

Additional biodiversity related measures have also been incorporated into the revised environmental management measures for the project as follows (refer to Chapter 6 of this report):

- Roads and Maritime would consider reuse of topsoil as part of the Urban Design Landscape Plan (UDLP) for the project (refer to management measure B-21).
- Roads and Maritime would consider transplanting native species from areas to be cleared into revegetation areas, depending on the type of species being removed and the likely success of transplanting. Plants to be used in revegetation would be sourced from local provenance seed where appropriate and available, and associated seed collection would be undertaken prior to clearing (refer to management measure B-22)
- Rehabilitation of the disturbed areas of the site would be undertaken in accordance with Roads and Maritime Batter Stabilisation Guidelines and Roads and Maritime contractor specifications (refer to management measure B-23).

## 3.17 Sydney Water

### 3.17.1 Utilities

#### Issue description

Sydney Water must be consulted with regarding the following:

- Sydney Water confirms that they are major trunk and reticulation assets within the proposed The Northern Road Upgrade area.
- These assets are used to supply services as per the Sydney Water Operating Licence & regulatory requirements.
- The DN900 and DN750 Raw Water mains is a critical piece of infrastructure transporting water to the Orchard Hills Filtration Plant and supply more than 250,000 of our existing customers.

#### Response

Noted. The EIS has identified a range of Sydney Water assets within the project area (refer to section 5.4.10 of the EIS). In accordance with the future consultation requirements outlined in section 6.4 of the EIS, Sydney Water would be consulted regarding any impacts to any major trunk or reticulation assets within the project, particularly the DN900 and DN750 Raw Water mains which are understood to supply more than 250,000 customers.

#### Issue description

For any adjustments of Sydney Water assets:

- Existing Water and Wastewater mains are to be replaced like for like, unless otherwise advised.
- New mains are to be designed and constructed to WSA 03-2011-3.1 SW Edition-2012.
- Water mains must not be located within the roads batter slope, either located at the toe or road shoulder.
- Sydney Water's Asset Adjustment and Protection Manual provides further details and is available on the Sydney Water Website.
- Adjustment/protection, building over/adjacent to asset and/or Section 73 applications are to be submitted through our standard processes. Instructions of the processes and any of related policies can be found on Sydney Water's website.

A Sydney Water accredited Water Servicing Coordinator can assist with in this process regarding the adjustment/deviation/protection of any/all Sydney Water assets impacted along the proposed route of this proposal and submission of subsequent applications required.

The assessment of asset adjustments can be undertaken through the Sydney Water Asset Adjustment process, which will consider the need for relocation or protection of our assets. Additionally, if assets are required to be changed, environmental approval will need to cover any works identified that may fall outside of the project boundary, but will be a result of the project works.

Sydney Water reserves the right to assess, based on final project layout & construction design prepared by the project team and/or their contractors, the impacts on our assets located within the project scope and the potential needs for adjustments funded by the project to accommodate accessibility of our pipes for operational & maintenance purposes, new pavement locations & changes to structures.

Amplification of the mains may be required to facilitate future growth along the development corridor. This will be assessed as adjustment applications are referred to Sydney Water for investigation. Sydney Water has previously met with RMS to outline our requirements for the allocation of space for the construction of future trunk assets required to service growth.

Access will need to be retained throughout the life of the project. Staging and timing will need to be undertaken as part of the design work and delivery of the project, to allow for shutdown & reconnection of our assets to ensure that Sydney Water maintains services to our customers in line with our Operating Licence.

### **Response**

Any adjustments to Sydney Water assets would be carried out in consultation with Sydney Water and in accordance with Sydney Water specifications outlined above and in the attachments to Sydney Water's submission.

### **Issue description**

Works impacting Sydney Water assets (i.e. DN900 & DN750 Raw Water mains) may impact the timing of RMS's programmed works which could add additional costs to the project. It is essential that RMS provide current Management Control Plans (MCP) regarding these projects to Sydney Water, and that updated copies continue to be forwarded to Sydney Water when changes to the programme occur.

### **Response**

As outlined in section 5.4.10 of the EIS, the extent of impact to utilities and services cannot be confirmed until the detailed design is finalised. However, prior to construction, strategies to address potential impacts to the water mains would be developed in consultation with Sydney Water and all efforts would be made to protect the DN900 and DN750 Raw Water mains in accordance with Sydney Water guidelines.

In the event that adequate protections cannot be achieved, these mains would need to be relocated or replaced. These works would be carried out in close collaboration with Sydney Water, and Roads and Maritime would provide current Management Control Plans to Sydney Water for review prior to the commencement of construction.

### **Issue description**

The Northern Road Stage 4 from Mersey Road (just north of) to Adams Road (just north of) Case 154155 has been submitted by WSC (Cardno). An investigation and Letter of Requirements/Works Deeds was issued on 03/02/17. The existing DN150 water main needs to be adjusted. The design plans received 11/07/17 currently being reviewed by internal stakeholders.

### **Response**

Noted.

### **Issue description**

The Northern Road Stage 5 from The Littlefield Road Luddenham and Glenmore Parkway Glenmore Park. RMS has been in discussions with Sydney Water's Delivery Management regarding a trial agreement for the delivery of the pipe adjustment works, however, this is now to include the cut-in works.

### **Response**

Noted. Discussion between Roads and Maritime and Sydney Water regarding a trial agreement for the delivery of pipe adjustment works would be ongoing and would include potential to carry out cut-in works.

### **Issue description**

Stage 6 relates to Northern Road from Adams Road to Littlefields Road. A feasibility Letter of Requirements was issued on 03/02/17. Feasibility letters are only valid on the day that they are issued as their purpose is to provide advice.

There are no water or sewer assets that are impacted. Sydney Water owned land that has received a partial property acquisition from RMS. This property acquisition has been passed on to Group Property for review. The sites are Lot 12 in DP 30775 & Lot 12 in DP 232322.

### **Response**

Noted.

### **Issue description**

Sydney Water drinking water and wastewater mains:

- Sydney Water has no wastewater related comments in relation to the proposed development.
- However, the subject development may impact existing drinking water mains along the Northern Road. Adequate protections of the water main are required during the road works in accordance with the attached technical guidelines.
- Given certain sections of water mains are in Defence Establishment, Orchard Hills's Land, a detailed Review of Environmental Factors may be required in dealing with any unexploded explosives that may exist.
- There are high voltage electric cables on pylons in the area, which could be a potential hazard for maintenance staff when attending repair work on the main. This safety issue needs to be addressed in the EIS to minimise the risks of touching HV transmission lines.

### **Response**

As outlined in section 5.4.10 of the EIS, the extent of impact to utilities and services cannot be confirmed until the detailed design is finalised. However, prior to construction, strategies to address potential impacts to the water mains would be developed in consultation with Sydney Water and all efforts would be made to protect the DN900 and DN750 Raw Water mains in accordance with Sydney Water guidelines.

In the event that adequate protections cannot be achieved, these mains would need to be relocated or replaced. These works would be carried out in close collaboration with Sydney Water and in accordance with the technical guidelines attached to Sydney Water's submission.

Any works within DEOH land would be carried out in consultation with Department of Defence. Works would not commence until a detailed assessment of unexploded ordinance has been completed and any identified ordinance had been cleared.

Potential hazards and risks associated with the construction of the project have been assessed in section 8.9 of the EIS. The likelihood of impacting on high voltage electrical cable would be minimised by undertaking utility checks, consulting with the relevant service infrastructure

providers and if required, protecting utilities within the project area prior to the commencement of construction.

### 3.17.2 Environment

#### Issue description

Sydney Water has no comments in relation to environmental impacts relating to the subject proposal.

#### Response

Noted.