

Contact: Peter Byrne  
Tel: (02) 9350 4785  
Fax: (02) 9350 4334  
Mb: 0439 621 702  
e-mail: Peter.Byrne@sydneywater.com.au  
**Sydney Water – Workplace Accommodation Program**



**Our reference: 2004/07360F**  
**Your reference: MP 08-0049**

17 October 2008

Environmental Planning Officer  
Strategic Assessments  
Department of Planning  
GPO Box 39  
Sydney NSW 2001



Dear Annette

**SUBJECT: PART 3A – PROJECT APPLICATION No. MP 08-0049**

I refer to our meeting of 16 September 2008, Sydney Water's Project Application for a new facility to be constructed within the eastern precinct of the Potts Hill Reservoir site.

As discussed, and later detailed within your letter dated 17 October 2008, reference S08/00388, please find additional information in support of the Environmental Assessment of July 2008 prepared by *Conics (Sydney)* and the Design Report prepared by Bates Smart Architects.

Should you have any further enquiries, please don't hesitate to contact Sydney Water's project officer, Peter Byrne, on the above telephone number.

Yours faithfully

A handwritten signature in blue ink that reads "Ray Abé".

Ray Abé  
Program Director  
Workplace Accommodation Program





Our Ref: **085223**  
Date: **17 October 2008**

Attn: **Ms Annette Birchall**



Strategic Assessments  
Department of Planning  
23-33 Bridge Street  
SYDNEY NSW 2000

**Via: email: [Annette.Birchall@planning.nsw.gov.au](mailto:Annette.Birchall@planning.nsw.gov.au)**

Dear Ms Birchall

**RE: MAJOR PROJECT APPLICATION  
SYDNEY WATER WORKPLACE FACILITY POTTS HILL (MP 08\_0049)  
Response to Submissions**

We write in response to your letter dated 17 September 2008, requesting our response to the summary of issues resulting from the exhibition of the major project application for the proposed Sydney Water Workplace Facility at Potts Hill. This letter addresses the issues raised. However as none of the responses result in any changes to the proposal other than clarification, a preferred project report is not included.

## Stormwater

*Bankstown Council notes the significant change in impervious areas proposed on the site and subsequently that stormwater must be managed adequately to ensure flows do not adversely impact adjoining sites, specifically the Greyhound Social Club.*

Although there is a change in the amount of impervious areas proposed, the proposal has been prepared to maintain post development stormwater flows to pre-development levels.

The measures used to control stormwater flows include the use of permeable paving and subsoil drainage to stormwater in the north eastern car parking area; an OSD stormwater detention tank with a capacity of 1500 m3 adjacent to the Greyhound Track site; new stormwater detention pit in the northern section of the site; and capture and reuse of roof stormwater through stormwater tanks of 200m3 and 350m3.

The use of a combination of active storage in bioretention basins, dry basins and underground storage will ensure stormwater management is adequate and does not adversely impact on stormwater flows over adjoining sites.

## Car parking

*The Department is concerned with the high number of car parking spaces that are proposed considering the site's access to public transport. The Department requests additional justification for the car parking proposed including the following:*

- *number of car parking spaces provided at the existing Sydney Water facility*
- *number of car parking spaces needed for field staff / operational vehicles*



- *average number of people attending training on a daily basis, the number of consecutive days a person attends training and the average percentage of people which come from outside of the Sydney metropolitan area to attend training.*

*A car parking strategy should be prepared which minimises on-site parking provisions and considers a range of management initiatives such as a 'car share' scheme for corporate fleets and potential assistance for employees to access work by public transport through salary packaging options and other incentives.*

As noted in the Environmental Assessment (EA), the proposed Sydney Water Workplace Facility is to consolidate all of the office/workshop activities across the whole of the reservoir lands into this one new location, together with activities presently conducted at the Guildford Pipehead Complex, depot activities at Ashby Avenue Birrong, and a partial relocation of services from Liverpool.

The nature and distribution of the existing facilities on the site is such that the total number of existing car spaces across the site is indistinct. In essence there has been enough space to accommodate all requirements. It is the new facility that seeks to limit the number of spaces, due to the much lesser available area.

Apart from the day to day operations at the Potts Hill Reservoir site for the supply and maintenance of Sydney's water supply, the site is also required and therefore to be designed to function as an emergency response centre, dealing with any and all events, that could occur to Sydney's water supply system. Consequently it requires flexibility of staffing and quick, easy access any time of the day or night. Sydney Water has advised that to ensure this flexibility, some 500 vehicle parking spaces are required in the vicinity of the new premises.

The EA as submitted makes reference to some 502 proposed vehicle parking spaces, comprising 413 for office parking, 36 for warehouse parking and 53 spaces for trucks/trailers. The traffic report refers to 415 car spaces, 21 motorcycle spaces and 47 trucks/trailer spaces. The figures in the schedules that accompany the site plan that illustrates the location of the spaces vary slightly from these totals.

Notwithstanding these discrepancies the proposed parking numbers are as follows.

Office	380 car spaces
	15 visitor spaces
	21 motorcycles spaces
	416 TOTAL

Warehouse	40 car spaces
	53 truck/trailer spaces
	93 TOTAL

Therefore the total parking provision proposed is 509 vehicle spaces. As noted in the various reports, the 93 warehouse spaces, comprising cars and trucks, are required for operational reasons. 82% of those vehicles are owned by Sydney Water. Of the 380 car spaces for the office component, these bring together the following:

- 18 spaces from civil headquarters
- 7 spaces from the occupational health and safety section
- 30 spaces from the construction team
- 165 spaces from the facility at 36B Brunner Road
- 86 spaces from Guilford, and
- 50 spaces for the new training centre.

Training conducted at Potts Hill caters for training on a daily basis, for up to ninety (90) people, plus their instructors. The training conducted is often of a varied nature and will include "desk bound" activities as well as



external training. This independent facility operates for staff throughout Sydney's water supply district. Field based staff who attend the training courses travel in a variety of Sydney Water vehicles, including trucks. This component has parking requirements separate to those of the other components of the facility.

Excluding the allocation for training, the office component accounts for 306 spaces, approximately 100 of which accommodate Sydney Water vehicles, leaving some 200 spaces. These spaces allow for growth in staff numbers, which are indicated to expand in the future. Staff also have access to a 'Travel Pass Scheme' under which Sydney Water purchases passes for travel to and from work using public transport. The amount is repaid through regular payroll deductions. In addition to the environmental benefits, this scheme also has financial advantages, as travel passes are often more cost effective.

Notwithstanding the allocation for growth in staff numbers and the existing travel scheme, Sydney Water undertakes to prepare a car parking strategy as described above, in order to minimise parking requirements as far as possible. Such a strategy would not only minimise any future parking needs, but also assist staff in having more choices about travel modes, in the interests of sustainability.

### **ESD**

*The Department would like further assessment and justification of the location of the warehouse office building in terms of solar access and worker amenity. Provide more detail regarding heating aspects of the buildings, particularly in relation of energy saving principles.*

Bates Smart architects have provided the following *Warehouse Office Design Statement*. This design intent is followed by comments from Arup in respect of the heating aspects.

*The design brief for the warehouse office component required a building that would respond to a number of particular requirements associated with the operational use of the warehouse facility, whilst offering a comparable degree of user comfort and amenity to that of the main office building. Furthermore, the design needed to address the southern entry to the site and provide disabled access throughout the facility, thus responding to the change of level between east (office) and west (operational) section of the site.*

*In order to respond to these requirements, the warehouse office component is proposed to be situated on the southern elevation of the main warehouse shed, providing a visual screen to the warehouse from the Brunner Road site entry. This arrangement has an additional benefit, in that the main warehouse shed will provide a solar screen to the office component from northern sun exposure, minimising solar heat gain. The warehouse office is to be separated from the main shed by a two storey circulation volume that will create an acoustic and physical buffer zone whilst providing disabled access to the 100% of the facility.*

*The requirement for direct visual supervision from the depot manager's office to the loading area of the warehouse and the hardstand area, together with the need to separate the warehouse office use from the dining and change room areas, resulted in a two storey building. In order to minimise solar heat gain from the northern sun, the greater portion of the office is oriented south, maximising access to the diffuse southern light and limiting the northern orientation only to the manager's office area (that requires a direct visual supervision of the hardstand). In addition the proposed building is to be fully protected from the low eastern and western light by utilising profiled sheet metal zincalume cladding to east and west facades.*

*The lower level of the office building is to house a service zone to the east, that is partially dug into the ground, and a dining area to the west. The dining area is glazed to the south and west, allowing direct access to the landscaped open space. In order to ensure shading and minimise solar heat gain to the dining area, the ground level of the building is set back in from the upper level. In*



particular, dining room access doors are set back some 4m from the upper storey envelope to provide a sheltered outdoor zone from the elements and shade the dining area from the low western sun.

Performance glazing is proposed to all glazed areas, in order to minimise heat gain, whilst double glazing and insulation is proposed to ensure minimal heat loss in winter months, thus reducing loading to the air conditioning system. In addition, the two storey volume of the circulation zone, is to have a series of ventilation openings to the roof, to allow rising hot air to discharge in summer months. This chimney effect, created by the two storey space, will additionally lower the need for active cooling, saving energy required for the air conditioning system.

Rainwater is to be collected from both the warehouse and warehouse office roofs and connected to the overall rainwater site collection system. All the toilets within the development, including those in the amenity zone on the ground level of the warehouse office facility, are to be connected to the rainwater tanks so that the collected water can be used for flushing.

**Heating Aspects of the warehouse office building (in relation to thermal comfort and resources consumption)**

For a typical office building at the particular location, dealing with cooling loads is more problematic than with heating loads. In summer, when heat gains are undesirable, the warehouse office's building envelope should be able to avoid direct solar radiation and heat gains through conduction from the façade, while in winter the strategy should be minimizing heat losses when internal loads plus solar gains are not able to restore thermal comfort.

The warehouse office building has no access to direct northern solar radiation and the largest façade is facing south. This means that in winter, heat losses would tend to be greater than heat gains. This situation should be reversed by providing the building with insulated envelope and high performance glass to keep heating loads inside the building in winter, therefore minimizing heat losses from conduction through facades. Lighting, equipment and people will account for a significant amount of internal loads, which will also reduce the need for heating. That simple approach is expected to reduce extra heating demand that may be required, therefore delivering thermal comfort with less energy/resources consumption.

We trust this information addresses the matters to the Department's satisfaction, however should further details or clarification be required, please do not hesitate to contact the writer by telephone.

Yours faithfully

CONICS (Sydney) PTY LTD

Silvija Smits

Senior Partner – Planning

cc      Sydney Water  
         Bates Smart