UTS

UTS Broadway Building

Utilities and Infrastructure Report

REP/220377/0001B

Final Issue | February 2011

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Document Verification

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		Name			
		Signature			
				Issue Document Verification with Document	✓

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Appendices

Executive Summary

This report has been prepared to identify the implications of the proposed building development on the existing services infrastructure in support of the Director General's Requirements for the construction of the new Broadway Building.

It addresses the following aspects:

- The extent of the statutory infrastructure in the vicinity of the new Broadway Building,
- The impact the new building's footprint will have on the routes of this infrastructure,
- The potential loads the development will have on the surrounding infrastructure,
- The implications of the relocation, realignment or augmentation of the affected services, and
- Potential affect on the storm water systems in the area and overland flow management.

Conclusion

Following analysis on the building's hydraulic services requirements there appears to be sufficient capacity in the authorities' sewer, stormwater, water mains and gas services for the proposed building development.

- Adequate potable cold water supplies have been identified for the new Broadway Building within the streets.
- Adequate capacity in the sewer lines have been identified for the Broadway Building. The design proposes several strategies, such as low-flow tapware, waterless urinals, and dual toilet supply to reduce wastewater output associated with new Broadway Building.
- Adequate capacity in the stormwater systems has been identified for the Broadway Building.
- The design incorporates water sensitive urban design principles such as rainwater harvesting to minimise flows and prevent stormwater runoff together with onsite detention associated with new Broadway Building.
- Adequate natural gas capacity in the streets has been identified for the proposed loads including trigeneration plant for the new Broadway Building.

1 Introduction

This report is written in response to items 13 of the Director General's Requirements checklist in relation to the Broadway Building located on the UTS City Campus.

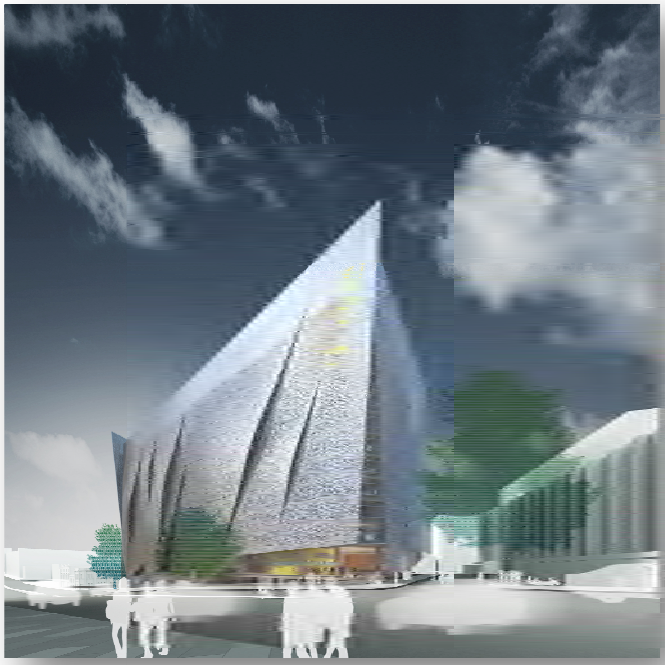
More specifically, the report addresses the key assessment requirements as detailed below:

13) – Utilities and Infrastructure

Details utility and infrastructure servicing, demonstrating development can be adequately serviced for water supply, wastewater, stormwater (...), gas (...).

The information in this report is based on available documentation and preliminary discussions with Sydney Water Coordinator (Metro Water); Local Authorities including Jemena Gas Network, Sydney Water, City of Sydney Council and UTS.

Design development will be required to verify the assessments made in this report.



2 Gas Services

2.1.1 Existing Configuration

There are existing high-pressure natural gas mains located in Jones Street. The gas pipes are Jemena Gas Networks assets.

The existing gas services in Jones Street have the following sizes and pressures:

- 32mm at 210KPa - Nylon inserted into 3 inch cast iron main
- 250mm at 1050kPa - Secondary steel main

These lines will be used to supply natural gas to the proposed Broadway Building including trigeneration plant. The exact location of the Trigeneration Plant will need to be confirmed.

2.1.2 Capability

The capacity of the main connection to the building will be determined depending upon mechanical gas requirements for trigeneration plant. Based on the preliminary information it has been estimated gas usage around 30GJ/h will be required for the trigeneration plant and another 3GJ/h for general site usage.

We have conducted preliminary assessments and discussion with the Commercial Section of Jemena Gas Networks NSW to assess preliminary impact on existing services. Further to the above we have made the application to Jemena to determine the impact on the surrounding infrastructure and are awaiting comments.

As part of the campus gas supply strategy UTS is investigating alternative source of gas supply to the Broadway Building. A gas supply from the internal gas network infrastructure within the Campus site as opposed to the Jemena Gas Network is under review by UTS.

Based on the preliminary discussions with the I&C Jemena Gas Network Development Manager the existing system has sufficient capacity to serve the new Broadway Building.

Details of the surrounding infrastructure can be seen in the Appendix A.

3 Potable Water Services

Jones Street has a 600mm CICL water main and 2 x 150mm CICL which are capable of providing sufficient hydraulic and fire flows to the Broadway Building. Broadway also has a 200 CICL water main with sufficient hydraulic and fire flows for the new development

3.1.1 Existing Configuration

It is proposed that the domestic cold water (DCW) will be supplied from the town main located in Jones Street via a new water connection to the Broadway Building. Details of the surrounding infrastructure can be seen in the Appendix B.

3.1.2 Capability

Final water use figures will be developed to assess the building requirements during design development.

Based on the preliminary information we estimated the following flows are required to the new Broadway Building.

- Fire hydrant flow rate of 20 litres/second,
- Fire sprinkler flow rate of 1100 litres/min,
- Domestic flow rate 5.0 litres/second
- Cooling Towers rate 6.0 litres/second

Our load estimates of the building indicate there is sufficient capacity in the Authorities water mains to cater for the additional loads of the new building.

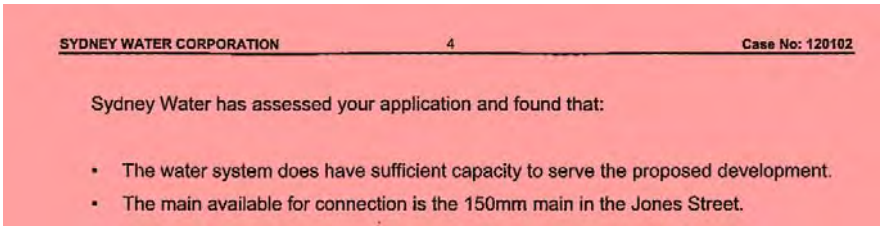
An application for Pressure and Flow enquiry has been made to Sydney Water. It has been confirmed that the existing 150mm water main in Jones Street does have a sufficient flow and pressure to serve the proposed development (Appendix C).

The application for a Section 73 was submitted to Sydney Water to determine the exact impact the development will have on the surrounding infrastructure and if local amplification to existing services will be required.

The Section 73 Notice of Requirements (Appendix D) has confirmed that the water system has sufficient capacity to serve the proposed development and the main available for connection is the 150mm main in Jones Street.

A large proportion of the water used on site has the potential to be served from non- potable source (rainwater tank) maximising the site's environmental potential including WCs, Cooling towers, Landscaping.

The extract from NOR is enclosed below:



SYDNEY WATER CORPORATION 4 Case No: 120102

Sydney Water has assessed your application and found that:

- The water system does have sufficient capacity to serve the proposed development.
- The main available for connection is the 150mm main in the Jones Street.

4 Sewer

4.1.1 Existing Configuration

Our records show that there are existing sewer mains in Jones Street, Broadway and Wattle Streets of sufficient capacity to service the proposed building. The existing sewer in the surrounding streets is a Sydney Water asset and the sewer services have the following sizes:

Jones Street – 525VC.

Wattle Street –1219 x 828mm brick oviform sewer trunk main.

Broadway – 1263 x 1574 brick oviform sewer trunk main

Lane Way 300VC sewer connected to 1219 x 1828 brick oviform in Wattle Street

4.1.2 Capability

The detailed design of the sanitary systems within the Broadway Building are yet to be developed and will be heavily dependent on the space planning of the laboratories, population and usage profiles.

A preliminary estimate of the building's population and number of sanitary fittings has yielded a potential peak flow of 7.5 l/s to sewer.

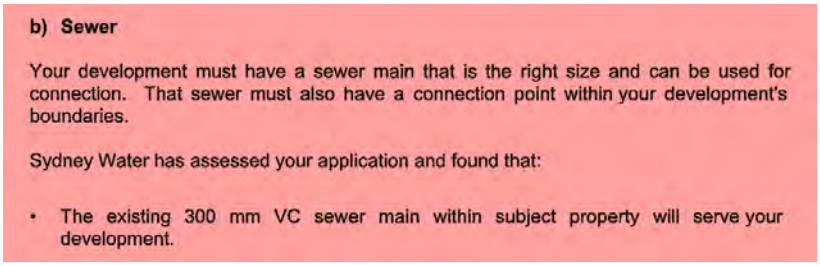
The proposed Broadway Building will need to drain to the existing Wattle Street sewer and this drain has sufficient capacity to cater for the loads of the new building. There is an existing 300VC sewer connection within the property which could be utilised subject to discussion with Sydney Water. (Refer to Appendix E)

The application for a Section 73 was submitted to Sydney Water to determine the exact impact the development will have on the surrounding infrastructure and if local amplification to existing services will be required.

The Section 73 Notice of Requirements has confirmed that the sewer main system has sufficient capacity to serve the proposed development and the existing 300VC sewer line will serve proposed building.

Further to above we have commenced discussions with a Water Servicing Coordinator with a view to prepare a services protection report for the services surrounding the development to ensure that construction / building works will not affect Sydney Water assets (water and sewer mains).

It is anticipated that the Broadway Building sewer drainage connection will be a minimum 225mm. The extract from NOR is enclosed below



b) Sewer

Your development must have a sewer main that is the right size and can be used for connection. That sewer must also have a connection point within your development's boundaries.

Sydney Water has assessed your application and found that:

- The existing 300 mm VC sewer main within subject property will serve your development.

5 Stormwater

5.1.1 Stormwater Design Proposal

Ground water at the perimeter of the underground car park will be directed to pump stations at the lowest level and pumped out to gravity stormwater system.

A gravity or syphonic roof drainage system will be installed to enable rainwater to be harvested from all areas of the main roof. A rainwater tank of approximately 100,000 litres (final volume to be determined based upon final cooling tower loads) is proposed to catch and store the rainwater within the roof plant room.

The stormwater from the Laneway glass roof will be collected via series of rainwater outlet and discharged to the rainwater tank located in the basement of the Broadway Building.

In addition to the collection of rainwater from the Broadway Building roof it is proposed the collection of runoff from portions of the existing Building 10 roof will also be harvested. This would require the existing rainwater downpipes in Building CB10 to be reconfigured to allow the rerouting of the rainwater to the new basement rain water tank (approx 100,000 litres dependent on potential uses) provided in the basement of the Broadway Building.

5.1.2 Existing Configuration

The existing site currently collects runoff into below ground drains and directs this storm water to existing Sydney Water / Council Stormwater system in Wattle Street through an existing ø300VC mm piped connection.

The existing connection in Wattle Street will remain in operation during and post construction and will attract no additional storm water load than that which currently exists on site.

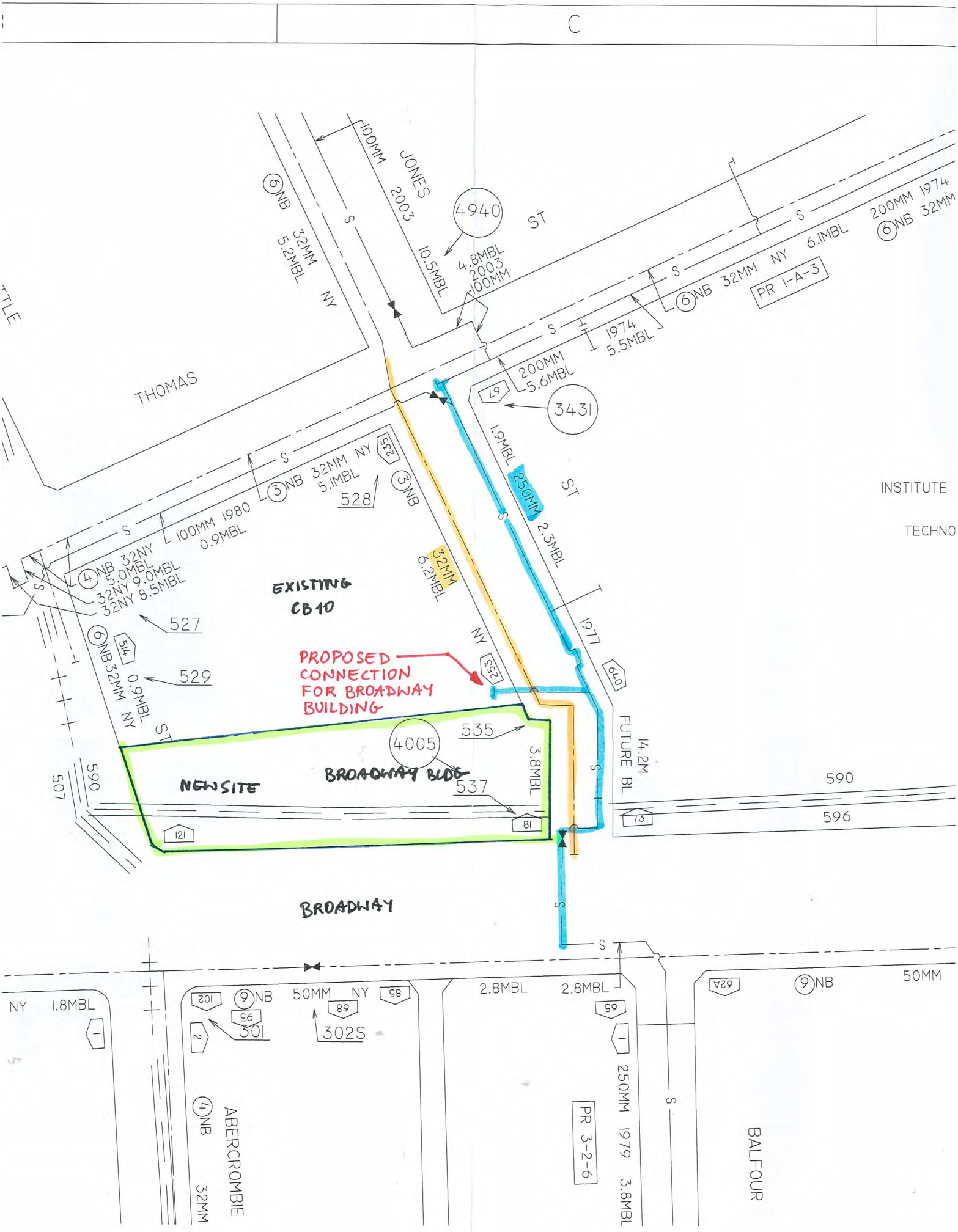
5.1.3 Capability

Our preliminary calculations indicate that the existing stormwater drain in Wattle Street has sufficient capacity for the proposed building.

Final calculations and plans showing on site storage, size and volume are to be submitted for final approval to Sydney Water and City of Sydney Council.

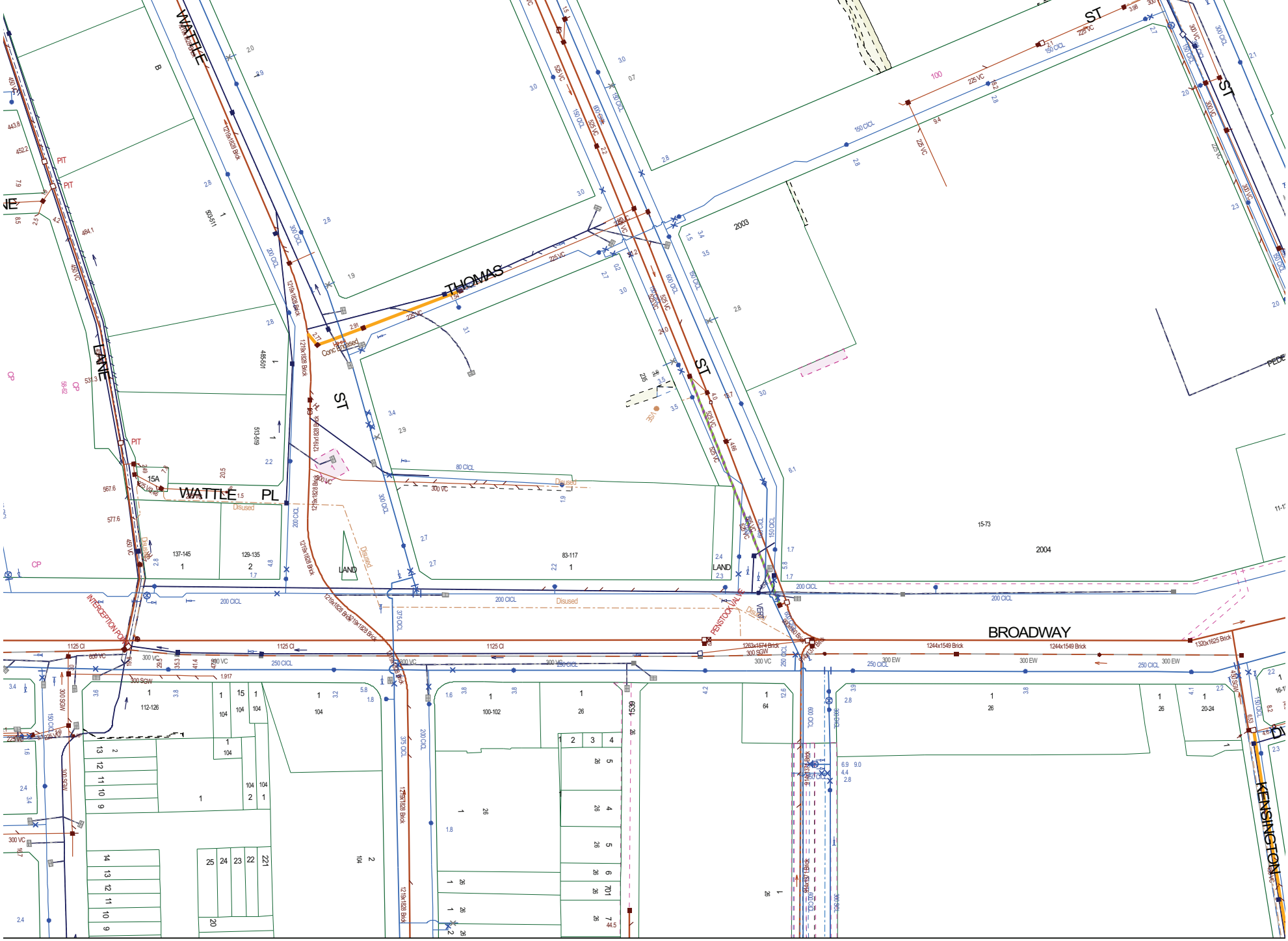
Appendix A

Natural Gas Diagram


C
100MM JONES 2003 10.5MBL
4940
4.8MBL 2003 100MM
ST
6 NB 32MM 5.2MBL NY
S
200MM 1974
6 NB 32MM
6 NB 32MM NY 6.1MBL
PR 1-A-3
1974 5.5MBL
200MM 5.6MBL
67
3431
1.9MBL
250MM
2.3MBL
1977
640
INSTITUTE
TECHNO
THOMAS
3 NB 32MM NY 5.1MBL
235
528
3 NB
100MM 1980 0.9MBL
4 NB 32NY 5.0MBL 32NY 9.0MBL 32NY 8.5MBL
EXISTING CB 10
32MM 6.2MBL
527
6 NB 32MM NY 0.9MBL
514
529
PROPOSED CONNECTION FOR BROADWAY BUILDING
253
NY
4005
535
537
3.8MBL
NEWSITE
BROADWAY BLDG
121
81
590
507
14.2M FUTURE BL
73
590
596
BROADWAY
NY 1.8MBL
1
9 NB 50MM NY
102
95
89
85
301
302S
2
4 NB 32MM
ABERCROMBIE
2.8MBL
2.8MBL
65
1
250MM 1979 3.8MBL
PR 3-2-6
624A
9 NB 50MM
BALFOUR

Appendix B

Sewerage and Water Diagram



DBYD Job No: 52962

DBYD Sequence No: 13346958

Appendix C

Pressure Statement

- 1 JUN 2010

Statement of Available Pressure and Flow

Sydney WATER

Metrowater
Po Box 233
Epping, 1710

WMS No: **78966**
Contact No: 8849-3531
Fax No: 8849-3111

Attention: Robyn

Date: 26/05/2010

Pressure & Flow Application Number: 2879015
Your Pressure Inquiry Dated: Mon May 24 2010
Property Address: 83-117 Broadway Ultimo 2007

The expected maximum and minimum pressures available in the water main given below relate to modelled existing demand conditions, either with or without extra flows for emergency fire fighting, and are not to be construed as availability for normal domestic supply for any proposed development.

ASSUMED CONNECTION DETAILS

Street Name: Jones St	Side of Street: West
Distance & Direction from Nearest Cross Street	25 metres West from Broadway
Approximate Ground Level (AHD):	15 metres
Nominal Size of Water Main (DN):	150 mm

EXPECTED WATER MAIN PRESSURES AT CONNECTION POINT

Normal Supply Conditions	
Maximum Pressure	60 metre head
Minimum Pressure	28 metre head

WITH PROPERTY FIRE PREVENTION SYSTEM DEMANDS	Flow l/s	Pressure head m
Fire Hose Reel Installations (Two hose reels simultaneously)	0.66	28
Fire Hydrant / Sprinkler Installations (Pressure expected to be maintained for 95% of the time)	5 10 15 20 30 40 50	28 28 28 27 27 25 24
Fire Installations based on peak demand (Pressure expected to be maintained with flows combined with peak demand in the water main)	5 10 15 20 30 40 50	27 27 27 27 26 25 23
Maximum Permissible Flow	52	23

(Please refer to reverse side for Notes)

pp **Robert Wickham**
Team Leader
Asset Planning

General Notes

This report is provided on the understanding that (i) the applicant has fully and correctly supplied the information necessary to produce and deliver the report and (ii) the following information is to be read and understood in conjunction with the results provided.

1. Under its Act and Operating Licence, Sydney Water is not required to design the water supply specifically for fire fighting. The applicant is therefore required to ensure that the actual performance of a fire fighting System, drawing water from the supply, satisfies the fire fighting requirements.

2. Due to short-term unavoidable operational incidents, such as mainbreaks, the regular supply and pressure may not be available all of the time.

3. To improve supply and/or water quality in the water supply System, limited areas are occasionally removed from the primary water supply zone and put onto another zone for short periods or even indefinitely. This could affect the supply pressures and flows given in this letter. This ongoing possibility of supply zone changes etc, means that the validity of this report is limited to one (1) year from the date of issue. It is the property owner's responsibility to periodically reassess the capability of the hydraulic Systems of the building to determine whether they continue to meet their original design requirements.

4. Sydney Water will provide a pressure report to applicants regardless of whether there is or will be an approved connection. Apparent suitable pressures are not in any way an indication that a connection would be approved without developer funded improvements to the water supply System. These improvements are implemented under the Sydney Water 'Urban Development Process'.

5. Pumps that are to be directly connected to the water supply require approval of both the pump and the connection. Applications are lodged through Sydney Water Business Centres and agencies. Where possible, on-site recycling tanks are recommended for pump testing to reduce water waste and allow higher pump test rates.

6. Periodic testing of boosted fire fighting installations is a requirement of the Australian Standards. To avoid the risk of a possible 'breach' of the Operating Licence, flows generated during testing of fire fighting installations are to be limited so that the pressure in Sydney Water's System is not reduced below 15 metres. Pumps that can cause a breach of the Operating Licence anywhere in the supply zone during testing will not be approved. This requirement should be carefully considered for installed pumps that can be tested to 150% of rated flow.

Notes on Models

1. Calibrated computer models are used to simulate maximum demand conditions experienced in each supply zone. Results have not been determined by customised field measurement and testing at the particular location of the application.

2. Regular updates of the models are conducted to account for issues such a urban consolidation, demand management or zone change.

3. Demand factors are selected to suit the type of fire-fighting installation. Factor 1 indicates pressures due to System demands as required under Australian Standards for fire hydrant installations. Factor 2 indicates pressures due to peak System demands.

4. When fire-fighting flows are included in the report, they are added to the applicable demand factor at the nominated location during a customised model run for a single fire. If adjacent properties become involved with a coincident fire, the pressures quoted may be substantially reduced.

5. Modelling of the requested fire fighting flows may indicate that local System capacity is exceeded and that negative pressures may occur in the supply System. Due to the risk of water contamination and the endangering of public health, Sydney Water reserves the right to refuse or limit the amount of low requested n the report and, as a consequence, limit the size of connection and/or pump.

6. The pressures indicated by the modelling, at the specified location, are provided without consideration of pressure losses due to the connection method to Sydney Water's mains.

7. Modern pipes have quality assured, factory applied, concrete lining. Some older pipes are, however, designated CICLIS (cast iron concrete lined in-situ). In this situation, results are obtained using conservative modelling techniques to account for the uncertain quality of the lining. However, it is recommended that the applicant obtains verification of any results by field-testing. Appropriate notification to Sydney Water by the accredited service provider shall be given before testing is undertaken (conditions may apply). Sydney Water can provide technical support on a "change-out basis" if required.

Appendix D

Sydney Water Notice of Requirements

Case Number: 120102

16 August 2010

UTS FACILITIES MANAGEMENT UNIT
C/- METROWATER MANAGEMENT

NOTICE OF REQUIREMENTS
for
SECTION 73 SUBDIVIDER/DEVELOPER COMPLIANCE CERTIFICATE
(Sydney Water Act 1994, Part 6, Division 9)

Developer:	**UTS FACILITIES MANAGEMENT UNIT**
Your reference:	**MW082**
Development:	**235 JONES ST, Ultimo**
Development Description:	**Broadway Building, University of Technology Sydney (UTS) Broadway. Lot 1 DP 554602 & Lot 1 DP 89492, UTS City Campus, and Broadway.**
Council Consent No:	**08_0116 by Planning NSW of 23 December 2009**
Your application date:	**9 June 2010**

Dear Applicant

Sydney Water has assessed your application for a Section 73 Compliance Certificate (the Certificate) for the development shown above. Before Sydney Water can issue the Certificate, you must meet all the requirements set out in this notice and summarised in the following document *What You Must Do To Get A Section 73 Certificate.*

You have until 16 August 2011 to meet those requirements and receive the Certificate. If you have not received the Certificate by then you will have to reapply (and pay another application fee) and Sydney Water will issue you with a new notice. We may have extra requirements and charges may change in the new notice.

The Water Servicing Coordinator (Coordinator) will be your point of contact with Sydney Water. They can answer most questions you might have on our developer process and charges.

You can also find out about this process by visiting www.sydneywater.com.au > Building Developing and Plumbing > Developing Your Land. (If you want to find out the status of your application, simply select 'Developer Application Enquiry' and enter you case number (shown above) and email address. A response will be sent automatically to you.

What You Must Do To Get A Section 73 Certificate

Summary

This is a summary of Sydney Water's requirements. The detailed list begins on the next page.

You must do all of the following things:

1. Have your building plans approved and stamped because what you are building may be over or near our pipes and we need to check your property building plans. Your Coordinator can tell you more about this and help with the approval.

Other things you need to do:

At the end of this Notice are some other things that you may need to do. They are NOT a requirement to be met before the Certificate can issue but may well be a requirement of Sydney Water in the future because of the impact of your development on our assets. You must read them before you go any further.

DETAILED REQUIREMENTS

1. Stamping and Approval of your Building Plans

You must have your building plans stamped and approved **before the Certificate can be issued. Building construction work MUST NOT commence until Sydney Water has granted approval.** Approval is needed because construction/building works may affect Sydney Water's assets (e.g. water and sewer mains).

Your Coordinator can tell you about the approval process including:

- Your provision, if required, of a "Services Protection Report" (also known as a "pegout"). This is needed to check whether the building and engineering plans show accurately where Sydney Water's assets are located in relation to your proposed building work. Your Coordinator will then either approve the plans or make requirements to protect those assets before approving the plans;
- Possible requirements;
- Costs; and
- Timeframes.
- You can also find information about this process (including technical specifications) if you either:
- Visit www.sydneywater.com.au > Building Developing and Plumbing > Building and Renovating. Here you can find Sydney Water's *Guidelines for Building Over/Adjacent to Sydney Water Assets;* or
- Call 13 20 92.

Notes:

- **The Certificate will not be issued until the plans have been approved and, if required, Sydney Water's assets are altered or deviated;**
- **You can only remove, deviate or replace any of Sydney Water's pipes using temporary pipework if you have written approval from Sydney Water's Development Operations Branch. You must engage your Coordinator to arrange this approval; and**
- **You must obtain our written approval before you do any work on Sydney Water's systems. Sydney Water will take action to have work stopped on the site if you do not have that approval. We will apply Section 44 of the *Sydney Water Act 1994.***

OTHER THINGS YOU NEED TO DO

Shown below are other things you need to do that are NOT a requirement for the Certificate. They may well be a requirement of Sydney Water in the future because of the impact of your development on our assets. You must read them before you go any further.

Water and Sewer Works Information.

a) Water

Your development must have a frontage to a water main that is the right size and can be used for connection.

Sydney Water has assessed your application and found that:

- The water system does have sufficient capacity to serve the proposed development.
- The main available for connection is the 150mm main in the Jones Street.

b) Sewer

Your development must have a sewer main that is the right size and can be used for connection. That sewer must also have a connection point within your development's boundaries.

Sydney Water has assessed your application and found that:

- The existing 300 mm VC sewer main within subject property will serve your development.

Disused Sewerage Service Sealing

Please do not forget that you must pay to disconnect all disused private sewerage services and seal them at the point of connection to a Sydney Water sewer main. This work must meet Sydney Water's standards in the NSW Code of Practice for Plumbing and Drainage (the Code) and be done by a licensed drainer. The licensed drainer must arrange for an inspection of the work by a Sydney Water plumbing and draining inspector. After Sydney Water's inspector has looked at the work, the drainer can issue the Certificate of Compliance. The Code requires this.

Soffit Requirements

Please be aware that floor levels must be able to meet Sydney Water's soffit requirements for property connection and drainage.

Trade Waste Information

Should this development generate trade wastewater, this notice of requirements does not guarantee the applicant that Sydney Water will accept the trade wastewater to its sewerage system. In the event trade wastewater is generated, the property owner is required to submit an application for permission to discharge trade wastewater to the sewerage system before business activities commence. A boundary trap will be required where arrestors and special units are installed for trade waste pre-treatment.

If this development type is "Industrial" then the property may be part of sewerage catchment subject to a wastewater reuse scheme. This may impact the level of pollutants such as Total Dissolved Solids (TDS) that Sydney Water will accept from the property to the sewerage system. Businesses wishing to discharge wastewater (other than domestic sewage) should first contact a Sydney Water Trade Waste Office. A boundary trap will be required where arrestors and special units are installed for trade wast pre-treatment.

Prospective Purchasers should be made aware of the above situation under the requirements of vendor disclosure.

For further information please visit the Sydney Water website at: http:// www.sydneywater.com.au/OurSystemsandOperations/TradeWaste/

To contact a Trade Waste Customer Service Representative please see below for Local Government Areas and their relevant contact number.

For the following LGA's the contact number for a Trade Waste Customer Representative is 02 9694 6500:

Ashfield, Bankstown, Botany Bay, Burwood, Camden, Campbelltown, Canada Bay, Canterbury, Fairfield, Hurstville, Kiama, Kogarah, Leichhardt, Liverpool, Marrickville, Randwick, Rockdale, Shellharbour, Strathfield, Sutherland, Wingecarribee, Wollondilly, Wollongong

For the following LGA's the contact number for a Trade Waste Customer Representative is 02 8805 5588:

Auburn, Baulkham Hills, Blacktown, Blue Mountains, Holroyd, Hornsby, Hunters Hill, Kuring-gai, Lane Cove, Manly, Mosman, North Sydney, Parramatta, Penrith, Pittwater, Ryde, Sydney, Warringah, Waverley, Willoughby, Woollahra

Backflow Prevention Information

In accordance with Sydney Water's Backflow Prevention Containment Policy, you must install a backflow prevention containment device immediately downstream of each master water meter/s servicing the property. In circumstances where there is no master meter/s the containment device shall be installed on the water supply entering the property boundary.

The device is to be installed on all water supplies entering the property, regardless of the supply type or metering arrangements. It is needed to reduce the risk of contamination by backflow from these supplies.

Separate hydrant and sprinkler fire services on non-residential properties, require the installation of a testable double check dector assembly. The device is to be located at the boundary of the property.

The device must be installed as a condition of continued use of the water supply. Failure to install and maintain the device may result in disconnection of the water service. A licensed plumber with backflow accreditation can advise you of the correct requirements for your property. To view a copy of Sydney Water's Backflow Prevention Policy and a list of backflow accredited plumbers visit http://www.sydneywater.com.au/Plumbing/BackflowPrevention/

Fire Fighting

Definition of fire fighting systems is the responsibility of the developer and is not part of the Section 73 process. It is recommended that a consultant should advise the developer regarding the fire fighting flow of the development and the ability of Sydney Water's system to provide that flow in an emergency. Sydney Water's Operating Licence directs that Sydney Water's mains are only required to provide domestic supply at a minimum pressure of 15 m head.

A report supplying modelled pressures called the Statement of Available pressure can be purchased through any Quickcheck agent and may be of some assistance when defining the

fire fighting system. The Statement of Available pressure, may advise flow limits that relate to system capacity or diameter of the main and pressure limits according to pressure management initiatives. If mains are required for fire fighting purposes, the mains shall be arranged through the water main extension process and not the Section 73 process.

Large Water Service Connection

A water main is available to provide your development with a domestic supply. The size of your development means that you will need a connection larger than the standard domestic 20 mm size.

To get approval for your connection, you will need to lodge an application with a Quick Check Agent or at a Sydney Water Customer Centre. You, or your hydraulic consultant, may need to supply the following:

A plan of the hydraulic layout;
A list of all the fixtures/fittings within the property;
A copy of the fireflow pressure inquiry issued by Sydney Water;
A pump application form (if a pump is required);
All pump details (if a pump is required).

You will have to pay an application fee.

Sydney Water does not consider whether a water main is adequate for fire fighting purposes for your development. We cannot guarantee that this water supply will meet your Council's fire fighting requirements. The Council and your hydraulic consultant can help.

Disused Water Service Sealing

You must pay to disconnect all disused private water services and seal them at the point of connection to a Sydney Water water main. This work must meet Sydney Water's standards in the NSW Code of Practice for Plumbing and Drainage (the Code) and be done by a licensed plumber. The licensed plumber must arrange for an inspection of the work by a Sydney Water plumbing and draining inspector. After Sydney Water's inspector has looked at the work, the drainer can issue the Certificate of Compliance. The Code requires this.

Other fees and requirements

The requirements in this Notice relate to your Certificate application only. Sydney Water may be involved with other aspects of your development and there may be other fees or requirements. These include:

- plumbing and drainage inspection costs;
- the installation of backflow prevention devices;
- trade waste requirements;
- large water connections and
- council fire fighting requirements. (It will help you to know what the fire fighting requirements are for your development as soon as possible. Your hydraulic consultant can help you here.)

END

Appendix E

Disuse a Section of Sewer

By 2025, global demand for water will have grown by over 40%

Sydney WATER

25 October 2010

Officer: S Maxwell
Tel: 8849-3439
Fax: 8849-3123

UTS Facilities Management
P.O. Box 233
Epping NSW 1710

Attention: Robyn

Dear Sir,

Property: 83-117 Broadway Ultimo
Property no. 4136127
Quick check no. 3007247

Sydney Water has approved your application to disuse a section of sewer located on the proposed building site could be partly disused upon site confirmation there are no unrecorded or encroaching customer-drain (house-service) connections to any section of sewer for disuse. An approved constructor must carry out this work under a 'minor works agreement'.

Sydney Water's Civil Maintenance will need to inspect the works and an inspection fee will be required to be paid at a Quick Check Agent.

On completion of the works a copy of the inspection report along with a Work As Constructed drawing of the disuse must be forwarded to Technical Services Parramatta to confirm Civil Maintenance has passed off work.

For further information regarding this matter please contact me on the above phone number during business hours.

Yours faithfully,

S Maxwell
Urban Growth
12th Floor Parramatta

RECEIVED
2 OCT 2010