

17 February 2010

## **REFERRAL RESPONSE – URBAN DESIGN**

FILE NO: DA 602/2009/1

ADDRESS: 8 Castra Place DOUBLE BAY 2028

PROPOSAL: Replacement of existing fixed wharf structure with berthing for 40 vessels & moorings for 25 vessels with a new floating structure with berths for 45 vessels and moorings for 20 vessels.

FROM: Tom Jones

TO: Mr P Kauter

### **1. DOCUMENTS PROVIDED**

This response is informed by the following information provided by the applicant:

- *Environmental Impact Statement Job number 09048 November 2009 prepared by Ingham Planning Pty. Ltd.*

Particular reference is made to the following parts of the application:

- *Visual Impact Assessment by Richard Lamb and Associates November 2009*
- *Submitted plans prepared by Mark Hurcum Design Practice*
- *Photomontages prepared by the POD Group*

### **2. BACKGROUND**

#### **2.1 Description of the Location**

Double Bay is the on the southern shore of Sydney Harbour, flanked by Point Piper to the east and Darling Point to the west. The sweep of the bay measures approximately 900m and is divided into two equal parts by a central rock promontory, hence the name Double Bay. Immediately to the west of the rock promontory is the outlet of the Jammeroo Creek. The existing Double Bay Marina is located just to the west of the creek mouth.

#### **2.2 The Existing Character of the Bay of Double Bay.**

Double Bay is a north facing open bay characterised by:

- Openness
- Sheltered water

- Small boats on swing moorings
- Steep flanks covered by predominantly residential buildings of all kinds from flat buildings to detached houses and gardens.
- Views of Clark Island (in the mouth of the bay), the headlands and the harbour beyond.
- Marine activity including sailing and motor boats.
- Steep sandy beaches with residential properties behind.

## 2.3 Relevant Planning Controls

The application is assessed with reference to the following planning documents:

- *Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005.*[SREP]
- *Sydney Harbour Foreshores & Waterways Area, Development Control Plan for SREP (Sydney Harbour Catchment) 2005.*[DCP for SREP]
- *Appendix D, Sydney Harbour Foreshores & Waterways Area Development Control Plan for SREP (Sydney Harbour Catchment) 2005.*[App. D, DCP for SREP]

### 2.3.1 Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005 (SREP)

Under the SREP, the proposed marina is located in zone W5 Water Recreation. In Zone W5, the proposed use as a commercial marina is permitted with consent. The W5 zone overview P.5 SREP includes the following statement:

*While many waterfronts have been modified, new development will need to protect any remnant natural features, retain important views and harmonise with the landscape. As water recreation facilities and marinas generally occupy a large amount of the waterway they will need to meet a demonstrated need and avoid conflicts with other water users.*

Relevant sections of the SREP are duplicated below:

#### ***Aims of Plan***

*2(1) (a) Sydney Harbour is to be recognised as a public resource, owned by the public, to be protected for the public good.*

#### ***Zone No W5 Water Recreation***

*The objectives of this zone are as follows:*

*(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,*

- (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,*
- (c) *to minimise the number, scale and extent of artificial structures consistent with their function,*
- (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,*
- (e) *to minimise congestion of and conflict between people using waters in this zone and the foreshore,*
- (f) *to protect and preserve beach environments and ensure they are free from artificial structures,*
- (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.*

## **DIVISION 2 MATTERS FOR CONSIDERATION**

### **26 Maintenance, protection and enhancement of views**

*The matters to be taken into consideration in relation to the maintenance, protection and enhancement of views are as follows:*

- (a) *development should maintain, protect and enhance views (including night views) to and from Sydney Harbour,*
- (b) *development should minimise any adverse impacts on views and vistas to and from public places, landmarks and heritage items,*
- (c) *the cumulative impact of development on views should be minimised.*

### **2.3.2 Sydney Harbour Foreshores & Waterways Area, Development Control Plan for SREP (Sydney Harbour Catchment) 2005 ( DCP for SREP)**

The DCP for SREP contains the following controls which are of particular significance to the proposal.

#### ***Part 3 Landscape Assessment***

##### ***3.2 general aims are to:-***

- *Minimise any significant impact on the views and vistas from and to:*
  - *public places*
  - *landmarks identified on the maps accompanying the DCP, and*
  - *heritage items;*
- *Ensure it complements the scenic character of the area.*

Section 3.4 of the DCP for SREP classifies Double Bay as having landscape character Type 10. Landscape character Type 10 applies to the wide open bays of the Eastern Suburbs, including Rose Bay, Watsons Bay, **Double Bay** and Rushcutters Bay.

The following performance criteria apply:

*Any development within this landscape is to satisfy the following criteria:*

- *it does not obscure, detract from or destroy special natural elements that are significant within the local context of the area;*
- *the open nature of the bays is not lost by overdevelopment of the foreshores; and*
- *it has been demonstrated that the commercial activities proposed within and adjacent to the foreshores are necessary and that their proposed use is compatible with existing and likely future land uses.*

### **2.3.3 Appendix D, Sydney Harbour Foreshores & Waterways Area Development Control Plan for SREP ( Sydney Harbour Catchment) 2005 (App. D, DCP for SREP)**

The DCP for SREP contains an Appendix D: *How to Undertake a Visual Impact Assessment for Marinas*. This Appendix includes 11 key findings of a study undertaken by URS consultant engineers on the visual impact of marinas. The proposal is discussed below in 4.0 VISUAL IMPACT ASSESSMENT using these criteria. Appendix D also contains a table which scores the severity of the impact of marina development. The methodology set out in App. D, DCP for SREP has been used to assess the visual impact of the proposal. The outcome of this assessment is summarised in TABLE 2.

## **3. THE PROPOSAL**

The Double Bay Marina proposal has two basic elements:

- The fixed pillions and floating pontoons.
- The vessels.

The following description of the proposal describes these two elements. The fixed elements are clearly identified in the documents supplied. The vessels are described only by a maximum length and an assumption that they float and are movable. The vessels will have a greater visual impact than the berthing structures.

### **3.1 Fixed elements**

The fixed structures changes proposed in the Marina extension are:

- An extension of the existing marina facilities at the Double Bay Marina. The existing jetty will be removed and replaced by a pontoon arm extending 98mm ( refer EIS page 5) further north into the Bay. The pontoon follows the line of the existing jetty.
- The adding of five berths and an increase in the average length of berths
- The re orientating of berths at the end of the pontoon
- Removal of the five swing moorings in the immediate vicinity of the Marina.

### 3.2 The Vessels

The length of the vessels that the pontoons can accommodate is indicated in TABLE 1 below:

Overall Length in metres	Up to 8.0	8.0 - 10.0	10.0-12.0	12.0 – 14.0	14.0 – 15.5	15.5- 8.0	Total
Number of berths	9	4	7	9	13	3	45

TABLE 1: Lengths of proposed berths

The berthed vessels will constitute the great majority of the proposed marina's visual bulk. The vessels it is proposed to berth are on average larger than those at the existing marinas.

The marina proposal reduces the number of swing moorings by five and increases the amount of vessels at berths by five. A density comparison of swing moorings and fixed berths is instructive. Sixteen boats 10m long can be accommodated on swing moorings in a hectare of water. One hundred and ten vessels 10m long can be accommodated in a hectare of fixed berths. Fixed berths are approximately 6.75 times denser than swing moorings. See FIGURE 1. The density of vessels on swing moorings is controlled by the geometry of the boat's swing, this physical control on density means that swing moorings are visually more permeable than fixed berths.

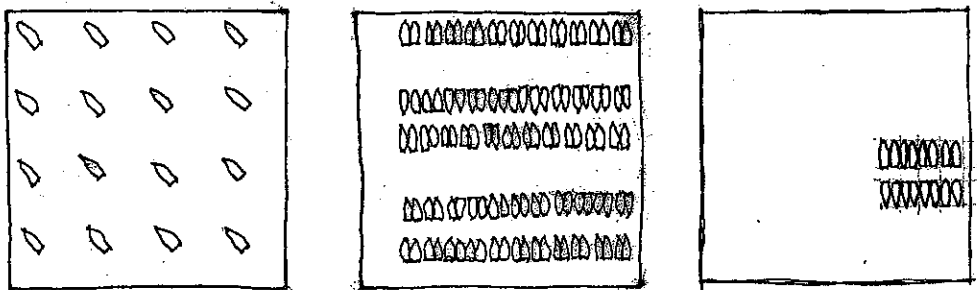


FIGURE 1 Density comparison of swing moorings and fixed berths

## 4. VISUAL IMPACT ASSESSMENT

I have visited the site and the surroundings, selected six varied viewing points and assessed the potential visual impact from these points. The locations I have selected are indicated on FIGURE 2 and discussed below:



**FIGURE 2:** Showing the extent of the proposed marina and where the photographs have been taken from.

The photographs have been taken with a consistent image cone as requested in the DCP for SREP and the extent of the proposed marina has been shown shaded. The shading showing the extent includes both the pontoon and the maximum sized boat which could be berthed in that location.

### 4.1 View 1: from Double Bay ferry wharf, Steyne Park (RLA view 3)

The South West corner of Double Bay features a municipal park called Steyne Park. The Double Bay ferry wharf is adjacent to the park and offers a good view of the subject site.

#### 4.1.1 Existing Condition

The vast majority of the existing marina sits directly in front of the rocky promontory in the middle of the bay. Hence the Marina is absorbed in to the landform behind.

#### 4.1.2 Proposed

The applicant intends to extend the berthing structures 98mm north into the bay

#### **4.1.3 View Impacts**

The full impact of the extension of the marina, and the vessels moored there, will be exposed to the Double Bay Wharf. An increased portion of the marina is seen against the open bay in front of Seven Shilling Beach and the east flank of the bay approximately 450m beyond. From the wharf, the impact of the extension is peripheral to the main harbour view and at a distance of over 200m from the viewer.



**FIGURE 3:** Showing view from Double Bay Wharf with the extent of the extended marina indicated.

#### **4.2 View 2: from the walkway to the Redleaf Pool approximately 60m east of the proposal (RLA view 7)**

##### **4.2.1 Existing Condition**

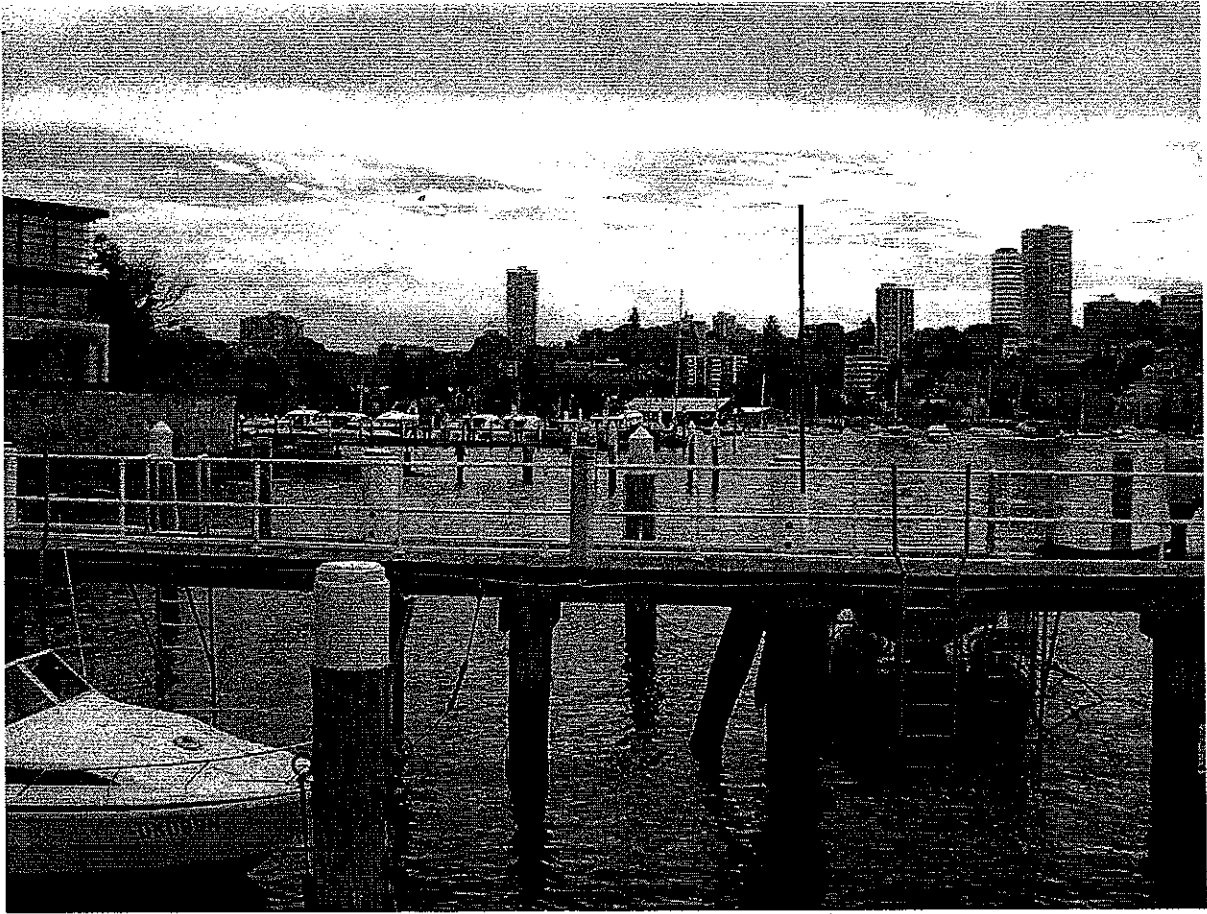
Much of the existing marina is behind the headland to the left of the image and not obvious in the view field.

##### **4.2.2 Proposed**

The proposal extends the mooring structures approximately 30m to the North. This means more of the marina will appear from around the headland when viewed from the Seven Shillings Beach.

#### **4.2.2 View Impacts**

Redleaf Pool and the adjacent beach and park are well used local amenities. The visual impact is however peripheral to the main aspect.



**FIGURE 4:** Showing view from the walkway around Redleaf Pool with estimated extent of the extended marina.

#### **4.3 View 3: from beach in front of 36 Stafford Street (RLA view 1)**

The residential properties on the west end of Castra Place and on Stafford Street are the closest to the proposal.

##### **4.3.1 Existing Condition**

The linear nature of the existing pier and the vessels moored to there occupy approximately 30m of the beach frontage. This part of the beach to the east of Beach Street is relatively lightly used by the general public, due to the tide, the lack of access from the east end and the private timber jetty at the end of Beach Street blocking easy access.

##### **4.3.2 Proposed**

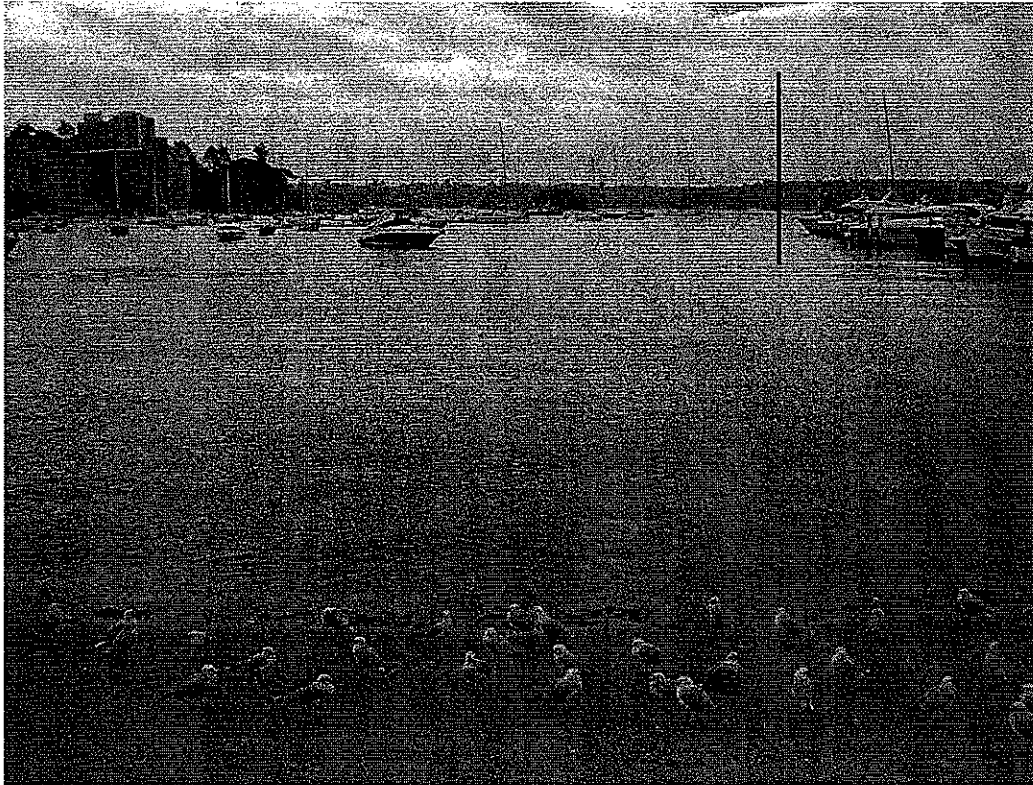
The proposal will occupy 30m of frontage.

##### **4.3.3 View Impacts**

There is very marginal increase in the amount of the harbour view blocked as a result of the proposal.



The waters of the bay are generally unlit. Any lighting beyond the line of the shore is intrinsically intrusive in a natural setting. It is possible that the lights from larger vessels could cause amenity impacts to surrounding residents.



**FIGURE 5:** Showing view from residential property fronting the beach with the extent of the extended marina marked.

#### **View 4: from west of the private jetty at the end of Beach Street (RLA view 2)**

The backs of eight residential properties adjoin the beach between Beach Street and The public wharf. There is a public footpath along the back of the beach which is well used both as a pedestrian route and as pausing point. This part of the beach has high urban design value.

##### **4.4.1 Existing Condition**

The beach looks out over the harbour to the north.

##### **4.4.2 Proposed**

The proposal will extend approximately 7m to the north. The Marina will block slightly more of the harbour view to the north east.

##### **4.4.3 View Impact**

The view impact is peripheral.



**FIGURE 6:** Showing the view from the beach at the end of Beach Street with the extent of the marina marked. The jetty to the right of the image is a private jetty which blocks access to the beach to the east of this point.

## **4.5 View 5: from the Public Ferry (RLA view 5)**

### **4.5.1 Existing condition**

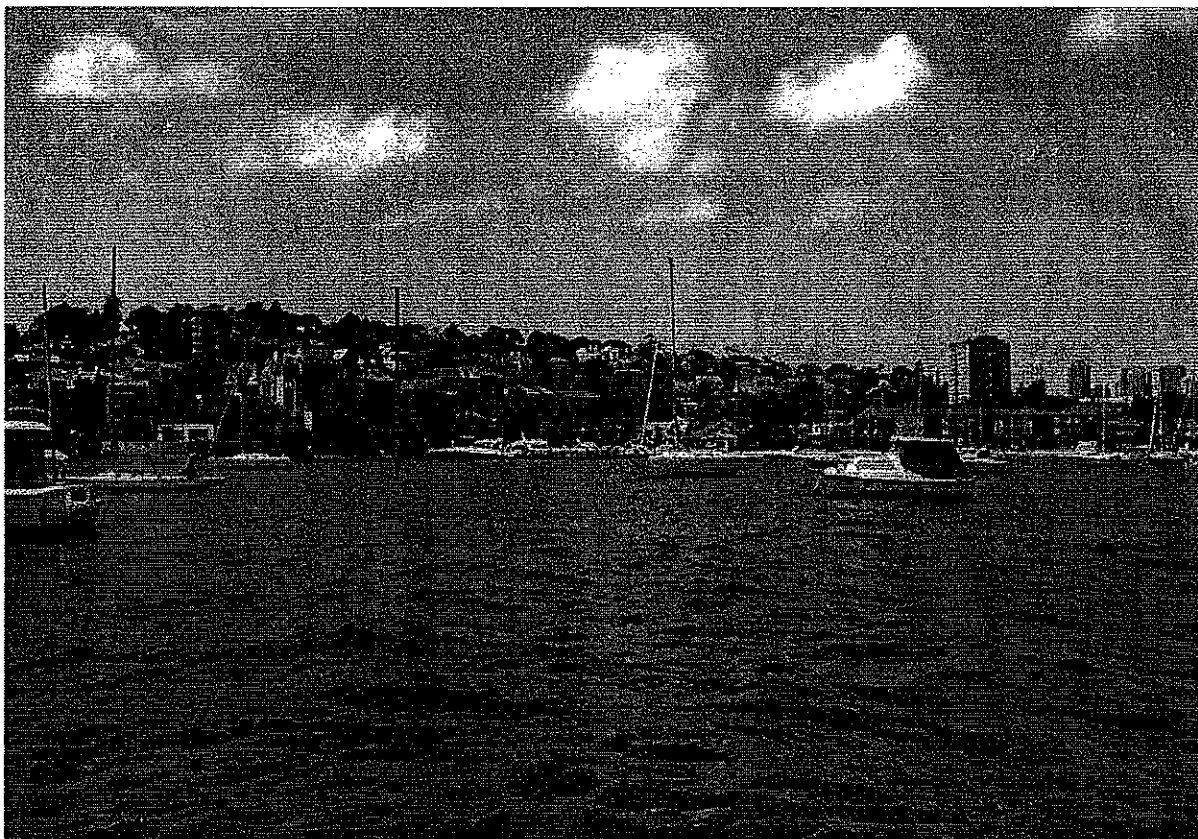
A public ferry sails on a regular basis on a course adjacent to the proposed Marina. On a ferry sailing to or from the Double Bay Ferry Wharf in Steyne Park there is a clear view of the existing marina. The marina is set against a promontory which is covered in housing.

### **4.5.2 Proposed**

The largest boats in the proposed marinas are berthed on the waterside. The size and number of berthed vessels will mean their visual presence becomes more apparent in the view from vessels and ferries on the waters of the main Harbour and the Bay.

### **4.5.3 View Impacts**

The corner of Double Bay where the proposed extension of the Marina is sited, is formed by a rocky promontory covered in housing. The extension will not have a severe visual impact when viewed against this backdrop.



**FIGURE 7: Showing the view from the water, with the extent of the extended marina marked.**  
(This image is copied from the rla report and the extent of the proposed marina has been added)

#### **4.6 View 6: From the end of Sherbrooke Avenue, Double Bay (RLA View 6)**

##### **4.6.1 Existing Condition**

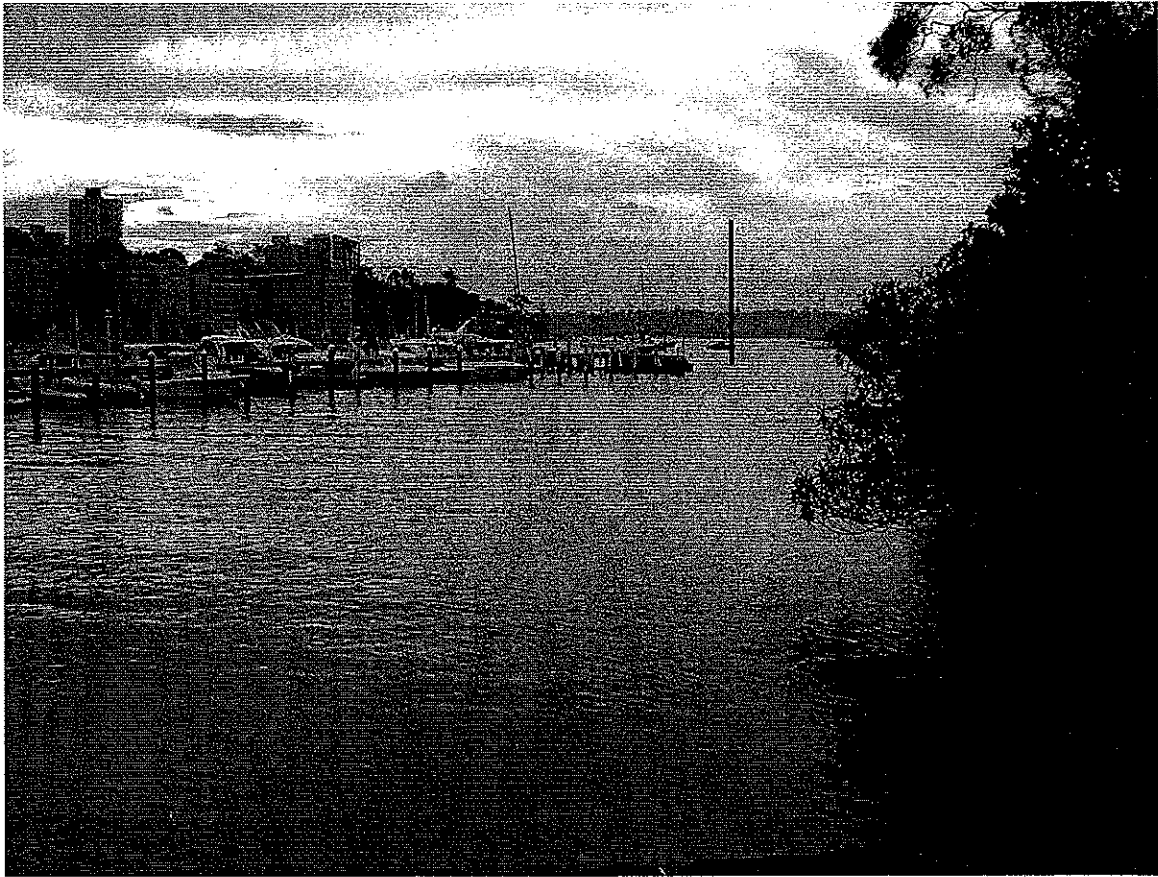
There is a covered creek that enters the bay just to the east of the Marina, which allows viewing of the bay. The Marina restricts the view from this point.

##### **4.6.2 Proposed**

The proposal extends the existing marina further into Double Bay and berths larger vessels there.

##### **4.6.3 View Impacts**

The locating of larger vessels at berths on the end of the proposed pontoon and their reorientation will have a slight impact on views from this point.



**FIGURE 8:** Showing view from where the Creek enters the Bay with the extent of the marina marked.

#### **4.7 Visual Impact Assessment Matrix**

The procedure prescribed in App. D, DCP for SREP is based on a comparison of before and after photographs. Photographs of existing views are taken using a 50mm focal length lens in landscape format to closely simulate the view experienced by the human eye. The proposal is illustrated by inserting an illustration of the proposed marinas at the same scale onto a second photograph of the existing. The viewpoints selected should represent a range of locations from which the proposed development is visible and has potential impact. Each view is assessed with reference to the criteria set out in Appendix D of the DCP for SREP and a score is determined for each view point.

High Impact	Average score of 2.334-3.000
Medium Impact	Average score of 1.667-2.333
Low Impact	Average score of 1.000-1.666

The scores which have been attributed to each factor (location of viewer, distance of view, etc.) are based on view impact as set out in Fig D2 of the DCP for SREP.

Factor	View 1 From end of DB Wharf	View 2 From the walkway around Redleaf Pool	View 3 From beach in front of 36 Stafford Street DB	View 4 From the beach in front of Beach Street DB	View 5 From the waterway as if on a ferry on DB	View 6 From the end of Sherbrooke Ave.
Location of viewer	3	3	3	3	3	3
Distance of view	2	2	3	2	2	3
Period of View	2	2	2	2	2	2
Scale or relative size (boat numbers and mix of vessel types)	2	2	2	2	2	2
Boat storage type / Spatial relationship (ie private or commercial marina or swing moorings and its settings)	2	2	2	2	2	2
Overall potential visual impact (average score)	2.2 (med)	2.2 (med)	2.4 (high)	2.2 (med)	2.2 (med)	2.4 (high)

**TABLE 2: Visual Impact Assessment Matrix of the Existing Marina**

Factor	View 1 From end of DB Wharf	View 2 From the walkway around Redleaf Pool	View 3 From beach in front of 36 Stafford Street DB	View 4 From the beach in front of Beach Street DB	View 5 From the waterway as if on a ferry on DB	View 6 From the end of Sherbrooke Ave.
Location of viewer	3	3	3	3	3	3
Distance of view	2	2	3	2	2	3
Period of View	2	2	2	2	2	2
Scale or relative size (boat numbers and mix of vessel types)	2	2	2	2	2	2
Boat storage type / Spatial relationship (ie private or commercial marina or swing moorings and its settings)	2	2	2	2	2	2
Overall potential visual impact average Score)	2.2 (med)	2.2 (med)	2.4 (high)	2.2 (med)	2.2 (med)	2.4 (high)

**TABLE 3: Visual Impact Assessment Matrix of the Proposed Marinas**

The matrix in appendix D of DCP for SREP indicates that the proposal will have a medium visual impact from five of the chosen viewing points. View 3 and 6 from the beach in front of 36 Stafford Street and at the end of Sherbrooke Avenue register a high impact. The Matrix assessment pinpoints the extent of the high impact. It is noted that the impact of the existing and the proposed are the same.

## 4.8 Visual Impact Assessment Comparison

The views I have selected and those used by the applicant's consultants, do not exactly correspond. Richard Lamb and Associates (RLA) have looked at a greater

number of views and have visited private homes. I have chosen not to assess the images provided by RLA, but rather to access a selection of views which are publicly accessible. Where the matrix involves accessing periods of view, I have considered the occupants of adjacent dwellings, as well as those using the public domain. This is an urban design assessment and places a particular importance on the perception of the marina redevelopment from the public domain.

This comparison indicates that while there are differences in scoring, my assessment concludes that the extension of the marina generally has a medium impact, a conclusion that roughly accords with that of RLA.

## 5. CONCLUSION

The Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005 requires the council to answer a number of key questions about the marina development:

- Is the development in the public interest?
- Is there a need?
- Does the visual outcome harmonise with the location?

In response to these questions I make the following observations:

- There are an equal number of boats accommodated in the proposed and existing marinas. However the proposed marina accommodates larger boats. In my opinion the marina is likely to have little discernable impact on the level of use of the harbour as a public facility.
- There is a clearly demonstrated market demand for the berthing of motor boats particularly in the outer harbour. This demand does not necessarily amount to a location specific need, since there are other potential locations for such marina facilities.
- The principle question posed for the Urban Design assessment is, does the development *maintain, protect and enhance the unique visual qualities of Sydney Harbour*? The SREP in zone W5 allows a marina only if it *results in a visual outcome that harmonises with the planned character of the locality*. The meaning of *planned character* is not defined in the SHREP. For the purposes of this assessment it is suggested that the *planned character* is the same as the existing character which is described in section 2.2.

The SREP does not allow commercial marina development in this location unless it harmonises with the existing character of the bay. A summary of the visual impact is made below.

### 5.1 The visual impact of the proposed structures

The marina building exists and is not being substantially altered by the proposal. The pontoons are slightly more extensive than the existing piers, but are at water level so have slightly less visual impact. The various structures on the pontoons; the piers, the

shelter, fuel bowsers, pump out and security gates will have a secondary visual impact.

## **5.2 The visual impact of the vessels berthed at the marinas**

The vessels berthed at the marina are the main component of the visual bulk of the proposal. The boats berthed at the proposed marinas will slightly increase the visual impact. This is due to the larger size of vessels to be accommodated.

## **5.3 The visual impact on residential properties**

There are two groups of residential properties from which there will be a visual impact. These are the houses and residential flat buildings on:

- Gladswood Gardens
- Castra Place and Stafford Street

Dwellings on Gladswood Gardens will look over the Marina, their views will be only slightly impacted upon.

The dwellings to the west of the marina extension will be marginally impacted on due to a slight incremental increase in the size of vessels.

## **5.4 The visual impact from the public domain**

There are three principle groups of public domain locations from which the proposal can be seen. These are:

- Steyne Park and Double Bay Beach, west of the proposal
- Redleaf pool and the adjacent Seven Shilling Beach, east of the proposal
- The waters of Double Bay, north of the proposal.

The extended proposal will be seen from the public domain from a relatively few locations and then generally as peripheral to the main view.

The extension to the marina will appear in the view field at the west end of Seven Shillings Beach. Presently the marina berths are hidden behind the promontory.

The visual impacts of the proposed marina extension from the water, is mitigated by the back drop and the existing use of the area for a marina.

The significance of the impact on the view from the public spaces east of the site is incremental, since marina facilities already exist.

The length of public beach slightly affected is approximately 120m long. The significance of this beach as public domain is compromised by the restriction to access caused by the private jetty at the end of Beach Street and the lack of public domain adjacent to the beach. It is noted that the adjacent beach to the west that is not significantly affected by the proposal is far more intensely used.

The drawings supplied by the applicant indicate points where lights can be used for servicing berthed vessels. Any lighting provided over the water will be evident at night from properties and public places that overlook this part of the bay.

## **5.5 The potential visual benefits of the proposal**

There are two potential visual benefits of the development. These are:

- The floating pontoons present a lower profile to the sea level.
- The proposal consolidates existing swing moorings into the proposed fixed berth configuration. This changes the nature of the visual impact with the clearing of an area of water of swing moorings. Refer **Figure 1**

## **5.6 Summary of Visual Assessment**

The principle impact of the proposal is on the beach and the properties directly adjacent to the beach, between the marina and the private wharf at the end of Beach Street.

The impact to these properties is slight and incremental. These properties are well endowed with environmental amenity, including direct access to the beach and to open water.

The slight impact on the view from the eastern section of the beach is not considered to have no impact on the quality of the public domain. When considering the impact of the proposal on the public domain as a whole the change is considered very minor.

## **6. RECOMMENDATION**

That the urban design impacts of the proposal are acceptable for the following reasons:

1. The incremental increase in the visual impact of the proposed marina extension is minor.
2. There are minor potential visual benefits to the proposal.
3. The no properties are significantly affected by the proposal.
4. The public domain is not impacted on.
5. The location is relatively secluded and the proposal does not affect the character of the location.

The proposal in its revised form is acceptable.

Tom Jones  
Urban Design Planner

