PROPOSED 'HIGH RACK' BUILDING, 58-72 REDFERN STREET, WETHERILL PARK

VISUAL IMPACT ASSESSMENT

DATE: 05 June 2017
PREPARED FOR: CIR Construction
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CERTIFIED PRACTISING PLANNER

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1. Introduction

1.1 Purpose of report

This report provides a visual impact assessment of the proposed 'high rack' building at 58-72 Redfern Street, Wetherill Park (the 'proposed building'). It has been prepared for the Proponent, CIR Construction.

The report was requested by Fairfield City Council. It is noteworthy that Council have no specific guidelines that apply to visual impact assessment nor are there any such requirements covered in detail under existing NSW legislation. In response, this report has adopted a suitable assessment methodology based on existing widely accepted professional standards tailored to the context of the site and the proposal type.

1.2 Scope of the assessment

The report focusses on the change to viewpoints from surrounding roads, residential areas and other public uses as a result of the main 'high rack' building described below and does not assess other aspects of the proposed development nor views within the immediate industrial area.

1.3 Description of Proposal

The assessment is based on project plans dated June 2016 (issue A), as included in **Appendix A**.

The proposed building is a warehouse with an overall maximum height of 45,165m, and measuring approximately 144,510m long (north-south) and 6,488m wide (Redfern Street frontage). The building would be constructed mostly from colourbond cladding.

2. Assessment methodology

2.1 General

The applied methodology has been based on professional experience with other similar projects, and existing guidelines used by government authorities in Australia such as the *Environmental Impact Assessment Guidance Note – Guidelines for Landscape Character and Visual Impact Assessment* (NSW Roads and Traffic Authority, 2013), *Visual Landscape Planning in Western Australia* (Western Australian Planning Commission, 2007) and the United Kingdom's well-regarded *Guidelines for Landscape and Visual Impact Assessment* (The Landscape Institute and Institute of Environmental Management and Assessment, 2013).

2.2 Visual impact considerations

All potentially sensitive viewpoints within an area of approximately 1kilometre (km) of the subject site were identified through aerial photography and on-site verification. When considering the effect to surrounding viewpoints, generally the level of impact is determined by a combination of:

- what would be visible from key view locations
- the category and type of situation from which people may view the components of the Proposal (e.g. resident or motorist)
- the potential number of people with a view towards components of the Proposal from any one view location
- the distance between a person and components of the Proposal (generally the closer the view the higher the effect)
- the duration of time that a person may view components of the Proposal.

Significance of impact

The significance of potential visual effects from any Proposal needs to weigh up a sometimes complex set of factors to arrive at a nuanced overall assessment of impact. However, generally in any assessment, the following is usually applicable:

- changes affecting large numbers of people will be more significant than those affecting smaller groups of viewers
- the higher the value given to a particular landscape type (such as one that has high natural or cultural values) the higher the significance of any change
- changes in views from recognised or important viewpoints are likely to be more significant than changes affecting less important paths and roads
- large-scale changes introducing a high level of contrast are likely to be more significant than small or lower contrast changes.

Discussion impacts of public versus private viewpoints

When assessing private viewpoints, such as residences, the closer the proximity and clearer the potential view, generally the greater sensitivity to change, and therefore the higher potential for visual impact. However, whilst a high impact may be experienced by an individual residence, or group of residences, the overall assessed impact level needs to take into account the number of residents affected.

Thus, assessing the impact to residential viewpoints attempts to balance both individual impacts plus how significant that impact may be in terms of the wider community and context.

2.3 Detailed assessment methodology

The different elements identified above have been considered throughout the assessment process and form the basis of the methodology to assess the effect to surrounding viewpoints. To do so two criteria – the 'visual sensitivity' and the magnitude of change, are applied as defined below (as adapted from NSW Roads and Maritime (2013)):

- Sensitivity - The sensitivity of a viewpoint and its capacity to absorb change, as well as the type of viewer and number of viewers
- Magnitude - The measurement of the scale, form and character of a development proposal when compared to the existing condition and how far the proposal is from the viewer.

For the purposes of this assessment, the specific criteria applied for visual sensitivity and magnitude of change are listed in **Table 2-2** and **Table 2-3**. However, it should be noted that these criteria are a general guide only.

TABLE 2-1: VISUAL SENSITIVITY RANKING CRITERIA

Visual Sensitivity	Criteria
Very High	▪ The site's location is within an area with a very high conservation or cultural value and/or ▪ Public views with a very high number of users in close proximity and the site is highly visually prominent and/or from a visually-sensitive land use
High	▪ The site's location is within an area with a high conservation or cultural value and/or ▪ Public views with a high number of users in close proximity and the site is visually prominent and/or is from a visually-sensitive land use ▪ Private views in close proximity (usually less than 300m) with mostly unimpeded views
Medium	▪ The site's location is within an area without notable conservation or cultural values ▪ Public views with a high or moderate number of viewers in close or moderate proximity, the site is largely visible and/or is from a visually-sensitive land use ▪ Private views in moderate proximity with mostly unimpeded views

Visual Sensitivity	Criteria
Low	▪ Public views with a low number of users &/or not in close proximity (beyond 500m) with mostly unimpeded views &/or site is visually prominent ▪ Other private views with mostly unimpeded views

TABLE 2-2 MAGNITUDE OF CHANGE RANKING CRITERIA

Magnitude	Criteria
Very Large	The proposal forms a significant and immediately apparent part of the scene, and one that significantly contrasts in scale and character (either existing or planned) and is detrimental to the visual quality of the scene.
Large	The proposal becomes a dominant feature of the scene to which other elements are generally subordinate, and one that quite noticeably contrasts in scale and character (either existing or planned), usually reducing the visual quality of the scene.
Medium	The proposal forms a visible and recognisable new element within the overall scene, yet one that is relatively compatible with the surrounding character (either existing or planned) and does not substantially detract from the visual quality of the scene.
Small	The proposal constitutes a minor component of the wider view, which is relatively compatible with the dominant landscape character. Awareness of the proposal would not have a marked effect on the overall quality of the scene.

Then, by combining 'visual sensitivity' and 'magnitude of change', an approximate level of visual impact to viewpoints is ascertained, as shown in **Table 2-3**. The range of overall impact level can be either beneficial or adverse, with five possible rankings used:

- severe
- major
- moderate
- minor
- negligible (which could also mean there is a benefit).

TABLE 2-3: POSSIBLE IMPACT LEVELS TO VIEWPOINTS

Matrix of relationship between sensitivity and magnitude					
	Magnitude				
sensitivity		**Very Large**	**Large**	**Medium**	**Small**
	Very High	Severe	Severe	Major	Moderate
	High	Severe	Major	Moderate	Minor
	Medium	Major	Moderate	Moderate	Minor
	Low	Minor	Minor	Minor	Negligible

3. Context of visual environment

3.1 Visual environment

The landscape character of the surrounding area is highly urban, with the industrial zone in which the site sits covering a very large area and being the dominant character of the immediate landscape (refer **Figure 3-1**). The industrial area consists of mostly contemporary industrial and warehouse buildings with a number of extensive bulk and height. Other tall elements include a large number of transmission towers that cross parts of the industrial area, including one close to the boundary of the subject site that is approximately 30m high.

FIGURE 3-1: EXISTING VIEW OVER WETHERILL PARK INDUSTRIAL AREA FROM RECONCILIATION ROAD

Around the edges of the closest industrial area is low density residential housing to the east and south, and to the north is the Fairfield Sustainable Resource Centre (SRC) and some recreational and vegetated areas. Further north of the SRC is the Prospect Reservoir and Greystanes' industrial park.

The scenic quality of the industrial area is similar to other such contemporary areas throughout this part of south-western Sydney. By their nature these areas are not particularly attractive when seen from outside viewpoints, are increasingly including higher warehouse-type buildings, and have a scenic quality generally of a low level.

Figure 3-2 illustrates the general context of the visual environment and the heights of a number of existing and approved future buildings and the nearby transmission tower.

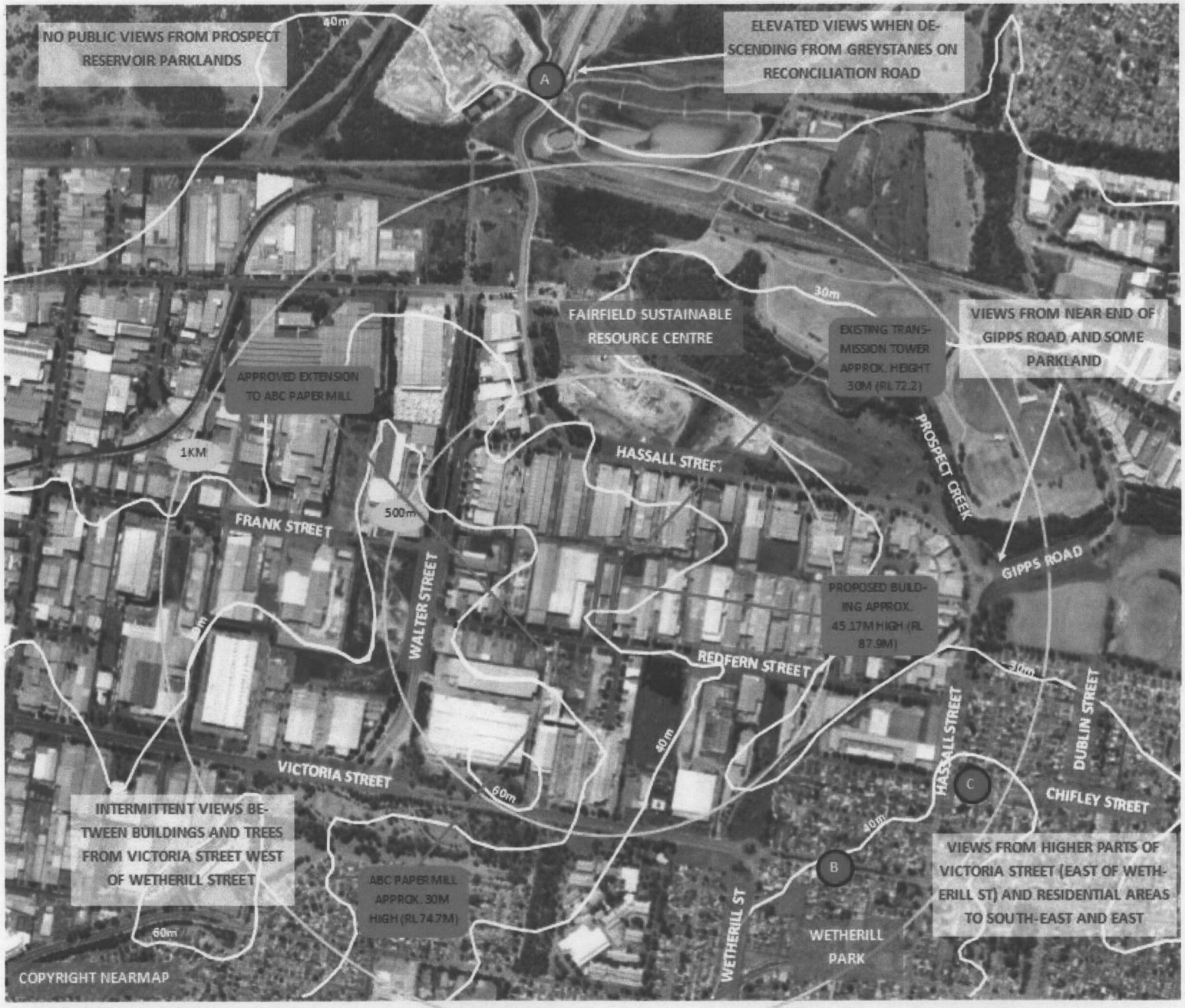


FIGURE 3-2 SITE LOCATION, VISUAL CONTEXT AND REPRENTATIVE VIEWPOINTS

3.2 General visibility of the proposed building

Due to the height of the proposed building, it will be highly visible when viewed from within the industrial area and from a number of outside public vantage points including from Victoria Street to the south, Gipps Street (and nearby recreational areas) to the east and from elevated areas along Reconciliation Road. The clearest views from Victoria Street would be from the elevated section to the east of Wetherill Street. There would be less opportunity for views of the proposed building from Victoria Street to the west of Wetherill Street, where such views would be intermittent between buildings and vegetation and with industrial buildings occupying the foreground.

There would also be views from some residential areas to the south of Victoria Street through to The Horsley Drive, as well as the Wetherill Park residential area to the east. There would be no views from publically-accessible parkland around Prospect Reservoir.

Figure 3-1 provides an analysis of the existing visual environment and potential visibility. The key potential public and private viewpoints to the proposed development are the focus of this report and assessed in detail in **Section 3.5**.

3.3 Height reference points

The closest height reference point used to estimate the height of the proposed building is the existing transmission tower situated just to the north-east as indicated in **Figure 3-2**. Based on a surveyed height of the lowest wire (estimated to be two-thirds of the height of the tower), the top of the tower has been estimated to have an approximate height of 30m, with a corresponding RL (reduced level) 72.2m. An 'RL' allows heights to be compared from one site to another as the heights are comparable.

The existing ABC Paper Mill building to the south (also identified in **Figure 3-2** and documented in the approved plans) has an approximate maximum height of 32m and an RL 74.7m. A proposed extension to this building has been approved at 63-65 Redfern Street (i.e. on the opposite side of Redfern Street to the proposed building) which has an approximate maximum RL 74.5m and includes a connecting conveyor bridge over Redfern Street.

Therefore the maximum height of the combined existing and approved future ABC Paper Mill buildings will be approximately RL 74.7m, the nearby transmission tower is at approximately RL 72.2m and the proposed building has a height of RL 87.9m. It is therefore estimated that the proposed building will be approximately 15.7m higher than the nearby transmission tower.

4. Visual impact assessment

4.1 Assessment of identified viewpoints

Of most significance is the potential visual impact to views from surrounding public roads, recreational areas and residential housing, and therefore the assessment focusses on viewpoints from those areas. No assessment has been made of views from within the Wetherill Park industrial area.

Three key representative viewpoints from the most affected locations have been selected to illustrate the general visual impact to the area previously described in **Section 3.2** under 'visibility':

- Viewpoint A – Reconciliation Road (represents public views from the elevated main road to the north)
- Viewpoint B – Victoria Street (represents public views from Victoria Street and elevated residential areas to south-east)
- Viewpoint C – Chifley Street (represents public views from a number of local roads and elevated residential areas to east).

The three representative viewpoints are identified in **Figure 3-2**.

4.2 Viewpoint A: Reconciliation Road

This viewpoint is from Reconciliation Road which descends from the higher areas around Greystanes industrial area (which is to the north) towards the Wetherill Park industrial area. Reconciliation Road is a well-trafficked major thoroughfare that connects to suburbs to the north as well as the M4 Motorway and Great Western Highway several kilometres away.

Visual sensitivity

There are currently elevated views from this viewpoint towards the Wetherill Park industrial area (refer **Figures 3-1** and **4-1**), with the view including both vegetation alongside the creek and Fairfield SRC, a number of large transmission towers and industrial buildings.

The sensitivity of this viewpoint has been assessed as medium which recognises that the viewpoint is situated within a large industrial area (including the industrial areas of both Greystanes and Wetherill Park), yet is of a public nature with a high number of viewers.

Magnitude of change

In **Figure 4-1** the existing ABC Paper Mill building can be seen, as well as the existing transmission tower near the subject site, with the outline of the proposed building estimated (see Appendix B for working maps of this analysis). It is therefore concluded that as the proposed building is approximately 15.7m higher than the nearby transmission tower, that the upper part of the building would be clearly seen from Reconciliation Road for an approximate distance of 500m when descending in a southerly direction.

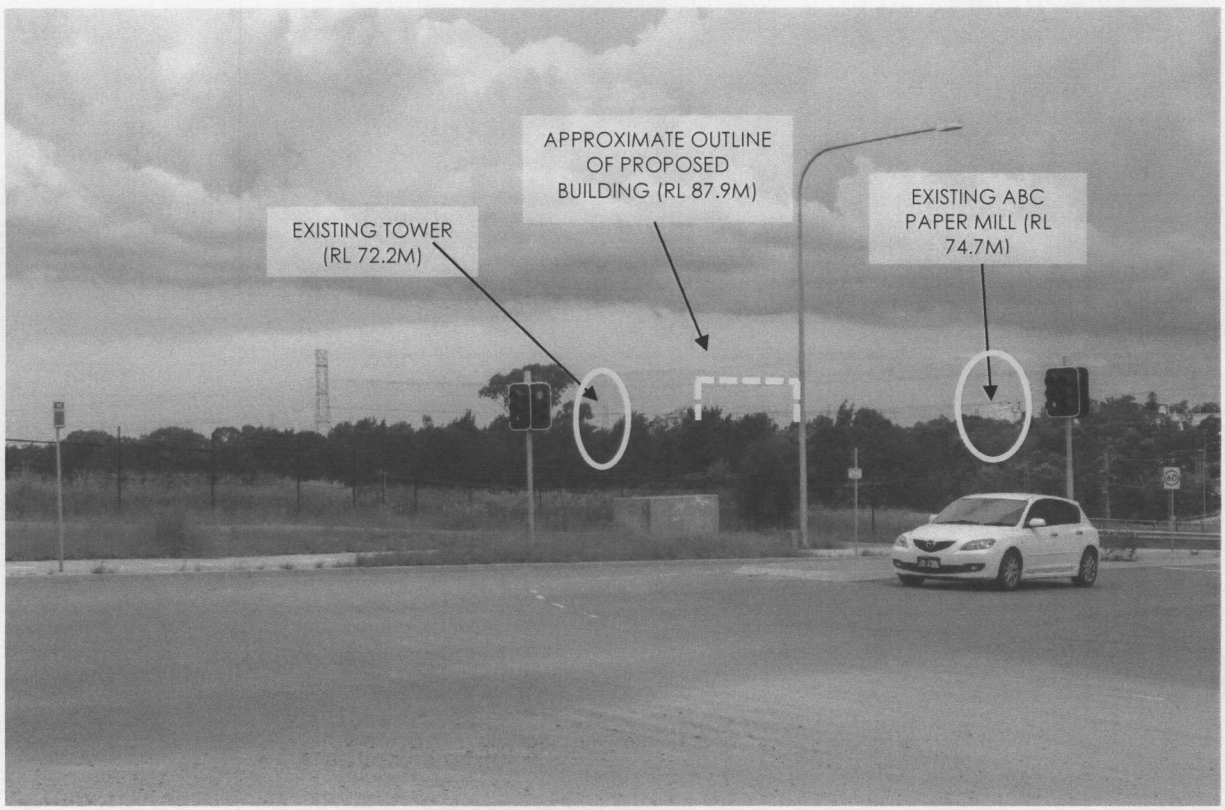


FIGURE 4-1: VIEWPOINT A - ESTIMATED CHANGE TO VIEW FROM RECONCILIATION ROAD

The magnitude of visual change to this viewpoint has been assessed as large, for although the building would be set within an industrial context it would be very obvious. At the same time, other existing elements such as the ABC Paper Mill building and transmission towers should be acknowledged as already detracting from the quality of this view.

Overall visual impact level

A magnitude of visual change of medium, combined with a visual sensitivity ranking of large, leads to a visual impact level to this viewpoint of moderate.

4.3 Viewpoint B: Victoria Street and residential areas to south-east

This viewpoint is from Victoria Street near the corner of Vonn Avenue (approximately 700m away, refer **Figure 4-2**), and represents the public views from this part of Victoria Street and private views from the surrounding elevated residential areas. The potentially-affected residential areas encompass the general area on the southern side of Victoria Street bounded by Wetherill Street, The Horsley Drive and Hassall Street, and some higher houses on the northern side of Victoria Street extending down to Galton Street.

Visual sensitivity

From the publically-available viewpoints around this part of Victoria Street, there are currently elevated views over Wetherill Park industrial area that include some houses in the foreground along Victoria Street. The visual sensitivity of public viewpoints along

Victoria Street is considered medium due to the high traffic volumes whilst taking into account the general urban nature of the surrounding area.

Similar views would be possible from some of the houses in the residential areas identified above, with the extent of views varying depending on intervening vegetation and structures. The visual sensitivity of these private viewpoints is to a degree subjective and will vary depending upon the viewers themselves, yet overall for the purposes of this assessment, a medium level of sensitivity has been adopted due to the distance and private nature of these viewpoints.

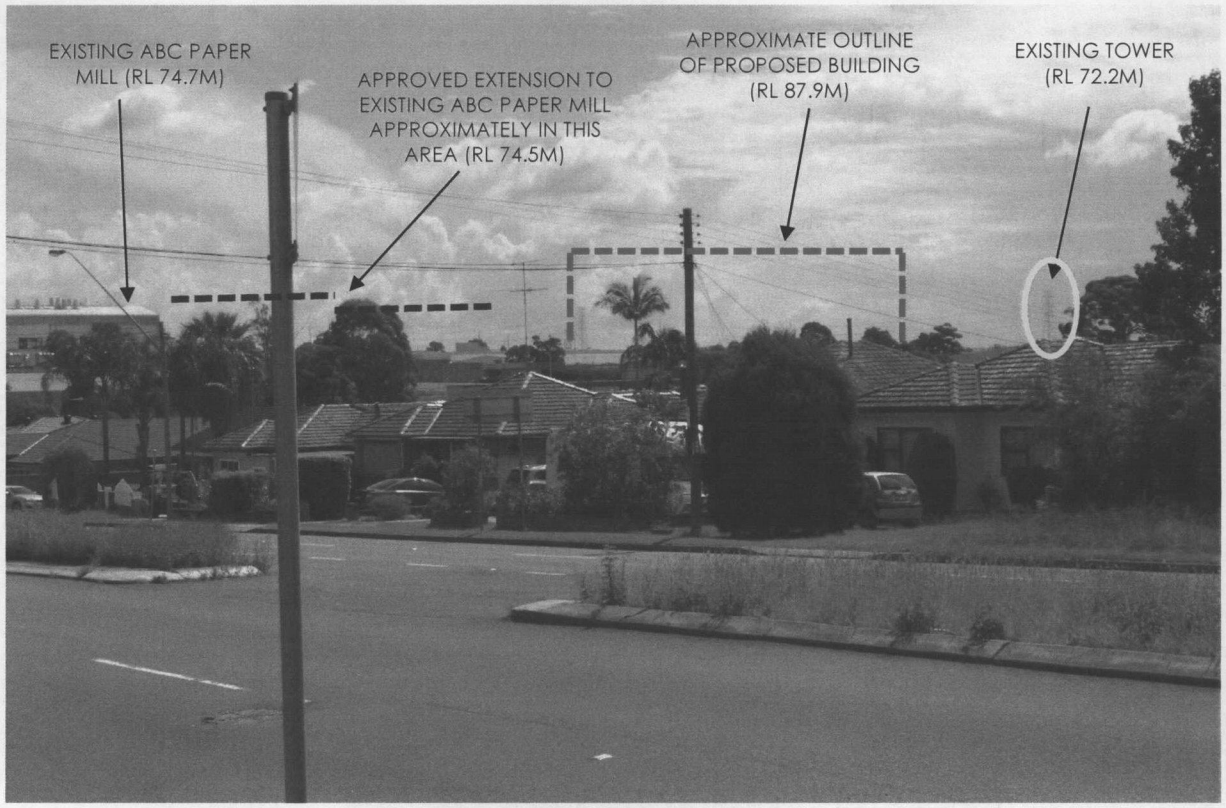


FIGURE 4-2: VIEWPOINT B – ESTIMATED CHANGE TO VIEW FROM VICTORIA STREET

Magnitude of change

In **Figure 4-2** the existing ABC Paper Mill building can be seen, as well as the existing transmission tower near the proposed building, with the outline estimated (see Appendix B for working maps of this analysis).

The magnitude of visual change to both public viewpoints along this part of Victoria Street, and for some private residents in the nearby area (only those with quite clear views), would be large.

Overall visual impact level

A magnitude of visual change of large is predicted for both public viewpoints along this part of Victoria Street, and for some private residents in the nearby area (those with quite clear views). That level, combined with a visual sensitivity ranking of medium, leads to a visual impact to both types of viewpoints of major.

4.4 Viewpoint C: residential areas to east

This viewpoint is from one of the highest parts of the residential area to the east of Wetherill Park industrial area (which is approximately 850m away along Chifley Street near the corner of Hassall Street). It is representative of potential views from higher residential areas on the eastern side of Hassall Street through to around Dublin Street, and from a narrow band on the opposite (western side) of Hassall Street.

Visual sensitivity

The clearest publically-available views would be from the east-west running streets of Galton Street, Chifley Street (refer **Figure 4-3**) and Eyre Street, where there are views to the west over the industrial area, with existing trees and houses blocking parts of that view depending on the viewer's location. These are local streets with low traffic volumes and therefore these public viewpoints would have a low visual sensitivity, with the views for some residents (those with clear views) of the same visual sensitivity.

FIGURE 4-3: VIEWPOINT C – ESTIMATED CHANGE TO VIEW FROM CHIFLEY STREET TOWARDS INDUSTRIAL AREA

Magnitude of change

The proposed building would be a prominent addition to the existing industrial skyline and would be clearly evident from the streets identified above and nearby residential areas. It would be approximately 13m higher than the existing ABC Paper Mill, and its approved extension, which would be to the left of the view, with the new building seen to its right approximately 15.7m higher than the nearby transmission tower. Taking account of the dominance of the existing large industrial zone that is in close proximity

to these residential areas, and the distance from the proposed building, it is considered there would be a medium change to the overall view from these viewpoints.

Overall visual impact level

A magnitude of visual change of medium, combined with a visual sensitivity ranking of low, leads to a predicted visual impact to this viewpoint of minor.

5. Key findings and discussion of possible mitigation measures

5.1 Summary of visual impact to surrounding viewpoints

Due to the height and overall scale of the proposed building, it would be very visually prominent when viewed as part of the industrial park from a number of public viewpoints, including those on Reconciliation Road to the north, the higher parts of Victoria Street (to the south-east) and local streets to the east. It would also be seen from some residential housing on the higher areas to the south-east and east. There would be no views from publically-accessible parkland around Prospect Reservoir. Refer **Figure 3-2** (page 7) for a map of the general visibility.

A notable mitigating factor is that the dominant character of the surrounding area is industrial and that the proposed building would be seen within the much broader visual context of an extensive existing industrial park, which includes Wetherill Park, Smithfield to the north-east and Greystanes to the north. There are also other existing and proposed large scale industrial buildings nearby, including the ABC Paper Mill and its proposed large extension and overhead conveyor, as well as a high number of nearby transmission towers that cross through the industrial area.

Of the three representative viewpoints that were identified and assessed the following impact levels are predicted:

- Viewpoint A – Reconciliation Road (represents public views from the elevated main road to the north): major impact
- Viewpoint B – Victoria Street (represents public views from Victoria Street and elevated residential areas to south-east): major impact
- Viewpoint C – Chifley Street (represents public views from a number of local roads and elevated residential areas to east): minor impact.

On the basis of the impact to these specific viewpoints, it is concluded that overall the visual impact to views from surrounding areas would be as high as 'major'.

5.2 Discussion of possible mitigation measures

The draft version of this report was based on a colour scheme for the building which had the colours reversed to that now proposed, that is the upper building was coloured a dark blue and the lower a light blue. A recommendation was made at that stage to change the colour scheme to the one now proposed, which is considered an improved outcome in terms of reduced contrast with the skyline and thus the level of visual impact. The beige colour of the existing ABC Paper Mill building supports the suggestion that a lighter colour would have less of a visual contrast when seen against the skyline from surrounding viewpoints.

The only more effective way to reduce visual impact to surrounding public and private viewpoints would be to reduce the overall height of the building to be closer to that of other dominant nearby buildings such as the existing ABC Paper Mill and its soon to be

developed extension. Should that occur it is predicted that the visual impact would be no more than 'moderate'.

It is noteworthy that there is no maximum height for industrial buildings within this industrial zone and therefore such a change to the design would need to be balanced against other considerations.

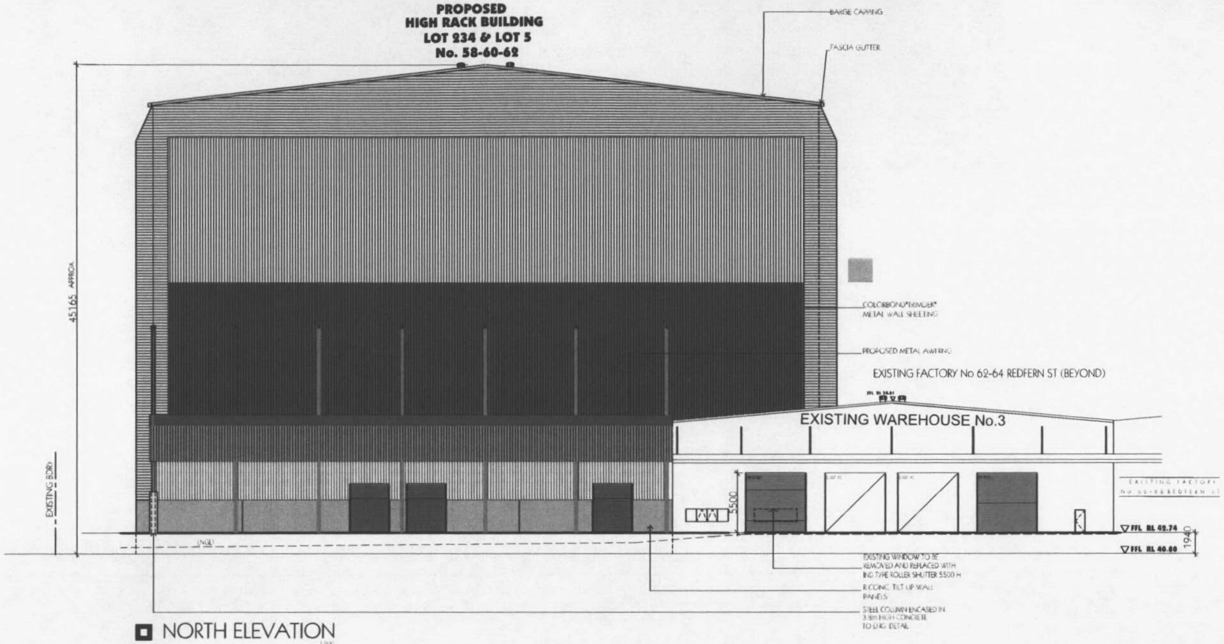
6. References

NSW Roads and Maritime Services (2013) *Environmental Impact Assessment Practice Note - Guideline for Landscape Character and Visual Impact Assessment.*

United Kingdom's Landscape Institute and Institute of Environmental Management and Assessment (2013). *Guidelines for Landscape and Visual Impact Assessment,* 3rd edition.

Western Australian Planning Commission and Department of Planning and Infrastructure, 2007. Visual *Landscape Planning in Western Australia.*

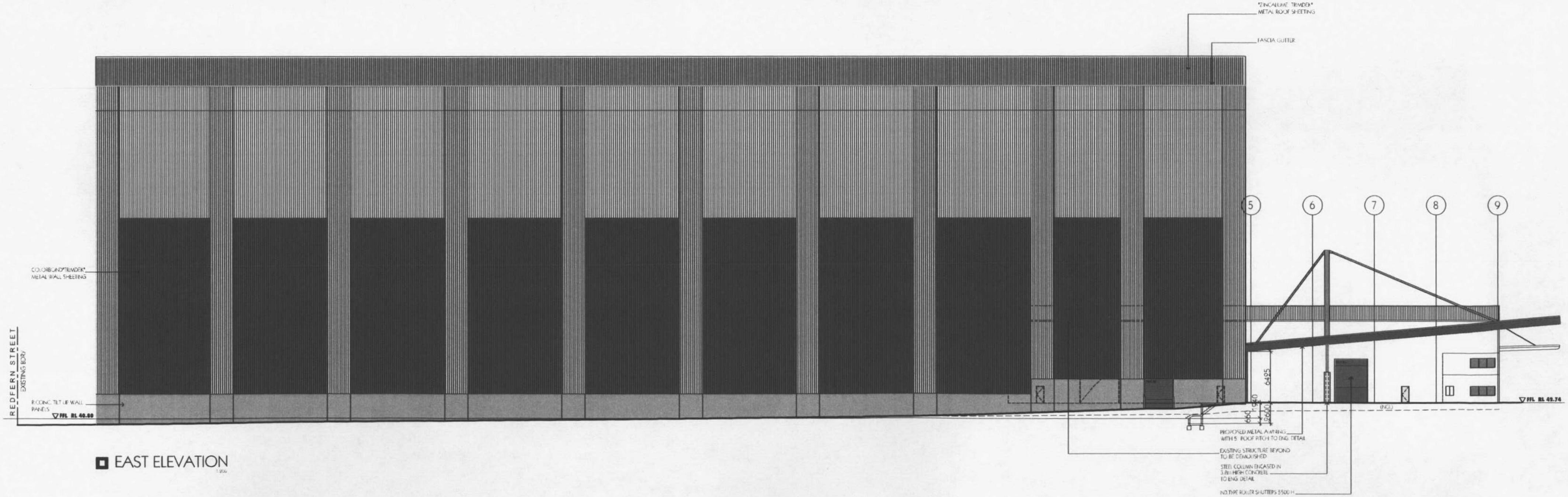
Appendix A: project plans assessed for this report



■ NORTH ELEVATION

PROPOSED COLOUR SCHEDULE

- COLORBOND WINDSPRAY METAL ROOF SHEETING
- COLORBOND WINDSPRAY COLORBOND METAL ROOF GUTTERS
- COLORBOND WINDSPRAY SURFMIST
- DULUX MONDRIAN BLUE METAL AWNING
- DULUX CURRENCY CREEK METAL AWNING COLUMN
- DULUX MONDRIAN BLUE FEATURE WALL
- DULUX BLUE ICE QUARTER FEATURE WALL
- DULUX FLOODED GUM R.CONC. TILT UP WALL PANELS



■ EAST ELEVATION

ALGORRY ZAPPIA & ASSOCIATES PTY LTD
Building Designers & Consulting Civil & Structural Engineers

Project: **PROPOSED EXPANSION TO EXIST. INDUST. DEVEL.**
AT LOT 234 DP 1037039, LOT 5 DP 3082 No 58-72 REDFERN STREET, WETHERILL PARK

Client: ABC Tissue Products

Title: ELEVATIONS

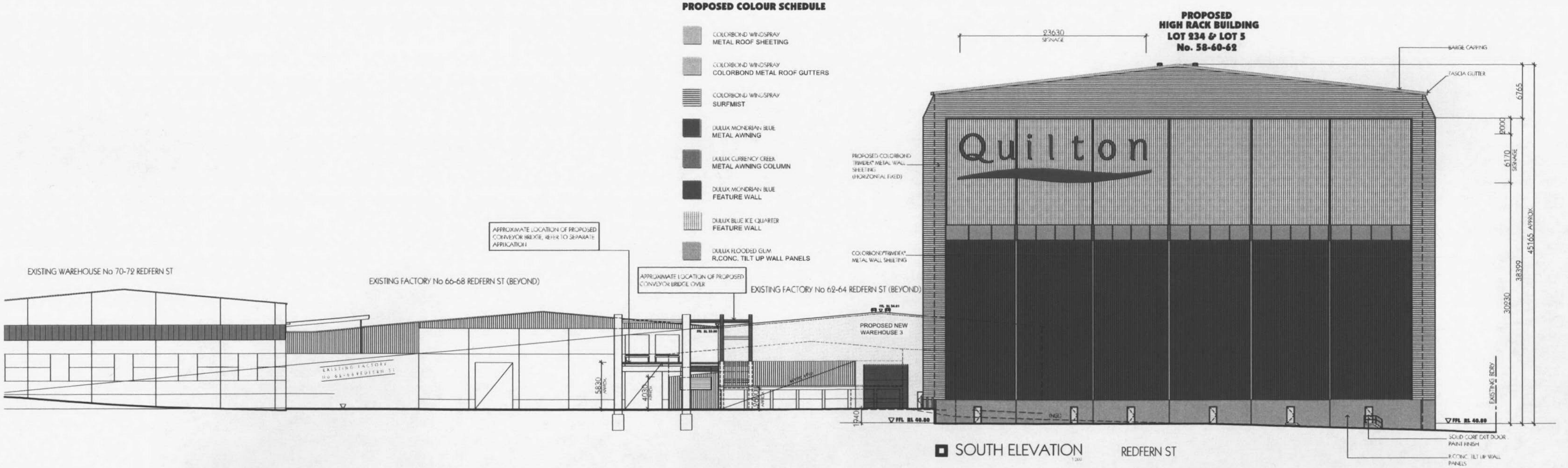
Drawn	Checked	Date
MC	CZ	JUNE 2016
Activity Type	Job #	Scale
DA	1129-16	1:200
Project #	Sheet No	Issue
P3808	A05	C

SECTION A-A

1:200

PROPOSED COLOUR SCHEDULE

- COLORBOND WINDSPRAY METAL ROOF SHEETING
- COLORBOND WINDSPRAY COLORBOND METAL ROOF GUTTERS
- COLORBOND WINDSPRAY SURFMIST
- DULUX MONDRIAN BLUE METAL AWNING
- DULUX CURRENCY CREEK METAL AWNING COLUMN
- DULUX MONDRIAN BLUE FEATURE WALL
- DULUX BLUE ICE QUARTER FEATURE WALL
- DULUX FLOODED GUM R.CONC. TILT UP WALL PANELS



SOUTH ELEVATION

1:200

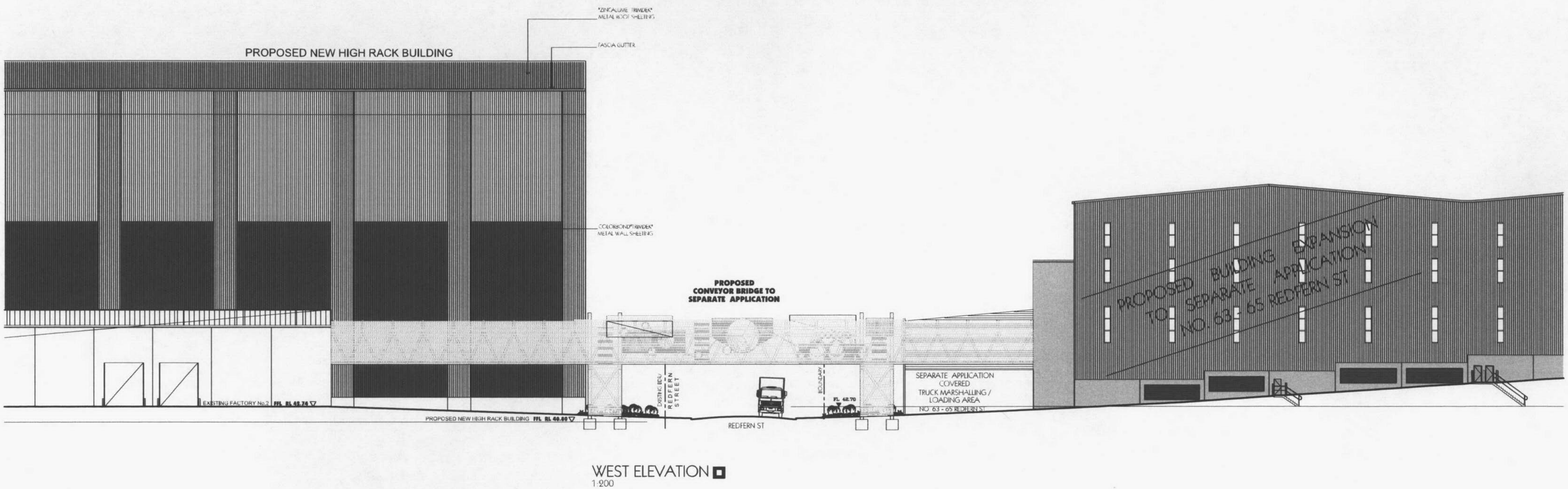
REDFERN ST

ALGORRY ZAPPIA & ASSOCIATES PTY LTD

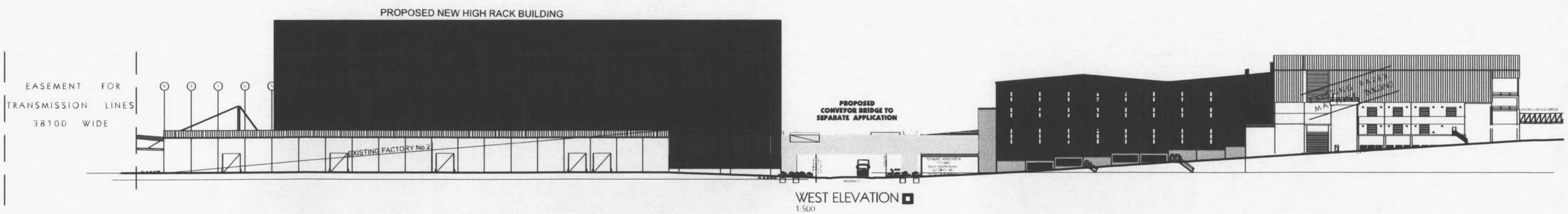
Building Designers & Consulting Civil & Structural Engineers

ABN 43 064 988 968

Project: PROPOSED EXPANSION TO EXIST. INDUST. DEVEL. AT LOT 234 DP 1037039, LOT 5 DP 3082 No 58-72 REDFERN STREET, WETHERILL PARK	Drawn: MG	Checked: CZ	Date: JUNE 2016
Client: ABC Tissue Products	Activity Type: DA	Job #: 1129-16	Scale @ A1: 1:200
Title: ELEVATION & SECTION	Project #: P3808	Drawing No: A04	Issue: C



WEST ELEVATION
1:200



WEST ELEVATION
1:500

Issue	Description	Date	Drawn	Issued
A	FOR DA	17-11-2016	MC	CZ
B	FOR DA	26-05-2017	MC	CZ

General Notes

1) All dimensions and floor areas are to be verified by the builder prior to the commencement of any building work. Any discrepancies are to be brought to the attention of the designer.
2) Levels shown are approximate unless accompanied by reduced levels.
3) Figured dimensions must be taken in preference to scaling.
4) All boundary clearances must be verified by the surveyor prior to the commencement of any building works.
5) Where engineering drawings are required such must take preference to this drawing.
6) Stormwater to be discharged to Council's requirements and AS 3500.3-1990.
7) All services to be located and verified by the builder with relevant authorities before any building work commences.

North Point

Consultants

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w www.algorryzappia.com.au
ABN 43 064 952 699

Project
PROPOSED EXPANSION TO EXIST. INDUST. DEVEL.
AT LOT 234 DP 1037039, LOT 5 DP 3082 No 58-72 REDFERN STREET, WETHERILL PARK

Client
ABC Tissue Products

Title
WEST ELEVATION

Drawn	Checked	Date
MC	CZ	JUNE 2016
Activity Type	**Job #**	**Scale @ A1**
DA	1129-16	1:500
Project #	**Sheet No**	**Issue**
P3808	A06	B

Appendix B: working visual analysis plans for representative viewpoints


Alpha Rd
Hyland Rd
Kurrajong Rd
Tarlington Pl
Hume Rd
Davis Rd
Widemere Rd
Gipps Rd
Long St
Hassall St
Frank St
Verrell St
Redfern St
Blackfriar Pl
Redfern St
Rosford St
Eyre St
Waller St
Victoria St
Ghifley St
© 2016 Google
Google
Tour Guide
2004
Imagery Date: 5/5/2016 33°50'00.16" S 150°54'37.08" E elev 40 m eye


Redfern St
Redfern St
Walter St
Blackfriars Pl
Verrel St
Blackstone St
Gipps Rd
Rosford St
Sydenham Crescent
Donegal Ave
Kilkenny Ave
Chifley St
Galton St
Dublin St
Hinkler St
Hart St
Wetherill St
Passmore St
Haywood Close
© 2016 Google
Google earth
Tour Guide
2004
Imagery Date: 5/5/2016 33°50'25.47" S 150°54'38.66" E elev 49 m eye alt 1.61 km


Redfern St
Walter St
Blackfriar Rd
Verrel St
Blackstone St
Gipps Rd
Rosford St
Redfern St
Chifley St
Galton St
Dublin St
Hinkler St
Hart St
Donegal Ave
Kilkenny Ave
Haywood Cl
Wetherill St
Hassall St
© 2016 Google
Google earth
Tour Guide
2004
Imagery Date: 5/5/2016 33°50'25.47" S 150°54'38.66" E elev 49 m eye alt 1.61 km