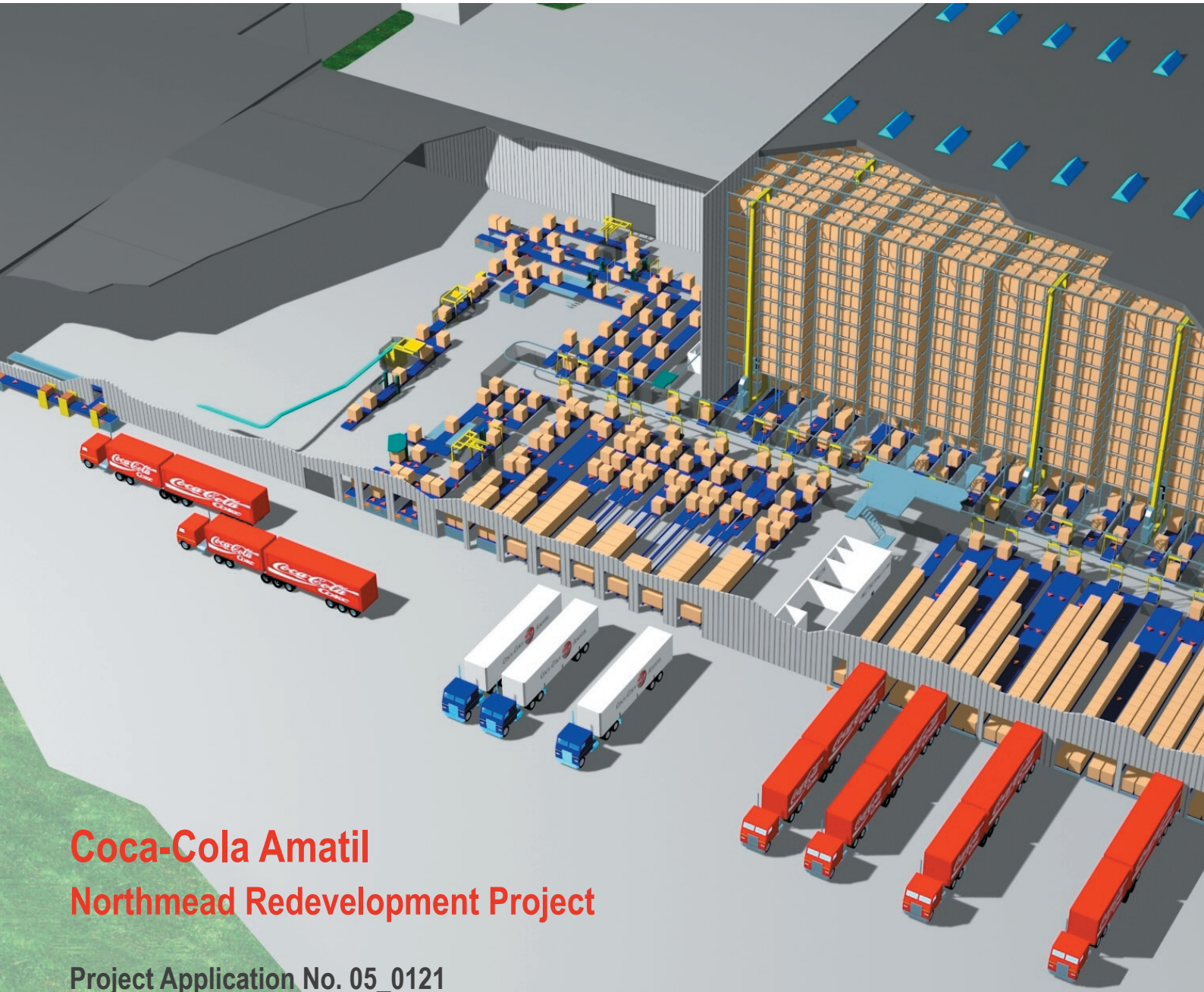
COCA-COLA AMATIL

JBA Urban Planning Consultants

BURNS BRIDGE

Preferred Project Report and Statement of Commitments



Coca-Cola Amatil

Northmead Redevelopment Project

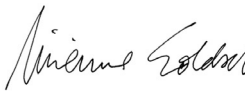
Project Application No. 05_0121

Submitted to
NSW Department of Planning
On behalf of Coca-Cola Amatil (Aust) Pty Ltd

November 2006

JBA Urban Planning Consultants Pty Ltd operates under a Quality Management System. This report has been prepared and reviewed in accordance with that system. If the report is not signed below, it is a preliminary draft.

This report has been prepared by: Vivienne Goldschmidt

Signature  Date 02/11/06

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1.0 Introduction

The Environmental Assessment Report (EAR) for a Project Application for the Coca-Cola Amatil Northmead Redevelopment Project was exhibited for 34 days from 6 September to 9 October 2006 and a total of 115 submissions and one petition were received. Coca-Cola Amatil (CCA) has reviewed and considered the submissions and in accordance with clause 75H (6) of the *Environmental Planning and Assessment Act 1979*, has responded to the issues raised.

This Preferred Project Report sets out CCA's response, revisions to the project to minimise environmental impacts, and a revised Statement of Commitments.

Submissions were received from Parramatta City Council, State government agencies and authorities, and the general public, summarised below.

- Authorities and agencies - 5
- Northmead Residents Action Group - 1
- Members of the public - 109, including form letters from 67 properties
- Petition - signed by 362 people.

With the exception of three submissions from the public which supported the proposal, all raised issues about the proposal. The vast majority of submissions were from people living in the immediate locality of the site at Northmead.

The matters raised were generally similar in nature and revolved around the following key issues:

- The visual impact of the proposal, including the impact on nearby residents and road users in the vicinity of the site.
- Noise management – including the adequacy of proposed measures to mitigate emissions from the development, especially for residents to the north.
- Traffic management, including the impact on local traffic flows, unsafe access and excessive parking provision.
- Concerns that approval would set a precedent for future similar development.
- The economic justification for the proposal.
- Management of on-site stormwater.
- Landscaping around the site.

CCA's response to the key issues is dealt with in Section 2. Section 3 details changes to the project and Section 4 the revised Statement of Commitments.

2.0 Response to key issues

2.1 Visual impact

The key issues in the submissions from the public were the visual impact of the proposed high bay warehouse (HBW) - both on residents in the immediate locality and on road users, and non-compliance with the height control in Parramatta DCP 2005. Concerns were also raised about the impact of the proposal on the character of the neighbourhood and its inappropriateness in the locality. The accuracy of the photomontages was also questioned.

The Parramatta Park Trust, in its submission, wanted the Visual Impact Assessment to include an assessment of impact on views identified in the Conservation Management Plan and Master Plan for the North Government Mixed Use Zone.

Scale and massing of the HBW

Parramatta City Council suggested that the scale and mass of the HBW could be reduced by better utilisation of CCA's land holdings at Northmead through site amalgamation. The strategy for Northmead considered all of CCA's land from 102 through to 128 Briens Road and is predicated on the layout, assets and logistical arrangements of the site as a whole, in particular the existing manufacturing facility and its proposed expansion. Accordingly, better utilisation through site amalgamation is not an option.

The EAR considered other locations and building orientations on the site and none were suitable. Overall, the proposed location is considered optimal since it does not affect existing production, existing offices, or future expansion of production. It is also at the lowest point on the site, thus minimising the visual impact of the development.

The EAR examined a range of options to reduce the bulk and scale of the warehouse as well as alternative heights. It also considered a smaller warehouse on the site by splitting capacity between Northmead and another location. As set out below, reducing the size, layout and capacity of the warehouse at Northmead is not operationally, practically and economically feasible.

The size and shape of the building is defined by the automatic storage system within and is therefore necessarily uniform in width, length and height. The proposed HBW is a "clad-rack" structure where the exterior cladding (walls and roof) is attached directly to the storage racking itself. The exterior of the building is essentially the weatherproof skin of the internal "machine". The construction method is the most efficient for this kind of facility and reduces the overall building envelope. This type of automated warehouse uses fixed-height cranes to access the storage racks which eliminates any opportunity for variation in height or longitudinal separation of building components.

The only means by which to break-up the mass of the warehouse would be to split it into two or more smaller physically segregated compartments on the site. If the 32 metre height were to be retained, a compartmentalised design would result in a larger overall building footprint to allow adequate separation of the components. The increased building footprint would preclude the proposed expansion of manufacturing operations at Northmead and result in substantial incremental capital costs. In combination this would render the project infeasible.

If the structure were to be broken into smaller components, with adequate separation, and still accommodate 55,000 pallets, the height would need to be increased to 40 metres or more. The visual impact of this alternative was not considered acceptable.

Given the above, the conventional approach to reducing massing and articulating/ modulating form by breaking it down into smaller components is not able to be employed in this instance. The visual impact mitigation strategy is therefore to keep the façade treatment as simple as possible and to use muted colours in order not to draw attention to the building and to ensure the form is the minimum possible size to house the function so that the building is no bigger than it needs to be.

Reducing the overall size of the warehouse at Northmead (and thus storage capacity) would involve splitting warehouse capacity. This was considered by the EAR and would lead to stock rotation inefficiencies and necessitate a larger combined warehousing capacity of 65,000-pallet capacity to achieve the same levels of customer service as the single proposed 55,000-pallet capacity facility at Northmead.

Scale economies in automated warehouse construction require a minimum feasible facility size, or increment in size, in the order of 25,000 pallet positions. As such, a minimum of 25,000 pallet positions would be required at the second location to make the facility viable. Construction of two facilities with a combined capacity of 65,000 pallets would lead to cost duplication in the order of $10M and result in neither facility being adequately sized to meet ongoing Bulk customer requirements, thereby locking-in forever a compromised operation.

The EAR considered reducing height of the HBW to less than 32 metres, as well as sinking the structure. If the height of the building were to be reduced below 32 metres while still providing capacity for 55,000 pallets, additional cranes would be required. This would add significant cost to the project as each crane and its associated infrastructure costs in the order of $750,000. The building footprint would also be substantially increased and the additional space requirement would necessitate demolition and relocation of infrastructure; restrict or prevent vehicle movements; and limit the planned expansion of production - thereby compromising the entire redevelopment plan.

Moreover, as set out in the EAR, at building heights of less than 32 metres the machine efficiency of the warehouse system, would be severely compromised. Accordingly, this option was not considered operationally, practically or economically feasible.

The option to reduce the height of the HBW by sinking the structure was discounted on the basis of cost and project delays.

Character of the neighbourhood

As illustrated in the EAR (Section 2.4) and the appended Visual Impact Assessment the wider locality surrounding the site comprises large footprint industrial and hospital buildings. The proposed HBW would be very similar in height and proportion to Westmead Hospital and the Westmead Children's Hospital and about the same height as, or taller than, a number of residential apartment buildings in the Westmead locality. Specifically, at RL 47.3 AHD (or 9 storeys/32 metres equivalent), the HBW would be consistent with the median ridge line RL of other buildings in close proximity, such as Westmead Hospital at RL 57.6 AHD and the residential buildings on Bridge Road which vary from 9 to 15 storeys with a maximum ridgeline of RL 54 AHD.

Within this broader locality, the height and scale of the proposal is not out of context.

The proposal occurs on land zoned for this purpose and continues a long existing land use. The existing character of the locality is industrial in nature, separated from residential land by a major arterial (Cumberland Highway). The proposal does not change a land use which has existed side-by-side with pockets of residential land for decades.

Despite the above, the HBW does impose itself on residents in the immediate locality – particularly in the vicinity of Edward and Christine Streets.

To mitigate the visual impacts of the HBW on residents in Northmead, CCA is amending the project in the following way:

- To reduce the visual presence of the HBW for residents along and around Balmoral Road it is proposed to plant large tall trees along the western side of Redbank Road to screen the eastern façade of the HBW at the terminating view from Balmoral Road.

- CCA will explore with residents living on Edward and Christine Streets in Northmead measures to mitigate the visual impact of the HBW from their houses. This will include planting screening trees in the road reserve along Briens Road and/or on their properties, as well as any other feasible methods to hide the view of the structure from their homes.

Materials and façade treatment

The materials selected are the most appropriate and economic for the application. Colorbond is a popular, high quality material commonly employed for the cladding of many building types including industrial buildings. The colours of the sheeting and the façade treatment have been carefully selected to ensure reflectivity is minimised, and the three colours chosen have been selected to graduate from dark at the base of the building to light at the top and on the roof. A long shallow serpentine curve bisects the façade close to ground level and continues smoothly around corners in order to reduce the visual impact of the building when viewed from a distance. The same shallow curves are used on short and long facades. The dark colours near the base relate to the hues of surrounding development and landscaping whilst the lighter colour at the top relates to the light blue of the sky near the skyline.

Complex applied façade treatments have the effect of drawing attention to a building which in turn increases visual impact. Accordingly, muted colours and a simple façade treatment were selected for the HBW to ensure they do not draw unnecessary attention to the structure. Façade patterns incorporating a greater level of detail and more prominent colours would have the effect of increasing rather than reducing visual impact.

Skyline issues and roof form

The roof form is based on the minimum slope required to drain the roof. The design approach is to keep the façade treatment and form as simple as possible, and for the roof to read as a continuation of the walls and part of an overall simple form. The HBW can be seen in the context of the skyline or horizon line only in regional views and some local views. In these cases the viewing point is generally elevated and the HBW is therefore seen from above in the context of other urban development and below the distant ridgelines.

The visual impact assessment examined the significant views identified in the Parramatta DCP 2005 with the proposed HBW in the foreground. These views are significant because the distant skyline of the Parramatta and Sydney CBDs can be seen. In each case the proposed development sits well below the ridgeline and the CBD view is preserved.

Photomontages

A large number of resident submissions stated that the photomontages in the Environmental Assessment Report misrepresented the visual impact of the facility.

The photomontages were prepared as follows:

- An extended crane arm was positioned on the CCA site at diagonal corners of the proposed HBW in order to accurately identify the height and location of the building from each viewing point. These cranes were surveyed into the correct height and position by a Registered Surveyor.
- Digital photographs using a 50mm focal length lens were taken from each of the selected viewing points in the direction of the location of the proposed HBW.
- A three dimensional computer model of the HBW was generated based on architectural plans for the facility.
- The model was inserted onto the photographs with the top corner of the proposed high bay warehouse coinciding with the top of the crane arms.

The effect of perspective explains why telegraph poles appear larger than the warehouse in the Briens Road/Redbank Road intersection photomontage. The effect of perspective is such that elements in the foreground always appear larger than elements in the background or distance. Therefore, elements in the foreground of the photomontages appear taller in comparison with the HBW, even though in reality, if placed side by side, the warehouse would be higher. If one examines the telegraph poles directly next to the HBW they are shorter than the warehouse. It is worth noting that the telegraph poles along Briens Road are particularly tall so those in the foreground are more likely to appear unusually tall.

Impact on North Government Mixed Use Zone

The Parramatta Park Trust stated in its submission that the Visual Impact Assessment failed to consider the impacts of the proposal on the cultural and natural heritage values of the Government Precinct defined in SREP 28.

The proposal falls well outside the Government Precinct and is not visible from the Precinct. For the purposes of the Visual Impact Assessment this was ascertained as follows. As described above the location and height of the proposed building was established with cranes and verified by a Registered Surveyor. CCA, together with representatives of the Department of Planning and Parramatta Council, then undertook a comprehensive tour of the various sites, including Parramatta Park and the Heritage Precinct around Parramatta Gaol, to confirm whether these should be included in the Visual Impact Assessment. Those sites from which the building would be visible were modelled in the Visual Impact Assessment and those from which the building would not be visible were, for obvious reasons, not modelled- including locations around the Gaol and the Park.

2.2 Noise management

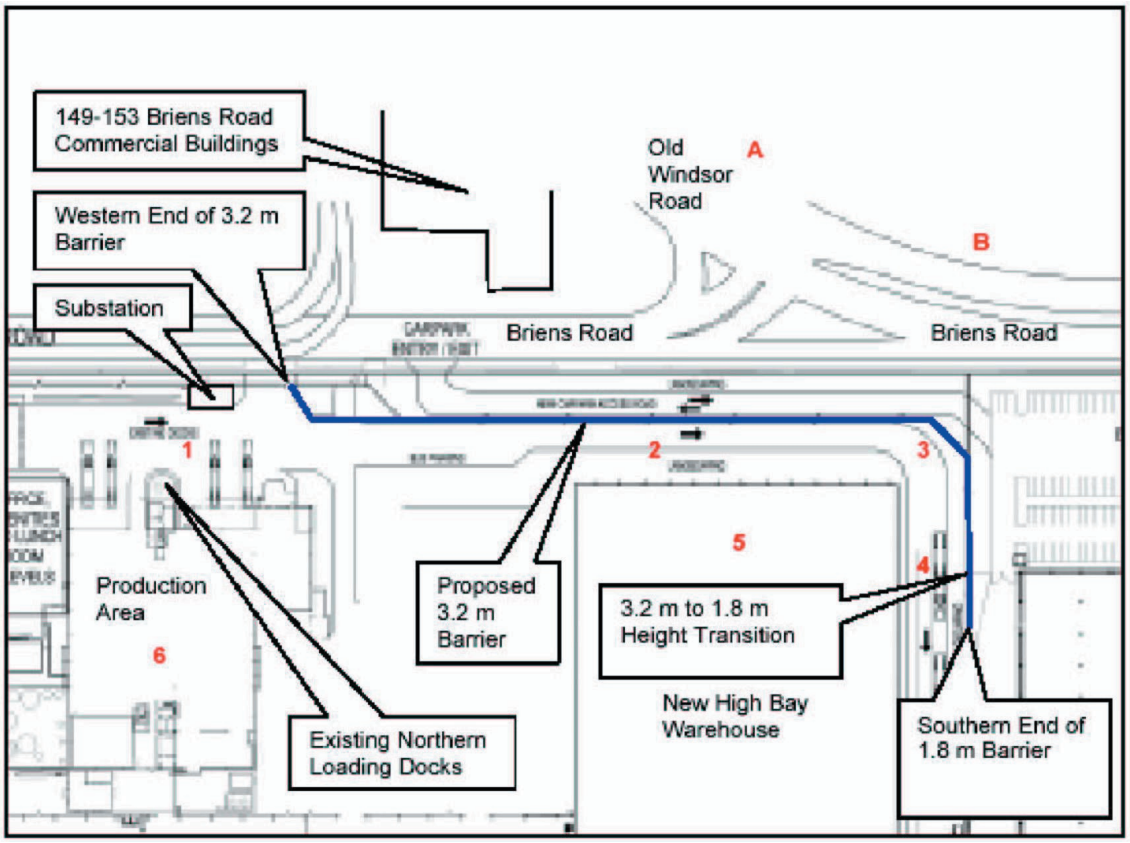
The overriding general issue associated with noise was the adequacy of proposed measures to mitigate emissions from the development, especially at night, and particularly for residents to the north. In addition, residents raised issues specifically in relation to the following - each of which is dealt with in turn:

- existing noise from the site, particularly at night;
- expected increase in noise as a result of the increase in site capacity;
- potential for noise to be generated at the elevated levels of the new building;
- lack of internal sound-proofing;
- potential for the new building to reflect vehicle noise.

Adequacy of proposed mitigation measures

The Department of Environment and Conservation has concerns about whether the proposed noise barrier will sufficiently attenuate noise levels to achieve the project specific noise levels, particularly at night. As explained below, the proposed 3.2 metre noise barrier is considered adequate to ensure compliance with the noise criteria for the receivers (ie. residents) located to the north of the site.

The principal noise emission from the CCA site to the nearest northern receivers will be truck movements, northern loading dock activities, internal noise breakout and mechanical plant located on the roof of the new warehouse. The locations of the different noise sources are identified in the following figure with the numbers 1 to 6, along with two representative receivers indicated as A and B. Truck movements along the circulation road, were assessed as point sources at three representative locations and corrections made to account for the quantity and typical duration of truck pass by events in a 15 minute night-time peak scenario.



Following more detailed design, arrangements for the proposed noise barrier have been somewhat modified - of which the details to achieve the necessary noise mitigation are as follows:

- The barrier will commence at a point 15m east of the existing electricity substation shown in the above figure and continue east along the northern side of the truck access road. It will be located on top of the retaining wall and landscape mounding between the car and truck access roads. It will be of solid construction (no gaps) with a minimum height of 3.2 m above the top of the retaining wall (not the truck pavement level).

- It will continue east along the top of the retaining wall between the car and truck access roads, and then follow the truck access road to the south-east and then south as indicated in the figure with a minimum height of 3.2 m.

- It will continue south with a minimum height of 3.2 m to a point directly west of the northern facade of the building at 102 Briens Road.

- It will then be reduced to a minimum height of 1.8 m and continue a further 30 m south.

The predicted contributions and cumulative total noise levels from the sources indicated in the above figure at the two nominated receivers are shown in **Table 1**. These predicted noise levels represent the contributions from the nominated sources during a representative 15 minute night-time peak scenario.

Table 1 Predicted Noise Levels at Northern Receivers during Night-time Peak

Map location	Source description	Receiver	Predicted Noise Level (dBA)	Night-time Criteria (dBA)	Comment
1	Northern Dock Activity	A	35	45	Shielding provided by commercial buildings to the north
		B	41	45	Shielding provided by barrier
2	Truck Movements	A	35	45	Shielding provided by barrier
		B	35	45	
3	Truck Movements	A	33	45	Shielding provided by barrier
		B	37	45	
4	Truck Movements	A	38	45	Shielding provided by barrier
		B	41	45	
5	Rooftop Ventilation Fans	A	17	45	Dominant contribution from two northern fans
		B	19	45	
6	Internal Production Noise Breakout	A	33	45	Breakout from northern (existing) production area
		B	33	45	
1 - 6 (all)	Dock Activity, Trucks, Internal Production and Fans	A	42	45	Combined 15 minute night-time peak scenario
		B	45	45	

The predicted noise levels included in **Table 1** include the following effects:

- Distance attenuation (including relative heights of sources, barriers and receivers)
- Directivity (including source reflection from the new warehouse wall)
- Shielding by the proposed barrier and the existing commercial building located across the road where applicable.

It can be seen from the results in **Table 1** that compliance with the night-time criteria is indicated at both the representative receiver locations for all noise sources considered, including the cumulative noise level during the typical night-time peak scenario. Therefore, the proposed 3.2 m barrier is considered to be adequate to ensure compliance with the specified criteria for the receivers located to the north of the site. Accordingly, CCA does not believe it necessary to restrict truck movements and activities at the northern dock at night.

Despite this, to further minimise noise from the site, particularly at night, all CCA and contractor trucks and forklifts will be required to have installed white noise reverse alarms to eliminate the impact of reverse alarms. This will occur within 4 weeks of approval and will address current and future activities.

In addition, CCA will proactively eliminate any gross external noise and any practices that increase noise and will implement a Traffic Noise Management Strategy for CCA and contract truck and forklift drivers. This will address through contract, coaching, performance management and monitoring noise creating practices including elimination of exhaust breaking; requiring drivers to turn off engines during queuing; applying best noise practice in the selection and maintenance of vehicle fleet, etc.

CCA will examine movement scheduling, where practicable, to reduce impacts during sensitive times.

Existing site noise

Once made aware of current noise from the site, CCA took steps to manage and eliminate any practices that increase noise – such as hammering on sugar trucks to loosen residue - and proactively commits to eliminating any gross external noise.

The above measures will address existing noise issues and are considered adequate.

Increased noise due to increased site capacity

An increase in the noise level at the northern receivers for proposed operations compared to existing operations will be primarily due to the addition of the truck circulation road around the north-eastern perimeter of the HBW. While the total number of truck movements within the site will not increase, the proposed circulation route will result in closer proximity to the nearest northern receivers.

The proposed 3.2 m barrier is designed to mitigate noise generated by this additional noise source, whilst also reducing noise from the existing northern dock which currently operates without any mitigation.

The noise assessment included the cumulative effect of both the existing operation and the future operation of the site. The proposed noise mitigation is designed to ensure compliance with the required criteria at the northern receivers for both existing and future noise sources.

Potential for noise generation at the elevated levels of the HBW

The new HBW is an automated storage area that does not generate significant noise levels. In addition, the building does not contain any significant openings that might allow noise breakout to occur in the vicinity of the nearest houses.

The only noise generation associated with the HBW that would occur from an elevated location would be due to the proposed ventilation fans on the roof of the structure.

An assessment was made of the noise contribution from this plant and the predicted noise contribution can be seen in **Table 1**. The resultant noise level contribution was not found to result in any increase in the overall predicted site noise emission, which is controlled by vehicle movements and dock activity.

Internal acoustic treatment

Internal acoustic treatments of industrial facilities are generally recommended where exceedances of the noise criteria are indicated at residential boundaries due either to internal noise breakout, or as a possible control measure to comply with occupational health and safety requirements for employees within the site. As stated above the HBW emits minimal noise, while as shown in **Table 1**, internal production noise breakout is well below the noise criteria.

Accordingly, acoustic treatment within buildings on the site is not required to comply with noise emission criteria.

Reflected vehicle noise

Any significant structure that is not acoustically absorptive may reflect acoustic energy back towards the source and hence towards noise-sensitive receivers. Potentially, noise could be reflected from either road traffic on Old Windsor Road / Briens Road, or from trucks using the site access road.

Due to the close proximity of the trucks on the site access road to the HBW, the amount of noise reflected from the building will be significant and was therefore included in the vehicle noise emission assessment contained in **Table 1**. An allowance of 3 dB for reflection was added to the assessment of vehicle noise, which represents a doubling of the acoustic energy and allows for total reflection (i.e. no losses – the worst case scenario) of vehicle noise from the warehouse back towards the residences on the northern side of Briens Road.

In other words, reflection was considered in the assessment and the mitigation measure (ie. the 3.2 metre wall) is considered adequate to control reflected as well as direct noise from vehicle movements on site.

With regard to reflection of vehicle noise on public roads, the greater distance between vehicles on Briens Road and the warehouse means that the reflected noise component will be less significant.

The increase in noise levels at the nearest residential boundary has been predicted for road traffic on Briens Road as detailed in **Table 2**. For the purpose of this calculation the source emission has been assumed to be the median of each carriageway and the noise level has been calculated from traffic count data. The absolute road traffic noise levels indicated here are not critical, rather it is the relative increase which is important.

Table 2 - Predicted Road Traffic Noise Level Increase at Northern Residences

Noise Source	Direct Path (Distance)	Reflected Path (Distance)	Resultant Noise Level	Increase in Noise Level
Eastbound Carriageway Resultant Noise Levels – LAeq (1 hour)	78.2 dBA (5 m)	65.0 dBA (115 m)	78.4 dBA	0.2 dBA
Westbound Carriageway Resultant Noise Levels – LAeq (1 hour)	74.7 dBA (25 m)	68.8 dBA (95 m)	75.7 dBA	1.0 dBA
Combined Resultant Noise Levels – LAeq (1 hour)	79.8 dBA	70.3 dBA	80.3 dBA	0.5 dBA

As shown above, it is estimated that the total increase in the road traffic noise level at residences opposite will be less than 1 dBA. This increase is considered minor and is likely to be indistinguishable from existing road traffic noise levels.

2.3 Traffic management

The vast majority of submissions from the public included the impact of the proposal on traffic and access in the locality of the Northmead site, including the impact on local roads of trucks servicing the CCA site. Parramatta Council also raised issues about the quantum of parking being provided on the site. The main issue raised by the Roads and Traffic Authority (RTA) concerned restricting access to the site at 102 Briens Road for safety reasons.

These matters are dealt with separately.

Local traffic generation and safety

The submissions identified additional traffic on the surrounding local road network, in particular Darcy Road, as having a major impact on the locality. As explained below, the additional traffic generated by the development will have no impact on the capacity of local roads and intersections.

In order to assess the traffic effects of the proposed development, traffic counts were undertaken during the morning and afternoon peak periods at intersections on the surrounding road network. These are the busiest times of the day when traffic from the proposal would combine with commuter traffic. In addition, counts were undertaken of the existing site traffic generation (cars and trucks) during the morning and afternoon peak periods and information was provided by CCA regarding truck movements.

Based on these surveys and traffic information, the proposed development is estimated to generate a total of some 230 to 240 vehicles per hour two-way during the morning and afternoon peak periods. This includes truck movements, employee vehicles and visitors.

The forecast traffic generation represents an increase of some 40 to 50 vehicles per hour two-way during the morning and afternoon peak periods. The majority of this additional traffic will be cars generated by employees. The proposed expanded facility will generate some 5 additional truck movements per hour two-way by 2008 and 10 additional truck movements per hour two-way by 2015. As concluded in the EAR, the intersections in the vicinity of the site will operate at the same levels of service as today.

The two sets of traffic signals on Briens Road, currently being constructed in association with the North-West T-Way, will incorporate bus priority which will operate every 10 minutes in each direction during peak periods and every 20 minutes during the daytime off peak period. Such a low and intermittent operation should not adversely affect traffic flows on Briens Road and the intersections should operate at an acceptable level of service.

Traffic flow increases in Briens Road (to the west of the site) and Darcy Road will be staff/worker vehicles only. Increases will be some 10 vehicles per hour during peak periods. This represents an increase of less than 1% compared to existing traffic flows. Such minor increases would not have noticeable traffic effects.

To address issues raised by local residents and Parramatta Council about truck drivers using local roads - primarily Darcy Road - to access the site, CCA has implemented a Truck Route Management Plan (TRMP) which requires all CCA trucks and contract vehicles to access the site to/from the Cumberland Highway and M2/M4/M7 Motorways. Semi-trailers and B-double movements are restricted from using Darcy Road for access to and from the site.

In addition to the TRMP, CCA commits via contract, coaching and performance management to:

- ensuring that no CCA trucks or contract trucks (semi-trailers and B-doubles) will enter or depart the CCA site via Darcy Road; and

- managing and monitoring the behaviour of CCA drivers and contractors between the Cumberland Highway and the CCA gateway to eliminate exhaust breaking, ensure speed limit adherence and safe driving practices – particularly when entering and exiting the site.

In addition to the above measures regarding Darcy Road, CCA has formally requested the RTA and the Parramatta Traffic Committee to support resident suggestions for a weight limit to be introduced between the site access driveway and Darcy Road and the introduction of a light traffic thoroughfare to the west of the site.

To address existing safety concerns about the intersection of Old Windsor Road and Briens Road, CCA proposes to fund the installation of an electronic advance traffic signal warning sign for eastbound vehicles on Old Windsor Road approaching the existing traffic lights at the intersection of Old Windsor Road and Briens Road. The warning sign would be linked to the existing traffic signals and activated on the red signal for eastbound traffic in Old Windsor Road. The flashing sign would warn approaching motorists of the red signal at the traffic light and instruct them to slow down prior to the intersection.

It should be noted that this is an existing traffic issue and the suggested advance warning sign is not as a result of the proposed redevelopment. However, it is a measure by CCA to contribute to the well-being of the community by enhancing road safety in the Northmead locality.

Parking

Parramatta City Council in its submission has indicated that there will be an over supply of parking on the site and that the proposed development does not comply with maximum parking rates set in Sydney Regional Environmental Plan 28 (SREP 28) or support the mode split objectives of SREP 28.

CCA is very conscious of the opportunities offered by the proposed North-West T-Way to reduce employee reliance on private vehicles to travel to work. Accordingly, it has targeted a 10% reduction in the number of private vehicles visiting the site and has committed to investigating establishing an incentive program to encourage use of the T-Way.

It should, however, be noted that a large number of employees at Northmead are shift workers who need to use public transport because of their hours of work (currently 160 staff, growing to 250 after the addition of the new production lines). A further 300 employees are mobile sales people whose work requires use of vehicles during the day. It should be further noted that the apparent high use of private vehicles is a simple reflection of the lack of public transport options at this time.

Despite the above, CCA proposes fewer parking spaces than would be required if the rates in SREP 28 were to be applied to the site. SREP 28 bases parking rates on industrial, commercial and warehouse floor space, rather than actual parking need derived from surveys in accordance with the RTA Guide to Traffic Generating Developments. The latter approach was adopted for the project and the current existing 540 spaces on site were deemed adequate to cater for growth at peak times by 2008 and 2015.

If the rates in SREP 28 were to be applied to the site based on the gross floor space that would eventuate from the proposal, 743 spaces would be required, as shown below. This is over 200 spaces more than is proposed. Accordingly, application of Council's parking rates results in over provisions of parking and is considered inappropriate

Table 3 - Parking requirements under SREP 28

Land use	Proposed GFA	SREP 28 maximum parking rate	Parking spaces
Office/Commercial	7,650	1 per 50m^2 GFA	153
Industrial	37,180	1 per 70m^2 GFA	531
Warehouse	17,680	1 per 300m^2 GFA	59
Total	62,510		743

Access to 102 Briens Road

The RTA, in its submission, stated that it prefers the existing far eastern entry driveway (that is to 102 Briens Road) be restricted to small service vehicles only as this section of Briens Road carries a large volume of traffic at high speed. It requires that there be no "link between the far eastern entry driveway and the car park at the front of the subject site (at the eastern end of the property)" and that "all vehicles accessing this car park should enter the subject site via the proposed new driveway (the middle driveway on the site)".

While CCA understands the RTA's concern, it is not possible to prevent access between the eastern entry driveway and the existing car park located at the front of 102 Briens Road. This is because it is not proposed to modify the existing building at 102 Briens Road and service vehicles are required to circulate around the perimeter of the existing building in a one-way direction in order to access the loading dock. In addition, staff vehicles are required to travel along the eastern boundary of the site in order to access the rear car parking areas located adjacent to the southern boundary of the site.

CCA is instead proposing an alternative arrangement to meet the intent of the RTA suggestion. This would be to limit access at this driveway to service vehicles only with entry and exit to be managed. The driveway itself is not to be closed.

Access for staff and visitors via the eastern driveway to/from 102 Briens Road will not be permitted. and will only be available via the new proposed driveway and access road to be built as part of the redevelopment of 104-128 Briens Road. This driveway will be located to the west of 102 Briens Road. The driveways and access road will be clearly signposted.

CCA proposes to discuss this and other possible alternative access schemes for 102 Briens Road with the RTA in order to develop a practical arrangement which would be supported by the relevant authorities.

2.4 Precedent for future similar development

Parramatta City Council and a number of members of the community were of the view that approval of the CCA development would establish a precedent for future approval of similar developments.

Approval would be unlikely to set a precedent for other similar approvals in Parramatta, or indeed the immediate locality, for the following reasons.

The need for the CCA facility and its co-location with a manufacturing plant are unique. In order to warrant and financially justify the substantial costs associated with the construction of an automated materials storage system, a company needs to have very high product throughput (inwards and outwards) and high storage volumes of pallet-based products - in the order of approximately 4,000 pallets on an average day with required storage volumes in the order of 50,000 pallets.

Very few companies in Australia meet these criteria - the major supermarket operators (Woolworths and Coles) and the large manufacturers of fast moving consumer goods (FMCG) such as the Fosters Group, Lion Nathan, Coca-Cola Amatil, Schweppes Cottees, and Kellogg's.

It is highly unlikely that Woolworths or Coles would construct a high-bay warehouse in Parramatta, as Woolworths has such a facility at Minchinbury and Coles is currently constructing a large warehouse at Eastern Creek.

For a FMCG manufacturer, the preferred logistics solution is to construct the primary warehouse alongside the manufacturing facility. This achieves the efficiency of storing the manufactured product (normally on pallets) directly off the production lines. It is highly unlikely that any of the abovementioned companies would construct a high-bay warehouse in Parramatta, as none of them (except for Coca-Cola Amatil) has a manufacturing facility in the area.

2.5 Economic benefits of the proposed development

Parramatta City Council questioned the local economic benefits of the proposal and suggested that the local visual impact outweighed the economic benefits. It also suggested that other land uses on the site would provide similar or better economic outcomes, that amongst other options the Northmead operation could be closed and the site redeveloped, and that the EAR did not detail the feasibility of CCA locating in whole or part elsewhere.

Looking at local economic benefits first, if the CCA operation were to be closed and relocated a loss of 700 jobs in the Parramatta area would occur immediately. This quantum of direct employment excluding the benefits of multipliers would be highly unlikely to be replicated on the site under scenarios suggested by Parramatta Council and others – such as redevelopment for residential purposes, medical research etc.

If the proposed production lines at Northmead were not to proceed, 90 full time equivalent jobs would be foregone. This would result in the loss of 450 additional jobs in production induced effects and a further 450 in consumption induced effects, totally 990 potential additional new jobs foregone. In addition, as detailed in the EAR, significant positive employment benefits from the actual construction of the HBW and new lines would not eventuate.

As further explained in the EAR, the proposal will generate over 18 months the following economic benefits – to Parramatta, Western Sydney and NSW:

- $178 million total economic activity directly in construction ($62 million) and through multiplier impacts ($116 million) from building the HBW;
- $1.821 billion of economic impacts by 2015 directly from wholesale output and through multiplier effects; and
- $129 million worth of economic impacts directly through capital investment in three production lines and through multiplier impacts.

It should be noted that CCA's main suppliers are located in Western Sydney (aluminium cans cardboard, PET bottles, etc) and should the three new production lines not proceed and instead be located interstate, the benefits to these businesses would be lost.

We now look at other options for the site and the costs of relocation. As stated in the EAR and elsewhere in this report, the subject site is zoned for the current use and has been used for this purpose for over 30 years. CCA has a substantial investment in Northmead and intends to remain there. The cost of re-establishing the plant elsewhere was covered in the EAR and would be $250 million ($1999), excluding a new warehouse, and in the order of $400 million including the warehouse. Extensive feasibility studies undertaken by CCA have established that relocation and re-establishment, in whole or part, are neither financially or logistically feasible, nor an option.

Other options suggested by Parramatta Council were also canvassed in the EAR, including relocation of warehouse operations to Eastern Creek. This has the disadvantage of splitting warehouse and manufacturing facilities and substantially increases the number of B-double truck movements on the road network. In 2008 this would generate 26,000 additional movements per year with attendant community infrastructure costs and greenhouse gas emissions.

The project would result in substantial resource cost savings to the community as a consequence of avoiding urban distribution and importation costs as follows:

- Net present value of avoided urban distribution travel over 20 years is $25.6M in 2006, when discounted at 7% per annum.
- Net present value of avoided importation over 20 years is $45.7M in 2006 in NSW and $15.9M interstate, discounted on the same basis.
- The combined estimated value of resource cost savings due to avoided transport of the project is $87.2 million in 2006 including greenhouse gas emissions. Of this, $8.1 million is estimated to be derived from avoided air pollution.

In addition, the proposal would enable a reduction of more than 50% in greenhouse gas emissions associated with CCA warehouse operations at Northmead – due mostly to the significant reduction in the transfer of product off-site for storage and distribution, and the reduction in double and triple-handling of product prior to delivery.

Given the above, the economic benefits of the proposal to the local and regional economy are considered to outweigh the impact of the visual bulk of the HBW on local residents. Measures proposed to mitigate the impact will off-set this to some extent. In addition, CCA is proposing a number of other measures which will benefit the community as a whole. These are:

- funding an arts and cultural program for Parramatta – in partnership with Parramatta City Council;
- investigating the use of rainwater harvested from the roof of the HBW to irrigate surrounding sports fields and open space, including Redbank Oval (Arthur Phillip Park);
- completing the construction of the section of the Redbank Track adjoining the CCA boundary; and
- funding an electronic advance traffic signal warning sign on Old Windsor Road.

2.6 Stormwater management

Stormwater discharge

Parramatta Council has raised a number of issues about the adequacy of the proposed stormwater management arrangements and contends that stormwater volume and peak discharge will increase. Council appears not to have understood that a new system to replace the existing is to be constructed. As explained below, the proposed stormwater discharge through the site is a significant improvement over the existing situation.

The existing drainage line is within an easement for drainage and overland flow and does not convey flows to the normally accepted standard in Sydney, namely the peak storm experienced at 5% Annual Exceedance Probability (AEP) (that is, the 20 year Average Recurrence Interval or ARI storm). The actual capacity is estimated at approximately the 2-year ARI (50 % AEP). Accordingly, overland flows would occur on average about every 2 years. There is no provision for containing overland flows within the existing heavily overgrown drainage easement and therefore overland flows would divert through the Coca-Cola Amatil site. This is a significant issue in terms of property risk and safety of site personnel, due to the volumes of flow, especially at higher ARI.

The development proposal corrects this deficiency in Council's infrastructure by upgrading the drainline from a 1050mm diameter circular pipe to a 2400mm x 1800mm box culvert. It also provides a large number of stormwater inlets and a high-capacity intake structure to collect overland flows from the external catchment and divert them to the new drainline. The new drainline will be able to convey the 100-year ARI storm from the external catchment. Overland flows in excess of the 100-year ARI are constrained to follow the route of the new drainline. These overland flows through the site would be far less than the existing situation, and would thereby reduce significantly the risk to persons and property. The new drainline would be contained within a new drainage easement replacing the old drainage easement. It is important to note that this proposal does not result in an increase in flows from the external catchment, but a safer handling of those flows.

Council's statement that the stormwater volume and peak discharge will increase is not correct. There is no change to the discharge from the external catchment. The discharge from the internal catchment will be reduced through on-site detention to Council's own standards, so that the peak site discharge will in fact be less than the existing situation.

Council notes that the quality of the water *may* improve. It would be more correct to say that it *would* improve. The existing drainage network has no provision for trapping of gross pollutants before discharge to Toongabbie Creek. The development proposal includes a major gross pollutant trap (GPT) being installed purely for the purpose of treating flows from the external catchment. This is in addition to provision for treatment of site runoff. The runoff from all new hardstand areas will be filtered by GPTs prior to discharging into the two On-site Detention (OSD) tanks on the site. Further oil and silt arrestors have been placed at the point of discharge from the northern OSD tank and on the outlet from the existing Council drainline which now conveys mostly roof water.

Council comments that the discharge will impact on an already stressed creek system that has steeply eroding banks. The existing drainline has no provision for scour protection at the outlet. The proposed new drainage discharge points will have scour protection, as discussed below. Again, this is a significant improvement.

Use of gabions

Council raised issues about the use of gabions due to short asset life cycle and maintenance problems.

Based on Council's concerns, the issue of gabions being used at the outlet structures has been reconsidered. CCA has modified the outlet details by removing the gabions and instead proposes using 'rip-rap' surrounded by stacked stone for the outlet structures. The 'rip-rap' consists of rocks set in a concrete base. The concrete base will reduce the growth of vegetation through the rip-rap as well as improving the protection against scour.

By using native rock types the outlets will blend into the landscape better than the previously proposed concrete and gabion solution. The velocity of flow during the 100-year ARI storm within the drainline is less than 2 m/sec. The 'rip-rap' will further reduce flow velocities to prevent scour.

Access over Redbank track

Council has concerns about the absence of pedestrian access across the proposed stormwater outlet.

As part of its commitment to the Redbank Track, CCA will as part of the completion of the track adjoining its boundary provide a bridge, designed for both cyclists and pedestrians, over the large eastern outlet structure.

Moreover, the proposed drainage system will reduce the volumes of overland flow crossing the walking track, thereby reducing the risk of washout and reducing construction and maintenance cost.

2.7 Landscaping

Issues were raised about the adequacy of landscaping to the north of the site along the Briens Road frontage and to the south along the rear boundary with Toongabbie Creek. Parramatta Council was concerned about the loss of flora from the site and did not want to see the existing open stormwater channel piped and instead envisaged that it be planted with native flora to encourage native birds.

With regard to the latter, the open drain is weed infested, provides habitat for snakes and rats, and breeding ground for mosquitoes. It is unsafe and its location does not accord with the design of the proposed development. This vegetation and the riparian vegetation adjoining the CCA do not comprise an endangered ecological community.

Tree removal is to be limited to 82 and these will be replaced at a ratio of 4:1 (four new trees for every one tree removed) as part of the site landscaping referred to below. A total of 370 new trees overall will be planted.

In response to the submissions about landscaping, CCA is amending the project as follows:

- Landscaping along the whole the Briens Road frontage (from the east of 102 to the west of 128) is to be significantly augmented with 30 advanced stock fig trees *(Ficus hilli)* and 30 Eucalyptus species similar to those removed (eg *Eucalyptus leucoxylon, Corymbia citridora, Eucalyptus tereticornis, Eucalyptus moluccana*) as illustrated in the accompanying revised Landscape Plan prepared by Clouston (see drawing PA-LA 01 and PA-LA 02).

- Wherever possible, available CCA land along the southern boundary of the site is to be landscaped with native plants such as *Eucalyptus tereticornis, Eucalyptus saligna, Angophora* fl*oribunda*, etc), to create a buffer to the riparian edge of Toongabbie Creek (see drawing PA-LA 01).

In addition CCA will undertake to complete the restoration, construction and planting of the Redbank Track along Toongabbie Creek adjoining CCA's boundary, in consultation with Parramatta Council, including the provision of a crossing over the stormwater outlet to the creek. CCA will undertake the ongoing maintenance of this section of track and the riparian corridor.

3.0 Preferred Project

On the basis of the submissions received and consultation with the Department of Planning, the following changes have been made to the project to minimise the environmental impacts. Accordingly, the Environmental Assessment Report (as exhibited) together with these changes comprises the Preferred Project.

3.1 Landscaping

- Landscaping along the whole the Briens Road frontage (from the east of 102 to the west of 128) is to be significantly augmented with 30 advanced stock fig trees (*Ficus hilli*) and 30 Eucalyptus species (eg *Eucalyptus leucoxylon, Corymbia citridora, Eucalyptus tereticornis, Eucalyptus moluccana*) as illustrated in the accompanying revised Landscape Plan prepared by Clouston (see drawing PA-LA 01 and PA-LA 02).

- Available CCA land along the southern boundary of the site is to be landscaped with native plants such as *Eucalyptus tereticornis, Eucalyptus saligna, Angophora floribunda*, etc), to create a buffer to the riparian edge of Toongabbie Creek (see drawing PA-LA 01).

- In order to reduce the visual presence of the HBW for residents along and around Balmoral Road, large tall trees are to be planted along the western side of Redbank Road to screen the eastern façade of the HBW at the terminating view from Balmoral Road. This will involve consultation with, and the agreement of, Parramatta Council and relevant landowners.

- CCA will explore with residents living on Edward and Christine Streets in Northmead measures to mitigate the visual impact of the HBW from their houses. This will include planting screening trees in the road reserve along Briens Road and/or on their properties, as well as any other feasible methods to hide the view of the structure from their homes.

3.2 Stormwater management

- A rip-rap lined outlet channel with stacked rock walls is to replace gabions at the large outlet on the eastern drainage line.

- The overall size of the major outlet structure is to be reduced and the energy dissipater is to be removed. The pipeline is now designed so as that flow velocities have been reduced to less than 2 m^3/s prior to the water exiting the culvert and thus no energy dissipation is required.

- To prevent further scour and improve creek bank amenity all existing outlets are to be upgraded using rip-rap and stacked rock.

3.3 Site access

- Access to 102 Briens Road will be restricted to service vehicles only. Staff and visitors will be restricted from using the eastern driveway to/from 102 Briens Road and access will be via the new proposed driveway and access road to be located to the west of 102 Briens Road. The driveways and access road will be clearly signposted.

3.4 Noise barrier

- The noise barrier required to achieve the necessary noise mitigation will adhere to the following specification:

  - commence at a point 15 m east of the existing electricity sub-station, continue east along the northern side of truck access located on top of the retaining wall and landscape mounding between the car and truck access roads. It will be of solid construction (no gaps) with a minimum height of 3.2 m above the top of the retaining wall (not the truck pavement level);

  - continue east along the top of the retaining wall between the car and truck access roads, and then follow the truck access road to the south-east and then south with a minimum height of 3.2 m;

  - continue south with a minimum height of 3.2 m to a point directly west of the northern facade of the building at 102 Briens Road;

  - continue a further 30 m south but may be reduced to a minimum height of 1.8 m.

4.0 Statement of Commitments

In accordance with Part 3A of the *Environmental Planning and Assessment Act 1979*, the following are the commitments made by CCA to manage and minimise potential impacts arising from the Coca-Cola Amatil Northmead Redevelopment Project.

4.1 Environmentally sustainable development

- CCA is committed to the principles of sustainability as defined in the *Environmental Planning and Assessment Act 1979*. The proposed development will incorporate the following measures in support of the principles of ESD:
  - Low energy and resource use building design;
  - Rainwater harvesting for irrigation and to minimise impact on stormwater infrastructure;
  - Natural ventilation of the HBW;
  - Filtration of water entering Toongabbie Creek from the CCA site and externally.
- CCA will continue to explore potential co-generation initiatives either solely or in partnership with Westmead Hospital.
- CCA will explore with Parramatta Council opportunities to utilise harvested rainwater to irrigate nearby playing fields and parks.
- CCA will develop and implement an Energy Management Plan focused on the containment and/or reduction of greenhouse gas emissions, energy conservation and use of alternative energy sources.

4.2 Management of construction noise, vibration, dust and erosion

- Management of noise, vibration, dust, soil and erosion arising from the proposed construction will be undertaken in accordance with the Construction Management Plan for the development.

4.3 Management of construction waste

- CCA undertakes to adopt the following targets as performance requirements for the management of construction waste:
  - 80% off site recycling for demolition wastes;
  - 90% recycling for excavation wastes; and
  - 70% off site recycling for construction wastes.

4.4 Management of construction traffic

- A Construction Traffic Management Plan will be prepared prior to issue of the Construction Certificate. The plan will include the principles set out in the Environmental Assessment Report to minimise construction traffic impacts at different stages of the construction process.

- CCA undertakes to ensure that the management of access, traffic and parking during construction will be in accordance with the Construction Traffic Management Plan, the requirements of the Roads and Traffic Authority and Parramatta City Council, and relevant Australian Standards.

4.5 Management of operational noise

- Plant will be designed, selected and operated in accordance with the DEC Industrial Noise Policy Guidelines and the Protection of Environment Operations Act.

- CCA will implement within 4 weeks of approval of the project a traffic management plan whereby all CCA and contractor trucks and forklifts will be required to install white noise reverse alarms to eliminate the impact of reverse alarms.

- CCA will proactively eliminate any gross external noise and any practices that increase noise – such as hammering on sugar trucks to loosen residue.

- CCA will implement a Traffic Noise Management Strategy for CCA and contract truck and forklift drivers to reduce - through contract, coaching, performance management and monitoring - noise creating practices. This includes elimination of exhaust breaking; requiring drivers to turn off engines during queuing; applying best noise practice in the selection and maintenance of vehicle fleet, etc.

- CCA will monitor noise arising from the ongoing operations of the facility, and establish formal mechanisms to record and respond to any complaints from the public about operational noise. This will include publicising a complaints handling facility such as a freecall telephone number.

4.6 Operational traffic and road safety

- CCA will ensure, via contract, coaching and performance management, that no CCA or contract trucks (semi-trailers and B-doubles) will enter or depart the CCA site via Darcy Road and that all CCA and contract vehicles will access the site to/from the Cumberland Highway and M2/M4/M7 Motorways.

- CCA will, via contract, coaching and performance management, manage and monitor the behaviour of CCA drivers and contractors between the Cumberland Highway and the CCA gateway in order to eliminate exhaust breaking, ensure speed limit adherence and foster safe driving practices – particularly when entering and exiting the site.

- CCA will establish formal mechanisms to record and respond to any complaints from the public about CCA or contract trucks using local roads. This will include publicising a complaints handling facility such as a freecall telephone number.

- CCA will undertake to pursue its request of the RTA and the Parramatta Traffic Committee for a weight limit to be introduced between the site access driveway and Darcy Road and the introduction of a light traffic thoroughfare to the west of the site.

- CCA will fund the installation of an electronic advanced traffic signal warning sign for eastbound vehicles on Old Windsor Road approaching the existing traffic lights at the intersection of Old Windsor Road and Briens Road.

4.7 Hazard management

- CCA will undertake the following in relation to managing hazards during construction and operations:

  - verifying during the design process that codes and standards have been applied appropriately;

  - ensuring during detailed design that the risks associated with the storage of compressed natural gas are managed to an acceptable level;

  - undertaking a construction safety study in line with HIPAP No. 7 to assess risks due to demolition, construction and simultaneous operations.

  - undertaking a Fire Safety Study in line with HIPAP No. 2, including an assessment of offsite impacts and escalation of incidents to existing hazardous materials.

4.8 Visual impacts of HBW

- In order to reduce the visual presence of the HBW for residents along and around Balmoral Road, CCA undertakes, in consultation with Parramatta Council and relevant landowners, to plant large tall trees along the western side of Redbank Road to screen the eastern façade of the HBW at the terminating view from Balmoral Road.

- CCA will explore with residents living on Edward and Christine Streets in Northmead measures to mitigate the visual impact of the HBW from their houses. This will include planting screening trees in the road reserve along Briens Road and/or on their properties, as well as any other feasible methods to hide the view of the structure from their homes.

4.9 Helicopter operations

- CCA undertakes to install markers, obstruction lighting or similar mechanisms on the HBW for avoidance purposes. This will be undertaken in consultation with CareFlight and on the advice of an aviation consultant to ensure that the design and specification will assist CareFlight in identifying the landing area, particularly when using instruments at night or during poor visibility.

4.10 Restoration of Redbank Track

- CCA undertakes to complete the restoration, construction and planting of the Redbank Track along Toongabbie Creek adjoining CCA's land, in consultation with Parramatta Council, including the provision of a crossing over the stormwater outlet to the creek.

- CCA will undertake the ongoing maintenance of the section of the track and the riparian corridor in this locality.

4.11 Use of the North-west/Parramatta-Rouse Hill Transit Way

- CCA undertakes to establish an incentive program to encourage Northmead employees to use the new T-Way to travel to work with a target 10% reduction in the number of private vehicles visiting the site.

4.12 Community facilities and services

- CCA undertakes to provide the following community services and facilities to benefit the local community and users of Windsor Road:
  - investigating the use of rainwater harvested from the roof of the HBW to irrigate surrounding sports fields and open space, including Redbank Oval (Arthur Phillip Park);
  - completing the construction, and ongoing maintenance of the section of the Redbank Track adjoining the CCA boundary; and
  - funding an electronic advance traffic signal warning sign on Old Windsor Road.

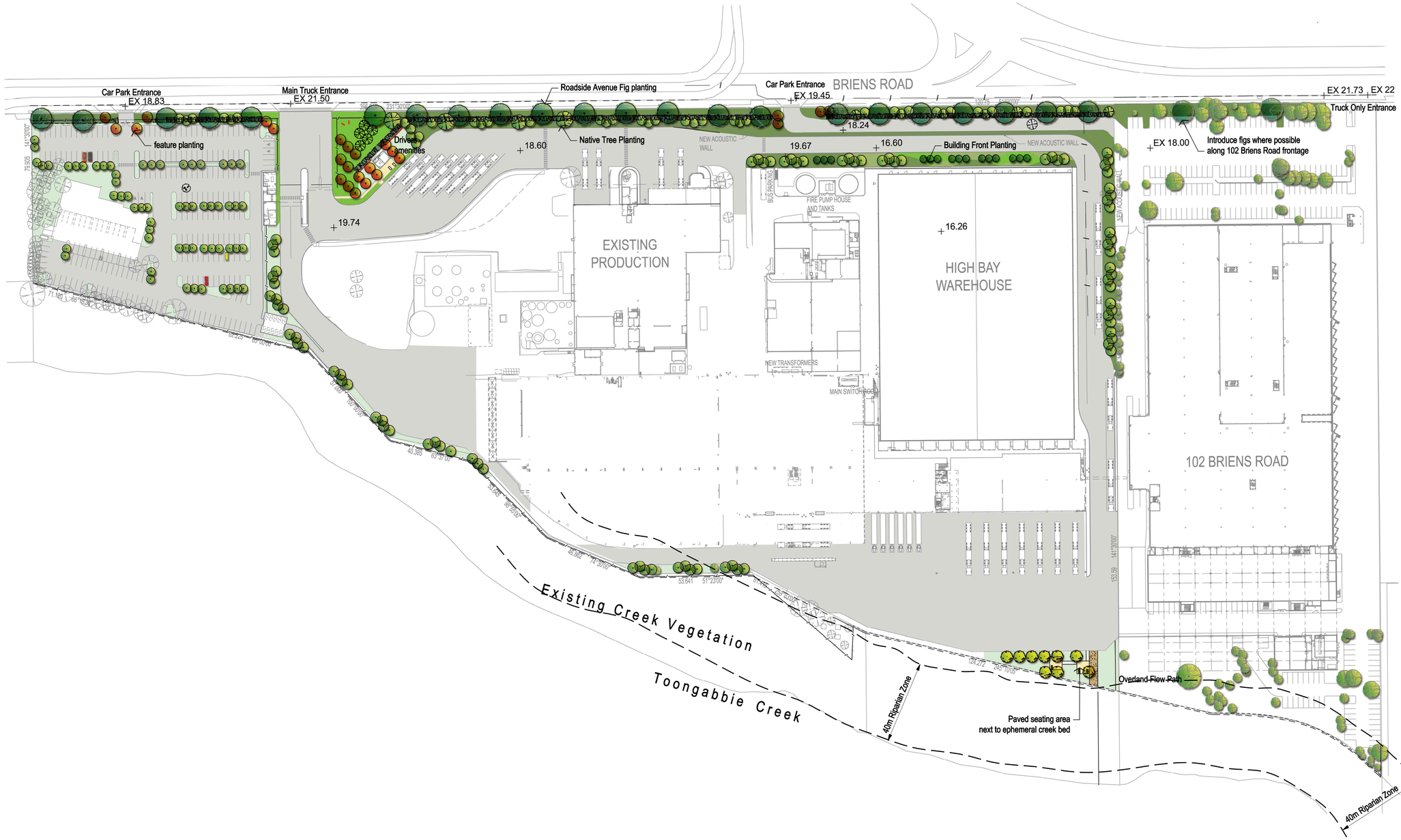
4.13 Arts and culture

- CCA undertakes to fund an arts and cultural program for Parramatta – in partnership with Parramatta City Council.

4.14 Community and stakeholder engagement

- CCA undertakes to establish a complaints handling mechanism to record and address issues in relation to the construction program and ongoing operations of the Northmead plant.
- CCA undertakes to hold an 'Open Day' once a year at the Northmead facility CCA to give the local community an opportunity to view the operations of the plant and to raise any matters of interest.
- CCA will keep residents informed about construction through a regular newsletter distributed in the local area.
- CCA will consult with Westmead Hospital once the hospital's development proposals are further developed to identify and explore possible synergies and mutual opportunities, and avoid possible conflicts.

Attachment A
Revised Landscape Plan



LEGEND

- Site Boundary
- Roadside avenue planting
- Existing Eucalypt planting
- New Eucalypt planting
- Entry feature planting
- Carpark planting
- Building front planting
- Dry creek planting
- Mass planting
- Groundcover
- Native grass planting
- Gravel & rock edge
- Paving
- Proposed fence
- Existing fence
- 16.26 Levels
- 40m Riparian Zone

NORTH

0 1 2 3 4 5 100 m

Coca Cola Amatil • Northmead

LANDSCAPE PLAN

NS 909 PA-LA 01

26/10/06 Issue: C

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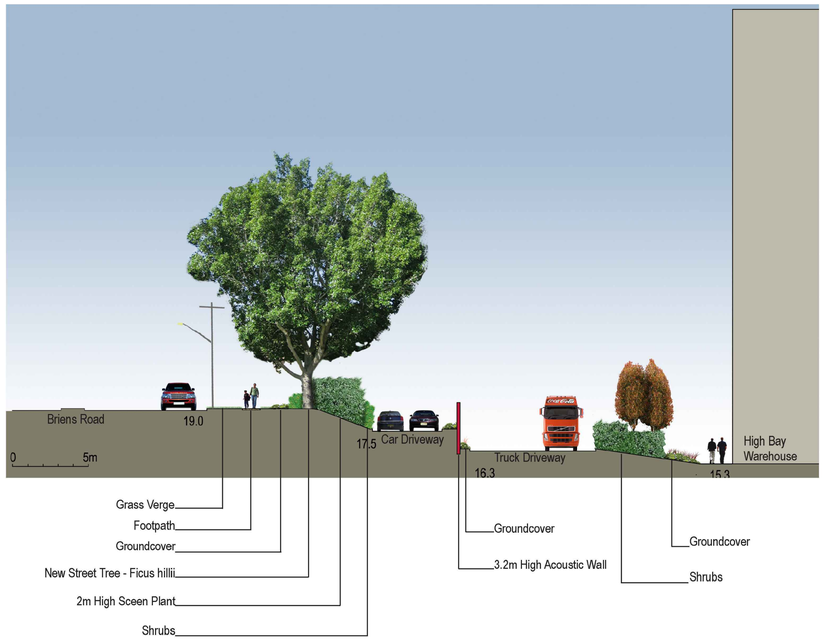

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NORTH

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ELEVATION AND SECTION

NS 909 PA-LA02

26/10/06 Issue: C