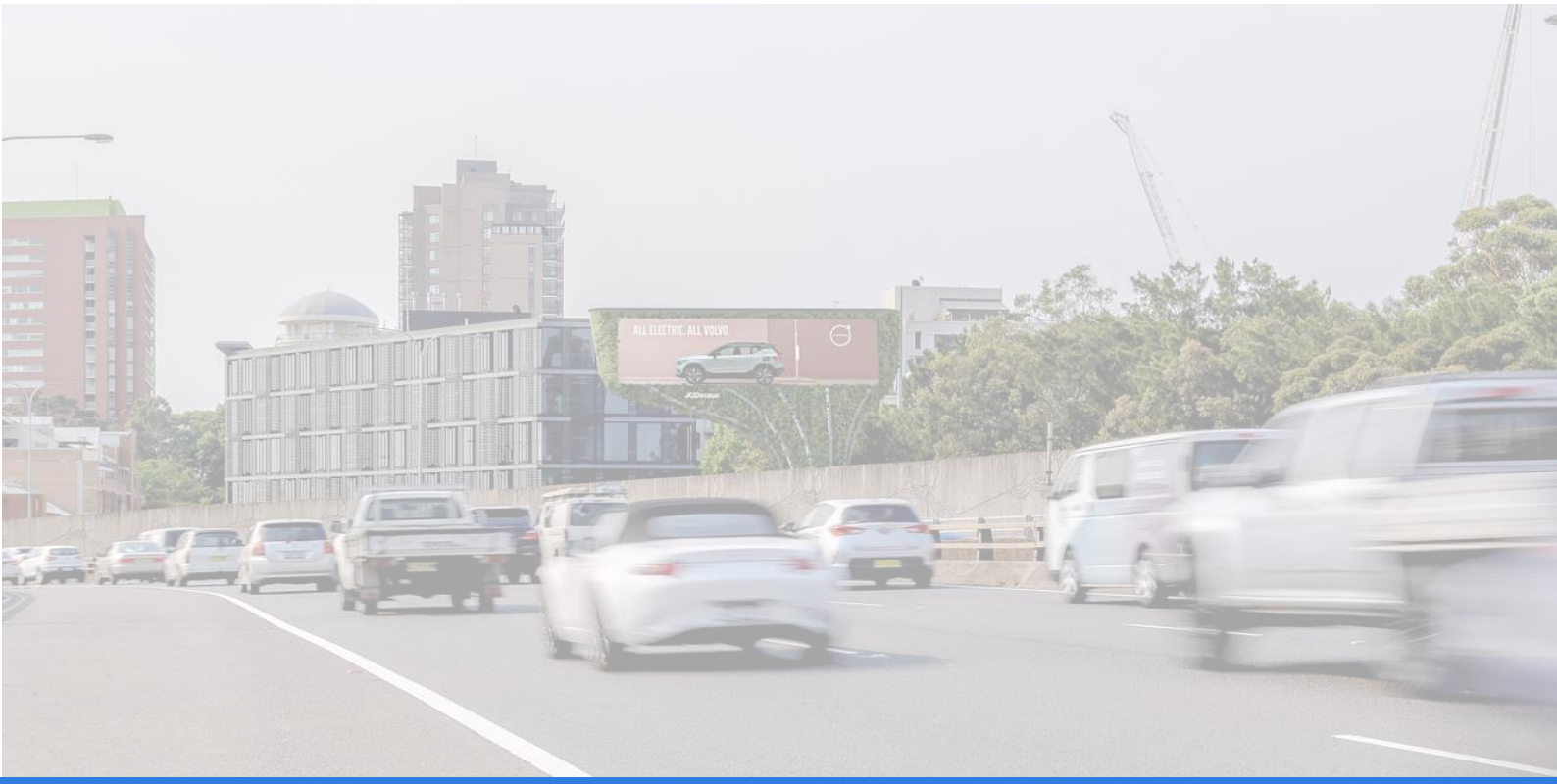


Western Distributor, Pyrmont
Digital Signage Safety Assessment

Prepared for:

JCDecaux

1 July 2022

The Transport Planning Partnership

Western Distributor, Pyrmont

Digital Signage Safety Assessment

Client: JCDecaux

Version: V03

Date: 1 July 2022

TTPP Reference: 21395

Quality Record

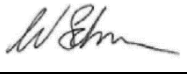
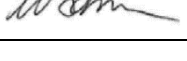
Version	Date	Prepared by	Reviewed by	Approved by	Signature
V01	20/05/22	Santi Botross	Wayne Johnson	Wayne Johnson	
V02	03/06/22	Santi Botross	Wayne Johnson	Wayne Johnson	
V03	01/07/22	Santi Botross	Wayne Johnson	Wayne Johnson	

Table of Contents

Tables

Figures

APPENDICES

1 Introduction

1.1 Overview

JCDecaux is seeking approval for the installation of a new LED illuminated digital sign on a support (monopole-like structure) located on the north side of the Western Distributor. The proposed sign would face westbound travel lanes on the Western Distributor en-route to Anzac Bridge.

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.

Previously, a Development Application (DA 10665) was submitted for a new digital sign proposal located approximately 250 m south-east of the subject proposal (Figure 1.1) The DA was granted approval by the Department of Planning on 1 April 2022. The visual display dimensions of the digital sign of the previous proposal and the subject proposal would be the same (12.48 m by 3.2 m), however there would be some variation to the appearance of the sign support. Namely, the previous design adopted a typical monopole with billboard design while the support structure and outer frame of the display area is covered in greenery (climbing plants) as shown in Figure 1.2. Details of the previous DA can be viewed at the Department's website (link below) while details and drawings of the subject proposal are provided throughout this report and in Appendix A.

Link to Department of Planning's website for Major Project Assessments:
http://www.majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=10665

Notably, this DA replaces DA 10665 with better environmental planning outcomes. It is proposed that DA 10665 would be surrendered once this DA is approved.

Figure 1.1: Subject Site

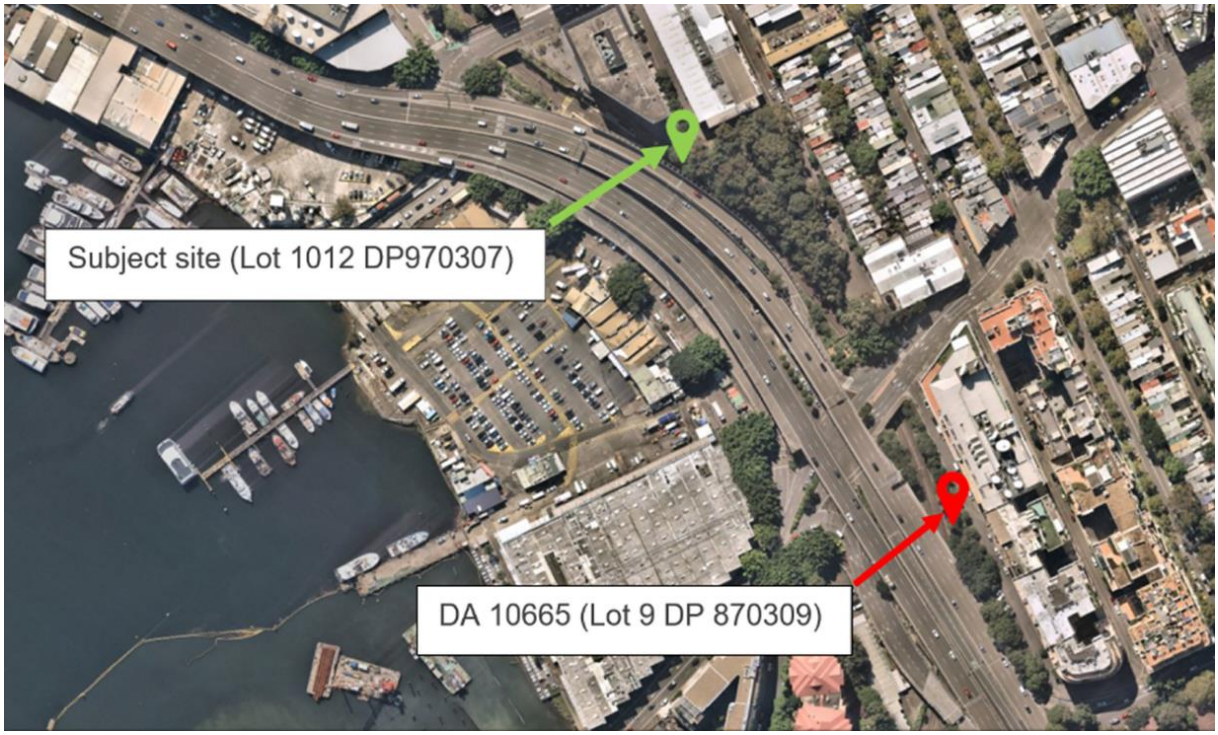


Figure 1.2: Proposed Digital Sign

1.2 Purpose of this Report

The aim of this assessment is to determine the suitability of the proposed digital sign 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 sign on the north side of the Western Distributor in Pyrmont.

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 Consultation with Authorities

Sydney Trains and JCDecaux attended a pre-DA meeting with Transport for NSW (TfNSW) prior to lodging the DA to discuss the proposed digital sign. At the meeting, TfNSW raised no road safety concerns in relation to the proposal.

1.4 References

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

- Site inspections of the sign location from a driving viewpoint along Western Distributor carried out on Wednesday 4 May 2022.
- 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 Environment Planning Policy (Industry and Employment) 2021.
- Concept design plans of the proposed digital sign dated 16/05/2022.

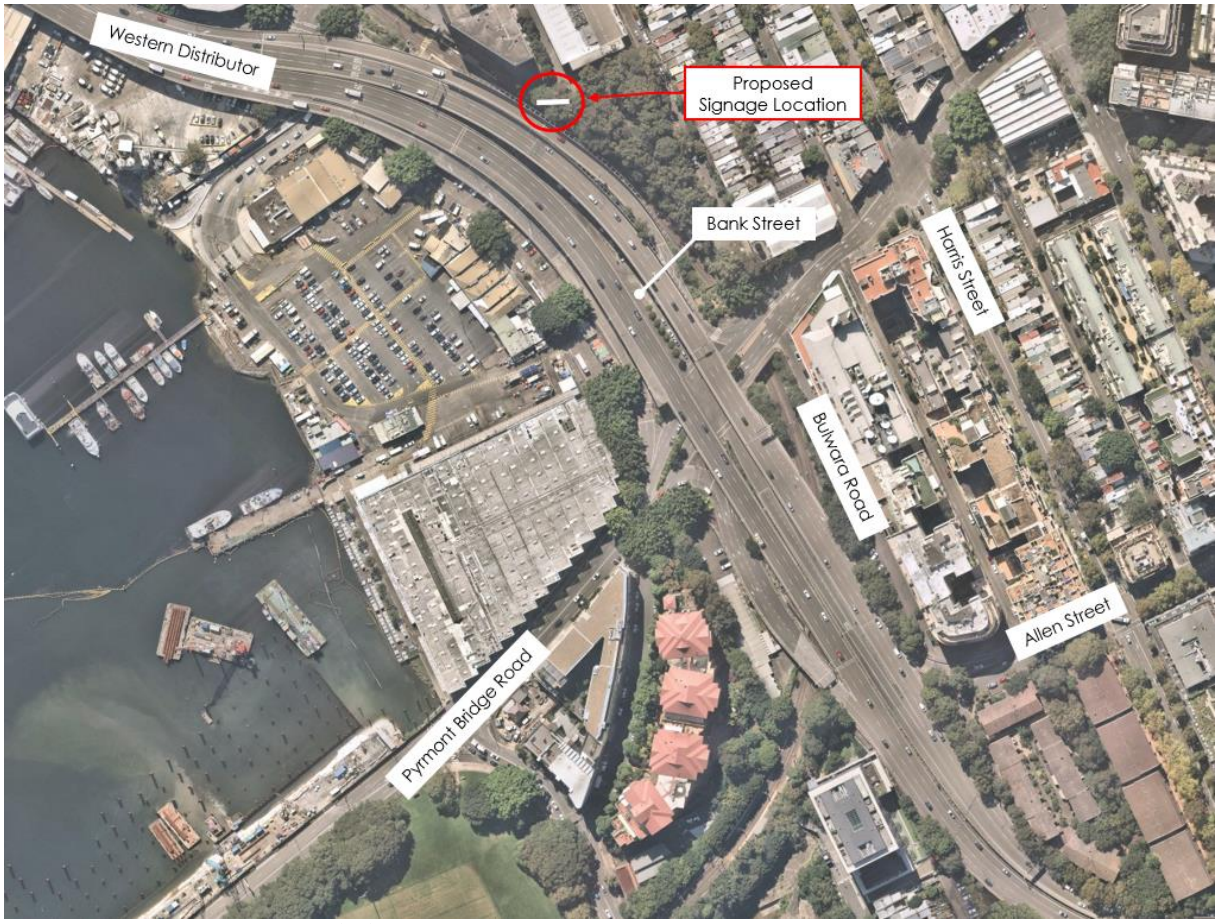
2 Proposal Description

2.1 Location Details

A new digital sign is proposed to be installed on the north side of the Western Distributor in Pyrmont. The sign would be positioned facing motorists traveling towards the western suburbs on the Western Distributor. An aerial image of the proposed sign location and surrounding environs are shown in Figure 2.1. The support structure would be located on ground level north of the light rail track and south-west of Paradise Reserve as shown in Figure 2.2.

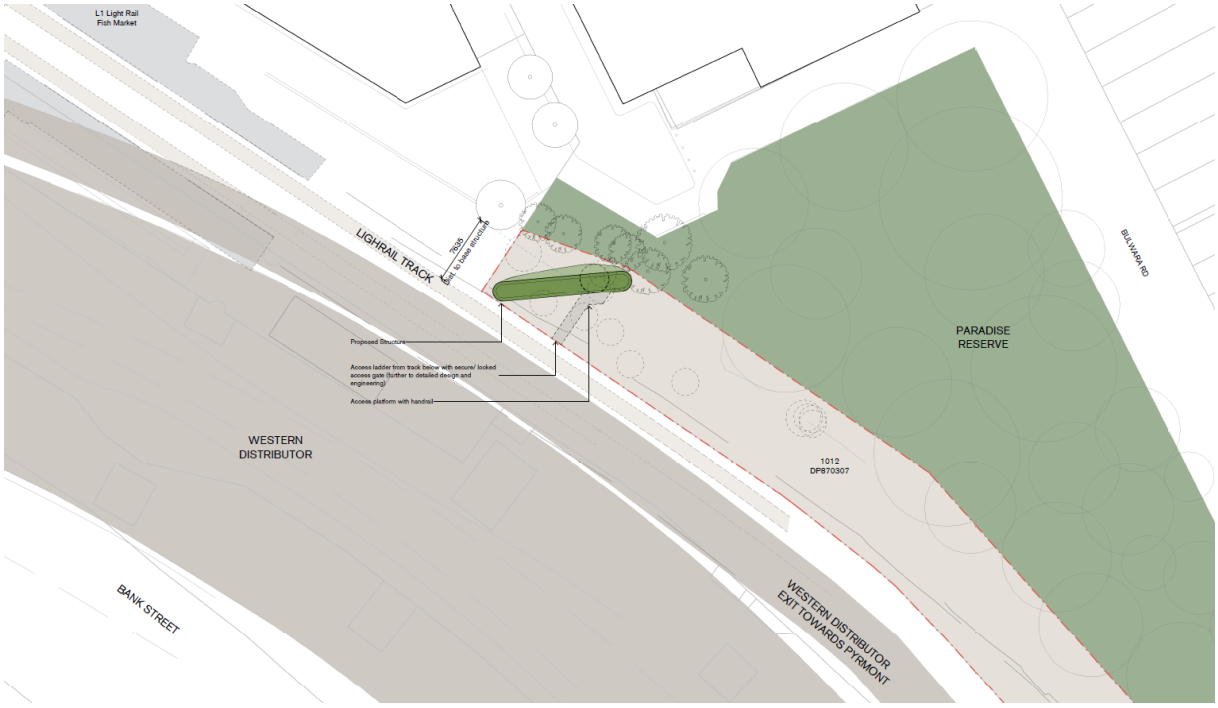
In the vicinity of the proposed sign, the main carriageway of the Western Distributor has 3-4 travel lanes in each direction. The speed zone on the Western Distributor where the digital sign is proposed to be located is signposted as 60 km/h.

Figure 2.1: Site Locality



Basemap Source: Nearmap, aerial imagery dated 03/04/2022

Figure 2.2: Sign Location



Source: JCDecaux

2.2 Description of Proposed Sign

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

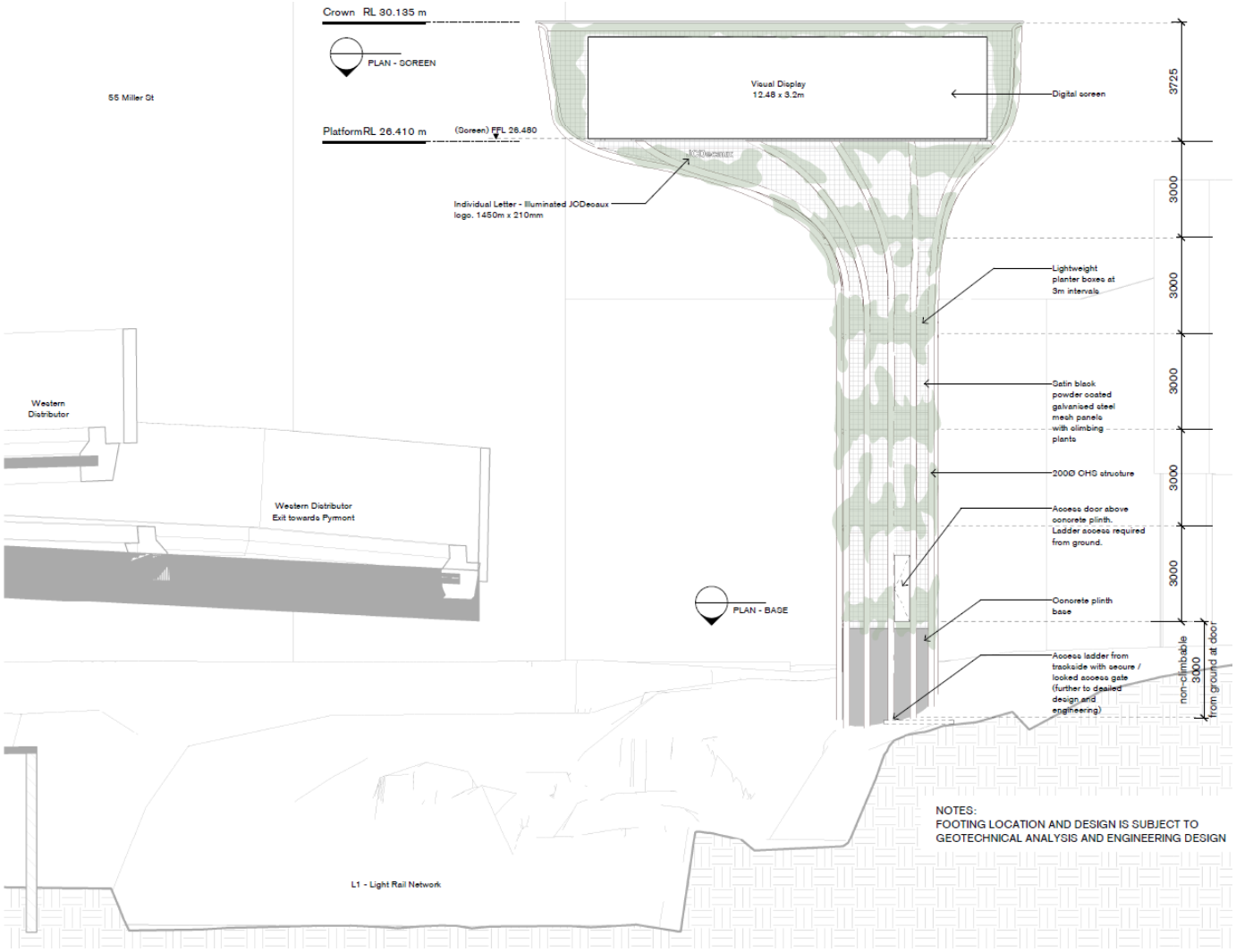
> *"advertising display area means, subject to subsection (2), the area of an advertisement or advertising structure used for signage, and includes any borders of, or surrounds to, the advertisement or advertising structure, but does not include safety devices, platforms or lighting devices associated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

On the above basis, the advertising display area of the proposed digital sign would be 40.2 m^2 (12.48 m width by 3.2 m height) plus "JCDecaux" logo (1.45 m width by 0.21 m height) mounted on steel mesh panels with climbing plants. The visual display area (the screen alone) would be 39.9 m^2 (12.48 m width by 3.2 m height). The proposed sign would not overhang the carriageway of the Western Distributor.

The proposed digital sign would be used by JCDecaux to promote its sponsors and third-party advertising. The digital sign would contain text and images.

The general design and specifications of the proposed digital sign are illustrated in Figure 2.3.

Figure 2.3: Proposed Digital Sign (South Elevation Plan)



Source: JCDecaux

2.3 Signage Exposure

The proposed digital sign and the contents displayed would be visible to traffic travelling towards the western suburbs on the Western Distributor. In the broader context of the surrounding road network, this would be in the westbound direction generally. In the immediate vicinity of the sign location, traffic flow is in the north direction which then turns towards the west about where the sign is proposed to be located. The road alignment of the Western Distributor is shown earlier in Figure 2.1.

A site inspection was carried out on Wednesday 4 May 2022 to observe driver sight distances on approach to the proposed digital sign. A description of the site investigation findings is provided herein.

2.3.1 Western Distributor South-East Approach

The lane configuration on the Western Distributor on approach to the proposed sign location is shown in Figure 2.4. Travel lanes are numbered to 1 to 4 from left to right.

Figure 2.4: Western Distributor Lane Configuration

Source: Photograph taken by TTPP dated 04/05/2022

The key findings are summarised below:

- The digital sign would be visible to motorists on Western Distributor travelling in the westbound direction towards the western suburbs.
- Treating the observed conditions during the site inspections as typical conditions in the area, the digital sign would likely be visible in travel lanes as follows:
  - In Lane 1, 460 m from the sign on approach.
  - In Lane 2, 435 m from the sign on approach.
  - In Lane 3, 410 m from the sign on approach.
  - In Lane 4, 385 m from the sign on approach.
- The digital sign would become out of driving view in travel lanes as follows:
  - Lane 1 splits from the Western Distributor to become the Pyrmont Bridge Road exit. In the Pyrmont Bridge Road exit lanes, driver visibility to the sign would become obstructed by vegetation and the Western Distributor bridge structure as there is a grade level difference between Pyrmont Bridge Road and the Western Distributor main carriageway. Visibility of the sign would be obstructed 250 m from the sign on approach in the Pyrmont Bridge Road exit lanes. The driving view in both exit lanes is shown in Figure 2.10.
  - In Lane 2 (continued on Western Distributor main carriageway), 20 m from the sign on approach.
  - In Lane 3 (continued on Western Distributor main carriageway), 15 m from the sign on approach.
  - In Lane 4 (continued on Western Distributor main carriageway), 10 m from the sign on approach.
- In Lanes 1 to 4, the digital sign would likely be readable at approximately 100 m on approach.
- The likely visible and readable distances in each lane on Western Distributor south-east approach to the digital sign are shown in Figure 2.6 to Figure 2.8.

Figure 2.5 illustrates the perspective of the designer's impression of the proposed digital sign.

Figure 2.5: Designer's Impression (from Western Distributor South-East Approach)

Source: JCDecaux

Figure 2.6: Western Distributor Sign Exposure – Lane 1

Source: Photographs taken by TTPP dated 04/05/2022

Figure 2.7: Western Distributor Sign Exposure – Lane 2

Source: Photographs taken by TTPP dated 04/05/2022

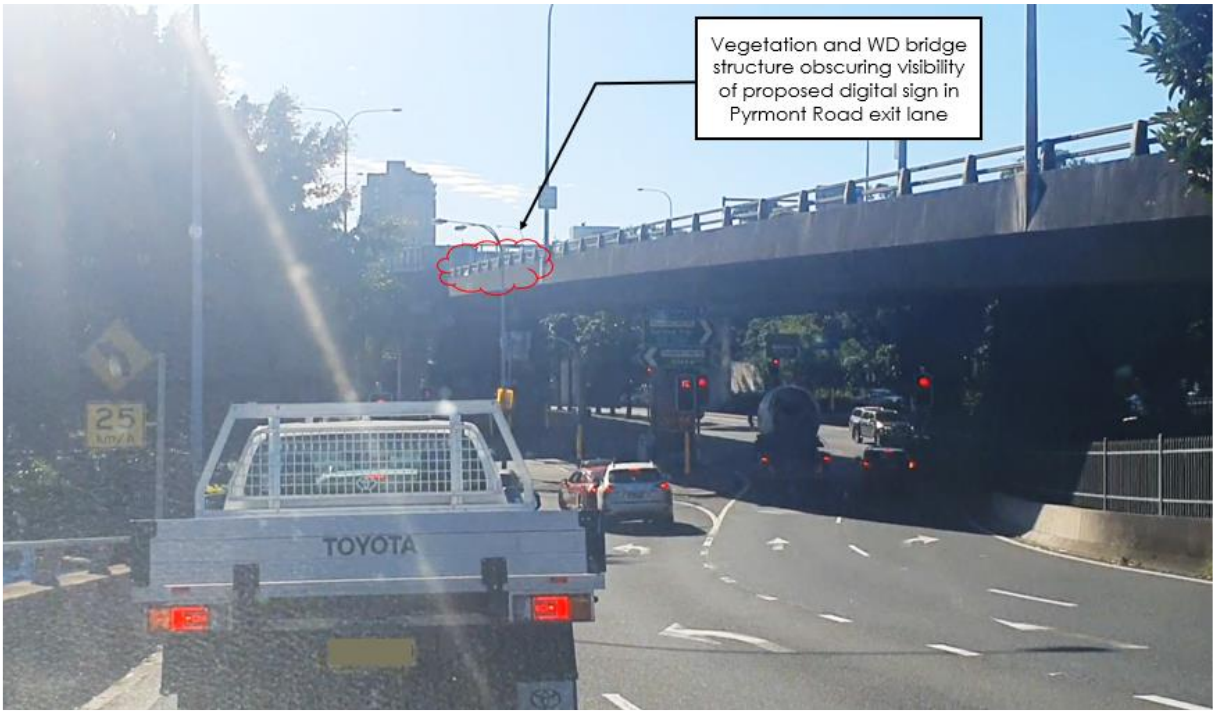
Figure 2.8: Western Distributor Sign Exposure – Lane 3

Source: Photographs taken by TTPP dated 04/05/2022

Figure 2.9: Western Distributor Sign Exposure – Lane 4

Source: Photographs taken by TTPP dated 04/05/2022

Figure 2.10: Pyrmont Bridge Road Exit



2.4 Crash History

Historic crash data has been obtained from Transport for NSW (TfNSW) and assessed for incidents along the Western Distributor within the readable distance of the proposed sign which would be readable from up to 100 m away.

Crash history data has been assessed on the south-east approach to the proposed digital sign for the most recent five-year period for data collated and published by TfNSW. This period between 1 January 2016 and 31 December 2020.

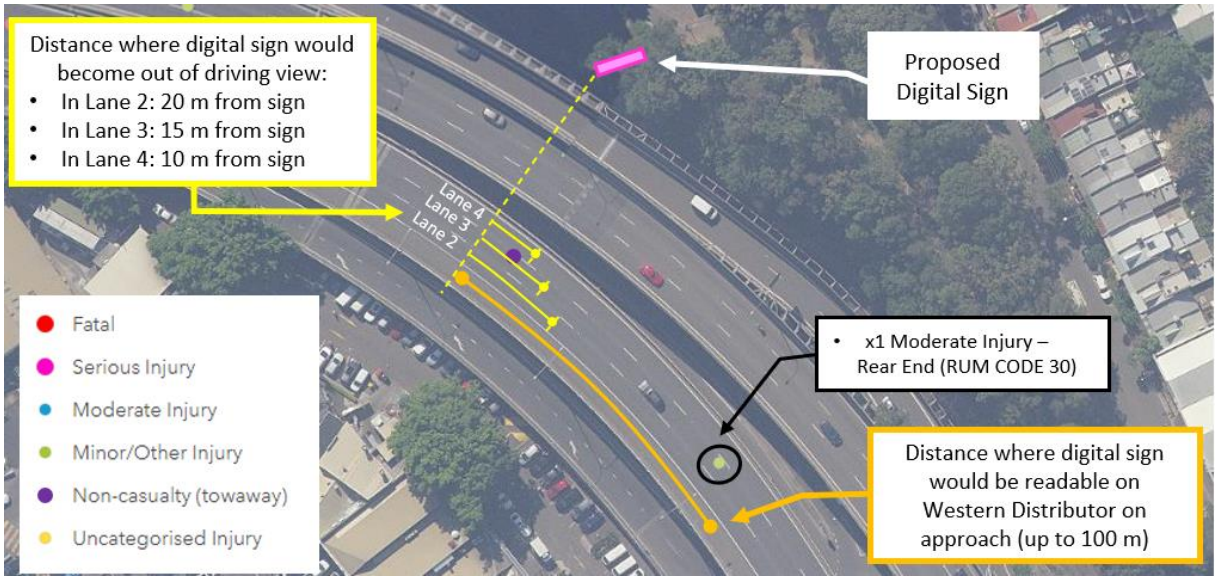
Two rear-end crashes were recorded on approach. One collision resulted in a minor injury and the other resulted in a vehicle tow-away. Notably, the crash which resulted in a vehicle being towed-away occurred within the distance where the proposed sign would be out of driving view on approach. Hence, it has been excluded from the tally of historic crashes.

A summary of crashes in the vicinity of the proposed digital sign 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)
Within **readable** distance (up to 100 m away from proposed digital sign)	Rear End (RUM CODE 30)				1	
Total		**Nil.**	**Nil.**	**Nil.**	1	**Nil.**

Figure 2.11: Crash Locations



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

Provision of the digital sign on the north side of Western Distributor 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 less 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 typically be suitable for the proposed digital signage.
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 sign would be classified as Zone 3. Zone 3 covers areas with generally medium off-street ambient lighting e.g. small to medium 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.
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 sign is not visible from a school zone, and therefore, would not be required to be conditioned as so.

	Criteria, for Signs less than 20 m² Display Area	Comments
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.*	Noted.
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 digital sign would be located approximately 12 m above the road surface level of the Pyrmont Bridge Road exit lane, which is greater than the minimum requirement.
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

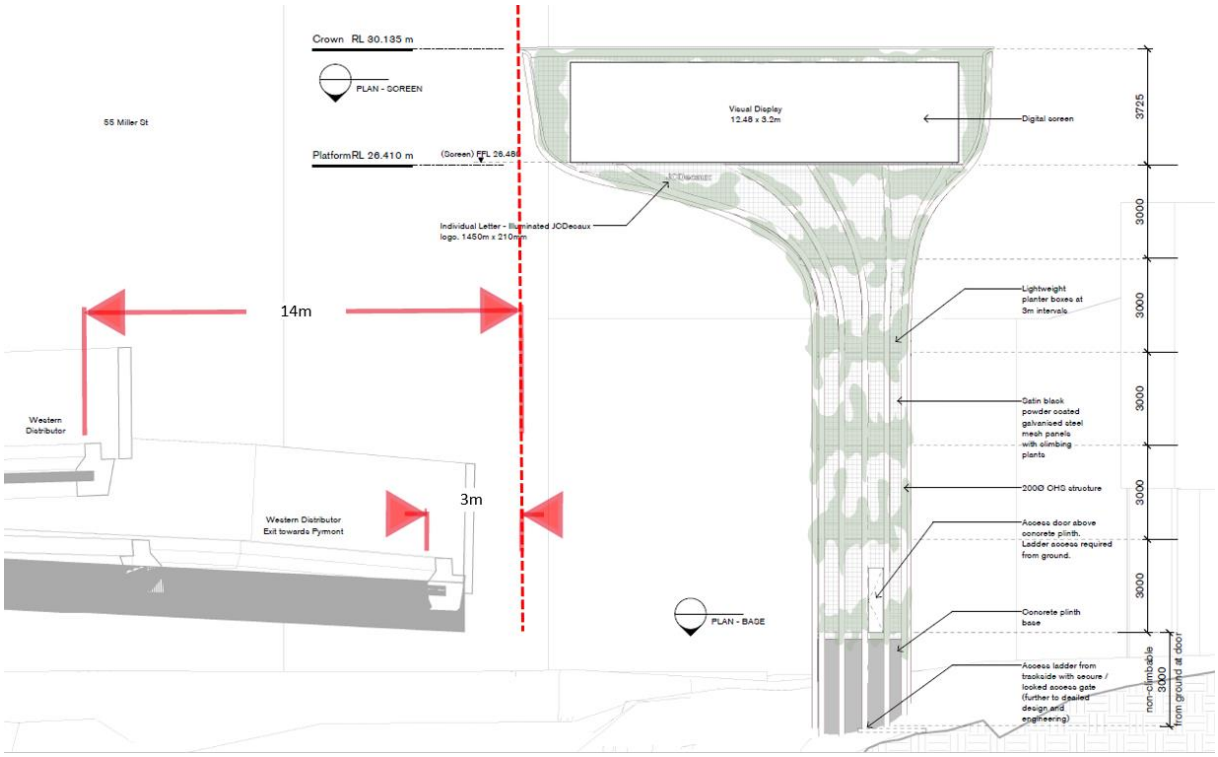
3.3.1.1 Road Clearance

(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 steel 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? Would 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?**

No footpath facilities or shared path facilities are provided on the Western Distributor. The digital sign would not physically obstruct any vehicle, pedestrian, and cyclist movements as it would be placed to the side of the carriageway (north side of the Pyrmont Bridge Road exit) . The sign would not cantilever over the roadway. The sign display and border would be offset from the edge of the Western Distributor main carriageway by 14 m and from the edge of the Pyrmont Bridge Road exit by approximately 3 m. This is illustrated in Figure 3.1 while full scale concept design drawings are contained in Appendix A.

Figure 3.1: Proposed Digital Sign (South Elevation)



(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.

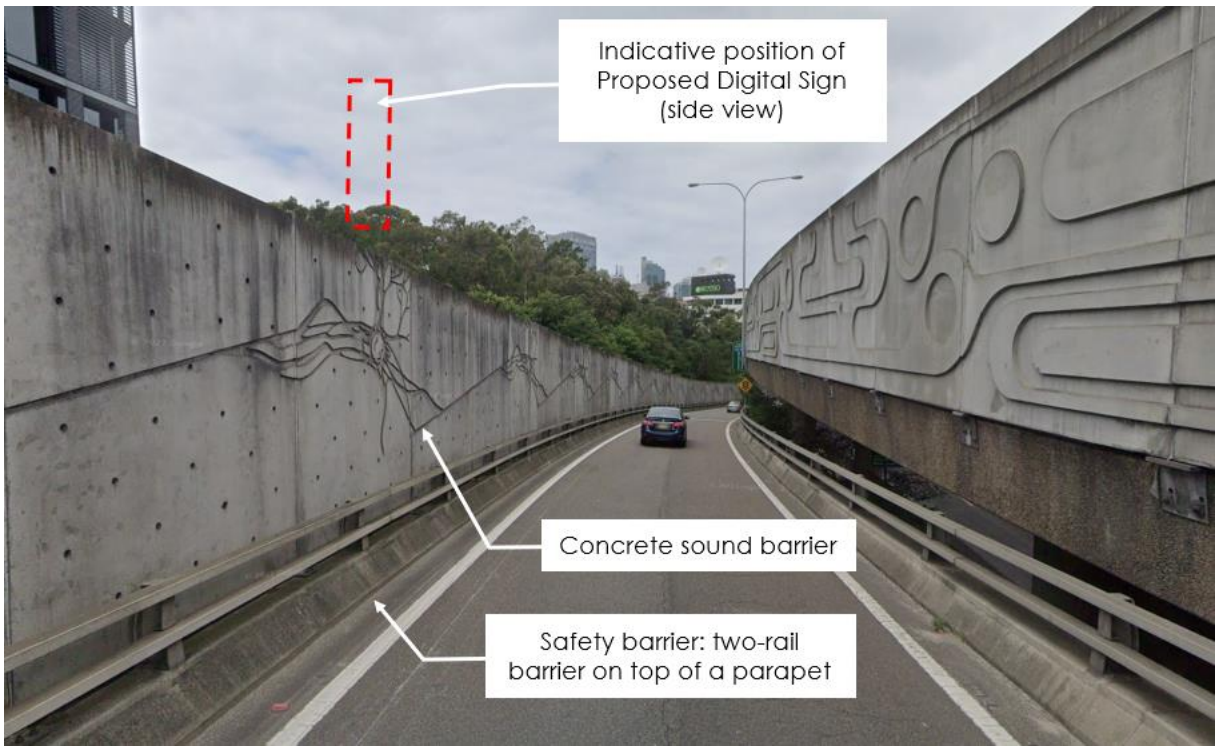
The proposed sign would be set behind the existing two-rail barrier installed on top of a parapet which is in-line with NSW Government's Bridge Aesthetics Design guideline to improve the appearance of bridges in NSW, prepared for the TfNSW Centre for Urban Design in February 2019. A concrete noise wall is set behind the safety barrier, providing further separation from the proposed sign.

(c) Where a sign is proposed within the clear zone but behind an existing RMS-approved crash barrier, all its structures 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.

From the position of the Western Distributor main carriageway the sign would be outside of the clear zone. From the position of the Pyrmont Bridge Road exit lane the dynamic deflection of the existing safety barrier would be zero given it is a rigid barrier. Considering there is a concrete noise wall directly behind the safety barrier, the working width along the exit lane would also be zero.

A photograph of the safety barrier and noise wall from the position of the Pyrmont Bridge Road exit lane (travelling eastbound) is presented in Figure 3.2.

Figure 3.2: Proposed Digital Sign (South Elevation)



Source: Google Maps, imagery dated December 2021

(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.

The proposed sign would not hang over roads and footpaths. Nonetheless, as part of the detailed design phase the digital sign 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 driver's view of the road particularly of other vehicles, bicycle riders or pedestrians at crossings.

The proposed digital sign would be located adjacent to the Western Distributor road corridor and would be positioned approximately 3 m and 14 m from the edge of the roadway (Figure 3.1). In this regard, the digital sign would not obstruct a driver's view of the road or other vehicles, bicycles riders or pedestrians at crossings.

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

Pedestrian and cyclist access on the Western Distributor is not permitted. The nearest location for pedestrian and cyclist access is Miller Lane which is on ground level below the Western Distributor bridge structure. In the vicinity of Miller Lane, pedestrian and cyclist view of the surrounding roadway would not be obstructed.

(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 photo-montage should be used to assess this issue.

The proposed sign would be located adjacent to the Western Distributor road corridor and would not indicate misleading information contrary to the existing roadway. This is supported by the designer's impression as shown in Figure 2.5.

(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 guidelines, angling a sign five degrees away from 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 sign would be located within a driver's line of sight for motorists on the Western Distributor (travelling in the direction of the western suburbs).

Motorists exiting the Western Distributor at the Pyrmont Bridge Road off-ramp are unlikely to view the sign due to the significant horizontal displacement between the sign and the driver's direct line-of-sight. The traffic stream ahead and the upcoming Pyrmont Bridge Road traffic signals would have greater prominence than the proposed digital sign.

Therefore, a driver would not turn away from the road ahead to view the digital sign.

The positioning and angle of the sign would not be expected to result in headlight reflection or glare.

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.**

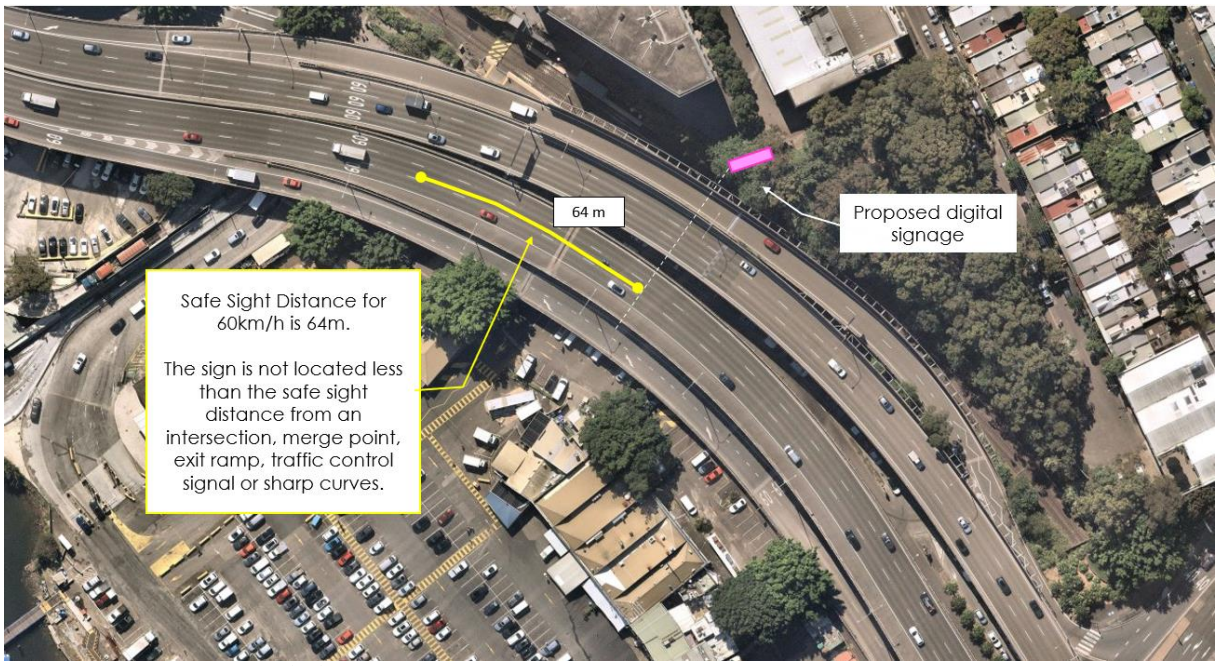
iii. **So that it is visible from the stem of a T-intersection.**

As per Austroads Guide to Road Design Part 4A, the minimum Stopping Sight Distance (SSD) refers to the distance to enable a normally alert driver, travelling at the operating speed on wet pavement, to perceive, react and brake to a stop before reaching a hazard on the road ahead. 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 60 km/h has been used to calculate the minimum SSD. A 60 km/h speed has been adopted based on the signposted speed limit on the Western Distributor and the speed which motorists were observed to be driving during the site inspection. According to Austroads, the minimum safe stopping sight distance for a 60 km/h speed zone is 64 m.

Accordingly, the digital sign would not be located within the safe stopping sight distance of an intersection, merge point, exit ramp, traffic control signal or sharp curve, as shown in Figure 3.3.

Figure 3.3: Minimum Safe Stopping Sight Distance



Map Source: Nearmap, aerial imagery dated 03/04/2022

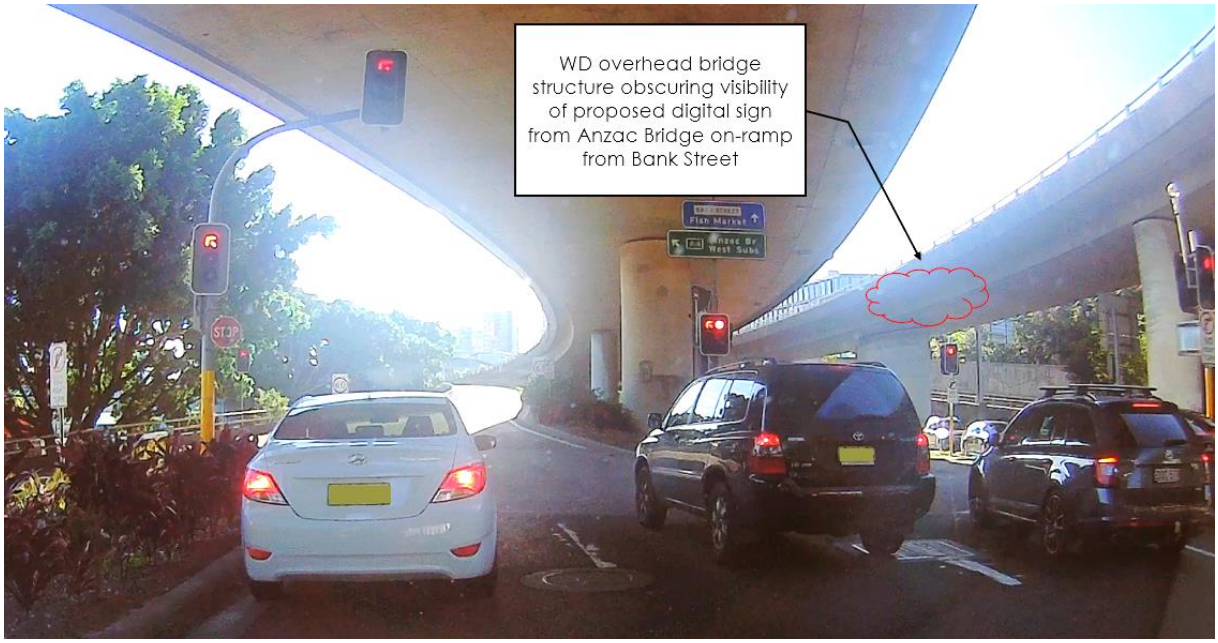
Motorists traveling northbound on Bulwara Road would not be able to observe the digital sign as large trees obstruct visibility of the sign, as shown in Figure 3.4.

Figure 3.4: Bulwara Road (facing towards Proposed Sign)

Source: Photographs taken by TTPP dated 04/05/2022

Motorists entering the Western Distributor via the Anzac Bridge on-ramp from Bank Street would not be able to observe the digital sign as the Western Distributor bridge structure obstructs visibility of the sign, as shown in Figure 3.5.

Figure 3.5: Anzac Bridge on-ramp from Banks Street



Source: Photographs taken by TTPP dated 04/05/2022

Motorists entering the Western Distributor via the Anzac Bridge on-ramp from Pyrmont Bridge Road would not be able to observe the digital sign as the Western Distributor bridge structure obstructs visibility of the sign, as shown in Figure 3.6.

Figure 3.6: Anzac Bridge on-ramp from Pyrmont Bridge Road

Source: Photographs taken by TTPP dated 04/05/2022

(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 decision is required, implying that a road safety implication could occur if a driver was distracted at this time.

Within the readable distance on the Western Distributor on approach to the proposed sign, the sign would be positioned well-above the roadway.

There are no nearby intersections along the Western Distributor and the sign would not be visible from Bulwara Road, Bank Street, and Pyrmont Bridge Road.

3.3.1.4 Sign Spacing

(a) Sign spacing should limit driver's 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.

There are no other digital signs or static billboards placed within 150 m of the proposed digital sign in both directions.

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?**

There are no traffic signs and devices in the vicinity of the sign which could become obscured, or their effectiveness become reduced by the proposed digital sign.

Details of the advertisement/s are not yet known since the project is still within the concept design stage. However, based on the example advertisements as depicted in the designer's impression (Figure 2.5), the sign would not display colours and shapes which could be mistaken for a traffic signal. Notwithstanding this, it is recommended that the content of the proposed sign be reviewed against Table 5 of the NSW 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.**

The digital sign is proposed to contain text and images. Based on the NSW Guidelines, the minimum dwell time for content displayed on the digital sign would be 10 seconds.

(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.

The proposed digital sign is not visible from any school zones.

(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 sign is proposed to contain text and images, which would be in a static manner without any motion for this dwell time. The transition between content would be almost instantaneous.

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

4 Conclusion

JCDecaux is proposing to install a new digital sign on the north side of the Western Distributor in Pyrmont.

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 digital sign would be facing westbound travel lanes on the Western Distributor en-route to Anzac Bridge.
- Two crashes were recorded within the readable distance on approach to the proposed sign location; one of these crashes occurred in the location where the proposed sign would become out of driving view on approach.
- The proposed digital sign would not be located within the safe stopping sight distance to the traffic signals, crossings or warning signage.
- The proposed sign would not obstruct/reduce visibility of any traffic control devices, signage, pedestrians or cyclists.
- The proposed digital sign would not give incorrect information on the road alignment.
- Based on the Guidelines, an appropriate dwell time for content displayed on the digital sign would be 10 seconds.

Having consideration for the signage safety assessment and discussions presented within this report, the analysis suggests that the installation of a digital sign on the north side of the Western Distributor in Pyrmont would be acceptable.

Appendix A

Concept Design Plans

DRAWING LIST

Drawing No.	Drawing Title	Revision
000	Proposed Site Plan	C
100	Plans	B
200	Elevations	C
300	Sections + Details	D
900	Materials and Finishes	B

W. tzannes.com.au
T. 61 2 9319 3744
E. tzannes@tzannes.com.au

Suite 5, L5, 2-12 Foveaux St
Surry Hills NSW 2010
Sydney, Australia

Nominated Architect

Alec Tzannes 4174
Amy Dowse 8926

General Notes

Verify dimensions on site prior to commencement of work. Check existing RL's on site. Advise Architect of any discrepancies before commencement. Allow for adjustments to suit discrepancies. Comply with relevant authorities requirements. Comply with Building Code of Australia requirements. Comply with relevant Australian Standards for materials and construction practice. Comply with Basix Certificate. Do not scale from drawings.

Rev	Date	For
A	09.05.22	FOR DEVELOPMENT APPLICATION - DRAFT
B	16.05.22	FOR DEVELOPMENT APPLICATION - DRAFT
C	23.05.22	FOR DEVELOPMENT APPLICATION - DRAFT

Client

JCDecaux
02 8066 9100 damien.rath@jcdecaux.com

Structural Engineer

Dennis Bunt Consulting Engineer
02 9451 3455 john@dbce.com.au

Legend

- Protected street trees.
- Protected park trees.
- Unprotected trees on site.
- Site access ladder and landings area

Refer to arborist report.
All other park trees indicatively shown.

Tzannes

Scale

As indicated @ A1

North

Project

Signage Proposal at western Distributor, Pyrmont

Address

Lot 1012 DP870307
Pyrmont Sydney NSW 2009

Status

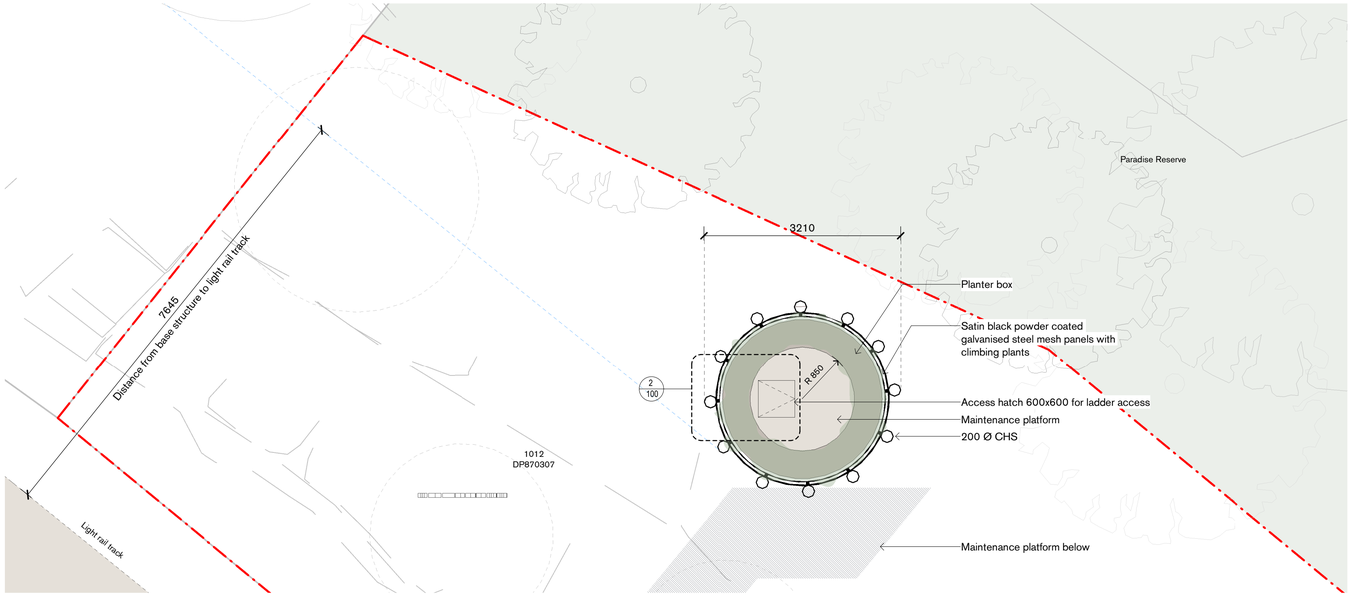
NOT FOR CONSTRUCTION

Drawing

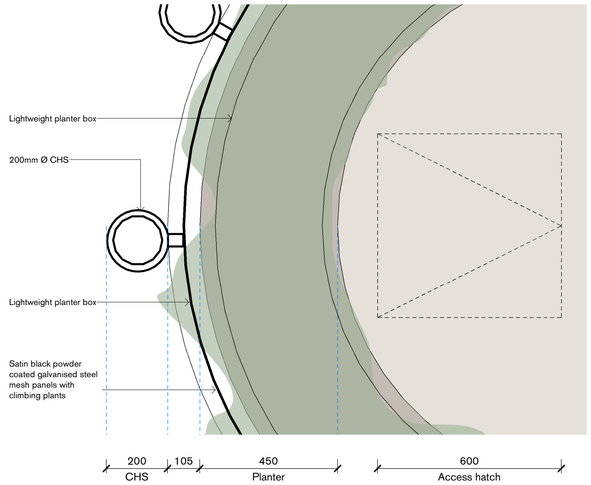
Proposed Site Plan

Date Created	Drawn	Checked
05/05/22	SB	TZ

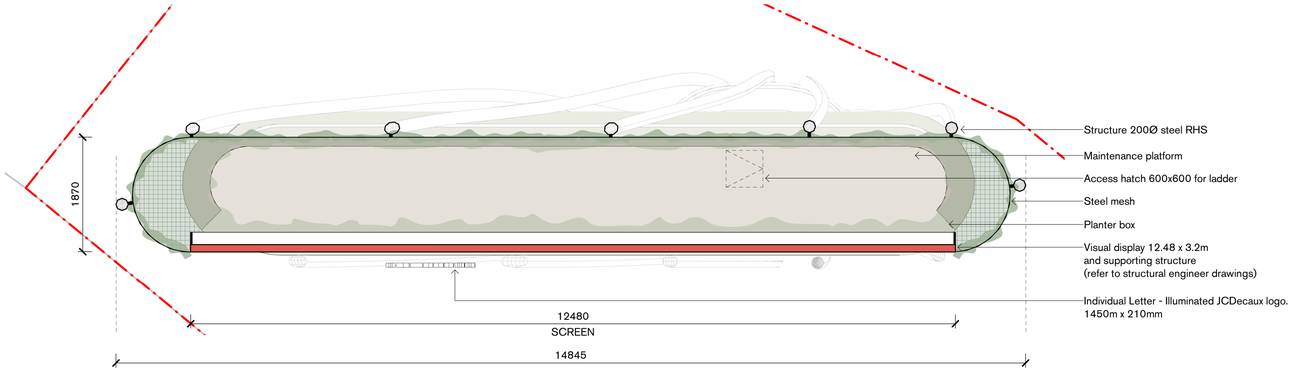
Project No.	Drawing No.	Revision
21034	000	C



1 | Plan @ RL 12.00 - Base
1 : 50



2 | Plan @ RL 19.07 - Base - Callout 1
1 : 10



3 | Plan @ RL 28.50 - Screen
1 : 50

W. tzannes.com.au
T. 61 2 9319 3744
E. tzannes@tzannes.com.au

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02 8066 9100 damien.rath@jcdecaux.com

Structural Engineer

Dennis Bunt Consulting Engineer
02 9451 3455 john@dbce.com.au

Legend

Tzannes

Scale **North**

As indicated @ A1

Project

Signage Proposal at western Distributor, Pyrmont

Address

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Pyrmont Sydney NSW 2009

Status

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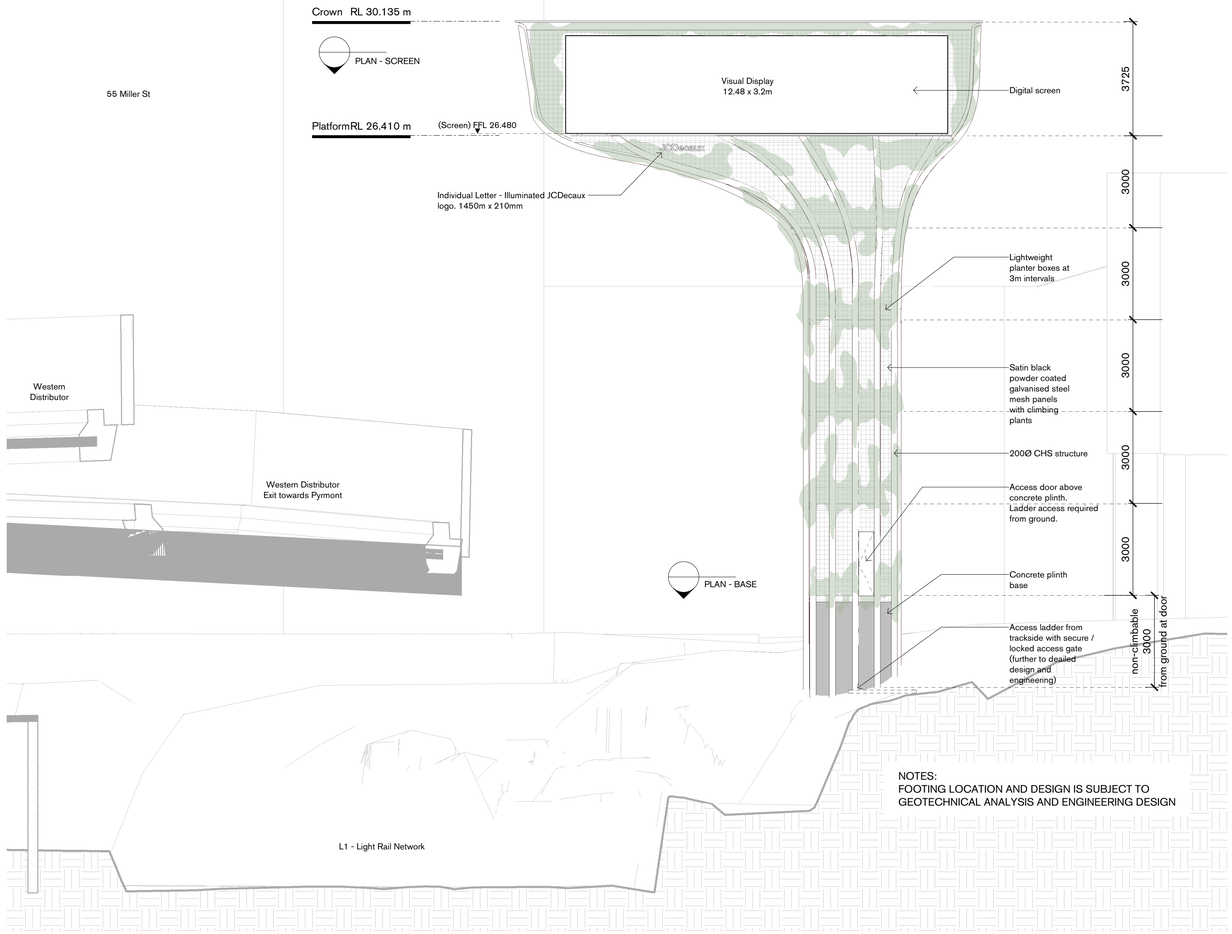
Drawing

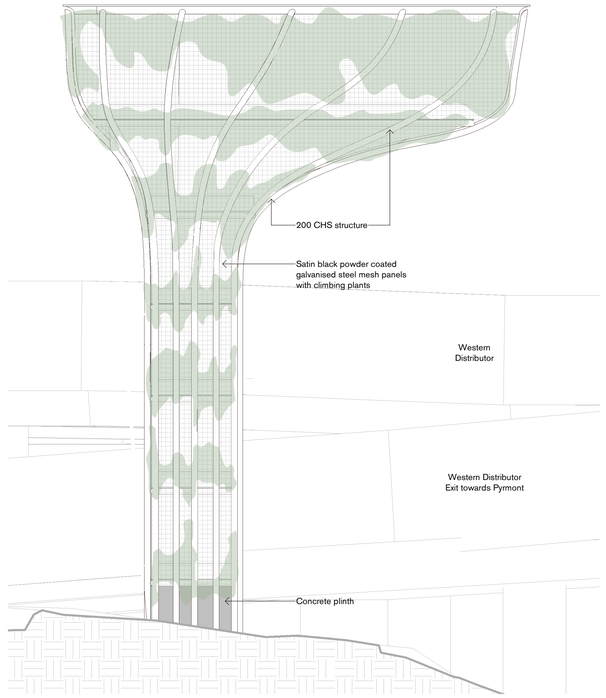
Plans

Date Created	Drawn	Checked
05/05/22	SB	TZ

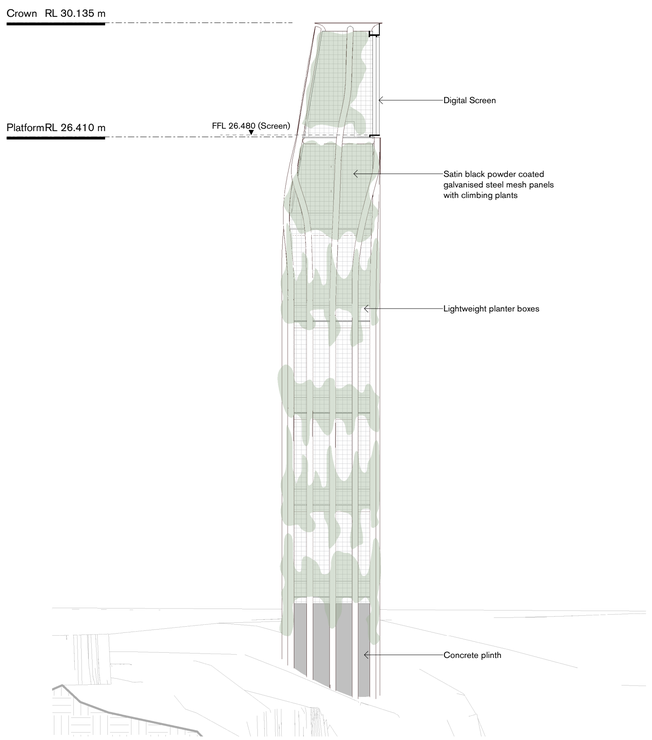
Project No.	Drawing No.	Revision
21034	100	B



1 | Elevation 03_South
1 : 100



2 | Elevation 01_North
1 : 100



3 | Elevation 04_West
1 : 100

W. tzannes.com.au
T. 61 2 9319 3744
E. tzannes@tzannes.com.au

Suite 5, L5, 2-12 Foveaux St
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02 8066 9100 damien.rath@jcdecaux.com

Structural Engineer
Dennis Bunt Consulting Engineer
02 9451 3455 john@dbce.com.au

Legend

Tzannes

Scale 1 : 100 @ A1

North

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Status
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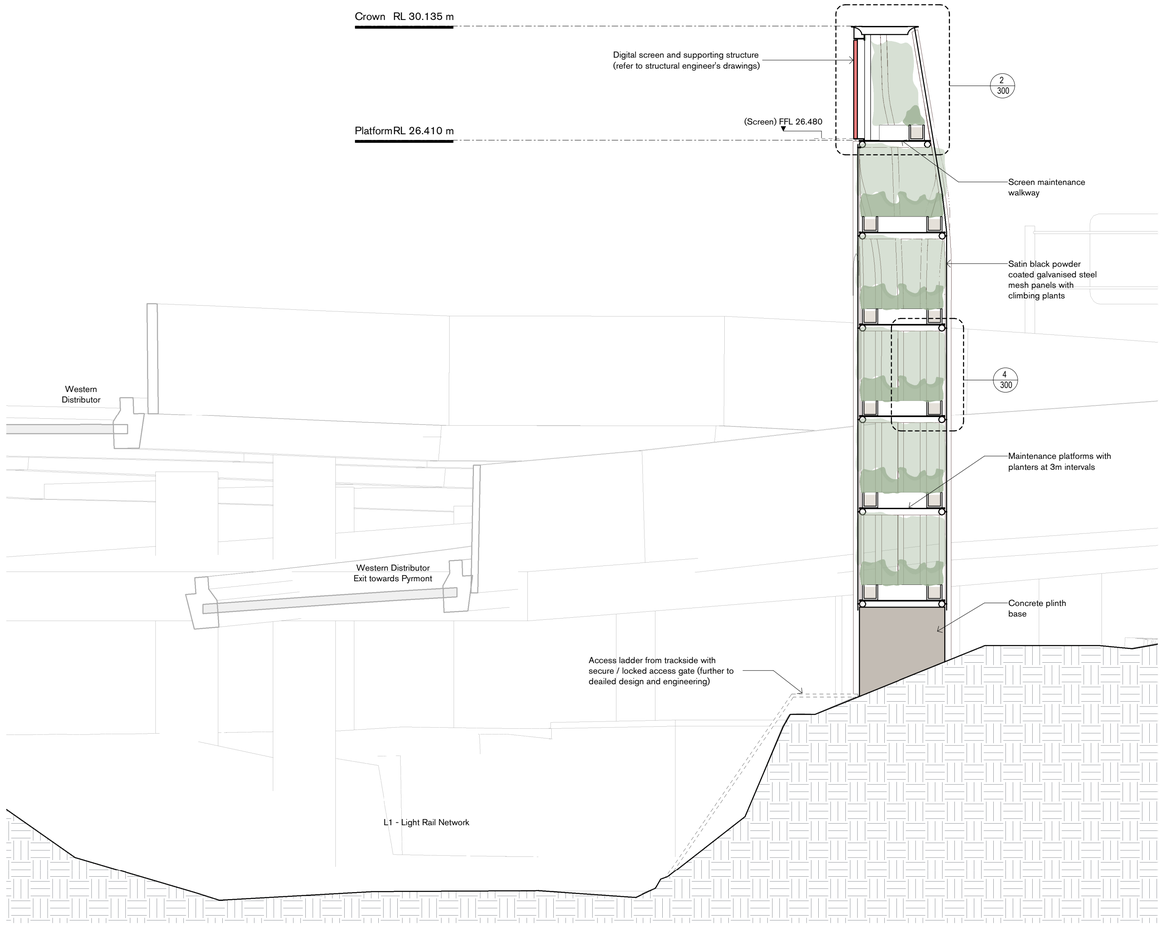
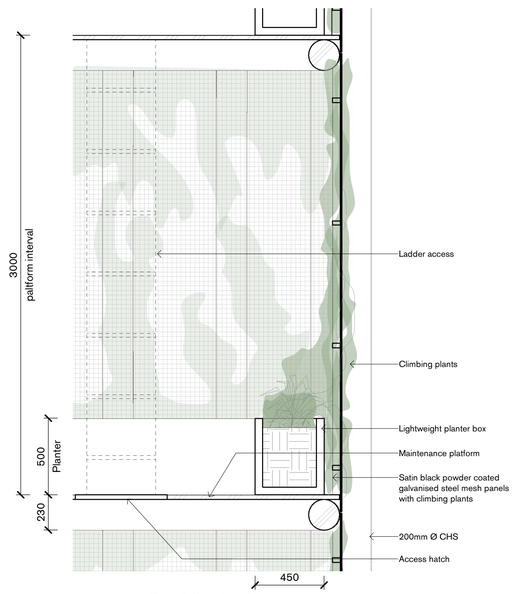
Drawing
Elevations

Date Created	Drawn	Checked
05/05/22	SB	TZ

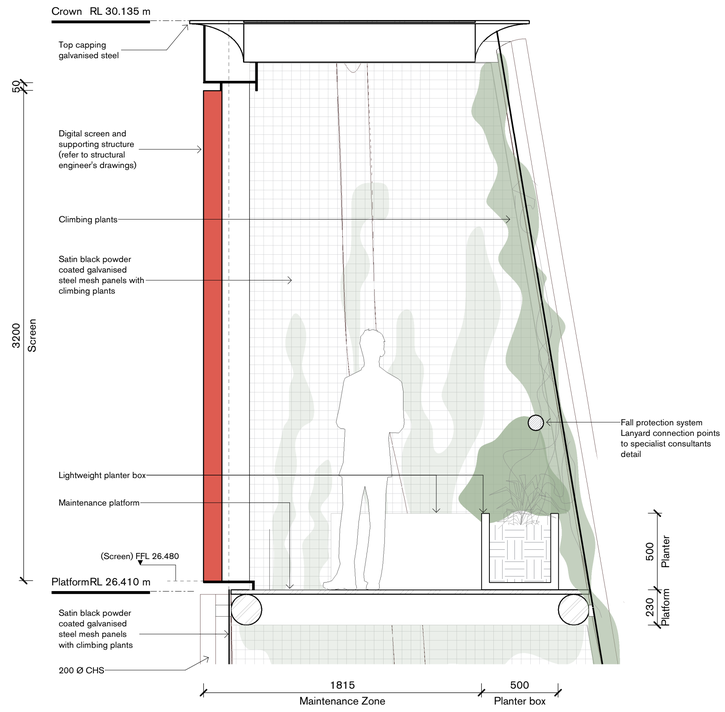
Project No.	Drawing No.	Revision
21034	200	C



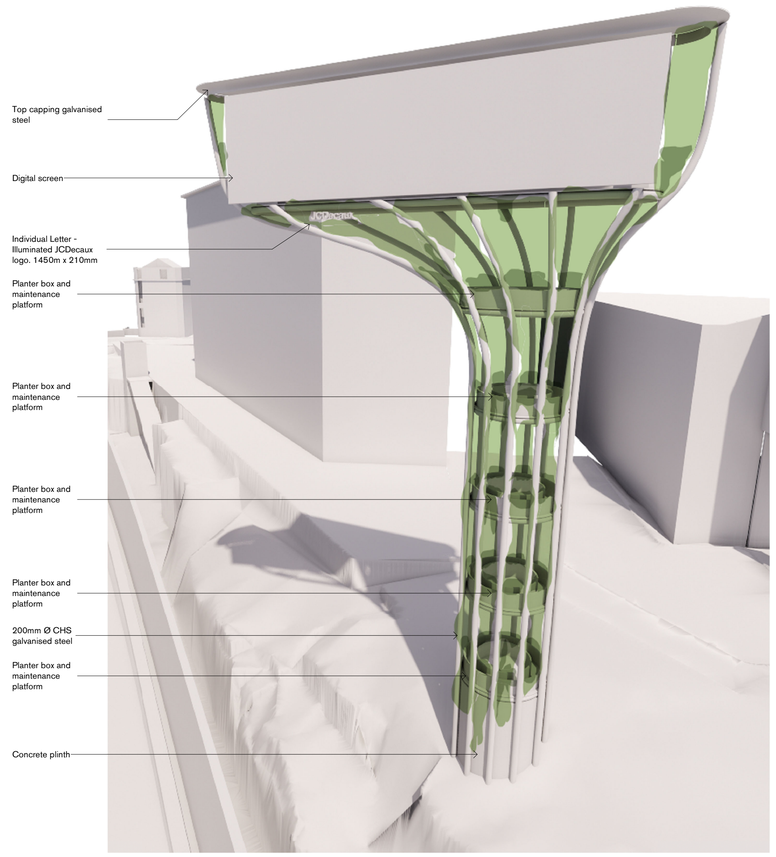
1 | Section 1
1 : 100



4 | Detail Section 01
1 : 20



2 | Detail Section 02
1 : 20



Axonometric View

W. tzannes.com.au
T. 61 2 9319 3744
E. tzannes@tzannes.com.au

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Legend

Tzannes

Scale **North**

As indicated @ A1

Project

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Status

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Drawing

Sections + Details

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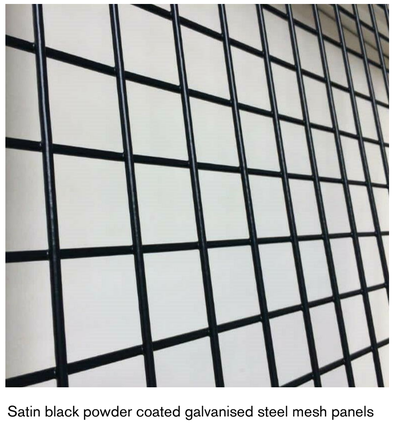
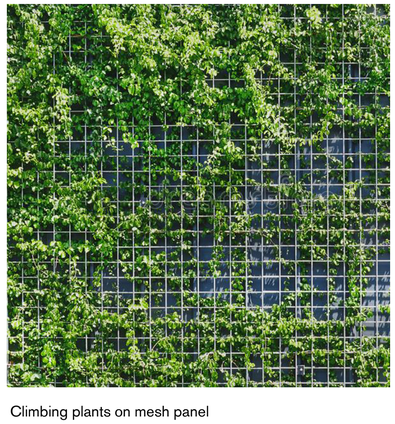
21034	300	D

LED Display Screen

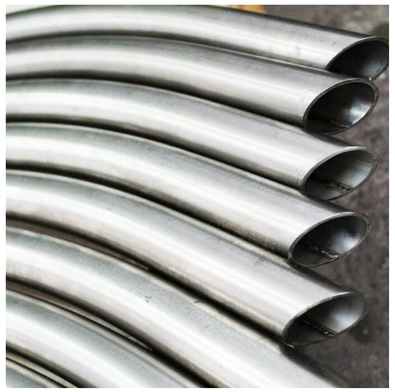
Climbing plants



Satin black powder coated galvanised steel mesh panels



Climbing plants on mesh panel



Galvanised steel pipes 200 Ø External Structure

Exposed Concrete Plinth

Photomontage – Proposed view from Miller Street
Note: This is a computer generated artists impression only. Proposed landscaping illustrated is indicative only and may reveal elements otherwise obscured.

Photomontage – Proposed view from Western Distributor
Note: This is a computer generated artists impression only. Proposed landscaping illustrated is indicative only and may reveal elements otherwise obscured.

W. tzannes.com.au
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Structural Engineer

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Legend

Tzannes

Scale @ A1

North

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Status
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Drawing
Materials and Finishes

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05/05/22	SB	TZ

Project No.	Drawing No.	Revision
21034	900	B

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?

The Transport Planning Partnership
Suite 402 Level 4, 22 Atchison Street
St Leonards NSW 2065

P.O. Box 237
St Leonards NSW 1590

02 8437 7800

info@ttpp.net.au

www.ttpp.net.au