

5.0 External Infrastructure Requirements

Electrical Infrastructure

Ausgrid are the electrical supply authority for site and have been consulted regarding the project. Two new electrical substations are required for the development and are proposed to be located to the south of the building adjacent the Cleveland Street carpark..

The connection new electrical infrastructure is anticipated to be from Cleveland Street. The new cables will underbored through the carpark in accordance with the project arborist's requirements so as to protect the tree root systems of the high value trees to be retained.

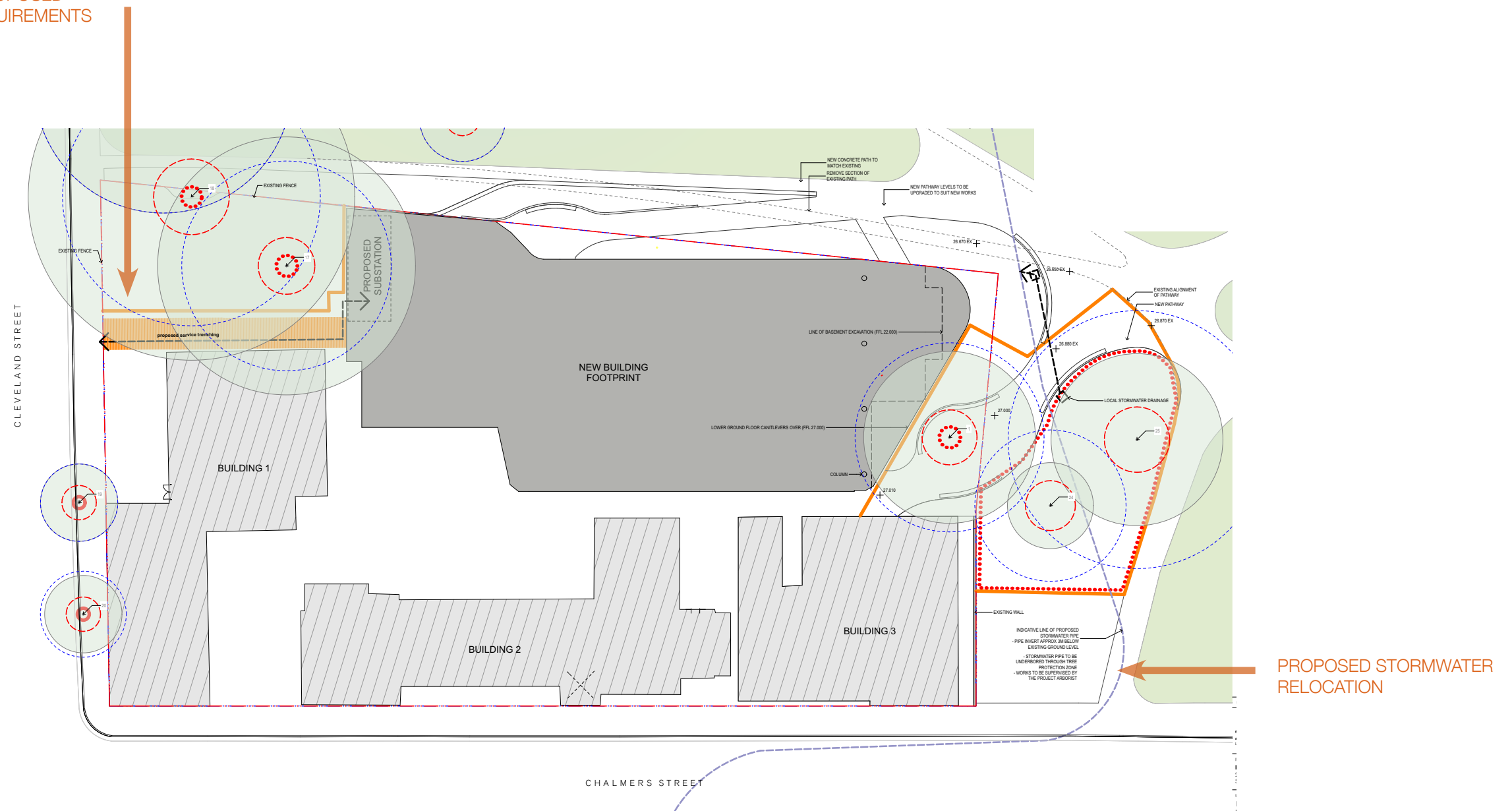
Stormwater

The footprint of the new building is located over an existing Sydney Water 1860s stormwater brick culvert. Sydney Water have indicated that they will not support any new structure to be built over the existing culvert.

Discussion with Sydney Water are currently underway to determine and approve the new stormwater culvert.

Any infrastructure works in the tree protection zones of trees to be retained will be subject to the requirements of the project arborist.

ELECTRICAL INFRASTRUCTURE - PROPOSED UNDERBORING TO ARBORIST'S REQUIREMENTS



6.0 Hardscape

MATERIALITY

Design Objective: Complement the materiality of the natural park setting and landscape design character of Prince Alfred Park and the heritage and sandstone elements of the existing heritage school buildings.

Existing materials



Brick & Sandstone



Asphalt



Concrete Pavement



Timber Furniture

Proposed materials



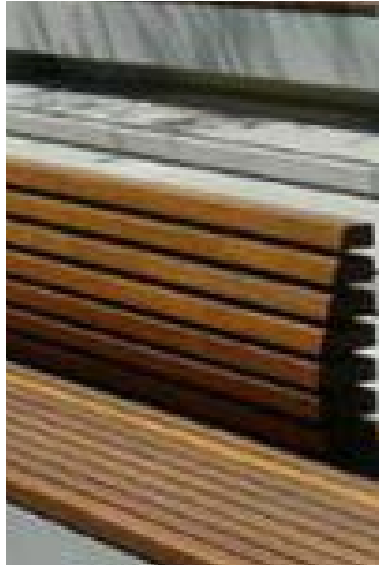
Concrete - various finishes



Sandstone Paving



Feature paving banding



7.0 Softscape

TREE PLANTING

A series of *Zelkova serrata*, deciduous trees selected for their suitability to city environs, are to be planted within the school grounds to provide a summer shade canopy and allow for winter sun.

A very hardy, adaptable and graceful tree with excellent uniformity and branch structure, *Zelkova serrata* tolerates partial shade. It is highly adaptable to different soil types, tolerates heat, compacted soils, air pollution and once established, low levels of drought and wind.

It is a moderate to long lived species, fast growing, with fire retardant properties, developing as an attractive shade tree with showy autumn foliage and attractive bark, it is generally free of any serious pests or diseases.

SOFTSCAPE

Podium planting is maximised throughout the school to soften the building with swathes of hardy native grasses, and *macrozamia* spp, reminiscent of the mass plantings to Prince Alfred Park and the interface between the park and the new school.

Educational/agricultural and permaculture plots are incorporated into the soft works as part of the planting strategy.

Existing palms to the western boundary area are to be replanted to the upgraded planting zones, and existing significant trees are incorporated into the design.



Trees and Plant Images

8.0 Ecological Sustainable Development

Ecological principles are integrated into the landscape design with the primary focus on water. Principles such as water sensitive urban design (WSUD), plant selection process and site micro climatic analysis inform the layout, materials selection and environmental response.

The primary landscape ESD initiatives include:

- Fall paving to facilitate surface water recharge to mass planting beds to reduce potable water usage
- Provide an appropriate area of planting to improve air quality and reduce the urban heat island effect; and select hardy, low water use, indigenous plant species where possible suited to the harsh urban environment.

Water is a key sustainable focus in the Australian landscape. Although many of the plant species to be selected will have low water requirements (and therefore are inherently water conserving), water-efficient subsoil drip irrigation systems are proposed to ensure that the landscape is maintained to the high standard required.



9.0 Streetscape & Connections

The Liveable Green Network Strategy and Masterplan Report Volume 1 (2011) was reviewed in respect of the proposed development and it's city-wide context.

Existing Bicycle Networks

According to the Liveable Network Strategy, Chalmers Street is to be retained as a separate cycleway and Cleveland Street as a mixed / on road traffic network. The pathway connections through Prince Alfred Park are identified as Off Street Pathways (shared paths).

Existing Pedestrian Networks

The Liveable Network Strategy overlays the city-wide pedestrian network with the City's cycle Masterplan to show where routes align or diverge.

Under the Masterplan, Chalmers Street is identified as a City-wide Main Pedestrian Network, Cleveland Street is a Local Pedestrian Network. Link

Streetscapes

The existing conditions of the streetscapes are as follows:

- concrete footpath and sandstone kerbs to Chalmers St and
- asphalt footpath and sandstone kerbs to Cleveland

The City of Sydney's Streetscape Codes (2013) were reviewed with regards to Council's overall streetscape strategy. The Codes indicate that Cleveland and Chalmers Streets are Local Areas (with Higher Activity) and Liveable City Pedestrian Links a higher level of footpath treatment may be required in some locations.

Any streetscape works associated with the development will seek to replicate and upgrade the existing conditions and retain and protect the existing sandstone kerbs.

Further clarification will be sought from City the Sydney.

Street Tree Planting

A review of the City's Street Tree Masterplan indicates that the Chalmers Streetscape is not specifically addressed. This may be due to the nature of Prince Alfred Park (featuring mature Fig Trees along Chalmers Street), the heritage context of the existing school buildings and the narrow footpath width.

Further clarification will be sought from City the Sydney regarding any additional street tree planting required to Chalmers and Cleveland Streets.



Existing Streetscape - Chalmers Street



Existing Streetscape - Cleveland Street



10.0 Prince Alfred Park Interface

Existing Planning Controls

The Prince Alfred Park Plan of Management (PoM)

In 2005 a Plan of Management was prepared for Prince Alfred Park. The PoM has informed the proposed development in the following ways:

Objectives

Natural Environment - the proposed educational facility aims to protect the park's natural character and heritage. The landscape design embraces the park's character and seeks to create an integrated park interface, linking the proposed building form with the existing natural environment.

Hardscape and softscape materials of the existing park are also incorporated into the proposed design.

Visual - Visibility and sightlines through the park have been improved by the proposal by opening the connection from Cleveland St to the park, moving the pathway away from the building edge and delivering strong passive surveillance through the presence of the glazed frontage to the park. The additional illumination from the new facility will improve park safety.

Strategies & Planning Principles

The proposal supports the strategies and planning principles for Prince Alfred Park as outlined in the Plan of Management- specifically 1.6a) reinforce and upgrade main pedestrian routes through the park minimising impaction grassed areas. The proposal includes upgrades to existing pathways adjacent the site, improvements to park drainage and new amenity planting with native plant species.

Land Categorisation & Core Objectives

As identified in the PoM, the land adjacent to the proposed school is classified as a Park and, as such, provides for passive and active use of the space for recreational, social, educational and cultural pursuits.

The proposed development reinforces the core objectives of this categorisation by facilitating educational and recreational activities to take place in the park in a controlled manner.

The joint use of the park space by the educational facility and the community is the subject of a 'Joint Use Project Agreement' (JUP) between the City of Sydney and the Department of Education. The agreement is currently being prepared and will continue to be developed in consultation with the City of Sydney.

The Department of Education is seeking an agreement with Council to enable the community to have access to the school facilities - the proposed education facility will integrate with the park through overlapping and managed uses that complement each other within a structured framework.



existing materials & character



existing planting



existing furniture

11.0 Consultation - Park Interface

The development of the design for the proposed school included several meetings with the City of Sydney Council to discuss the interface with Prince Alfred Park.

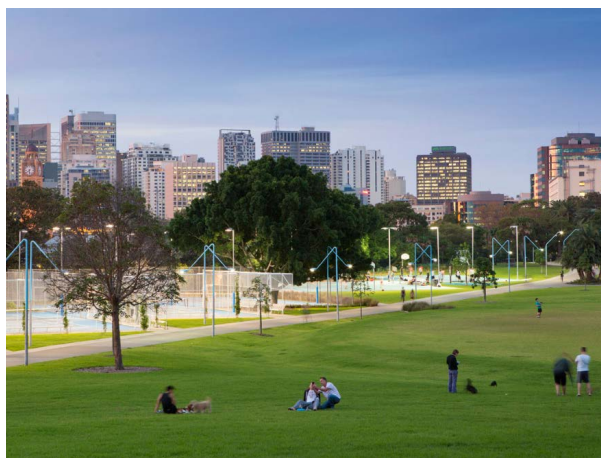
Discussions were also had with the Sue Barnsley, landscape architect, designer for Prince Alfred Park.

Consultation took place on the following dates:

- 14th March 2017;
- 28th March 2017;
- April 2017;
- 10th April 2017; and the
- 26th April 2017.

An important part of the discussion was how the new school and the proposed landscape design could connect to, and integrate with, the materiality and character of the existing park.

The design team received feedback from Council and Sue Barnsley through this process. This feedback indicated a general support in principle for the proposed park interface design.



Prince Alfred Park

