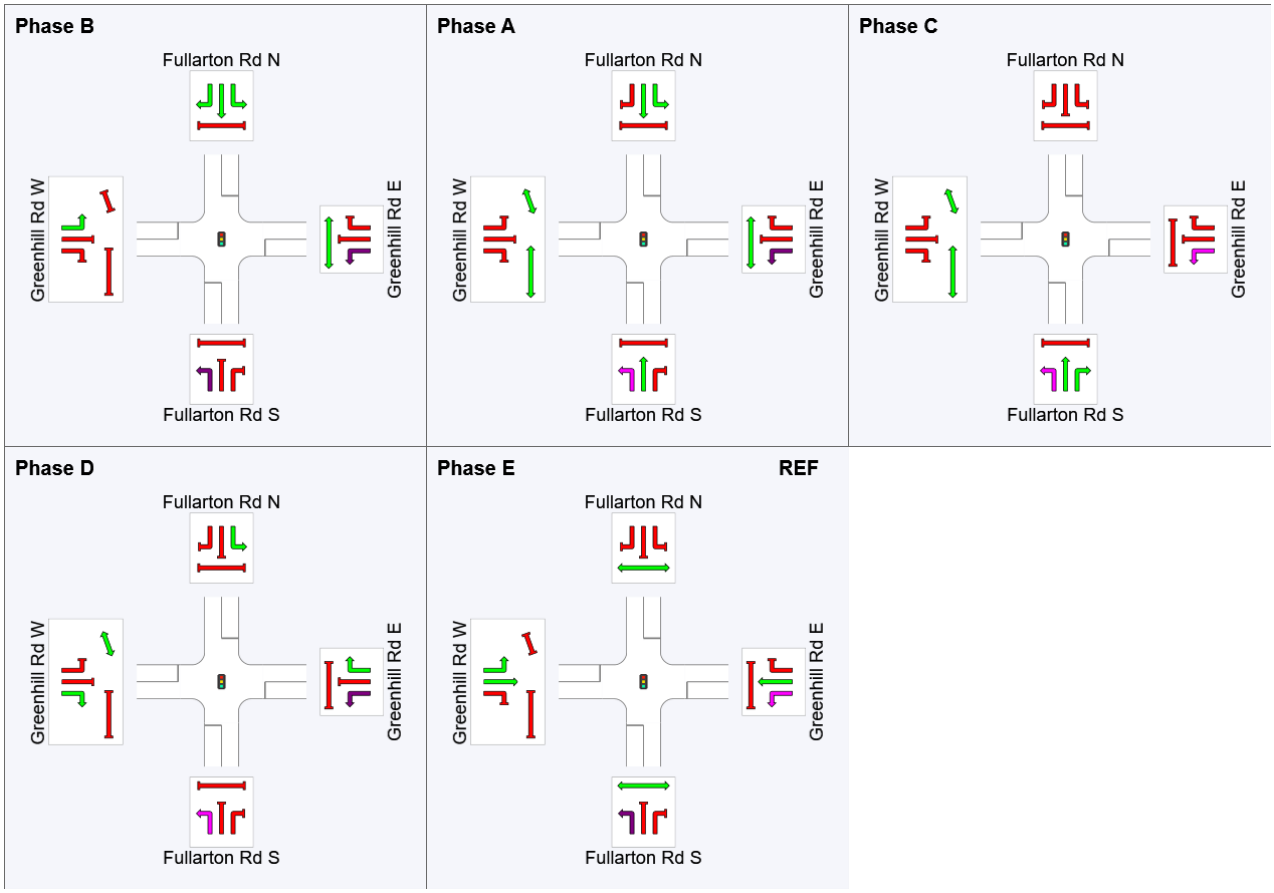
	DEMAND FLOWS [Total	HV]	Cap.	Deg. Satn	Lane Util.	Aver. Delay	Level of Service	95% BACK OF QUEUE [Veh	Dist]	Lane Config	Lane Length	Cap. Adj.	Prob. Block.

	veh/h	%	veh/h	v/c	%	sec			m		m	%	%
South: Fullarton Rd S													
Lane 1	116	2.7	1116	0.104	100	8.9	LOS A	1.0	7.2	Short	55	0.0	NA
Lane 2	200	3.0	568	0.352	46[6]	45.0	LOS D	10.1	72.7	Short	65	0.0	NA
Lane 3	375	3.0	492[1]	0.763	100	48.9	LOS D	22.4	160.7	Full	315	0.0	0.0
Lane 4	360	3.0	472[1]	0.763	100	49.0	LOS D	21.4	153.9	Full	315	0.0	0.0
Lane 5	134	3.1	150[1]	0.891	100	88.7	LOS F	10.6	76.4	Short	70	0.0	NA
Lane 6	134	3.1	150[1]	0.891	100	88.7	LOS F	10.6	76.4	Short	35	0.0	NA
Approach	1318	3.0		0.891		52.9	LOS D	22.4	160.7				
East: Greenhill Rd E													
Lane 1	327	2.4	585	0.558	100	42.0	LOS D	14.5	103.9	Short	115	0.0	NA
Lane 2	288	2.5	516	0.558	100	50.1	LOS D	16.8	119.8	Full	800	0.0	0.0
Lane 3	288	2.5	516	0.558	100	50.1	LOS D	16.8	119.8	Full	800	0.0	0.0
Lane 4	117	2.7	131	0.896	100	91.5	LOS F	9.5	68.1	Short	215	0.0	NA
Lane 5	119	2.7	132	0.896	100	91.4	LOS F	9.6	68.7	Short	105	0.0	NA
Approach	1139	2.5		0.896		56.3	LOS E	16.8	119.8				
North: Fullarton Rd N													
Lane 1	702	2.0	768	0.914	100	62.1	LOS E	54.9	390.9	Full	840	0.0	0.0
Lane 2	638	3.1	698[1]	0.914	100	60.4	LOS E	50.0	359.3	Full	840	0.0	0.0
Lane 3	241	2.4	322[1]	0.746	100	69.7	LOS E	17.1	122.1	Short	65	0.0	NA
Lane 4	241	2.4	322[1]	0.746	100	69.7	LOS E	17.1	122.1	Short	170	0.0	NA
Lane 5	250	2.4	335	0.746	100	69.9	LOS E	17.9	127.6	Short	130	0.0	NA
Approach	2072	2.5		0.914		64.3	LOS E	54.9	390.9				
West: Greenhill Rd W													
Lane 1	250	2.1	929	0.269	42[6]	14.1	LOS B	3.8	27.3	Short	65	0.0	NA
Lane 2	570	2.1	896	0.636	100	15.3	LOS B	14.5	103.6	Short	85	0.0	NA
Lane 3	292	2.0	515	0.567	62[6]	40.0	LOS D	15.6	111.3	Full	780	0.0	0.0
Lane 4	477	2.0	518	0.922	100	52.5	LOS D	36.2	257.7	Full	780	0.0	0.0
Lane 5	429	2.0	466[1]	0.922	100	51.9	LOS D	30.6	218.0	Full	780	0.0	0.0
Lane 6	83	2.5	133	0.625	100	77.8	LOS E	6.1	43.3	Short	55	0.0	NA
Approach	2102	2.1		0.922		37.0	LOS D	36.2	257.7				
Intersection	6631	2.5		0.922		52.0	LOS D	54.9	390.9				

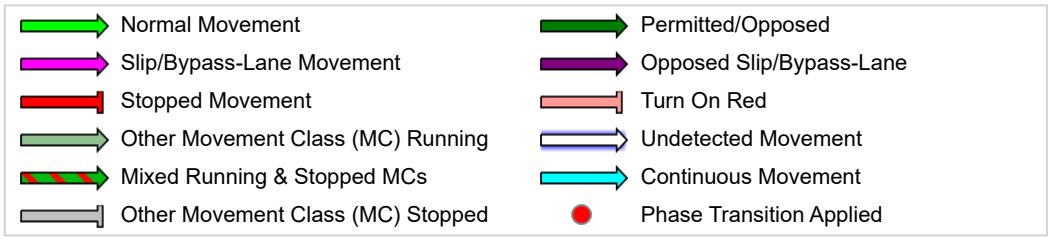
Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Lane LOS values are based on average delay per lane.
Intersection and Approach LOS values are based on average delay for all lanes.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

1 Reduced capacity due to a short lane effect. Short lane queues may extend into the full-length lanes. Some upstream delays at entry to short lanes are not included.
6 Lane under-utilisation due to downstream effects

Output Phase Sequence



REF: Reference Phase
VAR: Variable Phase



Phase Timing Summary

Phase	B	A	C	D	E
Phase Change Time (sec)	48	82	113	133	0
Green Time (sec)	28	25	14	11	41
Phase Time (sec)	34	31	20	18	47
Phase Split	23%	21%	13%	12%	31%

See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

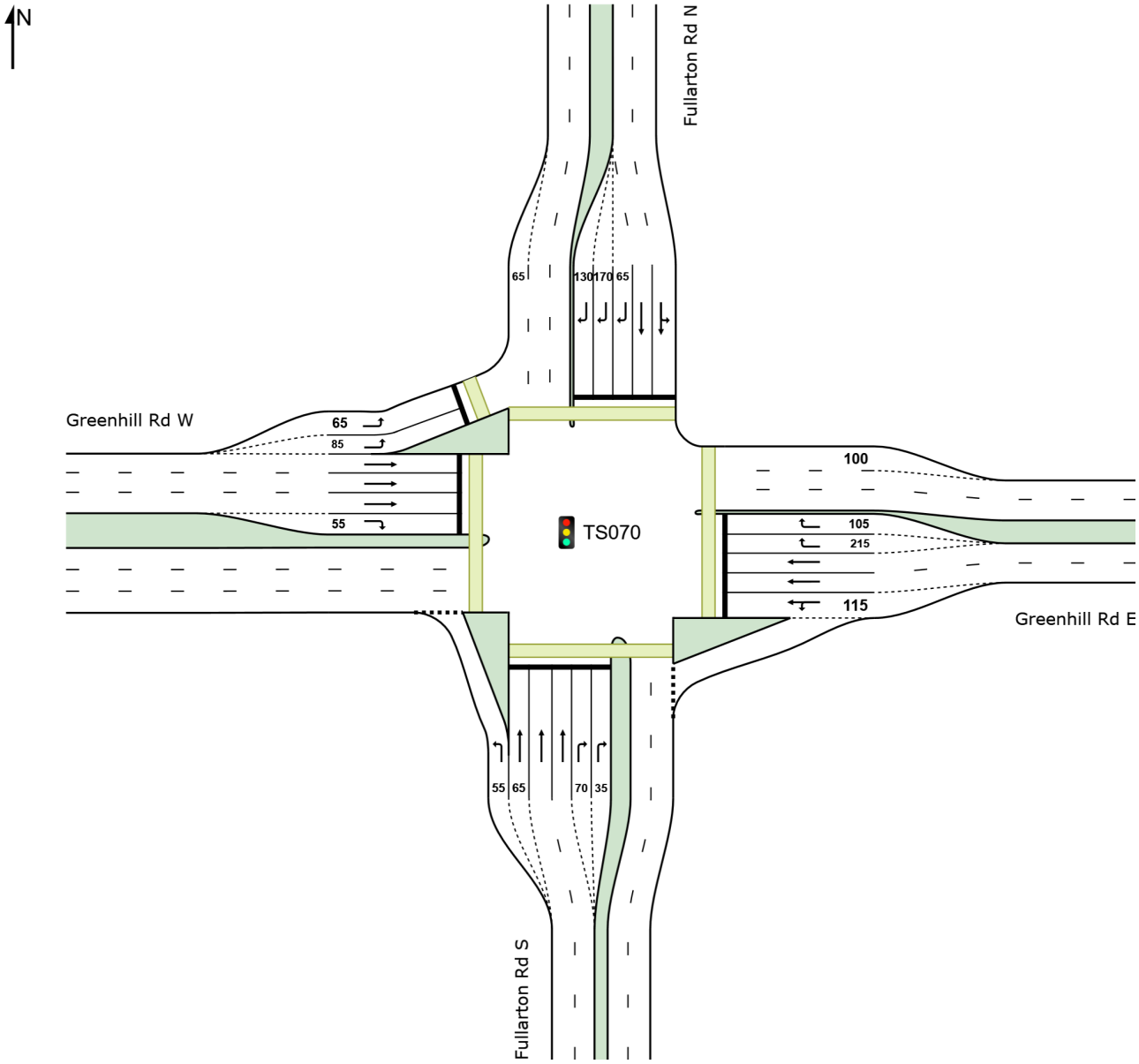
Site: TS070 [TS070-2023AM-Fullarton Rd Greenhill Rd - Glenside 100% (Site Folder: TS070 Greenhill Fullarton)]

Glenside 50% complete
Aug 2023 SCATS extract
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 150 seconds (Site User-Given Cycle Time)

Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: SCATS Extract - Import
Reference Phase: Phase E
Input Phase Sequence: B, A, C, D, E
Output Phase Sequence: B, A, C, D, E

Site Layout

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



Lane Use and Performance

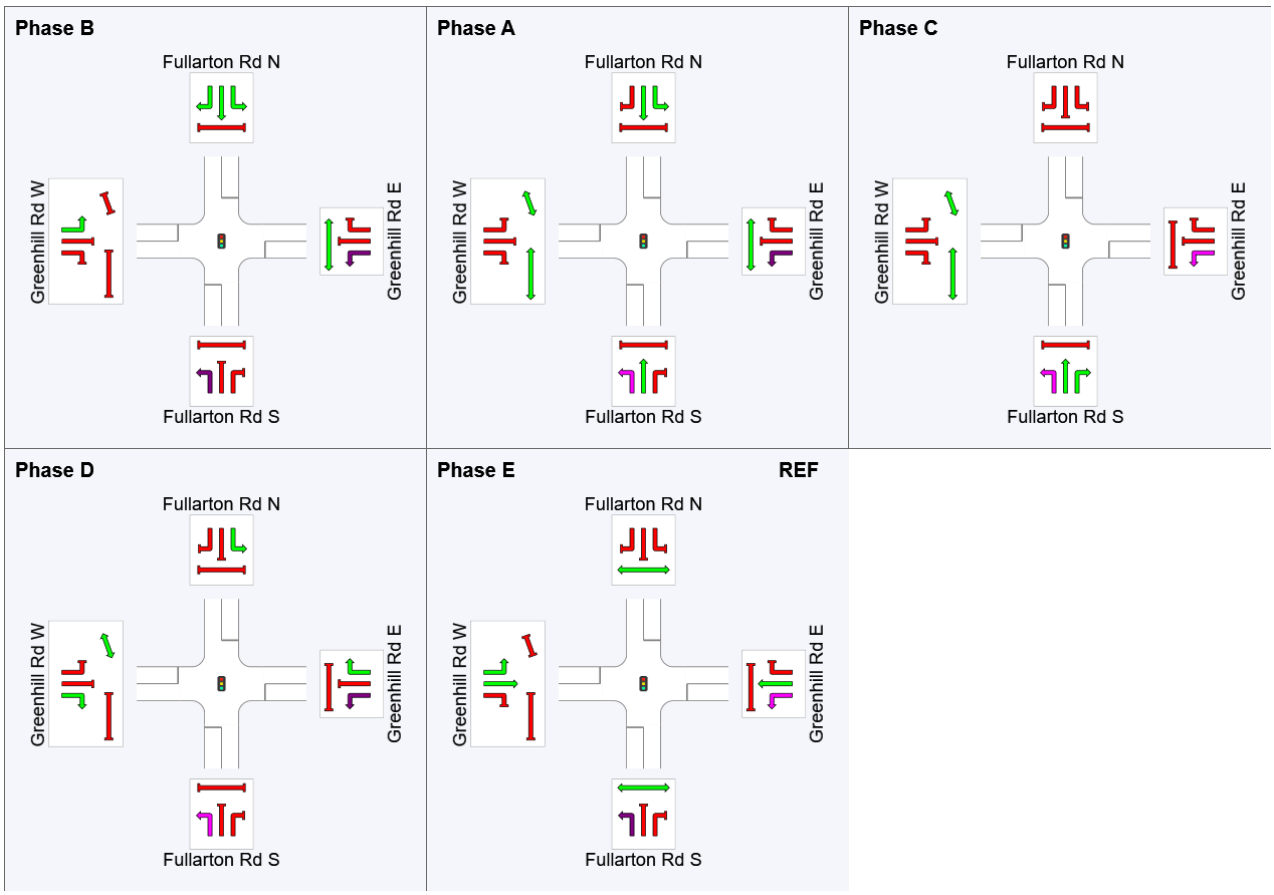
	DEMAND FLOWS [Total	HV]	Cap.	Deg. Satn	Lane Util.	Aver. Delay	Level of Service	95% BACK OF QUEUE [Veh	Dist]	Lane Config	Lane Length	Cap. Adj.	Prob. Block.

	veh/h	%	veh/h	v/c	%	sec			m		m	%	%
South: Fullarton Rd S													
Lane 1	109	2.9	948	0.115	100	19.2	LOS B	2.6	19.0	Short	55	0.0	NA
Lane 2	257	2.8	541[1]	0.475	46[6]	48.8	LOS D	13.9	99.5	Short	65	0.0	NA
Lane 3	451	2.8	438[1]	1.028	100	119.5	LOS F	46.6	334.1	Full	315	0.0	10.3
Lane 4	518	2.8	503[1]	1.028	100	117.2	LOS F	54.0	387.2	Full	315	0.0	23.7
Lane 5	91	2.9	107	0.842	100	89.2	LOS F	7.2	51.4	Short	70	0.0	NA
Lane 6	91	2.9	107	0.842	100	89.2	LOS F	7.2	51.4	Short	35	0.0	NA
Approach	1516	2.8		1.028		95.9	LOS F	54.0	387.2				
East: Greenhill Rd E													
Lane 1	533	2.4	520	1.024	100	90.6	LOS F	40.7	290.9	Short	115	0.0	NA
Lane 2	427	2.5	416[1]	1.024	100	118.5	LOS F	44.0	314.4	Full	800	0.0	0.0
Lane 3	465	2.5	453	1.024	100	117.2	LOS F	48.1	343.5	Full	800	0.0	0.0
Lane 4	263	2.4	250	1.050	100	144.5	LOS F	28.6	204.4	Short	215	0.0	NA
Lane 5	266	2.4	253	1.050	100	144.4	LOS F	28.9	206.4	Short	105	0.0	NA
Approach	1953	2.4		1.050		117.6	LOS F	48.1	343.5				
North: Fullarton Rd N													
Lane 1	623	2.1	767	0.812	100	45.2	LOS D	40.0	284.7	Full	840	0.0	0.0
Lane 2	602	2.7	742	0.812	100	44.2	LOS D	39.4	282.5	Full	840	0.0	0.0
Lane 3	267	2.5	253[1]	1.058	100	156.9	LOS F	30.9	220.8	Short	65	0.0	NA
Lane 4	267	2.5	253[1]	1.058	100	156.9	LOS F	30.9	220.8	Short	170	0.0	NA
Lane 5	304	2.5	287	1.058	100	155.3	LOS F	34.9	249.7	Short	130	0.0	NA
Approach	2064	2.4		1.058		90.1	LOS F	40.0	284.7				
West: Greenhill Rd W													
Lane 1	201	2.1	818	0.246	42[6]	20.3	LOS C	4.7	33.4	Short	65	0.0	NA
Lane 2	459	2.1	788	0.582	100	21.6	LOS C	15.4	109.7	Short	85	0.0	NA
Lane 3	212	2.0	452	0.468	62[6]	42.5	LOS D	11.4	81.3	Full	780	0.0	0.0
Lane 4	346	2.0	455	0.760	100	45.7	LOS D	22.0	156.9	Full	780	0.0	0.0
Lane 5	317	2.0	417[1]	0.760	100	44.9	LOS D	19.5	138.8	Full	780	0.0	0.0
Lane 6	61	1.7	256	0.239	100	61.3	LOS E	3.7	26.0	Short	55	0.0	NA
Approach	1596	2.0		0.760		35.6	LOS D	22.0	156.9				
Intersection	7128	2.4		1.058		86.6	LOS F	54.0	387.2				

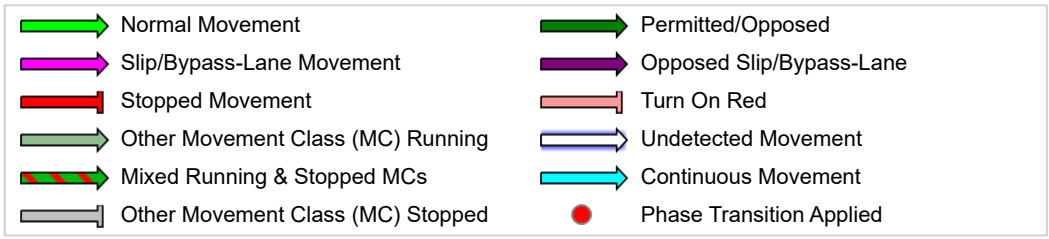
Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Lane LOS values are based on average delay per lane.
Intersection and Approach LOS values are based on average delay for all lanes.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

1 Reduced capacity due to a short lane effect. Short lane queues may extend into the full-length lanes. Some upstream delays at entry to short lanes are not included.
6 Lane under-utilisation due to downstream effects

Output Phase Sequence



REF: Reference Phase
VAR: Variable Phase



Phase Timing Summary

Phase	B	A	C	D	E
Phase Change Time (sec)	43	73	108	123	0
Green Time (sec)	24	29	9	21	36
Phase Time (sec)	30	35	15	28	42
Phase Split	20%	23%	10%	19%	28%

See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

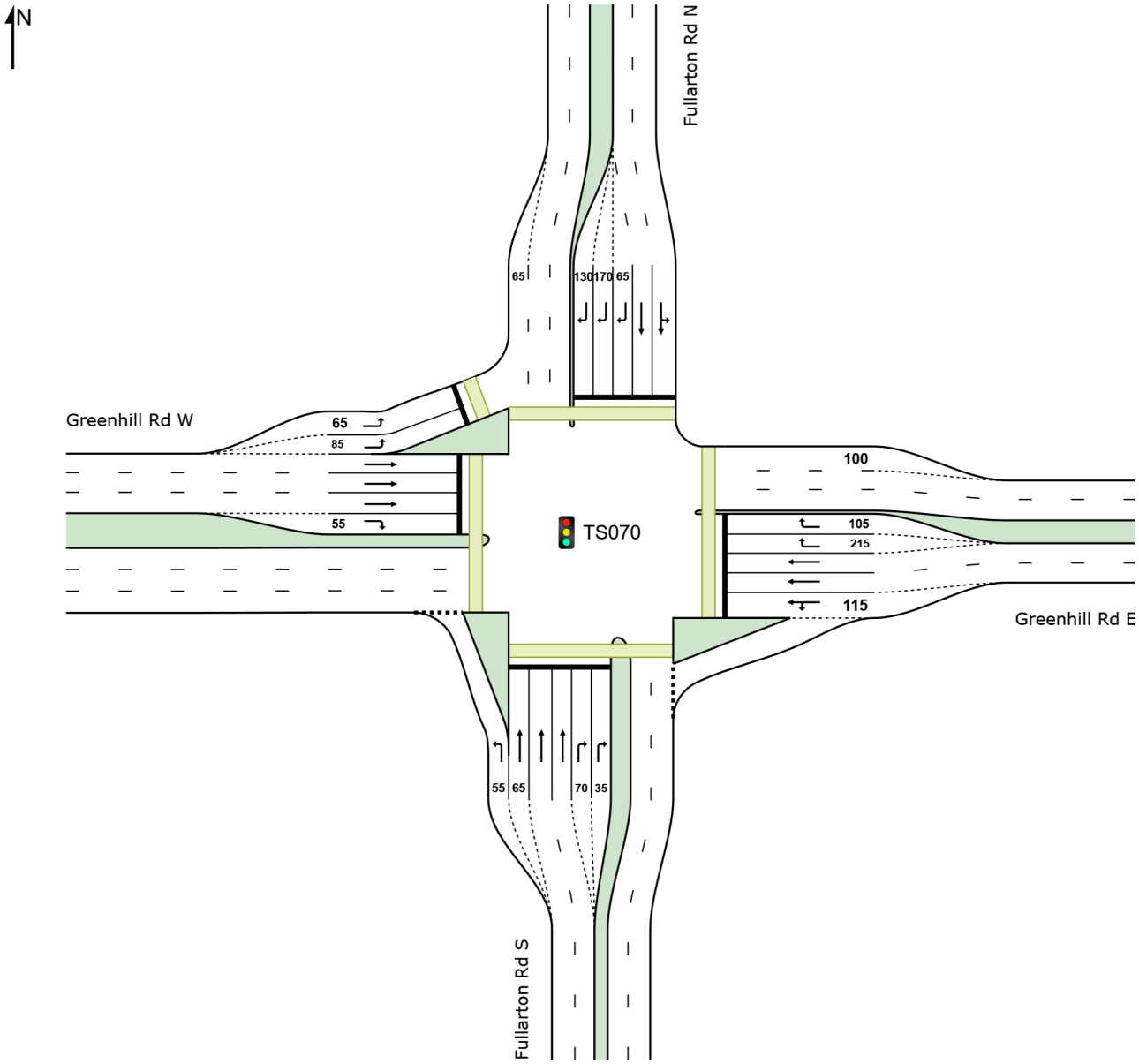
Site: TS070 [TS070-2023PM-Fullarton Rd Greenhill Rd - Glenside 100% (Site Folder: TS070 Greenhill Fullarton)]

Glenside 50% complete
Aug 2023 SCATS extract
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 150 seconds (Site User-Given Cycle Time)

Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: SCATS Extract - Import
Reference Phase: Phase E
Input Phase Sequence: B, A, C, D, E
Output Phase Sequence: B, A, C, D, E

Site Layout

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



Lane Use and Performance

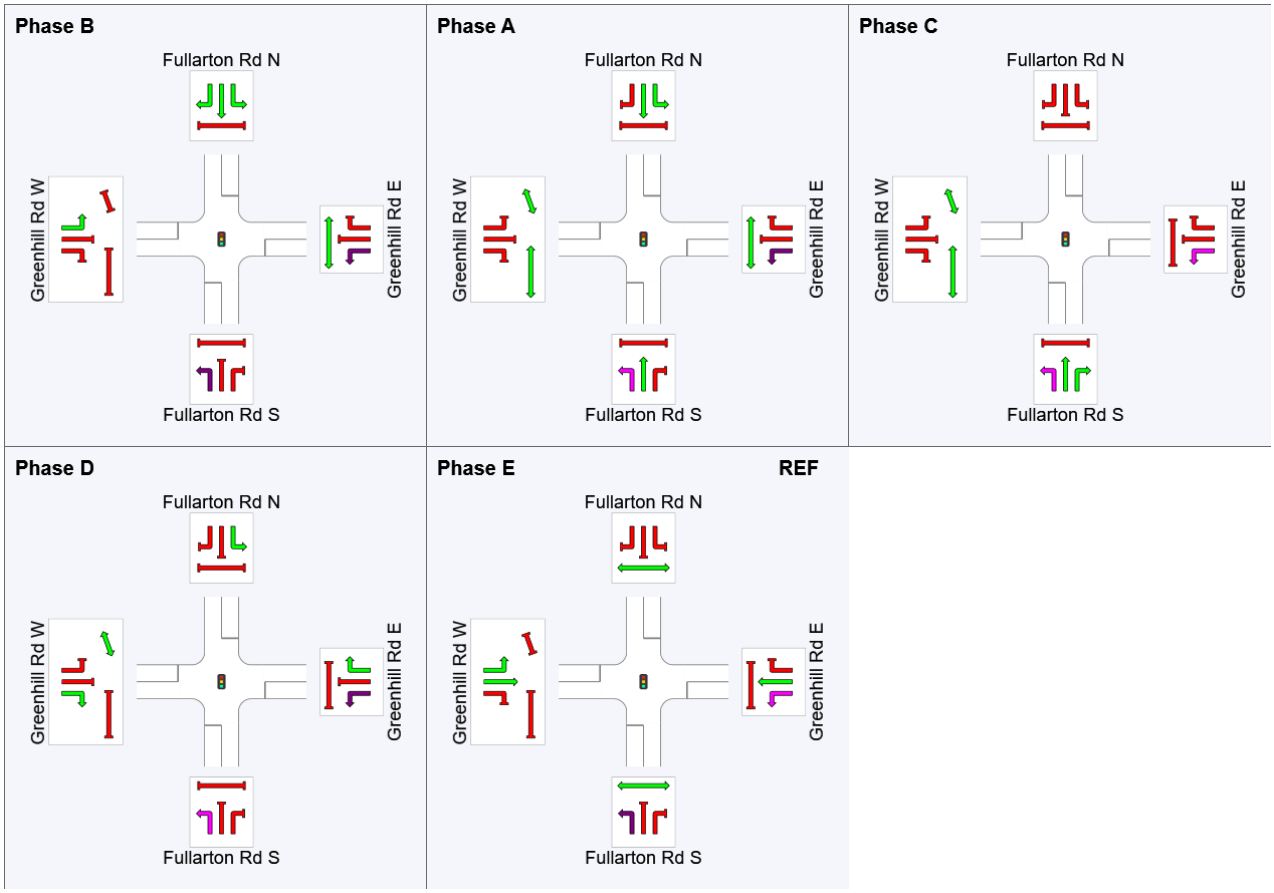
	DEMAND FLOWS [Total	HV]	Cap.	Deg. Satn	Lane Util.	Aver. Delay	Level of Service	95% BACK OF QUEUE [Veh	Dist]	Lane Config	Lane Length	Cap. Adj.	Prob. Block.

	veh/h	%	veh/h	v/c	%	sec			m		m	%	%
South: Fullarton Rd S													
Lane 1	117	2.7	1112	0.105	100	8.9	LOS A	1.0	7.3	Short	55	0.0	NA
Lane 2	202	3.0	606	0.333	46[6]	41.9	LOS D	9.7	70.0	Short	65	0.0	NA
Lane 3	382	3.0	529[1]	0.721	100	44.7	LOS D	21.6	154.8	Full	315	0.0	0.0
Lane 4	360	3.0	499[1]	0.721	100	44.4	LOS D	20.1	144.4	Full	315	0.0	0.0
Lane 5	133	3.2	139[1]	0.961	100	102.4	LOS F	11.6	83.1	Short	70	0.0	NA
Lane 6	133	3.2	139[1]	0.961	100	102.4	LOS F	11.6	83.1	Short	35	0.0	NA
Approach	1326	3.0		0.961		52.6	LOS D	21.6	154.8				
East: Greenhill Rd E													
Lane 1	324	2.5	542	0.598	100	47.0	LOS D	15.5	111.1	Short	115	0.0	NA
Lane 2	286	2.5	479	0.598	100	52.9	LOS D	17.3	123.9	Full	800	0.0	0.0
Lane 3	286	2.5	479	0.598	100	52.9	LOS D	17.3	123.9	Full	800	0.0	0.0
Lane 4	119	2.6	119	1.003	100	120.0	LOS F	11.3	81.2	Short	215	0.0	NA
Lane 5	121	2.6	120	1.003	100	119.8	LOS F	11.5	82.0	Short	105	0.0	NA
Approach	1136	2.5		1.003		65.4	LOS E	17.3	123.9				
North: Fullarton Rd N													
Lane 1	776	1.9	833	0.932	100	64.2	LOS E	63.1	449.2	Full	840	0.0	0.0
Lane 2	691	2.7	742[1]	0.932	100	62.3	LOS E	55.7	398.9	Full	840	0.0	0.0
Lane 3	241	2.4	336[1]	0.718	100	67.7	LOS E	16.8	119.9	Short	65	0.0	NA
Lane 4	241	2.4	336[1]	0.718	100	67.7	LOS E	16.8	119.9	Short	170	0.0	NA
Lane 5	249	2.4	347	0.718	100	67.9	LOS E	17.4	124.6	Short	130	0.0	NA
Approach	2199	2.3		0.932		64.8	LOS E	63.1	449.2				
West: Greenhill Rd W													
Lane 1	254	2.1	905	0.281	42[6]	15.4	LOS B	4.5	31.7	Short	65	0.0	NA
Lane 2	566	2.1	850[1]	0.665	100	16.9	LOS B	16.2	115.5	Short	85	0.0	NA
Lane 3	294	2.0	477	0.615	62[6]	43.6	LOS D	16.8	119.3	Full	780	0.0	0.0
Lane 4	480	2.0	480	0.999	100	81.2	LOS F	44.6	317.3	Full	780	0.0	0.0
Lane 5	425	2.0	426[1]	0.999	100	80.9	LOS F	37.2	265.1	Full	780	0.0	0.0
Lane 6	100	2.1	121	0.824	100	82.5	LOS F	7.7	54.9	Short	55	0.0	NA
Approach	2119	2.0		0.999		50.9	LOS D	44.6	317.3				
Intersection	6780	2.4		1.003		58.2	LOS E	63.1	449.2				

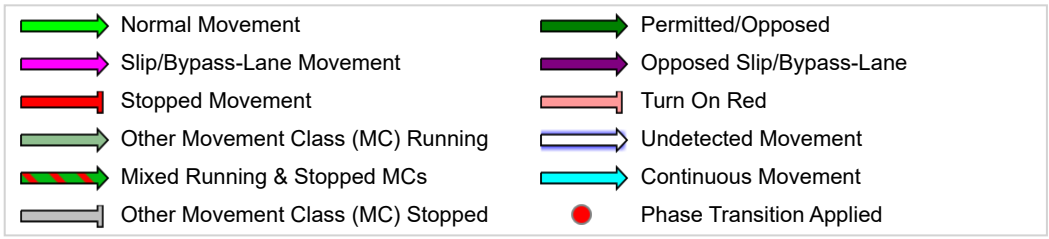
Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Lane LOS values are based on average delay per lane.
Intersection and Approach LOS values are based on average delay for all lanes.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

1 Reduced capacity due to a short lane effect. Short lane queues may extend into the full-length lanes. Some upstream delays at entry to short lanes are not included.
6 Lane under-utilisation due to downstream effects

Output Phase Sequence



REF: Reference Phase
VAR: Variable Phase



Phase Timing Summary

Phase	B	A	C	D	E
Phase Change Time (sec)	45	80	115	134	0
Green Time (sec)	29	29	13	10	38
Phase Time (sec)	35	35	19	17	44
Phase Split	23%	23%	13%	11%	29%

See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

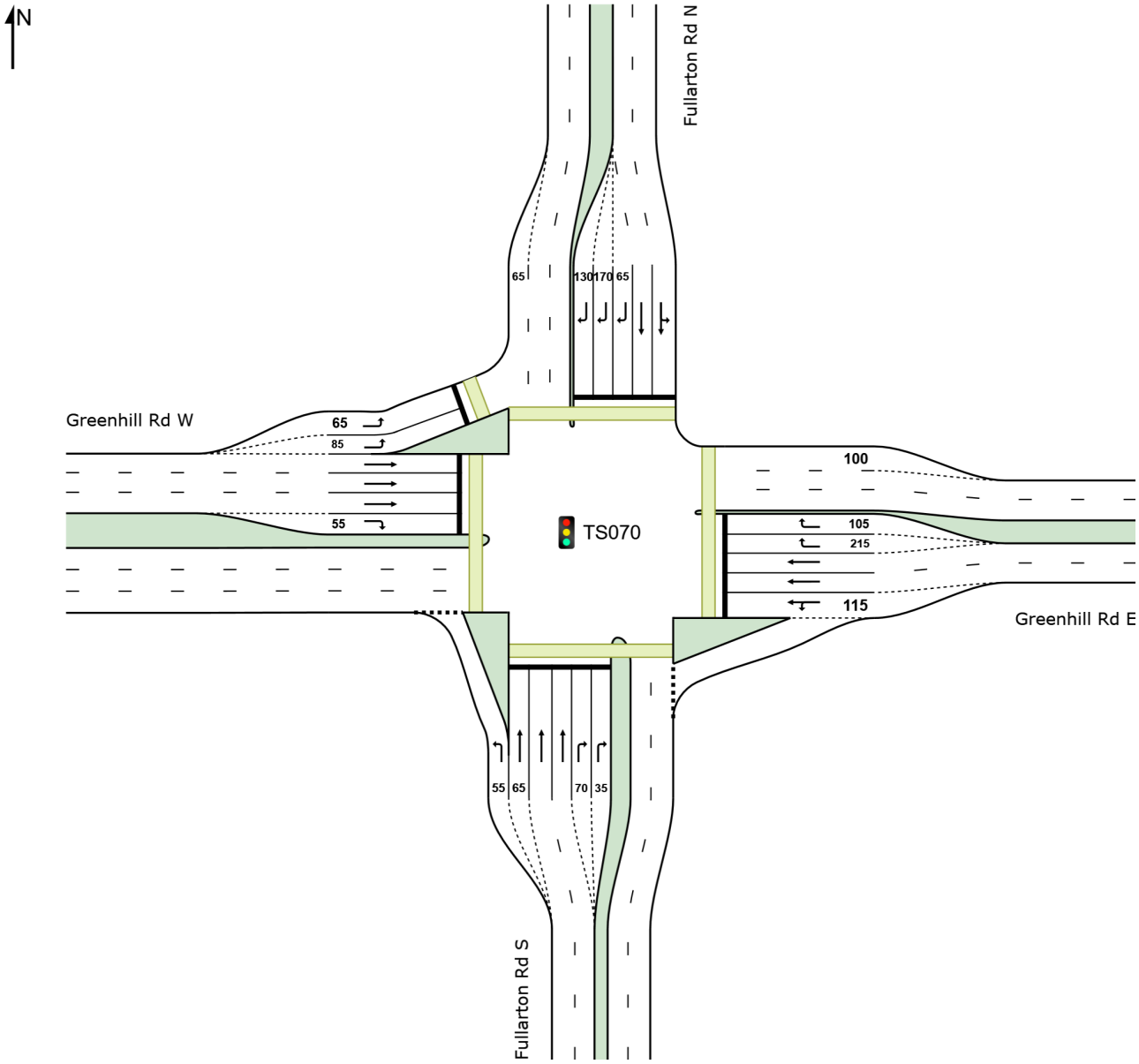
Site: TS070 [TS070-2023AM-Fullarton Rd Greenhill Rd - Glenside 100% + Code Amendment (Site Folder: TS070 Greenhill Fullarton)]

Glenside 50% complete
Aug 2023 SCATS extract
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 150 seconds (Site User-Given Cycle Time)

Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: SCATS Extract - Import
Reference Phase: Phase E
Input Phase Sequence: B, A, C, D, E
Output Phase Sequence: B, A, C, D, E

Site Layout

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



Lane Use and Performance

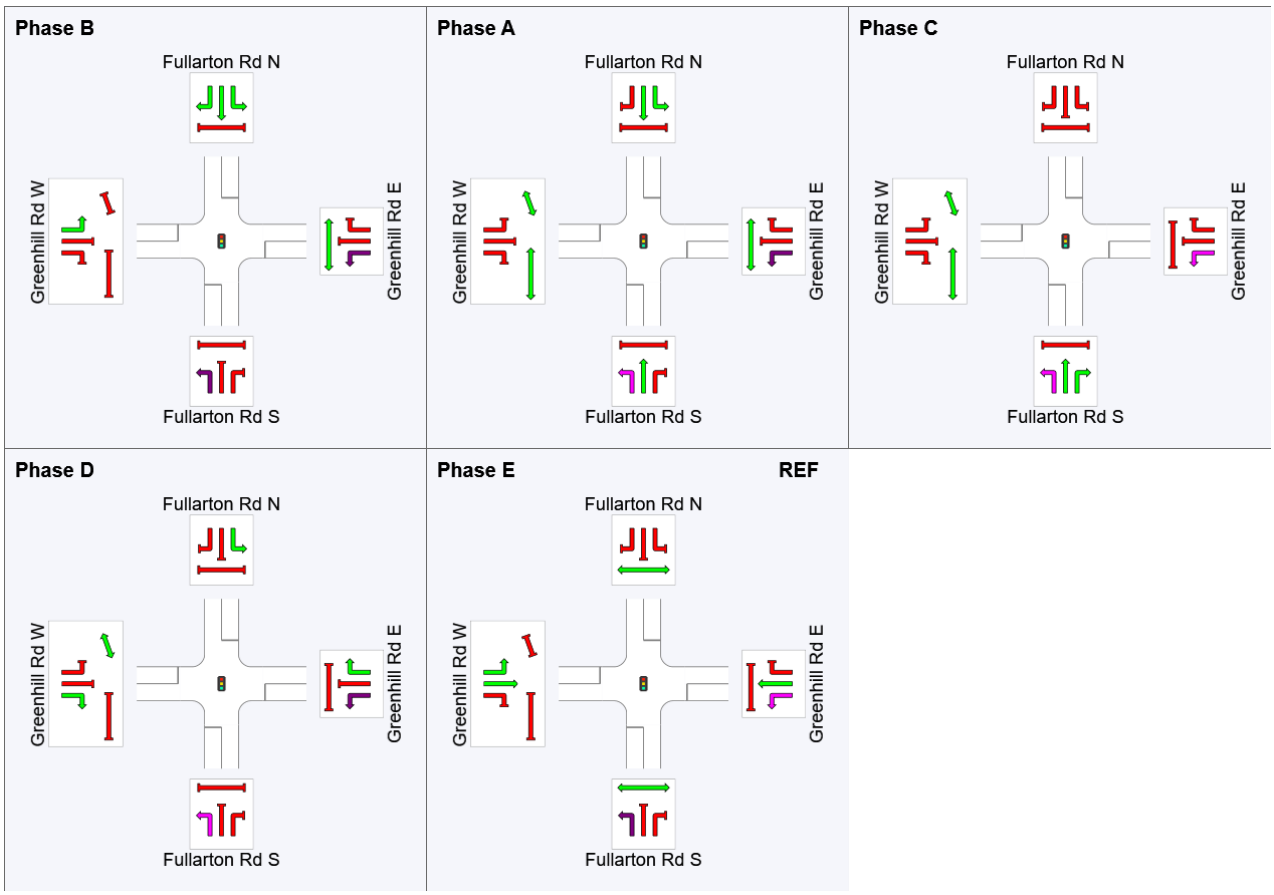
	DEMAND FLOWS [Total	HV]	Cap.	Deg. Satn	Lane Util.	Aver. Delay	Level of Service	95% BACK OF QUEUE [Veh	Dist]	Lane Config	Lane Length	Cap. Adj.	Prob. Block.

	veh/h	%	veh/h	v/c	%	sec			m		m	%	%
South: Fullarton Rd S													
Lane 1	112	2.8	948	0.118	100	19.2	LOS B	2.7	19.4	Short	55	0.0	NA
Lane 2	258	2.8	527[1]	0.490	46[6]	50.1	LOS D	14.2	101.7	Short	65	0.0	NA
Lane 3	459	2.8	432[1]	1.061	100	141.7	LOS F	51.6	369.6	Full	315	0.0	19.5
Lane 4	524	2.8	493[1]	1.061	100	139.7	LOS F	59.4	425.6	Full	315	0.0	32.4
Lane 5	91	2.9	107	0.842	100	89.2	LOS F	7.2	51.4	Short	70	0.0	NA
Lane 6	91	2.9	107	0.842	100	89.2	LOS F	7.2	51.4	Short	35	0.0	NA
Approach	1534	2.8		1.061		110.5	LOS F	59.4	425.6				
East: Greenhill Rd E													
Lane 1	534	2.4	520	1.026	100	91.2	LOS F	40.7	291.0	Short	115	0.0	NA
Lane 2	427	2.5	417[1]	1.026	100	119.4	LOS F	44.2	316.1	Full	800	0.0	0.0
Lane 3	465	2.5	453	1.026	100	118.1	LOS F	48.3	345.4	Full	800	0.0	0.0
Lane 4	272	2.3	262	1.037	100	136.3	LOS F	28.8	205.4	Short	215	0.0	NA
Lane 5	275	2.3	265	1.037	100	136.2	LOS F	29.1	207.4	Short	105	0.0	NA
Approach	1974	2.4		1.037		116.1	LOS F	48.3	345.4				
North: Fullarton Rd N													
Lane 1	629	2.1	754	0.834	100	48.1	LOS D	42.0	299.0	Full	840	0.0	0.0
Lane 2	608	2.7	729	0.834	100	47.1	LOS D	41.4	296.3	Full	840	0.0	0.0
Lane 3	267	2.5	253[1]	1.058	100	156.9	LOS F	30.9	220.8	Short	65	0.0	NA
Lane 4	267	2.5	253[1]	1.058	100	156.9	LOS F	30.9	220.8	Short	170	0.0	NA
Lane 5	304	2.5	287	1.058	100	155.3	LOS F	34.9	249.7	Short	130	0.0	NA
Approach	2076	2.4		1.058		91.6	LOS F	42.0	299.0				
West: Greenhill Rd W													
Lane 1	201	2.1	818	0.246	42[6]	20.4	LOS C	4.7	33.4	Short	65	0.0	NA
Lane 2	459	2.1	788	0.582	100	21.6	LOS C	15.4	109.7	Short	85	0.0	NA
Lane 3	212	2.0	452	0.468	62[6]	42.4	LOS D	11.4	81.3	Full	780	0.0	0.0
Lane 4	346	2.0	455	0.760	100	45.7	LOS D	22.0	156.8	Full	780	0.0	0.0
Lane 5	318	2.0	418[1]	0.760	100	44.9	LOS D	19.5	138.9	Full	780	0.0	0.0
Lane 6	63	1.7	268	0.236	100	60.0	LOS E	3.7	26.5	Short	55	0.0	NA
Approach	1598	2.0		0.760		35.6	LOS D	22.0	156.8				
Intersection	7181	2.4		1.061		89.9	LOS F	59.4	425.6				

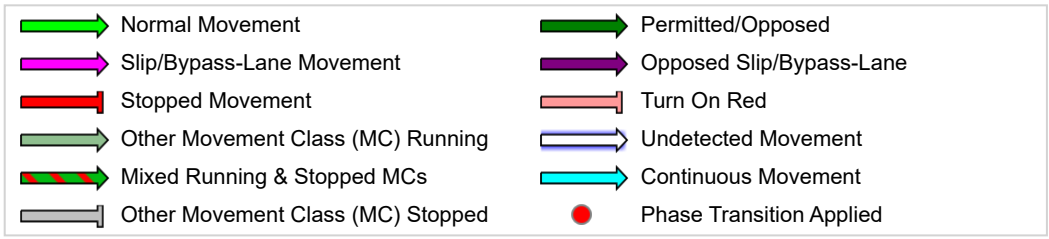
Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Lane LOS values are based on average delay per lane.
Intersection and Approach LOS values are based on average delay for all lanes.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

1 Reduced capacity due to a short lane effect. Short lane queues may extend into the full-length lanes. Some upstream delays at entry to short lanes are not included.
6 Lane under-utilisation due to downstream effects

Output Phase Sequence



REF: Reference Phase
VAR: Variable Phase



Phase Timing Summary

Phase	B	A	C	D	E
Phase Change Time (sec)	43	73	107	122	0
Green Time (sec)	24	28	9	22	36
Phase Time (sec)	30	34	15	29	42
Phase Split	20%	23%	10%	19%	28%

See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

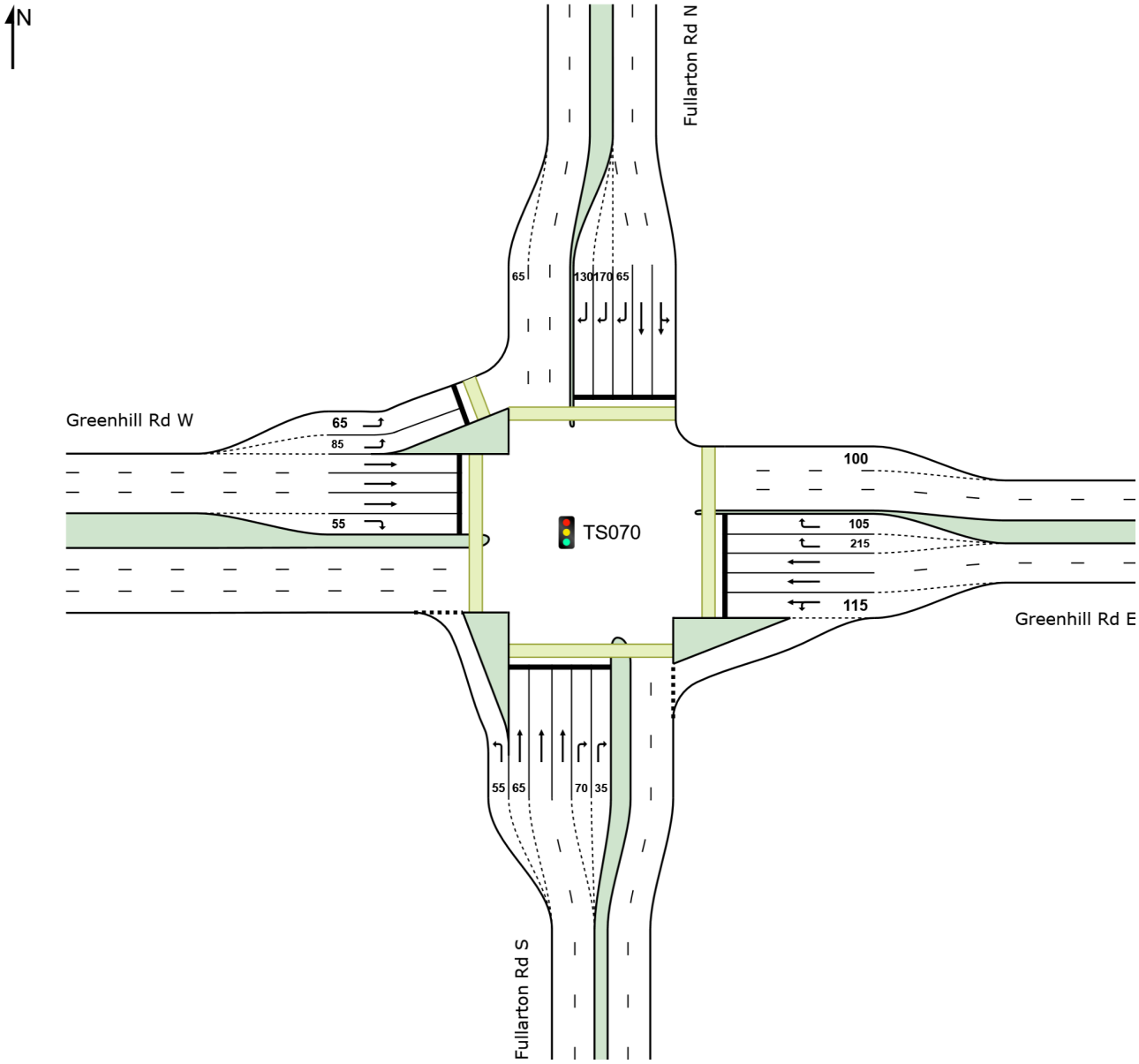
Site: TS070 [TS070-2023PM-Fullarton Rd Greenhill Rd - Glenside 100% + Code Amendment (Site Folder: TS070 Greenhill Fullarton)]

Glenside 50% complete
Aug 2023 SCATS extract
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 150 seconds (Site User-Given Cycle Time)

Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: SCATS Extract - Import
Reference Phase: Phase E
Input Phase Sequence: B, A, C, D, E
Output Phase Sequence: B, A, C, D, E

Site Layout

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



Lane Use and Performance

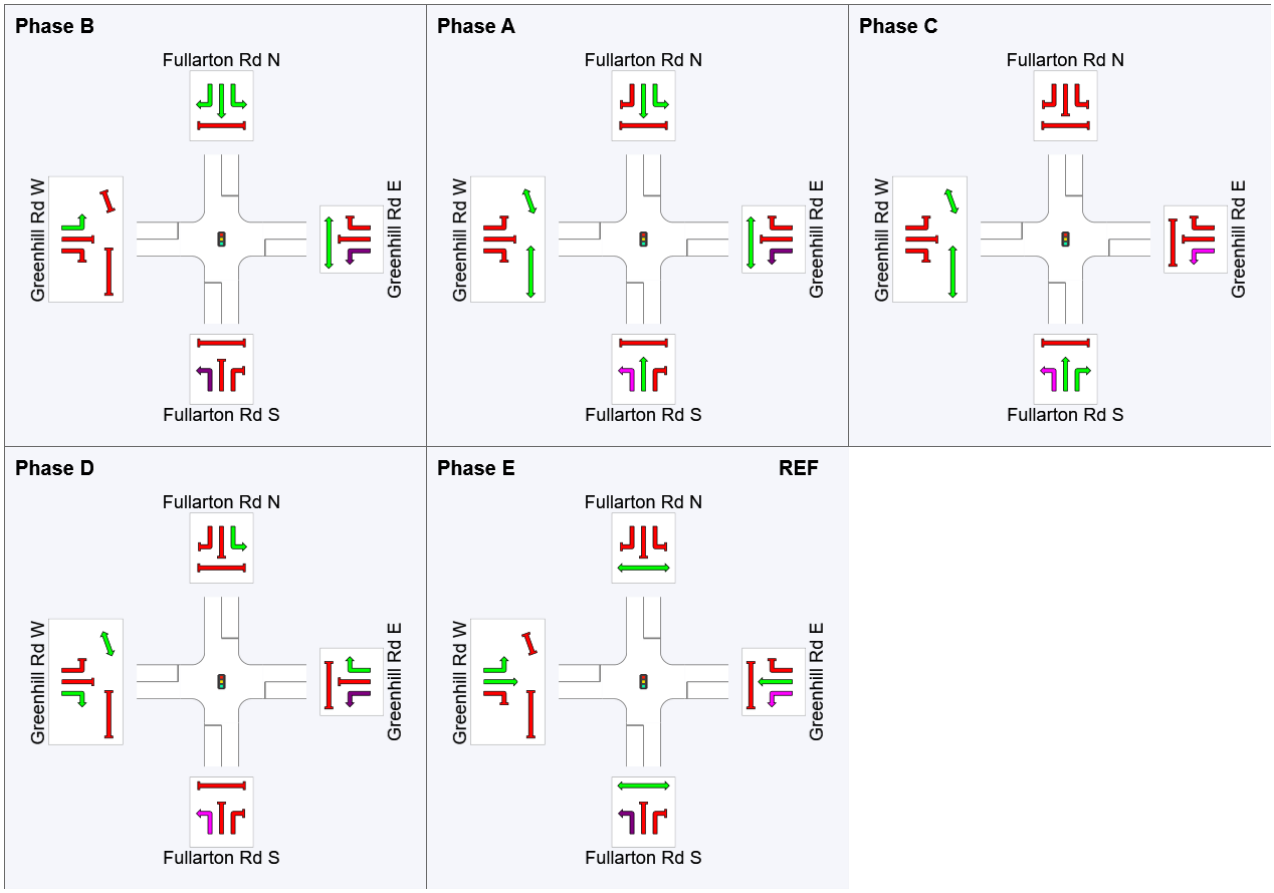
	DEMAND FLOWS [Total	HV]	Cap.	Deg. Satn	Lane Util.	Aver. Delay	Level of Service	95% BACK OF QUEUE [Veh	Dist]	Lane Config	Lane Length	Cap. Adj.	Prob. Block.

	veh/h	%	veh/h	v/c	%	sec			m		m	%	%
South: Fullarton Rd S													
Lane 1	117	2.7	1112	0.105	100	8.9	LOS A	1.0	7.3	Short	55	0.0	NA
Lane 2	202	3.0	606	0.334	46[6]	41.9	LOS D	9.8	70.2	Short	65	0.0	NA
Lane 3	382	3.0	529[1]	0.723	100	44.7	LOS D	21.6	155.0	Full	315	0.0	0.0
Lane 4	361	3.0	499[1]	0.723	100	44.4	LOS D	20.2	145.0	Full	315	0.0	0.0
Lane 5	133	3.2	139[1]	0.961	100	102.4	LOS F	11.6	83.1	Short	70	0.0	NA
Lane 6	133	3.2	139[1]	0.961	100	102.4	LOS F	11.6	83.1	Short	35	0.0	NA
Approach	1328	3.0		0.961		52.6	LOS D	21.6	155.0				
East: Greenhill Rd E													
Lane 1	324	2.5	542	0.598	100	47.8	LOS D	15.6	111.4	Short	115	0.0	NA
Lane 2	286	2.5	479	0.598	100	52.9	LOS D	17.3	123.9	Full	800	0.0	0.0
Lane 3	286	2.5	479	0.598	100	52.9	LOS D	17.3	123.9	Full	800	0.0	0.0
Lane 4	120	2.6	119	1.012	100	124.0	LOS F	11.7	83.6	Short	215	0.0	NA
Lane 5	122	2.6	120	1.012	100	123.9	LOS F	11.8	84.4	Short	105	0.0	NA
Approach	1138	2.5		1.012		66.6	LOS E	17.3	123.9				
North: Fullarton Rd N													
Lane 1	799	1.9	833	0.959	100	75.0	LOS E	70.6	501.8	Full	840	0.0	0.0
Lane 2	713	2.6	744[1]	0.959	100	73.1	LOS E	62.2	445.3	Full	840	0.0	0.0
Lane 3	241	2.4	336[1]	0.718	100	67.7	LOS E	16.8	119.9	Short	65	0.0	NA
Lane 4	241	2.4	336[1]	0.718	100	67.7	LOS E	16.8	119.9	Short	170	0.0	NA
Lane 5	249	2.4	347	0.718	100	67.9	LOS E	17.4	124.5	Short	130	0.0	NA
Approach	2243	2.3		0.959		72.0	LOS E	70.6	501.8				
West: Greenhill Rd W													
Lane 1	254	2.1	905	0.281	42[6]	15.4	LOS B	4.4	31.7	Short	65	0.0	NA
Lane 2	566	2.1	852[1]	0.664	100	16.9	LOS B	16.2	115.7	Short	85	0.0	NA
Lane 3	295	2.0	477	0.617	62[6]	43.6	LOS D	16.8	119.7	Full	780	0.0	0.0
Lane 4	481	2.0	480	1.002	100	82.5	LOS F	45.0	320.4	Full	780	0.0	0.0
Lane 5	423	2.0	422[1]	1.002	100	84.2	LOS F	38.5	273.8	Full	780	0.0	0.0
Lane 6	106	2.0	121	0.875	100	84.6	LOS F	8.3	59.4	Short	55	0.0	NA
Approach	2125	2.0		1.002		52.1	LOS D	45.0	320.4				
Intersection	6835	2.4		1.012		61.1	LOS E	70.6	501.8				

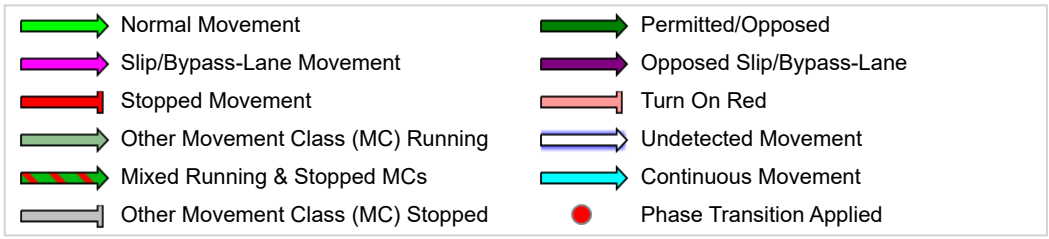
Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Lane LOS values are based on average delay per lane.
Intersection and Approach LOS values are based on average delay for all lanes.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

1 Reduced capacity due to a short lane effect. Short lane queues may extend into the full-length lanes. Some upstream delays at entry to short lanes are not included.
6 Lane under-utilisation due to downstream effects

Output Phase Sequence



REF: Reference Phase
VAR: Variable Phase



Phase Timing Summary

Phase	B	A	C	D	E
Phase Change Time (sec)	45	80	115	134	0
Green Time (sec)	29	29	13	10	38
Phase Time (sec)	35	35	19	17	44
Phase Split	23%	23%	13%	11%	29%

See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

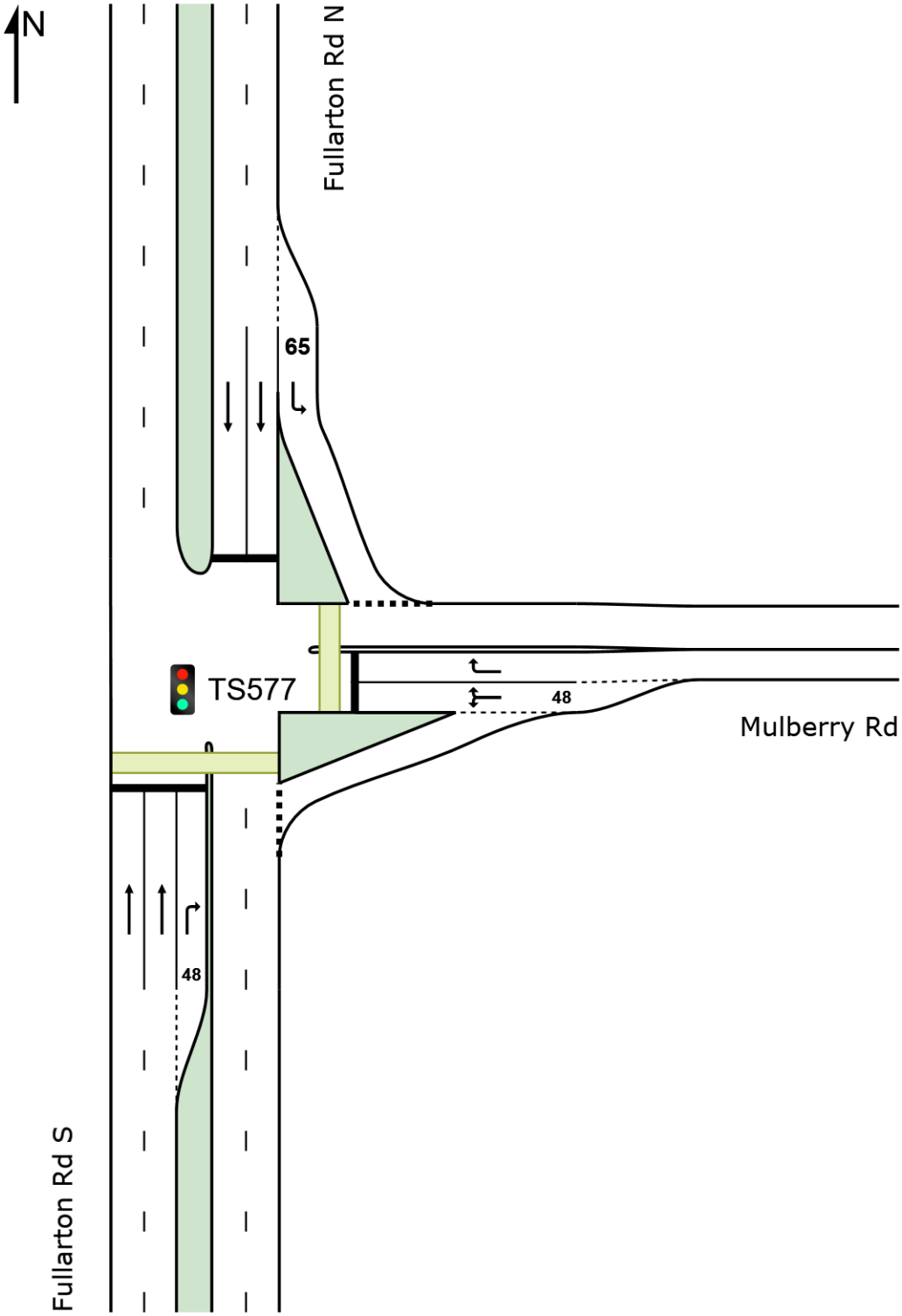
Site: TS577 [TS577-2023AM-Fullarton Rd Mulberry Rd - 2016 base (Site Folder: TS577 Fullarton Mulberry)]

AM Peak 15/08/23 0800 - 0900
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 75 seconds (Site User-Given Cycle Time)

Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Three Phase
Reference Phase: Phase A
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C

Site Layout

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



Lane Use and Performance

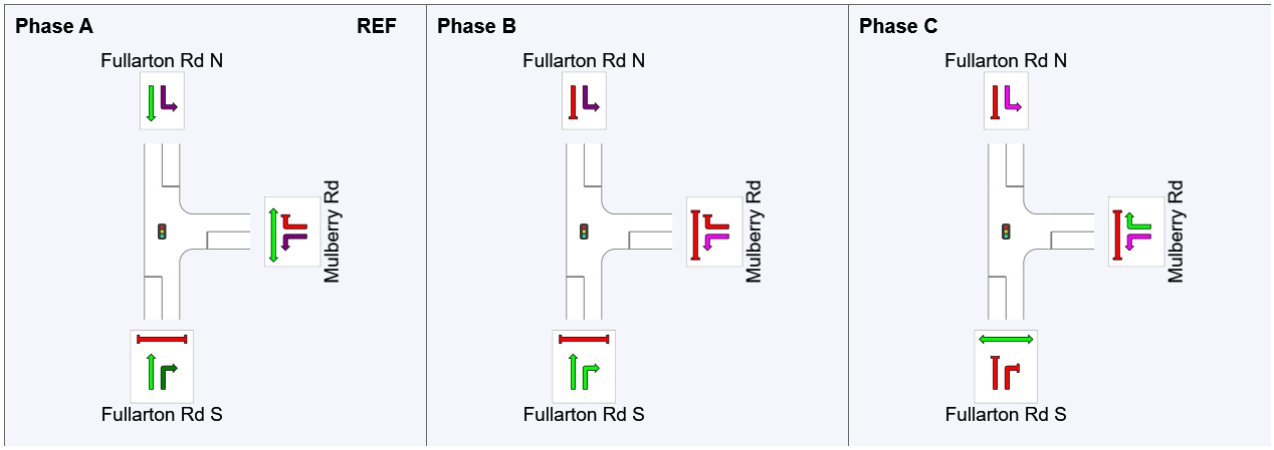
	DEMAND FLOWS [Total veh/h	HV] %	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh	Dist] m	Lane Config	Lane Length m	Cap. Adj. %	Prob. Block. %
South: Fullarton Rd S													
Lane 1	856	2.0	1335	0.641	100	6.8	LOS A	17.2	122.2	Full	300	0.0	0.0
Lane 2	809	2.0	1262[1]	0.641	100	6.5	LOS A	15.6	111.1	Full	300	0.0	0.0
Lane 3	54	2.0	320	0.168	100	19.6	LOS B	1.3	8.9	Short	48	0.0	NA
Approach	1718	2.0		0.641		7.1	LOS A	17.2	122.2				

East: Mulberry Rd													
Lane 1	27	0.0	721	0.037	100	9.8	LOS A	0.3	2.2	Short	48	0.0	NA
Lane 2	10	0.0	268	0.037	100	35.8	LOS D	0.3	2.2	Full	120	0.0	0.0
Approach	37	0.0		0.037		16.8	LOS B	0.3	2.2				
North: Fullarton Rd N													
Lane 1	74	0.0	1364	0.054	100	6.6	LOS A	0.4	2.6	Short	65	0.0	NA
Lane 2	627	2.0	1016	0.617	100	13.1	LOS B	16.0	113.7	Full	320	0.0	0.0
Lane 3	637	2.0	1032	0.617	100	13.1	LOS B	16.2	115.4	Full	320	0.0	0.0
Approach	1337	1.9		0.617		12.8	LOS B	16.2	115.4				
Intersection	3092	1.9		0.641		9.6	LOS A	17.2	122.2				

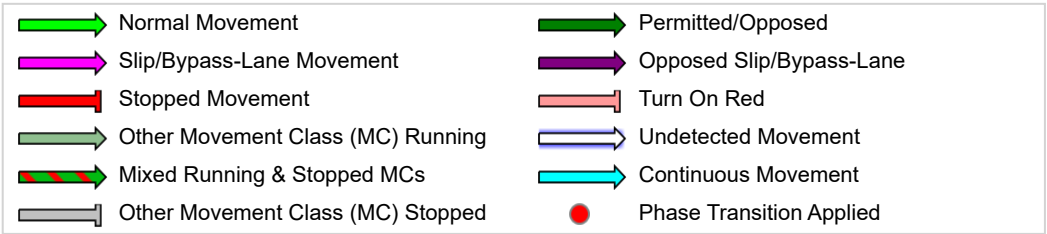
Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Lane LOS values are based on average delay per lane.
Intersection and Approach LOS values are based on average delay for all lanes.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

1 Reduced capacity due to a short lane effect. Short lane queues may extend into the full-length lanes. Some upstream delays at entry to short lanes are not included.

Output Phase Sequence



REF: Reference Phase
VAR: Variable Phase



Phase Timing Summary

Phase	A	B	C
Phase Change Time (sec)	0	46	58
Green Time (sec)	40	6	11
Phase Time (sec)	46	12	17

Phase Split	61%	16%	23%

See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

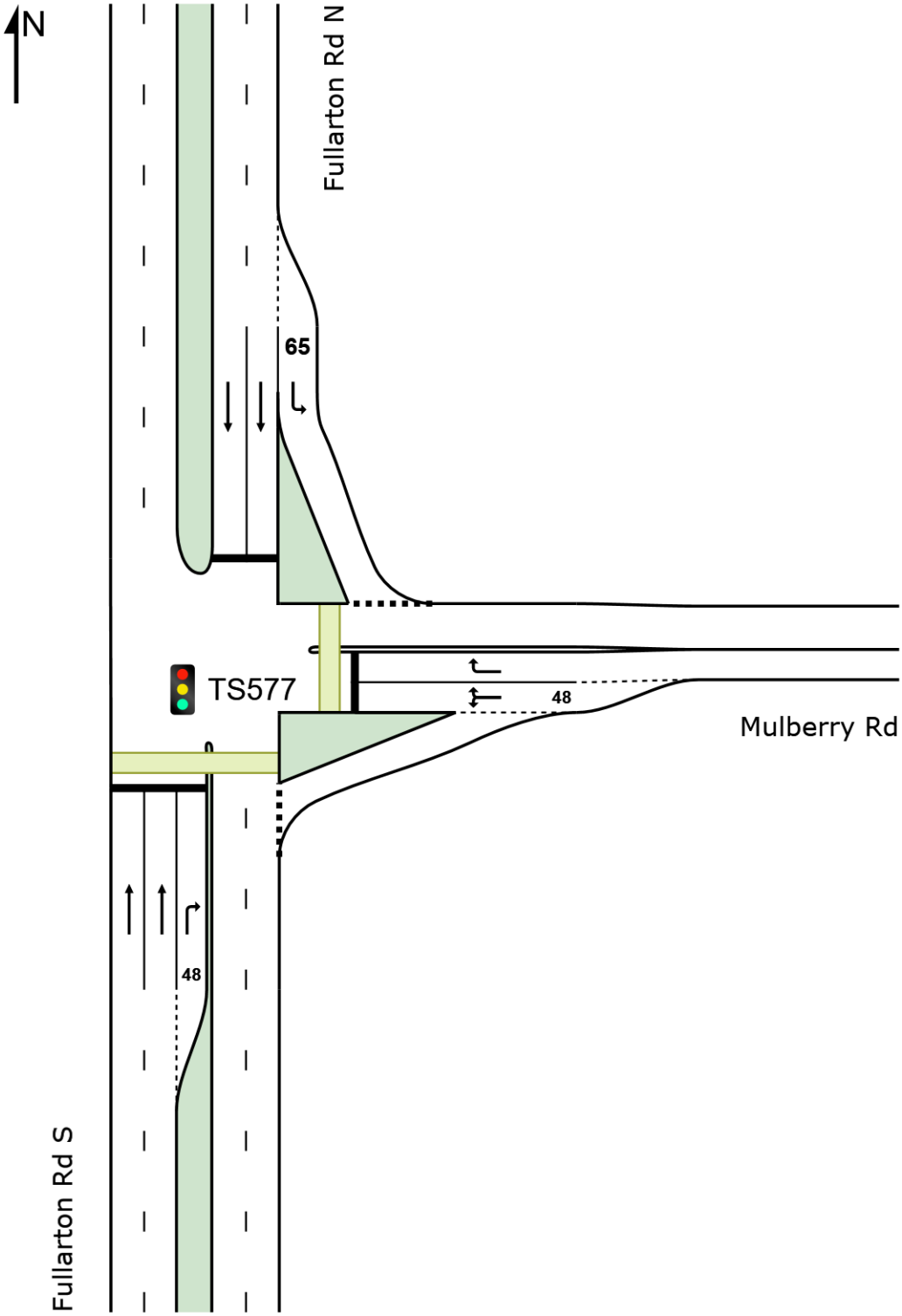
Site: TS577 [TS577-2023AM-Fullarton Rd Mulberry Rd - Existing (50% Glenside) (Site Folder: TS577 Fullarton Mulberry)]

AM Peak 15/08/23 0800 - 0900
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 75 seconds (Site User-Given Cycle Time)

Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Three Phase
Reference Phase: Phase A
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C

Site Layout

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



Lane Use and Performance

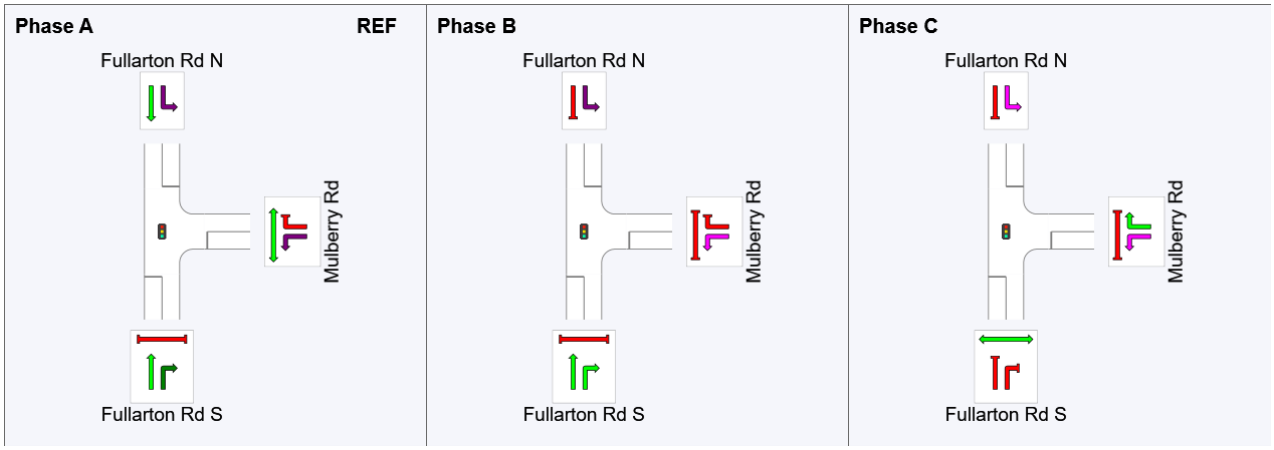
	DEMAND FLOWS [Total veh/h	HV] %	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh	Dist] m	Lane Config	Lane Length m	Cap. Adj. %	Prob. Block. %
South: Fullarton Rd S													
Lane 1	858	2.0	1335	0.642	100	6.8	LOS A	17.2	122.8	Full	300	0.0	0.0
Lane 2	807	2.0	1256[1]	0.642	100	6.5	LOS A	15.5	110.6	Full	300	0.0	0.0
Lane 3	59	1.8	320	0.184	100	19.7	LOS B	1.4	9.9	Short	48	0.0	NA
Approach	1723	2.0		0.642		7.1	LOS A	17.2	122.8				

East: Mulberry Rd													
Lane 1	86	0.0	406	0.212	100	16.9	LOS B	1.3	9.4	Short	48	0.0	NA
Lane 2	57	0.0	268	0.212	100	37.1	LOS D	1.9	13.4	Full	120	0.0	0.0
Approach	143	0.0		0.212		24.9	LOS C	1.9	13.4				
North: Fullarton Rd N													
Lane 1	118	0.0	1354	0.087	100	6.7	LOS A	0.6	4.3	Short	65	0.0	NA
Lane 2	627	2.0	1016	0.617	100	13.1	LOS B	16.0	113.7	Full	320	0.0	0.0
Lane 3	637	2.0	1032	0.617	100	13.1	LOS B	16.2	115.4	Full	320	0.0	0.0
Approach	1381	1.8		0.617		12.6	LOS B	16.2	115.4				
Intersection	3247	1.8		0.642		10.2	LOS B	17.2	122.8				

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Lane LOS values are based on average delay per lane.
Intersection and Approach LOS values are based on average delay for all lanes.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

1 Reduced capacity due to a short lane effect. Short lane queues may extend into the full-length lanes. Some upstream delays at entry to short lanes are not included.

Output Phase Sequence



REF: Reference Phase
VAR: Variable Phase

Phase Timing Summary

Phase	A	B	C
Phase Change Time (sec)	0	46	58
Green Time (sec)	40	6	11
Phase Time (sec)	46	12	17

Phase Split	61%	16%	23%

See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

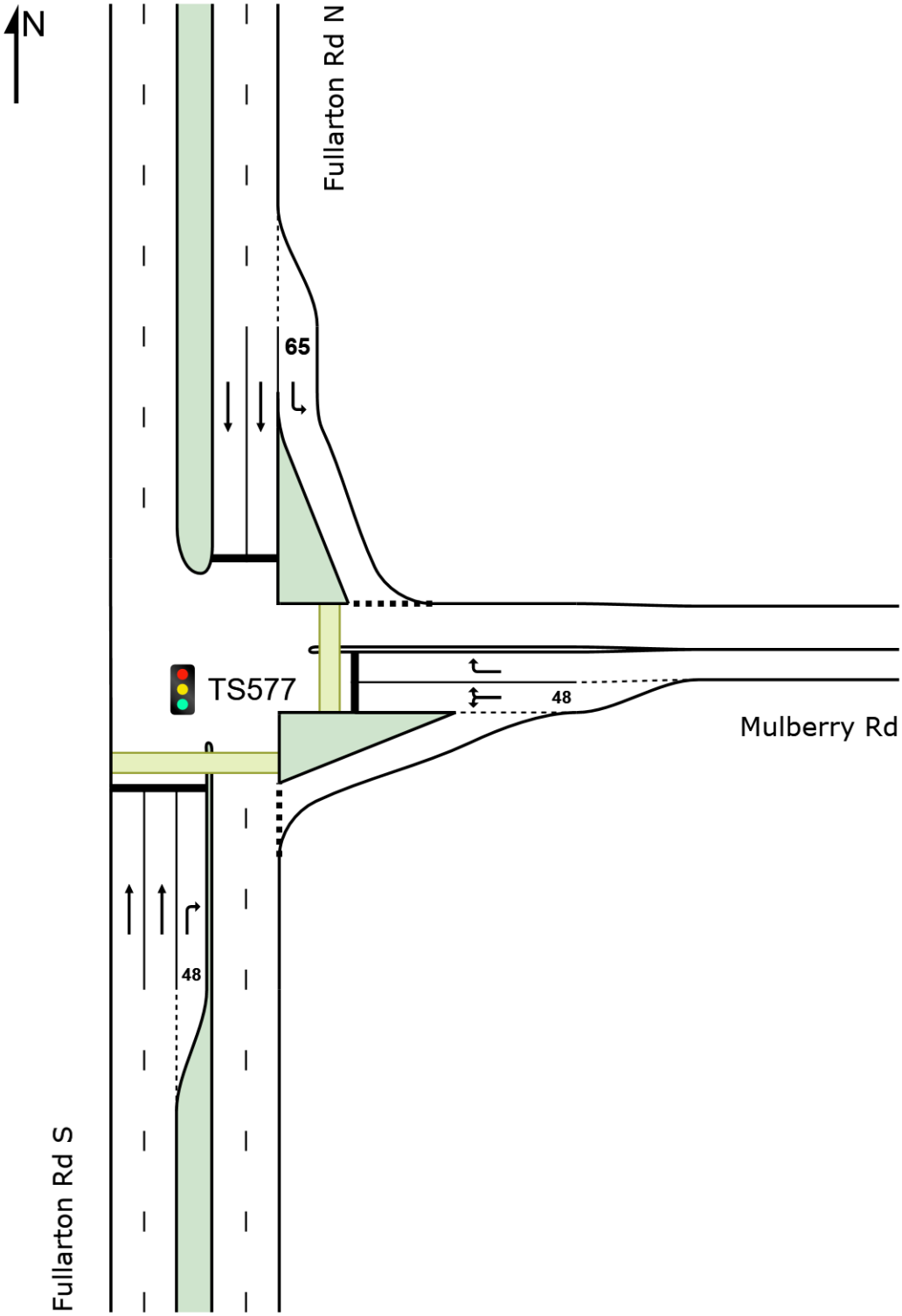
Site: TS577 [TS577-2023AM-Fullarton Rd Mulberry Rd - Glenside 100% (Site Folder: TS577 Fullarton Mulberry)]

AM Peak 15/08/23 0800 - 0900
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 75 seconds (Site User-Given Cycle Time)

Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Three Phase
Reference Phase: Phase A
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C

Site Layout

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



Lane Use and Performance

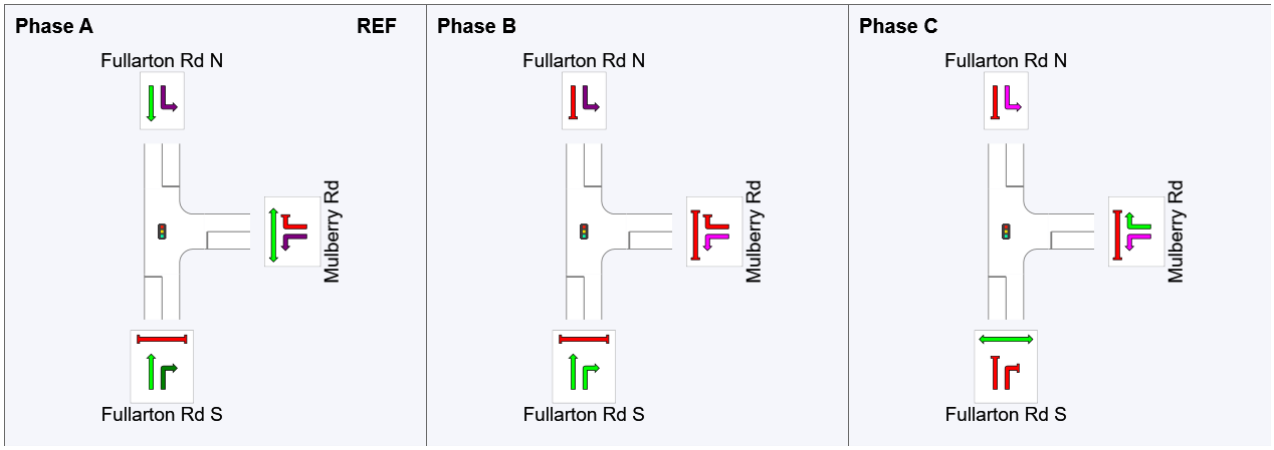
	DEMAND FLOWS [Total veh/h	HV] %	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh	Dist] m	Lane Config	Lane Length m	Cap. Adj. %	Prob. Block. %
South: Fullarton Rd S													
Lane 1	859	2.0	1335	0.644	100	6.8	LOS A	17.3	123.2	Full	300	0.0	0.0
Lane 2	805	2.0	1251[1]	0.644	100	6.5	LOS A	15.5	110.2	Full	300	0.0	0.0
Lane 3	63	1.7	320	0.197	100	19.8	LOS B	1.5	10.7	Short	48	0.0	NA
Approach	1727	2.0		0.644		7.1	LOS A	17.3	123.2				

East: Mulberry Rd													
Lane 1	135	0.0	372	0.362	100	18.6	LOS B	2.3	16.2	Short	48	0.0	NA
Lane 2	97	0.0	268	0.362	100	38.0	LOS D	3.3	23.4	Full	120	0.0	0.0
Approach	232	0.0		0.362		26.8	LOS C	3.3	23.4				
North: Fullarton Rd N													
Lane 1	144	0.0	1346	0.107	100	6.7	LOS A	0.8	5.4	Short	65	0.0	NA
Lane 2	627	2.0	1016	0.617	100	13.1	LOS B	16.0	113.7	Full	320	0.0	0.0
Lane 3	637	2.0	1032	0.617	100	13.1	LOS B	16.2	115.4	Full	320	0.0	0.0
Approach	1407	1.8		0.617		12.5	LOS B	16.2	115.4				
Intersection	3366	1.8		0.644		10.7	LOS B	17.3	123.2				

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Lane LOS values are based on average delay per lane.
Intersection and Approach LOS values are based on average delay for all lanes.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

1 Reduced capacity due to a short lane effect. Short lane queues may extend into the full-length lanes. Some upstream delays at entry to short lanes are not included.

Output Phase Sequence



REF: Reference Phase
VAR: Variable Phase

Phase Timing Summary

Phase	A	B	C
Phase Change Time (sec)	0	46	58
Green Time (sec)	40	6	11
Phase Time (sec)	46	12	17

Phase Split	61%	16%	23%

See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

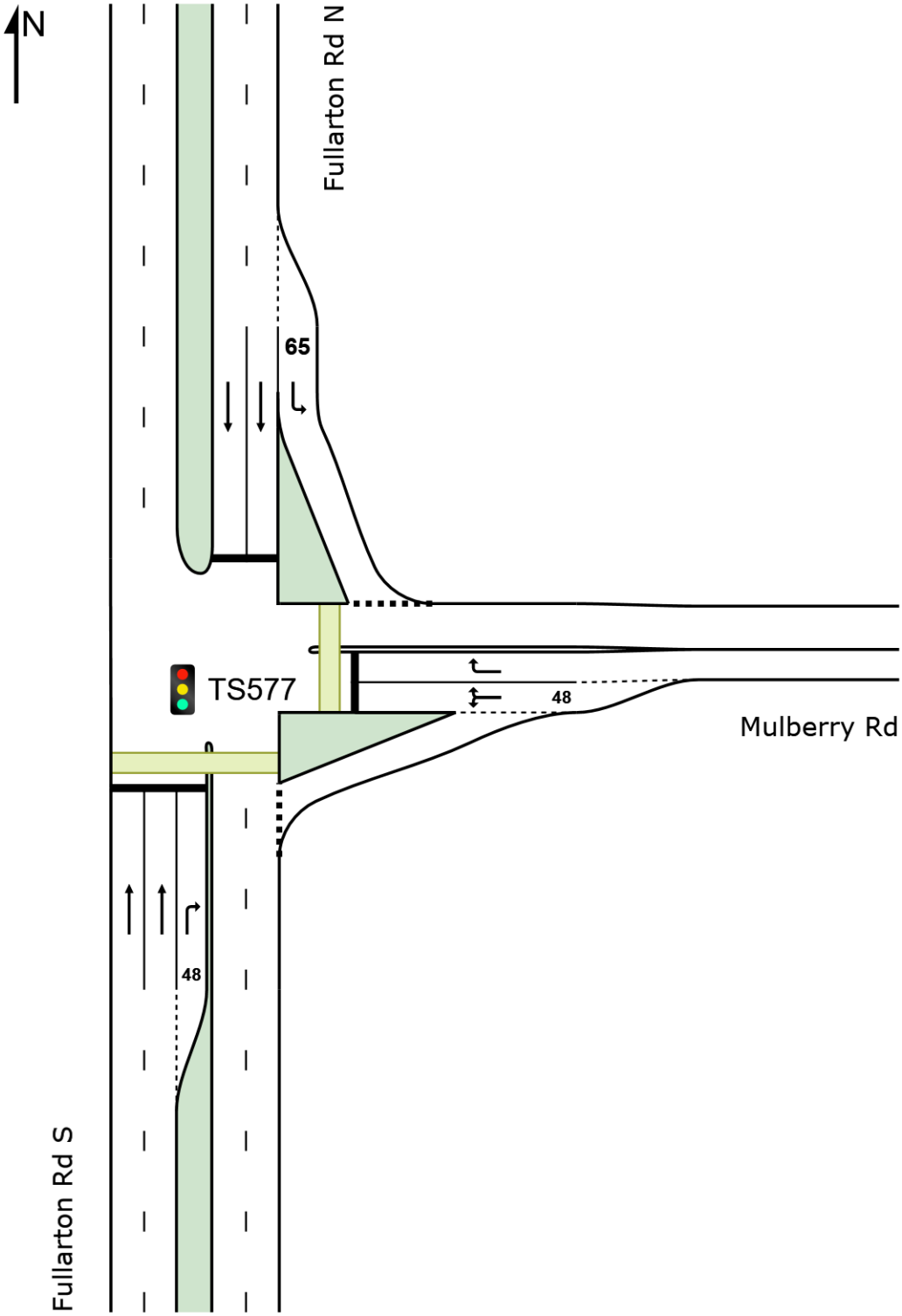
Site: TS577 [TS577-2023AM-Fullarton Rd Mulberry Rd - Code Amd (Site Folder: TS577 Fullarton Mulberry)]

AM Peak 15/08/23 0800 - 0900
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 75 seconds (Site User-Given Cycle Time)

Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Three Phase
Reference Phase: Phase A
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C

Site Layout

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



Lane Use and Performance

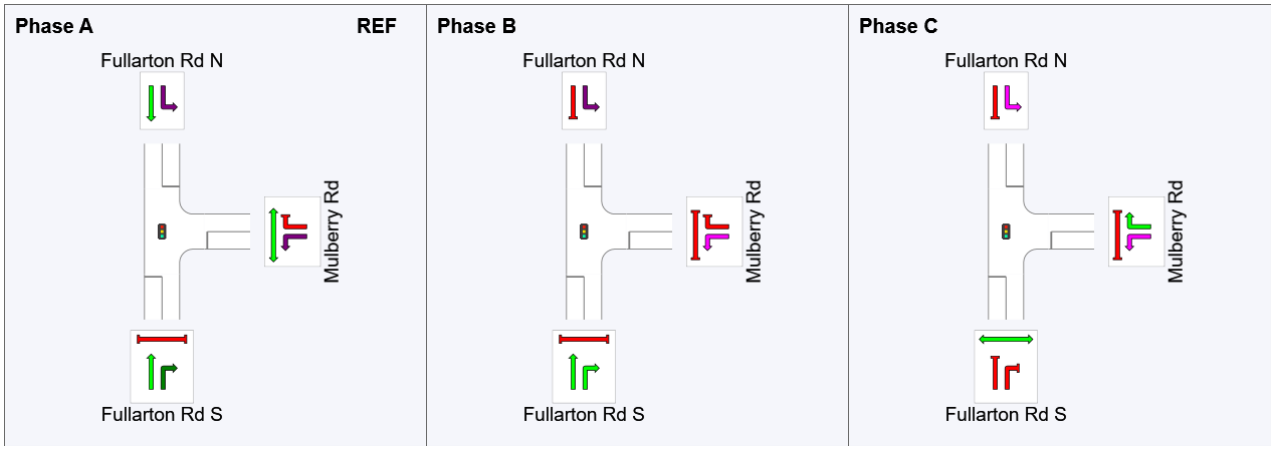
	DEMAND FLOWS [Total veh/h	HV] %	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh	Dist] m	Lane Config	Lane Length m	Cap. Adj. %	Prob. Block. %
South: Fullarton Rd S													
Lane 1	860	2.0	1335	0.644	100	6.8	LOS A	17.3	123.4	Full	300	0.0	0.0
Lane 2	804	2.0	1249[1]	0.644	100	6.5	LOS A	15.5	110.1	Full	300	0.0	0.0
Lane 3	65	1.6	321	0.204	100	19.9	LOS B	1.6	11.1	Short	48	0.0	NA
Approach	1729	1.9		0.644		7.2	LOS A	17.3	123.4				

East: Mulberry Rd													
Lane 1	148	0.0	371	0.400	100	18.9	LOS B	2.6	18.0	Short	48	0.0	NA
Lane 2	107	0.0	268	0.400	100	38.3	LOS D	3.7	26.1	Full	120	0.0	0.0
Approach	256	0.0		0.400		27.0	LOS C	3.7	26.1				
North: Fullarton Rd N													
Lane 1	158	0.0	1341	0.118	100	6.8	LOS A	0.9	6.5	Short	65	0.0	NA
Lane 2	627	2.0	1016	0.617	100	13.1	LOS B	16.0	113.7	Full	320	0.0	0.0
Lane 3	637	2.0	1032	0.617	100	13.1	LOS B	16.2	115.4	Full	320	0.0	0.0
Approach	1421	1.8		0.617		12.4	LOS B	16.2	115.4				
Intersection	3406	1.7		0.644		10.8	LOS B	17.3	123.4				

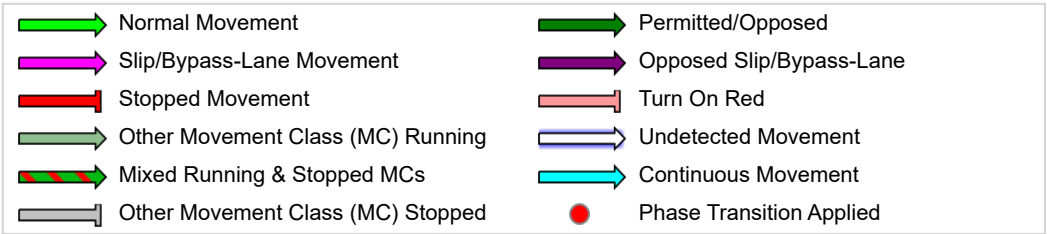
Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Lane LOS values are based on average delay per lane.
Intersection and Approach LOS values are based on average delay for all lanes.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

1 Reduced capacity due to a short lane effect. Short lane queues may extend into the full-length lanes. Some upstream delays at entry to short lanes are not included.

Output Phase Sequence



REF: Reference Phase
VAR: Variable Phase



Phase Timing Summary

Phase	A	B	C
Phase Change Time (sec)	0	46	58
Green Time (sec)	40	6	11
Phase Time (sec)	46	12	17

Phase Split	61%	16%	23%

See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

TS070 - OUTPUTS FOR MODIFIED PHASE SEQUENCE AND TIMES

USER REPORT FOR SITE

All Movement Classes

Project: Glenside Code Amendment_20240801

Template: Default Site User Report

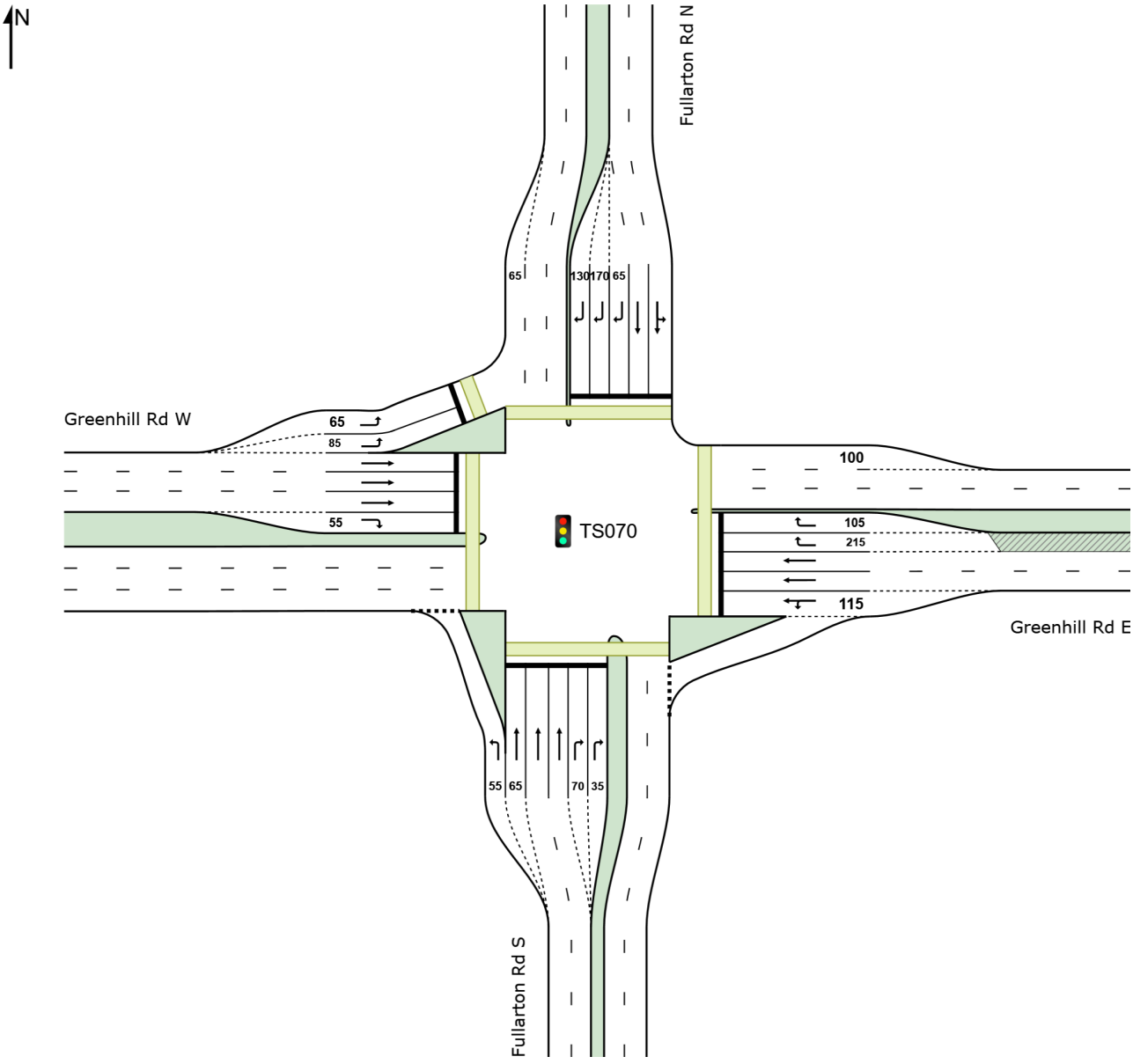
Site: TS070 [TS070-2023AM-Fullarton Rd Greenhill Rd - Existing (50% Glenside) (Site Folder: TS070 Greenhill Fullarton)]

Glenside 50% complete
Aug 2023 SCATS extract
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 150 seconds (Site User-Given Phase Times)

Timings based on settings in the Site Phasing & Timing dialog
Phase Times specified by the user
Phase Sequence: Four-Phase Leading Right Turns
Reference Phase: Phase A
Input Phase Sequence: B, A, C, D, D2, E
Output Phase Sequence: B, A, C, D, D2, E

Site Layout

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



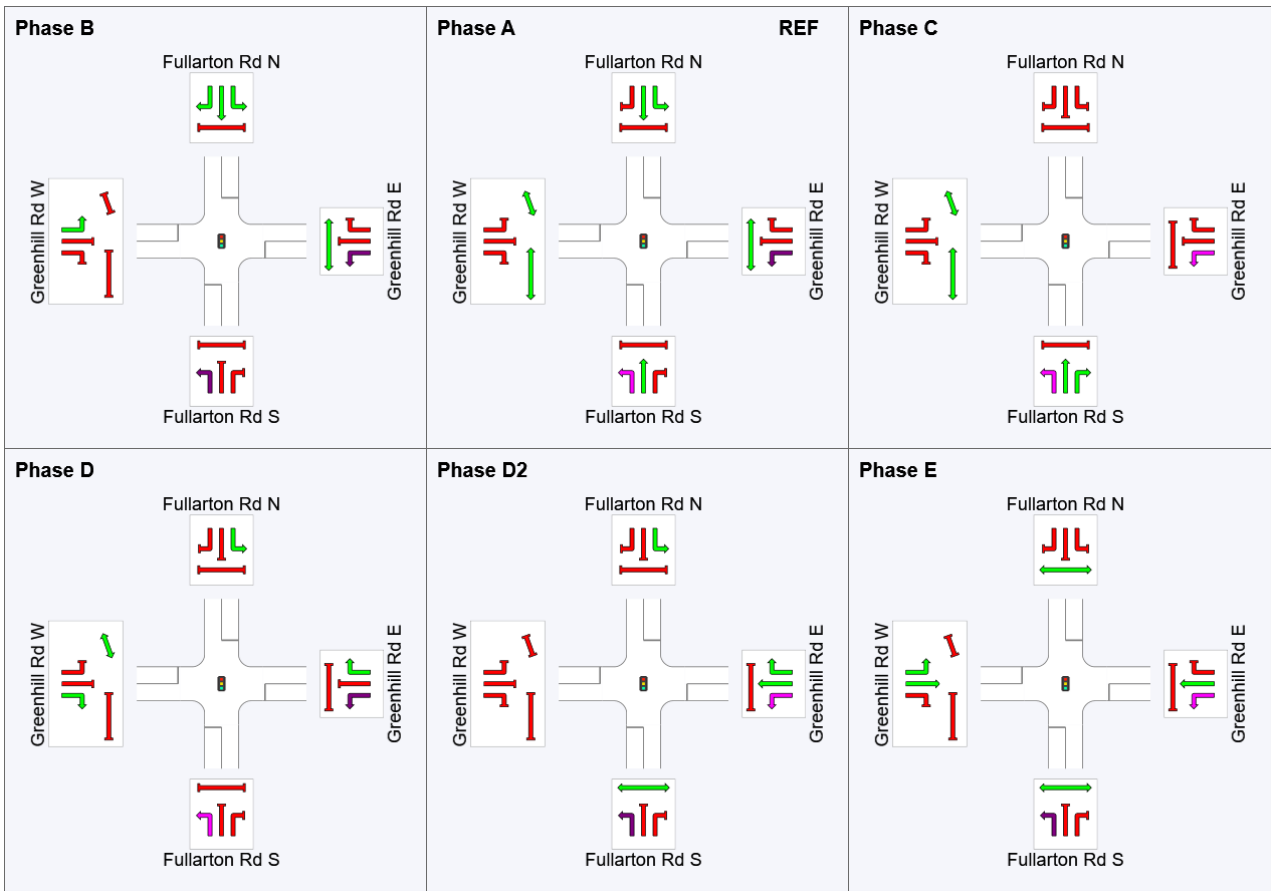
Lane Use and Performance

	DEMAND FLOWS [Total veh/h	HV] %	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh	Dist] m	Lane Config	Lane Length m	Cap. Adj. %	Prob. Block. %
South: Fullarton Rd S													
Lane 1	102	3.1	934	0.109	100	17.7	LOS B	2.3	16.3	Short	55	0.0	NA
Lane 2	251	3.0	593	0.422	46[6]	45.3	LOS D	12.8	92.2	Short	65	0.0	NA
Lane 3	434	3.0	475[1]	0.915	100	63.0	LOS E	31.1	223.0	Full	315	0.0	0.0
Lane 4	485	3.0	530[1]	0.915	100	63.7	LOS E	36.3	260.3	Full	315	0.0	0.0
Lane 5	94	2.8	108	0.876	100	91.2	LOS F	7.6	54.3	Short	70	0.0	NA
Lane 6	94	2.8	108	0.876	100	91.2	LOS F	7.6	54.3	Short	35	0.0	NA
Approach	1460	3.0		0.915		60.7	LOS E	36.3	260.3				
East: Greenhill Rd E													
Lane 1	519	2.4	627	0.828	100	48.3	LOS D	30.4	217.2	Short	115	0.0	NA
Lane 2	446	2.5	539[1]	0.828	100	55.3	LOS E	30.1	215.3	Full	800	0.0	0.0
Lane 3	459	2.5	554	0.828	100	55.6	LOS E	31.3	223.9	Full	800	0.0	0.0
Lane 4	247	2.5	274	0.900	100	84.5	LOS F	19.7	141.1	Short (P)	215	0.0	NA
Lane 5	249	2.5	277	0.900	100	84.4	LOS F	19.9	142.5	Short	105	0.0	NA
Approach	1919	2.5		0.900		61.0	LOS E	31.3	223.9				
North: Fullarton Rd N													
Lane 1	605	2.1	844	0.716	100	38.4	LOS D	35.1	250.5	Full	840	0.0	0.0
Lane 2	585	2.8	817	0.716	100	37.1	LOS D	34.7	248.6	Full	840	0.0	0.0
Lane 3	265	2.5	277[1]	0.957	100	100.6	LOS F	23.8	170.1	Short	65	0.0	NA
Lane 4	265	2.5	277[1]	0.957	100	100.6	LOS F	23.8	170.1	Short	170	0.0	NA
Lane 5	309	2.5	323	0.957	100	100.4	LOS F	28.2	201.4	Short	130	0.0	NA
Approach	2028	2.5		0.957		63.7	LOS E	35.1	250.5				
West: Greenhill Rd W													
Lane 1	211	2.1	756	0.280	42[6]	24.2	LOS C	6.0	43.0	Short	65	0.0	NA
Lane 2	449	2.1	678[1]	0.662	100	26.0	LOS C	17.9	127.7	Short	85	0.0	NA
Lane 3	210	2.0	352	0.598	62[6]	52.3	LOS D	13.1	93.4	Full	780	0.0	0.0
Lane 4	343	2.0	354	0.971	100	76.9	LOS E	29.5	210.2	Full	780	0.0	0.0
Lane 5	321	2.0	330[1]	0.971	100	76.6	LOS E	26.9	191.7	Full	780	0.0	0.0
Lane 6	57	1.9	85	0.668	100	84.3	LOS F	4.3	30.9	Short	55	0.0	NA
Approach	1592	2.1		0.971		52.5	LOS D	29.5	210.2				
Intersection	6999	2.5		0.971		59.8	LOS E	36.3	260.3				

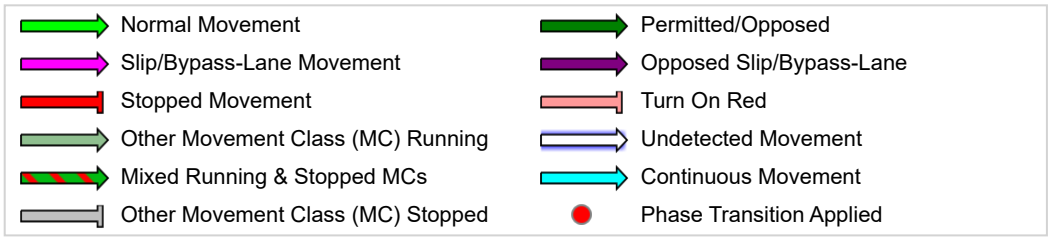
Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Lane LOS values are based on average delay per lane.
Intersection and Approach LOS values are based on average delay for all lanes.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

1 Reduced capacity due to a short lane effect. Short lane queues may extend into the full-length lanes. Some upstream delays at entry to short lanes are not included.
6 Lane under-utilisation due to downstream effects

Output Phase Sequence



REF: Reference Phase
VAR: Variable Phase



Phase Timing Summary

Phase	B	A	C	D	D2	E
Phase Change Time (sec)	117	0	38	53	66	82
Green Time (sec)	27	32	9	7	9	28
Phase Time (sec)	33	38	15	14	16	34
Phase Split	22%	25%	10%	9%	11%	23%

See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

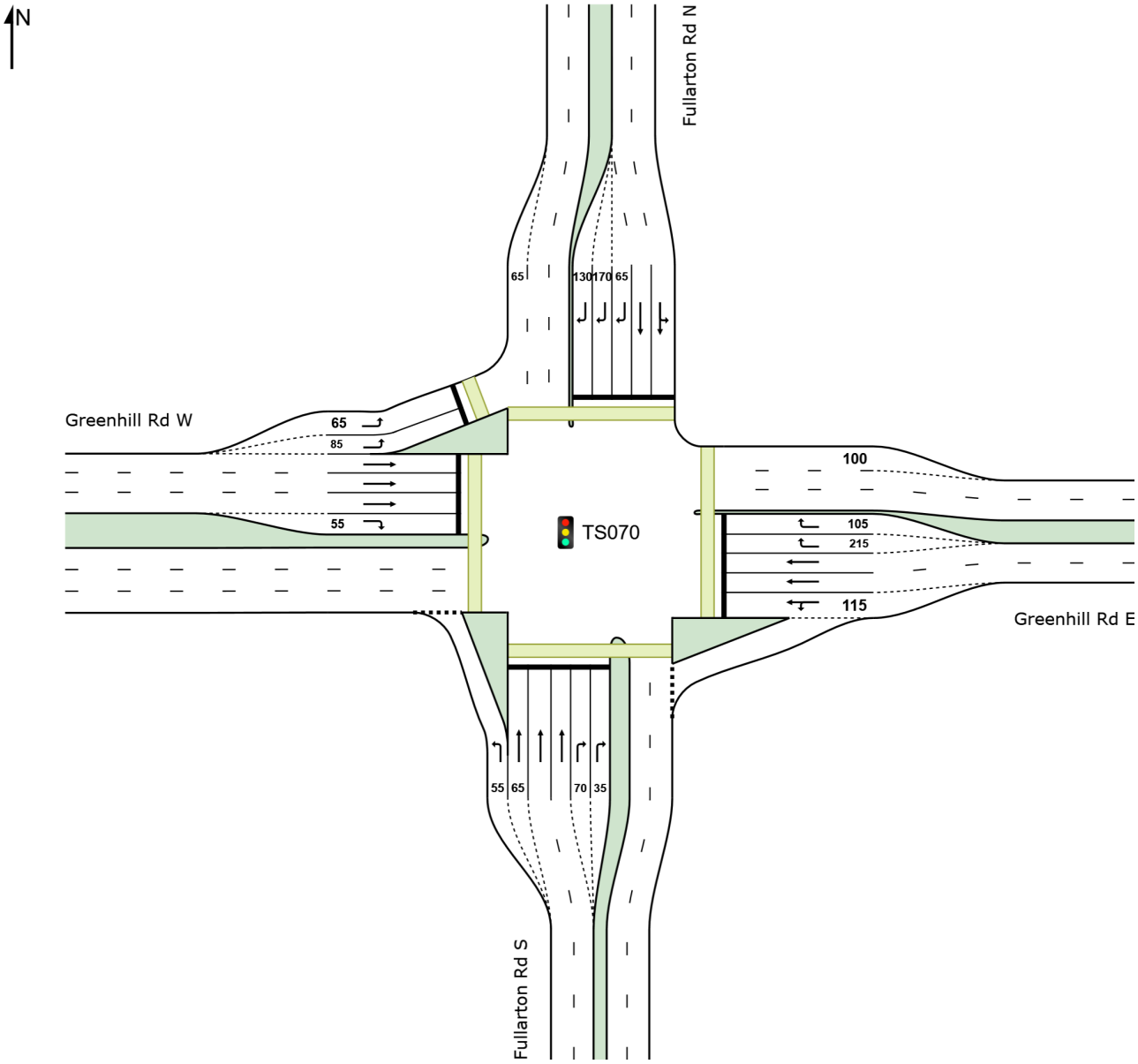
Site: TS070 [TS070-2023AM-Fullarton Rd Greenhill Rd - Existing (50% Glenside) (Site Folder: TS070 Greenhill Fullarton)]

Glenside 50% complete
Aug 2023 SCATS extract
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 150 seconds (Site User-Given Phase Times)

Timings based on settings in the Site Phasing & Timing dialog
Phase Times specified by the user
Phase Sequence: Four-Phase Leading Right Turns
Reference Phase: Phase E
Input Phase Sequence: B, A, C, D, E
Output Phase Sequence: B, A, C, D, E

Site Layout

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



Lane Use and Performance

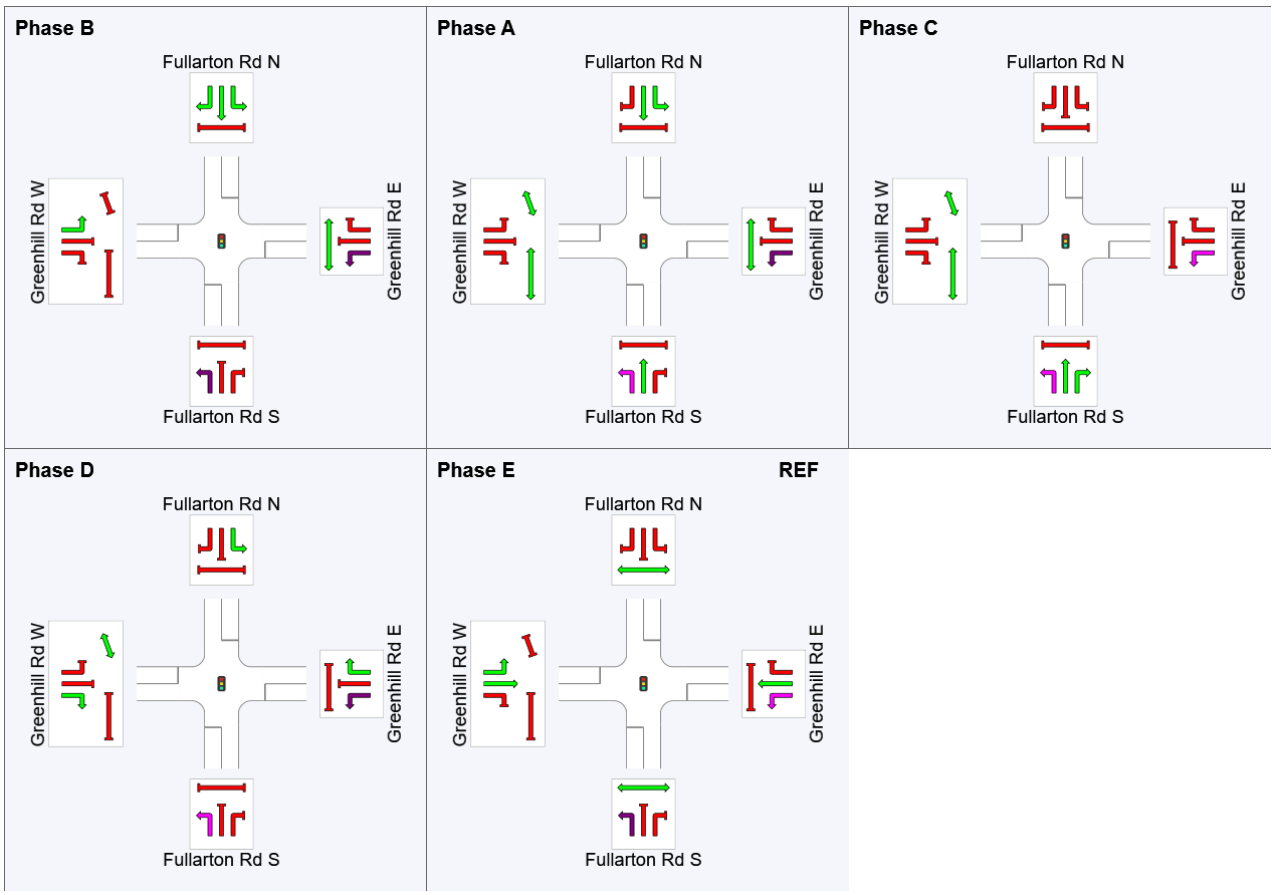
	DEMAND FLOWS [Total	HV]	Cap.	Deg. Satn	Lane Util.	Aver. Delay	Level of Service	95% BACK OF QUEUE [Veh	Dist]	Lane Config	Lane Length	Cap. Adj.	Prob. Block.

	veh/h	%	veh/h	v/c	%	sec			m		m	%	%
South: Fullarton Rd S													
Lane 1	116	2.7	1096	0.106	100	8.6	LOS A	0.9	6.7	Short	55	0.0	NA
Lane 2	200	3.0	542	0.369	46[6]	47.1	LOS D	10.4	75.0	Short	65	0.0	NA
Lane 3	372	3.0	466[1]	0.799	100	52.9	LOS D	23.3	167.5	Full	315	0.0	0.0
Lane 4	363	3.0	454[1]	0.799	100	53.1	LOS D	22.8	163.7	Full	315	0.0	0.0
Lane 5	134	3.1	138[1]	0.968	100	104.8	LOS F	11.8	84.5	Short	70	0.0	NA
Lane 6	134	3.1	138[1]	0.968	100	104.8	LOS F	11.8	84.5	Short	35	0.0	NA
Approach	1318	3.0		0.968		58.7	LOS E	23.3	167.5				
East: Greenhill Rd E													
Lane 1	328	2.4	559	0.586	100	44.0	LOS D	15.2	108.4	Short	115	0.0	NA
Lane 2	288	2.5	491	0.586	100	52.0	LOS D	17.2	123.1	Full	800	0.0	0.0
Lane 3	288	2.5	491	0.586	100	52.0	LOS D	17.2	123.1	Full	800	0.0	0.0
Lane 4	117	2.7	131	0.896	100	91.5	LOS F	9.5	68.1	Short	215	0.0	NA
Lane 5	119	2.7	132	0.896	100	91.4	LOS F	9.6	68.7	Short	105	0.0	NA
Approach	1139	2.5		0.896		57.9	LOS E	17.2	123.1				
North: Fullarton Rd N													
Lane 1	697	2.0	807	0.863	100	49.4	LOS D	47.8	340.6	Full	840	0.0	0.0
Lane 2	643	3.1	745[1]	0.863	100	47.6	LOS D	44.7	321.1	Full	840	0.0	0.0
Lane 3	243	2.4	378[1]	0.642	100	63.7	LOS E	16.2	116.1	Short	65	0.0	NA
Lane 4	243	2.4	378[1]	0.642	100	63.7	LOS E	16.2	116.1	Short	170	0.0	NA
Lane 5	246	2.4	383	0.642	100	63.8	LOS E	16.5	117.9	Short	130	0.0	NA
Approach	2072	2.5		0.863		53.9	LOS D	47.8	340.6				
West: Greenhill Rd W													
Lane 1	250	2.1	954	0.262	42[6]	12.9	LOS B	3.3	23.7	Short	65	0.0	NA
Lane 2	570	2.1	920	0.620	100	13.8	LOS B	12.6	89.7	Short	85	0.0	NA
Lane 3	292	2.0	490	0.596	62[6]	42.4	LOS D	16.3	115.9	Full	780	0.0	0.0
Lane 4	477	2.0	493	0.968	100	65.9	LOS E	40.4	287.5	Full	780	0.0	0.0
Lane 5	430	2.0	445[1]	0.968	100	65.6	LOS E	34.5	245.8	Full	780	0.0	0.0
Lane 6	83	2.5	133	0.625	100	77.8	LOS E	6.1	43.3	Short	55	0.0	NA
Approach	2102	2.1		0.968		42.6	LOS D	40.4	287.5				
Intersection	6631	2.5		0.968		52.0	LOS D	47.8	340.6				

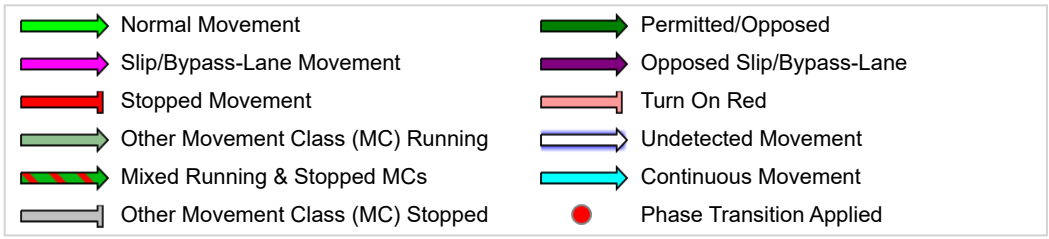
Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Lane LOS values are based on average delay per lane.
Intersection and Approach LOS values are based on average delay for all lanes.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

1 Reduced capacity due to a short lane effect. Short lane queues may extend into the full-length lanes. Some upstream delays at entry to short lanes are not included.
6 Lane under-utilisation due to downstream effects

Output Phase Sequence



REF: Reference Phase
VAR: Variable Phase



Phase Timing Summary

Phase	B	A	C	D	E
Phase Change Time (sec)	46	84	114	133	0
Green Time (sec)	32	24	13	11	39
Phase Time (sec)	38	30	19	18	45
Phase Split	25%	20%	13%	12%	30%

See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

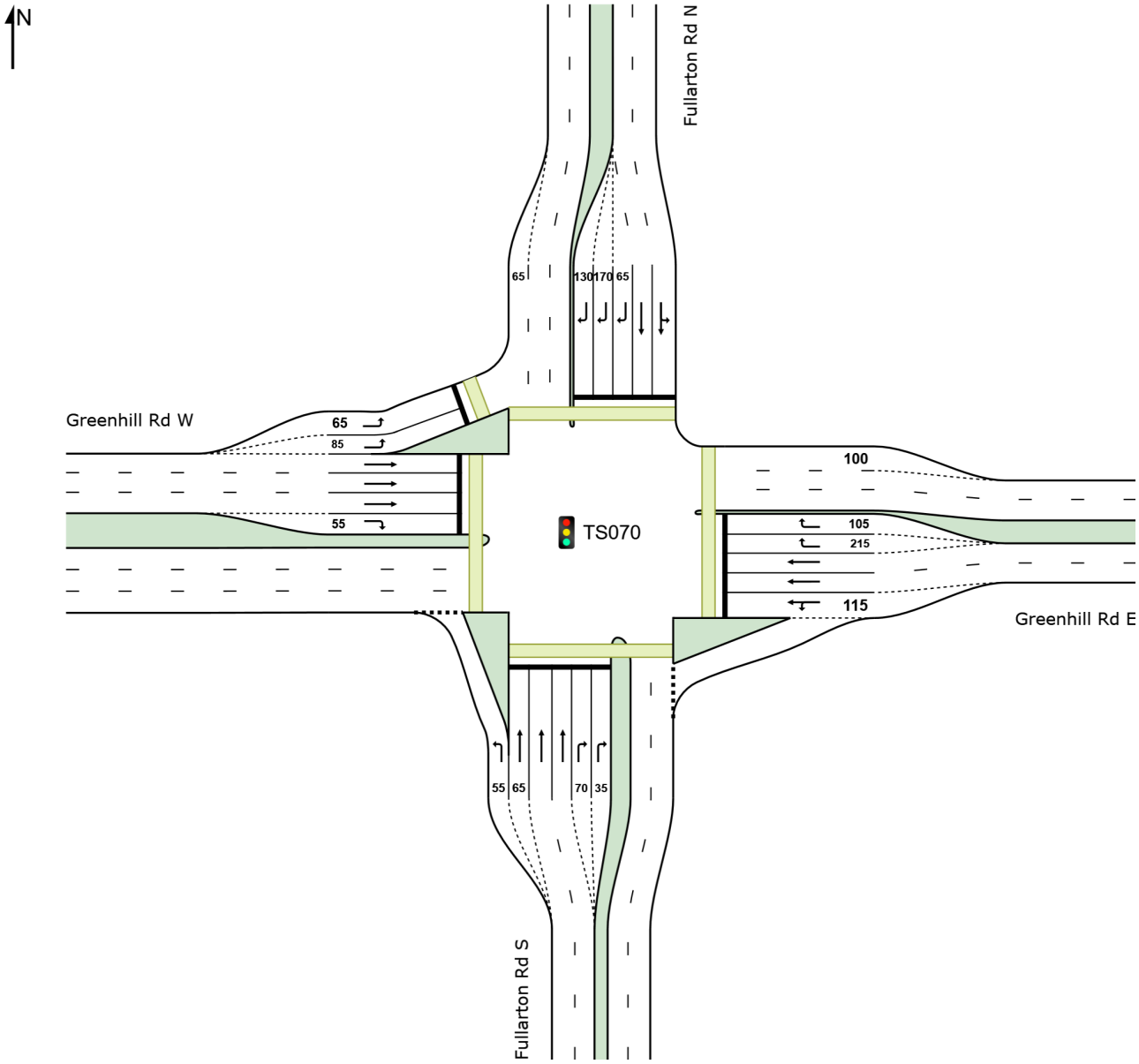
Site: TS070 [TS070-2023AM-Fullarton Rd Greenhill Rd - Glenside 100% (Site Folder: TS070 Greenhill Fullarton)]

Glenside 50% complete
Aug 2023 SCATS extract
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 150 seconds (Site User-Given Phase Times)

Timings based on settings in the Site Phasing & Timing dialog
Phase Times specified by the user
Phase Sequence: Four-Phase Leading Right Turns
Reference Phase: Phase A
Input Phase Sequence: B, A, C, D, D2, E
Output Phase Sequence: B, A, C, D, D2, E

Site Layout

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



Lane Use and Performance

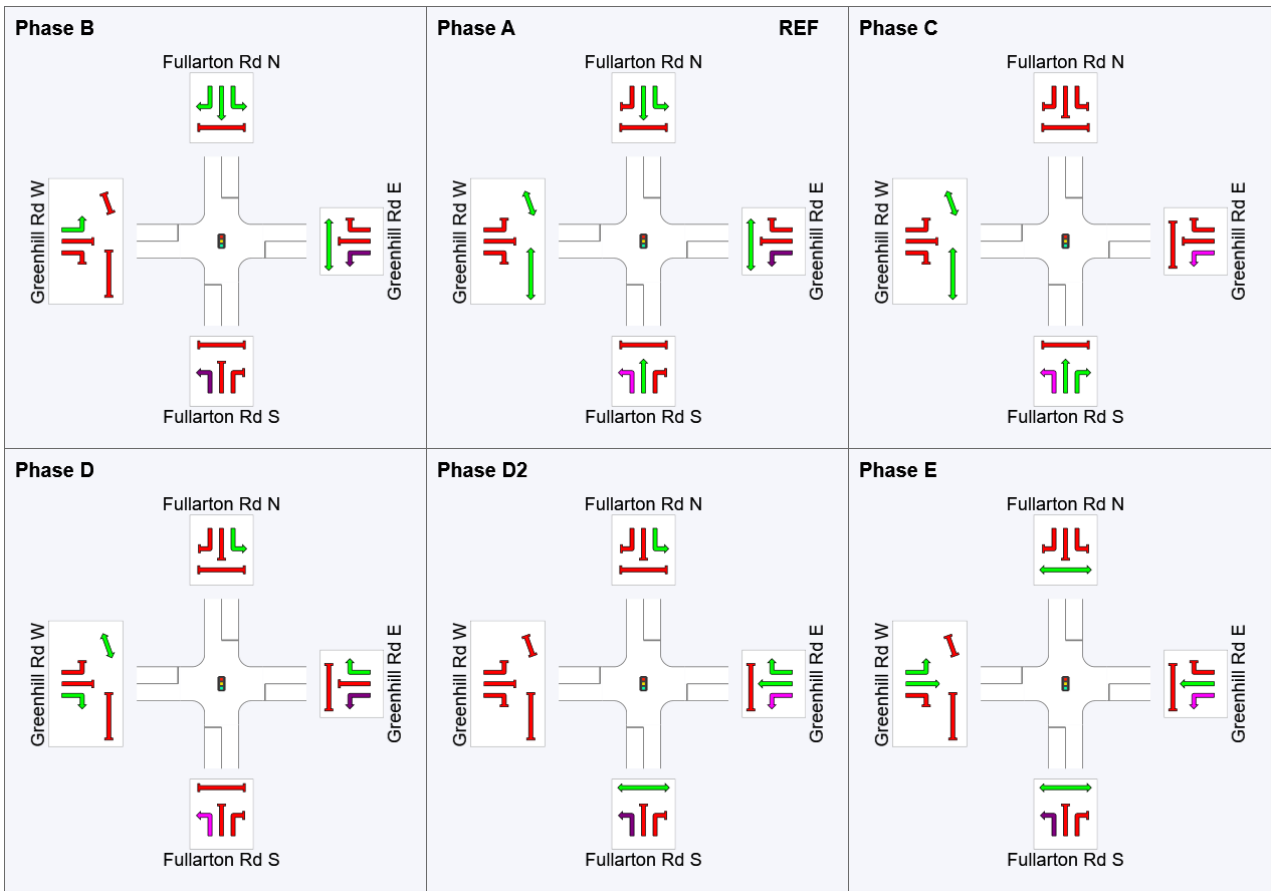
	DEMAND FLOWS [Total	HV]	Cap.	Deg. Satn	Lane Util.	Aver. Delay	Level of Service	95% BACK OF QUEUE [Veh	Dist]	Lane Config	Lane Length	Cap. Adj.	Prob. Block.

	veh/h	%	veh/h	v/c	%	sec			m		m	%	%
South: Fullarton Rd S													
Lane 1	109	2.9	934	0.117	100	17.7	LOS B	2.4	17.5	Short	55	0.0	NA
Lane 2	262	2.8	589[1]	0.444	46[6]	45.9	LOS D	13.5	97.1	Short	65	0.0	NA
Lane 3	449	2.8	467[1]	0.962	100	77.7	LOS E	36.0	257.9	Full	315	0.0	0.0
Lane 4	515	2.8	535[1]	0.962	100	78.1	LOS E	43.4	311.0	Full	315	0.0	3.9
Lane 5	91	2.9	107	0.842	100	89.2	LOS F	7.2	51.4	Short	70	0.0	NA
Lane 6	91	2.9	107	0.842	100	89.2	LOS F	7.2	51.4	Short	35	0.0	NA
Approach	1516	2.8		0.962		69.4	LOS E	43.4	311.0				
East: Greenhill Rd E													
Lane 1	519	2.4	625	0.829	100	49.0	LOS D	30.6	218.6	Short	115	0.0	NA
Lane 2	446	2.5	538[1]	0.829	100	55.4	LOS E	30.2	215.6	Full	800	0.0	0.0
Lane 3	460	2.5	554	0.829	100	55.8	LOS E	31.5	224.9	Full	800	0.0	0.0
Lane 4	263	2.4	274	0.959	100	97.6	LOS F	23.1	164.9	Short	215	0.0	NA
Lane 5	266	2.4	277	0.959	100	97.5	LOS F	23.3	166.5	Short	105	0.0	NA
Approach	1953	2.4		0.959		65.2	LOS E	31.5	224.9				
North: Fullarton Rd N													
Lane 1	623	2.1	844	0.737	100	38.9	LOS D	36.7	261.8	Full	840	0.0	0.0
Lane 2	603	2.7	817	0.737	100	37.6	LOS D	36.2	259.4	Full	840	0.0	0.0
Lane 3	265	2.5	277[1]	0.957	100	100.6	LOS F	23.8	170.1	Short	65	0.0	NA
Lane 4	265	2.5	277[1]	0.957	100	100.6	LOS F	23.8	170.1	Short	170	0.0	NA
Lane 5	309	2.5	323	0.957	100	100.4	LOS F	28.2	201.4	Short	130	0.0	NA
Approach	2064	2.4		0.957		63.6	LOS E	36.7	261.8				
West: Greenhill Rd W													
Lane 1	211	2.1	756	0.280	42[6]	24.3	LOS C	6.0	43.0	Short	65	0.0	NA
Lane 2	449	2.1	678[1]	0.662	100	26.0	LOS C	17.9	127.7	Short	85	0.0	NA
Lane 3	211	2.0	352	0.599	62[6]	52.4	LOS D	13.2	93.7	Full	780	0.0	0.0
Lane 4	344	2.0	354	0.973	100	77.5	LOS E	29.7	211.5	Full	780	0.0	0.0
Lane 5	320	2.0	329[1]	0.973	100	77.3	LOS E	26.9	191.6	Full	780	0.0	0.0
Lane 6	61	1.7	85	0.717	100	84.9	LOS F	4.7	33.4	Short	55	0.0	NA
Approach	1596	2.0		0.973		52.9	LOS D	29.7	211.5				
Intersection	7128	2.4		0.973		62.9	LOS E	43.4	311.0				

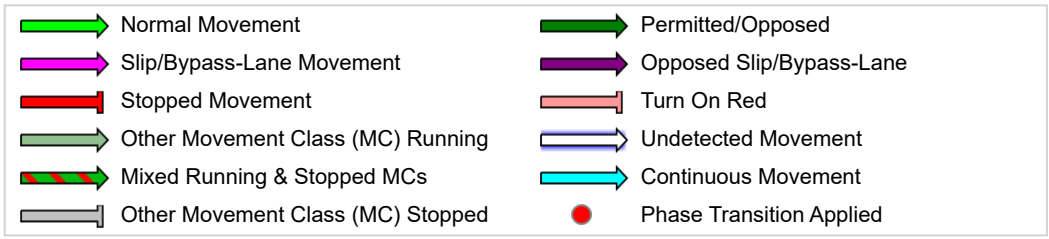
Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Lane LOS values are based on average delay per lane.
Intersection and Approach LOS values are based on average delay for all lanes.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

1 Reduced capacity due to a short lane effect. Short lane queues may extend into the full-length lanes. Some upstream delays at entry to short lanes are not included.
6 Lane under-utilisation due to downstream effects

Output Phase Sequence



REF: Reference Phase
VAR: Variable Phase



Phase Timing Summary

Phase	B	A	C	D	D2	E
Phase Change Time (sec)	117	0	38	53	66	82
Green Time (sec)	27	32	9	7	9	28
Phase Time (sec)	33	38	15	14	16	34
Phase Split	22%	25%	10%	9%	11%	23%

See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

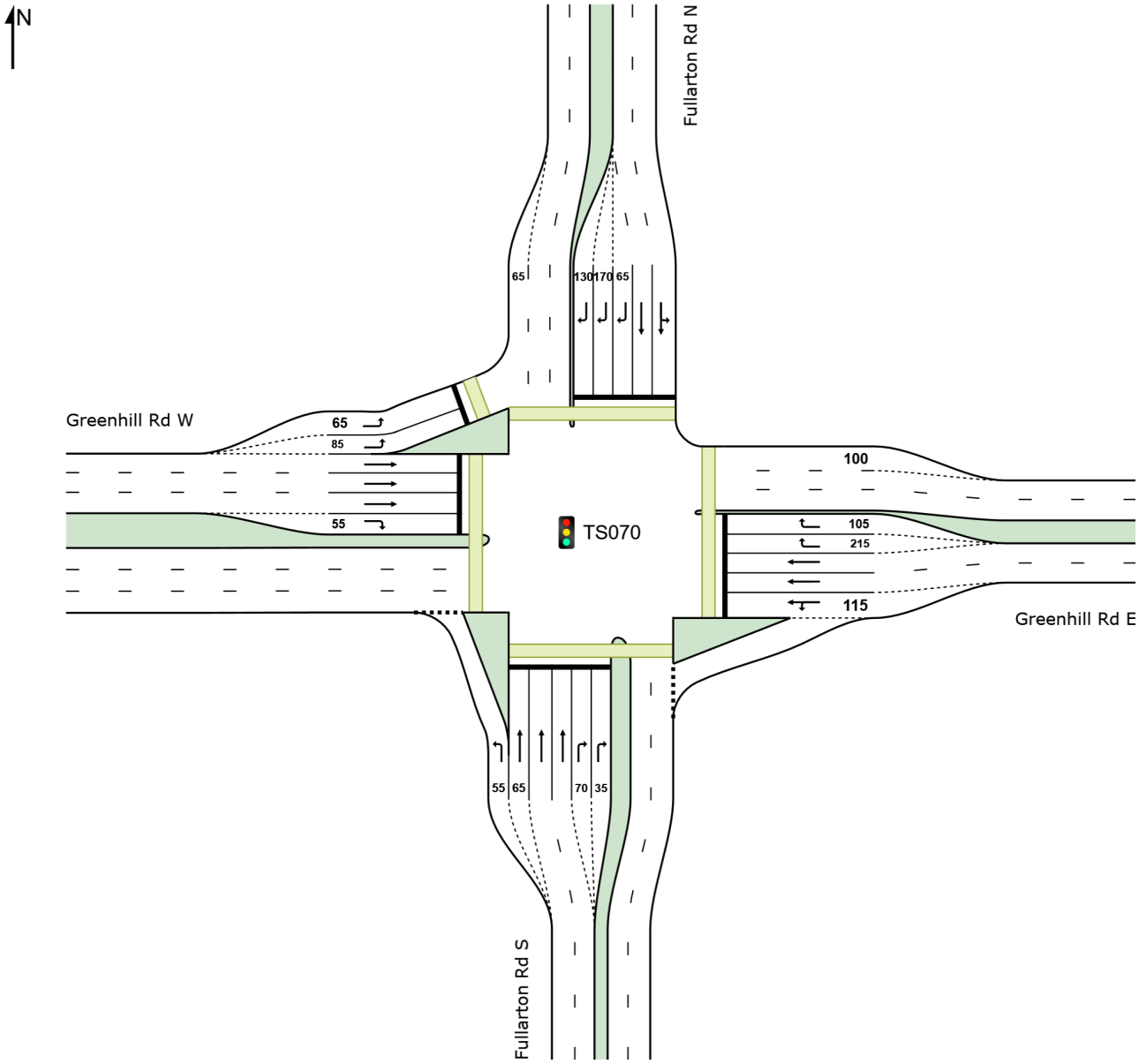
Site: TS070 [TS070-2023PM-Fullarton Rd Greenhill Rd - Glenside 100% (Site Folder: TS070 Greenhill Fullarton)]

Glenside 50% complete
Aug 2023 SCATS extract
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 150 seconds (Site User-Given Phase Times)

Timings based on settings in the Site Phasing & Timing dialog
Phase Times specified by the user
Phase Sequence: Four-Phase Leading Right Turns
Reference Phase: Phase E
Input Phase Sequence: B, A, C, D, E
Output Phase Sequence: B, A, C, D, E

Site Layout

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



Lane Use and Performance

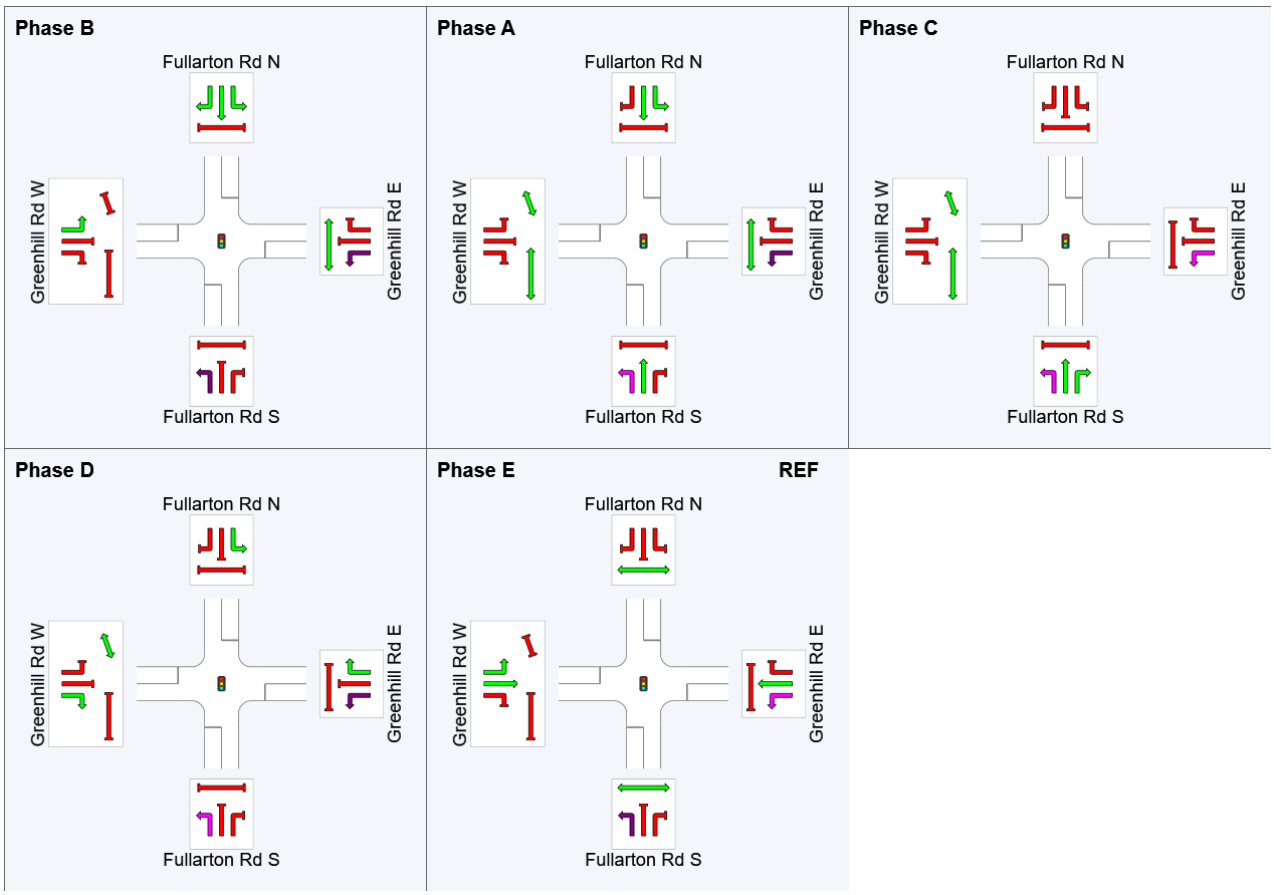
	DEMAND FLOWS [Total	HV]	Cap.	Deg. Satn	Lane Util.	Aver. Delay	Level of Service	95% BACK OF QUEUE [Veh	Dist]	Lane Config	Lane Length	Cap. Adj.	Prob. Block.

	veh/h	%	veh/h	v/c	%	sec			m		m	%	%
South: Fullarton Rd S													
Lane 1	117	2.7	1097	0.106	100	8.6	LOS A	0.9	6.7	Short	55	0.0	NA
Lane 2	202	3.0	543	0.372	46[6]	47.2	LOS D	10.6	75.8	Short	65	0.0	NA
Lane 3	374	3.0	464[1]	0.806	100	53.3	LOS D	23.6	169.7	Full	315	0.0	0.0
Lane 4	367	3.0	455[1]	0.806	100	53.6	LOS D	23.3	167.0	Full	315	0.0	0.0
Lane 5	133	3.2	139[1]	0.961	100	102.4	LOS F	11.6	83.1	Short	70	0.0	NA
Lane 6	133	3.2	139[1]	0.961	100	102.4	LOS F	11.6	83.1	Short	35	0.0	NA
Approach	1326	3.0		0.961		58.4	LOS E	23.6	169.7				
East: Greenhill Rd E													
Lane 1	323	2.5	555	0.583	100	46.5	LOS D	15.3	109.2	Short	115	0.0	NA
Lane 2	286	2.5	491	0.583	100	51.9	LOS D	17.1	122.3	Full	800	0.0	0.0
Lane 3	286	2.5	491	0.583	100	51.9	LOS D	17.1	122.3	Full	800	0.0	0.0
Lane 4	119	2.6	131	0.912	100	93.3	LOS F	9.8	70.2	Short	215	0.0	NA
Lane 5	121	2.6	132	0.912	100	93.2	LOS F	9.9	70.9	Short	105	0.0	NA
Approach	1136	2.5		0.912		59.1	LOS E	17.1	122.3				
North: Fullarton Rd N													
Lane 1	774	1.9	807	0.959	100	76.3	LOS E	68.5	487.5	Full	840	0.0	0.0
Lane 2	693	2.7	723[1]	0.959	100	74.5	LOS E	60.9	436.0	Full	840	0.0	0.0
Lane 3	243	2.4	378[1]	0.642	100	63.7	LOS E	16.2	116.1	Short	65	0.0	NA
Lane 4	243	2.4	378[1]	0.642	100	63.7	LOS E	16.2	116.1	Short	170	0.0	NA
Lane 5	246	2.4	383	0.642	100	63.8	LOS E	16.5	117.9	Short	130	0.0	NA
Approach	2199	2.3		0.959		71.5	LOS E	68.5	487.5				
West: Greenhill Rd W													
Lane 1	250	2.1	954	0.262	42[6]	12.9	LOS B	3.3	23.7	Short	65	0.0	NA
Lane 2	570	2.1	920	0.620	100	13.8	LOS B	12.6	89.7	Short	85	0.0	NA
Lane 3	294	2.0	490	0.600	62[6]	42.4	LOS D	16.4	117.0	Full	780	0.0	0.0
Lane 4	480	2.0	493	0.975	100	68.6	LOS E	41.5	295.3	Full	780	0.0	0.0
Lane 5	425	2.0	436[1]	0.975	100	68.4	LOS E	34.4	245.2	Full	780	0.0	0.0
Lane 6	100	2.1	133	0.749	100	79.5	LOS E	7.5	53.4	Short	55	0.0	NA
Approach	2119	2.0		0.975		44.1	LOS D	41.5	295.3				
Intersection	6780	2.4		0.975		58.3	LOS E	68.5	487.5				

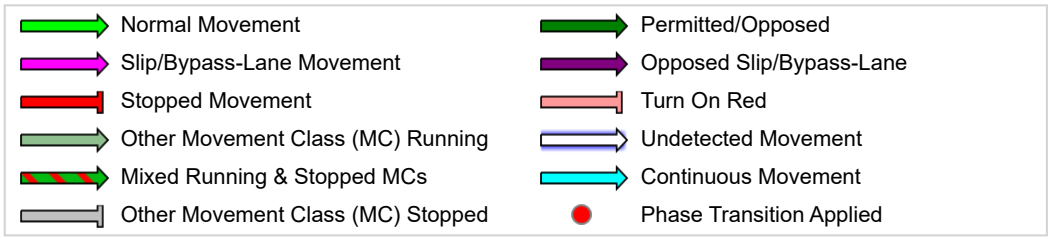
Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Lane LOS values are based on average delay per lane.
Intersection and Approach LOS values are based on average delay for all lanes.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

1 Reduced capacity due to a short lane effect. Short lane queues may extend into the full-length lanes. Some upstream delays at entry to short lanes are not included.
6 Lane under-utilisation due to downstream effects

Output Phase Sequence



REF: Reference Phase
VAR: Variable Phase



Phase Timing Summary

Phase	B	A	C	D	E
Phase Change Time (sec)	46	84	114	133	0
Green Time (sec)	32	24	13	11	39
Phase Time (sec)	38	30	19	18	45
Phase Split	25%	20%	13%	12%	30%

See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

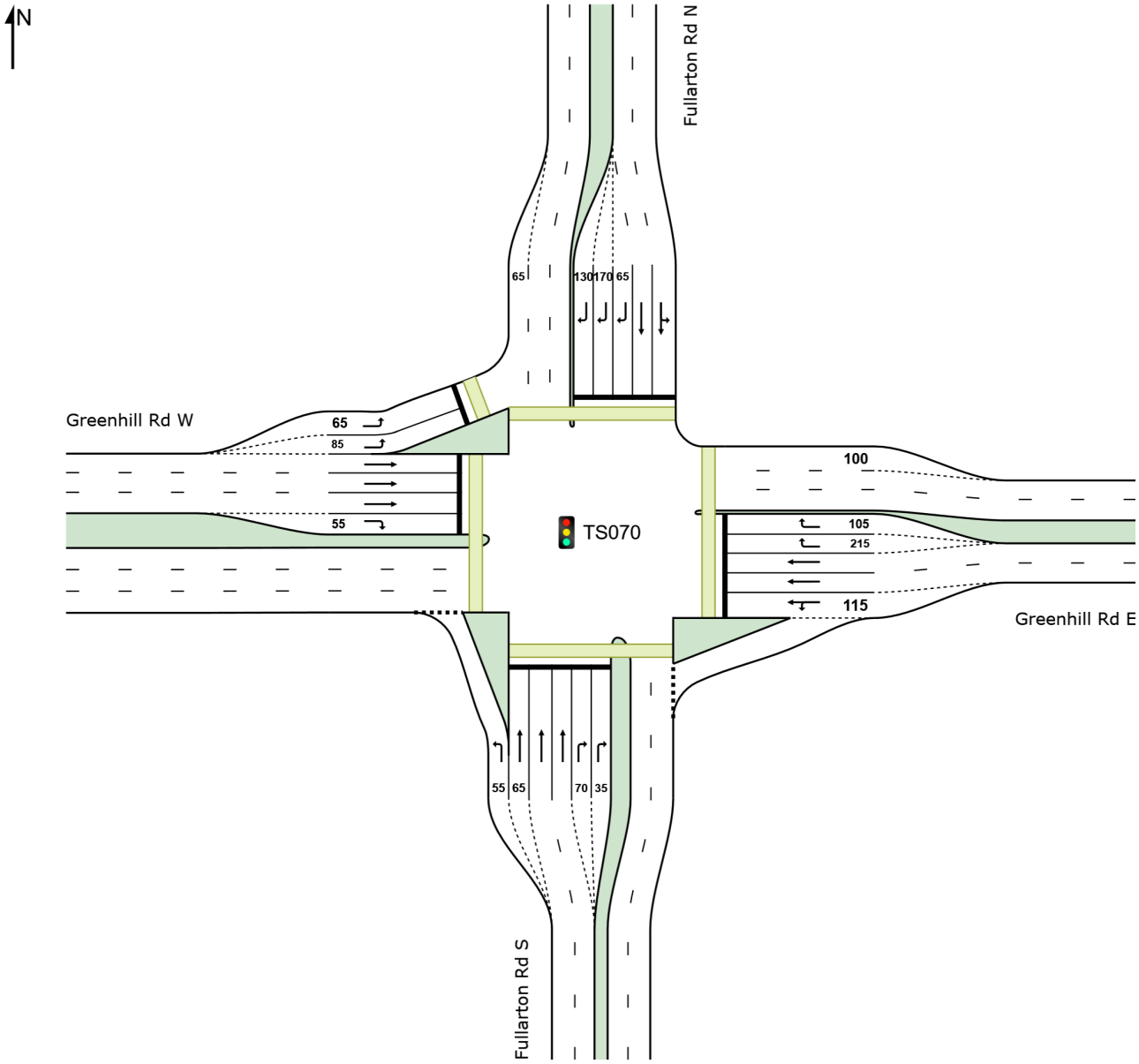
Site: TS070 [TS070-2023AM-Fullarton Rd Greenhill Rd - Glenside 100% + Code Amendment (Site Folder: TS070 Greenhill Fullarton)]

Glenside 50% complete
Aug 2023 SCATS extract
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 150 seconds (Site User-Given Phase Times)

Timings based on settings in the Site Phasing & Timing dialog
Phase Times specified by the user
Phase Sequence: Four-Phase Leading Right Turns
Reference Phase: Phase A
Input Phase Sequence: B, A, C, D, D2, E
Output Phase Sequence: B, A, C, D, D2, E

Site Layout

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



Lane Use and Performance

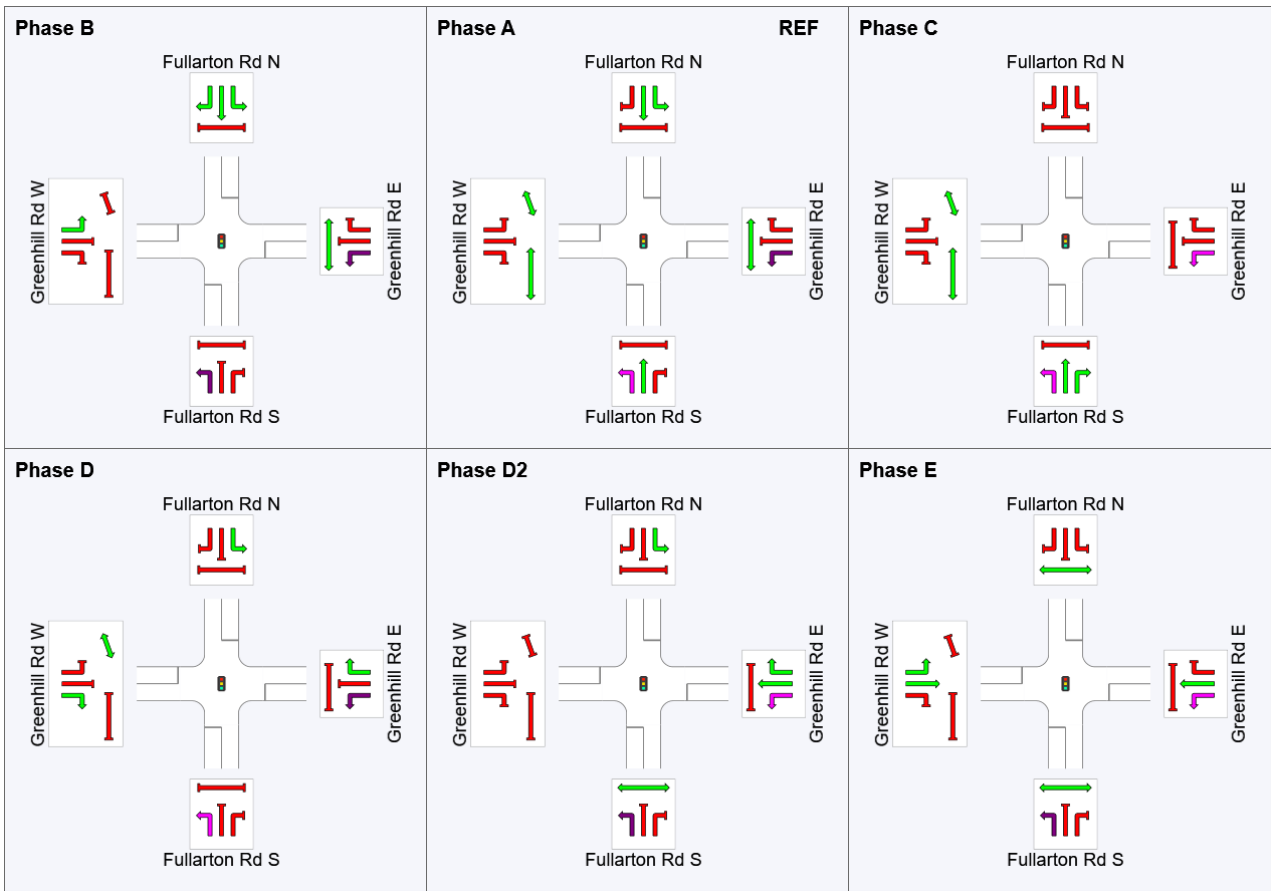
	DEMAND FLOWS [Total	HV]	Cap.	Deg. Satn	Lane Util.	Aver. Delay	Level of Service	95% BACK OF QUEUE [Veh	Dist]	Lane Config	Lane Length	Cap. Adj.	Prob. Block.

	veh/h	%	veh/h	v/c	%	sec			m		m	%	%
South: Fullarton Rd S													
Lane 1	112	2.8	934	0.119	100	17.8	LOS B	2.5	17.9	Short	55	0.0	NA
Lane 2	264	2.8	586[1]	0.451	46[6]	46.1	LOS D	13.7	98.1	Short	65	0.0	NA
Lane 3	454	2.8	465[1]	0.976	100	84.0	LOS F	37.8	271.2	Full	315	0.0	0.0
Lane 4	523	2.8	536[1]	0.976	100	84.4	LOS F	45.9	329.3	Full	315	0.0	9.0
Lane 5	91	2.9	107	0.842	100	89.2	LOS F	7.2	51.4	Short	70	0.0	NA
Lane 6	91	2.9	107	0.842	100	89.2	LOS F	7.2	51.4	Short	35	0.0	NA
Approach	1534	2.8		0.976		73.4	LOS E	45.9	329.3				
East: Greenhill Rd E													
Lane 1	520	2.4	625	0.831	100	49.3	LOS D	30.8	219.8	Short	115	0.0	NA
Lane 2	446	2.5	537[1]	0.831	100	55.6	LOS E	30.2	216.0	Full	800	0.0	0.0
Lane 3	461	2.5	554	0.831	100	55.9	LOS E	31.6	225.8	Full	800	0.0	0.0
Lane 4	272	2.3	274	0.992	100	111.6	LOS F	25.8	184.1	Short	215	0.0	NA
Lane 5	275	2.3	277	0.992	100	111.5	LOS F	26.0	185.9	Short	105	0.0	NA
Approach	1974	2.4		0.992		69.5	LOS E	31.6	225.8				
North: Fullarton Rd N													
Lane 1	628	2.1	844	0.744	100	39.1	LOS D	37.3	265.5	Full	840	0.0	0.0
Lane 2	608	2.7	817	0.744	100	37.7	LOS D	36.7	263.0	Full	840	0.0	0.0
Lane 3	265	2.5	277[1]	0.957	100	100.6	LOS F	23.8	170.1	Short	65	0.0	NA
Lane 4	265	2.5	277[1]	0.957	100	100.6	LOS F	23.8	170.1	Short	170	0.0	NA
Lane 5	309	2.5	323	0.957	100	100.4	LOS F	28.2	201.4	Short	130	0.0	NA
Approach	2076	2.4		0.957		63.5	LOS E	37.3	265.5				
West: Greenhill Rd W													
Lane 1	211	2.1	756	0.280	42[6]	24.4	LOS C	6.0	43.0	Short	65	0.0	NA
Lane 2	449	2.1	678[1]	0.662	100	26.0	LOS C	17.9	127.7	Short	85	0.0	NA
Lane 3	211	2.0	352	0.600	62[6]	52.4	LOS D	13.2	93.8	Full	780	0.0	0.0
Lane 4	344	2.0	354	0.974	100	77.9	LOS E	29.8	212.2	Full	780	0.0	0.0
Lane 5	319	2.0	328[1]	0.974	100	77.6	LOS E	26.9	191.6	Full	780	0.0	0.0
Lane 6	63	1.7	85	0.741	100	85.2	LOS F	4.9	34.7	Short	55	0.0	NA
Approach	1598	2.0		0.974		53.1	LOS D	29.8	212.2				
Intersection	7181	2.4		0.992		65.0	LOS E	45.9	329.3				

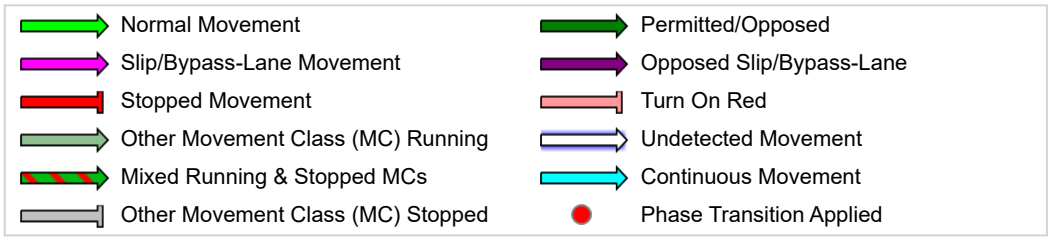
Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Lane LOS values are based on average delay per lane.
Intersection and Approach LOS values are based on average delay for all lanes.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

1 Reduced capacity due to a short lane effect. Short lane queues may extend into the full-length lanes. Some upstream delays at entry to short lanes are not included.
6 Lane under-utilisation due to downstream effects

Output Phase Sequence



REF: Reference Phase
VAR: Variable Phase



Phase Timing Summary

Phase	B	A	C	D	D2	E
Phase Change Time (sec)	117	0	38	53	66	82
Green Time (sec)	27	32	9	7	9	28
Phase Time (sec)	33	38	15	14	16	34
Phase Split	22%	25%	10%	9%	11%	23%

See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

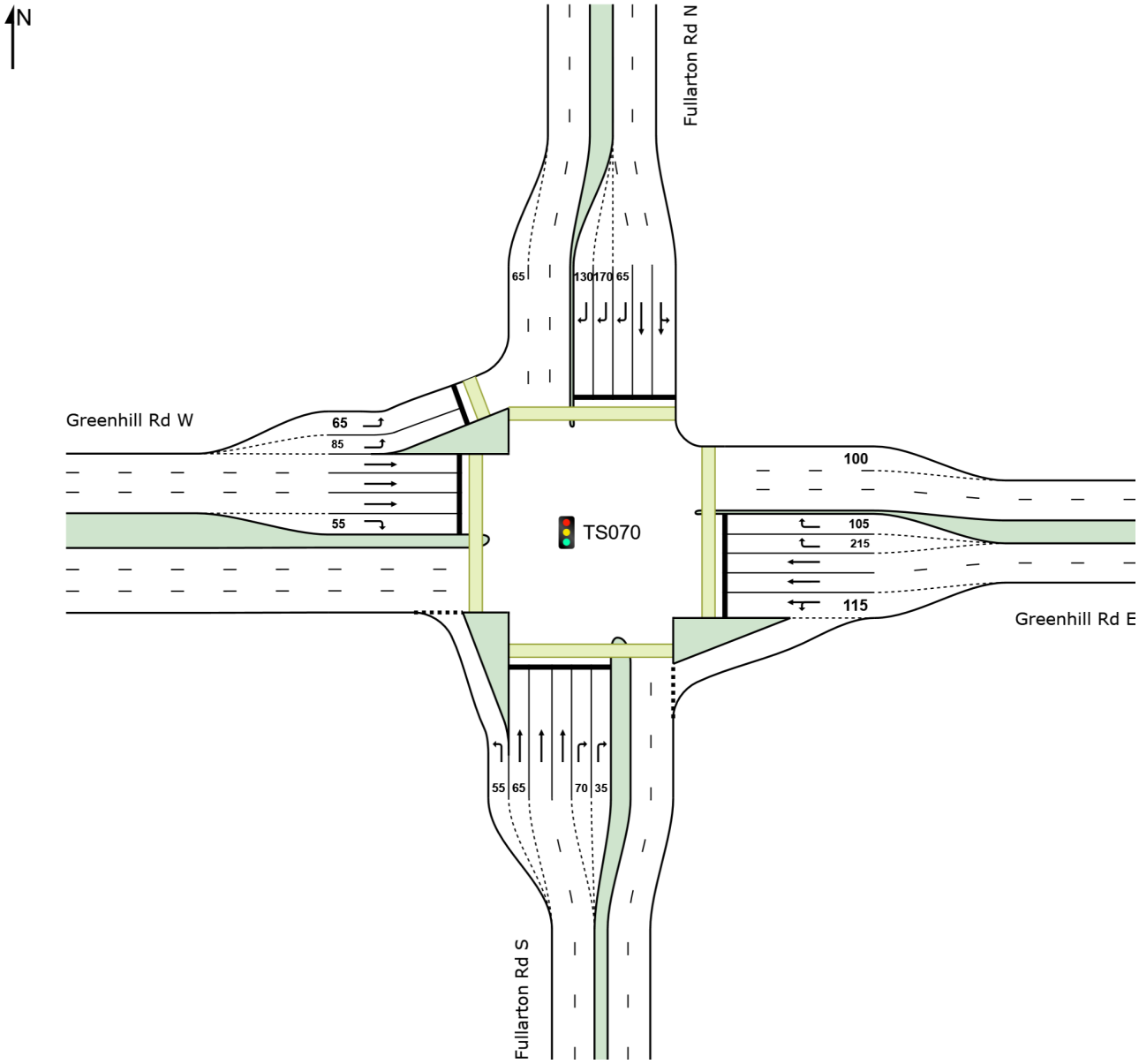
Site: TS070 [TS070-2023PM-Fullarton Rd Greenhill Rd - Glenside 100% + Code Amendment (Site Folder: TS070 Greenhill Fullarton)]

Glenside 50% complete
Aug 2023 SCATS extract
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 150 seconds (Site User-Given Phase Times)

Timings based on settings in the Site Phasing & Timing dialog
Phase Times specified by the user
Phase Sequence: Four-Phase Leading Right Turns
Reference Phase: Phase E
Input Phase Sequence: B, A, C, D, E
Output Phase Sequence: B, A, C, D, E

Site Layout

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



Lane Use and Performance

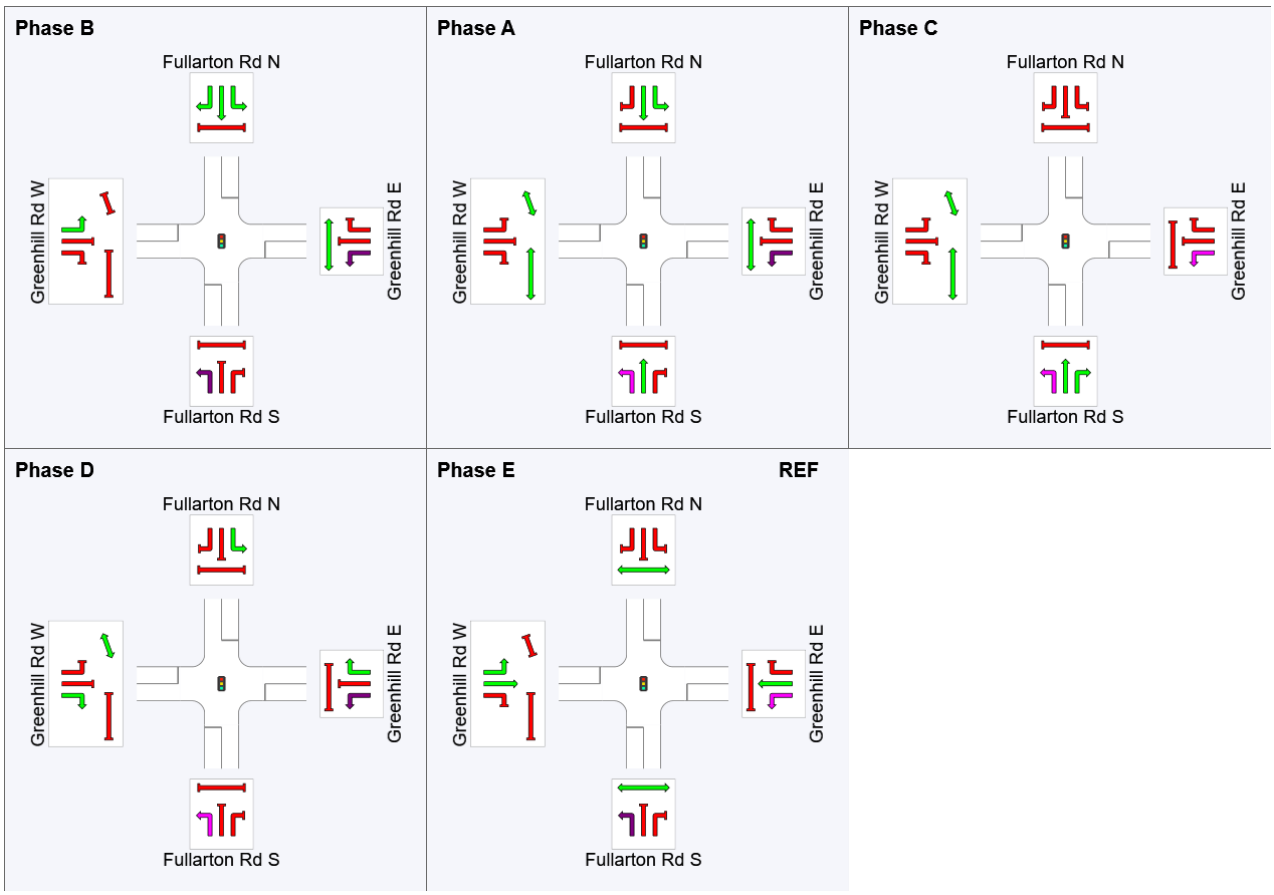
	DEMAND FLOWS [Total	HV]	Cap.	Deg. Satn	Lane Util.	Aver. Delay	Level of Service	95% BACK OF QUEUE [Veh	Dist]	Lane Config	Lane Length	Cap. Adj.	Prob. Block.

	veh/h	%	veh/h	v/c	%	sec			m		m	%	%
South: Fullarton Rd S													
Lane 1	117	2.7	1097	0.106	100	8.6	LOS A	0.9	6.7	Short	55	0.0	NA
Lane 2	202	3.0	543	0.373	46[6]	47.2	LOS D	10.6	76.0	Short	65	0.0	NA
Lane 3	375	3.0	464[1]	0.808	100	53.5	LOS D	23.7	170.3	Full	315	0.0	0.0
Lane 4	368	3.0	455[1]	0.808	100	53.7	LOS D	23.4	167.9	Full	315	0.0	0.0
Lane 5	133	3.2	139[1]	0.961	100	102.4	LOS F	11.6	83.1	Short	70	0.0	NA
Lane 6	133	3.2	139[1]	0.961	100	102.4	LOS F	11.6	83.1	Short	35	0.0	NA
Approach	1328	3.0		0.961		58.4	LOS E	23.7	170.3				
East: Greenhill Rd E													
Lane 1	323	2.5	555	0.583	100	47.2	LOS D	15.3	109.2	Short	115	0.0	NA
Lane 2	286	2.5	491	0.583	100	51.9	LOS D	17.1	122.3	Full	800	0.0	0.0
Lane 3	286	2.5	491	0.583	100	51.9	LOS D	17.1	122.3	Full	800	0.0	0.0
Lane 4	120	2.6	131	0.920	100	94.4	LOS F	10.0	71.3	Short	215	0.0	NA
Lane 5	122	2.6	132	0.920	100	94.3	LOS F	10.1	72.0	Short	105	0.0	NA
Approach	1138	2.5		0.920		59.6	LOS E	17.1	122.3				
North: Fullarton Rd N													
Lane 1	796	1.9	807	0.987	100	90.8	LOS F	77.0	547.4	Full	840	0.0	0.0
Lane 2	715	2.6	725[1]	0.987	100	88.8	LOS F	68.3	489.0	Full	840	0.0	0.0
Lane 3	243	2.4	378[1]	0.642	100	63.7	LOS E	16.2	116.1	Short	65	0.0	NA
Lane 4	243	2.4	378[1]	0.642	100	63.7	LOS E	16.2	116.1	Short	170	0.0	NA
Lane 5	246	2.4	383	0.642	100	63.8	LOS E	16.5	117.9	Short	130	0.0	NA
Approach	2243	2.3		0.987		81.3	LOS F	77.0	547.4				
West: Greenhill Rd W													
Lane 1	250	2.1	954	0.262	42[6]	12.9	LOS B	3.3	23.7	Short	65	0.0	NA
Lane 2	570	2.1	920	0.620	100	13.8	LOS B	12.6	89.7	Short	85	0.0	NA
Lane 3	295	2.0	490	0.602	62[6]	42.5	LOS D	16.5	117.5	Full	780	0.0	0.0
Lane 4	481	2.0	493	0.977	100	69.7	LOS E	41.9	298.3	Full	780	0.0	0.0
Lane 5	423	2.0	432[1]	0.977	100	69.4	LOS E	34.4	245.1	Full	780	0.0	0.0
Lane 6	106	2.0	134	0.796	100	80.5	LOS F	8.1	57.4	Short	55	0.0	NA
Approach	2125	2.0		0.977		44.7	LOS D	41.9	298.3				
Intersection	6835	2.4		0.987		61.9	LOS E	77.0	547.4				

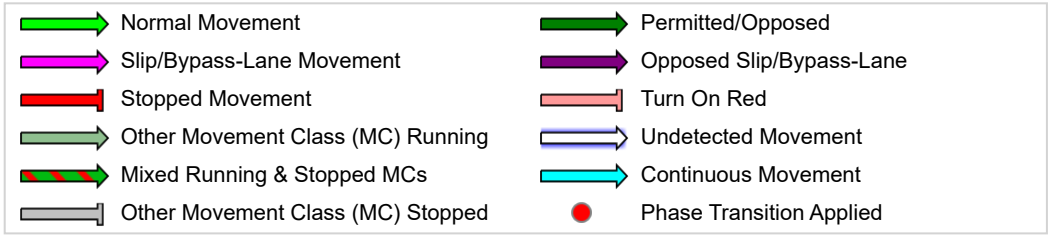
Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Lane LOS values are based on average delay per lane.
Intersection and Approach LOS values are based on average delay for all lanes.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

1 Reduced capacity due to a short lane effect. Short lane queues may extend into the full-length lanes. Some upstream delays at entry to short lanes are not included.
6 Lane under-utilisation due to downstream effects

Output Phase Sequence



REF: Reference Phase
VAR: Variable Phase



Phase Timing Summary

Phase	B	A	C	D	E
Phase Change Time (sec)	46	84	114	133	0
Green Time (sec)	32	24	13	11	39
Phase Time (sec)	38	30	19	18	45
Phase Split	25%	20%	13%	12%	30%

See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

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FOR FURTHER INFORMATION CONTACT:

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