



REVIEW OF ENVIRONMENTAL FACTORS FOR ADMINISTRATION AND STORAGE BUILDING AT ARNDELL ANGLICAN COLLEGE



Prepared for
**The Anglican School Corporation and
Arndell Anglican College**

By
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August 2018

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SIGNED CERTIFICATION

This Review of Environmental Factors (REF) has been prepared in accordance with the NSW Code of Practice for Part 5 Activities for registered non-government schools dated August 2017.

Environmental Assessment prepared by:

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Master of Urban and Regional Planning (Sydney University)
Registered Planner (Planning Institute of Australia)

Address: Ingham Planning Pty Ltd
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On behalf of: Anglican Schools Corporation

Applicant and Land Details

Applicant: Anglican Schools Corporation

Applicant Address: c/- Ingham Planning Pty Ltd
19/303 Pacific Highway
Lindfield NSW 2070

Land to be developed: Lot 8 Sec 11 DP 978855, 132 Wolseley Road OAKVILLE
known as Arndell Anglican College

Project: Single Storey Administration/Storage Facility Building

Declaration

I certify that that I have prepared the contents of this REF and, to the best of my knowledge, it is in accordance with the Code approved under Clause 244N of the Environmental Planning and Assessment Regulation 2000, and the information it contains is neither false nor misleading.

Name:



David Winley MURP (Syd) RPIA
Director



Date: 14th August 2018

1. INTRODUCTION

1.1 Background

This Review of Environmental Factors (REF) has been prepared by Ingham Planning Pty Ltd on behalf of The Anglican Schools Corporation for the proposed activity being the construction of a new single storey administration and storage facility building at Arndell Anglican College. The proposed activity is described in detail in Section 2 and illustrated in the detailed drawings attached as **Appendix A**.

This report examines the characteristics of the subject property, the nature of the surrounding locality, the zoning of the property and details of the proposed school building. The report then provides a review of the environmental factors of the proposal in terms of impacts of the activity, the zoning of the land and consideration of environmental matters relevant to the activity as required by Part 5 of the Environmental Planning and Assessment Act 1979 (as amended).

1.2 Proponent

The proponent of the proposed works is the Anglican Schools Corporation who governs the operation of Arndell Anglican College.

1.3 Determining Authority

Under the provisions of the EP&A Act and Regulations and the Education SEPP, registered non-government schools are deemed to be a “determining authority” for Part 5 “*development without consent*” within the boundaries of an existing school.

Arndell Anglican College is a registered non-government school (RNS) within the meaning of the Education Act 1990. The Anglican Schools Corporation governs the operation the school. Therefore, for the purposes of the proposed activity, TASC is the determining authority.

1.4 Purpose of the Report

The purpose of this REF is to assist ASC to fulfil its obligations as a determining authority for the proposed activity in accordance with Part 5 of the EP& A Act and the NSW Code of Practice for Part 5 Activities for registered non-government schools dated August 2017.

2. PROPOSED ACTIVITY

2.1 Summary of Activity

The proposed activity is for the construction of a single storey administration and storage building within the existing school property adjacent to the school administration facilities and carpark area. The proposed activity is described in detail in Section 2.3 and illustrated in the detailed drawings attached as **Appendix A**.

2.2 Location of Proposed Activity

The subject property is known as Arndell Anglican College at Wolseley Road, Oakville. (see **Figure 1 - Location** and **Figure 2 – Surrounding Land Uses**).

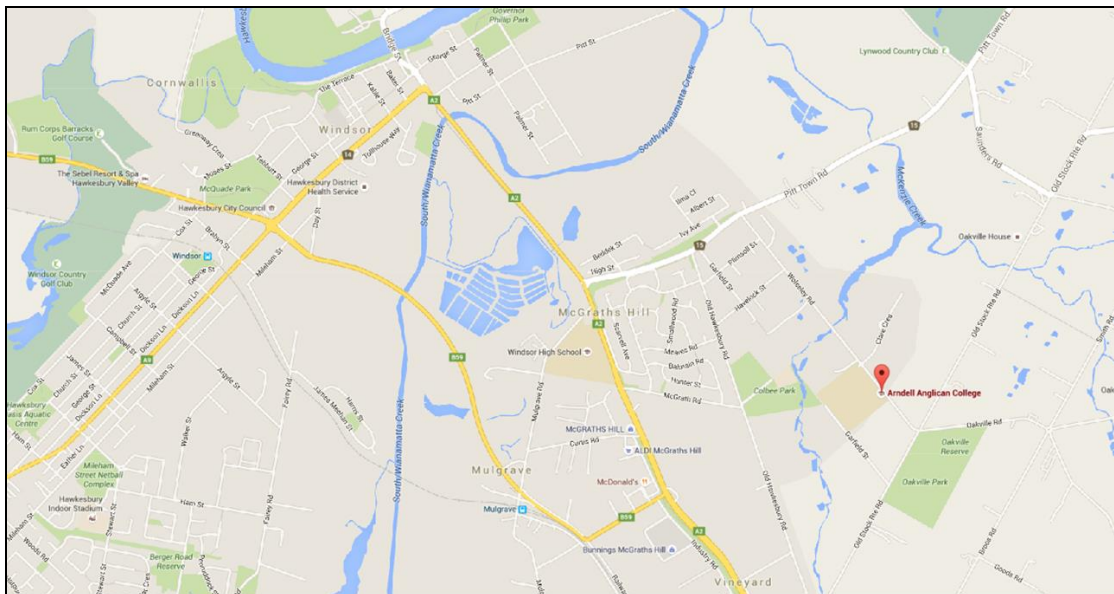


Figure 1 - Location

Arndell Anglican College is located approximately 1km to the east of Windsor Road between the centres of Vineyard and McGraths Hill.

The Arndell Anglican College comprising Junior and Senior School campus is the dominant land use within the Wolseley Road streetscape.

Arndell Anglican College comprising an early childhood centre, primary and secondary classroom modules, library, multi-purpose hall, sports courts and facilities, playing fields and carparking areas.

The Anglican Schools Corporation also owns the adjoining lot known as 132 Wolseley Road, Oakville (shown yellow below) which has been approved for educational use associated with the existing school.

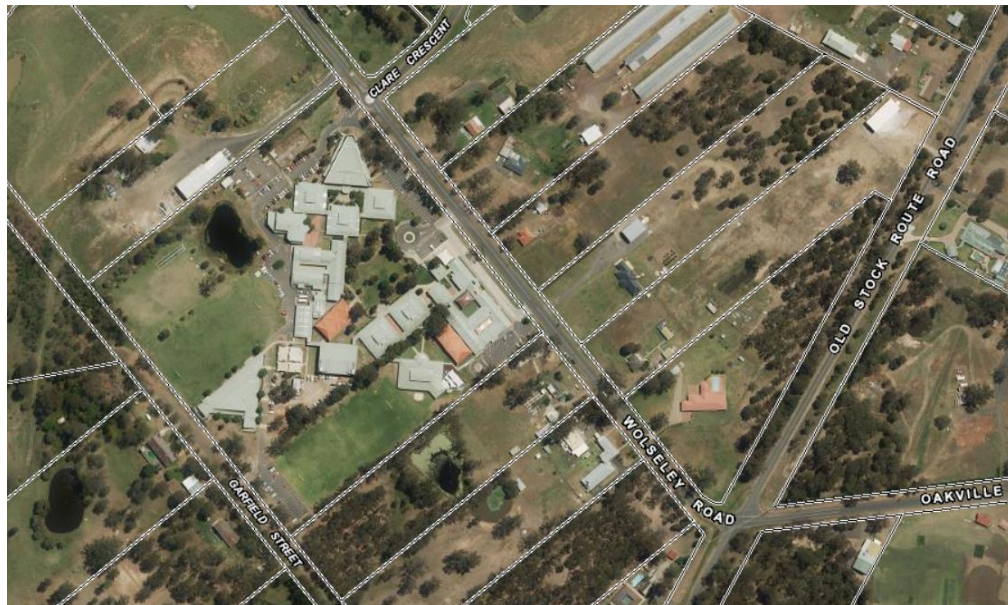


Figure 2 – Surrounding Land Uses

The site is adjoined by surrounding land uses comprising generally residential and rural/agricultural properties comprising single storey cottages and rural outbuildings (see **Figure 2 – Surrounding Land Uses**) A sealed driveway to a large industrial shed extends along the boundary of the adjoining property to the north. Residential premises on adjoining rural properties are well setback on the opposite side of Wolseley Road

The location of the proposed works on the subject site is within a cleared area on site that lies adjacent to the existing school administration building and carpark area.

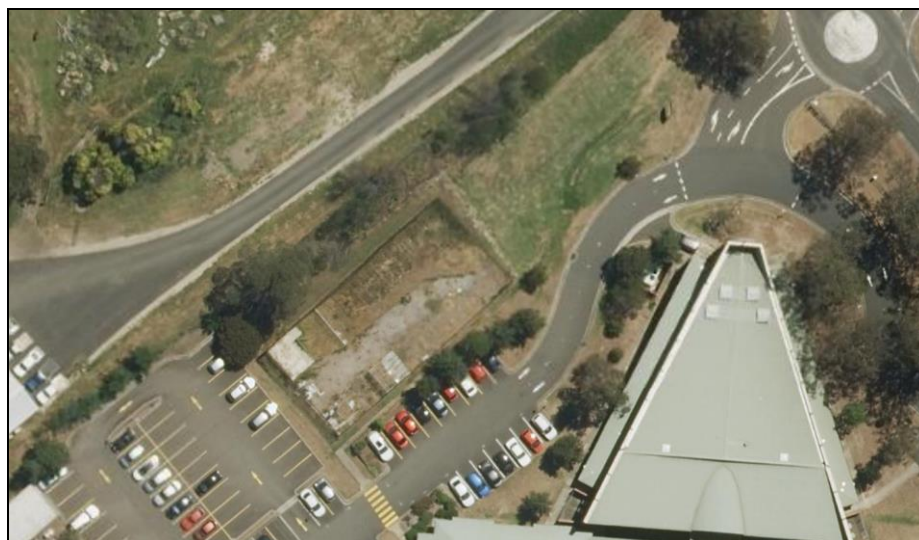


Figure 3 – Location of Proposed Works

2.3 Description of the Activity

The proposed activity is for the construction of a single storey administration and storage facility building within the existing school property adjacent to the school administration facilities and carpark area.

The proposed works are illustrated in the detailed drawings attached as **Appendix A**.

The single storey building is setback over 10 metres from the northern boundary of the school site and further from the Wolseley Road boundary.

The works are within a substantially cleared, level and underutilised part of the subject land. There are no trees to be removed and no impact on threatened species or their habitat.

The new building comprises administration and storage facilities for the existing school including staff rooms, uniform facility and change rooms, store room, IT room, kitchen and toilet facilities.

Carpark alterations and linemarking will be undertaken in order to provide driveway access and dedicated maintenance parking for school service vehicles loading and unloading to the storage facility. Upgrade to existing parking area will include an accessible parking space and wheelstops in accordance with the relevant Australian Standards (AS 2890.1-2204)

Personnel

The administration building will accommodate existing staff of the school. There is no additional staff or students proposed with the proposed activity.

Personnel onsite during construction is anticipated to be 6-8 people including Site supervisor, architect and engineering consultants and individual contractors.

Timing

The construction period is intended to commence in August 2018 and extend for a works period of between 26 weeks (weather permitting)

Construction Hours of Operation

Construction activities will adhere to the requirements of the Interim Noise Guidelines (DECC 2009) and the NSW Industrial Noise Policy (EPA, 2000) being

Monday – Friday:	7am – 5pm
Saturday:	8am - 1pm

Plant and Equipment

Construction plant and equipment anticipated to be required include grader, roller, small excavator, bob cat, truck and dog, concrete truck and water cart along with various trade deliveries.

3. PLANNING LEGISLATION

3.1 Education SEPP and Part 5 of the Environmental Planning and Assessment Act 1979.

State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017 (the Education SEPP) gazetted in September 2017 has provisions that are stated as making it easier for child-care providers, schools, TAFEs and universities to build new facilities and improve existing ones by streamlining approval processes to save time and money and deliver greater consistency across NSW.

Clause 36 of the Education SEPP sets out the range of activities that can be undertaken by Government schools and registered non-government schools under the “development without consent” pathway under the Environmental Planning and Assessment Act 1979.

Clause 36(1) states that:

- (1) Development for any of the following purposes may be carried out by or on behalf of a public authority without development consent on land within the boundaries of an existing school:*
- (a) construction, operation or maintenance, more than 5 metres from any property boundary with land in a residential zone and more than 1 metre from any property boundary with land in any other zone, of:*
 - (i) a library or an administration building that is not more than 1 storey high, or*

The proposal comprises a single storey administration building within an existing school that is setback over 10 metres from the closest boundary and includes staff rooms, toilets, kitchen, uniform area and a storage facility. The proposed works do not result in any increase in students beyond what has been previously approved for the school.

Clause 36(2) states that:

- (2) However, subclause (1) applies only to development that:*
- (a) does not require an alteration of traffic arrangements (for example, a new vehicular access point to the school or a change in location of an existing vehicular access point to the school), or*
 - (b) in the case of development referred to in subclause (1) (a)—does not allow for an increase in:*
 - (i) the number of students the school can accommodate, or*
 - (ii) the number of staff employed at the school, that is greater than 10% (compared with the average of each of those numbers for the 12-month period immediately before the commencement of the development).*

The proposed works do not require any new vehicular access point to the school or change the location of any existing vehicular access points. There is no alteration to transport or traffic arrangements associated with the new administration building.

The new administration building provides a new facility for existing administration staff. There is no increase in staff or student numbers associated with the proposed works.

Clause 36(3) states that:

(3) Nothing in this clause authorises the carrying out of development in contravention of any existing condition of the most recent development consent (other than a complying development certificate) that applies to any part of the school, relating to hours of operation, noise, car parking, vehicular movement, traffic generation, loading, waste management, landscaping or student or staff numbers.

The proposed works will not contravene any existing condition of development consent relating to the school site. The new building is in a vacant underutilised location within the existing school grounds and maintains existing hours of operation, noise, car parking, vehicular movement, traffic generation, loading, waste management, landscaping and student and staff numbers as provided for the current school operations under the exiting development consent.

3.2 NSW Code of Practice for Part 5 Activities for Registered Non-government Schools (RNS).

The NSW Code of Practice for Part 5 Activities for Registered Non-government Schools (RNS) is an approved code under Clause 244N of the Environmental Planning and Assessment Regulation 2000. Compliance with the Code is required for and RNS who intends to undertake any activities identified as ‘development without consent’ under the Education SEPP. The assessment process of Section 3 of the Code has been followed in regard to the proposed activity.

In accordance with the NSW Code of Practice for Part 5 activities for Non-government schools, the proposed works are deemed to be Class 1 works which is school development with relatively minor environmental impacts and include the following:

Minor School Development works

Minor School works include minor alterations to school buildings and structures; internal works; fitouts; accessibility works; restoration, replacement and repair works; and security measures such as fencing. These works still require an REF, however, require a less detailed assessment given the likely minimal environmental impact. Due to their minor nature, these works will not require the same level of consultation than other school development works.

Minor Class 1 works require RNSs to place the REF on their website to make the proposal and relevant parts of the assessment publicly available.

Other School Development works

Other School works include construction, operation or maintenance of school buildings and additions to existing buildings, particularly those that are close to residential boundaries, located within bushfire zones or affecting heritage items.

It is likely that the REF for these developments will require more detailed assessment than for minor developments to determine the likely impacts of the activity and whether suitable conditions are proposed to mitigate any impacts on the environment or surrounding locality.

These works will require consultation as set out in Section 3.3.3 of the Code.

The proposed activity is considered to be Part 5 “development without consent” under the provisions of State Environmental Planning Policy (Educational Establishments and Child Care Centre (the Education SEPP).

It is also noted that under the provisions of Clause 38 of the Education SEPP any amenities building, workshop or storage shed within an existing school that is not more than one storey in height and more than 5 metres from any property boundary with land in a residential zone and more than 1 metre from any property boundary with land in any other zone, can be undertaken as exempt development.

The legislative and environmental triggers identified in the Code have been considered in Section 3.3 and Section 4 of this REF.

The planning principles for schools in the Education SEPP are reproduced in **Appendix B** of the REF and have been used as a reference tool in assessing the proposed activity.

3.2 Hawkesbury Local Environmental Plan 2012

The zoning of the subject land falls under Hawkesbury local environmental planning instrument is the Hawkesbury Local Environmental Plan 2012 (HLEP). The subject site is zoned RU4 Primary Production Small Lots



Figure 3 Zoning

The zoning table of HLEP as it relates to this zone states as follows:

Zone RU4 Primary Production Small Lots**1 Objectives of zone**

- To enable sustainable primary industry and other compatible land uses.
- To encourage and promote diversity and employment opportunities in relation to primary industry enterprises, particularly those that require smaller lots or that are more intensive in nature.
- To minimise conflict between land uses within this zone and land uses within adjoining zones.
- To ensure that development occurs in a way that does not have a significant adverse effect on water catchments, including surface and groundwater quality and flows, land surface conditions and important ecosystems such as waterways.

2 Permitted without consent

Bed and breakfast accommodation; Environmental protection works; Extensive agriculture; Home occupations

3 Permitted with consent

*Animal boarding or training establishments; Boarding houses; Boat sheds; Building identification signs; Business identification signs; Camping grounds; Caravan parks; Cemeteries; Charter and tourism boating facilities; Child care centres; Community facilities; Dual occupancies (attached); Dwelling houses; **Educational establishments**; Entertainment facilities; Environmental facilities; Farm buildings; Flood mitigation works; Food and drink premises; Home-based child care; Home industries; Intensive livestock agriculture; Intensive plant agriculture; Jetties; Landscaping material supplies; Moorings; Places of public worship; Plant nurseries; Public administration buildings; Recreation areas; Recreation facilities (indoor); Recreation facilities (outdoor); Registered clubs; Respite day care centres; Roads; Roadside stalls; Rural supplies; Rural workers' dwellings; Tourist and visitor accommodation; Veterinary hospitals; Water recreation structures; Water storage facilities*

4 Prohibited

Any development not specified in item 2 or 3

The proposed administration and storage facility for the existing school is permissible within the zone and consistent with the character of development on the site. The activity will allow for the orderly and efficient use of land that is compatible with the existing land use within the locality.

3.3 Other Statutory and Planning Approval Requirements

Appendix C outlines the statutory and planning approval requirements of the activity and outlines the legislation that may be applicable to the development.

The proposed activity is not likely to have a significant impact of matters of National Environmental Significance (NES) or Commonwealth land, and therefore does not require a referral under the Commonwealth EPBC Act.

The proposed activity is not likely to significantly affect the environment or threatened species, populations or ecological communities, or their habitats. No Species Impact Statement is required.

Section 100B (3) of the [Rural Fires Act 1997](#) requires a person to obtain a bush fire safety authority under that Act before developing bush fire prone land for a special fire protection purpose such as a school.

4. REVIEW OF ENVIRONMENTAL FACTORS

4.1 Impacts of the Activity

In terms of the assessment of environmental impact of the proposed works, when assessing a Part 5 activity, a registered non-government school must fulfil its duty under Section 111, 112 of the EP& A Act and 228 of the Environmental Planning and Assessment Regulation 2000.

[Section 111\(1\) of the EP&A Act](#)

Section 111(1) of the EP& A Act requires that for the purpose of attaining the objects of this Act relating to the protection and enhancement of the environment, a determining authority in its consideration of an activity shall, examine and take into account to the fullest extent possible all matters affecting or likely to affect the environment by reason of the proposed activity. These matters have been considered in **Appendix D**.

It is noted that the regulations also may make provision for an approved code to address the matters referred to in Section 111. This Review of Environmental Factors has been prepared in accordance with the Code approved under Clause 244N of the Environmental Planning and Assessment Regulation 2000.

Section 112 of the EP & A Act provides that where an activity is a prescribed activity or an activity of a prescribed kind or is likely to significantly affect the environment then an environmental impact statement (EIS) is to be prepared. The proposed activity does not trigger any of the above requirements and as such Section 112 provisions do not apply.

[Clause 228\(2\) of the EP&A Regulation](#)

An assessment of various environmental and legislative triggers and the environmental factors provided in Clause 228(2) have been considered in the assessment process with key environmental issues identified in this report.

a. any environmental impact on a community,

Comment: The works will have a temporary impact during construction but minimal environmental impact on the surrounding community overall. It will assist the school community in the ongoing operations of the school.

b. any transformation of a locality,

Comment: The proposal will not significantly transform the locality. It will be a low scale addition to the administration facilities of the existing school.

c. any environmental impact on the ecosystems of the locality,

Comment: The proposal will not have any significant environmental impact on ecosystems.

d. any reduction of the aesthetic, recreational, scientific or other environmental quality or value of a locality,

Comment: The proposal will maintain the aesthetic quality of the educational establishment in the locality. There will be not reduction in the recreational, scientific or other environmental quality or value of the locality.

- e. *any effect on a locality, place or building having aesthetic, anthropological, archaeological, architectural, cultural, historical, scientific or social significance or other special value for present or future generations,*

Comment: No significant impact

- f. *any impact on the habitat of protected fauna (within the meaning of the National Parks and Wildlife Act (1974),*

Comment: No impact

- g. *any endangering of any species of animal, plant or other form of life, whether living on land, in water or in the air,*

Comment: No impact

- h. *any long-term effects on the environment,*

Comment: No long term effect

- i. *any degradation of the quality of the environment,*

Comment: The proposal will have minor impact during construction but will not degrade the quality of the environment

- j. *any risk to the safety of the environment,*

Comment: The proposal will operate as part of the existing school environment. Minor temporary risk to safety during construction that will be addressed in Construction Environmental Management Plan.

- k. *any reduction in the range of beneficial uses of the environment,*

Comment: No reduction in beneficial uses of the environment. The proposal provides a positive use of underutilised land within the existing school site.

- l. *any pollution of the environment,*

Comment: Minimal pollution during construction period. The proposal will not create any significant pollution to the environment

- m. *any environmental problems associated with the disposal of waste,*

Comment: Nil expected. Waste management will be undertaken in accordance with existing school waste operations. Construction waste will be dealt with in accordance with a Construction Environmental Management Plan.

- n. *any increased demands on resources (natural or otherwise) that are, or are likely to become, in short supply,*

Comment: The proposal will not create any significant demand of resources in short supply

- o. *any cumulative environmental effect with other existing or likely future activities,*

Comment: There is no significant cumulative effect on existing or likely future activities. The proposal provides efficient use of existing school land for administration purposes.

- p. *any impact on coastal processes and coastal hazards, including those under projected climate change conditions.*

Comment: No impact on coastal processes or hazards.

4.2 Other Environmental Considerations

A Section 149 Certificate has been provided by the project co-ordinator for Lot 1 DP 1044182 known as Arndell Anglican College, 104 Wolseley Road, Oakville it is noted that the part of the school land is affected by bushfire prone land and part of the school land is flood affected. The flood liable land policy provisions of Hawkesbury City Council will need to be considered and the NSW Rural Fire Service consulted in order to obtain a bushfire safety authority for the project. These matters are discussed in the following sections of this report.

4.2.1 Bushfire Prone Land

The extract from the Hawkesbury City Council - Bushfire Prone Land Map dated December 2016 shows that the subject site is clear of Class 1, 2 or 3 vegetation under the Rural Fire Service mapping but has an element of bushfire “Vegetation Buffer” area in the southern portion of the site and along the property boundaries.

The “development without consent” provisions of Clause 36 of the Education SEPP comprise a note stating as follows:

Note. Section 100B (3) of the [Rural Fires Act 1997](#) requires a person to obtain a bush fire safety authority under that Act before developing bush fire prone land for a special fire protection purpose such as a school.

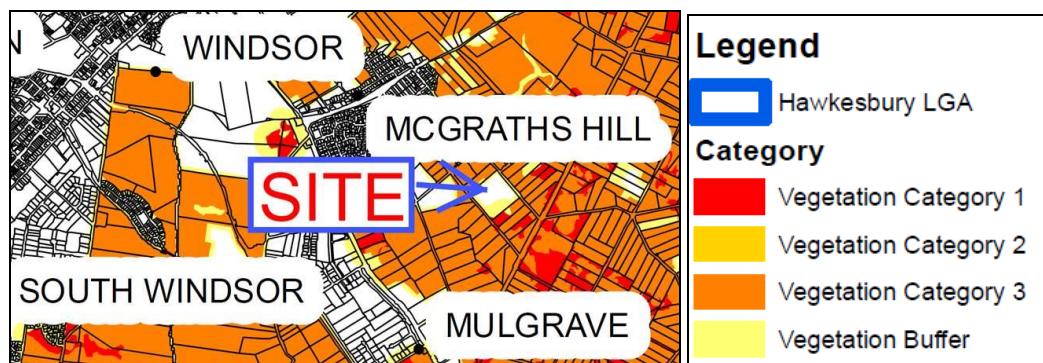


Figure 4 – Bushfire Prone Land (Source: Hawkesbury Bushfire Prone Land Map Dec 2016)

A Bushfire Assessment of the proposed single storey building on the school site has been prepared by a bushfire consultant and consultation with the Rural Fire Service has also been undertaken. The Bushfire Assessment is attached as **Appendix E1** and the Bushfire Safety Authority for the proposed works obtained from the Rural Fire Service is attached as **Appendix E2**.

The works associated with the proposed activity will be implemented in accordance with the findings and recommendation of the Bushfire Assessment and Bushfire Safety Authority obtained for the Rural Fire Service.

4.2.2 Flood Prone Land

The existing school property is affected by flood prone land. Indeed from review of the Hawkesbury City Council flood mapping of approximate flood extents of the Hawkesbury River (see **Figure 5 – Hawkesbury Flood Liable Land**), it would seem as though effectively the whole of McGraths Hill and most of Oakville is flood affected land.

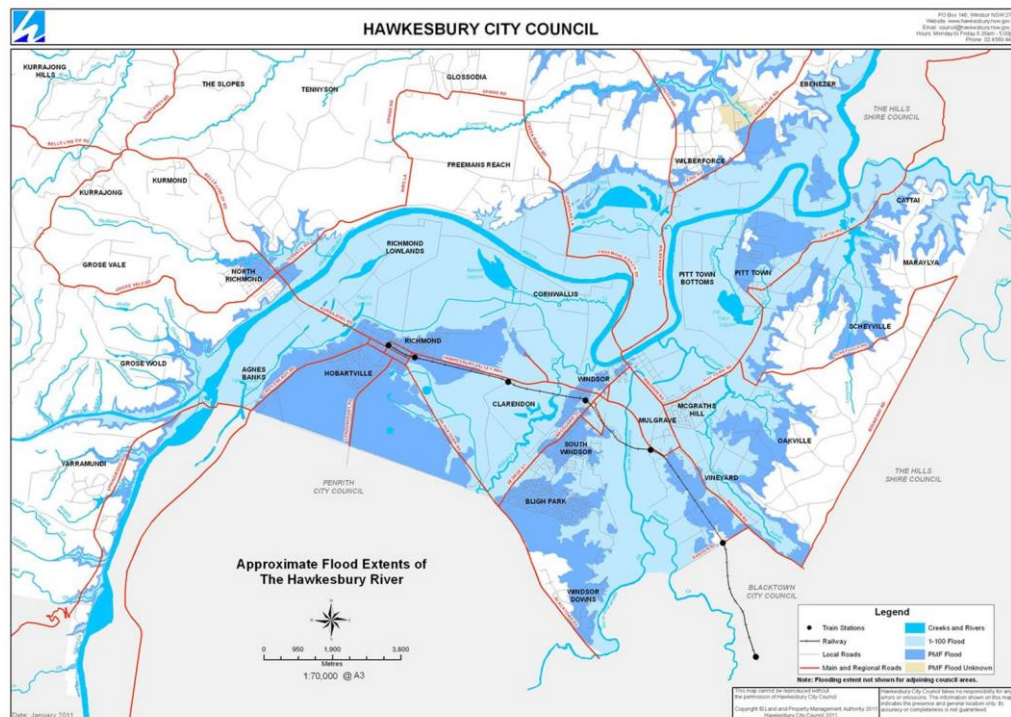


Figure 5 – Hawkesbury Flood Liable Land

Taylor Thompson Whitting (TTW) has been engaged to undertake a flood impact assessment for the proposed administration building at Arndell Anglican College (see **Appendix F**).

The proposed administration building is located on flood prone land and must therefore comply with Clause 6.3 of the Hawkesbury Local Environmental Plan 2012 (LEP) and Hawkesbury Development of Flood Liable Land Policy 2012.

The Hawkesbury Development of Flood Liable Land Policy states that:

3.0 POLICY STATEMENT

The following matters are to be applied when assessing an application on flood affected land or to which Clause 6.3 – Flood Planning, of the Hawkesbury Local Environmental Plan 2012 applies.

1. A building shall not be erected on any land lying at a level lower than 3 metres below the 1:100 ARI (average recurrent interval) flood event level for the area in which the land is situated, except as provided by subclauses (3) and (5).
2. Each habitable room in a building situated on any land to which this Policy applies shall have a floor level no lower than the 1:100 ARI (average recurrent interval) flood event level for the area in which the land is located.

Flood advice has been obtained for the subject property from Hawkesbury City Council which states that the adopted flood planning level for the site AEP RL 17.3AHD.

The Flood Impact Assessment prepared by TTW states that:

The proposed single storey building has an existing ground level of 15.80m at the north corner, which rises to approximately 17.43m at the top of kerb of the existing car park to the south of the building corner. The finished floor level will be set at a minimum of 17.30m and will require retaining walls to allow for the level difference (refer to figure 5).

The proposed building floor will be at or above the flood planning level of 17.30m and flood compatible materials will not be required. However the structural walls and building components below this level will be constructed with flood compatible materials and designed for exposure to the forces due to floodwater, debris and buoyancy up to the flood planning level.

For flood events greater than the 1% AEP, egress from the building can be made to the south towards the natural raised ridge which has an existing ground level of 20.00m. This ridge rises to 21.00m at Wolseley Road and provides a safe egress route off site.

4.2.3 Other matters

The impact of the activity on the surrounding natural and built environment will be minimal. It is considered that the proposed school building will sit comfortably within the grounds of the subject property and will provide an overall appearance that is consistent with and complements the character of the locality.

Environmental Protection

- ❖ No significant filling of land is required as a result of this development.
- ❖ Existing site characteristics will be maintained.
- ❖ The proposal does not involve the removal of any existing trees.
- ❖ The site has no heritage significance
- ❖ The proposal will not give rise to any form of pollution.
- ❖ The proposal will not be affected by traffic noise.

Services

- ❖ The site is already serviced by water, electricity, telephone, gas and connected to sewerage.

Special Considerations

- ❖ The proposal will create no overshadowing of surrounding residential property.
- ❖ The proposal does not result in an increase in students or staff.
- ❖ The proposal is not a traffic generating development.

4.2.4 Public Consultation

In accordance with the provisions of the Education and NSW Code of Practice for Part 5 Activities for Non-government schools prepared by NSW Planning & Environment, the Anglican Schools Corporation undertook public consultation in the form of writing to with relevant Government agencies (ie. Rural Fire Service), the Local Council (ie.

Hawkesbury City Council) and the owners of neighbouring properties to the school including a description of the works and copy of the proposed plan. Submissions were invited during a period of 21 business days between 5th June and 4th July 2018.

One submission was received from Hawkesbury City Council dated 20 July 2018 stating as follows:

The proposed development is located on land that is a 'flood control lot' whereby the predicted 1 in 100 year ARI flood event for this site is 17.3m AHD whilst the (probable maximum flood) PMF level is 26.5m AHD.

For land that is characterised as a flood control lot Council would require that the ground floor level of the building be located at a level at or above the predicted 1 in 100 year flood level of 17.3m AHD. In addition, a flood emergency management plan be established and implemented so as to promote a satisfactory awareness of expected flood behaviour and risks, identify measures to become flood prepared, and recommend a course of action during and after flood events.

The proposed development is also situated on bush fire prone land, being classified as 'Vegetation Buffer' on the Bushfire Prone Land Map prepared by the NSW Rural Fire Service. Any development identified on bush fire prone land needs to take consideration to Planning for Bush Fire Protection, 2006, prepared by the NSW Rural Fire Service.

The matters relating to flooding and bush fire prone land have been assessed in this REF and mitigation measures proposed in accordance with technical consultant input and bush fire safety authority issued by the RFS provided in the Appendices to the report.

In accordance with the NSW Code of Practice for Part 5 Activities for Non-government the registered non-government school (RNS) will notify Hawkesbury Council of its intention to proceed with the development and when commencement of works will start on the school land.

The Decision Statement made by the RNS for the proposed activity will also be made available on the RNS's website prior to the commencement of the activity.

5. MITIGATION MEASURES AND IMPLEMENTATION

Following review of the environmental issues and impacts on the locality, this section of the REF provides details an overview of the potential environmental impacts during the construction and operational phase of the works and mitigation measures **Recommended** for the proposed activity. These matters are provided in a table in **Appendix G – Mitigation Measures**.

The significance criteria for impacts is described below:

- *Adverse Impact* - Impact is a major problem. The impacts of the project are likely to be important considerations due to extensive disturbance resulting in adverse environmental impacts. These impacts are of concern to the project, as it is expected that there will be permanent changes to the local topography. Depending upon the relative importance attached to the issue during the decision- making process, mitigation measures and detailed design work will not remove the impacts upon the affected project infrastructure. Residual impacts would predominate.

- *Moderate Impact* - Impact is considered to be moderate. The impacts within the project area are likely to result in significant changes to features of the local environment. These impacts represent issues where adverse outcomes would be experienced but mitigation measures and detailed design work can ameliorate some of the consequences upon affected infrastructure. Some residual impacts would still arise.
- *Low Impact* - Impact recognisable but acceptable. These impacts are likely to be important only on a local scale and are unlikely to be of significant importance in the decision-making process. These impacts are generally of relevance for enhancing the subsequent design of the project and in the consideration of mitigation measures.
- *Negligible* - Minimal change. No impacts or those which are beneath levels of perception within normal bounds or variation or within the margin of forecasting error.

In accordance with the implementation procedures outlined in the Code, the mitigation measures include a requirement that building works cannot be commenced unless they have been certified in accordance with the National Construction Code (NCC) by a suitably qualified person demonstrating compliance with the technical provisions of the State's building laws.

It is also a requirement that a Construction Environmental Management Plan (CEMP) will be prepared addressing erosion and sediment control, waste management measures, access routes for construction vehicles, site entry and exit points and the like.

6. CONCLUSION

Having inspected the subject site and the surrounding locality, we are of the opinion that the proposed activity represents an appropriate and positive use of the land.

The proposed activity will not significantly affect the environment or threatened species, populations or ecological communities, or their habitats. The proposal does not require the preparation of an Environmental Impact Statement or a Species Impact Statement.

The proposed activity is not likely to have a significant impact of matters of National Environmental Significance (NES) or Commonwealth land, and therefore does not require a referral under the Commonwealth EPBC Act.

The proposed activity will result in the further development of a quality educational establishment with minimal impact on the amenity of adjoining properties and the existing character of the area. The works are considered appropriate following this review of environmental factors.

APPENDIX A

Reduced Set of Drawings



The
Anglican
Schools
Corporation

CAPITAL WORKS AND ASSET MANAGEMENT

LEVEL 3 8 WOODVILLE STREET, HURSTVILLE NSW 2220
P.O BOX 465, HURSTVILLE BC NSW 1481
ABN 63 544 529 806

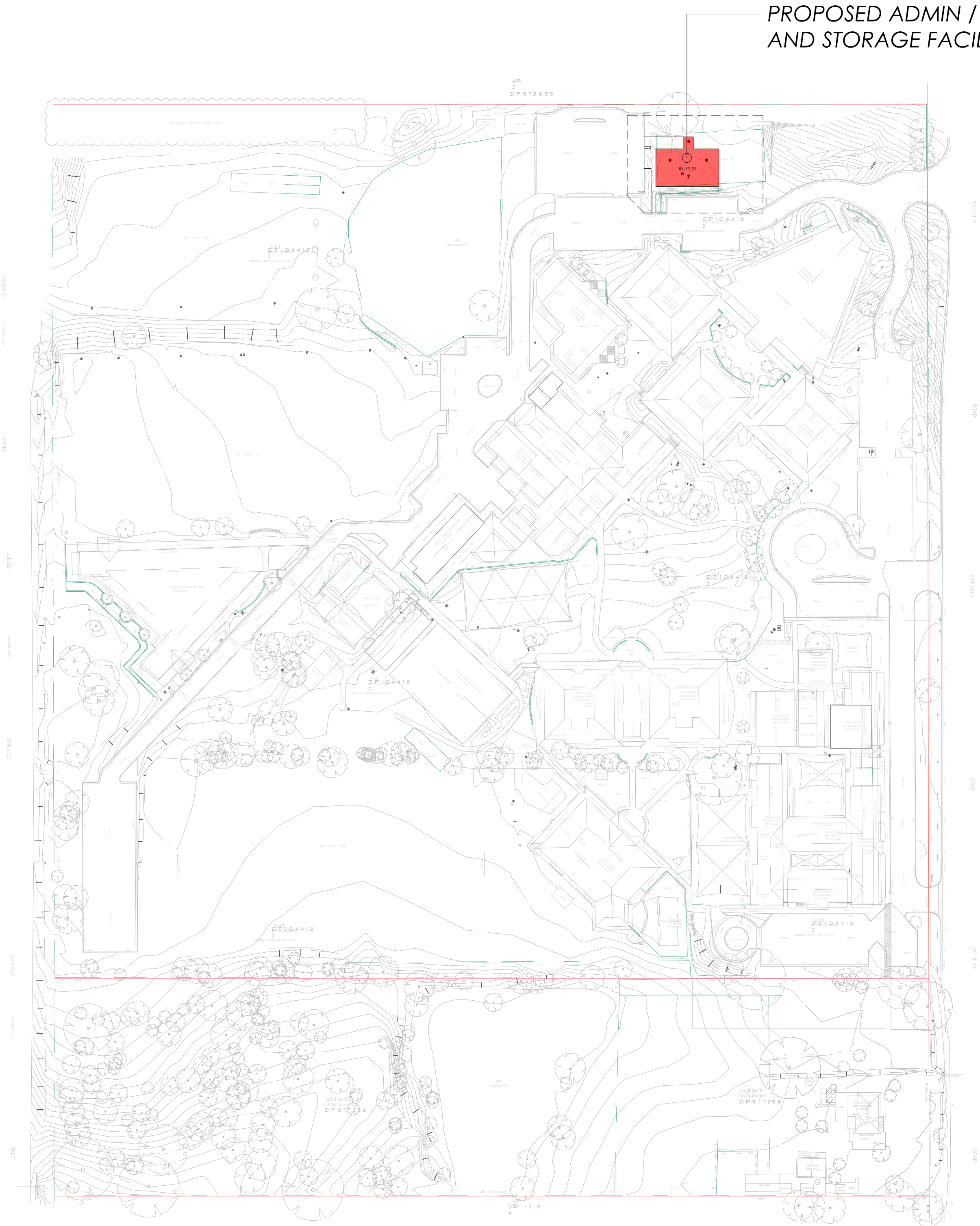
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PRINCIPAL CONSULTANT
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T: 02 9525 5588 F: 02 9525 0111 E: info@rossmark.com.au

NOTES:
- ALL DIMENSIONS ARE TO BE VERIFIED ON SITE BY THE BUILDER BEFORE COMMENCING WORK
- ALL WORKS MUST COMPLY WITH RELEVANT AUSTRALIAN BUILDING CODES AND AUSTRALIAN STANDARDS
- FINISHED FLOOR LEVEL REFERS TO INTERNAL FINISHED CONCRETE LEVEL
- WRITTEN DIMENSIONS TAKE PRECEDENCE TO SCALE

PROPOSED ADMIN / UNIFORM AND MAINTENANCE STORAGE FACILITY				STATUS		PRE - CONSTRUCTION ISSUE REVIEW	
ISSUE				DESCRIPTION		PROPOSED ADMIN / UNIFORM AND MAINTENANCE STORAGE FACILITY	
C				ISSUED FOR TENDER		25/05/18	
D				ADDENDUM TO TENDER ISSUE		31/05/18	
E				AMENDMENTS TO BCA COMMENTS		14/06/18	
F				PRE-CONSTRUCTION ISSUE		02/07/18	
G				PRE - CONSTRUCTION ISSUE REVIEW		08/08/18	
CLIENT				THE ANGLICAN SCHOOLS CORPORATION		DRAWN JS	
ADDRESS				118-124 Wolsley Road, Oakville NSW 2765		DATE 25/05/18	
						SCALE	
						DRAWING No. PWD-000	
						TOTAL SHEETS 13	



PROPOSED ADMIN / UNIFORM FACILITY
AND STORAGE FACILITY

- COMPLIANCE NOTES:
- PORTABLE FIRE EXTINGUISHERS TO COMPLY WITH TABLE E1.6 AND AS2444.2001
 - ALL SERVICES INCLUDING TELSTRA, GAS, POWER, WATER AND STORMWATER MUST BE LOCATED BEFORE WORK COMMENCES
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 - ALL RAMP AND BALUSTRADES TO BE IN COMPLIANCE WITH THE BCA AND AS 1428.1-2009 ACCESS AND MOBILITY REQUIREMENTS
 - CONTRACTOR TO LIAISE WITH NAC TO ENSURE MASTER KEY AND KEY SYSTEM MEETS AND MATCHES EXISTING
 - ALL EXTERNAL AND INTERNAL EXIT DOOR HARDWARE TO COMPLY WITH THE BCA AND AS 1428.1-2009 ACCESS AND MOBILITY REQUIREMENTS

- KEY:
- V VINYL FLOOR COVERING
 - C CARPET TILES
 - REM RECESSED ENTRY MAT
 - FW FLOOR WASTE
 - CF CONCRETE FINISH



UNISEX ACCESSIBLE WC SIGNAGE



EXIT SIGNS
4 WATT COLD CATHODE LONG-LIFE FLUORESCENT 'RUNNING MAN'
LUMINAIRE COMPLETE WITH DIRECTIONAL ARROWS WHERE REQUIRED
AND TO COMPLY WITH AS2293.1-2005

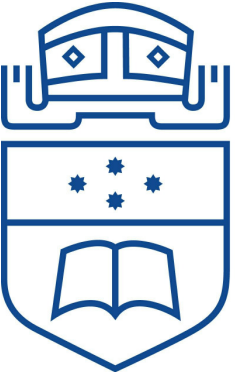
Exit Level G

BRaille EXIT SIGN
TO BE PLACED NEXT TO ALL EMERGENCY EXITS
TO COMPLY WITH AS1428.1-2009



DIRECTIONAL EXIT SIGNS
4 WATT COLD CATHODE LONG-LIFE FLUORESCENT 'RUNNING MAN'
LUMINAIRE COMPLETE WITH DIRECTIONAL ARROWS WHERE REQUIRED
AND TO COMPLY WITH AS2293.1-2005

PROPOSED SITE PLAN



The
Anglican
Schools
Corporation

CAPITAL WORKS AND ASSET MANAGEMENT

LEVEL 3 8 WOODVILLE STREET, HURSTVILLE NSW 2220
P.O BOX 465, HURSTVILLE BC NSW 1481
ABN 63 544 529 806

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ROSSMARK PTY LTD LIC 114562C
11 ERSKINE ROAD CARINGBAH, NSW 2229
T: 02 9525 5588 F: 02 9525 0111 E: info@rossmark.com.au

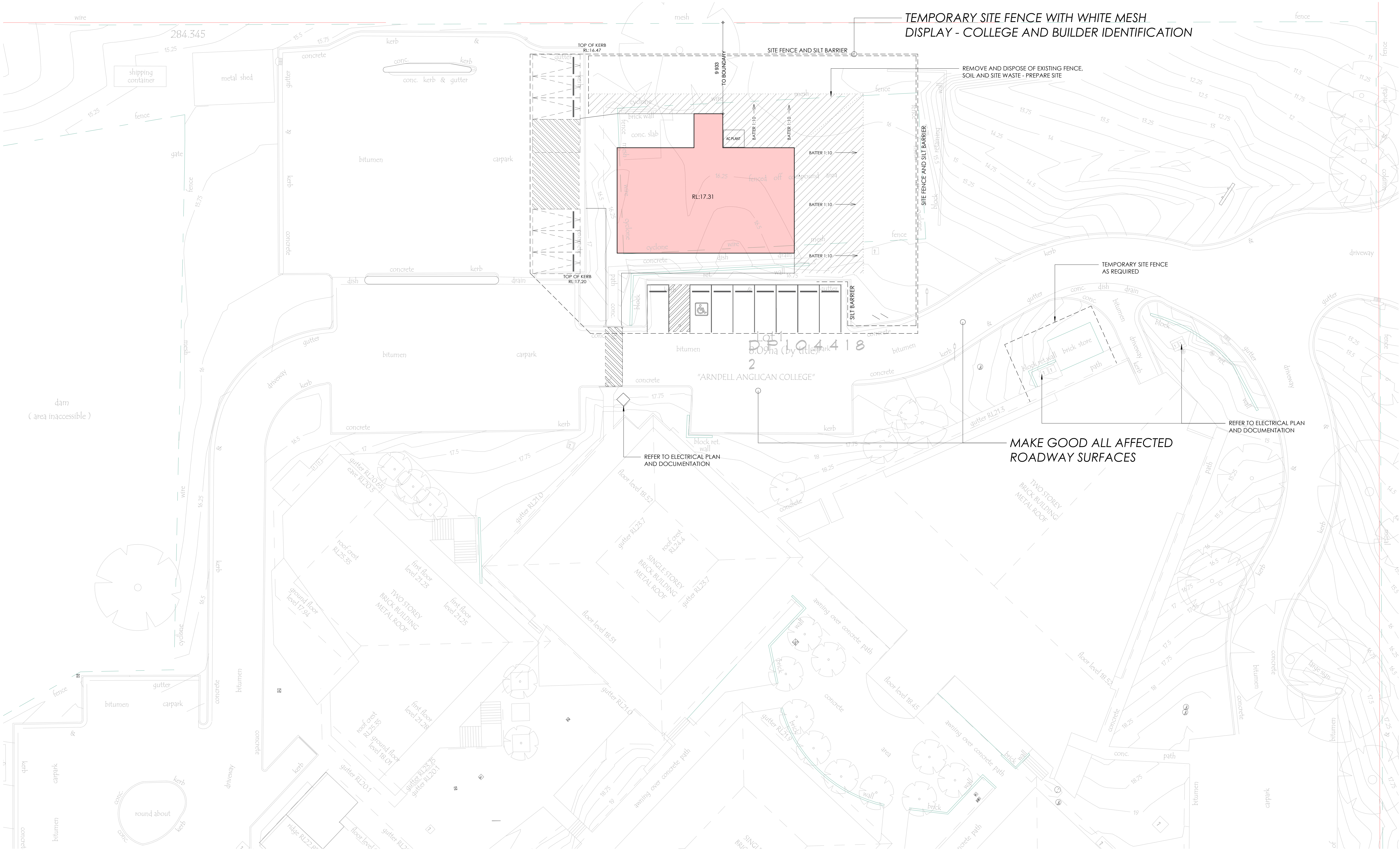
- NOTES:
- ALL DIMENSIONS ARE TO BE VERIFIED ON SITE BY THE BUILDER BEFORE COMMENCING WORK
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 - WRITTEN DIMENSIONS TAKE PRECEDENCE TO SCALE

PROPOSED ADMIN / UNIFORM AND
MAINTENANCE STORAGE FACILITY

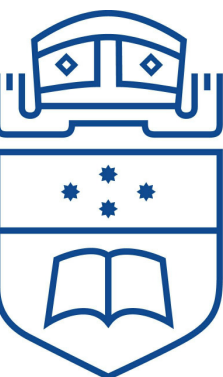
CLIENT
THE ANGLICAN SCHOOLS CORPORATION

ADDRESS
118-124 Wolseley Road, Oakville NSW 2765

ISSUE	DECRPTION	DATE	STATUS			
A	ISSUE FOR CONSULTANTS	19/03/18	DECRPTION	ISSUED FOR TENDER		
B	FINAL REVIEW PRE TENDER	14/05/18		PROPOSED ADMIN / UNIFORM AND MAINTENANCE STORAGE FACILITY		
C	ISSUED FOR TENDER	25/05/18				
D	ADDENDUM TO TENDER ISSUE	31/05/18	DRAWN	JS	DRAWING No.	TOTAL SHEETS
			DATE	25/05/18	TD-00	13
			SCALE	1 : 1000		



PROPOSED LOCAL SITE PLAN



The Anglican Schools Corporation

CAPITAL WORKS AND ASSET MANAGEMENT

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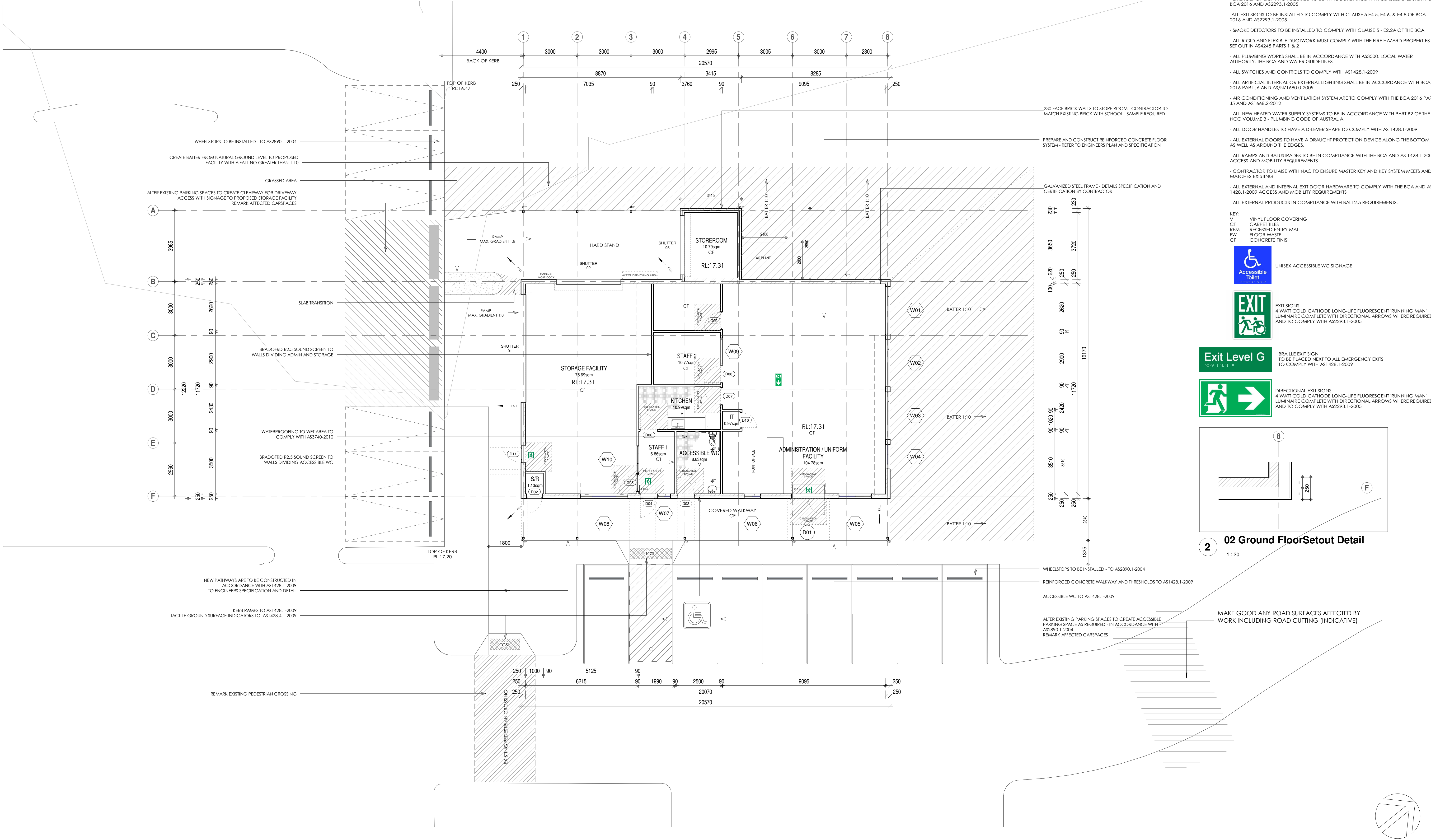
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PROPOSED ADMIN / UNIFORM AND MAINTENANCE STORAGE FACILITY

CLIENT
THE ANGLICAN SCHOOLS CORPORATION

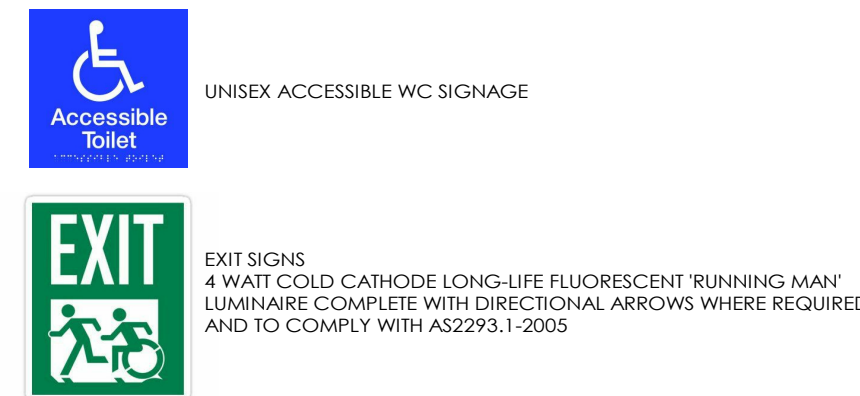
ADDRESS
118-124 Wolsley Road, Oakville NSW 2765

ISSUE	DECRPTION	DATE	STATUS			
C	ISSUED FOR TENDER	25/05/18	DRAWN	PRE - CONSTRUCTION ISSUE REVIEW		
D	ADDENDUM TO TENDER ISSUE	31/05/18		PROPOSED ADMIN / UNIFORM AND MAINTENANCE STORAGE FACILITY		
E	AMENDMENTS TO BCA COMMENTS	14/06/18				
F	PRE-CONSTRUCTION ISSUE	02/07/18	DATE	PWD-01		
G	PRE - CONSTRUCTION ISSUE REVIEW	08/08/18	SCALE			
			1 : 200	TOTAL SHEETS		



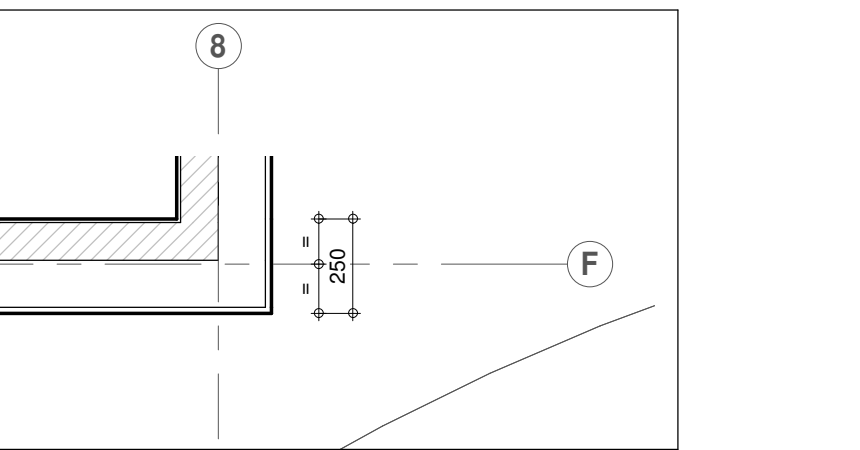
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 - ALL EXTERNAL PRODUCTS IN COMPLIANCE WITH BAL12.5 REQUIREMENTS.

- KEY:
- V VINYL FLOOR COVERING
 - CT CARPET TILES
 - REM RECESSED ENTRY MAT
 - FW FLOOR WASTE
 - CF CONCRETE FINISH



Exit Level G
TO BE PLACED NEXT TO ALL EMERGENCY EXITS
TO COMPLY WITH AS1428.1-2009

DIRECTIONAL EXIT SIGNS
4 WATT COLD CATHODE LONG-LIFE FLUORESCENT 'RUNNING MAN'
LUMINAIRE COMPLETE WITH DIRECTIONAL ARROWS WHERE REQUIRED
AND TO COMPLY WITH AS2293.1-2005



02 Ground Floor Setout Detail
1:20

PROPOSED GROUND FLOOR PLAN

GROSS FLOOR AREA : 246.02m²



The
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Schools
Corporation

CAPITAL WORKS AND ASSET MANAGEMENT

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ABN 63 544 529 806

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LIC 114562C
ABN 63 544 529 806

NOTES:
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PROPOSED ADMIN / UNIFORM AND MAINTENANCE STORAGE FACILITY

CLIENT
THE ANGLICAN SCHOOLS CORPORATION

ADDRESS
118-124 Wolseley Road, Oakville NSW 2765


ISSUE	DECIPTION	DATE	STATUS			
C	ISSUED FOR TENDER	25/05/18	PRE - CONSTRUCTION ISSUE REVIEW			
D	ADDENDUM TO TENDER ISSUE	31/05/18	DRAWN	PROPOSED ADMIN / UNIFORM AND MAINTENANCE STORAGE FACILITY		
E	AMENDMENTS TO BCA COMMENTS	14/06/18				
F	PRE-CONSTRUCTION ISSUE	02/07/18				
G	PRE - CONSTRUCTION ISSUE REVIEW	08/08/18	DATE	25/05/18	PWD-02	13
			SCALE	As indicated		

EXTERNAL COLOUR SCHEME			
APPLICATION	DESCRIPTION	MAKER/BRAND	COLOUR
ROOFING	COLORBOND SHEET METAL ROOFING - CUSTOM ORB	LYSAGHTS - OR SIMILAR	COLORBOND - PALE EUCALYPT
FASCIA/BARGE	18mm FASCIA/BARGE BOARDS	STRAMIT - OR SIMILAR	COLORBOND - PALE EUCALYPT
GUTTERING	150mm HALF FLAT BACK GUTTERS	STRAMIT - OR SIMILAR	COLORBOND - PALE EUCALYPT
DOWN PIPES	100mm ROUND SMOOTH DOWNPIPES	LYSAGHTS - OR SIMILAR	COLORBOND - MANOR READ
BEAMS AND POSTS	STRUCTURAL BEAMS AND POSTS	-	COLORBOND - PALE EUCALYPT
WINDOWS	ALUMINIUM FRAME - POWDER COATED	-	TO MATCH EXISTING COLORBOND - PALE EUCALYPT
GLAZED & EXTERNAL DOORS	ALUMINIUM FRAME - POWDER COATED	-	TO MATCH EXISTING COLORBOND - PALE EUCALYPT
WALL CLADDING	COLORBOND PROFILD SHEET METAL - CUSTOM ORB	LYSAGHTS - OR SIMILAR	COLORBOND - PAPERBARK
BRICKWORK	FACE BRICKWORK	BORIAL BRICK	ESCURA - TO MATCH EXISTING (PROVIDE SAMPLE)
WALL CLADDING	MATRIX F.C SHADOW LINE CLADDING	SCYON	PALE EUCALYPT


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KEY:


- V VINYL FLOOR COVERING
- CT CARPET TILES
- REM RECESSED ENTRY MAT
- FW FLOOR WASTE
- CF CONCRETE FINISH



UNISX ACCESSIBLE WC SIGNAGE




EXIT SIGNS
4 WATT GOLD CATHODE LONG-LIFE FLUORESCENT 'RUNNING MAN' LUMINAIRE COMPLETE WITH DIRECTIONAL ARROWS WHERE REQUIRED AND TO COMPLY WITH AS2293.1-2005

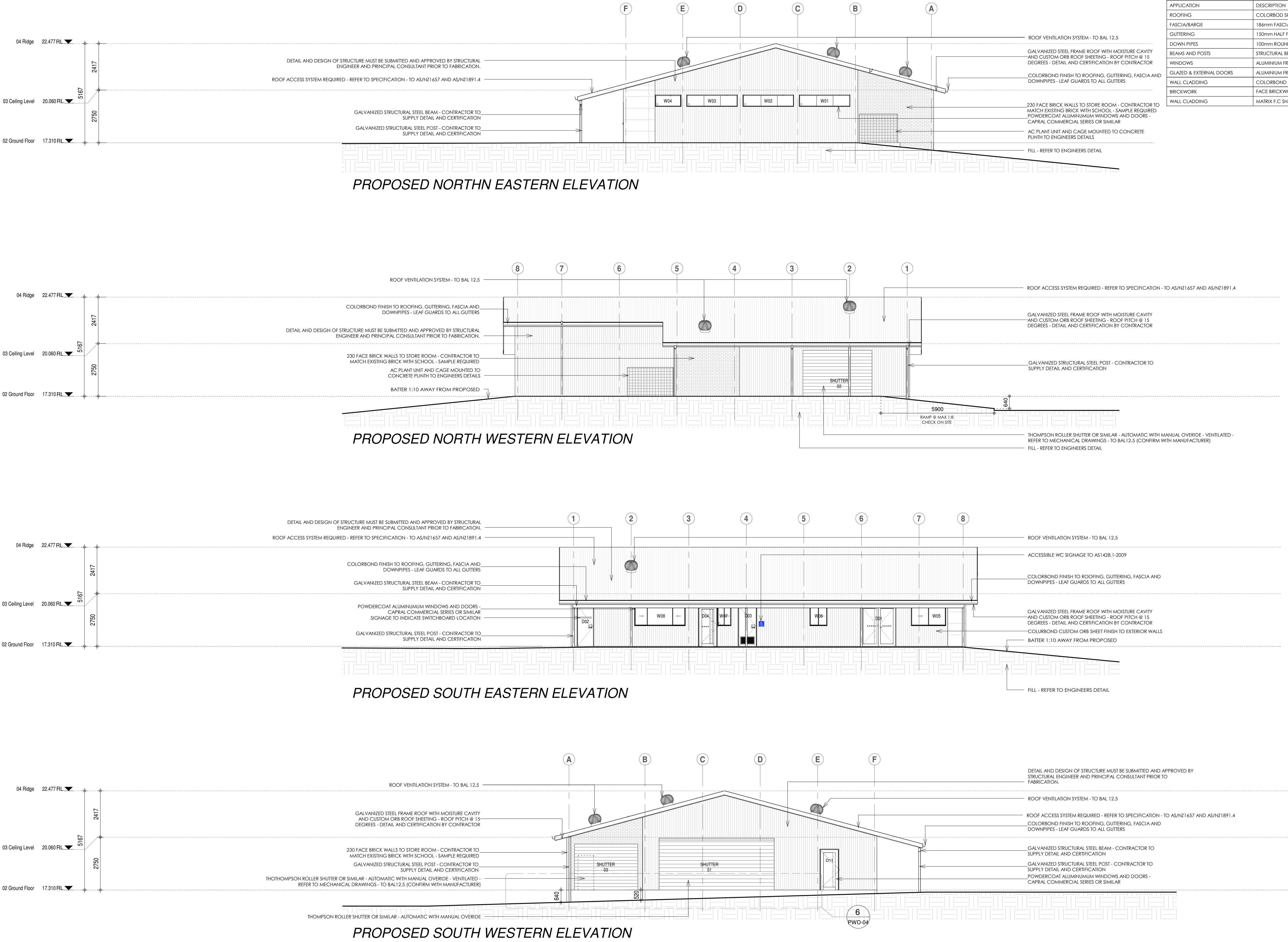


Exit Level G
COMPLY WITH AS 1428.1-2009

BRAILLE EXIT SIGN
TO BE PLACED NEXT TO ALL EMERGENCY EXITS
TO COMPLY WITH AS1428.1-2009



DIRECTIONAL EXIT SIGNS
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PROPOSED EXTERNAL ELEVATIONS



The Anglican Schools Corporation

CAPITAL WORKS AND ASSET MANAGEMENT

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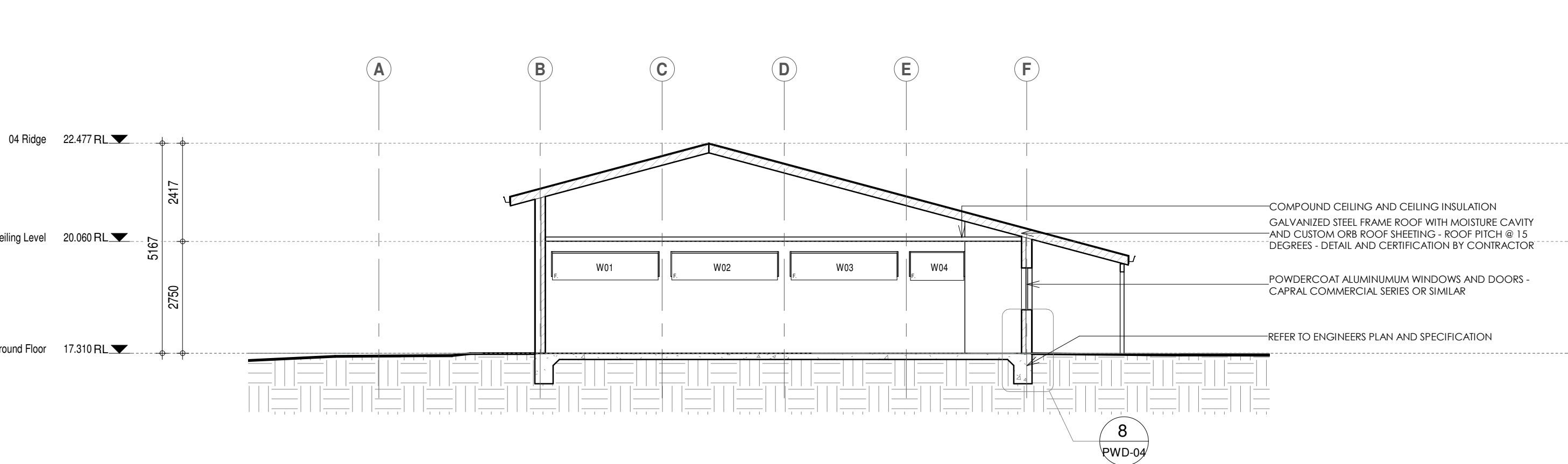
PRINCIPAL CONSULTANT
ROSSMARK PTY LTD LIC 114562C
11 ERSKINE ROAD CARINGBAH, NSW 2229
T: 02 9525 5586 F: 02 9525 0111 E: info@rossmark.com.au

PROPOSED ADMIN / UNIFORM AND MAINTENANCE STORAGE FACILITY

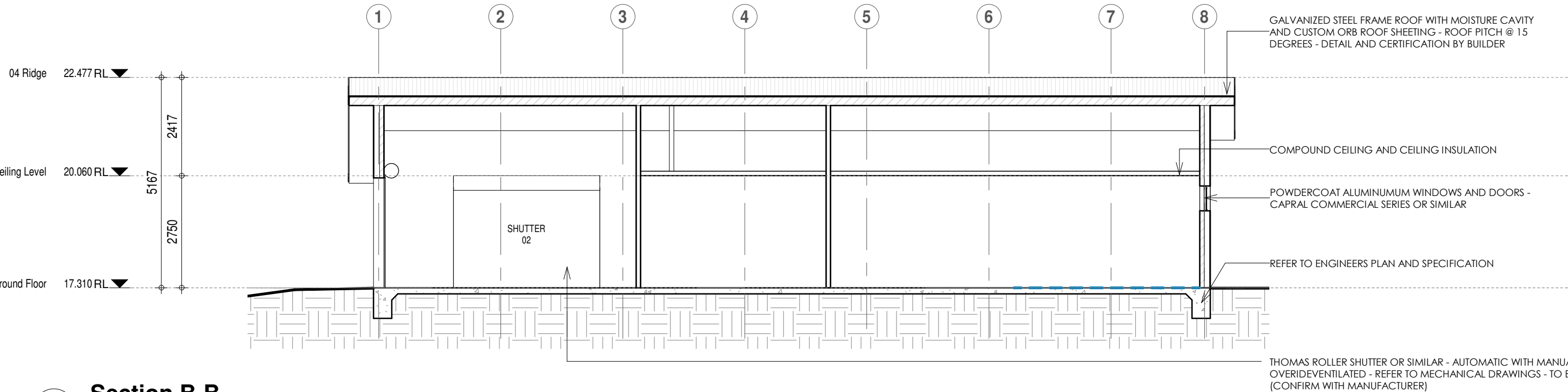
CLIENT
THE ANGLICAN SCHOOLS CORPORATION

ADDRESS
118-124 Wolsley Road, Oakville NSW 2765

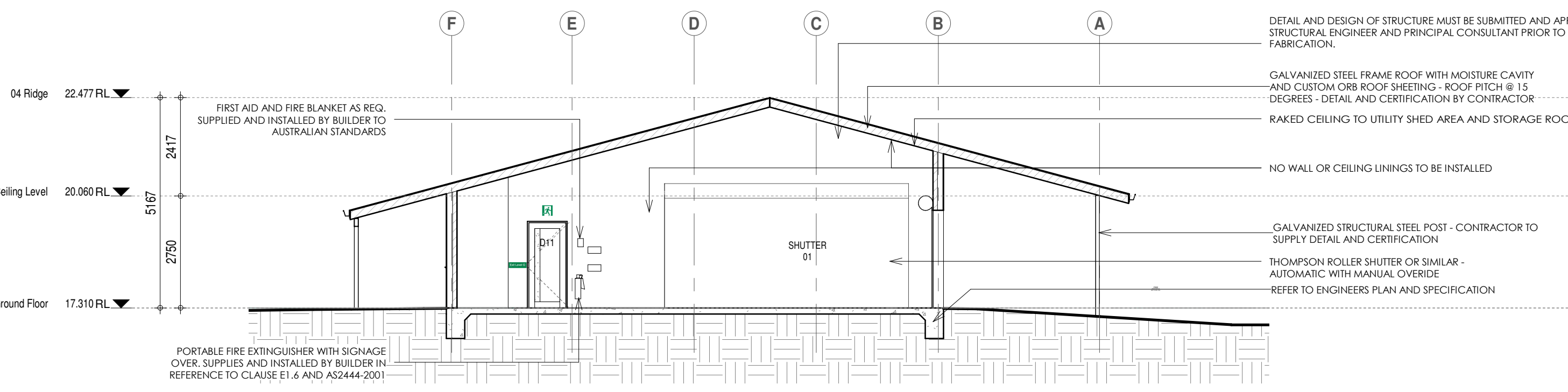
ISSUE	DECRPTION	DATE	STATUS	PRE - CONSTRUCTION ISSUE REVIEW			
C	ISSUED FOR TENDER	25/05/18	DECRPTION	PROPOSED ADMIN / UNIFORM AND MAINTENANCE STORAGE FACILITY			
D	ADDENDUM TO TENDER ISSUE	31/05/18					
E	AMENDMENTS TO BCA COMMENTS	14/06/18					
F	PRE-CONSTRUCTION ISSUE	02/07/18	DATE	25/05/18	PWD-03	DRAWING No.	TOTAL SHEETS
G	PRE - CONSTRUCTION ISSUE REVIEW	08/08/18	SCALE	1 : 100			



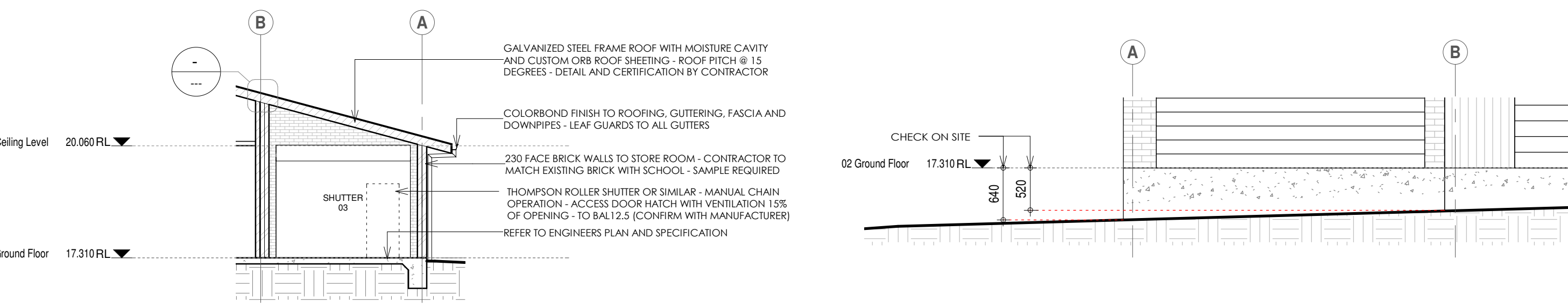
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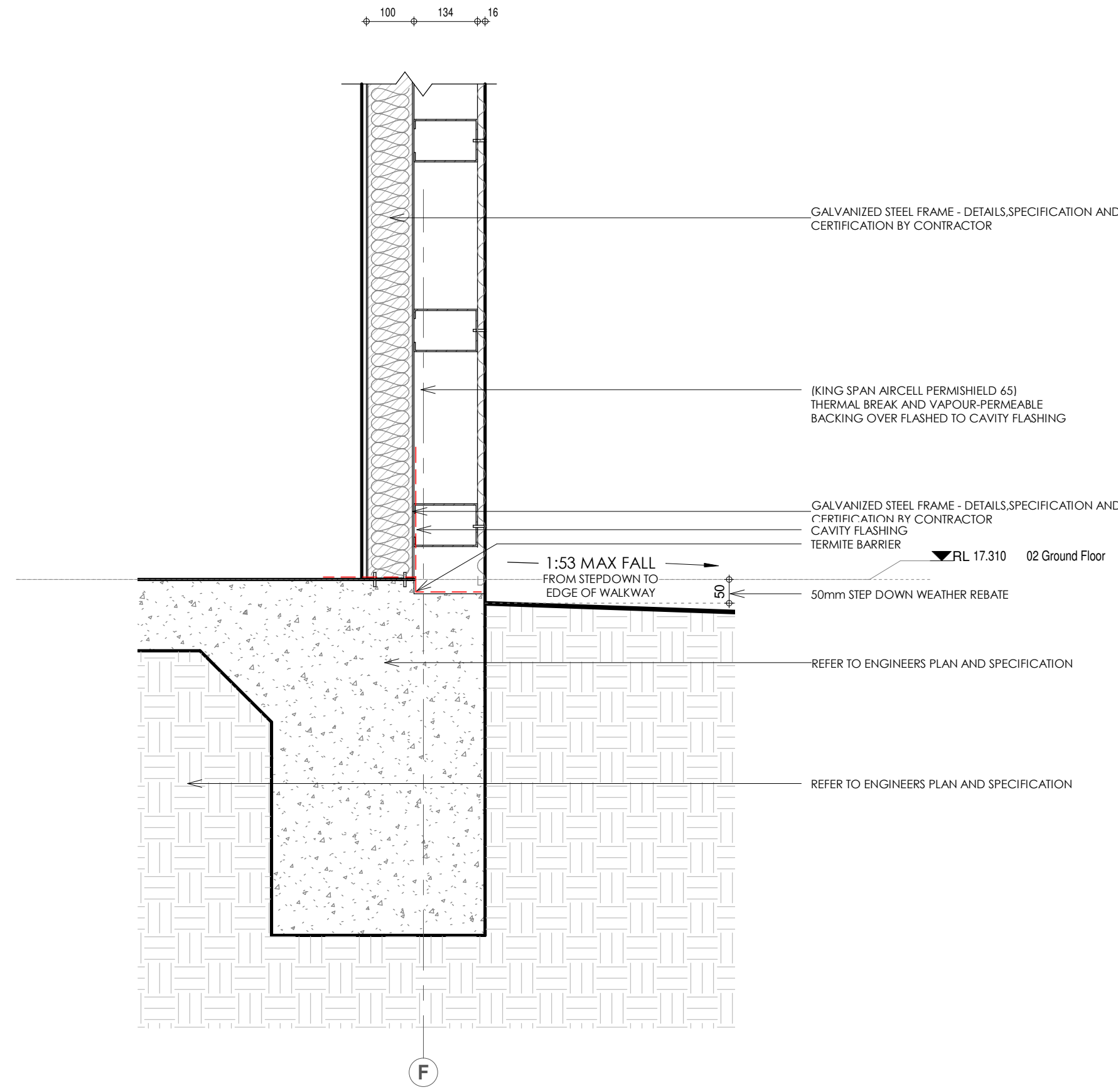
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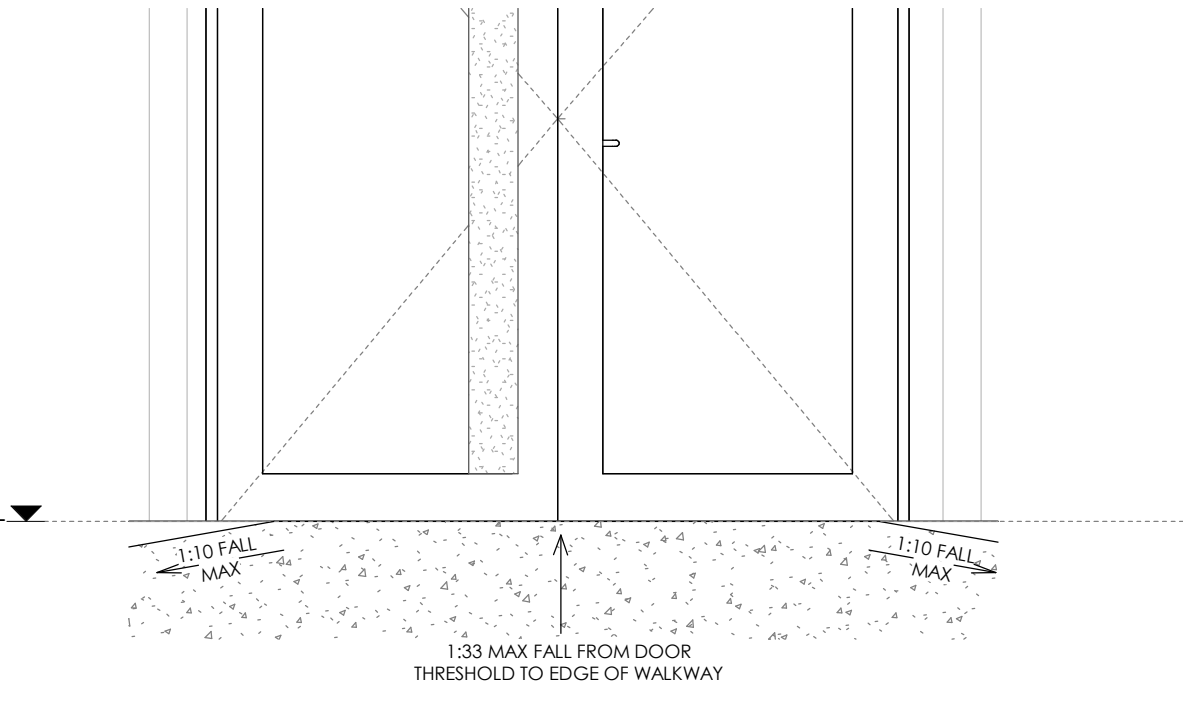
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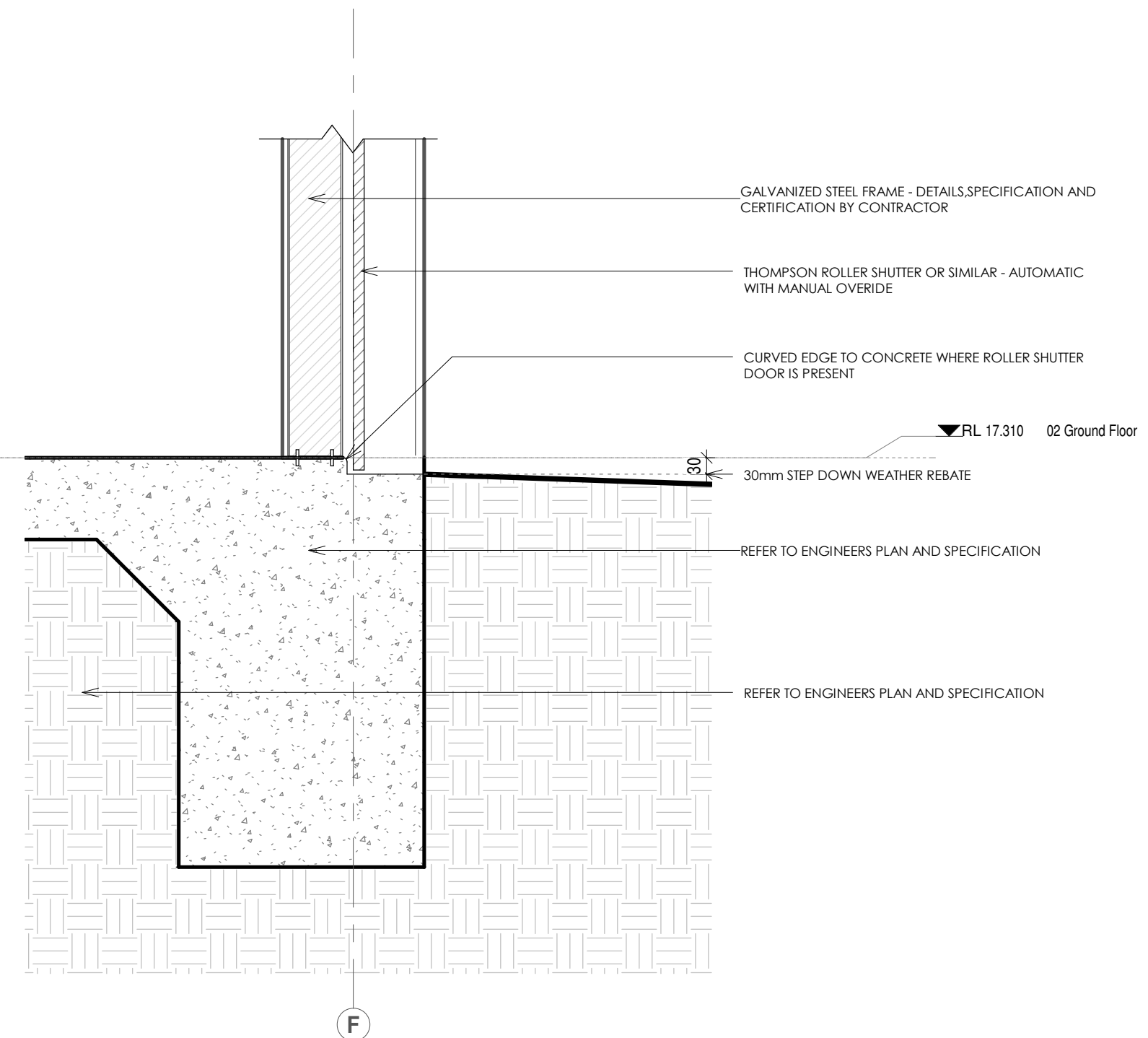
4 Section D-D
1 : 100



8 Section 1 - Callout 2
1 : 10



5 DOOR THRESHOLD DETAIL
1 : 20



7 Roller Door Rebate Detail
1 : 10

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KEY:

- V VINYL FLOOR COVERING
- CT CARPET TILES
- REM RECESSED ENTRY MAT
- FW FLOOR WASTE
- CF CONCRETE FINISH

Accessible Toilet

EXIT

Exit Level G

Exit Level G

Exit Level G

PROPOSED SECTIONS & DETAILS



The Anglican Schools Corporation

CAPITAL WORKS AND ASSET MANAGEMENT

LEVEL 3 8 WOODVILLE STREET, HURSTVILLE NSW 2220
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G	PRE - CONSTRUCTION ISSUE REVIEW	08/08/18

STATUS

PRE - CONSTRUCTION ISSUE REVIEW

PROPOSED ADMIN / UNIFORM AND MAINTENANCE STORAGE FACILITY

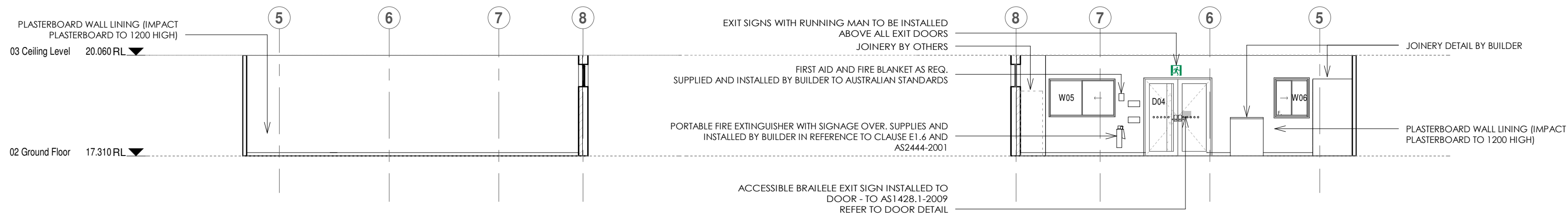
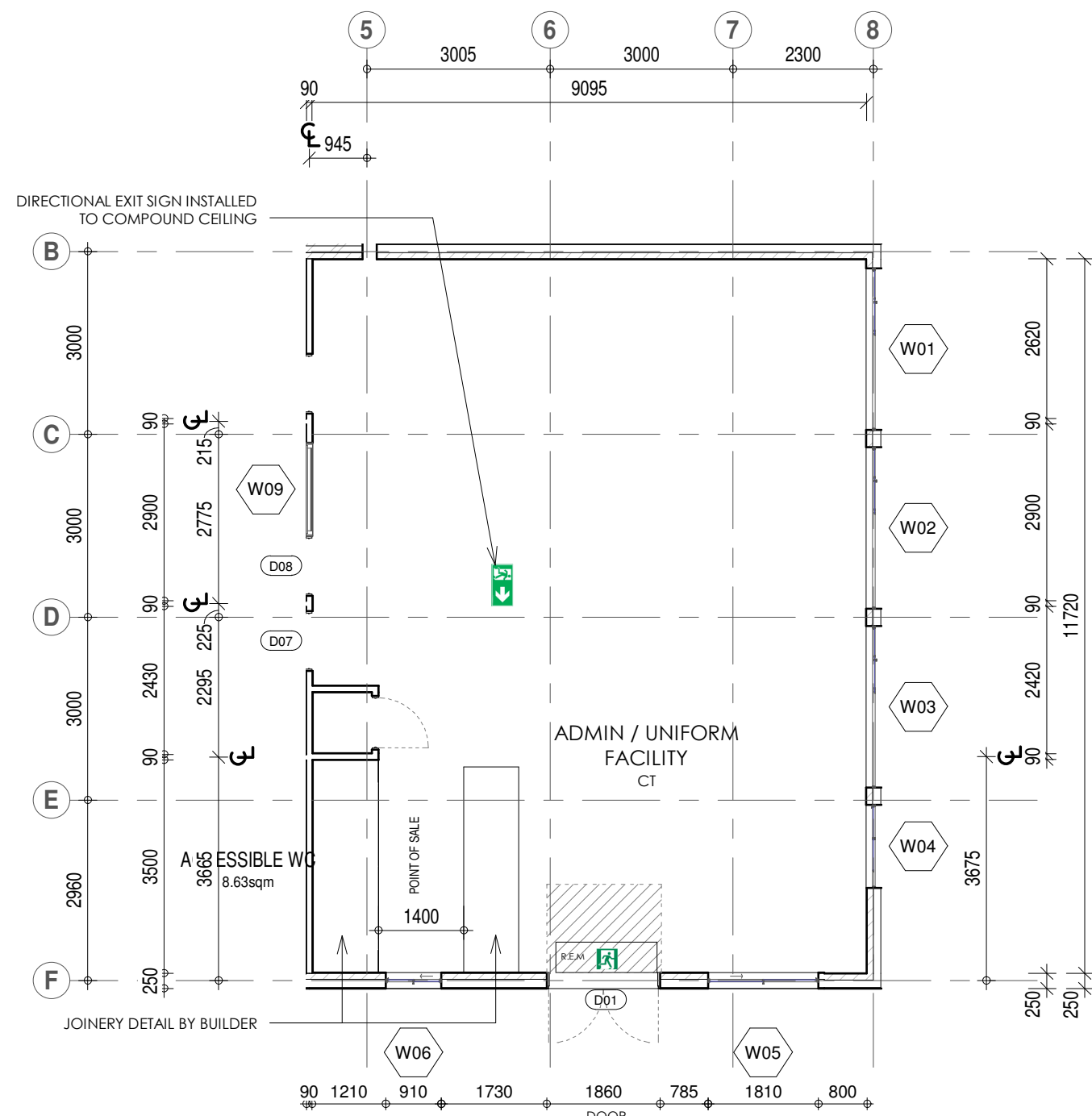
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DATE 25/05/18

SCALE As indicated

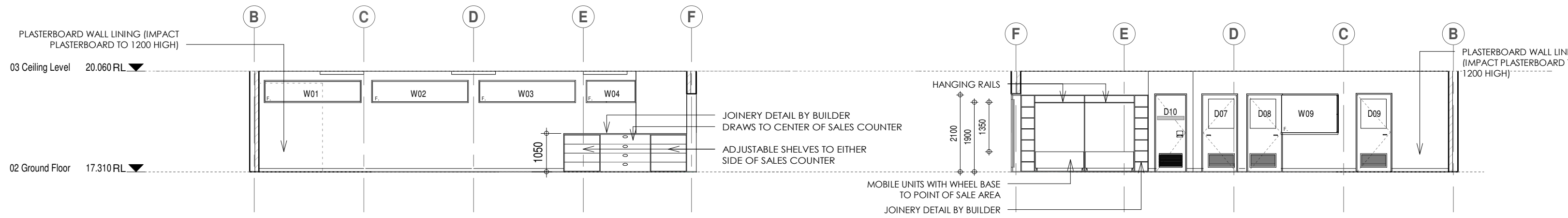
DRAWING No. PWD-04

TOTAL SHEETS 13



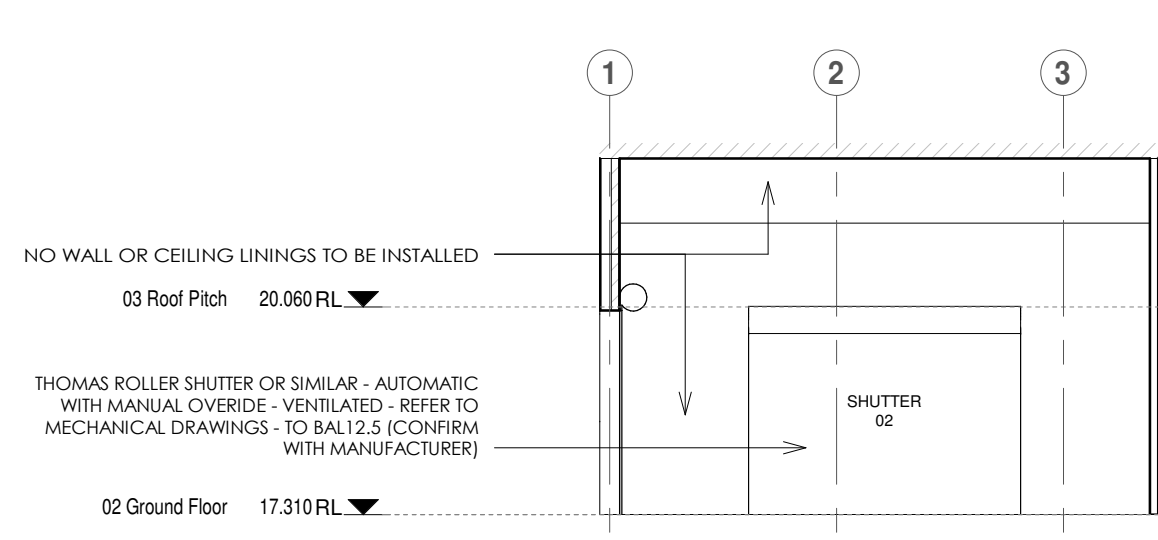
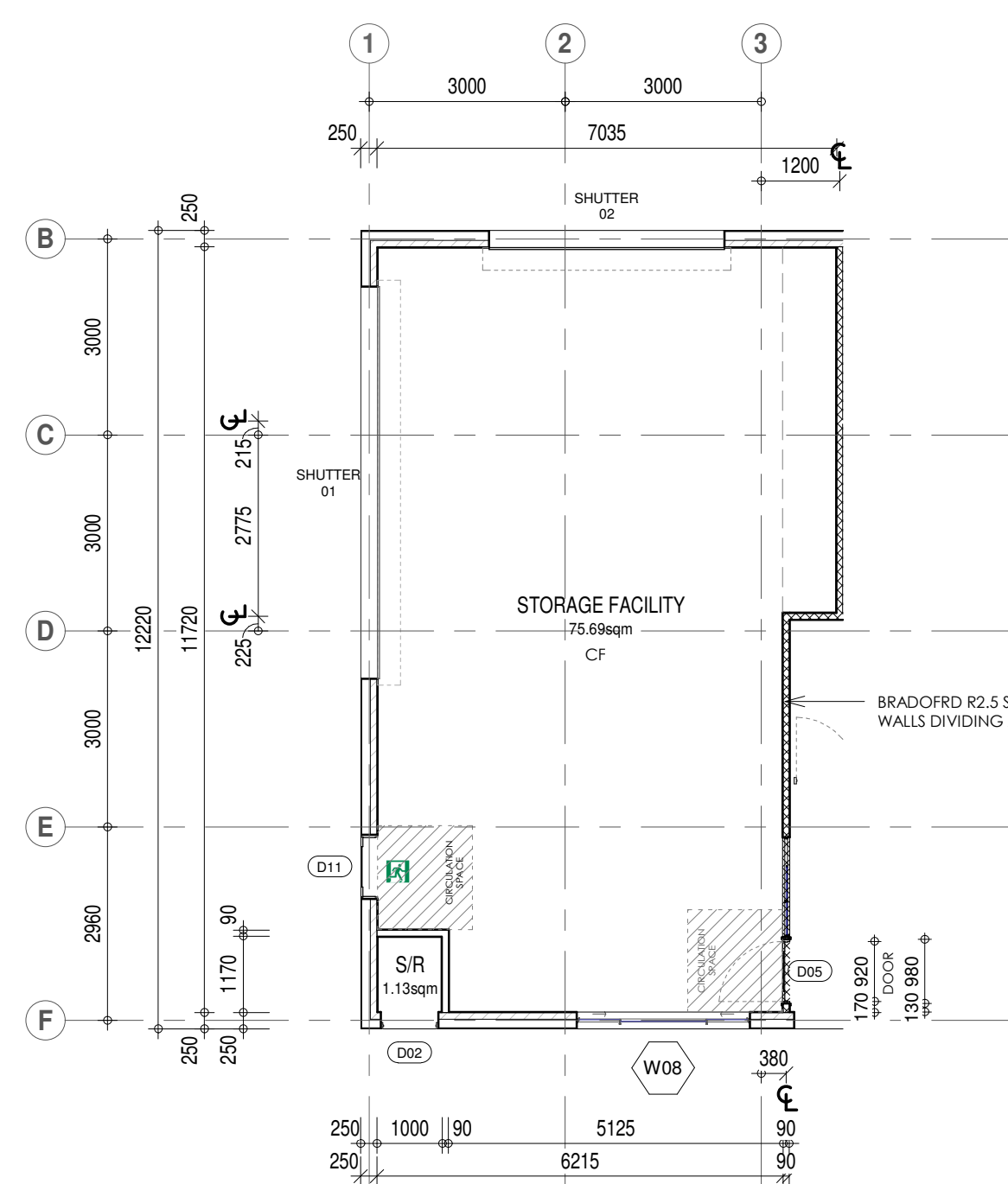
1 Admin/Uniform Facility - A
1 : 100

2 Admin/Uniform Facility - C
1 : 100

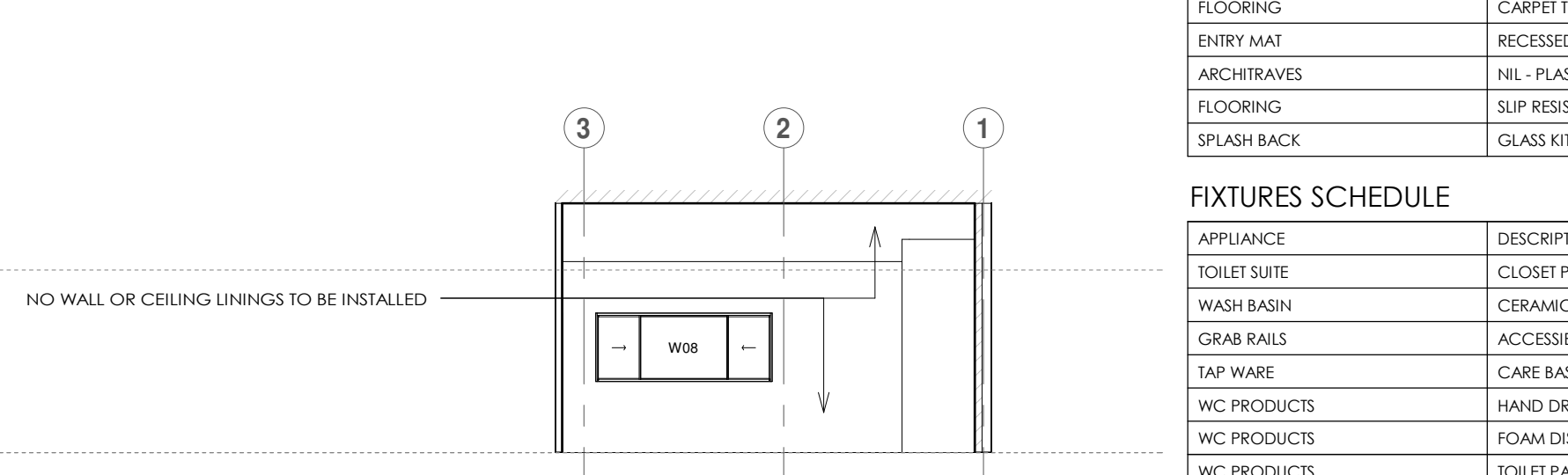


3 Admin/Uniform Facility - B
1 : 100

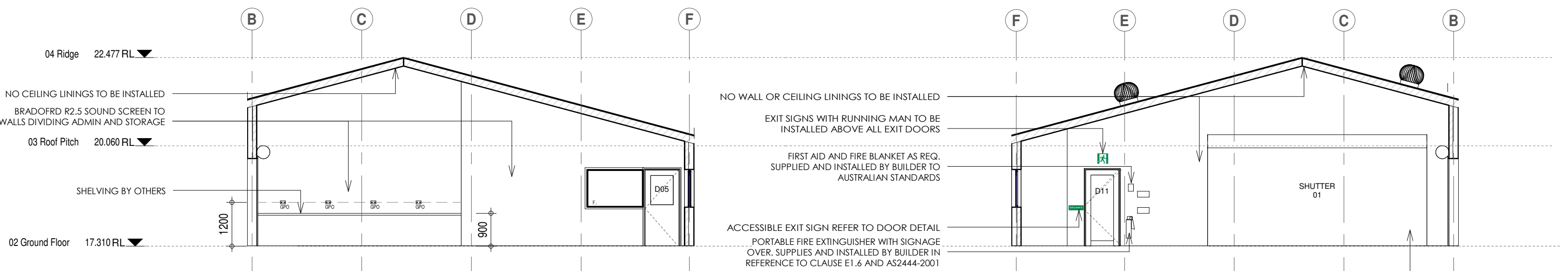
4 Admin/Uniform Facility - D
1 : 100



5 Storage Facility - A
1 : 100

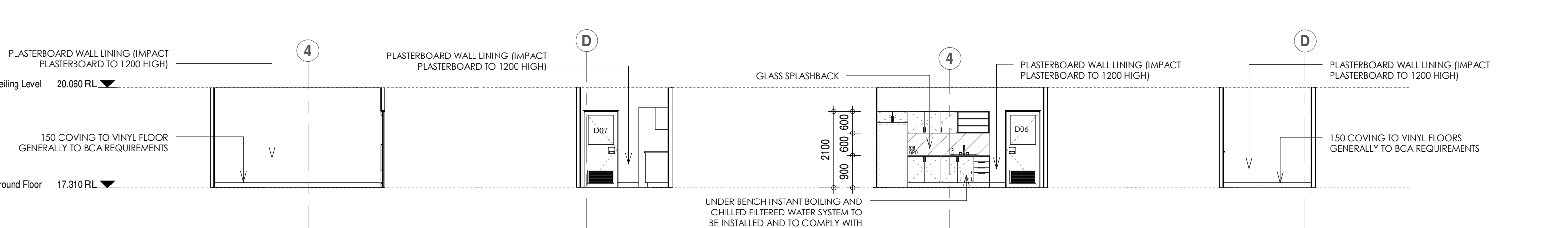
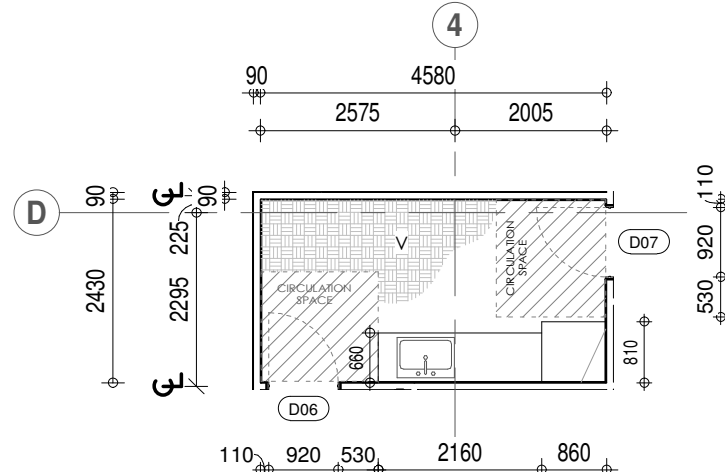


6 Storage Facility - C
1 : 100

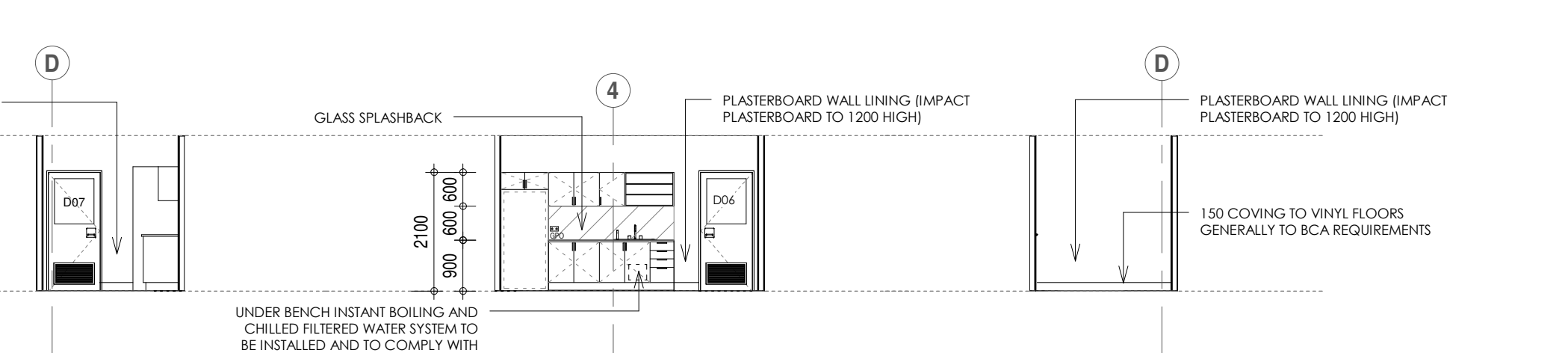


7 Storage Facility - B
1 : 100

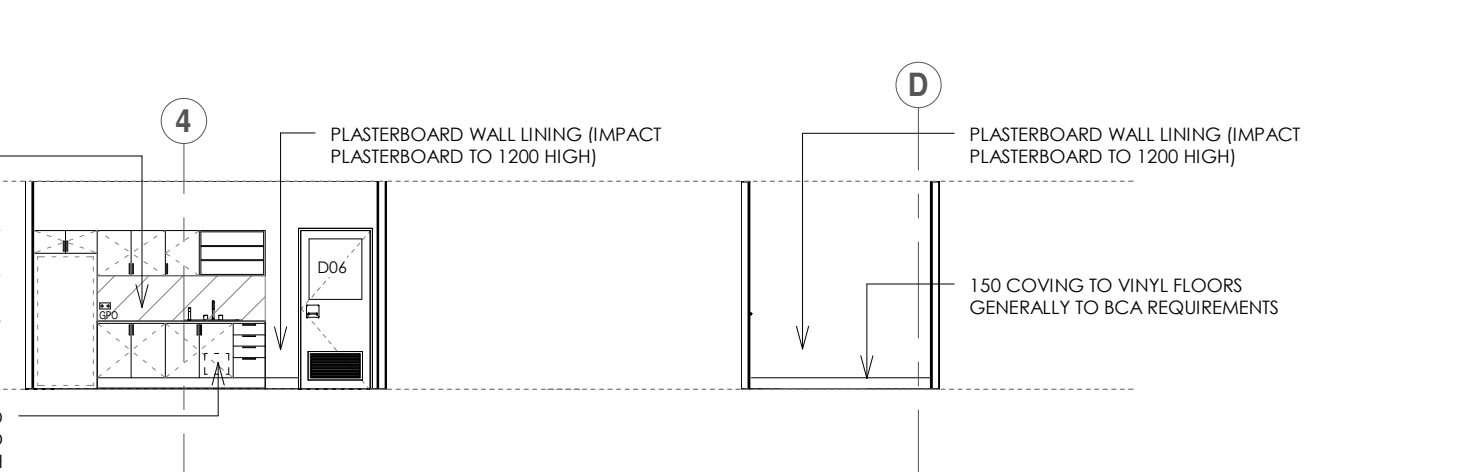
8 Storage Facility - D
1 : 100



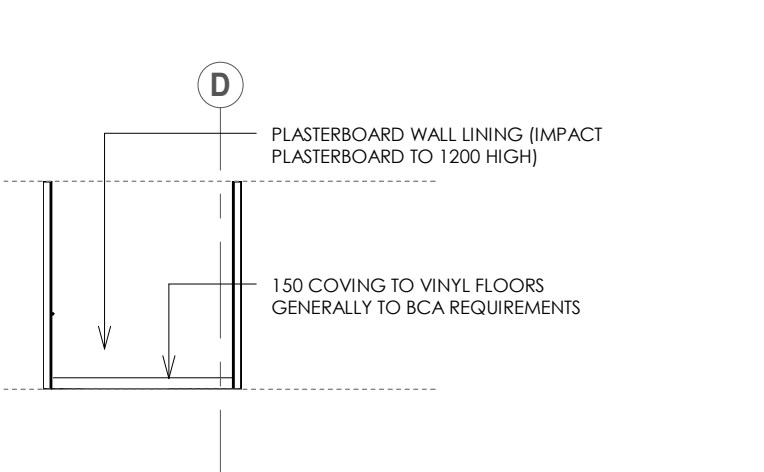
9 Kitchen - A
1 : 100



10 Kitchen - B
1 : 100



11 Kitchen - C
1 : 100



12 Kitchen - D
1 : 100



- COMPLIANCE NOTES:
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 - ALL EXTERNAL DOORS TO HAVE A DRAUGHT PROTECTION DEVICE ALONG THE BOTTOM AS WELL AS AROUND THE EDGES.
 - ALL RAMP AND BALUSTRADES TO BE IN COMPLIANCE WITH THE BCA AND AS 1428.1-2009 ACCESS AND MOBILITY REQUIREMENTS
 - CONTRACTOR TO LIAISE WITH NAC TO ENSURE MASTER KEY AND KEY SYSTEM MEETS AND MATCHES EXISTING
 - ALL EXTERNAL AND INTERNAL EXIT DOOR HARDWARE TO COMPLY WITH THE BCA AND AS 1428.1-2009 ACCESS AND MOBILITY REQUIREMENTS
 - ALL EXTERNAL PRODUCTS IN COMPLIANCE WITH BAL12.5 REQUIREMENTS.

INTERNAL COLOUR SCHEME

APPLICATION	DESCRIPTION	MAKER/BRAND	COLOUR
SKIRTING	90mm TIMBER SKIRTING GENERALLY	-	DULUX - LEXICON HALF
FLOORING	CARPET TILES	GODFREY HIRST CARPETS	970 TUITION
FLOORING	CARPET TILES	GODFREY HIRST CARPETS	950 STUDY GREEN
FLOORING	CARPET TILES	GODFREY HIRST CARPETS	670 CLASS RED
FLOORING	CARPET TILES	GODFREY HIRST CARPETS	860 EXAM BLUE
ENTRY MAT	RECESSED ENTRY MAT	LATHAM AJUST.	CHARCOAL
ARCHITRAVES	NIL - PLASTERSET	-	WALL
FLOORING	SLIP RESISTANT VINYL SHEET FLOORING	ARMSTRONG	SAFEGUARD R10 - MID GREY CRITICAL RADIANT FLUX RATING >8KM/m2
SPLASH BACK	GLASS KITCHEN SPLASHBACK	-	WHITE

FIXTURES SCHEDULE

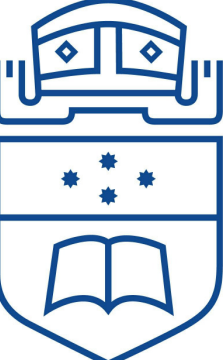
APPLIANCE	DESCRIPTION	QTY	MAKER/BRAND	PART NUMBER	DIMENSIONS (mm)	SUPPLIER
TOILET SUITE	CLOSET PAN WITH SEAT AND BACKREST	1	CAROMA	CARE 400 - CONNECTOR SUITE	REFER TO SPEC.	CONTRACTOR
WASH BASIN	CERAMIC WALL BASIN - LEFT HAND SHELF	1	CAROMA	OPAL 720	450x695x140	CONTRACTOR
GRAB RAILS	ACCESSIBLE COMPLIANCE GRAB RAILS	2	RBA	RBA4090-345	REFER TO SPEC.	CONTRACTOR
TAP WARE	CARE BASIN MIXER	1	CAROMA	90989CSA	REFER TO SPEC.	CONTRACTOR
WC PRODUCTS	HAND DRYER	1	RBA - QUIET DRY	B-7128	350x100x345	CONTRACTOR
WC PRODUCTS	FOAM DISPENSER	1	RBA - CONTURA	B4112	180x155x65	CONTRACTOR
WC PRODUCTS	TOILET PAPER DISPENSER - SINGLE	1	RBA	B-4699	155x155x120	CONTRACTOR
WC PRODUCTS	MIRROR	1	RBA	B1658 1639	991x406	CONTRACTOR
TAP WARE	UNDER SINK CLEANERS TAP	1	-	-	-	CONTRACTOR
GARMENT HANGING DEVICE	COAT HOOK	1	RBA	B-212	95x40x40	CONTRACTOR
SINK	KITCHEN SINK	1	CAROMA	S113.0R	930x500x197	CONTRACTOR
TAP WARE	KITCHEN SINK MIXER	1	CAROMA	90986CA4	REFER TO SPEC.	CONTRACTOR
WATER SYSTEM	UNDER BENCH INSTANT BOILING / CHILLED WATER SYSTE.	1	ZIP	-	REFER TO SPEC.	CONTRACTOR

- KEY:
- V VINYL FLOOR COVERING
 - CT CARPET TILES
 - REM RECESSED ENTRY MAT
 - FW FLOOR WASTE
 - CF CONCRETE FINISH
- UNISEX ACCESSIBLE WC SIGNAGE
- EXIT SIGNS
4 WATT COLD CATHODE LONG-LIFE FLUORESCENT 'RUNNING MAN' LUMINAIRE COMPLETE WITH DIRECTIONAL ARROWS WHERE REQUIRED AND TO COMPLY WITH AS2293.1-2005

Exit Level G
TO BE PLACED NEXT TO ALL EMERGENCY EXITS TO COMPLY WITH AS1428.1-2009

DIRECTIONAL EXIT SIGNS
4 WATT COLD CATHODE LONG-LIFE FLUORESCENT 'RUNNING MAN' LUMINAIRE COMPLETE WITH DIRECTIONAL ARROWS WHERE REQUIRED AND TO COMPLY WITH AS2293.1-2005

PROPOSED INTERNAL ELEVATIONS



The Anglican Schools Corporation

CAPITAL WORKS AND ASSET MANAGEMENT

LEVEL 3 8 WOODVILLE STREET, HURSTVILLE NSW 2220
P.O BOX 465, HURSTVILLE BC NSW 1481
ABN 63 544 529 806

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T: 02 9525 5588 F: 02 9525 0111 E: info@rossmark.com.au

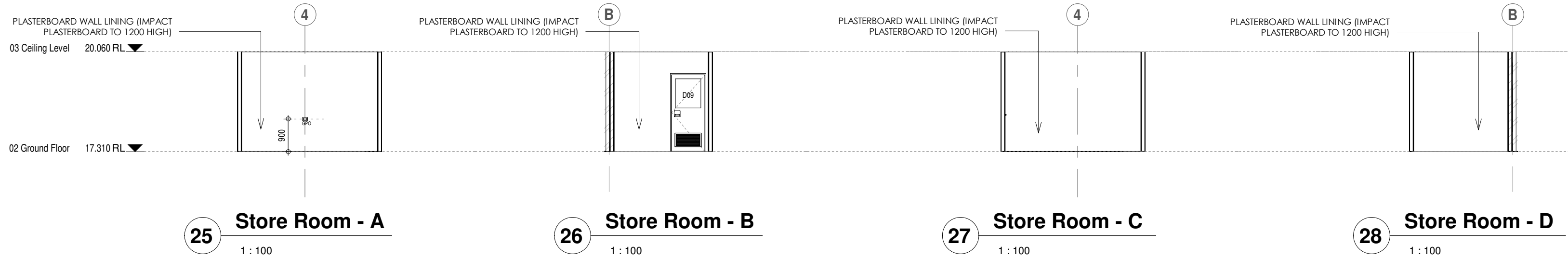
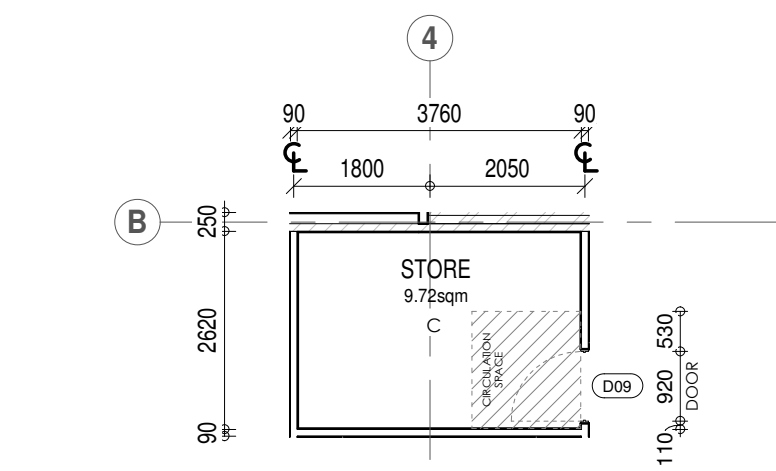
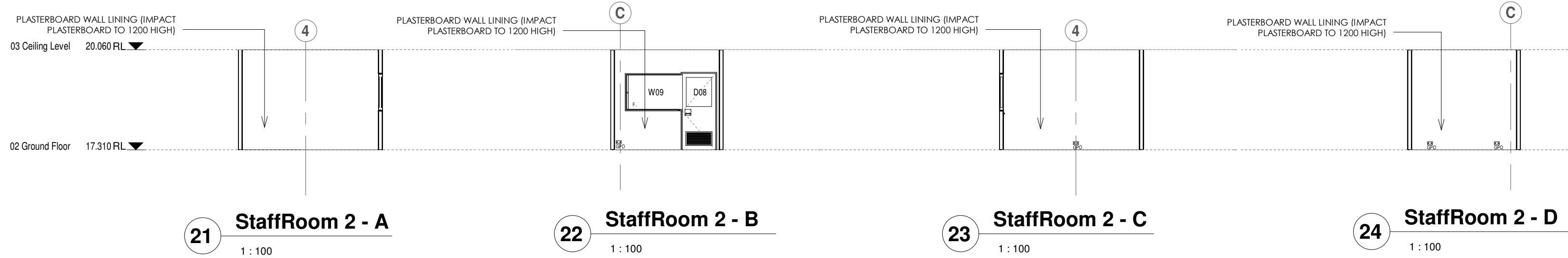
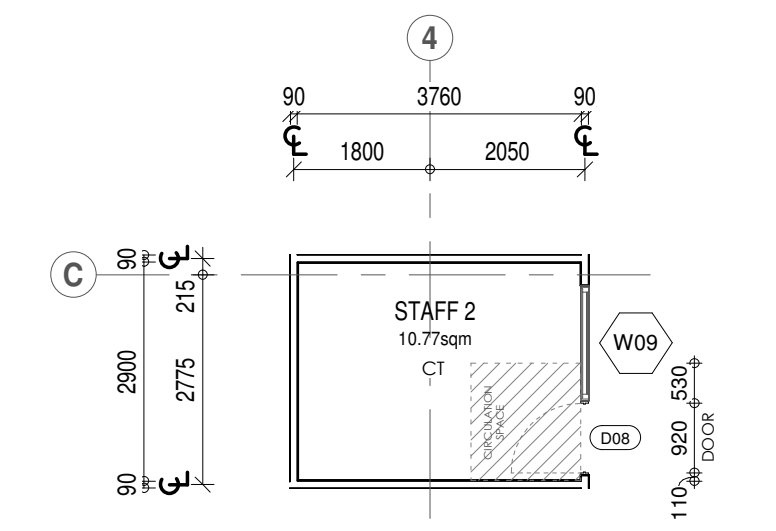
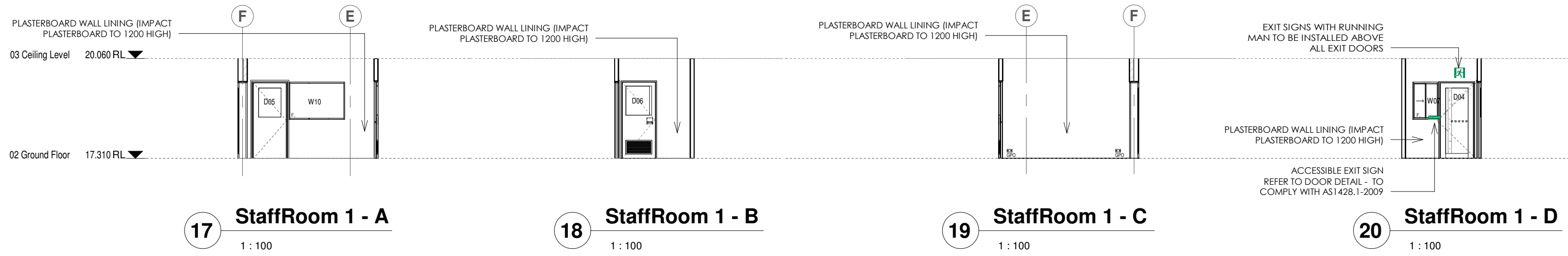
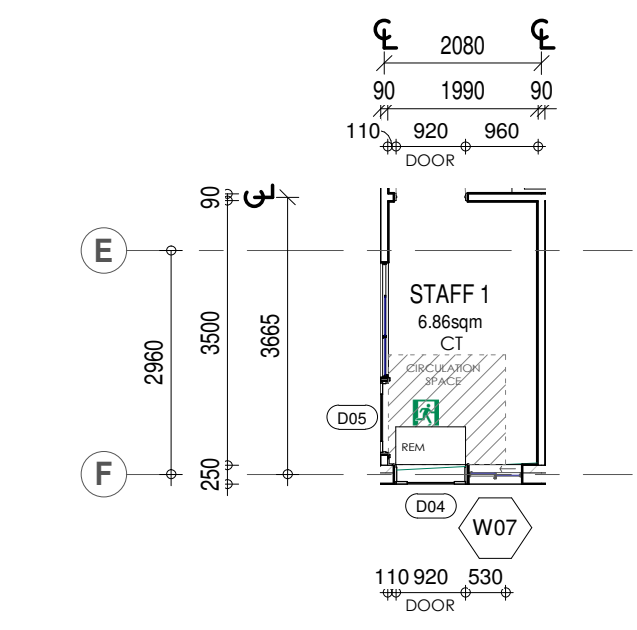
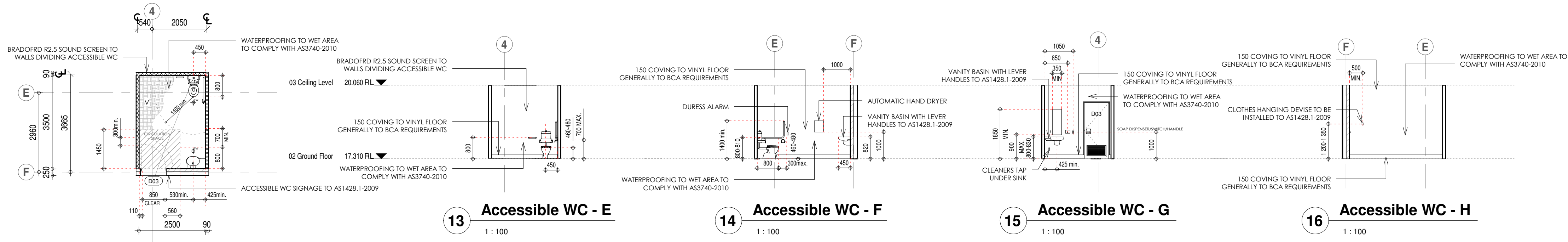
- NOTES:
- ALL DIMENSIONS ARE TO BE VERIFIED ON SITE BY THE BUILDER BEFORE COMMENCING WORK
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 - WRITTEN DIMENSIONS TAKE PRECEDENCE TO SCALE

PROPOSED ADMIN / UNIFORM AND MAINTENANCE STORAGE FACILITY

CLIENT
THE ANGLICAN SCHOOLS CORPORATION

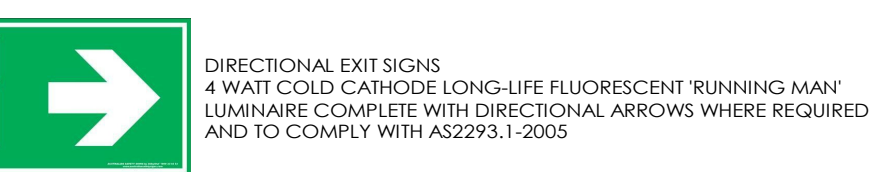
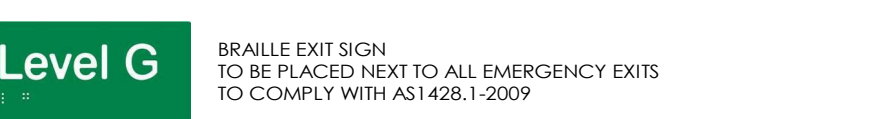
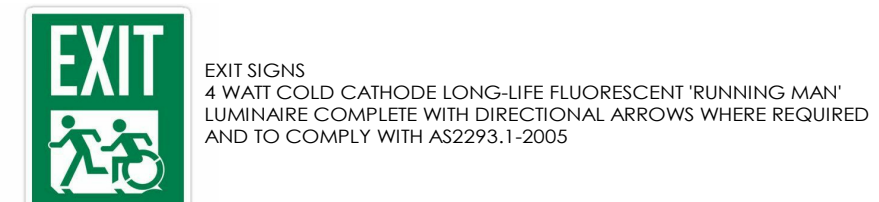
ADDRESS
118-124 Wolsley Road, Oakville NSW 2765

ISSUE	DECRPTION	DATE	STATUS	PRE - CONSTRUCTION ISSUE REVIEW			
C	ISSUED FOR TENDER	25/05/18	DRAWN	PROPOSED ADMIN / UNIFORM AND MAINTENANCE STORAGE FACILITY			
D	ADDENDUM TO TENDER ISSUE	31/05/18					
E	AMENDMENTS TO BCA COMMENTS	14/06/18					
F	PRE-CONSTRUCTION ISSUE	02/07/18	DATE	25/05/18	PWD-05	TOTAL SHEETS	13
G	PRE - CONSTRUCTION ISSUE REVIEW	08/08/18	SCALE	1 : 100			



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- KEY:
- V VINYL FLOOR COVERING
 - CT CARPET TILES
 - REM RECESSED ENTRY MAT
 - FW FLOOR WASTE
 - CF CONCRETE FINISH



INTERNAL COLOUR SCHEME

APPLICATION	DESCRIPTION	MAKER/BRAND	COLOUR
SKIRTING	90mm TIMBER SKIRTING GENERALLY	-	DULUX - LEXICON HALF
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FLOORING	CARPET TILES	GODFREY HIRST CARPETS	950 STUDY GREEN
FLOORING	CARPET TILES	GODFREY HIRST CARPETS	670 CLASS RED
FLOORING	CARPET TILES	GODFREY HIRST CARPETS	860 EXAM BLUE
ENTRY MAT	RECESSED ENTRY MAT	LATHAM AUST.	CHARCOAL
ARCHITRAVES	NIL - PLASTERSET	-	WALL
FLOORING	SLIP RESISTANT VINYL SHEET FLOORING	ARMSTRONG	SAFEGUARD R10 - MID GREY CRITICAL RADIANT FLUX RATING >8KM/m2
SPLASH BACK	GLASS KITCHEN SPLASHBACK	-	WHITE

FIXTURES SCHEDULE

APPLIANCE	DESCRIPTION	QTY	MAKER/BRAND	PART NUMBER	DIMENSIONS (mm)	SUPPLIER
TOILET SUITE	CLOSET PAN WITH SEAT AND BACKREST	1	CAROMA	CARE 400 - CONNECTOR SUITE	REFER TO SPEC.	CONTRACTOR
WASH BASIN	CERAMIC WALL BASIN - LEFT HAND SHELF	1	CAROMA	OPAL 720	450x695x140	CONTRACTOR
GRAB RAILS	ACCESSIBLE COMPLIANCE GRAB RAILS	2	RBA	RBA4090-345	REFER TO SPEC.	CONTRACTOR
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WATER SYSTEM	UNDER BENCH INSTANT BOILING / CHILLED WATER SYSTE.	1	ZIP	-	REFER TO SPEC.	CONTRACTOR

PROPOSED INTERNAL ELEVATIONS



The Anglican Schools Corporation

CAPITAL WORKS AND ASSET MANAGEMENT

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LIC 114562C

NOTES:

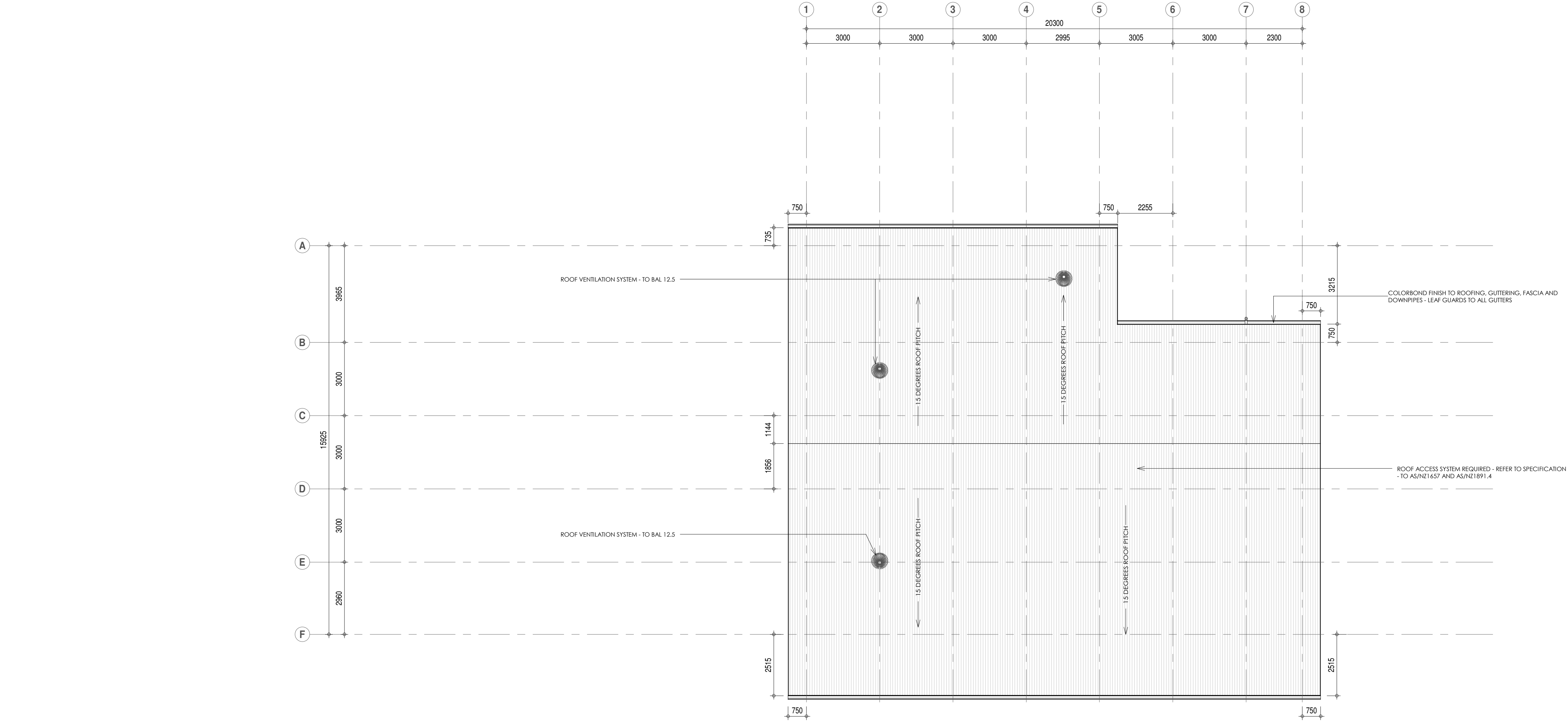
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PROPOSED ADMIN / UNIFORM AND MAINTENANCE STORAGE FACILITY

CLIENT
THE ANGLICAN SCHOOLS CORPORATION

ADDRESS
118-124 Wolseley Road, Oakville NSW 2765


ISSUE	DECEIPTION	DATE	STATUS	PRE - CONSTRUCTION ISSUE REVIEW		
C	ISSUED FOR TENDER	25/05/18	DECEIPTION	PROPOSED ADMIN / UNIFORM AND MAINTENANCE STORAGE FACILITY		
D	ADDENDUM TO TENDER ISSUE	31/05/18				
E	AMENDMENTS TO BCA COMMENTS	14/06/18				
F	PRE-CONSTRUCTION ISSUE	02/07/18	DRAWN	JS	DRAWING No.	TOTAL SHEETS
G	PRE - CONSTRUCTION ISSUE REVIEW	08/08/18	DATE	25/05/18	PWD-06	13
			SCALE	1 : 100		





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KEY:

- V VINYL FLOOR COVERING
- CT CARPET TILES
- REM RECESSED ENTRY MAT
- FW FLOOR WASTE
- CF CONCRETE FINISH

 UNISX ACCESSIBLE WC SIGNAGE

 EXIT SIGNS
4 WATT COLD CATHODE LONG-LIFE FLUORESCENT 'RUNNING MAN'
LUMINAIRE COMPLETE WITH DIRECTIONAL ARROWS WHERE REQUIRED
AND TO COMPLY WITH AS2293.1-2005

 **Exit Level G**
TO BE PLACED NEXT TO ALL EMERGENCY EXITS
TO COMPLY WITH AS1428.1-2009

 DIRECTIONAL EXIT SIGNS
4 WATT COLD CATHODE LONG-LIFE FLUORESCENT 'RUNNING MAN'
LUMINAIRE COMPLETE WITH DIRECTIONAL ARROWS WHERE REQUIRED
AND TO COMPLY WITH AS2293.1-2005

PROPOSED ROOF PLAN



The Anglican Schools Corporation

CAPITAL WORKS AND ASSET MANAGEMENT

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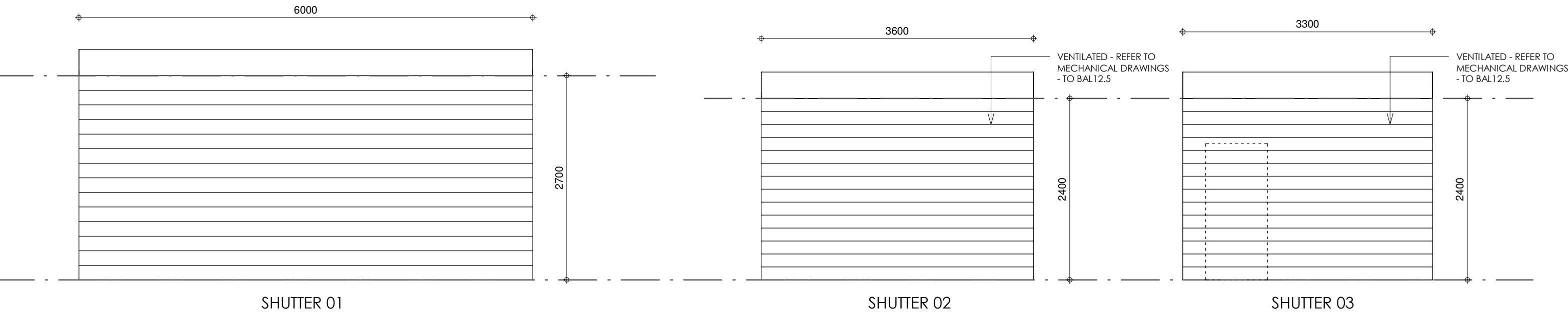
PRINCIPAL CONSULTANT
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T: 02 9525 5588 F: 02 9525 0111 E: info@rossmark.com.au

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PROPOSED ADMIN / UNIFORM AND MAINTENANCE STORAGE FACILITY		ISSUE	DESCRIPTION	DATE	DESCRIPTION	PROPOSED ADMIN / UNIFORM AND MAINTENANCE STORAGE FACILITY		
		C	ISSUED FOR TENDER	25/05/18				
CLIENT	THE ANGLICAN SCHOOLS CORPORATION	D	ADDENDUM TO TENDER ISSUE	31/05/18				
ADDRESS		E	AMENDMENTS TO BCA COMMENTS	14/06/18	DRAWN	JS	DRAWING No.	TOTAL SHEETS
		F	PRE-CONSTRUCTION ISSUE	02/07/18	DATE	25/05/18	PWD-07	13
118-124 Wolseley Road, Oakville NSW 2765	G	PRE - CONSTRUCTION ISSUE REVIEW	08/08/18	SCALE	1 : 100			

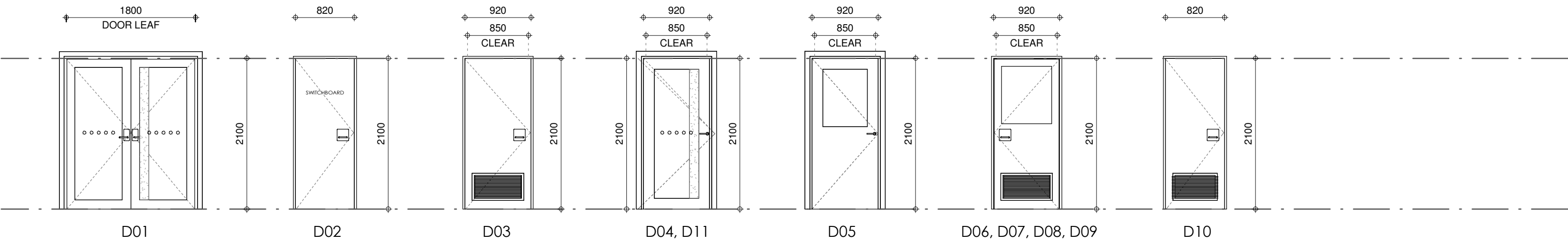
Door Schedule										
Mark	Location	Height	Width	Finish	Frame Material	Comments	Hardware	BLINDS	Glazing Type	Notes
D01	ADMIN/UNIFORM FACILITY	2100	1800	ALUMINIUM	ALUMINIUM	GLAZED - FULL LIGHT	LEVER ACTION HANDLE, LOCK, MASTER KEY	ROLLER BLINDS	5mm TOUGHENED - PRIVACY STRIP	DRAUGHT SEAL - CLOSER - CIRCULATION TO AS1428.1-2009
D02	SWITCH ROOM	2100	820	ALUMINIUM	ALUMINIUM	SOLID	LEVER ACTION HANDLE, LOCK, MASTER KEY	N/A	5mm TOUGHENED	"SWITCHBOARD" DOOR SIGNAGE
D03	ACCESSIBLE WC	2100	920	ALUMINIUM	ALUMINIUM	SOLID WITH VENT	LEVER ACTION HANDLE, LOCK, MASTER KEY	N/A		DRAUGHT SEAL - CLOSER - CIRCULATION TO AS1428.1-2009
D04	STAFF	2100	920	ALUMINIUM	ALUMINIUM	GLAZED - FULL LIGHT	LEVER ACTION HANDLE, LOCK, MASTER KEY	ROLLER BLINDS	5mm TOUGHENED - PRIVACY STRIP	DRAUGHT SEAL - CLOSER - CIRCULATION TO AS1428.1-2009
D05	STAFF	2100	920	TIMBER	TIMBER	GLAZED - HALF LIGHT	LEVER ACTION HANDLE, LOCK, MASTER KEY	N/A	5mm TOUGHENED	DRAUGHT SEAL - CIRCULATION TO AS1428.1-2009
D06	STAFF	2100	920	TIMBER	TIMBER	GLAZED - HALF LIGHT - VENT	LEVER ACTION HANDLE, LOCK	N/A	5mm TOUGHENED	DRAUGHT SEAL - CLOSER - CIRCULATION TO AS1428.1-2009
D07	KITCHEN	2100	920	TIMBER	TIMBER	GLAZED - HALF LIGHT - VENT	LEVER ACTION HANDLE, LOCK	N/A	5mm TOUGHENED	CIRCULATION TO AS1428.1-2009
D08	STAFF	2100	920	TIMBER	TIMBER	GLAZED - HALF LIGHT - VENT	LEVER ACTION HANDLE, LOCK	N/A	5mm TOUGHENED	CIRCULATION TO AS1428.1-2009
D09	STORE	2100	920	TIMBER	TIMBER	GLAZED - HALF LIGHT - VENT	LEVER ACTION HANDLE, LOCK	N/A	5mm TOUGHENED	CIRCULATION TO AS1428.1-2009
D10	IT	2100	920	TIMBER	TIMBER	SOLID WITH VENT	LEVER ACTION HANDLE, LOCK	N/A		
D11	STORAGE FACILITY	2100	920	ALUMINIUM	ALUMINIUM	GLAZED - FULL LIGHT	LEVER ACTION HANDLE, LOCK, MASTER KEY	ROLLER BLINDS	5mm TOUGHENED - PRIVACY STRIP	DRAUGHT SEAL - CLOSER - CIRCULATION TO AS1428.1-2009
SHUTTER 01	STORAGE FACILITY	2700	6000	STEEL	STEEL	SHUTTER	SELF LOCKING DRIVE SYSTEM	N/A	N/A	AUTOMATIC OPERATION (MANUAL OVERRIDE) - AUTOLOCK
SHUTTER 02	STORAGE FACILITY	2400	3600	STEEL	STEEL	SHUTTER	SELF LOCKING DRIVE SYSTEM	N/A	N/A	AUTOMATIC OPERATION (MANUAL OVERRIDE) - AUTOLOCK - VENTILATED
SHUTTER 03	FLAMMABLE STORE	2400	3300	STEEL	STEEL	SHUTTER - VENTILATED	SELF LOCKING DRIVE SYSTEM	N/A	N/A	MANUAL CHAIN OPERATION - ACCESS DOOR - VENTILATED
Grand total: 14										

ALL EXTERNAL DOORS IN COMPLIANCE WITH BAL 12.5 REQUIREMENTS



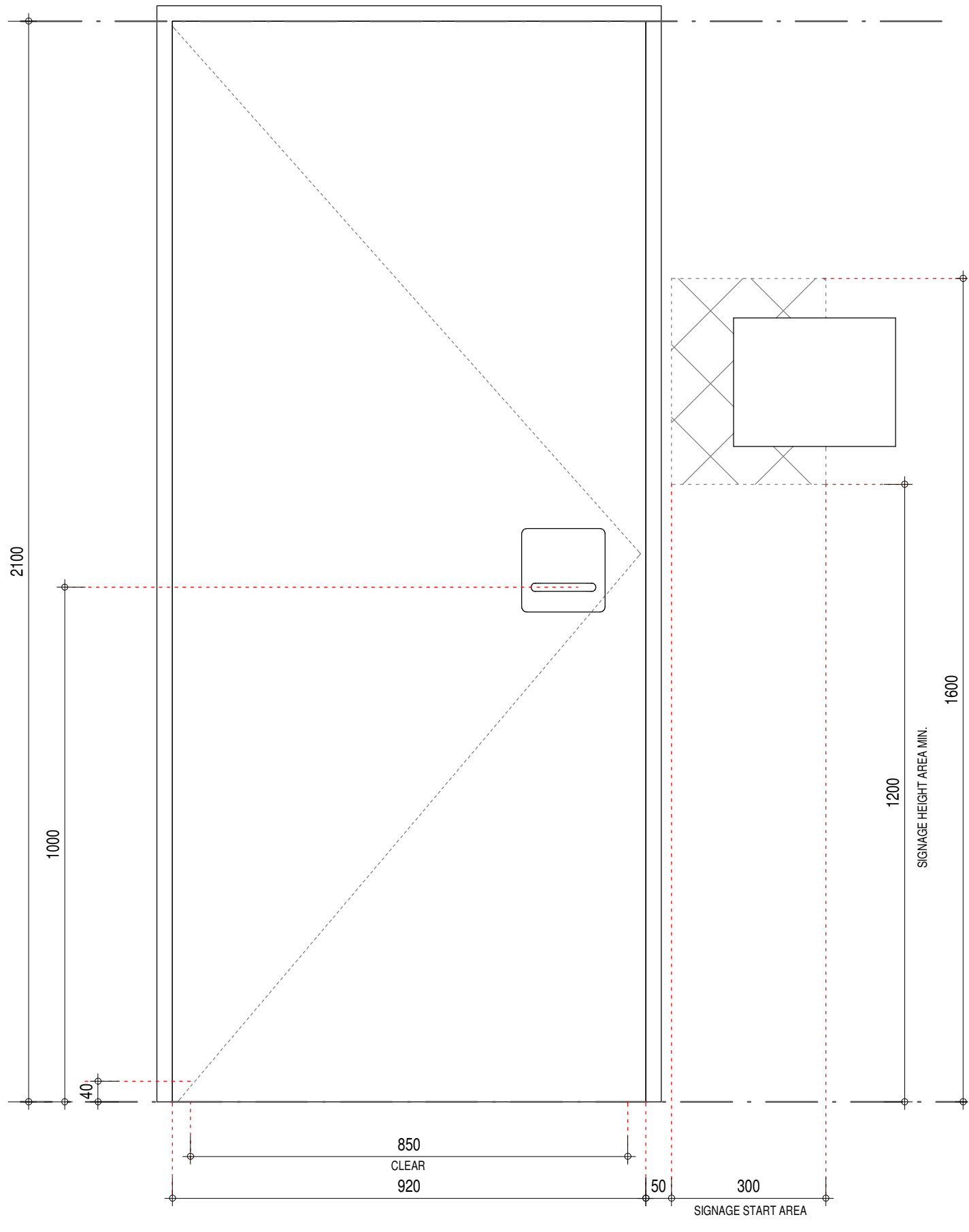
PROPOSED EXTERNAL SHUTTERS

ALL EXTERNAL SHUTTERS IN COMPLIANCE WITH BAL 12.5 REQUIREMENTS



PROPOSED EXTERNAL DOORS
SCALE 1:50

PROPOSED INTERNAL DOORS
SCALE 1:50



DOOR DETAIL

1 : 10

ALL DOOR SIGNAGE AND INDICATORS TO BE IN COMPLIANCE WITH AS1428.1-2009

COMPLIANCE NOTES:

- PORTABLE FIRE EXTINGUISHERS TO COMPLY WITH TABLE E1.6 AND AS2444.2001
- ALL SERVICES INCLUDING TELSTRA, GAS, POWER, WATER AND STORMWATER MUST BE LOCATED BEFORE WORK COMMENCES
- EMERGENCY LIGHTING REQUIRED TO BE IN ACCORDANCE WITH CLAUSES E4.2 & E4.4 OF BCA 2016 AND AS2293.1-2005
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- ALL PLUMBING WORKS SHALL BE IN ACCORDANCE WITH AS3500, LOCAL WATER AUTHORITY, THE BCA AND WATER GUIDELINES
- ALL SWITCHES AND CONTROLS TO COMPLY WITH AS1428.1-2009
- ALL ARTIFICIAL INTERNAL OR EXTERNAL LIGHTING SHALL BE IN ACCORDANCE WITH BCA 2016 PART J6 AND AS/NZ1680.0-2009
- AIR CONDITIONING AND VENTILATION SYSTEM ARE TO COMPLY WITH THE BCA 2016 PART J5 AND AS1648.2-2012
- ALL NEW HEATED WATER SUPPLY SYSTEMS TO BE IN ACCORDANCE WITH PART B2 OF THE NCC VOLUME 3 - PLUMBING CODE OF AUSTRALIA
- ALL DOOR HANDLES TO HAVE A D-LEVER SHAPE TO COMPLY WITH AS 1428.1-2009
- ALL EXTERNAL DOORS TO HAVE A DRAUGHT PROTECTION DEVICE ALONG THE BOTTOM AS WELL AS AROUND THE EDGES.
- ALL RAMP AND BALUSTRADES TO BE IN COMPLIANCE WITH THE BCA AND AS 1428.1-2009 ACCESS AND MOBILITY REQUIREMENTS
- CONTRACTOR TO LIAISE WITH NAC TO ENSURE MASTER KEY AND KEY SYSTEM MEETS AND MATCHES EXISTING
- ALL EXTERNAL AND INTERNAL EXIT DOOR HARDWARE TO COMPLY WITH THE BCA AND AS 1428.1-2009 ACCESS AND MOBILITY REQUIREMENTS
- ALL EXTERNAL PRODUCTS IN COMPLIANCE WITH BAL12.5 REQUIREMENTS.

KEY:
V VINYL FLOOR COVERING
CT CARPET TILES
REM RECESSED ENTRY MAT
FW FLOOR WASTE
CF CONCRETE FINISH



EXIT SIGNS
4 WATT COLD CATHODE LONG-LIFE FLUORESCENT 'RUNNING MAN'
LUMINAIRE COMPLETE WITH DIRECTIONAL ARROWS WHERE REQUIRED
AND TO COMPLY WITH AS2293.1-2005



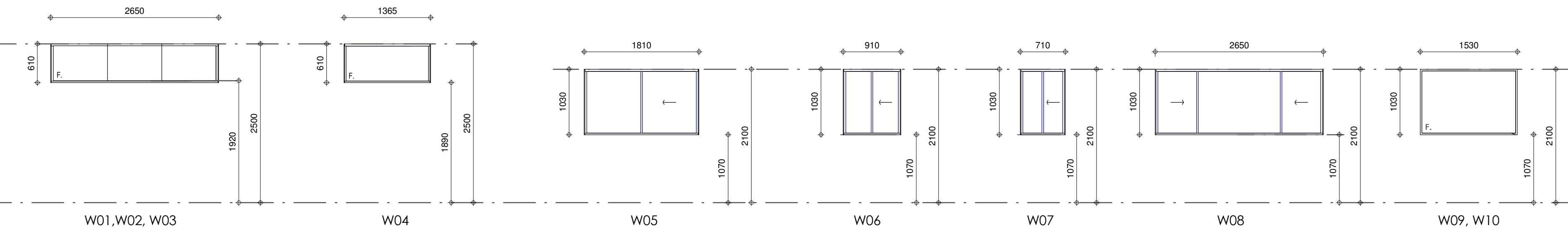
BRaille EXIT SIGN
TO BE PLACED NEXT TO ALL EMERGENCY EXITS
TO COMPLY WITH AS1428.1-2009



DIRECTIONAL EXIT SIGNS
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LUMINAIRE COMPLETE WITH DIRECTIONAL ARROWS WHERE REQUIRED
AND TO COMPLY WITH AS2293.1-2005

Window Schedule									
Mark	Location	Window Style	Width	Height	Material	Glazing	Remarks	Blinds	Hardware
W01	ADMIN/UNIFORM FACILITY - EXTERNAL	AFW0626	2650	610	ALUMINIUM	LOW-E	5mm TOUGHENED	YES	
W02	ADMIN/UNIFORM FACILITY - EXTERNAL	AFW0626	2650	610	ALUMINIUM	LOW-E	5mm TOUGHENED	YES	
W03	ADMIN/UNIFORM FACILITY - EXTERNAL	AFW0626	2650	610	ALUMINIUM	LOW-E	5mm TOUGHENED	YES	
W04	ADMIN/UNIFORM FACILITY - EXTERNAL	AFW0613	1365	610	ALUMINIUM	LOW-E	5mm TOUGHENED	YES	
W05	ADMIN/UNIFORM FACILITY - EXTERNAL	ASW1018	1810	1030	ALUMINIUM	CLEAR	5mm TOUGHENED	YES	FLY SCREENS (CORROSIVE RESISTANT - 2mm MAX APERTURE) - LOOKS (TO MATCH EX.)
W06	ADMIN/UNIFORM FACILITY - EXTERNAL	ASW1509	910	1030	ALUMINIUM	CLEAR	5mm TOUGHENED	YES	FLY SCREENS (CORROSIVE RESISTANT - 2mm MAX APERTURE) - LOOKS (TO MATCH EX.)
W07	STAFFROOM - EXTERNAL	ASW1507	710	1030	ALUMINIUM	CLEAR	5mm TOUGHENED	YES	FLY SCREENS (CORROSIVE RESISTANT - 2mm MAX APERTURE) - LOOKS (TO MATCH EX.)
W08	STORAGE FACILITY - EXTERNAL	ASW1528	2650	1030	ALUMINIUM	CLEAR	5mm TOUGHENED	YES	FLY SCREENS (CORROSIVE RESISTANT - 2mm MAX APERTURE) - LOOKS (TO MATCH EX.)
W09	STAFFROOM - INTERNAL	AFW1015	1530	1030	ALUMINIUM	CLEAR	5mm TOUGHENED	NO	
W10	STORAGE FACILITY - INTERNAL	AFW1015	1530	1030	ALUMINIUM	CLEAR	5mm TOUGHENED	NO	

ALL EXTERNAL WINDOWS IN COMPLIANCE WITH BAL 12.5 REQUIREMENTS



PROPOSED WINDOWS
SCALE 1:50

PROPOSED OPENING SCHEDULE

WALL THERMAL CALCULATION

LAYER	DESCRIPTION	THICKNESS (mm)	R-VALUE (SUMMER)	R-VALUE (WINTER)
1	EXTERIOR AIR FILM RESISTANCE	-	0.040	0.040
2	COLORBOND SHEET METAL CLADDING (ABSORBANCE VALUE -0.42)	0.45	0.000	0.000
3	AIR GAP (STILL)	50	0.170	0.170
4	THERMAL BREAK AND VAPOUR PERMEABLE SARKING - AIR CELL PERMISHIELD 65	6.5	1.6	1.8
5	WALL INSULATION - BRADFORD GOLD WALL BATTS (R2.5)	90	2.374	2.627
6	PLASTERBOARD LINING	13	0.059	0.059
7	INTERIOR AIR FILM RESISTANCE	-	0.120	0.120
TOTAL LAYER R-VALUE			4.4	4.8
REQUIRED R-VALUE			2.8	N/A

ROOF THERMAL CALCULATION

LAYER	DESCRIPTION	THICKNESS (mm)	R-VALUE (SUMMER)	R-VALUE (WINTER)
1	EXTERIOR AIR FILM RESISTANCE	-	0.040	0.040
2	COLORBOND SHEET METAL ROOFING (ABSORBANCE VALUE -0.6)	0.45	0.000	0.000
3	ROOF INSULATION - BRADFORD ANTICON 60 (R1.3)	60	1.239	1.368
4	UNVENTILATED REFLECTIVE ATTIC SPACE	-	1.090	0.560
5	CEILING INSULATION - BRADFORD ACOUSTICGUARD 11 (R1.7)	75	1.646	1.778
6	PLASTERBOARD CEILING	13	0.059	0.059
7	INTERIOR AIR FILM RESISTANCE	-	0.160	0.120
TOTAL LAYER R-VALUE			4.2	3.9
REQUIRED R-VALUE			3.7	N/A

NCC VOLUME ONE GLAZING CALCULATOR (first issued with NCC 2014)

Building name/description
AAC - ADMIN / UNIFORM FACILITY AND STORAGE FACILITY

Application
other

Climate zone
6

Storey
GROUND

Facade areas

	N	NE	E	SE	S	SW	W	NW	Internal
Option A		68.4m²		60.6m²					
Option B									

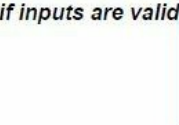
Glazing area (A) 5.22m² 6.26m²

Number of rows preferred in table below **8** (as currently displayed)

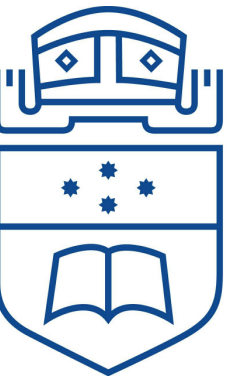
GLAZING ELEMENTS, ORIENTATION SECTOR, SIZE AND PERFORMANCE CHARACTERISTICS						SHADING		CALCULATED OUTCOMES OR (if inputs are valid)			
Glazing element		Facing sector		Size		Performance		P&H or device		Shading	
ID	Description (optional)	Option A facades	Option B facades	Height (m)	Width (m)	Area (m²)	Total System U-Value (AFRC)	Total System SHGC (AFRC)	P (m)	H (m)	Pin
1 W1	NE	NE	NE	0.61	2.40	4.8	0.56				
2 W2	NE	NE	NE	0.61	2.40	4.8	0.56				
3 W3	NE	NE	NE	0.61	2.40	4.8	0.56				
4 W4	NE	NE	NE	0.61	1.37	4.8	0.56				
5 W5	SE	SE	SE	1.03	1.81	6.5	0.69				
6 W6	SE	SE	SE	1.03	0.91	6.5	0.69				
7 W7	SE	SE	SE	1.03	0.71	6.5	0.69				
8 W8	SE	SE	SE	1.03	2.65	6.5	0.69				

IMPORTANT NOTICE AND DISCLAIMER IN RESPECT OF THE GLAZING CALCULATOR

The Glazing Calculator has been developed by the ABCB to assist in developing a better understanding of glazing energy efficiency parameters. While the ABCB believes that the Glazing Calculator, if used correctly, will produce accurate results, it is provided "as is" and without any representation or warranty of any kind, including that it is fit for any purpose or of merchantable quality, or functions as intended or at all. Your use of the Glazing Calculator is entirely at your own risk and the ABCB accepts no liability of any kind.



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The
Anglican
Schools
Corporation

CAPITAL WORKS AND ASSET MANAGEMENT

LEVEL 3 8 WOODVILLE STREET, HURSTVILLE NSW 2220
P.O BOX 465, HURSTVILLE BC NSW 1481
ABN 63 544 529 806

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T: 9525 5588 F: 02 9525 0111 E: info@rossmark.com.au

NOTES:

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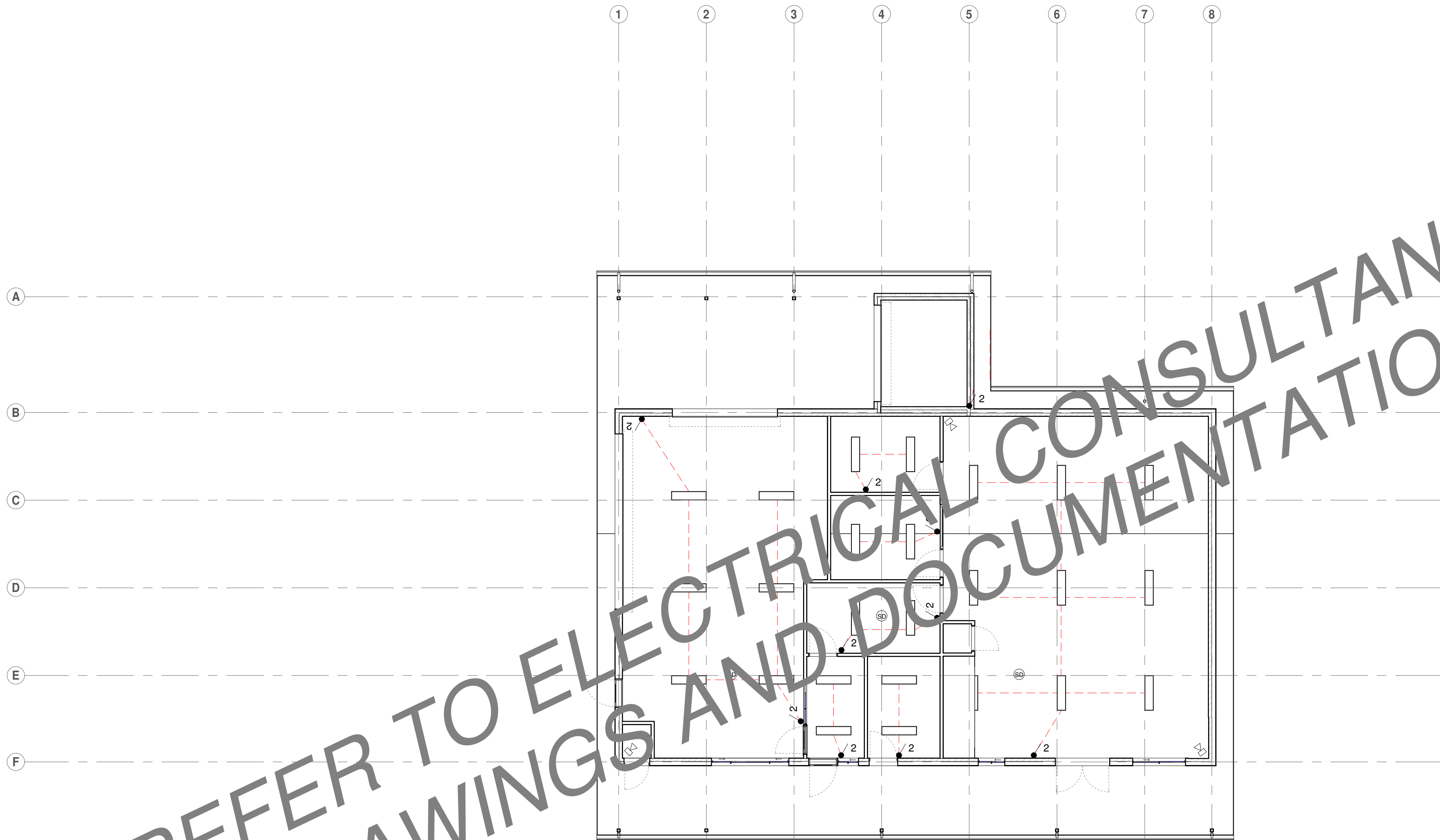
PROPOSED ADMIN / UNIFORM AND MAINTENANCE STORAGE FACILITY

CLIENT
THE ANGLICAN SCHOOLS CORPORATION

ADDRESS
118-124 Wolsley Road, Oakville NSW 2765

ISSUE	DECRPTION	DATE
C	ISSUED FOR TENDER	25/05/18
D	ADDENDUM TO TENDER ISSUE	31/05/18
E	AMENDMENTS TO BCA COMMENTS	14/06/18
F	PRE-CONSTRUCTION ISSUE	02/07/18
G	PRE - CONSTRUCTION ISSUE REVIEW	08/08/18

STATUS	PRE - CONSTRUCTION ISSUE REVIEW		
DECRPTION	PROPOSED ADMIN / UNIFORM AND MAINTENANCE STORAGE FACILITY		
DRAWN	JS	DRAWING No.	TOTAL SHEETS
DATE	25/05/18	PWD-08	13
SCALE	As indicated		



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- KEY:
- V VINYL FLOOR COVERING
 - CT CARPET TILES
 - REM RECESSED ENTRY MAT
 - FW FLOOR WASTE
 - CF CONCRETE FINISH



UNISX ACCESSIBLE WC SIGNAGE



EXIT SIGNS
4 WATT COLD CATHODE LONG-LIFE FLUORESCENT 'RUNNING MAN'
LUMINAIRE COMPLETE WITH DIRECTIONAL ARROWS WHERE REQUIRED
AND TO COMPLY WITH AS2293.1-2005



BRaille EXIT SIGN
TO BE PLACED NEXT TO ALL EMERGENCY EXITS
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DIRECTIONAL EXIT SIGNS
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LUMINAIRE COMPLETE WITH DIRECTIONAL ARROWS WHERE REQUIRED
AND TO COMPLY WITH AS2293.1-2005

PROPOSED CEILING AND ELECTRICAL PLAN



The Anglican Schools Corporation

CAPITAL WORKS AND ASSET MANAGEMENT

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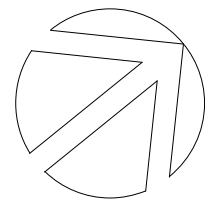
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PROPOSED ADMIN / UNIFORM AND MAINTENANCE STORAGE FACILITY

CLIENT
THE ANGLICAN SCHOOLS CORPORATION

ADDRESS
118-124 Wolseley Road, Oakville NSW 2765

ISSUE	DECRPTION	DATE
C	ISSUED FOR TENDER	25/05/18
D	ADDENDUM TO TENDER ISSUE	31/05/18
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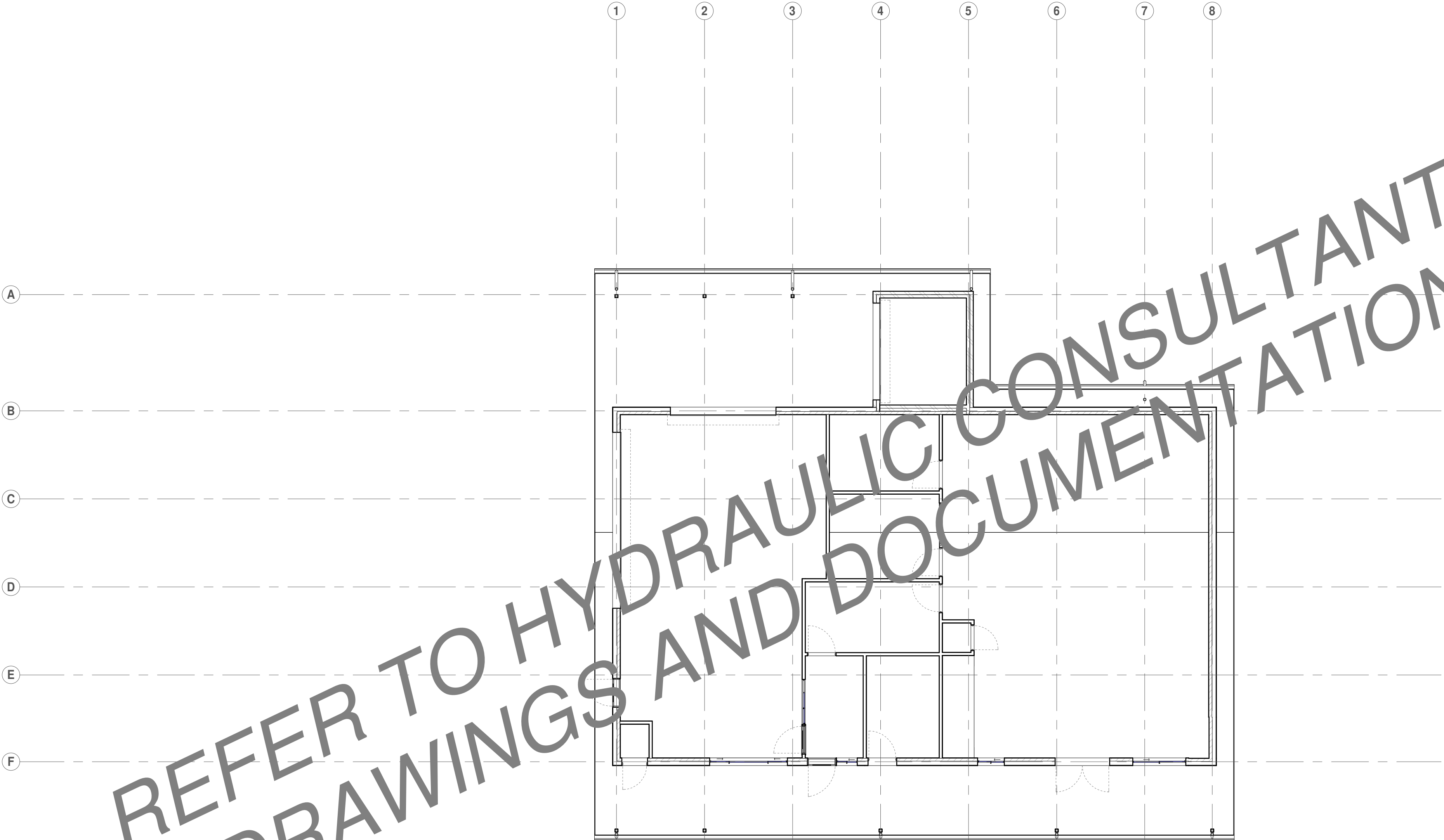
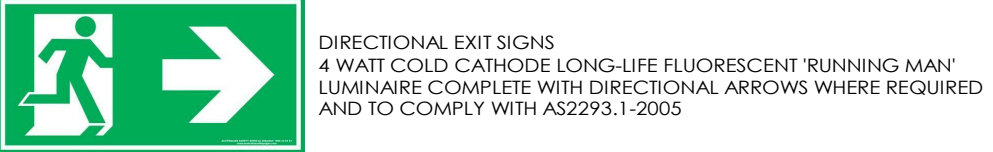
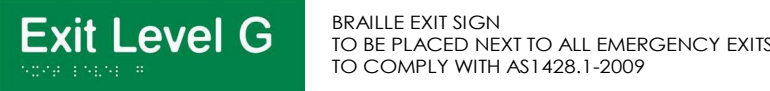
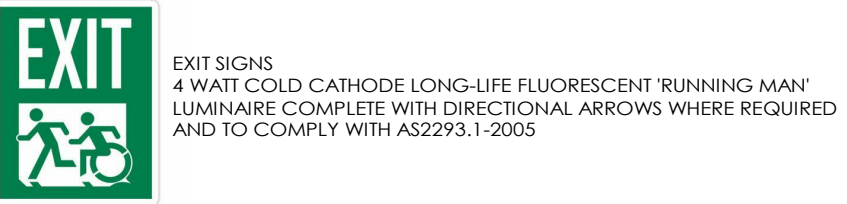
STATUS		PRE - CONSTRUCTION ISSUE REVIEW			
DECRPTION	PROPOSED ADMIN / UNIFORM AND MAINTENANCE STORAGE FACILITY				
	DRAWN	JS	DRAWING No.	TOTAL SHEETS	
DATE	25/05/18	PWD-09		13	
SCALE	1 : 100				

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KEY:

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- CT CARPET TILES
- REM RECESSED ENTRY MAT
- FW FLOOR WASTE
- CF CONCRETE FINISH



PROPOSED HYDRAULIC PLAN




The Anglican Schools Corporation

CAPITAL WORKS AND ASSET MANAGEMENT

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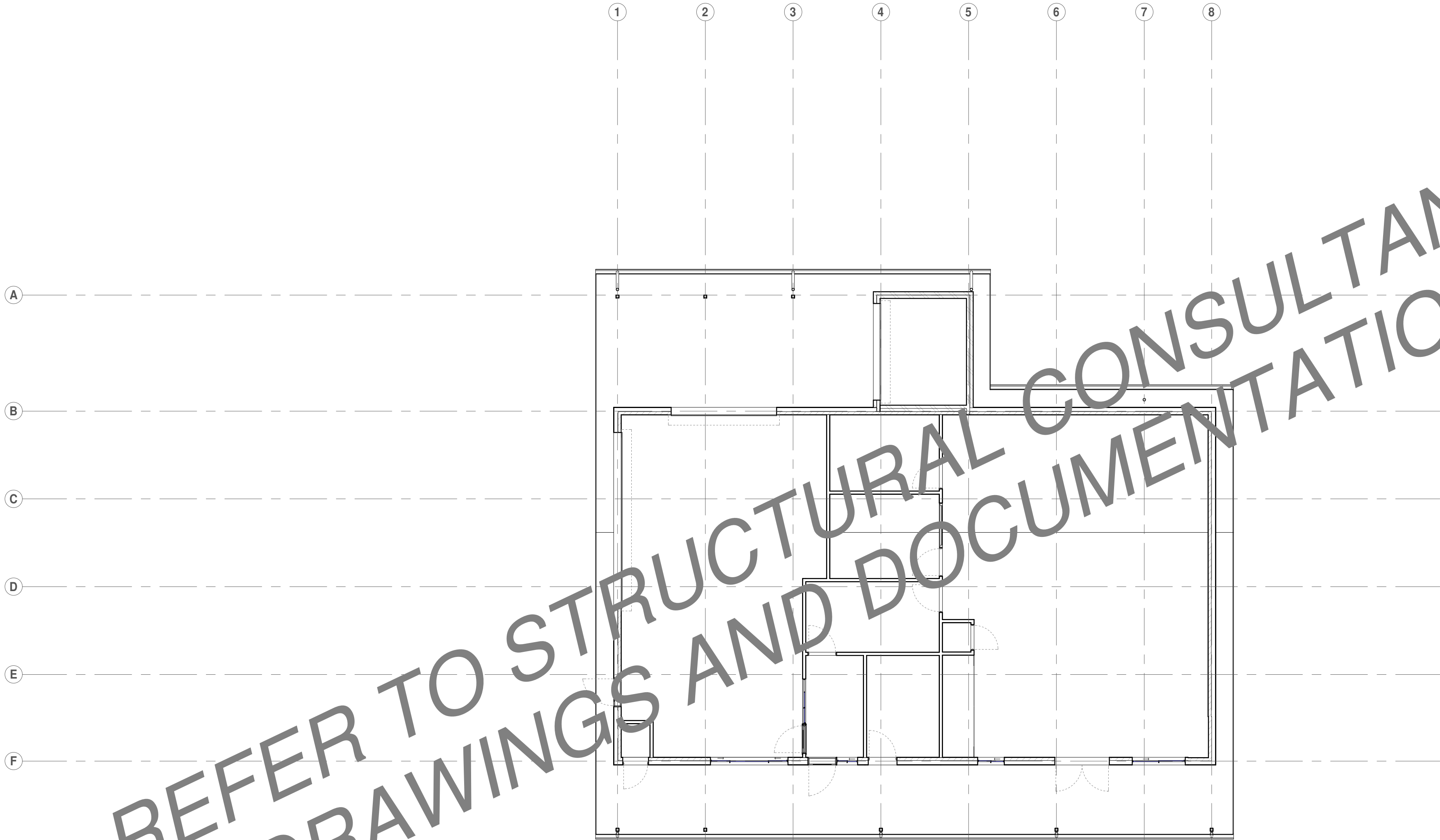


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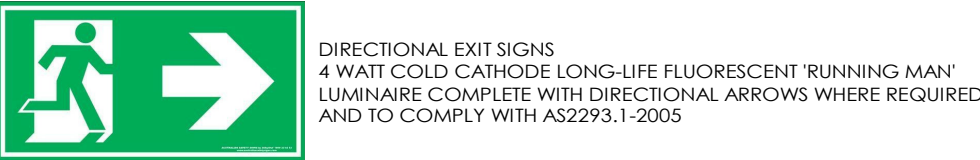
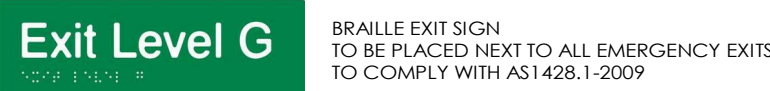
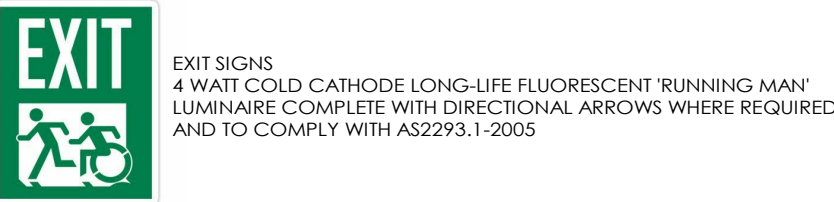
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PROPOSED ADMIN / UNIFORM AND MAINTENANCE STORAGE FACILITY			ISSUE	DECRPTION	DATE	STATUS	PRE - CONSTRUCTION ISSUE REVIEW		
CLIENT THE ANGLICAN SCHOOLS CORPORATION			C	ISSUED FOR TENDER	25/05/18	DECRPTION	PROPOSED ADMIN / UNIFORM AND MAINTENANCE STORAGE FACILITY		
			D	ADDENDUM TO TENDER ISSUE	31/05/18				
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ADDRESS 118-124 Wolseley Road, Oakville NSW 2765			F	PRE-CONSTRUCTION ISSUE	02/07/18	DATE	25/05/18	PWD-10	13
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 - SMOKE DETECTORS TO BE INSTALLED TO COMPLY WITH CLAUSE 5 - E2.2A OF THE BCA
 - ALL RIGID AND FLEXIBLE DUCTWORK MUST COMPLY WITH THE FIRE HAZARD PROPERTIES SET OUT IN AS4245 PARTS 1 & 2
 - ALL PLUMBING WORKS SHALL BE IN ACCORDANCE WITH AS3500, LOCAL WATER AUTHORITY, THE BCA AND WATER GUIDELINES
 - ALL SWITCHES AND CONTROLS TO COMPLY WITH AS1428.1-2009
 - ALL ARTIFICIAL INTERNAL OR EXTERNAL LIGHTING SHALL BE IN ACCORDANCE WITH BCA 2016 PART J6 AND AS/NZS1680.0-2009
 - AIR CONDITIONING AND VENTILATION SYSTEM ARE TO COMPLY WITH THE BCA 2016 PART J5 AND AS1668.2-2012
 - ALL NEW HEATED WATER SUPPLY SYSTEMS TO BE IN ACCORDANCE WITH PART B2 OF THE NCC VOLUME 3 - PLUMBING CODE OF AUSTRALIA
 - ALL DOOR HANDLES TO HAVE A D-LEVER SHAPE TO COMPLY WITH AS 1428.1-2009
 - ALL EXTERNAL DOORS TO HAVE A DRAUGHT PROTECTION DEVICE ALONG THE BOTTOM AS WELL AS AROUND THE EDGES.
 - ALL RAMP AND BALUSTRADES TO BE IN COMPLIANCE WITH THE BCA AND AS 1428.1-2009 ACCESS AND MOBILITY REQUIREMENTS
 - CONTRACTOR TO LIAISE WITH NAC TO ENSURE MASTER KEY AND KEY SYSTEM MEETS AND MATCHES EXISTING
 - ALL EXTERNAL AND INTERNAL EXIT DOOR HARDWARE TO COMPLY WITH THE BCA AND AS 1428.1-2009 ACCESS AND MOBILITY REQUIREMENTS
 - ALL EXTERNAL PRODUCTS IN COMPLIANCE WITH BAL12.5 REQUIREMENTS.

- KEY:
- V VINYL FLOOR COVERING
 - CT CARPET TILES
 - REM RECESSED ENTRY MAT
 - FW FLOOR WASTE
 - CF CONCRETE FINISH



PROPOSED STRUCTURAL PLAN



The Anglican Schools Corporation

CAPITAL WORKS AND ASSET MANAGEMENT

LEVEL 3 8 WOODVILLE STREET, HURSTVILLE NSW 2220
P.O BOX 465, HURSTVILLE BC NSW 1481
ABN 63 544 529 806

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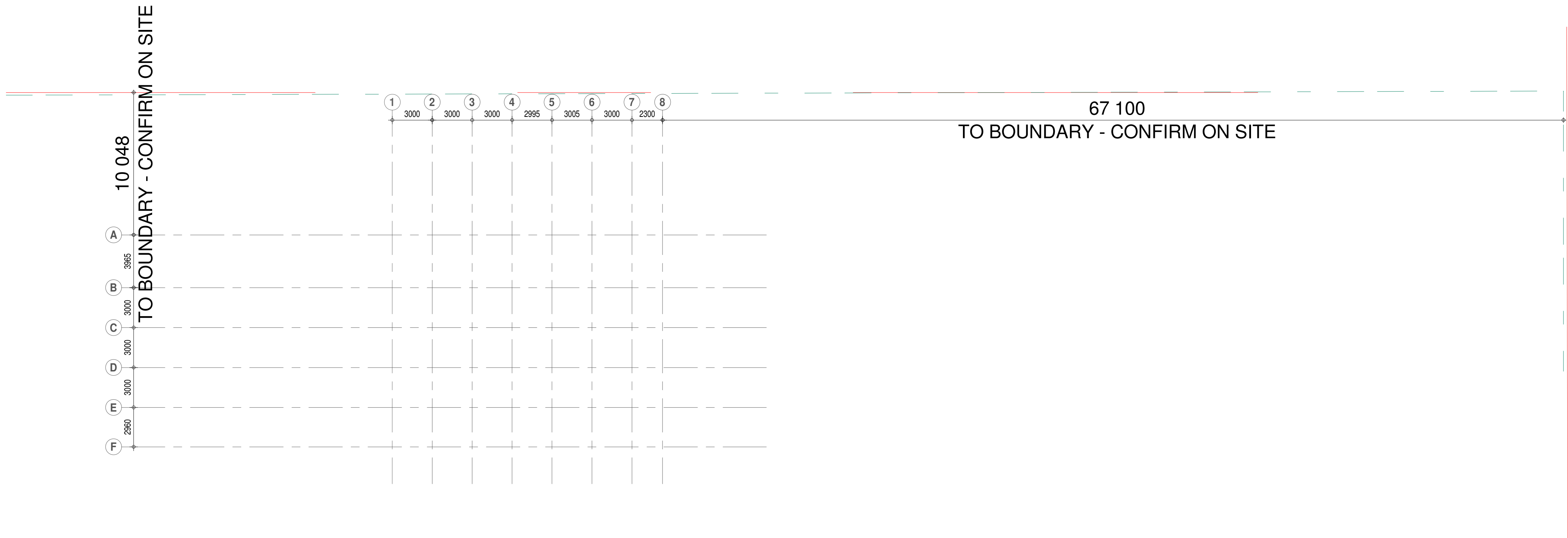
- NOTES:
- ALL DIMENSIONS ARE TO BE VERIFIED ON SITE BY THE BUILDER BEFORE COMMENCING WORK
 - ALL WORKS MUST COMPLY WITH RELEVANT AUSTRALIAN BUILDING CODES AND AUSTRALIAN STANDARDS
 - FINISHED FLOOR LEVEL REFERS TO INTERNAL FINISHED CONCRETE LEVEL
 - WRITTEN DIMENSIONS TAKE PRECEDENCE TO SCALE

PROPOSED ADMIN / UNIFORM AND MAINTENANCE STORAGE FACILITY

CLIENT
THE ANGLICAN SCHOOLS CORPORATION

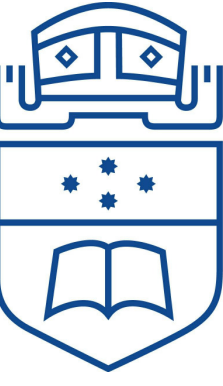
ADDRESS
118-124 Wolseley Road, Oakville NSW 2765

			STATUS	PRE - CONSTRUCTION ISSUE REVIEW		
ISSUE	DECRPTION	DATE	DECRPTION	PROPOSED ADMIN / UNIFORM AND MAINTENANCE STORAGE FACILITY		
C	ISSUED FOR TENDER	25/05/18				
D	ADDENDUM TO TENDER ISSUE	31/05/18				
E	AMENDMENTS TO BCA COMMENTS	14/06/18		DRAWN	JS	DRAWING No.
F	PRE-CONSTRUCTION ISSUE	02/07/18	DATE	25/05/18	PWD-11	13
G	PRE - CONSTRUCTION ISSUE REVIEW	08/08/18	SCALE	1 : 100		



NOTE : CONTRACTOR TO CONFIRM GRID SETOUT ON SITE BEFORE COMMENCEMENT OF ANY WORK

PROPOSED GRID SETOUT PLAN




The Anglican Schools Corporation

CAPITAL WORKS AND ASSET MANAGEMENT

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NOTES:

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- FINISHED FLOOR LEVEL REFERS TO INTERNAL FINISHED CONCRETE LEVEL
- WRITTEN DIMENSIONS TAKE PRECEDENCE TO SCALE

PROPOSED ADMIN / UNIFORM AND MAINTENANCE STORAGE FACILITY		ISSUE	DECRPTION	DATE	STATUS			
CLIENT THE ANGLICAN SCHOOLS CORPORATION	ADDRESS 118-124 Wolseley Road, Oakville NSW 2765	C	ISSUED FOR TENDER	25/05/18	DECRPTION	PRE - CONSTRUCTION ISSUE REVIEW		
		D	ADDENDUM TO TENDER ISSUE	31/05/18		PROPOSED ADMIN / UNIFORM AND MAINTENANCE STORAGE FACILITY		
		E	AMENDMENTS TO BCA COMMENTS	14/06/18	DRAWN	JS	DRAWING No.	TOTAL SHEETS
		F	PRE-CONSTRUCTION ISSUE	02/07/18	DATE	25/05/18	PWD-12	13
		G	PRE - CONSTRUCTION ISSUE REVIEW	08/08/18	SCALE	1 : 200		

APPENDIX B

Education SEPP Planning Principles

Appendix B: Education SEPP Planning Principles

Creating and maintaining safe, functional and well- designed schools has been an important consideration in the location and design of the proposed administration and storage building at Arndell Anglican College. The NSW Code provides the following seven planning principles to guide RNSs in their assessment of new school development proposals as follows:

Principle 1—context, built form and landscape

Comment: The location of the proposed building has considered the spatial organization of the school campus and located the building in an unutilized area adjacent to the existing school carpark and school administration facilities. The proposal forms a logical extension to the built form on the site. The single storey building is located on relatively level land and well setback from adjoining property boundaries and the street frontage of the site. There is no significant removal of vegetation required for the proposed activity. The proposal recognizes and protects the visual setting and natural environment.

Principle 2—sustainable, efficient and durable

Comment: Good design combines positive environmental, social and economic outcomes. The proposed building is built from materials that seek to minimize waste, energy loss, water and natural resources. The school building will be durable, resilient and adaptable to meet the ongoing administration needs of the school into the future.

Principle 3—accessible and inclusive

Comment: School buildings and their ground should provide wayfinding and be welcoming, accessible and inclusive to people with differing needs and capabilities. The proposal administration building caters for the needs of various staff, students and visitors being located adjacent to the existing school carpark with easy level access into the single storey building. An accessible parking space is provided adjacent to the entry of the building for people with a disability.

Principle 4—health and safety

Comment: Good school development optimises health, safety and security within its boundaries and the surrounding public domain, and balances this with the need to create a welcoming and accessible environment. The proposed development satisfies this principle as it provides an accessible and welcoming building within a safe and secure location.

Principle 5—amenity

Comment: Schools should provide pleasant and engaging spaces that are accessible for a wide range of educational, informal and community activities, while also considering the amenity of adjacent development and the local neighbourhood. The proposal is well setback and protects the amenity of neighbouring properties.

Principle 6—whole of life, flexible and adaptive

Comment: The school building design has considered future needs and taken a whole-of-life-cycle approach underpinned by site wide strategic and spatial planning. The proposed building provides environmental performance, ease of adaptation and maximises multi-use facilities.

Principle 7—aesthetics

Comment: The proposed school building and its setting is aesthetically pleasing and achieves a built form that has good proportions and a balanced composition of elements. It is considered to have a positive impact on the quality and character of the locality and the quality and sense of identity of the school within the surrounding neighbourhood.

APPENDIX C

Statutory Planning Framework

Appendix C - Statutory and Planning Context

1.1 Commonwealth legislation

1.1.1 *Environment Protection & Biodiversity Conservation Act 1999 (EPBC Act)*

The EPBC Act protects matters of National Environmental Significance (NES), such as threatened species and ecological communities, migratory species (protected under international agreements), and National Heritage places (among others).

Any actions that will, or are likely to have a significant impact on the matters of NES require referral and approval from the Australian Government Environment Minister. Significant impacts are defined by the Commonwealth (reference <http://www.environment.gov.au/epbc/guidelines-policies.html>) for matters of NES.

No matters of NES have been identified at or near the site of the proposed activity. A referral to the Commonwealth Department of Environment is not required.

1.2 State Legislation

1.2.1 *Environmental Planning and Assessment Act 1979 (EP&A Act)*

The EP&A Act is the principal planning legislation for NSW. It provides a framework for the overall environmental planning and assessment of proposals.

As ASC is the proponent, the works are to be assessed as 'development permissible without consent' under Part 5 of the EP&A Act. Accordingly ASC must satisfy Sections 111 and 112 of that Act by examining, and taking into account to the fullest extent possible, all matters which are likely to affect the environment. This REF is intended to assist, and ensure ASC compliance, with the EP&A Act including Sections 111 and 112.

This report addresses the requirements of s228 of the EP&A Regulation 2000.

1.2.2 *Threatened Species Conservation Act 1995 (TSC Act)*

The TSC Act lists and protects threatened species, populations and ecological communities that are under threat of extinction in NSW. NSW Office of Environment and Heritage (OEH) is responsible for administering the TSC Act.

Impacts to species, populations, or endangered communities listed under the TSC Act must be assessed using the '7-Part Test' under Section 5A of the EP&A Act. If the assessment determines that a significant impact to a particular species, population or community is likely to result, a Species Impact Statement (SIS) may be required.

Threatened species and communities listed under this Act will not be impacted by the works and therefore a Species Impact Statement is not required.

1.2.3 *Fisheries Management Act 1995 (FM Act)*

FM Act provides for the protection, conservation, and recovery of threatened species defined under the Act. It also makes provision for the management of threats to threatened species, populations, and ecological communities defined under the Act, as well as the protection of fish and fish habitat in general.

The development does not involve harm to mangroves or other protected marine vegetation, dredging or reclamation, blocking of fish passage and does not involve impact to a Key Fish Habitat waterway. Therefore the works will not require a Part 7 Fisheries permit under the FM Act.

1.2.4 Native Vegetation Act 2003 (NV Act)

The NV Act regulates the clearing of native vegetation on all land in NSW, except for land listed in Schedule 1 of the Act and biodiversity certified land (within the meaning of Part 7AA of the *Threatened Species Conservation Act 1995*).

Section 25(g) provides a legislative exclusion to 'any clearing that is, or is part of, an activity carried out by a determining authority' within the meaning of Part 5 of the EPA Act if the determining authority has complied with that part.

There is no clearing of native vegetation proposed.

1.2.5 National Parks and Wildlife Act 1974 (NPW ACT)

The NPW Act is administered by the Director-General of the National Parks and Wildlife Services, who is responsible for the control and management of all national parks, historic sites, nature reserves, and Aboriginal areas (among others). The main aim of the Act is to conserve the natural and cultural heritage of NSW.

The Act aims to conserve the natural and cultural heritage of NSW. Where works will disturb Aboriginal objects, an Aboriginal Heritage Impact Permit (AHIP) is required.

The proposed development is unlikely to harm Aboriginal objects and therefore a permit under the NP&W Act is not required.

1.2.6 Heritage Act 1977

The proposed development does not involve an item or place listed on the NSW State Heritage Register. Approval of works on the site is therefore not under s57 of the Heritage Act.

1.2.7 Protection of the Environment Operations Act 1997 (POEO ACT)

The POEO Act is the key environmental protection and pollution statute. The POEO Act is administered by the EPA and establishes a licensing regime for waste, air, water and pollution. Relevant sections of the Act are listed below:

- Part 5.3 Water Pollution
- Part 5.4 Air Pollution
- Part 5.5 Noise Pollution
- Part 5.6 Land Pollution and Waste.

Any work potentially resulting in pollution must comply with the POEO Act. Relevant licences must be obtained if required.

No licenses have been identified as being required including an Environmental Protection Licence (EPL).

1.2.8 Water Management Act 2000 (WM Act)

The WM Act's main objective is to manage NSW water in a sustainable and integrated manner that will benefit today's generations without compromising future generations' ability to meet their needs. The WM Act is administered by NSW Department of Primary Industries Water (DPI – Water) (previously NSW Office of Water) and establishes an approval regime for activities within waterfront land.

Controlled activity approval is typically required for work within 40 m of the highest bank of a river, lake or estuary. Section 91E of the Act creates an offence for carrying out a controlled activity within waterfront land without approval.

There are no works proposed within 40 metres of a river, lake or estuary. A controlled activity permit is not required.

1.2.9 Roads Act 1993

The proposed development does not involve carrying out work on a public road or connection to a classified road and therefore does not require approval under s138 of the Roads Act.

1.2.10 State Environmental Planning Policy (Educational Establishments and Child Care Centre) 2017 (Education SEPP)

State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017 (the Education SEPP) gazetted in September 2017 has provisions that are stated as making it easier for child-care providers, schools, TAFEs and universities to build new facilities and improve existing ones by streamlining approval processes to save time and money and deliver greater consistency across NSW. Clause 36 of the Education SEPP sets out the range of activities that can be undertaken by Government schools and registered non-government schools under the “development without consent” pathway.

The proposed activity is the subject of a Part 5 ‘development without consent’ pathway of assessment in accordance with the NSW Code of Practice for Part 5 Activities for registered non-government schools.

1.2.11 State Environmental Planning Policy No 14 (Coastal Wetlands)

The proposed development is located on land subject to SEPP 14 and involves clearing, filling, draining or constructing a levee. The proposed development is not located on land subject to SEPP 14. In accordance with s7 of the SEPP, the concurrence of the Director-General of the Department of Planning and Infrastructure is not required.

1.2.12 State Environmental Planning Policy No 26 (Littoral Rainforests)

The proposed development is located on land subject to SEPP 26 and involves disturbance of littoral rainforest. The proposed development is not located on land subject to SEPP 2. The concurrence of the Director-General of the Department of Planning and Infrastructure is not required.

1.2.13 State Environmental Planning Policy No 44 (Koala Habitat)

SEPP 44 aims to encourage the proper conservation and management of areas of natural vegetation that provide habitat for *Phascolarctos cinereus* (Koala) to ensure a permanent free-living population over their present range and reverse the current trend of Koala population decline.

The project is being assessed under Part 5 of the EP&A Act and is not a development application, and therefore SEPP44 does not apply.

1.2.14 State Environmental Planning Policy No 71 (Coastal Protection)

The Coastal Protection SEPP aims to protect and manage the values of coastal areas by ensuring appropriate access and developments within this area.

According to Clause 7 as the proposed works are not subject to a Development Application SEPP 71 does not apply to these works.

APPENDIX D

Environmental Considerations under Sec 111 of EP&A Act

APPENDIX D - Section 111(1) of the EP&A Act Considerations

For the purpose of attaining the objects of this Act relating to the protection and enhancement of the environment, a determining authority in its consideration of an activity shall, notwithstanding any other provisions of this Act or the provisions of any other Act or of any instrument made under this or any other Act, examine and take into account to the fullest extent possible all matters affecting or likely to affect the environment by reason of that activity.

- Principles of Ecological Sustainable Development
- Proximity to items of national environmental significance
- Precautionary Principle
- Potentially effects on threatened species, populations or ecological communities, or their habitats, including fish and marine vegetation
- Working near marine vegetation (mangroves, seagrass beds, etc.) or dredging a water body
- Impacting State, Local or section 170 register (Non-Aboriginal) heritage
- Potential impacts on Aboriginal cultural heritage including Aboriginal objects or Aboriginal places declared under the *National Parks and Wildlife Act 1974*, a Potential Aboriginal Deposit (PAD) or native title
- Working near protected wetlands and rainforests
- Working within a drinking water catchment area
- Working within State forests/area subject to forest agreement
- Altering ground water, water bodies, etc
- Discharging to stormwater or sewer
- Siting oil filled equipment within 40m of a sensitive area or within 5m upstream of a drain
- Working within areas with potential or actual contaminated land
- Impacting hollow bearing trees
- Impacting high value Habitat
- Koala Habitat
- Clearing native vegetation
- Electric and Magnetic Fields (EMF) and Prudent Avoidance
- Bushfire risk and vegetation management.

The above matters have been considered in the assessment of the potential environmental impact of the activity. The proposed activity will have little to no impact on the matters identified above.

The flood liable land policy provisions of Hawkesbury City Council will need to be considered and the NSW Rural Fire Service consulted in order to obtain a bushfire safety authority for the project. Other environmental protection matters have been discussed and mitigation measures recommended in the in the Review of Environmental Factors.

It is noted that the regulations may also make provision for an approved code to address the above matters. The Review of Environmental Factors has been prepared in accordance with the Code approved under Clause 244N of the Environmental Planning and Assessment Regulation 2000.

APPENDIX E1

Bushfire Assessment Report



Bushfire Protection Assessment

Proposed additional facilities – Arndell Anglican College Oakville – 118 - 124 Wolseley Road, Oakville

28 June 2018



BPAD
Bushfire
Planning & Design
Accredited Practitioner
Level 3

DOCUMENT TRACKING

Item	Detail
Project Name	Arndell Anglican College Oakville
Project Number	18WOL_10549
Client Name	Rossmark Pty Ltd
Project Manager	Mick George 0400 494 366
Prepared by	Michael Jordan
Reviewed by	Bruce Horkings
Approved by	Bruce Horkings FPAA BPAD L3 Certified Practitioner No. BPAD29963-L3
Status	Final
Version Number	1
Last saved on	28 June 2018

This report should be cited as *'Eco Logical Australia June 2018. Bushfire Protection Assessment: Proposed additional facilities – Arndell Anglican College Oakville – 118 -124 Wolseley Road, Oakville*

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Template 01/07/13

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1 Property and proposal

Table 1: Subject site summary

Street address or property name:	118 – 124 Wolseley Road		
Suburb, town or locality:	Oakville	Postcode:	2765
Lot/DP no:	Lot 1 DP1044182		
Local Government Area:	City of Hawkesbury		
Zoning:	RU4 – Primary Production Small Lots		
Type of development:	Special Fire Protection Purpose Development – additional school administration facilities		

1.1 Description of proposal

The proposal is for construction of a proposed administration, uniform facility and storage facility building to be located in the north-eastern area of the school campus (see **Figure 1**) at the Arndell Anglican College located at 118-124 Wolseley Road, Oakville (hereafter referred to as the subject land).

1.2 Assessment process

Being a Special Fire Protection Purpose (SFPP) development, the integrated development proposal was assessed in accord with Section 100B of the *Rural Fires Act 1997* and 'Planning for Bush Fire Protection 2006' (RFS 2006), herein referred to as PBP (See **Appendix A** for a summary of the assessment process).

However, as detailed within 4.2.3 of NSW Rural Fire Service 'Planning for Bushfire Protection 2006' (PBP 2006), *Specific Objectives for Special Fire Protection Purpose Developments*, in general office buildings for administration are not afforded the same protection as classrooms or assembly point buildings used for evacuation.

Assessment included a review of background documentation, design team consultation and GIS analysis.

Table 2 identifies the bushfire protection measures assessed and whether these involved acceptable or performance solutions.

Table 2: Summary of bushfire protection measures assessed

Bushfire Protection Measure	Acceptable Solution	Performance Solution	Report Section
Asset Protection Zones	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3.1
Construction standard	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3.3
Access	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3.4
Water supply	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3.5.1
Gas and electrical supplies	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3.5.2
Emergency and Evacuation planning	<input checked="" type="checkbox"/>	<input type="checkbox"/>	4

1.3 Bush fire prone land status

The proposed development includes land classified as bush fire prone on the City of Hawkesbury bushfire prone land (BFPL) map¹.

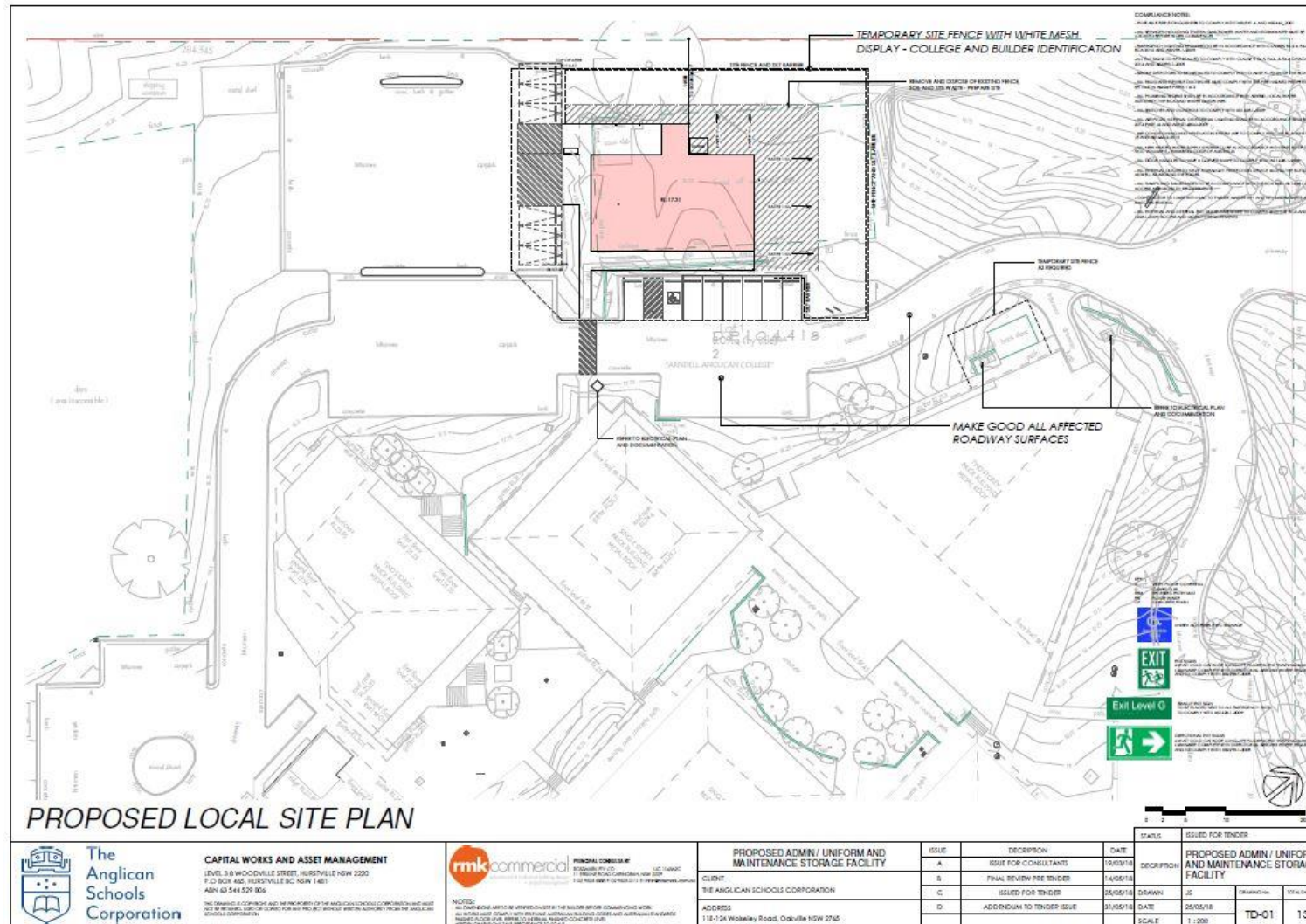


Figure 1: Proposed site plan

2 Bushfire threat assessment

Figure 2 shows the effective slope and predominant vegetation on transect lines representing the highest bushfire threat potentially posed to the proposed development site from various directions.

The effective slope has been determined from 1 m contour data.

The surrounding land is almost flat with a gentle downslope under the bushfire hazard falling within the PBP slope class of '>0-5 degrees downslope'.

The predominant bushfire hazard exists to the west and north-east from the building footprint is a remnant patch of Cumberland Plains Woodland vegetation. This vegetation is less than 1 ha in size, surrounded by managed land and separated from a larger expanse of woodland vegetation to the south. In accordance with PBP this vegetation is categorised as a 'low hazard' as shown in **Figure 1**. For low hazard vegetation the 'rainforest' provisions of PBP are applied as a surrogate for the reduced bushfire behaviour.

In all other directions is existing managed land in the form of the school grounds, residential dwellings with maintained curtilage or land used for low-scale agricultural purposes.

Figure 2 and **Table 3** show the vegetation and slope information assessed. Where required additional information is provided within **Table 3** on why and how the chosen slope and vegetation has been calculated.

The site is located within the Local Government Area (LGA) of Hawkesbury City and has a Fire Danger Index (FDI) of 100.

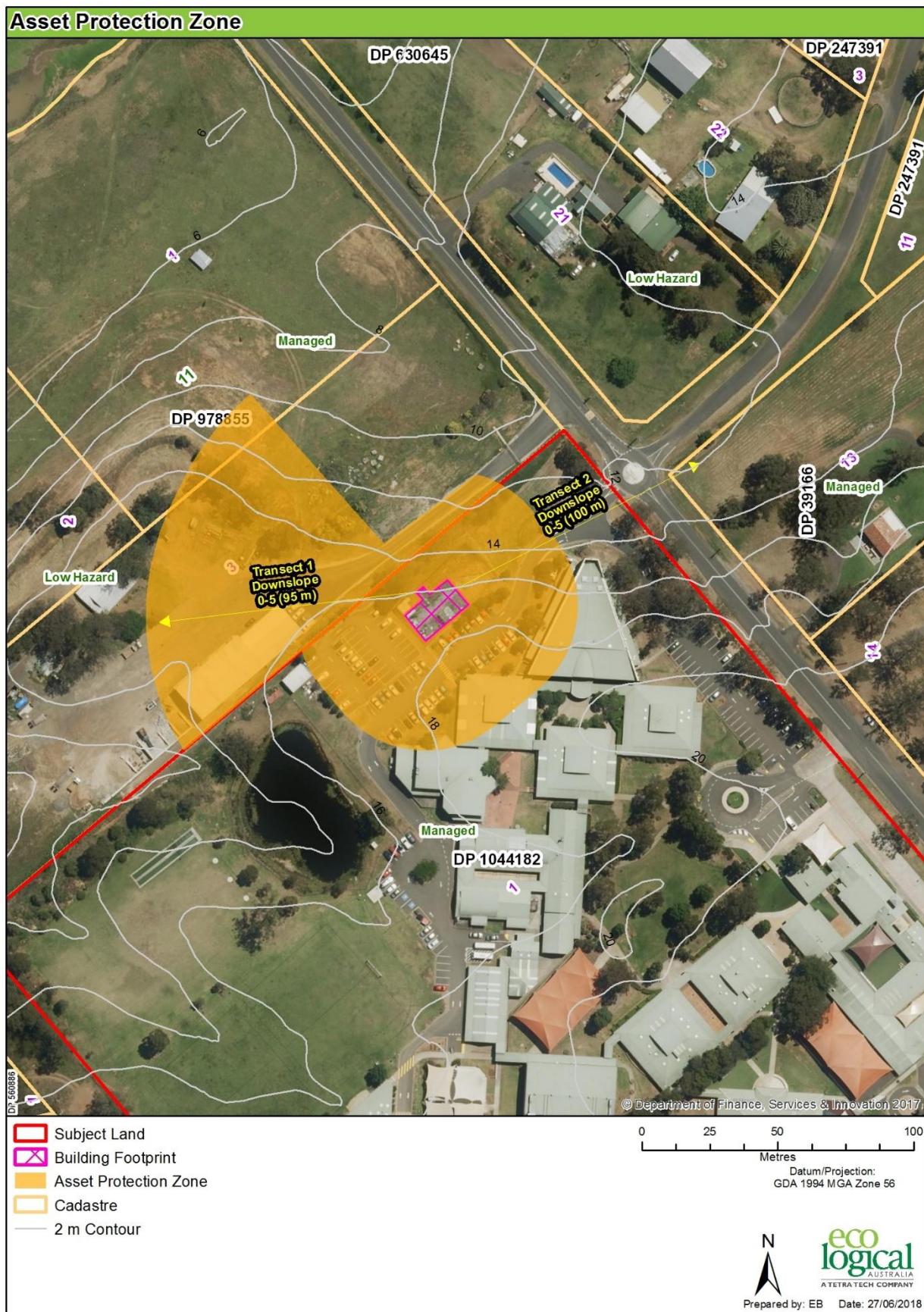


Figure 2: Bushfire hazard assessment and Asset Protection Zones (APZ)

3 Bushfire protection measures

3.1 Asset Protection Zones (APZ)

Special Fire Protection Purpose (SFPP) developments are required to achieve the APZ performance criteria of '*radiant heat levels not greater than 10kW/m² to be experienced by occupants or emergency services workers entering or exiting the building*'. However, as detailed within 4.2.3 of NSW Rural Fire Service 'Planning for Bushfire Protection 2006' (PBP 2006), *Specific Objectives for Special Fire Protection Purpose Developments*, in general office buildings for administration are not afforded the same protection as classrooms or assembly point buildings used for evacuation. Residential APZ dimensions have been used in place of SFPP requirements.

Table 3 shows the dimensions of the Asset Protection Zones (APZ) required in each of the transect line directions; and where relevant, information on how the APZ is to be provided is included. The footprint of the required APZ is also shown in **Figure 2**. Future development of adjoining land will also influence the final APZ dimensions and locations.

3.2 APZ maintenance plan

The APZ is currently in place and no further implementation works are required. The APZ and any future landscaping works within the school grounds should comply with the following Inner Protection Area standards:

- No tree or tree canopy is to occur within 2 m of the future building rooflines;
- The presence of a few shrubs or trees in the APZ is acceptable provided they:
 - Are well spread out and do not form a continuous canopy;
 - Are not species that retain dead material or deposit excessive quantities of ground fuel in a short period or in a danger period; and
 - Are located far enough away from the building so that they will not ignite future buildings by direct flame contact or radiant heat emission.
- Any landscaping or plantings should preferably be local endemic mesic species or other low flammability species;
- A minimal ground fuel is to be maintained to include less than 4 tonnes per hectare of fine fuel (fine fuel means ANY dead or living vegetation of <6 mm in diameter e.g. twigs less than a pencil in thickness. 4 t/ha is equivalent to a 1 cm thick layer of leaf litter); and
- Any structures storing combustible materials such as firewood (e.g. sheds) must be sealed to prevent entry of burning debris.

Further details on APZ implementation and management can be found on the NSW RFS website including:

https://www.rfs.nsw.gov.au/_data/assets/pdf_file/0010/13321/Standards-for-Asset-Protection-Zones.pdf.

Table 3: Bushfire hazard assessment and APZ requirements

Transect	Slope ¹	Vegetation ²	PBP residential APZ ³	Proposed APZ	AS 3959-2009 Bushfire Attack Level (BAL) ⁴	Comments
1 West	Downslope >0 to 5 degrees	Low Hazard (remnant)	10 m	≥95 m	BAL-12.5	APZ provided by maintained school grounds and neighbouring driveway along the north-western boundary. Due to the proposed building not being occupied (administration purposes), this does not require SFPP development APZ dimensions.
2 North-east	Downslope >0 to 5 degrees	Low Hazard (remnant)	10 m	≥40 m	BAL-12.5	
All other directions		Managed, under development or has development approval				

¹ Slope most significantly influencing the fire behaviour of the site having regard to vegetation found. Slope classes are according to PBP.

² Predominant vegetation is identified, according to PBP and “Where a mix of vegetation types exist the type providing the greater hazard is said to be predominate”.

³ Assessment according to table A2.6 of PBP (2006).

⁴ Assessment according to AS 3959-2009 Table 2.4.2.

3.3 Construction standard

The building construction standard is based on the determination of the Bushfire Attack Level (BAL) in accordance with Method 1 of *Australian Standard AS 3959-2009 'Construction of buildings in bushfire-prone areas'* (Standards Australia 2009). The BAL is based on known vegetation type, effective slope, and separation distance between the development and the bushfire hazard.

As demonstrated in **Table 1**, the development is affected by **BAL-12.5** from the bushfire hazard. It is important that the current version of AS3959 is consulted. Additionally, the additional construction requirements as outlined in PBP (within the 2010 Appendix 3 Addendum) are to be implemented as applicable to the proposed development.

It is important that the version of AS 3959-2009 applicable at the time of construction is consulted. Additionally, the NSW variation to the AS 3959-2009 as outlined in PBP 2010 Appendix 3 Addendum is to be applied.

3.4 Access

The subject land has frontage to Wolseley Road with an internal road system accessing car parking at multiple points as shown in **Figure 2**. It is anticipated that a fire impacting the subject land would be attended to by fire appliances situated within the hardstand surface of Wolseley Road or from the internal roads and car parking. If required, fire appliances can also access the school grounds from Garfield Street.

Figure 1 and **Figure 2** show the current and proposed access arrangement.

3.5 Services – Water, electricity and gas

3.5.1 Water

The proposal will be serviced by a reticulated water supply. **Table 4** identifies the acceptable solution requirements of Section 4.2.7 of PBP for which the proposal is compliant with, subject to the following specifications:

Table 4: Performance criteria for reticulated water supplies (PBP page 37)

Performance Criteria	Acceptable Solutions	complies
The intent may be achieved where:		
<ul style="list-style-type: none"> water supplies are easily accessible and located at regular intervals 	<ul style="list-style-type: none"> access points for reticulated water supply to SFPP developments incorporate a ring main system for all internal roads. 	Complies
	<ul style="list-style-type: none"> fire hydrant spacing, sizing and pressures comply with AS 2419.1 – 2005. Where this cannot be met, the RFS will require a test report of the water pressures anticipated by the relevant water supply authority. In such cases, the location, number and sizing of hydrants shall be determined using fire engineering principles. 	Complies
	<ul style="list-style-type: none"> the provisions of public roads in section 4.1.3 in relation to parking are met. 	Complies

3.5.2 Electricity services

Electricity supply to / within the subject land is located aboveground. The proposed overhead electrical transmission lines are compliant with Section 4.1.3 of PBP, subject to the following specifications:

- Lines with short pole spacing (30 metres) are required, unless crossing gullies, gorges or riparian areas; and
- No part of a tree is closer to a power line than the distance set out in accordance with the specifications in *'Guide for the Management of Vegetation in the Vicinity of Electricity Assets'* issued by the Industry Safety Steering Committee 3 (ISSC3 2016).

3.5.3 Gas services

Gas services (reticulated or bottle gas) are compliant with Section 4.2.7 of PBP, subject to the following specifications:

- Any gas services are to be installed and maintained in accordance with Australian Standard AS/NZS 1596 *The storage and handling of LP Gas* (SA 2014). Metal piping is to be used;
- All fixed gas cylinders are kept clear of all flammable materials to a distance of 10 metres and shielded on the hazard side of the installation;
- If gas cylinders need to be kept close to the building, the release valves are directed away from the building and at least 2 metres away from any combustible material, so that they do not act as a catalyst to combustion. Connections to and from gas cylinders are metal; and
- Polymer sheathed flexible gas supply lines to gas meters adjacent to buildings are not used.

4 Emergency and Evacuation Planning

An emergency and Evacuation Management Plan approved by the relevant fire authority for the area is to be prepared prior to occupation and is recommended. The plan will need to be consistent the RFS Guidelines for the preparation of the Emergency / Evacuation Plan.

If there is already a plan in place it is to be updated as necessary prior to the occupation of the proposed additional administration, uniform and storage facilities.

5 Assessment of environmental issues

An assessment of significant environmental features, threatened species or Aboriginal relics identified under the *Biodiversity Conservation Act 2016* or the *National Parks Act 1974* that will affect or be affected by the bushfire protection proposals in this report has not been undertaken as it is covered by other parts of the DA process. However, site impacts have been minimised by carefully selected bushfire protection measures. The impact footprint of these measures e.g. APZ is clearly identified within this report and therefore capable of being clearly assessed by suitably qualified persons as required.

City of Hawkesbury is the determining authority for this development; they will assess more thoroughly any potential environmental and heritage issues.

6 Conclusion

The proposed SFPP development complies with all the relevant acceptable solutions within 'Planning for Bush Fire Protection 2006', (see **Table 2**).

Table 6: Summary of bushfire protection measures assessed

Bushfire Protection Measures	Complies	Requirements	Acceptable Solution	Performance Solution	Report Section
Asset Protection Zones	<input checked="" type="checkbox"/>	APZ dimensions are detailed in Table 3 .	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3.1
APZ Maintenance plan	<input checked="" type="checkbox"/>	Identified APZ to be maintained in perpetuity to the detailed specifications in Section 3.2 .	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3.2
Construction standard	<input checked="" type="checkbox"/>	A maximum of BAL-12.5 is achievable.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3.3
Access	<input checked="" type="checkbox"/>	Access to meet standards detailed in Table 4 .	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3.4
Water supply	<input checked="" type="checkbox"/>	Reticulated water supply to meet PBP acceptable solution specifications for a SFPP.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3.5.1
Electricity service	<input checked="" type="checkbox"/>	Electricity supply located aboveground.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3.5.2
Gas service	<input checked="" type="checkbox"/>	Gas services are to be installed and maintained in accordance with AS/NZS 1596:2014.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3.5.3
Evacuation and Emergency Response Plan	<input checked="" type="checkbox"/>	An Evacuation and Emergency Response Plan compliant with the requirements of the NSW RFS guidelines is required prior to occupation.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	4

7 Recommendations

It is recommended that the Special Fire Protection Purpose development be issued a Bush Fire Safety Authority.



Michael Jordan
Bushfire Consultant



Bruce Horkings
Senior Bushfire Consultant
FPAAC BPAD-A Certified Practitioner No. BPAD29962-L3



8 References

Industry Safety Steering Committee 3 (ISSC3). 2016. *ISSC3 Guide for the Management of Vegetation in the Vicinity of Electricity Supply Infrastructure*. November 2016. NSW.

NSW Rural Fire Service (RFS). 2006. *Planning for Bush Fire Protection: A Guide for Councils, Planners, Fire Authorities, Developers and Home Owners* including the 2010 Appendix 3 Addendum. Australian Government Publishing Service, Canberra.

Standards Australia (SA). 2009. *Construction of buildings in bushfire-prone areas (including Amendments 1 – 3)*, AS 3959-2009. SAI Global, Sydney.

Standards Australia (SA). 2014. *The storage and handling of LP Gas*, AS/NZS 1596:2014. SAI Global, Sydney.

Standards Australia (SA). 2017. *Fire hydrant installations - System design, installation and commissioning*, AS 2419.1, SAI Global, Sydney.

Appendix A – Assessment process

Vegetation types

In accord with PBP the predominant vegetation class has been assessed for a distance of at least 140 m from the subject land in all directions.

Effective slope

In accord with PBP, the slope that would most significantly influence fire behaviour was determined over a distance of 100 m from the boundary of the proposed development where the vegetation was found.

Asset Protection Zone determination

Table A2.6 (FDI 100) of PBP has been used to determine the width of required Asset Protection Zone (APZ) for the proposed development using the vegetation and slope data identified in **Section 1**.

Special Fire Protection Purpose

In accord with PBP, the proposed SFPP has been assessed in accordance with section 4.2.7 for Special Fire Protection Purpose (SFPP) developments.

Appendix B - Access specifications

Table 5: Performance criteria for proposed internal roads (PBP page 35)

Performance Criteria	Acceptable Solutions	Complies
The intent may be achieved where:		
<ul style="list-style-type: none"> Internal road widths and design enable safe access for emergency services and allow crews to work with equipment about the vehicle 	<ul style="list-style-type: none"> Internal roads are two-wheel drive, sealed, all weather roads Internal perimeter roads are provided with at least two traffic lane widths (carriageway, 8 metres minimum kerb to kerb) and shoulders on each side, allowing traffic to pass in opposite directions Roads are through roads. Dead end roads are not more than 100 metres in length from a through road, incorporate a minimum 12 metres outer radius turning circle, and are clearly signposted as a dead end Traffic management devices are constructed to facilitate access by emergency services vehicles A minimum vertical distance of four metres to any overhanging obstructions, including tree branches, is provided Curves have a minimum inner radius of six metres and are minimal in number to allow for rapid access and egress The minimum distance between inner and outer curves is six metres Maximum grades do not exceed 15 degrees and average grades are not more than 10 degrees Cross fall of the pavement is not more than 10 degrees Roads do not traverse through wetland or other land potentially subject to periodic inundation (other than flood or storm surge). Roads are clearly signposted and bridges clearly indicate load ratings The internal road surfaces and bridges have a capacity to carry fully loaded firefighting vehicles (15 tonnes) 	Complies



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APPENDIX E2

**Bush Fire Safety Authority
by Rural Fire Service**



NSW RURAL FIRE SERVICE



Rossmark Pty Ltd
PO Box 2625
Taren Point NSW 2229

Our reference: D18/6273

9 August 2018

Attention: Matthew Earl

Dear Sir/Madam,

New administration, uniform facility and storage facility building - Arndell Anglican College - 118-124 Wolseley Road Oakville NSW 2765

I refer to your letter dated 5 July seeking our advice and general terms of approval for the above application for integrated development in accordance with Section 91 of the *Environmental Planning and Assessment Act 1979* in relation to the above development at Arndell Anglican College.

The New South Wales Rural Fire Service advises that this response is to be deemed to be a bush fire safety authority subject to the following conditions:

Asset Protection Zones

The intent of measures is to provide sufficient space for fire fighters and other emergency services personnel, ensuring radiant heat levels permit operations under critical conditions of radiant heat, smoke and embers, while supporting or evacuating occupants. To achieve this, the following conditions shall apply:

1. At the commencement of building works, and in perpetuity, the entire property shall be managed as an Inner Protection Area (IPA) as outlined within section 4.1.3 and Appendix 5 of *Planning for Bush Fire Protection 2006* and the NSW Rural Fire Service's document *Standards for asset protection zones*.

Water and Utilities

The intent of measure is to provide adequate serves of water for the protection of buildings during and after the passage of bush fire, and to locate gas and electricity so as not to contribute to the risk of fire to a building.

2. The provision of water, gas and electricity shall comply with sections 4.2.7 and 4.1.3 of *Planning for Bush Fire Protection 2006*

Postal address

NSW Rural Fire Service
Planning and Environment Services
Locked Bag 17
GRANVILLE NSW 2141

T 1300 NSW RFS
F (02) 8741 5433
E records@rfs.nsw.gov.au
www.rfs.nsw.gov.au

Design and Construction

The intent of measures is that buildings are designed and constructed to withstand the potential impacts of bush fire attack. To achieve this, the following conditions shall apply:

3. New construction shall comply with Sections 3 and 5 (BAL 12.5) Australian Standard AS3959-2009 *Construction of buildings in bush fire-prone areas* or NASH Standard (1.7.14 updated) *National Standard Steel Framed Construction in Bushfire Areas – 2014* as appropriate and section A3.7 Addendum Appendix 3 of *Planning for Bush Fire Protection 2006*.

Evacuation and Emergency Management

The intent of measures is to provide suitable emergency and evacuation (and relocation) arrangements for occupants of special fire protection purpose developments. To achieve this, the following conditions shall apply:

4. A Bush Fire Emergency Management and Evacuation Plan shall be prepared consistent with *Development Planning- A Guide to Developing a Bush Fire Emergency Management and Evacuation Plan December 2014*.

If you have any queries regarding this advice, please contact Emma Jensen, Development Assessment and Planning Officer, on 1300 NSW RFS.

Yours sincerely,



Nika Fomin
Manager, Planning and Environment Services (East)

APPENDIX F

Flood Impact Assessment

Arndell Anglican College: Administration Building

Flood Impact Assessment

Prepared for Rossmark / December 2017

171456 CAAB

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1.0 Introduction

Taylor Thomson Whitting has been appointed by Rossmark to complete a flood impact assessment for the proposed administration and maintenance building at Arndell Anglican College. The proposed building is classed as development permitted without consent under clause 36 (1) of the State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017:

- (1) *Development for any of the following purposes may be carried out by or on behalf of a public authority without development consent on land within the boundaries of an existing school:*
 - (a) *construction, operation or maintenance, more than 5 metres from any property boundary with land in a residential zone and more than 1 metre from any property boundary with land in any other zone, of:*
 - (i) *a library or an administration building that is not more than 1 storey high, or Development for the purpose of a portable one storey classroom may be carried out by any person without consent on land on which a school is located, if the classroom is located more than 5m from any property boundary.*

The proposed single storey building is located on flood prone land and must therefore comply with clause 6.3 of Hawkesbury Local Environmental Plan 2012 (LEP) and Hawkesbury City Council Development of Flood Liable Land Policy, 2012.

2.0 Site Location

The development site is located at 118-124 Wolseley Road, Oakville, Lot 1/DP 1044182, within Hawkesbury City Local Government Area. The site is located within a primary production small lots zone (RU4). The site is between the centres of Oakville and McGraths Hill, and is surrounded by rural and agricultural land. The site is bounded by Garfield Street to the southwest and Wolseley Road to the northeast, refer to figure 1.



Figure 1. Site Location

The site is occupied by the Arndell Anglican College which consists of an early childhood centre, primary and secondary classroom modules, library, multi-purpose hall, sports courts and facilities, playing fields and car parks. The site is square shaped, with a site area of approximately 80,850m². The topography of the site includes a ridge running from the southwest boundary to the north east boundary, refer to figure 2. The ridge creates two natural catchments that fall away from the ridge. The northwest area falls from the ridge (RL≈20.00m) towards an existing dam (RL≈15.00m) at an approximate grade of 3%. The southeast area falls from the ridge (RL≈20.00m) towards an existing dam (RL≈17.50) located within the additional land owned by the college at an approximate grade of 3%. All levels within this report are referenced to Australian Height Datum (AHD)

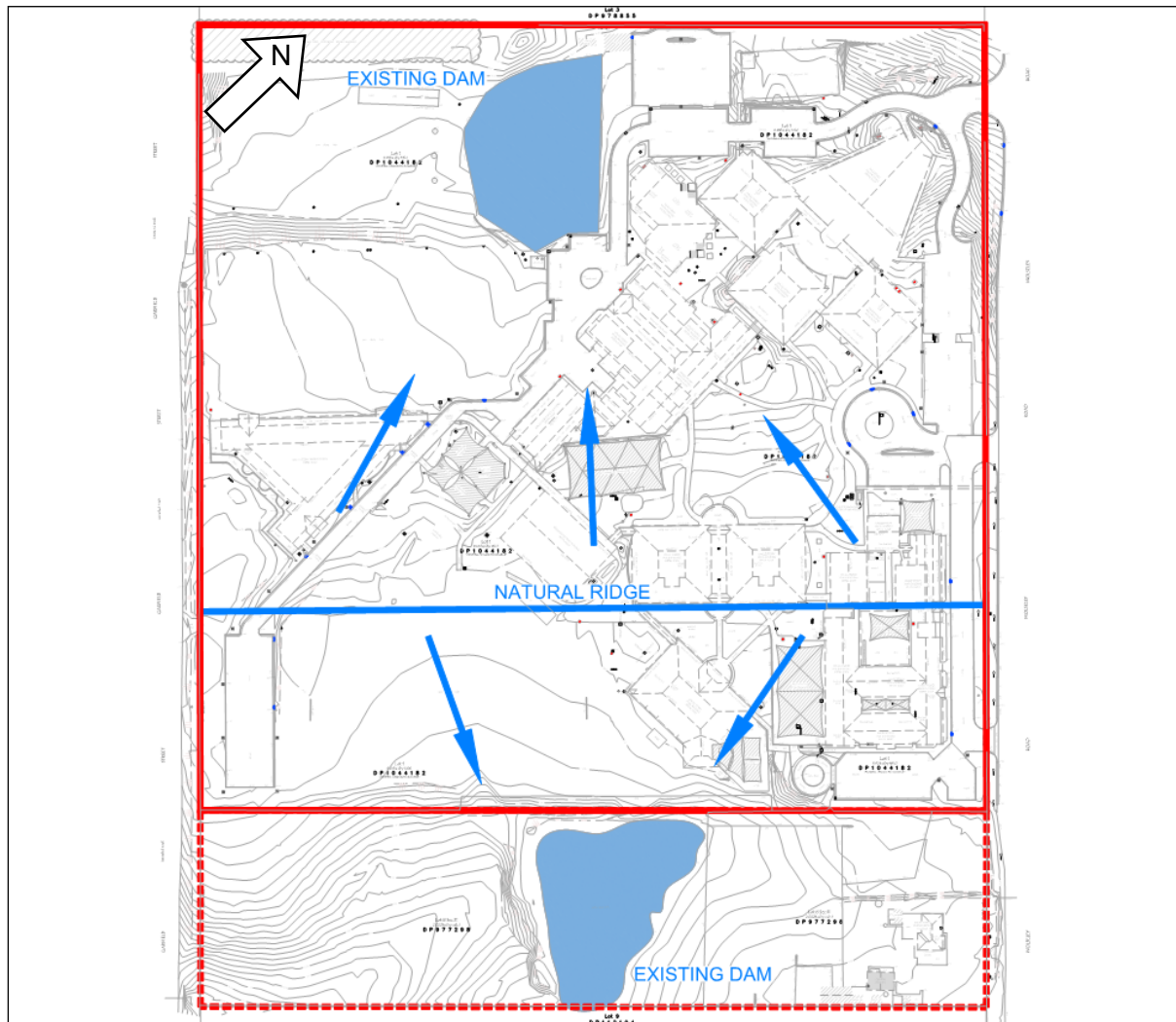


Figure 2. Site Topography

3.0 Development Proposals

The development proposals are for a single story administration and maintenance building within the existing college property. The proposed building will be located to the north of the site adjacent to existing car parking, refer to figure 3. The building will be located more than 5m from the northern boundary in accordance with the SEPP and the building floor level will be set at a minimum of 17.30m. No additional car parking is proposed as part of the development.



Figure 3. Proposed Building Location

4.0 Flood Impact

The development site is located within the Hawkesbury-Nepean catchment and is situated on flood prone land. Hawkesbury City Council has completed flood modelling and flood study report; *Hawkesbury Floodplain Risk Management Study and Plan, 2012*. The approximate flood extent for the 1% AEP flood is shown in figure 4. Flood advice has previously been obtained from Council which confirms that the flood planning level for this site is 17.30m AHD (1% AEP flood).

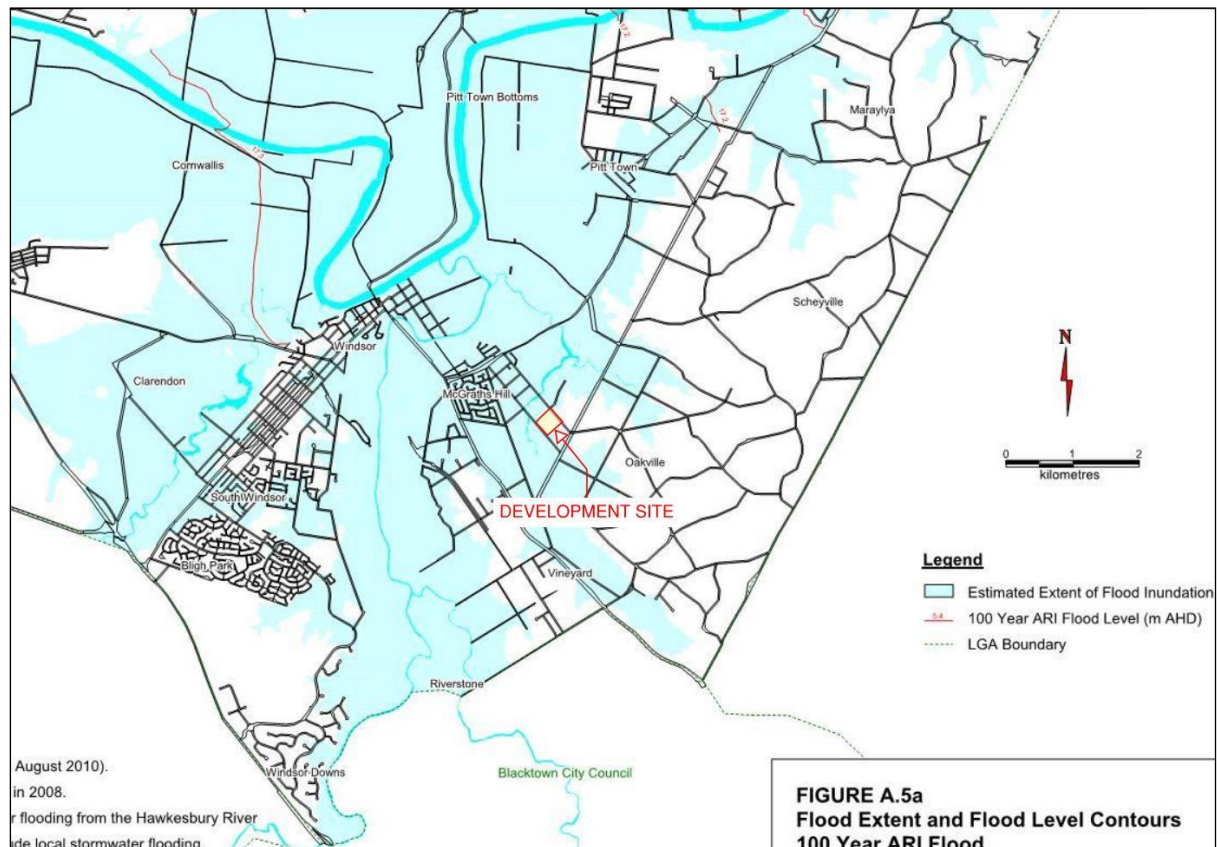


Figure 4. Flood Extent and Flood Level Contours 100 year ARI flood

The proposed single storey building has an existing ground level of 15.80m at the north corner, which rises to approximately 17.43m at the top of kerb of the existing car park to the south of the building corner. The finished floor level will be set at a minimum of 17.30m and will require retaining walls to allow for the level difference (refer to figure 5).

The proposed building floor will be at or above the flood planning level of 17.30m and flood compatible materials will not be required. However the structural walls and building components below this level will be constructed with flood compatible materials and designed for exposure to the forces due to floodwater, debris and buoyancy up to the flood planning level.

For flood events greater than the 1% AEP, egress from the building can be made to the south towards the natural raised ridge which has an existing ground level of 20.00m. This ridge rises to 21.00m at Wolseley Road and provides a safe egress route off site.

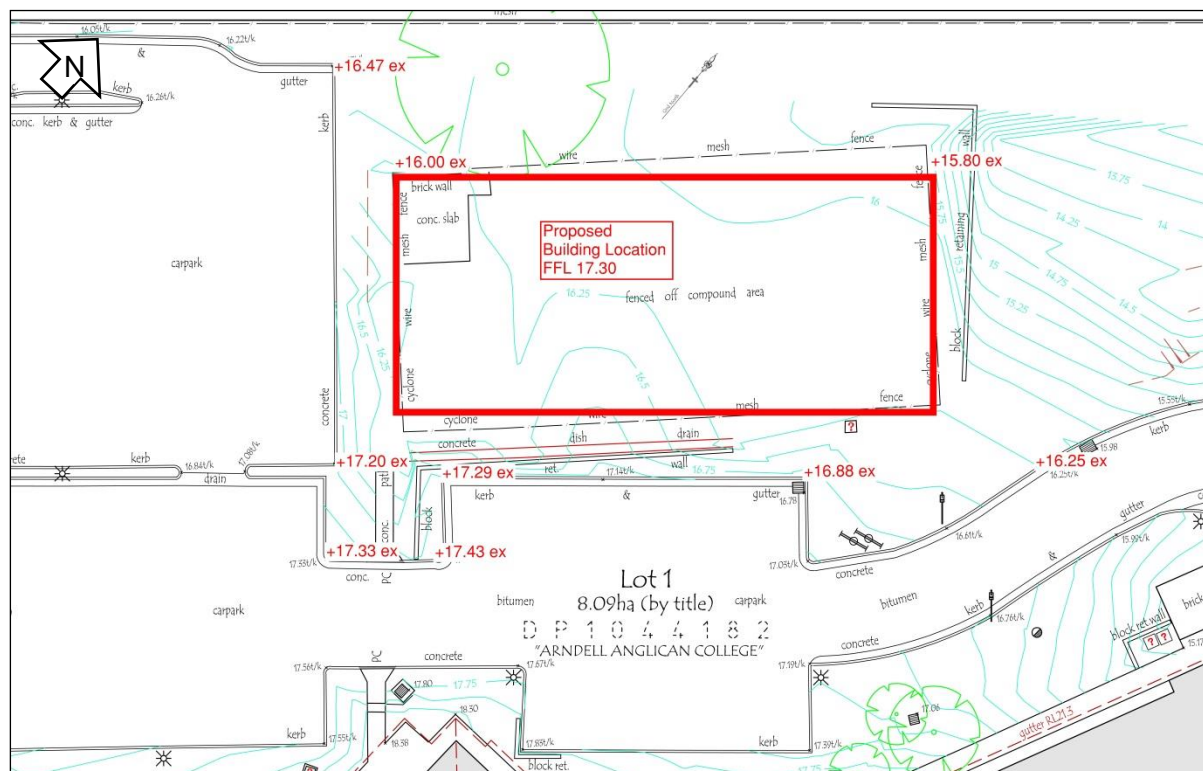


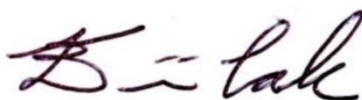
Figure 5. Indicative Building Levels

5.0 Conclusion

This report confirms that the development proposal is classed as development permitted without consent in accordance with State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017. The development is also in accordance with clause 6.3 of Hawkesbury Local Environmental Plan 2012 (LEP) and Hawkesbury City Council Development of Flood Liable Land Policy, 2012. The table below shows compliance with the specific clauses of Councils Flood Liable Land Policy.

Requirements	Compliance
1. A building shall not be erected on any land lying at a level lower than 3 metres below the 1:100 ARI (average recurrent interval) flood event level for the area in which the land is situated, except as provided by subclauses (3) and (5).	Yes
2. Each habitable room in a building situated on any land to which this Policy applies shall have a floor level no lower than the 1:100 ARI (average recurrent interval) flood event level for the area in which the land is located.	Yes
3. Notwithstanding subclauses (1), (2), (7) and (8), a building that was lawfully situated on any land at 30 June 1997 may be extended, altered, added to or replaced if the floor level of the building, after the building work has been carried out, is not more than 3 metres below the floor height standard for the land immediately before the commencement day.	Not Applicable
4. The assessment of a development application must consider the flood liability of access to the land and, if the land is within a floodway area, the effect of isolation of the land by flooding, notwithstanding whether other aspects of this Policy have been satisfied. In this regard the access to, and egress from, the land should not result in a travel path through areas of higher flood hazard risk and the development should not result in the occupants/users of the development being isolated and requiring rescue.	Yes
5. Minor (Non-Habitable) structures such as Farm Buildings, Outbuildings, Sheds, Garages and other Ancillary Structures may be erected on land below the 1:100 ARI (average recurrent interval) flood event level. However, the assessment of a development application for such a structure must consider the likely frequency of flooding, the potential flood damage (to both the subject structure and to other surrounding property should the structure be washed away) and measures to be taken for the evacuation of the property. In this regard the access to, and egress from, the land should not result in a travel path through areas of higher flood hazard risk.	Not Applicable
6. Any part of a building below the 1:100 ARI (average recurrent interval) flood event level is to be constructed of flood compatible materials.	Yes
7. Despite subclauses (1) and (2) but subject to subclause (3), a dwelling must not be erected on land lying below the 1:100 ARI (average recurrent interval) flood event level if the allotment of land on which it is to be erected was created by a subdivision approved under clause 11 of Hawkesbury Local Environmental Plan 1989 on or after the commencement day.	Not Applicable

Prepared by
**TAYLOR THOMSON WHITTING
(NSW) PTY LTD**



Eirian Crabbe
Senior Civil Engineer

Authorised By
**TAYLOR THOMSON WHITTING
(NSW) PTY LTD**



Stephen Brain
Technical Director / Director

Appendix A

APPENDIX G

Mitigation Measures

Appendix G Mitigation Measures

Impact On	Impact Level (Construction Phase)	Impact Level (Operational Phase)	Safeguards/Mitigation Measures	Responsibility
General				
All environmental factors	Low	Low	<ul style="list-style-type: none"> A CEMP should be prepared prior to any construction works commencing. The CEMP should include relevant REF safeguards summarised in Section 4. Prior to building work commencing, all works are to be certified to be in accordance with provisions of National Construction Code by a qualified certifier. 	Project Manager Contractor
Air Quality				
	Low	Negligible	<ul style="list-style-type: none"> Measures to minimise or prevent air pollution or dust are to be used including watering or covering exposed areas. Works are not to be carried out during strong winds or in weather conditions where high levels of dust or air borne particulates are likely. Vegetation or other materials are not to be burnt on site. Vehicles and vessels transporting waste or other materials that may produce odours or dust are to be covered during transportation. Stockpiles or areas that may generate dust are to be managed to suppress dust emissions. 	Project Manager Contractor

APPENDIX G Review of Environmental Factors for Administration Building at Arndell Anglican College

Impact On	Impact Level (Construction Phase)	Impact Level (Operational Phase)	Safeguards/Mitigation Measures	Responsibility
Noise				
	Low	Negligible	<ul style="list-style-type: none"> General noise from construction works must comply with the requirements with applicable Australian Standards or legislation Works to be carried out during normal work hours (i.e. 7am to 6pm Monday to Friday; 8am to 1pm Saturdays). Any work that is performed outside normal work hours or on Sundays or public holidays may not be permitted and, if permitted, works are to minimise noise impacts. 	Project Manager Contractor
Soil and Erosion				
	Low	Negligible	<ul style="list-style-type: none"> Site management will incorporate best management erosion and sediment control practices such as those found in the Department of Housing's "Blue Book (4th Edition) on erosion and sediment control. All erosion and silt control devices will be visually inspected weekly to ensure effectiveness as well as after each rainfall event. 	Project Manager Contractor
Water				
	Low	Negligible	<ul style="list-style-type: none"> No dirty water may be released into drainage lines and/or waterways. Visual monitoring of local water quality (ie turbidity, hydrocarbon spills/slicks) is to be undertaken on a regular basis to identify any potential spills or deficient erosion and sediment controls. 	Project Manager Contractor

Impact On	Impact Level (Construction Phase)	Impact Level (Operational Phase)	Safeguards/Mitigation Measures	Responsibility
			<ul style="list-style-type: none"> Water quality control measures are to be used to prevent any materials (eg. concrete, grout, sediment etc) entering drain inlets or waterways. Wash down should use potable water and excess debris removed using hand tools. Wash down waste must be filtered before release. 	
Flood Impact				
	Low	Low	<ul style="list-style-type: none"> Works to be undertaken in accordance with the conclusions and recommendations of the Flood Impact Assessment prepared by TTW Consulting Engineers – see Appendix F 	Project Manager Contractor Flood Engineer
Waste Management and Minimisation				
	Low	Low	<ul style="list-style-type: none"> All surplus material, off cuts, and other debris resulting from the work shall be removed from site and disposed of by a licensed contractor to a licensed waste management facility Waste material, other than vegetation and tree mulch, is not to be left on site once the works have been completed. Working areas are to be maintained, kept free of rubbish and cleaned up at the end of each working day. 	Project Manager Contractor
Bushfire				
	Low	Low	Works to be undertaken with the Bushfire Assessment and the conclusions and recommendations of the Bushfire Safety Authority from Rural Fire Service (RFS) – Appendix E	Project Manager Contractor Bushfire Advisor

APPENDIX G Review of Environmental Factors for Administration Building at Arndell Anglican College

Impact On	Impact Level (Construction Phase)	Impact Level (Operational Phase)	Safeguards/Mitigation Measures	Responsibility
Traffic				
	Low	Low	<ul style="list-style-type: none"> Current traffic movements and property accesses are to be maintained during the works. Any disturbance is to be minimised to prevent unnecessary traffic delays. Where possible, current vessel movements and public accesses to the waterway and foreshore are to be maintained during works. Any disturbance is to be minimised as much as practicable. 	Project Manager Contractor
Hazardous Waste				
	Low	Low	<ul style="list-style-type: none"> No bulk storage of hazardous substances or dangerous goods on site Minimise fuel volumes stored on site Emergency procedures shall be displayed in prominent position Spillage of chemicals will be cleaned up immediately 	Project Manager Contractor