

13th October 2025

Selena Nguyen
Mirvac
53 Murray St,
Pyrmont,
Sydney NSW

Dear Selena,

ptc. have been engaged to undertake an assessment of proposed extended construction hours at the instruction of Mirvac in relation to the letter submitted to the Department, by the City of Sydney dated 11 September 2025, in relation to the proposed Harbourside Shopping Centre Redevelopment project (SSD-49295711-Mod-6). This assessment evaluates the potential construction traffic impact on the nearby intersections during the evening period.

Existing Arrangements

The existing construction work hours as stipulated in Consent Condition E3 are as follows:

- 07:00 – 19:00 Mondays to Fridays inclusive,
- 07:00 – 17:00 Saturdays, and
- 17:00 – 18:00 Saturdays (internal works only).

Traffic surveys of the surrounding intersections undertaken on Thursday 29th August 2024 between 17:00 and 20:00 indicate that the network evening peak hour occurs between 17:15 and 18:15. These surveys were conducted at the following nearby intersections;

- Darling Dr / Murray St
- Darling Dr / Pier St
- Darling Dr / Ultimo Rd
- Murray St / Pyrmont St

Proposed Extended Hours

There will not be any construction vehicles that will be arriving to the site outside of the hours approved under Condition E3, except when permitted under Condition E5(b), which is proposed to be after 6pm and no later than 10pm Monday to Friday on a maximum of two occasions per calendar month.

The proposed extended hours fall after the approved hours (as above) and are from 19:00 to 22:00.

There is an estimated volume of 10 construction vehicles per hour expected to arrive and depart the site during these extended hours. This equates to 20 trips (10 inbound and 10 outbound).

Further to the above, it is intended that deliveries would be undertaken by non-construction vehicles (e.g., standard delivery trucks or vans) and would involve direct transfer of fitout materials into the building's below ground internal loading dock between 7:00 - 23:00 Mondays to Saturdays.

This process is consistent with standard retail and commercial loading dock operations that occur after hours in similar mixed-use environments and would not involve construction activities or generate construction-related noise outside of the approved construction hours.

Traffic Assessment

The evening network peak period occurs from 17:15 to 18:15. From this point onwards, the network traffic reduces. Refer to Table 1 and Figure 1, which illustrate the reduction in background network traffic as the evening progresses.

Table 1: Hourly Network Traffic Volumes

	17:00-18:00	18:00-19:00	19:00-20:00
Darling Dr / Murray St	1230	1190	777
Darling Dr / Pier St	994	893	646
Darling Dr / Ultimo Rd	1098	1131	805
Murray St / Pyrmont St	711	634	379
Total Network Vehicles	4033	3848	2607
Network Capacity Gained (number of network trips less than previous hour)		185	1241
Proposed Construction Vehicle Traffic	20	20	20

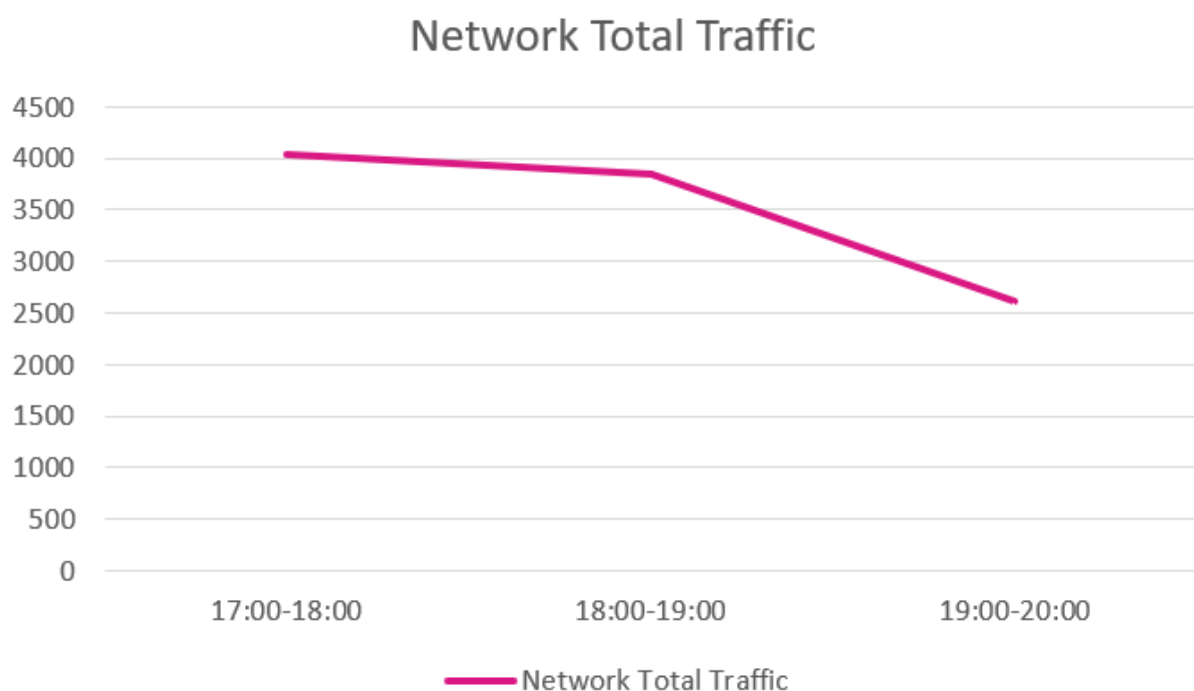


Figure 1: Graphical Representation of Falling Network Traffic Volumes in the Evening Hours

The proposed modification seeks to operate an estimated 10 construction vehicles per hour in the after-hours period, which falls below the quantity of vehicle trips or network capacity gained as background traffic reduces. Thus, it is expected that there is sufficient network capacity to accommodate the proposed construction vehicle movements in the extended hours period.

Traffic Modelling

SIDRA assessment of the network has been undertaken to evaluate the impact of the proposed 10 construction vehicles in the 19:00 to 20:00 extended work hours hour. This hour is the first hour outside of approved construction hours and, given the trend in network traffic volumes (reducing as the evening progresses), is likely to be the worst-case scenario.

Given the surrounding road network, it has been assumed for the purposes of this modelling exercise that construction vehicles would approach the Harbourside development site from the west, along Pyrmont Bridge Road and onto Darling Drive. This is a result of the connection to the ANZAC Bridge and state road network. Construction vehicles therefore have also been assumed to depart the site via this same route, performing a u-turn at the roundabout along Darling Drive outside the site frontage during both entry and exit routes. Refer to Figure 2.

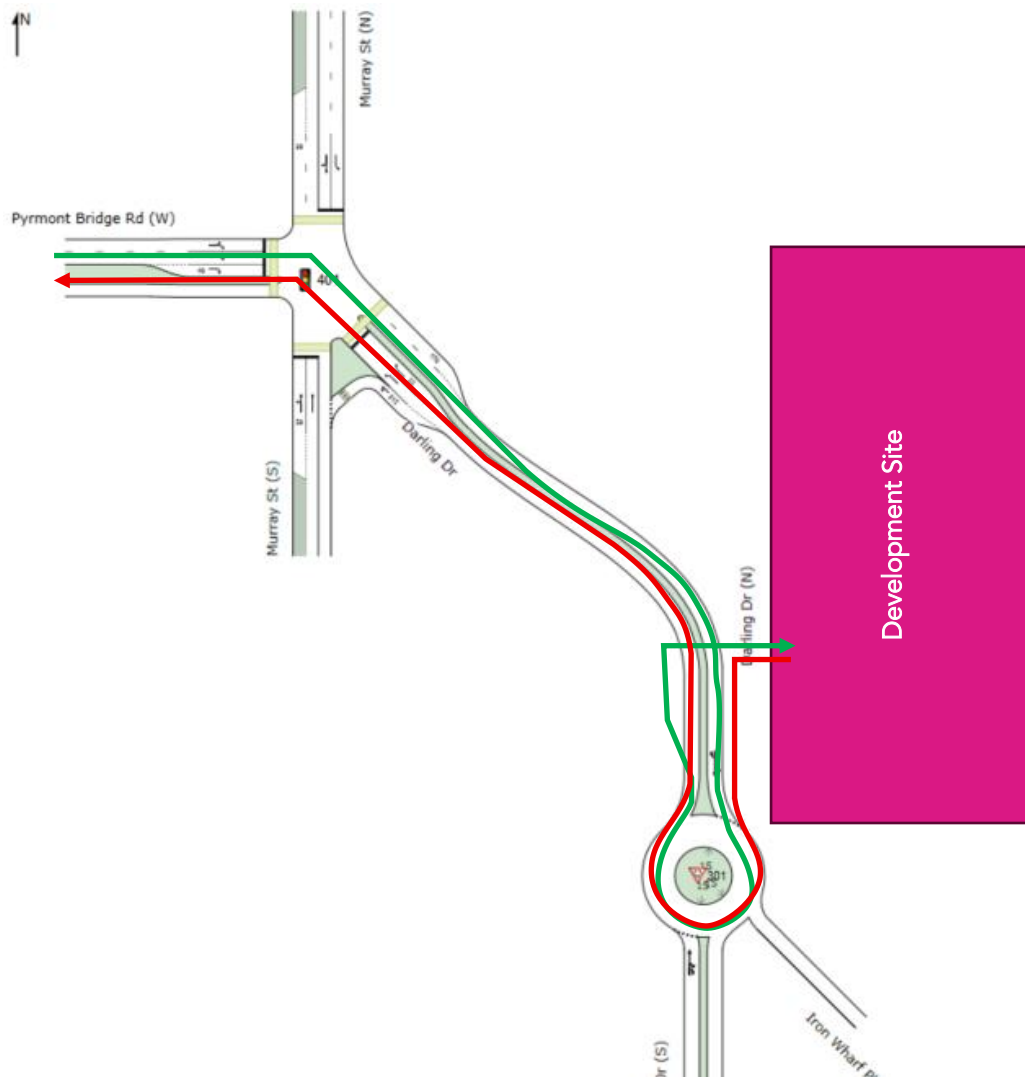


Figure 2: Haulage Route

SIDRA modelling output for the two key intersections along the haulage route for the 19:00-20:00 hour scenario is summarised below.

	Degree of Saturation	Average Delay	Level of Service	Queue Length (m) (95 th percentile)
Darling Dr / Murray St	0.324	33.1	C	50.4
Darling Dr / Iron Wharf Pl (roundabout)	0.133	11.8	A	4.6

Conclusion

Based on the findings from SIDRA modelling, there is no reason to expect any significant negative impact to the road network operational resulting from the introduction of after hours construction traffic. The intersections appear to operate at a suitable Level of Service during the 19:00-20:00 hour that has been assessed, which is considered to have the highest background network traffic volumes and thus be the most volatile to introduced construction traffic, when compared to later hours of the evening.

Yours faithfully



Jake Jansen

Senior Traffic Engineer

Document Control: Prepared by JJ on 13 October 2025. Reviewed by AM/JJ on 13 October 2025.

Attachment 1. SIDRA Output

MOVEMENT SUMMARY

 **Site: 401 [1. Pyrmont Bridge Road / Murray Street / Darling Drive - After Hours Construction Veh (Site Folder: 2024 Existing PM Peak)]**

 **Network: N101 [After Hours Construction Work (Network Folder: 2024 Existing Year Scenarios)]**

Output produced by **SIDRA INTERSECTION Version: 9.1.3.210**

2024_Pyrmont Bridge Road / Murray Street / Darling Drive_Extended Hours

Site Category: Existing Design
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total HV]	%	[Total HV]	%	v/c	sec		[Veh. veh	Dist] m				
South: Murray St (S)															
1	L2	All MCs	35	0.0	35	0.0	* 0.076	21.6	LOS B	0.8	5.9	0.77	0.67	0.77	27.0
2	T1	All MCs	68	0.0	68	0.0	* 0.247	49.3	LOS D	3.6	25.2	0.92	0.71	0.92	19.3
Approach			103	0.0	103	0.0	0.247	39.9	LOS C	3.6	25.2	0.87	0.70	0.87	21.4
SouthEast: Darling Dr															
21b	L3	All MCs	56	3.8	56	3.8	0.042	7.4	LOS A	0.2	1.8	0.15	0.62	0.15	46.7
21a	L1	All MCs	120	14.0	120	14.0	* 0.324	47.6	LOS D	6.0	46.9	0.89	0.77	0.89	19.9
23a	R1	All MCs	81	3.9	81	3.9	0.136	35.1	LOS C	3.3	24.0	0.74	0.73	0.74	23.3
Approach			257	8.6	257	8.6	0.324	34.9	LOS C	6.0	46.9	0.68	0.73	0.68	24.9
North: Murray St (N)															
7a	L1	All MCs	61	8.6	61	8.6	0.116	21.0	LOS B	1.5	11.6	0.72	0.70	0.72	20.8
8	T1	All MCs	61	0.0	61	0.0	* 0.313	37.2	LOS C	7.2	50.4	0.84	0.73	0.84	21.6
9	R2	All MCs	94	0.0	94	0.0	0.313	40.5	LOS C	7.2	50.4	0.84	0.73	0.84	18.3
Approach			216	2.4	216	2.4	0.313	34.0	LOS C	7.2	50.4	0.81	0.72	0.81	19.9
West: Pyrmont Bridge Rd (W)															
10	L2	All MCs	119	4.4	119	4.4	0.165	19.9	LOS B	4.0	29.3	0.59	0.67	0.59	24.1
12a	R1	All MCs	102	10.3	102	10.3	0.173	37.1	LOS C	4.0	29.3	0.75	0.72	0.75	15.7
12	R2	All MCs	35	0.0	35	0.0	* 0.053	26.8	LOS B	1.3	8.9	0.66	0.64	0.66	25.1
Approach			256	6.2	256	6.2	0.173	27.7	LOS B	4.0	30.5	0.66	0.69	0.66	21.4
All Vehicles			832	5.2	832	5.2	0.324	33.1	LOS C	7.2	50.4	0.73	0.71	0.73	22.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Eff. Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m					
South: Murray St (S)											
P1	Full	81	54.3	LOS E	0.3	0.3	0.95	0.95	221.0	200.0	0.90

SouthEast: Darling Dr											
P5	Full	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96
North: Murray St (N)											
P3	Full	1149	56.9	LOS E	3.9	3.9	1.00	1.00	223.5	200.0	0.89
West: Pyrmont Bridge Rd (W)											
P4	Full	137	54.5	LOS E	0.4	0.4	0.96	0.96	221.1	200.0	0.90
All Pedestrians		1420	56.4	LOS E	3.9	3.9	0.99	0.99	222.6	200.0	0.90

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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Project: P:\Projects_2022\0036_MRVC_Harbourside_03 Work in Progress\SIDRA\250930 Extended Work Hours Network Model.sip9

MOVEMENT SUMMARY

 **Site: 301 [5. Darling Drive / Iron Wharf Place - After Hours Construction Veh (Site Folder: 2024 Existing PM Peak)]**
Output produced by SIDRA INTERSECTION Version: 9.1.3.210

 **Network: N101 [After Hours Construction Work (Network Folder: 2024 Existing Year Scenarios)]**

2024_Darling Drive / Iron Wharf Place_Extended Hours

Site Category: Existing Design
Roundabout

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total HV]	%	[Total HV]	%				[Veh. veh	Dist] m				
			veh/h		veh/h		v/c	sec							km/h
South: Darling Dr (S)															
2	T1	All MCs	246	4.7	246	4.7	0.188	3.4	LOS A	1.2	8.4	0.14	0.39	0.14	32.0
3b	R3	All MCs	1	0.0	1	0.0	0.188	8.1	LOS A	1.2	8.4	0.14	0.39	0.14	33.7
3u	U	All MCs	31	0.0	31	0.0	0.188	9.0	LOS A	1.2	8.4	0.14	0.39	0.14	34.4
Approach			278	4.2	278	4.2	0.188	4.0	LOS A	1.2	8.4	0.14	0.39	0.14	32.4
North: Darling Dr (N)															
7a	L1	All MCs	1	0.0	1	0.0	0.133	1.6	LOS A	0.6	4.6	0.11	0.29	0.11	36.8
8	T1	All MCs	156	3.4	156	3.4	0.133	1.9	LOS A	0.6	4.6	0.11	0.29	0.11	37.5
9u	U	All MCs	21	100.0	21	100.0	0.133	11.8	LOS A	0.6	4.6	0.11	0.29	0.11	36.1
Approach			178	14.8	178	14.8	0.133	3.0	LOS A	0.6	4.6	0.11	0.29	0.11	37.4
All Vehicles			456	8.3	456	8.3	0.188	3.6	LOS A	1.2	8.4	0.13	0.36	0.13	35.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Roundabout Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.