



NSW DEPARTMENT OF
PRIMARY INDUSTRIES

Our Ref: WL6-10-3305B
Your ref: DA766/2006/1: Mr P Kauter: aw

12 January 2007

WOLLAHRA COUNCIL

DEVELOPMENT CONTROL

11 JAN 2007

Mr Mark Schofield
Team Leader – Development Control
Woollahra Municipal Council
PO Box 61
DOUBLE BAY NSW 1360

00429.07

DA06/0766

M. Schofield

P. Kauter

Dear Mr Schofield

Re: Development Application No. DA766/2006/1
Property: 594-596 New South Head Road, Rose Bay 2029
Proposal: Redevelopment of Rose Bay and Point Piper Marinas

Thank you for requesting the NSW Department of Primary Industries' (DPI) comments on the above proposal.

Officers of the Department have reviewed the information provided and have no objections to the proposal subject to the following conditions:

1. A permit to harm marine vegetation will be required for these works from DPI. The proposal will potentially harm, directly and/or indirectly, macroalgal and seagrass beds and therefore a permit is required to regulate that harm. The permit application must document the area of macroalgae and seagrass to be harmed. Applications are available at http://www.fisheries.nsw.gov.au/aquatic_habitats/aquatic_habitats/developer_and_council_tool_kit
2. The swing moorings within the area of the seagrass beds, both the permanent and intermittent beds, are permanently removed from the seabed as compensation for harm to seagrass and macroalgae.
3. Watercraft, during and after construction, are not to be moored over or anchored within seagrass beds and care should be taken when manoeuvring watercraft to avoid damage to seagrass. Seagrasses are a key habitat for many aquatic species and loss of vegetation means loss of productivity.
4. Contractors are to be informed of the position of the seagrass beds and of all mitigation measures to protect seagrass. Contractors are to be directed to implement all mitigation measures.
5. The materials used for construction are not deleterious to marine life, for example the use of antifouling paints or treated woods is not permitted. These materials inhibit marine growth and reduce the habitat available to marine life.
6. Interpretive signage informing the boating community of the importance of and ways in which they can protect seagrass must be developed and erected on all arms of both marinas. Seagrass is a key fish habitat and boaters must be aware of measures that they can implement to protect seagrass beds.

Cronulla Fisheries Centre
PO Box 21 CRONULLA NSW 2230
202 Nicholson Parade
Tel: (02) 9527 8411 Fax: (02) 9527 8576
www.dpi.nsw.gov.au
ABN 51 734 124 190

7. **Environmental safeguards** (silt curtains, booms etc.) are to be used during construction of the proposed works to ensure there is no escape of turbid plumes into the aquatic environment. Turbid plumes caused by runoff, driving of piles etc have the potential to smother aquatic vegetation and have a deleterious effect on benthic organisms. **Environmental safeguards and careful management of silt curtains are important in this case due to the proximity of seagrass beds. Curtains must not be placed in seagrass beds.**
8. **NSW DPI Caulerpa Management Plan is implemented.** *Caulerpa taxifolia* is a noxious weed and must not be spread to areas currently not infested including other estuaries.
9. **All other relevant authorities have no objections.**

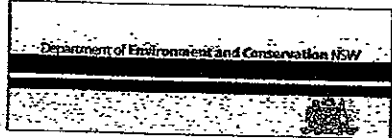
If you have any further enquiries please telephone me on (02) 9527 8422.

Yours sincerely



Lesley Diver
Conservation Manager (Central)
Aquatic Habitat Protection Unit

ANNEXURE 12



Notice No: 1068627

Mr P Kauter
Executive Planner
Woollahra Municipal Council
PO Box 61
Double Bay NSW 1360

WOOLLAHRA COUNCIL	
RECEIVED - PT.	
13 FEB 2007	
Doc No.	01633-07
File	DA06/0766
Action	P. Kauter

Dear Mr Kauter

RE: Redevelopment of Rose Bay and Point Piper Marinas

I refer to the development application and accompanying information provided for the redevelopment of Rose Bay and Point Piper Marinas received by the DEC on 12 December 2006.

The DEC has reviewed the information provided and has determined that it is able to issue an environment protection licence in the name of the EPA for the proposal subject to a number of conditions. The proponent will need to make a separate application to the DEC to obtain this licence.

The general terms of approval for this proposal are in Attachment A. They would constitute the key conditions in the environment protection licence. If Council grants development consent for this proposal, the DEC requests that the consent conditions not be inconsistent with relevant conditions in Attachment A.

These general terms relate to the development as proposed in the documents and information currently provided to the DEC. In the event that the development is modified either by the applicant prior to the granting of consent or as a result of the conditions proposed to be attached to the consent, it may be necessary to consult with the DEC about the changes before the consent is issued. This will enable the DEC to determine whether its general terms need to be modified in light of the changes.

If you have any questions, or wish to discuss this matter further please contact Debbie Cole on (02) 9995 6846, or Rachael Chan after March 2007 on (02) 9995 6827.

Yours sincerely

M. Philip 8.2.07

NEALE PHILIP
Head Infrastructure Unit, Metropolitan Branch
Environment Protection and Regulation Division

ATTACHMENT A: PROPOSED KEY LICENCE CONDITIONS FOR ROSE BAY AND POINT PIPER MARINAS

Administrative conditions

Information supplied to the EPA

Except as expressly provided by these general terms of approval, works and activities must be carried out in accordance with the proposal contained in:

- the development application 100/2006/766.1 submitted to Woollahra Municipal Council on 6 November 2006;
- any environmental impact statement *Redevelopment of Rose Bay and Point Piper Marinas November 2006* relating to the development; and

Fit and Proper Person

The applicant must, in the opinion of the EPA, be a fit and proper person to hold a licence under the Protection of the Environment Operations Act 1997, having regard to the matters in s.83 of that Act.

Limit conditions

Pollution of waters

Except as may be expressly provided by a licence under the Protection of the Environment Operations Act 1997 in relation to the development, section 120 of the Protection of the Environment Operations Act 1997 must be complied with in and in connection with the carrying out of the development.

Concentration limits

The licensee must not cause or permit the emission of offensive odour beyond the boundary of the premises.

Waste

For the purposes of this condition, waste generated at the premises includes waste collected from vessels at the premises and may include but not be limited to contaminated bilge water, litter, garbage, fuel, oil and waste from abrasive cleaning, sanding, scraping and painting.

Noise limits

Where a noise limit has not been prescribed, all operations and activities occurring on the premises must be conducted in a manner that will not cause offensive noise.

Operating conditions

Activities must be carried out in a competent manner

Licensed activities must be carried out in a competent manner. This includes:

- the processing, handling, movement and storage of materials and substances used to carry out the activity; and
- the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.

Maintenance of plant and equipment

All plant and equipment installed at the premises or used in connection with the licensed activity, must be maintained in a proper and efficient condition, and must be operated in a proper and efficient manner.

Dust

Activities occurring at the premises must be carried out in a manner that will minimise emissions of dust from the premises.

Trucks entering and leaving the premises that are carrying loads must be covered at all times, except during loading and unloading.

Stormwater/sediment control - Construction Phase

An Erosion and Sediment Control Plan (ESCP) must be prepared and implemented. The plan must describe the measures that will be employed to minimise erosion and the discharge of sediment and other pollutants to lands and/or waters during construction activities. The ESCP should be prepared in accordance with the requirements for

such plans outlined in *Managing Urban Stormwater: Soils and Construction* (available from the Department of Housing), and should use best industry practice for piling operations.

Stormwater/sediment control - Operation Phase

A Stormwater Management Scheme must be prepared for the development and must be implemented. Implementation of the Scheme must mitigate the impacts of stormwater run-off from and within the premises following the completion of construction activities. The Scheme should be consistent with the Stormwater Management Plan for the catchment. Where a Stormwater Management Plan has not yet been prepared the Scheme should be consistent with the guidance contained in *Managing Urban Stormwater: Council Handbook* (available from the DEC).

Waste Water Management

The licensee must ensure that sewage and greywater, that are associated with vessels at the premises, are managed in a manner that will prevent pollution of waters. Information on collection of sewage and greywater from vessels is provided in the *Environmental Guidelines - Best Management Practices for Marinas and Boat Repair Facilities, 1999*.

Monitoring and recording conditions

Recording of pollution complaints

The licensee must keep a legible record of all complaints made to the licensee or any employee or agent of the licensee in relation to pollution arising from any activity to which this licence applies.

The record must include details of the following:

- the date and time of the complaint;
 - the method by which the complaint was made;
 - any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect;
 - the nature of the complaint;
 - the action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; and
 - if no action was taken by the licensee, the reasons why no action was taken.
- The record of a complaint must be kept for at least 4 years after the complaint was made.
- The record must be produced to any authorised officer of the EPA who asks to see them.

Telephone complaints line

The licensee must operate during its operating hours a telephone complaints line for the purpose of receiving any complaints from members of the public in relation to activities conducted at the premises or by the vehicle or mobile plant, unless otherwise specified in the licence. The licensee must notify the public of the complaints line telephone number and the fact that it is a complaints line so that the impacted community knows how to make a complaint.

Reporting conditions

Annual Return

The licensee must complete and supply to the EPA an Annual Return in the approved form comprising:

- a Statement of Compliance; and
- a Monitoring and Complaints Summary.

Notification of environmental harm

The licensee or its employees must notify the EPA of incidents causing or threatening material harm to the environment as soon as practicable after the person becomes aware of the incident in accordance with the requirements of Part 5.7 of the Act. Notifications must be made by telephoning the EPA's Pollution Line service on 131 555. The licensee must provide written details of the notification to the EPA within 7 days of the date on which the incident occurred.

Written report

Where an authorised officer of the EPA suspects on reasonable grounds that:

- (a) where this licence applies to premises, an event has occurred at the premises; or
- (b) where this licence applies to vehicles or mobile plant, an event has occurred in connection with the carrying out of the activities authorised by this licence,

and the event has caused, is causing or is likely to cause material harm to the environment (whether the harm occurs on or off premises to which the licence applies), the authorised officer may request a written report of the event. The licensee must make all reasonable inquiries in relation to the event and supply the report to the EPA within such time as may be specified in the request.

The request may require a report which includes any or all of the following information:

- the cause, time and duration of the event;
- the type, volume and concentration of every pollutant discharged as a result of the event;
- the name, address and business hours telephone number of employees or agents of the licensee, or a specified class of them, who witnessed the event; and
- the name, address and business hours telephone number of every other person (of whom the licensee is aware) who witnessed the event, unless the licensee has been unable to obtain that information after making reasonable effort;
- action taken by the licensee in relation to the event, including any follow-up contact with any complainants;
- details of any measure taken or proposed to be taken to prevent or mitigate against a recurrence of such an event; and
- any other relevant matters.

The EPA may make a written request for further details in relation to any of the above matters if it is not satisfied with the report provided by the licensee. The licensee must provide such further details to the EPA within the time specified in the request.

SRDAC

**SYDNEY
REGIONAL
DEVELOPMENT
ADVISORY
COMMITTEE**

The General Manager
Woollahra Municipal Council
P.O. Box 61
Double Bay NSW 1360

Attention: Peter Kauter

PROPOSED ROSE BAY AND POINT PIPER MARINAS REDEVELOPMENT AT 594 NEW SOUTH HEAD ROAD, ROSE BAY AND 5 WUNULLA ROAD, POINT PIPER.

Dear Peter,

I refer to your letter of 15 March 2007 (Ref: DA766/06), concerning the above mentioned Development Application referral to the Roads and Traffic Authority (RTA) for comment in accordance with the provisions of Schedule 1 of State Environmental Planning Policy No 11 (SEPP 11). I wish to advise that the Sydney Regional Development Advisory Committee (SRDAC) considered the traffic impact of this application at its meeting on 11 April 2007.

Below are the Committee's recommendation and RTA's comments on the subject application:

1. Whilst the surrounding on-street parking occupancy surveys were conducted in October (spring), results within the Christopher Hallam & Associates Pty Ltd Traffic Report dated September 2006 indicated that Marina Boat usage and parking is at its highest demand during summer.

Therefore, Council should satisfy itself that there is an adequate supply of on-street parking spaces within a reasonable walking distance of the marina, particularly during the summer season, to accommodate this development proposal.
2. To facilitate deliveries at the Rose Bay Marina, the existing No Parking restriction along the northern side of New South Head Road in front of the marina entrance should be extended to include a combined 18m long "No Parking / Loading Zone". Prior to the installation of the parking restriction the applicant is to contact the RTA's Traffic Management Services on phone: (02) 8814 2907 for a works instruction.
3. Subject to Council's Local Traffic Committee's approval, an application should be made to Council for the installation of a combined "No Parking / Loading Zone" restriction over a distance of 18m adjacent to the entrance of the Point Piper Marina to accommodate set-down / pick up activities generated by the marina and to create an area for fuel tank refilling.
4. All works / regulatory signposting associated with the proposed development shall be at no cost to the RTA.

Roads and Traffic Authority
ABN 64 480 155 255



81 Flushcombe Road
Blacktown NSW 2148

PO Box 558 Blacktown NSW 2148
DX8120 Blacktown

T 02 8814 2490
F 02 8814 2107

ID 2007-1412.doc

www.rta.nsw.gov.au

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(2)

In accordance with State Environmental Planning Policy No. 11, it is essential that a copy of Council's determination on the proposal (conditions of consent if approved) is forwarded to the Committee at the same time it is sent to the developer.

Any inquiries in relation to this development application can be directed to the nominated Land Use & Transport Planner, Andrew Popoff, on telephone 8814 2180 or facsimile 8814 2107.

Yours sincerely



Ken Moon
Chairman, Sydney Regional Development Advisory Committee

28 June 2007



Phone: 9228 6151
Fax: 9228 6433

WOOLLAHRA COUNCIL
RECORDS DEPT.

Peter Kauter
Executive Planner
Woollahra Council
PO Box 61
Double Bay NSW 2028

Our ref: S92/01732
Your ref:

18 JUL 2007

10 July 2007

Doc No ... 08115/07
File ... DA06/0766
Action ... P. KAUTER

Dear Mr Kauter

Rose Bay Marina- Proposed upgrade to fuel storage and handling facilities

We refer to your e mail dated 3 July 2007 requesting comments from the Major Hazards Unit on the above proposal.

The documents submitted were reviewed and our comments in respect of the hazards related matters are:

1. The fuel storage will be for diesel only. Diesel is a combustibile and not a class 3 flammable dangerous good. Therefore SEPP 33 does not apply to the proposal.
2. However, it is noted (footnote page 4 of Patterson Britton letter dated 12 April 2007) that provision is being made for possible future conversion of one or more tanks to store unleaded petrol. Since no further details have been included regarding this possible future use, Council may wish to require that the Applicant lodge a new DA for such change. The new DA would need to address the applicability of SEPP 33 and where necessary, include a preliminary hazard analysis.
3. It is noted that the three diesel tanks will be located within a concrete chamber. The chamber is indicated on drawings to be partly below mean sea level. The Applicant should be required to confirm that (a) measures/systems will be in place to avoid build up of fuel vapours to a dangerous level in addition to preventing the ingress of sea water, particularly during times of adverse weather; and (b) buoyancy effects, when the sea level is high and the fuel tanks are close to empty, have been considered in the design.

Should Council determine to approve the application, the following hazards related condition is suggested for including in the consent.

Prior to introduction of fuel to the new tanks, the applicant shall submit to Council, documentation to support that items 1&2 in Terry Granger's letter dated 16 April 2007 and the matters detailed in the attachment to the letter titled "Summary of Works and Best Practices of fuel storage and handling facilities" have been satisfactorily completed.

Should you have any queries, please contact Sohan Fernando on telephone 9228 6151.

Yours sincerely

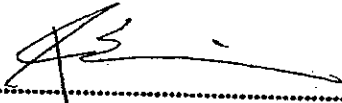
Derek Mullins
Director
Major Hazards Unit

ANNEXURE 15

W04/1452/4

Addenbrooke Pty Ltd - Proposed redevelopment of Rose Bay and Point Piper Marinas at and abutting 5 Wunulla Road, Point Piper and 594 New South Head Road, Rose Bay

1. This matter was considered by the Foreshores and Waterways Planning and Development Advisory Committee on 2 February 2007.
2. The Committee notes advice from NSW Maritime that it is currently considering an Application for Land Owner's Consent in relation to the proposed marina redevelopment.
3. The Committee notes that under the *Boat Storage Policy for Sydney Harbour*, the Government supports the conversion of commercial single moorings to marina berths as a means of freeing up water space for navigation.
4. The Committee is of the view that given the complexity of the proposal and detailed consideration required, that its full consideration of the application be deferred to a time following conclusion of the exhibition period. Timing to be advised by Council.
5. The Committee recommends that Council consider the requesting further information from the applicant in relation to:
 - a) waste management, in particular the quantity and means and location of storage/disposal of different types of waste generated by vessels to be stored at the marinas including waste oil, grey water, sewage and general rubbish;
 - b) the proposed use of the proposed hardstand associated with Rose Bay Marina and a justification for the proposed footprint; and
 - c) computer modelling of the visual impact of the marina redevelopment using the maximum size vessel capable of being berthed at the marina consistent with section 4.7 of the *Development Control Plan for Sydney Harbour Foreshores and Waterways*.



Persephone Rougellis
Chair
representing NSW Maritime



Una Williamson
representing Department of Planning



Peter Kauter
representing Woollahra Council

ANNEXURE 16

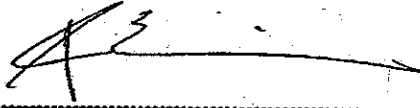
W04/1452/4

Addenbrooke Pty Ltd - Proposed redevelopment of Rose Bay & Point Piper marinas at and abutting No. 594 New South Head Road, ROSE BAY

1. This matter was considered by the Foreshores and Waterways Planning and Development Advisory Committee on 13 August 2007.
2. The Committee recognises that marina development is appropriate in this part of Rose Bay and the proposed marina development will result in a number of benefits. A number of key issues are outstanding and should be addressed prior to any decision to grant consent. These are:
 - a) visual impact of boat storage of Rose Bay Marina from the public foreshore and in particular the foreshore promenade and New South Head Road. The impact on public views are considered to be critical factors in any visual impact analysis;
 - b) the visual impact analysis required to be prepared under the *Development Control Plan for Sydney Harbour Foreshores and Waterways* showing appropriate regard for important public views from the promenade and New South Head Road which in some locations is considered to be high. There is also no suggestion in the DCP that an appropriate outcome of a view analysis is an averaging of the score of views from different locations as carried out in the EIS's visual impact assessment. Rather, an assessment is required of individual viewing locations and appropriate amendments being made to the layout of the marina to maintain important views (section 4.7 of the DCP);
 - c) further work being undertaken to improve the assessment of impact on the marine ecology as a result of the proposed development consistent with the recommendations of The Ecology Lab report commissioned by the Council and dated August 2007;
 - d) the potential underestimation of potential demand for additional parking and servicing in view of the size of vessels to be accommodated notwithstanding that there will be a net reduction in boat storage in the Bay. The Committee is aware of the Council commissioning a report into potential parking and traffic impacts of the proposed development;
 - e) the Committee is concerned that the proposed development will lead to a significant reduction in the number of publicly available single (swing) moorings and the impact of moorings available for yachts contrary to section 4.7 of the *Development Control Plan for Sydney Harbour Foreshores and Waterways*;
 - f) while the application provides for public dinghy storage in Rose Bay Park Reserve this location is further distanced from the private mooring area by the proposed Rose Bay Marina floating marina arms and would be of limited utility;

UNYEDIA

- g) the application fails to demonstrate that the current waste management facilities will be adequate to meet the demands of the proposed redeveloped marinas; and
- h) lack of information in the application ensuring that the waste management systems required for the new marinas may be inadequate given the extent of redevelopment and change in the type and size of vessel at the marinas. In view of the scale of the development it is disappointing that the EIS makes no referent to any intention, commitment or desire to apply for and achieve relevance and recognised quality standards in waste management.



Persephone Rougellis
Chair
representing NSW Maritime



Una Williamson
representing Department of Planning



Peter Kauter
representing Woollahra Council

3 Marist Place
Parramatta NSW 2150
Locked Bag 5020
Parramatta NSW 2124
DX 8225 PARRAMATTA

Telephone: 61 2 9873 8500
Facsimile: 61 2 9873 8599
heritageoffice@heritage.nsw.gov.au
www.heritage.nsw.gov.au

Contact: Karina Williams
Telephone: (02) 9873 8527
Karina.Williams@heritage.nsw.gov.au
File: H0500237/1
Our Ref: HPL46338
Your Ref: DA 100/2006/766.1

Mr Peter Kauter
Executive Planner
Planning and Development Division
Woollahra Municipal Council
PO Box 61
DOUBLE BAY NSW 1360

WOOLLAHRA COUNCIL
RECORDS DEPARTMENT

10 AUG 2007

Attention: Mr P. Kauter

Doc No 09020 07
File DA 06 / 0766
Action P. KAUTER

Dear Sir

594-596 New South Head Road, Rose Bay & 5 Wunulla Road, Point Piper
Development Application Referral - DA 766/2006/1

Thank you for your letter dated 9 July 2007 referring the above Development Application to the Heritage Office for comment which was received on 10 July 2007. The application and supporting information have been reviewed and the following comments are provided.

It is noted that the *Sydney Regional Environmental Plan—Sydney Harbour Catchment 2005* (SREP) identifies the heritage item 'Item 55: Remains of Western Rose Bay Ferry Wharf (New South Head Road)' within the subject area of the Development Application. The *Woollahra Local Environmental Plan 1995* (LEP) also identifies a separate item of significance within the subject area, the Esplanade, concrete balustrade (New South Head Road, Rose Bay).

It is understood that Woollahra Municipal Council has referred the application to the Heritage Office to seek our comments pursuant to Clause 58 (1)(b) of *Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005*. It should be noted that the Heritage Office is not the consent authority for this Development Application and does not therefore have a statutory role in the planning process in this instance.

However, as previously advised in the letter to Woollahra Municipal Council, dated August 2005, the Heritage Office is currently considering a community nomination for the listing of the Rose Bay Sea Wall and Promenade on the State Heritage Register, under the *Heritage Act 1977*. Should the sea wall (and balustrade) be listed on the State Heritage Register, the Heritage Council would become an approval authority for works under the *Heritage Act 1977*.

However, in order to assist Woollahra Municipal Council in making its decision, the Heritage Office considers that the proposed works in the vicinity of the sea wall, including the proposed modifications to the balustrade would have no adverse impact on the potential State heritage significance of the sea wall (and balustrade). Further, the Heritage Office considers that that the proposed development as a whole would have no adverse impacts on the local significance of the relevant items.

The Heritage Office recommends that Woollahra Municipal Council grant approval for the proposed development, subject to the recommendations as provided in the Rose Bay and Point Piper Marinas EIS Heritage Report, prepared by Noel Bell Ridley Smith and Partners in October 2006. Should Council approve the application it is suggested that the following Condition of Consent should be included:

The Applicant, or another party acting upon the consent, must apply to the Heritage Office for all necessary approvals required under the Heritage Act, 1977. The Applicant shall obtain an excavation permit under Section 140 of the Heritage Act 1977 or an exception under Section 139(4) in regard to the proposed works.

If you have any questions regarding the above matter please contact Karina Williams at the Heritage Office on (02) 9873 8527.

Yours faithfully

 7/08/07

Vincent Sicari
Manager
Conservation Team
Heritage Office
Department of Planning

NSW POLICE

Rose Bay Local Area Command
1 Wunulla rd, Point Piper
Rose Bay 2027
Telephone 02 9362 6399
Facsimile 02 9362 6311

**WOOLLAHRA COUNCIL
RECORDS DEPT.**

12 SEP 2007

11 September 2007

Mr Peter Kauter
Executive Planner
Woollahra Council
536 New South Head rd,
Double Bay, 2027

Doc No 10422-07
File DA06/0766
Action P. KAUTER

**RE: Proposed redevelopment – Rose Bay & Point Piper Marinas, 594-596 New South Head Road, Rose Bay & 5 Wunulla Road, Point Piper
Crime Prevention Through Environmental Design (CPTED) referral**

Background:

In April 2001 the NSW Minister for Planning introduced Crime Prevention Guidelines to Section 79C of the Environmental Planning and Assessment Act, 1979. These guidelines require consent authorities to ensure that development provides safety and security to users and the community. 'If a development presents a crime risk, the guidelines can be used to justify modification of the development to minimize crime risk, or, refusal of the development on the grounds that crime risk cannot be appropriately minimized'.

The Guidelines contain two parts. 'Part A details the need for a formal crime risk assessment (Safer by Design Evaluation) to be done in conjunction with trained police, and Part B outlines basic Crime Prevention Through Environmental Design (CPTED) principles and strategies that can be used by consent authorities to justify the modification proposals to minimize risk'. (DUAP 2001:2).

Crime Prevention Through Environmental Design (CPTED)

Crime Prevention Through Environmental Design (CPTED) is a crime prevention strategy that focuses on the planning, design and structure of cities and neighborhoods. It reduces opportunities for crime by using design and place management principles that reduce the likelihood of essential crime ingredients from intersecting in time and space.

Predatory offenders often make an informal cost-benefit assessment of potential victims and locations before committing crime. CPTED aims to create the reality (or perception) that the costs of committing crime are greater than the likely benefits. This is achieved by creating environmental and social conditions that:

- Maximize risk to offenders (increasing the likelihood of detection, challenge and apprehension).
- Maximize the effort required to commit crime (increasing the time, energy and resources required to commit crime)
- Minimize the actual and perceived benefits of crime (removing, minimizing or concealing crime attractors and rewards) and
- Minimize excuse making opportunities (removing conditions that encourage/facilitate rationalization of inappropriate behaviour)

CPTED employs four key strategies. These are surveillance, access control, territorial re-enforcement and space/activity management.

Site Description

The Rose Bay Marina, being floating walkways and hardstand wharf, currently extends around 100 meters into Rose Bay from the beach on the south western side of Rose Bay. Point Piper Marina extends around 125 meters into the bay from the western side of Rose Bay. Fuel is currently available from both locations. There are a combined total of 172 swing moorings in the water in the immediate surrounds of the marinas and a total of 52 fixed berths available at the marinas themselves.

In addition to the mooring of boats, the part of Rose Bay being affected is used recreationally for canoeing, kayaking, in and around the moored boats and further into Port Jackson. A café and other small marine businesses located on the Rose Bay Marina are open generally during the hours of daylight. The restaurant is open during the evenings.

The users of some of the boats in swing moorings store small dinghies along the foreshore at Rose Bay Park. These boats, mixed with other small watercraft such as canoes and catamarans, occupy a large amount of space under the foreshore trees.

The Royal Motor Yacht club is located immediately to the north of Point Piper Marina and includes a wharf extending into the bay. The Rose Bay Police station is located behind Rose Bay Park, between the two marinas.

The redevelopment will comprise,

- Removal of the existing fixed berths at the Rose Bay and Point Piper Marinas,
- Removal of the existing slipway at Rose Bay Marina,
- Installation of floating berths and walkway at the Rose Bay and Point Piper Marinas,
- Construction of a new hardstand at Rose Bay Marina,
- Installation of a new electricity substation on the hardstand at Rose Bay Marina,
- Installation of a new electricity substation on the hardstand at the Point Piper Marina,
- Installation of a new 75,000 litre fuel tank at Rose Bay Marina,
- Upgrade of fuel pumping facilities at Rose Bay and Point Piper Marinas,
- Upgrade of sewage pump out facilities at Point Piper
- Upgrade of disability access,
- Provision of casual berthing facilities and
- A new holding area for existing slipways at Point Piper Marina.

The development will result in changes to the number of available fixed berths (to become 159) and swing moorings (to become 15).

There are no planned changes to the existing marina buildings, offices restaurants or amenities. There are no planned changes to the nature of services provided by businesses on the marina.

(Redevelopment of Rose Bay and Point Piper Marinas – Environmental Impact Statement)

The development involves construction mostly occurring on or across water. The main features of the changes will involve an increase in the open water in front of Rose Bay Park through to the center of the bay and the concentration of boats at berths in the marinas that will now extend further into the bay. (approximately 240m for the Rose Bay Marina and 210m for the Point Piper Marina). Smaller walkways will extend off the main walkway forming spaces for the berths. A security gate will be placed at the junction of the main walkways to these smaller (finger) walkways, allowing only access for boat owners/users.

Police understand that the main walkways on each marina may be accessible to the public throughout the day and night. A gate will be installed on the gangway entrance to both main walkways which can be locked.

See the Environmental Impact Statement for the redevelopment for photographs and plans.

Site Risk Rating

The NSW Police Safer by Design Evaluation process is based upon Australia and New Zealand Risk Management Standard ANZS4360:1999. It is a contextually flexible, transparent process that identifies and quantifies crime hazards and location risk. Evaluation measures include crime likelihood (statistical probability), consequence (crime outcome), distributions of reported crime (hotspot analysis), socio-economic conditions (relative disadvantage), situational hazards and crime opportunity.

After conducting this process the rating for this development has been identified as, **Medium.**

With this in mind the following Crime Prevention Through Environmental Design (CPTED) treatments should be considered for the development in order to reduce opportunities for crime.

- *Natural*
- *Organised (low)*
- *Technical/Mechanical (low)*
- *Technical/Mechanical (high)*

Surveillance

Natural surveillance is achieved when normal space users can see and be seen by others. This highlights the importance of building layout, orientation and location; the strategic use of design; landscaping and lighting. Natural surveillance is a by-product of well-planned, well-designed and well-used space. Technical/mechanical Surveillance is achieved through mechanical/electronic measures such as CCTV, help points and mirrored building panels. Technical/mechanical surveillance is commonly used as a 'patch' to supervise isolated, higher risk locations. Formal (or Organised) Surveillance is achieved through the tactical positioning of guardians. An example would be the use of on-site supervisors at higher risk locations.

General Comments in Design for Surveillance:

- The proposed barriers separating the gangways from the main walkways and the barriers between the main walk ways and the finger wharves are to be made up of transparent glass. This provides a line of sight view along the walkways whilst allowing the security provided by the gates to be maintained. The main walkway of the Rose Bay Marina extends into the bay at an angle to the hardstand decking at the rear of the marina. The view from the hardstand therefore will only extend a certain distance along the western side of the walkway before it is blocked by berthed vessels.
- The pathway running east – west along New South Head road is bordered by a concrete balustrade. As a result, the Rose Bay Marina is not visible to passing traffic. One aspect of the redevelopment does include the removal of part of this wall. However, given the length of the wall the visibility of the marina from the road shall remain poor. Passing pedestrians, will have a view of the Rose Bay Marina and berths over this wall providing some ongoing general surveillance. Further changes to the structure and design of the wall are not a matter for the given redevelopment application.
- The only obstructions on the proposed walkways are intended to be 900mm high service pedestals, fire hose reels and fuel pumps which will be located on the walkway edges. This will ensure that any person on a given walkway will be at least in part visible to any other person on that walkway, distance permitting.
- During daylight hours the present café on the Rose Bay Marina and adjoining businesses ensure there are a regular number of people moving through the location.
- The changes to the marinas with their increased length accessible to the public, mean that it is possible that there will be an increase in the number of people attending purely for the experience of walking out on the walkways. This is referred to in the – Environmental Impact Statement Redevelopment of Rose Bay and Point Piper Marinas. This stands to increase the levels of natural surveillance in the area of the Rose Bay Marina.
- There is limited natural surveillance during the hours of darkness given the relative isolation of both Marinas to other businesses and nearby residences. There is only one other business in the general area, being a restaurant across the road from the Rose Bay Marina entrance.
- The marinas are otherwise visible to people on passing watercraft and those on the adjacent marina.
- Police understand that the marinas will be staffed 24 hours a day by an employee working out of the Rose Bay Marina office.

Recommendations:

- Surveillance equipment can enhance the physical security of a location and assist in the identification of people involved in anti-social or criminal behaviour.

- Cameras should be installed both on the eastern side of the marina building capturing pedestrians walking onto the marina from the New South Head road footpath. This should be accompanied by adequate lighting.
 - Cameras should be installed on the barriers managing access to the finger wharves from the main walkway. This should capture as much of the length of the finger wharves and berthed boats as possible.
 - Similarly, cameras should be installed on or near the main access barrier (separating the gangway from the main walkway) that allow coverage of the length of the main walkway and adjoining fairways.
 - TV monitors should enable staff to monitor activities on the camera. Alternately provision should be made for the CCTV to be recorded such that images can later be retrieved.
- Appropriately placed signage should indicate how marina staff can be contacted during the day and at night.

Lighting

There is a proven correlation between poor lighting, fear of crime, the avoidance of public places and crime opportunity. Good lighting can assist in increasing the usage of an area. Criminal acts can be committed by people who use the dark to conceal their presence or reduce the risk of being seen and later recognized. Similarly the ability of a person in a dark place to make out the features of another person has a direct impact on their feelings of personal safety.

Lighting on land should be designed to the Australian and New Zealand Lighting Standards. Australia and New Zealand Standard 1158.1 – Pedestrian, requires lighting engineers and designers to consider crime risk and fear when selecting lamps and lighting levels.

General Comments in Design for Lighting:

- The proposed plans for lighting for both Marinas includes the use of downward facing lights on 900mm high pedestals spaced every 10 meters along each walkway. This lighting is designed to light the walkways in the interests of the safety of pedestrians and boat users. There are no plans for other lighting on either Marina
- Police understand that any lighting installation on a marina is subject to requirements under a relevant standard (A.S 4282-1997). This includes the condition that lights face downwards and away from water. Excessive lighting in and around water provides a potential safety hazard for the navigation of boats in the dark.
- Police are concerned that the lighting on walkways be appropriate not only to allow the safe passage of pedestrians but also to ensure that a person on the walkway can be fully seen or recognized. The effect of the intended lighting is not yet known.

Recommendations

- Lighting provisions on the walkways of the Marinas should be reviewed after construction has been completed. This should be done to ensure that users of the walkways can be fully seen.
- Lighting at the entrance to the Rose Bay Marina should be adequate to ensure any person seen entering the Marina area at night from the New South Head road footpath is clearly visible to passing traffic. This could involve the use of strong sensor lights pointing downwards from a height above the entrance.

Territorial Re-enforcement

Criminals rarely commit crime in areas where the risk of detection and challenge are high. People who have guardianship or ownership of areas are more likely to provide effective supervision and to intervene in crime than passing strangers. Effective guardians are often ordinary people who are spatially 'connected' to a place and feel an association with, or responsibility for it. *Territorial Re-enforcement* uses actual and symbolic boundary markers, spatial legibility and environmental cues to 'connect' people with space, to encourage communal responsibility for public areas and facilities, and to communicate to people where they should/not be and what activities are appropriate.

General Comments in Design for Territorial Re-enforcement:

- The Rose Bay and Point Piper Marinas exist mostly over water. The land boundary of the Rose Bay Marina is marked by the wall adjoining the New South Head road footpath. The land boundary of the Point Piper Marina is marked by the end of the building and marina access path.
- The water borders of the marina area will be naturally limited to and defined by the extent of the actual walkways and berthed boats. For the purposes of navigating boats around the marina the border can be said to include the surrounding water fairways.
- The Rose Bay Marina is well attended during the day with the public visiting the businesses inside the Marina building or tending to boats in a berth. This is anticipated to continue.
- The intended presence of the Marina staff throughout the day and night provides an additional level of guardianship.

Environmental Maintenance/Space Activity Management

All space, even well planned and well-designed areas need to be effectively used and maintained to maximize community safety. Places that are infrequently used are commonly abused. There is a high correlation between urban decay, fear of crime and avoidance behaviour. Space/Activity management strategies are an important way to develop and maintain *natural* community control. Space management involves the formal supervision, control and care of the development. All space, even well planned and well-designed areas need to be effectively used and maintained to maximize community safety.

General Comments in Design for Environment Maintenance and

- In terms of crimes relating to marinas and boat owners the most significant issue is that of thefts from boats moored in berths or swing moorings. This includes theft of electrical equipment and fuel. The majority of these involve offenders utilizing a boat or other water craft to access both boats and marinas.
- The Rose Bay area is similar to most other marinas in the Port Jackson area in that such thefts are reported to Police on an occasional basis. Police believe a significant number of these incidents are not reported.
- The marina will hold over 160 boats and include three commercial publicly available fuel pumps.
- The Rose Bay Wharf is located 500 meters away in Lyne Park. The ferry service does not continue throughout the night.
- Buses travel on New South Head road in both directions with bus stop located along New South Head road. Pedestrians pass regularly during the day.
- Users of the marinas are expected to continue to park their personal vehicles along New South Head road and Wunulla road. The Environmental Impact Statement cites studies that do not project an increase in the number of vehicles being parked on these streets given the number of overall moorings and berthings are reducing. However, any increase in the number of people who will attend only for the experience of using walkways themselves is unknown. In the event the location becomes an attractive destination to sightseers and locals it is conceivable that there may be an increase in the number vehicles stopping outside or parking near the entrance to either of the marinas. This becomes an issue of public safety should there be an increase in vehicles stopping outside the Rose Bay Marina in a location where cars regularly travel at 60km/hr.

Recommendations

- Appropriate security measures should be included in plans for the fuel pumps. This could involve systems requiring a pin code access, bull valve system or tamper proof key access.
- Signage advising boat users to be mindful of boat security should be placed at the outer perimeter of the marinas, on all access gates and other suitable structures. This should include advice to boat users to fully secure and enclose possible access points to their boats. (Particularly in relation to the larger boats).
- Signage also needs to be provided at entry/exit points to the secured parts of the marina and throughout the development to advise visitors of what parts of the marina are private property and to warn that intruders may be prosecuted.
- The impact of a possible increase in vehicle traffic outside the entrance to the Rose Bay Marina should be monitored.
- The design of the pedestals containing the walkway lighting should be such that the opportunity for acts of vandalism and damage should be minimized.

Access Control

Access control treatments restrict, channel and encourage people and vehicles into, out of and around the development. Way-finding, desire-lines and formal/informal routes are important crime prevention considerations.

Access control is used to increase the time and effort required to commit crime and to increase the risk to criminals. *Natural access control* includes the tactical use of landforms and waterways features, design measures including building configuration; formal and informal pathways, landscaping, fencing and gardens. *Technical/Mechanical access control* includes the employment of security hardware and *Formal (or Organised) access control* includes on-site guardians such as employed security officers.

General Comments in Design for Access Control:

- The redevelopment is unique in that it is occurring on water. Therefore, access is naturally restricted to the use of walkways and watercraft.
- The current intention is to allow the main walkways of both marinas to remain accessible to the public throughout the day and night.
- Gates will be installed on the gangways linking the hardstands to the walkways. Further security gates/barriers shall be installed on the "finger" walkways where they intersect with the main walkway. These shall be accessible only to boat owners/users.
- The length of the main walkways will be accessible to any person in a watercraft. This will also be accessible to water taxis and water Police vessels.

Recommendations

- Any gate that may be shut and locked for the purpose of preventing access to any portion of a marina should be fitted with a monitored alarm system.
- The access through any security gate (linking the main walkways to the "finger" walkways, should require the use of a pin number or swipe card. Ideally the entry of any person should be able to be recorded through their use of such a system.
- In the event that staffing of the marinas ceases to be for 24 hours a day, provision should be made for the first access gates on the gangways to be able to be securely locked.

Conclusion

The New South Wales Police have a vital interest in ensuring the safety of members of the community and their property. By using the recommendations contained in this evaluation, any person who does so acknowledges that:

1. It is not possible to make areas evaluated by the NSWP absolutely safe for members of the community or their property
2. It is based upon the information provided to the NSWP at the time the evaluation was made,
3. The evaluation is a confidential document and is for use by the consent authority or organizations referred to on page 1 only,
4. The contents of this evaluation are not to be copied or circulated otherwise that for the purposes of the consent authority or organization referred to on page 1.

The NSW Police hopes that by using the recommendations contained in this document, criminal activity will be reduced and the safety of members of the community and their property will be increased. However, it does not guarantee that all risks have been identified, or that the area evaluated will be free from criminal activity if its recommendations are followed.

Yours sincerely



Malcolm Searle
Sergeant
Rose Bay Police
11 September 2007

SREP (SYDNEY HARBOUR CATCHMENT) 2005 ASSESSMENT TABLE

[SREP (Sydney Harbour Catchment) 2005 was made on 28/09/05 with the following aims:

- (a) to ensure that the catchment, foreshores, waterways and islands of Sydney Harbour are recognised, protected, enhanced and maintained:
 - (i) as an outstanding natural asset, and
 - (ii) as a public asset of national and heritage significance, for existing and future generations,
- (b) to ensure a healthy, sustainable environment on land and water,
- (c) to achieve a high quality and ecologically sustainable urban environment,
- (d) to ensure a prosperous working harbour and an effective transport corridor,
- (e) to encourage a culturally rich and vibrant place for people,
- (f) to ensure accessibility to and along Sydney Harbour and its foreshores,
- (g) to ensure the protection, maintenance and rehabilitation of watercourses, wetlands, riparian lands, remnant vegetation and ecological connectivity,
- (h) to provide a consolidated, simplified and updated legislative framework for future planning.

For the purpose of enabling these aims to be achieved in relation to the Foreshores and Waterways Area, the plan adopts the following principles:

- (a) Sydney Harbour is to be recognised as a public resource, owned by the public, to be protected for the public good,
- (b) the public good has precedence over the private good whenever and whatever change is proposed for Sydney Harbour or its foreshores,
- (c) protection of the natural assets of Sydney Harbour has precedence over all other interests.]

SREP (SYDNEY HARBOUR CATCHMENT) 2005	
Aims (cl.2)	Comment
(a) to ensure that the catchment, foreshores, waterways and islands of Sydney Harbour are recognised, protected, enhanced and maintained: (i) as an outstanding natural asset, and (ii) as a public asset of national and heritage significance, for existing and future generations	Blocking of municipal views and reduced public access to the waterway does not recognise, protect, enhance and maintain the Harbour as an outstanding natural asset and as a public asset of national and heritage significance for existing and future generations (report refs. pt. 17.1, 17.7 & 17.8).
(b) to ensure a healthy, sustainable environment on land and water	Satisfactory
(c) to achieve a high quality and ecologically sustainable urban environment	Satisfactory
(d) to ensure a prosperous working harbour and an effective transport corridor	Satisfactory
(e) to encourage a culturally rich and vibrant place for people,	Satisfactory
(f) to ensure accessibility to and along Sydney Harbour and its foreshores	Reduced access to the Harbour due to reduction in boat storage facilities (report ref. pt. 17.8) - unsatisfactory
(g) to ensure the protection, maintenance and rehabilitation of watercourses, wetlands, riparian lands, remnant vegetation and ecological connectivity	Satisfactory
(h) to provide a consolidated, simplified and updated legislative framework for future planning	Noted
Zone W5 Objectives (cl.17)	Comment
(a) to give preference to and increase public water-dependent development so that people can enjoy and freely access the waters of Sydney Harbour and its tributaries,	Marina is water dependent development; allows access to the waters of Sydney Harbour by marina customers; improved disabled access - satisfactory

(b) to allow development only where it is demonstrated that the public use of waters in this zone is enhanced and will not be compromised now or in the future,	Impacts on passive water users is acceptable; improved facilities for marina customers - satisfactory
(c) to minimise the number, scale and extent of artificial structures consistent with their function,	Existing moorings/berths replaced by floating pens; greater scale but less water occupancy
(d) to allow commercial water-dependent development, but only where it is demonstrated that it meets a justified demand, provides benefits to the general and boating public and results in a visual outcome that harmonises with the planned character of the locality,	Demand for storage of larger power boats (Boat Storage Policy); public access to main walkways; (WRDCP: O4.7.5 <i>protect important views from public spaces... to the harbour...</i> ; C4.7.2 <i>development maintains the views and vista corridors shown on the precinct map.</i> Vistas from promenade will be affected); visual outcomes will not harmonise with the planned character of the locality (report ref. pts. 15.4 & 17.1) - unsatisfactory
(e) to minimise congestion of and conflict between people using waters in this zone and the foreshore,	Points of access will not conflict; waterway management & navigation issues are acceptable - satisfactory
(f) to protect and preserve beach environments and ensure they are free from artificial structures,	Dinghy storage RB beach, otherwise no change; ecological impacts are acceptable (report ref. pt. 17.3 & 17.4)-satisfactory
(g) to ensure that the scale and size of development are appropriate to the locality, and protect and improve the natural assets and natural and cultural scenic quality of the surrounding area, particularly when viewed from waters in this zone or from areas of public access.	Floating pontoons are low profile; RB beach will not be affected: views from the RB promenade of shorelines & Shark Is will be affected (report ref. pt. 17.1) - unsatisfactory

MATTERS FOR CONSIDERATION (part 3, division 2)

Biodiversity, ecology and environment protection (cl.21)

(a) development should have a neutral or beneficial effect on the quality of water entering the waterways,	The quality of water entering the waterway will not be effected; waste pump-out facilities should be beneficial - satisfactory
(b) development should protect and enhance terrestrial and aquatic species, populations and ecological communities and, in particular, should avoid physical damage and shading of aquatic vegetation (such as seagrass, saltmarsh and algal and mangrove communities),	Marine ecology impacts are acceptable (report ref. pt. 17.3 & 17.4) – satisfactory
(c) development should promote ecological connectivity between neighbouring areas of aquatic vegetation (such as seagrass, saltmarsh and algal and mangrove communities),	Marine ecology impacts are acceptable (report ref. pt. 17.3 & 17.4) – satisfactory
(d) development should avoid indirect impacts on aquatic vegetation (such as changes to flow, current and wave action and changes to water quality) as a result of increased access,	Marine ecology impacts are acceptable (report ref. pt. 17.3 & 17.4) – satisfactory
(e) development should protect and reinstate natural intertidal foreshore areas, natural landforms and native vegetation,	Intertidal areas RB beach will not be affected - satisfactory
(f) development should retain, rehabilitate and restore riparian land,	Riparian land, i.e. RB beach, will not be affected satisfactory
(g) development on land adjoining wetlands should maintain and enhance the ecological integrity of the wetlands and, where possible, should provide a vegetative buffer to protect the wetlands,	Marine ecology impacts are acceptable (report ref. pt. 17.3 & 17.4) – satisfactory
(h) the cumulative environmental impact of development,	Marine ecology impacts are acceptable (report ref. pt. 17.3 & 17.4) – satisfactory
(i) whether sediments in the waterway adjacent to the development are contaminated, and what means will minimise their disturbance	Marine ecology impacts are acceptable (report ref. pt. 17.3) – satisfactory

Public access to, and use of, foreshores and waterways (cl.22)	
(a) development should maintain and improve public access to and along the foreshore, without adversely impacting on watercourses, wetlands, riparian lands or remnant vegetation,	There will be a neutral impact on foreshore access; watercourses, riparian land and remnant vegetation will not be adversely impacted; marine ecology impacts are acceptable (report ref. pts. 17.3 & 17.4) – satisfactory
(b) development should maintain and improve public access to and from the waterways for recreational purposes (such as swimming, fishing and boating), without adversely impacting on watercourses, wetlands, riparian lands or remnant vegetation,	Access from RB beach for passive recreation will be changed with removal of swing moorings; reduction in boat storage capacity will reduce access to the waterway; impacts are acceptable (report ref. pts. 17.9) – unsatisfactory
(c) if foreshore land made available for public access is not in public ownership, development should provide appropriate tenure and management mechanisms to safeguard public access to, and public use of, that land,	Not relevant
(d) the undesirability of boardwalks as a means of access across or along land below the mean high water mark if adequate alternative public access can otherwise be provided,	Not applicable
(e) the need to minimise disturbance of contaminated sediments.	Sediment quality impacts are acceptable (report ref. pt. 17.3) – satisfactory
Maintenance of a working harbour (cl.23)	
(a) foreshore sites should be retained so as to preserve the character and functions of a working harbour, in relation to both current and future demand,	Satisfactory
(b) consideration should be given to integrating facilities for maritime activities in any development,	Satisfactory
(c) in the case of development on land that adjoins land used for industrial and commercial maritime purposes, development should be compatible with the use of the adjoining land for those purposes,	Satisfactory
(d) in the case of development for industrial and commercial maritime purposes, development should provide and maintain public access to and along the foreshore where such access does not interfere with the use of the land for those purposes.	Public access to and along the foreshore will be maintained; disabled access will be improved; public access will to main walkway arms will be available – satisfactory
Interrelationship of waterway and foreshore uses (cl.24)	
(a) development should promote equitable use of the waterway, including use by passive recreation craft,	Waterway management & navigation issues are acceptable (report ref. pt. 17.8) – satisfactory
(b) development on foreshore land should minimise any adverse impact on the use of the waterway, including the use of the waterway for commercial and recreational uses,	Foreshore development is limited and will not impact on the use of the waterway – satisfactory
(c) development on foreshore land should minimise excessive congestion of traffic in the waterways or along the foreshore,	Waterway management & traffic/parking impacts are acceptable (report ref. pt. 17.2 & 17.8) – satisfactory
(d) water-dependent land uses should have priority over other uses,	Marina is water dependent – satisfactory
(e) development should avoid conflict between the various uses in the waterways and along the foreshores.	Waterway & foreshore conflicts are acceptable (report ref. pt. 17.8) – satisfactory
Foreshore and waterways scenic quality (cl.25)	

(a) the scale, form, design and siting of any building should be based on an analysis of: (i) the land on which it is to be erected, and (ii) the adjoining land, and (iii) the likely future character of the locality,	Scale, form, design & siting of RB marina will have unacceptable impacts (report ref. pt. 17.1) - unsatisfactory
(b) development should maintain, protect and enhance the unique visual qualities of Sydney Harbour and its islands, foreshores and tributaries,	Visual impacts of the Harbour & Shark Is, as viewed from RB promenade are unacceptable (report ref. pt. 17.1) – unsatisfactory
(c) the cumulative impact of water-based development should not detract from the character of the waterways and adjoining foreshores.	Change from moorings to berths will detract from the character of the waterway (report ref. pt. 17.1) – unsatisfactory
Maintenance, protection and enhancement of views (cl.26)	
(a) development should maintain, protect and enhance views (including night views) to and from Sydney Harbour,	Views to the Harbour will be impacted particularly from RB promenade (report ref. pt. 17.1) – unsatisfactory
(b) development should minimise any adverse impacts on views and vistas to and from public places, landmarks and heritage items,	Impact on views & vistas particularly from RB promenade, including views of shorelines, Shark Is, northern foreshore, main harbour channel & Manly are unacceptable (report ref. pt. 17.1) - unsatisfactory
(c) the cumulative impact of development on views should be minimised.	Cumulative impact on views from RB promenade are not minimised (report ref. pt. 17.1) – unsatisfactory
Boat storage facilities (cl.27)	
(a) development should increase the number of public boat storage facilities and encourage the use of such facilities,	Number of public boat storage facilities will be reduced by 65 (report ref. pt. 17.8) – unsatisfactory
(b) development should avoid the proliferation of boat sheds and other related buildings and structures below the mean high water mark,	Satisfactory
(c) development should provide for the shared use of private boat storage facilities,	No private boat storage facilities proposed
(d) development should avoid the proliferation of private boat storage facilities in and over the waterways by ensuring that all such facilities satisfy a demonstrated demand,	No private boat storage facilities proposed
(e) boat storage facilities should be as visually unobtrusive as possible,	Floating pontoons are low profile – satisfactory
(f) in the case of permanent boat storage, the safety and utility of the development should not be adversely affected by the wave environment, and the development should avoid adverse impacts on safe navigation and single moorings.	Design accords with AS 3962 & NSW Maritime guidelines – satisfactory
HERITAGE PROVISIONS (PART 5)	
Development in the vicinity of heritage items (cl.59)	

<p>(1) Before granting development consent to development in the vicinity of a heritage item, the consent authority must assess the impact of the proposed development on the heritage significance of the heritage item.</p> <p>(2) This clause extends to development:</p> <p>(a) that may have an impact on the setting of a heritage item, for example, by affecting a significant view to or from the item or by overshadowing, or</p> <p>(b) that may undermine or otherwise cause physical damage to a heritage item, or</p> <p>(c) that will otherwise have any adverse impact on the heritage significance of a heritage item.</p>	<p>The impact on significant views of Shark Is from RB promenade will be unacceptable (report ref. pts. 17.7) – unsatisfactory</p>
<p>WETLANDS PROTECTION (PART 6) (matters to be taken into consideration)</p>	
<p>(a) the development should have a neutral or beneficial effect on the quality of water entering the waterways,</p>	<p>Satisfactory</p>
<p>(b) the environmental effects of the development, including effects on:</p> <p>(i) the growth of native plant communities,</p> <p>(ii) the survival of native wildlife populations,</p> <p>(iii) the provision and quality of habitats for both indigenous and migratory species,</p> <p>(iv) the surface and groundwater characteristics of the site on which the development is proposed to be carried out and of the surrounding areas, including salinity and water quality and whether the wetland ecosystems are groundwater dependent,</p>	<p>Sediment quality & marine ecology impacts are acceptable (report ref. pt. 17.3 & 17.4) – satisfactory</p>
<p>(c) whether adequate safeguards and rehabilitation measures have been, or will be, made to protect the environment,</p>	<p>Sediment quality & marine ecology impacts are acceptable (report ref. pt. 17.3 & 17.4) – satisfactory</p>
<p>(d) whether carrying out the development would be consistent with the principles set out in <i>The NSW Wetlands Management Policy</i> (as published in March 1996 by the then Department of Land and Water Conservation),</p>	<p>Sediment quality & marine ecology impacts are acceptable (report ref. pt. 17.3 & 17.4) – satisfactory</p>
<p>(e) whether the development adequately preserves and enhances local native vegetation,</p>	<p>Sediment quality & marine ecology impacts are acceptable (report ref. pt. 17.3 & 17.4) – satisfactory</p>
<p>(f) whether the development application adequately demonstrates:</p> <p>(i) how the direct and indirect impacts of the development will preserve and enhance wetlands, and</p> <p>(ii) how the development will preserve and enhance the continuity and integrity of the wetlands, and</p> <p>(iii) how soil erosion and siltation will be minimised both while the development is being carried out and after it is completed, and</p> <p>(iv) how appropriate on-site measures are to be implemented to ensure that the intertidal zone is kept free from pollutants arising from the development, and</p> <p>(v) that the nutrient levels in the wetlands do not increase as a consequence of the development, and</p> <p>(vi) that stands of vegetation (both terrestrial and aquatic) are protected or rehabilitated, and</p> <p>(vii) that the development minimises physical damage to aquatic ecological communities, and</p> <p>(viii) that the development does not cause physical damage to aquatic ecological communities,</p>	<p>Sediment quality & marine ecology impacts are acceptable (report ref. pt. 17.3 & 17.4) – satisfactory</p>

(g) whether conditions should be imposed on the carrying out of the development requiring the carrying out of works to preserve or enhance the value of any surrounding wetlands.

Conditions should be imposed as contained in the CMP & EMP – satisfactory

ANNEXURE 20

SYDNEY HARBOUR FORESHORES & WATERWAYS AREA DEVELOPMENT CONTROL PLAN

ASSESSMENT TABLE

[The DCP applies to development within the foreshores and waterways area. It contains performance-based criteria and guidelines which need to be taken into consideration when assessing DAs. NOTE: While the majority of the DCP is a carryover from the DCP which supplemented the previous SREP 23 specific provisions relating to the assessment of marinas was added]

Part	Assessment
Part 2. Ecological assessment	
Ecological communities	
Terrestrial - grassland	Grasslands are <i>low</i> conservation value - satisfactory
Aquatic - sandy beaches - seagrass beds	Sandy beaches are <i>medium</i> conservation value - satisfactory Seagrass beds are <i>high</i> conservation value – satisfactory, (report ref. pts. 17.3 & 17.4)
Part 3. Landscape assessment	
- Landscape character type 10	Natural elements, being Rose Bay Beach, will not be adversely affected; open nature of the bay will not be affected by development on the foreshore; there is a demand for bigger power boats, which the marinas have been designed to accommodate; Rose Bay has an historical association with boat storage use which has been compatible with land uses
Part 4 Design guidelines for land-based and land/water interface development	
4.2 General	
public access to waterways and public land is maintained and enhanced;	Physical & disabled access will be improved; the proposal will reduce the number of boats which can be stored at the marinas and in that way will reduce public access to the waterway (report ref. pt. 17.8) – unsatisfactory
congestion of the waterway and foreshore is minimised;	Waterway management is considered satisfactory; parking & traffic impacts are acceptable (report ref. pts. 17.2 & 17.8) - satisfactory
conflicts on the waterway and foreshore are avoided;	Waterway management is considered satisfactory; parking & traffic impacts are acceptable (report ref. pts. 17.2 & 17.8) - satisfactory
the development warrants a foreshore location;	Foreshore location satisfactory
the development does not interfere with navigation, swimming or other recreational activities;	(report ref. pt. 17.8) - satisfactory
the demand for the development has been established;	Established demand – demand for larger power boat berths (report ref. pt. 15.4.2)
the structure does not obstruct or affect the natural flow of tides and currents;	Floating pontoons will not affect currents or tides – satisfactory
development does not dominate its landscape setting;	Location & size of boats will dominate views particularly from promenade (report ref. pt. 17.1) – unsatisfactory
the extent of development is kept to the absolute minimum necessary to provide access to the waterway;	Satisfactory

shared usage of facilities is encouraged to minimise the number of structures and their cumulative impact on the environment of the Harbour and its tributaries;	Casual berthing, refuelling & waste pump out facilities available to the general boating community – satisfactory
development is setback at least 2.5 metres from the division of the waterway as established by the NSW Maritime Authority and illustrated in Figure 4	N/A
4.7 Commercial marinas	
Location	
Marinas (where permissible) are to be located where they can be used by as many people as possible and are easily accessed from land and water	Location re: access is satisfactory; existing conditions re: Point Piper from land – satisfactory
marinas are to be located where there is adequate water depth or where minimal dredging of soft material will achieve an adequate water depth;	Water depth satisfactory; no dredging proposed – satisfactory
marinas are to be located away from areas subjected to exposed wave environments;	Satisfactory
marinas are preferably to be located away from wetlands or the wetlands protection area (both as defined by the SREP) or where they or the vessels using them will physically damage or overshadow estuarine vegetation of high value. Clauses 61 to 63 inclusive of SREP (Sydney Harbour Catchment) 2005 indicate provisions relevant to wetlands protection;	Wetlands protection area; impact on seagrass beds is satisfactory (report ref. pts. 17.2 & 17.3)
marinas are not to reduce the number of publicly available single (swing) moorings, jeopardise safe navigation or adversely impact other water users including small craft;	All 172 swing moorings to be relinquished; 15 to be provided by NSW Maritime; navigation & other water users impacts OK (report ref. pt. 17.8) - unsatisfactory
waterside structures are to minimise impacts on public water activities.	Satisfactory (report ref. pt. 17.8)
Design and layout	
buildings and other facilities are to be designed and sited so that natural or other attractive features are not obscured (see also Section 4.5 of this DCP);	Buildings & facilities will not obscure views of features; 4.5 relates to built form and is not relevant – satisfactory
buildings are to be designed so that their dimensions are not excessive and can reasonably meet the functional requirements of the proposed uses;	Buildings are existing – satisfactory
marinas are to enhance public access to and along the shore and, where relevant, the inter tidal zone;	Improvements to RB park path – satisfactory
Secure storage is to be provided in a controlled environment;	Design incorporates general security for the marinas – satisfactory
the extent of development over water including waterside structures, berths, fairways and access channels is to be minimised and result in minimal alienation of the waterway;	East-west movement on Rose Bay will be impacted; subject to tender service in perpetuity, OK (report ref. pt. 17.8)
marinas are to be in the form of a series of interlinked pontoons which shall be restrained and held in position by a minimum number of piles or mooring lines to anchor points in the seabed;	Satisfactory
design of marina restraints shall take into account the flexibility and performance of the pontoon systems under environmental loads;	Satisfactory
the colours, appearance and form of any associated buildings shall be compatible with the surrounding environment;	Satisfactory
shiny or reflective materials are not to be used;	Satisfactory
the depth and width of berths and fairways of	Restricted berths are proposed based on demand not

commercial marinas shall accommodate either a yacht or motor vessel. Restricted berths are to be nominated only where this will lead to an optimal environmental outcome;	environmental considerations (report ref. pt. 17.8) – unsatisfactory
commercial marinas are to provide a point of access to boats for disabled people where possible;	RB satisfactory; PtP – assisted disabled access – satisfactory
marinas are to be designed to minimise the impact of vessels when in use on the environment including on air and water quality, marine habitat and bank stability;	(report ref. pts. 17.3, 17.4 & 17.8) – satisfactory
<p>marina layouts are to be designed in accordance with the following publications:</p> <ul style="list-style-type: none"> • Department of Environment and Conservation (NSW) "Environmental Information for Marinas, Boatsheds and Slipways" (November 1998). NSW Maritime Authority "Engineering Standards and Guidelines for Maritime Structures" • NSW Fisheries Department's "Aquatic Habitat Management and Fish Conservation—Policy and Guidelines", 1998 • NSW Department of Primary Industries – Fisheries "Policy and Guidelines – Aquatic Management and Fish Conservation (1999)". • NSW Department of Primary Industries – Fisheries "Habitat Protection Plan No. 2: Seagrasses"; and • NSW Department of Primary Industries – Fisheries "Habitat Protection Plan No. 1: General". 	Department of Primary Industries & Department of Environment & Conservation have provided their general terms of approval; no objections from NSW Maritime – satisfactory
Facilities and services	
commercial marinas are to provide boating service facilities such as fuel, water, toilet facilities or sewage pumpout where practicable and where such facilities are not yet locally available;	Satisfactory
commercial marinas are to provide a mix and choice of boat storage facilities based on established demand as well as a range of marine services to the boating public; and	No swing moorings; restricted berths based on demand consideration – satisfactory
commercial marinas are to provide benefits to both the general and boating public; and	Physical access benefits including for disabled; general access to main walkways - satisfactory
vessels at the marina are not to be used as a permanent residence. A covenant shall be included on the lease to enforce this requirement.	Noted
Visual Impact	
Note: For detailed provisions on how to undertake a visual impact analysis see Appendix D in this DCP.	
the visual contrast (derived from an analysis of form, line, colour and texture) between the marina and the existing or planned future character of its setting is to be minimised;	Contrast between existing swing mooring & marina berth forms will impact on existing character (report ref. pt. 17.1) – unsatisfactory
the visual impact of the marina on people in the visual catchment (derived from an analysis of the potential number of viewers, their location within the landscape, distance from the marina, and duration of view) is to be minimised;	Locations on & to the promenade to east of RB marina will be will not be minimally impacted; other location are satisfactory (report ref. pt. 17.1) - unsatisfactory
any visual analysis shall consider the impact of the largest motor vessel(s) capable of being berthed at the marina;	Noted
the largest vessels (motorised or otherwise) to be berthed at the marina are to be located as far from	Satisfactory

shore as possible;	
waterside structures and berthed vessels associated with marinas are not to block views from foreshore public open space or views to foreshore public open space from the waterway;	Unsatisfactory re: berthed vessels to & from the NSH Rd promenade to the east of RB marina (report ref. pt. 17.1) - unsatisfactory
the bulk and scale of buildings and other structures on land is to be minimised through appropriate mitigation measures including landscaping, articulated walls, detailing of surfaces and by using smaller elements (see also Section 4.5 of this DCP);	Satisfactory
the visual impact of car parking from the waterway is to be minimised; and	N/A
all signage is to be located on dry land below the roofline (or parapet) of buildings. Advertising signs are not to detract from the visual quality or amenity of the foreshores and waterways when viewed from the waterways.	N/A
Environmental management	
<p>Pollution and waste:</p> <ul style="list-style-type: none"> • potential pollutant sources from the site must be controlled and meet established performance standards; • appropriate controls are to be in place and managed to prevent any pollutants entering the environment; • marinas for nine or more vessels are to provide adequate and readily accessible facilities for the collection and disposal of wastes from vessels; • facilities for pumping out sewage holding tanks are to be provided onshore; and • any waste that cannot be recycled is to be disposed of at an appropriate facility. 	Pollution controls are designed to meet standards re: fuel storage & pump out facility; Operation Management Plan has been provided; Site Audit Statement has been prepared; waste containers to be provided & stored in building other than 3 containers on the hardstand; waste disposal by contractor (report ref. pt. 17.3, 17.6) – satisfactory subject to conditions
<p>Traffic and Parking:</p> <ul style="list-style-type: none"> • land-based impacts including traffic volumes and parking demand meet established performance standards; • adequate car and trailer parking (based on the number and type of berths, associated activities and number of employees) is to be available on-site. Off-site parking is acceptable only where it will not reduce community amenity or generate adverse traffic impacts; and • the adverse impacts of traffic and parking generated by boat storage facilities in terms of congestion, safety, air quality and noise are to be minimised. 	Traffic management plan required (report ref. pt. 17.2) – satisfactory subject to
<p>Noise:</p> <ul style="list-style-type: none"> • the adverse impacts of noise (considering hours of operation, existing background noise, expected departure/arrival times for vessels, noise level of marina patrons, noise level from repair and testing of vessels and motors) are to be minimised through appropriate design and management measures; and • land-based impacts including noise emissions meet established performance standards. 	(report ref. pt. 17.5) satisfactory
<p>Lighting:</p> <ul style="list-style-type: none"> • the adverse impacts of lighting on night navigation and neighbours are to be minimised through appropriate design and management measures. 	Safety lighting only proposed; (report ref. pt. 17.1) – satisfactory subject to conditions

Health and amenity	
Marinas are to be a safe place to work and adequate environmental safety and emergency response plans are in place.	OH&S standards to be satisfied - satisfactory

The following figures are taken from the SHDCP, Appendix and relate to assessing visual impacts of marina developments.

FIGURE D1. INDICATIVE POTENTIAL VISUAL IMPACT OF VARIOUS DEVELOPMENT SCENARIOS

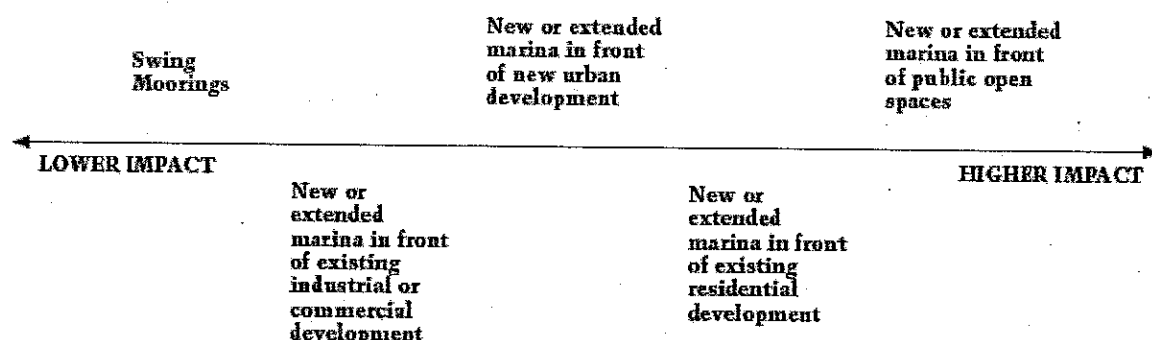


FIGURE D2. INDICATIVE CONTRIBUTION TO POTENTIAL VISUAL IMPACT

Factor	Low Impact	Medium Impact	High Impact
Location of viewer	Elevated position (ridge top) with clear view over marina.	Slightly elevated (lower slopes) with partial view over marina.	Adjoining shorelines or waterway with view blocked by marina and boats.
Distance of view	Land areas or waterway. (> 1000 m)	Land areas or water. (100-1,000 m)	Adjoining shoreline or waterway (< 100 m)
Period of view	Glimpse (eg moving car, bus or bike).	Few minutes up to half day (eg walking along foreshore, recreation in adjoining open space, boating on adjoining waterway).	Majority of day (e.g. adjoining residence or workplace).
Scale or relative size	Powerboat or yacht. (< 10 m long)	Powerboat or yacht (10-30 m long)	Powerboat or yacht. (30-50 m long)
Spatial relationships	Swing moorings adjoining relatively straight shoreline.	Marina adjoining relatively straight shoreline or swing moorings in narrow enclosed bay.	Marina in narrow enclosed bay.
Motion of objects	Motionless flags, wind generators and other objects.	Gently fluttering flags and slowly moving wind generators and other objects.	Flags fully extended and regularly changing direction, wind generators at full speed etc.