Preliminary Environmental Assessment

Australian Red Cross Blood Service: National Principal Site
17 O'Riordan Street, Alexandria

June 2008

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Ref: Preliminary Environmental Assessment_Jun08

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1 INTRODUCTION

1.1 Background

Australian Red Cross Blood Service (ARCBS) is a subsidiary of Australian Red Cross. It is a not-for-profit organisation which is jointly funded by Federal and State Governments. The ARCBS is responsible for providing the Australian community with safe, high quality blood products and related services. The ARCBS also provides vital services related to organ and tissue donation and tissue typing for transplantations.

The ARCBS was established as a national organisation in 1996, however its antecedents date to 1929 through various State and Territory Red Cross Transfusion Services. Before the ARCBS came into formal existence in 1996, the collection, processing and distribution of blood products throughout the country's health system was managed by individual State and Territory Red Cross Blood Transfusion Services.

The establishment of a national blood service has facilitated new levels of national and international co-operation, resulting in improved consistency, quality and safety across the country.

Australia now has an internationally recognized organisation supporting this vital area of health care. The ARCBS is capable of building on its diversified past to ensure the highest levels of scientific and professional standards in blood products across Australia. It is also able to assist other countries both at times of crisis and in building their own professional skills and systems in blood collection, manufacturing and delivery.

1.2 Overview of Project

Goodman International Limited (Goodman) proposes to construct a new purpose built medical facility for ARCBS at 17 O'Riordan Street Alexandria. The Project consists of the following:

- Demolition of all existing buildings and structures on the site;
- Construction of a new four storey building containing:
    - A new purpose-built medical laboratory, research and development facility, ancillary office/administration and warehouse and distribution functions having a total gross floor area (GFA) of 12,395 sqm
    - Basement car parking for 97 cars;
- Landscaping of the site
- Use of the completed building by Australian Red Cross Blood Service (ARCBS).

The proposed new facility would become the principle operations centre for ARCBS in NSW. It would house the main Sydney collection centre, test all New South Wales and Australian Capital Territory blood and process / distribute about 90% of New South Wales' blood and blood products. The proposed ARCBS facility will accommodate:

- Blood processing, testing laboratories and distribution functions for the Blood Service;
- Tissue typing laboratories essential to the National Transplantation Service;
- Research and Development laboratories;
- Training;
- A supplies warehouse for Blood Donor Centres;

- The Australian Bone Marrow Register, NSW Organ Donation Network and Australasian Donor awareness program; and
- Administrative functions including:
    - Operations Unit Executive
    - Operations services
    - Donor Services
    - Medical and Quality Services
    - Corporate Strategy and Planning
    - Government and International relations
    - Information services
    - Human resources and financing.

In addition to the above, the NAPS will also accommodate the blood processing activities which currently occur in the ARCBS Newcastle and ACT facilities. There will not be any Blood Donor Centres located at NAPS.

1.3 Need for the Project

The NSW Operations Centre for ARCBS is currently located at the Australian Red Cross Society (ARCS) Building at 153 Clarence Street, Sydney. The eleven storey building is shared between ARCS & ARCBS. Existing facilities have become inadequate and it is becoming increasingly difficult to meet operational and statutory obligations. Also, due to space restrictions at 153 Clarence Street, some operational functions have been re-located off-site to locations at 78-80 Clarence Street and Parramatta (Donor Management and NAT laboratories). Accordingly, ARCBS is proposing to relocate the current New South Wales / Australian Capital Territory Principal Site (NAPS) from its current facility to a contemporary, purpose-built facility at 17 O'Riordan Street, Alexandria.

The construction of a single purpose built facility will enable ARCBS to:

- Obtain sufficient space to conduct the required activities and consolidate these into one central facility which is purpose built for specific needs;
- Be located in a strategic location relative to collection and distribution areas enabling a more superior service and improve efficiency in the collection and distribution of blood and blood related products; and
- Increase opportunities for collaboration in the workplace particularly with research and development activities.

1.4 Statutory Context

The site is located in an existing industrial area within the Green Square Urban Renewal Area within the City of Sydney (Council) Local Government Area. The site is in zone 10(d) – Mixed Uses under the *South Sydney Local Environment Plan (LEP) 1998*, where development for the purposes of *High Technology Industries* such as this project is permissible with consent.

The capital expenditure of the Project will be approximately $72million and would generate up to 110 full-time jobs during construction and approximately 500 jobs once operational. The project constitutes a Major Project under Schedule 1 Clause 11 and Clause 19 of Part 3A of the *Environmental Planning and Assessment Act 1979 (EP&A Act)*. The project has therefore been referred to the NSW Department of Planning (DoP). On 19 June 2008, the DoP confirmed that the Director General, as a delegate of the Minister, had formed the opinion that the project put

forward by Goodman for the ARCBS National Principal Site (NAPS) constitutes a Project in respect of which, Part 3A of the EP&A Act applies.

1.5 Objective of this Report

Under Part 3A of the EP&A Act an application is to be made to the Department of Planning (DoP) for approval of the project supported by a Preliminary Environmental Assessment (PEA). This PEA document has been prepared by Goodman to identify the potential for environmental impact from the project including the anticipated positive impacts.

The objective of the PEA is to describe the project and to guide the further stages of environmental assessment by:

- Identifying those impacts which are significant and are likely to require further investigation.
- Identifying those impacts which are not likely to be significant and for which no further investigation is likely to be required.

2 EXISTING SITE

2.1 Location and Context

The subject site is located at 17 O'Riordan Street, Alexandria (See Figure 1). It is located approximately 5km from the Sydney CBD and approximately 2.5km from Sydney Airport within an existing industrial area in Zone 10(d) – Mixed Uses in the *South Sydney LEP 1998*. It is located within the Green Square Urban Renewal Area in close proximity to the proposed Green Square Town Centre and approximately 260m south west of the Green Square Railway Station. The Green Square Town Centre has been identified by the NSW Government as a major urban renewal area. The site is located at a higher point that the Green Square Town Centre which is generally low lying. Alexandria Canal is located to the south west of the site.

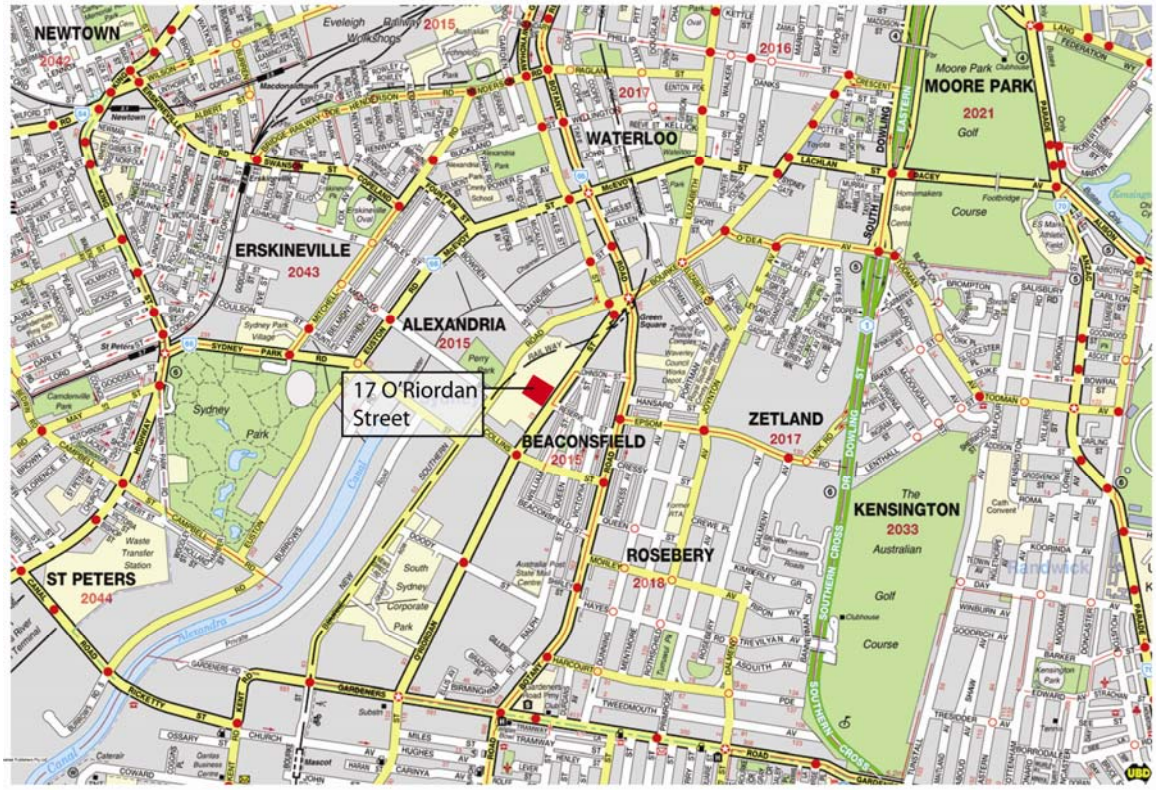


Figure 1: Location Plan

2.2 Surrounding Land Uses

To the east of the site is O'Riordan Street, existing industrial buildings and a linear park with a residential area further to the east. To the south are existing industrial and warehousing buildings. To the north and west is a vacant L-shaped block beneath which passes the Airport Rail Link tunnel.

Figure 2: Aerial Photograph

2.3 Access

Access to the site is gained via O'Riordan Street. The site has proximity to a number of arterial roads including O'Riordan Street, Bourke Road and the Eastern Distributor which provide excellent connection to the CBD to the north and the Motorway network to the south.

2.4 Existing Site Features

The site is a rectangular shaped parcel measuring approximately 76.8m x 95.8m with its shortest boundary fronting O'Riordan Street. It has a total area of 7,357sqm. It is described as Lot 4 DP 794095.

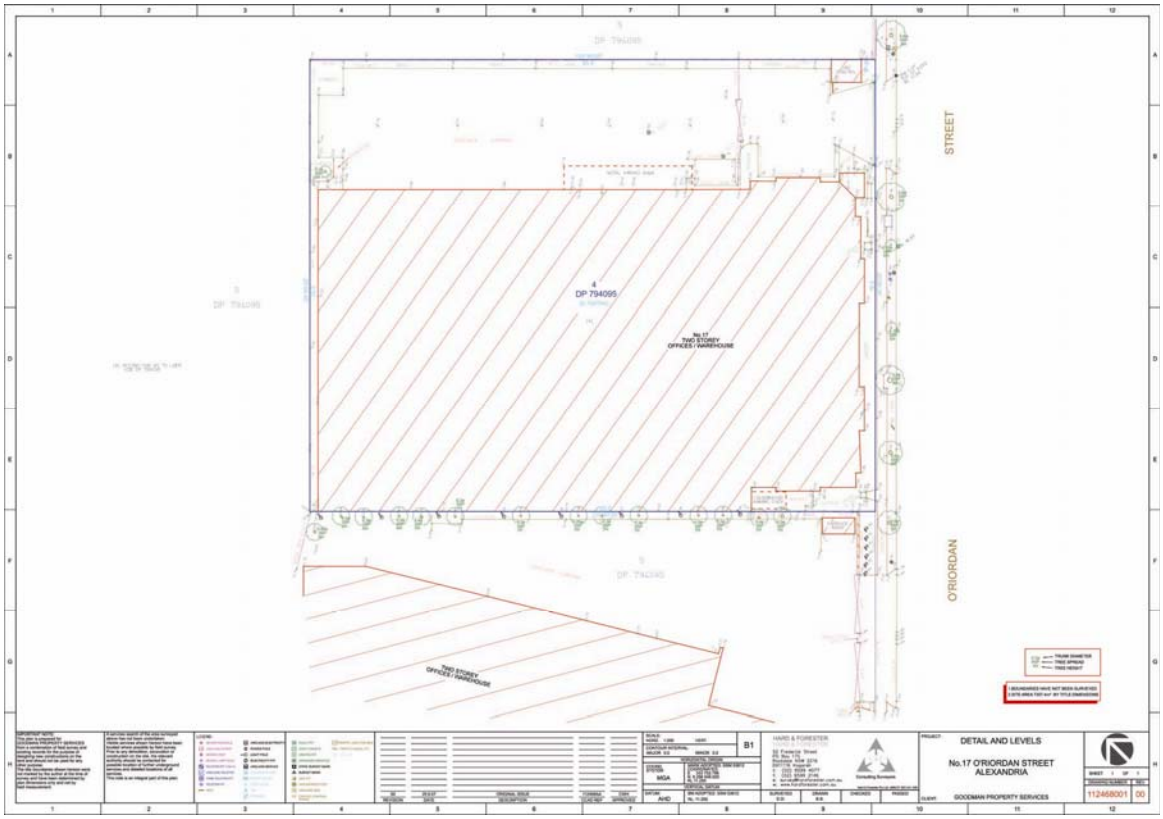


Figure 3: Site Survey

An existing warehouse facility and two storey office, with a building footprint of approximately 4998sqm (68% of the site), is located adjacent to the southern boundary. It has a zero side setback to the southern boundary and a front setback which varies from 1.8m to 2.7m. On the northern side of the building is a hardstand area for loading and servicing and shared car parking. A dedicated car parking area is located adjacent to the eastern property boundary. Access to the site is currently achieved by a single shared access point on the northern portion of the O'Riordan Street frontage.

This building is occupied by a single tenant who specializes in the on-line sale and distribution of wholesale discount goods and employs approximately 30 staff.

2.5 Site History

The existing buildings on the site were constructed in 1996 following development approval from South Sydney Council in 1994 (U94/00812). Title deed records indicate that the site was owned by a number of parties since 1918. Ownership details are as follows:

- 1918 – Austral Bronze Company Pty Ltd
- 1970 – Austral Bronze Copper Ltd
- 1989 – Leda Holdings Pty Ltd
- 1990 – Court Developments Pty Ltd
- 1995 – Prudential Assurance Company Ltd
- 1997 – Prudential Corporation Australia Ltd
- 1999 – Permanent Trustee Australia Ltd
- 2000 – Perpetual Nominees Ltd
- 2005 - Trust Company Australia Ltd

A review of historic aerial photographs indicates the site was occupied with commercial / industrial type warehouse structures in the 1950s. Subsequently development for a similar purpose took place to the north, north-east and south over the next 20 years. In the early 1990s the site was demolished to make way for the existing building, adjacent lots were also cleared.

2.6 Topography and Landform

The topography of the site is generally flat with a slight cross fall of about 1.5m from approximately RL 12.8 in the south west to approximately RL 11.3 in the north-east of the site.

2.7 Geology and Hydrogeology

Preliminary subsurface investigations have been undertaken on site including geo-technical and environmental assessments. These investigations indicate that the site soil predominately consists of alluvial material of sand and clay.

Groundwater at the site is reported at approximately 3.5m below ground level with a maximum design groundwater level of RL8.5 due to expected fluctuations over time. It is considered likely that groundwater flow would be towards the Alexandria Canal to the south west.

3 DESCRIPTION OF PROJECT

3.1 Scope

Goodman proposes to construct a new purpose built medical facility for ARCBS at 17 O'Riordan Street Alexandria. The Project consists of the following:

- Demolition of all existing buildings and structures on the site;
- Construction of a four storey building with a GFA of 12,395 sqm comprising:
    - A new purpose-built medical laboratory, research and development facility, ancillary office/administration and warehouse and distribution functions having a total gross floor area of 12,395 sqm
    - Basement car parking for 97 cars;
- Landscaping of the site
- Use of the completed building by Australian Red Cross Blood Service (ARCBS).

Table 3.1: Development Area Schedule

Element	***Proposed***
Site Area	7,357 m^2
No. of storeys	4 storeys
Building Height	18m (excluding plant)
Total Gross Floor Area (GFA)*	12,395 m^2
Floor Space Ratio (FSR)	1.68:1
Site Coverage (Ex. awnings)	62.5%
Hardstand Area	2,241 m^2
Landscaping Area**	1,104.50 m^2
Car Parking Spaces	97 (3 accessible spaces)

- **Note: Gross Floor Area Calculated in accordance with the definition of Gross Floor Area in the South Sydney LEP 1998*
- ***incl. hard and soft landscaping inclusive of Level 2 terrace*

3.2 Description of Proposed Use

Ground Level

The ground floor of approximately 4300 sqm NLA would accommodate the processing, inventory, distribution, supplies warehouse, transport and support areas, loading bays, archives, storage as well as outdoor loading and servicing areas for service vehicles and short term courier parking.

Basement Level

A single basement level would accommodate 97 parking spaces for ARCBS operational vehicles, staff and visitor parking as well as 6 motorcycle spaces, 10 bicycle stands, lockers and change rooms, WCs, plant equipment, lifts and stairwells. Access to the basement is via a shared entry/exit driveway located towards the southern end of the O'Riordan street frontage.

Level 1

This floor of approximately 400 sqm GFA would accommodate meeting areas, staff rooms, plant equipment, lifts and stairwells. The remainder of this floor is dedicated to plant equipment.

Level 2

This floor of approximately 3,700 sqm GFA would accommodate operational laboratories for mandatory testing and reference, research and business development laboratories and support facilities as well as an outdoor terrace area of approximately 700sqm.

Level 3
This floor of approximately 3,700sqm would accommodate the National Transplantation Service (NTA) laboratories, ARCBS training facility and administrative/office functions.

3.3 Architectural Vision

The design team's vision for the project is one of a strong urban statement which signals the regeneration of O'Riordan Street as an urban corridor extension of the Green Square Town Centre, while delivering an appropriate response to the context of the site and the 'visual image' desired by ARCBS.

The building proposal aligns itself to the 2.4m front street setback control as prescribed in the *South Sydney Development Control Plan 1997: Urban Design Part G: Special Precinct No.9 Green Square 2006 (Green Square DCP)* which creates a strong street urban edge to O'Riordan Street and allows a widened footpath along O'Riordan Street. This is in line with the intended urban design principles for the Green Square area and the City of Sydney intent to create O'Riordan Street as a significant entry corridor from the airport to the CBD.

The project would create a building with a strong visual urban presence onto O'Riordan Street through the formal use of a façade with a predominately vertical orientation. This is achieved by the use of deep vertical face concrete blades at close centres that has the effect of a dense colonnade as one moves along O'Riordan Street by either vehicle or by foot. The effect is enhanced by reinforcing the vertical through the concealment of the horizontal floor plates behind the glazing plane. The deep vertical blades also form sun-shading as this façade faces east. The repeating order of the blades is interrupted by strategic openings that are placed up according to functional and formal needs. The most significant of these being the entry 'portal' which has a generous scale signaling the main entry of the building. This 'entry portal' opens up onto an internal atrium linking all floors of the building which also acts as a large 'window' into the building where habitation and occupant movement over multiple levels can be witnessed from outside. Importantly this atrium also delivers large amounts of natural light deeper into the floor plates and encourages interaction amongst occupants.

The north, west, and south facades have a more regularly proportioned façade with an emphasis on balancing the horizontal with the verticals to create a contrast with the street elevation and emphasize its urban importance.

Materiality is intended to be expressed predominantly through pre-cast face concrete representing the structural and formal framing systems of the building. Placed within this formal ordering is a combination of grey tinted glazing and pre-finished charcoal coloured cladding elements which contrast with the light colouring of the concrete emphasizing framing and proportioning strength.

A preliminary drawing set prepared by Bligh Voller Nield (BVN) is included with this Preliminary Environmental Assessment (PEA).

Figure 4: Preliminary Perspective

3.4 Construction Works

Construction works associated with the proposed project are as follows:

- Demolition of existing building;
- Earthworks to excavate to a depth of approximately RL 9.1;
- Construction of a four storey base building, one level basement and integrated fit-out; and
- Landscaping and public domain works.

It is expected that the existing site services available to the site would adequately service the development without significant augmentation. There is no requirement for on-site detention of stormwater by either Sydney Water or City of Sydney Council.

The proposed timing for the project is presented in Table 3.4 below.

Table 3.4: Proposed Project Timeframe

Activity	***Proposed Timing***
Civil and Building Construction	1 December 2008 – 1 August 2010
ARCBS Occupation	31 August 2010

3.5 Capital Investment

The capital expenditure of the Project will be approximately $72million. This comprises of approximately $36million for the base building and $36 million for the fit-out.

3.6 Employment

The building population would comprise approximately 500 people in total who would typically populate the project as follows:

- Principal Day Shift (7:00am to 4:00pm) – approximately 400 staff
- Night Shift (4:00pm to 11:00pm) - approximately 75 staff
- Late Shift (from 11:00pm to early morning) – approximately 20 staff

3.7 Parking, Access and Circulation

The project would provide separate entry and exit driveways for the service vehicles and blood delivery vehicles. The entry driveway would be located at the northern end of the site while the exit driveway would be located at the southern side. In this way the service and blood delivery vehicles would entry the site from the northern driveway and circulate anti-clockwise around the proposed building and exit via the southern driveway. Courier vans will load and unload from the sides of the building, which the larger vehicles will access the warehouse are and loading docks at the rear of the facility. Loading and servicing in this way optimises the processing functions on the ground floor.

Access to the basement car parking is via a shared entry/exit driveway located towards the southern end of the O'Riordan street frontage. Parking for 97 cars would be provided in the basement.

3.8 Landscaping and Public Domain

A public domain widening of 2.4m in width along the full length of the O'Riordan Street frontage is proposed in accordance with the *Green Square DCP* which requires a 2.4m setback and dedication along this frontage.

Public Domain

Public domain improvement works are proposed in this zone including:

- Retention where possible of existing mature street trees and street verge;
- Upgrading and widening of pavement;
- New street tree planting in public domain;
- Up-lighting of building façade and provision of new street furniture.

Side and Rear boundaries

A narrow landscaping strip and new high quality fencing will be provided to the side and rear boundaries for security and visual screening.

Terrace

An outdoor terrace of approximately 700 sqm is proposed on the roof of the warehouse at Level 2 on the western side of the building. This terrace would provide an attractive outdoor recreation and congregation space for employees, it would create the opportunity for views back towards the city skyline and would be separated from the vehicular activity on the site and the noise and air emissions associated with vehicular traffic on O'Riordan Street.

3.9 Signage

A single signage element is proposed on the elevation to O'Riordan Street. This element is to be a symbolic representation of the ARCBS logo and would measure some 6m x6m in diameter. Prior to the installation of any signage Goodman proposes to submit detailed plans of the proposed signage to the DoP(or Council) for approval.

4 STATUTORY CONTEXT

4.1 Environmental Planning and Assessment Act 1979

The project constitutes 'development' and therefore is to be considered under the EP&A Act and the *Environmental Planning and Assessment Regulation 2000* (the Regulation). The EP&A Act and the Regulation set out the framework for which development must be assessed.

4.2 Part 3A Major Project

Projects assessed under Part 3A of the EP&A Act require development consent from the DoP. Part 3A applies if a project meets any of the types of project set out in *State Environmental Planning Policy (Major Projects) 2005*. This project is classified as a major project under Part 3A of the EP&A Act because it involves development for the purpose of a medical laboratory, research or development facility which employs more than 100 people and has a capital investment value in excess of $30 million and therefore triggers the criteria in Clause 11 of Schedule 1 of *State Environmental Planning Policy (Major Projects) 2005* and Clause 19 'development for the purposes of health, medical or related research that has a capital investment value of more than $15 million, or employs 100 or more people.'

On 19 June 2008, the NSW Department of Planning confirmed that the Director General, as a delegate of the Minister, had formed the opinion that the project constitutes a project that Part 3A of the EP&A Act applies because it triggers clause 11 and clause 19 of the *Major Projects SEPP*.

4.3 Permissibility

The land the subject of the proposed Major Project Application is currently in:

- Zone 10(d) – Mixed Use under the *South Sydney LEP 1998;*

The project, as development for the purpose of medical laboratory, research and development, is currently permissible under the *South Sydney LEP 1998* where development for the purpose of high technology industries in Zone 10(d) is permissible with consent. High technology industries are defined as follows:

> *"means an enterprise which has its primary function the manufacture, development, production, processing or assembly of, or research into… the following… biological, pharmaceutical, medical or paramedical systems, goods and components" (our emphasis)*

The project satisfies each of the types of activities listed in the high-technology use definition in the *South Sydney LEP 1998*. Accordingly, being a permissible use under the current local planning controls the project is deemed to be of a kind which the Minister is able to approve under Part 3A.

4.4 Other Environmental Planning Instruments

Section 75I(2) of the EP&A Act requires that the Director-General's Assessment Report consider the provisions of State Environmental Planning Policies (SEPPs) and other environmental planning instruments (EPIs) that are relevant to the project.

The following EPIs have been considered during the preparation of this PEA:

- *SEPP 33 – Hazardous and Offensive Development;*
- *SEPP 55 – Remediation of Land;*
- *SEPP 64 – Advertising and Signage;*
- *Draft SEPP 66 – Integration of Land Use and Transport;*
- *SEPP (Major Projects) 2005;*
- *SEPP (Infrastructure) 2007; and*
- *South Sydney Local Environmental Plan (LEP) 1998; and*
- *South Sydney Development Control Plan 1997;*
- *South Sydney Development Control Plan 1997: Urban Design*, *Precinct G: Special Precinct No. 9 – Green Square*
- *City of Sydney Development Control Plan No.11 – Traffic Generating Development*
- *City of Sydney Contributions Plan 2006*

A preliminary consideration of these EPIs is provided in table 4.1 below.

Table 4.1: Environmental Planning Instruments Summary

SEPP 33	*SEPP 33* provides definitions for hazardous and offensive industry to enable decisions on developments to be made on the basis of merit, rather than on industry type per se. The proposed facility would not involve the storage, distribution or use of significant quantities of dangerous goods or hazardous substances. Nor is the use of the facility likely to result in the emission of a polluting discharge (e.g. noise or odour) in a manner which would have a significant adverse impact in the locality or on the existing or likely future development on other land. Accordingly, it is considered likely that the project does not constitute a 'potentially offensive industry', and that the project is able to be conducted in a manner that is consistent with the aims and objectives of SEPP 33.
SEPP 55	*SEPP 55* aims to provide for a state-wide planning approach to the remediation of contaminated land, and in particular, to promote the remediation of contaminated land for the purpose of reducing the risk of harm to human health or any other aspect of the environment. Clause 7 of SEPP 55 requires a consent authority to consider whether the land for which a project/development application relates is contaminated, and if the land is contaminated, to be satisfied that the land is suitable in its contaminated state (or will be suitable, after remediation) prior to granting consent. The potential for site contamination on the subject land has been addressed in section 6.6.
SEPP 64	*SEPP 64* aims to ensure that any signage associated with a development, including any advertisement, that is visible from a public place is compatible with the desired amenity and visual character of an area, is suitably located and is of a high quality and finish. The only signage proposed under this project involves a building/business identification sign as defined in the policy. Clause 9 of the SEPP provides that an assessment of matters identified in Schedule 1 is not required for building identification signs and business identification signs. The proposed building and business identification signage is considered to be consistent with the aims and objectives of SEPP 64. As discussed in Section 3.9, Goodman will commit to the preparation of detailed signage plans in consultation with City of Sydney Council and to the satisfaction of the Director-General.
Draft SEPP 66	*Draft SEPP 66* is designed to apply to any development having a gross floor space of more than 1,000 square metres. The aims of the policy are to ensure that urban structure, building forms, land use locations, development designs, subdivision and street layouts help achieve the following planning objectives: *a) Improving accessibility to housing, employment and services by walking, cycling and public transport;* *b) Improving the choice of transport and reducing dependency solely on cars for travel purposes;* *c) Moderating growth in demand for travel and distances travelled especially by*

	car; *d) Supporting the efficient and viable operation of public transport services;* *e) Providing for the efficient movement of freight.* The site is considered ideal for the proposed project because of local considerations (proximity to Green Square Railway Stations, existing industrial areas and existing arterial road system) and regional factors (proximity to CBD, Sydney Airport and the Sydney Motorway network). It is considered that the project would assist in achieving the above objectives, particularly (a) because of its proximity to the CBD and local public transport facilities and (b) because of the efficiencies gained in the collection and distribution of blood and blood related products.
SEPP (Major Projects) 2005	*SEPP (Major Projects) 2005* aims to identify projects of State and regional planning significance that are of a kind that the approval and assessment process under Part 3A of the *EP&A Act* should apply. As stated in section 4.2 above, the project constitutes a class of development in Schedule 1 of the SEPP and consequently, the Minister is the approval authority for the project.
SEPP (Infrastructure) 2007	SEPP (Infrastructure) 2007 aims to facilitate the effective delivery of infrastructure across the State. Clause 104 of the SEPP applies to traffic generating development (in a similar manner to the recently repealed SEPP 11) and ensures that the RTA is given the opportunity to make representations on certain traffic generating development applications before a consent authority makes a determination on the project. The proposed facility would gain direct access from a classified road and therefore in accordance with Clause 104 (2) and (3), the Department of Planning will be required to refer the application to the RTA for its consideration.
South Sydney LEP 1998	As mentioned in Section 4.3, the subject site in Zone 10(d) 'Mixed Uses' under the *South Sydney LEP 1998*. The objectives of this zone include: *a) To establish a predominately employment based zone while allowing not more than 15% residential use of each development site, but only if it supports those employment uses, and* *b) To encourage appropriate business activities which contribute to economic growth and employment opportunities with the Green Square area, and* *c) To promote the vitality of the public domain by encouraging the location of active retail and entertainment uses at ground and first floor levels, particularly in areas fronting the Green Square Railway Station, and* *d) To ensure through the design of a high quality public domain that a high level of amenity is provided for pedestrians, shoppers and workers within the zone, and* *e) To minimise any adverse impact, including social impact, on residential amenity by devising appropriate design assessment criteria and applying specific impact mitigation requirements by the use of development control plans, and* *f) To ensure that existing and future development on land zoned industrial under this plan is preserved and promoted so as to protect the existing*

employment within South Sydney, and

g) *To ensure that development within the zone contributes to a sustainable, vibrant community, and reflects equal and integrated consideration of social, economic and environmental design issues, and*

h) *To enhance and enliven Green Square through the implementation of public art where appropriate.*

The project is considered to be consistent with these objectives, it is considered that the proposed project would contribute to establishing an employment based zone which improves employment opportunities in the area, would result in an improved public domain for pedestrians and appropriate mitigation of any adverse environmental impacts.

Clause 27B sets out planning principles which Council must give consideration to for development within the Green Square area. These principles are consistent with the key concepts in the vision for the Green Square area set out in Clause 27A which are: diversity, connectivity, interdependency and long term growth. The project is considered to be consistent with these objectives.

Clause 27C requires the preparation of a master plan for development of land if Council has not already adopted one for the area. Preparation of a master plan is not considered necessary for the project; this is because the project is a single freestanding building. Consideration has been given to future development and the relationship of the project to its surroundings and is considered to have no adverse impacts – further detail of this will be included in the Design Report in the Environmental Assessment.

City of Sydney Developer Contributions Plan 2006

The *City of Sydney Developer Contributions Plan*, prepared under Section 94 of the EP&A Act was adopted by City of Sydney Council in August 2006. Developer contributions for this area are levied on a per worker basis for the public services and facilities.

The project site is located in the Southern Precinct. ARCBS has an expected workforce of 500 people. A credit for existing uses/employees on the site would be deducted from the figure as shown in Table 4.1.1. It is therefore anticipated contributions payable in accordance with this Contribution plan will be:

Table 4.1.1: Contributions Payable – Southern Precinct*

Contribution Type	***Rate Per Worker ($)***	***Total ($)***
Community Facilities	270.27	135,135
Public Domain	149.69	74,845
New Open Space	1,166.35	583,175
New Roads	269.22	148,110
Accessibility	12.29	6,110
Management	13.28	6,640
Total	1,908.10	954,050
*Existing Use Credit***	*1,908.10*	*143,409*
TOTAL		**810,641**

**Note: Based on rates at 2006 and not indexed to current rate*

***Based on the expected employee density of existing building of 1 per 66.5 sqm GFA (4,998sqm facility).*

5 CONSULTATION

Agencies and other key stakeholders that may have an interest in the project and would be consulted during the application process include:

- City of Sydney Council
- Roads and Traffic Authority (RTA)
- Sydney Water
- RailCorp
- Sydney Airport
- NSW Department of Health
- Energy Australia
- Department of Energy and Climate Change (DECC)

It is not anticipated that any other agency concurrence will be required.

6 ENVIRONMENTAL EFFECTS

6.1 Site Suitability

The site is situated in an existing industrial and employment area in Zone 10(d) – Mixed Uses under the *South Sydney LEP 1998*. High technology industries for the purpose of medical laboratories, research and development, distribution and offices are permissible with consent.

6.2 Built Form, Urban Design and Landscaping

Design of the project has been developed by BVN Architects in association with Goodman. The Design Report to be included in the Environmental Assessment will address the following issues:

Built Form

The design report will address the impact of the proposed project on the existing area including:

- Bulk, scale and height of the building envelope;
- Form, modulation and articulation of the building; and
- Suitability of materials and finishes.

Streetscape

The design report will demonstrate that the development provides an appropriate frontage to the streetscape of O'Riordan Street including:

- Presentation of the building to the street;
- Driveway entrances and locations; and
- Landscape treatment of open space, building setbacks and street trees.

Impact on adjoining properties

The design report will demonstrate how the project will have a minimal impact on adjoining properties.

Landscaping

Tract Landscape consultants have been engaged to prepare a Landscape Concept Plan for the project. The Landscape Concept Plan will address the measures proposed to improve the quality of the public domain, provide a high quality private open space to benefit the workers on the level 2 terrace and appropriately plant the side and rear setbacks. Proposed tree planting will be prepared with consideration for Council's street tree master plan.

6.3 Traffic, Access and Parking

Preliminary Assessment

Masson, Wilson and Twiney (MWT) Traffic and Transport consultants have been engaged to undertake an assessment of the traffic and parking impacts associated with the project. A summary of the preliminary assessment is as follows:

Existing Road Network

The site has a high level of accessibility being located on O'Riordan Street – an arterial road between the CBD and Sydney Airport and its close proximity to other arterial roads. O'Riordan Street is a declared State Road and under the control and maintenance of the Roads and Traffic Authority (RTA). Generally O'Riordan Street permits all accesses to/from the abutting properties and intersecting streets.

The two-way peak hour traffic flows along O'Riordan Street are assessed as ranging from 1,750 vehicles per hour (vph) to about 2,200 vph.

Public Transport

The site is located within 300m of the Green Square Railway Station which is on the Airport and East Hills line. This line has direct train services to the City Circle stations as well as Campbelltown and Macarthur stations in the south. The line has a high frequency train service, running at approximately 5 to 10 minute intervals during peak periods. This site also has close proximity to a number of high frequency bus services along Botany Road and Collins Street. It is acknowledged that the State Transit Authority (STA) has a strategy to improve buses services through the Green Square re-development area as demand in the area increases – this will result in a high provision of public transport services over time.

Proposed Parking

The proposed car parking provision is as follows:

Table 6.3: Proposed ARCBS Car Parking Provision

Use	***No. of Spaces***
Staff Car Parking	52
Visitor Car Parking	10
Staff Vehicle Parking	25
Total	**97***

*Of these 3 spaces would be accessible spaces and 13 spaces would be labelled as small spaces

The proposed provision of 97 parking spaces is in accordance with the required provision in the *South Sydney Development Control Plan (DCP) No.11 Transport Guidelines for Development 1996.*

Proposed Access

It is proposed to provide separate entry and exit driveways for the service vehicles and blood delivery vehicles. The entry driveway would be located at the northern end of the site while the exit driveway would be located at the southern side. In this way the service and blood delivery vehicles would entry the site from the northern driveway and circulate anti-clockwise around the proposed building and exit via the southern driveway.

The entry and exit driveways have been designed to accommodate the vehicle swept path made by a 19m semi trailer.

In addition, a separate combined entry/exit ramp is proposed to provide access to the basement car parking area.

It is proposed, as per the existing situation, that full access to and from the site be allowed given that the site receives and despatches various blood products and other organs and tissues for which timely delivery is critical.

Anticipated Truck Movements

With reference to the existing use of the Clarence street facility, the following truck movements are expected for the proposed project:

Table 6.4: Proposed ARCBS Truck Movements

Vehicle Type	***No. of Movements***
Blood Delivery Vehicles	• Hiace vans / courier taxi 100 movements per day • Approximately 10 in and 10 out per peak hour
Semi-Trailers (19m)	• Two refrigerated trucks per week outside of peak periods (typically 10pm-2am) • One donor mobile unit arriving in the evening after peak periods and departing early the following morning • One Carter Holt Harvey delivery per fortnight
Other deliveries	• 20-30 small trucks per week • Approximately 2 in and 2 out per peak hour
Garbage trucks	• 3 per day expected outside of peak hours
BOC Gas trucks	• Approximately 1 per day outside peak periods

Based on this analysis, it is expected that there would be an additional 24 two-way movements per peak hour generated by service and blood delivery vehicles and importantly no deliveries by large trucks during the critical peak periods.

Impacts of project on external road network

An analysis of the impacts of the project on the external road network indicates that the project will have no detrimental impact on the external road network and level of service of existing intersections during peak periods. This is especially the case if the movements to the car park basement were restricted to left-in left out only.

Conclusions

- Access for service vehicles is provided via separate entry and exit driveways (in an anti-clockwise direction);
- A separate combined entry and exit driveway is proposed for car park access
- The provision of 97 car spaces is in accordance with the limit set by the *South Sydney Development Control Plan (DCP No.11) No.11 Transport Guidelines for Development 1996*;
- The proposed on-site parking provision and internal layout are considered satisfactory and generally in accordance with Australian Standard AS2890.1:2004;
- The project is expected to generate approximately 100 vph (including trucks servicing the site);
- Analysis indicates that the nearby intersections would continue to operate in a manner similar to that which presently applies;

- car park access would have improved operation with access restricted to left and right turn entry but left exit only although it is not necessary to ensure adequate level of service.

Further Assessment

A preliminary assessment of the traffic and parking impacts indicate that the project would be satisfactory and accordingly the project is supportable with respect to traffic. A copy of the completed report will accompany the Environmental Assessment.

6.4 Heritage

The Hill View Conservation area is located in close vicinity to the site on the eastern side of O'Riordan Street, north of Johnson Street. This area is identified as CA55 on the *South Sydney LEP 1998* Heritage Conservation Map (Amendment No.3), gazetted 22 December 2006. Although CA55 is not identified in the LEP heritage schedule, development within its vicinity is subject to the provisions of the *South Sydney LEP* 1998 and the *Heritage Act 1977*.

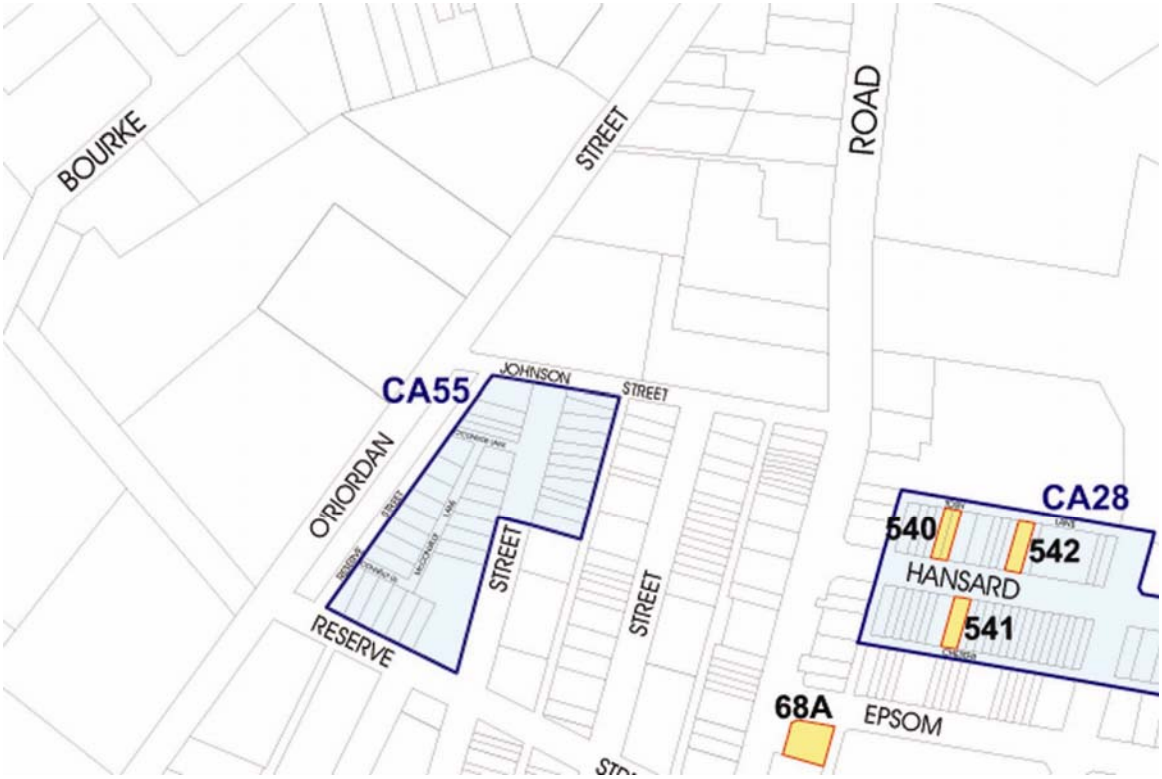


Figure 5: Extract from South Sydney LEP 1998 – Heritage Conservation Map

Preliminary Findings

The Hill View Conservation area is made up of small, low density, mainly residential terraces. Some of these have an industrial heritage, while others have been adapted to be used as small commercial / industrial premises at the lower end of Victoria and Queen Street. On the eastern side of O'Riordan Street, south from the corner of Johnson street is an existing row of mature trees and linear park which acts as an excellent buffer to the conservation area, providing relief from the traffic noise of O'Riordan Street as well as minimising the opportunity for any overshadowing or visual impacts from the project.

Further Assessment

To accompany the Environmental Assessment, Australian Museum Business Services (AMBS) is currently preparing a Statement of Heritage Impact (SoHI) that will consider the issues associated with the impact of the project on the heritage significance of the Hill View Conservation Area and outline any mitigative measures. This report will be produced in accordance with the *NSW Heritage Manual*, with particular reference to the sections on *Statements of Heritage Significance* and *Assessing Heritage Significance*.

6.5 Geology and Soils

A preliminary limited geotechnical investigation has been undertaken by Douglas Partners to provide information on the subsurface conditions at the site.

Preliminary Findings

Preliminary findings indicate that the subsurface profile can be described by five main material strata.

The pavement and filling on the site is up to 3.4m deep. Test bores indicate that the filling includes sand and gravel with some silt and clay.

There was generally a very loose silty sand layer beneath the filling then medium dense and dense sand to depths of 6.4 – 8.4m. Significant layers of soft material were not encountered in this stratum.

The alluvial materials comprised medium dense to dense sands and silty sands and stiff to very stiff clays and silty clays. This layer was about 2.5 – 5m thick. The alluvium was typically underlain by residual soils of stiff to hard consistency. The residual clay soils were generally about 2-4m thick.

Weathered rock is assumed to be at or close to the depth of cone refusal which occurred at 12.9 – 15.5m.

Groundwater was encountered between RL 7.6 and RL 7.9 during the field work and between RL 7.6 and RL 7.8 in the monitoring wells 10 days following the completion of the drilling. The sand profile is expected to be relatively permeable. A maximum design groundwater level of RL 8.5 is recommended for the site at this stage to take into account expected fluctuations in groundwater levels over time.

These preliminary findings have the following implications for the project:

- Excavation is unlikely to be required in rock;
- Temporary shoring or a temporary batter of 1.5(H):1(V) is suggested excavation in the filling and sands above the groundwater table;
- Basements located above RL 8.5 could be designed as drained basements and therefore have no requirement for tanking (the project has a basement RL of 9.45); and
- Piles are most likely the most appropriate form of foundations.

Effects of Project on Railway tunnel

The Airport Rail Line is located near the site and the exact location of the rail corridor has been identified. This information suggests that the corridor is located a sufficient distance from the site to prevent any adverse impacts of the project on its integrity. This will be verified in consultation with RailCorp.

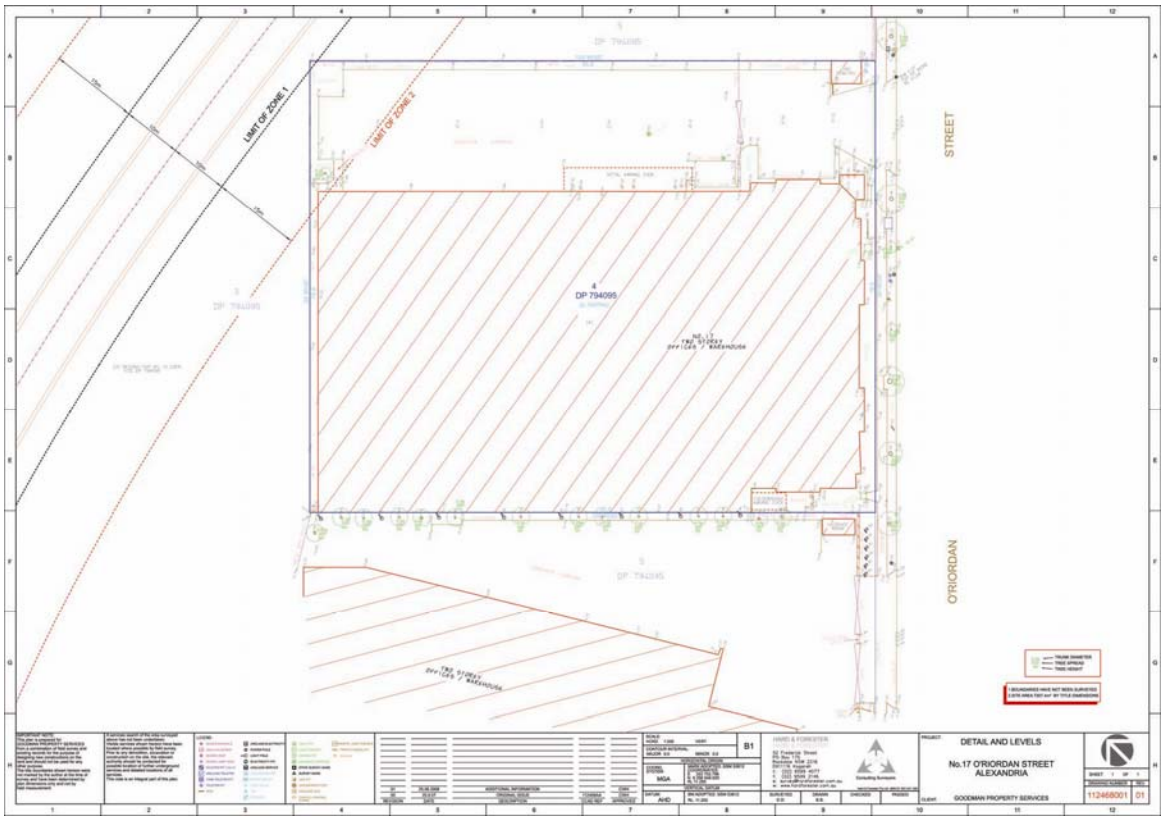


Figure 6: Site Survey and Rail Corridor Zones of Influence

Further Assessment

The results of this preliminary assessment indicate that there will be no significant geo-technical constraints to the required excavations for the basement and foundations for the project. In addition it is indicated that there will be no adverse impact on the Airport Rail Line Tunnel. Consultation with RailCorp to verify this will be conducted and details of this will be included in the Environmental Assessment. Further geo-technical analysis will also be completed once the existing tenant has re-located in order to refine the structural design of the project and the findings contained in the preliminary report.

6.6 Site Contamination

The potential for site contamination is being investigated for this project.

Background

In March 2003 Goodman commissioned an Environmental Due Diligence Assessment of the site to determine the likelihood of potential contamination issues. This report identified the risk of contamination of soils and/or groundwater as a result of historical on-site and off-site activities most notably the Austral Bronze Company is moderate and therefore considered to be a potential issue. This study also identifies that while the site is currently entirely sealed by concrete and bitumen which will limit direct exposure (e.g. dermal contact, ingestion) to potentially contaminated soils / groundwater and has no current significant contamination sources, contamination sources may still exist beneath the site from historic activities.

Further invasive investigations to fully characterise environmental conditions on the site was scheduled for July 2008 however, this has been delayed due to the current use of the facility by the existing tenant. In the interim, Goodman commissioned Douglas Partners in May 2008 to

prepare a limited preliminary contamination assessment of the site which included drilling of five test bores in the accessible areas of the site (limited to the hardstand and car parking area along the northern boundary).

Preliminary Findings

Eleven soils samples were selectively analysed from five test bores drilled in the accessible portion of the site. One soil sample has elevated levels of total PAH and Benzo(a)pyrene above the adopted assessment criteria. The contamination levels in all other soil samples were within the site assessment criteria.

Two groundwater samples were collected from the groundwater wells constructed at the site. Both groundwater samples contained elevated concentrations of TPH above the adopted screening levels for groundwater. One groundwater sample also had a marginally elevated concentration of zinc. The detected zinc level is, however, typical of industrial areas and does not constitute an unacceptable risk of harm.

Based on the results of the preliminary contamination assessment, some form of remediation may be required to render the site suitable for commercial/industrial development. However, further assessment is warranted to determine the nature, extent and impact of the contamination.

A more detailed contamination assessment involving additional borehole and laboratory analysis is required to fully 'characterise' the site. The detailed assessment would verify the findings of the preliminary investigation and assess the levels of contamination in areas that were not accessible during the preliminary investigation. The additional investigation should ideally be targeted at assessing contamination levels in filling and soil that will remain on the site following development as well as the groundwater quality across the entire site. The results of this report will then shape the extent and method of remediation should this be required.

Further assessment

These findings are based upon the results of a limited site investigation and a restricted program of surface and subsurface sampling, screening and laboratory testing which has been undertaken. This has prevented the ability to fully characterise the site. However once the current tenant has relocated, this will enable the full investigation to be completed.

Accordingly, Environmental Resource Management (ERM) are currently preparing an Environmental Site Investigation to be submitted with the Environmental Assessment to draw on the investigations which have already been done and provide a full methodology for the complete assessment of the site once it is made fully available. This investigation will make it possible to obtain a full understanding of the risks to enable a full characterisation of the site and determine appropriate or necessary remediation strategies required to make the site suitable for industrial and commercial use. An outline of the next phases of assessment is as follows:

- Phase II - Completion of Phase II investigation following relocation of existing tenant;
- Phase III - Remediation Action Plan (RAP) - If remediation is required preparation of an RAP; and
- Phase IIII - Validation of RAP.

6.7 Salinity

Potential salinity impacts are able to be assessed as part of the completed geo-technical investigation for the site. However, due to the prevailing geology of the locality which is

predominately alluvial, sandy soils, and that the proposed project is to be located above the groundwater level it is not anticipated that there will be salinity impacts on the project.

6.8 Stormwater Management

A preliminary hydraulic services report has been prepared by Whipps Wood Consultant Engineers.

Existing Site

The site currently has a high degree of impermeable surfaces on the site with a large warehouse building and adjacent hardstand and car parking. The existing stormwater drainage system, consisting of roof and surface drainage, discharges to a kerb inlet pit located over the Council Stormwater main in O'Riordan Street. Any overland flow also appears to flow from the site grades towards O'Riordan Street.

Project Stormwater

It is envisaged that the stormwater drainage for the project would consist of roof and surface drainage including the provision for rainwater harvesting and pollution control in accordance with the relevant Australian Standards and Australian Rainfall and runoff guidelines. Following discussions with City of Sydney drainage engineers it is understood that on-site detention would not be required do to the downstream location of the site in the Sheas Creek catchment.

Roof Drainage

Roof water would be collected into a series of downpipes which would discharge through a gross pollutant trap and then into a rainwater harvesting tank. The rainwater harvesting tank would have a capacity of 10,000 litres. Any overflow from the rainwater tank would be directed to the internal stormwater system and onto the Council infrastructure in O'Riordan Street. This rainwater tank would be located within the basement car parking area.

Stormwater Drainage System

The proposed stormwater drainage system would consist of a number of stormwater collection pits located in various positions around the perimeter of the site. Stormwater collected into these pits would be directed into a pollution control device. Based in the proposed layout of the development it is envisaged that stormwater would be collected on either side of the development and pass through separate pollution control devices.

Following discussions with Sydney Water it is proposed that the pollution control devices be equal to an Ecosol RSF 4000, with the capability to treat 230 litres of water per second.

Overland Flow

It is anticipated that the project will maintain grades to direct overland flow to O'Riordan street as per the current scenario.

Further Assessment

Preliminary assessment indicates that the stormwater impacts of the project can be actively managed by the implementation of a stormwater management plan consistent with that outlined above. The completed stormwater management plan will be submitted with the Environmental Assessment.

6.9 Erosion and Sediment Control

It is anticipated that erosion and sediment control measures will be necessary during construction and excavation. An erosion and sediment control plan is being prepared by SCP Consultants to accompany the Environmental Assessment. These measures will be incorporated to mitigate erosion and control sedimentation particularly during bulk excavations.

6.10 Flooding

Preliminary Assessment

There have been several flood studies conducted in the Green Square area in recent times. The most recent of which is the Green Square and West Kensington Flood study prepared by Webb Mekeown and Associates for the City of Sydney in 2008. The subject site is located just south of the extent of this study in a 'tailwater' area and as such this study cannot be relied upon to obtain relevant flood levels for the site. However, following preliminary advice from consultant engineers, the preliminary design of basement ramps and thresholds has been based on these levels.

Further Assessment

Cardno Lawson Treloar (Cardno) have been conducting a more recent flood study which models the current flooding conditions for the Green Square Area and the potential flood path scenarios based on development options for the proposed Green Square Town centre. This report is entitled "*Flood Mitigation Options Report Green Square Town Centre* (Draft dated 2 June 2008). Goodman has engaged Cardno to use this modelling information to prepare a flood study to confirm overland flow impacts of this proposed project. The results of this study will be incorporated in the design of the project with pavement levels designed to ensure that the basement ramp will have sufficient freeboard to the 1in100 year flood event as determined by this study. Council requirements for Freeboard in the *Green Square DCP* are stipulated as being the highest of either: 1% AEP + 500mm freeboard or PMF + 500mm freeboard. Pavement grades for the loading and servicing area will be designed to allow for the necessary storage of overland flow to mitigate any adverse impacts of the project.

It is anticipated that the future development of the Green Square Town Centre will not impact the flood assumptions for the site since the development of Green Square will be required to ensure that any potential flooding impacts of the development on neighbouring properties will be appropriately mitigated.

A copy of the completed flood study will be included in the Environmental Assessment.

6.11 Noise and Vibration

Given the nature of the project and the distance of sensitive users from the site, it is not expected to generate significant noise impact to surrounding land users. However a noise impact assessment is being prepared by Acoustic Logic to accompany the Environmental Assessment.

The noise assessment will address the following:

- Determine the acoustic objective of the External Noise Levels which are applicable for any external mechanical plants and equipments noise criteria. This assessment would be based on the relevant EPA guidelines;
- Formulate the criteria for a suitable level of structure-borne railway noise based on City of Sydney requirements and RIC guidelines;
- Determine resultant levels of train vibration impact to the subject development;
- Determine resultant levels of structure-borne noise in all habitable spaces within the development based on the measurements above;

- Assess tactile vibration in habitable areas in accordance with the criteria outlined in AS2670.2-190 and BS6472:1992 and determine requirements for isolation of the building from railway vibration in principle where required;
- Assess site aircraft noise exposure in accordance with AS 2021-2000 and City of Sydney requirements and determine acoustic treatment to comply with the internal noise level requirements of the standard. Determine the need for ventilation systems in accordance with AS 2021-2000.;
- Conduct traffic noise measurements and determine the resultant levels of traffic noise in all the various spaces of the development;
- Select suitable glazing and façade construction to reduce air-borne traffic noise sources to within the nominated criteria. This exercise will be undertaken separately for the respective building facades to ensure compliance with City of Sydney, marketing requirements and industry standards.

A copy of the completed report will be included in the Environmental Assessment.

6.12 Air Quality

The project is not expected to generate significant adverse impacts on air quality. The proposed use is not anticipated to generate any adverse air emissions. Sources of emissions will be vehicular traffic and potentially dust during construction which will be addressed in the Construction Management Plan (See Section 6.15).

6.13 ESD

SBE Consultants have been engaged to prepare an Ecologically Sustainable Development (ESD) report for the project.

Preliminary Assessment

A preliminary assessment of the project indicates it will accommodate the following sustainability initiatives:

- Shading appropriate to façade orientation;
- Maximised natural day-lighting where possible;
- Building fabric and glazing to comply with BCA Section J;
- Solar hot water heating;
- Energy efficient light fittings;
- Water efficient fittings;
- Dedicated space for the storage of recyclable waste;
- Use of low embodied energy materials where possible;
- Social interaction / breakout spaces for staff;
- Rainwater tank for water storage and re-use;
- Provision of 13 small car spaces to encourage the use of smaller vehicles;
- Air cooled chillers for water conservation;
- Bicycle parking; and
- Planting of native drought-tolerant vegetation.

Further Assessment

A completed ESD report will accompany the Environmental Assessment.

6.14 Waste Management

Operational Waste

Based on an analysis of the operation of the existing ARCBS facility at 153 Clarence Street, it is anticipated that the project will generate quantities of general solid and putrescible waste as well as sewerage and medical waste. Specialist consultants JD Macdonald are currently preparing a Waste Management report to accompany the Environmental Assessment which will include:

- Calculations of generated waste volumes;
- Equipment recommendations; and
- Strategies, options and recommendations for waste management.

All details supplied will be within local council guidelines and Workcover NSW – Code of Practice 1997 requirements and other relevant statutory guidelines for medical wastes.

Construction Waste

A Hazardous Materials (Hazmat) assessment is currently being prepared by ERM and will be included with the Environmental Assessment. Given the age of the existing facility (approximately 12 yrs) it is not anticipated that there will be any significant quantities of hazardous materials.

6.15 Construction

A Construction Management Plan is being prepared by BuildCorp it will address the following issues associated with construction of the proposed facility:

- Estimated Construction Program and duration;
- Hours of works;
- Traffic and Pedestrian Management;
- Construction vehicle parking and management;
- Security;
- Safety;
- Construction Noise and Vibration Management;
- Construction Waste Management;
- Erosion and sediment control;
- Management of trees – methods of removal and protection of those trees to be retained; and
- Any additional requirements of City of Sydney.

6.16 Socio-Economic Impacts

Preliminary Assessment

The project is anticipated to result in a number of significant socio-economic benefits. These are as follows:

- Creation of 500 full-time jobs and approximately 110 jobs during construction;
- Contribution to the urban renewal of the Green Square Area, and encouraging other employment generating activities to locate there;
- Multiplier effect of creating employment opportunities to service the needs of the proposed workforce and an increased demand for local goods and services;
- Increase public transport patronage and social interaction around Green Square Railway Station;
- Improve the safety and connectivity of the public domain which will encourage pedestrians to use the public domain;
- Increased passive surveillance and activity which will improve security;

- Provision of a vital service for the population of Australia, improving the health and wellbeing of society; and
- Research and education which will help to make a vital contribution to advancement in medical science and technology on a national and international level.

Further Assessment
An assessment of the socio-economic impacts of the project will be included in the Environmental Assessment.

6.17 Other Environmental Issues

The key environmental issues which relate to the project have been outlined above. Other environmental issues relevant to the project which will be addressed in the Environmental Assessment are summarized below:

Table 6.4: Other Environmental Issues

Tree Removal / Protection of Existing Trees	There are a number of existing street trees in the verge of O'Riordan Street. They are located approximately 8m apart, and typically 5m in height. The project will result in the removal of one of these trees. An Arborist Report will be prepared to support tree removal and included with the Environmental Assessment.
BCA Compliance Report	A BCA compliance report will accompany the Environmental Assessment. It will consider the BCA issues which relate to the base building and an identification of the BCA issues to be managed during detailed design by the PCA during documentation for construction
Fire Engineering Report	A Fire Engineering Report will be submitted with the Environmental Assessment.
Wind and Reflectivity	The project is not expected to generate any adverse wind impacts due to its relatively low scale of 4 storeys. Accordingly a specialist consultant report to address this will not be included with the Environmental Assessment. The project is also not expected to generate any adverse reflectivity. All glazing will have a reflectivity of less than 20% and be specified to avoid any negative reflectivity when viewed from the public domain. Accordingly a specialist consultant report will not be submitted with the Environmental Assessment.
Universal Access	An Access Report will accompany the Environmental Assessment

7 CONCLUSION

7.1 Consideration of Alternatives

In order to progress the design, an extensive analytical process has been undertaken. This has been focused around the following areas:

Base Building

Extensive testing of options has been undertaken in order to arrive at the proposed design. This has centered around providing a base building which can best accommodate the functional relationships of the proposed processes and activities to be undertaken within the facility while still maximising the amenity for building occupants in terms of access to natural day-lighting, opportunities for social interaction, provision of amenities, private open spaces and informal breakout spaces in order to make it an attractive place to work. This has also been balanced with an objective of creating a high quality, contemporary attractive building with a public presentation that will have a positive impact on its surrounds and is consistent with the image that ARCBS wants to portray to the public.

Internal Space Planning

Extensive consultation with user groups has been undertaken in order to develop the internal design brief for the project and determine the optimal layout, space requirements and functional relationships for the internal fit-out.

Site Location

ARCBS has given consideration to a number of different potential sites. Following analysis, the site was found to best meet their desired objectives in terms of proximity to local services, public transport and the CBD and arterial road network which is most centrally located relative to collection and distribution locations.

Scale

In terms of project scale, it is noted that:

- The FSR of 1.68:1 is less that the *Green Square DCP* FSR control of a maximum 2:1 without providing significant off-site public benefit and significantly less that the 3:1 FSR which includes the maximum allowable bonus if significant off-site public benefit is provided;
- The project complies with the predominant height control of 18m as indicated in *Green Square DCP*
- The site coverage for the project is 62.5%, which is substantially consistent with the 60% maximum site cover as stipulated in the *Green Square DCP* – the proposed ground floor is consistent with the ARCBS requirements to achieve an efficient ground floor processing area with the requisite separation between different processing areas which contain sensitive materials;
- The proposed car parking rate is in accordance with the Council required rate in *DCP No.11*;
- The proposed building layout and scale has been designed in accordance with the constraints of the site and consideration of its context.

Accordingly, it is considered that the proposed scale of the project provides a reasonable balance between maximising the development and employment opportunities of the site whilst ensuring that the amenity of the surrounding area is not adversely affected.

Alternative Re-development Options

In terms of potential alternative development purposes, it is noted that:

- The project would be used for medical laboratory, research and development, ancillary office and warehouse and distribution purposes, which are permissible forms of development on the land;
- Preliminary environmental assessment indicates that the project is able to be undertaken in a manner that would not adversely affect the environment or surrounding land uses; and
- The project would enable ARCBS to continue to improve the provision of a vital service for society which would generate significant socio-economic benefits, including employment for 500 direct full-time jobs and 110 indirect jobs during construction.

Accordingly, it is considered that the project represents reasonable and orderly development of the land.

Not undertaking the project is not considered to be a reasonable alternative, as:

- ARCBS has selected this site to be appropriate for their needs;
- The project is not predicted to have any significant impacts on the environment or surrounding land users; and
- Not undertaking the project would negate the project's significant socio-economic benefits, including employment for 500 direct full-time jobs and a capital investment of $72 million in the Green Square Area.

7.2 Project Justification

The construction of a new purpose built facility will have the following benefits:

- It would relieve the impediments to operation which are currently experienced in the existing ARCBS facility at 153 Clarence Street
- Allow the ARCBS to continue to perform a vital community service in a vastly improved, efficient manner (it should be noted that as the organization is a not for profit organization which relies and it is particularly important to enable operation in an efficient manner);
- Ensure that the future of blood services in Australia will be more secured; and
- Assist in achieving strategic planning objectives for the urban renewal of Green Square as outlined in the Sydney Metropolitan Strategy and Sustainable Sydney 2030.

7.3 Conclusion

Goodman proposes to develop a new purpose built facility for Australian Red Cross Blood Service (ARCBS). The project constitutes a 'Major Project' in accordance with *State Environmental Planning Policy (Major Projects) 2005* and therefore requires approval from the Minister of Planning under Part 3A of the *Environmental Planning and Assessment Act 1979*.

This document provides a description of the project and presents preliminary architectural plans in order to inform the Environmental Assessment process.

The PEA contained in this document identifies environmental issues that will require further assessment and the methods proposed for assessing these issues as part of the detailed Environmental Assessment.

Importantly, no issues of high environmental significance have been identified. This reflects the fact that the project will result in a new purpose built facility for ARCBS which will accommodate all activities in the most operationally efficient manner, will be more centrally located relative to

collection and distribution locations and has given due consideration for the context within which the project is located.

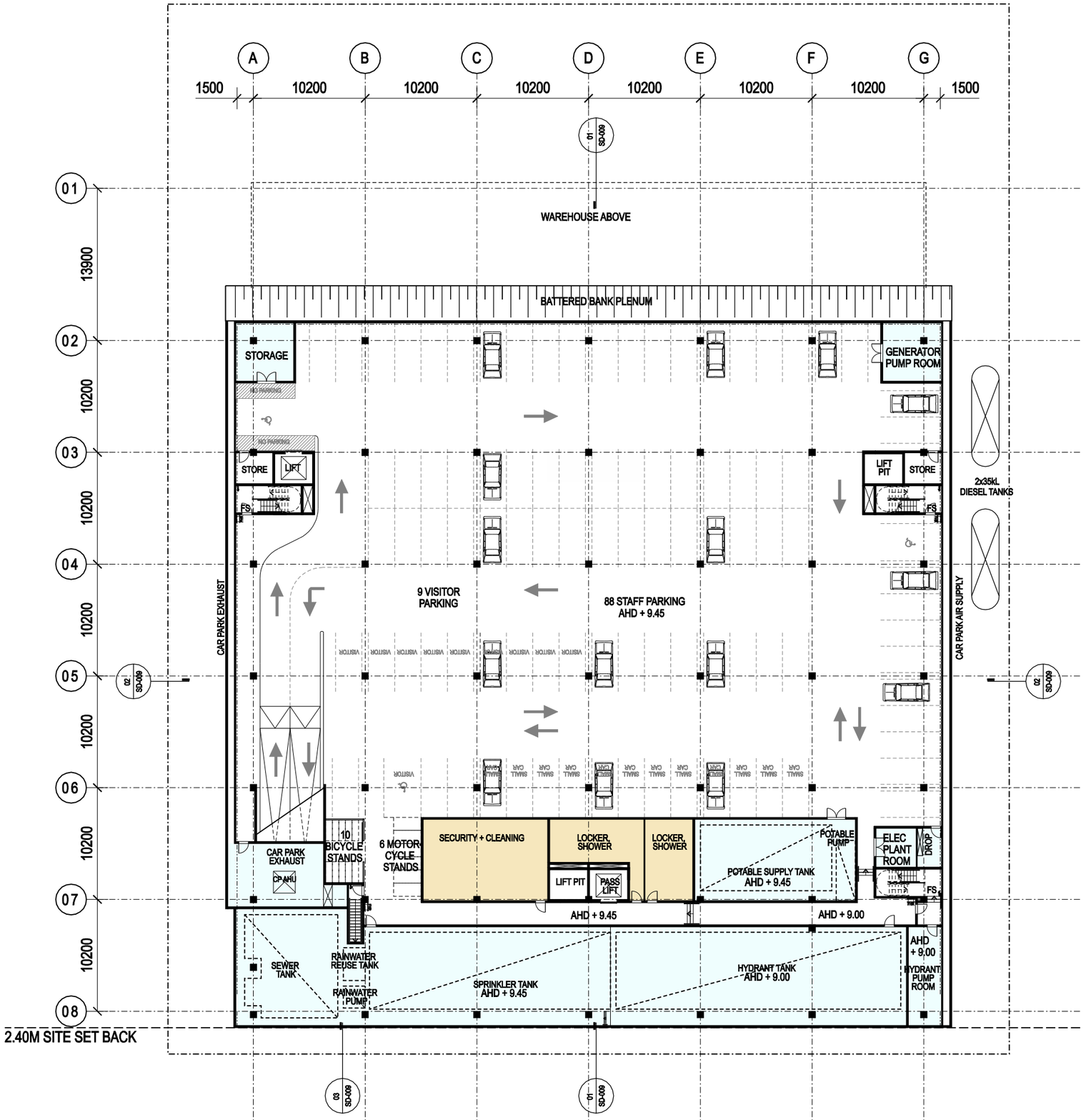
This document acts as a formal request to the DoP for the Director General's Environmental Assessment Requirements (DGRs) for this project.

Upon receipt of the DGRs, Goodman will complete a detailed Environmental Assessment and submit it to the DoP as part of the formal application for project approval.

The Environmental Assessment will be publicly exhibited during which time, submissions from interested parties and Government agencies will be sought.

After assessing the Environmental Assessment, and considering the issues raised in submissions, the Minister for Planning will determine whether or not to grant approval to the proposed project.

PRELIMINARY ARCHITECTURAL PLANS



BVN BlighVollerNieldArchitecture

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BVN BighVollerNieldArchitecture

CLIENT	PROJECT	PROJECT NORTH	GRAPHIC SCALE	SCALE	DRAWING	DRAWING NO	DATE	ISSUE
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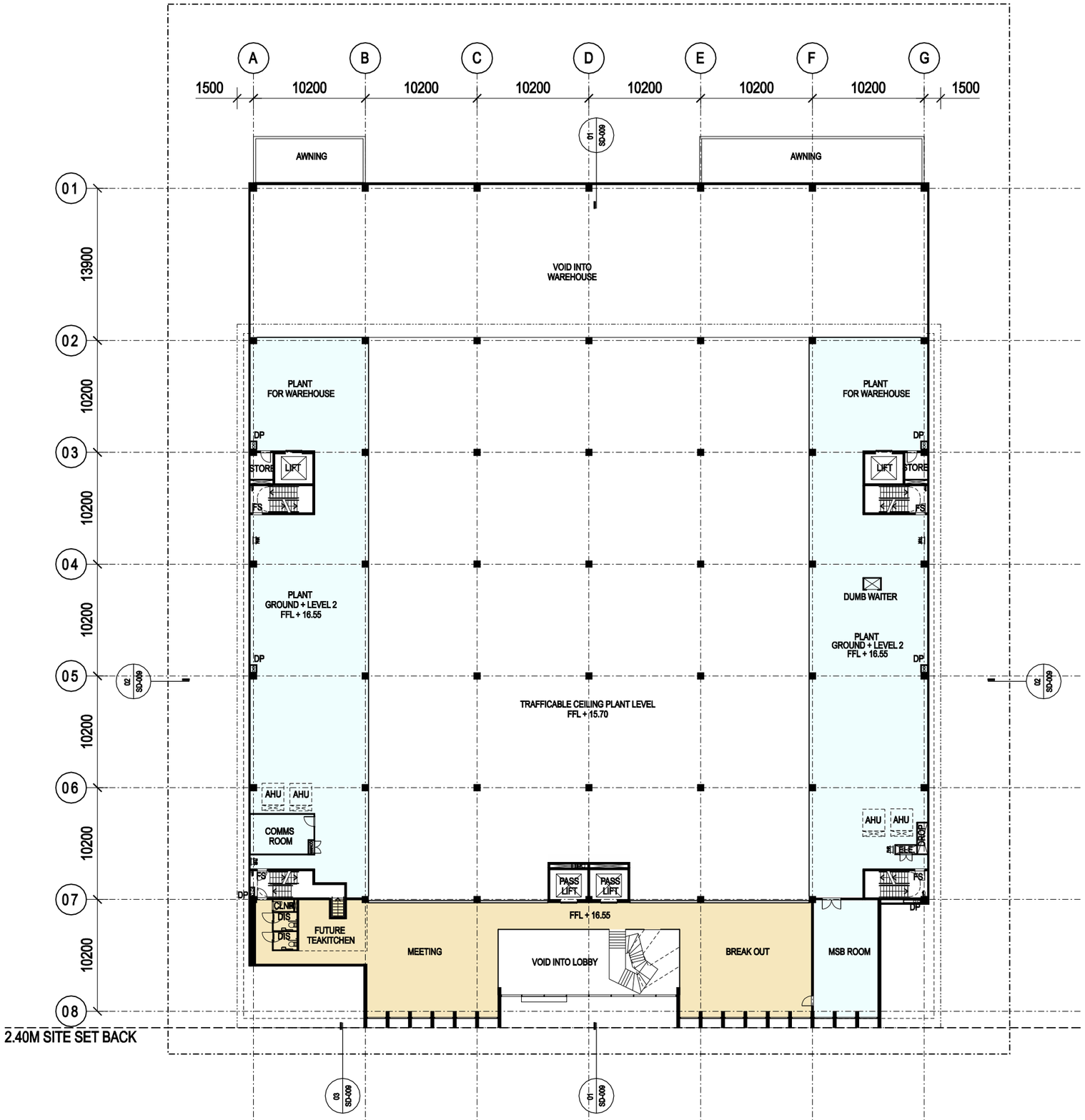

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CLIENT	PROJECT	PROJECT NORTH	GRAPHIC SCALE	SCALE	DRAWING	DRAWING NO	DATE	ISSUE
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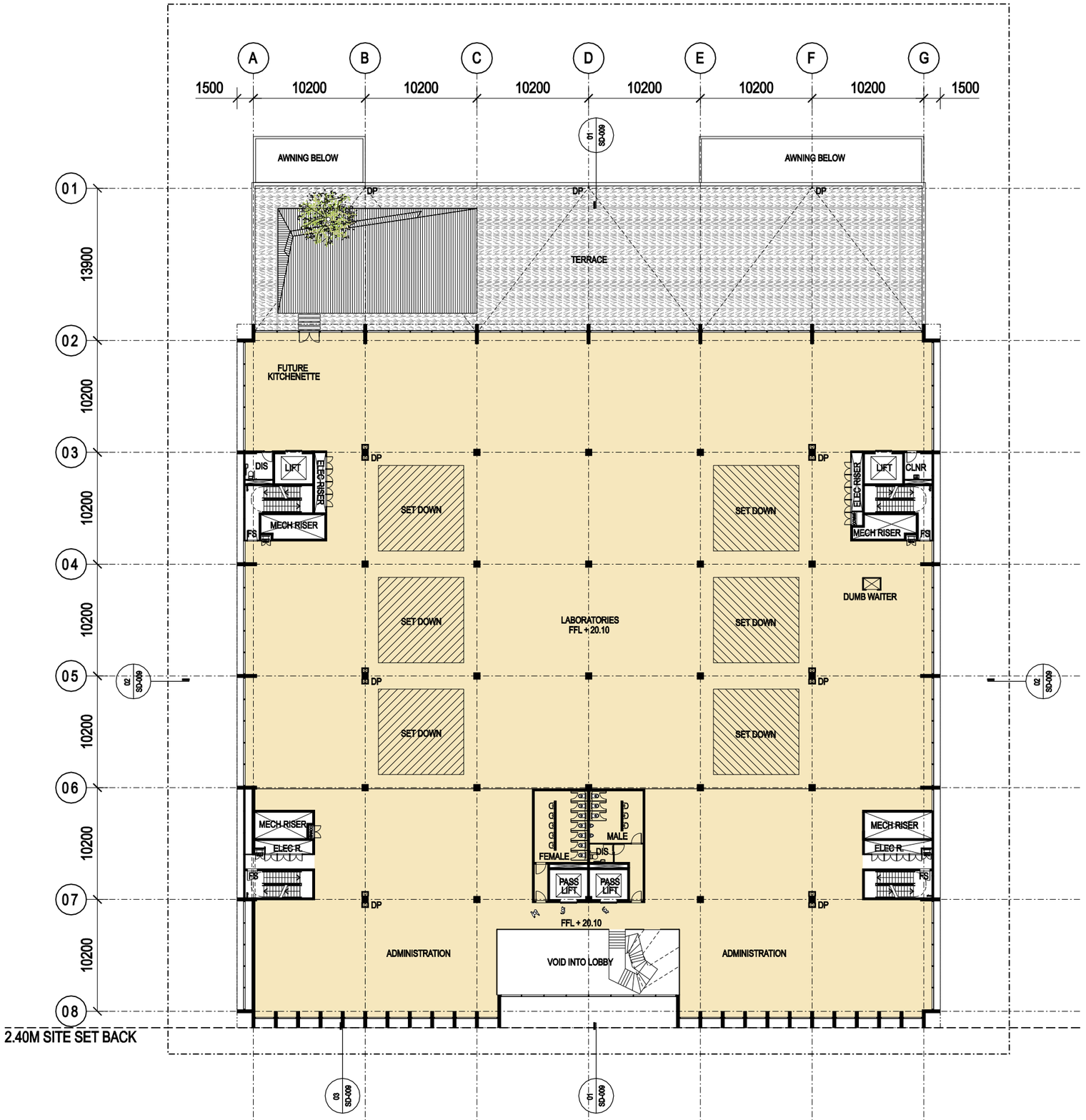

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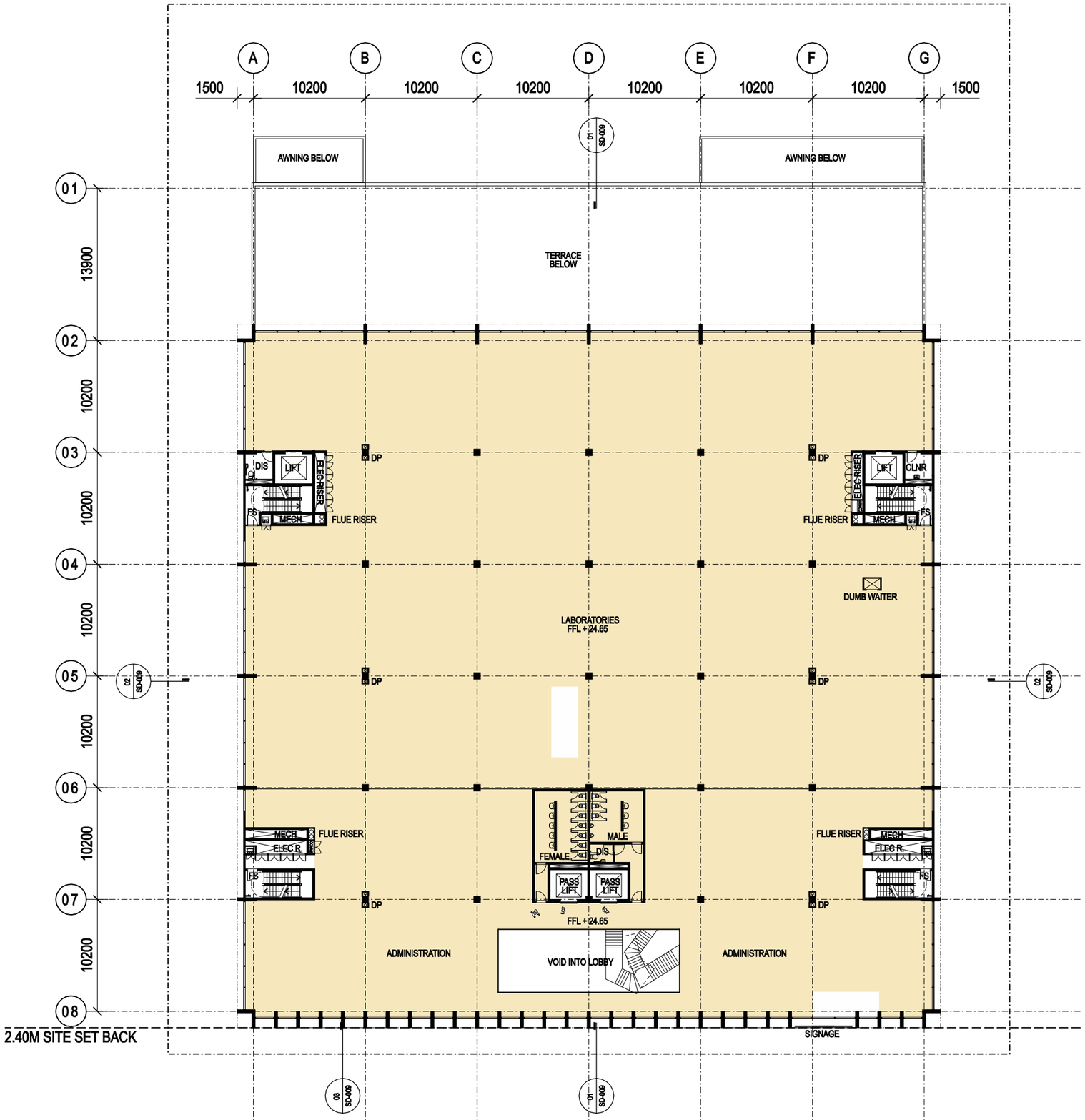

BVN BlighVollerNieldArchitecture

CLIENT	PROJECT	PROJECT NORTH	GRAPHIC SCALE	SCALE	DRAWING	DRAWING NO	DATE	ISSUE
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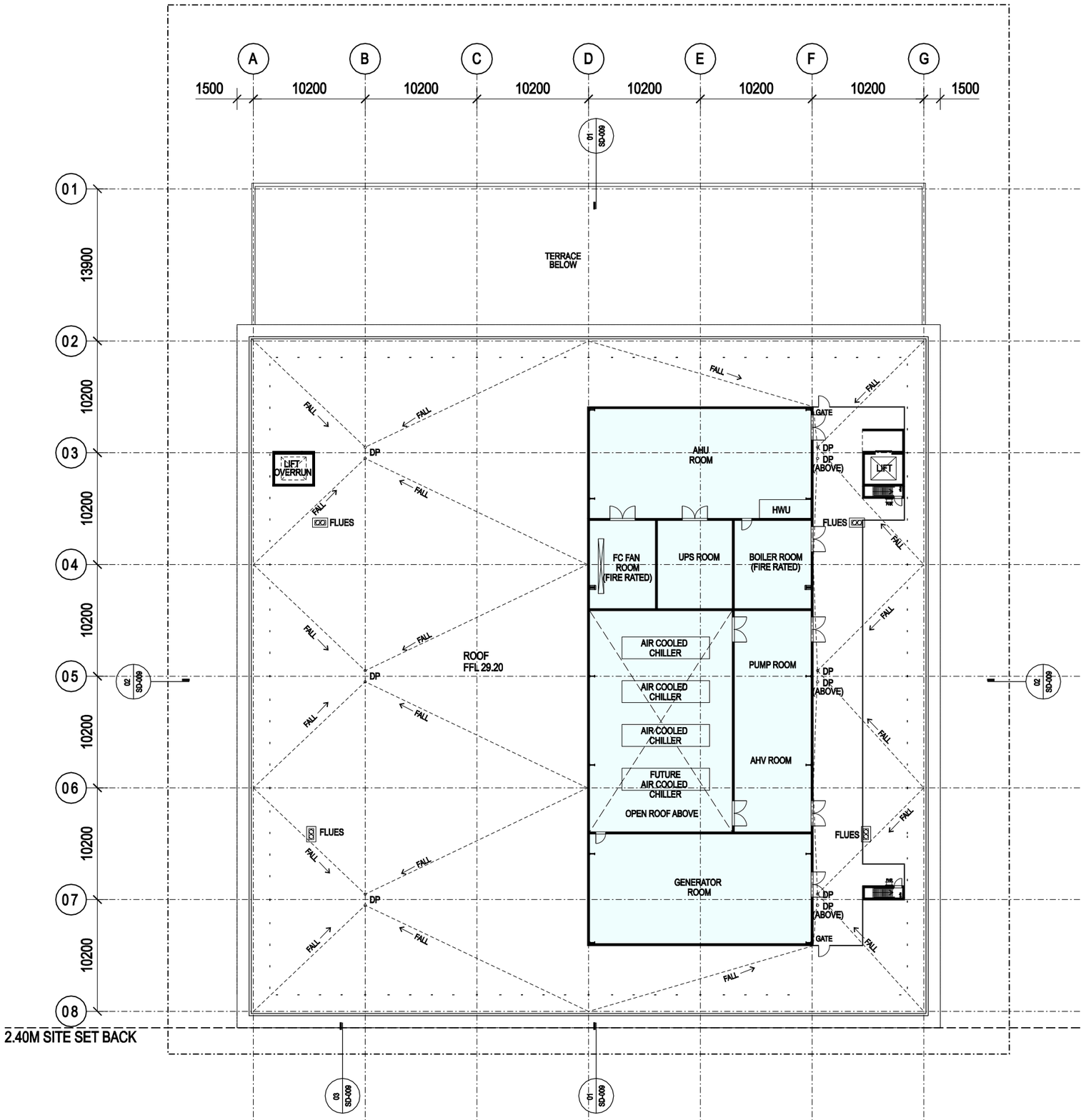

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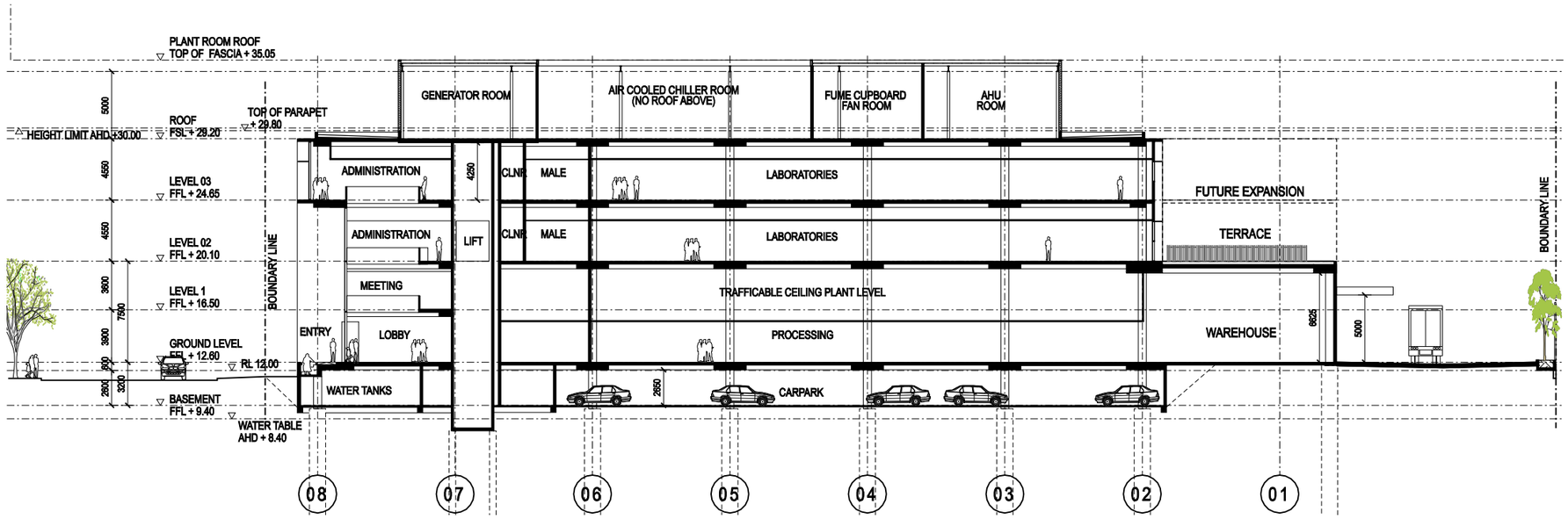

01 SECTION A
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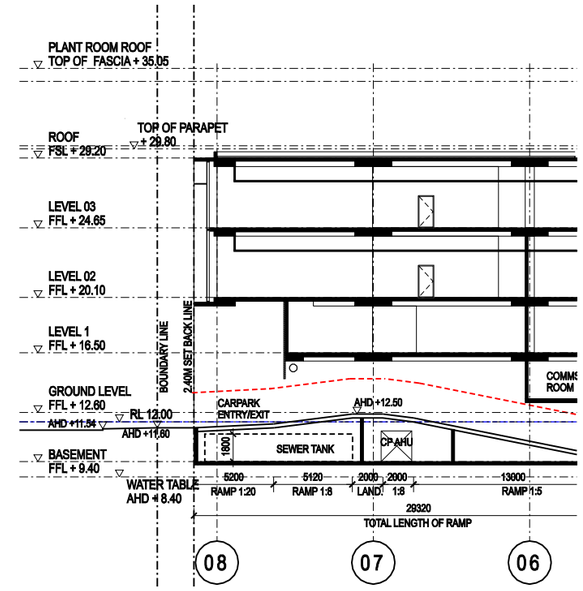
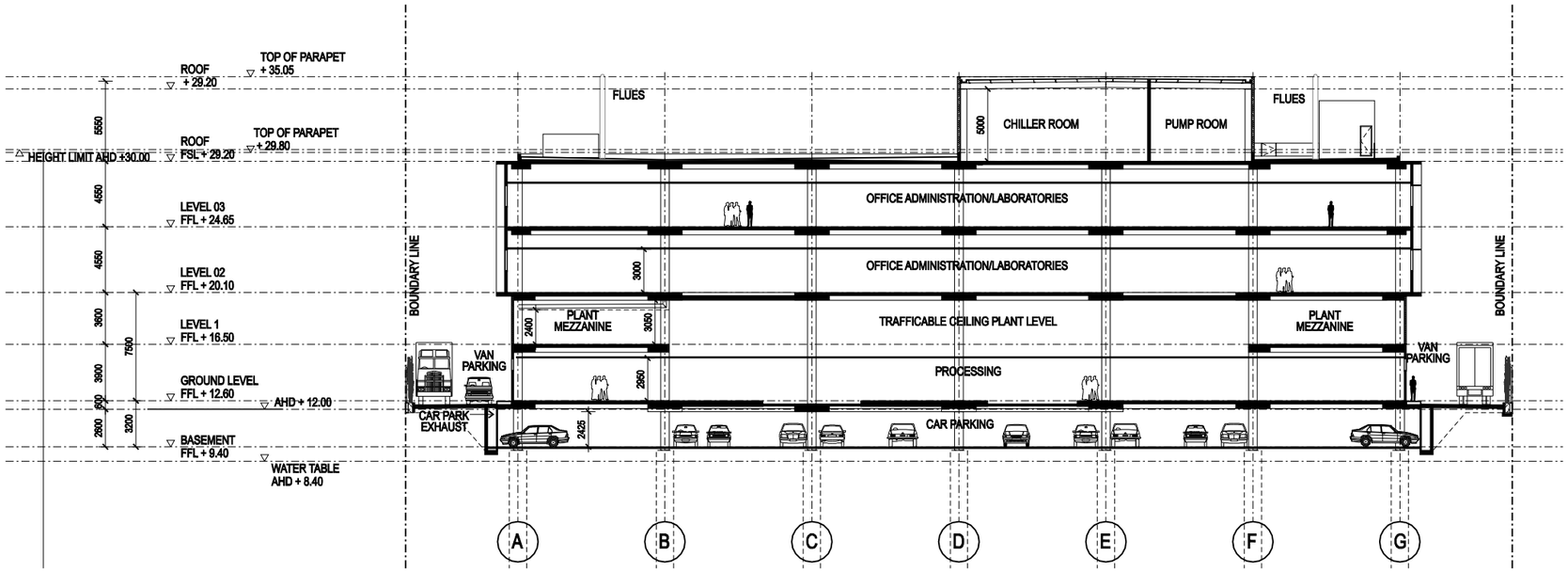


03 SECTION THROUGH CAR PARK RAMP
1:400



02 SECTION B
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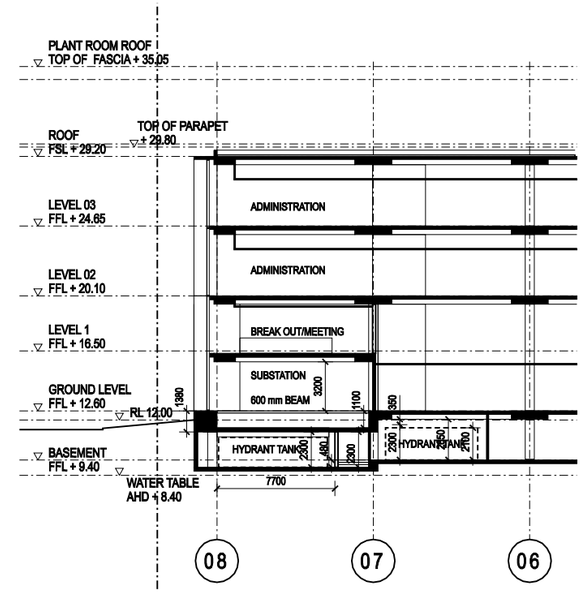

04 SECTION THROUGH SUBSTATION
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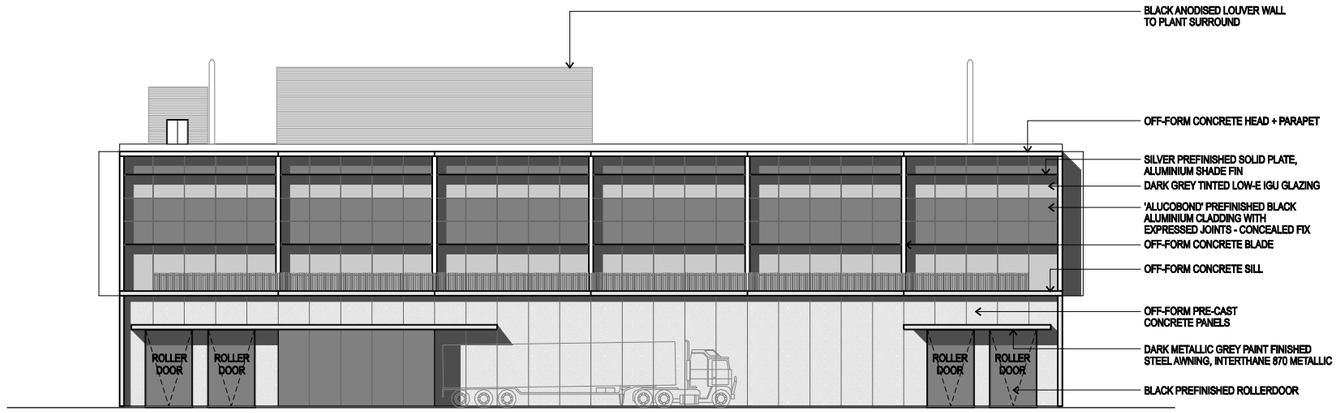
BVN BlighVollerNieldArchitecture

CLIENT	PROJECT	PROJECT NORTH	GRAPHIC SCALE	SCALE	DRAWING	DRAWING NO	DATE	ISSUE
GOODMAN	AUSTRALIAN RED CROSS BLOOD SERVICE		0 4000 10000	1:400 at A3	SCHEMATIC SECTION	SD-009	26.06.08	05



01 WEST ELEVATION
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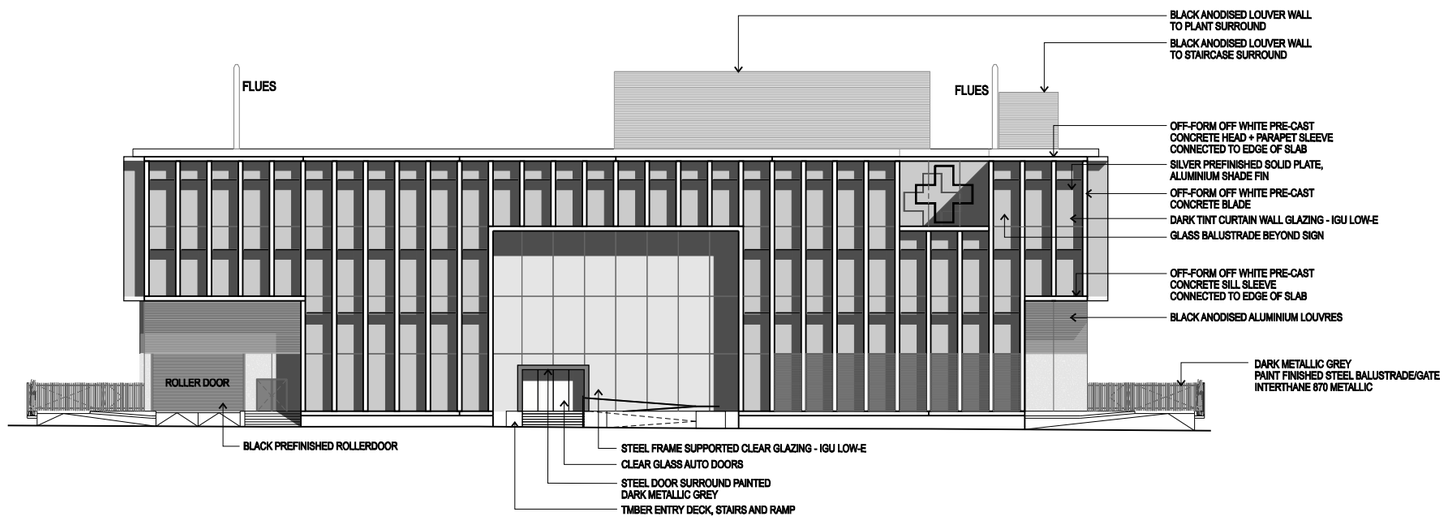
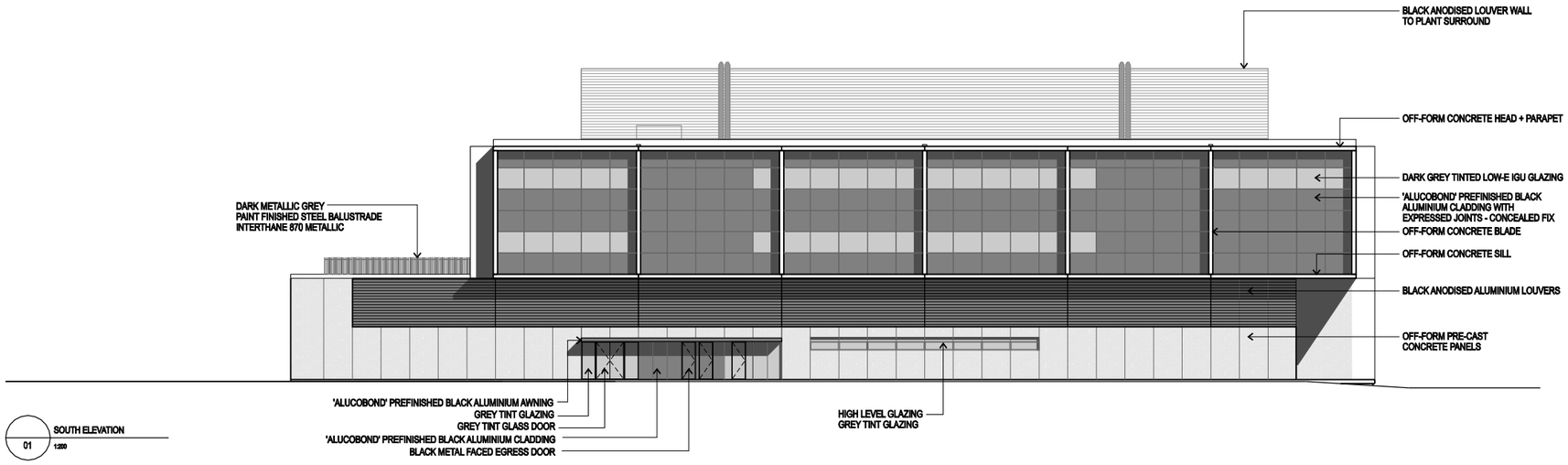


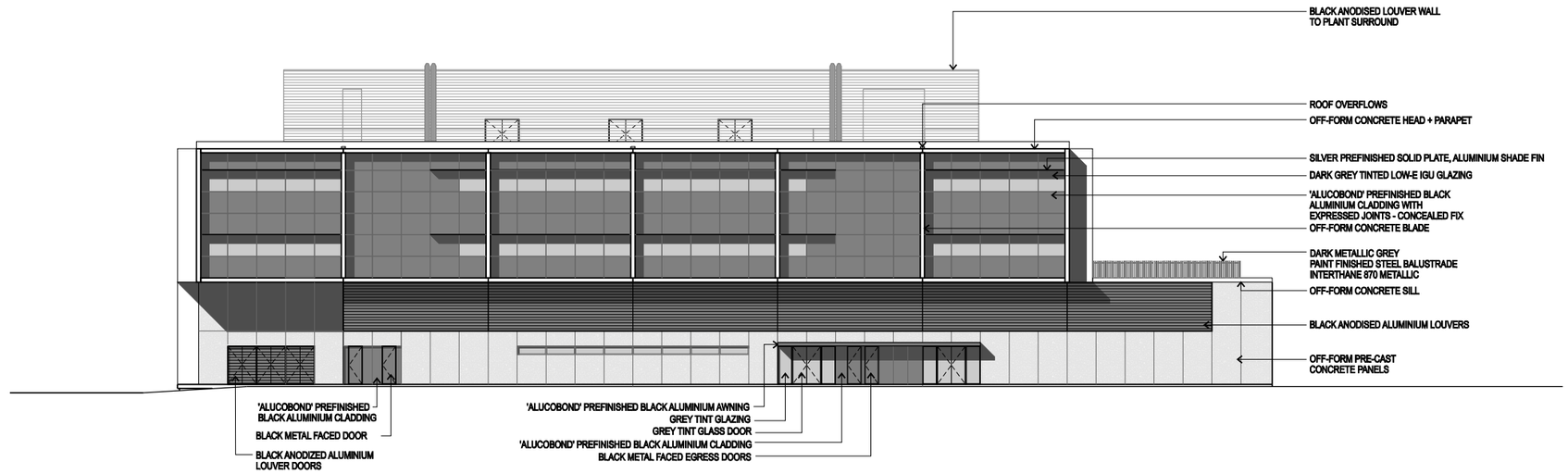
02 EAST ELEVATION
1:200

BVN BlighVollerNieldArchitecture

CLIENT	PROJECT	PROJECT NORTH	GRAPHIC SCALE	SCALE	DRAWING	DRAWING NO	DATE	ISSUE
GOODMAN	AUSTRALIAN RED CROSS BLOOD SERVICE		0 4000 10000	1:400 at A3	EAST & WEST ELEVATIONS	SD-010	26.06.08	05



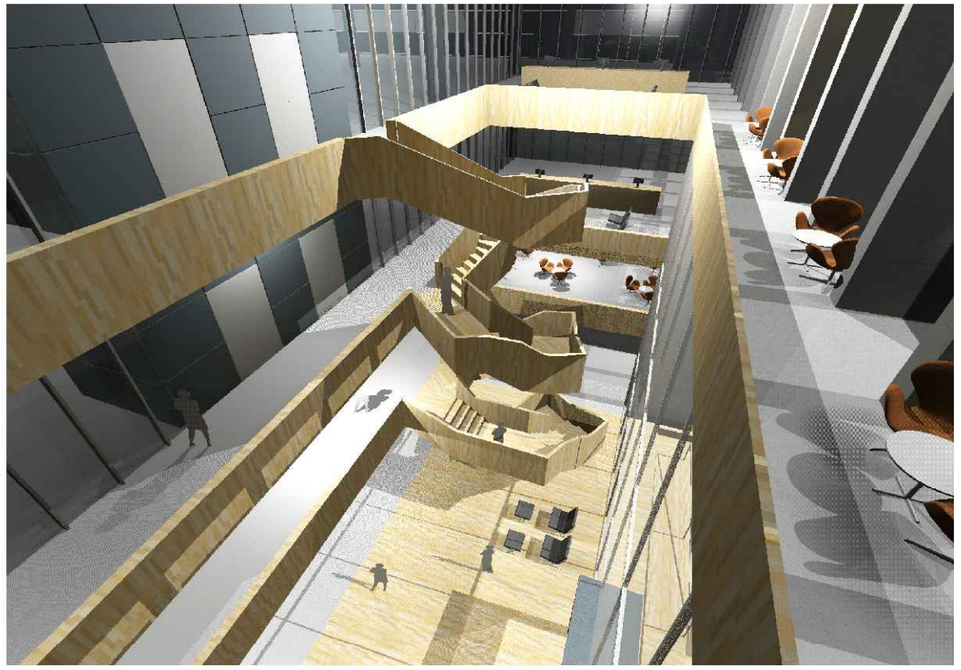
01 SOUTH ELEVATION
1:200



02 NORTH ELEVATION
1:200

BighVollerNieldArchitecture

CLIENT	PROJECT	PROJECT NORTH	GRAPHIC SCALE	SCALE	DRAWING	DRAWING NO	DATE	ISSUE
GOODMAN	AUSTRALIAN RED CROSS BLOOD SERVICE		0 4000 10000	1:400 at A3	NORTH & SOUTH ELEVATIONS	SD-011	26.06.08	05



BighVollerNieldArchitecture

CLIENT
GOODMAN

PROJECT
AUSTRALIAN RED CROSS BLOOD SERVICE

GRAPHIC SCALE
0 500 1250

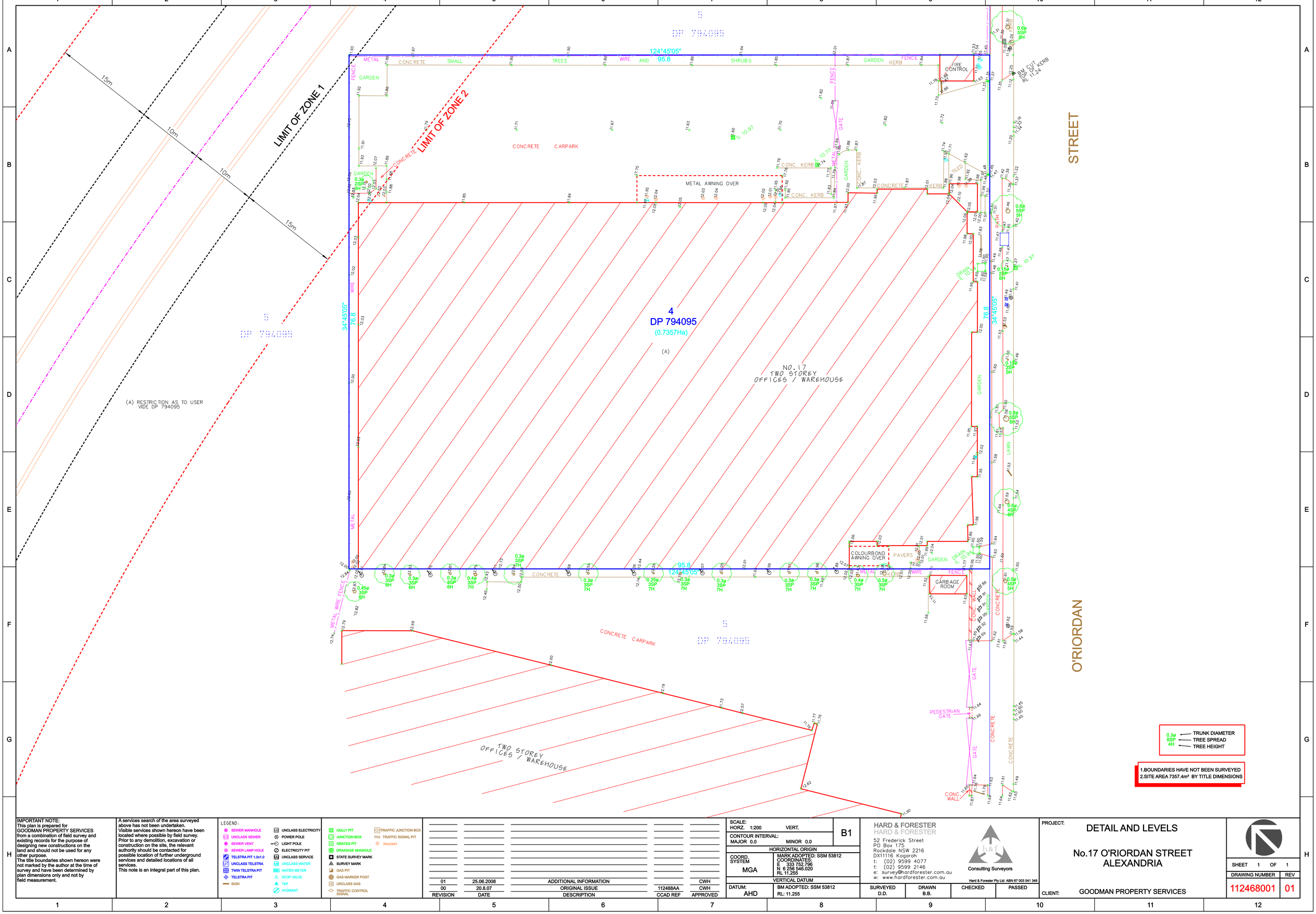
SCALE
1:50 at A3

DRAWING
PERSPECTIVES

DRAWING NO
SD-012

DATE
26.06.08

ISSUE
02



IMPORTANT NOTE:
This plan is prepared for GOODMAN PROPERTY SERVICES from a combination of field survey and existing records for the purpose of designing new constructions on the land and should not be used for any other purpose.
The title boundaries shown hereon were not marked by the author at the time of survey and have been determined by plan dimensions only and not by field measurement.

A services search of the area surveyed above has not been undertaken.
Visible services shown hereon have been located where possible by field survey. Prior to any demolition, excavation or construction on the site, the relevant authority should be contacted for possible location of further underground services and detailed locations of all services.
This note is an integral part of this plan.

LEGEND:
SEWER MANHOLE, SEWER VENT, SEWER LAMP HOLE, TELSTRA PIT 1.0x1.0, UNCLASS TELSTRA, TWIN TELSTRA PIT, TELSTRA PIT, SIGN
UNCLASS ELECTRICITY, POWER POLE, LIGHT POLE, ELECTRICITY PIT, UNCLASS SERVICE, UNCLASS WATER, WATER METER, STOP VALVE, TAP, HYDRANT
GULLY PIT, JUNCTION BOX, GRATED PIT, DRAINAGE MANHOLE, STATE SURVEY MARK, SURVEY MARK, GAS PIT, GAS MARKER POST, UNCLASS GAS, TRAFFIC CONTROL SIGNAL
TRAFFIC JUNCTION BOX, TRAFFIC SIGNAL PIT, RAILWAY

REVISION	DATE	DESCRIPTION	CCAD REF	APPROVED
01	25.06.2008	ADDITIONAL INFORMATION		CWH
00	20.8.07	ORIGINAL ISSUE	112468AA	CWH

SCALE: HORZ. 1:200 VERT.
CONTOUR INTERVAL: MAJOR 0.0 MINOR 0.0
B1
HORIZONTAL ORIGIN
COORD. SYSTEM: MGA
MARK ADOPTED: SSM 53812
COORDINATES: E 333 752.796 N 6 256 546.020 RL 11.255
VERTICAL DATUM
DATUM: AHD
BM ADOPTED: SSM 53812 RL: 11.255
SURVEYED D.D. | DRAWN B.B. | CHECKED | PASSED

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e: survey@hardforester.com.au
w: www.hardforester.com.au
Consulting Surveyors
Hard & Forester Pty Ltd ABN 67 003 541 348

PROJECT:
DETAIL AND LEVELS
No.17 O'RIORDAN STREET ALEXANDRIA
CLIENT: GOODMAN PROPERTY SERVICES

SHEET 1 OF 1
DRAWING NUMBER: 112468001
REV: 01

APPENDIX A: ENVIRONMENTAL ASSESSMENT CONSULTANT LIST

Appendix	***Discipline***	***Consultant***
Appendix A	Design Report	Bligh Voller Nield
Appendix B	Landscape Concept Plan	Tract Landscape Consultants
Appendix C	Traffic Report	Masson Wilson Twiney
Appendix D	Heritage Impact Statement	Australian Museum Business Services
Appendix E	Geotechnical report	Douglas Partners
Appendix F	Environmental Site Assessment	Environmental Resource Management (ERM)
Appendix G	Stormwater Concept Plan	Whipps Wood Consulting
Appendix H	Civil Drawings and Erosion and Sediment Control	SCP
Appendix I	Flood Report	Cardno Lawson Treloar
Appendix J	Noise Impact Assessment	Acoustic Logic
Appendix K	ESD report	SBE
Appendix L	Waste Management Plan	JD MacDonald
Appendix M	Construction Management Plan	BuildCorp
Appendix N	Arborist Report	Footprint Green
Appendix O	BCA Report	BM+G
Appendix P	Fire Engineering report	TBC
Appendix Q	Access Report	Morris Godding Access Consultants
Appendix R	Hazmat Report	ERM