NORTHROP

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8th February 2018

RE: St Joseph's College Hunters Hill

Mark St Hunters Hill NSW 2110

Sports Court Project (SCP)

SSDA 8970 Structural Report

In accordance with the Secretary's Environmental Assessment Act (SEARS) we provide an overview of the proposed structural system.

1 PROJECT DESCRIPTION

1.1 Demolition of the following existing buildings (which are not heritage significant) near the intersection of Luke Street and Gladesville Road:

(a) Visual Arts Centre
(b) Healy Gym and Maintenance Workshop
(c) Outdoor sports courts
(d) Workshop/storage and shed.

1.2 Construction of the Sports Courts Project (**SCP**) comprising the following facilities:

1.2.1 Lower Ground Floor: New car parking, maintenance workshops, storage, offices, amenities etc. A net increase of 55 car parking spaces is proposed (85 new spaces to be provided in the SCP basement less 30 at grade spaces to be removed)

1.2.2 Ground floor: Three indoor sports courts, amenities, kitchen and entry lobbies

1.2.3 First Floor: Void over sports courts, tiered seating (148 seats), staff facilities, two general learning areas and foyer

1.2.4 Driveway entry to the SCP (no new vehicular cross overs), landscape upgrade and tree removal/replacement.

1.3 Prefabricated buildings in the north-western corner of the site near the intersection of Mary Street with proposed works comprising:

(e) Temporary relocation of the existing chapel statue
(f) Installation of prefabricated buildings and Mark Street to accommodate the Healy Gym.

1.4 Use of the completed works as an educational establishment.

1.5 Staging which would facilitate completion of the SCP in up to two stages (noting that the entire project may be completed in one stage).

2 PROPOSED STRUCTURE

2.1 Foundations, basement walls and slabs at basement level.

Columns will be supported on bored piers founded on rock. Perimeter retaining walls will be intermittent reinforced bored piers with reinforced shotcrete walls between piers. Slabs at basement level will generally be slabs on cut ground with some suspended work at the south end due to a storm water detention basin being located under the basement slab.

2.1 Suspended slabs

Suspended slabs will be post tensioned slab/ band construction supported off reinforced concrete columns.

2.2 Roof Structure

The primary roof structure is composed of steel trusses running east west supporting steel purlins. There is an open plant room on the roof.

2.3 Fire Rating of structure

The structure will be designed to the Building Code of Australia, Type A Construction appropriate to the building's classification.

3 GEOTECHNICAL REPORTS

A geotechnical report has been carried out and are attached separately.

4 STRUCTURAL DESIGN

The proposed structure will be designed in accordance with the relevant Australian Standards and be structurally adequate to support the required loads imposed for the building as detailed on the architectural drawings by TKD Architects.

Prepared by

Northrop Consulting Engineers P/L

Philip O'Hara BE CIVIL

Principal