- Car parking; and
- Landscaped areas.

3.4.2 NSW Police Force business units

The Police Facility will comprise the following uses:

- Offices;
- Warehouse and archives;
- Workshops and garages;
- Hard stand areas for vehicles, plant and other equipment;
- Car parking;
- Landscaped areas;
- Up to two radio antennae, potentially up to 30m high; and
- An emergency helicopter landing pad. The helipad will be sited to ensure that there are no unacceptable impacts on nearby residents.

Figure 57 – Employment land – possible building types

3.4.3 TransGrid electricity substation

The proposed substation will be a new prototype. This development will be an essential component of the planned augmentation of the electricity supply for the greater Sydney

metropolitan area. While no design concepts have been prepared at this stage, a low profile building is envisaged built into the embankment south of Reservoir 1.

Substantial boundary setbacks from Rookwood Road, the proposed access road off Rookwood Road, and the Sydney Water Facility are also envisaged to allow for landscape screening and appropriate security measures.

3.4.4 EnergyAustralia depot

The existing parcel of land on Brunker Road currently occupied by Sydney Water administration uses and parking/ open storage also provides the opportunity for development as a depot for EnergyAustralia, comprising office and warehouse uses. This parcel will also be the subject of a future application.

3.4.5 Signage on Rookwood Road

It is envisaged that there will be identification signage and advertising on the Rookwood Road frontage of the employment precinct and possibly within the employment precinct as part of Sydney Water's delivery of community information about water use and conservation. Advertising signage is also desirable for the marketing of the residential precinct. Applications for consent for signage will be prepared at the appropriate time.

3.5 Road structure and access

A concept of the potential road layout and access locations for the employment precinct and the residential precinct are shown on Figure 50 and Figure 51.

The traffic implications of the proposed access arrangements for the residential precinct, and for the employment precinct, including an assessment of the nature and scale of the expected occupants of the employment land have been addressed by MWT and are detailed at Appendix D. The assessment has been carried out using the proposed land-uses and expected traffic generation levels in accordance with accepted modelling approaches consistent with Council and RTA requirements. Proposed traffic management measures to address the effects of development are outlined in Section 4.5. Given that this is a concept plan application, the details of parking arrangements have not yet been addressed, however, compliance with relevant codes and policies is not expected to be a problem, and this will be addressed in subsequent project or development applications.

3.5.1 Employment precinct

The proposed access arrangements for the employment precinct comprise a cul-de-sac off Brunker Road in the location of the current access driveway into the Sydney Water site, and a cul-de-sac off Rookwood Road adjacent to the boundary with the greyhound track. Each access is proposed as a full-turning movement signalised intersection. This arrangement will enable adequate access to the employment precinct for internal users of the land, and will avoid any possibility of a traffic shortcut through the employment land between Brunker Road and Rookwood Road.

In addition, a pedestrian and emergency vehicle access will be provided from the Sydney Water Facility across the Sydney Water retained land to the residential precinct, to allow employees to walk to and from Birrong Station, and to facilitate access by emergency vehicles.

The other parcel of employment land on Brunker Road will be accessed via a driveway in the vicinity of the existing driveway to Sydney Water uses.

3.5.2 Residential precinct

The residential precinct will be served by two access points off Cooper Road, and one access point off Brunker Road just east of Cooper Road.

Two dedicated pedestrian access points are proposed off Cooper Road to facilitate efficient access between the residential precinct and Birrong Station.

3.6 Proposed land form

Geotechnical investigations have indicated that future landforms can closely follow the existing ground levels. Roads will be placed at grade wherever possible. Some earth works will be required to form terraces or retaining walls on the embankments in order to allow dynamic compaction, but otherwise the earthworks are expected to be minimal.

3.7 Removal of fill and re-use of Reservoir 1

The proposed solution to the geotechnical conditions on-site is dynamic compaction of fill areas to achieve stability. A trial measure is proposed. However, if the results are not satisfactory, an alternative approach will be adopted.

The alternative would be to remove an amount of fill that is equivalent to the weight/ pressure of the development that is likely to go on the land. This process is expected to produce an amount of surplus fill, which is estimated to be of such a quantity that is not cost effective to remove to landfill. Investigations carried out by Patterson Britton & Partners (now Worley Parsons) into the possible use of Reservoir 1 for the storage of the excess fill has determined that it is structurally and economically feasible (a copy of that report is included at Appendix J).

The preferred manner in which the fill could be stored is shown in Figure 58, prepared by Worley Parsons (formerly Patterson Britton & Partners).

The reservoir has the capacity to accommodate up to 6m of fill above the reservoir floor. The preferred approach to using the reservoir would see the fill located adjacent to the eastern and southern walls to improve its wall stability. It would be located to allow Sydney Water continued access to key infrastructure within and around the reservoir, and to allow the reservoir to continue to perform its present minor storm water management role.

In addition to locating the excess fill within Reservoir 1, there is an opportunity to utilise part of the reservoir for the storage of storm water or recycled water. These options are being investigated in conjunction with water sustainability measures associated with the redevelopment of the surplus land.

Preliminary investigations indicate that the storage of fill and water within Reservoir 1 (including site preparation and the transporting of fill) can be achieved without any detrimental impact on the fabric of the reservoir.