



Planning

Contact: Louise Bochner
Phone: 02 9228 6263
Fax: 02 9228 6488
Email: louise.bochner@planning.nsw.gov.au

Mrs Clare Brown
Partner
JBA Planning Consultants Pty Ltd
Level 7, 77 Berry Street,
NORTH SYDNEY NSW 2060

Our ref: MP 09_0154
File: S09/01526-1

Dear Mrs Brown,

Director-General's Requirements for 7 Railway Street, Chatswood (MP 09_0154)

Thank you for your request for Director-General's Environmental Assessment Requirements (DGRs) for the above project on behalf of Mirvac. The DGRs were prepared from the information provided within your application and in consultation with relevant Government agencies, including Council (attached).

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.

Prior to exhibiting the Environmental Assessment, the Council in consultation with the Department will review the document to determine if it adequately addresses the DGRs. If the Environmental Assessment does not adequately address the DGRs, the Director-General 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. Please contact the Department at least two weeks before you propose to submit the Environmental Assessment to determine the fees applicable to the application.

While the provision of key issues and assessment requirements means you are able to commence preparation of your Environmental Assessment, I would like to take this opportunity to reiterate the Department's particular concerns regarding the limited amount of commercial floorspace proposed in the development.

In addition, there are matters previously considered in relation to the masterplanning of this precinct relating to the quantum of public open space and provision of a through - site pedestrian access under the railway enclosure structure which will need to be considered as part of this current proposal.

Please also find attached with this letter, copies of submissions from other agencies providing their key issues for the proposal. Please note that these responses have been provided to you for information and should be considered in your Environmental Assessment, however they do not form part of the DGRs for the Environmental Assessment.

If you have any queries regarding this matter, please do not hesitate to contact Louise Bochner on 9228 6263 or via e-mail at louise.bochner@planning.nsw.gov.au.

Yours sincerely

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Richard Pearson
Deputy Director General
Development Assessment and Systems Performance
(As delegate for the Director General)

CC: Willoughby City Council

Application number	MP 09_0154
Project	Application for the construction of a residential/commercial development.
Location	7 Railway Street, Chatswood
Proponent	JBA Urban Planning Consultants Pty Ltd on behalf of Mirvac
Date issued	10/11/2009
Expiry date	If the Environmental Assessment (EA) is not exhibited within 2 years after the date of issue, the applicant must consult further with the Director-General in relation to the preparation of the environmental assessment.
Key issues	<p>The Environmental Assessment (EA) must address the following key issues:</p> <p>1. Relevant EPI's policies and Guidelines to be Addressed Planning provisions applying to the site, including permissibility and the provisions of all plans and policies including:</p> <ul style="list-style-type: none"> • Objects of the EP&A Act 1979; • NSW State Plan, Urban Transport Statement; • Draft Inner North Sub-regional Strategy; • Sydney Regional Environmental Plan (SREP) No. 5 (Chatswood Town Centre); • SEPP (Building Sustainability Index: BASIX) 2004; • SEPP 55 Remediation of Land; and • SEPP 65 Design Quality of Residential Flat Development. • Department's <i>Interim Guidelines for Development near Rail Corridors and Busy Roads</i> (2008). • Nature and extent of any non-compliance with relevant environmental planning instruments, plans and guidelines (including the Willoughby DCP 2006) and justification for any non-compliance. <p>2. Built Form The EA shall address the height, bulk and scale of the proposed development within the context of the locality, and in particular, any proposed exceedences of existing and draft height controls applying to the land and zoning. In addition, detailed envelope/height and contextual studies should be undertaken to ensure the proposal integrates with the local environment, and the form, layout and siting of the building achieves optimal design and amenity outcomes. The EA shall also provide the following documents:</p> <ul style="list-style-type: none"> • Comparable height study to demonstrate how the proposed height relates to the height of the existing/approved developments surrounding the subject site; • View analysis to and from the site from key vantage points; and • Options for the siting and layout of building envelopes. <p>3. Land Use The EA shall address the relevant metropolitan, regional and local strategies in relation to the desired future mix of landuses, and provide a justification for the amount of residential floorspace being proposed. In this regard, it is considered</p>

that the development should provide on site a substantial component of commercial floor space.

4. Urban Design / Public Domain

The EA shall address the design quality with specific consideration of the façade, massing, setbacks, building articulation, use of appropriate colours, materials/finishes, landscaping, safety by design and public domain, including an assessment against the CPTED Principles.

The EA shall provide options for the provision of a through site pedestrian access under the railway enclosure structure.

The EA shall provide options for the provision of public open space on top of the railway enclosure structure, and shall provide a justification for any reduction in the area of such open space compared with that proposed in the Masterplan approval for the Precinct.

5. Environmental and Residential Amenity

The EA must address solar access, acoustic privacy, visual privacy, view loss and wind impacts and achieve a high level of environmental and residential amenity.

In particular, the EA shall have regard to any increases in overshadowing of adjacent residential areas and public open space, and in particular, the public open space of Chatswood Mall.

6. Transport and Accessibility (Construction and Operational)

The EA shall address the following matters:

- Provide a Transport & Accessibility Impact Assessment prepared in accordance with the RTA's *Guide to Traffic Generating Developments* and making reference to the *NSW Planning Guidelines for Walking and Cycling*, considering the following issues:
 - Traffic generation including daily and peak traffic movements likely to be generated by the proposed development, the impact on nearby intersections and the need for funding or upgrading or road improvement works (if required). The intersections which are required to be modelled are detailed on Page 2 of the correspondence from the RTA dated 9 October 2009;
 - Access, loading dock(s) and service vehicle movements (including vehicle type and likely arrival and departure times);
 - Car parking arrangements, including number of spaces shall comply with Willoughby DCP 2006;
 - Demonstrate that a minimalist approach to carparking provision is taken based on the accessibility of the site to public transport;
 - Measures to promote sustainable means of transport including public transport usage and pedestrian and bicycle linkages in addition to addressing the potential for implementing a location specific sustainable travel plan;
 - Demonstrate how users of the development will be able to make travel choices that support the achievement of relevant State Plan targets;
 - Detail the existing pedestrian and cycle movements within the vicinity of the site and determine the adequacy of the proposal to meet the likely future demand for increased pedestrian and cycle access;
 - Identify measures to mitigate potential impacts for pedestrians and

	<p>cyclists during the construction stage of the project; and</p> <ul style="list-style-type: none"> • Provide an assessment of the implications of the proposed development for non-car travel modes (including public transport, walking and cycling). • There is a joint RTA/Council Traffic Study currently being undertaken in the Chatswood CBD area investigating environs traffic options. Any recommendations from this study that may impact upon the application should be taken into consideration in the EA. <p>7. Ecologically Sustainable Development (ESD) The EA shall detail how the development will incorporate ESD principles in the design, construction and ongoing operation phases of the development.</p> <p>The EA must demonstrate that the development has been assessed against a suitably accredited rating scheme to meet industry best practice and give consideration to carbon and water use neutrality as an ESD goal for the development.</p> <p>8. Contributions The EA shall address the provision of public benefit, services and infrastructure having regard to Council's Section 94 Contribution Plan, and provide details of any Planning Agreement or other legally binding instrument proposed to facilitate this development.</p> <p>9. Drainage The EA shall address drainage / groundwater / flooding issues associated with the development / site, including stormwater, drainage infrastructure and incorporation of Water Sensitive Urban Design measures.</p> <p>10. Utilities In consultation with relevant agencies, address the existing capacity and requirements of the development for the provision of utilities including staging of infrastructure works.</p> <p>11. Noise and Vibration Assessment The EA should address the issue of noise and vibration impact from the railway corridor and Pacific Highway, and provide detail of how this will be managed and ameliorated through the design of the building, in compliance with relevant Australian Standards and the Department's <i>Interim Guidelines for Development near Rail Corridors and Busy Roads</i>.</p> <p>12. Statement of Commitments The EA must include a draft Statement of Commitments detailing measures for environmental management, mitigation measures and monitoring for the project.</p> <p>13. Consultation Undertake an appropriate and justified level of consultation in accordance with the Department's <i>Major Project Community Consultation Guidelines October 2007</i>.</p>
Deemed refusal period	60 days

Plans and Documents to accompany the Application

<p>General</p>	<p>The Environmental Assessment (EA) must include:</p> <ol style="list-style-type: none"> 1. An executive summary; 2. A thorough site analysis including site plans, areal photographs and a description of the existing and surrounding environment; 3. A thorough description of the proposed development; 4. An assessment of the key issues specified above and a table outlining how these key issues have been addressed; 5. An assessment of the potential impacts of the project and a draft Statement of Commitments, outlining environmental management, mitigation and monitoring measures to be implemented to minimise any potential impacts of the project; 6. The plans and documents outlined below; 7. A signed statement from the author of the Environmental Assessment certifying that the information contained in the report is neither false nor misleading; 8. A Quantity Surveyor's Certificate of Cost to verify the capital investment value of the project (in accordance with the definition contained in the Major Projects SEPP); and 9. 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.
<p>Plans and Documents</p>	<p>The following plans, architectural drawings, diagrams and relevant documentation shall be submitted;</p> <ol style="list-style-type: none"> 1. An existing site survey plan drawn at an appropriate scale illustrating; <ul style="list-style-type: none"> • the location of the land, boundary measurements, area (sq.m) and north point; • the location of the land with respect to the adjoining rail boundary and rail infrastructure; • the existing levels of the land in relation to buildings and roads; • location and height of existing structures on the site; and • location and height of adjacent buildings and private open space. • all levels to be to Australian Height Datum. 2. A Site Analysis Plan must be provided which identifies existing natural elements of the site (including all hazards and constraints), existing vegetation, footpath crossing levels and alignments, existing pedestrian and vehicular access points and other facilities, slope and topography, utility services, boundaries, orientation, view corridors and all structures on neighbouring properties where relevant to the application (including windows, driveways, private open space etc). 3. A locality/context plan drawn at an appropriate scale should be submitted indicating: <ul style="list-style-type: none"> • significant local features such as parks, community facilities and open space and heritage items; • the location and uses of existing buildings, shopping and employment areas; • traffic and road patterns, pedestrian routes and public transport nodes.

	<p>4. Architectural drawings at an appropriate scale illustrating:</p> <ul style="list-style-type: none"> • the location of any existing building envelopes or structures on the land in relation to the boundaries of the land and any development on adjoining land; • detailed floor plans, sections and elevations of the proposed buildings; • elevation plans providing details of external building materials and colours proposed; • fenestrations, balconies and other features; • accessibility requirements of the Building Code of Australia and the Disability Discrimination Act; • the height (AHD) of the proposed development in relation to the land; • the level of the lowest floor, the level of any unbuilt area and the level of the ground; and • any changes that will be made to the level of the land by excavation, filling or otherwise. <p>5. Other plans:</p> <ul style="list-style-type: none"> • Erosion and Sediment Control Plan – plan or drawing that shows the nature and location of all erosion and sedimentation control measures to be utilised on the site; • Geotechnical/Structural Report – prepared by a recognised professional to assess the risk of Geotechnical failure on the site and identifies design solutions and works to be carried out to ensure the stability of the land and structures and safety of persons. The Report needs to be prepared in accordance with RailCorp’s <i>“Brief for Review of Geotechnical & Structural Design for Developments Adjacent to or above Rail Corridor for External Third Party Works”</i> performed under the NSW SEPP (Infrastructure) 2007. • Electrolysis Risk Analysis – prepared by a recognised professional which assesses the electrolysis risk for the development from stray currents. • Stormwater Concept Plan and Hydrology Report – prepared by a recognised professional to identify that drainage from the development, and any potential impacts upon the railway corridor. • View Analysis - Visual aids such as a photomontage must be used to demonstrate visual impacts of the proposed building envelopes in particular having regard to the siting, bulk and scale relationships from key areas; • Landscape plan - illustrating treatment of open space areas on the site, screen planting along common boundaries and tree protection measures both on and off the site. • Shadow diagrams showing solar access to the site and adjacent properties at summer solstice (Dec 21), winter solstice (June 21) and the equinox (March 21 and September 21) at 9.00 am, 12.00 midday and 3.00 pm. • Construction Plan – that considers structural support during excavation and any track/tunnel monitoring requirements during excavation and construction phases of the development.
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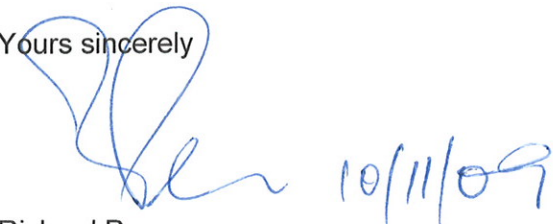
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PO Box K349
Haymarket NSW 1238
Tel: (02) 8922 4062 Fax: (02) 8922 4890
Email: alice.pettini@railcorp.nsw.gov.au

23 October 2009.

Ms Louise Bochner
Senior Planner
Department of Planning
GPO Box 39
Sydney NSW 2001

ATTENTION: Louise Bochner

Dear Ms Bochner,

**DIRECTOR GENERAL'S REQUIREMENTS
7 Railway Street, Chatswood
REQUEST FOR KEY ISSUES AND ASSESSMENT REQUIREMENTS**

I refer to your Department's email of 15 October 2009 requesting RailCorp's key issues and assessment requirements for the above proposal.

In brief, it is RailCorp's position that the Environmental Assessment should address the issues contained in your Department's *Development Near Rail Corridors and Busy Roads - Interim Guideline*. ✓ DGRs

In terms of the type of documentation required by RailCorp in order to assess the likely impacts on the rail corridor, RailCorp requests that the following be included in the Director-General's requirements:

- *The proponent shall provide an accurate survey locating the development with respect to the rail boundary and rail infrastructure. This work is to be undertaken by a registered surveyor.* ✓ DGRs
- *An acoustic assessment is to be submitted demonstrating how the proposed development will comply with the Department of Planning's Interim Guidelines for Development near Rail Corridors and Busy Roads.* ✓ DGRs (5/12)
- *An Electrolysis Expert is to be engaged to prepare a report on the Electrolysis Risk to the development from stray currents.* ✓ DGRs
- *Geotechnical and Structural report that meets the requirements of the attached brief.* ✓ DGRs
- *Construction methodology with details pertaining to structural support during*

(Circular PS08-016) Issued 22 Dec 08



RailCorp

excavation and details of any track/tunnel monitoring requirements during excavation and construction phases. ✓ DGRs

- Cross sectional drawings showing ground surface, rail tracks, sub soil profile, proposed basement excavation and structural design of sub ground support adjacent to the Rail Corridor. ✓ in section 4 of PLAN
- Given the site's location next to the rail corridor, drainage from the development must be adequately disposed of/managed and not allowed to be discharged into the corridor unless prior approval has been obtained from RailCorp. A hydrology report should also be conducted (if applicable). ✓ in section 9 of DGRs

In addition, the proponent is to meet the following requirement:

Given the possible likelihood of objects being dropped or thrown onto the rail corridor from balconies, windows and other external features (eg roof terraces and external fire escapes) that face the rail corridor, the Applicant is required to install measures (eg awning windows, louvers, enclosed balconies etc) which prevent the throwing of objects onto the rail corridor.

Thank you for providing RailCorp the opportunity to comment and please contact me if you have any further enquires. Please forward to RailCorp a copy of the Director-General's Environmental Assessment Requirements once finalised.

Yours sincerely,

Alice Pettini
Assistant Town Planner
RailCorp Property

Attachment:

A) Geotechnical and Structural Brief



RailCorp

BRIEF FOR REVIEW OF GEOTECHNICAL & STRUCTURAL DESIGN FOR DEVELOPMENTS ADJACENT TO OR ABOVE RAIL CORRIDOR FOR EXTERNAL THIRD PARTY WORKS PERFORMED UNDER THE NSW STATE ENVIRONMENT PLANNING POLICY (Infrastructure) 2007

INTRODUCTION

The NSW State Environment Planning Policy (Infrastructure) 2007 requires development applications for development within 25 metres of the Rail Corridor with ground penetrations greater than 2 metres to be referred to Rail Authority for review and concurrence before the consent authority consents to development applications.

The response period for RailCorp to reply from the date of receipt of a development application from a consent authority is 21 days. The consent authority may grant consent to a development without concurrence of the Chief Executive Officer of the Rail Authority if 21 days have passed since giving notice and the Chief Executive Officer has not granted or refused to grant concurrence.

If insufficient information is submitted with a notice from a consent authority for the rail authority to review the development application (**DA**), RailCorp will have 14 days to respond to the referring consent authority to request the process be stopped until the development applicant provides the requested information. This "stopping of the clock" can be enacted once only with each consent authority referral.

RailCorp's internal resources are limited and external professional service providers may be required to assist RailCorp in undertaking the review of the development application to identify deficiencies in the submitted development application.

SCOPE AND OBJECTIVES

The following brief is for geotechnical and structural engineering consultants to perform design reviews of geotechnical and structural reports which form part of the documentation submitted to RailCorp by a consent authority on behalf of development applicants.

The main task for the design reviewer will be to verify that the developer's design consultant has taken into account the column loads, determined the loads and pressures under the footings that may impact on rail tunnels and other infrastructure and to be satisfied that the loads and pressures are within approved limits.

In addition, the design reviewer is to verify that the developer's design consultant has conducted sufficient geotechnical investigation and analysis to determine what subsidence or displacement of rail infrastructure may occur due to the development and whether these movements are within approved limits.

The reviewing consultant will refer to the parameters set out within this brief to identify non compliance or detail omissions within the DA referral.

The following specific tasks are required to be undertaken by the reviewing consultant:

1. Liaison and initial briefing with RailCorp.
2. Preliminary review of all relevant documents associated with the DA to appreciate the intended work.
3. Site visit if necessary to appreciate the existing conditions and dimension of the intended work.
4. Detailed assessment of DA documents to:
 - Identify and establish relevant criteria for assessment of the proposal in addition to the information contained in this document.



- Identify what additional documents are required to be submitted by the Developer to enable full assessment of the proposal to be carried out.
 - Identify issues of concern or non-compliance resulting from the detailed review of the proposal, in particular those related to loads on tunnels resulting from structures associated with the proposed development and stress relief due to excavation.
 - Identify conditions of a geotechnical and structural nature to be included in the final list of consent conditions.
5. Prepare a report of the detailed assessment of the DA.

DOCUMENTS TO BE PROVIDED BY RAILCORP

RailCorp will provide all relevant documents in its possession associated with the DA. These documents will include some or all of the following where available:

1. Architectural and Engineering drawings related to the proposed development
2. Structural and geotechnical reports related to the proposed development
3. Services search information
4. Dilapidation reports of existing RailCorp infrastructure
5. Drawings of existing RailCorp infrastructure affected by the proposed development.

DOCUMENTATION TO BE SUBMITTED BY REVIEW CONSULTANT

1. The reviewer must provide a written report in the form of conditions for inclusion with the final list of conditions of concurrence in reply to development application referrals by consent authorities.
2. The reviewer is required to submit the aforementioned report to RailCorp **within 5 working days of receipt** to facilitate additional review by RailCorp personnel within the aforementioned 14 day period.

GUIDELINES FOR ASSESSMENT OF DEVELOPMENT APPLICATION

Outlined below are conditions associated with developments adjacent to or over RailCorp property or infrastructure. These conditions are to be considered by the reviewer in assessing the proposal and in developing consent conditions for the particular DA. The conditions are written in the form that may be directly inserted into a list of conditions.

The reviewer may modify and add to the conditions outlined below.

General Conditions

- As part of RailCorp's final approval of the project, a design review will be undertaken by RailCorp's Chief Engineer Bridges and Structures and Principal Geotechnical Engineer, or by a nominated Design Panel Member.
- Final approval will only be granted when signed detailed plans with final calculations and a copy of Council approval are submitted to Rail Corridor Management Group who will arrange for the appropriate reviews.



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- The Developer is to employ a qualified registered surveyor to produce an accurate plan showing the location of the track centre lines, tunnel walls, cubicles, refuges, easements and other infrastructure in relation to the proposed development. Details of the track centreline can be obtained from Regional External Party Works Managers who can be contacted via the Rail Corridor Management Group.
- Using the detailed survey plan, the Developer's Structural Consultant is to plot the location of (to be signed off by a Registered Surveyor) and state the expected loads and resulting bearing pressures on the tunnel as well as any other part of the development that may impact on RailCorp property, infrastructure or operation..
- The need for demolition methodology of any existing structures is to be identified.
- Prior to commencement of work for the building foundations, it will be necessary for a dilapidation report of RailCorp tunnels and infrastructure to be carried out by a representative of the Developer and Contractor for the project with RailCorp's Regional External Party Works Manager.
- The developer will be required to submit a detailed work method statement outlining the proposed methods of excavation, construction and associated monitoring regimes.
- Three (3) sets of prints of the approved drawings of all piers, footings and excavation plans together with calculation and geotechnical reports are to be forwarded to Rail Corridor Management Group, for record and compliance purposes.
- When the work has been completed, three sets of executed relevant drawings are to be forwarded to RailCorp for record purposes. A full set of drawings is not necessary, only the "work as executed" structural and architectural general arrangement and elevations of the building be necessary.
- Should any adverse effect on the tunnels be observed during construction, it will be necessary to stop work until a suitable alternative solution is determined. The procedures to be adopted for this process are to be provided to RailCorp for review and approval prior to commencement of works. Any damage to the tunnels should be repaired immediately to the satisfaction of RailCorp. A detailed work method statement and safety management plan must be submitted and approved before construction is permitted to commence.

Dilapidation Survey and Monitoring Plan

- This survey would establish the extent of any existing cracks in the tunnel linings, have them suitably marked and identified to enable any deterioration in the lining during and after construction to be monitored. An appropriate monitoring regime, including installation of any necessary devices or instruments, will need to be reviewed and approved by RailCorp prior to commencement of works. Depending on the proposed works and methodologies, it may be necessary to carry out other dilapidation surveys at predetermined stages which will be identified during the review process.
- Specific defect limits and intervention levels are to be set for individual projects

Geotechnical Investigation and Assessment

1. The Developer would be required to carry out a very thorough geotechnical investigation of the rock strata above, alongside and below RailCorp's tunnels to obtain a clear indication of the locked up stresses in the rock mass, the location and inclination of bedding planes and joints in the rock and to work out measure to be adopted in the design to conform to conditions (4 and 5) below.
2. 3m of vertical cover is the minimum requirement; 6m is the desirable cover. 3.5m of sound rock at the sides is required to provide sound pillar support.



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3. The Developer would be required to carry out 3D Finite Element Analysis (FEA) to satisfy RailCorp of the effects on the tunnel lining by the excavation for the proposed Development. The input data for the FEA would have to be approved by RailCorp engineers prior to running the programme.
4. There should be no new cracking of tunnel lining as a result of the development.
5. No existing crack to increase by more than 0.5mm in width.

Design Loads – General

- Any temporary or permanent works adjacent to the RailCorp boundary may be subject to the influence of train loading and must be assessed in accordance with AS5100 for live load surcharge. Parts of the structure so affected must be designed in accordance with ESC 360, ESC 370 and ESC 380.
- Permanent works adjacent to RailCorp Boundary must take into account design actions resulting from any proposed future construction within the rail corridor. This advice will be provided by RailCorp.
- The design may need to include derailment protection incorporating deflection walls.

Temporary Construction within or adjacent to RailCorp Property

- Only minor construction work will be permitted within the rail corridor.
 - Permanent or temporary soil or rock anchors extending into RailCorp property to stabilise excavation faces are not acceptable to RailCorp, unless there are demonstrable geotechnical and property development benefits to Rail.
 - Temporary components of shoring systems that are located such that their stability has the potential to affect the railway corridor shall have a minimum service life of 10 years excluding considerations of any support from the permanent structure. Shoring systems shall be designed by an approved design organisation and verified by a separate approved independent design organisation and certifications covering design and verification are to be provided to RailCorp.

Permanent Works within RailCorp Property

- No permanent work within RailCorp property shall be constructed without approval from RailCorp.

Demolition and Excavation

- All excavation and footing construction is to be carried out under the supervision and to the satisfaction of the relevant Regional External Party Works Manager in accordance with a pre-arranged program.
- No explosives shall be used for the splitting or removal of rock.

Drainage

- During construction over and adjacent to the tunnels, the Developer is to observe extreme care to prevent water from collecting on or adjacent to the tunnels and to ensure that the water proofing of the tunnels is not damaged.



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- If water were to enter the tunnel, services would be interrupted. If this should happen, the Contractor shall be liable for the RailCorp expenditure involved with restoring or maintaining alternative services.
- In addition, should the flat top tunnels be exposed (with prior RailCorp approval) it is possible that leaks can occur due to faults in waterproof membrane. If this happens, the contractor shall provide additional waterproofing to the satisfaction of RailCorp.
- Seepage into the tunnel must not exceed the existing ambient range of flow rates.
- Fittings must not be adversely affected

Electrolysis

- Developers are to be advised of their responsibilities of ensuring that precautions are taken in the design of the project to eliminate potential electrolysis impact on the proposed construction from the operation of trains in the electrified rail corridor, if considered necessary. This will involve commissioning an Electrolysis Report by an appropriate Cathodic Protection Engineer. A list of such Engineers is available upon request from the Rail Corridor Management Group.

Acceptable Loads on Tunnels:

Two types of tunnel construction exist in the CBD area. Each type requires different design considerations.

A. Cut and Cover (Flat Top) Tunnels

The safe allowable design bearing pressure on the tunnel roof will have to be determined in the following manner:

1. Test bores are to be drilled outside the line of the tunnel walls to determine the bearing pressure of the rock at the bottom of the tunnel walls. Any drilling adjacent to the side of the tunnels is to be kept 1m clear of the outside of the tunnel and refuge walls using a methodology to be approved by RailCorp.
2. A site inspection is to be carried out inside the affected tunnels so as to establish the condition of the brickwork and tunnel roof and walls.
3. Test holes are to be excavated on the property to expose the tunnel walls using a methodology to be approved by RailCorp. This will enable testing of the brickwork wall to be carried out. Tests on representative samples to be carried out on the brickwork by taking vertical cores and a safe F'm for the brickwork is to be determined.
4. The tunnel inspection is to be co-ordinated by the relevant Regional External Party Works Manager. Contact can be made through the Rail Corridor Management group.

Details of the tests in 3 above and the assumptions made from them are to be forwarded to RailCorp for review and approval. The RailCorp Structural Engineer will then give the Developer the allowable pressures of loads over the tunnels.

5. No lateral surcharge loading from the Development footings is to be imposed on the tunnel walls. The level of any footing is to be below a line drawn at 45 degrees from the base of the footings to the base of the brick wall.



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6. No uplift forces are to occur from wind loading at the underside of any footings which bear on top of the tunnel roof. Also no horizontal forces should be transferred to the tunnels in their current state.
7. Approval for item 6 above is subject to a visual evaluation on the condition of the top of the tunnel roof when exposed. The relevant Regional External Party Works Manager is to be involved.
8. Column footings which are located on top of the tunnel roof are to bear directly on top of bridging beams which shall be designed to transfer the column loads to the brick walls. No welding to the roof beams will be permitted due to the chemical composition of the Broad Flange Beams (**BFB**) used in the construction which makes it unsuitable for welding.
9. The waterproofing treatment for the top and side walls of the exposed tunnels is to be approved by RailCorp and effected in the very early stages to stop ingress of water into the tunnels.
10. The designer is to provide elevations of all walls showing what is to be constructed on top of the tunnel wall, indicating levels of proposed floor slabs, RailCorp's easements, location and value of load, size of footings, together with cross section, etc.

These drawings in addition to indicating exactly what loading is being carried by each wall may be used by RailCorp and Developer as the basis of the Right of Support agreement to be drawn up between the two parties.

B. The Eastern Suburbs Tunnels (ESR)

- The loading over and adjacent to the ESR arch tunnels is to generally conform to the information contained in sketch (4) (copy attached). Additional information re: Design Requirements will be provided if proposed building is to be constructed over the ESR Tunnels.

C. Deep Excavations Adjacent to Arch Tunnels

If there is a deep excavation adjacent to the Arch Tunnel, then a detailed geotechnical investigation is to be carried out on the rock in the vicinity of the tunnels. RAILCORP will insist on the following procedures.

- a. The rock face adjacent to the tunnels is to be progressively rock bolted as the excavation proceeds. Depending on the condition of the rock, additional precautions may be required.
- b. The structure in the excavation is to be poured against the exposed rock face. A copy of the geotechnical report and the proposed rock supporting procedure is to be forwarded to RAILCORP.
- c. Before proceeding with the excavation, the Developer is to obtain RAILCORP approval.
- d. The Geotechnical Engineer may require that the excavation is to be monitored by a Geotechnical Consultant employed by Developer. A nominated RAILCORP observer is to be involved with this monitoring on a part time basis. Also, in addition to tilt metres and inclinometers etc., an accurate survey check of the tunnel is to be maintained by the Developer.

Details of inclinometers and tilt metres to be obtained from Geotechnical Engineer.

- e. The Geotechnical Engineer requires the following:

The excavation is to be geologically mapped by the Developers Geotechnical Engineer.

Developers' Geotechnical Engineer will be responsible for monitoring by instrumentation e.g. using borehole inclinometers, tilt meters and tape extensometer etc during the excavation.



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In addition the Developer shall maintain an accurate survey check on the tunnel level and alignment.

A nominated RAILCORP representative will generally observe the mapping and excavation activities on a part time basis.

- C. METROWEST, METROPITT and all other future rail tunnels (generally provided by Rail Development or Connell Wagner).
- D. Airport tunnel – generally provided by Transfield or their representative.
- E. BOX TUNNELS - ILLAWARRA RELIEF

The tunnel easement for Box Tunnels is generally 300mm above the top of the tunnel. The design loads on Box Tunnels are as follows:

1. UDL 150KPa on top of the tunnel at a strata 300mm above the external top surface of the tunnel or 6150mm above rail level whichever is greater. A raft footing slab would be deemed to satisfy the definition of a UDL.
2. Concentrated/Point loads if placed directly on the walls of the tunnel should be spread longitudinally on the walls by spreader beams so that the walls are not loaded in excess of the loading condition stated in (1).
3. Concentrated/Point loads located between tunnel walls should be bridged to transfer the load to the tunnel walls and then spread as described in (2) or the bridging beams may be supported on piles/bored piers located no closer than 3 metres from the tunnel wall and should be sleeved so that no lateral pressure is exerted on the tunnel
4. If construction as in (2) and (3) above is adopted and it is deemed desirable to remove the waterproofing and cover slab and cast the footings/spreader beams directly on the structural concrete of the walls, the waterproofing will have to be reinstated to RAILCORP satisfaction.
5. The footings of the building are not to be constructed over the construction joints of the tunnels and are not to be located less than 300mm from a construction joint.
6. The piles/piers as in (3) above may be located within 1 metre from the outside face of the tunnel to the nearest surface of the pile/pier provided that the external profile of the tunnel walls, refuges, cubicles etc. are exposed to ensure that the piles/piers are not located nearer than 1 metre.
7. The Developers attention is drawn to the fact that there will be vibration and noise from the rail operations transmitted into the structure. It is the Developers responsibility to take all necessary measures to attenuate this situation and the RAILCORP will not be responsible for any problems to the development arising from its current and future operations.

It is considered essential that the Developer must provide anti-vibration devices between the development structure and the tunnels.

8. Easements for the ESR Box Tunnels areas follow:

- a. 6000mm to vertical plane measured horizontally from centre line of each track.
- b. Below a horizontal plane measured 300mm above concrete tunnel roof. (i.e. 6150mm above rail level). A loading restriction of 150kpa will be required at this plane.

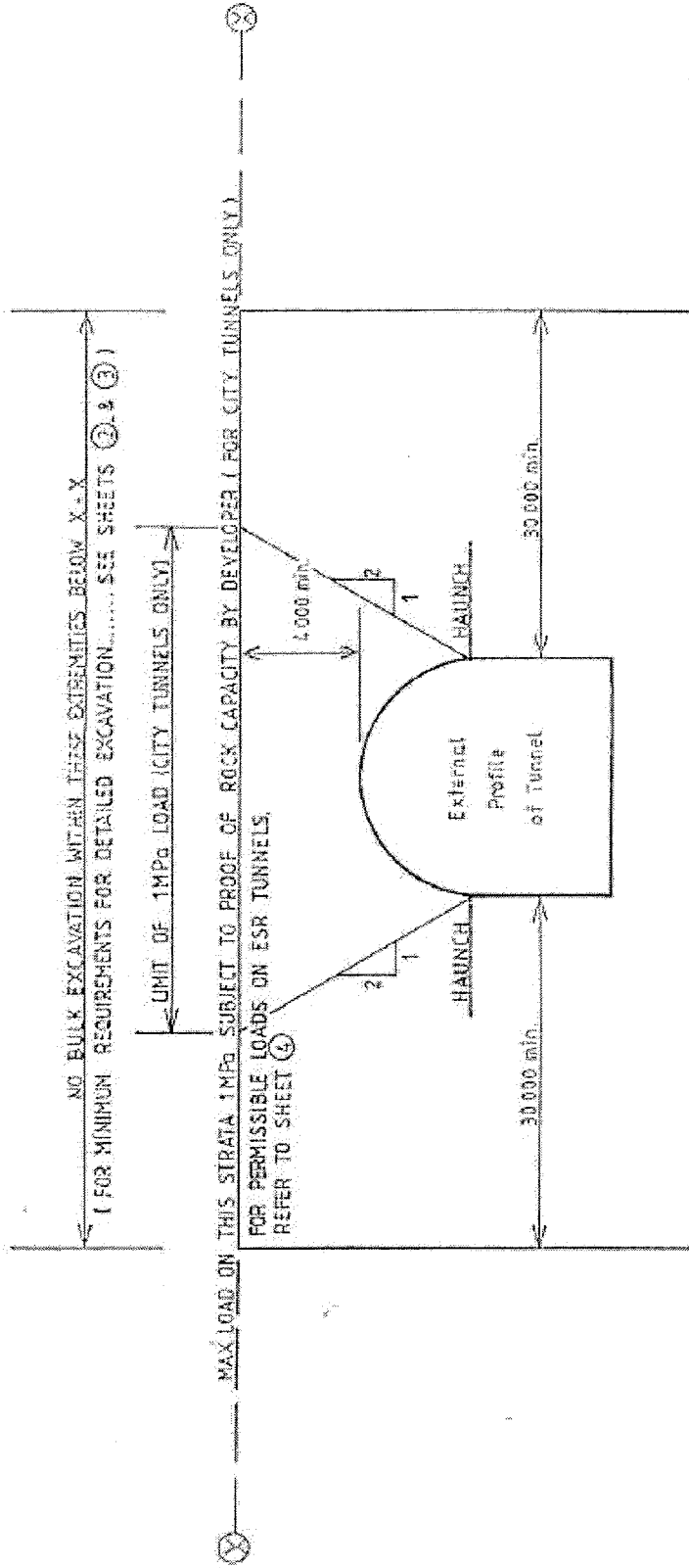
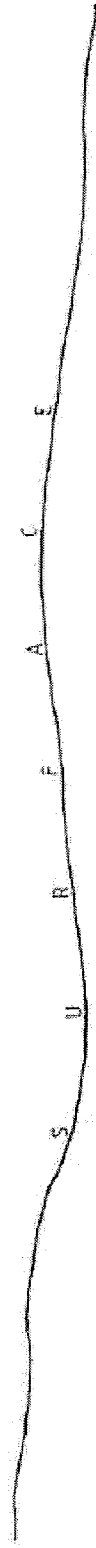


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Note: Geotechnical reviews and reports will also be required in the case of proposed works associated with excavations over two metres in depth, bridges and other supported structures and construction works, earthworks, cutting and embankments as well as some under-bores and under track crossings.



DEVELOPMENTS OVER AND ADJACENT TO SRA TUNNELS
PERMISSIBLE LOADS AND EXCAVATION SHEET ①





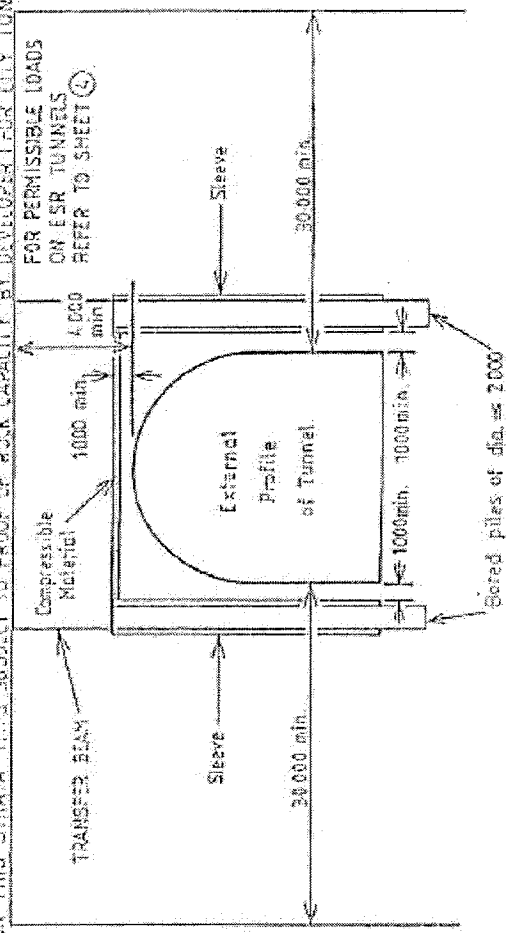
MINIMUM REQUIREMENTS FOR DETAILED EXCAVATION SHEET ②



NO BULK EXCAVATION WITHIN THESE EXTREMITIES BELOW X-Y

② MAX. LOAD ON THIS STRATA NOT SUBJECT TO PROOF OF ROCK CAPACITY BY DEVELOPER FOR CITY TUNNELS. ONLY FOR PERMISSIBLE LOADS ON ESR TUNNELS REFER TO SHEET ④

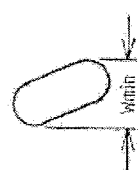
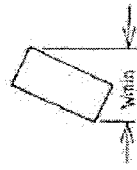
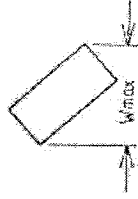
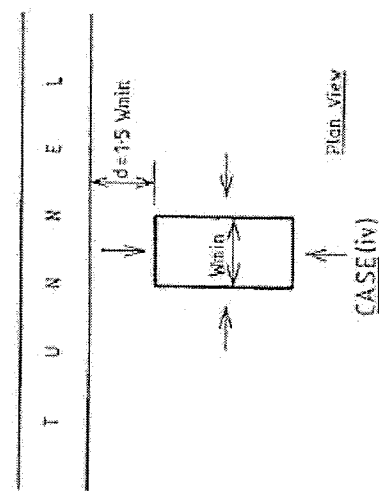
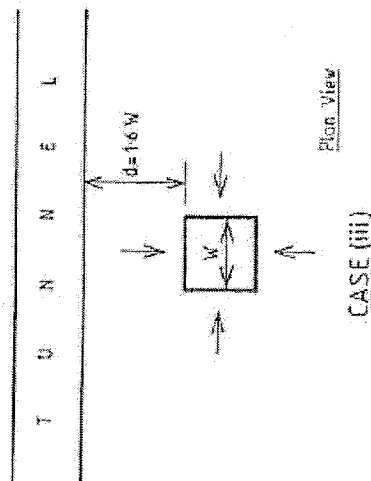
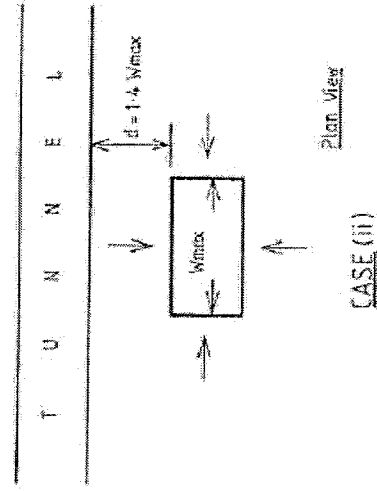
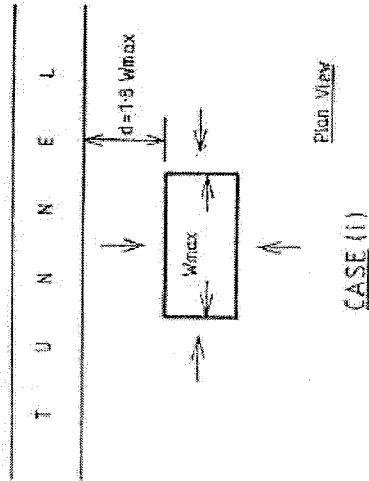
SEE SHEET ① FOR LIMIT OF TRAPEZOID





**DEVELOPMENTS OVER AND ADJACENT TO SRA TUNNELS
MINIMUM REQUIREMENTS FOR DETAILED EXCAVATION SHEET ③**

NOTE: For irregular shapes and orientation, use equivalent dimension.





PERMISSIBLE LOADS OVER ESR TUNNELS SHEET 4

NOTE: DEFINITION OF:

CLOSE FOOTINGS: ARE THOSE IN WHICH THE STRESSED ZONES OF ADJACENT FOOTINGS ON A 1:2 DISTRIBUTION THROUGH ROCK, INTERSECT ABOVE THE EASEMENT.

CONCENTRATED LOADINGS: ARE THOSE IN WHICH THE STRESSED ZONES OF ADJACENT FOOTINGS DO NOT INTERSECT AT OR ABOVE THE EASEMENT ON A 1:2 DISTRIBUTION THROUGH ROCK.

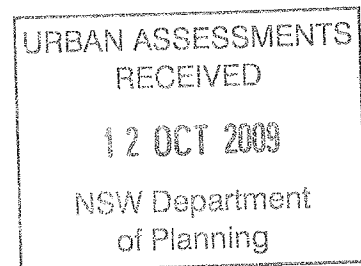
FEATURE	SOUND ROCK COVER	UNIFORM LOADING Ref't footing or close footings (SEE NOTE ABOVE)	CONCENTRATED LOADING Column or isolated footings of lift core etc. (SEE NOTE ABOVE)	TEMPORARY LOADING Construction Plant or Materials
	in	kPa	kPa	Mass footings Clearance between loads in
SINGLE TRACK TUNNEL	3	250	50	5
	6	500	200	5
SINGLE TRACK TUNNEL AT A SECTION WITH A CURVE AND REFUGE	3	100	10	5
	6	200	50	5



RailCorp

9 October 2009

Mr M Woodland,
Director Urban Assessments
Department of Planning,
GPO Box 39,
SYDNEY NSW 2000



Dear Mr Woodland,

Re: MP_0154: 7 RAILWAY STREET, CHATSWOOD.

It is with considerable concern that Council responds to your letter of 23 September, 2009 regarding a proposed predominantly residential development at 7 Railway Street, Chatswood pursuant to Part 3A of the *Environmental Planning and Assessment Act 1979*.

Any comment on the proposal and the draft DGRs must be prefaced by the fact that Council had no knowledge of this application by Mirvac having been made. Mirvac met with Council on the 5th May this year to discuss the possibility of incorporating residential into the development at 7 Railway Street and Council indicated its opposition to the proposal for reasons that will become clear in this letter. I subsequently rang you to advise you of the meeting and indicated Council's opposition to any proposal that would involve the use of Part 3A to delete the commercial office building.

It is Council's view that this application should not have progressed even to this point. Any preliminary meeting about the application, which must have been held with Department staff, should have first examined the justification for departure from the Metro Strategy and Council's CBD Strategy as is reflected in the proposal. This should not be left to Point 3 in the draft DGRs to consider but should have been the precursor to any decision to the lodging of the application.

SITE AND PLANNING BACKGROUND

The land is the last component of the development of the railway land north of Chatswood Station known as Pacific Place that was purchased in stages by Mirvac from State Rail Authority finishing in about 2000. The western section of the Pacific Place site including the railway corridor and the part fronting Help Street site is zoned Business Commercial 3(c2). The eastern side, with the exception of a small area fronting Help Street is zoned Residential 2(d) under SREP 5. The objectives for how development of the land is to occur on the various parts of the site are reflected in those zonings. It was also originally presented to the market on the basis of a site specific DCP that provided for two commercial office towers and retail on that part of the site zoned 3(c2) and two low-rise residential buildings and one high rise residential building on that part of the site zoned 2(d). The latter scheme for the 2(d) zone is similar to what has been constructed on that part of the site (the buildings are known as B2E and Cambridge).

Mirvac as the successful tenderer for the purchase of Pacific Place approached Council to introduce mixed use commercial/ residential development to the part of the site zoned 3(c2). While Council had relaxed the floor space controls for residential development in 1995, it had prepared an amendment to SREP 5 to restrict residential in commercial zones to 1:1 within the permissible floor space ratio. The four year relaxation of the floor space controls was part of Council's response to the State Government to deliver dwellings for urban consolidation. The initiative over the four years resulted in over 2,000 dwellings on the fringes and around Chatswood CBD but retained primarily the core retail and office precincts. A report by property and economic consultants, Colliers supported the amendment but warned that further residential development would undermine Chatswood's commercial and retail requirements in the sub-region. The amendment to SREP 5 was gazetted in December, 1999 but Government at the request of Mirvac adjusted the residential FSR on the Pacific Place site in the 3(c2) zone to 3:1.

Council and Mirvac entered into negotiation about the project and a site specific study was undertaken for a new DCP for the site to accommodate the additional residential floor space. This resulted in specific provisions in a DCP, slight adjustment to the boundary between the 3(c2) and 2(d) zones and changes to the development standards of height and floor space ratio. The height controls are subject to a height control map. The floor space ratio that applies to the 3(c2) is measured as a total for the whole of the site zoned 3(c2) zone (REP 5 Clause 11(10)). The base floor space ratio is 4:1 with bonus floor space being recognised with provision of a public precinct on the site and road widening in Help Street. The actual floor space approved exceeds the permissible GFA including the bonus floor space. A SEPP1 variation was supported reflecting a proposal at the time to provide through site links and a pedestrian bridge over Help Street linking to the Station (this latter bridge proposal subsequently became obsolete with the final design of Chatswood Station and Interchange) even though additional floor space had been granted for the project on the basis of its provision. The layout of the site was planned so that the residential units were located on the northern part of the site, being on the northern edge of Chatswood CBD, and the southern key site was to comprise the commercial office tower and landscaped open space/through site link. The Office tower site fronting Help is contiguous with the office core of Chatswood between Victoria Avenue and the Zenith Centre. The public precinct plaza and the through site link under the railway that connected to the eastern plaza, the bus interchange/station and the retail precinct reflects a strong pedestrian desire line in this location. A child care centre was provided in the development in lieu of s94 contributions for child care and provides for the needs of the residential and future working population on the site.

The entire Pacific Place site was negotiated and planned strategically from the outset to achieve a proper balance of commercial office employment, residential units and community space.

CHATSWOOD STRATEGY

At the heart of the Chatswood CBD Strategy and the Sydney Metro Strategy is the need to consolidate employment opportunities at key locations that are well served by public transport such as Chatswood. This is a well documented and a basic planning principle for any growing city. Chatswood has been recognised as a subregional office centre in every strategy document for Sydney since the original County of Cumberland Planning Scheme.

While it is accepted that high density residential use should be located in proximity to CBDs and transport nodes, it is proper planning practice that residential development should not

occur to the detriment of the commercial business role of those centres. Loss of commercial sites to residential, as was acknowledged in the Colliers study, can undermine the profile and long term viability of centres as corporate office and retail precincts because:

- It can reduce the supply of land for commercial/retail use that is the primary role of the CBD (once a site is developed for units and strata titled it will never be available for office development).
- It can adversely impact on the business dynamics of the centre by residential complaints to other new development, noise, traffic, light/glare, privacy and so on.
- The architectural style of residential buildings is markedly dissimilar to office buildings and usually the quality of finish is less durable.
- Continuity of commercial/retail land use is interrupted preventing clustering of complementary business activities and their support services.
- Exposure of corporate headquarters to other businesses and their perceived profile in the market can be diminished.

The Metro Strategy recognises the importance of the major centres and specifically provides for an increase in employment in Chatswood of 7,000 jobs in the life of the strategy. Council has accepted and planned for that growth in its draft LEP currently before the Department by allowing for additional floor space of more than 140,000 square metres. Supporting documentation including a report by CB Richard Ellis has been submitted to the Department with the draft Comprehensive LEP. The gross floor space for office development approved on 7 Railway Street was included in that calculation but the potential office floor space was increased for the site in the LEP as part of the strategy for future development to provide for the jobs growth. Other than allowing the additional office GFA on the site, the intended development outcomes for Pacific Place are unchanged in the comprehensive LEP.

Essential to the Chatswood strategy is maintaining the compact nature of Chatswood CBD and accommodating the growth within its current footprint because of the spatial constraints to its growth. Chatswood is constrained in the north by schools and existing high and medium rise residential, in the west by Pacific Highway and steep topography and in the south by existing high rise residential development. The additional benefit of maintaining the compact form of Chatswood is that it is a walkable size and it already has a pattern of high-rise buildings that is identifiable from many vantage points around Sydney.

The compact form means that to accommodate growth, densities must increase within the current boundary of the centre as land supply is limited. It also means that Chatswood cannot lose key sites to residential development if it is to fulfil its role as a sub-regional employment centre of Sydney. The decision by the State Government to approve three residential towers at Chatswood Transport Interchange was contrary to appropriate planning for that site that should have included a significant commercial office component. However, this may be recoverable so long as there is no more erosion of business zoned land in the CBD.

THE MIRVAC PROPOSAL

The Mirvac proposal seeks to capitalise on the success of the rest of the Pacific Place residential development where the site design and layout was a successful co-operation between Council and Mirvac to resolve an appropriate development form and amenity. It then seeks to rely on the land use bias obtained through the previous approvals and the height approved by the Minister for the residential towers over the Station to justify the

departure from the strategic objectives for the site and the zoning and to justify the significant height increase. It supports this with a "Market Assessment Report" by Urbis which is discussed later in this letter. It takes a self serving, profit driven short term view of development for the land without consideration of appropriate planning development for Chatswood and the strategic role it should play in the northern Sydney sub-region. It seeks to subvert the importance of that strategic role for short term gain noting that residential development is more financially attractive as the development costs and profit are realised in a relatively short time frame unlike office development that requires a longer term investment. Nationally (and globally) office development is at a historical low and tenant pre-commitments are difficult to obtain. Nevertheless, the office planning for Chatswood CBD has anticipated new office activity once the global recession declines by increasing heights and FSR under the LEP. The Mirvac proposal will undermine the potential for Chatswood to attract new office development once the office market returns.

The proposed development seeks to vary the planned outcomes for the site from that approved in Development Consent 2001/600 based on the DCP and Master Plan Consent 1999/1812 as follows:

1. Reduce commercial GFA from 28,144 square metres to 1,700 square metres.
2. Increase GFA on the site from 28,144 square metres to 35,660 square metres.
3. Introduce 33,960 square metres of residential development (277 units).
4. Increase height from RL 179 (roof height) and RL 189 (sculptured roof element) to RL 231.
5. Increase car parking on the site from 221 spaces to 410 spaces.
6. Reduce the footprint of the building to 1,260 square metres such that it no longer straddles the rail enclosure structure and no longer gives the opportunity to provide a café active use with outside seating to activate the public precinct at the top of the rail structure.
7. Increased open space with an indication that it is to be dedicated to Council. **The open space is public precinct plaza space over basement car parking on both sides of the rail line and the plaza above the rail line that generated a bonus floor space in the original design. Council will not take ownership of and be responsible for maintenance of encumbered space in these circumstances.**
8. No longer make available the link under the rail line to the eastern plaza and thence to the retail part of Chatswood and the bus interchange which is a strong desire line for pedestrians from buildings in Railway Street and McIntosh Street and beyond. Safety and security matters were considered and supported previously in the original application for that link.
9. Does not resolve outcomes for active frontage requirements for the plaza for the eastern side of the rail line.
10. Introduces increased shadowing over Chatswood Mall.

A copy of the relevant consents for the site has been provided as an attachment to this letter.

For Council, the proposed development is contrary to all prior negotiations, it is at odds with the strategic site planning and assessment as well as the publicly exhibited planning outcome for development of the site. It is unacceptable in all aspects.

The logical extension of the Mirvac proposal is that Chatswood will become simply a dormitory and retail centre. If this is the State Governments intent for Chatswood then it must revise the Inner North Sub-Regional Strategy and the Metropolitan Strategy. Council will amend the draft LEP for Willoughby as it relates to the Chatswood CBD by removing the entire Business Zone west of the railway and introduce a residential zoning.

If residential development as proposed in the Mirvac scheme proceeds for 7 Railway Street, then it will signal to the corporate office groups in Chatswood that the CBD will become the Central "Residential" District. This will lead to increasing office vacancy rates, conversion of existing buildings to strata office suites and the gradual conversion of Premium Grade Office buildings to B and C Grade buildings.

THE URBIS MARKET ASSESSMENT

The Urbis Market Assessment makes a number of challenging statements not the least of which is a claim that the Inner North Subregional Strategy, although it is in draft, is out of date and in essence will not achieve what it intends. The thesis of the Urbis assessment is that major new office development is unlikely to happen in Chatswood in the foreseeable future and as a result the 7 Railway Street site does not need to be retained for office demand and that residential development should be supported and happen now.

Without carrying out a full review of the Urbis report there are nevertheless a number of comments that can be made on the Urbis assessment:

1. The Urbis report has a clear agenda concerning a particular site where the owner wishes to carry out development immediately. It does not have a strategic planning understanding of the position and role that Chatswood should fulfil in Greater Sydney.
2. The assessment acknowledges a 14.2% vacancy rate in Chatswood but fails to properly put that in perspective that the greater vacancy rate is in the B and C Grade office stock at 21% which is the smaller older style office premises. The A-grade stock (33% of the total stock) has a vacancy rate of 12% which is comparable to other centres in Sydney.
3. The competition with Macquarie Park that is so heavily highlighted in the assessment acknowledges that it is comparative only to the provision of A grade stock but does not acknowledge the different style of the stock; that is, campus style low-rise floor areas with large floor plates versus the high-rise office with smaller floor plates in Chatswood that are more adaptable to multiple tenancies and suits a different market to the Macquarie Park developments.
4. It is significant to note that there are lower employment numbers relative to the size of the office stock in Macquarie compared with Chatswood and North Sydney. In 2001, Macquarie Park had 800,000 square metres of stock with 32,200 jobs whereas North Sydney had 800,000 square metres providing 49,000 jobs and Chatswood had 500,000 square metres of retail and office (300,000 square metres of office) with 23,000 jobs. Notwithstanding this, the Urbis discussion still applies a predictive assumption for the future floor space demand of 20 square metres per worker for the future job requirements under the Sub Regional Strategy that is not applicable to the campus style in Macquarie Park. This flaw in their assumption is reflected in the potential jobs capacity of stock in Macquarie Park of 1.7 million square metres with 55,300 jobs in 2031 (1 to 31 square metres). This simple comparison suggests a greater efficiency in achieving jobs in the North Sydney and Chatswood style of development against the Macquarie Park situation but it also reflects the Specialist Centre role of Macquarie Park in the Metro Strategy compared with the major centre and global city roles of Chatswood and North Sydney.
5. The Urbis assessment does not recognise the recent history of Chatswood whereby delays in the replacement of out dated planning controls has contributed to the slow down in Chatswood and obsolete stock not being redeveloped. This was largely

due to the uncertainty of the impact of the Epping Rail Link (Parramatta RL) and the Interchange Development that resulted in the amendments to the CBD planning controls being deferred.

6. The Urbis assessment does not recognise the stimulation and increased profile of Chatswood that will follow completion of Council's Civic Place project. That project will provide not just a cultural and entertainment hub for the subregion but will provide business and conference facilities. It does not recognise the likely support and complementary activities that will co-locate near that facility. It does not take account of the enhanced identification of Chatswood, nationally and internationally, that the Concert Hall and Theatre will bring to the benefit of businesses located in the centre and which will act as an attractor for new business.
7. The assessment does not adequately acknowledge the significance strategically of Chatswood being in the Global Economic Corridor of Sydney where the ratio of jobs to population is greater than elsewhere in Sydney. The INSS states that "*Continued growth of Macquarie Park and additional provision of office space in North Sydney, Chatswood and St Leonards will enable the corridor to continue to provide A-grade office space to attract and retain the higher order economic activities already associated with the Global Economic Corridor*" and to sustain Sydney's position as Australia's global city.
8. The assessment does not acknowledge the limited supply of land in Chatswood CBD nor adequately assess the impact of the loss of this site to Chatswood's role as a major commercial and employment centre serving not just its own population but also drawing people from well outside the region to work, seek business services and start new businesses.
9. The assessment does not acknowledge the interest that has been shown in Chatswood recently that is likely to re-emerge when the GFC eases, for example, the office location search by IAG for 66,000 square metres in 2005 that include Chatswood and was apparently affected by the decision to develop the towers at the station for residential units; or the interest by Leightons to build an office tower on 7 Railway Street noting that the company occupies offices in several locations in Chatswood (see newsletter confirmation attached). It is noted that IAG elected to remain in its current multiple locations rather than consolidate as it was unable to find a satisfactory site.

PRECEDENT

Chatswood's office potential has already suffered from the impact of the Ministerial approval of residential towers over Chatswood Station (CTI) as well as the height precedent of that approval. Further loss of potential A-grade office sites can only exacerbate that situation.

Chatswood is at a cross-roads where any more solely residential projects especially on a site such as 7 Railway Street will finish Chatswood as a viable corporate office location. Council is aware of a number of sites that would seek to redevelop to residential at a higher density relying on the precedent of the CTI (and 7 Railway Street) to enjoy the opportunity of the quicker return on investment. This includes an A-grade office building occupied by Asteron Insurance that was only built in the early 1990's. We note that the owners of that building are represented by the same planning consultant as the subject proposal.

THE DRAFT DGR'S

While Council was asked to comment on the draft DGRs, there is no point when in Council's view the fundamental principle of the development is inappropriate.

LEGAL VALIDITY OF THE APPLICATION

The application has been purportedly lodged pursuant to Part 3A. The relevant instrument is SEPP (Major Development).

Clause 6 (1) (a) of the SEPP provides that:

- (1) Development that, in the opinion of the Minister, is development of a kind:
(a) that is described in Schedule 1 or 2,**

is declared to be a project to which Part 3A applies.

Clause 6 (2) (a) qualifies cl 6(1) in the following terms:

- (2) However, any such development does not become a project to which Part 3A of the Act applies by the operation of subclause (1) if:**

(a) the carrying out of that development has been authorised by a consent that is in force under Part 4 of the Act before development of that kind is declared under subclause (1).

It is Council's opinion that the effect of cl.6 (2) (a) is to disqualify the Mirvac proposal from the application of Part 3A as:

- 1). It is development described in Schedule 1 Group 5 as being a "residential, commercial or retail project";
- 2) It has development consent under Part 4 for the purposes of the same kind of development being a commercial office building, retail shops, restaurant, and public precinct.
- 3) Clause 6 (2) (a) specifically excludes "any such development) that has been authorised by a consent that is in force under Part 4.

Council urges the Department to review the legal validity of the Mirvac application and confirm that the Minister is able to consider the project as a Major Development under the SEPP and Part 3A.

OTHER ISSUES

If the Department persists with the consideration of the Mirvac proposal then the project must satisfy the following matters in any assessment:

1. Why the indicated scale is acceptable within the Chatswood Town Centre given the permissible height limit of RL 152 metres in the 3(c2) zone and approved height on the subject site of RL 179 and noting that the height of the development over the Interchange was approved on the basis that it would serve as an identifier for the railway and public transport hub and that it sat above an interchange podium?
2. How will the Mirvac development contribute to achieving the Metropolitan Strategy targets for long term employment in Chatswood?
3. Why the development should not retain the through site pedestrian access under the railway enclosure structure given that Mirvac previously advised that there would not be any safety or security issues that could not be managed and as it would serve a valuable public benefit for pedestrian access?;
4. Why has the project proposed an excessive amount of car parking having regard to the proximity of the public transport services?

5. Having regard to the number of existing residents on the Pacific Place site, the additional population proposed in the application and the proposal to now delete the public open space that was to be provided under the Masterplan approval on the top of the rail way enclosure structure with lift and stair access, what increased public open space is to be provided to meet the increased demand for public open space in the area?
6. Why should the long term maintenance and management of the plaza areas be borne by Council particularly as they will be located above car parking areas?
7. Why should the development result in any additional overshadowing of the Chatswood Mall at any time of the day or year despite Council proposing to spend over \$4 million in refurbishing the Mall as a public open space area for outdoor seating and eating.
8. How will the development achieve carbon and water use neutrality as an ESD goal for the development?

CONCLUSION

If the Department is of the mind to support this application, then Council requests that Chatswood CBD in the Comprehensive LEP for Willoughby currently before the Department be deferred from the LEP. Council does this to allow time to reconsider the future direction, employment potential, development standards and zonings for Chatswood. The proposed zonings and development standards of the LEP are based on the strategic principles and the roles for Chatswood being consolidated as a major commercial centre of Sydney and providing an additional 7,300 jobs and business services. The precedent that would result from the proposed residential development in conjunction with the residential towers approved by the Minister at the CTI will so significantly change the potential of Chatswood that Council will have to reconsider the LEP. The likely outcome is a dormitory centre, downgrading of office stock from A to C grade, a proliferation of residential apartment buildings with additional unplanned pressure on open space, community and recreational facilities and a centre relying on retailing in the eastern retail precinct only for employment and local services.

I would be pleased to meet with representatives of the Department to see how the issues raised in this letter can be resolved.

Yours faithfully,



Greg Woodhams
ENVIRONMENTAL SERVICES DIRECTOR

Our Reference: RDC 09M1476
Your Reference: MP09_0154
Contact: Edmond Platon
Telephone: 8849 2906

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The Director
Development Assessment and System Performance – Urban Assessment
Department of Planning
GPO Box 39
Sydney NSW 2001



Attention: Louise Bochner

REQUEST FOR PROVISION OF KEY ISSUES AND ASSESSMENT REQUIREMENTS – PROJECT APPLICATION FOR THE CONSTRUCTION OF A COMMERCIAL/RESIDENTIAL DEVELOPMENT, 7 RAILWAY STREET CHATSWOOD

Dear Sir / Madam,

I refer to your letter of 23 September 2009 (Ref: MP09_0154) requesting the Roads and Traffic Authority (RTA) to provide details of key issues and assessment requirements regarding the abovementioned development for inclusion in the Director General's Environmental Assessment (EA) requirements.

The RTA would like the following issues to be included in the transport and traffic impact assessment of the proposed development:

1. It is noted that the Metropolitan Strategy has designated Chatswood as a Major Centre and a major focal point for regional transport connections and jobs growth. It is important that the development of the new commercial/residential building takes into consideration, and contributes to the achievement of, transport objectives contained in this and other high-level NSW Government strategies.

These strategies include the NSW State Plan and draft Inner North Subregional Strategy. These policies share the aims of increasing the use of walking, cycling and public transport; appropriately co-locating new urban development with existing and improved transport services; and improving the efficiency of the road network.

By addressing both the supply of transport services and measures to manage demand for car use, the EA report should demonstrate how users of the commercial/residential development will be able to make travel choices that support the achievement of relevant State Plan targets.

2. Daily and peak traffic movements likely to be generated by the proposed development including the impact on nearby intersections and the need / associated funding for upgrading or road improvement works (if required).

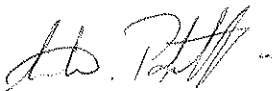
Roads and Traffic Authority

The key intersections to be examined / modelled include:

- Pacific Highway/Railway Street
 - Pacific Highway/Help Street/Fullers Road
 - Pacific Highway/Victoria Avenue
 - Help Street/Railway Street
 - Any other signalised intersection affected by the proposed development
3. Details of the proposed accesses and the parking provisions associated with the proposed development including compliance with the requirements of the relevant Australian Standards (ie: turn paths, sight distance requirements, aisle widths, etc).
 4. The proposed number of car parking spaces is to comply with the appropriate parking codes. As this area is serviced well by public transport, it should be ensured the parking provision is kept to the minimum.
 5. Details of service vehicle movements (including vehicle type and likely arrival and departure times).
 6. The RTA requires the EA report to assess the implications of the proposed development for non-car travel modes (including public transport use, walking and cycling); the potential for implementing a location-specific sustainable travel plan (e.g. 'Travelsmart' or other travel behaviour change initiative); and the provision of facilities to increase the non-car mode share for travel to and from the site. This will entail an assessment of the accessibility of the development site by public transport. However, an assessment of the impact of increase patronage demand on the existing public transport system as a result of the proposed development and above initiatives would also be required.
 7. There are traffic studies that have been recently completed or currently being undertaken on the Pacific Highway and local road network within the vicinity of the site (i.e. Chatswood Traffic Study – GHD September 2009). The outcomes and recommendations of these studies may impact on road widening reservations and upgrades to intersections along the Pacific Highway and to key routes within and surrounding the Chatswood City Centre. Any recommendations from the studies must be considered in the preparation of the EA report.
 8. The RTA will require in due course the provision of a traffic management plan for all demolition/construction activities, detailing vehicle routes, number of trucks, hours of operation, access arrangements and traffic control measures.

Further enquiries on this matter can be directed to the nominated Assistant Planner, Edmond Platon on phone 8849 2906 or facsimile (02) 8849 2918.

Yours faithfully,



Andrew Popoff
A / Senior Land Use Planner
Transport Planning, Sydney Region

9 October 2009



RailCorp

RailCorp Property
PO Box K349
Haymarket NSW 1238
Tel: (02) 8922 4062 Fax: (02) 8922 4890
Email: alice.pettini@railcorp.nsw.gov.au

23 October 2009.

Ms Louise Bochner
Senior Planner
Department of Planning
GPO Box 39
Sydney NSW 2001

ATTENTION: Louise Bochner

Dear Ms Bochner,

**DIRECTOR GENERAL'S REQUIREMENTS
7 Railway Street, Chatswood
REQUEST FOR KEY ISSUES AND ASSESSMENT REQUIREMENTS**

I refer to your Department's email of 15 October 2009 requesting RailCorp's key issues and assessment requirements for the above proposal.

In brief, it is RailCorp's position that the Environmental Assessment should address the issues contained in your Department's *Development Near Rail Corridors and Busy Roads - Interim Guideline*. ✓ DGRs

In terms of the type of documentation required by RailCorp in order to assess the likely impacts on the rail corridor, RailCorp requests that the following be included in the Director-General's requirements:

- *The proponent shall provide an accurate survey locating the development with respect to the rail boundary and rail infrastructure. This work is to be undertaken by a registered surveyor.* ✓ DGRs
- *An acoustic assessment is to be submitted demonstrating how the proposed development will comply with the Department of Planning's Interim Guidelines for Development near Rail Corridors and Busy Roads.* ✓ DGRs (5/12)
- *An Electrolysis Expert is to be engaged to prepare a report on the Electrolysis Risk to the development from stray currents.* ✓ DGRs
- *Geotechnical and Structural report that meets the requirements of the attached brief.* ✓ DGRs
- *Construction methodology with details pertaining to structural support during*

(Circular PS08-016) Issued 22 Dec 08



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excavation and details of any track/tunnel monitoring requirements during excavation and construction phases. ✓ DGRs

- Cross sectional drawings showing ground surface, rail tracks, sub soil profile, proposed basement excavation and structural design of sub ground support adjacent to the Rail Corridor. ✓ in section 4 of PLAN
- Given the site's location next to the rail corridor, drainage from the development must be adequately disposed of/managed and not allowed to be discharged into the corridor unless prior approval has been obtained from RailCorp. A hydrology report should also be conducted (if applicable). ✓ in section 9 of DGRs

In addition, the proponent is to meet the following requirement:

Given the possible likelihood of objects being dropped or thrown onto the rail corridor from balconies, windows and other external features (eg roof terraces and external fire escapes) that face the rail corridor, the Applicant is required to install measures (eg awning windows, louvers, enclosed balconies etc) which prevent the throwing of objects onto the rail corridor.

Thank you for providing RailCorp the opportunity to comment and please contact me if you have any further enquires. Please forward to RailCorp a copy of the Director-General's Environmental Assessment Requirements once finalised.

Yours sincerely,

Alice Pettini
Assistant Town Planner
RailCorp Property

Attachment:

A) Geotechnical and Structural Brief



RailCorp

BRIEF FOR REVIEW OF GEOTECHNICAL & STRUCTURAL DESIGN FOR DEVELOPMENTS ADJACENT TO OR ABOVE RAIL CORRIDOR FOR EXTERNAL THIRD PARTY WORKS PERFORMED UNDER THE NSW STATE ENVIRONMENT PLANNING POLICY (Infrastructure) 2007

INTRODUCTION

The NSW State Environment Planning Policy (Infrastructure) 2007 requires development applications for development within 25 metres of the Rail Corridor with ground penetrations greater than 2 metres to be referred to Rail Authority for review and concurrence before the consent authority consents to development applications.

The response period for RailCorp to reply from the date of receipt of a development application from a consent authority is 21 days. The consent authority may grant consent to a development without concurrence of the Chief Executive Officer of the Rail Authority if 21 days have passed since giving notice and the Chief Executive Officer has not granted or refused to grant concurrence.

If insufficient information is submitted with a notice from a consent authority for the rail authority to review the development application (**DA**), RailCorp will have 14 days to respond to the referring consent authority to request the process be stopped until the development applicant provides the requested information. This "stopping of the clock" can be enacted once only with each consent authority referral.

RailCorp's internal resources are limited and external professional service providers may be required to assist RailCorp in undertaking the review of the development application to identify deficiencies in the submitted development application.

SCOPE AND OBJECTIVES

The following brief is for geotechnical and structural engineering consultants to perform design reviews of geotechnical and structural reports which form part of the documentation submitted to RailCorp by a consent authority on behalf of development applicants.

The main task for the design reviewer will be to verify that the developer's design consultant has taken into account the column loads, determined the loads and pressures under the footings that may impact on rail tunnels and other infrastructure and to be satisfied that the loads and pressures are within approved limits.

In addition, the design reviewer is to verify that the developer's design consultant has conducted sufficient geotechnical investigation and analysis to determine what subsidence or displacement of rail infrastructure may occur due to the development and whether these movements are within approved limits.

The reviewing consultant will refer to the parameters set out within this brief to identify non compliance or detail omissions within the DA referral.

The following specific tasks are required to be undertaken by the reviewing consultant:

1. Liaison and initial briefing with RailCorp.
2. Preliminary review of all relevant documents associated with the DA to appreciate the intended work.
3. Site visit if necessary to appreciate the existing conditions and dimension of the intended work.
4. Detailed assessment of DA documents to:
 - Identify and establish relevant criteria for assessment of the proposal in addition to the information contained in this document.



- Identify what additional documents are required to be submitted by the Developer to enable full assessment of the proposal to be carried out.
 - Identify issues of concern or non-compliance resulting from the detailed review of the proposal, in particular those related to loads on tunnels resulting from structures associated with the proposed development and stress relief due to excavation.
 - Identify conditions of a geotechnical and structural nature to be included in the final list of consent conditions.
5. Prepare a report of the detailed assessment of the DA.

DOCUMENTS TO BE PROVIDED BY RAILCORP

RailCorp will provide all relevant documents in its possession associated with the DA. These documents will include some or all of the following where available:

1. Architectural and Engineering drawings related to the proposed development
2. Structural and geotechnical reports related to the proposed development
3. Services search information
4. Dilapidation reports of existing RailCorp infrastructure
5. Drawings of existing RailCorp infrastructure affected by the proposed development.

DOCUMENTATION TO BE SUBMITTED BY REVIEW CONSULTANT

1. The reviewer must provide a written report in the form of conditions for inclusion with the final list of conditions of concurrence in reply to development application referrals by consent authorities.
2. The reviewer is required to submit the aforementioned report to RailCorp **within 5 working days of receipt** to facilitate additional review by RailCorp personnel within the aforementioned 14 day period.

GUIDELINES FOR ASSESSMENT OF DEVELOPMENT APPLICATION

Outlined below are conditions associated with developments adjacent to or over RailCorp property or infrastructure. These conditions are to be considered by the reviewer in assessing the proposal and in developing consent conditions for the particular DA. The conditions are written in the form that may be directly inserted into a list of conditions.

The reviewer may modify and add to the conditions outlined below.

General Conditions

- As part of RailCorp's final approval of the project, a design review will be undertaken by RailCorp's Chief Engineer Bridges and Structures and Principal Geotechnical Engineer, or by a nominated Design Panel Member.
- Final approval will only be granted when signed detailed plans with final calculations and a copy of Council approval are submitted to Rail Corridor Management Group who will arrange for the appropriate reviews.



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- The Developer is to employ a qualified registered surveyor to produce an accurate plan showing the location of the track centre lines, tunnel walls, cubicles, refuges, easements and other infrastructure in relation to the proposed development. Details of the track centreline can be obtained from Regional External Party Works Managers who can be contacted via the Rail Corridor Management Group.
- Using the detailed survey plan, the Developer's Structural Consultant is to plot the location of (to be signed off by a Registered Surveyor) and state the expected loads and resulting bearing pressures on the tunnel as well as any other part of the development that may impact on RailCorp property, infrastructure or operation..
- The need for demolition methodology of any existing structures is to be identified.
- Prior to commencement of work for the building foundations, it will be necessary for a dilapidation report of RailCorp tunnels and infrastructure to be carried out by a representative of the Developer and Contractor for the project with RailCorp's Regional External Party Works Manager.
- The developer will be required to submit a detailed work method statement outlining the proposed methods of excavation, construction and associated monitoring regimes.
- Three (3) sets of prints of the approved drawings of all piers, footings and excavation plans together with calculation and geotechnical reports are to be forwarded to Rail Corridor Management Group, for record and compliance purposes.
- When the work has been completed, three sets of executed relevant drawings are to be forwarded to RailCorp for record purposes. A full set of drawings is not necessary, only the "work as executed" structural and architectural general arrangement and elevations of the building be necessary.
- Should any adverse effect on the tunnels be observed during construction, it will be necessary to stop work until a suitable alternative solution is determined. The procedures to be adopted for this process are to be provided to RailCorp for review and approval prior to commencement of works. Any damage to the tunnels should be repaired immediately to the satisfaction of RailCorp. A detailed work method statement and safety management plan must be submitted and approved before construction is permitted to commence.

Dilapidation Survey and Monitoring Plan

- This survey would establish the extent of any existing cracks in the tunnel linings, have them suitably marked and identified to enable any deterioration in the lining during and after construction to be monitored. An appropriate monitoring regime, including installation of any necessary devices or instruments, will need to be reviewed and approved by RailCorp prior to commencement of works. Depending on the proposed works and methodologies, it may be necessary to carry out other dilapidation surveys at predetermined stages which will be identified during the review process.
- Specific defect limits and intervention levels are to be set for individual projects

Geotechnical Investigation and Assessment

1. The Developer would be required to carry out a very thorough geotechnical investigation of the rock strata above, alongside and below RailCorp's tunnels to obtain a clear indication of the locked up stresses in the rock mass, the location and inclination of bedding planes and joints in the rock and to work out measure to be adopted in the design to conform to conditions (4 and 5) below.
2. 3m of vertical cover is the minimum requirement; 6m is the desirable cover. 3.5m of sound rock at the sides is required to provide sound pillar support.



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3. The Developer would be required to carry out 3D Finite Element Analysis (FEA) to satisfy RailCorp of the effects on the tunnel lining by the excavation for the proposed Development. The input data for the FEA would have to be approved by RailCorp engineers prior to running the programme.
4. There should be no new cracking of tunnel lining as a result of the development.
5. No existing crack to increase by more than 0.5mm in width.

Design Loads – General

- Any temporary or permanent works adjacent to the RailCorp boundary may be subject to the influence of train loading and must be assessed in accordance with AS5100 for live load surcharge. Parts of the structure so affected must be designed in accordance with ESC 360, ESC 370 and ESC 380.
- Permanent works adjacent to RailCorp Boundary must take into account design actions resulting from any proposed future construction within the rail corridor. This advice will be provided by RailCorp.
- The design may need to include derailment protection incorporating deflection walls.

Temporary Construction within or adjacent to RailCorp Property

- Only minor construction work will be permitted within the rail corridor.
 - Permanent or temporary soil or rock anchors extending into RailCorp property to stabilise excavation faces are not acceptable to RailCorp, unless there are demonstrable geotechnical and property development benefits to Rail.
 - Temporary components of shoring systems that are located such that their stability has the potential to affect the railway corridor shall have a minimum service life of 10 years excluding considerations of any support from the permanent structure. Shoring systems shall be designed by an approved design organisation and verified by a separate approved independent design organisation and certifications covering design and verification are to be provided to RailCorp.

Permanent Works within RailCorp Property

- No permanent work within RailCorp property shall be constructed without approval from RailCorp.

Demolition and Excavation

- All excavation and footing construction is to be carried out under the supervision and to the satisfaction of the relevant Regional External Party Works Manager in accordance with a pre-arranged program.
- No explosives shall be used for the splitting or removal of rock.

Drainage

- During construction over and adjacent to the tunnels, the Developer is to observe extreme care to prevent water from collecting on or adjacent to the tunnels and to ensure that the water proofing of the tunnels is not damaged.



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- If water were to enter the tunnel, services would be interrupted. If this should happen, the Contractor shall be liable for the RailCorp expenditure involved with restoring or maintaining alternative services.
- In addition, should the flat top tunnels be exposed (with prior RailCorp approval) it is possible that leaks can occur due to faults in waterproof membrane. If this happens, the contractor shall provide additional waterproofing to the satisfaction of RailCorp.
- Seepage into the tunnel must not exceed the existing ambient range of flow rates.
- Fittings must not be adversely affected

Electrolysis

- Developers are to be advised of their responsibilities of ensuring that precautions are taken in the design of the project to eliminate potential electrolysis impact on the proposed construction from the operation of trains in the electrified rail corridor, if considered necessary. This will involve commissioning an Electrolysis Report by an appropriate Cathodic Protection Engineer. A list of such Engineers is available upon request from the Rail Corridor Management Group.

Acceptable Loads on Tunnels:

Two types of tunnel construction exist in the CBD area. Each type requires different design considerations.

A. Cut and Cover (Flat Top) Tunnels

The safe allowable design bearing pressure on the tunnel roof will have to be determined in the following manner:

1. Test bores are to be drilled outside the line of the tunnel walls to determine the bearing pressure of the rock at the bottom of the tunnel walls. Any drilling adjacent to the side of the tunnels is to be kept 1m clear of the outside of the tunnel and refuge walls using a methodology to be approved by RailCorp.
2. A site inspection is to be carried out inside the affected tunnels so as to establish the condition of the brickwork and tunnel roof and walls.
3. Test holes are to be excavated on the property to expose the tunnel walls using a methodology to be approved by RailCorp. This will enable testing of the brickwork wall to be carried out. Tests on representative samples to be carried out on the brickwork by taking vertical cores and a safe F'm for the brickwork is to be determined.
4. The tunnel inspection is to be co-ordinated by the relevant Regional External Party Works Manager. Contact can be made through the Rail Corridor Management group.

Details of the tests in 3 above and the assumptions made from them are to be forwarded to RailCorp for review and approval. The RailCorp Structural Engineer will then give the Developer the allowable pressures of loads over the tunnels.

5. No lateral surcharge loading from the Development footings is to be imposed on the tunnel walls. The level of any footing is to be below a line drawn at 45 degrees from the base of the footings to the base of the brick wall.



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6. No uplift forces are to occur from wind loading at the underside of any footings which bear on top of the tunnel roof. Also no horizontal forces should be transferred to the tunnels in their current state.
7. Approval for item 6 above is subject to a visual evaluation on the condition of the top of the tunnel roof when exposed. The relevant Regional External Party Works Manager is to be involved.
8. Column footings which are located on top of the tunnel roof are to bear directly on top of bridging beams which shall be designed to transfer the column loads to the brick walls. No welding to the roof beams will be permitted due to the chemical composition of the Broad Flange Beams (**BFB**) used in the construction which makes it unsuitable for welding.
9. The waterproofing treatment for the top and side walls of the exposed tunnels is to be approved by RailCorp and effected in the very early stages to stop ingress of water into the tunnels.
10. The designer is to provide elevations of all walls showing what is to be constructed on top of the tunnel wall, indicating levels of proposed floor slabs, RailCorp's easements, location and value of load, size of footings, together with cross section, etc.

These drawings in addition to indicating exactly what loading is being carried by each wall may be used by RailCorp and Developer as the basis of the Right of Support agreement to be drawn up between the two parties.

B. The Eastern Suburbs Tunnels (ESR)

- The loading over and adjacent to the ESR arch tunnels is to generally conform to the information contained in sketch (4) (copy attached). Additional information re: Design Requirements will be provided if proposed building is to be constructed over the ESR Tunnels.

C. Deep Excavations Adjacent to Arch Tunnels

If there is a deep excavation adjacent to the Arch Tunnel, then a detailed geotechnical investigation is to be carried out on the rock in the vicinity of the tunnels. RAILCORP will insist on the following procedures.

- a. The rock face adjacent to the tunnels is to be progressively rock bolted as the excavation proceeds. Depending on the condition of the rock, additional precautions may be required.
- b. The structure in the excavation is to be poured against the exposed rock face. A copy of the geotechnical report and the proposed rock supporting procedure is to be forwarded to RAILCORP.
- c. Before proceeding with the excavation, the Developer is to obtain RAILCORP approval.
- d. The Geotechnical Engineer may require that the excavation is to be monitored by a Geotechnical Consultant employed by Developer. A nominated RAILCORP observer is to be involved with this monitoring on a part time basis. Also, in addition to tilt metres and inclinometers etc., an accurate survey check of the tunnel is to be maintained by the Developer.

Details of inclinometers and tilt metres to be obtained from Geotechnical Engineer.

- e. The Geotechnical Engineer requires the following:

The excavation is to be geologically mapped by the Developers Geotechnical Engineer.

Developers' Geotechnical Engineer will be responsible for monitoring by instrumentation e.g. using borehole inclinometers, tilt meters and tape extensometer etc during the excavation.



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In addition the Developer shall maintain an accurate survey check on the tunnel level and alignment.

A nominated RAILCORP representative will generally observe the mapping and excavation activities on a part time basis.

- C. METROWEST, METROPITT and all other future rail tunnels (generally provided by Rail Development or Connell Wagner).
- D. Airport tunnel – generally provided by Transfield or their representative.
- E. BOX TUNNELS - ILLAWARRA RELIEF

The tunnel easement for Box Tunnels is generally 300mm above the top of the tunnel. The design loads on Box Tunnels are as follows:

1. UDL 150KPa on top of the tunnel at a strata 300mm above the external top surface of the tunnel or 6150mm above rail level whichever is greater. A raft footing slab would be deemed to satisfy the definition of a UDL.
2. Concentrated/Point loads if placed directly on the walls of the tunnel should be spread longitudinally on the walls by spreader beams so that the walls are not loaded in excess of the loading condition stated in (1).
3. Concentrated/Point loads located between tunnel walls should be bridged to transfer the load to the tunnel walls and then spread as described in (2) or the bridging beams may be supported on piles/bored piers located no closer than 3 metres from the tunnel wall and should be sleeved so that no lateral pressure is exerted on the tunnel
4. If construction as in (2) and (3) above is adopted and it is deemed desirable to remove the waterproofing and cover slab and cast the footings/spreader beams directly on the structural concrete of the walls, the waterproofing will have to be reinstated to RAILCORP satisfaction.
5. The footings of the building are not to be constructed over the construction joints of the tunnels and are not to be located less than 300mm from a construction joint.
6. The piles/piers as in (3) above may be located within 1 metre from the outside face of the tunnel to the nearest surface of the pile/pier provided that the external profile of the tunnel walls, refuges, cubicles etc. are exposed to ensure that the piles/piers are not located nearer than 1 metre.
7. The Developers attention is drawn to the fact that there will be vibration and noise from the rail operations transmitted into the structure. It is the Developers responsibility to take all necessary measures to attenuate this situation and the RAILCORP will not be responsible for any problems to the development arising from its current and future operations.

It is considered essential that the Developer must provide anti-vibration devices between the development structure and the tunnels.

8. Easements for the ESR Box Tunnels areas follow:

- a. 6000mm to vertical plane measured horizontally from centre line of each track.
- b. Below a horizontal plane measured 300mm above concrete tunnel roof. (i.e. 6150mm above rail level). A loading restriction of 150kpa will be required at this plane.

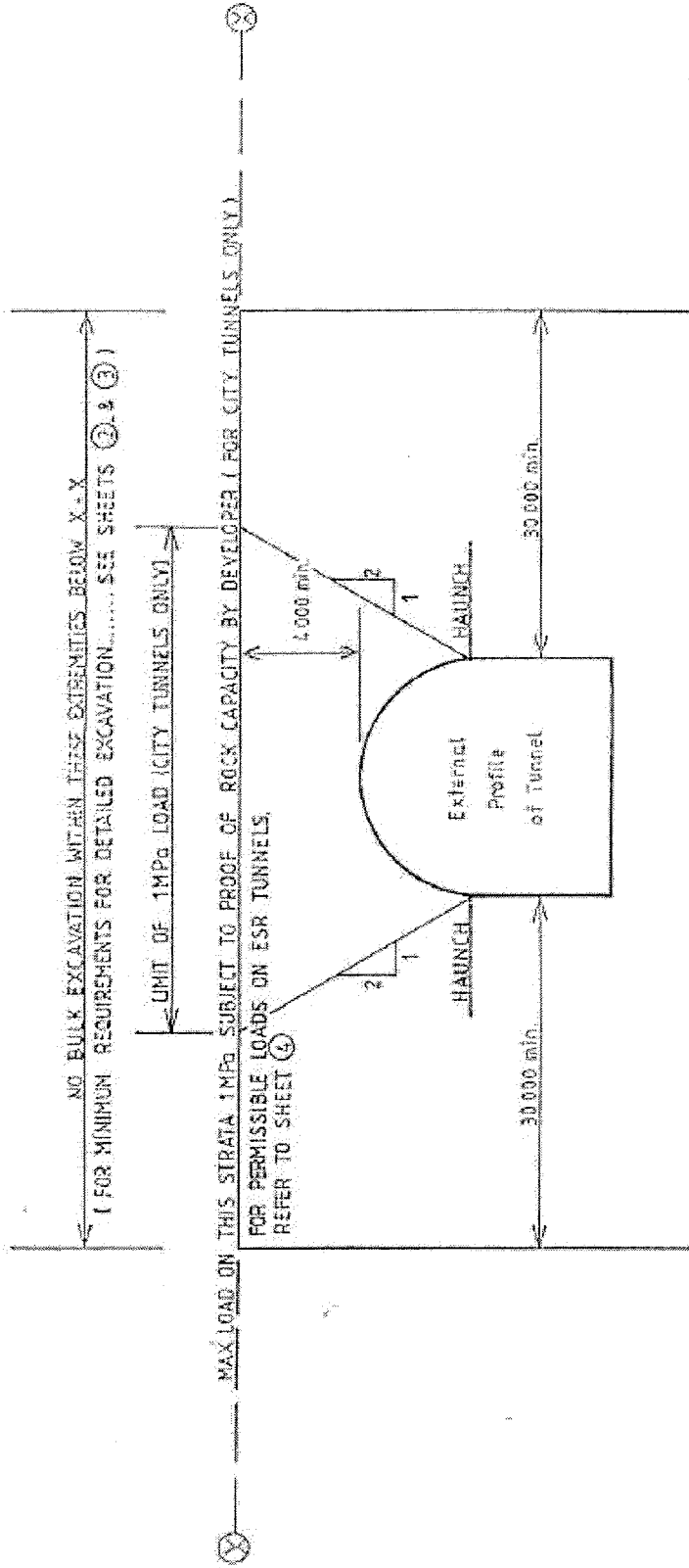


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Note: Geotechnical reviews and reports will also be required in the case of proposed works associated with excavations over two metres in depth, bridges and other supported structures and construction works, earthworks, cutting and embankments as well as some under-bores and under track crossings.



DEVELOPMENTS OVER AND ADJACENT TO SRA TUNNELS
PERMISSIBLE LOADS AND EXCAVATION SHEET ①





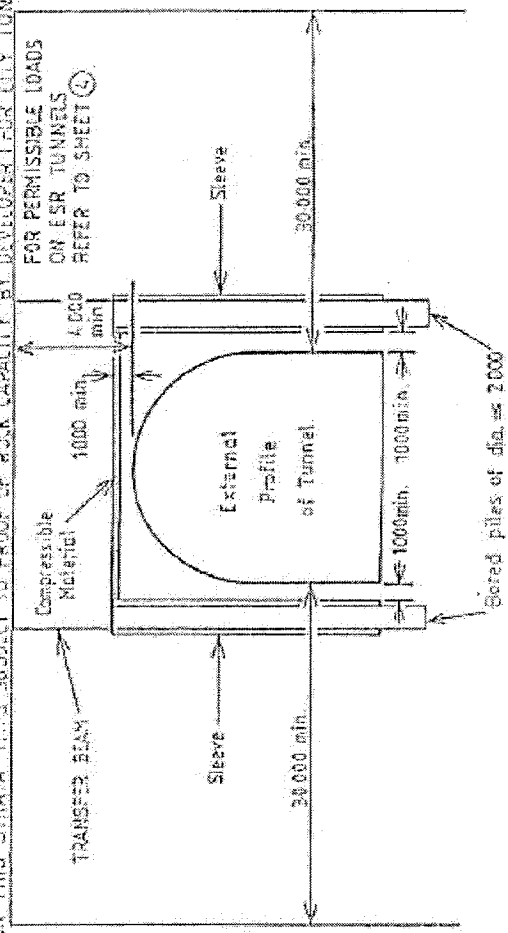
MINIMUM REQUIREMENTS FOR DETAILED EXCAVATION SHEET ②



NO BULK EXCAVATION WITHIN THESE EXTREMITIES BELOW X-Y

② MAX. LOAD ON THIS STRATA NOT SUBJECT TO PROOF OF ROCK CAPACITY BY DEVELOPER FOR CITY TUNNELS. ONLY FOR PERMISSIBLE LOADS ON ESR TUNNELS REFER TO SHEET ④

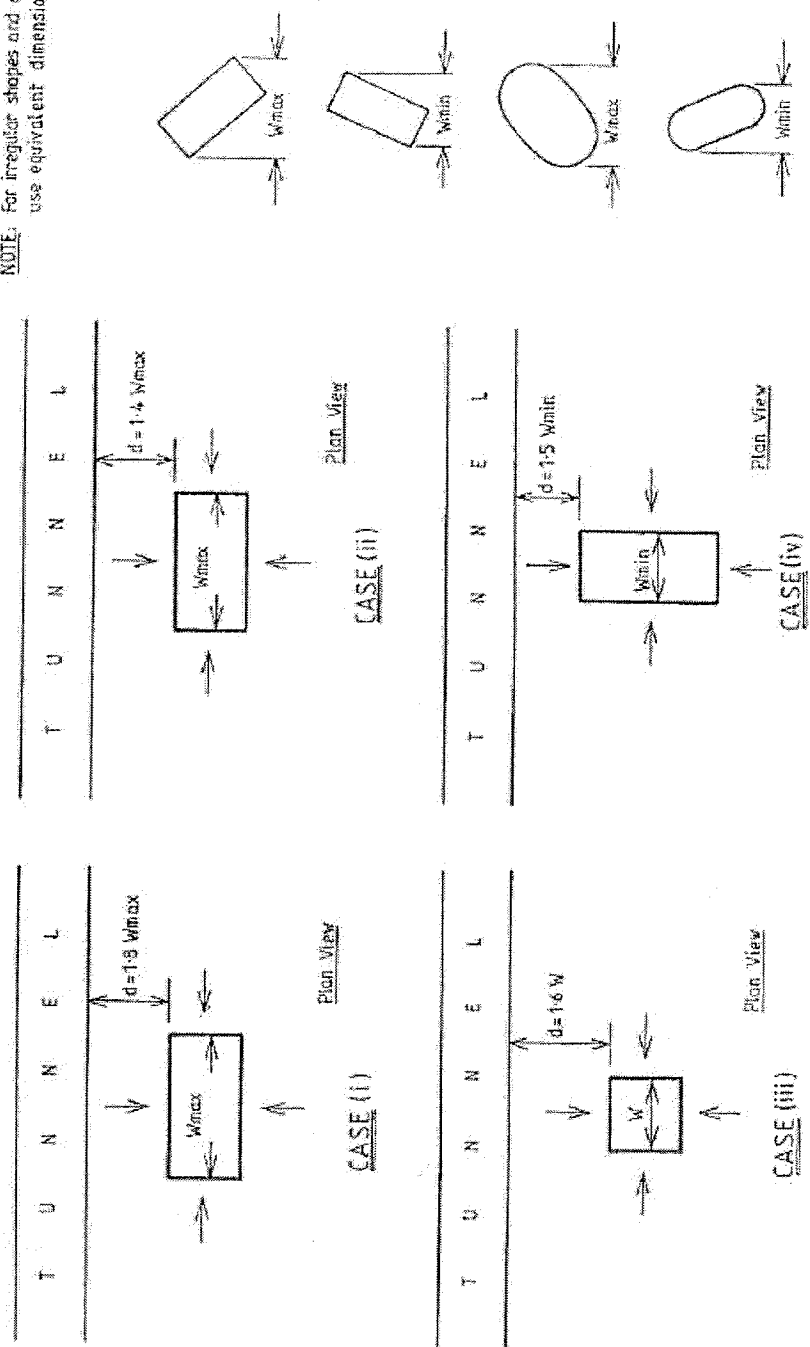
SEE SHEET ① FOR LIMIT OF TRAPEZOID





**DEVELOPMENTS OVER AND ADJACENT TO SRA TUNNELS
MINIMUM REQUIREMENTS FOR DETAILED EXCAVATION SHEET ③**

NOTE: For irregular shapes and orientation, use equivalent dimension.





PERMISSIBLE LOADS OVER ESR TUNNELS SHEET 4

NOTE: DEFINITION OF:

CLOSE FOOTINGS: ARE THOSE IN WHICH THE STRESSED ZONES OF ADJACENT FOOTINGS ON A 1:2 DISTRIBUTION THROUGH ROCK, INTERSECT ABOVE THE EASEMENT.

CONCENTRATED LOADINGS: ARE THOSE IN WHICH THE STRESSED ZONES OF ADJACENT FOOTINGS DO NOT INTERSECT AT OR ABOVE THE EASEMENT ON A 1:2 DISTRIBUTION THROUGH ROCK.

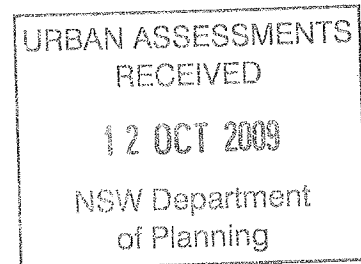
FEATURE	SOUND ROCK COVER	UNIFORM LOADING Roff footing or close footings (SEE NOTE ABOVE)	CONCENTRATED LOADING Column or isolated footings of left core etc. (SEE NOTE ABOVE)	TEMPORARY LOADING Construction Plant or Materials
	In	kPa	kPa	Mass footings Clearance between loads m
SINGLE TRACK TUNNEL	3	250	50	5
	6	500	200	5
SINGLE TRACK TUNNEL AT A SECTION WITH A CURVE AND REFUGE	3	100	10	5
	6	200	50	5



RailCorp

9 October 2009

Mr M Woodland,
Director Urban Assessments
Department of Planning,
GPO Box 39,
SYDNEY NSW 2000



Dear Mr Woodland,

Re: MP_0154: 7 RAILWAY STREET, CHATSWOOD.

It is with considerable concern that Council responds to your letter of 23 September, 2009 regarding a proposed predominantly residential development at 7 Railway Street, Chatswood pursuant to Part 3A of the *Environmental Planning and Assessment Act 1979*.

Any comment on the proposal and the draft DGRs must be prefaced by the fact that Council had no knowledge of this application by Mirvac having been made. Mirvac met with Council on the 5th May this year to discuss the possibility of incorporating residential into the development at 7 Railway Street and Council indicated its opposition to the proposal for reasons that will become clear in this letter. I subsequently rang you to advise you of the meeting and indicated Council's opposition to any proposal that would involve the use of Part 3A to delete the commercial office building.

It is Council's view that this application should not have progressed even to this point. Any preliminary meeting about the application, which must have been held with Department staff, should have first examined the justification for departure from the Metro Strategy and Council's CBD Strategy as is reflected in the proposal. This should not be left to Point 3 in the draft DGRs to consider but should have been the precursor to any decision to the lodging of the application.

SITE AND PLANNING BACKGROUND

The land is the last component of the development of the railway land north of Chatswood Station known as Pacific Place that was purchased in stages by Mirvac from State Rail Authority finishing in about 2000. The western section of the Pacific Place site including the railway corridor and the part fronting Help Street site is zoned Business Commercial 3(c2). The eastern side, with the exception of a small area fronting Help Street is zoned Residential 2(d) under SREP 5. The objectives for how development of the land is to occur on the various parts of the site are reflected in those zonings. It was also originally presented to the market on the basis of a site specific DCP that provided for two commercial office towers and retail on that part of the site zoned 3(c2) and two low-rise residential buildings and one high rise residential building on that part of the site zoned 2(d). The latter scheme for the 2(d) zone is similar to what has been constructed on that part of the site (the buildings are known as B2E and Cambridge).

Mirvac as the successful tenderer for the purchase of Pacific Place approached Council to introduce mixed use commercial/ residential development to the part of the site zoned 3(c2). While Council had relaxed the floor space controls for residential development in 1995, it had prepared an amendment to SREP 5 to restrict residential in commercial zones to 1:1 within the permissible floor space ratio. The four year relaxation of the floor space controls was part of Council's response to the State Government to deliver dwellings for urban consolidation. The initiative over the four years resulted in over 2,000 dwellings on the fringes and around Chatswood CBD but retained primarily the core retail and office precincts. A report by property and economic consultants, Colliers supported the amendment but warned that further residential development would undermine Chatswood's commercial and retail requirements in the sub-region. The amendment to SREP 5 was gazetted in December, 1999 but Government at the request of Mirvac adjusted the residential FSR on the Pacific Place site in the 3(c2) zone to 3:1.

Council and Mirvac entered into negotiation about the project and a site specific study was undertaken for a new DCP for the site to accommodate the additional residential floor space. This resulted in specific provisions in a DCP, slight adjustment to the boundary between the 3(c2) and 2(d) zones and changes to the development standards of height and floor space ratio. The height controls are subject to a height control map. The floor space ratio that applies to the 3(c2) is measured as a total for the whole of the site zoned 3(c2) zone (REP 5 Clause 11(10)). The base floor space ratio is 4:1 with bonus floor space being recognised with provision of a public precinct on the site and road widening in Help Street. The actual floor space approved exceeds the permissible GFA including the bonus floor space. A SEPP1 variation was supported reflecting a proposal at the time to provide through site links and a pedestrian bridge over Help Street linking to the Station (this latter bridge proposal subsequently became obsolete with the final design of Chatswood Station and Interchange) even though additional floor space had been granted for the project on the basis of its provision. The layout of the site was planned so that the residential units were located on the northern part of the site, being on the northern edge of Chatswood CBD, and the southern key site was to comprise the commercial office tower and landscaped open space/through site link. The Office tower site fronting Help is contiguous with the office core of Chatswood between Victoria Avenue and the Zenith Centre. The public precinct plaza and the through site link under the railway that connected to the eastern plaza, the bus interchange/station and the retail precinct reflects a strong pedestrian desire line in this location. A child care centre was provided in the development in lieu of s94 contributions for child care and provides for the needs of the residential and future working population on the site.

The entire Pacific Place site was negotiated and planned strategically from the outset to achieve a proper balance of commercial office employment, residential units and community space.

CHATSWOOD STRATEGY

At the heart of the Chatswood CBD Strategy and the Sydney Metro Strategy is the need to consolidate employment opportunities at key locations that are well served by public transport such as Chatswood. This is a well documented and a basic planning principle for any growing city. Chatswood has been recognised as a subregional office centre in every strategy document for Sydney since the original County of Cumberland Planning Scheme.

While it is accepted that high density residential use should be located in proximity to CBDs and transport nodes, it is proper planning practice that residential development should not

occur to the detriment of the commercial business role of those centres. Loss of commercial sites to residential, as was acknowledged in the Colliers study, can undermine the profile and long term viability of centres as corporate office and retail precincts because:

- It can reduce the supply of land for commercial/retail use that is the primary role of the CBD (once a site is developed for units and strata titled it will never be available for office development).
- It can adversely impact on the business dynamics of the centre by residential complaints to other new development, noise, traffic, light/glare, privacy and so on.
- The architectural style of residential buildings is markedly dissimilar to office buildings and usually the quality of finish is less durable.
- Continuity of commercial/retail land use is interrupted preventing clustering of complementary business activities and their support services.
- Exposure of corporate headquarters to other businesses and their perceived profile in the market can be diminished.

The Metro Strategy recognises the importance of the major centres and specifically provides for an increase in employment in Chatswood of 7,000 jobs in the life of the strategy. Council has accepted and planned for that growth in its draft LEP currently before the Department by allowing for additional floor space of more than 140,000 square metres. Supporting documentation including a report by CB Richard Ellis has been submitted to the Department with the draft Comprehensive LEP. The gross floor space for office development approved on 7 Railway Street was included in that calculation but the potential office floor space was increased for the site in the LEP as part of the strategy for future development to provide for the jobs growth. Other than allowing the additional office GFA on the site, the intended development outcomes for Pacific Place are unchanged in the comprehensive LEP.

Essential to the Chatswood strategy is maintaining the compact nature of Chatswood CBD and accommodating the growth within its current footprint because of the spatial constraints to its growth. Chatswood is constrained in the north by schools and existing high and medium rise residential, in the west by Pacific Highway and steep topography and in the south by existing high rise residential development. The additional benefit of maintaining the compact form of Chatswood is that it is a walkable size and it already has a pattern of high-rise buildings that is identifiable from many vantage points around Sydney.

The compact form means that to accommodate growth, densities must increase within the current boundary of the centre as land supply is limited. It also means that Chatswood cannot lose key sites to residential development if it is to fulfil its role as a sub-regional employment centre of Sydney. The decision by the State Government to approve three residential towers at Chatswood Transport Interchange was contrary to appropriate planning for that site that should have included a significant commercial office component. However, this may be recoverable so long as there is no more erosion of business zoned land in the CBD.

THE MIRVAC PROPOSAL

The Mirvac proposal seeks to capitalise on the success of the rest of the Pacific Place residential development where the site design and layout was a successful co-operation between Council and Mirvac to resolve an appropriate development form and amenity. It then seeks to rely on the land use bias obtained through the previous approvals and the height approved by the Minister for the residential towers over the Station to justify the

departure from the strategic objectives for the site and the zoning and to justify the significant height increase. It supports this with a "Market Assessment Report" by Urbis which is discussed later in this letter. It takes a self serving, profit driven short term view of development for the land without consideration of appropriate planning development for Chatswood and the strategic role it should play in the northern Sydney sub-region. It seeks to subvert the importance of that strategic role for short term gain noting that residential development is more financially attractive as the development costs and profit are realised in a relatively short time frame unlike office development that requires a longer term investment. Nationally (and globally) office development is at a historical low and tenant pre-commitments are difficult to obtain. Nevertheless, the office planning for Chatswood CBD has anticipated new office activity once the global recession declines by increasing heights and FSR under the LEP. The Mirvac proposal will undermine the potential for Chatswood to attract new office development once the office market returns.

The proposed development seeks to vary the planned outcomes for the site from that approved in Development Consent 2001/600 based on the DCP and Master Plan Consent 1999/1812 as follows:

1. Reduce commercial GFA from 28,144 square metres to 1,700 square metres.
2. Increase GFA on the site from 28,144 square metres to 35,660 square metres.
3. Introduce 33,960 square metres of residential development (277 units).
4. Increase height from RL 179 (roof height) and RL 189 (sculptured roof element) to RL 231.
5. Increase car parking on the site from 221 spaces to 410 spaces.
6. Reduce the footprint of the building to 1,260 square metres such that it no longer straddles the rail enclosure structure and no longer gives the opportunity to provide a café active use with outside seating to activate the public precinct at the top of the rail structure.
7. Increased open space with an indication that it is to be dedicated to Council. **The open space is public precinct plaza space over basement car parking on both sides of the rail line and the plaza above the rail line that generated a bonus floor space in the original design. Council will not take ownership of and be responsible for maintenance of encumbered space in these circumstances.**
8. No longer make available the link under the rail line to the eastern plaza and thence to the retail part of Chatswood and the bus interchange which is a strong desire line for pedestrians from buildings in Railway Street and McIntosh Street and beyond. Safety and security matters were considered and supported previously in the original application for that link.
9. Does not resolve outcomes for active frontage requirements for the plaza for the eastern side of the rail line.
10. Introduces increased shadowing over Chatswood Mall.

A copy of the relevant consents for the site has been provided as an attachment to this letter.

For Council, the proposed development is contrary to all prior negotiations, it is at odds with the strategic site planning and assessment as well as the publicly exhibited planning outcome for development of the site. It is unacceptable in all aspects.

The logical extension of the Mirvac proposal is that Chatswood will become simply a dormitory and retail centre. If this is the State Governments intent for Chatswood then it must revise the Inner North Sub-Regional Strategy and the Metropolitan Strategy. Council will amend the draft LEP for Willoughby as it relates to the Chatswood CBD by removing the entire Business Zone west of the railway and introduce a residential zoning.

If residential development as proposed in the Mirvac scheme proceeds for 7 Railway Street, then it will signal to the corporate office groups in Chatswood that the CBD will become the Central "Residential" District. This will lead to increasing office vacancy rates, conversion of existing buildings to strata office suites and the gradual conversion of Premium Grade Office buildings to B and C Grade buildings.

THE URBIS MARKET ASSESSMENT

The Urbis Market Assessment makes a number of challenging statements not the least of which is a claim that the Inner North Subregional Strategy, although it is in draft, is out of date and in essence will not achieve what it intends. The thesis of the Urbis assessment is that major new office development is unlikely to happen in Chatswood in the foreseeable future and as a result the 7 Railway Street site does not need to be retained for office demand and that residential development should be supported and happen now.

Without carrying out a full review of the Urbis report there are nevertheless a number of comments that can be made on the Urbis assessment:

1. The Urbis report has a clear agenda concerning a particular site where the owner wishes to carry out development immediately. It does not have a strategic planning understanding of the position and role that Chatswood should fulfil in Greater Sydney.
2. The assessment acknowledges a 14.2% vacancy rate in Chatswood but fails to properly put that in perspective that the greater vacancy rate is in the B and C Grade office stock at 21% which is the smaller older style office premises. The A-grade stock (33% of the total stock) has a vacancy rate of 12% which is comparable to other centres in Sydney.
3. The competition with Macquarie Park that is so heavily highlighted in the assessment acknowledges that it is comparative only to the provision of A grade stock but does not acknowledge the different style of the stock; that is, campus style low-rise floor areas with large floor plates versus the high-rise office with smaller floor plates in Chatswood that are more adaptable to multiple tenancies and suits a different market to the Macquarie Park developments.
4. It is significant to note that there are lower employment numbers relative to the size of the office stock in Macquarie compared with Chatswood and North Sydney. In 2001, Macquarie Park had 800,000 square metres of stock with 32,200 jobs whereas North Sydney had 800,000 square metres providing 49,000 jobs and Chatswood had 500,000 square metres of retail and office (300,000 square metres of office) with 23,000 jobs. Notwithstanding this, the Urbis discussion still applies a predictive assumption for the future floor space demand of 20 square metres per worker for the future job requirements under the Sub Regional Strategy that is not applicable to the campus style in Macquarie Park. This flaw in their assumption is reflected in the potential jobs capacity of stock in Macquarie Park of 1.7 million square metres with 55,300 jobs in 2031 (1 to 31 square metres). This simple comparison suggests a greater efficiency in achieving jobs in the North Sydney and Chatswood style of development against the Macquarie Park situation but it also reflects the Specialist Centre role of Macquarie Park in the Metro Strategy compared with the major centre and global city roles of Chatswood and North Sydney.
5. The Urbis assessment does not recognise the recent history of Chatswood whereby delays in the replacement of out dated planning controls has contributed to the slow down in Chatswood and obsolete stock not being redeveloped. This was largely

due to the uncertainty of the impact of the Epping Rail Link (Parramatta RL) and the Interchange Development that resulted in the amendments to the CBD planning controls being deferred.

6. The Urbis assessment does not recognise the stimulation and increased profile of Chatswood that will follow completion of Council's Civic Place project. That project will provide not just a cultural and entertainment hub for the subregion but will provide business and conference facilities. It does not recognise the likely support and complementary activities that will co-locate near that facility. It does not take account of the enhanced identification of Chatswood, nationally and internationally, that the Concert Hall and Theatre will bring to the benefit of businesses located in the centre and which will act as an attractor for new business.
7. The assessment does not adequately acknowledge the significance strategically of Chatswood being in the Global Economic Corridor of Sydney where the ratio of jobs to population is greater than elsewhere in Sydney. The INSS states that "*Continued growth of Macquarie Park and additional provision of office space in North Sydney, Chatswood and St Leonards will enable the corridor to continue to provide A-grade office space to attract and retain the higher order economic activities already associated with the Global Economic Corridor*" and to sustain Sydney's position as Australia's global city.
8. The assessment does not acknowledge the limited supply of land in Chatswood CBD nor adequately assess the impact of the loss of this site to Chatswood's role as a major commercial and employment centre serving not just its own population but also drawing people from well outside the region to work, seek business services and start new businesses.
9. The assessment does not acknowledge the interest that has been shown in Chatswood recently that is likely to re-emerge when the GFC eases, for example, the office location search by IAG for 66,000 square metres in 2005 that include Chatswood and was apparently affected by the decision to develop the towers at the station for residential units; or the interest by Leightons to build an office tower on 7 Railway Street noting that the company occupies offices in several locations in Chatswood (see newsletter confirmation attached). It is noted that IAG elected to remain in its current multiple locations rather than consolidate as it was unable to find a satisfactory site.

PRECEDENT

Chatswood's office potential has already suffered from the impact of the Ministerial approval of residential towers over Chatswood Station (CTI) as well as the height precedent of that approval. Further loss of potential A-grade office sites can only exacerbate that situation.

Chatswood is at a cross-roads where any more solely residential projects especially on a site such as 7 Railway Street will finish Chatswood as a viable corporate office location. Council is aware of a number of sites that would seek to redevelop to residential at a higher density relying on the precedent of the CTI (and 7 Railway Street) to enjoy the opportunity of the quicker return on investment. This includes an A-grade office building occupied by Asteron Insurance that was only built in the early 1990's. We note that the owners of that building are represented by the same planning consultant as the subject proposal.

THE DRAFT DGR'S

While Council was asked to comment on the draft DGRs, there is no point when in Council's view the fundamental principle of the development is inappropriate.

LEGAL VALIDITY OF THE APPLICATION

The application has been purportedly lodged pursuant to Part 3A. The relevant instrument is SEPP (Major Development).

Clause 6 (1) (a) of the SEPP provides that:

- (1) Development that, in the opinion of the Minister, is development of a kind:
(a) that is described in Schedule 1 or 2,**

is declared to be a project to which Part 3A applies.

Clause 6 (2) (a) qualifies cl 6(1) in the following terms:

- (2) However, any such development does not become a project to which Part 3A of the Act applies by the operation of subclause (1) if:**

(a) the carrying out of that development has been authorised by a consent that is in force under Part 4 of the Act before development of that kind is declared under subclause (1).

It is Council's opinion that the effect of cl.6 (2) (a) is to disqualify the Mirvac proposal from the application of Part 3A as:

- 1). It is development described in Schedule 1 Group 5 as being a "residential, commercial or retail project";
- 2) It has development consent under Part 4 for the purposes of the same kind of development being a commercial office building, retail shops, restaurant, and public precinct.
- 3) Clause 6 (2) (a) specifically excludes "any such development) that has been authorised by a consent that is in force under Part 4.

Council urges the Department to review the legal validity of the Mirvac application and confirm that the Minister is able to consider the project as a Major Development under the SEPP and Part 3A.

OTHER ISSUES

If the Department persists with the consideration of the Mirvac proposal then the project must satisfy the following matters in any assessment:

1. Why the indicated scale is acceptable within the Chatswood Town Centre given the permissible height limit of RL 152 metres in the 3(c2) zone and approved height on the subject site of RL 179 and noting that the height of the development over the Interchange was approved on the basis that it would serve as an identifier for the railway and public transport hub and that it sat above an interchange podium?
2. How will the Mirvac development contribute to achieving the Metropolitan Strategy targets for long term employment in Chatswood?
3. Why the development should not retain the through site pedestrian access under the railway enclosure structure given that Mirvac previously advised that there would not be any safety or security issues that could not be managed and as it would serve a valuable public benefit for pedestrian access?;
4. Why has the project proposed an excessive amount of car parking having regard to the proximity of the public transport services?

5. Having regard to the number of existing residents on the Pacific Place site, the additional population proposed in the application and the proposal to now delete the public open space that was to be provided under the Masterplan approval on the top of the rail way enclosure structure with lift and stair access, what increased public open space is to be provided to meet the increased demand for public open space in the area?
6. Why should the long term maintenance and management of the plaza areas be borne by Council particularly as they will be located above car parking areas?
7. Why should the development result in any additional overshadowing of the Chatswood Mall at any time of the day or year despite Council proposing to spend over \$4 million in refurbishing the Mall as a public open space area for outdoor seating and eating.
8. How will the development achieve carbon and water use neutrality as an ESD goal for the development?

CONCLUSION

If the Department is of the mind to support this application, then Council requests that Chatswood CBD in the Comprehensive LEP for Willoughby currently before the Department be deferred from the LEP. Council does this to allow time to reconsider the future direction, employment potential, development standards and zonings for Chatswood. The proposed zonings and development standards of the LEP are based on the strategic principles and the roles for Chatswood being consolidated as a major commercial centre of Sydney and providing an additional 7,300 jobs and business services. The precedent that would result from the proposed residential development in conjunction with the residential towers approved by the Minister at the CTI will so significantly change the potential of Chatswood that Council will have to reconsider the LEP. The likely outcome is a dormitory centre, downgrading of office stock from A to C grade, a proliferation of residential apartment buildings with additional unplanned pressure on open space, community and recreational facilities and a centre relying on retailing in the eastern retail precinct only for employment and local services.

I would be pleased to meet with representatives of the Department to see how the issues raised in this letter can be resolved.

Yours faithfully,



Greg Woodhams
ENVIRONMENTAL SERVICES DIRECTOR

Our Reference: RDC 09M1476
Your Reference: MP09_0154
Contact: Edmond Platon
Telephone: 8849 2906

AS
RTA
14/10
DLB
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AS

The Director
Development Assessment and System Performance – Urban Assessment
Department of Planning
GPO Box 39
Sydney NSW 2001



Attention: Louise Bochner

REQUEST FOR PROVISION OF KEY ISSUES AND ASSESSMENT REQUIREMENTS – PROJECT APPLICATION FOR THE CONSTRUCTION OF A COMMERCIAL/RESIDENTIAL DEVELOPMENT, 7 RAILWAY STREET CHATSWOOD

Dear Sir / Madam,

I refer to your letter of 23 September 2009 (Ref: MP09_0154) requesting the Roads and Traffic Authority (RTA) to provide details of key issues and assessment requirements regarding the abovementioned development for inclusion in the Director General's Environmental Assessment (EA) requirements.

The RTA would like the following issues to be included in the transport and traffic impact assessment of the proposed development:

1. It is noted that the Metropolitan Strategy has designated Chatswood as a Major Centre and a major focal point for regional transport connections and jobs growth. It is important that the development of the new commercial/residential building takes into consideration, and contributes to the achievement of, transport objectives contained in this and other high-level NSW Government strategies.

These strategies include the NSW State Plan and draft Inner North Subregional Strategy. These policies share the aims of increasing the use of walking, cycling and public transport; appropriately co-locating new urban development with existing and improved transport services; and improving the efficiency of the road network.

By addressing both the supply of transport services and measures to manage demand for car use, the EA report should demonstrate how users of the commercial/residential development will be able to make travel choices that support the achievement of relevant State Plan targets.

2. Daily and peak traffic movements likely to be generated by the proposed development including the impact on nearby intersections and the need / associated funding for upgrading or road improvement works (if required).

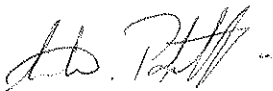
Roads and Traffic Authority

The key intersections to be examined / modelled include:

- Pacific Highway/Railway Street
 - Pacific Highway/Help Street/Fullers Road
 - Pacific Highway/Victoria Avenue
 - Help Street/Railway Street
 - Any other signalised intersection affected by the proposed development
3. Details of the proposed accesses and the parking provisions associated with the proposed development including compliance with the requirements of the relevant Australian Standards (ie: turn paths, sight distance requirements, aisle widths, etc).
 4. The proposed number of car parking spaces is to comply with the appropriate parking codes. As this area is serviced well by public transport, it should be ensured the parking provision is kept to the minimum.
 5. Details of service vehicle movements (including vehicle type and likely arrival and departure times).
 6. The RTA requires the EA report to assess the implications of the proposed development for non-car travel modes (including public transport use, walking and cycling); the potential for implementing a location-specific sustainable travel plan (e.g. 'Travelsmart' or other travel behaviour change initiative); and the provision of facilities to increase the non-car mode share for travel to and from the site. This will entail an assessment of the accessibility of the development site by public transport. However, an assessment of the impact of increase patronage demand on the existing public transport system as a result of the proposed development and above initiatives would also be required.
 7. There are traffic studies that have been recently completed or currently being undertaken on the Pacific Highway and local road network within the vicinity of the site (i.e. Chatswood Traffic Study – GHD September 2009). The outcomes and recommendations of these studies may impact on road widening reservations and upgrades to intersections along the Pacific Highway and to key routes within and surrounding the Chatswood City Centre. Any recommendations from the studies must be considered in the preparation of the EA report.
 8. The RTA will require in due course the provision of a traffic management plan for all demolition/construction activities, detailing vehicle routes, number of trucks, hours of operation, access arrangements and traffic control measures.

Further enquiries on this matter can be directed to the nominated Assistant Planner, Edmond Platon on phone 8849 2906 or facsimile (02) 8849 2918.

Yours faithfully,



Andrew Popoff
A / Senior Land Use Planner
Transport Planning, Sydney Region

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