

**HYDRAULIC AND FIRE SPRINKLER SERVICES**

**DA DESIGN STATEMENT**

**for**

**UTS STUDENT ACCOMMODATION**

**PETER JOHNSON BUILDING**

**JOB No.**  
7106

**DATE:**  
February, 2009

**ISSUE:**  
ISSUE A

**HYDRAULIC & FIRE SERVICES CONSULTANTS**



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GDK Hydraulics have reviewed the existing infrastructure in regard to the provision of Hydraulics & Fire Services and comment as follows.

### **SEWER**

There is a Sydney Water 300mm VC sewer main at the rear of the Project with sufficient capacity to serve the Development.

There is an existing 225mm boundary trap on the north eastern boundary for connection of the sewer drainage from the Development.

### **WATER**

There is an existing Sydney Water 300mm DICL water main in Harris Street with sufficient capacity to provide water services to the Development.

Extension from the Sydney Water 300mm DICL water main in Harris Street will be provided to reticulate water services to the Development.

### **HOT WATER PLANT**

The Facility is to be provided with a gas fired hot water plant systems.

The main hot water generation plants shall be Rheem/Raypak boilers and a separate Rheem Guardian warm water system.

The hot water pipework shall be insulated with a min 25mm thick insulation in accordance with BCA Section J requirements.

### **GAS**

Gas (natural) is available for this Development as advised by Jemena Gas Network, from the gas main in Harris Street.

Jemena will extend the gas to a connection point on the boundary.

Extension from the connection point will be provided to reticulate gas to the hot water plant and laundry dryers.

### **FIRE HYDRANT**

The existing Sydney Water 300mm DICL water main in Harris Street is able to provide Fire Hydrant services to the Development.

The hydrant supply will be taken from the Sydney Water 300mm DICL water main in Harris Street and extended through the Development.

## **FIRE SPRINKLER**

The existing Sydney Water 300mm DICL water main in Harris Street is able to provide Fire Sprinkler services to the Development.

The Fire Sprinkler supply will be taken from the Sydney Water 300mm DICL water main in Harris Street and extend to the Development to provide Fire Sprinkler services.

## **ESD STRATEGY'S**

The Following is a list of proposed ESD initiatives for this project.

### **Water.**

All tapware to be a minimum AAA rated (3 star wells rated).

All WC's to be 4.5/3 litre flushing.

The Rain water re-use for landscape watering.

## **DESIGN PARAMETERS**

The hydraulic and wet fire services design will be undertaken to conform with the requirements of:

- . Building Code of Australia.
- . NSW Fire Brigade.
- . AS 3500 National Plumbing and Drainage Code – 2003
- . New South Wales Code of Practice
- . Natural Gas Company Rules and Regulations AG601
- . Sydney City Council.
- . Sydney Water Corporation
- . AS 2118 Automatic Fire Sprinkler Systems