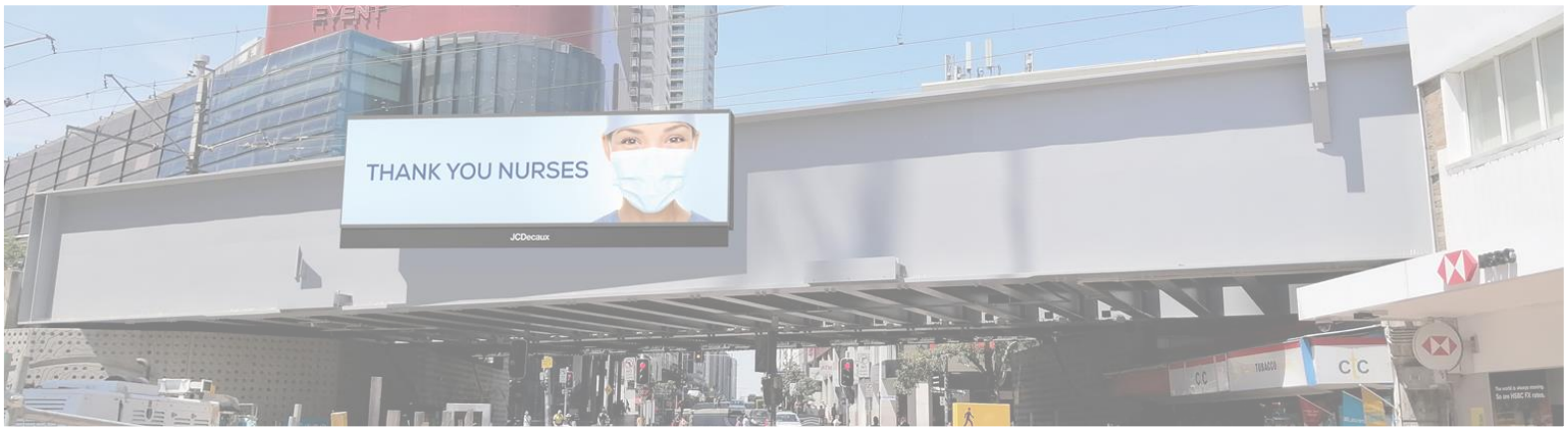
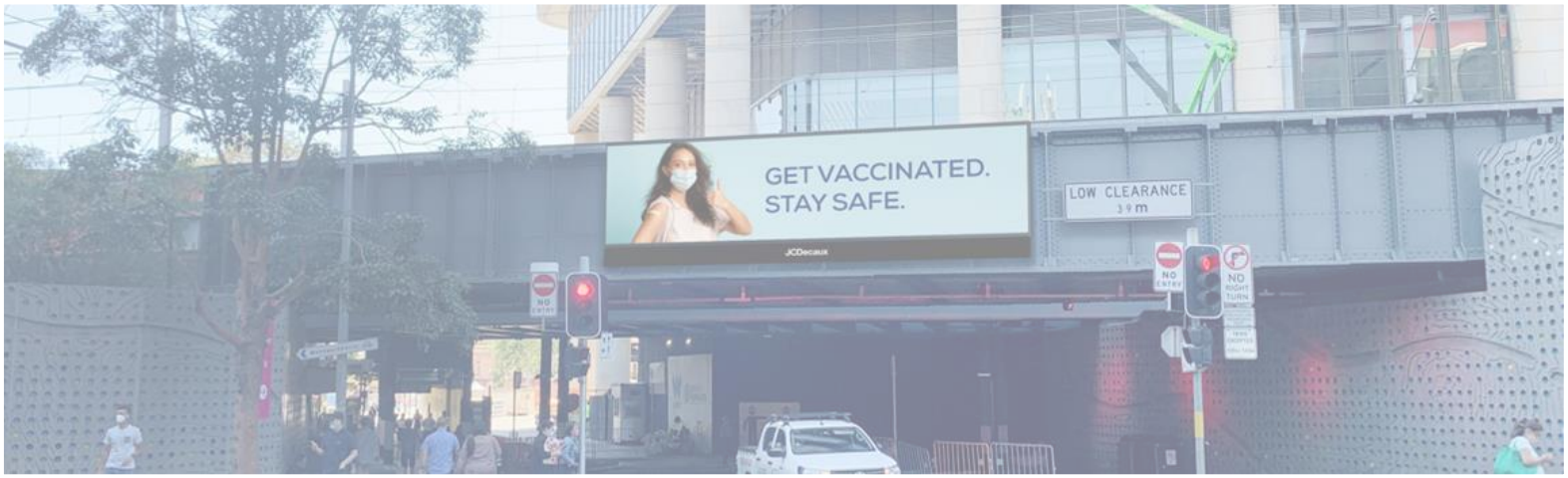




Darcy Street, Parramatta
Digital Signage Safety Assessment

Prepared for:

JCDecaux

23 March 2022

The Transport Planning Partnership

Darcy Street, Parramatta
Digital Signage Safety Assessment

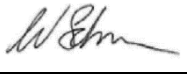
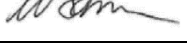
Client: JCDecaux

Version: V03

Date: 23 March 2022

TTPP Reference: 21395

Quality Record

Version	Date	Prepared by	Reviewed by	Approved by	Signature
V01	10/02/2022	Kenta Lam	Santi Botross	Wayne Johnson	
V02	14/02/2022	Kenta Lam	Santi Botross	Wayne Johnson	
V03	23/03/2022	Kenta Lam	Santi Botross	Wayne Johnson	

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APPENDICES

1 Introduction

1.1 Overview

JCDecaux is seeking approval for the installation of LED digital illuminated signage on an existing railway bridge above Darcy Street in Parramatta. The proposed signs are to be located on the north side and south side of the railway bridge, facing the Church Street pedestrian plaza and northbound travel lanes on Church Street.

The Transport Planning Partnership (TTPP) has been commissioned by JCDecaux to undertake a signage safety assessment. This assessment has been carried out in accordance with Department of Planning's *Transport Corridor Outdoor Advertising and Signage Guidelines*, November 2017 (Guidelines) and Chapter 3 of State Environmental Planning Policy (Industry and Employment) 2021 (Industry and Employment SEPP). The Guidelines outline best practice for the planning and design of outdoor advertisements in transport corridors. The Industry and Employment SEPP sets out rules regarding outdoor advertising signage for permissible locations and exempt developments.

1.2 Purpose of this Report

The aim of this assessment is to determine the suitability of the proposed digital signage and provide recommendations on mitigation measures to alleviate impacts on the surrounding road network. This report sets out the findings of TTPP's safety assessment for the proposed digital signage above Darcy Street in Parramatta.

The following items have been considered in this report:

- Potential for the sign to obstruct or distract a driver's view of the road, traffic control devices and signalised pedestrian crossings.
- Distance from upstream or downstream intersections or other decision points, such as pedestrian crossings and traffic signals.
- Potential for the sign to distract at a critical time or for an extended period of time.
- Location relative to the carriageway and its potential to be a physical obstruction for vehicles or other road users.
- Appropriate dwell times based on the speed environment.
- Location in relation to other signage.

1.3 References

In preparing this report, reference has been made to the following:

- An inspection of the sign location from a driving viewpoint along Darcy Street and Church Street carried out on Wednesday, 3 November 2021.
- Austroads Guide to Road Design Part 3, Geometric Design, 2016.
- Transport Corridor Outdoor Advertising and Signage Guidelines, November 2017 by Department of Planning and Environment.
- State Environmental Planning Policy (Industry and Employment) 2021.
- Concept design plans of the proposed digital signage dated 9 February 2022 (north side) and 31 January 2022 (south side).

2 Proposal Description

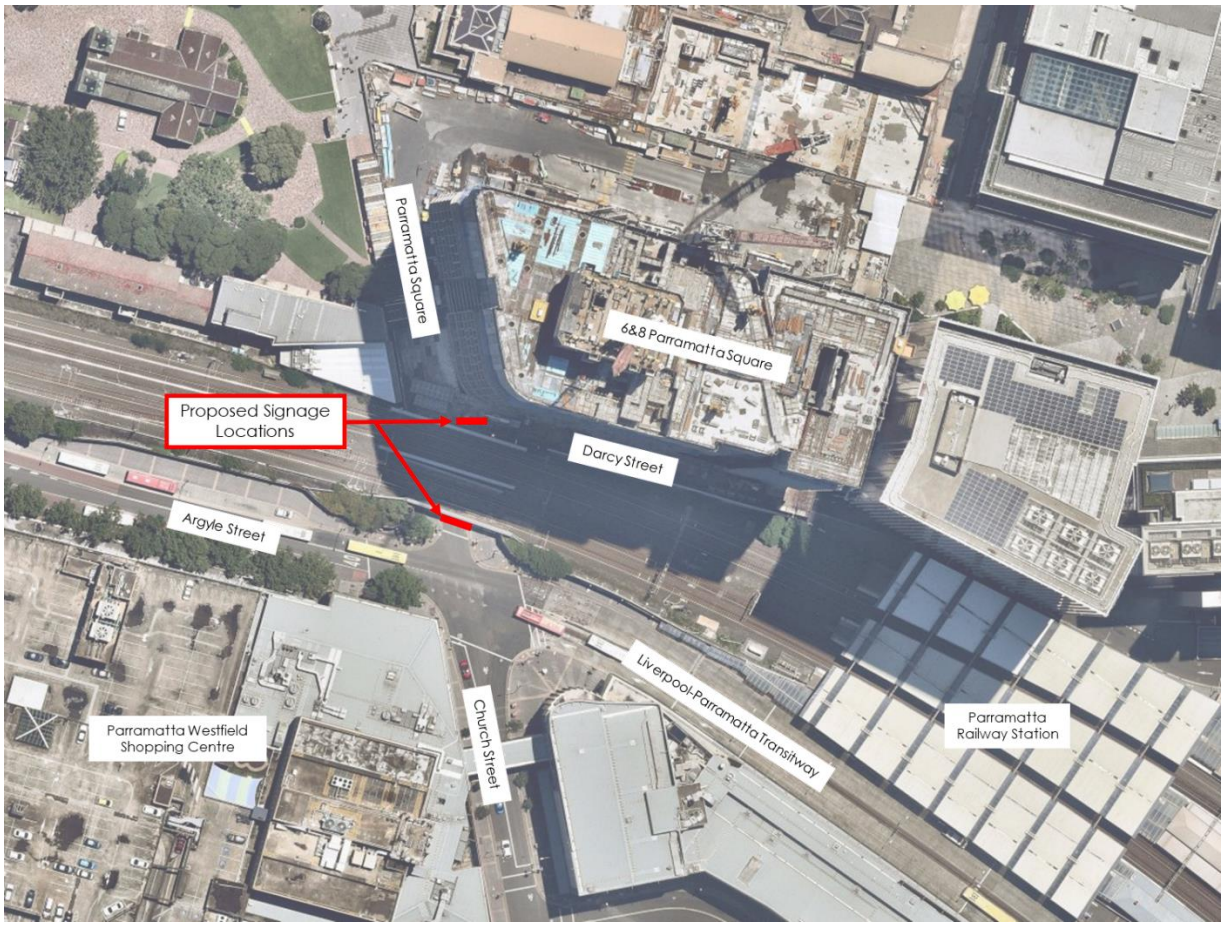
2.1 Location Details

One new digital sign is proposed to be installed on the north side and another new digital sign is proposed to be installed on the south side of the existing railway bridge across Darcy Street in Parramatta. Darcy Street is a one-lane one-way road that runs in the westbound direction parallel to the rail line and adjoins at the intersection of Argyle Street, Darcy Street and Church Street. Streets in the vicinity of the proposed digital signs are signposted as a 40km/h High Pedestrian Activity Area.

The proposed digital signage would be located in close proximity to Westfield Shopping Centre and Parramatta Railway Station. In addition, 6&8 Parramatta Square development located directly north of the digital signage location will be a 50-storey commercial office tower. This development is currently under construction and is expected to be completed by April 2022.

An aerial image of the signage location and surrounding environs are shown in Figure 2.1.

Figure 2.1: Signage Location



Map Source: Nearmap, aerial image dated 27 December 2020

2.2 Description of Proposed Signage

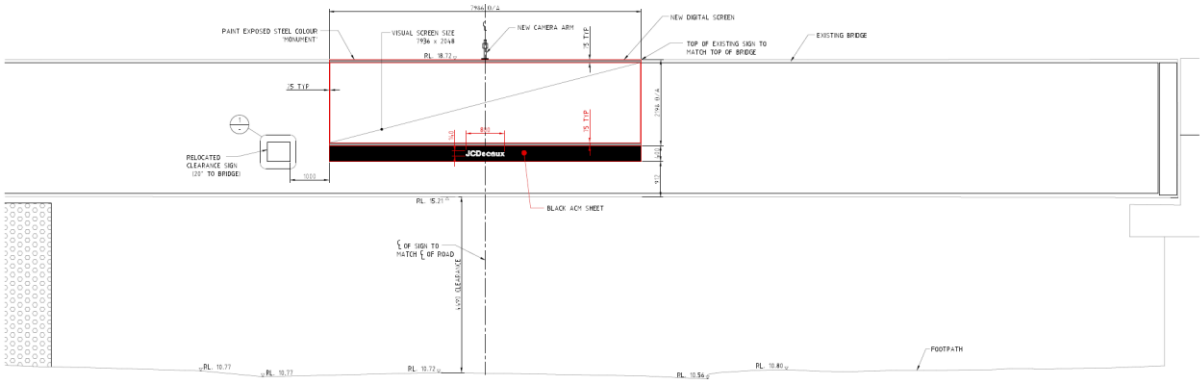
As per the Industry and Employment SEPP, the advertising display area is defined as follows:

> *"advertising display area means, subject to subsection (2), the area of an advertisement or advertising structure used for signage, and includes any borders of, or surrounds to, the advertisement or advertising structure, but does not include safety devices, platforms or lighting devices associated with advertisements or advertising structures."*

On the above basis, the advertising display area and visual display area (the screen alone) for the proposed digital signs would be as follows:

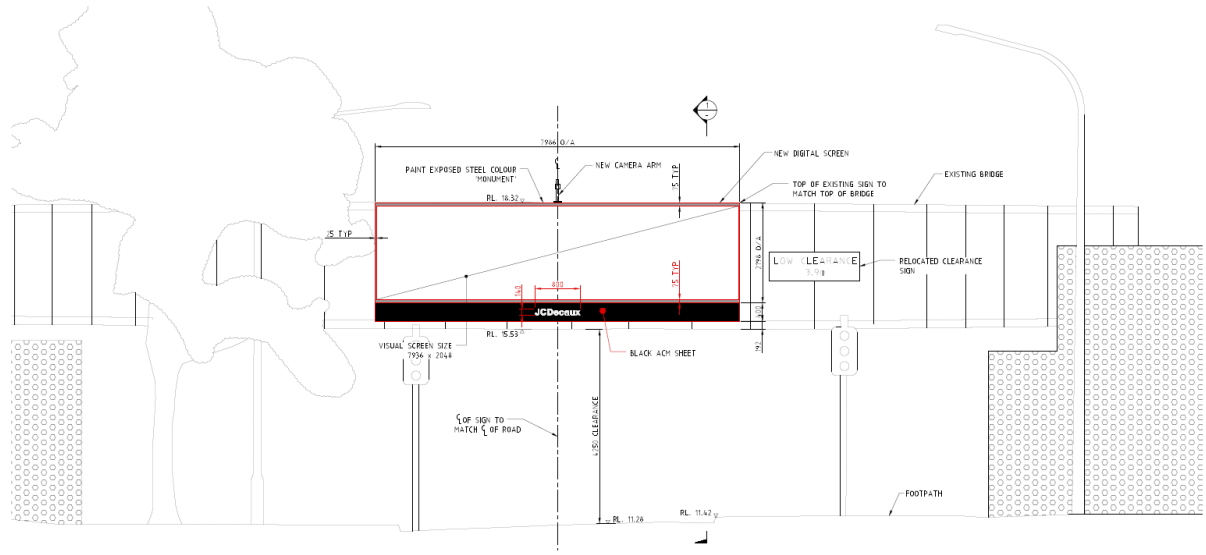
- Sign facing the North Approach:
  - Advertising display area would be 20.75 m^2 (7.986 m width by 2.198 m height plus the "JCDecaux" black ACM sheet with 7.986 m width by 0.400 m height).
  - Visual display area (the screen alone) would be 16.25 m^2 (7.936 m width by 2.048 m height).
- Sign facing the South Approach:
  - Advertising display area would be 20.75 m^2 (7.986 m width by 2.198 m height plus the "JCDecaux" black ACM sheet with 7.986m width by 0.400 m height).
  - Visual display area (the screen alone) would be 16.25 m^2 (7.936 m width by 2.048 m height).

Figure 2.2: Proposed Digital Sign on North Approach (Elevation Plan)



Source: JCDecaux dated 09/02/2022

Figure 2.3: Proposed Digital Sign on South Approach (Elevation Plan)



Source: JCDecaux dated 31/01/2022

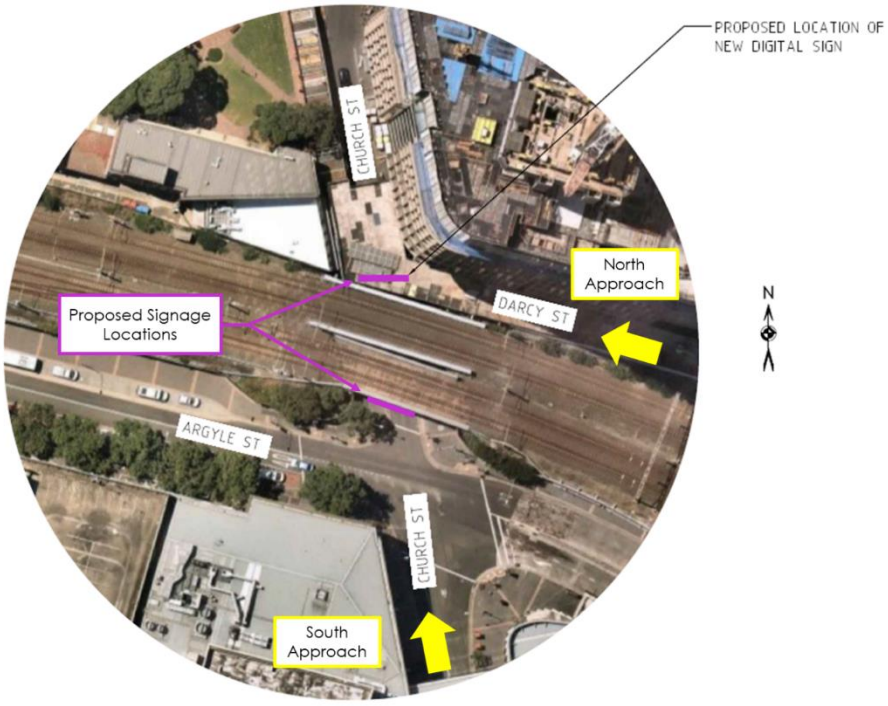
2.3 Signage Exposure

The proposed digital sign on the north side of the railway bridge would be visible to pedestrians walking southbound through the Church Street pedestrian plaza. On the south side of the railway bridge, the proposed digital sign would be visible to traffic travelling on Church Street northbound and buses travelling westbound on the Liverpool-Parramatta Transitway (T-way).

A site visit was undertaken on Wednesday 3 November 2021 to inspect driver sight distances on both approaches to the proposed signage location and observe any potential crash hazards likely to result from the proposed digital signage.

The north and south approaches to the proposed digital signage are shown in Figure 2.4. A description of the site investigation findings is provided herein.

Figure 2.4: Darcy Street North and South Approaches



2.3.1 Darcy Street North Approach

There is a single travel lane on Darcy Street north approach towards the proposed sign location as shown in Figure 2.6. In saying this, however, the left side of the proposed digital sign would be cantilevered from the north side of the bridge such that the digital sign would face the Church Street pedestrian plaza. There would be an acute angle of 15 degrees between the display and the bridge girder as shown in Figure 2.5. As such, the proposed sign display would not be visible from the travel lane on Darcy Street.

It is noted that at the time of the site inspection, Darcy Street was lined with construction hoarding as part of the Parramatta Square project.

Figure 2.5: Proposed Digital Sign Facing Church Street Pedestrian Plaza (North Side)

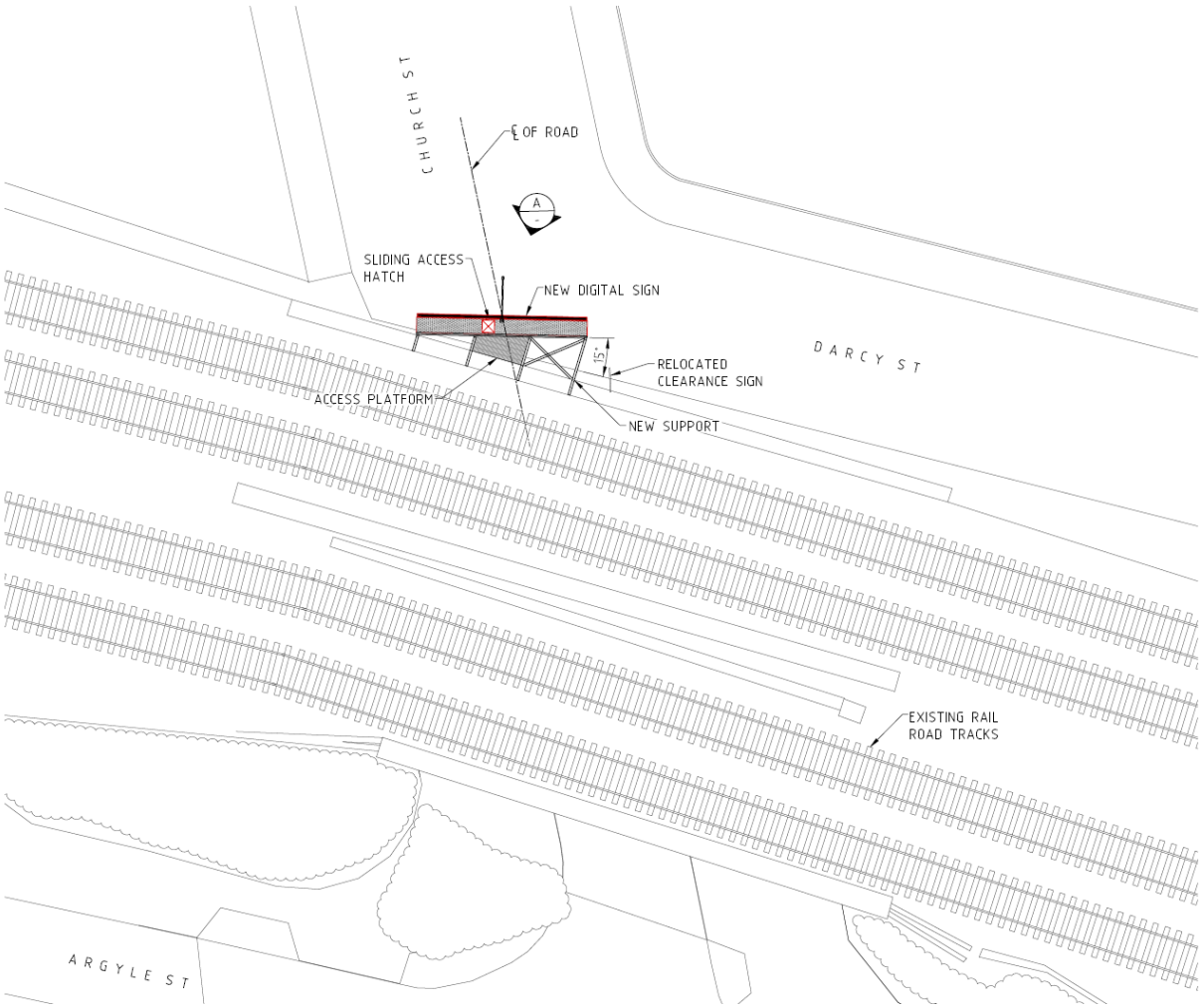


Figure 2.6: Darcy Street North Approach Lane Configuration

Source: Photograph taken by TTPP date 3/11/2021

The key findings are summarised below:

- The north facing digital sign display would not be visible to motorists on Darcy Street travelling southbound. The north facing digital sign display would be visible to pedestrians walking southbound through the Church Street pedestrian plaza. Figure 2.7 shows the perspective of the designer's impression of the concept design at the proposed sign location.
- Darcy Street is a one-lane, one-way street. From Smith Street, the roadway runs in the westbound direction then changes to the southbound direction directly beneath the rail bridge.
- Darcy Street primarily caters to buses, and vehicles exiting the basement car park of the building at 4 Parramatta Square. Currently, there are also construction vehicles exiting via Darcy Street which are associated with the ongoing Parramatta Square project.

Figure 2.7: Designer's Impression on North Approach

Source: JCDecaux

2.3.2 Church Street South Approach

Church Street has a single travel lane in the northbound direction towards the proposed digital sign. At the intersection of Argyle Street with Church Street, traffic must turn left from the Church Street south approach to the Argyle Street west approach. The general traffic flow in the vicinity is illustrated in Figure 2.8. The T-way runs in the east-west direction south of the rail line and proposed digital sign.

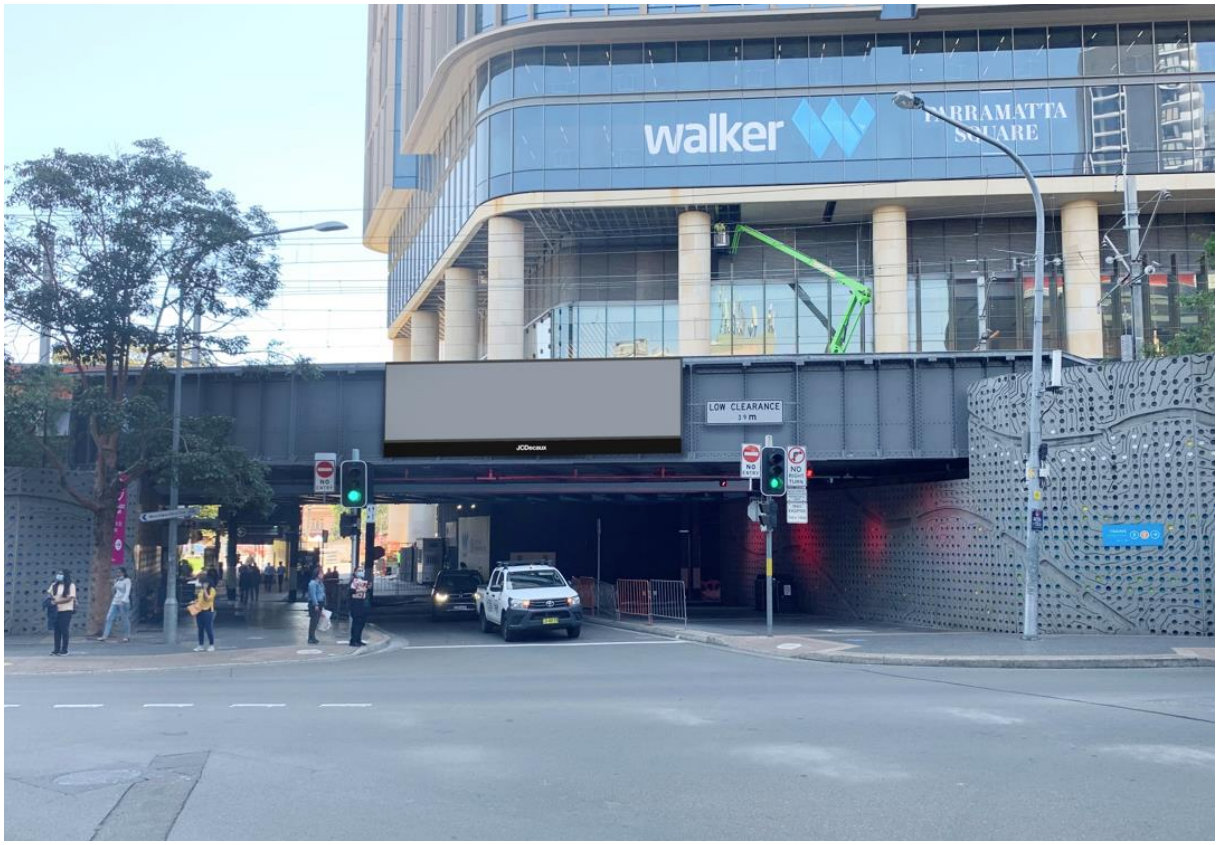
Figure 2.8: Church Street South Approach Lane Configuration

Basemap Source: Nearmap, aerial imagery dated 27 December 2020

- The south facing digital sign would be visible to motorists on Church Street travelling northbound, and partially visible from the T-way (Argyle Street east-west approaches).
- Treating the observed conditions during the site inspection as typical conditions in the area, the digital sign would likely be visible 150 m from the sign on the Church Street south approach.
- The likely readable distance would be approximately 65 m from the sign on Church Street.
- There is no existing signage at this location, and therefore, the likely readable distance is based on the designer's impression as shown in Figure 2.9.

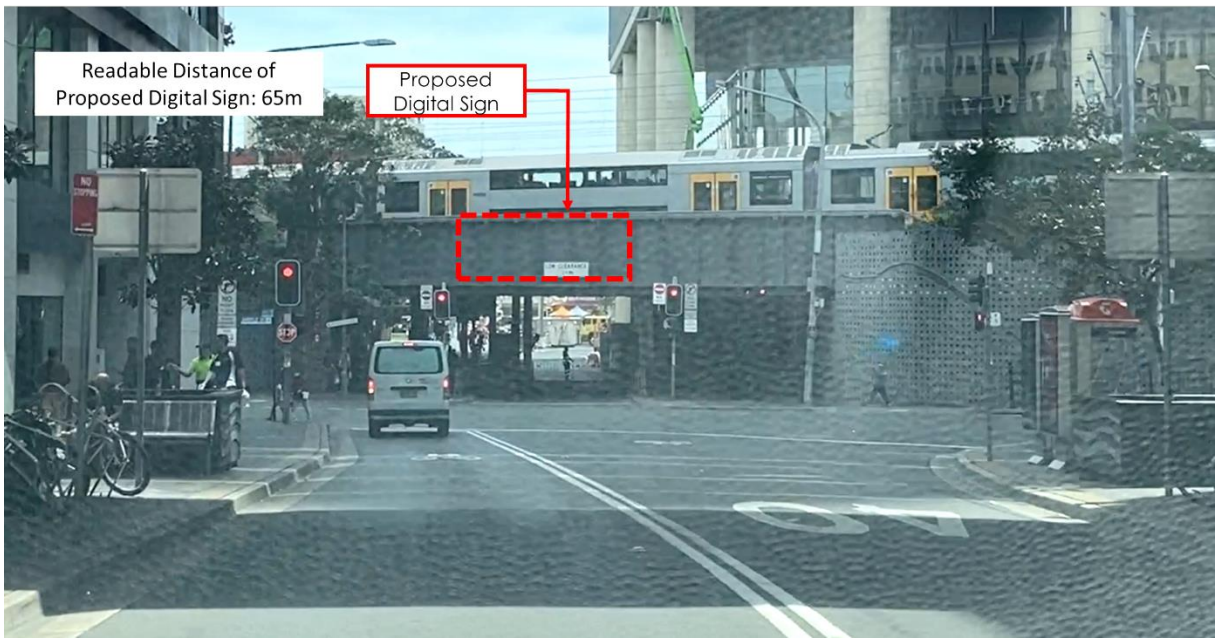
Figure 2.9 shows the perspective of the designer's impression of the concept design at the proposed sign location. Likely visible and readable distances are shown in Figure 2.10.

Figure 2.9: Designer's Impression on South Approach



Source: JCDecaux

Figure 2.10: South Approach Sign Exposure



Source: Photograph taken by TTPP dated 3/11/2021

2.4 Crash History

Historic crash data has been obtained from Transport for NSW (TfNSW) and assessed for incidents on Darcy Street and Church Street within the visible distance of the proposed digital signage on the south approach. The proposed digital sign on the north approach would not be visible to traffic on Darcy Street as the display would face towards the Church Street pedestrian plaza. The proposed digital sign would be visible from approximately 150 m on the south approach.

The assessment has been carried out for the most recent five-year period for data collated and published by TfNSW. This period is between 1 January 2016 and 31 December 2020 (5 year confirmed dataset).

There were no recorded crash incidents on Darcy Street north approach in the recent five years.

On the south approach, there were a total of four crash incidents recorded in the recent five years within the visible distance of the proposed digital sign location. Three of the four incidents were pedestrian-related crashes resulting in one serious injury, one moderate injury, and one minor injury. In addition, there was one crash incident recorded at the Church Street, Darcy Street and Argyle Street intersection. The incident involved a driver losing control of their vehicle while turning left from Church Street to Argyle Street, and colliding with a roadside object. This resulted in the vehicle being towed-away.

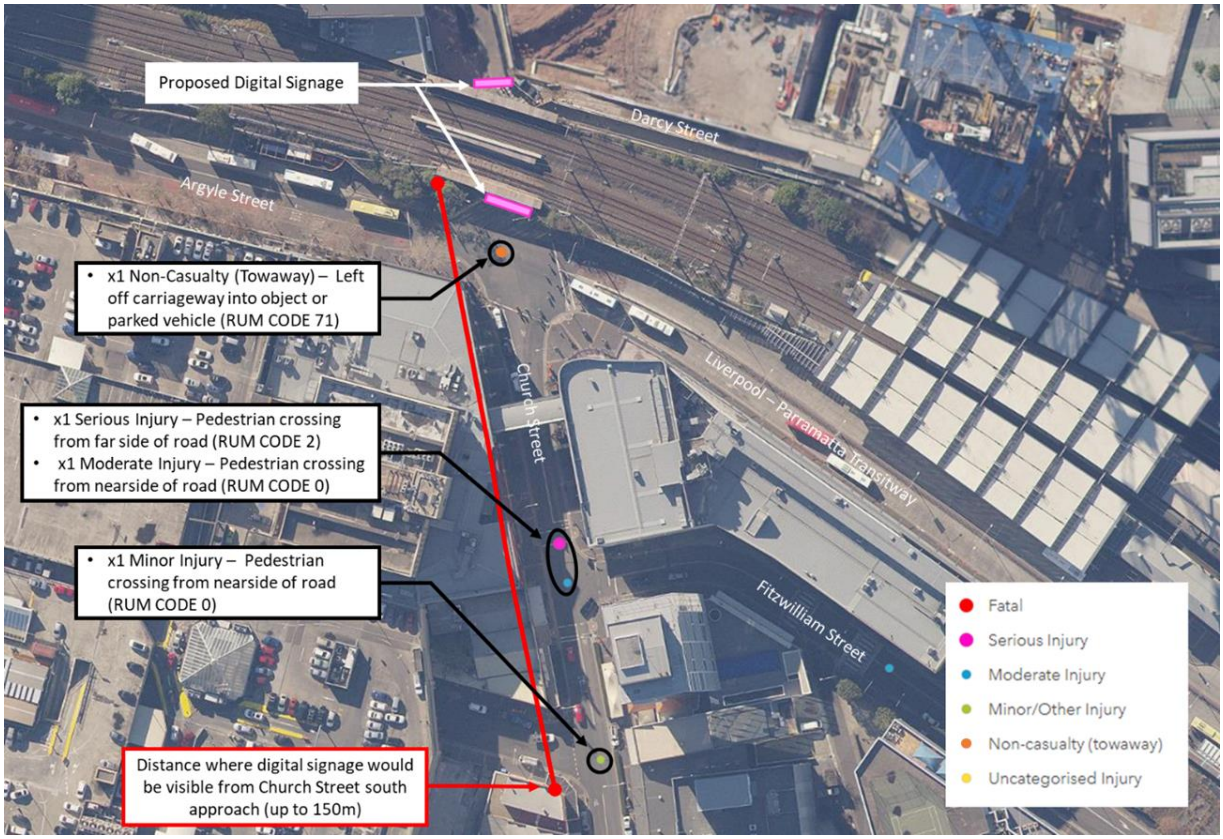
A summary of crashes in the vicinity of the proposed digital signage is presented in Table 2.1, while the crash location and incident descriptions are illustrated in Figure 2.11.

Table 2.1: Crash Type and Severity

Location	Crash Type	Crash Severity (No. of Crashes)				
		Fatality	Serious Injury	Moderate Injury	Minor Injury	Non-casualty (tow-away)
North Approach	-	Nil.				
South Approach	Pedestrian Near Side (RUM CODE 0)			1	1	
	Pedestrian Far Side (RUM CODE 2)		1			
	Left Off Carriageway (RUM CODE 71)					1
	Total	**Nil.**	**1**	**1**	**1**	**1**

Source: Transport for NSW

Figure 2.11: Crash Locations in Recent 5-Year Period



Source: Transport for NSW

3 Statutory Requirements

This section of the report assesses the compliance with the safety assessment criteria established in the NSW Guidelines and State Environmental Planning Policy (Industry and Employment) 2021. It requires analysis as to whether the proposal would reduce the safety of:

- Any public roads
- Pedestrians and cyclists
- Pedestrians by obscuring sight lines from public areas

The proposed design has been assessed against the relevant statutory requirements and guidelines. In order to assess any new installation against the key safety assessment criteria, a series of detailed criteria are set out in Section 3, *Advertisements and Road Safety* of the NSW Guidelines.

3.1 Industry and Employment SEPP Schedule 5

Clauses 1 to 7 of the Industry and Employment SEPP – Schedule 5 refer to aspects that are unrelated to road safety, as outlined in Appendix B. However, Clause 8 is related to road safety, and thus, is covered under this signage safety assessment as follows:

(a) Would the proposal reduce the safety for any public road?
(b) Would the proposal reduce the safety for pedestrians or bicyclists?
(c) Would the proposal reduce the safety for pedestrians, particularly children, by obscuring sightlines from public areas.

Provision of digital advertising signs on both sides of the overhead railway bridge across Darcy Street is unlikely to reduce safety for motorists, pedestrians or cyclists.

Assessment of the proposal in accordance with the Department of Planning's *Transport Corridor Outdoor Advertising and Signage Guidelines* has been undertaken in the following sections below.

3.2 Transport Corridor Outdoor Advertising and Signage Guidelines – Digital Signs Criteria (Section 2 of Guidelines)

Transport Corridor Outdoor Advertising and Signage Guidelines specify criteria which are directly applicable to the assessment of digital signs. The criteria have been assessed in Table 3.1.

It is noted that most of the criteria are related to signage content and would need to be addressed by the operator. In addition, this criteria should be included as part of the consent conditions for the proposal to ensure future compliance.

Table 3.1: Digital Sign Criteria (Section 2 of Guidelines)

Criteria, for Signs greater than 20 m² Display Area		Comments
A	*Each advertisement must be displayed in a completely static manner, without any motion, for the approved dwell time as per criterion (d) below.*	Relates to sign content only.
B	*Message sequencing designed to make a driver anticipate the next message is prohibited across images presented on a sign and across a series of signs.*	Relates to sign content only.
C	*The image must not be capable of being mistaken:* *i. for a prescribed traffic control device because it has, for example, red, amber or green circles, octagons, crosses or triangles or shapes or patterns that may result in the advertisement being mistaken for a prescribed traffic control device, or* *ii. as text providing driving instructions to drivers.*	Relates to sign content only.
D	*Dwell times for image display are:* *i. 10 seconds for areas where the speed limit is below 80 km/h.* *ii. 25 seconds for areas where the speed limit is 80 km/h and over.*	As detailed in Section 3.3.2.2 a dwell time of 10 seconds would be suitable for the proposed digital signage on the north approach and south approach. However, it is recommended to increase the dwell time (e.g. up to 15 seconds) for the digital sign on the south approach given that it is in close proximity to traffic signals
E	*The transition time between messages must be no longer than 0.1seconds, and in the event of image failure, the default image must be a black screen.*	An almost instantaneous transition is likely to reduce the additional distraction potential for digital signs. It is assumed that this operational requirement would be met.
F	*Luminance levels must comply with the requirements in Section 3 (Transport Corridor Advertising Signage Guidelines).*	This signage would be classified as Zone 2. Zone 2 covers areas with high off-street ambient lighting e.g. some major shopping/ commercial centres.
G	*The images displayed on the sign must not otherwise unreasonably dazzle or distract drivers without limitation to their colouring or contain flickering or flashing content.*	It is assumed that this operational requirement would be met.
H	*The amount of text and information supplied on a sign should be kept to a minimum (e.g. no more than a driver can read at a short glance).*	Relates to sign content only.

Criteria, for Signs greater than 20 m² Display Area		Comments
I	*Any signs that is within 250 metres of a classified road and is visible from a school zone must be switched to a fixed display during school zone hours.*	The signs are not located within a school zone.
J	*Each sign proposal must be assessed on a case by case basis including replacement of an existing fixed, scrolling or tri-vision sign with a digital sign and in the instance of a sign being visible from each direction, both directions for each location must be assessed on their own merits.*	Noted.
K	*At any time, including where the speed limit in the area of the sign is changed, if detrimental effect is identified on road safety post installation of a digital sign, RMS reserves the right to re-assess the site using an independent RMS-accredited road safety auditor. Any safety issues identified by the auditor and options for rectifying the issues are to be discussed between RMS and the sign owner and operator.*	Noted.
L	*Sign spacing should limit drivers' view to a single sign at any given time with a distance of no less than 150m between signs in any one corridor. Exemptions for low speed, high pedestrian zones or CBD zones would be assessed by RMS as part of their concurrence role.*	The sign would not be located less than 150 m from an existing static sign.
M	*Signs greater than or equal to 20sqm must obtain RMS concurrence and must ensure the following minimum vertical clearances:* *i. 2.5m from lowest point of the sign above the road surface if located outside the clear zone* *ii. 5.5m from lowest point of the sign above the road surface if located within the clear zone (including shoulders and traffic lanes) or the deflection zone of a safety barrier if a safety barrier is installed.* *If attached to road infrastructure (such as an overpass), the sign must be located so that no portion of the advertising sign is lower than the minimum vertical clearance under the overpass or supporting structure at the corresponding location.*	The bottom of the proposed signage would be positioned higher than the underside of the overhead railway bridge. Refer to Appendix A for the concept design plan showing dimensions.
N	*An electronic log of a sign's operational activity must be maintained by the operator for the duration of the development consent and be available to the consent authority and/or RMS to allow a review of the sign's activity in case of a complaint.*	Noted.
O	*A road safety check which focuses on the effects of the placement and operation of all signs over 20sqm must be carried out in accordance with Part 3 of the RMS Guidelines for Road Safety Audit Practices after a 12-month period of operation but within 18 months of the signs installation. The road safety check must be carried out by an independent RMS-accredited road safety auditor who did not contribute to the original application documentation. A copy of the report is to be provided to RMS and any safety concerns identified by the auditor relating to the operation or installation of the sign must be rectified by the applicant. In cases where the applicant is the RMS, the report is to be provided to the Department of Planning and Environment as well.*	Noted.

3.3 Transport Corridor Outdoor Advertising and Signage Guidelines (Section 3 of Guidelines)

3.3.1 Sign Location Criteria

3.3.1.1 Road Clearance

(a) The advertisement must not create a physical obstruction or hazard. For example:

(i) Does the sign obstruct the movement of pedestrians or bicycle riders? (e.g. telephone kiosks and other street furniture along roads and footpath areas).

(ii) Does the sign protrude below a bridge or other structure so it could be hit by trucks or other tall vehicles? Will the clearance between the road surface and the bottom of the sign meet appropriate road standards for that particular road?

(iii) Does the sign protrude laterally into the transport corridor so it could be hit by trucks or wide vehicles?

The digital signage would not physically obstruct any vehicle, pedestrian, and cyclist movements as it would be placed on the sides of the railway bridge directly above the Darcy Street carriageway. The digital signage would not protrude below the underside of the railway bridge and hence the vertical clearance would be maintained as per existing conditions.

The concept designs for the proposed signage and its positioning on the railway bridge are contained in Appendix A.

(b) Where the sign supports are not frangible (breakable), the sign must be placed outside the clear zone in an acceptable location in accordance with Austroads Guide to Road Design (and RMS supplements) or behind an RMS-approved crash barrier.

The digital signage would be installed on both sides of the railway bridge, which is positioned above the road carriageway and outside of the clear zone. Hence, it would not require an RMS-approved crash barrier.

(c) Where a sign is proposed within the clear zone but behind an existing RMS-approved crash barrier, all its structure up to 5.8m in height (relative to the road level) are to comply with any applicable lateral clearances specified by Austroads Guide to Road Design (and RMS supplements) with respect to dynamic deflection and working width.

The digital signage would not be located within the clear zone.

The existing available vertical clearance between the road surface and the underside of the railway bridge would be maintained.

(d) All signs that are permitted to hang over roads or footpaths should meet wind loading requirements as specified in AS1170.1 and AS1170.2. All vertical clearances as specified above are regarded as being the height of the sign when under maximum vertical deflection.

As part of the detailed design phase, the digital signage would be designed in accordance with Australian Standards AS1170.1 and AS1170.2 to meet the requirements for wind loading, whilst having consideration for height of the sign boards when under maximum vertical deflection.

3.3.1.2 Line of Sight

(a) An advertisement must not obstruct the drivers view of the road particularly of other vehicles, bicycle riders or pedestrians at crossings.

The proposed digital signage would be positioned on the side of the railway bridge above the carriageway. Therefore, it would not obstruct a driver's view towards the road and other road users.

(b) An advertisement must not obstruct a pedestrian or cyclist's view of the road.

Similarly, the proposed signage would not obstruct pedestrian and cyclists view of the road.

(c) The advertisement should not be located in a position that has the potential to give incorrect information on the alignment of the road. In this context, the location and arrangement of signs' structures should not give visual clues to the driver suggesting that the road alignment is different to the actual alignment. An accurate photomontage should be used to assess this issue.

The digital sign on the north approach would face the Church Street pedestrian plaza. Hence, the sign would not be visible to motorists on the north approach. Notwithstanding this, the sign would not be located in a way that has the potential to give correct information to pedestrians viewing the site. This is shown by the designer's impression in Figure 2.7.

Similarly, the proposed digital sign on the south approach would not display misleading information or information contrary to the existing roadway. This is supported by the designer's impression of the proposed sign as depicted in Figure 2.9.

(d) The advertisement should not distract a driver's attention away from the road environment for an extended length of time. For example:

- **(i) The sign should not be located in such a way that the driver's head is required to turn away from the road and the components of the traffic stream in order to view its display and/or message. All drivers should still be able to see the road when viewing the sign, as well as the main components of the traffic stream in peripheral view.**
- **(ii) The sign should be oriented in a manner that does not create headlight reflection in the driver's line of sight. As a guideline, angling a sign five degrees away from the right angles to the driver's line of sight can minimise headline reflections. On a curved road alignment, this should be checked for the distance measured back from the sign that a car would travel in 2.5 seconds at the design speed.**

The proposed digital sign on the north approach would be angled towards the Church Street pedestrian plaza, and therefore, motorists on Darcy Street would not be able to view the sign display. As such, motorists would not be distracted by its content.

On the south approach, the proposed digital sign would be located within a driver's line of sight on Church Street within a viewable distance of up to 150 m. In addition, the digital sign would be placed above the road, therefore, a driver would not be required to turn away from the road in order to view the digital sign.

Motorists on Fitzwilliam Street would not have visibility of the proposed sign as it would be obstructed by structural columns of the Westfield building, as shown in Figure 3.1.

Figure 3.1: Motorist's View from Fitzwilliam Street

Source: Photograph taken by TTPP dated 3/11/2021

The sign facing the south approach would be partially visible to bus drivers on the T-way (Argyle Street east-west approach). However, due to the acute viewing angle from the east approach and west approach, the proposed sign would not be highly visible to bus drivers and therefore would have minimal potential to cause distraction. Furthermore, on the west approach, visibility to the sign would be obstructed by nearby trees. The view towards the sign from the T-way are shown in Figure 3.2 and Figure 3.3.

Figure 3.2: View from T-way (facing west)

Source: Photograph taken by TTPP dated 3/11/2021

Figure 3.3: Motorist's View from Argyle Street

Source: Photograph taken by TTPP dated 3/11/2021

3.3.1.3 Proximity to Decision Making Points and Conflict Points

(a) A sign should not be located:

- **(i) Less than the safe sight distance from an intersection, merge points, exit ramp, traffic control signal or sharp curves.**
- **(ii) Less than the safe stopping sight distance from a marked foot crossing, pedestrian crossing, pedestrian refuge, cycle crossing, cycleway facility or hazard within the road environment.**
- **(iii) So that is visible from the stem of a T-intersection.**

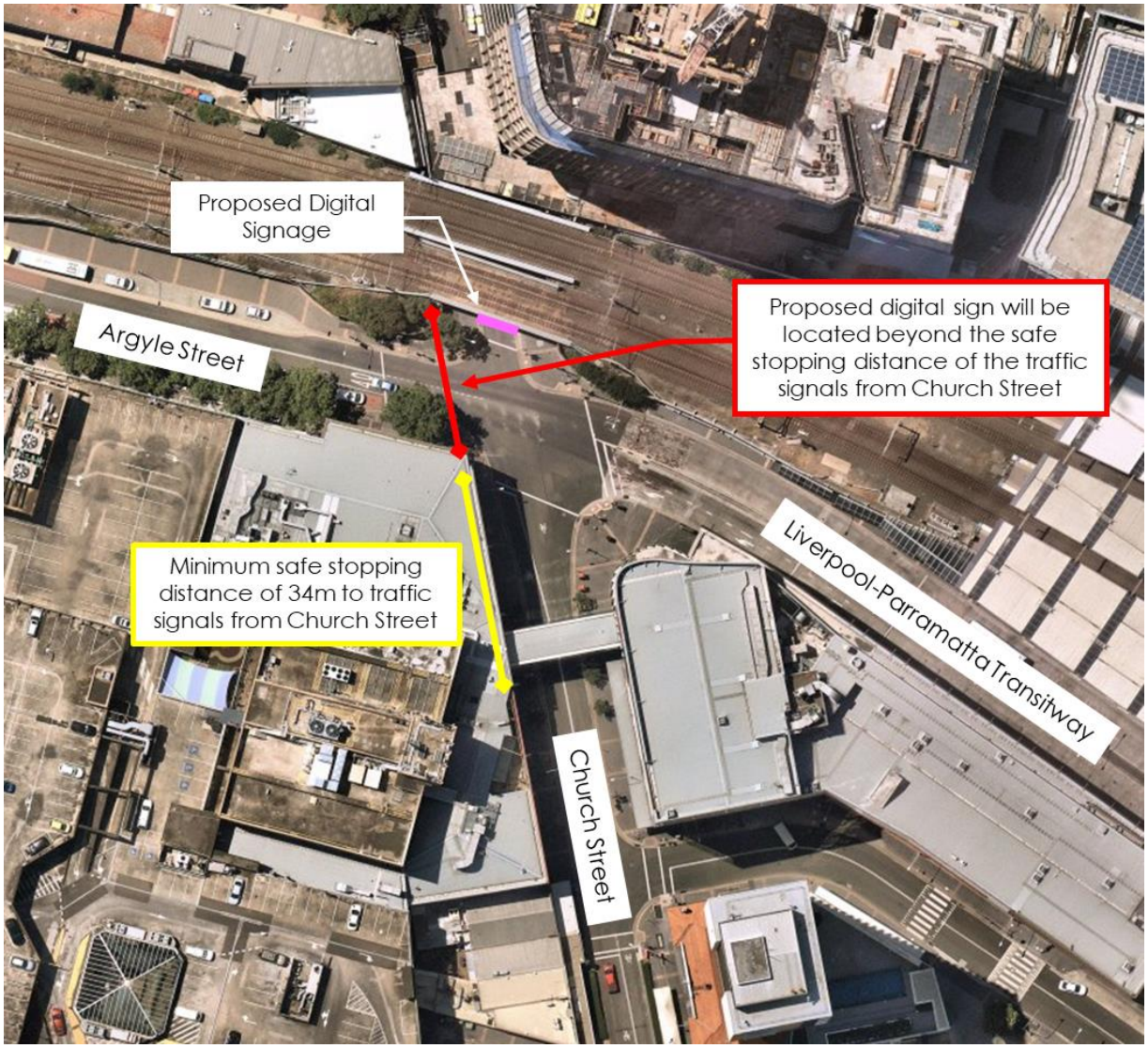
In accordance with Austroads Guide to Road Design, Part 3, sight distance refers to the distance required to enable a driver to react and stop before reaching a hazard. This distance is dependent on the operating (85th percentile) speed of the road, road gradient and other road characteristics.

For the purpose of this assessment, an operating speed of 40 km/h has been used to calculate the minimum SSD. A 40 km/h speed has been adopted based on the signposted speed limit on Church Street as well as the speed limit which motorists were observed to be driving during the site inspection. According to Austroads, the minimum safe stopping sight distance for a 40 km/h speed zone is 34 m.

The proposed sign on the south approach is located beyond the traffic signals at the Darcy Street, Church Street and Argyle Street intersection as shown in Figure 3.4. Therefore, the sign would not be located less than the safe stopping sight distance from the intersection.

On the north approach, the proposed digital sign would be located within the 34 m SSD of the traffic signals, however, the proposed digital sign would not be visible to motorists. As such, safe stopping distance would not be applicable on this approach.

Figure 3.4: Minimum Safe Sight Distance on South Approach



Map Source: Nearmap, aerial imagery dated 24 January 2021

(b) The placement of a sign should not distract a driver at a critical time. In particular, signs should not obstruct a driver's view:

- **(i) Of a road hazard,**
- **(ii) To an intersection,**
- **(iii) To a prescribed traffic control device (such as traffic signals, stop or give way signs or warning signs)**
- **(iv) To an emergency vehicle access point or Type 2 driveways (wider than 6-9 metres) or higher.**

A "critical time" is understood to refer to a point in time when a driver's decision is required implying that a road safety implication could occur if a driver was distracted at this time.

The proposed digital sign on the south approach would be positioned beyond the safe stopping sight distance of the traffic signals at Darcy Street, Church Street and Argyle Street. As such, the proposed digital sign would not obstruct the motorist's view of traffic signal lanterns at any time.

On the north approach, the proposed sign would not distract a motorist travelling on Darcy Street at a critical time as the digital sign display would not be visible to motorists.

3.3.1.4 Sign Spacing

(a) Sign spacing should limit drivers view to a single sign at any given time with a distance of no less than 150m between signs in any one corridor. Exemptions for low speed, high pedestrian zones or CBD zones will be assessed by RMS as part of their concurrence role.

There are no other digital signs or static billboards placed within 150 m of the proposed signage.

3.3.2 Sign Design and Operation Criteria

3.3.2.1 Advertising Signage and Traffic Control Devices

(a) The advertisement must not distract a driver from, obstruct or reduce the visibility and effectiveness of directional signs, traffic signals, prescribed traffic control devices, regulatory signs or advisory signs or obscure information about the road alignment.
(b) The advertisement must not interfere with stopping sight distance for the road's design speed or the effectiveness of a traffic control device. For example:
  (i) Could the advertisement be construed as giving instructions to traffic such as 'Stop', 'Halt' or 'Give Way'?
  (ii) Does the advertisement imitate a prescribed traffic control device?
  (iii) If the sign is in the vicinity of traffic lights, does the advertisement use red, amber or green circles, octagons, crosses or triangles or shapes or patterns that may result in the advertisement being mistaken for a traffic signal?

Details of the advertisement/s are not yet known since the project is still within the concept design stage. However, it is proposed that the signage would not display colours and shapes which could be mistaken for a traffic signal or traffic signs.

Notwithstanding this, it is recommended that the content of the proposed sign be reviewed against Table 5 of the Guidelines to avoid any content that may be construed as imitating a traffic control device.

3.3.2.2 Dwell Time and Transition Time

(a) Each advertisement must be displayed in a completely static manner, without any motion, for the approved dwell time as per criterion (b) below
(b) Dwell times for image display must not be less than:
  (i) 10 seconds for areas where the speed limit is below 80km/h
  (ii) 25 seconds for areas where the speed limit is 80km/h and over.
(c) Any digital sign that is within 250 metres of a classified road and is visible from a school zone must be switched to a fixed display during school zone hours.
(d) Digital signs must not contain animated or video/movie style advertising or messages of image failure, the default image must be a black screen.

The digital signage would contain text and images. Based on the Guidelines, the minimum dwell time for content displayed on the digital signage would be 10 seconds.

As assessed in Section 3.3.1.3, the proposed sign on the south approach is located beyond the safe stopping sight distance of the traffic signals. In addition, the area is marked as a 40 km/h High Pedestrian Activity Area which provides a low-speed environment where motorists are more vigilant of pedestrian movements. As such, the minimum dwell time of 10 seconds is considered acceptable at this location.

Notwithstanding this, increasing the minimum dwell time could be considered a measure to mitigate any preserved safety risk of the proposed sign located in the vicinity of traffic signals. Thus, it is suggested that the dwell time is increased to a minimum of 15 seconds for the sign on the south approach.

The basis for this recommendation is the Land and Environment Court Case, Outdoor Systems Pty Ltd v Georges River Council and Roads and Maritime Services [2017] NSWLEC 1505. In this case, a digital sign was proposed to be installed at the intersection of Princes Highway and Rocky Point Road in Kogarah. The applicant proposed to modify the dwell time of the digital signage to 15 seconds (from 24 hours, as previously approved by RMS as the minimum dwell time). The LEC deemed the reduced dwell time to 15 seconds appropriate on the basis that the crash history at the proposed signage location did not suggest that it was a "crash hotspot". This decision was driven by expert evidence provided by registered psychologist and RMS accredited Level 3 Road Safety Auditor, Carolyn Samsa, who spent five years working in the NSW Centre for Road Safety at the RTA and nine years in the industry advising associations representing outdoor advertising.

The LEC decision was further supported by the fact that during a 3-month period where the digital signage operated with a 10 second dwell time, there were no crashes reported in the vicinity of the sign. Furthermore, it was acknowledged in the court case that there were other digital billboards that were previously approved and operational at signalised intersections within the Sydney basin with dwell times of approximately 10 seconds and yet there were no reported incidents of drivers being distracted by these signs as far as Samsa had been aware.

As assessed in Section 2.4, historical crash data within the visible distance of the proposed sign indicates that the proposed sign would not be located within a crash hotspot.

On this basis, a dwell time of 15 seconds, a five second increase on the minimum 10 seconds dwell time prescribed by the Guidelines, is deemed to be an appropriate measure for consideration.

The proposed digital signage would not be located within a school zone.

3.3.2.3 Illumination and Reflectance

(a) Luminance levels must comply with the requirements in Table 6 in Transport Corridor Outdoor Advertising and Signage Guidelines
(b) The image displayed on the sign must not otherwise unreasonably dazzle or distract drivers without limitation to their colouring or contain flickering or flashing content.

Section 3.3.3 of the Guidelines details assessment criteria to ensure that illumination and reflectance qualities of signage do not cause a road safety hazard. It is understood that these criteria would be addressed in a separate specialist report prepared by a qualified consultant.

3.3.2.4 Interaction and Sequencing

(a) The advertisement must not incorporate technology which interacts with in-vehicle electronic devices or mobile devices. This includes interactive technology or technology that enables opt-in direction communication with road users.
(b) Message sequencing designed to make a driver anticipated the next message is prohibited across images presented on a single sign and across a series of signs.

The proposed signage would not contain interactive technology or technology that enables opt-in direction communication with motorists. The digital signage would not be designed to make motorists anticipate information.

4 Conclusion

One new digital sign is proposed to be installed on the north side and another new digital sign is proposed to be installed on the south side of the existing railway bridge across Darcy Street in Parramatta.

The proposal has been assessed in accordance with the following statutory requirements for digital advertising signs:

- Transport Corridor Outdoor Advertising and Signage Guidelines
- State Environmental Planning Policy (Industry and Employment) 2021.

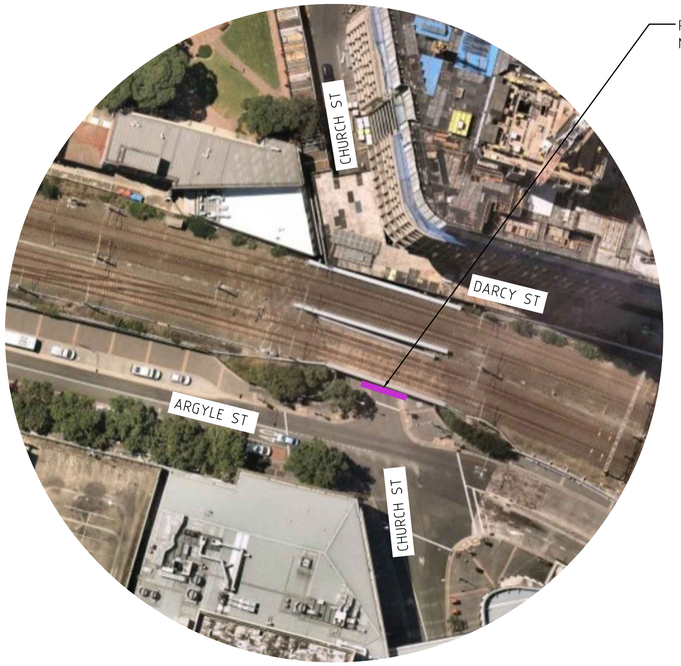
The following findings and conclusions are made from the signage safety assessment:

- The proposed sign on the north approach would face the Church Street pedestrian plaza. As such, the sign display would not be visible to motorists on Darcy Street north approach. On the south approach, the proposed digital sign is located within the driver's peripheral vision.
- Four crashes have occurred within the visible distance of the proposed digital sign on the south approach in the most recent five years. There have been no crashes on the north approach to the digital sign location in the same period.
- The proposed sign on the south approach would not be located within the safe stopping sight distance to traffic signals, crossings or directional/information signage or any other decision point.
- The proposed signage would not obstruct/ reduce visibility of any traffic control devices, signage, pedestrians or cyclists.
- The proposed signage would not give incorrect information on the road alignment.
- The area around the proposed digital signage is marked as 40 km/h High Pedestrian Activity Area. Based on this, a dwell time of 10 seconds for the digital signage is suitable. However, it is recommended to increase the dwell time up to 15 seconds (minimum) for the digital sign on the south approach given that it is in close proximity to traffic signals.
- The proposed signage would not compromise safety for road users in the vicinity.

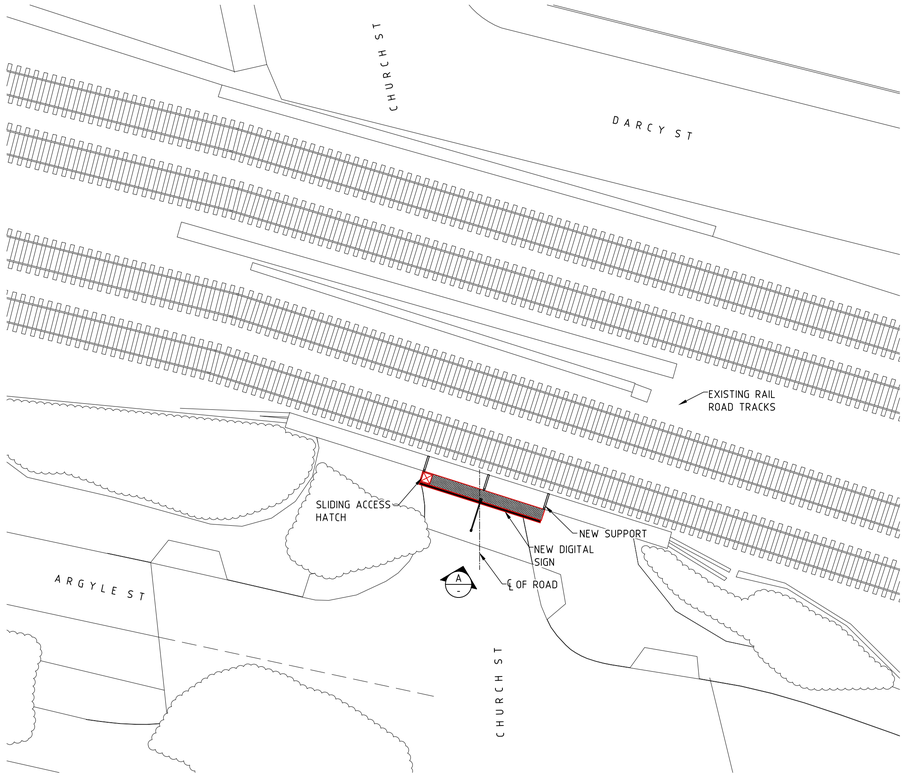
Having consideration for the signage safety assessment and discussions presented within this report, the analysis suggests that the installation of one digital sign on the north and one digital sign on the south side of the existing railway bridge across Darcy Street would be acceptable.

Appendix A

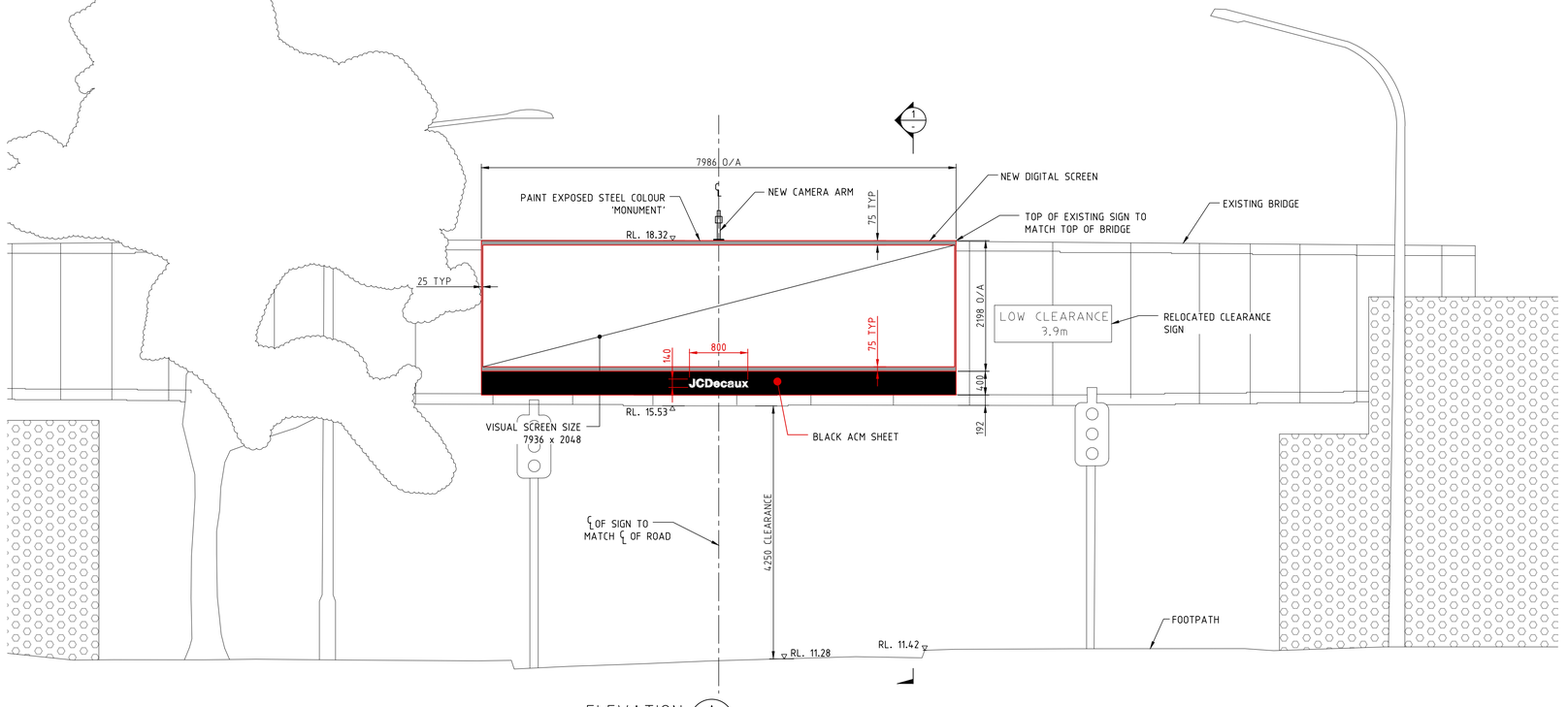
Concept Design Plans



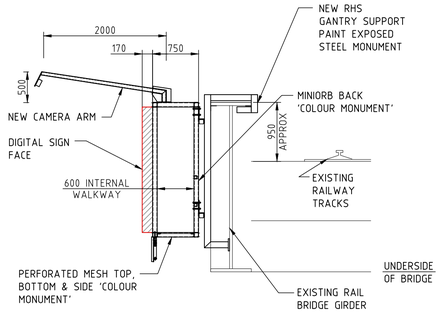
AERIAL PHOTO
NTS



SITE PLAN
SCALE 1:200



ELEVATION A
SCALE 1:50
(NORTHBOUND)



SECTION 1
SCALE 1:50

NOT FOR CONSTRUCTION

ISS	DATE	COMMENT
A	12/01/22	ISSUED FOR APPROVAL
B	19/01/22	ISSUED FOR APPROVAL
C	31/01/22	ISSUED FOR APPROVAL

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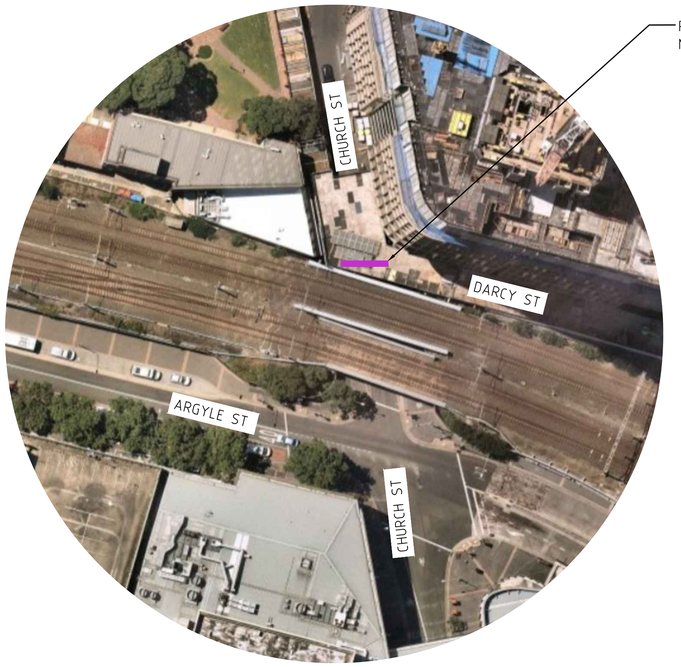
CLIENT: JCDecaux

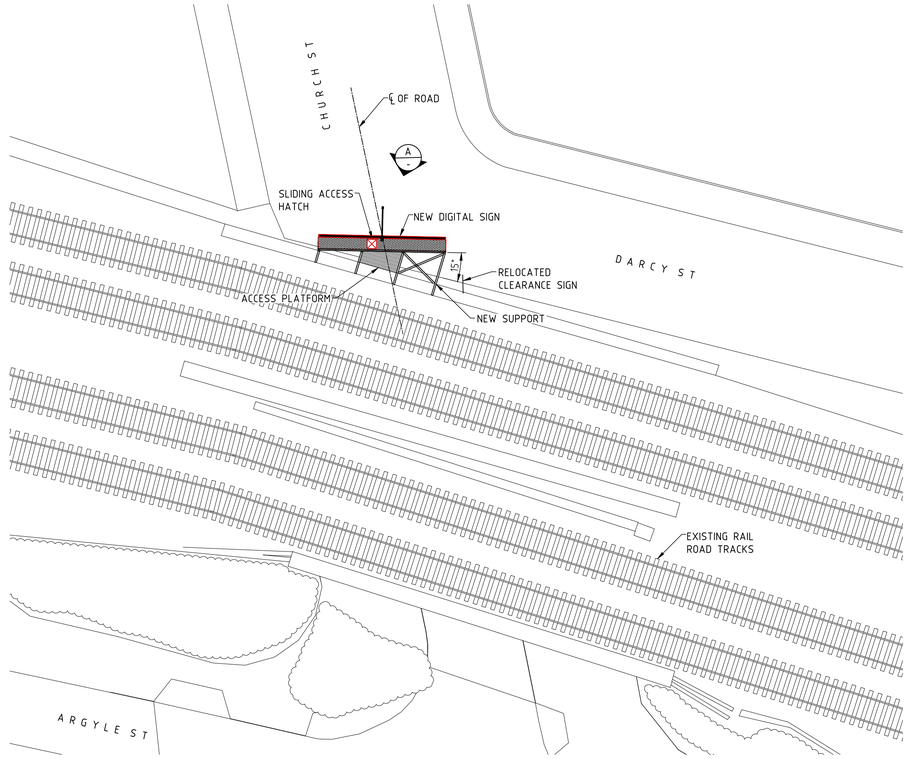
PROJECT: DARCY ST, PARRAMATTA, SUPER 8 (NORTHBOUND)

TITLE: PROPOSED DIGITAL SIGN GENERAL ARRANGEMENT & SITE PLAN (NORTHBOUND)

DRAWN A.T	DESIGN J.L	DATE: JAN' 22
JOB NO: 21264		DWG NO: DA01
SCALE @ A1: AS SHOWN		REV: C



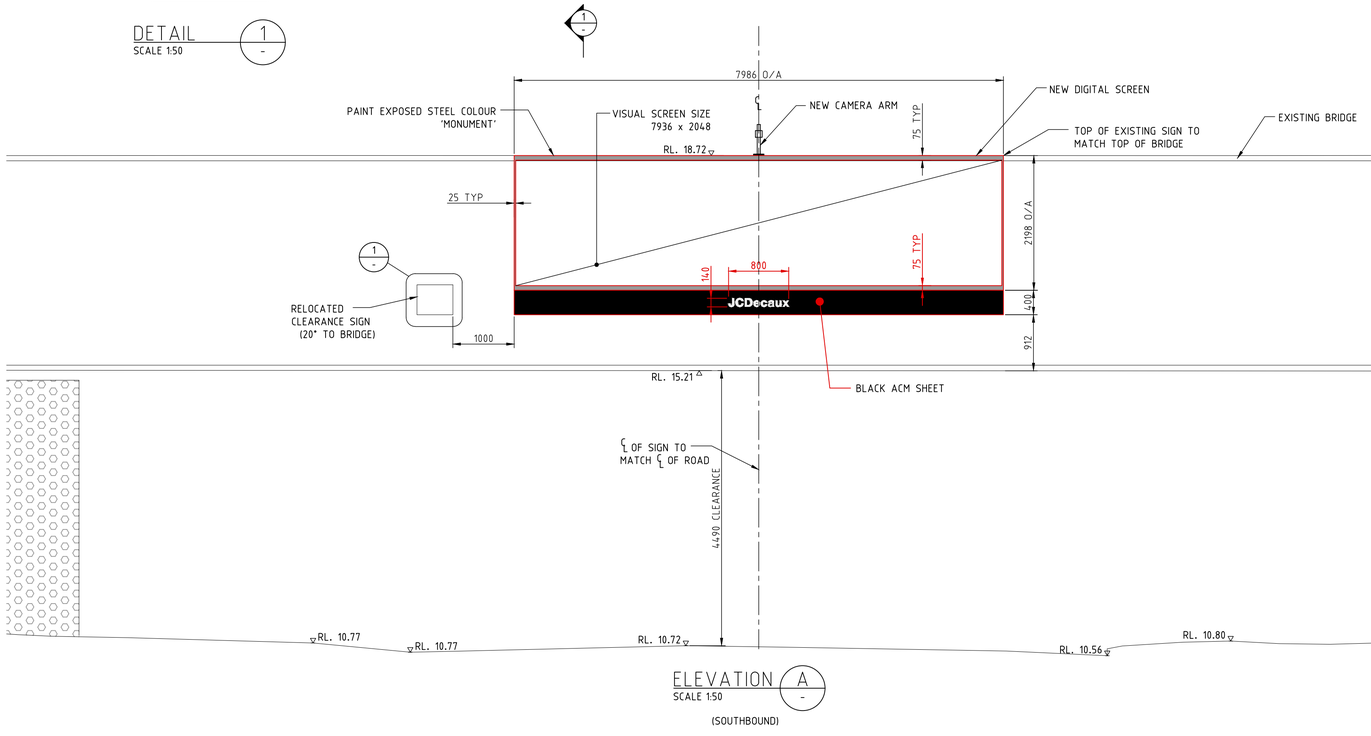
AERIAL PHOTO
NTS



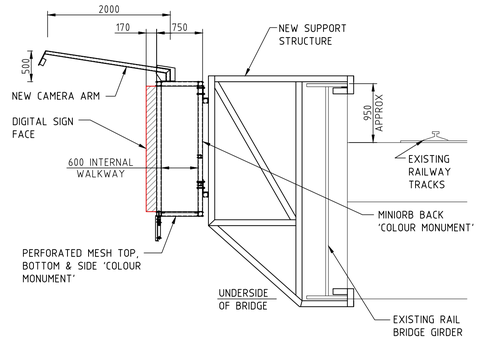
SITE PLAN
SCALE 1:200

LOW CLEARANCE
3.9m

DETAIL 1 -
SCALE 1:50



ELEVATION A -
SCALE 1:50
(SOUTHBOUND)



SECTION 1 -
SCALE 1:50

NOT FOR CONSTRUCTION

ISS	DATE	COMMENT
A	12/01/22	ISSUED FOR APPROVAL
B	19/01/22	ISSUED FOR APPROVAL
C	31/01/22	ISSUED FOR APPROVAL
D	01/02/22	ISSUED FOR APPROVAL
E	09/02/22	ISSUED FOR APPROVAL

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CLIENT: JCDecaux

PROJECT: DARCY ST, PARRAMATTA, SUPER 8 (SOUTHBOUND)

TITLE: PROPOSED DIGITAL SIGN GENERAL ARRANGEMENT & SITE PLAN (SOUTHBOUND)

DRAWN A.T	DESIGN J.L	DATE: JAN' 22
JOB NO: 21264		DWG NO: DA02
SCALE @ A1: AS SHOWN		REV: E

Appendix B

State Environmental Planning Policy (Industry and Employment) – Schedule 5

State Environmental Planning Policy (Industry and Employment) 2021

Current version for 1 March 2022 to date (accessed 22 March 2022 at 15:07)

Schedule 5

Schedule 5 Assessment criteria

sections 3.6, 3.11 and 3.15

1 Character of the area

- Is the proposal compatible with the existing or desired future character of the area or locality in which it is proposed to be located?
- Is the proposal consistent with a particular theme for outdoor advertising in the area or locality?

2 Special areas

- Does the proposal detract from the amenity or visual quality of any environmentally sensitive areas, heritage areas, natural or other conservation areas, open space areas, waterways, rural landscapes or residential areas?

3 Views and vistas

- Does the proposal obscure or compromise important views?
- Does the proposal dominate the skyline and reduce the quality of vistas?
- Does the proposal respect the viewing rights of other advertisers?

4 Streetscape, setting or landscape

- Is the scale, proportion and form of the proposal appropriate for the streetscape, setting or landscape?
- Does the proposal contribute to the visual interest of the streetscape, setting or landscape?
- Does the proposal reduce clutter by rationalising and simplifying existing advertising?
- Does the proposal screen unsightliness?
- Does the proposal protrude above buildings, structures or tree canopies in the area or locality?
- Does the proposal require ongoing vegetation management?

5 Site and building

- Is the proposal compatible with the scale, proportion and other characteristics of the site or building, or both, on which the proposed signage is to be located?
- Does the proposal respect important features of the site or building, or both?
- Does the proposal show innovation and imagination in its relationship to the site or building, or both?

6 Associated devices and logos with advertisements and advertising structures

- Have any safety devices, platforms, lighting devices or logos been designed as an integral part of the signage or structure on which it is to be displayed?

7 Illumination

- Would illumination result in unacceptable glare?
- Would illumination affect safety for pedestrians, vehicles or aircraft?
- Would illumination detract from the amenity of any residence or other form of accommodation?
- Can the intensity of the illumination be adjusted, if necessary?
- Is the illumination subject to a curfew?

8 Safety

- Would the proposal reduce the safety for any public road?
- Would the proposal reduce the safety for pedestrians or bicyclists?
- Would the proposal reduce the safety for pedestrians, particularly children, by obscuring sightlines from public areas?

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