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Hydraulic Services Appraisal

North Curl Curl Public School
Playfield Road, North Curl Curl

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North Curl Curl Public School
Playfield Road, North Curl Curl

Issue P1 - Preliminary

Date 20th April 2017

Job No 20160250

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INDEX

1	Purpose of Report.....	4
1.1	Project and Service Summary	4
1.2	Proposed hydraulic services requirements.....	5
1.3	Existing Conditions	5
1.4	Existing Service Condition	5
2	Compliance Issues.....	6
3	Section 73	6
4	Authority Co-Ordination	6
4.1	Trade Waste.....	6
5	Summary.....	7



1 Purpose of Report

This report has been prepared as a preliminary assessment of the hydraulic services at the proposed North Curl Curl Public School. The assessment is based on the available existing architectural floor plans and sections, in addition to an inspection conducted on 8th March 2017.

1.1 Project and Service Summary

The following summarises the key elements of the existing hydraulic services installed on site.

Item	Description
Site Description	The site comprises on grade carpark in addition to an existing single & double level buildings, which is currently occupied by North Curl Curl Public School.
Fire Hydrant Service	There is currently no on-site Fire Hydrant System.
Fire Hose Reel Service	There is currently no on-site Fire Hose reel system visible onsite at the time of inspection.
Sewer Drainage	We understand that a sewer main connection is available in the southern boundary of the site adjacent to Abbott Road.
Roof Drainage	A series of downpipes collect rainwater from the roof areas. These downpipes connect to the inground drainage.
Potable Water Supply	We understand that potable water for the site extends from a water meter located at the southern boundary of the site adjacent to Abbott Road.
Gas Supply	We understand that gas supply for the site extends from a gas meter located at the western boundary entrance.

Note:

During the site inspection, we noted markings in the carpark which indicated that a services detection contractor had recently undertaken a services investigation. This was confirmed by the site maintenance manager. We have not reviewed any of the site investigation findings and request a copy to enable this report and existing services analysis to be completed.



1.2 Proposed hydraulic services requirements

Based on a preliminary review of the proposed change of use at the site we understand the following hydraulic service requirements:

Service	Required
Fire Hydrant	Yes. Installed in accordance with AS 2419.
Fire Hose Reel	To non-student areas only, subject to confirmation by BCA consultant
Sewer Drainage	Yes. A diversion of the existing in ground sanitary drainage is required to allow the existing building to remain operational during construction of the proposed new building works.
Grey and Black water harvesting	No
Stormwater Drainage	Yes. Design by others
Onsite stormwater detention	Design by others
Rainwater Harvesting	Yes. Subject to client preference, propose relocation of existing above ground rainwater tank.
Trade Waste Drainage	
▪ Grease	Yes, proposed school canteen- Consultation with Sydney Water
▪ Dilution	No.
▪ Plaster arrestor	No.
Potable Cold Water	Yes. A diversion of the existing in ground portable water is required to allow the existing building to remain operational during construction of the proposed new building works.
Potable Hot Water	Yes.
Gas Supply	Yes. Possibly space heating

1.3 Existing Conditions

The site inspection conducted on 8th March 2017, was limited in its investigation and a further detailed investigation is required. However, we did note the existing sanitary and portable water drainage will need to be relocated for the existing buildings to be operational during construction of the proposed buildings.

1.4 Existing Service Condition

Generally, the existing hydraulic services appeared to be in a reasonable condition consideration the age of the building and operation of the facility.



2 Compliance Issues

The following outlines compliance issues which require review by the BCA consultant to determine compliance or a performance based solution.

Service	Compliance Issue	Action
Fire Hose Reel	Based on the current code requirements fire hose reel coverage in education facilities is only required to administration and assembly areas for fire compartments larger than 500m ²	The BCA consultant to confirm if fire hose reel coverage is required for the library area.

3 Section 73

The development shall require Sydney Water approval in the form of a section 73 certificate.

The Section 73 notice of requirements will indicate any sewer main extensions to the site and water connection requirements.

Sydney Water will not accept a section 73 application without either a development consent or complying development certificate.

Following receipt of the application Sydney Water will require between 4 weeks to 2 months to assess the application. Once the application is assessed Sydney Water will supply a Notice of Requirements, which may stipulate mains upgrades or similar. The Client is then required to undertake the nominated works if they are specified or if no works are required then the client signs the relevant forms which are then submitted back to Sydney Water. Once this paperwork is complete Sydney Water will provide a certificate.

Based on the above this item is time critical and should be undertaken immediately once the development consent is submitted.

4 Authority Co-Ordination

4.1 Trade Waste

We understand that the following pre-treatment facilities shall be required;

1. Grease arrestor for the canteen

Based on the above it is necessary to submit an application to Sydney Water outlining the processes, anticipated population and fixture schedule to enable the trade waste office to determine the appropriate trade waste response i.e. grease arrestor size. This information should be submitted as soon as practicable to ensure adequate plant space is provided for any specific equipment.



5 Summary

There are a number of critical external services issues that need to be reviewed and addressed as the design progresses. These issues include:

- A fire hydrant system is required to be installed
- An upgrade of the gas service appears to be required
- Sanitary drainage and water services onsite require diversion to allow the existing building to be operational during construction.

