

Dominican Convent Inc. (St Marys College)

Construction of a new multi purpose school building and modifications to existing heritage building

253 Franklin Street, ADELAIDE

020/A046/17

TABLE OF CONTENTS

	PAGE NO
AGENDA REPORT	2-14
ATTACHMENTS	
1: PLANS	15-32
2: APPLICATION DOCUMENTS	33-38
a. Planning report – Jensen Plus	39-82
 b. Design Statement – Grieve Gillett Anderson 	83-86
c. Preliminary site investigation – Parsons Brinckerhoff	87-161
 d. Heritage Impact Statement – Grieve Gillett Anderson 	162-163
e. Landscape Design Concept – Jensen Plus	164-165
f. Noise Impact Assessment – Parsons Brinckerhoff	166-174
g. Stormwater Management Plan – Parsons Brinckerhoff	175-186
3: AGENCY COMMENTS	187
a. Government Architect	188-191
 b. State Heritage Branch – DEWNR 	192-195
 c. Safety & Service Division – DPTI 	196-198
4: ADDITIONAL INFORMATION	199-201
5: DEVELOPMENT PLAN PROVISIONS	202-234





<u>OVERVIEW</u>

Application No	020/A046/17
Unique ID/KNET ID	2188 - 2017/13589/01
Applicant	Dominican Convent Inc. (St Marys College C\- Jensen Plus)
Proposal	A staged development incorporating demolition of existing
	building alterations to existing beritage building new entry
	pavilion including fencing landscaping and associated site
	works
Subject Land	253 Franklin Street, ADELAIDE
Zone/Policy Area	Capital City Zone
Relevant Authority	State Commission Assessment Panel (development in the city
	greater than \$10million)
Lodgement Date	14 June 2017
Council	City of Adelaide
Development Plan	City of Adelaide – Consolidated 30 May 2017
Type of Development	Merit
Public Notification	Category 1
Referral Agencies	Safety and Service Division of the Department of Planning,
	Transport and Infrastructure (DPTI), State Heritage Unit and
	Office of the Government Architect
Report Author	Brett Miller – Team Leader CBD & Metro
RECOMMENDATION	Development Plan Consent subject to conditions

EXECUTIVE SUMMARY

The proposed development involves works to be undertaken on the existing site of an educational establishment (St Marys College) located at the corner of West Terrace and Franklin Street. The proposal includes, the demolition of an existing gymnasium, construction of a new 14.2 metre high building on the corner of Franklin Street and West Terrace, the refurbishment of an existing heritage building and the construction of a new reception area adjoining the heritage building.

The proposed new mixed use building is to house year twelve rooms and a new netball court and to be clad in a mixture of Zinc cladding and translucent polycarbonate sheeting to provide a lightness and sense of transparency. The reception building is proposed to be clad in lightweight materials to ensure minimal impact on the adjacent heritage building.

The application has been referred to the Government Architect, Safety and Service Division of DPTI and the State Heritage Unit with all referral bodies providing support for the proposed development.

The proposed development is generally consistent with the provisions of the Capital City Zone and the Adelaide (City) Development Plan Consolidated 30 May 2017.

ASSESSMENT REPORT

1. BACKGROUND

1.1 Strategic Context

A significant review of Adelaide City planning policies was undertaken in March 2012 resulting in a new policy framework that supports a city form that is aligned with the directions of the 30-Year Plan for Greater Adelaide and creating a more active vibrant



city. Introduced policies of relevance place emphasis in the Capital City Zoning which encourages a high quality exemplar development for the City centre.

A further review of the Development Plan was undertaken and consolidated in 30 May 2017. The changes to the development Plan focussed around improved design, integration with the public realm, tightening of the height restrictions and clarification around requirements for supporting of overheight developments.

1.2 Pre-Lodgement Process

The applicant chose to proceed through a pre-lodgement process which resulted in the proposal being presented to 2 Pre-Lodgement meetings and 3 Design Review meetings. The applicant considered the advice from each meeting and amended their proposal to incorporate the feedback received.

2. DESCRIPTION OF PROPOSAL

Application details are contained in the ATTACHMENTS.

The proposed development includes the following elements:

- Demolition of the existing gymnasium (Veritas Building) and car park,
- Internal alterations to the existing Boylan building with a new entry pavilion addition,
- Construction of a new West Terrace building comprising Year 12, Arts and fullsize netball facilities over two levels,
- Associated fencing and landscaping.

The proposed new building proposed at the corner of West Terrace and Franklin Street is to be constructed of a mixture of materials as outlined below:

- Double skin polycarbonate wall cladding
- Face brickwork
- Powder coated (Monument) aluminium window frames
- Standing seam zinc wall cladding Pigmento Brown
- Flat lock Zinc wall cladding Quartz
- Concrete Stairs (internal to site)
- Precast concrete panels (internal to site)

The proposed new reception building is to be constructed from:

- Powder coated (Monument) aluminium window frames and door frames
- Standing seam zinc wall cladding Pigmento Brown
- Glass frontage

3. SITE AND LOCALITY

3.1 Site Description

The site comprises of 1 allotment of approximately 9850 square metres. The allotment is described as follows:

Lot No	Street	Suburb	Hundred	Title Reference
329	Franklin	Adelaide	Adelaide	5842/466

The subject site is located on the corner of West Terrace, Franklin Street and Gray Street and it currently contains St Marys College. The site has a frontage of 64.07 metres to West Terrace, 153.77 metres to Franklin Street and 64.12 metres to Gray Street.



The proposed development is situated on the north western corner of the site, adjacent the signalised intersection of Franklin Street and West Terrace.

3.2 Locality

The locality is characterised by a mixture of developments with a Greek Orthodox church, private hall, commercial building and converted cottages located adjacent the site to the northern side of Franklin Street. There is a residential apartment tower located to the north-east and a wholesale seafood merchant to the eastern corner of the site. Gray Street comprises of predominantly small scale commercial activities.

West Terrace has a mixture of commercial activities and Adelaide High School is located approximately 150 metres to the north-west of the site.

Figure 1 – Location Map



4. COUNCIL COMMENTS or TECHNICAL ADVICE

4.1 City of Adelaide

The City of Adelaide were referred the application for technical advice and raised no concerns with the proposed development.

5. STATUTORY REFERRAL BODY COMMENTS

Referral responses are contained in the ATTACHMENTS.

The Government Architect, Safety Services Division of DPTI and the State Heritage Branch of DEWNR are all mandatory referral bodies in accordance with Schedule 8 of the Development Regulations 2008. The State Commission Assessment Panel (SCAP) must have regard to this advice. All agencies have recommended conditions be attached to any subsequent approval with all being considered reasonable and have been attached to the recommendation of this report.

5.1 State Heritage Unit, DEWNR

The State Heritage Unit has considered the proposal through the Pre-Lodgement process and the formal development application. The proposed development was considered acceptable by the State Heritage Branch for the following reasons:

- The West Terrace component of the project does not directly affect any heritage fabric.
- Visually, it is considered to be a complimentary response in scale, form, architectural expression and materiality to the State heritage listed Boylan Building, with sufficient separation to maintain the historic building's spacious contextual relationship with Franklin Street.
- The design and materials of the perimeter ground floor boundary wall establish a strong visual relationship with the various boundary wall types along Franklin Street, and reinforce the site's identity as a school campus and its relationship with the Bishop's residence on West Terrace.
- The proposed entrance pavilion abutting the Boylan Building is submissive to the historic building in scale, visual weight, architectural expression and location. It physical form and materiality establish a clear contextual relationship to the West Terrace building, which helps to reinforce the open space between them as an integral part of the site context.
- The connection to the altered western face of the Boylan Building is physically and visually minimal, and retains a high degree of visibility and legibility for the historic building including the projecting stair tower. The cutting down of the paired windows as a single new door opening retains the general rhythm of openings and does not appreciably disrupt the visual integrity of the façade as seen from a distance.
- The cutting down of the single window to create a doorway south of the stair tower will be relatively inconspicuous in the principal views of the historic building.
- It is understood that, within the new entrance pavilion, the external face of the Boylan Building will remain in its present unpainted masonry state.
- The internal works are respectful of the extant original features within this extensively altered space, and will not diminish the heritage values of the building.

5.2 Government Architect

The Government Architect is supportive of the proposal as lodged and commended the project team for balancing the practical and aspirational aspects of the proposed development. The Government Architect supported the project's ambition to respect the existing character of the campus and streetscape whilst portraying an identity of the College to the public realm. The Government Architect acknowledged that the College had previously had a limited presence addressing the street so this proposal will provide a more prominent street presence and is supported.

The Government Architect supports the altered access arrangements to the site and acknowledges the College's requirements to limit accessibility to the site. The Government Architect supports the development as a whole, however recommends that a final finishes board and schedule be supplied to ensure the development reaches its design potential.





5.3 Safety and Services Division, DPTI

The Safety and Services Division of DPTI was referred the application on the basis of the site being located adjacent the intersection of West Terrace and Franklin Street. The Department made raised no concern with the proposed development other than to suggest a condition to ensure the development does not cause a safety concern by way of glare to passing motorists.

6. PUBLIC NOTIFICATION

The application is a Category 1 development pursuant to The City of Adelaide Development Plan. No public notification was required.

7. POLICY OVERVIEW

The subject land is located within the Capital City Zone as described in the Adelaide (City) Development Plan consolidated 30 May 2017 (Map Adel/23).

The Capital City Zone is intended as the economic and cultural focus of the State to include a range of employment, community, educational, tourism and entertainment facilities. It is anticipated that an increased population within the Zone will complement the range of opportunities and experiences provided in the City and increase its vibrancy. The Capital City Zone is intended to be active during the day, evening and night.

Relevant planning policies are contained in Appendix One and summarised below.

Figure 2 – Zoning Map



7.1 Policy Area

The proposed development is not located in a Policy Area of Precinct.



7.2 Zone

The Zone encourages a diverse range of land uses with non-residential land uses at the ground floor level for an active street frontage. The site is in two height limit areas of 43 metres and 53 metres (with exemption criteria to exceed this) and a minimum height equal to half of the height limits (i.e. 21.5 or 26.5 metres), unless the site is adjacent to or includes a heritage place. The zoning provisions support developments of a high standard of architectural design and finish that is appropriate to the City's role and image as the capital of the State.

7.3 Council Wide

The Council Wide provisions provide direction on the desire for increased levels of activity and interest at ground level; the safe and convenient servicing of sites; a high standard of design and appropriate bulk and scale of buildings and contribution to streetscape.

7.4 Overlays

7.4.1 Affordable Housing

While the proposal is in an area subject to the affordable housing overlay the proposed development does not involve any residential component.

7.4.2 Adelaide City Airport Building Heights

The application was not referred for comment relating to Airport Building Heights. At a height of 14.2 metres the proposed development is well below the Obstacle Limitation Surface for the site as outlined in the relevant Development Plan map.

8. PLANNING ASSESSMENT

The application has been assessed against the relevant provisions of the City of Adelaide Development Plan, which are contained in Appendix One.

8.1 Quantitative Provisions

	Development Plan Guideline	Proposed	Guideline Achieved	Comment
Building Height	Maximum height of 53m Minimum Height 26.5m except where adjacent a heritage place	14.2m to the top of the parapet	YES A NO A PARTIAL A	As the proposed building is adjacent a state heritage place, has a state heritage place on site and given it is within an established educational facility, a lesser building height than the minimum guideline is considered appropriate
Land Use	Educational Establishment	Educational	YES 🛛	Existing use on

SCAP Agenda Item 2.2.5 24 August 2017



		(Ct Mary o			proposal to
			PARTIAL		
		College)		<u> </u>	improve facilities.
Car Parking	The Development Plan requires car parking to be provided in accordance with Table Adel/7. Note Table Adel/7 does not specify any minimum or maximum car parking requirement for the proposed use	No additional car parking spaces proposed	YES NO PARTIAL		Whilst there is proposed to be increased student numbers there is not proposed to be additional parking onsite, the Development Plan does not require any car parking in this zone.
Front Setback	The Development Plan contemplates buildings within the Capital City Zone to be built to the street edge.	Zero setback to the Franklin Street frontage	YES NO PARTIAL	$\boxtimes \Box$	
Side Setback	The Development Plan contemplates buildings within the Capital City Zone to be built to the street edge.	Zero setback to the West Terrace frontage	YES NO PARTIAL		

8.2 Land Use and Character

The provisions of the Capital City Zone call for a vibrant mix of commercial, retail, professional services, hospitality, entertainment, educational facilities, and medium and high density living. The ongoing use of the subject land for an education establishment and the replacement of the existing school building with a new building that provides updated facilities is consistent with this policy intent.

The reports provided as part of the development application outline that the proposed development will allow more modern teaching practises to be used on the school site.

The proposed building is consistent with the existing built form in the locality in terms of bulk and scale and its design and finishes have been assessed as suitable by the Government Architect.

8.3 Design and Appearance

The provisions of the Capital City Zone seek innovative design approaches and contemporary architecture that respond to a building's context as well as a high standard of architectural design and finish which is appropriate to the City's role and image as the capital of the State.

The applicant's architects (Grieve Gillett Anderson) prepared and submitted an Architectural Design Statement as part of the development application. In the design statement it is outlined the following in relation to the outwardly facing elements of the building:



"Corner address

While the revised design of the corner does not project into the public realm, the design intent of a corner lantern is retained and enhanced. The peeling back of the solid zinc façades on West Terrace and Franklin Street to reveal the corner frames the gateway.

Further review of the qualities of "shadowing" afforded with the material, the facade now plays on the tapestry of transparency and opacity. The removal of "colour" bands speaks to the narrative of a singular voice of the College. The night time integration of lighting elements will further enhance the presence of the College in the public realm.

Opening Depth to Year 12 Entry

The opening on Franklin is not a main entry and will be use occasionally. The design considers CPTED issues, and to eliminate 'loitering' around deep recess after hours. The foyer area will also be illuminated at night.

The entry door is set back from boundary by 500mm. The foyer and undercover areas internally will allow for weather protection inside the building when required.

Interface with existing site perimeter walls and proposed capping detail

The existing masonry ranges from red brick (West Terrace), veneer stone with brick capping and concrete plinth (central Franklin Street section), bluestone with red brick capping, (western half of Boylan Building frontage), and limestone with red brick and rendered capping (eastern Franklin Street section).

Given the disparate materials and detailing of the existing wall sections, the new building plinth will not mimic the capping detail on any of the other sections but to reference the solidity, mass and material quality of the existing site enclosure.

The proposed horizontal banding of the brickwork will be based on the palette of colours found within the other sections of wall, brought together in a consistent masonry unit and finish but with subtle colour variations. The capping detail will be developed to form an integral part of the window reveal.

A recessed brick wall detail with glazed brick will be employed to effect the transition between sections, adding visual interest to the brick wall whilst referencing school colour."

The design and appearance of the development application has been considered by the Government Architect with support being given to the overall design and intent of the application. Based on the information provided as part of the development application and the advice of the Government Architect, it is considered that the proposed building is suitable in this location and zone. As discussed earlier in the report there is a recommended condition in relation to a materials board being supplied and reviewed prior to development approval being granted.

8.4 Heritage

The Development Plan has specific policy that addresses the need for development to respect the built heritage of the city and ensure that impacts on heritage buildings are approved and preserve their historical context. The application was referred to the State Heritage Unit for comment with support being given to the design and integration with the Heritage building on site.



The application includes works to the Heritage listed 'Boylan' building to refurbish the existing offices and update the IT/ICT requirements for the College. The application is proposing to retain much of the key features of the building and has been designed sensitively in relation to window and door openings.

There is a new single storey pavilion proposed as part of this development that is to be constructed adjacent the heritage building which has been sympathetically designed to provide a relatively light weight reception and entry to the reburbished building.

As outlined earlier in this report the delegate of the Minister for Heritage considered the proposed development to be acceptable subject to two conditions that have been included in the recommended conditions of this report.

Based on the specialist heritage advice and information provided as part of the development application and referral process it is considered that the proposed building will have an acceptable, if not positive, impact on the adjacent State Heritage place.

8.5 Traffic Impact, Access and Parking

The proposed development results in the removal of 16 on-site car parking spaces with the applicant stating that staff that utilised these spaces needing to find alternative parking locations or utilise public transport to get to work. It is noted that currently staff park on the site, within the adjacent church land to the south, on street or in nearby car parks. It is reasonable, given the substantial public transport network that accesses the City, to support the removal of the on-site car parking spaces, and whilst this may be seen as inconvenient to the staff that were using the car parks is a sustainable outcome for the College. It is noted that the removal of car parking is supported by the Development Plans desire to shift towards sustainable and active transport modes within the CBD.

There is no proposed change to pick-up and drop off arrangements which currently occur in the on-street car parks on Franklin Street or Grote Street. These car parks do have parking restrictions to facilitate student pick-ups in the afternoon. As the Development Plan encourages sustainable or active transport modes and does not specify a car parking rate for educational establishments the proposed development is considered acceptable in terms of traffic, access and parking.

8.6 Environmental Factors

8.6.1 Energy Efficiency

The development application documentation included a brief ESD and Energy Efficiency Statement. This statement details an appropriate strategy being considered to ensure ESD and energy efficiency principles of the Development Plan are being appropriately addressed. The design includes water efficient fittings and fixtures, efficient heating and cooling systems to provide adequate levels of ventilation, specific building materiality and wall to window ratios and a reuse of landscaping elements.

8.6.2 Site Contamination

As the development is not a change of land use no information has been sought regarding potential for site contamination. However the applicant has undertaken some preliminary investigations which have revealed that there is no indication of soil contamination.



8.6.3 Stormwater

A preliminary Stormwater Management Plan (SMP) prepared by WSP Parsons Brinckerhoff was submitted as part of the development application. The report outlines that earlier consultation with City of Adelaide regarding stormwater management planning occurred in preparing the preliminary report and that a final detailed stormwater design will be undertaken as part of detailed documentation. The report concludes that the redevelopment will have a negligible impact on the existing stormwater network around the site. The report also mentions that the City of Adelaide have indicated that the existing system will have capacity to accommodate the slight increase in flows from the site. A recommended condition will require the provision of a final detailed stormwater plan, in consultation with Council.

8.7 Signage

The Development Plan promotes development that achieves an overall consistency of advertisements along street frontages. The applicant's planning consultant has confirmed that any necessary signage that requires Development Approval will be the subject of a separate development application.

8.8 Staging

The development is proposed to be undertaken in two stages, being:

- Stage 1 Demolition of the existing gymnasium (Veritas Building) and car park, and construction of the new West Terrace building.
- Stage 2 Internal alterations to the existing Boylan building with a new entry pavilion addition, and completion of associated fencing and landscaping.

The applicant is seeking to extend the period for commencement of the second stage to 3 years time with a substantial completion date of 5 years from the operative date of approval. Given the works to be undertaken and the investment from the College it is reasonable for this to be granted with notes to this effect being placed on the recommendation of this report.

9. CONCLUSION

The proposed development has been carefully considered in relation to the context of the site, the heritage buildings, the external impacts and the overall design intent for the City. The proposal is considered to have satisfied the Development Plan principles and objectives, with no concerns being raised from any referral agency.

The proposed building is considered to be consistent with and should complement the existing built form in the locality in terms of bulk and scale. Its height, while below the minimum height provisions in the Development Plan, takes its cue from the adjacent State heritage item and the policy that development adjacent to heritage items should respect their heritage value and context.

The proposal is considered to be a positive development for the subject site and supports the overall intent of the city form and is therefore recommended for support of the State Commission Assessment Panel.



10. RECOMMENDATION

It is recommended that the State Commission Assessment Panel:

- 1) RESOLVE that the proposed development is NOT seriously at variance with the policies in the Development Plan.
- 2) RESOLVE that the State Commission Assessment Panel is satisfied that the proposal generally accords with the related Objectives and Principles of Development Control of the City of Adelaide Development Plan.
- 3) RESOLVE to grant Development Plan Consent to the proposal by Dominican Convent Inc (St Marys College) for a staged development incorporating demolition of existing gymnasium and construction of new multipurpose school building, alterations to existing heritage building, new entry pavilion including fencing, landscaping and associated site works at 253 Franklin Street, Adelaide subject to the following conditions of consent.

PLANNING CONDITIONS

1. That except where minor amendments may be required by other relevant Acts, or by conditions imposed by this application, the development shall be established in strict accordance with the details and following plans submitted in Development Application No 020/A046/17.

Drawing Title	Drawing number	Dated	Issue
Cover Page	DA00	26.05.17	-
Document List Site Plan	DA01	26.05.17	-
Demolition Plan Ground Floor Plan Roof Plan	DA21	26.05.17	-
Elevations	DA31	26.05.17	
Section	DA41	26.05.17	-
Demolition Plan	DA02	26.05.17	-
Ground Floor Plan	DA21	26.05.17	-
Court Floor Plan	DA22	07.07.17	А
Plant Floor Plan	DA23	26.05.17	-
Roof Plan	DA24	26.05.17	-
Elevations Sheet 01	DA31	07.07.17	Α
Elevations Sheet 02	DA32	26.05.17	-

Plans drawn by Grieve Gillett Anderson

- 2. Prior to Development Approval being granted a materials samples board and schedule shall be submitted to and approved by the State Commission Assessment Panel.
- 3. Landscaping shown on the approved plans shall be established prior to the operation of the development and shall be maintained and nurtured at all times with any diseased or dying plants being replaced.
- 4. All external lighting on the site shall be designed and constructed to conform to Australian Standard (AS 4282-1997).
- 5. A final detailed Stormwater Management Plan shall be submitted, in consultation with the City of Adelaide to the satisfaction of the Development Assessment Commission. The details of the plan shall be incorporated within the Building Rules



Consent documentation, submitted for Development Approval, and be implemented prior to occupation or use of the development.

- 6. All stormwater design and construction shall be in accordance with Australian Standard AS/NZS 3500.3:2015 (Part 3) to ensure that stormwater does not adversely affect any adjoining property or public road.
- 7. A Construction Environment Management Plan (CEMP) shall be prepared and implemented in accordance with current industry standards – including the EPA publications "Handbook for Pollution Avoidance on Commercial and Residential Building Sites – Second Edition" and, where applicable, "Environmental Management of On-site Remediation" – to minimise environmental harm and disturbance during construction.
- 8. The finished floor level of the ground floor level entry shall match that of the existing footpath unless otherwise agreed to by the Development Assessment Commission.
- 9. All Council, utility or state-agency maintained infrastructure (i.e. roads, kerbs, drains, crossovers, footpaths etc.) that is demolished, altered, removed or damaged during the construction of the development shall be reinstated to Council, utility or state agency specifications. All costs associated with these works shall be met by the proponent.

Safety and Service – Traffic Operations Condition:

10. The exterior cladding shall be finished in a material of low reflectivity to minimise the risk of glare that may dazzle or distract motorists.

Heritage Branch Conditions:

- 11. Boylan Building works: The Superintendent where called on by the drawings or specification to approve the scope of works, workmanship or samples of work, shop drawings, locations of service runs, chases or penetrations, repairs, materials, colours, finishes, making good and other matters concerning the extent and quality of the works—shall do so on the basis of possessing or seeking from a suitably experienced heritage consultant appropriate expertise in heritage conservation, traditional practice and the sensitive upgrading of heritage places.
- 12. Prior to the commencement of works to the Boylan Building, further details shall be provided to the satisfaction of the planning authority in consultation with the State Heritage Unit (Department of Environment, Water and Natural Resources) of the following items.
 - a. Roof and wall junctions between the new pavilion and the Boylan Building
 - b. Lintel and reveal details for the enlarged opening within the pavilion
 - c. Reveal, frame and door details for the new door opening south of the stair tower
 - d. Any incidental or consequential conservation works to the Boylan Building.

ADVISORY NOTES

- a. This Development Plan Consent will expire after 12 months from the date of this Notification, unless staged Development Approval from Council has been received within that period or this Consent has been extended by the State Commission Assessment Panel.
- b. The applicant is also advised that any act or work authorised or required by this Notification must be substantially commenced within 1 year of the staged Development Approval issued by Council and substantially completed within **5 years**



of the date of final Development Approval issued by Council, unless that Development Approval is extended by the Council.

- c. The applicant has a right of appeal against the conditions which have been imposed on this Development Plan Consent. Such an appeal must be lodged at the Environment, Resources and Development Court within two months from the day of receiving this notice or such longer time as the Court may allow. The applicant is asked to contact the Court if wishing to appeal. The Court is located in the Sir Samuel Way Building, Victoria Square, Adelaide, (telephone number 8204 0289).
- d. Any changes to the proposal for which planning consent is sought or granted may give rise to heritage impacts requiring further consultation with the Department of Environment, Water and Natural Resources, or an additional referral to the Minister for Sustainability, Environment and Conservation. Such changes would include for example (a) an application to vary the planning consent, or (b) Building Rules documentation that incorporates differences from the proposal as documented in the planning application.
- e. The applicant is to be aware of the following requirements of the Heritage Places Act 1993.
 - If an archaeological artefact believed to be of heritage significance is encountered during excavation works, disturbance in the vicinity shall cease and the SA Heritage Council shall be notified.
 - Where it is known in advance (or there is reasonable cause to suspect) that significant archaeological artefacts may be encountered, a permit is required prior to commencing excavation works. For further information, contact the Department of Environment, Water and Natural Resources.
- f. The applicant is advised of the following requirements of the Aboriginal Heritage Act 1988.
 - If Aboriginal sites, objects or remains are discovered during excavation works, the Aboriginal Heritage Branch of the Aboriginal Affairs and Reconciliation Division of the Department of the Premier and Cabinet (as delegate of the Minister) should be notified under Section 20 of the Aboriginal Heritage Act 1988.

Brett Miller **TEAM LEADER – CBD & INNER METRO DEVELOPMENT DIVISION DEPARTMENT OF PLANNING, TRANSPORT and INFRASTRUCTURE**

ATTACHMENT 1

PLANS



DA01	DOCUMENT LIST AND SITE PLAN
DA21	DEMOLITION PLAN, FLOOR PLAN AND ROOF PLAN
DA31	ELEVATIONS
DA41	SECTION
DA61	PERSPECTIVE IMAGES





1 DEMOLITION PLAN 1:100





3 ROOF PLAN





IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	100			150				200		250			300
													/
							2						
A41.dwg													
_DA DRAWINGS\16051_ARP_D					_		— · —						
ingsl5.2.2 Design Development)													
05.0 Documentation\5.02 Drawi								F					
St Mary's College West Terrace													
LE LOCATION: G'\2016\16051_					Ī			 	 ·		·	 	
PLOT FIL						A DA21	SEC		 1:50				
PLOT FILE DATE: 26.05.2													









DOCUMENT LIST DA01 DOCUMENT LIST AND SITE PLAN DA02 SITE DEMOLITION PLAN DA21 GROUND FLOOR PLAN DA22 COURT FLOOR PLAN DA23 PLANT FLOOR PLAN DA24 ROOF PLAN DA31 ELEVATIONS SHEET 01 DA32 ELEVATIONS SHEET 02 SUN DIAGRAMS DA51 PERSPECTIVE IMAGES 01 DA61 DA62 PERSPECTIVE IMAGES 02 0 0 0 BOUNDARY WEST TERRACE DEVELOPMENT ▝▋▖▎▎▎▎▎ WEST TERRACE ATED SHADE STRUCTUR C15 RECEPTION P.E. COORD S13 S12 C14 S COORE UNDERCOVER YEAR 1 YEAR 4 YEAR 5 YR 10 AREA COORD. 0 0 0 0 ο STORE ROOM C13 C12 C11 OSHC YEAR 2 YEAR 3 Home economics CHANGEROOM

1 SITE PLAN

1:200

ADJACENT PROPERTY

























	650		700)	A1 Sheet	Legend	d						
· · ·		_											
		_											
_ · _ · _ · _ · _	_ · · ·	_											
			 										
	EXISTING BRI	ск											
	WALL DE TON	U											
						-	26.05.17	ISSUED) FOR DEVE	LOPMENT AF	PROVAL	Ver	Appr
						Drawin	ng Status	FO		PRO	/AI	ver.	
						Consu	Itant						
						W Lev	SP vel 14, 1 King	William S	Street		adelaide@	(08) 8110)wsparour	9500 com
						Consu	Itant				~~~uuucu	,	
						JE 6/2 Fre	59 Glen Osm wville SA 50	LUS nond Roa 063	d		admin1@jens	(08) 8338 senplus.co	5511 om.au
							חום	<u>\</u> /۲		1			
									T				
								L I FD	I CEN		243 Pirie	Street Ade	elaide 5000
						H		LN	JLI	N	+l admin@	61 8 8232)ggand.co	3626 om.au
						Project	t					ggand.co	m.au
								RY			GE		
						ע רו	v⊏ð I)EVFI	יב _0F	NTM MFN	∪⊏ IT			
						25		KLIN S	STREET				
						Drawin							
							LEV#	ጓ H (T በ2	JINS 2				
								. 52	-				
						/	\wedge		Do not sca drawing is to	le drawings. Us be read in con	se figured dimention with all reputies	nsions only relevant con	This tracts,
								ナ	and dimensi preparation	ons on site price ons on site price of shop drawing this drawing is w	awings. Uneck or to commencer gs or fabrication ested in Grieve C	and verity nent of any n of compo illett Ptv 1+4	work, work, onents. d.
						Scale ((at A1.)	1.1		Juaning 15 V			
						Job No).		Drawin	g No.		ssue	
						•	160	51		DA3	2	-	
									<u> I </u>		I]









1:2000











-





ATTACHMENT 2

APPLICATION DOCUMENTS

DEVELOPMENT APPLICATION FORM

PLEASE LISE BL			SE.						
COUNCIL:	DOMINICAN CONVENT INC. (ST.	Provious Development No:							
APPLICANT:	MARY'S COLLEGE)								
Postal Address:	<u>c/- JENSEN PLUS</u>	Assessment No:							
UNIT 6, 259 GLE	N OSMOND ROAD, FREWVILLE SA 5063								
Owner:	APPLICANT IS OWNER	-							
Postal Address:	c/- JENSEN PLUS	Complying		Application	n forwarded to	DA			
UNIT 6, 259 GLE	N OSMOND ROAD, FREWVILLE SA 5063	Non Compl	lying	Commissi	on/Council on				
BUILDER: TO B	E DETERMINED	D Notification	Cat 2	/	/				
		Notification	Cat 3	Decision:					
Postal Address:		Referrals/C	oncurrences	Туре:					
		DA Commis	ssion	Date:	/ /				
	Licence No:								
CONTACT PERS	ON FOR FURTHER INFORMATION		Decision	Fees	Receipt No	Date			
		Planning:	required						
Name: ANDREW	CASPAR	Building:							
Telephone: 8338	5511 [work] [Ah]	Land Division:							
Fax:	[work][Ah]	Additional:							
EXISTING USE:_	SCHOOL	Development Approval							
DESCRIPTION O	DEMOLITION (F PROPOSED DEVELOPMENT: ENTRY PAVILI	OF EXISTING GYMNA ON; NEW TEACHING,	L SIUM; ALTERATIO	NS TO EXISTIN ALL BUILDING;	I IG HERITAGE BUI FENCING AND LA	LDING; NEW			
LOCATION OF PI	ROPOSED DEVELOPMENT:ALLOTMEN	T 329 ON FILED	PLAN 181171						
House No: 253	Lot No: Street: FRANKLIN ST	REET T	own/Suburb: _	ADELAIDE	SA 5000				
Section No [full/pa	rt] Hundred:	V	olume: <u>5842</u>		Folio: 466				
Section No [full/pa	rt] Hundred:	V	olume:		Folio:				
LAND DIVISION:									
Site Area [m ²]	Reserve Area [m ²]		No of existing a	Illotments					
Number of addition	nal allotments [excluding road and reserve]: $_$		Lease:	YES					
BUILDING RULE	S CLASSIFICATION SOUGHT:		Present classifi	cation:					
If Class 5,6,78 or 9	9 classification is sought, state the proposed n	umber of employe	es: Ma	le:	Female:				
lf Class 9a classifi	cation is sought, state the number o persons f	or whom accomm	odation is provi	ded:					
If Class 9b classifi	cation is sought, state the proposed number o	f occupants of the	various spaces	s at the pren	nises:				
DOES EITHER SO	CHEDULE 21 OR 22 OF THE DEVELOPMEN	T REGULATIONS	S 2008 APPLY	? YES					
HAS THE CONST	RUCTION INDUSTRY TRAINING FUND ACT	2008 LEVY BEE	N PAID?	YES					
DEVELOPMENT	COST [do not include any fit-out costs]:	<u>12,025,480</u>							
I acknowledge tha the Development I	t copies of this application and supporting doo Regulations 2008.	cumentation may b	be provided to in	nterested pe	ersons in accord	dance with			
SIGNATURE:	/ 0		Da	ted: 1	/ 06 / 2	017			

SIG	N۵	TI	IR	F٠
010	11/		213	-

DEVELOPMENT REGULATIONS 2008 Form of Declaration (Schedule 5 clause 2A)

To: Adelaide City Council

From: WSP Australia (PTY) Ltd

Date of Application: 29 / 5 / 2017

Location of Proposed Development: st Marys College, 253 Franklin street, Adelaide.

House No: Lot No:800 Street: Surrey Farm Drive Town/Suburb, Golden Grove

Section No (full/part):Hundred:

Volume: Folio:

Nature of Proposed Development:

New Gym and Teaching Facility and Upgrade of existing Boylan Building.

Warren Davies

.....being the applicant/ a person acting on behalf of the applicant (delete the inapplicable statement) for the development described above declare that the proposed development will involve the construction of a building which would, if constructed in accordance with the plans submitted, not be contrary to the regulations prescribed for the purposes of section 86 of the Electricity Act 1996. I make this declaration under clause 2A(1) of Schedule 5 of the Development Regulations 2008.

Date: 29/05/2017 Signed: Note:

This declaration is signed subject to receiving the SAPN Swing and Sag analysis. This is expected Week beginning 20/6/2016. Preliminary SAPN analysis indicates the clearance from powerlines will be acceptable.

Note 1

This declaration is only relevant to those development applications seeking authorisation for a form of development that involves the construction of a building (there is a definition of 'building' contained in section 4(1) of the Development Act 1993), other than where the development is limited to –

- a) an internal alteration of a building; or
- an alteration to the walls of a building but not so as to alter the shape of the b) building.

Note 2

The requirements of section 86 of the *Electricity Act 1996* do not apply in relation to:

- a) a fence that is less than 2.0 m in height; or
- b) a service line installed specifically to supply electricity to the building or structure by the operator of the transmission or distribution network from which the electricity is being supplied.

Note 3

Section 86 of the *Electricity Act 1996* refers to the erection of buildings in proximity to powerlines. The regulations under this Act prescribe minimum safe clearance distances that must be complied with.

Note 4

The majority of applications will not have any powerline issues, as normal residential setbacks often cause the building to comply with the prescribed powerline clearance distances. Buildings/renovations located far away from powerlines, for example towards the back of properties, will usually also comply.

Particular care needs to be taken where high voltage powerlines exist; where the development:

- is on a major road;
- commercial/industrial in nature; or
- built to the property boundary.

Note 5

Information brochures 'Powerline Clearance Declaration Guide' and 'Building Safely Near Powerlines' have been prepared by the Technical Regulator to assist applicants and other interested persons. Copies of these brochures are available from council and the Office of the Technical Regulator. The brochures and other relevant information can also be found at www.technicalregulator.sa.gov.au

Note 6

In cases where applicants have obtained a written approval from the Technical Regulator to build the development specified above in its current form within the prescribed clearance distances, the applicant is able to sign the form.

PLN/06/0024


Register Search (CT 5842/466) 31/05/2017 04:16PM P4116 20170531011141 \$27.75

REAL PROPERTY ACT, 1886



The Registrar-General certifies that this Title Register Search displays the records maintained in the Register Book and other notations at the time of searching.



Certificate of Title - Volume 5842 Folio 466

Parent Title(s)

CT 5812/12

Creating Dealing(s) TG 8

TG 8994531

09/03/2001 Edition 1

Edition Issued

09/03/2001

Estate Type

FEE SIMPLE

Title Issued

Registered Proprietor

DOMINICAN CONVENT INC. OF 225 CROSS ROAD CUMBERLAND PARK SA 5041

Description of Land

ALLOTMENT 329 FILED PLAN 181171 IN THE AREA NAMED ADELAIDE HUNDRED OF ADELAIDE

Easements

SUBJECT TO EASEMENT(S) OVER THE LAND MARKED A TO DISTRIBUTION LESSOR CORPORATION (SUBJECT TO LEASE 8890000) (TG 8994531)

Schedule of Dealings

Dealing Number Description

7139956 APPLICATION AGREEMENT PERSUANT TO SECTION 39(D) OF THE CITY OF ADELAIDE DEVELOPMENT CONTROL ACT, 1976

Notations

Dealings Affecting Title	NIL
Priority Notices	NIL
Notations on Plan	NIL
Registrar-General's Notes	NIL
Administrative Interests	
CONFIRMED IN SA HERITAGE F	REGISTER 11/09/1986

Land Services



Register Search (CT 5842/466) 31/05/2017 04:16PM P4116 20170531011141 \$27.75







Land Services

Copyright Privacy Disclaimer: www.sailis.sa.gov.au/home/showCopyright www.sailis.sa.gov.au/home/showPrivacyStatement www.sailis.sa.gov.au/home/showDisclaimer

ATTACHMENT 2a

PLANNING REPORT Jensen Plus

St Mary's College Redevelopment

Planning Report

June 2017





Planning Landscape Architecture Urban Design Social Planning

Contents

1.	Introduction	3
	About St Mary's College	3
	Drivers of development	3
	Pre-lodgement Design Review Process	3
2.	Site + locality assessment	5
	Subject site	5
	Surrounding locality	7
3.	Description of development	10
	Nature of the development	10
	Design	10
	West Terrace Building	10
	Boylan building alternations + entry pavilion	10
	Landscaping + other works	11
	Car parking, access + servicing	11
	Staging	11
4.	Development plan assessment	12
	Procedural matters	12
	Land uses	12
	Heritage context	13
	Built form + appearance	14
	Pedestrian environment + public realm	21
	Amenity + interface	23
	Access + movement	24
	Environmentally sustainable development	27
	Contaminated sites	29
5.	Conclusion	31

Appendices A to I

♣

Revision number: 3

Produced by Jensen PLUS

6/259 Glen Osmond Road Frewville 5063 South Australia

08 8338 5511

admin1@jensenplus.com.au

www.jensenplus.com.au

1. Introduction

Jensen PLUS has been engaged by St. Mary's College to prepare this planning report to accompany a development application for the development of a new educational facility, and refurbishment of existing administrative facilities, at the College's campus at the corner of Franklin Street and West Terrace, Adelaide.

This report has been prepared following a review of plans and related documents that are to be submitted with the development application. Furthermore, visits to the site and an assessment of the surrounding locality, together with discussions with the relevant DPTI, Council and referral agency staff have been considered in the preparation of this report. As the development has undergone the prelodgement design review process, the advice and recommendations of the Design Review Panel have also been considered within the documentation of the proposal and assessment.

This report has been informed by the documentation supporting the application and makes reference to the following within Appendices:

- _ Appendix A Certificate of Title
- Appendix B Preliminary Site Investigation (Contamination)
- Appendix C Architectural Plans
- _ Appendix D Design Statement
- _ Appendix E Heritage Impact Assessment
- Appendix F Landscape Concept Design
- _ Appendix G Noise Impact Assessment
- _ Appendix H Stormwater Management Plan
- _ Appendix I ESD and Energy Efficiency Statement

About St Mary's College

St Mary's College was established in 1869 and is the oldest continuously running school for girls in South Australia. Established by 7 Dominican Sisters from Ireland, the school now offers reception to Year 12 education in the Dominican tradition.

The school currently accommodates over 800 students across the entire spectrum of its junior, middle and senior sub-schools.

The school serves a community of girls and young women and curriculum aims to support and challenge individual learning by encouraging girls to engage in a wide range of co-curricular activities with a special commitment to the Performing Arts, Sport (particularly Netball), Social Justice and Ecological Sustainability.

Drivers of development

The proposed development has arisen from a combination of current shortcomings of the existing accommodation at the school, and Catholic Education SA's Strategic Plan New Levels of Excellence which is seeking to restructure its schools such that Year 7 becomes part of the secondary school program by 2019. This restructure will increase the Year 7 capacity at St Marys College by 3 classes (approximately 75 students).

In order to accommodate the extra students, as well as achieve other strategic objectives for its learning programs and quality of accommodation, an upgrade and expansion of the existing facilities is required.

The school's vision for the development is:

Delivery of a contemporary, flexible, functional and aspirational space that reinforces and enhances the school's reputation and pedagogy, which will improve educational outcomes for the school and the community.

Pre-lodgement Design Review Process

The applicant has voluntarily sought to proceed through the pre-lodgement Design Review Process. The proposal was presented to 2 Pre-Lodgement Meetings and 3 Design Review Panel Meetings. There was generally a level of support for the proposal's objectives or the site and the development outcomes overall, however the following key design issues arose from this process and have further shaped the proposal:

- desire to celebrate the college's identity through and expression that highlights its non-commercial nature
- accommodation of site circulation that reinforces the long-term vision for the site, particularly at stair landings within the new building and adjacent spaces
- ensuring the size of the entry is suitably sized to cater for the numbers of students, parents and other users

- desire to increase amenity and activation to Franklin Street
- _ further exploit northern light and activate street whilst balancing privacy and safety of students
- internal program to better inform the composition of the built form
- _ further exploration of solar shading opportunities, night time appearance and activation
- integration of external stair language to rest of building language, including making the stairs a sculptural element

As a result of participating in the design review process and absorbing the recommendations of the Panel each time, the proposal has evolved in its design to incorporate the feedback received throughout the design review process, and is considered to be a much better design outcome as a result in terms of its functionality and appearance. The evolution and rationale of the design is set out in the Design Statement by Grieve Gillett Andersen Architects which forms Appendix D to this report.

2. Site + locality assessment

Subject site

The site that is subject to the development comprises the entire school land, as well as a portion of adjacent land to the south belonging to the Catholic Church (St Patrick's Church). This is shown within Figure 1.

The school site comprises allotment 329 on Filed Plan 181171 as contained within Certificate of Title Volume 5842 Folio 466, commonly referred to as 253 Franklin Street. The land parcel is approximately 9,850 square metres in area and has three street frontages. The frontage to West Terrace is 64.07 metres, Franklin Street (its principal frontage) is 153.77 metres and Gray street to the east is 64.12 metres.

The school's relationship to the adjacent Catholic church site is by virtue of the use of some of the land for the placement of transportable classrooms and parking for staff, together with use of tennis courts. This arrangement is via a lease / agreement with the Catholic church.

There are a number of buildings located across the site ranging in age. The majority of the buildings are

connected either through internal hallway, covered external pathways or above ground bridges.

The oldest building on the site is the original convent building (1 – meeting and administration spaces) and associated Boylan building (2 - administrative and ICT facilities on ground with classes and year 12 spaces on upper levels). These structures are listed as State heritage places, along with the extent of boundary stone wall that runs along Franklin Street.

Other buildings on the site date from the 1960s (3 – Moore building), late 80's - early 90's (4 – Catherine / Kavanagh which contains the junior school, 5 – Veritas which houses the gymnasium), or were constructed over the last 10 years (6 – Performing Arts Centre and 7 – Resource Centre Buildings) (including historic elements)

Beyond the school's land, two transportable buildings are utilised for art classes and for PE classes and offices on the land rented from the Catholic church.



Figure 1: Extent of subject site and specific buildings that make up the existing school facilities.



Image 1: Boylan Building, wall and main school entry gate



Image 2: Veritas Hall and West Terrace staff car park



Image 3: St Catherine's / Kavanagh Building from West Terrace

₽



Image 4: Performing Art building from Gray Street



Image 5: Resource Centre building and Veritas lawns looking south-east



Image 6: Rear of Moore building, including transportable art and PE classrooms and fencing for tennis courts (view from Grote St)

The portion of the site subject to the proposed development is the Veritas building and adjacent car park area, the Boylan building, together with the Veritas lawn and play spaces between the two buildings.

The majority of the buildings on the land are two storey in form, with the exception of the performing arts centre and the western portion of the Boylan building, both of which are three storeys. Due to the varying ages of the building, there is a variety of styles and materials present on the site including stone, brick and concrete walls, with iron / Colorbond roofing.

The principal student entry to the school is via a gate positioned centrally along the Franklin Street frontage. Other entries (principally for staff) include gates and vehicle entry on Gray Street, as well as staff entries from West Terrace (car park) and the church site to the south. Car parking for staff at the school is split between the West Terrace car park (18 spaces) and the parking on the neighbouring church site adjacent the transportable buildings (31 spaces).

The Veritas lawns are the principal open play space available to students, however there are other play areas utilised including the lawn area to the east of the Boylan building, as well as courtyards and other hard surface spaces between the buildings. The Veritas lawns contain mature and semi-mature trees around their perimeter that contribute to the amenity of these spaces and the outlook from the Resources centre building. A regulated Norfolk Island Pine tree is located to the north of the Boylan Building adjacent the Franklin Street frontage. The Significant tree identified within the Development Plan for this site has since been removed as part of the development of the Resource Centre building in 2010.

Surrounding locality

The extent and nature of the surrounding locality is identified within Figure 2 below. It comprises both side of Franklin Street from the West Terrace junction east until just beyond the Gray Street junction. It includes the West Terrace frontages from the Grote Street junction north up to the Waymouth Street junction. The locality also includes the entire grounds of the Church of St Patricks bound by Gray Street to the east and Grote Street to the south. The locality has a diverse character, resembling the varied nature and eras of development in this location. Grote Street is largely characterised by the state heritage buildings associated with the Church of St Patrick and the neighbouring Archbishop's residence buildings. The character is spacious in this location due to the large distances between the building made up of parking areas and the tennis courts, utilised by the school. A cluster of large trees also is an important landscape element in the character of this part of the locality.

The portion of West Terrace within the locality is divided into two parts, each with different character. That portion to the north of Franklin Street has a mixture of more contemporary building form, typically with flat roofs, although with a largely consistent two storey height. The buildings are set to the West Terrace frontage forming a built form edge. Large advertising hoardings, some of which sit above the roof outlines dominate views, along with the vast expanse of roadway comprising West Terrace itself.

To the south of Franklin Street (and incorporating the site), the character is more aligned to the historic context of the state heritage places in this location. Buildings are set back from West Terrace and materiality and colours are brick and stone, with generally gabled roof structures. Building heights vary between single and two storey forms. The brick fence that fronts the subject site and adjacent Archbishop's resident complex is an important horizontal form that defines the edge of the city's built form. These frontages contrast with the open landscaped setting of the parklands on the opposite side of West Terrace.

The Franklin Street character is similarly diverse. Building vary in setbacks, frontage widths range from narrow to quite large sites, and the building heights also range from single storeys to up to 5 storeys. Materiality is also varied reflective of the different eras of building in this location.

The Greek Orthodox church is a distinctive building in the street due to its irregular circular form and the height of the bell tower. This does provide some balance to the height and scale of the Boylan building on the subject site opposite.



Figure 2: Extent and characteristics of the surrounding locality



Image 7: Greek Orthodox church opposite site on Franklin Street (state heritage place)

₽



Image 8: Northern section of Franklin Street (looking north-east)



Image 9: Buildings along West Terrace between Waymouth St and Franklin St



Image 11: Archbishop's Residence buildings (state heritage place) viewed from West Terrace



Image 13: Church of St Patricks, Grote Street (state heritage place)

♣



Image 10: Building on corner of West Terrace and Franklin Street (northern side)



Image 12: Archbishop's Residence buildings viewed from Grote Street (state heritage place)



Image 14: Parklands opposite on West Terrace

9

3. Description of development

Nature of the development

The proposed development includes the following elements:

- Demolition of the existing gymnasium (Veritas Building) and car park
- Internal alterations to the existing Boylan building with a new entry pavilion addition
- Construction of a new West Terrace building comprising Year 12, Arts and full-size netball facilities over two levels
- _ Associated fencing and landscaping.

Design

The Design Statement by Grieve Gillett Andersen Architects which forms Appendix D to this report sets out the design considerations which have been taken into account in designing the proposed development, particularly in response to issues raised during the Design Review Process.

Specifically, the design has been refined to deliver:

- Definition of the Franklin Street and West Terrace corner, through identification signage providing eye-level identification for pedestrians and vehicles, integrated with lighting elements for night-time appearance. The distinctive design and materials of the façades at this corner will further enhance the presence of the College in the public realm.
- External stairs which minimise impact on the lawn area.
- A plinth to the new building which references, without mimicking, the materials and detailing of existing wall sections.
- Articulation of the façade through a series of planes with shifting alignments and setbacks from the boundary. At the corner of West Terrace and Franklin Street, further definition will be provided by "peeling back" this solid zinc façade to reveal the apparently underlying transparent material, providing a tapestry of transparency and opacity. Further interest and articulation is provided through the placement of windows of varying size and position on each of the main street façades.
- Providing depth to the façade at the new Year 12 entry, without encouraging after-hours loitering.

West Terrace Building

The new West Terrace Building will replace the existing Veritas Building and an adjacent car parking area fronting West Terrace.

The West Terrace Building will house the following facilities:

- _ A full-size netball court
- _ Year 12 general learning areas and common areas
- _ PE teaching spaces
- _ Senior and Junior School art facilities.

While the scale and form of the building are dictated in part by the spatial requirements of the netball court, they will also portray the identity of St. Mary's College within the public realm.

The building is sited hard against the western (West Terrace) and northern (Franklin Street) site boundaries, reinforcing the building as a statement of the school's identity, but also maximising retention of the Veritas Lawns, and maintaining separation from the Boylan Building to retain its prominence.

The building is grounded using a brick plinth element, with a combination of standing zinc cladding and translucent polycarbornate sheeting above ground floor level along the street façade and to the eastern and southern façade.

The eastern stair from the lawn to the first-floor level of the new building has been designed to minimise impact on the lawn area, while connecting with the central circulation spine at ground level. It is generous in width (3,000mm) and is of precast concrete with slip-resistant finish to meet applicable standards. A 1,500mm portal and hood over the entry at first-floor level will provide weather protection, and, together with the integrated balustrade, will form a sculptural element in this central part of the School.

Boylan building alternations + entry pavilion

Works to the Boylan Building will replace existing offices in the ground floor of the Boylan Building with new finishes and furnishings to house administrative and IT/ICT functions. As the interior has been extensively remodelled in the past, a substantial amount of original fabric has been removed. The proposed refurbishment will focus on retaining as

10

much volume as possible, retaining key features such as fireplace surrounds, and ensuring partitions are located sensitively in relation to window and door openings.

A new contemporary single-storey pavilion will be constructed immediately to the west of the Boylan Building, with a light connection to the existing western wall. It will provide a new reception area accessible from Franklin Street. The materials and design will reference the new West Terrace Building, and will maintain views through the projecting stairwell behind the reception area through glazing, with the western wall finished in zinc cladding to tie into the West Terrace building.

Landscaping + other works

The Landscape Concept Design which forms part of the proposed development is provided as Appendix F to this report. The Landscape Concept Design will complement new and existing buildings by providing attractive and functional outdoor areas for the School community, and an attractive interface with the public realm. Features of the Landscape Concept Design include:

- _ Retention and improvement of the Veritas Lawns
- New trees with renewed seating units and resinbound gravel paving, and hedging for privacy and enclosure to the Franklin Street frontage
- Seating with columnar or shade-tolerant trees, as appropriate
- Retention and protection of existing trees during works
- _ A new junior playground with recycled equipment.
- A paved entry from Franklin Street to the new pavilion.

By providing for privacy and enclosure, while minimising the availability of spaces for loitering and providing appropriate opportunities for passive surveillance, the proposed development will contribute to Crime Prevention Through Environmental Design (CPTED).

As outlined in the Stormwater Management Plan (Appendix H), the proposed development will only marginally increase the overall impervious surface area of the site and will therefore have a negligible impact on the existing stormwater system. Discussions with Adelaide City Council indicate that the existing system will have sufficient capacity to accommodate any minor increase in flows. The proposed development will result in a slight improvement in water quality

Car parking, access + servicing

The proposal removes the car parking of 16 vehicles from the existing West Terrace car park. It is not intended to relocate parking to other locations, with staff required to either catch public transport, or find alternative on-street parking. Currently staff park on the site (theatre undercroft and adjacent former convent), within the adjacent church land to the south and on-street or nearby car parks.

The proposal does not seek to change the student pick-up and drop-off arrangements for the site, which currently include use of parking spaces adjacent the entry gate along Franklin Street, as well as along Grote Street. These parking spaces have parking restrictions between 3pm and 4pm to facilitate student pick-up and drop-off.

As the current mix of journey to school trips for students are largely in favour of public transport (approximately 60%) instead of drop-offs, it is not expected that the additional students who use the proposed development will have any material impact on vehicle movements or car parking demand in the immediate vicinity.

Arrangements for service vehicles will not be changed by the proposed development.

Staging

It is proposed that the development will be undertaken in two principal stages:

- Stage 1 Demolition of the existing gymnasium (Veritas Building) and car park, and construction of the new West Terrace building.
- Stage 2 Internal alterations to the existing Boylan building with a new entry pavilion addition, and completion of associated fencing and landscaping.

To accommodate this proposed staging, the applicant seeks an exercise by DAC of its discretion under Regulation 48(2) of the *Development Regulations* 2008 to extend the prescribed period for commencement of Stage 2 of the proposed development to 3 years from the operative date of approval, and the period for substantial completion of the proposed development to 5 years from the operative date of approval.

4. Development plan assessment

Procedural matters

The subject development is located within the Capital City Zone of the Adelaide City Council Development Plan (Consolidated 30 May 2017). Within the zone, an educational establishment is not listed as either a complying or non-complying form of development. The proposal is therefore a merit form of development pursuant to Section 35(5) of the *Development Act, 1993*.

The proposed development, is not located on land adjacent to the City Living Zone or Adelaide Historic (Conservation) Zone. As such, pursuant to Principle of development control 37(a), the proposed development is a Category 1 development.

Land uses

The following provisions of the Development Plan are applicable to the subject development insofar as they relate to land uses proposed.

Capital City Zone

Desired Character Statement

This Zone is the economic and cultural focus of the State and includes a range of employment, community, educational, tourism and entertainment facilities...The Zone will be active during the day, evening and late night....

Objectives

- *1 The principal focus for the economic, social and political life of metropolitan Adelaide and the State.*
- *2* A vibrant mix of commercial, retail, professional services, hospitality, entertainment, educational facilities, and medium and high density living.

Principles of development control

- *1 The following types of development, or combinations thereof, are envisaged*
 -Educational establishment
- *2* Land uses that are typically closed during the day should be designed to maximise daytime and evening activation at street level and be compatible with surrounding land uses, in particular residential development.
- *4 Development listed as non-complying is generally inappropriate.*

Council Wide

Objectives

- *4 Community and social facilities and services that promote greater equity, are located for convenient access by residents, workers and visitors and that form a focus for residential development.*
- *5 Location of appropriate community facilities (e.g. schools, hospitals and other institutions) where they are conveniently accessible to the population they serve.*
- 73: The role of the City enhanced as:
 - (d) a centre for education and research built on key academic strengths and on the excellent learning environment and student accommodation available in the City;

Principles of development control

- 2 Community facilities should:
 - *(a) be located conveniently in relation to the population they serve;*
 - (b) be designed for multi-purpose use where possible;
 - *(c) meet the demonstrated needs of the various communities who will use them;*
 - *(d) be safe and easy to reach on foot, by bicycle and by public transport;*
 - (e) be situated in suitable locations; and
 - *(f) not unreasonably impact on the amenity of the surrounding locality through excessive traffic generation.*
- *3* The redevelopment, alteration or change of use of community facilities should ensure the adequate provision of such facilities.
- *266* Development, particularly within the Capital City and Institutional Zones, is encouraged to:
 - *(b) provide for the growth in economic activities that sustain and enhance the variety and mix of land uses and the character and function of the City;*
 - *(c) maximise opportunities for co-location, multiple use and sharing of facilities;*
 - (d) be accessible to all modes of transport (particularly public transport) and safe pedestrian and cycling routes; and

The Capital City zone lists an educational establishment as an envisaged use. The Development Plan more broadly supports the expansion and improvement of local community facilities and services reflective of the Adelaide CBD as the principal place for activities for the city. In addition, the Capital City zone also supports additional activities and uses that further expand the hours of activity outside of typical office hours.

The proposed development, being an expansion to the existing educational establishment use, is entirely consistent with the intent of the Capital City zone and the Development Plan generally. The new West Terrace building will create a new multi-purpose space that will continue to be made available for hire by community groups outside of school hours.

Indeed, the new facilities will significantly improve the quality of these spaces, including providing an outlook over the Adelaide Parklands, whilst maintaining the level of security for the remainder of the school's facilities. These activities will further support increasing activity on the site outside of school hours, contributing to an increased activation of a site that would typically be vacant during these times.

Heritage context

The following provisions of the Development Plan are applicable to the subject development insofar as they relate to its heritage context.

Capital City Zone

Desired Character Statement

Contemporary juxtapositions will provide new settings for heritage places.

Views to important civic landmarks, the Park Lands and the Adelaide Hills will be retained as an important part of the City's charm and character.

Objectives

- *5: Innovative design approaches and contemporary architecture that respond to a building's context.*
- *8: Development that contributes to the Desired Character of the Zone.*

Principles of development control

- 5 Development should be consistent with the Desired Character for the Zone.
- 11 Buildings should be positioned regularly on the site and built to the street frontage, except where a setback is required to accommodate outdoor dining or provide a contextual response to a heritage place.

Council Wide

Objectives

42: Acknowledge the diversity of Adelaide's cultural heritage from pre-European occupation to current time through the conservation of heritage places and retention of their heritage value.

- *43: Development that retains the heritage value and setting of a heritage place and its built form contribution to the locality.*
- *44: Continued use or adaptive reuse of the land, buildings and structures comprising a heritage place.*

Principles of development control

- *136 Development of a heritage place should conserve the elements of heritage value as identified in the relevant Tables.*
- 137 Development affecting a State heritage place (Table Adel/1), Local heritage place (Table Adel/2), Local heritage place (Townscape) (Table Adel/3) or Local heritage place (City Significance) (Table Adel/4), including:
 - (a) adaptation to a new use;
 - (b) additional construction;
 - (c) part demolition;
 - (d) alterations; or
 - (e) conservation works;

should facilitate its continued or adaptive use, and utilise materials, finishes, setbacks, scale and other built form qualities that are complementary to the heritage place.

- 140 Development on land adjacent to a heritage place in non-residential Zones or Policy Areas should incorporate design elements, including where it comprises an innovative contemporary design, that:
 - *(a) utilise materials, finishes, and other built form qualities that complement the adjacent heritage place; and*
 - *(b) is located no closer to the primary street frontage than the adjacent heritage place.*
- 142 Development that abuts the built form/fabric of a heritage place should be carefully integrated, generally being located behind or at the side of the heritage place and without necessarily replicating historic detailing, so as to retain the heritage value of the heritage place.
- 145 Fencing to the street boundary, and returning along the side boundaries to the alignment of the building front of a heritage place, should be compatible with the heritage value of the heritage place and any existing fencing.

The Capital City zone recognises a need for new development to respond to important buildings, vistas and spaces that contribute to the character of a location. It does however also recognise a desire for new buildings to have a contemporary appearance, to differentiate from heritage buildings, whilst also doing so in a respectful manner in terms of form and positioning. This is reinforced within the Council Wide provisions, with additional value paced on the continue use and re-use of heritage buildings.

The extent of the State heritage listing applying to the site relates principally to the Boylan building, together with the remnants of the original stone fencing along Franklin Street.

A heritage impact assessment has been prepared by Grieve Gillett Andersen and is contained within Appendix E. It concludes the following in regards to the important heritage fabric and setting attributes for the site:

- The existing building and parking area to be demolished are of no heritage value, and do not contribute to providing a suitable context for the Boylan Building and early sections of stone wall fronting Franklin Street.
- The new West Terrace Building will be grounded by a masonry plinth element that references the historic enclosure of the school by stone and brick perimeter walls. While referencing the qualities of these walls, the plinth will differentiate itself by the use of banded brick. Connections with existing walls to West Terrace and Franklin Street will be marked by a slender steel fin connection, which will also reference new entry gates adjacent to the Boylan Building.

It is noted that the internal works to the ground floor level of the Boylan building will not impact on any original heritage fabric, as the interior of the building has been completely altered as part of alterations undertaken some years ago which adapted the building into 3 levels. The original fireplaces are the remaining fabric and internal features within this part of the building internally on the ground level. These are being retained and featured within the new spaces proposed in the new floor plan layout.

The addition to the Boylan building has also been carefully considered in its placement and design to be respectful of the original fabric of the building, and its setting. Specifically, it has achieved this by:

- being set back behind the principal façade of the Boylan building's frontage to Franklin Street
- being of a low height and form so as to minimise its intrusion to views of the Boylan building
- providing glazing to the front and rear facades such that it provides transparency and views through the pavilion to the original fabric of the Boylan building, including an arched door and circular window
- sensitively connecting to the original building fabric through the use of materials, design and placement that sit lightly adjacent to the Boylan

building, and maintain views through to the projecting stairwell behind the new reception area.

The need to maintain access for people with disabilities to the IT learning spaces has required the need to make a minor alteration to one of the windows on the western façade so that it can is converted to a door.

The proposed development also recognises the setting of adjacent heritage places in the form of the Archbishop's Residence to the south, including through the integration between the brick plinth and remaining sections of wall.

The proposed development responds appropriately and sensitively to the setting of the State heritage place on the site, and those adjacent the site. Importantly, the development enables the ongoing utilisation of the Boylan building for the school's administration, teaching / ICT facilities. It also provides a stronger focus with the new entry to the Boylan frontage than the current arrangements on the site. It is considered to suitably address the heritage context and appearance provisions within the Development Plan.

Built form + appearance

The following provisions of the Development Plan are applicable to the subject development insofar as they relate to the following elements of the building design. These provisions include changes to the Development Plan made by the Capital City Policy Review (Design Quality) Development Plan Amendment approved on 30 May 2017.

Building height

Capital City Zone

Desired Character Statement

High-scale development is envisaged in the Zone with high street walls that frame the streets.

Objectives

- 7: Large sites developed to their full potential while ensuring a cohesive scale of development and responding to a building's context.
- *8: Development that contributes to the Desired Character of the Zone.*

- 5 Development should be consistent with the Desired Character for the Zone.
- 21 Development should not exceed the maximum building height shown in Concept Plan Figures CC/1 and 2 unless:

- (a) it meets one or more of the following:
 - *(i)* the proposed building is located in one of the following areas:
 - (1) fronting North Terrace, West Terrace or East Terrace and/or at the junction of two City boulevards shown in Concept Plan Figures CC/1 and 2;
 - ...
 - (3) within 200 metres of a high concentration public transport route identified on Map Adel/1 (Overlay 4);
 - *(iii) the site area is greater than 1500 square metres and has side or rear vehicle access;*
- (b) and only if:
 - *(i) at least two of the following features are provided:*
 - (1) the development provides an orderly transition up to an existing taller building or prescribed maximum building height in an adjoining Zone or Policy Area;
 - *(2) the development incorporates the retention and conservation of a character building or listed heritage place;*
 - (3) high quality publicly accessible open space that is directly connected to, and well integrated with, public realm areas of the street;
 - (4) publicly accessible, safe and secure pedestrian linkages that connect through the development site as part of the cities pedestrian network on Map Adel/1 (Overlay 2A);
 - (5) on site car parking does not exceed a rate of 0.5 spaces per dwelling, or car parking is provided underground;
 - (6) residential, office or any other actively occupied use is located on all of the street facing side of the building, with any above ground car parking located behind;
 - (7) a range of dwelling types that includes at least 10% of 3+ bedroom apartments;
 - (8) more than 15 per cent of dwellings as affordable housing.
 - *(ii) plus all of the following sustainable design measures are provided:*
 - (1) a rooftop garden covering a majority of the available roof area supported by services that ensure ongoing maintenance;

- (2) a greenroof, or greenwalls/facades supported by services that ensure ongoing maintenance;
- *(3) innovative external shading devices on all of the western side of a street facing façade; and*
- (4) higher amenity through provision of private open space in excess of minimum requirements, access to natural light and ventilation to all habitable spaces and common circulation areas.
- 22 Development should have optimal height and floor space yields to take advantage of the premium City location and should have a building height no less than half the maximum shown on Concept Plan Figures CC/1 and 2, or 28 metres in the Central Business Policy Area, except where one or more of the following applies:
 - (a) a lower building height is necessary to achieve compliance with the Commonwealth Airports (Protection of Airspace) Regulations;
 - *(c) the site is adjacent to a heritage place, or includes a heritage place;*

Council Wide

Principles of development control

- *169 The height and scale of development and the type of land use should reflect and respond to the role of the street it fronts as illustrated on Map Adel/1 (Overlay 1).*
- 170 The height, scale and massing of buildings should reinforce:
 - *(a) the desired character, built form, public environment and scale of the streetscape as contemplated within the Zone and Policy Area, and have regard to:*
 - *(i) maintaining consistent parapet lines, floor levels, height and massing with existing buildings consistent with the areas desired character;*
- 172 Buildings and structures should not adversely affect by way of their height and location the long-term operational, safety and commercial requirements of Adelaide International Airport. Buildings and structures which exceed the heights shown in Map Adel/1 (Overlay 5) and which penetrate the Obstacle Limitation Surfaces (OLS) should be designed, marked or lit to ensure the safe operation of aircraft within the airspace around the Adelaide International Airport.

The Capital City Zone seeks development that maximises opportunities on the site, and as a result does not provide a specific height limit in this location, other than in relation to the OLS limits associated with the safe operation of Adelaide Airport. Reflective of this, the zone does provide a minimum height of 28 metres in this location, reflective of its desire to achieve a continuous urban wall fronting the park lands. The proposed development, being 14 metres in height, does not achieve this minimum desired height for new buildings, however, this is not fatal to the proposal as the zone does recognise that a reduced height may be appropriate where:

- _ it is adjacent to a heritage place or
- a lower building height is appropriate to achieve compliance with Commonwealth Airport Safety legislation (ie OLS limits)

Both of these scenarios are applicable in this instance in that the subject building is situated within a context of a number of State heritage places, typically in the two – three storey building height and form.

Adelaide Airport Limited has confirmed that the OLS limit for the subject site is 55 metres. The parapet of the proposed building is positioned at 55 metres AHD, and is therefore within the OLS limit for the site.

The proposed development is also consistent with the mixed height and building forms in the locality.

Setbacks

Capital City Zone

Desired Character Statement

High-scale development is envisaged in the Zone with high street walls that frame the streets.

In important pedestrian areas, buildings will be set back at higher levels above the street wall to provide views to the sky and create a comfortable pedestrian environment. In narrow streets and laneways the street setback above the street wall may be relatively shallow or non-existent to create intimate spaces through a greater sense of enclosure. In the Central Business Policy Areas, upper level setbacks are not envisaged.

The distinctive grid pattern of Adelaide will be reinforced through the creation of a series of attractive boulevards as shown on Concept Plan Figures CC/1 and 2. These boulevards will provide a clear sense of arrival into the City and be characterised by buildings that are aligned to the street pattern, particularly at ground level.

The City's boulevards, terraces and Squares will be developed as follows:

(e) West Terrace will be reinforced as the western 'gateway' to the City centre and will form an imposing frontage to the western City edge. Buildings will be constructed to the front and side boundaries, and designed to maximise views through to the Park Lands.

Objectives

- *6: Buildings that reinforce the gridded layout of Adelaide's streets and respond to the underlying built-form framework of the City.*
- *8: Development that contributes to the Desired Character of the Zone.*

Principles of development control

- **11** Buildings should be positioned regularly on the site and built to the street frontage, except where a setback is required to accommodate outdoor dining or provide a contextual response to a heritage place.
- 12 Buildings should be designed to include a podium/street wall height and upper level setback (in the order of 3-6 metres) that:
 - *(a) relates to the scale and context of the adjoining built form;*
 - (b provides a human scale at street level;
 - (c) creates a well-defined and continuity of frontage;
 - (d) gives emphasis and definition to street corners to clearly define the street grid;
 - *(e) contributes to the interest, vitality and security of the pedestrian environment;*
 - *(f) maintains a sense of openness to the sky for pedestrians and brings daylight to the street; and*
 - (g) achieves pedestrian comfort by minimising micro climatic impacts (particularly shade/shelter, wind tunnelling and downward drafts).

other than (h) or (i):

- (h) in the Central Business Policy Area;
- (i) where a lesser (or zero) upper level setback and/or podium height is warranted to correspond with and complement the form of adjacent development, in which case alternative design solutions should be included to achieve a cohesive streetscape, provided parts (b) to (g) are still achieved.

Council Wide

- *168 Development should be of a high standard of design and should reinforce the grid layout and distinctive urban character of the City by maintaining a clear distinction between the following:*
 - *(a) the intense urban development and built-form of the town acres in the Capital City, Main Street, Mixed Use, City Frame and City Living Zones;*
- 179 Buildings within the Capital City Zone should be built to the street edge to reinforce the grid pattern, create a continuity of frontage and provide definition and enclosure to the public realm whilst contributing to the interest, vitality and security of the pedestrian environment.

- *191 New development on major corner sites should define and reinforce the townscape importance of these sites with appropriately scaled buildings that:*
 - (b) abut the street frontage; and

The new West Terrace Building meets the requirements of the Development Plan by providing high walls on the West Terrace and Franklin Street boundaries to frame those streets, reinforce the grid street pattern and contribute to an imposing built form edge to West Terrace.

The new pavilion building will be set back from Franklin Street to an extent generally equal to the setback of the Boylan Building, ensuring that the new structure does not dominate or overwhelm the State Heritage Place.

Building form and scale

Capital City Zone

Desired Character Statement

Non-residential and/or residential land uses will face the street at the first floor level to contribute to street vibrancy.

New development will achieve high design quality by being:

- Contextual so that it responds to its surroundings, recognises and carefully considers the adjacent built form, and positively contributes to the character of the immediate area.
- Durable by being fit for purpose, adaptable and long lasting, and carefully considers the existing development around it.
- Inclusive by integrating landscape design to optimize pedestrian and cyclist usability, privacy, and equitable access, and also promote the provision of quality spaces integrated with public realm that can be used for access and recreation and help optimize security and safety both internally and into the public realm, for occupants and visitors alike.
- Sustainable by integrating sustainable systems into new buildings and the surrounding landscape design to improve environmental performance and amenity for occupants.

Contemporary juxtapositions will provide new settings for heritage places. Innovative forms are expected in areas of identified street character, referencing the past, but with emphasis on modern design-based responses that support optimal site development.

There will also be a rich display of art that is accessible to the public and contextually relevant.

The City's boulevards, terraces and Squares will be developed as follows:

(e) West Terrace will be reinforced as the western 'gateway' to the City centre and will form an imposing frontage to the western City edge. Buildings will be constructed to the front and side boundaries, and designed to maximise views through to the Park Lands. Corner sites at the junctions of West Terrace and the major east-west streets will be developed as strongly defined visual gateways to the City. This will provide an imposing frontage to the western edge of the City, which comprises a mixture of commercial, showroom and residential development.

(g) Currie, Grenfell, Franklin and Flinders streets, as wider east-west boulevards provide important entry points to the City....These streets also provide long views to the hills as their closing vistas and these view corridors should remain uncluttered.

Objectives

- *5: Innovative design approaches and contemporary architecture that respond to a building's context.*
- *6: Buildings that reinforce the gridded layout of Adelaide's streets and respond to the underlying builtform framework of the City.*
- 7: Large sites developed to their full potential while ensuring a cohesive scale of development and responding to a building's context.
- *8: Development that contributes to the Desired Character of the Zone.*

- 5 Development should be consistent with the Desired Character for the Zone.
- 6 Development should be of a high standard of architectural design and finish which is appropriate to the City's role and image as the capital of the State.
- 7. Buildings should achieve a high design quality by:
 - (a) the use of quality materials and finishes;
 - (b) providing a high degree of visual interest through articulation, avoiding any large blank façades, or incorporating other such design features;
 - *(c) ensuring lower levels are well integrated with, and contribute to a vibrant public realm; and*
 - (d) ensuring any ground and first floor level car parking elements are sleeved by residential or nonresidential land uses (such as shops, offices and consulting rooms) to ensure an activated street frontage.
- 11 Buildings should be designed to include a podium/street wall height and upper level setback (in the order of 3-6 metres) that:
 - (a) (i) relates to the scale and context of the adjoining built form;
 - (ii) provides a human scale at street level;
 - *(iii) creates a well-defined and continuity of frontage;*

- *(iv) gives emphasis and definition to street corners to clearly define the street grid;*
- *(v) contributes to the interest, vitality and security of the pedestrian environment;*
- *(vi) maintains a sense of openness to the sky for pedestrians and brings daylight to the street; and*
- *(vii) achieves pedestrian comfort by minimising micro climatic impacts (particularly shade/shelter, wind tunnelling and downward drafts).*
- (b) other than:
 - (i) in the Central Business Policy Area; or
 - (ii) where a lesser (or zero) upper level setback and/or podium height is warranted to correspond with and complement the form of adjacent development, in which case alternative design solutions should be included to achieve a cohesive streetscape, provided parts (a) (ii) – (vii) are still achieved.
- 14 Building façades should be strongly modelled, incorporate a vertical composition which reflects the proportions of existing frontages, and ensure that architectural detailing is consistent around corners and along minor streets and laneways.
- *17 Development along the terraces should contribute to a continuous built form to frame the City edge and activate the Park Lands.*

Council Wide

Objectives

- *46: Reinforcement of the city's grid pattern of streets through:*
 - *(a) high rise development framing city boulevards, the Squares and Park Lands*
- *48: Development which incorporates a high level of design excellence in terms of scale, bulk, massing, materials, finishes, colours and architectural treatment.*

- **167** Where development significantly exceeds quantitative policy provisions, it should demonstrate a significantly higher standard of design outcome in relation to qualitative policy provisions including pedestrian and cyclist amenity, activation, sustainability and public realm and streetscape contribution.
- *168 Development should be of a high standard of design and should reinforce the grid layout and distinctive urban character of the City by maintaining a clear distinction between the following:*
 - *(a) the intense urban development and built-form of the town acres in the Capital City, Main Street, Mixed Use, City Frame and City Living Zones;*
 - (d) the open landscape of the Park Lands Zone.

- *169* The height and scale of development and the type of land use should reflect and respond to the role of the street it fronts as illustrated on Map Adel/1 (Overlay 1).
- *170 The height, scale and massing of buildings should reinforce:*
 - *(a) the desired character, built form, public environment and scale of the streetscape as contemplated within the Zone and Policy Area, and have regard to:*
 - *(i) maintaining consistent parapet lines, floor levels, height and massing with existing buildings consistent with the areas desired character;*
 - *(ii) reflecting the prevailing pattern of visual subdivision of neighbouring building frontages where frontages display a character pattern of vertical and horizontal sub-divisions; and*
 - (iii) avoiding massive unbroken facades.
 - *(b) a comfortable proportion of human scale at street level by:*
 - *(i) building ground level to the street frontage where zero set-backs prevail;*
 - *(ii) breaking up the building facade into distinct elements;*
 - *(iii)incorporating art work and wall and window detailing; and*
 - *(iv)including attractive planting, seating and pedestrian shelter.*
- **180** Development should respect the composition and proportion of architectural elements of building facades that form an important pattern which contributes to the streetscape's distinctive character in a manner consistent with the desired character of a locality by:
 - (a) establishing visual links with neighbouring buildings by reflecting and reinforcing the prevailing pattern of visual sub-division in building facades where a pattern of vertical and/or horizontal sub-divisions is evident and desirable, for example, there may be strong horizontal lines of verandahs, masonry courses, podia or openings, or there may be vertical proportions in the divisions of facades or windows; and
 - (b) clearly defining ground, middle and roof top levels.
- *181* Where there is little or no established building pattern, new buildings should create new features which contribute to an areas desired character and the way the urban environment is understood by:
 - (a) frontages creating clearly defined edges;
 - *(b) generating new compositions and points of interest;*
 - *(c) introducing elements for future neighbouring buildings; and*

- *(d) emphasising the importance of the building according to the street hierarchy.*
- **182** Building facades fronting street frontages, access ways, driveways or public spaces should be composed with an appropriate scale, rhythm and proportion which responds to the use of the building, the desired character of the locality and the modelling and proportions of adjacent buildings.

Design Techniques (these are ONE WAY of meeting the above Principle)

182.1 Design solutions may include:

- (a) defining a base, middle and top related to the overall proportion of the building;
- *(b) expressing key horizontal lines within the townscape by using cornices, a change in materials or building setback;*
- (c) expressing the internal layout of the building by using for example, vertical bays or its structure, such as party wall divisions;
- (d) expressing the variation in floor to floor height, particularly at the lower levels;
- *(e) articulating building entries with awnings, porticos, recesses, blade walls and projecting bays;*
- *(f) using a variety of window types to create a rhythm or express the use of the building;*
- (g) incorporating architectural features which give human scale to the design of the building at street level such as entrance porches, awnings and colonnades;
- (*h*) designing facades to reflect the orientation of the site using elements such as sun shading, light shelves and bay windows as environmental controls;
- *(i) expressing important corners by giving visual prominence to parts of the facade, for example, a change of building articulation, material or colour, roof expression or increased height;*
- *(j) using a variation of contrasting surface finishes, textures, colours or patterns; or*
- (k) avoiding unbroken building elevations of more than 15 metres on a vertical plan;
- *(I) using recessed balconies and deep windows to create articulation and define shadows thereby adding visual depth to the facade;*
- *185* No part of any fully enclosed building should extend over property boundaries, including streets and public spaces, whether above a balcony at a lower level or not.
- **186** Building services such as drainage pipes together with security grills/screens, ventilation louvres and car park entry doors, should be coordinated and integrated with the overall facade design.
- *191* New development on major corner sites should define and reinforce the townscape importance of these sites with appropriately scaled buildings that:

- (a) establish an architectural form on the corner;
- (b) abut the street frontage; and
- (c) address all street frontages.

Design Technique (these are ONE WAY of meeting part of the above Principle)

- 191.1 In relation to Principle 191(a):
- (a) corporation of corner elements such as pediments, turrets, verandahs, balconies and other articulation and modelling into the design of the building;
- *(b) incorporation of prominent entrances and/or windows at the apex;*
- (c) increasing roof expression or building height at the corner to emphasise the importance of the street corner;
- (d) rotating the building line to create a chamfered edge;
- (e) projecting corner elements forward; and/or
- (f) in a change of building articulation, material or colour.

Objective

- *49: Innovative and interesting skylines which contribute to the overall design and performance of the building.*
- Principles of development control
- **192** Where a prevailing pattern of roof form assists in establishing the desired character of the locality, new roof forms should be complementary to the shape, pitch, angle and materials of adjacent building roofs.
- *193* Buildings should be designed to incorporate well designed roof tops that:
 - *(a) reinforce the desired character of the locality, as expressed in the relevant Zone or Policy Area;*
 - (b) enhance the skyline and local views;
 - *(c) contribute to the architectural quality of the building;*
 - (d) provide a compositional relationship between the upper-most levels and the lower portions of the building;
 - (e) provide an expression of identity;
 - (f) articulate the roof, breaking down its massing on large buildings to minimise apparent bulk;
 - (g) respond to the orientation of the site; and
 - (h) create minimal glare.

Design Techniques (these are ONE WAY of meeting the above Principle)

193.1 Design solutions may include:

(*a*) articulating form and surface by large, simple features that can be recognised from a distant view point;

(b) tapering towers by stepping back floor plates;

(c) integrating plant and fixtures within the roof top design; and/or

(*d*) incorporating an architectural roof feature within the design of the building by:

- *(i) creating a feature that forms part of its overall architectural form and composition;*
- *(ii) ensuring visual compatibility with nearby towers and other structures whilst maintaining architectural distinction;*
- *(iii) providing sky line features capable of being viewed over great distances;*
- (iv) including modelled parapets;
- (v) ensuring compatibility of podia height at street alignment; and/or
- (vi) incorporating roof top gardens and terraces.
- *194 Roof top plant and ancillary equipment that projects above the ceiling of the top storey should:*
 - (a) be designed to minimise the visual impact; and
 - (b) be screened from view, including the potential view looking down or across from existing or possible higher buildings, or be included in a decorative roof form that is integrated into the design of the building.
- *195 Roof design should facilitate future use for sustainable functions such as:*
 - (a) rainwater tanks for water conservation;
 - *(b) roof surfaces orientated, angled and of suitable material for photovoltaic applications; and/or*
 - (c) "green" roofs (ie roof top gardens structurally capable of supporting vegetation) or water features.

The proposed development responds to, and furthers, these built form objectives by providing a distinctive, high-quality design that responds to its site and context, identifies the School within its surrounds and provides a suitable contemporary juxtaposition with nearby heritage places.

At street level, a human scale and sense of interest is provided by the masonry plinth element with its reference to historic stone and brick perimeter walls. While a measure of enclosure and security is necessary for the School and its students, the materials and design achieve this in a way which integrates and enhances both the public and the private realms.

Materials chosen for the West Terrace Building will add visual interest while breaking up the visual mass of the building. Similarly, the modulation of the façade will avoid the appearance of a monolithic form.

Materiality

Council Wide

Principles of development control

- *187 The design, external materials, colours and finishes of buildings should have regard to their surrounding townscape context, built form and public environment, consistent with the desired character of the relevant Zone and Policy Area.*
- 188 Development should be finished with materials that are sympathetic to the design and setting of the new building and which incorporate recycled or low embodied energy materials. The form, colour, texture and quality of materials should be of high quality, durable and contribute to the desired character of the locality. Materials, colours and finishes should not necessarily imitate materials and colours of an existing streetscape
- *189 Materials and finishes that are easily maintained and do not readily stain, discolour or deteriorate should be utilised.*
- 190 Development should avoid the use of large expanses of highly reflective materials and large areas of monotonous, sheer materials (such as polished granite and curtained wall glazing).

The upper level of the West Terrace Building is clad in translucent polycarbonate sheet to its West Terrace and Franklin Street frontages and the corner of these important streets, providing a lightness and sense of transparency and referencing the school's desire to portray "learning on display". This is reinforced by the windows of various size and placement along these frontages. The same façade treatment continues on the building's internal (southern and eastern) elevations.

The selection of this contemporary material and design approach is deliberate and, combined with standing seam zinc cladding to the north-east and south-west corners of the building, will break up the mass of the building visually while creating interest and defining this key corner site.

Importantly, the material allows for light spill during the night, creating a lantern effect that creates interest in this corner, but also emphasise activity outside of normal school hours.

The material selection and building design present a contemporary, and refined design approach that will make a positive contribution to the streetscape along Franklin Street and West Terrace, despite the significant budgetary limitations of the project. At ground level, the masonry plinth, as well as referencing and complementing the historic stone and brick walls and providing visual interest, is highly robust and resistant to vandalism.

Pedestrian environment + public realm

The following provisions of the Development Plan are applicable to the subject development insofar as they relate to its interface with the public realm.

Capital City Zone

Desired Character Statement

[...] an interesting pedestrian environment and human scale will be created at ground floor levels through careful building articulation and fenestration, frequent openings in building façades, verandahs, balconies, awnings and other features that provide weather protection.

In important pedestrian areas, buildings will be set back at higher levels above the street wall to provide views to the sky and create a comfortable pedestrian environment.

At ground level, development will continue to provide visual interest after hours by being well lit and having no external shutters.

Objectives

4: City streets that provide a comfortable pedestrian environment.

Principles of development control

- 5 Development should be consistent with the Desired Character for the Zone.
- 8 Buildings should present an attractive pedestrianoriented frontage that adds interest and vitality to City streets and laneways.
- *9 The finished ground floor level of buildings should be at grade and/or level with the footpath to provide direct pedestrian access and street level activation.*
- 10 Providing footpath widths and street tree growth permit, development should contribute to the comfort of pedestrians through the incorporation of verandahs, balconies, awnings and/or canopies that provide pedestrian shelter.
- 14 Buildings, advertisements, site landscaping, street planting and paving should have an integrated, coordinated appearance and should enhance the urban environment.
- 27 Development should provide pedestrian linkages for safe and convenient movement with arcades and lanes clearly designated and well-lit to encourage pedestrian access to public transport and areas of activity. Blank surfaces, shutters and solid infills lining such routes should be avoided.

Council Wide

Objectives

- 24: A safe and secure, crime resistant environment that:
 - (a) ensures that land uses are integrated and designed to facilitate natural surveillance;

(b) promotes building and site security; and

- (c) promotes visibility through the incorporation of clear lines of sight and appropriate lighting.
- *50: Development that enhances the public environment and, where appropriate provides activity and interest at street level, reinforcing a locality's desired character.*
- *51: Development designed to promote pedestrian activity and provide a high quality experience for City residents, workers and visitors by:*
 - (a) enlivening building edges;
 - (b) creating welcoming, safe and vibrant spaces;
 - *(c) improving perceptions of public safety through passive surveillance; and*
 - (*d*) creating interesting and lively pedestrian environments.

- 82 Development should promote the safety and security of the community in the public realm and within development. Development should:
 - (a) promote natural surveillance of the public realm, including open space, car parks, pedestrian routes, service lanes, public transport stops and residential areas, through the design and location of physical features, electrical and mechanical devices, activities and people to maximise visibility by:
 - *(i) orientating windows, doors and building entrances towards the street, open spaces, car parks, pedestrian routes and public transport stops;*
 - *(ii) avoiding high walls, blank facades, carports and landscaping that obscures direct views to public areas;*
 - *(iv) positioning recreational and public space areas so they are bound by roads on at least two road frontages or overlooked by development;*
 - *(v)* creating a complementary mix of day and night-time activities, such as residential, commercial, recreational and community uses, that extend the duration and level of intensity of public activity;
 - (vii) ensuring that rear service areas and access lanes are either secured or exposed to surveillance;...
 - *(b) provide access control by facilitating communication, escape and path finding within development through legible design by:*
 - (i) incorporating clear directional devices;
 - *(ii) avoiding opportunities for concealment near well-travelled routes;*

- (iii) closing off or locking areas during off-peak hours, such as stairwells, to concentrate access/exit points to a particular route;
- *(iv) use of devices such as stainless steel mirrors where a passage has a bend;*
- (v) locating main entrances and exits at the front of a site and in view of a street;
- (vi) providing open space and pedestrian routes which are clearly defined and have clear and direct sightlines for the users; and
- (vii) locating elevators and stairwells where they can be viewed by a maximum number of people, near the edge of buildings where there is a glass wall at the entrance.
- *(c) promote territoriality or sense of ownership through physical features that express ownership and control over the environment and provide a clear delineation of public and private space by:*
 - *(i) clear delineation of boundaries marking public, private and semi-private space, such as by paving, lighting, walls and planting;...*
 - *(iii) locating main entrances and exits at the front of a site and in view of a street.*
- (d) provide awareness through design of what is around and what is ahead so that legitimate users and observers can make an accurate assessment of the safety of a locality and site and plan their behaviour accordingly by:
 - *(i) avoiding blind sharp corners, pillars, tall solid fences and a sudden change in grade of pathways, stairs or corridors so that movement can be predicted;*
 - *(ii) using devices such as convex security mirrors or reflective surfaces where lines of sight are impeded;*
 - *(iii) ensuring barriers along pathways such as landscaping, fencing and walls are permeable;*
 - *(iv) planting shrubs that have a mature height less than one metre and trees with a canopy that begins at two metres;*
 - (v) adequate and consistent lighting of open spaces, building entrances, parking and pedestrian areas to avoid the creation of shadowed areas; and
 - *(vi) use of robust and durable design features to discourage vandalism.*
- 196 Development should be designed to create active street frontages that provide activity and interest to passing pedestrians and contribute to the liveliness, vitality and security of the public realm.

Design Techniques (these are ONE WAY of meeting the above Principle)

196.1 Design solutions may include:

- (a) Well designed and legible entrances, lobbies and commercial uses at ground level.
- *(b) Window displays of merchandise or open shopfronts, well-lit panel displays, corporate identity and/or artworks.*
- (c) Avoiding vast expanses of blank walls presenting flat surfaces without detailing, openings or activity.
- *(d) Orientating active parts of a building to the street frontage.*
- (e) Incorporating uses such as retailing, food and drink outlets, counter services and cafés/restaurants particularly with outdoor seating areas.
- 230 Permanent structures over a footpath should have a minimum clearance of 3.0 metres above the existing footpath level, except for advertisements which should have a minimum clearance of 2.5 metres and temporary structures and retractable canopies which should have a minimum clearance of 2.3 metres above the existing footpath level.

Within the constraints presented by the intended function of the West Terrace Building, and the need to ensure safety and security for students, the proposed development will contribute to active and visually engaging frontages to West Terrace and Franklin Street.

The brick plinth of the West Terrace Building will provide a strong and visually interesting edge to West Terrace, and will continue the form and scale of the existing brick wall and reference historic and established character.

Along the Franklin Street frontage, the new pavilion will create enhanced visual interest and will complement, without overshadowing or dominating the Boylan Building State Heritage Place.

The retention and enhancement of the Veritas Lawns will maintain on-site open space for the School community, which is of limited availability in the inner-city location.

The proposed development is located in an area which is not a primary pedestrian area. Many of the pedestrians in the vicinity will be students or other members of the School community, so will appreciate both the on-site and off-site impacts of the proposed development and the integration between existing and new built form.

The creation of a single access point for visitors to the School from Franklin Street to the new pavilion will contribute to the objectives of Crime Prevention Through Environmental Design by prominently identifying the main point of entry and providing a clear delineation between public and private spaces; similarly, the placement and form of new buildings, including significant glazed areas at street level, and the open landscaping of outdoor areas will create open sightlines and will minimise the creation of spaces for loitering and other undesirable activity.

An additional entry to the West Terrace Building from Franklin Street will allow lift and stair access after-hours, when the main reception entry is closed. This secondary entry is clearly visible within the building's façade and will be appropriately illuminated at night to minimise the opportunity for loitering.

The building incorporates windows of varying size at all above-ground levels to the Franklin Street and West Terrace facades, allowing for actual and perceived visual surveillance over the surrounding public realm and the western parklands.

Amenity + interface

The following provisions of the Development Plan are applicable to the subject development insofar as they relate to the quality of amenity for occupants and that of surrounding developments.

Council Wide

Objectives

- *26: Development that does not unreasonably interfere with the desired character of the locality by generating unduly annoying or disturbing noise.*
- 27: Noise sensitive development designed to protect its occupants from existing noise sources and from noise sources contemplated within the relevant Zone or Policy Area and that does not unreasonably interfere with the operation of non-residential uses contemplated within the relevant Zone or Policy Area.
- *33: Buildings which are designed and sited to be energy efficient and to minimise micro-climatic and solar access impacts on land or other buildings.*

Principles of development control

- 93 Mechanical plant or equipment should be designed, sited and screened to minimise noise impact on adjacent premises or properties. The noise level associated with the combined operation of plant and equipment such as air conditioning, ventilation and refrigeration systems when assessed at the nearest existing or envisaged noise sensitive location in or adjacent to the site should not exceed
 - (a) 55 dB(A) during daytime (7.00am to 10.00pm) and 45 dB(A) during night time (10.00pm to 7.00am) when measured and adjusted in accordance with the relevant environmental noise legislation except where it can be demonstrated that a high background noise exists.

- (b) 50 dB(A) during daytime (7.00am to 10.00pm) and 40 dB(A) during night time (10.00pm to 7.00am) in or adjacent to a City Living Zone, the Adelaide Historic (Conservation) Zone, the North Adelaide Historic (Conservation) Zone or the Park Lands Zone when measured and adjusted in accordance with the relevant environmental noise legislation except where it can be demonstrated that a high background noise exists.
- 95 Noise sensitive development should incorporate adequate noise attenuation measures into their design and construction to provide occupants with reasonable amenity when exposed to noise sources such as major transport corridors (road, rail, tram and aircraft), commercial centres, entertainment premises and the like, and from activities and land uses contemplated in the relevant Zone and Policy Area provisions.
- *Development should be designed and sited to minimise micro-climatic and solar access impact on adjacent land or buildings, including effects of patterns of wind, temperature, daylight, sunlight, glare and shadow.*
- 120 Development should be designed and sited to ensure an adequate level of daylight, minimise overshadowing of buildings, and public and private outdoor spaces, particularly during the lunch time hours.
- 122 Glazing on building facades should not result in glare which produces discomfort or danger to pedestrians, occupants of adjacent buildings and users of vehicles.

Design Techniques (these are ONE WAY of meeting the above Principle)

122.1 Design solutions may include:

- (*a*) reducing the quantity of glass used by having a higher proportion of masonry or other non-reflective materials in the building exterior;
- (b) recessing glass into the building;
- (c) shading or angling the glass;
- (d) selecting glass that has a low level of reflection; and/or
- *(e) avoiding the use of large expanses of highly reflective materials.*

Overlay 2 - Noise and Air Emissions

Objective

1: Protect community health and amenity from adverse impacts of noise and air emissions.

- *1: Noise and air quality sensitive development located adjacent to high noise and/or air pollution sources should:*
 - (a) shield sensitive uses and areas through one or more of the following measures:

- *(i) placing buildings containing less sensitive uses between the emission source and sensitive land uses and areas*
- *(ii) within individual buildings, place rooms more sensitive to air quality and noise impacts (e.g. bedrooms) further away from the emission source*
- *(iii) erecting noise attenuation barriers provided the requirements for safety, urban design and access can be met*
- (b) use building design elements such as varying building heights, widths, articulation, setbacks and shapes to increase wind turbulence and the dispersion of air pollutants provided wind impacts on pedestrian amenity are acceptable
- (c) locate ground level private open space, communal open space and outdoor play areas within educational establishments (including childcare centres) away from the emission source.

The proposed development will not unreasonably interfere with the existing or desired character of its locality. Student activities will be enclosed within the West Terrace Building and will not have an undue impact on any surrounding receivers.

The location of the West Terrace Building, at the corner of two major streets and away from any existing residential or other buildings, means there is no opportunity for overlooking or shadowing from the proposed development (the adjacent Archbishop's residence is over 100 metres away and separated from the site by large trees and other two storey school buildings).

The Noise Impact Assessment (Appendix G) undertaken in relation to the proposed development identified noise-sensitive receivers surrounding the site, and found that noise emissions from plant and mechanical equipment associated with the development are expected to be compliant with noise criteria specified in the South Australia Environment Protection Policy (Noise), with a requirement to review whether noise mitigation measures are required upon final equipment selection.

Access + movement

The following provisions of the Development are applicable to the subject development insofar as they relate to the access and movement proposed.

Capital City Zone

Desired Character Statement

A comprehensive, safe and convenient movement network throughout the City will develop, focusing on the provision of linkages on both public and private land between *important destinations and public transport. A high quality system of bicycle or shared pedestrian and bicycle routes will be established within the Zone.*

Objectives

- *4: City streets that provide a comfortable pedestrian environment.*
- *8: Development that contributes to the Desired Character of the Zone.*

Principles of development control

- 26 Pedestrian movement should be based on a network of pedestrian malls, arcades and lanes, linking the surrounding Zones and giving a variety of north-south and east-west links.
- 27 Development should provide pedestrian linkages for safe and convenient movement with arcades and lanes clearly designated and well-lit to encourage pedestrian access to public transport and areas of activity. Blank surfaces, shutters and solid infills lining such routes should be avoided.
- 28 Car parking should be provided in accordance with Table Adel/7.

Council Wide

Objectives

- *60:* Access to and movement within the City that is easy, safe, comfortable and convenient with priority given to pedestrian and cyclist safety and access.
- *61:* Development that promotes the comfort, enjoyment and security of pedestrians by providing shelter and reducing conflict with motor vehicles.
- *62:* Development that contributes to the quality of the public realm as a safe, secure and attractive environment for pedestrian movement and social interaction.
- *63:* Safe and convenient design of and access to buildings and public spaces, particularly for people with disabilities.
- *64: Greater use of bicycles for travel to and within the City and the improvement of conditions, safety and facilities for cyclists.*
- *65: Adequate supply of secure, short stay and long stay bicycle parking to support desired growth in City activities.*
- *66: Development that promotes the use of sustainable transport consistent with State Government objectives and initiatives.*
- *68: Development that supports a shift toward active and sustainable transport modes (i.e. public transport, cycling and walking).*
- *69: An enhanced City environment and the maintenance of an appropriate hierarchy of roads to distribute traffic into the City to serve development in preference to through traffic.*

- *70: Adequate off-street facilities for loading and unloading of courier, delivery and service vehicles and access for emergency vehicles.*
- *71: To meet community expectation for parking supply while supporting a shift toward active and sustainable transport modes.*
- 72: An adequate supply of short-stay and long-stay parking to support desired growth in City activities without detrimental affect on traffic and pedestrian flows.

Principles of development control

- *224 Development should provide safe, convenient and comfortable access and movement.*
- *225* Vehicle access points along primary and secondary city access roads and local connector roads, as shown on Map Adel/1 (Overlay 1) should be restricted.
- **226** Development should reflect the significance of the paths and increase the permeability of the pedestrian network identified within Map Adel/1 (Overlay 2) by ensuring:
 - (a) pedestrians are not disrupted or inconvenienced by badly designed or located vehicle access ramps in footpaths or streets; and
 - *(b) vehicle and service entry points are kept to a minimum to avoid adverse impact on pedestrian amenity.*
- **228** Development should provide and maintain pedestrian shelter, access and through-site links in accordance with the walking routes identified within Map Adel/1 (Overlays 2, 2A and 3) and the provisions of the Zone or Policy Area in which it is located. Such facilities should be appropriately designed and detailed to enhance the pedestrian environment, have regard to the mobility needs of people with disabilities, and be safe, suitable and accessible.
- **232** Access for people with disabilities should be provided to and within all buildings to which members of the public have access in accordance with the relevant Australian Standards. Such access should be provided through the principal entrance, subject to heritage considerations and for exemptions under the relevant legislation.
- *233* Development should have regard to the bicycle routes identified within Map Adel/1 (Overlay 3) by:
 - (a) limiting vehicular access points; and
 - *(b) ensuring that vehicles can enter and leave the site in a forward direction, thereby avoiding reverse manoeuvres.*
- *234* An adequate supply of on-site secure bicycle parking should be provided to meet the demand generated by the development within the site area of the development. Bicycle parking should be provided in accordance with the requirements set out in Table Adel/6.

- *235* Onsite secure bicycle parking facilities for residents and employees (long stay) should be:
 - (a) located in a prominent place;
 - (b) located at ground floor level;
 - (c) located undercover;
 - *(d) located where passive surveillance is possible, or covered by CCTV;*
 - (e) well-lit and well signed;
 - (f) close to well used entrances;
 - (g) accessible by cycling along a safe, well-lit route;
 - (h) take the form of a secure cage with locking rails inside or individual bicycle lockers; and
 - *(i) in the case of a cage have an access key/pass common to the building access key/pass.*
- *236* Onsite secure bicycle parking facilities for short stay users (i.e. bicycle rails) should be:
 - (a) directly associated with the main entrance;
 - (b) located at ground floor level;
 - (c) located undercover;
 - (d) well-lit and well signed;
 - *(e) located where passive surveillance is possible, or covered by CCTV; and*
 - (f) accessible by cycling along a safe, well-lit route.
- 237 Access to bicycle parking should be designed to:
 - *(a) minimise conflict with motor vehicles and pedestrians;*
 - *(b) ensure the route is well signed and well-lit including the use of road markings such as a bicycle logo if appropriate to help guide cyclists; and*
 - (c) ensure the route is unhindered by low roof heights.

Design Technique (this is ONE WAY of meeting the above Principle)

- 237.1 In relation to Principle 237(a):
 - (a) avoid unnecessary vehicular crossing points, particularly with potential reversing movements from motor vehicles; and
 - *(b) utilise the shortest, most direct route for cycles to reach the destination bicycle parking*
- *237.2 In relation to Principle 237(c), a minimum clearance of 2 metres for new, permanent structures.*
- 238 To facilitate and encourage the use of bicycles and walking as a means of travel to and from the place of work, commercial and institutional development should provide on-site shower and changing facilities.
- **240** Development along high concentration public transport routes identified in Map Adel/1 (Overlay 4) should:

- (a) ensure there are pedestrian links through the site if needed to provide access to public transport;
- (d) where possible, avoid vehicle access across high concentration public transport routes identified in Map Adel/1 (Overlay 4). Where unavoidable, vehicle access should be integrated into the design of the development whilst retaining active street frontages.
- **241** Development should be designed so that vehicle access points for parking, servicing or deliveries, and pedestrian access to a site, are located to minimise traffic hazards and vehicle queuing on public roads. Access should be safe, convenient and suitable for the development on the site, and should be obtained from minor streets and lanes unless otherwise stated in the provisions for the relevant Zone or Policy Area and provided residential amenity is not unreasonably affected.
- **242** Facilities for the loading and unloading of courier, delivery and service vehicles and access for emergency vehicles should be provided on-site as appropriate to the size and nature of the development. Such facilities should be screened from public view and designed, where possible, so that vehicles may enter and leave in a forward direction.

Design Technique (this is ONE WAY of meeting the above Principle)

242.1 Commercial vehicle facilities in compliance with the requirements recommended in Australian Standard AS 2890:2: Off-Street Parking - Part 2: Commercial Vehicle Facilities.

- **247** The number of access points on primary city access roads identified in Map Adel/1 (Overlay 1) should be limited to minimise traffic and pedestrian inconvenience, interference with public transport facilities and adverse effects on the environment.
- **248** Buildings located along primary and secondary access roads should be sited to avoid the need for vehicles to reverse on to the road (unless the dimensions of the site make this impractical).
- 251 Car parking areas should be located and designed to:
 - (a) ensure safe and convenient pedestrian movement and traffic circulation through and within the car parking area;
 - *(b) include adequate provision for manoeuvring and individually accessible car standing areas;*
 - *(c) enable, where practical, vehicles to enter and leave the site in a forward direction;*
 - (d) minimise interruption to the pattern of built form along street frontages;
 - (e) provide for access off minor streets and for the screening from public view of such car parking areas by buildings on the site wherever possible;

- *(f) minimise adverse impacts on adjoining residential properties in relation to noise and access and egress;*
- (g) minimise loss of existing on-street parking spaces arising through crossovers and access;
- *(h) incorporate secure bicycle parking spaces and facilitate convenient, safe and comfortable access to these spaces by cyclists; and*
- *(i) provide landscaping, such as semi-mature trees, to shade parked vehicles and reduce the visual impact of the car parking area while maintaining direct sight lines and informal visual surveillance.*

Design Technique (this is ONE WAY of meeting the above Principle)

251.1 Car parking in compliance with the requirements recommended in Australian Standard AS 2890.1: 'Parking Facilities - Off-street Car Parking' and Australian Standard AS 2890.2: Off-Street Parking - Part 2: Commercial Vehicle Facilities.

- **252** All development should provide car parking spaces for people with disabilities in accordance with the requirements in the Building Code of Australia (BCA). For classes of buildings not covered by the requirements of the BCA, the number of spaces should be provided in accordance with Table Adel/7 and such car parking spaces should comply with Australian Standard 2890.1: 'Parking Facilities Offstreet Car Parking'.
- 254 Off-street parking should:
 - *(a) be controlled in accordance with the provisions for the relevant Policy Area;*
 - *(b) be located away from street frontages or designed as an integral part of buildings on the site. Provision of parking at basement level is encouraged;*
- **263** In areas outside the Core and Primary Pedestrian Areas identified in Map Adel/1 (Overlays 2, 2A and 3), car parking may be provided to serve a development within the site of the development or elsewhere. Where car parking is provided, it should be:
 - (a) provided with vehicle access points that do not cross major walking routes identified in Map Adel/1 (Overlay 2); and
 - *(b) located away from frontages to major streets wherever possible.*

Table Adel/6

Type of Development	Bicycle parking space standard for employees and/or residents	Bicycle parking space standard for customers, visitors and/or shoppers
Educational Establishment "School"	1 per 20 full-time time employees.	Additional 10 percent of total employee parking spaces.

While new car parking is not proposed as part of the development, the removal of car parking along the West Terrace frontage, and any form of access and egress from that street, will reduce the possibility of conflict between vehicles, and between vehicles and pedestrians, along that frontage.

Pick-up and drop-off arrangements for students will not change as a result of the proposed development. Existing facilities and arrangements have the capacity to accommodate the expected increase in student numbers. Arrivals, while principally from Franklin Street, also occur along Gray Street and Grote Street (through the adjacent church land).

Student and staff journeys to and from the School can readily be completed by public transport or other non-private vehicle modes. Frequent bus services run along Grote Street, and Currie Street, within 150 metres and 300 metres respectively of the site. These services provide ready connections to other services, including the Glenelg to Entertainment Centre tram and the Adelaide Railway Station, and this connectivity is reflected in the 60% of students who currently take public transport to school.

The removal of additional staff parking supports the Development Plan's desired to shift to sustainable and active transport modes for journeys to work within the CBD.

Environmentally sustainable development

The following provisions of the Development are applicable to the subject development insofar as they relate to the sustainability of the proposal.

Council Wide

Objectives

- *30: Development which is compatible with the long term sustainability of the environment, minimises consumption of non-renewable resources and utilises alternative energy generation systems.*
- 35: Development which maximises the use of stormwater.
- *36: Development designed and located to protect stormwater from pollution sources.*
- *37: Development designed and located to protect or enhance the environmental values of receiving waters.*
- *38: Development designed and located to prevent erosion.*
- *39: Development designed and located to prevent or minimise the risk of downstream flooding.*

Principles of Development Control

- 106 Buildings should provide adequate thermal comfort for occupants and minimise the need for energy use for heating, cooling and lighting by:
 - (a) providing an internal day living area with a northfacing window, other than for minor additions*, by:
 - *(i) arranging and concentrating main activity areas of a building to the north for solar penetration; and*
 - *(ii) placing buildings on east-west allotments against or close to the southern boundary to maximise northern solar access and separation to other buildings to the north.*
 - (b) efficient layout, such as zoning house layout to enable main living areas to be separately heated and cooled, other than for minor additions;
 - (c) locating, sizing and shading windows to reduce summer heat loads and permit entry of winter sun;
 - *(d) allowing for natural cross ventilation to enable cooling breezes to reduce internal temperatures in summer;*
 - *(e) including thermal insulation of roof, walls, floors and ceilings and by draught proofing doors, windows and openings;*
 - (f) ensuring light colours are applied to external surfaces that receive a high degree of sun exposure, but not to an extent that will cause glare which produces discomfort or danger to pedestrians, occupants of adjacent buildings and users of vehicles;
 - *(g) providing an external clothes line for residential development; and*
 - (h) use of landscaping.

Design Techniques (these are ONE WAY of meeting part of the above Principle)

- 106.1 In relation to Principle 106(a), facing the length of the development to the north to maximise solar access with day living areas incorporating a window that faces between 200 west and 300 east of true north; or
- 106.2 In relation to Principle 106(b):
 - *(a) grouping rooms with similar uses and heating and cooling needs;*
 - *(b) incorporating doors between living areas and other rooms and corridors; and*
 - *(c) placing utility areas such as bathrooms, toilets and laundries as buffer zones to the west.*
- 106.3 In relation to Principle 106(c):
 - (c) shading of north facing windows to allow winter sun access but providing complete shading during summer, such as by eaves overhang, awnings,

adjustable louvres, pergola's, shutters or planting of deciduous trees and vines;

- (d) external shading is provided to west facing windows; and
- (e) designing skylights and high level windows with adjustable louvres, double glazing and shading to minimise heat gain or loss.
- 106.4 In relation to Principle 106(d):
 - (a) positioning windows and doors to encourage cross ventilation for summer cooling as illustrated below.
- 106.5 In relation to Principle 106(h):
 - (a) using appropriate landscaping to assist in microclimatic management of a site by:
 - *(i) planting of evergreen trees along the eastern and western boundaries to protect from eastern and western sun providing it poses no undue risk of damage to footings; or*
 - *(ii) incorporating low shrubs, lawns, ponds and pools to cool summer breezes.*
- 107 All development should be designed to promote naturally ventilated and day lit buildings to minimise the need for mechanical ventilation and lighting systems.
- 108 Energy reductions should, where possible, be achieved by the following:
 - (a) appropriate orientation of the building by:
 - (i) maximising north/south facing facades;
 - *(ii) designing and locating the building so the north facade receives good direct solar radiation;*
 - *(iii) minimising east/west facades to protect the building from summer sun and winter winds;*
 - *(iv) narrow floor plates to maximise the amount of floor area receiving good daylight; and/or*
 - *(v) minimising the ratio of wall surface to floor area.*
 - (b) window orientation and shading;
 - (c) adequate thermal mass including night time purging to cool thermal mass;
 - (d) appropriate insulation by:
 - (i) insulating windows, walls, floors and roofs; and
 - *(ii) sealing of external openings to minimise infiltration.*
 - (e) maximising natural ventilation including the provision of openable windows;
 - *(f) appropriate selection of materials, colours and finishes; and*
 - (g) introduction of efficient energy use technologies such as geo-exchange and embedded, distributed energy generation systems such as cogeneration*, wind power, fuel cells and solar photovoltaic

panels that supplement the energy needs of the building and in some cases, export surplus energy to the electricity grid.

Design Techniques (these are ONE WAY of meeting part of the above Principle)

108.1 In relation to Principle 108(b) (refer Figure 108.1):

- (a) shading for all windows except for south facing elevation against summer sun penetration, by means such as vegetation, external louvres, external blinds, structural overhangs, low emittance glazing, spectrally-selective glazing and/or window films;
- (b) maximising natural daylight while limiting glare through the incorporation of narrow floor plates, light shelves, shaded skylights, light shafts and/or atriums with daylight sensing control of electric lighting;
- (c) integration of solar shading with solar energy collection technology such as solar heat pumps and photovoltaic cells; and/or
- (d) use of high performance glazing.
- 108.2 In relation to Principle 108(c):
 - (a) night purging and fan assisted thermal chimneys to remove heat stored in the building during the day and the recirculation of warm air during winter; and
 - (b) adjustable air flow rates for high, but variable, occupancy rates (ie office and conference areas).
- 108.3 In relation to Principle 108(f):
 - (a) use of materials and light colours that reflect rather than absorb solar radiation, whilst ensuring reflective material avoids transferring heat and glare to adjoining properties and/or the pedestrian environment;
 - (b) use of well insulated materials; and
 - (c) light coloured internal walls and ceilings to assist with effective distribution of daylight.
- 108.4 In relation to Principle 108(g), geo-exchange heating and cooling systems including closed loop and open loop systems.
- 109 Orientation and pitch of the roof should facilitate the efficient use of solar collectors and photovoltaic cells.

Design Techniques (these are ONE WAY of meeting the above Principle)

- *109.1 A roof incorporating an area of at least 10 square metres which:*
 - *(a) faces between 300 east and 200 west of north respectively; and*
 - (b) has a pitch of greater than 180.
- *110 Buildings, where practical, should be refurbished, adapted and reused to ensure an efficient use of resources.*

128 Development should incorporate appropriate measures to minimise any concentrated stormwater discharge from the site.

Design Techniques (these are ONE WAY of meeting the above Principle)

- 128.1 For residential and non-residential development, rainfall run-off should be retained and used as much as possible through the application of an appropriate range of the following techniques:
 - (a) collection and use of roof run-off in rain saver gutters and rainwater tanks for irrigation (a 500 litre rainwater tank to irrigate 25 square metres of garden), and internal purposes (drinking when considered safe to do so, flushing toilets, washing, and bathing);
 - (b) use of on-site detention tank/s with an appropriately sized orifice;
 - (c) directing rainfall run-off onto landscaped areas;
 - (d) installing appropriate soakage devices (soakage trenches or wells) having regard to the availability of unbuilt upon or unsealed areas, the ability of soils to absorb and drain water, the potential impact on building foundations and footings on or adjacent to the site, and the ability to safely direct surplus flows to a public street without causing nuisance to adjoining properties; and
 - *(e) use of permeable forms of paving for public and private parking areas, open storage, display, work areas, driveways, vehicle and pedestrian carriageways.*
- 129 Development should incorporate appropriate measures to minimise the discharge of sediment, suspended solids, organic matter, nutrients, bacteria and litter and other contaminants to the stormwater system and may incorporate systems for treatment or use on site.

Design Techniques (these are ONE WAY of meeting the above Principle)

129.1 For residential and non-residential development:

- (a) rainfall run-off from the roof of any building, where not retained on site, discharged directly to the street water table or to the council stormwater system and not mixed with rainfall run-off originating from surfaces such as car parks, outdoor storage areas and display areas; and
- *(b) rainfall run-off from ground surfaces directed to a stormwater treatment system capable of removing litter, sediment, grease, oil and other substances capable of contaminating stormwater. Also, a high flow bypass provided to enable water from extreme rainfall events to discharge direct to stormwater swales or to council stormwater systems. The stormwater treatment system is to discharge on site to storage; grassed swales; stone filled trenches; small infiltration basins; a constructed water feature; bores approved for*

aquifer recharge; or off site to the council stormwater system.

- 129.2 Wastewater from air conditioning units, cooling towers and compressors prevented from discharging into any stormwater drainage system.
- 129.3 Housing and other building layouts which minimise sewage and water piping with potential for leakage.
- 131 Development should manage stormwater to ensure that the design capacity of existing or planned downstream systems are not exceeded, and other property or environments are not adversely affected as a result of any concentrated stormwater discharge from the site.

The ESD and Energy Efficiency Statement (Appendix I) outlines the "Lean, Clean, Green" strategy that has been considered in the design of the proposed development, to deliver sustainable outcomes for the project. This strategy involves optimised passive design to reduce energy use; the use of efficient services; and the incorporation of appropriate technologies and materials.

The key ESD and energy efficiency initiatives being implemented in relation to the proposed development are as follows:

- the building form, materiality and window to wall ratio has been formulated to achieve passive design outcomes which manage indoor environment quality, as well as ensure compliance with energy efficiency provisions under NCC Section J.
- HVAC systems and control systems have been designed to ensure efficient heating, cooling and ventilation of the building.
- _ best-practice water efficient fittings and fixtures.
- best practice in the selection of low-toxicity building materials and finishes.
- reuse of landscape elements such as benches, shade structures and play elements.

Contaminated sites

Council Wide

Objective

29: A safe and healthy living and working environment.

Principle of Development Control

105 Where there is evidence of, or reasonable suspicion that land, buildings and/or water, including underground water, may have been contaminated, or there is evidence of past potentially contaminating activity/ies, development should only occur where it is demonstrated that the land, buildings and/or water can be made suitable for its intended use prior to commencement of that use. A Preliminary Site Investigation has been undertaken in relation to the site and is provided in Appendix B.

No potentially contaminating activities were identified for the site on a Section 7 search conducted by the Environment Protection Authority (EPA). No licences have been issued by SafeWork SA for the use of the site to store dangerous goods.

A site inspection and geotechnical investigation undertaken on 5 October 2016 found slag and fill material from 0.3 to 0.75 m below ground level at

♣

one borehole location, within the existing West Terrace car park, indicating potentially contaminating activities at that location. The existing car park will be completely capped by the proposed West Terrace Building.

The applicant will ensure that the contracted builder incorporates appropriate measures as part of the construction management plan to ensure that testing of soils occurs and that soil removed if found to be contaminated.

5. Conclusion

St Mary's College is expanding and redeveloping its campus facilities to accommodate anticipated growth in its student capacity as a result of population growth in its catchment, and the restructuring of the junior and senior school year levels.

The proposal seeks to redevelop the existing undersized and inadequate netball and gym facilities and car park which do not make a positive contrition to the outlook of the school campus in this strategic corner location.

The proposal also seeks to create a stronger more user and visitor friendly entry to the school that will assist with wayfinding, security and identity along Franklin Street. This will be done both with a sympathetic addition to the Boylan State heritage building, as well as internal reconfiguration of spaces that facilitate improved learning spaces and administration functions.

The height of the proposed buildings and their location balance the need to respect the heritage setting of the Boylan building and other adjacent state heritage places with the desire by the zone policies to provide a strong built form edge to this part of the city CBD.

The West Terrace building is designed to address and activate West Terrace and Franklin Street through its form and materiality, recognising the need to balance this desire within the policy with the need for the school to create sufficient privacy and security for students in learning spaces and in the campus generally.

The new entry pavilion is subservient to the Boylan building structure in form and its glazed front and rear maintains views to the heritage fabric of the Boylan building.

The development seeks to link the two newly created spaces and integrate them with the existing buildings and spaces on the site through a considered landscape concept master plan. The concept reinforces the new identity desired by the College at its Franklin Street entrance, whilst also creating a range of gathering and play spaces focussed on the Veritas lawns and the junior school courtyard and playground.

The opportunity for students and staff to undertake their journeys using the many forms of public transport in close proximity to the site, and the loss of staff parking on the site achieves the Development Plan's desire to shift to more sustainable and active transport modes.

The proposed development is not considered to be seriously at variance with the provisions of the Development Plan. Indeed, the proposal demonstrates, on multiple accounts, a consistency with the objectives of the Capital City Zone, and the intent of the Development Plan generally such that it warrants Development Plan Consent.

Appendix A

Certificate of Title





Product Date/Time Customer Reference Order ID Cost

Register Search (CT 5842/466) 31/05/2017 04:16PM P4116 20170531011141 \$27.75

REAL PROPERTY ACT. 1886



The Registrar-General certifies that this Title Register Search displays the records maintained in the Register Book and other notations at the time of searching.

Edition 1



Certificate of Title - Volume 5842 Folio 466

Parent Title(s)

CT 5812/12

Creating Dealing(s) TG 8994531

Title Issued

09/03/2001

Edition Issued

09/03/2001

Estate Type

FEE SIMPLE

Registered Proprietor

DOMINICAN CONVENT INC. OF 225 CROSS ROAD CUMBERLAND PARK SA 5041

Description of Land

ALLOTMENT 329 FILED PLAN 181171 IN THE AREA NAMED ADELAIDE HUNDRED OF ADELAIDE

Easements

SUBJECT TO EASEMENT(S) OVER THE LAND MARKED A TO DISTRIBUTION LESSOR CORPORATION (SUBJECT TO LEASE 8890000) (TG 8994531)

Schedule of Dealings

Dealing Number Description

7139956 APPLICATION AGREEMENT PERSUANT TO SECTION 39(D) OF THE CITY OF ADELAIDE **DEVELOPMENT CONTROL ACT, 1976**

Notations

Dealings Affecting Title	NIL		
Priority Notices	NIL		
Notations on Plan	NIL		
Registrar-General's Notes	NIL		
Administrative Interests			
CONFIRMED IN SA HERITAGE REGISTER			

Land Services

11/09/1986


Register Search (CT 5842/466) 31/05/2017 04:16PM P4116 20170531011141 \$27.75







Land Services

Appendix B

Preliminary Site Investigation (Contamination) – WSP Parsons Brinckerhoff



Appendix C

Architectural Plans – Grieve Gillett Andersen



Appendix D

Design Statement – Grieve Gillett Andersen



Appendix E

Heritage Impact Assessment – Grieve Gillett Andersen



Appendix F

Landscape Concept Design



Appendix G

Noise Impact Assessment – WSP Parsons Brinckerhoff



Appendix H

Stormwater Management Plan – WSP Parsons Brinckerhoff



Appendix I

ESD and Energy Efficiency Statement – WSP Parsons Brinckerhoff





26 April 2017

David Barone Associate Jensen Plus 6/259 Glen Osmond Rd Frewville 5063 SA

Dear David

St Marys College Senior Learning Centre - ESD & Energy Efficiency

A "Lean, Clean, Green" strategy has been considered in the design of the proposed St Mary's Senior School Centre to deliver sustainable outcomes for the project. This strategy centres on the following themes:



- → Lean: Optimised passive design to reduce energy use
- → Clean: Use of efficient services
- → **Green**: Incorporation of appropriate technologies and materials

The key ESD and energy efficiency initiatives being implemented into the project are as follows:

- Passive design and Section J: WSP|PB Sustainability has considered the building form, materiality and window to wall ratio to achieve passive design outcomes which manage indoor environment quality, as well as ensure compliance with the energy efficiency provisions under NCC Section J.
- Energy efficient services: WSP|PB Sustainability has worked in conjunction with the building services engineers to provide input into the HVAC and control systems design, to ensure the efficient heating, cooling and ventilation of the building
- → Water Efficient Design: WSP|PB Sustainability has provided input to the design team to assist in the specification of best-practice water efficient fittings and fixtures
- → Low-toxicity Building Materials: WSP|PB Sustainability has provided input to the design team to assist in the specification of best practice low-toxicity building materials and finishes.

Yours sincerely

who the

Andrew Williams Senior Sustainability Consultant



Level 1, 1 King William Street Adelaide SA 5000 GPO Box 398 Adelaide SA 5001

Tel: +61 8 8405 4300 Fax: +61 8 8405 4301

www.wsp-pb.com

ATTACHMENT 2b

DESIGN STATEMENT

Grieve Gillett Andersen

ST MARY'S COLLEGE WEST TERRACE DEVELOPMENT FRANKLIN STREET AND WEST TERRACE CORNER

Further definition of the Franklin Street and West Terrace corner through an element that identifies the college in the public realm

The panel identifies potential of a "public signage" via vertical blade element that can be incorporated into the corner to enable identification of the college in the public realm.

We note that signage is non-compliant in this instance, and all signage elements are not to be included in this application, and will be considered separately.

Notwithstanding, we note that any elements encroaching onto the public realm will require a special permit from Adelaide City Council, which adds associated risk to project program.

It is envisaged that identification signage will be located on the masonry plinth wall, and allows for eye level connection of the college identification for pedestrian and vehicles. The sign will be integrated with lighting elements for night time appearance.

Identification of the College will also be integrated and incorporated on the West Terrace facade, at high level, in large font with perforated zinc, allowing also for nigth time apprearance.

Corner address

While the revised design of the corner does not project into the public realm, the design intent of a corner lantern is retained and enhanced. The peeling back of the solid zinc façades on West Terrace and Franklin Street to reveal the corner frames the gateway.

Further review of the qualities of "shadowing" afforded with the material, the facade now plays on the tapestry of transparency and opacity. The removal of "colour" bands speaks to the narrative of a singular voice of the College.

The night time integration of lighting elements will further enhance the presence of the College in the public realm.





GRIEVE GILLETT ANDERSEN

St MARY'S COLLEGE WEST TERRACE DEVELOPMENT INTERNAL STAIRS

Architectural expression of external stair, safety and relationship with the lawn.

The stairs are designed and located in such a way to minimise impact of the lawn area.

It connects to the central circulation spine on the ground level, and is one of 3 access routes to the upper level.

The stairs is generous in width (3000mm wide) and will be precast concrete finish, with required slip resistance and associated finish to achieve compliance.

A portal with intermediate 1500mm wide "hood' over the entry door will provide weather protection over the landing area.

The balustrade is integrated with the portal, forming a sculptural element within the school. We propose mild steel, clear finish, in line with the methodology of a self finishing base material.

A series of wide step seating is also integrated around the base of the stairs, allowing interaction with the stairs and increased amenities with planting under the stairs.





GRIEVE GILLETT ANDERSEN

WEST TERRACE DEVELOPMENT FRANKLIN STREET AND WEST TERRACE CORNER - NIGHT

Opening Depth to Year 12 Entry

The opening on Franklin is not a main entry and will be use occasionally. The design considers CPTED issues, and to eliminate 'loitering' around deep recess after hours. The foyer area will also be illuminated at night.

The entry door is set back from boundary by 500mm. The foyer and undercover areas internally will allow for weather protection inside the building when required.



Interface with existing site perimeter walls and proposed capping detail

The existing masonry ranges from red brick (West Terrace), veneer stone with brick capping and concrete plinth (central Franklin Street section), bluestone with red brick capping, (western half of Boylan Building frontage), and limestone with red brick and rendered capping (eastern Franklin Street section).

Given the disparate materials and detailing of the existing wall sections, the new building plinth will not mimic the capping detail on any of the other sections but to reference the solidity, mass and material quality of the existing site enclosure.

The proposed horizontal banding of the brickwork will be based on the palette of colours found within the other sections of wall, brought together in a consistent masonry unit and finish but with subtle colour variations. The capping detail will be developed to form an integral part of the window reveal.

A recessed brick wall detail with glazed brick will be employed to effect the transition between sections, adding visual interest to the brick wall whilst referencing school colour.



GRIEVE GILLETT ANDERSEN

ATTACHMENT 2c

PRELIMINARY SITE INVESTIGATION Parsons Brinckerhoff

GRIEVE GILLETT ANDERSON

Preliminary Site Investigation

ST MARY'S COLLEGE, 253 FRANKLIN STREET, ADELAIDE, SA





Preliminary Site Investigation

ST MARY'S COLLEGE, 253 FRANKLIN STREET, ADELAIDE, SA

Grieve Gillett Anderson

REV	DATE	DETAILS
00	13/12/2016	Draft

AUTHOR, REVIEWER AND APPROVER DETAILS

Prepared by:	Joel Kirk; Sandra Struck	Date: 13/12/2016 Signature:
Reviewed by:	Shya Jackson	Date: 13/12/2016 Signature:
Approved by:	Shya Jackson	Date: 13/12/2016 Signature:

WSP | Parsons Brinckerhoff

Level 1, 1 King William Street Adelaide SA 5000 GPO Box 398 Adelaide SA 5001

Tel: +61 8 8405 4300 Fax: +61 8 8405 4301

www.wsp-pb.com

Filename: 16-0186-00-2284731T



This document may contain confidential and legally privileged information, neither of which are intended to be waived, and must be used only for its intended purpose. Any unauthorised copying, dissemination or use in any form or by any means other than by the addressee, is strictly prohibited. If you have received this document in error or by any means other than as authorised addressee, please notify us immediately and we will arrange for its return to us.

TABLE OF CONTENTS

1	INTRODUCTION	1
1.1	Background information	1
1.2	Objectives	1
2	SITE HISTORY INVESTIGATIONS	2
2.1	Methodology	2
2.2	Site characterisation	2
2.3	Previous investigations	5
2.4	Historical information	5
3	PSI DISCUSSION.	.10
3.1	Historical overview	10
3.2	Potentially contaminating activities	10
3.3	Contaminants of interest	10
4	INTRUSIVE SOIL INVESTIGATION	.11
4.1	Soil profile	11
4.2	Soil PID readings, odour and staining	11
5	SUMMARY	.12
6	REFERENCES	.13
7	STATEMENT OF LIMITATIONS	.14

LIST OF TABLES

Table 2.1	Site identification details	2
Table 2.2	Surrounding land uses	3
Table 2.3	Adelaide Plains aquifer geology	4
Table 2.4	History of certificates of title	5
Table 2.5	Aerial photograph review	6
Table 2.6	Adjacent Section 83A notifications to SA EPA	8
Table 2.7	Dangerous goods licensing summary	9

LIST OF APPENDICES

- Appendix A Figures
- Appendix B Site photographs
- Appendix C Groundwater bore search
- Appendix D Extract from Adelaide City Council Development Plan
- Appendix E Current Certificate of Title
- Appendix F Historical aerial photographs
- Appendix G EPA Section 7 search
- Appendix H Dangerous goods register search
- Appendix I Borelogs

1 INTRODUCTION

1.1 Background information

WSP Environmental Pty Ltd trading as WSP I Parsons Brinckerhoff was commissioned by Grieve Gillett Anderson (GGAND) to undertake a Preliminary Site Investigation (PSI) for a site identified as Allotment 329 in Filed Plan 181171, Hundred of Adelaide (the site). The site is located at 253 Franklin Street, Adelaide, SA. A site locality map is presented as Figure 1 (Appendix A).

It is understood that the total site are is approximately 9,860 m² and consists of a car park, several buildings and grassed area. The *Veritas* building is proposed to be redeveloped as a mixed use building. In addition a small extension is proposed to be added to the Foyer of the Boylan building, which is heritage listed. A geotechnical soil investigation was undertaken by WSP Parsons Brinckerhoff in October 2016 and is reported in *St Mary's College Redevelopment – Geotechnical Interpretive Report*, report number 16-0160-00-2284731T, dated 21 October 2016.

A PSI was required to identity if there is any potential for current and/or past uses to have materially impacted the site with respect to contamination. The assessment was undertaken in compliance with the *National Environment Protection (Assessment of Site Contamination) Measure 1999* as amended in 2013 (ASC NEPM).

This work was undertaken in accordance with our proposal (*Provision for Preliminary site investigation and environmental testing at St Mary's College*), dated 26 September 2016, as approved by St Marys College on 15 November 2016. Limited intrusive investigations were undertaken in conjunction with the Geotechnical investigation on 5 October 2016, however the environmental samples were out of holding time by the time formal project approval was given and therefore the sample analysis was not undertaken.

1.2 Objectives

The main objective of the PSI was to identify site contamination issues which may have resulted from past and/or current site use(s) and which may significantly impact ongoing use of the site as a college/school and/or represent potential public health or environmental risks.

2 SITE HISTORY INVESTIGATIONS

2.1 Methodology

This report has been prepared in accordance with the guidance provided in the following documents:

- 1. National Environment Protection Council (NEPC) 2013, National Environment Protection (Assessment of Site Contamination) Measure 1999 as amended in 2013 (No. 1) (ASC NEPM).
- 2. Planning SA 2001, Site Contamination. Planning Advisory Notice 20.
- **3.** Standards Australia (2005) Guide to the Sampling and Investigation of Potentially Contaminated Soil Part 1: Non-Volatile and Semi-Volatile Compounds. AS4482.1-2005 Homebush NSW.

2.2 Site characterisation

2.2.1 Site identification

Site identification details are provided in Table 2.1.

Table 2.1 Site identification details

SITE ADDRESS	253 Franklin St, Adelaide South Australia 5000
COUNCIL REGISTER NUMBER	0201450905
CERTIFICATE OF TITLE REFERENCE	CT5842/465
LOCAL GOVERNMENT AUTHORITY	Adelaide City Council
PROPERTY OWNER	Distribution Lessor Corporation
ZONING	Capital City Zone
CURRENT SITE USE	College/school
PROPOSED SITE USE	College/school
LAND AREA	9,860 m ²

2.2.2 Site inspection

An inspection of the site was conducted on 5 October 2016 whilst undertaking the geotechnical drilling. A site location plan is presented as Figure 2 (Appendix A) and photographs taken during the site inspection are included in Appendix B.

The site is located on Franklin Street within the confines of the school. At the time of the inspection, the western section of the site was being used as a gated car park, middle section comprised of the *Veritas* building (hall) and the eastern section was irrigated lawn with a paved walkway/driveway. The topography of the site was generally flat.

A building currently exists on the site and takes up approximately half of the proposed building footprint.

2.2.3 Adjacent land use and sensitive receptors

At the time of the inspection, the immediately surrounding land uses observed at the site were as detailed in Table 2.2 below.

Table 2.2	Surrounding land uses
NORTH	Franklin Street. Greek Orthodox Community Centre "Olympic House", Greek Orthodox Church
SOUTH	St Marys College, St Patricks Church
EAST	Gray Street. Seafood Merchant "International Oyster Seafood's", Mechanic, Residential Buildings
WEST	West Terrace, Tambawodli Park

The site is located within a mixed commercial and residential area. Sensitive human and environmental receptors located within the vicinity of the site are considered likely to include the following:

- → students and employees of the school
- → future users of and maintenance workers on the site
- → residents located to the east
- → workers who may undertake excavation, maintenance or construction work within the surrounding area (i.e. to the site developments, underground services)
- \rightarrow the River Torrens located approximately 1 km to the north.

2.2.4 Regional geology

The Department of Mines and Energy (1982), Engineering Geology of the Adelaide City Area, Bulletin 51 provides a more comprehensive summary of the expected site geology. This Bulletin indicates that the subsurface material is likely to have originally included topsoil, a Red-Brown 'B' Horizon, the Calcareous Mantle and Hindmarsh Clay (Keswick Clay equivalent) underlain by Carisbrooke Sand and/or Hallett Cove Sandstone.

The Adelaide 1:250,000 geological map sheet (South Australian Department of Mines and Energy, 1983) indicates the region is underlain by undifferentiated calcretes (Qpca).

The Adelaide soil association map (Taylor et al., 1989) indicates that the soils that are likely to be present on site are brown sandy to clayey soils with abundant earth lime and calcrete in the sub subsoil. Shallow uniform red to brown soil with granular structure developed on highly calcareous parent material.

According to the Australian Soil Resource Information System (ASRIS) website (http://www.asris.csiro.au/mapping/viewer.htm), the area directly below the site and surrounding area has no known occurrence of acid sulphate soils however this is based on limited data.

2.2.5 Regional hydrogeology

A total of six Quaternary aquifers (Q1 to Q6) have been identified in the Adelaide region and are underlain by a series of deeper Tertiary aged aquifers (T1 to T4), the latter considered to be essentially confined.

The aquifers identified within the Quaternary age sediments of the Adelaide Plains are typically found within the coarser interbedded silt, sand and gravel layers and vary greatly in thickness (typically from 1 to 18 m), lithology and hydraulic conductivity. The confining beds between the Quaternary aquifers consist of clay and silt and range in thickness from 1 to 20 m. These confining beds are absent in some areas, allowing hydraulic connection between the aquifers.

Table 2.3 details the main aquifers located beneath the Adelaide region (South Australian Department of Mines and Energy, 1992).

AQUIFERS ROCK TYPE		GEOLOGICAL UNITS	AGE
Shallow aquifers	Sand and gravel in clay	Pooraka Formation Hindmarsh Clay	Quaternary
Deep aquifer T1	Sand, sandstone and limestone Dry Creek Sands Hallett Cove Sandstone Port Willunga Formation		Tertiary
Confining bed	Clay with limestone layers	Munno Para Clay	
Deep aquifer T2	Limestone and sand	Port Willunga Formation	-
Confining bed	Siltstone and claystone	Port Willunga Formation (Ruarung Member and Aldinga Member)	-
Deep aquifer T3	Limestone and sandstone	Port Willunga Formation (Lower Aldinga Member and Chinaman Gully Formation)	
Confining bed	Siltstone	Blanche Point Formation Tortachilla Limestone	
Deep aquifer T4	Sand	South Maslin Sand	-
Confining bed	Clay	Clinton Formation	
Fractured bedrock aquifer	Quartzite and siltstone	Adelaidean System	Precambrian

Table 2.3 Adelaide Plains aquifer geology

The site is located within hydrological zone 4. This zone covers a large portion of the Golden-Adelaide Embayment and contains up to three quaternary and two Tertiary aquifers, and a fractured rock aquifer. Each Tertiary aquifer consists mainly of thin layers of fine sand with low yield. Most of the Quaternary and Tertiary aquifers become thin, shallow and interconnected in the vicinity of the River Torrens. The shallow fractured rock aquifer near the River Torrens contains groundwater of low salinity and significant yield.

A summary of the WaterConnect bore database, accessed December 2016 (<u>www.waterconnect.sa.gov.au</u>), for the area (Appendix C) indicates there are 98 bores within a 500 m radius of the site, 64 of which are groundwater wells. In terms of their primary purpose, twenty one bores were listed as investigation bores, twelve for monitoring, two for observation purposes, and one for irrigation purposes. The purpose/s of the remaining groundwater bores were not listed.

Based on information contained in the database, the wells were drilled to depths of between 4.0 and 137.77 m between 1994 and 2016. Standing water levels (SWLs) recorded for 49 of the bores ranged from 0.50 to 19.81 m below ground level (mBGL). Groundwater salinity, recorded for 12 of the bores, ranged from 882 mg/L to 3,184 mg/L total dissolved solids (TDS). Of the shallow bores, i.e. those drilled to <10 m depth, TDS ranged from 882 mg/L to 3,046 mg/L and SWL ranged from 0.5 to 2.83 mBGL.

There is one registered bore located in the centre site (bore number 6628-17280) and is listed as being for drainage purposes. It was drilled to a depth of 21.6 mBGL in 1994.

The closest registered bore to the site (bore number 6628-287), located approximately 180 mBGL southwest, was drilled to 34.14 m in 1914. The purpose of this bore and its current status was not listed.

Based on the proximity of the site to the River Torrens, the groundwater within the uppermost aquifer would generally be expected to flow in a northerly direction.

2.2.6 Zoning

According to the Adelaide City Council Development Plan, consolidated 24 September 2015, an extract of which is included in Appendix D, the site is currently zoned as Capital City Zone. The purpose of the zone is to provide for a range of financial, legal, administrative, cultural, recreational, tourist, entertainment and other uses that complement the capital city function of the locality.

2.3 **Previous investigations**

No previous investigations are known to have been undertaken at the site.

2.4 Historical information

2.4.1 History of Certificates of Title

The site is currently described by Certificate of Title Volume 5842 Folio 466 and a historical search of titles pertaining to this site was conducted. A copy of the current Certificate of Title is included in Appendix E.

Table 2.4 summarises the history of Certificates of Title applicable to the site. Land owners are highlighted in bold.

Table 2.4History of certificates of title

PROPERTY DESCRIPTION	CERTIFICATE OF TITLE	PARENT TITLE	DATE	DETAILS
Portion of the town acres numbered 253 and 255	Volume 619 Folio 148		15 April 1897	New title issued to Mary Catherine Kavenagh, Mary Columba Boylan, Mary Francis Nelson, Mary Francis Gaffeney and Mary Patrick Heydon (all Adelaide Dominican Nuns)
			1 November 1897	Transfer to Dominican Convent Inc.
Portion of the town acres numbered 254	Volume 621 Folio 141		25 June 1897	New title issued to Mary Catherine Kavenagh, Mary Columba Boylan, Mary Francis Nelson, Mary Francis Gaffeney and Mary Patrick Heydon (all Adelaide Dominican Nuns)
			1 November 1897	Transfer to Dominican Convent Inc.
Portion of the town acres numbered 253, 254 and 255	Volume 638 Folio 160	Volume 619 Folio 148 and Volume 621 Folio 141	28 September 1898	New title issued to the Dominican Convent Inc.

PROPERTY DESCRIPTION	CERTIFICATE OF TITLE	PARENT TITLE	DATE	DETAILS
Portion of the town acres numbered 253, 254 and 255	Volume 3110 Folio 56	Volume 638 Folio 160	27 September 1962	New title issued to the Dominican Convent Inc.
Portion of Allotment 329 FP 181171 in the area named Adelaide, Hundred of Adelaide	Volume 5812 Folio 12	Volume 3110 Folio 56	3 March 2000	New title issued to the Dominican Convent Inc.
Portion of Allotment 329 FP 181171 in the area named Adelaide, Hundred of Adelaide	Volume 5842 Folio 466	Volume 5812 Folio 12	9 March 2001	New title issued to the Distribution Lessor Corporation

2.4.2 Aerial photograph review

Copies of relevant portions of aerial photographs of the area taken in 1949, 1959, 1969, 1979, 1989, 1999, 2005 and 2016 were provided by the Department of Environment, Water and Natural Resources (DEWNR). In addition the latest *Google* satellite imagery from 2016 has been included and these are presented in Appendix F.

A summary of the features identified within each of the aerial photographs is provided in Table 2.5.

Table 2.5 Aerial photograph review

ESCRIPTION			
ite layout: The site appears to be occupied. The present day building that occupies the north-east section is the site is evident (<i>Boylan Building</i>). There appears to be a garden in the western section of the site and large tree is located in the centre of the site.			
Surrounding area: Directly west of the site over West Terrace is a large shed/warehouse with a fenced in yard. A number of smaller buildings are present north and east which may be residences/shops. A church is located directly south of the site, with two recreational courts and a cluster of buildings (south-west block) as per the present day configuration.			
Site layout: There appears to be no change to the building that occupies the north-east section (<i>Boylan Building</i>). The garden in the western section of the site has been replaced with a car park and the large tree occupying the centre of the site has been removed and replaced with a small building. The remainder of the site appears to be sealed.			
urrounding area: There are three tennis courts and one netball court south-west of the site across West errace. North of the site the <i>Olympic</i> building is in its present day location. The area east of the site opears unchanged and south of the site appears unchanged with the exception of the removal of the erreational courts.			
ite layout: There appears to be no change to the <i>Boylan Building</i> . The car park has been extended and opears to be operating as a car sales yard. The small building in the centre of the site and sealed surface as been removed and replaced with three tennis courts. A building (approx. 7 x 35 m) has been erected in the south-east corner of the site.			
urrounding area: The shed/warehouse west of the site is still present however three tennis courts have een constructed in the yard. The three tennis courts and one netball court south-west of the site have een replaced with a park and unpaved tracks. North of the site a Greek orthodox church has been built and the building directly east has been demolished. To the south tennis courts have been restored.			

YEAR	DESCRIPTION
1979	Site layout: The site appears relatively unchanged however two additional buildings have been built on the southern boundary of the site.
	Surrounding area: Two small buildings have been erected south of the site behind the church. A small asphalt car park has been laid south of the site.
1989	Site layout: The site appears relatively unchanged.
	Surrounding area: The surrounding area appears relatively unchanged.
1999	Site layout: The eastern section of the site appears largely unchanged. The large building (approx. 7 x 35 m) seen in the 1969 image has been removed and replaced with some form of pavement. The car lot in the western section of the site has been replaced with a car park, student classrooms and a gymnasium.
	Surrounding area: The shed/warehouse with the tennis courts to the west of the site has been removed and replaced with grassed recreational parkland. South of the site the recreational courts appear to be repurposed as a car park. North and east of the site appears relatively unchanged.
2005	Site layout The site appears relatively unchanged.
	Surrounding area: South of the site the recreation courts appear to have been resurfaced and returned to tennis courts. North, east and west of the site appears relatively unchanged.
2016	Site layout: The site appears relatively unchanged.
	Surrounding area: The surrounding area appears relatively unchanged.

2.4.3 EPA Section 7 search

A Section 7 search was conducted by the South Australian EPA for the land described in Certificate of Title Volume 5842 Folio 466.

A copy of the search results is included in Appendix G and indicated the following, as of the 28 November 2016:

- → There are no mortgages, charges or prescribed encumbrances affecting the site under the relevant sections of the *Environment Protection Act 1993*.
- → No licenses and exemptions recorded by EPA in public register have been issued under the Part 6 of the Environment Protection Act 1993.
- → No licenses to operate a waste depot and/or to produce listed waste have been issued or repealed for the site under the South Australian Waste Management Commission Act 1979, the Waste Management Act 1987 or the Environment Protection Act 1993.
- \rightarrow The EPA does not hold any of the following information:
 - reports, environmental assessments or site contamination audits of the land or any part of the land
 - details of serious or material harm, or notifications of site contamination, under Section 83A of the Environment Protection Act 1993
 - details of an agreement for the exclusion or limitation of liability for site contamination
 - details of any agreements relating to approved voluntary site contamination assessment or remediation proposals
 - details of notification of the commencement or termination of a site contamination audit; or
 - any other relevant information, as listed in the Section 7 search results.

The Section 7 Search results note that historical records provided to the EPA concerning matters arising prior to 1 May 1995 are limited and may not be accurate or complete.

2.4.4 EPA public register

A search of the SA EPA website was undertaken on 22 November 2016 to assess whether any Section 83A notifications had been recorded in the area. There were no notifications for the site in question, however the notifications for sites in close proximity are listed in Table 2.6 below. The nearest notifications were:

NOTIFICATION NUMBER	TYPE	ADDRESS	POTENTIALLY CONTAMINATING ACTIVITY	DISTANCE FROM SITE
60079	Audit Termination	231-241 Waymouth and 17 Crowther Street ADELAIDE SA 5000	Not recorded	170 m
61519	Audit Notification	231-241 Waymouth Street and 17 Crowther Street ADELAIDE SA 5000	Motor vehicle repair or maintenance	170 m
60117	Audit Notification	Franklin Street ADELAIDE SA 5000	Not recorded	
60117	Audit Termination	Franklin Street ADELAIDE SA 5000	Not recorded	
60098	Audit Notification	142-184 Franklin Street ADELAIDE SA 5000	Not recorded	230 m
60098	Audit Termination	142-184 Franklin Street ADELAIDE SA 5000	Not recorded	230 m
60934	Audit Notification	142-184 Franklin Street ADELAIDE SA 5000	Fill or soil importation; Liquid organic chemical substances-storage	230 m
60934	Audit Termination	142-184 Franklin Street ADELAIDE SA 5000	Not recorded	230 m

Table 2.6 Adjacent Section 83A notifications to SA EPA

Potential contamination from these sites is considered unlikely to impact upon the site due to the distance of separation.

2.4.5 Anecdotal information

Anecdotal information provided by site users indicated that as early as 1869 the college was established on the corner of West Terrace and Franklin Street. In 1898 the college was extended to include the *Boylan Building*. The site has operated as a college since then. From 1969 to 1999 the western section of the site operated as a car sales yard.

2.4.6 Dangerous goods register

A register of information regarding current and historical licensing of dangerous goods is maintained by SafeWork SA. The dangerous goods classes and activities required to be licensed are indicated in Table 2.7. It should be noted that government agencies are not required to notify SafeWork SA regarding the storage of dangerous goods at their sites.

Table 2.7 Dangerous goods licensing summary

DANGEROUS GOODS CLASS	DESCRIPTION OF GOODS	LICENCE REQUIRED FOR STORAGE	LICENCE REQUIRED FOR SELLING
2.1	Flammable gases	\checkmark	-
3	Flammable liquids*	\checkmark	-
	Motor spirit (petrol)	\checkmark	✓
	Diesel	-	✓
	Liquid Petroleum Gas (LPG)	✓	-
6	Poisonous (toxic) and infectious substances	✓	_
8	Corrosive substances	~	_

* For licensing purposes "flammable liquids" does not include petroleum products as these are licensed separately as motor spirit, diesel and LPG.

SafeWork SA conducted a search of the dangerous goods register to check for any existing licenses for the site. The results of the search indicated that there are no current or historical records for the site. A copy of the dangerous goods search is included in Appendix H.

3 PSI DISCUSSION

3.1 Historical overview

The findings of the PSI assessment indicated that the St Mary's Girls College was established in 1869. In 1898 the college was extended to include the *Boylan Building*.

3.2 Potentially contaminating activities

Historical and recent site activities that are possible sources of site were identified in desktop studies.

The following potentially contaminating activities were **confirmed** to have occurred at the site:

→ use of imported, and potentially impacted fill materials, which were identified during the intrusive investigation.

It is considered possible that the following potentially contaminating activities **may** also have occurred at the site:

- → possible use of termiticides (organochlorine pesticides (OCPs), organophosphorous pesticides (OPPs), arsenic) beneath the buildings on site
- → possible use of herbicides to keep the site free of garden/lawn weeds.

3.3 Contaminants of interest

Based on the historical review, the following contaminants of interest were considered applicable for the St Mary's College site:

- → metals (arsenic, cadmium, chromium, copper, lead, mercury, nickel and zinc)
- → polycyclic aromatic hydrocarbons (PAHs)
- → OCPs/OPPs
- → fertilizers (nitrogen, phosphorous)
- → triazines, phenoxyacid herbicides and/or glyphosate.

4 INTRUSIVE SOIL INVESTIGATION

A geotechnical investigation was undertaken on 5 October 2016 to inform the redevelopment at the St Mary's College and involved the drilling of four boreholes to a maximum depth of 6.0 m. The methodology and results of this investigation is included in WSP | Parsons Brinckerhoff's report *St Mary's College Redevelopment – Geotechnical Interpretive Report*, report number 16-0160-00-2284731T, dated 21 October 2016.

For the purpose of this report, only environmental findings of this investigations is summarised below. Note that no soil samples were chemically analysed, thus, no information can be provided with regards to potential chemical impacts of the soil. Soil borelogs are included in Appendix I.

4.1 Soil profile

Fill materials of varying thickness were identified across the site to depths of 0.75 mBGL. The predominant fill material located on site was gravelly sand, sand and clayey sand. Slag was found in the fill material from 0.3 to 0.75 mBGL at BH03.

The underlying natural soil profile generally comprised of fine to coarse grained sand, clayey sand and gravelly sand directly below the fill layer. Low to medium plasticity, soft to firm sandy clay transitioning to very stiff, firm clay/sandy clay with depth.

4.2 Soil PID readings, odour and staining

Headspace PID readings within soils were taken at each sampling point and ranged from 0.0 to 0.5 ppm. No staining or odours was observed in any of the boreholes.

5 SUMMARY

From the preliminary site investigations, the following can be summarised:

- → The St Mary's Girls College was established in 1869 and has operated as a college since, the site is owned by Dominican nuns. In 1898 the college was extended to include the *Boylan Building*.
- → The site is zoned as a Capital City Zone under the Adelaide City Council Development Plan. The purpose of the zone is to provide for a range of financial, legal, administrative, cultural, and recreational, tourist, entertainment and other uses that complement the capital city function of the locality, and is consistent with the ongoing land uses of the site.
- → A Section 7 search was conducted by the South Australian Environment Protection Authority (EPA) for the land described in Certificate of Title Volume 5842 Folio 466. No potentially contaminating activities were identified for Allotment 329 of the CT.
- → A search of the dangerous goods register was requested of SafeWork SA to check for any existing licenses for the site. The results of the search indicated that no licences had been issued.
- → A site inspection and geotechnical investigation was undertaken on 5 October 2016 and found slag in the fill material from 0.3 to 0.75 mBGL at one borehole location.
- → Any waste material generated during site redevelopment listed for off-site disposal or on-site re-use will be required to comply with the relevant SA EPA standards and guidelines.

6 REFERENCES

- → Australian Soil Resource Information System website: <u>http://www.asris.csiro.au/mapping/viewer.htm</u>
- → Department of Environment, Water and Natural Resources (DEWNR, 2015) Master Register of All Bores. Primary Industries and Resources South Australia.
- → Environment Protection Act 1993.
- → Forbes, B.G. (1980), 1:50,000 Preliminary Geological Map Resources Series, Adelaide (sheet 6628-111), SA Department of Mines and Energy.
- → Selby, J., & Lindsay, J. M. (1982). Engineering geology of the Adelaide city area (Vol. 51). Department of Mines and Energy.
- → South Australian Department of Mines and Energy (1969) Adelaide 1:250,000 Geological Map Sheet.
- → South Australian Department of Mines and Energy (1992) *Groundwater in the Adelaide Metropolitan Area.* Information Sheet 21.
- → South Australian Environment Protection Authority (SA EPA, 2008) Site Contamination Notification of Site Contamination that Affects or Threatens Underground Water Pursuant to Section 83A of the Environment Protection Act 1993.
- → SA EPA public register <u>http://www.epa.sa.gov.au/what we do/public register directory/site contamination index</u>
- → Standards Australia (1993) Geotechnical Site Investigations. AS1726.
- → Standards Australia (2005) Guide to the Sampling and Investigation of Potentially Contaminated Soil Part 1: Non-Volatile and Semi-Volatile Compounds. AS4482.1-2005 Homebush NSW.
- → Standards Australia (1999) Guide to the Sampling and Investigation of Potentially Contaminated Soils Part 2. Volatile Substances AS4482.2-1999.
- → WaterConnect website (https://www.waterconnect.sa.gov.au/) accessed December 2016.

7 STATEMENT OF LIMITATIONS

SCOPE OF SERVICES

This environmental site assessment report (the report) has been prepared in accordance with the scope of services set out in the contract, or as otherwise agreed, between the client and WSP | Parsons Brinckerhoff (scope of services). In some circumstances the scope of services may have been limited by a range of factors such as time, budget, access and/or site disturbance constraints.

RELIANCE ON DATA

In preparing the report, WSP | Parsons Brinckerhoff has relied upon data, surveys, analyses, designs, plans and other information provided by the client and other individuals and organisations, most of which are referred to in the report (the data). Except as otherwise stated in the report, WSP | Parsons Brinckerhoff has not verified the accuracy or completeness of the data. To the extent that the statements, opinions, facts, information, conclusions and/or recommendations in the report (conclusions) are based in whole or part on the data, those conclusions are contingent upon the accuracy and completeness of the data. WSP | Parsons Brinckerhoff will not be liable in relation to incorrect conclusions should any data, information or condition be incorrect or have been concealed, withheld, misrepresented or otherwise not fully disclosed to WSP | Parsons Brinckerhoff.

ENVIRONMENTAL CONCLUSIONS

In accordance with the scope of services, WSP | Parsons Brinckerhoff has relied upon the data and has not conducted any environmental field monitoring or testing in the preparation of the report. The conclusions are based upon the data and visual observations and are therefore merely indicative of the environmental condition of the site at the time of preparing the report, including the presence or otherwise of contaminants or emissions.

Within the limitations imposed by the scope of services, the assessment of the site and preparation of this report have been undertaken and performed in a professional manner, in accordance with generally accepted practices and using a degree of skill and care ordinarily exercised by reputable environmental consultants under similar circumstances. No other warranty, expressed or implied, is made.

REPORT FOR BENEFIT OF CLIENT

The report has been prepared for the benefit of the client and no other party. WSP | Parsons Brinckerhoff assumes no responsibility and will not be liable to any other person or organisation for or in relation to any matter dealt with or conclusions expressed in the report, or for any loss or damage suffered by any other person or organisation arising from matters dealt with or conclusions expressed in the report (including without limitation matters arising from any negligent act or omission of WSP | Parsons Brinckerhoff or for any loss or damage suffered by any other party in relying upon the matters dealt with or conclusions expressed in the report). Other parties should not rely upon the report or the accuracy or completeness of any conclusions and should make their own enquiries and obtain independent advice in relation to such matters.

OTHER LIMITATIONS

WSP | Parsons Brinckerhoff will not be liable to update or revise the report to take into account any events, emergent circumstances or facts occurring or becoming apparent after the date of the report.

The scope of services did not include any assessment of the title to nor ownership of the properties, buildings and structures referred to in the report, nor the application or interpretation of laws in the jurisdiction in which those properties, buildings and structures are located.

Appendix A

FIGURES






Appendix B

SITE PHOTOGRAPHS



Photograph 1: Borehole BH01 location, western side of the Veritas Building, currently used as a car park. Photograph taken facing north-east.



Photograph 2: Borehole BH02 location, eastern side of the Veritas Building. Photograph taken facing southwest.



Photograph 3: Borehole BH03 location, eastern side of the Veritas Building. Photograph taken facing west.



Photograph 4: Borehole BH04 location with drain running through foot path on the western side of the Boylan Building. Photograph taken facing north-west.



Photograph 5: Western section of the car park. Photograph taken facing north.



Photograph 6: Grassed middle section of site and classrooms. Photograph taken facing south-east.

Appendix C

GROUNDWATER BORE SEARCH

WSP PARSONS BRINCKERHOFF

DHNO	Unit_No	Obs_No c	irillhole_class	Aquifer	Orig_drilled_depth	Orig_drilled_date	max_drill_depth	max_drill_date	late_open_depth	late_open_date	late_permit_no	cased_to	case_min_diam	purpose
47301	6628-201		Ŵ	Tes(T3-4)	112.78	22/02/1968	112.78	22/02/1968	112.78	22/02/1968				
47302	6628-202	ADE089	MM	Tes(T3-4)	121.92	1/01/1972	121.92	1/01/1972	69	16/08/1976		42.67	152	OBSRCL
47324	6628-224		MM			1/01/1915	137.77	3/03/1915	137.77	3/03/1915				
47325	6628-225		WM			1/03/1915	52.43	3/03/1915	52.43	3/03/1915				
47326	6628-226		WM			1/02/1915	30.48	3/03/1915	30.48	3/03/1915				
47327	6628-227		ŴŴ	Qpac(Q4)	23.77	1/07/1939	23.77	1/07/1939	23.77	1/07/1939				
47328	6628-228		ŴŴ	Qpac(Q4)	21.34	1/03/1938	21.34	1/03/1938	21.34	1/03/1938				
47329	6628-229		MW	Qpac(Q4)	22.86	1/05/1938	22.86	1/05/1938	22.86	1/05/1938				
47387	6628-287		٨W		34.14	27/10/1914	34.14	27/10/1914	34.14	27/10/1914				
47468	6628-368		ŴŴ	Tes(T3-4)	113	13/09/1976	113	13/09/1976	113	13/09/1976	186			OBS
53850 6	5628-6881		ŴŴ	Teb	60	28/03/1978	100	17/07/1978	0	17/07/1978	2798	63.8	114	
58722 6	628-11753		ŴŴ	Qpah			12.55	3/09/1981	12.55	3/09/1981			120	
60196 6	628-13227		Ŵ		6	1/01/1985	6	1/01/1985	6	1/01/1985	15892	6	140	DRN
60413 6	628-13444		MM	Tomw(T2)	160	29/11/1984	160	29/11/1984	160	29/11/1984	14718	29	150	
150964 6	628-17280		WM		21.6	6/05/1994	21.6	6/05/1994	21.6	6/05/1994	31584	21.6	100	DRN
167080 6	628-18670		WM	Qpah	6	22/10/1997	6	22/10/1997	6	22/10/1997	42816	6	80	١N٧
167081 6	628-18671		٨W	Qpah	6	23/10/1997	6	23/10/1997	6	23/10/1997	42816	6	80	١N٧
196337 6	628-21176		WM	Qpah	25	30/09/2002	25	30/09/2002	25	30/09/2002	16165	16.9	51	MON
198444 6	628-21566		ŴŴ	Tes(T3-4)	78	13/11/2003	78	13/11/2003	78	13/11/2003	63762	60	155	IRR
200942 6	628-21866		ŴŴ				19		0	14/11/2003	63887			
206417 6	628-22243		WM		15	18/07/2005	15	18/07/2005	15	18/07/2005	105758	12	50	MON
206419 6	628-22244		WM	Qpah	21	19/07/2005	12	19/07/2005	21	19/07/2005	105759	17	50	MON
206420 6	628-22245		WM		15	21/02/2005	15	21/02/2005	15	21/02/2005	105761	12	50	MON
206421 6	628-22246		WM	Qpac(Q4)	22	20/07/2005	22	20/07/2005	21	20/07/2005	105762	18	50	MON
206422 6	628-22247		WM	Qpac(Q4)	22	15/07/2005	22	15/07/2005	0	10/01/2008	141477			MON
219297 6	628-22663		WM	Qpah	20	3/11/2005	20	3/11/2005	20	3/11/2005	111427	14	50	MON
234232 6	628-23080		WM		17.3	19/07/2007	17.3	19/07/2007	17.3	19/07/2007	133323	8.1	50	INV
241386 6	628-23715		WM	Qpah	18.3	27/03/2008	18.3	27/03/2008	18.3	27/03/2008	144571	15.2	50	INV
241387 6	628-23716		WM	Qpah	19.5	27/03/2008	19.5	27/03/2008	19.5	27/03/2008	144568	16.5	50	
241388 6	628-23717		WM	Qpah	20	26/03/2008	20	26/03/2008	20	26/03/2008	144572	17	50	
241389 6	628-23718		WM	Qpah	20	23/03/2008	20	23/03/2008	20	23/03/2008	144573	14	50	
241390 6	628-23719		WM	Qpah	20	26/03/2008	20	26/03/2008	20	26/03/2008	144570	16	50	INV
241567 6	628-23786		WM	Qpah	19	22/08/2008	19	22/08/2008	19	22/08/2008	153089	13	50	INV
241568 6	628-23787		WM	Qpah	19	22/08/2008	19	22/08/2008	19	22/08/2008	153090	13	50	INV
245776 6	628-24624		WW		20.2	6/03/2008	20.2	6/03/2008	20.2	6/03/2008	143589			INV
252790 6	628-24903		ŴŴ		20	8/07/2008	20	8/07/2008	20	8/07/2008	143591			INV
252813 6	628-24909		WW		20.1	7/07/2008	20.1	7/07/2008	20.1	7/07/2008	143590			INV
252966 6	628-24932		MM	Qpah	23	14/08/2009	23	14/08/2009	23	14/08/2009	170431	11	50	INV
252967 6	628-24933		MM	Qpah	21	14/08/2009	21	14/08/2009	21	14/08/2009	170432	15	50	INV
252968 6	628-24934		MM	Qpah	20	17/08/2009	20	17/08/2009	20	17/08/2009	170433	11	50	INV
252969 6	628-24935		WM	Qpah	20	17/08/2009	20	17/08/2009	20	17/08/2009	170434	11	50	INV
253372 6	628-25024		WW		13.28	26/11/2009	13.28	26/11/2009	13.28	26/11/2009	181968	10.2	50	MON
265259 6	628-25936		WW	Qpah	21	25/08/2014	21	25/08/2014	0	2/05/2015	243427			INV
266440 6	628-26014		WW		24.5	17/09/2011	24.5	17/09/2011	0	27/10/2011	205473			INV
275265 6	628-26859		WW	Qpah	26	29/10/2012	26	29/10/2012	25	29/10/2012	216863	22	50	INV
275266 6	628-26860		WW	Qpah	25.5	30/10/2012	25.5	30/10/2012	21	30/10/2012	216862	21	50	INV
280908 6	628-27514		Ŵ	Qpah	3.8	14/07/2014	3.8	14/07/2014	0	2/05/2015	243424			
280909 6	628-27515		Ŵ	Qpah	4.3	14/07/2014	4.3	14/07/2014	0	2/05/2015	243429			NV
280910 6	628-27516		WM	Qpah	4	14/07/2014	4	14/07/2014	0	2/05/2015	243428			INV

sed_to case_min_diam purpose	INV			10 50	10 50	10 50	10 50	10 50	10 50 MON	10 50 MON	10 50 MON	10 50 10 50 10 50 11 50 11 50 11 50 11 50 11 50 11 50 11 50 11 50 11 50	10 50 10 50 10 50 18.5 50 18.5 50	10 50 10 50 10 50 11 50 18.5 50 18.5 50	10 50 10 50 10 50 11 50 18.5 50 18.5 50
late_permit_no case(239435		243431	243431 246996 1	243431 246996 1(243430	243431 246996 1(243430 243430	243431 246996 1(243430 243430 243430 243426	243431 246996 1(243430 243430 243430 243426 243425 243425	243431 246996 1(243430 243430 243430 243426 243425 243425 243425 270836	243431 246996 1(243430 243430 243430 243426 243425 243425 243425 243425 243425 243425 243425 256152 1	243431 246996 10 246996 243430 243430 243426 243425 25355 25355 25355 25355 25355 25355 25355 25552 2555	243431 24696 24695 243430 243430 243430 243426 243425 243425 243425 236152 11 256152 256150 256150	243431 246996 10 246996 243430 243430 243426 243425 243425 243425 243425 243425 243425 243425 243425 243425 256152 11 256150 18	243431 246996 10 246996 10 243430 243430 243426 243425 243425 11 270835 11 256150 18	243431 246966 246966 243430 243430 243426 243425 243425 243425 243425 243425 243425 243425 256152 12 256150 18 256150 18 256150 266150
th late_open_date	20/11/2014		2/05/2015	2/05/2015 23/04/2015	2/05/2015 23/04/2015 2/05/2015	2/05/2015 23/04/2015 2/05/2015 2/05/2015	2/05/2015 23/04/2015 2/05/2015 2/05/2015 2/05/2015 2/05/2015	2/05/2015 23/04/2015 2/05/2015 2/05/2015 2/05/2015 2/05/2015 2/05/2015	2/05/2015 23/04/2015 2/05/2015 2/05/2015 2/05/2015 2/05/2015 2/05/2015 18/08/2016	2/05/2015 23/04/2015 2/05/2015 2/05/2015 2/05/2015 2/05/2015 18/08/2016 18/08/2016 2/02/2016	2/05/2015 23/04/2015 2/05/2015 2/05/2015 2/05/2015 2/05/2015 18/08/2016 18/08/2016 18/08/2016 18/08/2016	2/05/2015 23/04/2015 2/05/2015 2/05/2015 2/05/2015 2/05/2015 18/08/2016 18/08/2016 18/08/2016 3/02/2016 3/02/2016	2/05/2015 23/04/2015 2/05/2015 2/05/2015 2/05/2015 2/05/2016 18/08/2016 18/08/2016 18/08/2016 3/02/2016 3/02/2016 2/05/2016	2/05/2015 23/04/2015 2/05/2015 2/05/2015 2/05/2015 2/05/2016 18/08/2016 18/08/2016 18/08/2016 3/02/2016 3/02/2016 25/05/2016 25/05/2016	2/05/2015 23/04/2015 2/05/2015 2/05/2015 2/05/2015 2/05/2016 18/08/2016 18/08/2016 3/02/2016 3/02/2016 25/05/2016 25/05/2016 25/05/2016 18/08/2016
	4 0		4 0	5 13 13	4 0 5 13 0 0	0 0 13 0	0 0 0 13	0 0 0 0 0 13 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	23 0 0 0 13 0	0 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	4 4 0 5 4 13 6 6 0 0 21.5 0 2 21.5	4 4 0 5 13 13 6 0 0 0 22 22 23 20 20 21.5 20 20	4 0 5 13 6 0 0 7 22 23 8 21.5 21.5 24 21.5 21.5	4 4 0 5 13 13 6 0 0 0 6 21.5 21.5 0 21.5 0 0
בלווו וומי מווו למוי	20/11/2014	1 100/ 11/ 11		11/11/2014 23/04/2015	11/11/2014 23/04/2015 31/10/2014	11/11/2014 23/04/2015 31/10/2014 2/05/2015	11/11/2014 23/04/2015 31/10/2014 2/05/2015	11/11/2014 23/04/2015 31/10/2014 2/05/2015	11/11/2014 23/04/2015 31/10/2014 2/05/2015 4/02/2016	11/11/2014 23/04/2015 31/10/2014 2/05/2015 4/02/2016 2/02/2016	11/11/2014 23/04/2015 31/10/2014 2/05/2015 4/02/2016 2/02/2016 2/02/2016	11/11/2014 23/04/2015 31/10/2014 2/05/2015 4/02/2016 2/02/2016 2/02/2016 3/02/2016	11/11/2014 23/04/2015 31/10/2014 2/05/2015 2/05/2016 2/02/2016 3/02/2016 2/02/2016 2/02/2016	11/11/2014 23/04/2015 31/10/2014 2/05/2015 2/05/2016 2/02/2016 2/02/2016 3/02/2016 2/02/2016 2/02/2016 2/02/2016 2/05/2016	11/11/2014 23/04/2015 31/10/2014 2/05/2015 2/05/2016 2/02/2016 2/02/2016 2/02/2016 2/02/2016 2/02/2016 2/02/2016 2/02/2016 2/02/2016 2/02/2016 2/02/2016 2/02/2016
ig_ariilea_aate max_ariii_ae	20/11/2014 19.5	11/11/2014 20.5		23/04/2015 13	23/04/2015 13 31/10/2014 20.6	23/04/2015 13 31/10/2014 20.6	23/04/2015 13 23/04/2014 20.6 31/10/2014 20.6	23/04/2015 13 23/04/2014 20.6 31/10/2014 20.6 2.5 2.5	23/04/2015 13 23/04/2014 20.6 31/10/2014 20.6 21/10/2014 20.5 4/02/2016 2.5	23/04/2015 13 23/04/2014 20.6 31/10/2014 20.6 23/04/2014 20.5 4/02/2016 21.5 2/02/2016 22.5	23/04/2015 13 23/04/2014 20.6 31/10/2014 20.6 21/10/2014 20.5 4/02/2016 2.5 2/02/2016 21.5 2/02/2016 22 2/02/2016 22	33/04/2015 13 33/10/2014 20.6 31/10/2014 20.5 4/02/2016 2.5 2/02/2016 21.5 2/02/2016 22 3/02/2016 22	3/04/2015 13 33/10/2014 20.6 31/10/2014 20.6 21/10/2016 2.5 4/02/2016 21.5 2/02/2016 22 3/02/2016 21.5	3/10/2015 13 31/10/2014 20.6 31/10/2016 2.5 4/02/2016 2.5 2/02/2016 21.5 2/02/2016 22 3/02/2016 21.5 2/02/2016 22 3/02/2016 21.5	3/10/2015 13 31/10/2014 20.6 31/10/2016 2.5 4/02/2016 21.5 2/02/2016 22 3/02/2016 21.5 3/02/2016 21.5 2/02/2016 22 3/02/2016 21.5 202 20.7
-0.00 ⁻ 0.00 ⁻ 0.00 ⁻	19.5 20	20.5 11		13 23	13 23 20.6 32	13 23 20.6 33	13 23 20.6 33	20.6 23	13 23 20.6 33 21.5 4	13 23 20.6 3: 20.5 3: 21.5 4 22 2	13 23 20.6 3: 20.5 3: 21.5 4 22 2 22 2	13 23 20.6 3: 20.5 3: 21.5 4 22 2 21.5 2 21.5 3 21.5 3 21.5 3 21.5 3 21.5 3 21.5 3 21.5 3 21.5 3	13 23 20.6 3: 20.5 3: 21.5 2 22 2 21.5 3	13 23 20.6 3: 20.5 3: 21.5 4 22 2 21.5 3 21.5 3	13 23 20.6 3 20.5 3 21.5 2 22 2 21.5 3
יומסס שלמוורו	Qpah	Tomw(T1)	4000	Updi	Cipari	Chai	Qpah	Qpah Qpah	Qpah	дран	дран	дран	дран	дран	дран
	MM	MM				MM N									
	281052 6628-27532	284356 6628-27622	285089 6628-27764		287357 6628-28004	287357 6628-28004 287358 6628-28005	287357 6628-28004 287358 6628-28005 287359 6628-28005	287357 6628-28004 287358 6628-28005 287359 6628-28006 287359 6628-28006 287350 6628-28006	287357 6628-28004 287358 6628-28005 287359 6628-28006 287350 6628-28007 287360 6628-28007 288460 6628-28143	287357 6628-28004 287358 6628-28005 287359 6628-28006 287360 6628-28007 287360 6628-28007 288460 6628-28143 288461 6628-28143	287357 6628-28004 287358 6628-28005 287359 6628-28006 287350 6628-28007 287360 6628-28007 288460 6628-28143 288461 6628-28143 288462 6628-28143	287357 6628-28004 287358 6628-28005 287359 6628-28006 287360 6628-28007 288460 6628-28143 288461 6628-28144 288461 6628-281445 288463 6628-28145 288463 6628-28145 288463 6628-28145	287357 6628-28004 287358 6628-28005 287359 6628-28006 287360 6628-28007 288460 6628-28143 288461 6628-28144 288461 6628-28144 288463 6628-28146 288463 6628-28146 288453 6628-28146 288750 6628-28244	287357 6628-28004 287357 6628-28005 287359 6628-28006 287350 6628-28007 287350 6628-28007 288460 6628-28143 288461 6628-28143 288462 6628-28144 288463 6628-28144 288463 6628-28144 288451 6628-28145 288750 6628-28244 288751 6628-28244	287357 6628-28004 287359 6628-28005 287359 6628-28005 287350 6628-28007 287360 6628-28143 288461 6628-28144 288461 6628-28144 288463 6628-281445 288463 6628-281445 288451 6628-282445 288751 6628-282445 288751 6628-28245 288751 6628-28245 288751 6628-28245 288751 6628-28245

DHNO	Unit_No	latest_status	latest_status_date	SW	rsw	water_level_date	TDS EC salinity_date pH	pH_date	yield	yield_date	mga_easting	mga_northing	mga_zone	hundred	plan	parcel
47301	6628-201	ABD		17.37	21.05	22/02/1968			0.25	22/02/1968	279595.71	6131925.36	7 4	ADELAIDE	H1051C	0 S6028
47302	6628-202	_		17.16	21.14	14/03/1997	1496 2700 30/01/1990 7.5	30/01/1990	11.37	25/10/1972	279557.69	6131974.39	54	ADELAIDE	H1051C	0 S6028
47324	6628-224	_		24.38	16.72	3/03/1915					279724.76	6132733.3	54	ADELAIDE	F18138	5 A543
47325	6628-225			19.81	21.71	3/03/1915			1.26	3/03/1915	279758.74	6132738.22	54	ADELAIDE	F18138	5 A543
47326	6628-226			3.66	37.76	3/03/1915					279739.83	6132698.27	54	ADELAIDE	F17089	2 A91
47327	6628-227					•	2798 5005 1/07/1939				279739.83	6132698.27	54	ADELAIDE	F17089	2 A91
47328	6628-228			17.98	23.44	1/03/1938	3184 5684 31/03/1938				279739.83	6132698.27	7 4	ADELAIDE	F17089	2 A91
47329	6628-229			19.81	21.61	1/05/1938	2984 5332 1/05/1938				279739.83	6132698.27	54	ADELAIDE	F17089	2 A91
47387	6628-287			18.29	22.15	27/10/1914			1.26	27/10/1914	279728.77	6132112.27	54	ADELAIDE	F36332	A100
47468	6628-368	BKF		40	1.79	13/09/1976	2802 4768 29/09/1976 7.6	29/09/1976	10		279991.77	6132673.25	54	ADELAIDE	F15925	5 A1
53850	6628-6881	BKF	17/07/1978	18	23.66	28/03/1978	2404 4310 28/03/1978 7.8	28/03/1978	3 0.38	28/03/1978	279935.71	6132397.3	54	ADELAIDE	F18121	7 A375
58722	6628-11753	ABD		6.35	34.77	3/09/1981	882 1600 3/09/1981 8.5	3/09/1981			280099.75	6132596.27	54	ADELAIDE	D1923	4 A5
60196	6628-13227	OPR									279768.74	6132562.32	54	ADELAIDE	F4000(A62
60413	6628-13444			20	21.68	29/11/1985			7		279948.76	6132413.26	54	ADELAIDE	F13784	4 A1
150964	6628-17280										279765.85	6132261.23	54	ADELAIDE	F18117	1 A329
167080	6628-18670			0.5	31.94	22/10/1997	2892 5170 22/10/1997				279314.88	6132206.28	54	ADELAIDE	D2335() Q51
167081	6628-18671			2.83	30.18	23/10/1997	3046 5440 23/10/1997				279334.86	6132079.23	54	ADELAIDE	D2335() Q52
196337	6628-21176			19.66	21.72	30/09/2002					279860.75	6132544.15	7 4	ADELAIDE	D6650	t A82
198444	6628-21566			30	7.35	13/11/2003			7.8	13/11/2003	279553.25	6131888.9	7 4	ADELAIDE	H1051C	0 S6028
200942	6628-21866	ABD	14/11/2003								279572.87	6131961.23	75	ADELAIDE	H1051C	0 S6028
206417	6628-22243	DRY	18/07/2005			18/07/2005					280193.53	6132429.45	54	ADELAIDE		
206419	6628-22244			19	22.75	19/07/2005					280068.47	6132425.36	54	ADELAIDE	D23079) A1
206420	6628-22245	DRY	21/02/2005			21/02/2005					280135.05	6132476.8	54	ADELAIDE	F40003	A44
206421	6628-22246			19	22.84	20/07/2005					280067.44	6132405.62	2 4	ADELAIDE	D3444	A5
206422	6628-22247	BKF	10/01/2008	19	22.55	15/07/2005					280165.27	6132445.43	7 4	ADELAIDE	F18129	0 A448
219297	6628-22663			19	22.77	3/11/2005					279925.12	6132593.11	54	ADELAIDE	F18134	5 A503
234232	6628-23080										280165.39	6132443.61	54	ADELAIDE	F18129	0 A448
241386	6628-23715			17.2	24.74	27/03/2008					280081.21	6132381.57	54	ADELAIDE	D3444	A1
241387	6628-23716			18	23.87	27/03/2008					280080.47	6132398.49	54	ADELAIDE	D3444	A5
241388	6628-23717			18	23.72	26/03/2008					280095.93	6132428.14	54	ADELAIDE		
241389	6628-23718			18	23.51	23/03/2008					280123.35	6132462.83	54	ADELAIDE		
241390	6628-23719			18	23.58	26/03/2008					280145.33	6132443.69	7 4	ADELAIDE		
241567	6628-23786			16	25.96	22/08/2008					280067.78	6131930.06	54	ADELAIDE	F19957	5 A92
241568	6628-23787			16	25.94	22/08/2008					280065.66	6131919.48	54	ADELAIDE	F19957	5 A92
245776	6628-24624										279956.11	6132422.09	54	ADELAIDE	F18127	5 A434
252790	6628-24903										279938.23	6132446.63	54	ADELAIDE	F18127	8 A436
252813	6628-24909	_									279952.88	6132473.01	54	ADELAIDE	F11008	2 A1
252966	6628-24932			16		14/08/2009					280125	6131960	54	ADELAIDE	D4347	5 A2
252967	6628-24933			17		14/08/2009					280072	6131944	54	ADELAIDE	D4347	5 A1
252968	6628-24934			16.5		17/08/2009					280050	6131956	54	ADELAIDE	D4347	5 A1
252969	6628-24935			16.5		17/08/2009					280015	6131974	54	ADELAIDE	F17110	5 A91
253372	6628-25024					22/12/2009					279392.5	6132219	54	ADELAIDE	D2335() Q51
265259	6628-25936	BKF	2/05/2015	18.5		2/05/2015					279963.76	6132507.01	2 4	ADELAIDE	F11219	4 A5
266440	6628-26014	BKF	27/10/2011								279939.34	6132727.35	2 4	ADELAIDE		
275265	6628-26859	_		18.4		29/10/2012					280147.72	6132449.3	54	ADELAIDE		
275266	6628-26860			18.5		30/10/2012					280123.81	6132459.76	54	ADELAIDE		
280908	6628-27514	BKF	2/05/2015	1.8		14/07/2014					279962.83	6132507.46	54	ADELAIDE	F11219	4 A5
280909	6628-27515	BKF	2/05/2015	1.7		2/05/2015					279984.42	6132506.83	54	ADELAIDE	F11219	4 A5
280910	6628-27516	BKF	2/05/2015	1.8		14/07/2014					279985.37	6132539.63	54	ADELAIDE	F11219	4 A5

ONHO	Unit_No	latest_status	latest_status_date	swl	rswl	water_level_date TDS	EC	salinity_date	ЬH	pH_date	yield	yield_date	mga_easting	mga_northing	mga_zone	hundred	plan	parcel
281052	6628-27532	BKF	20/11/2014	18.8		20/11/2014							280060.3	6132550.34	54	ADELAIDE	D13800	A11
284356	6628-27622	BKF	2/05/2015	18.5		11/11/2014							279986.7	6132548.57	54	ADELAIDE	F112194	A5
285089	6628-27764			12.5		23/04/2015							280089.5	6132363	54	ADELAIDE	D77900	A201
287357	6628-28004	BKF	2/05/2015										280007	6132508.7	54	ADELAIDE	D63478	A88
287358	6628-28005	BKF	2/05/2015										279984.8	6132531.5	54	ADELAIDE	F112194	A5
287359	6628-28006	BKF	2/05/2015	2		2/05/2015							279971.8	6132524.1	54	ADELAIDE	F112194	A5
287360	6628-28007	BKF	2/05/2015										279983.5	6132545.1	54	ADELAIDE	F112194	A5
288460	6628-28143	BKF	18/08/2016	19.2		4/02/2016							279942	6132471	54	ADELAIDE	F181274	A432
288461	6628-28144			19.2		2/02/2016							279923	6132436	54	ADELAIDE	F181273	A431
288462	6628-28145	BKF	18/08/2016	19.1		2/02/2016							279944	6132447	54	ADELAIDE	F181278	A436
288463	6628-28146			19.2		3/02/2016							279956	6132420	54	ADELAIDE	F181276	A434
288750	6628-28244												279949.75	6132443.91	54	ADELAIDE	F181278	A436
288751	6628-28245												279943.97	6132443.25	54	ADELAIDE	F181278	A436
289610	6628-28483	BKF	18/08/2016										279939	6132477	54	ADELAIDE	F181274	A432
289611	6628-28484	BKF	18/08/2016										279936	6132457	54	ADELAIDE	F181274	A432

DHNO	Unit_No	Title	water_info	salinity	water_chemistry	geophys_log	drill_log	lith_log
47301	6628-201	CR 5754 517	~	z	z	z	z	z
47302	6628-202	CR 5754 517	٢	Υ	Y	N	N	N
47324	6628-224	CT 5743 863	٢	z	N	N	N	N
47325	6628-225	CT 5743 863	٢	z	Z	N	z	N
47326	6628-226	CT 5331 536	٢	z	N	N	Z	N
47327	6628-227	CT 5331 536	z	Y	Y	N	Z	N
47328	6628-228	CT 5331 536	٢	Y	Y	N	Z	N
47329	6628-229	CT 5331 536	٢	Υ	Y	N	N	N
47387	6628-287	CT 5914 626	٢	z	Z	N	Ν	z
47468	6628-368	CT 5301 74	۲	۲	۲	z	z	z
53850	6628-6881	CT 5457 41	~	۲	z	z	≻	z
58722	6628-11753	CT 5404 813	۲	۲	z	z	z	z
60196	6628-13227	CT 5745 170	z	z	z	z	z	z
60413	6628-13444	CT 5301 485	٢	z	z	٨	z	N
150964	6628-17280	CT 5842 466	z	z	z	z	٨	z
167080	6628-18670	CR 5707 712	٢	۲	z	z	٢	z
167081	6628-18671	CR 5707 712	7	۲	z	z	٢	z
196337	6628-21176	CT 5939 923	~	z	z	z	۲	z
198444	6628-21566	CR 5754 517	~	z	z	z	≻	z
200942	6628-21866	CR 5754 517	z	z	z	z	z	z
206417	6628-22243		~	z	z	z	۲	z
206419	6628-22244	CT 5454 873	7	z	z	z	≻	z
206420	6628-22245	CT 5156 306	~	z	z	z	≻	z
206421	6628-22246	CT 5384 989	~	z	z	z	۲	z
206422	6628-22247	CT 5384 991	~	z	z	z	۲	z
219297	6628-22663	CT 5381 101	~	z	z	z	≻	z
234232	6628-23080	CT 5384 991	z	Z	N	N	γ	N
241386	6628-23715	CT 5384 989	٢	z	Z	N	λ	N
241387	6628-23716	CT 5384 989	٢	z	Z	Ν	٨	z
241388	6628-23717		٢	z	Z	Z	۲	N
241389	6628-23718		٢	z	Z	N	Υ	N
241390	6628-23719		٢	Z	N	N	γ	N
241567	6628-23786	CT 5444 259	۲	z	z	z	٢	z
241568	6628-23787	CT 5444 259	٢	Z	N	N	Υ	N
245776	6628-24624	CT 5811 213	z	z	z	z	z	٢
252790	6628-24903	CT 5465 489	z	z	z	z	z	٢
252813	6628-24909	CT 5198 439	z	z	z	z	z	٢
252966	6628-24932	CT 5645 796	۲	z	z	z	۲	z
252967	6628-24933	CT 5452 672	۲	z	z	z	~	z
252968	6628-24934	CT 5452 672	۲	z	z	z	۲	N
252969	6628-24935	CT 5336 446	~	z	z	z	۲	z
253372	6628-25024	CR 5707 712	~	z	z	z	z	٢
265259	6628-25936	CT 6123 338	~	z	z	z	7	٢
266440	6628-26014		z	z	z	z	۲	٢
275265	6628-26859		~	z	z	z	z	٢
275266	6628-26860		~	z	z	z	z	٢
280908	6628-27514	CT 6123 338	7	z	z	z	۲	٢
280909	6628-27515	CT 6123 338	7	z	z	z	۲	٢
280910	6628-27516	CT 6123 338	~	z	z	z	۲	٢

ONHQ	Unit_No	Title	water_info	salinity	water_chemistry	geophys_log	drill_log	lith_log
281052	6628-27532	CT 6134 284	٢	z	Z	z	٨	z
284356	6628-27622	CT 6123 338	٢	z	z	z	γ	γ
285089	6628-27764	CT 6057 779	٢	z	Z	z	z	z
287357	6628-28004	CT 6123 345	z	z	z	z	z	٨
287358	6628-28005	CT 6123 338	z	z	z	z	z	٨
287359	6628-28006	CT 6123 338	٢	z	z	z	z	٨
287360	6628-28007	CT 6123 338	z	z	Z	z	z	٢
288460	6628-28143	CT 5847 980	٢	z	Z	z	γ	z
288461	6628-28144	CT 6023 152	۲	z	Z	z	γ	z
288462	6628-28145	CT 5465 489	۲	z	z	z	۲	z
288463	6628-28146	CT 5811 213	٢	z	z	z	٨	z
288750	6628-28244	CT 5465 489	z	z	z	z	z	z
288751	6628-28245	CT 5465 489	z	z	z	z	z	z
289610	6628-28483	CT 5847 980	z	z	Z	z	N	z
289611	6628-28484	CT 5847 980	z	z	N	N	N	Z



Appendix D

EXTRACT FROM ADELAIDE CITY COUNCIL DEVELOPMENT PLAN

Development Plan



Adelaide (City)

Consolidated – 24 September 2015

Please refer to the Adelaide (City) page at <u>www.sa.gov.au/developmentplans</u> to see any amendments not consolidated.



Government of South Australia

Department of Planning, Transport and Infrastructure

CAPITAL CITY ZONE

Introduction

The Desired Character, Objectives and Principles of Development Control that follow apply in the whole of the Capital City Zone shown on <u>Maps Adel/17 to 20, 23 to 26 and 29 to 31</u>. They are additional to those expressed for the whole of the Council area and in cases of apparent conflict, take precedence over the more general provisions. In the assessment of development, the greatest weight is to be applied to satisfying the Desired Character for the Zone.

DESIRED CHARACTER

This Zone is the economic and cultural focus of the State and includes a range of employment, community, educational, tourism and entertainment facilities. It is anticipated that an increased population within the Zone will complement the range of opportunities and experiences provided in the City and increase its vibrancy.

The Zone will be active during the day, evening and late night. Licensed entertainment premises, nightclubs and bars are encouraged throughout the Zone, particularly where they are located above or below ground floor level to maintain street level activation during the day and evening.

High-scale development is envisaged in the Zone with high street walls that frame the streets. However an interesting pedestrian environment and human scale will be created at ground floor levels through careful building articulation and fenestration, frequent openings in building façades, verandahs, balconies, awnings and other features that provide weather protection.

In important pedestrian areas, buildings will be set back at higher levels above the street wall to provide views to the sky and create a comfortable pedestrian environment. In narrow streets and laneways the street setback above the street wall may be relatively shallow or non-existent to create intimate spaces through a greater sense of enclosure. In the Central Business Policy Areas, upper level setbacks are not envisaged.

Non-residential land uses at ground floor level that generate high levels of pedestrian activity such as shops, cafés and restaurants will occur throughout the Zone. Within the Central Business Policy Area, residential land uses at ground level are discouraged. At ground level, development will continue to provide visual interest after hours by being well lit and having no external shutters.

There will also be a rich display of art that is accessible to the public and contextually relevant.

Exemplary and outstanding building design is desired in recognition of the location as South Australia's capital. Contemporary juxtapositions will provide new settings for heritage places. Innovative forms are expected in areas of identified street character, referencing the past, but with emphasis on modern design-based responses that support optimal site development.

Adelaide's pattern of streets and squares

The distinctive grid pattern of Adelaide will be reinforced through the creation of a series of attractive boulevards as shown on Concept Plan Figures CC/1 and 2. These boulevards will provide a clear sense of arrival into the City and be characterised by buildings that are aligned to the street pattern, particularly at ground level.

Views to important civic landmarks, the Park Lands and the Adelaide Hills will be retained as an important part of the City's charm and character.

The City's boulevards, terraces and Squares will be developed as follows:

- (a) North Terrace will be reinforced as an important pedestrian promenade and cultural boulevard that provides an important northern edge to the City square mile.
- (b) King William Street will be enhanced as the City's principal north-south boulevard and will be reinforced as the City's commercial spine.





- (c) Grote Street-Wakefield Street will be enhanced as the City's principal east-west boulevard and will be developed to provide a strong frame that presents a sense of enclosure to the street.
- (d) East Terrace will be characterised by buildings that maximise views through to the Park Lands and provide a distinct City edge.
- (e) West Terrace will be reinforced as the western 'gateway' to the City centre and will form an imposing frontage to the western City edge. Buildings will be constructed to the front and side boundaries, and designed to maximise views through to the Park Lands. Corner sites at the junctions of West Terrace and the major east-west streets will be developed as strongly defined visual gateways to the City. This will provide an imposing frontage to the western edge of the City, which comprises a mixture of commercial, showroom and residential development.
- (f) Pulteney and Morphett streets are key north-south boulevards. A sense of activation and enclosure of these streets will be enhanced through mixed use development with a strong built form edge. Pulteney Street will include residential, office and institutional uses, and retail activities. These boulevards will become important tree-lined commercial corridors.
- (g) Currie, Grenfell, Franklin and Flinders streets, as wider east-west boulevards provide important entry points to the City. Currie and Grenfell streets will become a key focus for pedestrians, cycling and public transport. These streets also provide long views to the hills as their closing vistas and these view corridors should remain uncluttered.
- (h) Victoria, Hindmarsh and Light Squares will have a continuous edge of medium to high-scale development that frames the Squares and increases ground level activity.

The Zone also includes a number of Main Street areas, encompassing Rundle Mall, Rundle Street, Hindley Street and Gouger Street, which are envisaged to have a wide range of retail, commercial and community uses that generate high levels of activity. These areas will have an intimately scaled built form with narrow and frequent building frontages. These areas are shown on Concept Plan Figures CC/1 and 2.

Minor streets and laneways will have a sense of enclosure (a tall street wall compared to street width) and an intimate, welcoming and comfortable pedestrian environment with buildings sited and composed in a way that responds to the buildings' context. There will be a strong emphasis on ground level activation through frequent window openings, land uses that spill out onto the footpath, and control of wind impacts.

Development in minor streets and laneways with a high value character will respond to important character elements and provide a comfortable pedestrian environment, particularly in the following streets: Gray, Leigh, Union, Chesser, Coromandel, Tucker, Cardwell, Kenton, Market, Ruthven, Cannon, Tatham, Benthem streets, Murrays Lane and Wright Court.

A comprehensive, safe and convenient movement network throughout the City will develop, focusing on the provision of linkages on both public and private land between important destinations and public transport. A high quality system of bicycle or shared pedestrian and bicycle routes will be established within the Zone.

OBJECTIVES

General

- **Objective 1:** The principal focus for the economic, social and political life of metropolitan Adelaide and the State.
- **Objective 2:** A vibrant mix of commercial, retail, professional services, hospitality, entertainment, educational facilities, and medium and high density living.
- **Objective 3:** Design and management of City living to ensure the compatibility of residential amenity with the essential commercial and leisure functions of the Zone.

- **Objective 4:** City streets that provide a comfortable pedestrian environment.
- **Objective 5:** Innovative design approaches and contemporary architecture that respond to a building's context.
- **Objective 6:** Buildings that reinforce the gridded layout of Adelaide's streets and respond to the underlying built-form framework of the City.
- **Objective 7:** Large sites developed to their full potential while ensuring a cohesive scale of development and responding to a building's context.
- **Objective 8:** Development that contributes to the Desired Character of the Zone.

PRINCIPLES OF DEVELOPMENT CONTROL

Land Use

1 The following types of development, or combinations thereof, are envisaged:

Affordable housing Aged persons accommodation Community centre Consulting room Convention centre Dwelling Educational establishment Emergency services facility Hospital Hote Indoor recreation centre Licensed entertainment premises Library Motel Office Pre-school Personal service establishment Place of worship Serviced apartment Restaurant Residential flat building Student accommodation Shop or group of shops Tourist accommodation

- 2 Land uses that are typically closed during the day should be designed to maximise daytime and evening activation at street level and be compatible with surrounding land uses, in particular residential development.
- 3 Low impact industries should be located outside the Central Business Policy Area and have minimal off-site impacts with respect to noise, air, water and waste emissions, traffic generation and movement.
- 4 Development listed as non-complying is generally inappropriate.

Form and Character

5 Development should be consistent with the Desired Character for the Zone.

Design and Appearance

6 Development should be of a high standard of architectural design and finish which is appropriate to the City's role and image as the capital of the State.



NORTH ADELAIDE HISTORIC (CONSERVATION) ZONE

NAH(C)Z1 - Hill Street Policy Area NAH(C)Z2 - Childers East Policy Area NAH(C)Z3 - Wellington Square Policy Area NAH(C)Z4 - Tynte Policy Area NAH(C)Z5 - Carclew Policy Area NAH(C)Z5 - Carclew Policy Area NAH(C)Z7 - Lefevre Policy Area NAH(C)Z8 - Cathedral Policy Area NAH(C)Z8 - Cathedral Policy Area NAH(C)Z9 - Women's and Children's Hospital Policy Area NAH(C)Z10 - Stanley West Policy Area NAH(C)Z11 - Kentish Arms Policy Area

CAPITAL CITY ZONE

- CC CAPITAL CITY ZONE
- CC13 Central Business Policy Area
- CC14 Main Street Policy Area

PARK LANDS ZONE

- PL16 Golf Links Policy Area
- PL17 Northern Park Lands Policy Area
- PL18 River Torrens East Policy Area
- PL19 Botanic Park Policy Area
- PL20 Rundle and Rymill Parks Policy Area
- PL21 Eastern Park Lands Policy Area
- PL22 Southern Park Lands Policy Area
- PL23 Western Park Lands Policy Area
- PL24 River Torrens West Policy Area
- PL25 Adelaide Oval Policy Area
- PL26 Brougham and Palmer Gardens Policy Area

RIVERBANK ZONE

Rb27 - Health Policy Area Rb28 - Entertainment Policy Area

CITY LIVING ZONE

- CiL29 East Terrace Policy Area
- CiL30 South Terrace Policy Area
- CiL31 South East Policy Area
- CiL32 South Central Policy Area
- CiL33 South West Policy Area

CITY FRAME ZONE

CF - CITY FRAME ZONE

MAIN STREET ZONES

MS(O) - MAIN STREET (O'CONNELL) ZONE MS(ME) - MAIN STREET (MELBOURNE EAST) ZONE MS(H) - MAIN STREET (HUTT) ZONE MS(A) - MAIN STREET (ADELAIDE) ZONE

MIXED USE (MELBOURNE WEST) ZONE

MU(MW) - MIXED USE (MELBOURNE WEST) ZONE

INSTITUTIONAL ZONES

- I1 INSTITUTIONAL (ST ANDREW'S) ZONE
- 12 INSTITUTIONAL (GOVERNMENT HOUSE) ZONE
- 13 INSTITUTIONAL (UNIVERSITY/HOSPITAL)

ADELAIDE HISTORIC (CONSERVATION) ZONE

AH(C)Z - ADELAIDE HISTORIC (CONSERVATION) ZONE

Appendix E

CURRENT CERTIFICATE OF TITLE



Register Search 09/12/2016 05:29PM 2284731T 20161209010955 \$27.75

The Registrar-General certifies that this Title Register Search displays the records maintained in the Register Book and other notations at the time of searching.



Registrar-General

ROPERTY ACT, 1880

Australia

duth

Certificate of Title - Volume 5842 Folio 466

Parent Title(s)CT 5812/12Dealing(s)TG 8994531Creating Title09/03/2001Edition1

Edition Issued 09/03/2001

Estate Type

FEE SIMPLE

Registered Proprietor

DOMINICAN CONVENT INC. OF 225 CROSS ROAD CUMBERLAND PARK SA 5041

Description of Land

ALLOTMENT 329 FILED PLAN 181171 IN THE AREA NAMED ADELAIDE HUNDRED OF ADELAIDE

Easements

SUBJECT TO EASEMENT(S) OVER THE LAND MARKED A TO DISTRIBUTION LESSOR CORPORATION (SUBJECT TO LEASE 8890000) (TG 8994531)

Schedule of Dealings

Dealing Number Description

7139956

APPLICATION AGREEMENT PERSUANT TO SECTION 39(D) OF THE CITY OF ADELAIDE DEVELOPMENT CONTROL ACT, 1976

Notations

Dealings Affecting Title

NIL

Priority Notices

Land Services

Page 1 of 3



Register Search 09/12/2016 05:29PM 2284731T 20161209010955 \$27.75

NIL

Notations on Plan

NIL

Registrar-General's Notes

NIL

Administrative Interests

CONFIRMED IN SA HERITAGE REGISTER 11/09/1986

Land Services



Register Search 09/12/2016 05:29PM 2284731T 20161209010955 \$27.75





0 15 30 45 60 Metres

Land Services

Copyright Privacy Disclaimer: www.sailis.sa.gov.au/home/showCopyright www.sailis.sa.gov.au/home/showPrivacyStatement www.sailis.sa.gov.au/home/showDisclaimer

Appendix F

HISTORICAL AERIAL PHOTOGRAPHS







e132260









Appendix G

EPA SECTION 7 SEARCH



Environment Protection Authority







GPO Box 2607 Adelaide SA 5001 250 Victoria Square Adelaide SA T (08) 8204 2000 F (08) 8204 2020 Country areas 1800 623 445

Parsons Brinckerhoff Level 1 1 King William Street ADELAIDE SA 5000

jokirk@pb.com.au

Contact: Section 7 Telephone: (08) 8204 2026 Email: epasection7@sa.gov.au

Contact: Public Register Telephone: (08) 8204 9128 Email: epa.publicregister@sa.gov.au

28 November, 2016

EPA STATEMENT TO FORM 1 - CONTRACTS FOR SALE OF LAND OR BUSINESS

The EPA provides this statement to assist the vendor meet its obligations under section 7(1)(b) of the *Land and Business (Sale and Conveyancing) Act 1994.* A response to the questions prescribed in Schedule 1-Contracts for sale of land or business-forms (Divisions 1 and 2) of the *Land and Business (Sale and Conveyancing) Act 1994* is provided in relation to the land.

I refer to your enquiry concerning the parcel of land comprised in

Title ReferenceCT Volume 5842 Folio 466Address253 Franklin Street, ADELAIDE SA 5000

Schedule – Division 1 – Land and Business (Sale and Conveyancing) Regulations 2010

PARTICULARS OF MORTGAGES, CHARGES AND PRESCRIBED ENCUMBRANCES AFFECTING THE LAND

7. Environment Protection Act 1993

Does the EPA hold any of the following details relating to the *Environment Protection Act 1993*:

7.1	Section 59 - Environment performance agreement that is registered in relation to the land.	NO
7.2	Section 93 - Environment protection order that is registered in relation to the land.	NO
7.3	Section 93A - Environment protection order relating to cessation of activity that is registered in relation to the land.	NO
7.4	Section 99 - Clean-up order that is registered in relation to the land.	NO
7.5	Section 100 - Clean-up authorisation that is registered in relation to the land.	NO
7.6	Section 103H - Site contamination assessment order that is registered in relation to the land.	NO
7.7	Section 103J - Site remediation order that is registered in relation to the land.	NO
7.8	Section 103N - Notice of declaration of special management area in relation to the land (due to possible existence of site contamination).	NO
--------	---	----
7.9	Section 103P - Notation of site contamination audit report in relation to the land.	NO
7.10	Section 103S - Notice of prohibition or restriction on taking water affected by site contamination in relation to the land.	NO
Sched	ule – Division 2 – Land and Business (Sale and Conveyancing) Regulations 2010	
PARTI	CULARS RELATING TO ENVIRONMENT PROTECTION	
3-Lice	nces and exemptions recorded by EPA in public register	
Does t	he EPA hold any of the following details in the public register:	
a)	details of a current licence issued under Part 6 of the <i>Environment Protection Act</i> 1993 to conduct, at the land-	
i)	a waste or recycling depot (as referred to in clause 3(3) of Schedule 1 Part A of that Act); or	NO
ii)	activities producing listed wastes (as referred to in clause 3(4) of Schedule 1 Part A of that Act); or	NO
iii)	any other prescribed activity of environmental significance under Schedule 1 of that Act?	NO
b)	details of a licence no longer in force issued under Part 6 of the <i>Environment Protection Act</i> 1993 to conduct, at the land-	
i)	a waste or recycling depot (as referred to in clause 3(3) of Schedule 1 Part A of that Act); or	NO
ii)	activities producing listed wastes (as referred to in clause 3(4) of Schedule 1 Part A of that Act); or	NO
iii)	any other prescribed activity of environmental significance under Schedule 1 of that Act?	NO
c)	details of a current exemption issued under Part 6 of the <i>Environment Protection Act 1993</i> from the application of a specified provision of that Act in relation to an activity carried on at the land?	NO
d)	details of an exemption no longer in force issued under Part 6 of the <i>Environment Protection Act 1993</i> from the application of a specified provision of that Act in relation to an activity carried on at the land?	NO
e)	details of a licence issued under the repealed <i>South Australian Waste Management</i> <i>Commission Act 1979</i> to operate a waste depot at the land?	NO
f)	details of a licence issued under the repealed <i>Waste Management Act 1987</i> to operate a waste depot at the land?	NO
g)	details of a licence issued under the repealed <i>South Australian Waste Management</i> <i>Commission Act 1979</i> to produce waste of a prescribed kind (within the meaning of that Act) at the land?	NO

h)	details of a licence issued under the repealed <i>Waste Management Act 1987</i> to produce prescribed waste (within the meaning of that Act) at the land?	NO
4-Poll	lution and site contamination on the land - details recorded by the EPA in public register	
Does land:	the EPA hold any of the following details in the public register in relation to the land or part of the	
a)	details of serious or material environmental harm caused or threatened in the course of an activity (whether or not notified under section 83 of the <i>Environment Protection Act 1993</i>)?	NO
b)	details of site contamination notified to the EPA under section 83A of the <i>Environment</i> <i>Protection Act 1993</i> ?	NO
c)	a copy of a report of an environmental assessment (whether prepared by the EPA or some other person or body and whether or not required under legislation) that forms part of the information required to be recorded in the public register?	NO
d)	a copy of a site contamination audit report?	NO
e)	details of an agreement for the exclusion or limitation of liability for site contamination to which section 103E of the <i>Environment Protection Act</i> 1993 applies?	NO
f)	details of an agreement entered into with the EPA relating to an approved voluntary site contamination assessment proposal under section 103I of the <i>Environment Protection Act</i> 1993?	NO
g)	details of an agreement entered into with the EPA relating to an approved voluntary site remediation proposal under section 103K of the <i>Environment Protection Act 1993?</i>	NO
h)	details of a notification under section 103Z(1) of the <i>Environment Protection Act 1993</i> relating to the commencement of a site contamination audit?	NO
i)	details of a notification under section 103Z(2) of the <i>Environment Protection Act</i> 1993 relating to the termination before completion of a site contamination audit?	NO
j)	details of records, held by the former <i>South Australian Waste Management Commission</i> under the repealed <i>Waste Management Act 1987</i> , of waste (within the meaning of that Act) having been deposited on the land between 1 January 1983 and 30 April 1995?	NO
5-Poll	lution and site contamination on the land - other details held by EPA	
Does	the EPA hold any of the following details in relation to the land or part of the land:	
a)	a copy of a report known as a "Health Commission Report" prepared by or on behalf of the <i>South Australian Health Commission</i> (under the repealed <i>South Australian Health Commission Act 1976</i>)?	NO
b)	details (which may include a report of an environmental assessment) relevant to an agreement entered into with the EPA relating to an approved voluntary site contamination assessment proposal under section 103I of the <i>Environment Protection Act 1993?</i>	NO
c)	details (which may include a report of an environmental assessment) relevant to an agreement entered into with the EPA relating to an approved voluntary site remediation proposal under section 103K of the <i>Environment Protection Act</i> 1993?	NO

d)	a copy of a pre-1 July 2009 site audit report?	NO
e)	details relating to the termination before completion of a pre-1 July 2009 site audit?	NO

All care and diligence has been taken to access the above information from available records. Historical records provided to the EPA concerning matters arising prior to 1 May 1995 are limited and may not be accurate or complete and therefore the EPA cannot confirm the accuracy of the historical information provided.

Appendix H

DANGEROUS GOODS REGISTER SEARCH



Government of South Australia

SafeWork SA

Attorney-General's Department

Licensing, Customer Services Team

Level 4 World Park A 33 Richmond Road Keswick SA 5035

GPO Box 465 Adelaide SA 5001

DX 715 Adelaide

 Phone
 1300 365 255

 Fax
 08 8204 9200

 Email
 licensing.safework@sa.gov.au

 ABN
 50-560-588-327

www.safework.sa.gov.au

Dear Joel,

Joel Kirk

30 November 2016

WSP - Parsons Brinckerhoff

Level 1, 1 King William Street

ADELAIDE SA 5000

DANGEROUS SUBSTANCES LICENCE SEARCH

PROPERTY DETAILS - 253 Franklin Street, ADELAIDE

Further to your Application for a Dangerous Substance Search dated **22 November 2016** for the abovementioned site, I advise that there are no current or historical records for this site.

Yours sincerely

Ptro p

X MANAGER LICENSING, CUSTOMER SERVICES TEAM SAFEWORK SA

Appendix I

BORELOGS



BOREHOLE NO.

BH01

Clie Pro Bor	nt: ject: eho l	.e Lo	cation:	St Mar St Mar 253 Fra	y's C y's C ankli	college college n Stre	e Re et, /	development Adelaide 5000, SA.	Da Da Re	te Com te Com corded	imenced: 5/10/16 ipleted: 5/10/16 By: JK				
Pro Dril Bor	ject l I Mo ehol	Num de l /N e Di	ber: /lounting: ameter:	228473 Rockm 50 mm	31T naste	r		Hole Angle: -90° Surfa Bearing: — Со-ог	ce F rds:	Lo RL: E 2	E 279697 N 6132284 MGA94 54				
	E	Borel	nole Inform	nation				Field Material D	esc	ription					
; МЕТНОD	SUPPORT	WATER	RL (m AHD) DEPTH (m)	FIELD TEST	SAMPLE	GRAPHIC LOG	USCS SYMBOL	SOIL/ROCK MATERIAL FIELD DESCRIPTION	MOISTURE		HAND PENETROMETER (kPa)	STRUCTURE AND ADDITIONAL OBSERVATIONS			
AS		NFGWE	0.02-	- - BH01_ 0.15 - 0.25 m PID = 0.2 ppm BH01_ - 0.50 - 0.60 m DID = 0.2	ES			ASPHALT FILL: Gravelly Sand; fine to coarse grained, pale white, brown, fine to medium grained sub-angular gravel FILL: Sand; medium to coarse grained, pale brown, with fine to coarse grained sub-angular gravel, trace calcareous material				0.02-0.15 m: Inferred Roadbase 0.15-0.7 m: Blue asphalt fragments observed			
PT	-		1.0- 1.10	BH01_ - 1.20 - - 1.30 m	ES		SC	Clayey SAND; fine to coarse grained, pale orange-brown, low plasticity, trace fine grained gravel Sandy CLAY; low plasticity, pale orange-brown, fine to coarse grained, trace fine grained gravel	M ->P			1.0-1.2 m: Sample 58212			
ר 10/ 10/2010 וביאו טפעשיני א באשריי א בי			^{1.45}	BH01 2.00 2.10 m PID = 0.0 ppm	ES			Sandy CLAY; low to medium plasticity, grey-brown with pale white mottle, fine grained sand	>P			-			
000.0FU >>PURAWIIBI IIV			2.5(2.5 -	-			CH	Sandy CLAY; high plasticity, grey-brown with pale white mottle, fine grained sand	>P			2.5-2.7 m: Sample 58213			
			3.0	BH01_ 2.90 - 3.00 m PID = 0.0 ppm	ES		Un ·	CLAY, high plasticity, grey with red mottle.	~r		400 500	-			
			3.5	-							480	-			
			4.0	-							450	-			
				-							450	4.5-4.7 m: Sample 58214			



BOREHOLE NO.

BH01

Clie Pro Bor	ent: ject: eho l	e Lc	ocation:	St Mar St Mar 253 Fr	ry's (ry's (rank l i	Colleg Colleg	e e Re	development Adelaide 5000, SA				Da Da Re	te Com te Com corded	menced: 5/10/16 pleted: 5/10/16 By: JK
Pro <u></u> Drill Bor	ject l I Mo ehol	Num de l /ľ	nber: Mounting: ameter:	22847 Rockr 50 mn	31T naste	er		, Hole Angle: Bearing:	-90°	Surfac	ce R	Lo: L: F 2	g Chec 79697	ked By: MDL
	E	Bore	hole Inform	nation				Bodinig.	Field Ma	terial De	scri			
МЕТНОD	SUPPORT	WATER	RL (m AHD) DEPTH (m)	FIELD TEST	SAMPLE	GRAPHIC LOG	USCS SYMBOL	SOIL/ROCK MATERIAL FIEL	D DESCRIPTIC	DN	MOISTURE		HAND PENETROMETER (kPa)	STRUCTURE AND ADDITIONAL OBSERVATIONS
PT		NFGWE	5.5 -	-			CH	CLAY, high plasticity, grey with red m	ottle.		>PL		590 >600	
ped by Datgel Pty Ltd			6.9 6.0 -	-				END OF BOREHOLE AT 6.00 m Target depth Backfilled					500	-
DrawingFile>> 18/10/2016 12:47 Devel			7.0 - 7.5 -	-										
J LOG SI MARY'S BH LOGS GPJ <			8.0 -	-										
			8.5 -	-										
erhoff Australia Mry Lto. VUU 8.30.002 MD LLD			9.0 -	-										
arsons brince				This	Boreh	nole log	g sho	uld be read in conjunction with P	arsons Brinc	ckerhoff's	 acco	mpanying s	standard	notes.



BOREHOLE NO.

BH02

SHEET: 1 OF 2

Clie Pro Bor Pro	ent: ject eho ject	: le Lo Num	cation: iber:	5 2 2	St Mary's College St Mary's College Redevelopment 253 Franklin Street, Adelaide 5000, SA. 2284731T								Da Da Re Log	te Com te Com corded g Checl	menced: pleted: By: ked By:	5/10/16 5/10/16 JK MDL
Drill Bor	l Mo eho	odel/N le Di	Mounting	: F 5	Rockm 50 mm	aste	r		Hole Angle: -90° Surfa Bearing: — Co-o	ace rds:	RL	.:	E 27	79730	N 6132292 I	MGA94 54
		Bore	hole Info	rmat	tion				Field Material D)esc	rip	otion				
МЕТНОD	SUPPORT	WATER	RL (m AHD) DEPTH (m)		FIELD TEST	SAMPLE	GRAPHIC LOG	USCS SYMBOL	SOIL/ROCK MATERIAL FIELD DESCRIPTION					HAND PENETROMETER (kPa)	STRUCTU OB	RE AND ADDITIONAL SERVATIONS
Ρī		NFGWE			BH02_ 0.00 - 0.10 m	ES	· · ·	SP	SAND; fine to coarse grained, dark brown, with organic matter and rootlets	· ŀ	VI					
			0.20- 0.30-	P	PID = 0.1 ppm		· · · ·	SP	SAND; fine to coarse grained, dark brown, with fine grained gravel, with organic matter and rootlets	Ţ	N N					
			0.	.5 - I	BH02_ 0.50 - 0.60 m PID = 0.1	ES			Clayey SAND; fine to coarse grained, dark red-brown, low plasticity fines, trace fine grained gravel, with organic matter and rootlets						0.5-0.8 m: Plas depth	ticity decreasing with
			0.80-		ppm _		(· / · . .] · ' /.	SC	Clayey SAND; fine to coarse grained, pale brown, low plasticity fines, trace fine grained gravel	M	N					
			1.0(1.	0	BH02_ 1.00 - 1.10 m PID = 0.0 ppm	ES		CL- CI	Sandy CLAY; low to medium plasticity, orange-brown, fine grained sand, trace fine grained gravel	>F	PL					
				-										275		
			1.5(1.					CL	Sandy CLAY; low plasticity, grey, brown with orange-brown mottle, fine to coarse grained sand	>F	PL			250 275	1.8-2.0 m: San	- nple 58206
			2.	.0	BH02_ 2.00 - 2.10 m PID = 0.0 ppm	ES								450		
5			2.45- 2.	.5 -				СН	Sandy CLAY; high plasticity, grey with red mottle, fine to coarse grained sand	>F	PL			550		-
			2.70-	-				СН	CLAY; high plasticity, grey with red mottle	>F	PL			550		
			3.	.0 - P 	BH02_ 3.00 - 3.10 m PID = 0.1 ppm	ES								>600		
			3.	.5 -										>600	3.5-3.7 m: San	- nple 58207
				-										>600		
			4.	.0	BH02_ 4.00 - 4.10 m PID = 0.0 ppm	ES								>600		
			4.40- 4.	5					CORE LOSS 1.20m (4.40-5.60)							



BOREHOLE NO.

BH02

SHEFT

Clie Pro Bor Pro	ent: ject: ehol ject	e Lo Num	cation: ber:	St Mar St Mar 253 Fr 228473	y's C y's C ankli 31T	Colleg Colleg in Stre	e e Re eet, /	edevelopment Adelaide 5000, SA.	Dat Dat Rec Log	e Com e Com corded Checl	menced: 5/10/16 pleted: 5/10/16 By: JK ked By: MDL		
Dri l Bor	l Mo ehol	de l /N e Di	Nounting: ameter:	Rockm 50 mm	naste	er		Hole Angle: -90° Surfa Bearing: — Co-o	ace rds	RL: :	E 27	9730	N 6132292 MGA94 54
Г	E	Bore	hole Inforn	nation				Field Material D	es	riptic	n		
METHOD	SUPPORT	WATER	RL (m AHD) DEPTH (m)	FIELD TEST	SAMPLE	GRAPHIC LOG	USCS SYMBOL	SOIL/ROCK MATERIAL FIELD DESCRIPTION				HAND PENETROMETER (kPa)	STRUCTURE AND ADDITIONAL OBSERVATIONS
PT		NFGWE	5.5-				СН	CORE LOSS 1.20m (4.40-5.60) CLAY; high plasticity, grey with red mottle	~	PL 		>600	5.7-5.9 m: Sample 58208
1G ST MARY'S BH LUGSGEPJ < <drawing-he>> 18/10/2016 12:47 Developed by Daget Pty Lid</drawing-he>			6.5 - 7.0 - 7.5 - 8.0 -					END OF BOREHOLE AT 6.00 m Target depth Backfilled					-
CERE LOG PB NON-CORED LC			8.5 -	-									-
ווהגפוחסוד Australia Fry Lto. עיט מ. אי עיטב רם בום זי ו			9.0 - 9.5 -										



BOREHOLE NO.

BH03

SHEET

Clie Proj Bor Proj	ent: ject: ehol ject	le Lo Nurr	cation: iber:		St Mary's College St Mary's College Redevelopment 253 Franklin Street, Adelaide 5000, SA. 2284731T									Structure Structure <t< th=""></t<>
Dri l Bor	l Mo ehol	de l /N le Di	Mountir ameter	ng: ::	Rockm 50 mm	aste	r		Hole Angle: -90 ° Surfa Bearing: <mark>—</mark> Co-o	nce rds	R ::	L: E 27	79732	N 6132278 MGA94 54
	E	Bore	hole In	form	ation				Field Material D	es	cri	ption		I
METHOD	SUPPORT	WATER	RL (m AHD)	DEPTH (m)	FIELD TEST	SAMPLE	GRAPHIC LOG	USCS SYMBOL	SOIL/ROCK MATERIAL FIELD DESCRIPTION		MOISTURE		HAND PENETROMETER (kPa)	STRUCTURE AND ADDITIONAL OBSERVATIONS
PT				-	BH03_ 0.00 - 0.10 m PID = 0.0	ES			FILL: Sand; medium to coarse grained, brown, with rootlets and organic material		М			
			0.3	30 - 0.5 - -	BH03_ 0.50 - 0.70 m PID = 0.1	ES			FILL: Sand; fine to coarse grained, dark brown, with low to medium plasticity day, trace fine grained gravel, with calcareous material, rootlets, organic material, brick and slag fragments	+	м			
			0.7	- - 1.0 -	Ppm QC01 QC02 BH03_ 1.00 - 1.10 m PID = 0.2 ppm	ES		SP	Gravelly SAND; fine to coarse grained, pale orange-brown, sub-angular to sub-rounded fine to medium grained gravel		м			
		05/10/16	1.4	45 1.5 — - -				CI	Sandy CLAY; medium plasticity, pale orange-brown, fine to coarse grained sand, trace fine grained gravel	>	PL		40	1.5-1.6 m: Sample 58209
				- 2.0	BH03_ 2.00 - 2.10 m PID = 0.3 ppm	ES							50	
			2/	2.5									320	
			3.0					CI	Sandy CLAY; medium plasticity, grey-brown with yellow-brown and orange-red-brown mottle, fine to coarse grained sand, trace black fine grained gravel	>	PL		270	
5			3.4	10				СН	CLAY; high plasticity, grey with red mottle	>	PL		280 250	3.4-3.6 m: Sample 58210
				- 4.0 — -	BH03_ 4.00 - 4.10 m PID = 0.0 ppm	ES								
``````````````````````````````````````				- 4.5—									440 330	
				-									500	
					This E	Boreh	ole log	l sho	uld be read in conjunction with Parsons Brinckerhoff's	s ac	co	mpanying s	standard	notes.



### **BOREHOLE ENGINEERING LOG**

BOREHOLE NO.

# **BH03**

SHEET

Pro Bor Pro	ent: ject: ehol ject	le Lo Num	cation: iber:		St Mar St Mar 253 Fra 228473	y's C y's C ankli 31T	colleg colleg n Stre	e e Re eet, <i>i</i>	development Adelaide 5000, SA.	Da Da Re Lo	Date Commenced:5/10/16Date Completed:5/10/16Recorded By:JKLog Checked By:MDL				
Dri <b>l</b> Bor	l Mo ehol	de <b>l</b> /N le Di	Mountir ameter	ng: :	Rockm 50 mm	aste	r		Hole Angle: <b>-90°</b> Bearing: —	ŀ	Surfac Co-orc	e R ls:	L: E 2	79732	N 6132278 MGA94 54
	E	Bore	hole In	form	ation	_			Fiel	d Mat	erial De	scri	ption		1
МЕТНОD	SUPPORT	WATER	RL (m AHD)	DEPTH (m)	FIELD TEST	SAMPLE	GRAPHIC LOG	USCS SYMBOL	SOIL/ROCK MATERIAL FIELD DESC	RIPTION	N	MOISTURE		HAND PENETROMETER (kPa)	STRUCTURE AND ADDITIONAL OBSERVATIONS
PI				- - - 5.5 — - - -	BH03	FS			CLAY; high plasticity, grey with red mottle			>PL		340 340 340 400	5.2-5.4 m: Sample 58211
pped by Datgel Mty Ltd			6.6	₩6.0 - - 6.5 - -	5.90 - 6.00 m PID = 0.0 ppm	ES	/ /		END OF BOREHOLE AT 6.00 m Target depth Backfilled						
< <ul> <li><uramingfile>&gt; 18/10/2015 12:47 Development</uramingfile></li> </ul>				7.0											
				- - 8.0 - -											
				8.5											-
10. VUV 0.000 1 2 1 200 000 000				- 9.0 - - - -											
S BRIICKEITIUII AUSualia 1 y L				9.5 — - - -											



BOREHOLE NO.

## BH04

SHEET : 1 OF 1

Clie Proj Bore Proj	ent: ject: ehol ject	le Lo Num	cation: ber:	St Mary's College St Mary's College Redevelopment 253 Franklin Street, Adelaide 5000, SA. 2284731T								te Com te Com corded g Checl	menced: pleted: By: ked By:	5/10/16 5/10/16 JK MDL
Dri <b>ll</b> Bor	l Mo ehol	Model/Mounting:RockmasterHole Angle:-90°Surface RL:ehole Diameter:50 mmBearing:—Co-ords:E 279769								9769	N 6132289	MGA94 54		
	Ē	Bore	hole Inform	nation				Field Material D	esc	ri	ption			
METHOD	SUPPORT	WATER	RL (m AHD) DEPTH (m)	FIELD TEST	SAMPLE	GRAPHIC LOG	USCS SYMBOL	SOIL/ROCK MATERIAL FIELD DESCRIPTION	MOISTURE			HAND PENETROMETER (kPa)	STRUCT	JRE AND ADDITIONAL BSERVATIONS
AS HA			0.05 0.10 0.40	BH04_ - 0.10 - 0.20 m - PID = 0.5 ppm	ES			BRICK PAVER  FILL: Sand; fine to coarse grained, yellow  FILL: Clayey Sand; fine to medium grained, brown, dark brown, low to medium plasticity clay, trace fine to medium grained gravel, brick fragments, calcareous material		<u>Л</u> Л				
AS	-		0.5( <b>0.5</b> -	BH04_ - 0.50 - 0.60 m - PID = 0.2 _ ppm	ES	> > 2 0	SP	FILL: Clayey Sano; Tine to medium grained, prown, oark brown, low to medium plasticity (day, with fine to coarse grained gravel, brick fragments, calcareous material Gravelly SAND; fine to coarse grained, pale brown, fine to coarse grained sub-angular to sub-rounded gravel Gravelly CLAY; low plasticity, pale white, brown, fine to medium grained sub-rounded gravel, trace fine to medium grained sub-rounded gravel, trace fine to medium	/ N / >F	// // PL				-
			1.0 · 1.25 —	BH04_ - 1.00 - 1.10 m - PID = 0.0 ppm	ES	0	CL	Gravely CLAY; low plasticity, pale white, orange-brown, fine to	>F	۶L			1.25-2.1 m: G	- iravel content decreasing
		05/10/16	1.5	-				grained sand					1.5-1.65 m: S	ample 58204 -
PT			2.0 · 2.10	BH04_ - 2.10 - 2.20 m - PID = 0.1	ES		CL	Gravelly CLAY; low plasticity, pale white, orange-brown, fine grained rounded black gravel, trace fine to medium grained sand	>F	֊				
			2.40 2.5 - 2.65	- - -	1			Sandy CLAY; medium plasticity, pale white, brown, with pale white orange-brown mottle, fine grained sand, trace fine grained gravel	>F	า		110 160		-
			3.0 -	- - - - - - 3.10 m - PID = 0.0	ES		СН	orange-brown mottle, fine to coarse grained sand, trace fine grained gravel				330 290		
			3.5	- - - -	J							320 340		-
I			<del>4.0</del> 4.0-	-								390 	3.8-4.0 m: Sa	mple 58204
,			4.5	-				EIN OF BOREHOLE AT 4.00 m Target depth Backfilled						
┝				 This E	Boreh	lole log	) g sho	uld be read in conjunction with Parsons Brinckerhoff's	aco	cor	mpanying s	tandard	notes.	

#### PARSONS **(ERHOFF** Explanatory Notes — Soil Description

In engineering terms soil includes every type of uncemented or partially cemented inorganic material found in the ground. In practice, if the material can be remoulded by hand in its field condition or in water it is described as a soil. The dominant soil constituent is given in capital letters, with secondary textures in lower case. The dominant feature is assessed from the Unified Soil Classification system and a soil symbol is used to define a soil layer as follows:

#### -----

SUPPO	DRT
С	Casing
Μ	Drill mud
Nil	No support
FIELD	TEST
DM	Dilatometer test
HB	Hammer bounce
OT	Other test (eg. plate load test)
PE	Permeability test
PM	Pressuremeter test
PP	Pocket penetrometer
SPT	Standard penetration test
SV	Shear vane test
SAMPI	_E
В	Bulk disturbed sample
D	Disturbed sample
PT	Push tube
SPT	SPT sample
1150	I Indisturbed comple in 50mm diar

- Undisturbed sample in 50mm diameter tube U50
- U75 Undisturbed sample in 75mm diameter tube

#### UNIFIED SOIL CLASSIFICATION

The appropriate symbols are selected on the result of visual examination, field tests and available laboratory tests, such as, sieve analysis, liquid limit and plasticity index.

USC Symbol	Description
GW	Well graded gravel
GP	Poorly graded gravel
GM	Silty gravel
GC	Clayey gravel
SW	Well graded sand
SP	Poorly graded sand
SM	Silty sand
SC	Clayey sand
ML	Silt of low plasticity
CL	Clay of low plasticity
OL	Organic soil of low plasticity
CI	Clay of medium or intermediate plasticity
MH	Silt of high plasticity
СН	Clay of high plasticity
OH	Organic soil of high plasticity
Pt	Peaty Soil

#### **MOISTURE CONDITION**

- Dry - Cohesive soils are friable or powdery Cohesionless soil grains are free-running
- Moist Soil feels cool, darkened in colour Cohesive soils can be moulded Cohesionless soil grains tend to adhere
- Cohesive soils usually weakened Wet Free water forms on hands when handling For cohesive soils the following codes may also be used: MC>PL Moisture Content greater than the Plastic Limit.
- MC~PL Moisture Content near the Plastic Limit. MC<PI Moisture Content less than the Plastic Limit.

#### WATER SYMBOLS AND DEFINITIONS

> Water inflow

#### Complete water loss



Water level at date shown

#### **COHESIVE SOILS - CONSISTENCY**

The consistency of a cohesive soil is defined by descriptive terminology such as very soft, soft, firm, stiff, very stiff and hard. These terms are assessed by the shear strength of the soil as observed visually, by the pocket penetrometer values and by resistance to deformation to hand moulding.

A Pocket Penetrometer may be used in the field or the laboratory to provide approximate assessment of unconfined compressive strength of cohesive soils. The values are recorded in kPa, as follows:

Strength	Symbol	Pocket Penetrometer Reading (kPa)
Very Soft	VS	< 25
Soft	S	25 to 50
Firm	F	50 to 100
Stiff	St	100 to 200
Very Stiff	VSt	200 to 400
Hard	Н	> 400

#### **COHESIONLESS SOILS - RELATIVE DENSITY**

Relative density terms such as very loose, loose, medium, dense and very dense are used to describe silty and sandy material, and these are usually based on resistance to drilling penetration or the Standard Penetration Test (SPT) 'N' values. Other condition terms, such as friable, powdery or crumbly may also be used.

The Standard Penetration Test (SPT) is carried out in accordance with AS 1289, 6.3.1. For completed tests the number of blows required to drive the split spoon sampler 300 mm is recorded as the N value. For incomplete tests the number of blows and the penetration beyond the seating depth of 150 mm are recorded. If the 150 mm seating penetration is not achieved the number of blows to achieve the measured penetration is recorded. SPT correlations may be subject to corrections for overburden pressure and equipment type.

Term	Symbol	Density Index	N Value (blows /0.3 m)	DCP (blows /100m
Very Loose	VL	0 to 15	0 to 4	0 to 1
Loose	L	15 to 35	4 to 10	1 to 2
Medium Dense	MD	35 to 65	10 to 30	2 to 5
Dense	D	65 to 85	30 to 50	5 to 10
Very Dense	VD	>85	>50	>10

#### **COHESIONLESS SOILS - PARTICLE SIZE TERMS**

Name	Subdivision	Size
Boulders		>200mm
Cobbles		63mm to 200mm
	coarse	20mm to 63mm
Gravel	medium	6mm to 20mm
	fine	2.36mm to 6mm
	coarse	0.6mm to 2.36mm
Sand	medium	0.2mm to 0.6mm
	fine	0.075mm to 0.2mm

#### NFGWO **No Free Groundwater Observed**

The observation of groundwater, whether present or not, was not possible due to drilling water, surface seepage or cave in of the borehole/test pit.

#### **No Free Groundwater Encountered** NFGWE

The borehole/test pit was dry soon after excavation. Inflow may have been observed had the borehole/test pit been left open for a longer period.

#### PARSONS BRINCKERHOFF

### Explanatory Notes — Rock Description

The rock is described with strength and weathering symbols as shown below. Other features such as bedding and dip angle are given.

#### DRILLING/EXCAVATION METHODS

Symbol	Term	
AS	Auger Screwing	
EX	Excavation	
HA	Hand Auger	
NMLC/HMLC	Diamond Core –triple tube	
NQ/HQ/PQ	Diamond Core – wireline	
PC	Percussion	
PCB	Poly Carbonised Diamond Bit	
PT	Push Tube	
RAB	Rotary Air Blast	
RC	Reverse Circulation	
S	Sonic drill	
VB	Vibrocoring	
WB	Washbore with blade	
WR	Washbore with roller (tricone)	

#### **ROCK MATERIAL WEATHERING**

Rock weathering is described mainly using the following abbreviations and definitions used in AS1726.

Term	Symbol	Definition
Residual soil	RS	Soil developed on extremely weathered rock, the mass structure & substance fabric are no longer evident; there is a large change in volume but the soil has not been significantly transported.
Extremely weathered	XW	Rock is weathered to such an extent that it has 'soil' properties, ie: it either disintegrates or can be remoulded in water, but the texture of original rock is evident.
Highly weathered	HW	Rock substance affected by weathering to the extent that limonite staining or bleaching affects the whole of the rock substance and other signs of chemical or physical decomposition are evident. Porosity and strength may be increased or decreased compared to fresh rock usually as a result of iron leaching or deposition. The colour and strength of the original rock substance
Distinctly weathered	DW	Rock strength usually changed by weathering. The rock may be highly discoloured, usually iron staining. Porosity may be increased by leaching, or may be decreased due to deposition of weathering products in pores.
Moderately weathered	MW	Rock substance affected by weathering to the extent that staining extends throughout the whole of the rock substance and the original colour of the fresh rock is no longer recognisable
Slightly weathered	SW	Rock is slightly discoloured but shows little or no change of strength from fresh rock.
Fresh	FR	Rock shows no sign of decomposition or staining.

If differentiation between highly and moderately weathered rock cannot be determined, then distinctly weathered is used which complies to terms described in Australian Standard AS1726.

#### **ROCK QUALITY**

The fracture spacing is shown where applicable and the Rock Quality Designation (RQD) where:

#### **ROCK STRENGTH**

Rock strength is described using AS1726 & ISRM - Commission on Standardisation of Laboratory & Field Tests, "Suggested method of determining the Uniaxial Compressive Strength of Rock materials & the Point Load Index", as follows:

Term	Symbol	Point Load Index Is ₍₅₀₎ (MPa)
Extremely Low	EL	<0.03
Very Low	VL	0.03 to 0.1
Low	L	0.1 to 0.3
Medium	М	0.3 to 1
High	Н	1 to 3
Very High	VH	3 to 10
Extremely High	EH	>10

Diametral Point Load Index test

Axial Point Load Index test

#### DEFECT SPACING/BEDDING THICKNESS

Measured at right angles to defects of same set or bedding.

The method of measurement shall be reported.

Term	Defect Spacing	Bedding
Extremely closely spaced	<6 mm 6 to 20 mm	Thinly Laminated Laminated
Very closely spaced	20 to 60 mm	Very Thin
Closely spaced	0.06 to 0.2 m	Thin
Moderately widely spaced	0.2 to 0.6 m	Medium
Widely spaced	0.6 to 2 m	Thick
Very widely spaced	>2 m	Very Thick

#### DEFECT DESCRIPTION

Symbol	Term	Symbol	Term
Bg	Bedding	DB	Drill Break
Pt	Parting	Se	Seam
Cn	Contact	SZ	Sheared Zone
Bd	Boundary	CZ	Crushed Zone
Jt	Joint	F	Fault
Fo	Foliation	Vn	Vein
С	Cleavage		

#### PLANARITY/ROUGHNESS

Planarity	Description	Planarity	Description
PI	Planar	Cu	Curved
Un	Undulating	Vu	Vuggy
lr	Irregular	Wv	Wavy
St	Stepped		
Roughness	Description	Roughness	Description

	-	¥	-
Sm	Smooth	Po	Polished
Ro	Rough	SI	Slickensided
The inclination	if defects are my	actured from the	nornondioulor

The inclination if defects are measured from the perpendicular to the core axis.

#### COATING OR INFILLING

Abbreviation	Description	Abbreviation	Description
Cln	Clean	Со	Coal
Cg	Coating	Cr	Crushed rock
In	infill	Fe	Limonite/ironstone
Sn	Stain	FI	Feldspar
Vr	Veneer	Gp	Gypsum
Са	Calcite	Mn	Manganese
Ch	Chlorite	Ру	Pyrite
CI	Clay	Qz	Quartz

Revised 21/5/2012



### **Graphic Symbols — Soils and Rocks**

Typical symbols for soils and rocks are as follows. Combinations of these symbols may be used to indicate mixed materials such as clayey sand.

#### SOIL SYMBOLS

#### **ROCK SYMBOLS**



Main components

SAND

GRAVEL

CLAY

SILT



**BOULDERS/COBBLES** 

TOPSOIL

PEAT

#### Minor components



Clayey



Sandy

Silty

Gravelly

OTHER MATERIAL SYMBOLS



FILL



BITUMEN



CONCRETE



Igneous rocks



Metamorphic rocks



SLATE, PHYLLITE, SCHIST

GNEISS

QUARTZITE





ATTACHMENT 3 d

# HERITAGE IMPACT STATEMENT

Grieve Gillett Andersen

#### **Heritage Impact Statement**

#### West Terrace Development

1. Demolition

The proposed new building to the corner of West Terrace and Franklin Street will replace the existing Veritas Hall and a small area of carparking. The existing building and parking area are of no heritage value, and do not strongly contribute to providing a suitable context for the State listed Boylan Building and early sections of stone wall fronting Franklin Street.

#### 2. New works and siting

The new facility on the corner site will house a full size netball court, Year 12 GLAs and common areas, PE teaching spaces, and Senior and Junior School Art facilities. The scale and form of the building is in part a response to the spatial requirements of the netball court, but also as a statement to portray the identity of St Mary's College into the public realm.

The siting of the building is intended to be hard against the west and north site boundaries, to reinforce the building as a statement of the school's identity, but also to maximise retention of the Veritas Lawns, and maintain separation from the Boylan Building to retain its prominence.

3. Materials and Finishes

The building is grounded in the site by the masonry plinth element that references the historic enclosure of the school by stone and brick perimeter walls. The plinth will reference the solidity, and material qualities of the other sections of the perimeter wall, but will differentiate itself by the use of banded brick, picking up on the variety of colour and material in other fence sections. The connections between the existing walls to West Terrace and Franklin Street have been carefully considered and will be marked by a slender steel fin connection, that will also reference back to the new entry gates adjacent the Boylan Building.

The upper level of the building envelope is clad in a translucent polycarbonate sheet, providing a lightness and sense of transparency that references the school's desire to portray 'learning on display', whilst also maintaining some privacy for students and staff to the public realm. The selection of a contemporary material is deliberate and is combined with standing seam zinc cladding to the north east and south west corners of the building. The masonry, polycarbonate and zinc have all been selected as self finishing materials, and are used in a way to break up the mass of the building visually.

#### **Boylan Refurbishment and New Reception Pavilion**

1. Internal Refurbishment

The ground floor of the Boylan Building is proposed to be stripped out and refitted with new finishes and furnishing to house Administrative and IT/ICT functions. The interior of the Boylan Building has previously been extensively remodelled and included the removal of the old first floor and replacement with two new levels, which removed a substantial amount of fabric. The proposed refurbishment will focus on retaining key features such as fireplace surrounds, retaining as much volume as possible, and ensuring partitions are located sensitively in relation to window and door openings.

2. New Reception Pavilion

A new contemporary single storey pavilion is proposed to be constructed to the west of the Boylan Building, with a light connection to the existing western wall. The materials and finishes for the pavilion will reference the WTD, utilising zinc cladding and glazed walls to ensure the pavilion sits lightly adjacent the heritage building, and maintain views through to the projecting stairwell behind the reception area.

3. Landscaping, fencing and entry

New landscaping and reconfigured gates are proposed to provide a clear, secure entry point to the school, and improve the presence of the school as it presents to Franklin Street.

ATTACHMENT 3e

LANDSCAPE DESIGN CONCEPT

Jensen Plus



Planning Landscape Architecture Urban Design Social Planning

**JENSEN** 

PLUS

# **ST MARY'S COLLEGE** LANDSCAPE CONCEPT DESIGN

DATE: JUNE 2017 REV: B CODE: P4116 SCALE: 1:300 @ A2



ATTACHMENT 3f

NOISE IMPACT ASSESSMENT

Parsons Brinckerhoff

ST MARY'S COLLEGE

# St Mary's College NOISE IMPACT ASSESSMENT

APRIL 2017



### St Mary's College NOISE IMPACT ASSESSMENT

St Mary's College

REV	DATE	DETAILS
Draft	26/04/2017	Draft

#### AUTHOR, REVIEWER AND APPROVER DETAILS

Prepared by:	T Nguyen	Date: 26/04/2017	Signature:	Huyen
Reviewed by:	C. Marsh	Date: 26/04/2017	Signature:	CHEN
Approved by:	K. Lloyd	Date: 26/04/2017	Signature:	Majer May

#### WSP | Parsons Brinckerhoff

Level 27, Ernst & Young Centre 680 George Street Sydney NSW 2000 GPO Box 5394 Sydney NSW 2001

Tel: +61 2 9272 5100 Fax: +61 2 9272 5101

www.wsp-pb.com

Filename: 2284731PA-170124-TDN-ST MARYS NIA CXM.docx

WSP PARSONS BRINCKERHOFF

This document may contain confidential and legally privileged information, neither of which are intended to be waived, and must be used only for its intended purpose. Any unauthorised copying, dissemination or use in any form or by any means other than by the addressee, is strictly prohibited. If you have received this document in error or by any means other than as authorised addressee, please notify us immediately and we will arrange for its return to us.

# TABLE OF CONTENTS

4	SUMMARY	.5
3.1	Outdoor plant and mechanical noise	3
3	ASSESSMENT	.3
2	CRITERIA	.2
1	INTRODUCTION	.1

# 1 INTRODUCTION

WSP | Parsons Brinckerhoff has been appointed by St Mary's College to undertake a Noise Impact Assessment of the proposed development at 253 Franklin Street, Adelaide, South Australia. The development includes a new two storey school building consisting of standard learning spaces, offices, computer rooms and a gymnasium to serve as a multifunctional space (for sports activities and to serve as an assembly area).

The purpose of this report is to establish criteria for noise sensitive receivers surrounding the proposed site. Noise emissions from mechanical equipment associated with the premises have been predicted and assessed against the established criteria to minimise noise impacts on the neighbourhood surrounding the site.

# 2 CRITERIA

The proposed development for St Mary's College has the potential to contribute to the existing noise environment. In order to ensure that nearby properties are not adversely affected by noise emissions from the development, the design criteria must comply with relevant policy and legislation; South Australia Environment Protection (Noise) Policy 2007 and the Environmental Protection Agency's guideline (Guidelines for the use of the Environment Protection Policy 2007).

The development site is currently listed as a Capital City Zone under the Adelaide City Development Plan. The relevant zoning map for the proposed development and surrounding area is presented in Figure 2.1.



#### Figure 2.1 Land zoning map

The applicable land use categories adjacent to the development are commercial and residential. The indicative noise factor for each land use has been selected and is presented in Table 2.1 in accordance with Clause 4 of the EPA *Guidelines for the use of the Environmental Protection (Noise) Policy.* 

Table 2.1	Land z	oning i	indicative	noise	factor

Land use category	Time	Indicative noise factor, dBA
Residential	Day (7am to 10pm)	52
	Night (10pm to 7am)	45
Commercial	Day (7am to 10pm)	62
	Night (10pm to 7am)	55

# **3** ASSESSMENT

This section provides information on the assessment of plant and mechanical noise emissions from the proposed development. This is to ensure noise from operation of mechanical plant and equipment will not impact the amenity of the neighbouring sensitive receivers based on the limiting criteria provided in Section 2.

#### 3.1 Outdoor plant and mechanical noise

The proposed location of the noise generating plant and mechanical equipment associated with the development is on the roof of the West Terrace building. The plant layout is presented in Figure 3.1. It is considered likely that the rooftop mechanical plant and equipment will be operational during the day time period (7.00am to 10.00pm). As such, predictions have considered only the day time period.



Figure 3.1 Outdoor plant location

Specific plant and mechanical services equipment have not been selected at this stage in the design. An indicative assessment has been undertaken based on the preliminary equipment selections provided by WSP | Parsons Brinckerhoff Buildings to ensure compliance to the noise criteria at the nearest affected receiver. The sound power level for the preliminary selections is presented in Table 3.1.

Equipment	Sound power level, dB(A)								
	63Hz	125Hz	250Hz	500Hz	1000Hz	2000Hz	4000Hz	8000Hz	dB(A)
ACC-L2-01	102	92	88	84	78	72	67	60	86
ACC-L2-02	102	92	88	84	78	72	67	60	86

Equipment	Sound power level, dB(A)								
	63Hz	125Hz	250Hz	500Hz	1000Hz	2000Hz	4000Hz	8000Hz	dB(A)
ACC-L2-03	97	92	88	85	79	71	64	60	86
EVC-L2-01	95	90	85	83	82	79	73	64	86
EVC-L2-02	95	90	85	83	82	79	73	64	86
GEF-L2-01	74	84	75	73	71	68	66	62	85
TEF-L2-01	74	84	75	73	71	68	66	62	85

Table 3.2 presents the predicted noise level at the nearest receiver boundary and the applicable noise criteria. Noise emissions from plant and mechanical equipment associated with the development are expected to be compliant with the established noise criteria.

#### Table 3.2 Predicted noise level at nearest receiver boundary

Receiver type	Distance to nearest boundary (m)	Criteria, dB(A)	Predicted noise level, dB(A)
Residential	100	52	45
Commercial	60	62	50

Noise emissions from final selections must be reviewed as the project progresses to ensure that they are compliant with the noise criteria in Section 2. If selected equipment is in excess of the noise criteria, acoustic mitigations measures shall be provided. These measures may include, but are not limited to;

- Attenuators
- Noise barriers
- Acoustic louvres
- Acoustic absorption

# 4 SUMMARY

WSP | Parsons Brinckerhoff have undertaken a Noise Impact Assessment associated with the St Mary's College development located at 253 Franklin Street, Adelaide South Australia.

The noise sensitive receivers surrounding the site have been identified, including residential and commercial receivers. Specific noise level criteria has been established in accordance with the South Australia Environment Protection Policy (Noise).

Potential noise impacts from mechanical plant and equipment have been assessed to ensure compliance to the established criteria. Noise emissions from the plant and mechanical equipment associated with the development are expected to be complaint with the noise criteria based on the preliminary equipment selections provided by WSP | Parsons Brinckerhoff Buildings. Noise emissions from final equipment selections must be reviewed as the project progresses to ensure that they are compliant. Noise mitigations measures may be required upon the final equipment selections.

# ATTACHMENT 3g

# STORMWATER MANAGEMENT PLAN Parsons Brinckerhoff

GRIEVE GILLETT ANDERSEN PTY LTD

# St Mary's College

STORMWATER MANAGEMENT PLAN

APRIL 2017



### **St Mary's College** STORMWATER MANAGEMENT PLAN

Grieve Gillett Andersen Pty Ltd

REV	DATE	DETAILS
А	26.04.2017	SWMP – Preliminary Issue

#### AUTHOR, REVIEWER AND APPROVER DETAILS

Prepared by:	Belinda Macklin	Date: 26/04/2017	Signature:	Mark 2.
Reviewed by:	Adam Newman	Date: 26/04/2017	Signature:	All
Approved by:	Adam Newman	Date: 26/04/2017	Signature:	All

#### WSP | Parsons Brinckerhoff

Level 1, 1 King William Street Adelaide SA 5000 GPO Box 398 Adelaide SA 5001

Tel: +61 8 8405 4300 Fax: +61 8 8405 4301

www.wsp-pb.com

Filename: 2284731T-170426-BFM-SWMP_



This document may contain confidential and legally privileged information, neither of which are intended to be waived, and must be used only for its intended purpose. Any unauthorised copying, dissemination or use in any form or by any means other than by the addressee, is strictly prohibited. If you have received this document in error or by any means other than as authorised addressee, please notify us immediately and we will arrange for its return to us.

# TABLE OF CONTENTS

1	INTRODUCTION	1
1.1	Existing Conditions	1
1.1.1	Site Description	1
1.1.2	Stormwater Network	2
1.1.3	Pre-Construction Flows	3
2	PROPOSED CONDITIONS	4
2.1	Proposed Site Layout	4
2.1.1 2.1.2	Proposed Drainage System Quality of Outlet Water	4 5
3	SUMMARY	6

# LIST OF APPENDICES

Appendix A existing drainage system

i.

# 1 INTRODUCTION

St Mary's College (StMC) will increase Year 7 capacity by an additional three classes by 2019. As a result of the increase to the school's population, StMC is proposing a redevelopment of the West Terrace portion of the site to provide a new stand-alone building to cater for the following:

- → a full size indoor gym (dimensioned appropriately to contain a full size netball court),
- → classrooms to house the art department,
- $\rightarrow$  a Year 12 Centre / hub (flexible teaching spaces and breakout areas),
- → upgrading and relocation of the existing Administration and entry to St Mary's from Franklin Street,
- $\rightarrow$  construct a new front office / Reception area,
- → refurbish interior layout of existing Boylan Building to incorporate administration and office spaces for StMC staff

The purpose of this Stormwater Management Plan (SWMP) is to provide an overview of the stormwater works as part of the proposed development, in order to achieve Development Approval (DA) and to inform subsequent phases of engineering design. It should be noted that further investigations are warranted to test and validate certain assumptions and conditions within the site, and to confirm the extent of the current stormwater network to ensure no adverse impacts to existing stormwater connections that will continue to discharge stormwater flows in to the internal stormwater network once proposed redevelopment works are completed.

#### **1.1 Existing Conditions**

#### 1.1.1 Site Description

The existing site comprises of a carparking area located to the west, which fronts West Terrace, a gymnasium building, and Veritas Lawn area.

The Boylan Building is situated to the east of the Veritas Lawn area.

An enlarged view of the project site is shown in Figure 1 below, with the building, carpark and other infrastructure to be demolished highlighted with red crosses.



Figure 1: Enlarged view of the St Mary's College site in the vicinity of the redevelopment area

#### 1.1.2 Stormwater Network

The existing stormwater infrastructure in the immediate vicinity of the proposed new stand-alone building is to the east and south of the building. There is currently a low lying surface area to the Veritas Lawn area, where stormwater has been known to pond adjacent the south-eastern corner of the existing building / pedestrian footpath.

Currently, the existing gymnasium building gutters overflow to the north, directly onto the Franklin Street bitumen footpath.

The existing stormwater infrastructure in the immediate vicinity of the proposed extension works to the Boylan Building is to the west of this building. Stormwater pits sit within an invert drain, and appear to be directed north, to existing Council stormwater infrastructure in Franklin Street.

The underground pipe connections between various existing stormwater pits and subsequent direction of underground flows from some stormwater pits is not fully understood to this stormwater network in the vicinity of the redevelopment works to the site.

This will need to be clarified once a contractor begin works on-site, in order to eliminate the impact on upstream stormwater flows to StMC that are discharging to stormwater infrastructure adjacent the redevelopment. This will be necessary to understand particularly as a number of existing pits and associated stormwater pipes will be demolished or rerouted to accommodate the new building envelope and associated civil works.

The existing drainage system is as included in Appendix A.

The grade across the site is relatively flat in areas, ranging between 0.5% and 1% fall, to up to the DDA compliance of 2.5%.

Currently there does not appear to be any stormwater treatment associated with the flows discharging from the site, in the vicinity of the area to be redeveloped. Surface flows discharge overland across the Veritas Lawn area (overland flows in excess of those infiltrated into the grassed area), and vehicular path between the Veritas Lawn area and the Boylan Building, ultimately to beneath the gated entrances fronting Franklin Street and in to Council's stormwater infrastructure.
#### 1.1.3 Pre-Construction Flows

The area impacted by the proposed redevelopment is approximately 450 m² of existing bitumen carparking area, approximately 520 m² of existing gymnasium and 300 m² of existing Veritas Lawn area to construct the stand-alone building.

The pre-constructed surface area to the stand-alone building is predominantly impervious, with a 25% reduction to the pervious Veritas Lawn area to accommodate the proposed redevelopment. This 25% reduction of lawn area (from the pre-developed condition to the post-developed condition) equates to a 300 m² reduction of pervious area to the site, or a 300 litre tank sized to collect Q100 design storm flows and discharge at a Q20 year ARI design flow rate to the existing Council stormwater infrastructure. This reduction of pervious area to impervious building will not generate a notable increase to the overall outflow from the site post-development. Given that there is no significant overall change in catchment area, there is no specific need for a detention tank.

Approximately 120 m² of existing bitumen roadway adjacent the Boylan Building will be impacted by the proposed additional offices and Reception area directly adjacent to the Boylan Building.

The pre-constructed surface area is 100% impervious, and there will be no change to the post-developed construction works, therefore no requirement for a detention system to this location either.

# **2 PROPOSED CONDITIONS**

#### 2.1 Proposed Site Layout

As identified in Section 1 of this SWMP, the project works will incorporate a new stand-alone building to house a full size indoor gym, classrooms to the art department and flexible teaching spaces and breakout areas, as well as an extension to the Boylan Building to accommodate new front office and a Reception area.

The access road in to the site from Franklin Street will be modified to suit the new extension to the Boylan Building, and to the south of the new stand-alone building, where pedestrian access between existing buildings and new stand-alone building will be accommodated (to DDA compliance), and playground area relocated accordingly.

Refer to the Figure 2 below, where the blue indicates the new building works and the purple indicates the regrading works required to integrate the area between the new buildings and existing buildings and associated pedestrian areas to DDA compliance.



Figure 2: Proposed extent of redevelopment

#### 2.1.1 Proposed Drainage System

Discussions with Adelaide City Council representatives as part of the preparation of this SWMP have identified there are incomplete records to size of Council stormwater infrastructure to the corner of West Terrace and Franklin Street directly adjacent the development boundary. However, Council will be supportive of direct connections in to adjacent grated inlet pits to minimise the use of chequerplate

drains. Council have stated that for simplicity, the design team can assume that the grated inlet pits and outlets will cater for the critical 1 in 20 year rain event discharging from the site.

The preferred design approach is to:

- → provide an FFL of 40.800 AHD to the stand-alone building. This finished floor level will be approximately 300mm above the (median) Franklin Street watertable. Further consideration to this indicative FFL and its impacts to the design and existing site constraints will be given during the civil design to confirm its DDA compliance and suitability to all surrounding areas required to match back in to
- → provide an FFL of 41.800 to the extension works to the Boylan Building, in keeping with the existing Boylan Building FFL that these works are connecting to
- → direct surface stormwater flows to existing internal networks, or rerouted stormwater infrastructure as required to accommodate the new buildings, in that the proposed site will function as per the current pre-developed site
- → the stand-alone building to include for gutters to the main roof, with downpipes located to the northern and southern sides of the building. Downpipes to discharge to ground, to chequerplate drains or existing grated inlet pits if located adjacent the downpipes
- → the extension of building to the Boylan Building to include for gutters, with downpipes located to the west of the building, to discharge directly in to the adjacent existing or rerouted stormwater infrastructure beneath the invert drain, and ultimately out to a Franklin Street grated inlet pit

#### 2.1.2 Quality of Outlet Water

As the proposed building footprint will replace the existing carpark area, there will be an overall improvement in the quality of the water leaving the site. Rainwater from building roofs is considered cleaner than rainwater captured on roadways due to the presence of diesel, oils and other potential contaminants from trucks and cars on the paved surface.

As the existing carpark and building stormwater connects to an existing stormwater system that receives untreated stormwater from multiple external sources, such as West Terrace and Franklin Street, there is little benefit in providing a treatment system (on-line or off-line) to improve the water quality of the redevelopment's runoff prior to discharge into the existing system.

# 3 SUMMARY

In summary, the redevelopment of the site will only marginally increase the overall impervious surface area of the site and therefore will have a negligible impact on the existing stormwater system surrounding the site. Based on discussions with Adelaide City Council, the existing system will have sufficient capacity to accommodate any minor increase in flows from the St Mary's College redevelopment if no treatment measures are considered. Furthermore it is expected to result in a slight improvement in water quality with road bitumen areas reverting to building rooftops.

# Appendix A

**EXISTING DRAINAGE SYSTEM** 



ATTACHMENT 3

AGENCY COMMENTS

## ATTACHMENT 3a

**REFERRAL RESPONSE** 

**Government Architect** 

## OFFICE FOR DESIGN + ARCHITECTURE®

## Confidential

File No: 2014/11234/01

Ref No: 11689817 10 July 2017

Brett Miller Team Leader – CBD and Inner Metro Development Division Department of Planning, Transport and Infrastructure Level 5, 50 Flinders Street Adelaide SA 5000

brett.miller@sa.gov.au

For the attention of the Development Assessment Commission.

## St Mary's College West Terrace Development and Administration Building Refurbishment

Further to the referral (020/A046/17) received 16 June 2017 pertaining to the above development application and in my capacity as a referral in the Development Assessment Commission, I would like to offer the following comments for your consideration.

The project was presented to the Design Review panel on two occasions, over which period the design progressed positively. The proponent's engagement with the Design Review process is acknowledged.

The proposal seeks to demolish the existing gymnasium and car park located on the corner of West Terrace and Franklin Street and construction of a new building accommodating Year 12, Arts and full size netball facilities over two levels (the West Terrace Development). Internal alterations to the State heritage listed Boylan building are also proposed, as well as construction of a new single storey entry pavilion addition (the Administration Refurbishment Project).

I support the project ambition to portray the identity of the College in the public realm while respecting the established character of the campus and local streetscape context. I also acknowledge the budget constraints that apply to this project and commend the project team for balancing the practical and aspirational aspects of the proposal.

St Mary's College has primary frontages to West Terrace and Franklin Street and a secondary frontage to Gray Street. Historically, the campus has developed with an internal focus in response to the College's functional requirements. The State heritage listed Boylan building and stone boundary wall along Franklin Street currently provides a prominent street presence, however there is a perceived lack of address and College identity. Internal open space for play and outdoor learning is also limited due to the site constraints. The Archbishop's House, a State heritage place, is located directly south of the site. West Terrace is a main arterial road on the city edge and is characterised by commercial development that includes several car dealerships and the Adelaide Park Lands to the west. Franklin Street includes a mix of commercial, religious and residential buildings of varying scale.

Level 1, 26-28 Leigh Street Adelaide SA 5000

GPO Box 1533 Adelaide SA 5001

DX 56601

T- +61(0)8 8402 1884 E- odasa@sa.gov.au



## OFFICE FOR DESIGN + ARCHITECTURE®

## Confidential

File No: 2014/11234/01

Ref No: 11689817 The proposed site configuration positions the West Terrace Development on the north west corner of the site, with the approximately 14 metre tall built form aligned to the West Terrace and Franklin Street boundaries. I support the site configuration that minimises impacts on the limited open space afforded by the constrained site. The proposed building setbacks and scale also relate to the traditional built form pattern of large buildings on street corners and the Development Plan's ambition for strongly defined visual gateways on corner sites at the junctions of West Terrace.

The main entrance into the College is located off Franklin Street and includes a small forecourt, two sets of 'steel blade' gates and a single storey entry pavilion to the Boylan building. I support the inclusion of a controlled entrance point into the College grounds. I also support the inclusion of a secondary entrance off Franklin Street that provides out of hours access to the West Terrace Development.

The proposed West Terrace Development includes General Learning Areas, common areas and arts facilities on the ground floor, a full sized netball court with amenities on the first floor and plant room on the mezzanine level. I acknowledge the parameters applying to the size and configuration of the building envelope to achieve a full sized court and support the intent for ground floor learning areas to be flexible and visible to younger students.

The built form of the West Terrace Development is characterised by a 1.8m high masonry plinth along Franklin Street and West Terrace, with facades clad with polycarbonate and zinc above. I support the project team's ambition to celebrate the College and its new identity through an expression that demonstrates the non-commercial nature of the development.

The plinth, the height of which has been informed by the existing boundary walls, includes courses of red and contextually coloured brickwork and recesses of glazed blue brickwork. High level windows are proposed above the plinth, which are setback with a chamfered reveal to the street. I support the inclusion of a plinth along the street edge that moderates the transition between new and old elements and detailing of the capping that blends with the disparate materials and details of the existing wall sections. I also support the articulation and expression of the high level windows that provide valuable light access, while maintaining student privacy.

The vertically proportioned polycarbonate facades vary in opacity, enabling obscured views into the building. Irregularly positioned windows of varying size are also proposed to the West Terrace and Franklin Street corner. I support the use of polycarbonate that permits discrete views into the building and indicates activity while maintaining student privacy. I also support the playful arrangement of windows, which in my view typifies the school use. The polycarbonate's lighter appearance and openness within the College grounds aligns with the key design principle of 'learning on display', which I support. Internal task lighting is positioned and programmed on a timer to produce a glowing diffused nighttime lighting effect to the corner element, which I support.

The tapered north east and south west corners of the West Terrace Development are solid, clad in standing seam zinc with panels offset to imitate folding. I commend the use of zinc, which is a high quality, durable material that responds appropriately to the historic context. The success of the offset panels of standing seam, however is contingent on careful detailing and I urge the design team to consider this as design development progresses.

Level 1, 26-28 Leigh Street Adelaide SA 5000

GPO Box 1533 Adelaide SA 5001

DX 56601

T- +61(0)8 8402 1884 E- odasa@sa.gov.au



## OFFICE FOR DESIGN + ARCHITECTURE®

## Confidential

File No: 2014/11234/01

Ref No: 11689817

An external stair is proposed in the south west corner of the West Terrace Development, extending into the Veritas Lawn. I support the positioning of the stair externally to maximise internal teaching space. I also support the stair expression, which presents as a continuous folded plane that forms the stair balustrade and portal canopy. This folded expression also extends to the Franklin Street entrance, which I support.

The Veritas Lawn is the College's largest green space and includes a number of established trees to its perimeter that provide valuable shade and green outlook from the first floor library windows. I support the project team's intent to retain existing trees where possible and proposed landscape works that include new trees, hedging and seating. I also support the interface between the Lawn and the West Terrace Development, particularly the ground floor cloister that affords weather protection. While not included in the project scope, a landscaped area is also envisaged in the longer term between the Boylan building and the Franklin Street boundary wall. I urge the College to pursue this landscaping, as in my view it will contribute positively to the presentation of the heritage building and experience of visitors to the College.

The proposal includes internal refurbishment works to the State heritage listed Boylan building, which seek to improve administration and learning area outcomes. I support the conservation strategy that retains key interior features such as fireplace surrounds and the positioning of new partitions relative to existing window and door openings. A new single storey entry pavilion addition is proposed to the west of the Boylan building accommodating a new reception area. The architectural expression and materiality of the entry pavilion references the West Terrace Development and the proposed detailing provides a minimal connection to the heritage place, which I support.

In my view, the success of this project is contingent on detailing that reflects and supports the design ambition, which I anticipate will continue to develop and strengthen as design development progresses. While I acknowledge that analysis by the design team indicates shading on the north and west is not required, I also urge ongoing analysis to ensure excessive heat loading in the general learning areas does not occur.

To ensure the most successful design outcome is achieved the Development Assessment Commission may like to consider particular aspects of the project, which would benefit from protection as part of the planning permission, such as:

Provision of a materials samples board and schedule to demonstrate selections.

Yours sincerely

Kirsteen Mackay South Australian Government Architect

Level 1, 26-28 Leigh Street Adelaide SA 5000

GPO Box 1533 Adelaide SA 5001

DX 56601

T- +61(0)8 8402 1884 E- odasa@sa.gov.au



## ATTACHMENT 3b

REFERRAL RESPONSE

DEWNR – State Heritage



#### **Government of South Australia**

Department of Environment, Water and Natural Resources

State Heritage Unit

Economic and Sustainable Development Group Level 9 81-91 Waymouth Street Adelaide SA 5000 GPO Box 1047 Adelaide SA 5001 Australia DX138

Ph: +61 8 8124 4960 Fax: +61 8 8124 4980

www.environment.sa.gov.au

Ref: SH/13396D Date: 20 July 2017

Ms Alison Gill Secretary Development Assessment Commission GPO Box 1815 ADELAIDE SA 5001

Attention: Elysse Kuhar

Dear Ms Kuhar

#### DESCRIPTION: ST MARY'S DOMINICAN CONVENT (CATHOLIC) - DEMOLITION OF EXISTING GYMNASIUM AND CONSTRUCTION OF NEW MULTIPURPOSE SCHOOL BUILDING, ALTERATIONS TO EXISTING HERITAGE BUILDING, NEW ENTRY PAVILION INCLUDING FENCING, LANDSCAPING AND ASSOCIATED SITE WORKS - 253 FRANKLIN STREET, ADELAIDE

Application number:	020/A046/17
Referral received:	16/06/2017
State heritage place:	St Mary's Dominican Convent (Catholic), 273 Franklin Street ADELAIDE

The above application has been referred to the Minister for Sustainability, Environment and Conservation in accordance with Section 37 of the *Development Act* 1993 as development that directly affects a State heritage place or, in the opinion of the relevant authority, materially affects the context within which a State heritage place is situated.

Subject to the recommendation set out below, the proposed development is considered to be acceptable in relation to the above State heritage place for the following reason/s.

- The West Terrace component of the project does not directly affect any heritage fabric.
- Visually, it is considered to be a complimentary response in scale, form, architectural expression and materiality to the State heritage listed Boylan Building, with sufficient separation to maintain the historic building's spacious contextual relationship with Franklin Street.
- The design and materials of the perimeter ground floor boundary wall establish a strong visual relationship with the various boundary wall types along Franklin Street, and reinforce the site's identity as a school campus and its relationship with the Bishop's residence on West Terrace.
- The proposed entrance pavilion abutting the Boylan Building is submissive to the historic building in scale, visual weight, architectural expression and location. It physical form and materiality establish a clear contextual relationship to the West Terrace building, which helps to reinforce the open space between them as an integral part of the site context.
- The connection to the altered western face of the Boylan Building is physically and visually minimal, and retains a high degree of visibility and legibility for the historic building including the projecting stair tower. The cutting down of the paired windows as a single new door opening retains the general rhythm of openings and does not appreciably disrupt the visual integrity of the façade as seen from a distance.
- The cutting down of the single window to create a doorway south of the stair tower will be relatively inconspicous in the principal views of the historic building.
- It is understood that, within the new entrance pavilion, the external face of the Boylan Building will remain in its present unpainted masonry state.

• The internal works are respectful of the extant original features within this extensively altered space, and will not diminish the heritage values of the building.

#### Recommendation

A. The following condition/s should be incorporated into any consent or approval.

#### Condition 1: Boylan Building works

The Superintendent—where called on by the drawings or specification to approve the scope of works, workmanship or samples of work, shop drawings, locations of service runs, chases or penetrations, repairs, materials, colours, finishes, making good and other matters concerning the extent and quality of the works—shall do so on the basis of possessing or seeking from a suitably experienced heritage consultant appropriate expertise in heritage conservation, traditional practice and the sensitive upgrading of heritage places.

Reason for condition: To ensure that decision making during the course of the works is based on appropriate expertise in heritage conservation practice.

- Condition 2: Prior to the commencement of works to the Boylan Building, further details shall be provided to the satisfaction of the planning authority in consultation with the State Heritage Unit (Department of Environment, Water and Natural Resources) of the following items.
  - a) Roof and wall junctions between the new pavilion and the Boylan Building
  - b) Lintel and reveal details for the enlarged opening within the pavilion
  - c) Reveal, frame and door details for the new door opening south of the stair tower
  - d) Any incidental or consequential conservation works to the Boylan Building

Reason for condition: Detail not developed at this stage of the project.

#### General notes

- Any changes to the proposal for which planning consent is sought or granted may give rise to heritage impacts requiring further consultation with the Department of Environment, Water and Natural Resources, or an additional referral to the Minister for Sustainability, Environment and Conservation. Such changes would include for example (a) an application to vary the planning consent, or (b) Building Rules documentation that incorporates differences from the proposal as documented in the planning application.
- 2. To ensure a satisfactory heritage outcome, the Development Assessment Commission is requested to consult the Department of Environment, Water and Natural Resources in finalising any conditions or reserved matters above.
- 3. In accordance with Regulation 43 of the Development Regulations 2008, please send the Department of Environment, Water and Natural Resources a copy of the Decision Notification.
- 4. The Commission is requested to inform the applicant of the following requirements of the Heritage Places Act 1993.
  - (a) If an archaeological artefact believed to be of heritage significance is encountered during excavation works, disturbance in the vicinity shall cease and the SA Heritage Council shall be notified.
  - (b) Where it is known in advance (or there is reasonable cause to suspect) that significant archaeological artefacts may be encountered, a permit is required prior to commencing excavation works.

For further information, contact the Department of Environment, Water and Natural Resources.

- 5. The Commission is requested to inform the applicant of the following requirements of the Aboriginal Heritage Act 1988.
  - (a) If Aboriginal sites, objects or remains are discovered during excavation works, the Aboriginal Heritage Branch of the Aboriginal Affairs and Reconciliation Division of the Department of the Premier and Cabinet (as delegate of the Minister) should be notified under Section 20 of the Aboriginal Heritage Act 1988.

For any enquiries in relation to this application, I can be contacted on telephone 8124 4935 or e-mail <u>peter.wells@sa.gov.au</u>.

Yours sincerely

Peter Wells Principal Conservation Architect DEPARTMENT OF ENVIRONMENT, WATER AND NATURAL RESOURCES as delegate of the MINISTER FOR SUSTAINABILITY, ENVIRONMENT AND CONSERVATION

## ATTACHMENT 3c

**REFERRAL RESPONSE** 

DPTI – Safety & Services

In reply please quote 2017/01867/01, Process ID: 465180 Enquiries to Vittorio Varricchio Telephone (08) 8226 8393 Facsimile (08) 8226 8330 E-mail dpti.luc@sa.gov.au



SAFETY AND SERVICE – Traffic Operations

GPO Box 1533 Adelaide SA 5001

Telephone: 61 8 8226 8222 Facsimile: 61 8 8226 8330

ABN 92 366 288 135

Development Assessment Commission C/- Ms Elysse Kuhar Department of Planning Transport and Infrastructure GPO Box 1815 ADELAIDE SA 5001

Dear Ms Kuhar,

14/07/2017

#### CONSULTATION RESPONSE

Development No.	020/A046/17
Applicant	Dominican Convent Inc (St Mary's College)
Location	253 Franklin Street, Adelaide
Proposal	Demolition of existing gymnasium and construction of new multipurpose school building, alterations to existing heritage building

I refer to the above development application forwarded to the Safety and Service Division (SSD) of the Department of Planning, Transport and Infrastructure (DPTI) requesting comment. SSD provides the following report to assist the planning authority with its decision.

#### CONSIDERATION

The application proposes to demolish an existing gymnasium and construct a multipurpose building. Alterations and additions to an existing heritage building, including a new entry pavilion are also proposed, along with landscaping and other site works.

The subject site abuts Franklin Street and West Terrace, both of which are under the care, control and management of City of Adelaide. It is noted that the proposal will involve the closure of an existing access to/from West Terrace. Given the role and function of West Terrace, it is likely that the removal of an access on this road will be beneficial for road safety and traffic flow.

The site is located adjacent the West Terrace / Franklin Street signalised intersection. Subsequently, it is recommended that the proposed cladding upon the east, west and north facades (particularly the glazed surface) be treated so that they are non-reflective in order to ensure they do not cause glare and/or distraction to road users.

#### ADVICE

In view of the above, SSD does not object in-principle to the development subject to the following condition being applied to any approvals granted:

1. The exterior cladding shall be finished in a material of low reflectivity to minimise the risk of glare that may dazzle or distract motorists.

Yours sincerely,

MANAGER, TRAFFIC OPERATIONS For COMMISSIONER OF HIGHWAYS

A copy of the decision notification form should be forwarded to dpti.developmentapplications@sa.gov.au

ATTACHMENT 4

ADDITIONAL INFORMATION

243 Pirie Street Adelaide South Australia 5000 T +61 8 8232 3626 admin@ggand.com.au

ggand.com.au



07 July 2017

Ms Elysse Kuhar Planning Officer Development Assessment Commission Level 5, 50 Flinders Street Adelaide SA 5000

Dear Elysse,

#### St Mary's College (StMC) Developments RFI

I refer to your correspondence on 27 June 2017 regarding clarification for St Mary's College Developments.

#### 1. Double Doors in East Elevation

Please see attached drawing WTD_DA22_REVA and WTD_DA31_REVA.

The double doors on the east elevation (accessed from the external stairs) are full height glazed double doors with no side lights or transform window over. DA62 (Perspective image) most accurately depicts the design intent.

#### 2. Landscape works to front of Boylan Building

The scope of landscape works to the front of Boylan Building is not currently included in the project scope. It is a landscape masterplan for StMC that considers a whole of site approach in relation to the resolution of areas around the new entry pavilion.

This was included as part of the Design Review sessions to demonstrate the long term intent for this space. There is no money in the budget for the project to do this work at this point in time, but it is the College's longer term intent to utilise this space as a landscaped area for staff to use.

#### 3. Lighting strategy for West Terrace Development

The design team has considered multiple options for lighting of the corner lantern element. Our research, modelling, 1:1 testing and prototyping shows that polycarbonate generally diffuses light and the most effective way to create a glowing diffused lighting effect to the corner element is with internal lighting.

Internal task lighting is carefully located to enable the effect as demonstrated in DA 61. The fittings will be programmed on timer. This approached considers overall funding available, longevity of light fittings (located predominantly in an internal environment) as well as on-going maintenance and cost for the College.



#### 4. Lighting of Plant Room and impact on facade

Location of plant equipment have been thoroughly considered to ensure that they are offset from the polycarbonate wall sufficiently to minimise shadowing. In addition, Light fittings are designed to be located as close as possible to the polycarbonate wall to eliminate overshadowing of plant equipment.

#### 5. Drawing Numbers

For clarity and delineation of scope for the project team, the drawings are set up as West Terrace Development and Admin Refurbishment Project. Please refer to the Project Title as the drawing numbers are allocated relative to project.

We trust the above information is satisfactory. Please do not hesitate to contact me if you require any additional information.

Kind Regards Grieve Gillett Andersen

Esther Chew Senior Architect

**ATTACHMENT 5** 

## DEVELOPMENT PLAN PROVISIONS

#### CAPITAL CITY ZONE

#### Introduction

The Desired Character, Objectives and Principles of Development Control that follow apply in the whole of the Capital City Zone shown on <u>Maps Adel/17 to 20, 23 to 26 and 29 to 31</u>. They are additional to those expressed for the whole of the Council area and in cases of apparent conflict, take precedence over the more general provisions. In the assessment of development, the greatest weight is to be applied to satisfying the Desired Character for the Zone.

#### **DESIRED CHARACTER**

This Zone is the economic and cultural focus of the State and includes a range of employment, community, educational, tourism and entertainment facilities. It is anticipated that an increased population within the Zone will complement the range of opportunities and experiences provided in the City and increase its vibrancy.

The Zone will be active during the day, evening and late night. Licensed entertainment premises, nightclubs and bars are encouraged throughout the Zone, particularly where they are located above or below ground floor level to maintain street level activation during the day and evening.

High-scale development is envisaged in the Zone with high street walls that frame the streets. However an interesting pedestrian environment and human scale will be created at ground floor levels through careful building articulation and fenestration, frequent openings in building façades, verandahs, balconies, awnings and other features that provide weather protection.

In important pedestrian areas, buildings will be set back at higher levels above the street wall to provide views to the sky and create a comfortable pedestrian environment. In narrow streets and laneways the street setback above the street wall may be relatively shallow or non-existent to create intimate spaces through a greater sense of enclosure. In the Central Business Policy Areas, upper level setbacks are not envisaged.

Non-residential land uses at ground floor level that generate high levels of pedestrian activity such as shops, cafés and restaurants will occur throughout the Zone. Within the Central Business Policy Area, residential land uses at ground level are discouraged. At ground level, development will continue to provide visual interest after hours by being well lit and having no external shutters.

There will also be a rich display of art that is accessible to the public and contextually relevant.

Exemplary and outstanding building design is desired in recognition of the location as South Australia's capital. Contemporary juxtapositions will provide new settings for heritage places. Innovative forms are expected in areas of identified street character, referencing the past, but with emphasis on modern design-based responses that support optimal site development.

#### Adelaide's pattern of streets and squares

The distinctive grid pattern of Adelaide will be reinforced through the creation of a series of attractive boulevards as shown on Concept Plan <u>Figures CC/1 and 2</u>. These boulevards will provide a clear sense of arrival into the City and be characterised by buildings that are aligned to the street pattern, particularly at ground level.

Views to important civic landmarks, the Park Lands and the Adelaide Hills will be retained as an important part of the City's charm and character.

The City's boulevards, terraces and Squares will be developed as follows:

(a) North Terrace will be reinforced as an important pedestrian promenade and cultural boulevard that provides an important northern edge to the City square mile.

- (b) King William Street will be enhanced as the City's principal north-south boulevard and will be reinforced as the City's commercial spine.
- (c) Grote Street-Wakefield Street will be enhanced as the City's principal east-west boulevard and will be developed to provide a strong frame that presents a sense of enclosure to the street.
- (d) East Terrace will be characterised by buildings that maximise views through to the Park Lands and provide a distinct City edge.
- (e) West Terrace will be reinforced as the western 'gateway' to the City centre and will form an imposing frontage to the western City edge. Buildings will be constructed to the front and side boundaries, and designed to maximise views through to the Park Lands. Corner sites at the junctions of West Terrace and the major east-west streets will be developed as strongly defined visual gateways to the City. This will provide an imposing frontage to the western edge of the City, which comprises a mixture of commercial, showroom and residential development.
- (f) Pulteney and Morphett streets are key north-south boulevards. A sense of activation and enclosure of these streets will be enhanced through mixed use development with a strong built form edge. Pulteney Street will include residential, office and institutional uses, and retail activities. These boulevards will become important tree-lined commercial corridors.
- (g) Currie, Grenfell, Franklin and Flinders streets, as wider east-west boulevards provide important entry points to the City. Currie and Grenfell streets will become a key focus for pedestrians, cycling and public transport. These streets also provide long views to the hills as their closing vistas and these view corridors should remain uncluttered.
- (h) Victoria, Hindmarsh and Light Squares will have a continuous edge of medium to high-scale development that frames the Squares and increases ground level activity.

The Zone also includes a number of Main Street areas, encompassing Rundle Mall, Rundle Street, Hindley Street and Gouger Street, which are envisaged to have a wide range of retail, commercial and community uses that generate high levels of activity. These areas will have an intimately scaled built form with narrow and frequent building frontages. These areas are shown on Concept Plan Figures CC/1 and 2.

Minor streets and laneways will have a sense of enclosure (a tall street wall compared to street width) and an intimate, welcoming and comfortable pedestrian environment with buildings sited and composed in a way that responds to the buildings' context. There will be a strong emphasis on ground level activation through frequent window openings, land uses that spill out onto the footpath, and control of wind impacts.

Development in minor streets and laneways with a high value character will respond to important character elements and provide a comfortable pedestrian environment, particularly in the following streets: Gray, Leigh, Union, Chesser, Coromandel, Tucker, Cardwell, Kenton, Market, Ruthven, Cannon, Tatham, Benthem streets, Murrays Lane and Wright Court.

A comprehensive, safe and convenient movement network throughout the City will develop, focusing on the provision of linkages on both public and private land between important destinations and public transport. A high quality system of bicycle or shared pedestrian and bicycle routes will be established within the Zone.

#### OBJECTIVES

#### General

## **Objective 1:** The principal focus for the economic, social and political life of metropolitan Adelaide and the State.

Objective 2:	A vibrant mix of commercial, retail, professional services, hospitality, entertainment, educational facilities, and medium and high density living.
Objective 3:	Design and management of City living to ensure the compatibility of residential amenity with the essential commercial and leisure functions of the Zone.
Objective 4:	City streets that provide a comfortable pedestrian environment.
Objective 5:	Innovative design approaches and contemporary architecture that respond to a building's context.
Objective 6:	Buildings that reinforce the gridded layout of Adelaide's streets and respond to the underlying built-form framework of the City.
Objective 7:	Large sites developed to their full potential while ensuring a cohesive scale of development and responding to a building's context.

Development that contributes to the Desired Character of the Zone. **Objective 8:** 

#### PRINCIPLES OF DEVELOPMENT CONTROL

#### Land Use

- 1 The following types of development, or combinations thereof, are envisaged:
  - Affordable housing Aged persons accommodation Community centre Consulting room Convention centre Dwelling Educational establishment Emergency services facility Hospital Hotel Indoor recreation centre Licensed entertainment premises Library Motel Office Pre-school Personal service establishment Place of worship Serviced apartment Restaurant Residential flat building Student accommodation Shop or group of shops Tourist accommodation
- 2 Land uses that are typically closed during the day should be designed to maximise daytime and evening activation at street level and be compatible with surrounding land uses, in particular residential development.
- 3 Low impact industries should be located outside the Central Business Policy Area and have minimal off-site impacts with respect to noise, air, water and waste emissions, traffic generation and movement.
- 4 Development listed as non-complying is generally inappropriate.

#### Form and Character

**5** Development should be consistent with the Desired Character for the Zone.

#### **Design and Appearance**

- 6 Development should be of a high standard of architectural design and finish which is appropriate to the City's role and image as the capital of the State.
- **7** Buildings should present an attractive pedestrian-oriented frontage that adds interest and vitality to City streets and laneways.
- 8 The finished ground floor level of buildings should be at grade and/or level with the footpath to provide direct pedestrian access and street level activation.
- **9** Providing footpath widths and street tree growth permit, development should contribute to the comfort of pedestrians through the incorporation of verandahs, balconies, awnings and/or canopies that provide pedestrian shelter.
- **10** Buildings should be positioned regularly on the site and built to the street frontage, except where a setback is required to accommodate outdoor dining or provide a contextual response to a heritage place.
- 11 Other than in the Central Business Policy Area, buildings should be designed to include a podium/street wall height and upper level setback (in the order of 3-6 metres) that:
  - (a) relates to the width of the street and achieves a suitable level of enclosure to the public realm;
  - (b) provides a human scale at street level;
  - (c) creates a well-defined and continuity of frontage;
  - (d) gives emphasis and definition to street corners to clearly define the street grid;
  - (e) contributes to the interest, vitality and security of the pedestrian environment;
  - (f) maintains a sense of openness to the sky for pedestrians and brings daylight to the street; and
  - (g) achieves pedestrian comfort by minimising micro climatic impacts (particularly wind tunnelling and downward drafts).
- **12** Buildings north of Rundle Mall, Rundle Street, Hindley Street and Gouger Street should have a built form that incorporates slender tower elements, spaces between buildings or other design techniques that enable sunlight access to the southern footpath.
- **13** Buildings, advertisements, site landscaping, street planting and paving should have an integrated, coordinated appearance and should enhance the urban environment.
- **14** Building façades should be strongly modelled, incorporate a vertical composition which reflects the proportions of existing frontages, and ensure that architectural detailing is consistent around corners and along minor streets and laneways.

#### The Squares (Victoria, Hindmarsh and Light)

**15** Outdoor eating and drinking facilities associated with cafés and restaurants are appropriate ground floor uses and should contribute to the vitality of the Squares and create a focus for leisure.

- **16** Buildings fronting the Squares should:
  - (a) provide a comfortable pedestrian and recreation environment by enabling direct sunlight to a minimum of 75 percent of the landscaped part of each Square at the September equinox; and
  - (b) reinforce the enclosure of the Squares with a continuous built-form with no upper level set-backs.
- The Terraces (North, East and West)
- **17** Development along the terraces should contribute to a continuous built form to frame the City edge and activate the Park Lands.
- **18** Development along North Terrace should reinforce the predominant scale and 'City wall' character of the Terrace frontage.

#### **Building Height**

- **19** Development should generally be compatible with the overall desired city form and not exceed the maximum building height shown in Concept Plan Figures CC/1 and 2; unless it meets one or more of the following:
  - (a) the proposed building is located in one of the following areas:
    - (i) fronting North Terrace, West Terrace or East Terrace and/or at the junction of two City boulevards shown in Concept Plan <u>Figures CC/1 and 2</u>;
    - (ii) on an allotment with frontage to Light Square;
    - (iii) within 200 metres of a high concentration public transport route identified on <u>Map</u> <u>Adel/1 (Overlay 4);</u>
  - (b) the site area is greater than 1500 square metres and has side or rear vehicle access;
  - (c) the development provides an orderly transition up to an existing taller building or prescribed maximum building height in an adjoining Zone or Policy Area;
  - (d) the proposal incorporates the retention and conservation of a character building.
- **20** Development should have optimal height and floor space yields to take advantage of the premium City location and should have a building height no less than half the maximum shown on Concept Plan Figures CC/1 and 2, or 28 metres in the Central Business Policy Area, except where one or more of the following applies:
  - (a) a lower building height is necessary to achieve compliance with the Commonwealth Airports (Protection of Airspace) Regulations;
  - (b) the site is adjacent to the City Living Zone or the Adelaide Historic (Conservation) Zone and a lesser building height is required to manage the interface with low-rise residential development;
  - (c) the site is adjacent to a heritage place, or includes a heritage place;
  - (d) the development includes the construction of a building in the same, or substantially the same, position as a building which was demolished, as a result of significant damage caused by an event, within the previous 3 years where the new building has the same, or substantially the same, layout and external appearance as the previous building.

#### Interface

- 21 Development should manage the interface with the City Living Zone or the Adelaide Historic (Conservation) Zone in relation to building height, overshadowing, massing, building proportions and traffic impacts and should avoid land uses, or intensity of land uses, that adversely affect residential amenity.
- 22 Development on all sites on the southern side of Gouger Street Angas Street and adjacent to a northern boundary of the City Living Zone or the Adelaide Historic (Conservation) Zone should not exceed 22 metres in building height unless the Council Wide overshadowing Principles of Development Control are met.

#### Movement

- **23** Pedestrian movement should be based on a network of pedestrian malls, arcades and lanes, linking the surrounding Zones and giving a variety of north-south and east-west links.
- 24 Development should provide pedestrian linkages for safe and convenient movement with arcades and lanes clearly designated and well-lit to encourage pedestrian access to public transport and areas of activity. Blank surfaces, shutters and solid infills lining such routes should be avoided.
- 25 Development should ensure existing through-site and on-street pedestrian links are maintained and new pedestrian links are developed in accordance with <u>Map Adel/1 (Overlay 2A)</u>.
- 26 Car parking should be provided in accordance with <u>Table Adel/7</u>.
- 27 Multi-level car parks should locate vehicle access points away from the primary street frontage wherever possible and should not be located:
  - (a) within any of the following areas:
    - (i) the Core Pedestrian Area identified in Map Adel/1 (Overlays 2, 2A and 3)
    - (ii) on frontages to North Terrace, East Terrace, Rundle Street, Hindley Street, Currie Street, Waymouth Street (east of Light Square), Victoria Square or King William Street;
  - (b) where they conflict with existing or projected pedestrian movement and/or activity;
  - (c) where they would cause undue disruption to traffic flow; and
  - (d) where it involves creating new crossovers in North Terrace, Rundle Street, Hindley Street, Currie Street and Waymouth Street (east of Light Square), Grenfell Street and Pirie Street (west of Pulteney Street), Victoria Square, Light Square, Hindmarsh Square, Gawler Place and King William Street or access across primary City access and secondary City access roads identified in <u>Map Adel/1 (Overlay 1)</u>.
- 28 Multi-level, non-ancillary car parks are inappropriate within the Core Pedestrian Area as shown on <u>Map Adel/1 (Overlays 2, 2A and 3)</u>.
- 29 Vehicle parking spaces and multi-level vehicle parking structures within buildings should:
  - (a) enhance active street frontages by providing land uses such as commercial, retail or other non-car park uses along ground floor street frontages;
  - (b) complement the surrounding built form in terms of height, massing and scale; and

(c) incorporate façade treatments along major street frontages that are sufficiently enclosed and detailed to complement neighbouring buildings consistent with the Desired Character of the locality.

#### Advertising

- **30** Other than signs along Hindley Street, advertisements should use simple graphics and be restrained in their size, design and colour.
- **31** In minor streets and laneways, a greater diversity of type, shape, numbers and design of advertisements are appropriate provided they are of a small-scale and located to present a consistent message band to pedestrians.
- **32** There should be an overall consistency achieved by advertisements along individual street frontages.
- **33** In Chesser Street, French Street and Coromandel Place advertisements should be small and preferably square and should not be located more than 3.7 metres above natural ground level or an abutting footpath or street. However, advertisements in these streets may be considered above 3.7 metres at locations near the intersections with major streets.
- **34** Advertisements on the Currie Street frontages between Topham Mall and Gilbert Place and its north-south prolongation should be of a size, shape and location complementary to the desired townscape character, with particular regard to the following:
  - (a) On the southern side of Currie Street, advertisements should be fixed with their underside at a common height, except where the architectural detailing of building façades precludes it. At this 'canopy' level advertisements should be of a uniform size and fixed without the support of guy wires. Where architectural detailing permits, advertisements may mark the major entrances to buildings along the southern side of Currie Street with vertical projecting advertisements 1.5 metres high by 1.2 metres wide at, or marginally above, the existing canopy level. Painted wall or window signs should be restrained.
  - (b) On the northern side of Currie Street, advertisements should be of a uniform fixing height and consistent dimensions to match those prevailing in the area.

#### **PROCEDURAL MATTERS**

#### **Complying Development**

35 Complying developments are prescribed in Schedule 4 of the Development Regulations 2008.

In addition, the following forms of development are assigned as **complying**:

- (a) Other than in relation to a State heritage place, Local heritage place (City Significance), or Local heritage place, work undertaken within a building which does not involve a change of use or affect the external appearance of the building;
- (b) Temporary depot for Council for a period of no more than 3 months where it can be demonstrated that appropriate provision has been made for:
  - (i) dust control;
  - (ii) screening, including landscaping;
  - (iii) containment of litter and water; and
  - (iv) securing of the site.

(c) Change in the use of land from a non-residential use to an office, shop or consulting room (excluding any retail showroom, adult entertainment premises, adult products and services premises or licensed premises).

#### Non-complying Development

36 The following kinds of development are **non-complying**:

A change in use of land to any of the following:

Amusement machine centre

Advertisements involving any of the following:

- (a) Third party advertising except on Hindley Street, Rundle Mall or on allotments at the intersection of Rundle Street and Pulteney Street, or temporary advertisements on construction sites;
- (b) Advertisements located at roof level where the sky or another building forms the background when viewed from ground level;
- (c) Advertisements in the area bounded by West Terrace, Grote Street, Franklin Street and Gray Street;
- (d) Animation of advertisements along and adjacent to the North Terrace, King William Street and Victoria Square frontages.

Total demolition of a State Heritage Place (as identified in Table Adel/1).

Vehicle parking except:

- (a) where it is ancillary to an approved or existing use;
- (b) it is a multi-level car park located outside the Core Pedestrian Area as indicated on Map Adel/1 (Overlay 2, 2A and 3); or
- (c) it is within an existing building located outside the Core Pedestrian Area as indicated on <u>Map Adel/1 (Overlay 2, 2A and 3)</u>.

#### **Public Notification**

**37** Categories of public notification are prescribed in Schedule 9 of the *Development Regulations* 2008.

In addition, the following forms of development, or any combination of (except where the development is non-complying), are assigned:

(a) **Category 1**, public notification not required:

All forms of development other than where it is assigned Category 2.

(b) **Category 2**, public notification required. Third parties do not have any appeal rights.

Any development where the site of the development is adjacent land to land in the City Living Zone or Adelaide Historic (Conservation) Zone and it exceeds 22 metres in building height.

Note: For Category 3 development, public notification is required. Third parties may make written representations, appear before the relevant authority on the matter, and may appeal against a development consent. This includes any development not classified as either Category 1 or Category 2.

#### **Council Wide**

#### Medium to High Scale Residential/Serviced Apartment

#### OBJECTIVE

**Objective 22:** Medium to high scale residential (including student accommodation) or serviced apartment development that:

- (a) has a high standard of amenity and environmental performance;
- (b) comprises functional internal layouts;
- (c) is adaptable to meet a variety of accommodation and living needs; and
- (d) includes well-designed and functional recreation and storage areas.

#### PRINCIPLES OF DEVELOPMENT CONTROL

#### **Building Entrances**

- 48 Entrances to medium to high scale residential or serviced apartment development should:
  - (a) be oriented towards the street;
  - (b) be visible and easily identifiable from the street; and
  - (c) provide shelter, a sense of personal address and transitional space around the entry.
- **49** Entrances to individual dwellings or apartments within medium to high scale residential or serviced apartment development should:
  - (a) be located as close as practical to the lift and/or lobby access and minimise the need for long access corridors;
  - (b) be clearly identifiable; and
  - (c) avoid the creation of potential areas for entrapment.

#### Daylight, Sunlight and Ventilation

- **50** Medium to high scale residential or serviced apartment development should be designed to maximise opportunities to facilitate natural ventilation and capitalise on natural daylight and minimise the need for artificial lighting during daylight hours.
- 51 Medium to high scale residential or serviced apartment development should be designed and located to maximise solar access to dwellings and communal open space on the norther facade.
- **52** Ceiling heights that promote the use of taller windows, highlight windows, fan lights and light shelves should be utilised to facilitate access to natural light, improve daylight distribution and enhance air circulation, particularly in dwellings with limited light access and deep interiors.
- **53** All new medium to high scale residential or serviced apartment development should have direct ventilation and natural light.
- 54 The maximum distance of a habitable room such as a living, dining, bedroom or kitchen from a window providing natural light and ventilation to that room is 8 metres.

- **55** Light wells should not be used as the primary source of daylight for living rooms to ensure a sufficient level of outlook and daylight.
- **56** Medium to high scale residential or serviced apartment development should be designed to ensure living areas, private open space or communal open space, where such communal open space provides the primary area of private open space, are the main recipients of sunlight.
- **57** Medium to high scale residential or serviced apartment development should locate living areas, private open space and communal open space, where such communal open space provides the primary area of private open space, where they will receive sunlight and, where possible, should maintain at least two hours of direct sunlight solar time on 22 June to:
  - (a) at least one habitable room window (excluding bathroom, toilet, laundry or storage room windows);
  - (b) to at least 20 percent of the private open space; and
  - (c) communal open space, where such communal open space provides the primary private open space for any adjacent residential development.
- **58** Natural cross ventilation of habitable rooms should be achieved by the following methods:
  - (a) positioning window and door openings in different directions to encourage cross ventilation from cooling summer breezes;
  - (b) installing small low level windows on the windward side and larger raised openings on the leeward side to maximise airspeed in the room;
  - (c) installing higher level casement or sash windows, clerestory windows or operable fanlight windows to facilitate convective currents;
  - (d) selecting windows which the occupants can reconfigure to funnel breezes such as vertical louvred, casement windows and externally opening doors;
  - (e) ensuring the internal layout minimises interruptions to airflow;
  - (f) limiting building depth to allow for ease of cross ventilation; and/or
  - (g) draught proofing doors, windows and other openings.

#### **Private Open Space**

- **59** Medium to high scale residential development and serviced apartments should provide the following private open space:
  - (a) studio (where there is no separate bedroom): no minimum requirement but some provision is desirable.
  - (b) 1 bedroom dwelling/apartment: 8 square metres.
  - (c) 2 bedroom dwelling/apartment: 11 square metres.
  - (d) 3+ bedroom dwelling/apartment: 15 square metres.

A lesser amount of private open space may be considered appropriate in circumstances where the equivalent amount of open space is provided in a communal open space accessible to all occupants of the development. Private open space for 2 or more bedroom dwellings/apartments may be divided into different areas whilst private open space for studios or 1 bedroom dwelling/apartments should be in a single area.

Areas used for parking of motor vehicles are not included as private open space.

Note: In the City Living, Main Street and Institutional Zones, specific landscaped open space and private landscaped open space provisions apply.

- **60** Medium to high scale residential (other than student accommodation) or serviced apartment development should ensure direct access from living areas to private open space areas, which may take the form of balconies, terraces, decks or other elevated outdoor areas provided the amenity and visual privacy of adjacent properties is protected.
- 61 Other than for student accommodation, private open space should have a minimum dimension of 2 metres and should be well proportioned to be functional and promote indoor/outdoor living.
- **62** Balconies should be integrated into the overall architectural form and detail of the development and should:
  - (a) utilise sun screens, pergolas, shutters and openable walls to control sunlight and wind;
  - (b) be cantilevered, partially cantilevered and/or recessed in response to daylight, wind, acoustic and visual privacy;
  - (c) be of a depth that ensures sunlight can enter the dwelling below; and
  - (d) allow views and casual surveillance of the street while providing for safety and visual privacy.
- **63** Secondary balconies, including Juliet balconies or operable walls with balustrades should be considered, subject to overlooking and privacy, for additional amenity and choice.
- **64** For clothes drying, balconies off laundries or bathrooms and roof top areas should be screened from public view.
- **65** The incorporation of roof top gardens is encouraged providing it does not result in unreasonable overlooking or loss of privacy.

#### **Visual Privacy**

- **66** Medium to high scale residential or serviced apartment development should be designed and sited to minimise the potential overlooking of habitable rooms such as bedrooms and living areas of adjacent development.
- **67** A habitable room window, balcony, roof garden, terrace or deck should be set-back from boundaries with adjacent sites at least three metres to provide an adequate level of amenity and privacy and to not restrict the reasonable development of adjacent sites.

#### **Noise and Internal Layout**

- **68** Medium to high scale residential or serviced apartment development close to high noise sources (e.g. major roads, established places of entertainment and centres of activity) should be designed to locate noise sensitive rooms and private open space away from noise sources, or be protected by appropriate shielding techniques.
- **69** Attached or abutting dwellings/apartments should be designed to minimise the transmission of sound between dwellings and, in particular, to protect bedrooms from possible noise intrusions.

#### **Minimum Unit Sizes**

- **70** Medium to high scale residential or serviced apartment development should provide a high quality living environment by ensuring the following minimum internal floor areas:
  - (a) studio (where there is no separate bedroom): 35 square metres.
  - (b) 1 bedroom dwelling/apartment: 50 square metres
  - (c) 2 bedroom dwelling/apartment: 65 square metres
  - (d) 3+ bedroom dwelling/apartment: 80 square metres plus an additional 15 square metres for every additional bedroom over 3 bedrooms.

Note: Dwelling/apartment "unit size" includes internal storage areas but does not include balconies or car parking as part of the calculation.

71 Internal structural columns should correspond with the position of internal walls to ensure that the space within the dwelling/apartment is useable.

#### Adaptability

- 72 Within medium to high scale residential or serviced apartment development, dwelling/apartment layouts should be adaptable to accommodate:
  - (a) a range of activities and privacy levels between different spaces;
  - (b) flexible room sizes and proportions;
  - (c) efficient circulation to optimise the functionality of floor space within rooms; and
  - (d) the future reuse of student accommodation as residential apartments through a design and layout that allows individual apartments to be reconfigured into a larger dwelling or other alternative use.

#### Outlook

**73** All medium to high scale residential or serviced apartment development should be designed to ensure the living rooms have a satisfactory external outlook. Living rooms that do not have an outlook or the only source of outlook is through high level windows or a skylight are not considered to provide an appropriate level of amenity for the occupiers.

Note: Outlook is a short range prospect and is distinct from a view which is more extensive and long range to particular objects or geographic features.

- **74** Light wells may be used as a source of daylight, ventilation, outlook and sunlight for medium to high scale residential or serviced apartment development provided that:
  - (a) living rooms do not have lightwells as their only source of outlook;
  - (b) lightwells up to 18 metres in height have a minimum horizontal dimension of 3 metres or 6 metres if overlooked by bedrooms; and
  - (c) lightwells higher than 18 metres in height have a minimum horizontal dimension of 6 metres or 9 metres if overlooked by bedrooms.

#### **On-Site Parking and Fencing**

#### OBJECTIVE

**Objective 23:** Safe and convenient on-site car parking for resident and visitor vehicles.

#### PRINCIPLES OF DEVELOPMENT CONTROL

- **75** To ensure an adequate provision of on-site parking, car parking should be provided for medium to high scale residential (other than student accommodation) or serviced apartment development in accordance with <u>Table Adel/7</u>.
- **76** Garages and parking structures associated with medium to high scale residential or serviced apartment development should be located so that they do not visually dominate the street frontage.
- 77 Car parking areas should be designed and located to:
  - (a) be close and convenient to dwellings/apartments;
  - (b) be lit at night;
  - (c) be well ventilated if enclosed;
  - (d) avoid headlight glare into windows; and
  - (e) clearly define visitor parking.
- 78 Where garages are located within a basement or undercroft:
  - (a) the width of access driveways should be kept to a minimum and should not detract from the streetscape;
  - (b) driveways should be designed to ensure safe and convenient access and egress;
  - (c) access should be restricted to one driveway or one point of access and egress;
  - (d) vehicles should be able to safely exit in a forward direction and should not compromise pedestrian safety or cause conflict with other vehicles; and
  - (e) the height of the car park ceiling should not exceed one metre above the finished ground floor level to ensure minimal impact on the streetscape.
- 79 Fencing and walls should:
  - (a) be articulated and detailed to provide visual interest;
  - (b) assist the development to address the street;
  - (c) assist in the provision of safety and surveillance;
  - (d) assist in highlighting entrances; and
  - (e) enable visibility of buildings from and to the street.

#### **Storage Areas**

**80** Site facilities should be readily accessible to each dwelling/serviced apartment, complement the development and relevant desired character and should include:

- (a) a common mail box structure located close to the main pedestrian entrance;
- (b) areas for the storage and collection of goods, materials, refuse and waste including facilities to enable the separation of recyclable materials as appropriate to the size and nature of the development and screened from public view; and
- (c) external clothes drying areas for residential dwellings that do not incorporate ground level open space.
- **81** Medium to high scale residential (other than student accommodation) or serviced apartment development should provide adequate and accessible storage facilities for the occupants at the following minimum rates:
  - (a) studio: 6 cubic metres
  - (b) 1 bedroom dwelling/apartment: 8 cubic metres
  - (c) 2 bedroom dwelling/apartment: 10 cubic metres
  - (d) 3+ bedroom dwelling/apartment: 12 cubic metres

50 percent of the storage space should be provided within the dwelling/apartment with the remainder provided in the basement or other communal areas.

#### Environmental

#### **Crime Prevention Through Urban Design**

#### **OBJECTIVES**

**Objective 24:** A safe and secure, crime resistant environment that:

- (a) ensures that land uses are integrated and designed to facilitate natural surveillance;
- (b) promotes building and site security; and
- (c) promotes visibility through the incorporation of clear lines of sight and appropriate lighting.

#### PRINCIPLES OF DEVELOPMENT CONTROL

- **82** Development should promote the safety and security of the community in the public realm and within development. Development should:
  - (a) promote natural surveillance of the public realm, including open space, car parks, pedestrian routes, service lanes, public transport stops and residential areas, through the design and location of physical features, electrical and mechanical devices, activities and people to maximise visibility by:
    - (i) orientating windows, doors and building entrances towards the street, open spaces, car parks, pedestrian routes and public transport stops;
    - avoiding high walls, blank facades, carports and landscaping that obscures direct views to public areas;
    - (iii) arranging living areas, windows, pedestrian paths and balconies to overlook recreation areas, entrances and car parks;
    - (iv) positioning recreational and public space areas so they are bound by roads on at least two road frontages or overlooked by development;
- (v) creating a complementary mix of day and night-time activities, such as residential, commercial, recreational and community uses, that extend the duration and level of intensity of public activity;
- (vi) locating public toilets, telephones and other public facilities with direct access and good visibility from well-trafficked public spaces;
- (vii) ensuring that rear service areas and access lanes are either secured or exposed to surveillance; and
- (viii) ensuring the surveillance of isolated locations through the use of audio monitors, emergency telephones or alarms, video cameras or staff eg by surveillance of lift and toilet areas within car parks.
- (b) provide access control by facilitating communication, escape and path finding within development through legible design by:
  - (i) incorporating clear directional devices;
  - (ii) avoiding opportunities for concealment near well travelled routes;
  - (iii) closing off or locking areas during off-peak hours, such as stairwells, to concentrate access/exit points to a particular route;
  - (iv) use of devices such as stainless steel mirrors where a passage has a bend;
  - (v) locating main entrances and exits at the front of a site and in view of a street;
  - (vi) providing open space and pedestrian routes which are clearly defined and have clear and direct sightlines for the users; and
  - (vii) locating elevators and stairwells where they can be viewed by a maximum number of people, near the edge of buildings where there is a glass wall at the entrance.
- (c) promote territoriality or sense of ownership through physical features that express ownership and control over the environment and provide a clear delineation of public and private space by:
  - (i) clear delineation of boundaries marking public, private and semi-private space, such as by paving, lighting, walls and planting;
  - dividing large development sites into territorial zones to create a sense of ownership of common space by smaller groups of dwellings; and
  - (iii) locating main entrances and exits at the front of a site and in view of a street.
- (d) provide awareness through design of what is around and what is ahead so that legitimate users and observers can make an accurate assessment of the safety of a locality and site and plan their behaviour accordingly by:
  - (i) avoiding blind sharp corners, pillars, tall solid fences and a sudden change in grade of pathways, stairs or corridors so that movement can be predicted;
  - using devices such as convex security mirrors or reflective surfaces where lines of sight are impeded;
  - (iii) ensuring barriers along pathways such as landscaping, fencing and walls are permeable;

- (iv) planting shrubs that have a mature height less than one metre and trees with a canopy that begins at two metres;
- (v) adequate and consistent lighting of open spaces, building entrances, parking and pedestrian areas to avoid the creation of shadowed areas; and
- (vi) use of robust and durable design features to discourage vandalism.
- **83** Residential development should be designed to overlook streets, public and communal open space to allow casual surveillance.
- **84** To maximise security and safety, buildings should be designed to minimise access between roofs, balconies and windows of adjacent buildings.
- **85** Security features should be incorporated within the design of shop fronts to complement the design of the frontage and allow window shopping out of hours. If security grilles are provided, these should:
  - (a) be transparent and illuminated to complement the appearance of the frontage;
  - (b) provide for window shopping; and
  - (c) allow for the spill of light from the shop front onto the street.

Solid shutters with less than 75 percent permeability are not acceptable.

#### **Noise Emissions**

# **OBJECTIVES**

- **Objective 26:** Development that does not unreasonably interfere with the desired character of the locality by generating unduly annoying or disturbing noise.
- **Objective 27:** Noise sensitive development designed to protect its occupants from existing noise sources and from noise sources contemplated within the relevant Zone or Policy Area and that does not unreasonably interfere with the operation of non-residential uses contemplated within the relevant Zone or Policy Area.

## PRINCIPLES OF DEVELOPMENT CONTROL

# **Noise Sources**

- **89** Development with potential to emit significant noise (including licensed entertainment premises and licensed premises) should incorporate appropriate noise attenuation measures in to their design to prevent noise from causing unreasonable interference with the amenity and desired character of the locality, as contemplated in the relevant Zone and Policy Area.
- **93** Mechanical plant or equipment should be designed, sited and screened to minimise noise impact on adjacent premises or properties. The noise level associated with the combined operation of plant and equipment such as air conditioning, ventilation and refrigeration systems when assessed at the nearest existing or envisaged noise sensitive location in or adjacent to the site should not exceed
  - (a) 55 dB(A) during daytime (7.00am to 10.00pm) and 45 dB(A) during night time (10.00pm to 7.00am) when measured and adjusted in accordance with the relevant environmental noise legislation except where it can be demonstrated that a high background noise exists.
  - (b) 50 dB(A) during daytime (7.00am to 10.00pm) and 40 dB(A) during night time (10.00pm to 7.00am) in or adjacent to a City Living Zone, the Adelaide Historic

(Conservation) Zone, the North Adelaide Historic (Conservation) Zone or the Park Lands Zone when measured and adjusted in accordance with the relevant environmental noise legislation except where it can be demonstrated that a high background noise exists.

- 94 To ensure minimal disturbance to residents:
  - (a) ancillary activities such as deliveries, collection, movement of private waste bins, goods, empty bottles and the like should not occur:
    - (i) after 10.00pm; and
    - (ii) before 7.00am Monday to Saturday or before 9.00am on a Sunday or Public Holiday.
  - (b) typical activity within any car park area including vehicles being started, doors closing and vehicles moving away from the premises should not result in sleep disturbance when proposed for use after 10.00pm as defined by the limits recommended by the World Health Organisation.

# **Noise Receivers**

- **95** Noise sensitive development should incorporate adequate noise attenuation measures into their design and construction to provide occupants with reasonable amenity when exposed to noise sources such as major transport corridors (road, rail, tram and aircraft), commercial centres, entertainment premises and the like, and from activities and land uses contemplated in the relevant Zone and Policy Area provisions.
- **96** Noise sensitive development in mixed use areas should not unreasonably interfere with the operation of surrounding non-residential uses that generate noise levels that are commensurate with the envisaged amenity of the locality.
- **97** Noise sensitive development adjacent to noise sources should include noise attenuation measures to achieve the following:
  - (a) satisfaction of the sleep disturbance criteria in the bedrooms or sleeping areas of the development as defined by the limits recommended by the World Health Organisation;
  - (b) the maximum satisfactory levels in any habitable room for development near major roads, as provided in the Australian/New Zealand Standard AS/NZS 2107:2000 -'Acoustics - Recommended Design Sound Levels and Reverberation Times for Building Interiors'; and
  - (c) noise level in any bedroom, when exposed to music noise (L₁₀) from existing entertainment premises, being:
    - (i) less than 8 dB above the level of background noise (L_{90,15 min}) in any octave band of the sound spectrum; and
    - (ii) less than 5 dB(A) above the level of background noise (L_{A90,15 min}) for the overall (sum of all octave bands) A-weighted levels.
  - Background noise within the habitable room can be taken to be that expected in a typical residential/apartment development of the type proposed, that is inclusive of internal noise sources such as air conditioning systems, refrigerators and the like as deemed appropriate.

Unless otherwise demonstrated, the minimum background noise to be used will be:

Octave Band Centre Frequency (Hz)	Minimum Background Noise Level (L _{A90, 15} ) dB (A)
63	10
125	12
250	14
500	14
1000	12
2000	10
4000	8
Overall Sum	21

# on the basis of the windows being closed for the noise sensitive development and any existing entertainment premises complying with the relevant legislation relating to noise emission.

Note: The report prepared by a suitably qualified acoustic engineer at the planning application submission stage should identify existing noise sources, identify the appropriate level of sound attenuation required and specify the noise attenuation measures that will be applied to the proposal. The noise attenuation measures might include:

- (a) siting and orientating the building away from the noise source and/or providing an external area that limits noise levels to World Health Organisation recommendations for residential areas;
- (b) sensitive internal layout of rooms, by locating noise sensitive rooms such as bedrooms and secluded private open space areas away from the noise source;
- (c) locating and designing entrances to be sealed and to provide air lock entries to sensitive rooms;
- (d) window location and design through thicker glass or double glazing of windows in recognition of the noise source;
- (e) sloping of roof or flat roof/parapet design to assist in noise passing overhead rather than penetrating through the roof of the dwelling;
- (f) selecting appropriate construction materials, such as sound absorbing materials and materials that reduce sound transmission;
- (g) installing door seals;
- (h) creation of hybrid buildings that serve as a buffer between different uses, eg the location of offices between residential and entertainment uses, can be vertically or horizontally applied;
- (i) adequate separation between residential and noise generating uses;
- (j) acoustic separation of ducts, fans etc;
- (k) constructing shared walls and floors between dwellings/apartments in a way which minimises the transmission of noise; or
- (I) separating openings of adjacent dwellings/apartments by a distance of a least three metres.
- **98** Attached dwellings/serviced apartments should be designed to minimise the transmission of sound between dwellings/serviced apartments and should particularly protect bedrooms from possible noise intrusion.

#### Waste Management

#### OBJECTIVE

**Objective 28:** Development which supports high local environmental quality, promotes waste minimisation, re-use and recycling, encourages waste water, grey water and stormwater re-use and does not generate unacceptable levels of air, liquid or solid pollution.

#### PRINCIPLES OF DEVELOPMENT CONTROL

**101** A dedicated area for on-site collection and sorting of recyclable materials and refuse should be provided within all new development.

- **102** A dedicated area for the collection and sorting of construction waste and the recycling of building materials during construction as appropriate to the size and nature of the development should be provided and screened from public view.
- **103** Development greater than 2 000 square metres of total floor area should manage waste by:
  - (a) containing a dedicated area for the collection and sorting of construction waste and recyclable building materials;
  - (b) on-site storage and management of waste;
  - (c) disposal of non-recyclable waste; and
  - (d) incorporating waste water and stormwater re-use including the treatment and re-use of grey water.
- **104** Development should not result in emission of atmospheric, liquid or other pollutants, or cause unacceptable levels of smell and odour which would detrimentally affect the amenity of adjacent properties or its locality. Land uses such as restaurants, shops, cafés or other uses that generate smell and odour should:
  - (a) ensure extraction flues, ventilation and plant equipment are located in appropriate locations that will not detrimentally affect the amenity of adjacent occupiers in terms of noise, odours and the appearance of the equipment;
  - (b) ensure ventilation and extraction equipment and ducting have the capacity to clean and filter the air before being released into the atmosphere; and
  - (c) ensure the size of the ventilation and extraction equipment is suitable and has the capacity to adequately cater for the demand generated by the potential number of patrons.

and also states any conditions pertaining to the use(s).

# **Energy Efficiency**

# OBJECTIVE

**Objective 30:** Development which is compatible with the long term sustainability of the environment, minimises consumption of non-renewable resources and utilises alternative energy generation systems.

# PRINCIPLES OF DEVELOPMENT CONTROL

#### All Development

- **106** Buildings should provide adequate thermal comfort for occupants and minimise the need for energy use for heating, cooling and lighting by:
  - (a) providing an internal day living area with a north-facing window, other than for minor additions^{*}, by:
    - (i) arranging and concentrating main activity areas of a building to the north for solar penetration; and

^{*} Minor additions have a floor area less than 50 percent of the existing dwelling and do not include a day living area.

- placing buildings on east-west allotments against or close to the southern boundary to maximise northern solar access and separation to other buildings to the north.
- (b) efficient layout, such as zoning house layout to enable main living areas to be separately heated and cooled, other than for minor additions;
- (c) locating, sizing and shading windows to reduce summer heat loads and permit entry of winter sun;
- (d) allowing for natural cross ventilation to enable cooling breezes to reduce internal temperatures in summer;
- (e) including thermal insulation of roof, walls, floors and ceilings and by draught proofing doors, windows and openings;
- (f) ensuring light colours are applied to external surfaces that receive a high degree of sun exposure, but not to an extent that will cause glare which produces discomfort or danger to pedestrians, occupants of adjacent buildings and users of vehicles;
- (g) providing an external clothes line for residential development; and
- (h) use of landscaping.
- **107** All development should be designed to promote naturally ventilated and day lit buildings to minimise the need for mechanical ventilation and lighting systems.
- **108** Energy reductions should, where possible, be achieved by the following:
  - (a) appropriate orientation of the building by:
    - (i) maximising north/south facing facades;
    - designing and locating the building so the north facade receives good direct solar radiation;
    - (iii) minimising east/west facades to protect the building from summer sun and winter winds;
    - (iv) narrow floor plates to maximise the amount of floor area receiving good daylight; and/or
    - (v) minimising the ratio of wall surface to floor area.
  - (b) window orientation and shading;
  - (c) adequate thermal mass including night time purging to cool thermal mass;
  - (d) appropriate insulation by:
    - (i) insulating windows, walls, floors and roofs; and
    - (ii) sealing of external openings to minimise infiltration.
  - (e) maximising natural ventilation including the provision of openable windows;
  - (f) appropriate selection of materials, colours and finishes; and
  - (g) introduction of efficient energy use technologies such as geo-exchange and embedded, distributed energy generation systems such as cogeneration*, wind power,

fuel cells and solar photovoltaic panels that supplement the energy needs of the building and in some cases, export surplus energy to the electricity grid.

- **109** Orientation and pitch of the roof should facilitate the efficient use of solar collectors and photovoltaic cells.
- **110** Buildings, where practical, should be refurbished, adapted and reused to ensure an efficient use of resources.
- 111 New buildings should be readily adaptable to future alternative uses.
- **112** Selection of internal materials for all buildings should be made with regard to internal air quality and ensure low toxic emissions, particularly with respect to paint and joinery products.
- **114** Development is encouraged to avoid heat loss by incorporating treatments, such as double glazing of windows along the southern elevation, or by minimizing the extent of windows facing south.

# **Micro-climate and Sunlight**

#### **OBJECTIVES**

- **Objective 33:** Buildings which are designed and sited to be energy efficient and to minimise micro-climatic and solar access impacts on land or other buildings.
- **Objective 34:** Protection from rain, wind and sun without causing detriment to heritage places, street trees or the integrity of the streetscape.

- **119** Development should be designed and sited to minimise micro-climatic and solar access impact on adjacent land or buildings, including effects of patterns of wind, temperature, daylight, sunlight, glare and shadow.
- **120** Development should be designed and sited to ensure an adequate level of daylight, minimise overshadowing of buildings, and public and private outdoor spaces, particularly during the lunch time hours.
- **121** Development should not significantly reduce daylight to private open space, communal open space, where such communal open space provides the primary private open space, and habitable rooms in adjacent City Living Zone, Adelaide Historic (Conservation) Zone and North Adelaide Historic (Conservation) Zone.
- **122** Glazing on building facades should not result in glare which produces discomfort or danger to pedestrians, occupants of adjacent buildings and users of vehicles.
- **124** Weather protection should not be introduced where it would interfere with the integrity or heritage value of heritage places or unduly affect street trees.
- **125** Development that is over 21 metres in building height and is to be built at or on the street frontage should minimise wind tunnel effect.

# **Stormwater Management**

#### OBJECTIVES

**Objective 35:** Development which maximises the use of stormwater.

**Objective 36:** Development designed and located to protect stormwater from pollution sources.

Surface water (inland, marine, estuarine) and ground water has the potential to be detrimentally affected by water run-off from development containing solid and liquid wastes. Minimising and possibly eliminating sources of pollution will reduce the potential for degrading water quality and enable increased use of stormwater for a range of applications with environmental, economic and social benefits.

- **Objective 37:** Development designed and located to protect or enhance the environmental values of receiving waters.
- **Objective 38:** Development designed and located to prevent erosion.

Development involving soil disturbance may result in erosion and subsequently sedimentation and pollutants entering receiving waters. Design techniques should be incorporated during both the construction and operation phases of development to minimise the transportation of sediment and pollutants off-site.

**Objective 39:** Development designed and located to prevent or minimise the risk of downstream flooding.

# PRINCIPLES OF DEVELOPMENT CONTROL

- **126** Development of stormwater management systems should be designed and located to improve the quality of stormwater, minimise pollutant transfer to receiving waters, and protect downstream receiving waters from high levels of flow.
- **127** Development affecting existing stormwater management systems should be designed and located to improve the quality of stormwater, minimise pollutant transfer to receiving waters, and protect downstream receiving waters from high levels of flow.
- **128** Development should incorporate appropriate measures to minimise any concentrated stormwater discharge from the site.
- **131** Development should manage stormwater to ensure that the design capacity of existing or planned downstream systems are not exceeded, and other property or environments are not adversely affected as a result of any concentrated stormwater discharge from the site.

# Heritage and Conservation

# OBJECTIVES

- **Objective 42:** Acknowledge the diversity of Adelaide's cultural heritage from pre-European occupation to current time through the conservation of heritage places and retention of their heritage value.
- **Objective 43:** Development that retains the heritage value and setting of a heritage place and its built form contribution to the locality.
- **Objective 44:** Continued use or adaptive reuse of the land, buildings and structures comprising a heritage place.
- **Objective 45:** Recognition of Aboriginal sites, items and areas which are of social, archaeological, cultural, mythological or anthropological significance.

# PRINCIPLES OF DEVELOPMENT CONTROL

- **140** Development on land adjacent to a heritage place in non-residential Zones or Policy Areas should incorporate design elements, including where it comprises an innovative contemporary design, that:
  - (a) utilise materials, finishes, and other built form qualities that complement the adjacent heritage place; and
  - (b) is located no closer to the primary street frontage than the adjacent heritage place.
- **142** Development that abuts the built form/fabric of a heritage place should be carefully integrated, generally being located behind or at the side of the heritage place and without necessarily replicating historic detailing, so as to retain the heritage value of the heritage place.

# **Development on Land Adjacent to a Heritage Place**

- **162** Development on land adjacent to land containing a Heritage Place should demonstrate design consideration of the relationship with the Heritage Place (without necessarily replicating its historic detailing) by establishing compatible:
  - (a) scale, bulk and setbacks;
  - (b) proportion and composition of design elements;
  - (c) form and visual interest (as determined by play of light and shade, treatments of openings and depths of reveals, roofline and silhouette, colour and texture of materials and details, landscaping and fencing);
  - (d) width of frontage and boundary set-back patterns; and
  - (e) vehicle access and carparking arrangements.
- **163** Development on land adjacent to a Heritage Place and sited in prominent locations, such as corners or at the termination of vistas where a strong presence is desirable, should have a scale and detail equal to that of the Heritage Place.
- 164 In a locality where single-storey Heritage Places prevail at or close to the primary street frontage, single storey development and a consistent building set-back should be maintained. Sympathetically designed second storey components that utilise or extend roof space to the rear of a building may be appropriate subject to scale, views from the street, overshadowing and privacy considerations.
- **165** Development that is visible from the street should match the building levels and storey heights of adjacent Heritage Places.

# Height, Bulk and Scale

- **167** Development should be of a high standard of design and should reinforce the grid layout and distinctive urban character of the City by maintaining a clear distinction between the following:
  - (a) the intense urban development and built-form of the town acres in the Capital City, Main Street, Mixed Use, City Frame and City Living Zones;

- (b) the less intense and more informal groupings of buildings set within the landscaped environment of the Institutional Zones;
- (c) the historic character of the Adelaide and North Adelaide Historic (Conservation) Zones and groups of historic housing within the City Living Zone; and
- (d) the open landscape of the Park Lands Zone.
- **168** The height and scale of development and the type of land use should reflect and respond to the role of the street it fronts as illustrated on <u>Map Adel/1 (Overlay 1)</u>.
- **169** The height, scale and massing of buildings should reinforce:
  - (a) the desired character, built form, public environment and scale of the streetscape as contemplated within the Zone and Policy Area, and have regard to:
    - (i) maintaining consistent parapet lines, floor levels, height and massing with existing buildings consistent with the areas desired character;
    - (ii) reflecting the prevailing pattern of visual sub-division of neighbouring building frontages where frontages display a character pattern of vertical and horizontal sub-divisions; and
    - (iii) avoiding massive unbroken facades.
  - (b) a comfortable proportion of human scale at street level by:
    - (i) building ground level to the street frontage where zero set-backs prevail;
    - (ii) breaking up the building facade into distinct elements;
    - (iii) incorporating art work and wall and window detailing; and
    - (iv) including attractive planting, seating and pedestrian shelter.
- **170** Where possible, large sites should incorporate pedestrian links and combine them with publicly accessible open space.
- **171** Buildings and structures should not adversely affect by way of their height and location the longterm operational, safety and commercial requirements of Adelaide International Airport. Buildings and structures which exceed the heights shown in <u>Map Adel/1 (Overlay 5)</u> and which penetrate the Obstacle Limitation Surfaces (OLS) should be designed, marked or lit to ensure the safe operation of aircraft within the airspace around the Adelaide International Airport.

# Landscaped Open Space

176 Landscaped open space should be provided on the site of a development to at least the extent specified in the Principles of Development Control for the relevant Zone or Policy Area for siting, amenity and screening purposes. Where the existing amount of landscaped open space provided is less than the amount specified in the relevant Zone or Policy Area, development should not further reduce this amount. Where landscaped open space is not required, the provision of landscaped pedestrian spaces, planter boxes and in-ground planting is appropriate.

# **Building Set-backs**

**178** Buildings within the Capital City Zone should be built to the street edge to reinforce the grid pattern, create a continuity of frontage and provide definition and enclosure to the public realm whilst contributing to the interest, vitality and security of the pedestrian environment.

# **Composition and Proportion**

- **179** Development should respect the composition and proportion of architectural elements of building facades that form an important pattern which contributes to the streetscape's distinctive character in a manner consistent with the desired character of a locality by:
  - (a) establishing visual links with neighbouring buildings by reflecting and reinforcing the prevailing pattern of visual sub-division in building facades where a pattern of vertical and/or horizontal sub-divisions is evident and desirable, for example, there may be strong horizontal lines of verandahs, masonry courses, podia or openings, or there may be vertical proportions in the divisions of facades or windows; and
  - (b) clearly defining ground, middle and roof top levels.
- **180** Where there is little or no established building pattern, new buildings should create new features which contribute to an areas desired character and the way the urban environment is understood by:
  - (a) frontages creating clearly defined edges;
  - (b) generating new compositions and points of interest;
  - (c) introducing elements for future neighbouring buildings; and
  - (d) emphasising the importance of the building according to the street hierarchy.

# **Articulation and Modelling**

- **181** Building facades fronting street frontages, access ways, driveways or public spaces should be composed with an appropriate scale, rhythm and proportion which responds to the use of the building, the desired character of the locality and the modelling and proportions of adjacent buildings.
- 182 Balconies should be designed to give shelter to the street or public space at first floor levels.
- 183 Balconies should:
  - (a) respond to the street context and building orientation; and
  - (b) incorporate balustrade detailing to reflect the balcony type and location and the materials and detail of the building facade.
- **184** No part of any fully enclosed building should extend over property boundaries, including streets and public spaces, whether above a balcony at a lower level or not.
- **185** Building services such as drainage pipes together with security grills/screens, ventilation louvres and car park entry doors, should be coordinated and integrated with the overall facade design.

# Materials, Colours and Finishes

- **186** The design, external materials, colours and finishes of buildings should have regard to their surrounding townscape context, built form and public environment, consistent with the desired character of the relevant Zone and Policy Area.
- 187 Development should be finished with materials that are sympathetic to the design and setting of the new building and which incorporate recycled or low embodied energy materials. The form, colour, texture and quality of materials should be of high quality, durable and contribute to the desired character of the locality. Materials, colours and finishes should not necessarily imitate materials and colours of an existing streetscape

- **188** Materials and finishes that are easily maintained and do not readily stain, discolour or deteriorate should be utilised.
- **189** Development should avoid the use of large expanses of highly reflective materials and large areas of monotonous, sheer materials (such as polished granite and curtained wall glazing).

# Sky and Roof Lines

# OBJECTIVE

**Objective 49:** Innovative and interesting skylines which contribute to the overall design and performance of the building.

- **191** Where a prevailing pattern of roof form assists in establishing the desired character of the locality, new roof forms should be complementary to the shape, pitch, angle and materials of adjacent building roofs.
- **192** Buildings should be designed to incorporate well designed roof tops that:
  - (a) reinforce the desired character of the locality, as expressed in the relevant Zone or Policy Area;
  - (b) enhance the skyline and local views;
  - (c) contribute to the architectural quality of the building;
  - (d) provide a compositional relationship between the upper-most levels and the lower portions of the building;
  - (e) provide an expression of identity;
  - (f) articulate the roof, breaking down its massing on large buildings to minimise apparent bulk;
  - (g) respond to the orientation of the site; and
  - (h) create minimal glare.
- **193** Roof top plant and ancillary equipment that projects above the ceiling of the top storey should:
  - (a) be designed to minimise the visual impact; and
  - (b) be screened from view, including the potential view looking down or across from existing or possible higher buildings, or be included in a decorative roof form that is integrated into the design of the building.
- **194** Roof design should facilitate future use for sustainable functions such as:
  - (a) rainwater tanks for water conservation;
  - (b) roof surfaces orientated, angled and of suitable material for photovoltaic applications; and/or
  - (c) "green" roofs (ie roof top gardens structurally capable of supporting vegetation) or water features.

# **Active Street Frontages**

#### OBJECTIVES

- **Objective 50:** Development that enhances the public environment and, where appropriate provides activity and interest at street level, reinforcing a locality's desired character.
- **Objective 51:** Development designed to promote pedestrian activity and provide a high quality experience for City residents, workers and visitors by:
  - (a) enlivening building edges;
  - (b) creating welcoming, safe and vibrant spaces;
  - (c) improving perceptions of public safety through passive surveillance; and
  - (d) creating interesting and lively pedestrian environments.

#### PRINCIPLES OF DEVELOPMENT CONTROL

- **195** Development should be designed to create active street frontages that provide activity and interest to passing pedestrians and contribute to the liveliness, vitality and security of the public realm.
- **196** Retail frontages should be designed to provide interest to passing pedestrians at street level and relief to building mass.
- **197** Commercial buildings should be designed to ensure that ground floor facades are rich in detail so they are exciting to walk by, interesting to look at and to stand beside.
- **198** Residential development should be designed to create interesting pedestrian environments and resident surveillance of any street, accessway and driveway.

# **Outdoor Dining**

# OBJECTIVE

**Objective 52:** Development that contributes to the vibrancy, activity and desired character of a locality.

## PRINCIPLES OF DEVELOPMENT CONTROL

**199** Outdoor dining should:

- (a) be located outside the associated premises;
- (b) provide sufficient set-backs, such as from kerbs and property boundaries, and clearances, such as from buildings;
- (c) be located in an area safe for patrons where the security of the building is not compromised;
- (d) ensure the dining area is set back from the building line at street intersections;
- (e) ensure unimpeded pedestrian flow through free and uninterrupted pedestrian paths; and

(f) ensure wheelchair access to pedestrian ramps is not compromised.

**200** Structures should:

- (a) be of high quality design and form an integral part of the streetscape;
- (b) not restrict public access;
- (c) not detract or restrict views of significant sightlines, buildings and landmarks;
- **201** Signage that identifies the business name or logo, or advertises goods sold on the premises is only appropriate on glass and canvas screens and umbrellas and should meet the following:
  - signage and advertisements should be designed to improve and complement the amenity of the premises, be of an appropriate design and consistent with the desired character of the locality;
  - (b) advertisements on outdoor dining items such as umbrellas and canvas screens should not exceed a portion that covers 10 percent of the total available space on each outdoor dining item, up to half of which may be commercial advertisements in the form of product logos used or sold by the premises;
  - (c) advertisements should not be illuminated or animated; and
  - (d) third party advertising on outdoor dining items is inappropriate.

# **Transport and Access**

# **Access and Movement**

#### OBJECTIVE

**Objective 60:** Access to and movement within the City that is easy, safe, comfortable and convenient with priority given to pedestrian and cyclist safety and access.

## PRINCIPLES OF DEVELOPMENT CONTROL

- 223 Development should provide safe, convenient and comfortable access and movement.
- 224 Vehicle access points along primary and secondary city access roads and local connector roads, as shown on <u>Map Adel/1 (Overlay 1)</u> should be restricted.

# **Pedestrian Access**

#### OBJECTIVES

- **Objective 61:** Development that promotes the comfort, enjoyment and security of pedestrians by providing shelter and reducing conflict with motor vehicles.
- **Objective 62:** Development that contributes to the quality of the public realm as a safe, secure and attractive environment for pedestrian movement and social interaction.
- **Objective 63:** Safe and convenient design of and access to buildings and public spaces, particularly for people with disabilities.

# PRINCIPLES OF DEVELOPMENT CONTROL

225 Development should reflect the significance of the paths and increase the permeability of the pedestrian network identified within <u>Map Adel/1 (Overlay 2)</u> by ensuring:

- (a) pedestrians are not disrupted or inconvenienced by badly designed or located vehicle access ramps in footpaths or streets; and
- (b) vehicle and service entry points are kept to a minimum to avoid adverse impact on pedestrian amenity.

## **Bicycle Access**

#### **OBJECTIVES**

- **Objective 64:** Greater use of bicycles for travel to and within the City and the improvement of conditions, safety and facilities for cyclists.
- **Objective 65:** Adequate supply of secure, short stay and long stay bicycle parking to support desired growth in City activities.

- **232** Development should have regard to the bicycle routes identified within <u>Map Adel/1 (Overlay 3)</u> by:
  - (a) limiting vehicular access points; and
  - (b) ensuring that vehicles can enter and leave the site in a forward direction, thereby avoiding reverse manoeuvres.
- **233** An adequate supply of on-site secure bicycle parking should be provided to meet the demand generated by the development within the site area of the development. Bicycle parking should be provided in accordance with the requirements set out in <u>Table Adel/6</u>.
- 234 Onsite secure bicycle parking facilities for residents and employees (long stay) should be:
  - (a) located in a prominent place;
  - (b) located at ground floor level;
  - (c) located undercover;
  - (d) located where passive surveillance is possible, or covered by CCTV;
  - (e) well lit and well signed;
  - (f) close to well used entrances;
  - (g) accessible by cycling along a safe, well lit route;
  - (h) take the form of a secure cage with locking rails inside or individual bicycle lockers; and
  - (i) in the case of a cage have an access key/pass common to the building access key/pass.
- 235 Onsite secure bicycle parking facilities for short stay users (i.e. bicycle rails) should be:
  - (a) directly associated with the main entrance;
  - (b) located at ground floor level;
  - (c) located undercover;

- (d) well lit and well signed;
- (e) located where passive surveillance is possible, or covered by CCTV; and
- (f) accessible by cycling along a safe, well lit route.
- 236 Access to bicycle parking should be designed to:
  - (a) minimise conflict with motor vehicles and pedestrians;
  - (b) ensure the route is well signed and well lit including the use of road markings such as a bicycle logo if appropriate to help guide cyclists; and
  - (c) ensure the route is unhindered by low roof heights.

integrated into the design of the development whilst retaining active street frontages.

# **Traffic and Vehicle Access**

#### **OBJECTIVES**

- **Objective 68:** Development that supports a shift toward active and sustainable transport modes (i.e. public transport, cycling and walking).
- **Objective 69:** An enhanced City environment and the maintenance of an appropriate hierarchy of roads to distribute traffic into the City to serve development in preference to through traffic.
- **Objective 70:** Adequate off-street facilities for loading and unloading of courier, delivery and service vehicles and access for emergency vehicles.

# PRINCIPLES OF DEVELOPMENT CONTROL

- **240** Development should be designed so that vehicle access points for parking, servicing or deliveries, and pedestrian access to a site, are located to minimise traffic hazards and vehicle queuing on public roads. Access should be safe, convenient and suitable for the development on the site, and should be obtained from minor streets and lanes unless otherwise stated in the provisions for the relevant Zone or Policy Area and provided residential amenity is not unreasonably affected.
- **241** Facilities for the loading and unloading of courier, delivery and service vehicles and access for emergency vehicles should be provided on-site as appropriate to the size and nature of the development. Such facilities should be screened from public view and designed, where possible, so that vehicles may enter and leave in a forward direction.
- **247** Buildings located along primary and secondary access roads should be sited to avoid the need for vehicles to reverse on to the road (unless the dimensions of the site make this impractical).

# **Car Parking**

#### **OBJECTIVES**

- **Objective 71:** To meet community expectation for parking supply while supporting a shift toward active and sustainable transport modes.
- **Objective 72:** An adequate supply of short-stay and long-stay parking to support desired growth in City activities without detrimental affect on traffic and pedestrian flows.

# PRINCIPLES OF DEVELOPMENT CONTROL

250 Car parking areas should be located and designed to:

- (a) ensure safe and convenient pedestrian movement and traffic circulation through and within the car parking area;
- (b) include adequate provision for manoeuvring and individually accessible car standing areas;
- (c) enable, where practical, vehicles to enter and leave the site in a forward direction;
- (d) minimise interruption to the pattern of built form along street frontages;
- (e) provide for access off minor streets and for the screening from public view of such car parking areas by buildings on the site wherever possible;
- (f) minimise adverse impacts on adjoining residential properties in relation to noise and access and egress;
- (g) minimise loss of existing on-street parking spaces arising through crossovers and access;
- (h) incorporate secure bicycle parking spaces and facilitate convenient, safe and comfortable access to these spaces by cyclists; and
- (i) provide landscaping, such as semi-mature trees, to shade parked vehicles and reduce the visual impact of the car parking area while maintaining direct sight lines and informal visual surveillance.

# **OVERLAYS**

# **OVERLAY 1 – AFFORDABLE HOUSING**

The following Objectives and Principles of Development Control apply to the designated areas marked on <u>Map Adel/1 (Overlays 15a, 15b and 15c</u>). They are additional to those expressed for the whole of the Council area and those expressed for the relevant Zone and, if applicable, Policy Area.

## INTERPRETATION

Where the Objectives and/or Principles of Development Control that apply in relation to this Overlay are in conflict with the relevant Council wide, Zone or Policy Area Objectives and/or Principles of Development Control in the Development Plan, the Overlay will prevail.

#### **OBJECTIVES**

- **Objective 1:** Affordable housing that is integrated with residential and mixed use development.
- **Objective 2:** Development that comprises a range of affordable dwelling types that cater for a variety of household structures.
- **Objective 3:** Affordable housing that deliver whole-of-life cost savings to the occupants.
- **Objective 4:** Affordable housing that is provided in a wide range of locations and integrated into the City.

# PRINCIPLES OF DEVELOPMENT CONTROL

1 Development comprising 20 or more dwellings should include a minimum of 15 percent affordable housing.

- 2 Where development includes affordable housing, then the quantitative provisions in respect to the following elements are not applicable to the affordable housing component provided the qualitative outcomes can be achieved:
  - (a) allotment area and dimensions;
  - (b) building height;
  - (c) site area and dimensions;
  - (d) site coverage;
  - (e) front, side and rear setbacks to boundaries;
  - (f) area and dimensions of private open space;
  - (g) minimum unit sizes;
  - (h) minimum storage areas;
  - (i) plot ratio;
  - (j) dwelling unit factor; and
  - (k) landscaped open space.