



***MAJOR PROJECT ASSESSMENT:
ALTERATIONS AND ADDITIONS TO
CHATSWOOD CHASE SHOPPING CENTRE
LOT 3 IN DP 790756, LOT 1 IN DP 781567,
LOT 1 IN DP 806034 AND LOT 1 IN DP
74357
345 VICTORIA AVENUE, 19 HAVILAH
STREET AND 8 MALVERN AVENUE,
CHATSWOOD
Proposed by COLONIAL FIRST STATE
PROPERTY MANAGEMENT (CFSPM)***

Director-General's
Environmental Assessment Report
Section 75I of the
Environmental Planning and Assessment Act 1979

*(prepared by Willoughby Council under instrument of
delegation dated 2 January 2007)*

November, 2007



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1 EXECUTIVE SUMMARY

1.1 Overview

This is a report on a major project application.

Colonial First State Property Management (the Proponent) is proposing to carry out alterations and additions to Chatswood Chase Shopping Centre at 345 Victoria Avenue, 19 Havilah Street and 8 Malvern Avenue (Lot 3 DP 790756, Lot 1 DP 781567, Lot 1 DP 806034, Lot 1 DP 74357) ("the proposal").

The objective of the proposal is to maintain Chatswood Chase's position as a premier shopping destination and contribute to the continuous enhancement of Chatswood centre. To achieve the objective, the proposal seeks to address a number of issues associated with the presentation and operation of the existing centre including but not limited to pedestrian congestion on the Lower Ground Floor, lack of transparency of the main entry in Victoria Avenue and the current need for use of a secondary alternate entry for access for people with disabilities and parents with prams from Victoria Avenue.

In addressing the existing issues with the centre and to allow high quality refurbishment the project proposes:

- Demolition of two adjacent office buildings;
- Expansion of the shopping centre within its current site and onto the adjacent sites previously occupied by the office buildings;
- Refurbishment of the internal areas of the shopping centre;
- Improving the external presentation to Victoria Avenue, Havilah St and Malvern Avenue;
- Upgrading the pedestrian and vehicular access and car parking facilities;
- Providing landscaped set-backs in Havilah Street and Malvern Avenue and enhanced landscaping to Victoria Avenue;
- Addressing storm-water management issues.

The estimated project cost of the development is \$103.5 million. The proposal will create 460 full time equivalent construction jobs and 520 full time and part time Centre operational jobs on completion. During construction it is estimated that the supplier multiplier effects on employment will provide 1000 jobs and during operation the multiplier employment impact is estimated will be 700 jobs. It is noted that the project has little impact on the Archer Street side of the existing shopping centre as it is intended to refurbish that component at a later date when the development designs for the Civic Place retail/hotel site opposite in Archer Street have progressed. Futures proposals for that part of the site can then consider the changing context.

During the exhibition period, the Council received a total of 2 submissions from public authorities and 29 submissions from the public plus a submission from the local Member of Parliament on behalf of a constituent. Key issues considered in the assessment included:

1. Relationship of the project and its impacts on residential units adjacent at 1-3 Havilah Street;
2. Relationship and impacts on adjacent commercial development;
3. External presentation to the public domain;
4. Management of vehicular, pedestrian and delivery access to the site;
5. Sustainability initiatives proposed;
6. Storm-water management implications;
7. Car parking provision;
8. Construction staging and impacts especially traffic management, noise and vibration; and,
9. Traffic management impacts in the surrounding road network.

The Council as the delegate of the Director General of the Department of Planning has assessed the merits of the project and is satisfied that the impacts of the proposed development have been addressed via the

Proponent's Statement of Commitments and the recommended conditions of consent, and can be suitably mitigated and/or managed to ensure a satisfactory level of environmental performance. On these grounds, the Council is satisfied that the site is suitable for the proposed development and that the project will provide environmental, social and economic benefits to the region. On this basis the Council considers that the Department should also be satisfied with the project.

The proposal has not met all statutory requirements but the proposal has adequately justified any non-compliances.

The Council as the delegate of the Director General recommends that the project be approved, subject to conditions.

2 BACKGROUND

2.1 THE SITE

2.1.1 Site context and location

The site, at 345 Victoria Avenue, 19 Havilah Street and 8 Malvern Avenue, Chatswood, (Lot 3 in DP 790756, Lot 1 in DP 781567, Lot 1 in DP 806034 and Lot 1 in DP 74357), is located within the local government area of Willoughby and is owned by Colonial First State Property (Lot 3 in DP 790756 and Lot 1 in DP 806034), Anthony Valos (Lot 1 in DP 781567) and Willoughby City Council (Lot 1 in DP 74357 being the existing driveway to Malvern Avenue). Colonial First State Property is in the process of purchasing the land not in their ownership.

The site forms the eastern edge of Chatswood central business district and in particular the retail precinct of Chatswood CBD. It has its main frontage, entrance and address to Victoria Avenue and a second frontage and entrance to Archer Street. Opposite in Victoria Avenue is mixed retail/commercial development. Opposite in Archer Street is retail development, the Civic Place hotel development site and the Our Lady of Dolours Catholic Parish School and Church. The Civic Place development consisting of a new library, concert hall, drama theatre, multi-purpose hall and exhibition space as well as the hotel and retail shops and restaurants is a project that is expected to commence construction during 2008.

The eastern side of the site abuts the commercial buildings at 341 Victoria Avenue and 5 Havilah Street and a mixed commercial/residential building at 1-3 Havilah Street. Beyond those properties on the north and east, the site has frontage to Havilah Street. To the north the site has frontage to Malvern Avenue and it extends along the rear of Mercy College Catholic Girls High School and the two to three storey office buildings at 12-14 and 16-18 Malvern Avenue. Opposite in Malvern Avenue and Havilah Street is low density residential development beyond which is the North Chatswood Heritage Conservation Area.

The site is located approximately 450 metres along Victoria Avenue from Chatswood Station and Interchange. All STA bus routes except one entering Chatswood from the south and east enter Chatswood along Victoria Avenue past the site to terminate at the Interchange.

Chatswood Chase is within the major sub-regional shopping precinct of Chatswood. Chatswood provides more than 190,000 square metres of retail floor space and attracts shoppers from the whole of the northern and north-eastern side of Sydney. Chatswood is recognised as a Major Centre in the Department of Planning's Metro Strategy. Statistically in terms of office and retail floor space and employment levels, Chatswood is the largest of the major centres identified in the Metro Strategy.

2.1.2 Existing site features

The site of the existing shopping centre is irregular in shape with a total area of 29,395 square metres. The additional land to be added to the site totals 5,939 square metres increasing the site area to 35,334 square metres.

The existing site is wholly occupied by the existing Chatswood Chase shopping centre and its multi-deck car park. It currently presents as a classic "big-box" shopping centre when viewed from Victoria Avenue and Archer Street. The frontage to Victoria Avenue is 120 metres that includes the width of the driveway entry in Victoria Avenue located opposite Neridah Street. The driveway entry from Victoria Avenue for a distance of 10 metres from the front alignment is public road and is a remnant of Neridah Street that originally passed through the original site. The four lane driveway connects to the basement level car parking and a ground level loading dock.

The Archer Street frontage also has a length of approximately 120 metres. The existing shopping centre is set back 3 metres from the street alignment which allows for landscaping and a covered casual seating area along that frontage. An express ramp to the upper levels of the car park runs along the northern boundary of the building from the Archer Street frontage. Mills Lane bounding the southern side of the Archer Street frontage provides an access to a second ground floor loading dock.

View of the existing shopping centre from Havilah Street is that of the open deck car park for a length of approximately 55 metres. The car park structure is set back 15 metres from the Havilah Street frontage which allows for some landscaped screening of mature trees along that frontage of which six are in healthy condition. From Malvern Avenue the frontage of the existing shopping centre is only the width of the four lane driveway entry to the lower ground level of car parking and the third loading dock facility on the site. The remainder of the existing development is viewed as a backdrop to the two to three storey commercial office buildings that front Malvern Avenue and the corner of Havilah Street. Along the shared boundary to the rear of 1-3 and 5 Havilah Street there is a 4.3 metre set back (increasing to 7 metres on the upper level) that provides separation between development on those sites and the multi deck car park of the shopping centre. Located in the set back is a stand of She-oaks (*Casuarina sp.*).

The topography of the existing site provides a consistent fall in natural ground levels from the south west to the north-east of the existing site. Overall the fall is in the order of 4 metres which is relatively gentle over the large site area. There are no known natural significant features such as rock outcrops or the like that remain on the existing site or on the additional land that is being added to the site. However, the natural drainage course that originally passed through the site has overland flow issues in peak rain periods that continue to impact the site. In a severe storm event, as was experienced in 1992, flooding of the basement car parks and the building in the vicinity of the end of Mills Lane will mean consideration of the 1 in 100 year storm event in the design of the proposed development. The storm water is now diverted into a pipe that runs below street level along the Victoria Avenue frontage and then down the centre's eastern side boundary shared with the properties fronting Havilah Street. It then passes under the office building at 5 Havilah Street to cross under Havilah Street and connect up with the open channel link to Scotts Creek.

2.2 SITE HISTORY

The existing Chatswood Chase Shopping Centre was constructed during 1981 and 1982 following approval by Council in Development Consent 1980/262 as amended by Development Consent 1981/157. Prior to development as a shopping centre the land that made up the site was used in the main as a Council Works Depot with residential cottages located along Havilah Street and retail shops and a church fronting Victoria Avenue. The continuation of Neridah Street and Mills Lane passed through the original site and were closed and incorporated into the amalgamated site at the time of development of the existing centre. A natural water course crossed the site that connected to an open channel running through the residential area east of the site. It is part of the Scotts Creek system flowing into Middle Harbour. As part of the development of the existing centre the channel was piped and diverted but still connects to the open channel on the opposite side of Havilah Street.

The church was reconstructed on an adjacent site fronting Victoria Avenue as part of the original development and is still located at 365 Victoria Avenue. Other than internal refurbishment, Chatswood Chase remained largely unchanged after completion until major extensions and alterations occurred from 1994 to 1999 following Development Consent 1994/93 (as amended). These alterations and additions added a retail level and provided additional basement and roof level car parking on the site.

The additional site area that is being incorporated into the existing shopping centre site in the subject proposal is currently occupied by two to three storey office buildings with frontages and access from Havilah Street and Malvern Avenue. Prior to development of that land for office purposes which occurred during the mid-1980's, the land was used for residential purposes.



Figure 1 – Site Location - Regional



Figure 2 – Site Location – Chatswood CBD

3 PROPOSED DEVELOPMENT

This is an application for approval to carry out major alterations, additions and refurbishment of Chatswood Chase Shopping Centre. The development proposes:

- Demolition of two small office buildings at 19 Havilah Street and 8 Malvern Avenue;
- Expansion of the shopping centre onto those sites to allow relocation of the supermarket located on the Lower Ground Floor with an increase in the size of the supermarket from 2,644 square metres to 3,571 square metres (927 square metres increase in floor area).
- Reconfiguration and alteration to the layout of the Lower Ground Floor to separate the fresh food service from the dining and food court facilities creating a fresh food precinct within the centre and new dining terrace;
- Provision of a new pedestrian entry from Havilah Street;
- Alteration of the Victoria Avenue entrance to open the entrance to both the Lower Ground and Ground Floors of the Centre by making use of the split levels between the entrance and the two floor levels.
- Alteration and extension of the Ground Floor providing a new mall connection to reconfigured car parking;
- Alteration and extension over the Victoria Avenue driveway providing a new mall with changes to circulation and connection to reconfigured car parking;
- Alteration and addition to the car parking levels to accommodate additional car parking commensurate with the additional floor area;
- Provision of external finishes and treatments to the presentation of the centre when viewed from Havilah Street and Malvern Avenue that also consider acoustic impacts and light spill;
- Renovation of the presentation of the centre when viewed from Victoria Avenue to up-grade the entry experience, provide access for people with disabilities and generally provide a more interactive frontage with the public domain;
- Landscaping to the 9 metre set backs to Havilah Street and Malvern Avenue; and
- Alterations to the Victoria Avenue facade propose encroachment of elements of the façade, awnings and a centre identification blade into the road reserve of Victoria Avenue.

The construction of the proposed development is proposed to be staged to enable continuous trading of the centre during the construction. Five zones have been identified for the construction staging being Zones "A" to "E" reflecting the general sequence of the construction program. Zone A is located at the corner of Havilah Street and Malvern Avenue and works in that zone will occur first to demolish the existing office buildings, extend the basement car parking, construction of the new supermarket premises and car parking above it including the new access arrangements. Zone B is the alterations to provide the new mall connection and fresh food precinct to the supermarket and reconfiguration of the retail space on Ground Level and above and car parking above. The construction program will allow the supermarket to be relocated and enable the subsequent stages to proceed.

The proposed development covers land that is controlled by two environmental planning instruments. The existing site of Chatswood Chase Shopping Centre is on land zoned Business Retail 3(c1) in Sydney Regional Environmental Plan No. 5 (SREP 5). The land in Havilah Street and Malvern Avenue that is proposed to be added to the site is zoned Restricted Office 3(e) in Willoughby Local Environmental Plan No. 1995 (WLEP 1995). The development data for the proposed development given below is separated into two tables to reflect the two zonings and the development standards of the respective Instruments.

Table 1 – Development data SREP 5

	Existing	Proposed	Relevant Development Standard (SEPP, REP, LEP, DCP)	Compliance
Site Area	29,395	29,395	N/A	/N/A
GFA	64,128	75,534		Yes
FSR	2.18:1	2.57:1	3:1	Yes
Height	22 metres (27m glazed roof over central void)	22 metres (27m glazed roof over central void)	52 metres	Yes

Table 2 – Development data WLEP 1995

	Existing	Proposed	Relevant Development Standard (SEPP, REP, LEP, DCP)	Compliance
Site Area	4,655	4,655	N/A	N/A
GFA	4,450	2,342		Yes
FSR	1.05:1	0.5:1	1:1	Yes
Height	10 metres	18 metres	9 metres	No
Setbacks	9 metres	9 metres	9 metres	Yes

The proposed development/redevelopment of the shopping centre considered in total proposes increasing gross floor area of the Centre from 64,128 square metres to 77,876 square metres. Allowing for the gross floor areas to be demolished in the office buildings of 4,450 square metres this represents an overall floor space ratio increase of 2.18:1 to 2.2:1.

The car parking currently provided on site totals 2,309 car spaces which is one space per 22.22 square metres of gross leasable floor space (GLA). The car parking is unevenly distributed across the site relative to the two zonings that control development on the site. The application with the alteration and reconfiguration of the car parking proposes to provide one space per 25.4 square metres of gross leasable floor space. Council's car parking requirements of WDCP are one car space per 25 square metres which is based on total retail selling areas. These areas are not specifically defined at this stage of the design development. On the basis that GLA is greater than total retail selling area, the car parking provision is within requirements.

The issue of non-compliance as noted in the table is the height of the proposed development on that part of the site zoned 3(e) under WLEP 1995, that is, on 19 Havilah Street and 8 Malvern Avenue. The permissible height is 9 metres from natural ground level to roof height but the actual height proposed at its highest point of the architectural blade feature is 18 metres. The blade is part of the architectural treatment that addresses the corner of Havilah Street and Malvern Avenue. Elsewhere along those frontages the building has variable height averaging 16 metres. The building on that part of the site accommodates car parking, the supermarket with a floor level at approximately natural ground level, the supermarket plant room and ancillary offices. The building bulk along the Havilah Street/Malvern Avenue frontages is primarily car parking levels that are screened from the public domain by external architectural detailing that includes acoustic panels. Generally it is concluded that the non-compliance with the height control is acceptable in the circumstances of the location having regard to the stepped building form, the 9 metre set back at ground level, the width of the road carriageway separating the low density houses opposite from the new building and the façade treatment.

The further issues of non-compliance not expressed in the tables concern permissibility of general shops in the 3(e) zone of WLEP 1995 and the restriction on use of part of the site in the 3(c1) zone of SREP 5 to car parking (Clause 9 of SREP 5). A detailed discussion of these issues is contained within Section 4 of this report.



Figure 3a: Lower Ground Floor



Figure 3b: Ground Floor

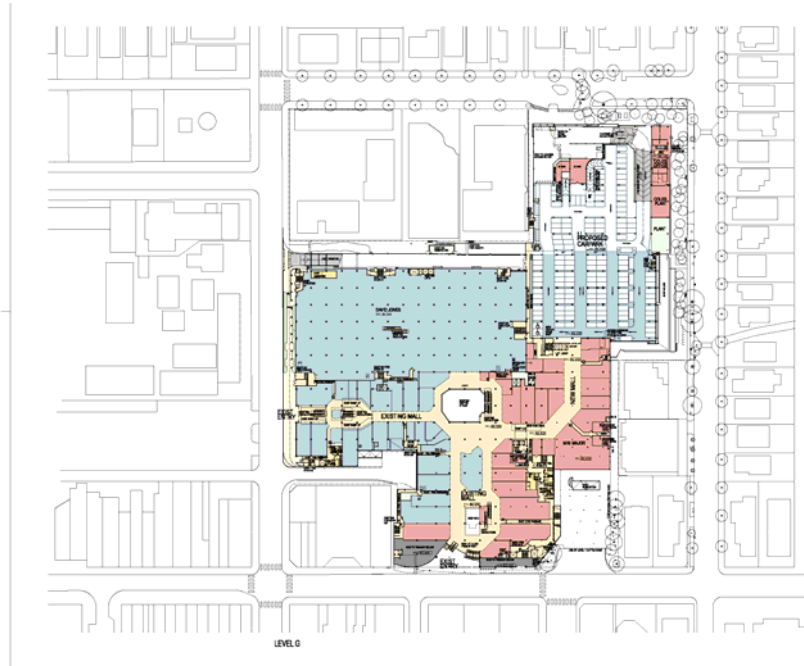


Figure 3c: Level 1

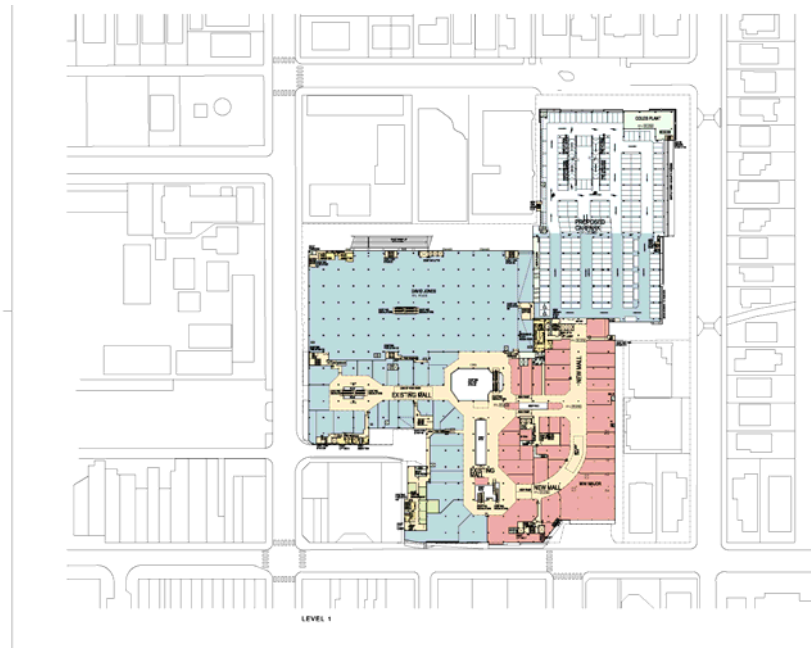


Figure 3d: Level 3

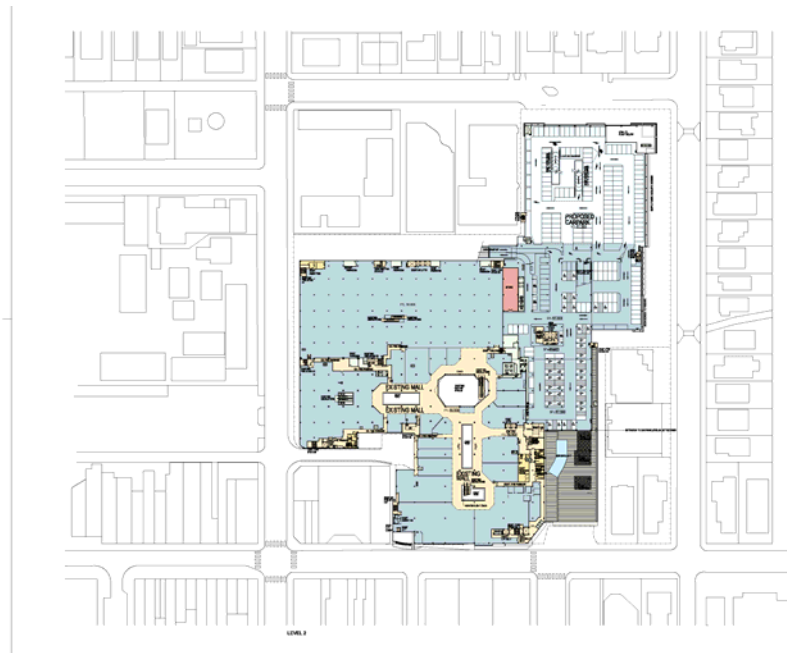


Figure 3e: Level 3

3.1 PROJECT CHRONOLOGY

- 27 October, 2006 – request for opinion lodged with the Department as to whether Part 3A applies (Clause 6).
- 21 December, 2006 – the Minister formed the opinion that the proposal is a Project and that Part 3A of the Act applies.
- 2 January, 2007 – Instrument of Delegation to Willoughby City Council to carry out the functions of the Director General conferred by Part 3A of the Environmental Planning and Assessment Act, 1979.
- 23 January, 2007 – Director- General's Environmental Assessment Requirements (DGRs) signed by the Director- General's Delegate and provided to the proponent.
- 7 June, 2007 - Environmental Assessment lodged with Council and the Department.
- 13 June, 2007 - Environmental Assessment (EA) lodged deemed adequate.
- 25 June, 2007 to 25 July, 2007 – EA placed on public exhibition
- 18 July, 2007 a Public Briefing was held at Willoughby City Council when the proponent outlined the proposed development to interested members of the community and neighbours and answered questions.
- 8 August, 2007 – Summary of submissions provided to proponent and issues from the Council
- 11 September, 2007 – preferred project report submitted with the plans. Updated specialist reports where relevant were received on 2 October, 2007.
- 3 October, 2007 – meeting held with correspondents from adjoining properties in Malvern Avenue and Havilah Street.
- 5 October, 2007 - further amended plans were received that address some plan anomalies.
- Several Meetings were held with proponent and the proponent's specialist consultants throughout the consideration and assessment of the proposal.
- 6 November, 2007 – final preferred project plans received that addressed inconsistencies in some plans

3.2 PROJECT AMENDMENTS

A preferred project report was submitted on 11 September, 2007 incorporating the following amendments that addressed submissions from local residents and businesses and comments of Council Officers:

- Provision of an increased set back to 1-3 and 5-7 Havilah Street to address mass and bulk impacts and loss of existing buffer landscaping of She-Oaks. The set back now proposed is 4.4 metres which is the set back of the existing car park structure at ground level. The provision of the set back allows the retention of the trees. It achieves a separation of 5.87 metres from the extended retail levels to the face of the residential balconies on Levels 1 and 2 of the mixed use building at 1-3 Havilah Street and a separation of to the 7 metres to the penthouse level unit on Level 3 and roof recreation area. The separation to the commercial building at 5-7 Havilah Street achieved by provision of the set back is 7.55 metres. Car park levels above the retail are setback further to 7.35 metres from the boundary which is 9.2 metres from the face of the balconies below.
- The Havilah Street pedestrian entry was modified to remove the roof over the entry walkway and a 2.5 metre high hedge screen in a widened planter bed has been provided to the side boundary to 5-7 Havilah Street.
- Level 2A of the car park has been reduced in size to reduce car parking commensurate with the reduced floor space as a result of the above amendments.
- The extent of Basement Levels 1 and 2 have been pulled back from the boundary with 12-14 Malvern Avenue by 9 metres to reduce the extent of excavation adjacent to a building containing two sensitive day surgery centres.
- A set back of 2.4 metres has been provided adjacent to 12-14 Malvern Avenue and the architectural entry/corner detail of the building over the driveway has been extend to wrap the corner and address the public domain approaching the site in Malvern Avenue from the west.

These changes were not advertised but were submitted to the Department for placing on the Department's web site. The neighbours who made submissions on the original application were invited to Council on 3 October, 2007 to view and discuss the preferred project and provide further comments. These comments were communicated to the proponent and are discussed later in this report. The proponent advised on 9 October, 2007 that no further design changes were proposed and that the preferred project would remain as lodged in September/October and presented on 3 October, 2007.

4 STATUTORY CONTEXT

4.1 MAJOR PROJECT DECLARATION

The project is a Major Project under *State Environmental Planning Policy (Major Projects) 2005* being described in Schedule 1, Clause 13 being development within Group 5 Residential, Commercial or Retail Projects. The opinion was formed by the Minister 21 December, 2006.

4.2 PERMISSIBILITY

The site is affected by two environmental planning instruments being Sydney Regional Environmental Plan No. 5 and Willoughby Local Environmental Plan No. 1995. The proposed development is not strictly permissible under the provisions of those plans. The objectives and provisions of those plans are discussed further in Section 4.8 of this report. Notwithstanding, the provisions of those plans are set aside by Section 75R of the Environmental Planning and Assessment Act, 1979 as a declared major project that achieves the objects of the Act as discussed in Section 4.5.

4.3 MINISTER'S POWER TO APPROVE

The Council as the delegate of the Director General has exhibited the Environmental Assessment (EA) in accordance with section 75H (3) of the Environmental Planning and Assessment Act, 1979, as described in section 5, below. Notwithstanding that elements of the project are not permissible under the relevant environmental planning instruments, the project meets the requirements of the Major Projects SEPP. Therefore, the Council as the delegate of the Director General has met the legal obligations of the Department and the Minister has the power to determine this project.

4.4 DIRECTOR-GENERAL'S ENVIRONMENTAL ASSESSMENT REQUIREMENTS (DGRS)

The DGRs issued on 23 January, 2007 required the following issues to be addressed:

- Relevant EPI's and Guidelines to be addressed;
- Built Form, Urban Design and Streetscape;
- Public Domain, Pedestrians and Landscaping;
- Traffic and Parking Issues;
- Ecologically Sustainable Development;
- Drainage and Stormwater;
- Provision of Public Services and Infrastructure;
- Utilities
- Social and Economic Context;
- Demolition/Construction Impacts;
- Waste Management;
- Building Code of Australia Compliance Report;
- Noise Impacts; and,
- Statement of Commitments

The DGRs are in **Appendix A**

The EA lodged by the proponent on 7 June, 2007, was adequate in addressing the DGRs.

4.5 OBJECTS OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979

The objects of any statute provide an overarching framework that informs the purpose and intent of the legislation and gives guidance to its operation. The Minister's consideration and determination of a project application under Part 3A must be informed by the relevant provisions of the Act, consistent with the backdrops of the objects of the Act.

The objects of the Act in section 5 are as follows:

(a) to encourage:

- (i) the proper management, development and conservation of natural and artificial resources, including agricultural land, natural areas, forests, minerals, water, cities, towns and villages for the purpose of promoting the social and economic welfare of the community and a better environment,*
- (ii) the promotion and co-ordination of the orderly and economic use and development of land,*
- (iii) the protection, provision and co-ordination of communication and utility services,*
- (iv) the provision of land for public purposes,*
- (v) the provision and co-ordination of community services and facilities, and*
- (vi) the protection of the environment, including the protection and conservation of native animals and plants, including threatened species, populations and ecological communities, and their habitats, and*
- (vii) ecologically sustainable development, and*
- (viii) the provision and maintenance of affordable housing, and*

(b) to promote the sharing of the responsibility for environmental planning between the different levels of government in the State, and

(c) to provide increased opportunity for public involvement and participation in environmental planning and assessment.

Of particular relevance to the assessment of the subject application is consideration of the Objects under section 5(a) and 5(b). Relevantly, the Objects stipulated under section 5(a) (i), (ii) and (vii) are significant factors informing the determination of the application. The project does not raise significant issues with regards to (iii), (iv), (v), and (vi).

With respect to ESD, the Act adopts the definition in the *Protection of the Environment Administration Act 1991* including the precautionary principle, the principle of inter-generational equity, the principle of conservation of biological diversity and ecological integrity, and the principle of improved valuation, pricing and incentive mechanisms.

The Council has considered the Objects of the Act, including the encouragement of ESD in the assessment of the project application.

4.6 Ecologically Sustainable Development (ESD) Principles

There are five accepted ESD principles:

- (a) decision-making processes should effectively integrate both long-term and short-term economic, environmental, social and equitable considerations (the integration principle);*
- (b) if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation (the precautionary principle);*
- (c) the principle of inter-generational equity - that the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations (the inter-generational principle);*
- (d) the conservation of biological diversity and ecological integrity should be a fundamental consideration in decision-making (the biodiversity principle); and*
- (e) improved valuation, pricing and incentive mechanisms should be promoted (the valuation principle).*

The Council has considered the proposed development in relation to the ESD principles and has made the following conclusions:

Integration Principle - the social and economic benefits of the proposal are demonstrated in the documentation submitted for the assessment of this application. The environmental impacts are and will be addressed through the proponent's EA report including the Statement of Commitments, and recommended conditions of consent. The Council's assessment has duly considered all issues raised by the community and public authorities. The proposal as recommended for approval does not hinder the opportunities of others to continue to use and enjoy land in the vicinity.

Precautionary Principle – the EA is supported by technical and environmental reports which conclude that the proposal's impacts can be successfully mitigated. No irreversible or serious environmental impacts have been identified. The recommended conditions require additional information to ensure the proposal's extent and nature is fully documented, particularly with respect to storm water management, and opportunities are provided for proposed management measures to incorporate best practices.

Inter-Generational Principle – the alterations and additions to the existing shopping centre represents a sustainable use of land providing integrated retail services in a location well served by public transport. The retail product on offer by the proponent will enhance the shopping experience of Chatswood.

Biodiversity Principle – The site does not contain any threatened or vulnerable species, populations, communities or significant habitats. The preferred project proposes to maintain the existing amount of

landscaping on the site and a condition requires at least 60% locally native species further satisfying the biodiversity principle.

Valuation Principle – the proposal seeks to promote further retail development in an existing CBD area making better use of existing infrastructure of Chatswood CBD. The proposal has identified appropriate safeguards to mitigate impacts and undertaken to provide those safeguards in the project

The proponent has committed to the ESD principles and has reinforced this through the Statement of Commitments and the Environmental Assessment which explores key ESD opportunities, including mechanical, electrical and hydraulic systems as well as architectural designs to ensure high environmental performance is delivered.

4.7 Section 75I OF THE ACT

Section 75I(2) of the Act provides that the Director-General's report to the Minister is to address a number of requirements. These matters and the Council's response as a delegate of the Director General are set out as follows:

<i>Section 75I(2) criteria</i>	<i>Response</i>
Copy of the proponent's environmental assessment and the preferred project report; and	The Proponent's EA and the Proponent's Preferred Project Report is provided for the Minister's consideration on disk along with the Statement of Commitments. The Statement of Commitments is also provided at Appendix F.
Any advice provided by public authorities on the project; and	All advice provided by public authorities on the project for the Minister's consideration is set out in Section 6 of the Report.
Copy of any report of a panel constituted under Section 75G in respect of the project; and	No statutory independent hearing and assessment panel was undertaken in respect of this project.
Copy of or reference to the provisions of any State Environmental Planning Policy that substantially govern the carrying out of the project; and	Each relevant SEPP that substantially govern the carrying out of the project is identified in Section 4.8 of this Report (summary in Appendix B), including a brief assessment of the impact of the SEPP on the development proposal.
Except in the case of a critical infrastructure project – a copy of or reference to the provisions of any environmental planning instrument that would (but for this Part) substantially govern the carrying out of the project and that have been taken into consideration in the environmental assessment of the project under this Division, and	An assessment of the development relative to the prevailing environmental planning instrument is provided in Sections 4 and 5 of this report. A summary is provided in Appendix B and C.
Any environmental assessment undertaken by the Director General or other matter the Director General considers appropriate; and	The environmental assessment of the project application is this report in its entirety.
A statement relating to compliance with the environmental assessment requirements under this Division with respect to the project.	The proponent's EA addressed the DGR requirements (Appendix A) and the EA is considered to have satisfied those requirements as addressed in this report. Refer to the Conclusion in Section 7 of this report for a statement relating to this requirement.

4.8 ENVIRONMENTAL PLANNING INSTRUMENTS (EPIS)

4.8.1 Application of EPIs to Part 3A projects

To satisfy the requirements of section 75(2)(d) and (e) of the Act, this report includes references to the provisions of the environmental planning instruments that govern the carrying out of the project and have been taken into consideration in the environmental assessment of the project. A summary of compliance with the relevant s EPIs is in **Appendix B**.

The primary controls guiding the assessment of the proposal are:

- Sydney Regional Environmental Plan No. 5
- Willoughby Local Environmental Plan No 1995
- State Environmental Planning Policy No. 11
- State Environmental Planning Policy No. 55
- Draft State Environmental Planning Policy No 66

Other controls to be considered in the assessment of the proposal are:

- Willoughby Development Control Plan
- Roads Act, 1993



Figure 4: Zoning Extract

The provisions, including development standards of local environmental plans, and development control plans are not required to be strictly applied in the assessment and determination of major projects under Part 3A of the Act. Notwithstanding, these standards and provisions are relevant considerations as the DGRs require the proponent to address such standards and provisions. Accordingly the objectives of a number of EPIs and the development standards therein and other plans and policies that substantially govern the carrying out of the project are appropriate for consideration in this assessment as follows:

4.8.2 State Environmental Planning Policy (Major Projects) 2005

The MP SEPP applies to the project as discussed in Section 4.1 above.

4.8.3 State Environmental Planning Policy No.11 – Traffic Generating Developments

The development proposal was referred to the Sydney Regional Development Advisory Committee of the Roads and Traffic Authority. The Committee considered the proposal at its meeting of 25 July, 2007 and provided comments to Council by letter dated 17 September, 2007. The considerations of SRDAC are discussed in Section 6 of this report.

4.8.4 State Environmental Planning Policy No 55 – Remediation of Land

A preliminary contamination assessment of the additional site area has been carried out as part of the application documentation. It indicates that there is unlikely to be any contamination present based on the history of use and observation. Nevertheless the precautionary principle is applied and further investigation is required prior to excavation and construction work commencing.

4.8.5 Draft State Environmental Planning Policy No. 66 – Integration of Land Use and Transport

Draft SEPP 66 has the relevant intentions to:

- Encourage alternative forms of transport (and minimising car usage) such as walking, cycling and public transport usage;
- Improve the choice of transport and reduce the demand for travel especially by car;
- Efficient management of deliveries and freight and ,
- Integrate retailing into existing established centres to support the efficient and viable operation of public transport.

Chatswood CBD and its immediate surrounds provides medium to high density housing choices, community facilities and services, employment opportunities in an integrated office precinct, cultural and entertainment facilities and integrated retail services. These are located in walking distance from the Chatswood Transport Interchange at the new Chatswood Station complex. The bus routes into the Interchange link Chatswood via the strategic bus corridors to Macquarie, Parramatta and the northern beaches. Completion of the new rail link will link Chatswood to Epping as well as the City and Hornsby and thence to other parts of the rail network. Therefore as a highly urbanised mixed use centre located at a transport nodal point, Chatswood is well placed to accommodate additional retail development that makes use of its existing transport infrastructure and caters for the needs of the increasing population living within and around the CBD. The proposal in consolidating the retail role of Chatswood is thus consistent with the objectives of Draft SEPP 66.

The application was referred to the Department of Transport for comment. The Department noted in its response that the application proposed a number of initiatives to reduce car based demand for transport including development of a Green Travel Plan for staff, improved pedestrian access from surrounding streets, provision of additional bicycle storage and reduction in the rate of car parking supply to be consistent with Council's parking requirements. The comments of the Department of Transport are discussed further in Section 6 of this Report.

4.8.6 Sydney Regional Environmental Plan 5

The existing site of Chatswood Chase Shopping Centre is zoned Business Retail 3(c1). The objectives of Zone No 3(c1) are:

- (i) to consolidate the zone as the Chatswood Town Centre's retail core;
- (ii) to retain retail frontage at ground level within the retail core;
- (iii) to improve the shopping environment by developing a pedestrian mall along Victoria Avenue; and;
- (iv) to permit residential and restricted commercial use while maintaining the predominant retail character of the zone.

The proposed development for alterations and additions to Chatswood Chase Shopping Centre is consistent with the objectives of the Business Retail Zone especially objectives (i) and (ii). The allowable uses in the zone are shops, refreshment rooms, business premises and restricted commercial uses are purposes for which the shopping centre caters. However, Clause 9 of SREP 5 restricts development of part of the land in Zone No. 3(c1) generally near Havilah Street to access and car parking associated with or ancillary to the use of the balance of the site which is that of the shopping centre. The restricted use of the site covers the area currently occupied by the existing access driveways from Malvern Avenue and Victoria Avenue and the existing multi deck car parking structures. Therefore, the proposed alterations and additions that extend the retail shopping centre into the restricted area of the site are not permissible under Clause 9 of SREP 5 notwithstanding that the part of the site affected by the restriction will remain predominantly in car parking use.

The objectives of Clause 9 in SREP 5 are not specifically stated in the Plan. However, there is a recognised pattern to the land use structure of Chatswood CBD that is reinforced in the layout of the Chatswood Chase site that was approved in 1981. SREP 5 was gazetted in 1983 and it is considered that Clause 9 was introduced to recognise the consistent structure of Chatswood where the car parking facilities serving the retail core of Chatswood form an edge to the precinct in a similar manner as the Albert Avenue multi-deck parking station provides on the southern edge of the precinct. The car parking facilities separate the retail uses from lower intensity CBD fringe activities and residential development. It is considered that the objective of Clause 9 was to recognise the provision of ancillary car parking needs in the pattern established elsewhere in the CBD but as the private car park is for shoppers to Chatswood Chase and is not owned by Council, a Special Use – Car parking zone was not appropriate (as is the zone for the public car park in Albert Avenue).

Noting that the predominant use of the restricted area is proposed to continue to be access and ancillary car parking it is considered that the objective of the clause is nevertheless still met notwithstanding that the shopping centre is proposed to be extended onto the restricted area. The minor extension to the lower ground floor and ground floor will address pedestrian congestion points and improve pedestrian circulation in the centre. The main extension into the restricted area is proposed at Level 1 which will introduce connecting malls and improve circulation in a part of the centre that currently has a degree of isolation.

The change in façade and presentation to Havilah Street is also considered to be an improvement to the visual amenity of the residential properties opposite.

In the circumstances of this major project, the proposed development is considered to be consistent with the objectives of SREP5.

4.8.7 Willoughby Local Environmental Plan 1995

The additional land that is to be added to the site in Havilah Street and Malvern Avenue is under Willoughby Local Environmental Plan No 1995 and is zoned Restricted Office 3(e). Zone No 3(e) permits restricted retail uses that cater for local office employees, such as chemist, hairdresser, delicatessen or take-away sandwich shop and the like, residential flat buildings attached to other permitted uses and office premises. As the proposed development locates a supermarket on the land, the proposal is not permissible under the provisions of Clause 35E of WLEP 1995. It also exceeds the height control as noted in Section 3.

The Zone No 3(e) abuts the existing Chatswood Chase site along Havilah Street and Malvern Avenue. The existing development of low-rise office buildings and mixed residential/office development in the zone is consistent with the zone objectives as a fringe location to Chatswood CBD.

Although the proposed non-complying development on that part of the site is for the single level supermarket and ancillary offices and plant room, the bulk of the development is for ancillary car parking. The vehicular access to site will remain off the western section of Malvern Avenue as existing. The demolition of the two office buildings will remove the access and traffic generation of those two sites from the location and allow continuous landscaping of the 9 metre set back. While a secondary pedestrian access point is proposed from Havilah Street to cater for pedestrians coming from the residential area to the north, the main pedestrian access is from within the centre via malls linked to Victoria Avenue and Archer Street and the ancillary car parking. The

secondary pedestrian entry proposed will address the concern regarding those pedestrians who currently access the shops through the car park and across a truck access to enter the centre from the north.

The restricted and unsafe pedestrian access in the location, removal of current vehicle crossings and the opportunity for continuous landscaping has the potential of screening the additional height and mass of the proposed development when viewed from the residential area. Currently the view of the 3(e) part of the site comprises low-rise offices with the backdrop of the existing open sided multi-deck car park behind. While planter boxes are affixed to the car park structure that originally contained plantings that provided green relief to the car park, these are no longer in use due to restrictions on watering and the associated maintenance problems. The proposed architectural form although exceeding the height control provides an integrated and articulated architectural style that addresses the corner of Havilah Street and Malvern Avenue, provides external enclosure, finish and acoustic treatment to the car parking levels and removes the potential overlooking from the car park that previously existed.

In the circumstances it is considered that the proposed development is still responding to the context of a fringe location to Chatswood CBD by providing an architectural solution that provides a better overall relationship to the surrounding area, improves landscaping and reduces traffic impacts and overlooking.

4.8.8 The Roads Act, 1993

The proposed architectural solutions for Victoria Avenue are seeking to address the lack of articulation in the current "big-box" form of the centre by introducing blade walls, an above awning façade signage structure, glazed elements and a stylistic detail to the awning structure over the Victoria Avenue entry. These elements of the building overhang the boundary and encroach into the Victoria Avenue road reserve (the footpath space but not the road carriageway). They will require an air space lease due to the extent of the encroachment proposed, which varies up in width up to 2.9 metres, pursuant to Section 149 of the Roads Act, 1993. As Willoughby Council is the owner of the road and the Roads Authority, it is required to consider the appropriateness of the proposed encroachments.

Recognising that the encroachments will significantly add to the quality of the building presentation to the public domain in Victoria Avenue and introduce a style and form that will give greater identity and recognition to one of the major shopping centres in Chatswood, no objection is raised to the proposed encroachments. The proposed architectural presentation is discussed further in Section 5.2 of this report.

4.9 OTHER PLANS AND POLICIES

The Proposal has been considered against the following non-statutory documents:

4.9.1 Willoughby DCP

Relevant Parts of Willoughby DCP are discussed in more detail as part of the assessment in Section 5 of this report. The relevant parts of WDCP that provide guidance for the assessment of the application include:

- Part C.3 – Sustainable Development
- Part C.4 - Transport Requirements for Development
- Part C.5 – Water Management
- Part C.6 - Access, Mobility and Adaptability
- Part C.8 – Waste Management
- Part C.11 – Safety by Design
- Part C.15 – Under-grounding of Services
- Part G.5 – Advertising and Advertising Structures

The proposed development has been assessed against these controls in Section 5 of this report. It is noted that components of the requirements for compliance with WDCP are matters for the detailed design stage, for example, compliance with AS 1428 for access provisions for people with disabilities or AS 2890 for the design of car parks. In this respect the assessment also considers the ability to address the requirements in the conditions of consent. A summary of the proposed development assessed against the WDCP requirements (with recommended conditions if relevant) is in **Appendix C** of this report.

5 ASSESSMENT OF ENVIRONMENTAL IMPACTS

Key issues considered in the Council's assessment of the Environmental Assessment include:

- Context in the streetscape;
- Relationship to neighbours;
- Traffic generation impacts;
- Balance between car parking provision and providing for alternative forms of transport and promoting use of public transport;
- Sustainability initiatives;
- Flooding and stormwater management;
- Privacy and overshadowing impacts;
- Acoustic amenity;
- Social and economic impact on the retail offer in Chatswood.

Other impacts that have been considered are:

- Construction impacts and staging; and
- Operational impacts of deliveries, waste management and trolleys.

5.1 STAGING DURING CONSTRUCTION

A concept construction staging has been provided with the application that divides the construction works into five zones commencing with Zone A on the north-east part of the site to Zone E on the south-west part of the site. The staging of construction works recognises the need to keep the centre trading during the estimated two years it will take to complete the construction works and to provide an adequate level of car parking. Although spread over five zones the completion of the construction works falls into two phases. The newly constructed retail space in zones A to D will need to open concurrently to allow relocation of Coles supermarket into its new premises and demolition of its existing premises in Zone E. Relocation of Coles will be necessary to complete the new entry to Victoria Avenue and internal mall rearrangements. Generally the concept of the staging is acceptable noting that the staging will be an ongoing process developed in consultation with project stakeholders and the construction contractor.

Each stage of the construction works will require a detailed construction management plan that adequately addresses the impacts from noise and vibration, construction traffic and sediment run-off at each stage. This will require appropriate conditions in any consent. Noise and vibration management will require as a minimum complying with the EPA's Environmental Noise Manual. Liaison arrangements with neighbours particularly to advise when higher levels of noise and vibration will be expected need to be detailed. For those visiting the centre, a public information program will be necessary as changes in access, car parking and pedestrian movements are made. Standard construction hours apply in Willoughby but facility exists to adjust those hours especially when the construction works need to occur outside peak hours because of safety or heavy vehicle access constraints or where there is no noise generation and construction works are occurring wholly within the building. Changes to construction hours would consider the circumstances and require that access is managed at those times to minimise impacts on neighbours.

5.2 FUTURE CHARACTER AND VISUAL IMPACTS

The current Chatswood Chase presents to Victoria Avenue as a classic 1980's "big-box" shopping centre. The proposed architectural treatments to the Victoria Avenue façade will give greater identity, articulation and activeness to the presentation of the centre when viewed from Victoria Avenue. The use of glazed elements will introduce transparency to the presentation that is blank and wall-like in its current form. The redesign of the entry with external architectural treatments using a section of curved and split level awning form are considered to give greater identity to the entrance that currently is recessive and obscure in the streetscape. The redesign of the entry will open to both the lower ground and ground floor levels increasing connectivity to the public domain. Disabled access that is currently obscure and isolated is proposed to be provided as an integrated outcome in the design. There are opportunities for public art at the entry that need to be explored further in the detailed design that will further enhance the character of the entry. A consent condition can require design and provision of public art elements at the location.

The Victoria Avenue façade proposes a major "Chatswood Chase" sign located on an integrated architectural blade wall of the façade with facade signage structure for major tenant signage. The approach is consistent with the requirements of Part G.5 of WDCP that has as its objective for signage to be architecturally integrated and to be of a size and proportion that complements the proportions of the building while being informative. As such it is not considered to be a projecting wall sign which is prohibited by WDCP. The proposed signage complies with the requirement that signage be limited to avoid visual clutter, repetition or competition between signs. Life style imaging is indicated over the driveway entry from Victoria Avenue which is acceptable recognising the potential for changing imagery that will give interest when viewed from those arriving at the site from Neridah Street. To ensure that this is maintained for changing imagery that may also recognise the festivals during the year, an appropriate condition of consent is included that it not be used for product advertising.

The current proposal does not include alterations to the Archer Street entry and façade. These are proposed to occur at a later stage when more is known on the development design outcomes for the hotel/serviced apartments site in the Civic Place development opposite in Archer Street. As with the Victoria Avenue frontage, the centre would benefit from greater articulation and external style detailing and finish in its presentation to the public domain in Archer Street although the landscaped 3 metre set back along Archer Street moderates the "big-box" form compared with the Victoria Avenue presentation.

The extensions to the centre along Havilah Street and Malvern Avenue that include enclosure of the car parking levels with aluminium composite material and glazing will increase the mass of the built form when viewed from the residential area compared with the current two-three storey office buildings. However, the existing multi-deck car park structure presents as an open sided structure that is a backdrop to the existing office buildings and, therefore, is also a contributing element to the streetscape. It is considered that the architectural style and detail of the external finish that is proposed to incorporate blade elements and corner treatment with a 9 metre landscaped set back will positively contribute to the streetscape in the location by providing an architecturally modulated and integrated outcome. The partial enclosure of the building will also allow for acoustic treatment of the car parking levels, management of exhaust fumes in filtered mechanical ventilation systems, management of light spill and management of the potential for overlooking that currently exists from the open sided multi-deck car park.

Along Havilah Street the existing multi-deck car park where it has frontage to Havilah Street is set back 15 metres with mature landscaped screening to Havilah Street. This partially softens its visual impact. The proposed alterations to the structure extends the lower ground retail level out from the existing building line reducing the set back to 9 metres and requires the removal of most trees. Above this retail level, the set back of 15 metres is maintained to the car park structure and the external finish proposed uses angled mesh which is a change from the project that was exhibited as a result of review of the acoustic impacts of the car park. The acoustic impacts of those car park levels at the location have been considered in the amended noise report and are said to be acceptable as they are as existing and are ameliorated by the 15 metre set back. It is considered, however, that the noise circumstances should be improved given the extent of change proposed in the location. Therefore, it is considered that the aluminium composite material proposed for acoustic attenuation should be used up to the Level 1 car park (RL 92) to address noise with the mesh façade used above that point. The same treatment should be extended to wrap the full length of the southern elevation above the proposed pedestrian walkway noting that the landscaped buffer when viewed from 5-7 Havilah Street

and beyond in Havilah Street is proposed to be removed to provide the pedestrian link. In addition the external mesh finish where retained in the location will assist in removing impacts of overlooking and light spill that currently occur in that location but are mitigated by the dense tree canopy of the landscaping that will be removed. This can also be addressed in the conditions of consent. It is noted that the proponent intended originally to keep three of the existing trees in the landscaped set back to Havilah Street. The trees proposed to be retained are in reasonable health but have poor canopy shape. On balance it was determined in consultation with Council's Landscape Section that a better outcome for visual presentation and the streetscape was to remove the existing trees to enable fresh mature new plantings including stands of *Angophora costata* as indicated in the landscape plan.

The proposed pedestrian entry from Havilah Street is adjacent to the office building at 5-7 Havilah Street. Adjacent to the entry, the building façade presentation of the extended retail space is part glazing and part masonry. The glazed areas are proposed to overlook the pedestrian walkway along with a section facing Havilah Street adjacent to the entry. The safer by design issues related to the design of the walkway, neighbourhood impact issues and management of the use are discussed later in this report. Relevant to this section of the report is the visual presentation of the link when viewed from the public domain as it introduces a retail component of Chatswood Chase to Havilah Street that has previously not existed. However, since the development of Chatswood Chase the commercial office presence in Havilah Street has been well established removing the residential scale from one side of the street. On the basis of the safer and more convenient access it provides to pedestrians from the North Chatswood area and the simplistic form of the entry detail, the incorporation of the entry is considered acceptable. However, for reasons noted elsewhere in this report, its design will require some modification.

5.3 DENSITY, HEIGHTS AND SETBACKS

The overall density of the Chatswood Chase site incorporating the proposed changes will yield a floor space ratio of 2.2:1 (compared with Westfields that has in the order of 4.3:1 on the part of its site). Chatswood Chase will still be a relatively under-developed site that is partly attributable to its design form that incorporates extensive void areas within the centre. The void areas and the wide pedestrian malls within the centre are proposed to be retained and enhanced to reflect the high quality interior design and atmosphere and the intention of maintaining the Centre as a higher order retail experience. For Chatswood as a retail destination, the different styles that this represents complementing the other retail on offer in Chatswood adds to the retail experience for shoppers and the attractiveness of Chatswood as a retail destination.

The height of the development varies across the site and at its maximum is 27 metres to the top of the existing glazed roof over the main central void which is well within the 52 metre height potential of SREP 5 that applies to that part of the site. The highest level of structure is 22 metres being the existing level 3 car parking. This is set back well within the site and is not readily viewed from the surrounding public domain.

The height of the development along the Havilah Street and Malvern Avenue frontages is up to 18 metres at the architectural blade features but averages 16 metres along the balance of those frontages. These heights include plant rooms that are integrated into the architectural form. The WLEP 1995 height control in the location is 9 metres excluding the plant room with the existing office buildings to be demolished having an average height of 10-12 metres including plant room. The increased height with a 9 metre landscaped set back at ground level and varied set back and articulation in the vertical form means that the impacts of the additional height are ameliorated in the streetscape. As a result the comparison of the photomontages of the existing and the proposed development demonstrate that the proposal should fit comfortably in the streetscape. The effect of including the site under the provisions of Part 3A of the Act means that the height (and FSR) limit does not apply.

5.4 PRIVACY

Privacy impacts from overlooking have been addressed previously in this report noting that the potential of overlooking that currently exists from the multi-deck car park are being addressed by the proposed enclosure of the facades.

The privacy impacts of the pedestrian entry from Havilah Street on 5-7 Havilah Street are of concern noting that the entry requires ramping from natural ground level to the building floor level which is a rise of 1.65 metres. The walkway is proposed to be 4 metres wide and open to the sky until it reaches the entry doors to the centre that are set back more than 30 metres from the building line to Havilah Street. Notwithstanding the safer by design issues discussed later in this report, it is considered that the proposed 1 metre wide hedge treatment along the length of the link adjacent to the boundary with the neighbour is not adequate to ameliorate privacy including acoustic privacy impacts, and security impacts from pedestrians using the link. Whilst the adjoining property is a commercial use the layout of the building incorporates outdoor terrace areas beside the proposed walkway. The terrace areas add amenity for the commercial tenants. Noting that the link also forms a path of travel for fire egress, two options are proposed. Firstly it is considered that the 3 metre wide extent of the pathway should be fully enclosed incorporating opaque glazed elements to allow light penetration and entry doors placed at the building line in Havilah Street. Enclosure will address privacy impacts (as well as safer by design issues discussed later in this report). Alternatively it could be widened to 6 metres width in total provided a minimum 2 metre wide landscaped buffer and acoustic fencing to the boundary with a splay to the corner of the building at the entry to improve visibility along its length. This latter option is preferred. The design change can be address in the conditions of consent. Separate consideration is given to the management of shopping trolleys and drop-off from vehicles at the location later in this report.

The overlooking impacts that currently exist to the residential units at the rear of 1-3 Havilah Street from the loading area and existing multi-deck car park will be ameliorated by the extensions and enclosure of the retail floor area. The existing car park levels that will remain above the altered floor space are set back a further 3.35 metres so that immediate overlooking will be avoided and restricted to more distant neighbourhood views. In addition the existing 4.3 metre landscaped buffer is to be maintained. The retail levels are proposed to be rendered and painted and provided with landscaping in the form of climbers to give some green relief to the outlook from those units. The units located on the south west corner of the building at Level 1 and 2 will still have some aspect down into the void of the loading area driveways as existing through the elevated extensions to Level 1 of the shopping centre over the area and will change the outlook above the void.

Even though the 4.3 metre set back to the boundary at ground level with 1-7 Havilah Street and the landscaped buffer has been maintained in the preferred project following amendment as a result of neighbour submissions, it is considered that more has to be done in the vicinity of the residential units at 1-3 Havilah Street. The two extended retail levels above the ground level increase the mass and sense of enclosure for those units. This is regardless of the fact that the landscaped set back area runs north-south along the full length of the boundary at that location and has the potential to provide reasonable light access although filtered through the existing stand of *Casaurina sp.* The concern is air circulation, mass, bulk and outlook. For these reasons a stepping in the building is required for the Level 1 retail level of an additional 2 metres along the length of the façade facing 1-3 Havilah Street and require a change to the internal retail space. This can be addressed in the conditions of consent.

The variable width existing landscaped buffer between the loading area exit driveway and the commercial units at 341 Victoria Avenue is proposed to be retained and re-landscaped. The extension of Level 1 retail floor space above the Victoria Avenue driveway still leaves an open void with a height of more than 12 metres below it. The extended upper floor area is proposed to be set back 4.3 metres from the boundary. The extended floor area structure will give partial enclosure of the driveway and loading area of Victoria Avenue so that acoustic treatment of the underside of the structure will be necessary as identified in the Noise Report.

5.5 SOLAR ACCESS AND OVERSHADOWING

The proposed development is on the south side of Malvern Avenue and so is south and west of the low density residential areas. Afternoon shadowing impacts are mainly on Havilah Street.

The massing of the building and increased set back from 9 metres at ground level to 15 metres above a height of 9 metres means that the commercial building at 5-7 Havilah Street will still maintain good sunlight access to the upper level staff balcony even in mid-winter and adequate level of sunlight access to the lower level balcony from morning through to lunch-time.

The shadowing impacts on the office building at 12-14 Malvern Avenue are morning sun shadows but given its northern aspect the building will still enjoy good sunlight access. The provision of a 2.4 metre setback along the boundary that increases to an approximately 5.4 metre separation to the building face is considered adequate to allow light penetration to the commercial suites along that boundary. The level 2A car park has also been cut back along the boundary which reduces the height of the enclosing walls of the proposed building. The occupants of the building have requested that beyond the corner feature of 'wood-grained' style textured aluminium finish at the Malvern Avenue frontage that the wall be finished in a light beige colour. This can be addressed in conditions of consent.

5.6 WIND IMPACTS

The Wind Report by MEL Consultants concludes that the proposal will not cause wind conditions to exceed the criterion for walking comfort in the surrounding streets. The site is protected from adverse prevailing winds from the south and north-west by surrounding development.

5.7 SUSTAINABILITY

The proponent is targeting achieving 4 Green Stars for the new and refurbished components of the shopping centre. This is in line with the Pilot Rating Tool for Shopping Centres recently released by the Green Building Council. The project plans will require further design development to finalise the expression of the sustainability initiatives but the undertakings are as follows:

- Involvement of a Green Star Accredited Professional to provide sustainability advice throughout the design and delivery period of the project.
- Requirement to recycle or reuse construction waste
- A comprehensive Waste and Recycling Management Plan and Environmental Management Plan for the site.
- Paints and floor coverings with low levels of Volatile Organic Compounds (VOCs) and composite wood products with low emissions of formaldehyde. This will promote a healthy indoor environment.
- Energy efficiency air-conditioning and lighting control system that minimises the energy use and therefore greenhouse gas emissions.
- Electrical sub-metering of all substantial energy users in the building and all tenancies
- Car park ventilation system incorporating passive supply air, and variable speed drives controlled by carbon monoxide monitoring to minimise energy use of the system.
- Cyclist facilities for building staff and visitors, including bike storage areas and shower facilities to promote the use of bicycles.
- Water efficient fittings in the bathroom and shower facilities.
- Rainwater harvesting from the roof areas. This water will be stored and used for flushing of toilets and irrigation of the surrounding landscaped areas.
- Water meters installed on all major water users in the development. These will be connected to the building management system to provide a leak detection system.
- Recycled steel and concrete used in areas of the development.
- Elements of the structure and façade will be designed to be disassembled for future reuse or recycling, thereby conserving embodied energy and resources.
- Refrigerants will be selected to have no ozone depleting potential.

Sustainability initiatives in the architecture include passive measures by use of energy efficient glazing and laser cut panels in the skylights, façade and roof insulation. The active measures generally include use of energy efficient lighting, lifts and escalators in addition to what is noted above. It is intended to incorporate in

the air conditioning system an energy saving feature that will involve automatically relating indoor temperature to ambient outdoor temperature to minimize the "thermal shock" upon entry.

It is acknowledged that a sustainability report card will be required to be maintained as the design development occurs and construction progresses. The supervision of the continual review and monitoring of the sustainability reporting system needs to be managed by the appointed Green Star accredited consultant. This can be addressed in the conditions of the consent. Generally the sustainability initiatives proposed are consistent with the objectives and requirements of Part C.3 of WDCP.

5.8 EARTHWORKS

The earthworks involve the excavation of the land at 19 Havilah Street and 8 Malvern Avenue for extension of the basement car park levels below the proposed supermarket. A preliminary contamination assessment of the land has been carried out relying on the history of use of the land and observation. While no contamination is expected to be found, in the absence of a full investigation of the soil, further testing needs to be carried out before excavation commences to determine whether any remediation measures are necessary. Also this will determine the appropriate location and method of spoil removal. This can be addressed in the conditions of consent.

5.9 STORM WATER AND WATER MANAGEMENT

The impacts of the proposed development relate to the potential increased peak discharge to the storm water system due to the increased rainfall catchment area from the extensions along Havilah Street as well as the effluent quality from the increased car park area.

It is proposed to provide a storm water collection and re-use system that will collect run-off from the roof levels of the car parking and store it for re-use for landscape irrigation and toilet flushing. Storage tanks are proposed below the lower basement level for bulk rainwater storage and at lower basement level for storage for landscape irrigation. The storage volumes proposed are approximately 320 cubic metres. The re-use of stormwater on the site will reduce the total volume of storm water exiting the site each year which should generally be confined to the peak storm water events when the tanks may be full. It is noted that run-off from the car park levels is proposed to be routed through a petrol interceptor and silt trap to remove contaminants before re-use or entry into the Council storm water system. The final design of the system will also require a detention system albeit reduced in capacity because of the re-use on the site. However, finalisation of the design of the storm water management system on the site is subject of completion of a flooding study that is discussed in Section 5.10. The principles for storm water management on the site are consistent with the requirements of Part C.5 of WDCP.

The remodelling and extension of the lower ground floor will require adjustment of the food court drainage system to accommodate the greasy trade waste. The remodelled food court will drain to a combination of the existing and new grease arrestors and thence to the Sydney Water sewer. This is a matter for further design development at Construction Certificate stage.

5.10 FLOODING

A full flood study of the site and its catchment is required to address known potential flooding impacts in a 1 in 100 year storm event. The existing Chatswood Chase site was originally crossed by a natural water course that was piped and diverted with construction of the existing centre. The diverted storm water then connects to the open channel that still exists on the eastern side of Havilah Street which then flows to Scotts Creek. The open channel is part of a Sydney Water storm water system. Storm events in the past including the extreme event in 1992 caused flooding in the basement car park levels and at the end of Mills Lane. Flooding of neighbouring properties including the church and Victoria Plaza also occurred in 1992. The overland flow path is from Archer Street and along Victoria Avenue. The changes proposed to the centre particularly at the Victoria Avenue entry and near Mills Lane may result in overland storm water penetration into the building in a 1 in 100 year flood event.

The proponent's consultant, Ove Arup Pty Ltd, is currently carrying out a full Flood Study with the assistance of Willoughby Council. It will include hydrologic analysis of the Scotts Creek catchment and the stormwater drainage system in the vicinity of the site as well as modelling of the system to simulate storm events. The flood study needs to be completed before the detailed design in Zone E of the site is finalised due to potential impacts on entry design to the building especially at Victoria Avenue. As this part of the site is in the second phase of the construction program, it is reasonable to allow the completion of the Flood Study during the first phase of the construction program. Appropriate conditions of consent can address the issue.

5.11 LANDSCAPING

The areas required for detailed landscaping on the site are primarily along Havilah Street and Malvern Avenue. The predominant tree species proposed to be used is *Angophora costata* along both frontages. The use of the species which is native to the area is supported by Council's Landscape Officer because of its durability, and suitability of its height and shape in the location. Supported by Council's Landscape Officer it is now proposed to remove all the existing trees on the site along the Havilah Street frontage where previously it was proposed to keep three of the existing *Eucalyptus sp.* in the set back to the existing car park. This conclusion was reached because of the poor condition of the trees that were able to be retained due to close planting and poor shape. Although *Angophora costata* are proposed to predominate other tree planting proposed for variety include *Syzygium australe* and *Tristanopsis laurina* amongst others. All the proposed tree species are represented in the area. The trees are proposed to be under planted with *Callistemon sp.* and *Grevillea sp.* as shrubs with swathes of a variety of ground cover plants and low tuft plants.

The pattern of landscaping is also proposed in the set back area adjacent to 341 Victoria Avenue adjacent to the driveway. As noted previously the stand of *Casaurina sp.* is proposed to be retained at the rear of 1 to 7 Havilah Street.

New street trees along the full frontage to Havilah Street and Malvern Avenue are proposed as required by Council's Landscape Officer noting that under-grounding of the cabling in the street will be required in accordance with part C.15 of WDCP. The nominated street tree species is *Angophora costata* in Havilah Street and *Michelia doltsopa* in Malvern Avenue.

Along the Victoria Avenue frontage the two *Platanus x hybrida* are to be retained at the driveway entry to the site. Council's Landscape Officer has required the provision of two additional *Platanus x hybrida* as the street tree in Victoria Avenue (consistent with the rest of Victoria Avenue) and these are indicated on the landscape plan.

Generally the landscape design will complement the built form and provide a good urban design outcome for the streetscape of the public domain around the site.

5.12 SOCIAL CONTEXT

It was estimated in the Social Impact Assessment that about 3,800 people live within 500 metres of the centre and about 84,000 in its primary catchment area (PTA). The PTA is expected to increase in population to around 89,000 in the next ten years. The total Trade Area was found to be 430,000 and encompasses most of Sydney's North Shore. The PTA residents are more affluent than average and a younger and at the same time an older population than the total trade area. Two workshops were held with residents as part of the research for the project as well as patron surveys were carried out. The workshops with the residents with presentation of the early concept drawings allowed some but not all of their concerns to be addressed. For example, there were mixed views about the Havilah Street pedestrian entry.

The social impact assessment informed the design process with respect to some of the issues with the existing centre such as legibility of the pedestrian and vehicular entries, disabled access and safe and easy movement within the centre. The identified issues are considered to have been addressed in the proposal subject to some design modifications noted elsewhere in this report.

The conclusions of the social impact assessment are supported that the proposal will have a positive contribution by enhancing the retail experience of Chatswood increasing choice and variety, access for people with disabilities will be improved, opportunities for social interaction will be maintained, the external presentation

renovation will improve the public domain environment and the Centre will reinforce the use of public transport infrastructure available in Chatswood and the accessibility of the location.

5.13 ECONOMIC CONTEXT

The economic assessment indicated that approximately 50% of customers and turnover is from the primary trade area (PTA) with a further 22 % from the secondary trade area. Interestingly Chatswood Chase attracts a higher than average proportion of customers from the main trade area being 27 % compared with 23% for other centres and the average per capita retail spending in Chatswood Chase is 20% above the Sydney average. Growth in the main trade group has been identified and that is the group that the Centre aims to cater for in this proposal. The expected growth up to 2010 suggests an additional 17,561 square metres of floor space could be supported in the area increasing to 41,646 square metres by 2016. Therefore, the proposed 11,000 square metre increase in gross leasable floor area proposed is catering for a proportion of that additional floor space potential. As a result the economic impact of the proposal on other centres is estimated to be only between -0.3% for Hornsby and Warringah Mall, -2.6 % for Westfields and -2.9% for Castlecrag. These impacts are acceptable and do not allow for potential upgrades that are also likely to occur in other centres. For other retail services within Chatswood as well as Westfields, it is noted that more than 40% of Chatswood Chase customers visit other services and business in Chatswood during the shopping trip which is a positive spin-off for Chatswood retailers.

Direct employment increase as a result of the proposal when completed is estimated to be 440 net additional jobs with the supplier multiplier effect of more than 700 jobs. During construction it is expected to provide 460 jobs with a multiplier potential of over 1,000 jobs.

In the context of the potentially more complete retail offer in Chatswood that will result from the project, consolidation of Chatswood as a retail destination and the intent to capture predicted future demand in a location well served by public transport and complementary retailing, the economic considerations of the project are found to be acceptable.

5.14 TRAFFIC AND ACCESS

5.14.1 Traffic and Access (including deliveries)

The proposed vehicular access arrangements to the site are largely unchanged by the proposal. The exception is the relocation of the supermarket loading area from Mills Lane to use of the driveway from Malvern Avenue. This will increase the number of truck movements in Malvern Avenue such that a draft Operation Management Plan was required from Coles. This demonstrates that with the expected delivery needs the size of the dock is adequate. The maximum size truck that can be accommodated is a 17 metre articulated vehicle which is not possible in the existing dock accessed via Mills Lane which, although not permitted by the conditions of the current Coles consents, occasionally arrive in Chatswood and halt traffic in Archer Street while the articulated vehicle is reversed down the full length of Mills Lane. The proposed delivery hours (and waste collection) are to be restricted to 7.00am to 8.00pm Monday to Saturday and 8am to 8pm on Sundays and Public Holidays. The Store Manager will be responsible for adhering to the Operations Management Plan that includes complaint management procedures. The Operations Management Plan for Coles is considered satisfactory.

However, the overall proposed delivery arrangement with the proposed five different locations for deliveries for the rest of the centre requires clarification. An Operational Management Plan is required for the co-ordination of use of the different loading areas including waste handling and recycling facilities and the security management of each. Some degree of specialisation may be appropriate given the constraints on the use of some of the docks. They can subsequently be the responsibility of Centre Management to administer but at this stage it will inform the detailed design process. The modified loading area proposed at the end of Mills Lane requires redesign to reduce the use of Mills Lane for manoeuvring and the potential for conflicts between trucks using other loading areas accessed from the lane. This will likely involve maintaining the north-south orientation of the loading area as existing. The new loading area off Malvern Avenue (separate to Coles) has structural columns of the existing building within the manoeuvring area that cannot be removed and will hinder the manoeuvring of vehicles. The Operational Management Plan needs to indicate the hours of use, the purpose of the dock and role it performs including area of the centre it caters for if relevant, the truck size limits, waste

handling facilities provided and security arrangements. The requirement for an Operational Management Plan for the loading areas (excluding Coles) can be addressed in the consent.

Increased traffic generation from the site as well as changes to traffic patterns as a result of changes to the car parking and delivery arrangements have been analysed. As a result of that a number of traffic management initiatives in the surrounding road network are required as a result of and in conjunction with this development. These include the requirements of the Regional Development Advisory Committee of the Roads and Traffic Authority. As detailed design of the traffic management requirements is still to occur for the approval of the Willoughby City Council Local Traffic Committee and where relevant, the Roads and Traffic Authority, the improvements need to be identified in the conditions of consent including but not limited to:

- Provision of a raised median to prevent the illegal right turn into the Archer Street entry;
- Provision of a right turn phase at the traffic lights at Neridah Street (south) and Victoria Avenue;
- Provision of a right turn phase at the traffic lights in Archer Street (north) to Malvern Avenue;
- Prohibit the right turn heading west on Victoria Avenue from the car park exit;
- Narrowing of the road carriageway at the entry to Mills Lane;
- Narrowing of the left turn driveway exit into Victoria Avenue;
- Improve pedestrian priority at the crossing located at the Archer Street entry with contrasting pavement treatment and to highlight the presence of the driveway to pedestrians.
- Provision of a bicycle phase to the traffic light at Malvern Avenue and Archer Street;
- Consider banning right turn out of Daisy Street into Archer Street in peak hours;
- Redesign and possibly relocation of the speed hump in Havilah Street and its associated vegetation to improve view lines to the proposed pedestrian entry;
- Provision of a Traffic and Car Parking Management Plan for peak trading periods to consider management of traffic congestion.

With the above measures being provided the traffic impacts of the development are considered will be ameliorated.

It is not proposed to provide any short term parking at the pedestrian entry from Havilah Street (that is, no change to existing parking restrictions) as it is intended that the entry is only to provide for the convenience of local residents and not as a drop-off or pick-up area for the centre. It is considered that further investigation is needed in the design to provide an area for drop-off and pick-up internal to the centre which can be required in the detailed design conditions of the consent. Consideration was given to deleting the Havilah Street entry however the merits of having the new access were assessed as outweighing possible impacts. Moving it closer to the Coles check-outs would likely encourage greater pick-up/drop-off for Coles shoppers and encourage trolley 'escape'. The current location (subject to further design changes) is supported. Some additional parking enforcement by Council Parking Officers may be required to stop double parking and to stop illegal parking in the driveways of 1-3 and 5-7 Havilah Street as well as driveways opposite.

5.14.2 Pedestrians

Pedestrian access including access for people with disabilities will be made safer and more convenient with the proposed upgrade of the Victoria Avenue entry and the new access to Havilah Street. It is noted that the Archer Street entry is yet to receive detailed design review in a subsequent development stage. Tenants and visitors to the commercial/medical suites of 12-14 Malvern Avenue apparently access the Chatswood Chase car park through the main driveway and loading area. This will no longer be possible and they will need to use the Archer Street or Havilah Street entries for pedestrian access.

5.14.3 Parking

Car parking provision on the site will be increased from 2309 car spaces to 2456 car spaces. The rate of car parking provision is commensurate with the proposed floor area and it is noted that it now accords with current car parking requirement of Part C.4 of WDCP. The current car parking requirements reflect the need to encourage alternative forms of transport and public transport use. The proponent also proposes preparation of a Green Travel Plan for staff and Car Park Management Plan.

The car parking provision on the site will be interlinked but in a manner that is remote from the entrance when moving from the basement levels to the upper levels. The two basement levels of car parking providing 1,097 spaces are accessed from Victoria Avenue via three ticket gates to Basement Level 1. The multi-deck car parking providing 1,359 spaces are accessed from Malvern Avenue through two ticket gates to Level GA (Ground A) and Archer Street through one ticket gate to Level 2. An interim level is proposed at ground level (over the supermarket) that is only accessed as part of the circulation from the basement levels to the multi-deck car park above the supermarket and is, therefore, going to be relatively obscure. In terms of traffic management of the surrounding streets the proposal enables traffic to be spread rather than concentrated but for the shopper it may be less convenient and require some familiarity with the car park to understand the circulation. Essential, therefore, will be the need for clever directional signage including "real-time" signage that provides guidance to available spaces and best access to particular shops. This can be addressed in the conditions of the consent.

Inadequate motor cycle parking is proposed in the current plans that will also require a condition for the provision of 18 motor cycle spaces. Basement level 1 is proposed to provide 20 additional bicycle racks adjacent to the proposed new travelator. Current bicycle parking demand has been noted to be between 10 and 20 bicycles. Also there is a need for provision of secure bicycle lockers for staff and visitors accommodating 26 bicycles. This can also be addressed in the conditions of consent.

Provision for rails for 10-12 bicycles at each of the pedestrian entrances is also required. The current proposal indicates rails provided at the Havilah Street entry only. Further investigation is needed for provision in Victoria Avenue but the location is acknowledged to be constrained and problematic. It may be necessary to accommodate more bicycle rails as a temporary solution at the Archer Street entry with a more permanent solution being designed into the upgrade of that entry in the future. This also needs to be addressed in the consent.

Twenty parking spaces for people with disabilities are proposed to be retained within the two basement levels. Due to the constraints imposed by the existing structure, these spaces do not currently and will not fully comply with AS 2890. However, given the range of needs of people with disabilities they are acceptable and they are well located for access to the centre. They can be used by other than those that have a roof mounted wheel chair rack. It is proposed to provide a further 36 complying spaces on the Level 2 car park accessed from Malvern Avenue or Archer Street. This gives a total provision of 56 spaces which is 2.3% of the total car spaces exceeding the minimum requirement of 2%. Clear directional signage as recommended by the access consultant, Access Associates, will be necessary as a result.

5.14.4 Shopping Trolleys

Shopping trolleys are a problem in the streets around Chatswood. A survey conducted by Willoughby Council between 27 September and 12 October, 2007 found that on any given day there are in the order of 116 shopping trolleys left unattended or abandoned in and around Chatswood CBD. The proposal to introduce a pedestrian access to Havilah Street may create a significant problem for trolley management in the location. Also the ability to wheel a trolley to Havilah Street at that location may foster the use of Havilah Street for short-term parking and drop-off. The additional traffic generation that would result is considered unacceptable in the location. Therefore, a shopping trolley management strategy is required to prevent trolleys being able to exit the building. It is required that some form of trolley management system be put in place to stop trolleys from moving beyond an internal collection point at the exit. As more than just Coles use trolleys, it will be a Centre Management requirement to administer the system. This can be addressed in the conditions of consent and will require physical constraints, signage and enforcement by management.

5.15 ACOUSTIC AMENITY

The proposed acoustic treatments with the expanded car parking levels are indicated in the Noise Report by Norman Disney and Young to achieve a nominal 3dB(A) improvement in the operational noise performance. The relocation of the supermarket loading dock to within the building which is the noisiest loading dock in the centre will reduce the overall impacts of noise from the centre. Partial enclosure of the Victoria Avenue dock may increase noise reverberation in the vicinity such that acoustic insulation batts are required to the underside of the enclosing structure as noted previously in this report.

Mechanical noise of plant has been considered in the report and adequate performance requirements set. The predicted change to road traffic noise in the vicinity was found to be less than 0.8dB(A). The outcome is within EPA Noise Amenity Criteria. It is noted that the noise impacts of traffic are conditional upon managing times of truck movements in Malvern Avenue as noted previously in this report.

Modification of the car park façade in Havilah Street and the Havilah Street pedestrian entry are required as outlined in Section 5.2.

5.16 PUBLIC SERVICES AND INFRASTRUCTURE

Utility services to the site including telecommunications, electricity, gas, water and sewer are available to the site. The electricity demands will require the provision of a second substation in Malvern Avenue adjacent to an existing substation that is to be used. Excess capacity in other substations around the site will be required to be taken up by the development. Objection was raised to the retention of the substation and provision of a second substation in the landscaped set back to Malvern Avenue. Council is not satisfied that the two substations could not be provided within the building structure including below ground in the set back area. Although the proponent has advised that a solution has not been resolved with Energy Australia, it is considered that further investigation needs to be carried out. This can be addressed in conditions of consent. Additional landscaping is required to screen any new structure.

Sydney Water will be informed of the development and its requirements addressed. It is noted that Sydney Water was advised of the application but no response was received so that standard conditions for Sydney Water are proposed for the consent.

5.17 SECTION 94 AND OTHER CONTRIBUTIONS

Section 94 contributions apply for the additional development that is proposed to be accommodated on the site. The applicable plans are "Open Space, Recreation and Community Facilities", "Child care", "Road and Traffic Management" and "Drainage". The contributions total \$ 2,709,344.32 based on the proposed increase of 13,748 square metres in gross floor area and 11,084 square metres of gross leasable floor space and allowing for the credit from the office buildings to be demolished. It is noted that the Roads and Traffic Management contribution has been reduced in recognition of the extent of road improvements being required. The proponent is aware of the contributions applicable and has accepted to pay them. Consideration was given to off-setting some of the contribution by the provision of a recreational facility in the development, for example, on the roof-top. The form of the upper roof design and its proximity to residential properties in Havilah Street and Malvern Avenue (noise and lighting) suggest that a roof-top facility such as tennis, netball or basketball courts might best be situated over the Stage 2 Archer Street area which has the largest uninterrupted roof area. A note to this effect will be included in the consent.

5.18 SAFER BY DESIGN

The application was considered by the Crime Prevention Officer of Chatswood Local Area Command. The following issues were noted:

- Security of the Havilah Street pedestrian entry noting the length from the building line to the actual entry doors. Issues are the available sight lines of the entry, level of passive surveillance, lighting and security of a recessed entrance. Potential for entry after hours including from the adjacent property even if gates are provided.

- Security of entries from the Victoria Avenue and Mills Lane loading docks especially to rear of shops or service corridors that connect to the rear of shops. Both loading areas are directly connected to the public domain and are less able to be secured compared with those serviced from the separate driveway from Malvern Avenue. Although both are existing docks, the manner in which they will be used and their management and connection to the centre is changing.
- Clear sign-posting or other management devices will be needed in Malvern Avenue to avoid confusion and result in pedestrian or vehicular entry to the loading dock driveway.
- Consideration needs to be given to use of graffiti resistant exteriors. In this regard also the landscaping needs to avoid creating concealment locations next to the building for graffiti artists. This particularly applies to the frontages that have less activity and hence less opportunity for passive surveillance being Havilah Street and Malvern Avenue frontages. Similarly the size of glazed elements to the Coles office area accessible from the ground should be of a manageable size for replacement if vandalised.
- Trellis framing for creeper planting in landscaping adjacent to building exteriors and car park entries is good in reducing graffiti.

The concerns expressed regarding the Havilah Street pedestrian entry have been considered and resulted in a requirement to reconsider the design as noted in Section 5.4 of this report notwithstanding that the proponent has committed to providing an Assessment of Crime Prevention through Environmental Design and Security Plan prior to a Construction Certificate.

The security management issues of the loading docks off Victoria Avenue and Mills Lane require further consideration in the detailed design and in the future management of the centre. As the proponent has undertaken to further investigate the safer by design issues in the detailed design development it may include changes to door entries/exits, signage and on-site management of the loading docks if required.

5.19 COMMENTS ON DRAFT STATEMENT OF COMMITMENTS

A Statement of Commitments for the preferred project has been provided. It includes undertakings to meet the required standards for fire safety, access for people with disabilities, acoustic privacy including during construction and achieve the 4 Green Star target for ESD. The Statement of Commitments is attached in **Appendix F**.

It is considered that the draft Statement of Commitments is adequately comprehensive and that in combination with the proposed conditions of consent, some of which have been discussed in the report, there will be satisfactory management of the environmental impacts of the proposed development.

5.20 BCA MATTERS

The existing shopping centre is a complex building in terms of assessment against the current deemed to satisfy provisions of the BCA. It is accepted that the alterations and additions proposed will require a performance-based solution by the PCA. As there are some inconsistencies between the initial Fire Engineering Brief and the BCA Report submitted with the application, it is required that a further report on BCA matters be provided to Council especially with respect to fire safety. This can be required in the conditions of consent which will also establish that that the building as altered and extended is assessed as a united building.

5.21 WASTE MANAGEMENT

The existing waste management arrangements are proposed to be maintained. These currently provide for:

- Cardboard/paper is separated and baled for recycling;
- Organic waste is separated for collection and transport to an "Earth Power" site;

- General waste is collected and either compacted or binned for transport to Artarmon Transfer Station;
- Used cooking oil is separately collected.

The EA makes reference to and details the existing arrangements at the existing loading docks. However with the changes proposed to the loading dock arrangements there will have to be adjustments made to the waste management system around the site. This can include increasing the facilities for separation and collection of recyclables. Further detailing is required on the waste management system that addresses the potential up-grade and rationalisation of waste management between the loading docks. A Waste Management Plan can inform the Operations Management Plan for the loading docks as required in Section 5.14 above.

5.22 PUBLIC INTEREST

The proposed alterations and additions to Chatswood Chase will provide significant benefits to the community and to Chatswood, including:

- Enhanced retail opportunity and service in Chatswood in line with demand;
- Maintain Chatswood's competitive position relative to other retail centres that will have a flow-on benefit to other businesses including other retail businesses given the multi-purpose nature of trips to Chatswood;
- Up-grade of the presentation of the building to Victoria Avenue providing a positive contribution to the streetscape;
- Employment opportunities generated;
- Up-grade of the presentation of the streetscape in Havilah Street and Malvern Avenue;
- Sustainability initiatives;
- Reduced visual, overlooking and acoustic impacts of the car parking by enclosure of the car park structure ; and,
- Rationalisation and up-grade of the pedestrian access arrangements to the centre.

The development also adaptively reuses as much of the existing structure as possible. With the proposed conditions of consent and Statement of Commitments provided by the proponent, the potential impacts of the development have been ameliorated. The proposal is considered will make a positive contribution to Chatswood and the local community and for the reasons noted above is considered in the public interest.

6 CONSULTATION AND ISSUES RAISED

6.1 PUBLIC EXHIBITION DETAILS

The major project application was exhibited for 30 days from 25 June 2007 to 25 July 2007 and was published in the newspaper. The EA was made available to the public in the Department's Information Centre and at Willoughby Council and Chatswood Public Library.

A Preferred Project Report was lodged on 11 September, with further plans on 2 October, 2007 and as the changes to the nature of the project were not significant to the general public, it was not re-exhibited but it was viewed by the neighbours at meetings held on 3 October, 2007.

6.2 SUBMISSIONS RECEIVED ON ENVIRONMENTAL ASSESSMENT REPORT

The Council received a total of 31 submissions comprising 29 submissions from in response to the public notification and 2 submissions from public authorities being Department of Transport, Roads and the Regional

Development Advisory Committee of the RTA. A summary of the neighbour notification submissions can be found in **Appendix D** and the public authority submissions are discussed below in Section 6.3 of this report. The proponent responded to the submissions on 11 September, 2007 and the proponent's response is in **Appendix E**.

The 29 submissions from the public included 16 letters of objection from residents or on behalf of residents in 1-3 Havilah Street and 5 letters of objection from 339 Victoria Avenue. Of the public authority submissions, no objection to the development was made subject to various conditions.

6.3 SUBMISSIONS FROM PUBLIC AUTHORITIES

The following submissions were received from public authorities:

6.3.1 Department of Transport

- The Ministry acknowledged the proposed initiatives that will assist in reducing car based trips;
- Car parking provision should be consistent with the Draft Metropolitan Parking Strategy and the objectives of the Inner North Sub-Regional Strategy;

[Comment – Proposed car parking rate of provision has been reduced compared with existing and is consistent with WDCP and the objectives of the draft Sub-regional Strategy. The Draft Metropolitan Parking Strategy has not been released as yet to Councils]

- Investigate the provision of a dedicated car share parking space in support of the local *GoGet* car sharing scheme;

[Comment – This requires further investigation as Chatswood Chase car parking is owned by the centre is only available during the Centre trading hours. Access to the car space would therefore be restricted. Notwithstanding the advice should be investigated by the proponent and a condition can address this point]

- Adopt a pricing regime that achieves a reduction in private vehicle use (including reduced free periods of parking);

[Comment – The pricing regime is consistent with the shopper car parks in the rest of Chatswood including the provision of 3 hours free car parking. It has been found over a long period of observation by Council and noting the pricing regimes of competitive retail centres to Chatswood including Macquarie Centre and Warringah Mall that the pricing structure is an appropriate balance at this time. Should circumstances change Council would negotiate with operators of the car parks to change the current system as well as vary the pricing regime of its own car park in Albert Avenue. These pricing regimes do not apply for longer stay and car parks serving the office precinct of Chatswood]

- Provision for secure staff bicycle facilities and shower facilities;

[Comment – This is addressed in the proposal with requirement for additional facilities as noted in Section 5 of this report]

- A 12 month report after operation on the need for more bicycle facilities and success of the proposed Green Travel Plan;

[Comment – This is proposed to be addressed in the conditions of consent]

- Provide information on the Chatswood Chase web-site on public transport and bicycle access to the centre;

[Comment – This is proposed to be addressed in the conditions of consent]

- Provide adequate sight distances for pedestrians and bicycles at the car park entries;

[Comment – This has been considered in the assessment of the access assessment in Section 5]

- Provide minimum standards for pedestrian and bicycle access;

[Comment – This has been considered in the traffic assessment in Section 5 noting that a bicycle route is located in Lane W124. A bicycle phase is required to be provided at the Archer Street intersection. Pedestrian desire lines and safety have been considered in the rationalisation of pedestrian access from the north as well as up-grade of the access in Victoria Avenue]

- Address removal of waste and management of deliveries to the site.

[Comment – Waste management and delivery management has been considered in the project and is assessed in Section 5]

6.3.2 Roads and Traffic Authority

The Regional Traffic Advisory Committee of the RTA has advised of the following requirements:

1. Provision of a right turn phase for vehicles entering Malvern Avenue from Archer Street (north). Provision of a left turn slip lane in Archer Street if possible.

[Comment – Addressed in assessment and conditioned]

2. Concern regarding travel times for buses in Victoria Avenue has been advised to the RTA by STA noting that the development could worsen the situation.

[Comment – Council's assessment does not support with this comment. No change is proposed for the Victoria Avenue bus stops. Additional patronage will require monitoring by STA to consider increased services]

3. The right turn for exiting vehicles from the car park at Victoria Avenue should be banned. Vehicles wishing to turn west will use Albert Avenue.

[Comment – Use of Victoria Avenue is not appropriate noting also the problem of sight lines for vehicles exiting the car park turning right. Albert Avenue is the appropriate exit route from Chatswood for vehicles travelling west from the car park]

4. Council should consider reinstating the right turn movement at Archer Street and Victoria Avenue eastwards.

[Comment – This was given further consideration by Council's Traffic Section and not supported. The Traffic Group had further discussion with the RTA and it was found that the RTA considered that the introduction of the right turn ban at Archer St/Victoria Ave had transferred the right turn accident problem to Neridah St/Victoria Ave. This was found not to be the case after review of the crash data for both intersections and therefore the reinstatement could not be justified. This is particularly as it would add to queuing and congestion at the intersection adversely affecting traffic flows and the efficiency of the intersection. It would also cause additional delay to an STA bus route that turns left at that intersection due to the increased use of the left lane that would result]

5. The left turn slip lane at the car park exit in Victoria Avenue should be investigated to see if it can be narrowed to improve pedestrian comfort and safety. It will depend on the truck manoeuvring requirements.

[Comment – Addressed in assessment and conditioned]
6. Provision of three entry gates to the car park entry from Victoria Avenue to address queuing problems with the current two gate arrangement and comply with AS 2890.1.

[Comment – Advised to the proponent who has amended the car park design in the preferred project]
7. Investigate banning the right turn out of Daisy Street into Archer Street during peak hour.

[Comment – Not supported as a requirement of this development application. It requires further investigation by Council having regard to the operation of Daisy, Tulip and Violet Streets. Referred for further consideration to Council's Traffic Group]
8. Eliminate the illegal right turn movement into the shopping centre entry in Archer Street by providing a raised concrete median strip in Archer Street.

[Comment – Addressed in the assessment and conditioned]
9. The Archer Street entry is to be upgraded to improve pedestrian safety and priority at the entry.

[Comment – Addressed in the assessment and conditioned]
10. The bicycle route along Lane W124 noted in *Willoughby Bike Plan* should be extended along Malvern Avenue with a shared path through the closed section. The signals at Malvern Avenue/Archer Street intersection should be provided with a bicycle phase.

[Comment – The signal change can be part of the required changes to the traffic lights at the intersection. The extension of the bicycle path would be along Malvern Avenue from Archer Street to Havilah Street]
11. The entry to Mills Lane should be narrowed to improve pedestrian safety and comfort. This would be subject to Auto-TURN simulation of trucks entering the lane.

[Comment – Addressed in the assessment and conditioned]
12. A separation between the truck entry and the driveway entry to the car park in Malvern Avenue should be separated to avoid conflicts between vehicles and provide a pedestrian refuge between the two driveways;

[Comment – Advised to the proponent who has made appropriate amendments in the preferred project plans]
13. A Traffic and Car Parking Management Plan is required to be submitted to the RTA and Council for approval that addresses issue of management of localised traffic congestion associated with the development and to recommend strategies for dealing with traffic and parking during peak trading times such as Christmas, sale times and the like.

[Comment – Noted and a condition required]
14. The driveway, loading areas and car parking design shall be in accordance with AS 2890.1 – 2004 and AS 2890.2 – 2002.

[Comment – Noted and condition required]

15. To improve parking efficiency on the site a dynamic signage system is to be provided that indicates the location and availability of spaces.

[Comment – Addressed in the assessment and conditioned]

16. A "Green Travel Plan" should be developed and implemented.

[Comment – Proposed by Proponent in the application]

17. Appropriate contributions to road infrastructure improvements as required by Council's s.94 Plan should be required.

[Comment – Noted and addressed in the conditions]

18. All traffic signal modifications shall be designed to meet RTA requirements and approved prior to commencement of works.

[Comment – Noted and addressed in the conditions]

19. The developer shall be responsible for public utility adjustment or relocation required as a result of the above works including signage and at no cost to the RTA.

[Comment – Noted and addressed in the conditions]

6.4 PUBLIC SUBMISSIONS

6.4.1 Summary of issues raised in public submissions

The following issues were raised in the public submissions:

- Relationship to residential units especially 1-3 Havilah Street – loss of light, loss of outlook, loss of air circulation, mass and bulk, trellis will provide 'ladder' for burglars, traffic impacts in area, noise and vibration impacts during construction, dust impacts during construction;
- Relationship to office building 5-7 Havilah Street – loss of privacy, loss of sunlight to staff balconies, impacts of noise, trolleys and drop-off due to the pedestrian walkway, loss of green buffer, construction impacts;
- Loss of trees in Havilah Street and significant change to streetscape, mass and height;
- Loss of neighbourhood serenity;
- Needs staff smoking area on site rather than in surrounding streets;
- Provide free parking to staff to stop parking in streets;
- Relationship to 12-14 Malvern Avenue where there two day surgery centres carrying out delicate surgery – loss of light, noise and vibration during construction.

Most of these submissions raise issues related to relationship to neighbours (25 submissions), urban design (4 submissions), traffic including construction noise and traffic (24 submissions) etc. Discussion on the key issues which include those raised in submissions is in **Section 5** of this report.

A summary of all submissions received can be found in **Appendix D**. The proponent responded to these submissions on 11 September 2007 in the preferred project. The proponent's response to the submissions and Council's considerations is found at **Appendix E**.

6.4.2 Other issues raised in public submissions

One submission raised the impact of staff smokers congregating outside the building particularly in Archer Street which causes a passive smoking impact on pedestrians passing by. The situation is acknowledged and it is considered appropriate that the proponent consider a staff smoking area for the centre. This can be addressed in the conditions of consent. Options include a roof top location or other internal area with natural ventilation.

7 CONCLUSION

The EA has been assessed and the submissions have been considered in response to the proposal. The key issues raised in submissions related to relationships to neighbours, operational issues and management and mitigation of construction impacts. These issues have been considered and a number of conditions are recommended to ensure the satisfactory addressing of these issues and minimal impacts as a result of the proposal.

The proposed development will allow for significant up-grade of Chatswood Chase Shopping Centre that will maintain its quality of retail offer. Furthermore, the project application has complied with the environmental assessment requirements and generally complied with the objectives of the development standards of existing environmental planning instruments.

On these grounds, the site is considered to be suitable for the proposed development and the project is in the public interest. Consequently, it is recommended that the project be approved, subject to the conditions of approval/modifications to the concept plan.

8 RECOMMENDATION

It is recommended that the Minister:

- (A) consider the findings and recommendations of this Report; and
- (B) approve the carrying out of the project, under Section 75J *Environmental Planning and Assessment Act, 1979*; subject to modifications of the project and conditions and sign the Determination of the Major Project (**tag A**).

Prepared by:
Noni de Carvalho
CBD Place Manager,
Willoughby City Council

Endorsed by:
Greg Woodhams
Environmental Services Director,
Willoughby City Council

APPENDIX A. DIRECTOR-GENERAL'S ENVIRONMENTAL ASSESSMENT REQUIREMENTS



NSW GOVERNMENT
Department of Planning

29 JAN 2007

JB ✓
AW
AG

Contact: Aaron Sutherland
Phone: 02 9228 6457
Fax: 02 9228 6540
E-mail: aaron.sutherland@planning.nsw.gov.au

Our ref: MP 06_0301
File: 506/00804

Daryl Stubbings
Colonial First State Property
1341 Dandenong Road
CHADSTONE VIC 3148

Dear Mr Stubbings,

Subject: Director General's Requirements for the Chatswood Chase Shopping Centre Refurbishment and Expansion, MP 06_0301

I refer to your letter and Preliminary Assessment lodged on 27 October 2006 in which you requested confirmation that your proposal is a Major Project to which Part 3A of the *Environmental Planning and Assessment Act, 1979* (the Act) applies.

I advise you that the Minister formed the opinion on 21 December 2006 that your proposal is a Project and that Part 3A of the Act applies.

I have also attached a copy of the Director General's requirements (DGR's) for environmental assessment of the project which have been prepared based on the information provided to date. Under section 75F(3) of the Act, the Director-General may alter or supplement these requirements if necessary and in light of any additional information that may be provided prior to the proponent seeking approval for the project.

I also inform you that in this particular circumstance, the function of the Director General under Part 3A of the Act has been delegated to Willoughby City Council in accordance with Instrument of Delegation dated 2 January 2007.

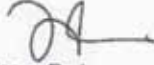
Accordingly, it would be appreciated if you would contact the Council before you propose to submit the Environmental Assessment for the project to determine:

- the fees applicable to the application;
- relevant land owner notification requirements;
- consultation and public exhibition arrangements that will apply;
- options available in publishing the Environmental Assessment via the Internet.

Prior to exhibiting the Environmental Assessment, the Council will review the document to determine if it adequately addresses the DGR's. If the Council considers that the Environmental Assessment does not adequately address the DGR's, the Council may require the proponent to revise the Environmental Assessment to address the matters notified to the proponent. Following this review period the Environmental Assessment will be made publicly available for a minimum period of 30 days.

If you have any enquiries about these requirements, please contact Aaron Sutherland on 02 9228 6457 or via e-mail at aaron.sutherland@planning.nsw.gov.au.

Yours sincerely



Jason Perica
Executive Director
Strategic Sites & Urban Renewal
As Delegate for the Director General

23/1/07

cc: Mr John Owen
General Manager - Willoughby City Council
PO Box 57
CHATSWOOD NSW 2067

Julie Bindon
JBA Urban Planning Consultant Pty Ltd
Level 2, 97 Pacific Highway
NORTH SYDNEY NSW 2060

Director-General's Requirements

Section 75F of the Environmental Planning and Assessment Act 1979

Application number	06_0301
Project	Chatswood Chase Shopping Centre Refurbishment and Expansion
Location	The site is bounded by Victoria Avenue, Malvern Avenue, Havilah Street and Archer Street, Chatswood and includes two lots upon which the existing shopping centre is located, being Lot 3 DP 790756 and Lot 1 DP 74357, and two additional lots which are to accommodate the expansion, being Lot 1 DP 781567 and Lot 1 DP 806034.
Proponent	JBA Urban Planning Consultants
Date issued	23/1/07
Expiry date	2 years from date of issue
General requirements	<p>The Environmental Assessment (EA) must include:</p> <ol style="list-style-type: none"> 1. An executive summary; 2. A description of the proposal including: <ul style="list-style-type: none"> - description of the site and surrounds - suitability of the site for the proposed development; - likely environmental, social and economic impacts; - justification for undertaking the project; and - alternatives considered 3. Address the following: <ul style="list-style-type: none"> • consideration of any relevant statutory provisions; • overview of other environmental issues and any relevant provisions arising from environmental planning instruments; • an environmental risk analysis of the project; • a detailed assessment of the key issues specified below; • a draft Statement of Commitments, outlining environmental management, mitigation and monitoring measures • a conclusion justifying the project, taking into consideration the environmental impacts of the proposal, the suitability of the site, and whether or not the project is in the public interest; • a signed statement from the author of the Environmental Assessment certifying that the information contained in the report is neither false nor misleading. • a quantity surveyor's cost estimate report to verify the capital investment value of the project.
Key issues	<p>The Environmental Assessment must address the following key issues:</p> <p>Relevant EPs and Guidelines to be addressed Assess the proposal against all relevant legislation and planning provisions applying to the site, including:</p> <ul style="list-style-type: none"> • Sydney Regional Environmental Plan No. 5 – Chatswood Town Centre; • Draft State Environmental Planning Policy No. 66 – Integration of Land Use and Transport; • State Environmental Planning Policy No. 11 – Traffic Generating Development; • State Environmental Planning Policy No. 55 – Remediation of Land; • Willoughby Local Environmental Plan 1995; • Willoughby Development Control Plan 2006; <p>The Environmental Assessment must identify the nature and extent of any non-compliance with relevant environmental planning instruments, plans and guidelines and provide adequate justification for any non-compliance.</p> <p>Built Form, Urban Design and Streetscape Assessment must include, but not be limited to, consideration of the following matters:</p> <ul style="list-style-type: none"> • Consistency with the character of development in the locality and relative to adjacent buildings including density, streetscape, scale, height, and built form.

	<ul style="list-style-type: none">• The impacts of the proposed development on privacy, views and overshadowing of the adjoining sites.• Analysis of views & vistas and impact of the proposal on these views. <p>Public domain/ pedestrians and Landscaping The Environmental Assessment is to demonstrate how the proposed building design and treatment of the public domain:</p> <ul style="list-style-type: none">• Addresses the pedestrian access in the context of Chatswood Town Centre;• ensures access for people with disabilities; and• minimises potential for vehicle and pedestrian conflicts;• provides appropriate landscaping; and• mitigates wind impacts <p>The Environmental Assessment must include a design for the public domain and landscaped elements associated with the development which demonstrates good urban design and high quality landscaping and which integrates with the Chatswood Town Centre.</p> <p>Traffic and Parking Issues The Environmental Assessment must present a traffic impact study for parking and access to the site which must be prepared in accordance with the RTA's relevant policies and guidelines. The assessment should include the following issues:</p> <ul style="list-style-type: none">• assessment of proposed access arrangements to the site in the context of the Chatswood Town Centre and car park operations;• consideration of the traffic impacts on the existing intersections and the capacity of road network to safely and efficiently cater for the additional vehicular traffic generated;• assessment of pedestrian, cyclist and public transport issues; <p>Ecologically Sustainable Development Detail how the development will incorporate ESD principles in the design, construction and ongoing operation phases. Details shall be provided of sediment and erosion control and other measures during construction and water conservation and minimisation practices.</p> <p>Drainage and Stormwater The environmental assessment is to address drainage and stormwater issues associated with the development. This should include a drainage concept plan.</p> <p>Provision of Public Services and Infrastructure Address provision of public services and infrastructure having regard to the Council's Section 94 Contribution Plan.</p> <p>Utilities In consultation with relevant agencies, address the existing capacity and requirements of the development for public services and infrastructure.</p> <p>Social and Economic Context A social and economic impact study is to be submitted with the environmental assessment which addresses the economic context, capacity and impact of the proposed development in the context of the Chatswood Town Centre.</p> <p>Demolition/Construction Impacts Address measures to ameliorate potential impacts arising from the construction of the proposed development.</p> <p>Waste Management Address demolition and construction wastes that may be generated - likely quantities, proposed disposal destinations and best practices for safe handling and disposal in accordance with WorkCover's Occupational Health and Safety requirements.</p> <p>Building Code of Australia Compliance Report Address the compliance of the development with the relevant provisions of the Building Code of Australia.</p>
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	<p>Noise Impacts Demonstrate that the proposal will be designed, constructed, operated and maintained so that there is no unacceptable level of noise impacts (including traffic noise) on amenity in the locality</p> <p>Statement of Commitments The Environmental Assessment must include: (i). Proposed mitigation and management of any impacts identified in the above assessment; and (ii). A draft Statement of Commitments detailing measures for environmental management, mitigation measures and monitoring for the projects. The draft Statement of Commitments should include consideration of:</p> <ul style="list-style-type: none">• built form and design of the proposed buildings;• access arrangements, traffic management and parking;• existing infrastructure on the site and measures to protect or relocate any such infrastructure, particularly the electricity cable;• stormwater management;• any contributions towards infrastructure costs; and• identification of the ongoing responsibility for ownership and maintenance of any public domain works.
Deemed refusal period	Under clause 8E(2) of the <i>Environmental Planning and Assessment Regulation 2000</i> , the applicable deemed refusal period is 60 days from the end of the proponent's Environment Assessment period for the project.

APPENDIX B. COMPLIANCE WITH EPIS INCLUDING STATE ENVIRONMENTAL PLANNING POLICIES THAT SUBSTANTIALLY GOVERN THE CARRYING OUT OF A PROJECT.

ENVIRONMENTAL PLANNING INSTRUMENT	CONSIDERATION
SEPP 11 – Traffic Generating Development	Referred to Sydney Regional Advisory Committee of RTA and the Committee's comments addressed in Section 6.3.2. of the Report.
SEPP 55 – Remediation of Land	Contamination study of the site provided with EA – no evidence of contamination found. Precautionary principle applied in draft conditions (Section 4.8.4. of Report).
Draft SEPP 66 – Integration of Land Use and Transport	Consistent with objectives and requirements (Section 4.8.5 of Report).
SREP 5 – Chatswood Town Centre:-	See Section 4.8.6 of Report
Clause 3(1). General Aims	Consistent with general aims and objectives especially (a), (b), (d), (e), (f) and (g).
Clause 2(2)(b) – Specific Aims and Objectives	Consistent with objectives for zone especially (i) and (ii).
Clause 7H – Land Use	Complies with permissible land uses.
Clause 9 Restrictions on Use	Does not comply – development proposes retail uses on part of the site restricted to ancillary car parking. Still predominately car parking.
Clause 11 Floor – Space Ratio	Complies – FSR propose is 2.57:1 where permissible FSR is 3:1
Clause 15 – Height	Complies – Height variable over site to existing maximum of 27m for glazed roof over existing central void. No change proposed. Permissible 52M.
Clause 33 – Consultation	Referred to RTA as required.
WLEP 1995	See Section 4.8.7 in Report
Clause 2 Aims and Objectives	Consistent with general objectives especially (b), (c), (i), (g)
Clause 9 Advertisements	Complies – no third party advertising proposed.
Clause 13d Amenity	Consistent – the amenity of adjoining and nearby properties has been considered.
Clause 35e – Zone objectives/Permissible uses	Does not comply due to supermarket proposed on WLEP part of site.
Clause 36 Floor Space Ratio	Complies – proposed FSR only 0.5:1 where 1:1 permissible bulk of development car parking on WLEP part of site.
Clause 37 Height	Does not comply – proposed height 16 – 18 metres where 9 metres permissible. Additional height due to car parking.
Roads Act, 1993	Various encroachments of the building are proposed in Victoria Avenue. An air space lease agreement with Council is acceptable to Council as the owner of the road.

APPENDIX C. COMPLIANCE WITH DCPS AND OTHER PLANS AND POLICIES

Environmental Planning Instruments considered in assessment of proposal.

Provisions of Environmental Planning Instrument	Consideration
State Environmental Planning Policy (Major Projects) 2005	
Schedule 1, Clause 13 Group 5 Residential Commercial or Retail Projects	Identifies the site as an area to which Part 3A of the Act must apply.
Willoughby Development Control Plan	
Part C.3 Sustainable Development	Consistent – proposed to achieve 4 Green Stars based on the pilot rating for shopping centres. Conditions B1(4), B23, B24, B25, F18, F38.
Part C4 Transport Requirements	Compliance with car parking requirements. Green Travel plan proposed Commitment to Access Management Plan. Conditions B1(5) and (6), B2(4), B16, B17, B18, B19, B20, G2, G3, G9, G10 confirm
Part C5 Water Management	Consistent with water retention/recycling and detention requirements. Final design subject to completion of flood study. Commitment given to compliance Conditions B31, B32, B33, F24, F25, F26, F27, F28, F29 and F30.
Part C.6 Access, Mobility and Adaptability	Consistent with requirements but full compliance requires detailed design development commitment given to Access Management Plan.
Part C.8 Waste Management	Consistent with requirements but full compliance requires detailed design Conditions B1(5), B15, B29.
Part C.11 Safety By Design	Design changes required by condition B2(2). Commitment given to CPETD principles. Condition AN22.
Part C.15 Under grounding of Cables	Proponent aware of requirement. Reinforced by Condition F43.
Part G.5 Advertising and Advertising Structures	No third party advertising proposed. Location of signage and signage structures identified. Condition F39 requires separate approval of signage form and content when known.

APPENDIX D. SUMMARY OF PUBLIC SUBMISSIONS

Project description
MP06_0301

Summary of all submissions received for this application

SUMMARY OF SUBMISSIONS ALTERATIONS AND ADDITIONS TO CHATSWOOD CHASE

Key:-

D = Design review carried out for preferred project

C = Potential consent condition prior to Construction Certificate requirement

N = Noted/considered in assessment if relevant

Address	No of Submissions	Matters Raised	Council Comment
1-3 Havilah Street	16 plus local State M.P.	• Loss of landscaped buffer (stand of Casuarinas)	D/C
		• Loss of light/reduced sunshine access	D/C
		• Loss of fresh air/air circulation	D/C
		• Loss of outlook	D/C
		• Mass height and bulk of building at boundary unacceptable.	D/C
		• Trellis screening not adequate – insufficient space for maintenance and cleaning – will provide a “ladder” for burglars	D
		• Plenty of land to adjust design and have regard to neighbours.	D
		• Devaluation of property	N
		• Zoning currently restricted to protect properties (Cl. 9,SREP5).	N

Address	No of Submissions	Matters Raised	Council Comment
		<ul style="list-style-type: none"> Plans incorrect do not reflect actual setbacks and use. Problems of proximity during construction – noise, vibration, structural drainage likely to 1-3 Havilah, units will be unliveable, dust, privacy loss. Need 10 -12 metres separation and reduced height to RL 87 – 89. Traffic impacts more cars. 	D C N
341 Victoria Avenue	2	<ul style="list-style-type: none"> Loss of light Loss of ventilation Loss of privacy Excessive height Loss of landscaped buffer – told at meeting last year it would remain. Need acoustic wall for noise 3 storey height maximum should be maintained in Havilah/Malvern area. 	N* N* N* N* N* N*
339 Victoria Avenue	5	<ul style="list-style-type: none"> Loss of mature trees in Havilah Street Shadowing, loss of sunlight Loss of views Reduced setbacks – easy to access balconies of neighbours, trellis is a problem as it is a “ladder”. Needs 10-12 metre setback and reduced height. Alternative is to buy adjacent properties and include in site. 	N/C N** N** N** N N

Address	No of Submissions	Matters Raised	Council Comment
		<ul style="list-style-type: none"> • Kiss and ride potential with access from Havilah Street – 'kiss and ride' facility should be provided on site. • Havilah Street pedestrian entry should be designed to minimise impact on 5-7 Havilah Street. • Noise and air pollution from increased traffic. • Noise and air pollution during construction. • Should provide double glazing and financial compensation for impacts. 	<p>N/C</p> <p>D/C</p> <p>N</p> <p>C</p> <p>N</p>
12-14 Malvern	1	<ul style="list-style-type: none"> • Currently Chatswood Grove is a "healthy" building • Loss of light • Loss of air circulation • Will devalue property • Increased heavy vehicle traffic in Malvern Avenue and increased traffic congestion and conflicts at entry. • Increased noise • Restricted pedestrian access for patients. • Construction damage potential • Noise and vibration impacts during construction with delicate surgery in two day surgery centres in building. • Infection risk with increased dust in air conditioning 	<p>D</p> <p>D</p> <p>D</p> <p>N</p> <p>N</p> <p>N</p> <p>D</p> <p>C</p> <p>C</p> <p>D</p>
5-7 Havilah Street	1	<ul style="list-style-type: none"> • Currently a "healthy" building 	N

Address	No of Submissions	Matters Raised	Council Comment
		<ul style="list-style-type: none"> • Loss of privacy • Loss of sunlight to balconies used by staff and guests • Loss of amenity because of increased building height, reduced setback. • Construction noise impacts on editing work • Pedestrian access adjacent will have negative impacts of noise, trolleys, drop-off of people • Current separation to north and rear should be retained • Pedestrian access should be moved • Needs more than green space as buffer 	<p>N</p> <p>N</p> <p>D</p> <p>C</p> <p>N</p> <p>N/D</p> <p>N</p> <p>N</p>

Address	No of Submissions	Matters Raised	Council Comment
2 Havilah Street	1	<ul style="list-style-type: none"> • Feeling of being hemmed in • Large corporations gobble up / overwhelming • Loss of view line over 1-3 Havilah Street – grey wall 5 metres above roof. • Lacks quality of life components. • Reduce height to RL 90 and set back at least 10 metres. 	<p>N</p> <p>N</p> <p>N/D</p> <p>N</p> <p>N</p>
50 Nicholson Street	1	<ul style="list-style-type: none"> • Only fire escapes to Havilah Street now – 4m wide entry extends impact of Chatswood Chase contrary to planning principles of past design limit to commercial area. • Havilah Street entry attractive as it links to fresh food “centroid” – quick stop issue in Havilah St as there is direct access. • Exceeds 9m height control • Loss of mature streets in Havilah Street (8) – loss of visual protection – impact on root system of trees to be retained should be clarified by Council. • Planter boxes no longer an option because of water needed. • Effect of proposed landscaped screening not accurate – likely not adequate. • Havilah Street powerlines should be underground • Loss of neighbourhood serenity, security, people loitering at entry, kiss and ride issue, taxis and tourist buses 	<p>N</p> <p>N</p> <p>N</p> <p>N</p> <p>N</p> <p>N</p> <p>C</p> <p>N</p>

Address	No of Submissions	Matters Raised	Council Comment
3 Daisy Street	1	<ul style="list-style-type: none"> • Needs staff smoking area unpleasant to walk along Archer Street – impacts on amenity of others. • Removed trees should be relaced • Traffic impacts Daisy Street – developer should do traffic study • No mention of bike path in Kirk Lane • Problem of illegal right turns into ramp in Archer Street – Council does not enforce – needs to be median strip 	<p>N</p> <p>N</p> <p>N</p> <p>N</p> <p>N</p>
27 Blakesley Street	1	<ul style="list-style-type: none"> • Pedestrian access in Havilah Street should be open as long as shops • Consider pedestrian link to Civic Place/no change to other pedestrian movements • Green Travel Plan supported – real time information bus and trains, bicycle facilities, no excess car parking • Additional car parking should be under Coles to reduce scale • Need buffer zone to commercial precinct – landscaping, staggered vertical and horizontal building elements, increased set backs • Enclose car parks to reduce noise and light spill – reduce access to upper levels after 6pm (except Thursday) • Provide free employee parking to stop parking in streets around • Active street frontages Vic Ave and Archer Street • No external vents pipes tanks exhausts etc 	<p>N</p> <p>N</p> <p>N</p> <p>N</p> <p>N</p> <p>N</p> <p>N</p>

		<ul style="list-style-type: none"> • Tight controls on construction hours • Minimise construction traffic Havilah Street • Ensure shopping trolleys are disabled when they exit the building • No hotels, night clubs or amusement centres • Developer contributions to benefit pedestrians, transport access, public art, social 	<p>N</p> <p>N</p> <p>C</p> <p>C</p> <p>N</p> <p>N</p> <p>N</p>
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* The landscaped setback between the driveway and 341 Victoria Avenue is being retained with a variable width up to 6 metres.

** A number of points raised by submissions from 339 Victoria Avenue appear to be in support of residents at 1-3 Havilah Street rather than directly affecting that property.

APPENDIX E. PROPONENT'S RESPONSE TO SUBMISSIONS



Chatswood Chase Shopping Centre Table of Response to Submissions

The table below summarises the responds to issues raised as part of the exhibition of the EAR. The table should be read in conjunction with correspondence from WOC dated 8 August 2007 provided in Appendix A.

No.	Comment	Response
Architectural Form		
1	Council looks forward to similar modifications to the Archer Street in the future that will also see the centre interact and contribute more positively to the public domain along that frontage.	Noted
2a	Council requests that you reconsider elements of the built form in Victoria Avenue particularly with respect to the extent of building encroachment into the road reserve. Elements to consider include:	-
2b	- Up to a 450mm building encroachment Council will accept without a lease arrangement under the Roads Act, 1993 subject to suitable Indemnities and Certifications of structural adequacy being provided.	Noted
2c	- Awning: The maximum width of an awning is 3.6 metres subject to the face of the awning being setback 600mm from the kerb line of the road carriageway. The clearance to the underside of the awning shall be at least 3 metres or of sufficient height that any proposed under awning signage has a clearance of 2.6 metres above the footpath.	Awnings will comply with these requirements. Sweeping curved awning will be adjusted to be at least 600mm back from kerb.
2d	- Encroachments: All encroachments that are not subject to a lease must be capable of removal from the building without affecting the structural integrity of the building.	Noted
2e	- Within the context of the above background information you are requested to give further consideration to the design along the Victoria Avenue frontage.	Noted

Chatswood Chase Shopping Centre - Response to Submissions

September 2007

No.	Comment	Response
3	<p>Glazed Element- Victoria Avenue</p> <p>The glazed/transparent element adjacent to the east of the entry has changed in its form from the April 2006 design where it increased in horizontal width as it increased in height to a form that now is proposed to increase not only in width but also depth as it increases in height. The extent of encroachment into the road reserve increases to 1 to 2 metres and includes areas of leasable floor area on Levels 1 and 2. It also forces the Chatswood Chase signage blade to increase in depth to be readable from afar such that it appears to extend to the line of the kerb or more.</p>	<ul style="list-style-type: none"> - The Chatswood Chase signage blade will project no closer to the kerb than 600mm. - The glazed element adjacent to the east of the Victoria Avenue entry is fixed over the existing façade. There are therefore no areas of leasable floor area outside the site boundary. - The glass is colour-backed not transparent. - The glazed element splay out to maximize articulation.
3b	<p>On the basis of the above:</p> <ul style="list-style-type: none"> - The depth of the blade is considered excessive. It is considered that the design of both elements should be reviewed to maintain a constant depth over the height of both elements. - It is considered that the blade encroachment should be less than 3 metres and other encroaching elements should be adjusted such that the "Chatswood Chase" signage can be read from afar. 	<p>Council has previously encouraged increasing the depth of these elements. Maintaining a constant depth will diminish the dynamic quality of these elements and the level of articulation. We would prefer to retain current principles. We believe the sign should be readable from a distance; most viewing will be carried out from moving vehicles.</p>
4	<p>Signage Frame - Victoria Avenue</p> <p>It is considered that the building in the location needs to be redesigned to introduce some light and appearance of transparency in the location that addresses both the south and east views to the site and that the major tenant signage location and design be reconsidered as part of that process.</p>	<ul style="list-style-type: none"> - The sign now returns onto the splayed wall. - The panels will not be transparent, however, framing of the signage frame will give depth to the signage and integrate it with the façade treatment of the centre along Victoria Avenue. - Major tenants signage or logo will be displayed on each face of the sign, being visible from the south, along Neridah Street and east along Victoria Avenue.
5	<p>Lifestyle Images – Victoria Avenue</p> <p>Clarification is sought on the intent for the graphics above the entry in Victoria Avenue and the intention for the glazed elements above the driveway. It is not Council's intent that either location is used for changing billboards of tenant advertising.</p>	<p>This element is for lifestyle graphics only and will not be transparent. The scope of graphics used on the sign is to be confirmed in consultation with the assessment authority and through the preparation of signage strategy to be agreed with the assessment authority at a later stage.</p>
6	<p>Public Art</p> <p>At pre DA discussion opportunities for public art elements being incorporated into the entry experience from Victoria Avenue were supported. It is unclear in the documentation as to what form and how that is proposed to occur.</p>	<p>Public art will be provided to the property in a location, design and capital cost to be agreed with Willoughby City Council.</p>
7	<p>Malvern Avenue</p> <p>The architecture of the elevation facing west in Malvern Avenue needs to be given further consideration and design detail as a major vehicular entry point for the centre. Similarly the side elevation to the building element above the driveway in Victoria Avenue needs similar treatment.</p>	<p>The building height has been reduced due to the deletion of car park Level 2A.</p> <p>The west face of Zone A (Refer to EAR, Figure 20 – Building Zone Overview) (the part of the site fronting Malvern Avenue) has for the most part been moved approximately 2400mm from the boundary line (between the site and 12-14 Malvern Avenue).</p> <p>The increased setback of 2400mm and reduced height will improve the amenity, outlook and penetration of natural light from that proposed as part of the EAR.</p> <p>The louvre element provided on the North Wall (addressing Malvern Avenue) has been returned approximately 6000mm down the west wall from the north corner.</p> <p>The louvers articulate the façade more and better address the visual aspect of the building when approaching along Malvern Avenue from Archer Street.</p>

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No.	Comment	Response
8	<p>Electricity Substations</p> <p>Any requirement for electricity substations should be incorporated into the building and integrated into its architecture.</p>	<p>Maximum electricity demand calculations for the proposed development have been submitted to Energy Australia. Based on preliminary maximum demand, the distribution of load within the proposed development and Energy Australia's existing HV reticulation within the area, Energy Australia have advised that a new 1000KVA kiosk substation adjacent to Malvern Avenue (along with the retention of the existing kiosk substation in the same area) will be required.</p> <p>On behalf of the proponents, Norman Disney Young have approached Energy Australia with Council's objection to the location of the substation outside the fabric of the building. Norman Disney & Young are waiting for a design brief from Energy Australia.</p>
Relationship to Neighbours		
9	<p>1-3 Havilah Street</p> <p>Redesign is required to address the relationship particularly with respect to the impacts on 1-3 Havilah Street that has residential units that face directly towards the proposed development. Provision of a setback in the order of at least 7 metres and a landscaped buffer is necessary to maintain some outlook, light penetration and potential for air circulation. Consideration should be given to retention of the existing mature tree buffer if possible. The solution may also involve stepping the setback where it is increased with the height.</p>	<p>The design has been amended.</p> <p>The revised proposal increases the setback from the adjoining properties from those proposed as part of the EAR, increasing the setback to 4000mm, consistent with the current setback of the car park building for levels LG to Level 1, with a greater setback of 7350mm for Levels 2 and Level 2A.</p> <p>The extensions to the various levels (in construction Zones C and D) (located immediately adjacent to 1-3 and 5-7 Havilah Street) will not be constructed any closer to adjoining properties than the present building line of Level G.</p> <p>The proposal improves the amenity, outlook and natural light than that proposed as part of the EAR. The existing tree screen in the setback will be retained.</p>
10a	<p>5-7 Havilah Street</p> <p>The mass and bulk relationship with 5-7 Havilah Street and 12-14 Malvern Avenue as commercial buildings is considered to be primarily with respect to light penetration and mass and bulk of the building. Modulation generally and set back of the upper levels of the building... should be given consideration.</p> <p>The additional concerns expressed by 5-7 Havilah Street regarding loss of sunlight and outlook to its recreational balconies have been considered. Council notes that the roof height of the proposed development over the pedestrian entry and for a distance of 45 metres is about RL 86.8. The proposed building for that distance is set back above that height to about 15 metres from the boundary to the external face of the architectural acoustic screen. Noting that the upper level balcony is at RL 86. and the parapet height of the building is RL 90. and allowing for the orientation of the site, it is considered that there is a reasonable relationship between the buildings and adequate potential for sun light access to the upper level balcony particularly during the lunchtime period. However, the lower terrace may be affected and the relationship is considered further below in respect to the Havilah Street access.</p>	<p>The design has been amended.</p> <p>The revised proposal increases the setback from the adjoining properties from those proposed as part of the EAR, increasing the setback to 4000mm, consistent with the current setback of the car park building for levels LG to Level 1, with a greater setback of 7350mm for Levels 2 and Level 2A.</p> <p>The extensions to the various levels (in construction Zones C and D) (located immediately adjacent to 1-3 and 5-7 Havilah Street) will not be constructed any closer to adjoining properties than the present building line of Level G.</p> <p>The proposal improves the amenity, outlook and natural light than that proposed as part of the EAR. The existing tree screen in the setback will be retained.</p> <p>The proposed roof over the Havilah Street entry has been deleted and the tall landscaped screen replaced with 2500mm high hedge screen. The design amendments improve the amenity and the penetration of natural light than that proposed as part of the EAR. The new building structure is now approximately 4500mm from boundary with 5-7 Havilah Street.</p> <p>Other design changes include the deletion of the acoustic screen to the existing car park. The revised acoustic report advises that such a measure are not required.</p> <p>Graphic elements to the wall adjacent to Havilah Street entry walkway have been added. Adding more articulation and visual interest to the wall and walkway in this area.</p>

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No.	Comment	Response
10b	<p>12-14 Malvern Avenue</p> <p>The mass and bulk relationship with 5-7 Havilah Street and 12-14 Malvern Avenue as commercial buildings is considered to be primarily with respect to light penetration and mass and bulk of the building. Modulation generally and set back of the upper levels of the building especially adjacent to 12-14 Malvern Avenue should be given consideration.</p>	<p>The design has been amended.</p> <p>The building height has been reduced due to the deletion of car park Level 2A.</p> <p>The west face of Zone A (Refer to EAR, Figure 20 – Building Zone Overview) (the part of the site fronting Malvern Avenue) has for the most part been moved approximately 2400mm in from the boundary line (between the site and 12-14 Malvern Avenue).</p> <p>The increased setback of 2400mm and reduced height will improve the amenity, outlook and penetration of natural light from that proposed as part of the EAR.</p> <p>The louvre element provided on the North Wall (addressing Malvern Avenue) has been returned approximately 6000mm down the west wall from the north corner.</p> <p>The louvers articulate the façade more and better address the visual aspect of the building when approaching along Malvern Avenue from the Archer Street.</p>
11a	<p>341 Victoria Avenue</p> <p>The relationship to 341 Victoria Avenue at this stage is considered acceptable noting that the separation along the boundary of the site with the Chatswood Chase driveway access to the basement car parks is being retained which will allow for buffer planting (see later landscape comments).</p>	Noted
12	<p>Victoria Avenue Vehicular Entry/Exit</p> <p>Advice from a suitably qualified expert (Noise) is requested as to whether the noise from traffic in the driveway will be made worse by the partial enclosure of the driveway such that the request for acoustic screening or some form of treatment noted in some of the submissions needs to be undertaken.</p>	Should the acoustic detailed analysis prove that acoustic treatment is required to the covered loading dock than appropriate resiliently faced, acoustically absorbent material will be provided.
Landscape Design		
13	<p>At the public meeting, comment was made by your architect that it was expected that there was potential for three of the existing trees in the Havilah Street setback to the existing car park will be retained. Council's Landscape Section requires clarification on this point having regard to the extent of demolition and building works that may impact on the root system of the trees. The clarification needs to carefully consider the species, age and health of the trees noting that if damaged through the demolition/construction process, they may become a danger in the future for pedestrians in the vicinity.</p>	<p>The existing tree screen will be lost during construction. A new integrated landscape installation will be provided from 5-7 Havilah Street around to the boundary with 12-14 Malvern Avenue.</p> <p>Hedge planting and new street trees will be planted to Council requirements along Havilah Street as agreed with Council. Illustrated on updated Landscape Plans, Drawing Numbers 1461-LC1 and 1461-LC2.</p>
14a	<p>Various inconsistencies exist between the landscaped plan and the architectural plans, these require review and clarification. These include:</p>	Updated Landscape Plans provided, Drawing Numbers 1461-LC1 and 1461-LC2.
14b	<p>– Level changes and the need for retaining walls along the boundary with Havilah Street in the architectural plans that do not appear in the landscape plans. Council's expectation is that the interface is seamless with minimal level change and if a change in level is required it is not of a height that requires fencing.</p>	The detailed design to achieve Council's expectation will be addressed prior to issue of the CC for Landscaping.
14c	<p>– A paved pathway from Malvern Avenue enters that site to the building but its purpose is unknown.</p>	Stepping stone pavers have been provided where access is required to switchrooms.

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No.	Comment	Response
14d	– Planters required in the building structure and roof detailing to allow for the proposed planting is not reflected in the architectural plans for the Havilah Street pedestrian access.	The roof to Havilah Street pedestrian entry is now proposed to be deleted. Refer 20a.
14e	– It is noted that any planting over concrete structures requires more than 600mm depth of soil. Additional detail on the locations where planting is over structure needs to be clarified.	Additional details provided in Landscape Concept Plans, Drawing Numbers 1451-LC1 and 1451-LC2.
15	Street trees (two) in Victoria Avenue will be required consistent with the rest of Victoria Avenue being <i>Platanus x hybrida</i> in vaulted tree pits in accordance with Council's specifications. Generally the use of Bangalow Palms is not supported. In the case of the Victoria Avenue loading area interface, the tree planting should be <i>Platanus x hybrida</i> (two) close to the street and <i>Angophora costata</i> to the rear or north of the frontage. Council would also like to see the two existing <i>Platanus x hybrida</i> retained at the Victoria Avenue driveway entry.	Two new street trees will be planted to Council requirements in tree planting pits as illustrated on Drawing Numbers 1451-LC1 and 1451-LC2.
16	Under-grounding of cables will be required	Under grounding of any new cables required for the new development will be provided.
17	To increase the growing area of the new and replacement trees and to soften the commercial character the public footpath shall not be fully paved and shall include a nature strip along the kerb line.	The footpath is existing, and no change to the footpath width is proposed.
18	There are other details relating to the landscaping of the site such that it is appropriate that the landscape architect have further discussions with Council's Landscape Section.	Additional details provided in Landscape Concept Plans, Drawing Numbers 1451-LC1 and 1451-LC2.

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Havilah Street Pedestrian Access		
19	The local community is mixed in its opinion regarding the proposed Havilah Street pedestrian access. On balance it is considered at this stage that a pedestrian access in Havilah Street will be supported.	Noted
20	Notwithstanding the above, the following requires consideration: - The pedestrian entry should be set back from the boundary and buffer landscaping to 5-7 Havilah Street provided in the set back. This gives more options for the type of planting that is consistent with locally indigenous species rather than confusing the view lines and movement through the entry with a trellis and palms. The width of the set back to be adequate for the purpose and is expected to be in the order of over 3 metres. The glazed side wall of the pedestrian entry will look onto the buffer.	The proposed roof over the Havilah Street entry has been deleted and the tall landscaped screen replaced with 2500mm high hedge screen. The design amendments improve the amenity and the penetration of natural light than that proposed as part of the EAR. The new building structure is now approximately 4500mm from boundary with 5-7 Havilah Street. Other design changes include the deletion of the acoustic screen to the existing car park, consistent with the advise in the revised acoustic report. Graphic elements to the wall adjacent to Havilah Street entry walkway have been added. Adding more articulation and visual interest to the walkway in this area.
21a	- Management of the out of hours use and security of the walkway noting that the actual entry doors to the centre are located 28 metres from the face of the building. It will act as an entrapment location. Any measures to provide security to the access will have to consider that it is also part of the fire exit from Stair 14.	The management of the out of hours use and security of the walkway is to be managed through the detailed design and Construction Certificate.
21b	- An undertaking needs to be provided and details given that shopping trolleys used in the centre will be fitted with features such as special flooring treatment or automatic braking devices or similar that precludes trolleys being taken outside the building.	The management of trolleys is to be managed through the detailed design and Construction Certificate. Details on appropriately gating the walkway will be considered as part of the detailed design.
21c	- Agreement to adjustment or relocation of the traffic management device at the location to provide unobstructed view lines of the access and ensure a level of passive surveillance from the public domain.	Propose to replace the existing speed hump with a "wombat" type raised pedestrian crossing.
21d	Council will not agree to provision of any short term parking restrictions in the location as it will encourage use for quick stop shopping and increase vehicular traffic in Havilah Street. The current time limits are proposed to remain. This issue and the additional setback of the entry has been considered in the context of the objection by the adjoining owner that their driveway/crossing is likely to be used for short stay pick-up/drop off by customers.	Noted
BCA Matters		
22	There are some inconsistencies between the issues raised in the BCA report and the fire engineering brief. The BCA report notes that there is less than the required exit width proposed on the lower ground floor but the fire engineering brief considers that the exit width issue is on the ground floor.	An updated BCA assessment report reflecting the current status of the design including confirmation of assessment of exit widths will be issued concurrently (under separate cover) with this report (Response to Submissions).
23	The BCA report does not have regard to considering the amenities requirements for staffing levels likely in the centre notwithstanding that the likely employment numbers have been identified in the social impact assessment.	Dix Gardner (Private Certifier) will provide formal confirmation of compliance of the amenities requirements having regard to the staff population numbers concurrently (under separate cover) with this report (Response to Submissions).

Traffic Management Issues and Car Parking		
24	<p>In carrying out the investigation where traffic volumes are being considered you are advised to have regard to the fact that an allowance has been made in the report for traffic generation from the Chatswood Transport Precinct Project (CTPP) for its 10,500 GLA retail floor space where no car parking is provided and the same consultant did not acknowledge any traffic generation in the report accompanying the application to the Minister for the CTPP development.</p> <p>Also the development proposed on the Civic Place hotel site (DA2007/323) is now known and proposes 141 serviced apartments, a tavern, restaurants and ancillary retailing with provision of 147 car spaces. The impact of those context developments on the surrounding road needs to be adjusted to properly consider the Chatswood Chase development impacts.</p>	<p>Traffic/Parking issues have been addressed by the project traffic consultants, Masson Wilson Twiney Pty Ltd. Their response is provided in Appendix D to this Report.</p> <p>In assessing the traffic generated by the Chatswood Transport Precinct Project, a cautious/conservative allowance was made. The traffic analysis conducted for Chatswood Chase was therefore conservative (i.e. provided trip generation rates which are likely to be in excess than those actually expected).</p> <p>No further analysis of the Civic Place Hotel site traffic generation is considered necessary as in each case "worst" case i.e. higher than expected traffic generation estimates were incorporated in the Chatswood Chase analysis.</p>
25a	<p>The following further investigation is required:</p> <ul style="list-style-type: none"> - The level of service of some intersections is not compatible with expected delay. 	<p>It is acknowledged that there are some discrepancies in Table 3.3 of the Traffic and Transport Assessment. These arose through transcription errors and are corrected on an amended version of the table which is attached at Appendix D.</p>
25b	<ul style="list-style-type: none"> - Increase in the number of entry boom gates from Victoria Avenue from two to three. 	<p>An additional boomgate is shown on the Victoria Avenue entrance plans.</p>
25c	<ul style="list-style-type: none"> - No right turn from Daisy Street to Archer Street south. 	<p>The provision of a no right turn from Daisy Street to Archer Street is a decision which should be made by council.</p>
25d	<ul style="list-style-type: none"> - Potential of a raised median to stop the illegal right turn movement from Archer Street (north) to the speed ramp. 	<p>Agreed. It is suggested that the following condition be imposed:</p> <p>"The applicant shall construct a central median in Archer Street opposite the Chatswood Chase car park access to prevent right turns into and out of the site. The design of the median shall be approved by Council's Director of Technical Services."</p>
25e	<ul style="list-style-type: none"> - Provision of a right turn phase at Neridah St (south) /Victoria Ave and Malvern Ave (north)/Archer Street. 	<p>It is suggested that phasing of these traffic lights be agreed with the RTA. To achieve this it is suggested that the following condition of consent be applied:</p> <p>"The applicant shall investigate the most appropriate phasing of traffic signals at the intersections of Neridah Street (south) with Victoria Avenue and of Malvern Avenue with Archer Street. The investigation shall include examination for the potential for separate right turn phases in Neridah Street and Archer Street and as appropriate involve consultation with RTA and Council officers. The applicant shall implement any phasing changes determined as being appropriate in the investigation."</p>
25f	<ul style="list-style-type: none"> - Removal of the right turn facility to exit west from the basement car park entry in Victoria Avenue. 	<p>Agreed. This would be examined as part of 25 e) above.</p>
25g	<ul style="list-style-type: none"> - A bicycle only phase at Archer/Malvern intersection from Lane W124. 	<p>Agreed. This would be examined as part of 25 e) above.</p>

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25h	- Kerb narrowing to reduce the crossing width for pedestrians at Mills Lane while still allowing for truck movements to the Mills Lane loading facility.	Agreed in principle but will need to be subject to detailed design to ensure that large trucks can still turn left in and out. We suggest a condition as follows: "In conjunction with Council's engineering department the applicant shall investigate the potential to narrow the throat of Mills Lane at its intersection with Archer Street. The applicant shall implement any narrowing deemed appropriate."
25i	- Provision and location of 18 motorcycle bays.	Agreed and suggest the following condition: "A minimum of 18 motorcycle spaces shall be provided within the car park of the Centre."
25j	- Provision of in the order of 10-12 bicycle parking bays at each entrance to the centre noting that as space is an issue at the Victoria Avenue entrance if less are provided at that location, extra are provided at an alternative entrance and adequately sign posted accordingly.	As previously discussed with WCC, this may be difficult as there may be implications for pedestrian access or landscaping. We suggest the following condition to cover this: "Prior to the issue of the construction certificate, the applicant shall investigate in conjunction with Council officers the potential to provide 10 to 12 bicycle parking spaces at each of the three main pedestrian entrances to the Centre. The applicant shall provide the bicycle parking agreed in the investigation."
25k	- Provision of bicycle lockers with capacity for at least 26 bicycles.	The following condition is suggested: "The applicant shall provide secure caged or locker bicycle parking for 26 bicycles within the Centre."
25l	- Reviewing the design of all car park levels having regard to the Memo of 20 July, 2007 (previously circulated).	The car park design is likely to change slightly as detailed structural and services design takes place. We accordingly suggest the following condition to ensure that the design is satisfactory: "The car park layout shall be generally as indicated on Buchan Group's plans (list plan numbers as appropriate). Parking spaces on new structure shall have geometry generally in accordance with the requirements of Australian Standard AS 2890.1-2004."
25m	- Redesign of the parallel drive way entrances from Malvern Avenue to minimise potential truck and vehicle conflicts and provide increased safety for pedestrians.	The design has been modified to separate the driveways as suggested by Council. The potential for improved delineation of movements in Malvern Avenue is being investigated in conjunction with landscaping plans.
25n	- Checking and confirmation of the adequacy of the design of the entry/exit ramp from/to Malvern Avenue for all size vehicles likely to use the car park (swept path confirmation).	A plot indicating vehicle access movements is attached at Appendix D.
25o	- Redesign of the left turn into Victoria Avenue (east) from the car park/loading area to improve pedestrian safety.	Any change to this will need to meet RTA requirements because of the relationship of the left turn to the adjacent traffic signals. We suggest the following condition in relation to this: "The applicant shall consult the RTA in relation to the potential to narrow the free left turn lane from the Chatswood Chase Victoria Avenue car park exit into Victoria Avenue with a view to making the crossing of the left turn easier for pedestrians. If the RTA is agreeable to the left turn lane being narrowed, the applicant shall implement such narrowing."
25p	- Investigation of the need for provision of a pedestrian crossing/refuge across Havilah Street at the pedestrian entry (it may not be necessary) and adjustment to the traffic calming device (see also earlier point no.4) and car parking layout in the street.	Propose to replace the existing speed hump with a raised pedestrian crossing.

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25q	- Further clarification of the design and operation of the Coles loading area as its size including the size of the goods handling area is not considered adequate for the size of supermarket. Truck manoeuvring for 17 metre articulated vehicles requires confirmation allowing for the potential of a second vehicle being present at the dock. Goods handling needs to allow for the incoming goods holding area prior to stacking on shelves as well as waste management storage facilities for general waste, putrescibles and recycled waste (cardboard baling facility etc).	A draft management plan prepared by Coles is attached as Attachment 4 in the Traffic Statement at Appendix 4.
25r	- Further clarification of the scope and scale of use of the loading areas and waste handling services off Mills Lane including the 'Coles' area including truck sizes.	Plan showing truck layout supplied at Appendix 4.
26	Further given the extent of demolition, redesign and reconstruction of the car park levels and the loading dock from Malvern Avenue, the design needs to consider achieving the head room requirements (2.5 metres) for car spaces for people with disabilities.	New spaces are located on Level 2 and are proposed to have a vertical clearance of 2.5m above them. Because of the need to match existing floor levels it will not be possible to provide such headroom elsewhere in the car park.
27	The maneuvering of delivery vehicles is not to be compromised by columns located in the manoeuvring area. Unobstructed head room in the truck loading areas shall be a minimum of 4 metres.	Headroom in the new Coles loading area will be a minimum of 4m.

Hydraulic Matters		
28	Chatswood Chase lies within a major stormwater system being part of the Scotts Creek system. Recent studies commissioned by Council have indicated there are likely to be issues of overland flow and the capacity of the system during a 1 in 100 year event. It is noted that the proposal will impact on existing stormwater pipes that traverse the site. Further hydraulic investigation is required in consultation with Council's Engineering Section (Eric Cheang 9777 7708).	<p>1) <u>Overland Flow</u> - WCC plan to install a 5000m³ flood mitigation/water reuse storage tank as part of the Civic Place development. This will have a significant affect on the existing hydrological conditions of Scotts Creek Catchment. Council's Consultant has completed a preliminary flood study of the Catchment and it was agreed with WCC on 15 August 07 that Arup could access some information derived for this study. Arup acknowledge that flooding may occur and subject to review of Council flood study will advise the proponent of likelihood of flooding. The proponents will provide a flood risk management strategy to Council in response to the likelihood of this event based on the current design.</p> <p>2) <u>Traversing Pipes</u> – Concept design for the treatment of the traversing pipe was discussed and agreed with WCC on 15 August 07 (subject to WCC review of detailed design). Concept includes:</p> <ul style="list-style-type: none"> - diversion of existing Council drainage; grated inlet on NE side of Archer Street diverted to existing Council pit on opposite side of Archer Street and grated inlet on southern side of Malvern Street diverted to existing Council system on Malvern/Havilah Street - provide for drainage of adjacent private properties to the NW of the site. Connection of this drainage through the new development requires an Interlotment Drainage Easement and appropriately sized drainage conduits. <p>3) <u>On Site Detention (OSD)</u> - OSD to be provided to WCC requirements for the new Coles development area on the northern section of the site. Alterations and additions in other existing building areas will not require OSD.</p> <p>4) <u>Rainwater Reuse</u> – As discussed and agreed with WCC on 15 August 07, the proposed 250m³ rainwater reuse tank proposed is satisfactory. The designers to explore rainwater reuse opportunities to maximising reuse where possible.</p>
29	You will also be required to consult with Sydney Water as it is part of a Sydney Water system. Reference is made to the Memo of 30 July previously circulated to you.	Arup to consult with Sydney Water regarding any of their assets that will be directly affected by the proposed development.

APPENDIX F. ENVIRONMENTAL ASSESSMENT AND STATEMENT OF COMMITMENTS

The Environmental Assessment is provided on disk in consideration of its length. Provided below is the Statement of Commitments.

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Statement of Commitments

Approved Project

The development of Chatswood Chase will be carried out generally in accordance with the architectural drawings prepared by The Buchan Group and landscape architect drawings prepared by Mark McWha as shown numbered and dated in Table 1 below, and with the Environmental Assessment Report prepared by JBA Urban Planning Consultants Pty Ltd dated June 2007 and the subsequent "Response to Submissions" report also prepared by JBA and dated September 2007.

Table 1 – Architectural Drawings

Design Standards			
Drawing Number (revision)	Date	Drawing Number (revision)	Date
AEX 100 (07)	03-09-07	ATP 401 (04)	03-09-07
AEX 200 (07)	03-09-07	ATP 402 (04)	03-09-07
AEX 201 (07)	03-09-07	ATP 500 (04)	03-09-07
AEX 202 (08)	03-09-07	ATP 501 (05)	06-09-07
AEX 203 (07)	03-09-07	ATP 502 (05)	06-09-07
AEX 204 (07)	03-09-07	ATP 503 (04)	06-09-07
AEX 205 (06)	03-09-07	ATP 504 (04)	06-09-07
ATP 100 (05)	03-09-07	ATP 505 (04)	06-09-07
ATP 101 (05)	03-09-07	ATP 506 (04)	06-09-07
ATP 102 (05)	03-09-07	ATP 507 (03)	03-09-07
ATP 103 (07)	03-09-07	ATP 601 (04)	03-09-07
ATP 104 (04)	03-09-07	ATP 602 (04)	03-09-07
ATP 105 (03)	03-09-07	ATP 603 (04)	03-09-07
ATP 200 (08)	06-09-07	ATP 604 (04)	03-09-07
ATP 201 (08)	06-09-07	ATP 605 (05)	03-09-07
ATP 202 (10)	06-09-07	ATP 606 (04)	03-09-07
ATP 203 (09)	06-09-07	ATP 607 (03)	03-09-07
ATP 204 (10)	06-09-07	ATP 608 (03)	03-09-07
ATP 205 (08)	06-09-07	ATP 609 (03)	03-09-07
ATP 206 (10)	06-09-07	ATP 610 (03)	03-09-07
ATP 207 (08)	06-09-07	ATP 611 (03)	03-09-07
ATP 208 (09)	06-09-07	ATP 612 (03)	03-09-07

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ATP 209 (08)	06-09-07	ATP 813 (00)	10-09-07
ATP 210 (08)	06-09-07	ATP 800 (09)	06-09-07
ATP 400 (04)	03-09-07	ATP 801 (02)	03-09-07
		ATP 802 (01)	03-09-07

Design Standards

The new components of the proposed development will comply with the design standards shown in Table 2. The existing development will be retained in its current state.

Table 2 – Design Standards

Design Standards	
Design Issue	Standard
General building and fire safety	Building Code of Australia
Vehicle access, parking	<ul style="list-style-type: none"> • Parking bays and aisles are proposed to comply generally with AS2890.1 2004 for Class 3 or 3A parking. • Accessible spaces to comply with draft AS2890.6 off street car parking for people with disabilities
Access for the disabled	<ul style="list-style-type: none"> • Australian Standards AS1428.1 (2001) Design for access and mobility Part 1: General requirements for access-New building work; • AS1428.2 (1992) Design for access and mobility Part 2: Enhanced and additional requirements-Buildings and facilities • AS1735.12 (1999) Lifts, escalators and moving walkways Part 12: Facilities for persons with disabilities • AS2890.1 – 1993 Car Parking -Off-street parking; AS2890.1 – 2004 Car Parking -Off-street parking; DR04021 – 2004 Parking facilities – Off-street parking for people with disabilities (with the exception of the minimum floor to ceiling heights on all parking levels other than Level 2. The existing floor to ceiling heights on all parking levels other than Level 2 may be used).
Acoustic privacy	<ul style="list-style-type: none"> • Criteria specified in the Noise Impact Assessment prepared by Norman Disney & Young dated May 2007, and reissued in September 2007. • Construction noise will comply with noise criteria requirements in the Environment Noise Control Manual which are as follows: • LA10 = background LA10 + 20 dB(A) for periods of less

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	<p>than 4 weeks;</p> <ul style="list-style-type: none"> • L_{A10} = background L_{A10} + 10 dB(A) for periods between 4 and 26 weeks; and • L_{A10} = background L_{A10} + 5 dB(A) for periods greater than 26 weeks • To prevent damage to dwellings vibration levels will be below 10mm/s at the site boundary and below 5mm/s at any foundation level of any occupied building;
ESD performance	<ul style="list-style-type: none"> • 4 Green Stars under the Pilot Rating Tool for Shopping Centres, prepared by the Green Building Council of Australia, will be prepared for refurbished and new parts of the Shopping Centre.

Matters to be completed prior to Construction Certificate

The matters to be completed prior to the issue of a construction certificate are:

- A Green Star Rating Report prepared in accordance with the Pilot Rating Tool for Shopping Centres by the Green Building Council of Australia will be prepared and submitted to Willoughby City Council demonstrating the achievement of 4 Green Stars for refurbished and new parts of the Shopping Centre.
- An Assessment of Crime Prevention through Environmental Design and Security Management Plan will be prepared and submitted to Willoughby City Council.
- Should the outcomes of the Chatswood Chase flood study require design amendments, that these design amendments will be done to the satisfaction of council.
- Construction drawings for stormwater management works will be prepared in accordance with the requirements of Willoughby City Council and submitted to Council prior to the issue of a construction certificate for those works.
- An Arborist Report justifying the selection of trees to be removed on the Havilah Street and Malvern Avenue frontages will be prepared and submitted to Willoughby City Council prior to any tree removal.
- Should the acoustic detailed analysis prove that acoustic treatment is required to the covered loading dock than appropriate resiliently faced, acoustically absorbent material will be provided.

With partial enclosure of the car park entry, it is anticipated that reverberant noise in this area may increase. To treat these effects, the acoustic consultants, Norman Disney Young have recommended that the underside of the enclosing element be treated with.

Matters to be completed prior to Occupation Certificate

The matters to be completed prior to the issue of an occupation certificate are:

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- Section 94 monetary contributions will be paid to Willoughby City Council as prescribed in Willoughby City Councils developer Contribution Plan, dated July 2007;
- Public art will be provided to the property in a location, design and capital cost to be agreed with Willoughby City Council.
- An Access Management Plan will be prepared and submitted to Willoughby City Council. It will include the following components:
 - Car Park Management Plan that includes, amongst other matters, directional and information signage on driveway access to car parking levels and car parking spaces available on each level;
 - Green Travel Plan that aims to encourage staff and users of the Chatswood Chase shopping centre to minimise the use of cars and use alternative modes of transport to access the shopping centre;
 - Operational Management Plan for access for the disabled; and
 - Integration Plan to co-ordinate and integrate the networks of pedestrian, cycle and vehicle access.
- Stormwater management works will be completed, and a report on the completion of the works will be prepared and submitted to Willoughby City Council.
- Landscape works will be completed, and a report on the completion of the works will be prepared and submitted to Willoughby City Council.

Construction management

A Construction Management Plan will be prepared and sent to Willoughby City Council prior to the commencement of works for each stage of works associated with demolition, excavation and building construction.

The Construction Management Plan will address the matters and comply with the standards identified in the Construction Management Strategy prepared by Clifton Coney Group dated May 2007, and in the Noise Impact Assessment prepared by Norman Disney & Young dated May 2007. A dilapidation report for properties immediately adjoining areas of proposed construction works will be undertaken.

The provisions in the Environmental Planning and Assessment Regulation 2000 relating to construction works will apply to the proposed development.

Ongoing monitoring and management

A qualified Acoustical Consultant (being a member of the Acoustic Association) will be engaged to undertake an ambient noise and vibration survey at agreed sensitive locations to establish baseline noise and vibration conditions prior to the commencement of the construction/demolition project.

The monitoring will be conducted in accordance with the following procedures:

- Assessment Procedure for Baseline Noise Monitoring Base line noise monitoring will be conducted in the noise sensitive zone over a period of not less than one week. Monitoring will be undertaken prior to the commencement of construction or demolition site activity or (in the case of the Guideline being applied after site work has commenced) during days when construction or demolition activity is not

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occurring. All noise measurements will be performed by a qualified acoustic consultant in general accordance with Australian Standard AS 1055.1-1997.

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