

ACCESS REPORT

BIOLOGICAL SCIENCES PROJECT

BOTANY STREET, KENSINGTON UNIVERSITY OF NSW

SSD 6674 SUBMISSION



Prepared by Mark Relf

22nd January 2015



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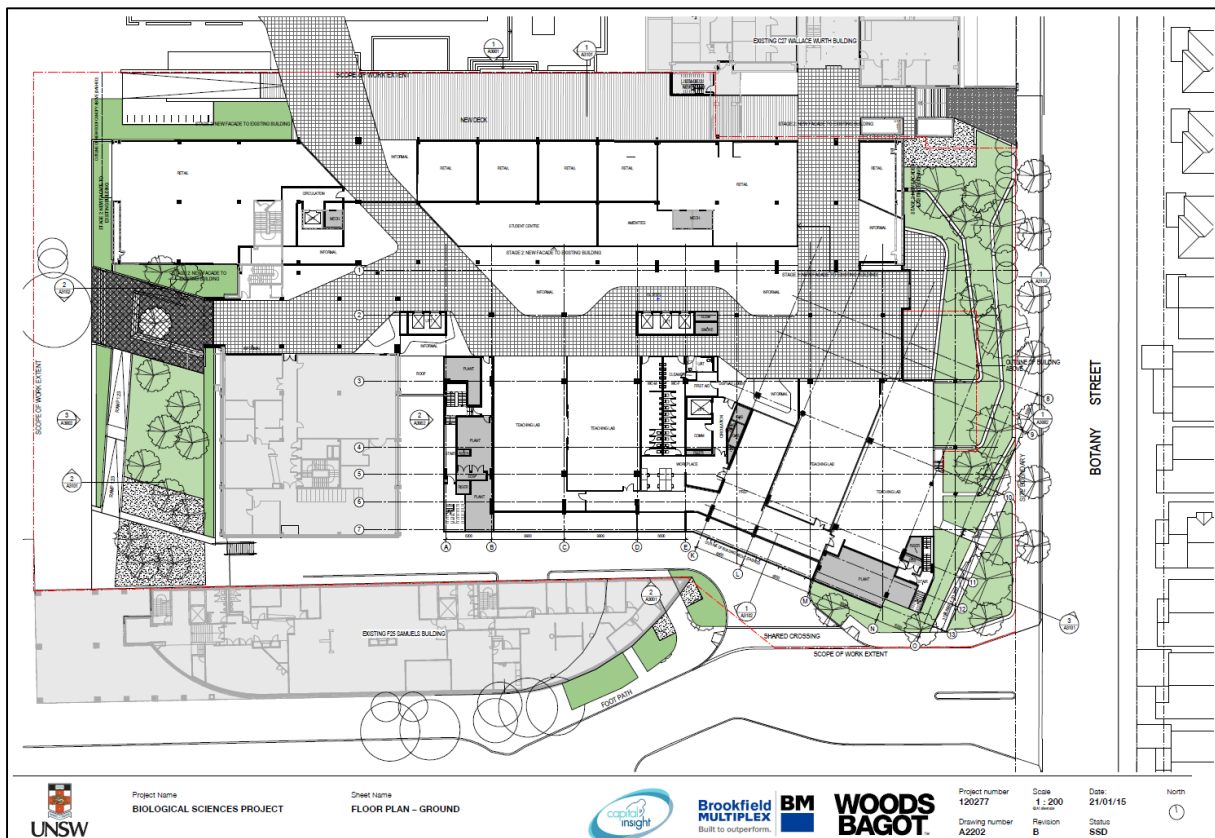
Introduction

This report has been prepared to provide an Access Report for the redevelopment of the Biological Sciences project located within the UNSW campus adjoining Botany Street, Kingsford site entry.

The redevelopment consists of two stages with this report considering the stage I works.

Stage I is the construction of;

- A new nine (9) Storey building (including plant room level 7) in the existing location of E27 Bio Theatres Building;
- The fitout of the lower ground floor of the southern/western wing of the existing Bio Sciences Building D26,
- Construction of the eastern atrium, construction of the structure and lift core to the western atrium,
- The refurbishment of the ground floor of the existing D26 building,
- Creating a link thru to newly constructed E26 on the north and western elevation, and
- Upgrade of landscape surrounding newly constructed E26 as illustrated below.



Stage 2 proposes;

- Complete the construction of the western atrium,
- Install the western lifts,
- Refurbishment of facades to the existing D26 building,
- Construction of stair block in between Wallace Wurth and D26, and
- Upgraded landscape to the open areas surrounding the D26 buildings.

Assessment Criteria

This assessment considers the following legislation, planning instruments and standards pertaining to access for people with disabilities:

- (1) Parts D3, E3.6, F2.4 of the Building Code of Australia (BCA 2014)
- (2) DDA Premises Standards
- (3) Australian Standard AS1428.1 (2009) – Design for Access and Mobility: General Requirements
- (4) Australian Standard AS1428.4.1 (2009) – Tactile Ground Surface Indicators.
- (5) Australian Standard AS1735.12 (1999) – Lifts for people with disabilities
- (6) University Access Policy and relevant aspects of Australian Standard AS1428.2 (1992) – Design for Access and Mobility: Enhanced Requirements where required.

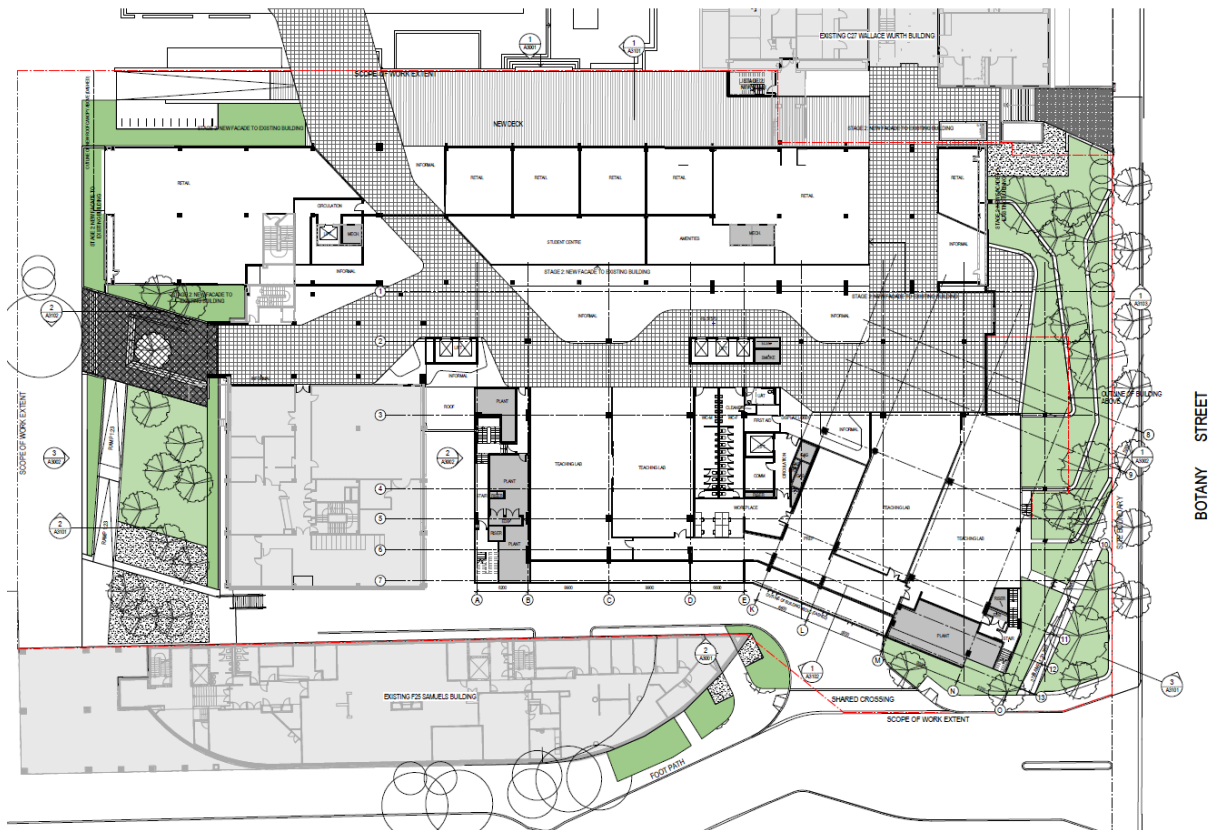
Plans

The plans relied upon for this accessibility assessment include the following plans for **SD ROUND 2**:

| DRAWING LIST - UNSW BIOLOGICAL SCIENCE | | | |
|--|---|------------------|------------------------------|
| Sheet Number | Sheet Name | Current Revision | Current Revision Description |
| A0001 | COVER SHEET | B | SSD SUBMISSION |
| A1000 | SITE PLAN | B | SSD SUBMISSION |
| A1201 | STAGING PLAN 01 | B | SSD SUBMISSION |
| A1202 | STAGING PLAN 02 | B | SSD SUBMISSION |
| A1203 | STAGING PLAN 03 | B | SSD SUBMISSION |
| A1302 | SHADOW DIAGRAMS JUNE 9AM | B | SSD SUBMISSION |
| A1303 | SHADOW DIAGRAMS - JUNE 12PM | B | SSD SUBMISSION |
| A1304 | SHADOW DIAGRAMS - JUNE 2.53PM | B | SSD SUBMISSION |
| A1305 | SHADOW DIAGRAMS JUNE 3PM | B | SSD SUBMISSION |
| A1306 | SHADOW DIAGRAMS - TIME SHADOW CROSS ADJACENT STREET EDGE (JUNE 12.48PM) | B | SSD SUBMISSION |
| A2201 | FLOOR PLAN – LOWER GROUND | B | SSD SUBMISSION |
| A2202 | FLOOR PLAN – GROUND | B | SSD SUBMISSION |
| A2203 | FLOOR PLAN – LEVEL 1 | B | SSD SUBMISSION |
| A2204 | FLOOR PLAN – LEVEL 2 | B | SSD SUBMISSION |
| A2205 | FLOOR PLAN – LEVEL 3 | B | SSD SUBMISSION |
| A2206 | FLOOR PLAN – LEVEL 4 | B | SSD SUBMISSION |
| A2207 | FLOOR PLAN – LEVEL 5 | B | SSD SUBMISSION |
| A2208 | FLOOR PLAN – LEVEL 6 | B | SSD SUBMISSION |
| A2209 | FLOOR PLAN – LEVEL 7 | B | SSD SUBMISSION |
| A2210 | FLOOR PLAN - ROOF | B | SSD SUBMISSION |
| A3001 | ELEVATION - 01 | B | SSD SUBMISSION |
| A3002 | ELEVATION - 02 | B | SSD SUBMISSION |
| A3101 | SECTIONS - 01 | B | SSD SUBMISSION |
| A3102 | SECTIONS - 02 | B | SSD SUBMISSION |
| A3103 | SECTIONS - 03 | B | SSD SUBMISSION |

Accessibility Assessment

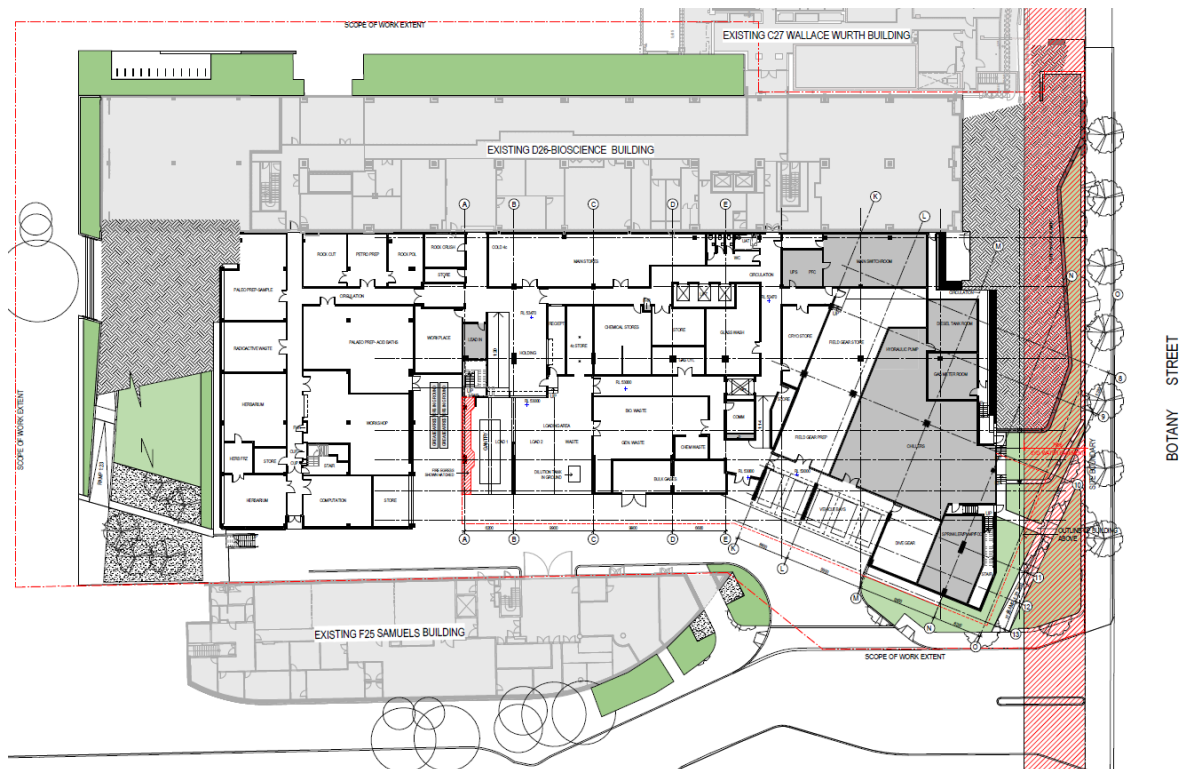
External Pathways and Building Entrances (Parts D3.2 & D3.3 of the BCA)



| BCA / DDA Access Code Review | Complies |
|--|---|
| <p>Ground Floor Level</p> <ol style="list-style-type: none"> 1. The development is located in an area that has significant slope across the site that incorporates an accessible building entrance at the lower ground floor and accessible links to the ground floor entrances from the existing building. 2. Ground Floor Entrances – The new building works provide several entrances and entry points to access the building. The Stage I works propose a three principal entries at the ground floor level; <ol style="list-style-type: none"> a) One on-grade level entry from the common walkway adjoining the existing D26 Bio Sciences building and the C27 Wallace Wurth building through the existing D26 Bio Sciences building to the new central atrium foyer area of the new building. b) Second on-grade level entry from a north-western approach through the existing D26 Bio Sciences building to the new building. c) Third entry from the north-south accessway at the western end of the building known as Chancellery Walk that will incorporate a ramped accessway and stairway to access the building entry. 3. Lower Ground Floor Entrance - At the lower ground floor the plans propose an entry doorway with at-grade access from an adjoining vehicular area that enables access to a level corridor and ramped corridor to lifts. | <p>YES</p> <p>YES</p> <p>YES</p> <p>YES</p> |

| BCA / DDA Access Code Review | Complies |
|--|-------------------------------|
| <p>4. The entrance ramps and stairs will be detailed with handrails, tactile ground surface indicators and other features as required by ASI428.1 and ASI428.4.1 to satisfy Parts D3.3 and D3.8 of the BCA and DDA Access Code.</p> | <p>YES at CC stage</p> |
| <p>5. The existing and new entrance doorways indicate double doorways with swing doors that provide circulation spaces that will existing comply with ASI428.1 and satisfy Part D3.2 of the BCA and DDA Access Code. Ideally, these doors will be detailed as auto sliding doors at a future design stage.</p> | <p>YES.</p> |
| <p>6. Doors will be documented at a future stage to confirm 850mm clear opening widths, level threshold, doorway luminance contrast, glazing markings where required and doorway hardware complying with ASI428.1 to satisfy Part D3.2 of the BCA and DDA Access Code.</p> | <p>YES at CC stage</p> |
| <p>7. Overall, the plans illustrate appropriate access to enter the building from all approaches at the ground floor level consistent with ASI428.1 to satisfy Part D3.2 of the BCA and DDA Access Code.</p> | <p>YES</p> |

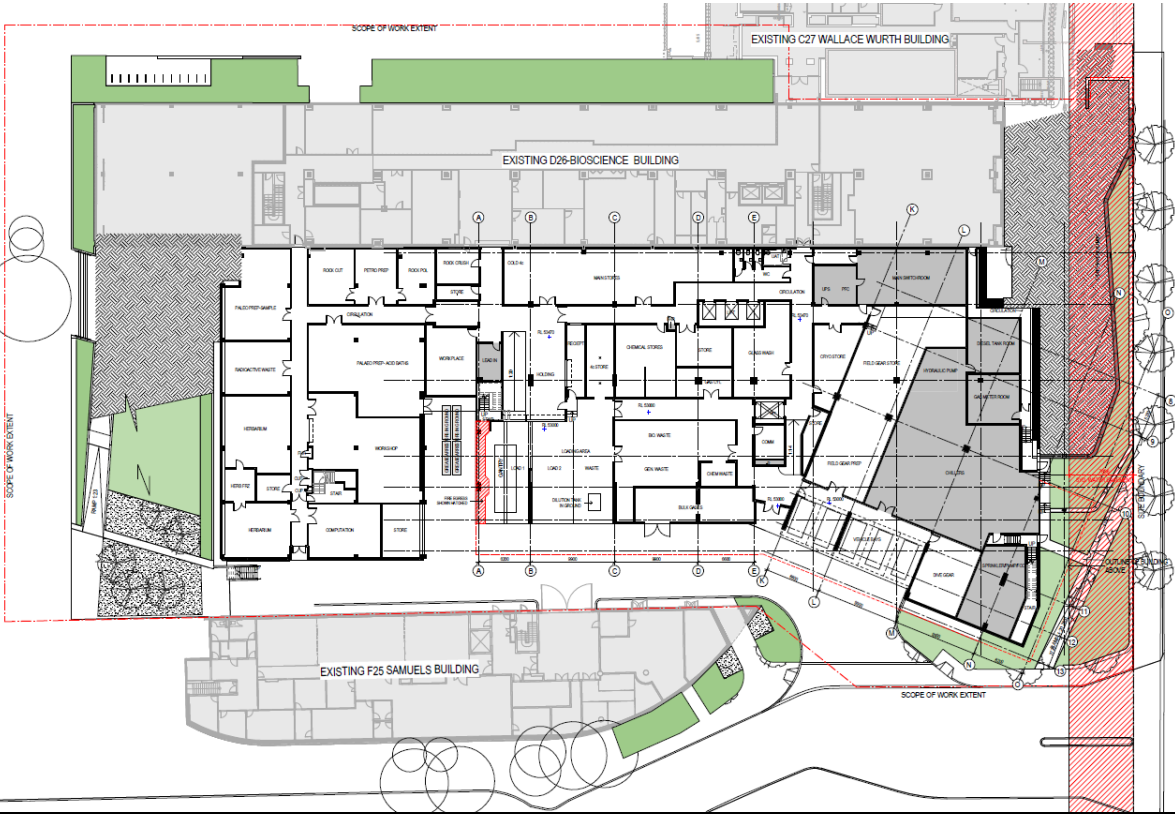
Lower Ground Floor

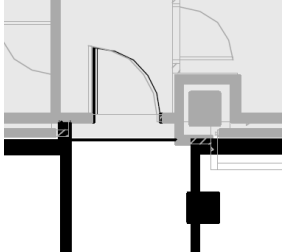
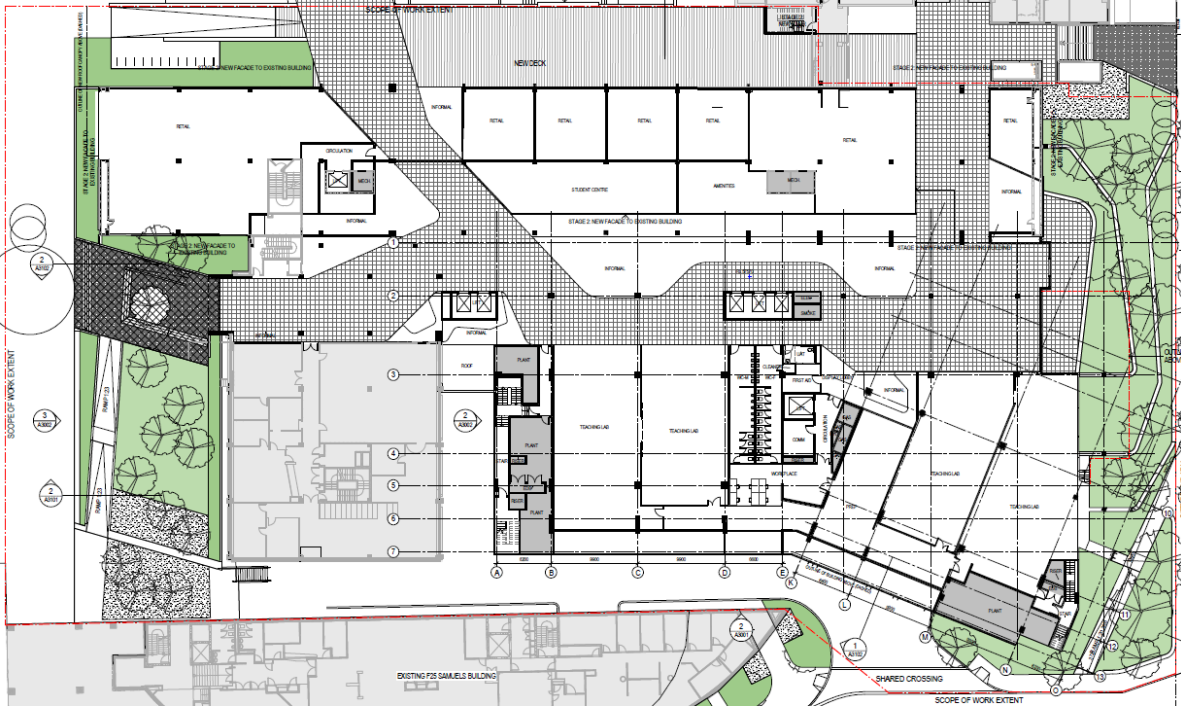


| | |
|--|-------------------|
| <p>8. Entrances – At the lower ground floor the plans propose an entry doorway with at-grade access that enables access to a corridor and lifts. The split level design of the lower ground floor incorporates ramps and a lift which has dual ended doorway openings to access the split levels and thereby facilitate equitable access at this level in a manner consistent with ASI428.1 to satisfy Part D3.2 of the BCA and DDA Access Code.</p> | <p>YES</p> |
| <p>9. There are several other external doors at the lower ground floor that can facilitate independent accessible entrances to the Field Gear Prep, Chiller room, Dive gear room and the south-western corridor to achieve equitable access to</p> | <p>YES</p> |

| BCA / DDA Access Code Review | Complies |
|---|---|
| <p>all areas in a manner consistent with ASI428.1 to satisfy Part D3.2 of the BCA and DDA Access Code.</p> <p>10. The external doorways indicate double doorways with swing doors that provide circulation spaces that will comply with ASI428.1 and satisfy Part D3.2 of the BCA and DDA Access Code.</p> <p>11. Doors will be documented at a future stage to confirm 850mm clear opening widths for the active door leaf, level threshold, doorway luminance contrast, glazing markings where required and doorway hardware complying with ASI428.1 to satisfy Part D3.2 of the BCA and DDA Access Code.</p> | <p>YES at CC stage</p> <p>YES at CC stage</p> |

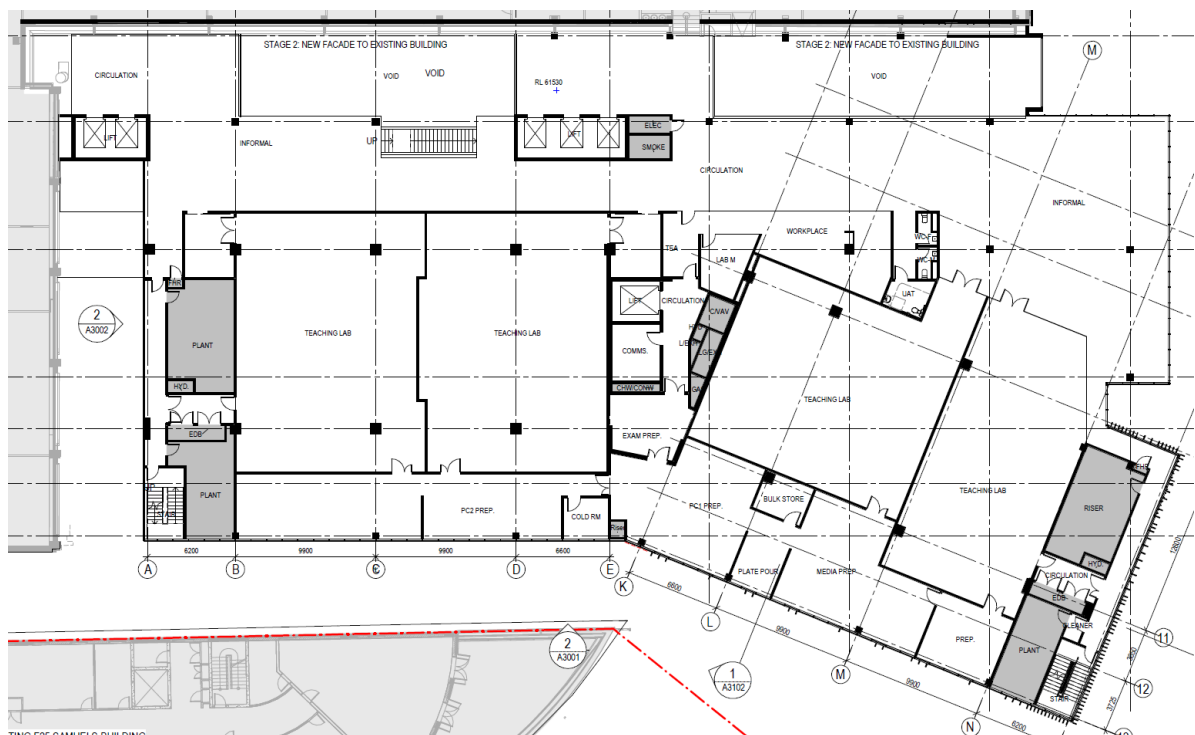
Internal Accessways (Part D3.3 of the BCA)

| BCA / DDA Access Code Review | Complies |
|--|-------------------------------------|
| <p>Lower Ground Floor</p>  | |
| <p>12. Lower Ground Floor Level – The central lift landing provides 3000mm width while the central access corridors propose varying widths of 1600mm-1800mm generally and 2000mm minimum leading to the larger goods/passenger lift.</p> <p>13. The layout of doorways adjoining the central corridors will provide appropriate doorway circulation spaces, 1540mm X 2070mm Turning areas and 1800 X 2000mm Passing bays at the 90 degree turn and 20 maximum intervals in accordance with ASI428.1 to satisfy Part D3.3 of the BCA and DDA Access Code.</p> | <p>YES</p> <p>YES</p> |

| BCA / DDA Access Code Review | Complies |
|---|--|
| <p>14. The majority of other internal doorways to secondary rooms also provide appropriate doorway circulation spaces complying with ASI428.1 while the use of several plant and equipment rooms will be exempt from disability access requirements due to the uses, which may affect the health of people with disabilities. Such rooms shall be deemed exempt consistent with Part D3.4 of the BCA and DDA Access Code.</p> <p>15. The sanitary facilities adjacent to the central lift landing indicate appropriate access in accordance with ASI428.1 to satisfy Parts D3.3 and F2.4 of the BCA and DDA Access Code, which will be confirmed at a future construction documentation stage.</p> <p>16. With respect to the interface with the adjoining existing building the plans propose two doorways; one double doorway adjoining the lifts and a second door to the western end of the building.</p> | <p>YES</p> <p>YES at CC stage</p> |
| <p>17. While the double doorway inherently provides appropriate circulation spaces the single western door shall require an adjustment to achieve 530mm latchside clearance with a 920mm door.</p> |  <p>YES Can comply</p> |
| <p>Ground Floor Level</p>  | |
| <p>18. The open plan foyer areas provide ample circulation spaces to access all areas on the ground floor with an appropriate layout of doorways adjoining the corridors which facilitate doorway circulation spaces, Turning and Passing areas in accordance with ASI428.1 to satisfy Part D3.3 of the BCA and DDA Access Code.</p> | <p>YES</p> |

| BCA / DDA Access Code Review | Complies |
|--|-------------------------------|
| <p>19. The unenclosed stairway within the entry foyer shall require protection from headroom hazards and comply with ASI428.1 and ASI428.4.1 in all regards to satisfy parts D3.3 and D3.8 of the BCA and DDA Access Code.</p> | <p>YES</p> |
| <p>20. The sanitary facilities adjacent to the central lift landing can provide appropriate access in accordance with ASI428.1 to satisfy Parts D3.3 and F2.4 of the BCA and DDA Access Code, which will be confirmed at a future construction documentation stage.</p> | <p>YES</p> |
| <p>21. With respect to the interface with the adjacent existing building the plans propose several open and level corridor links to the northern and western aspects of the existing buildings.</p> | <p>YES</p> |
| <p>22. Doors will be documented at a future stage to confirm 850mm clear opening widths for the active door leaf, level threshold, doorway luminance contrast, glazing markings where required and doorway hardware complying with ASI428.1 to satisfy Part D3.3 of the BCA and DDA Access Code.</p> | <p>YES at CC stage</p> |
| <p>23. Overall, the plans illustrate appropriate access to circulate within the ground floor areas consistent with ASI428.1 to satisfy Part D3.2 of the BCA and DDA Access Code.</p> | <p>YES</p> |

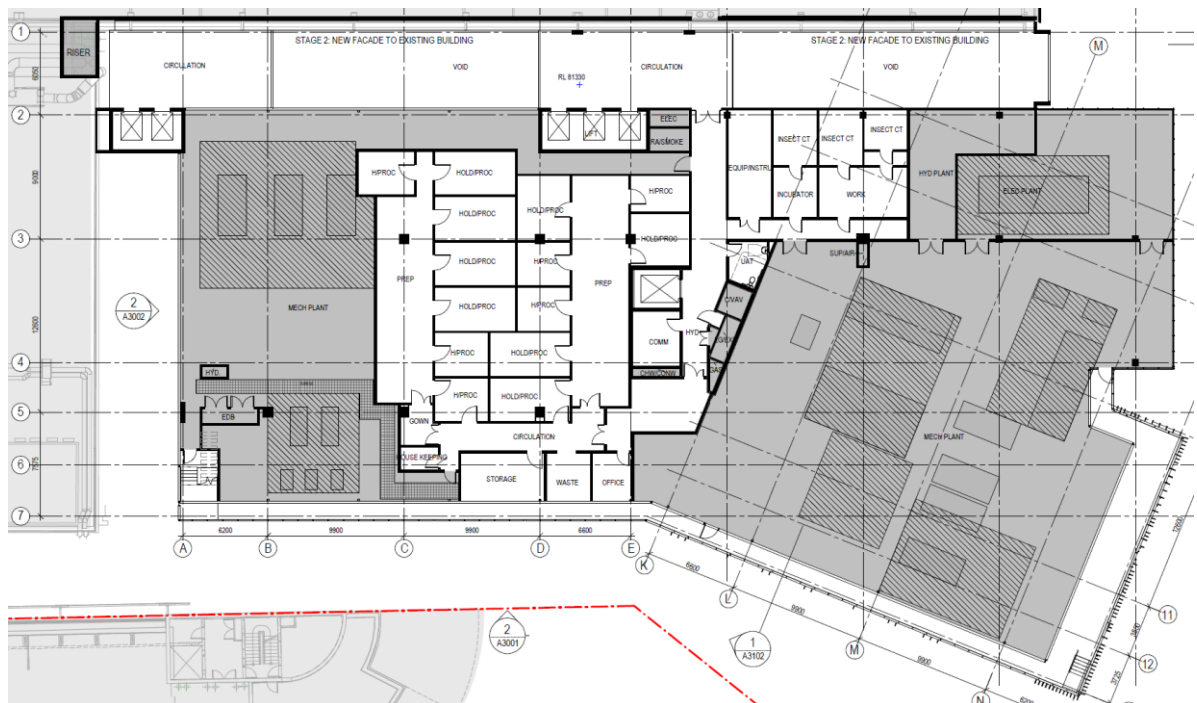
Level 1 Floor Plan



| | |
|--|-------------------|
| <p>24. The central lift landing provides ample width while the central access corridors propose varying widths of 3000mm minimum leading to doorways to access several teaching labs, a workplace office, sanitary facilities and corridor link to the larger goods/passenger lift lobby and prep areas to readily comply with ASI428.1, Part D3.3 of the BCA and DDA Access Code in terms of doorway circulation spaces, Turning and Passing areas.</p> | <p>YES</p> |
|--|-------------------|

| BCA / DDA Access Code Review | Complies |
|---|------------------------|
| <p>32. Double doorways to the larger goods/passenger lift lobby and prep areas and single doors to various offices, meeting rooms and sanitary facilities provide appropriate doorway circulation spaces to comply with ASI428.1, Part D3.3 of the BCA and DDA Access Code.</p> | YES |
| <p>33. Fitout of these areas shall be confirmed at a future design stage.</p> | YES |
| <p>34. The western group of sanitary facilities will provide a unisex accessible toilet in accordance with ASI428.1 to satisfy Parts D3.3 and F2.4 of the BCA and DDA Access Code, which will be confirmed at a future construction documentation stage.</p> | YES at CC stage |
| <p>35. Ambulant accessible male and female toilet cubicles are required in accordance with ASI428.1 to comply with Part F2.4 of the BCA and DDA Access Code.</p> | YES at CC stage |

Level 6



| | |
|---|-------------------|
| <p>36. The central lift landing provides ample width with a double doorway to a 2400mm minimum width corridor to the goods/passenger lift to comply with ASI428.1, Part D3.3 of the BCA and DDA Access Code in terms of doorway circulation spaces, Turning and Passing areas.</p> | YES |
| <p>37. The 1400mm width corridor to several offices shall require a 1540 X 2070mm Turning Area at the end of the corridor to comply with D3.3 of the BCA and DDA Access Code. If outward swing doors are required for the Incubator and adjacent rooms then corridor is required to be 1670mm minimum width to comply with ASI428.1</p> | Can Comply |
| <p>38. Access corridors to and within various equipment rooms, Holding/Processing Rooms and offices comply with ASI428.1, Part D3.3 of the BCA and DDA Access Code in terms of doorway circulation spaces, Turning and Passing areas.</p> | YES |

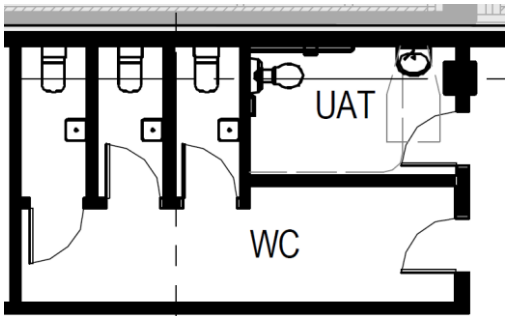
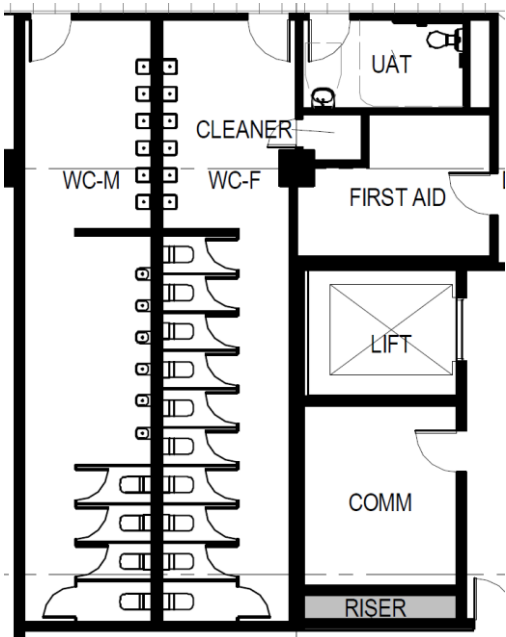
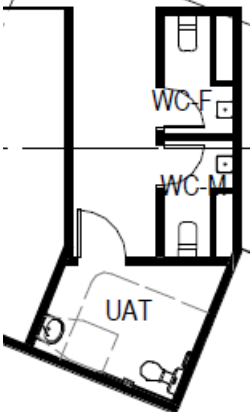
| BCA / DDA Access Code Review | Complies |
|---|---|
| <p>Lifts</p> <p>39. Lift Installations – The proposed installation of 3 passenger lifts and 1 combined goods/passenger lift in stage 1 and 2 passenger lifts in stage 2 that travel from lower ground floor to all areas of the building will comply with Table D3.1 and Part D3.3 of the BCA and DDA Premises Standards.</p> <p>40. The passenger lifts require at least 1400mm X 2000mm to comply with Part E3 of the BCA and DDA Premises Standards for a lift that travels 25 metres.</p> <p>41. Emergency Egress Lifts - It is recommended that at least one lift be designed for use during a fire evacuation including a smoke / fire protected lift lobby</p> | <p>YES</p> <p>YES</p> <p>Recommen- dation</p> |
| <p>Stairways</p> <p>42. Stairways (Non Fire Isolated) - In accordance with part D3.3(a)(ii) of the BCA the non fire-isolated stairs will be detailed at construction certificate stage with handrails on both sides, closed raisers with no overhanging lips and luminance contrasting step nosings to the requirements of AS1428.1 to satisfy Parts D3.3(a)(ii) of the BCA and be slip resistant to P4 or R11 for outdoor stair as specified by Table D2.14 of the BCA.</p> <p>43. Stairways (Fire Isolated) - In accordance with part D3.3(a)(iii) of the BCA the fire-isolated stairs will be detailed at construction certificate stage with step nosings to the requirements of AS1428.1 to satisfy Parts D3.3(a)(ii) of the BCA and be slip resistant to P3 or R10 for indoor stair as specified by Table D2.14 of the BCA.</p> <p>44. The fire-isolated stairs are also required to provide single inner handrails that are continuous through landings and incorporate fixings to walls and baluster in accordance with clause 12 of AS1428.1 to satisfy Part D2.17(a)(vi) of the BCA.</p> | <p>YES at CC stage</p> <p>YES at CC stage</p> <p>YES at CC stage</p> |

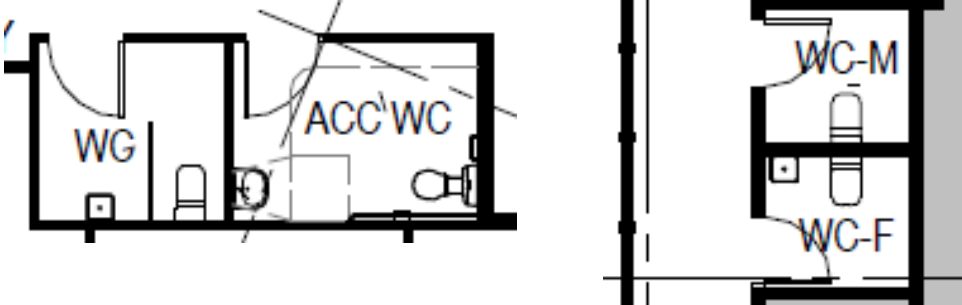
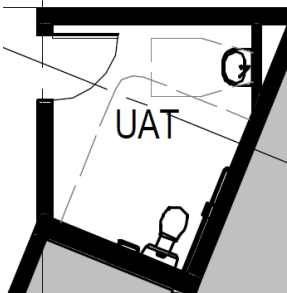
Tactile ground surface indicators

| BCA / DDA Access Code Review | Complies |
|---|-----------------------------------|
| <p>45. Details concerning the provision of tactile ground surface indicators (TGSI's) as required by Part D3.8 of the BCA will be provided at construction certificate stage for pedestrian ramps and stairs (excluding fire/egress only stairs) and overhead hazards where less than 2000mm height clearance is provided such as stairway undercroft spaces in accordance with AS1428.4.1.</p> | <p>YES at CC stage</p> |

Accessible Sanitary Facilities (Part F2.4 of the BCA)

| BCA / DDA Access Code Review | Complies |
|---|----------------------------------|
| <p>46. Every Floor has sanitary facilities and will provide a unisex wheelchair accessible toilet and where male and female cubicles exist then an ambulant accessible male and female cubicle shall be included.</p> | <p>YES Can Comply</p> |

| BCA / DDA Access Code Review | Complies |
|--|---|
| <p>47. Lower Ground Floor level provides a central group of sanitary facilities that includes a unisex wheelchair accessible toilet unisex while the male and female facilities will require detailing of ambulant accessible toilets.</p> |  <p>YES</p> |
| <p>48. Ground Floor level provides a central group of sanitary facilities that includes a unisex wheelchair accessible toilet unisex while the male and female facilities will require detailing of ambulant accessible toilets.</p> |  <p>YES</p> |
| <p>49. Level I provides an area designated for sanitary facilities which will require detailing of a unisex wheelchair accessible toilet, male and female ambulant accessible cubicles.</p> |  <p>YES</p> |

| BCA / DDA Access Code Review | Complies |
|--|------------------------|
| <p>50. Levels 2 to 5 provide three (3) banks of toilets with the western and central group providing a unisex wheelchair accessible toilet and male and female toilets that will require detailing of an ambulant male and female accessible cubicle.</p>  | <p>Can Comply</p> |
| <p>51. Level 6 provides one (1) unisex wheelchair accessible toilet.</p>  | <p>YES</p> |
| <p>52. Details of internal fittings and fixtures will be confirmed at the construction certificate stage to comply with AS1428.1 to satisfy and Part F2.4 of the BCA and the DDA Access Code.</p> | <p>YES at CC stage</p> |

Identification – Braille and tactile signage

| BCA / DDA Access Code Review | Complies |
|---|------------------------|
| <p>53. Sanitary Facilities - Details concerning the provision of raised tactile and Braille signage for ALL of the toilets as required by Part D3.6 and Specification D3.6 of the BCA, will be provided at construction certificate stage.</p> | <p>YES at CC stage</p> |
| <p>54. Fire Exit Doors - FIRE EXIT signs on doors shall also be detailed with raised tactile and Braille characters as required by Part D3.6 and Specification D3.6 of the BCA.</p> | <p>YES at CC stage</p> |
| <p>55. Hearing Augmentation - Details concerning the provision of raised tactile and Braille signage for rooms installed with assistive listening systems (such as Teaching Labs that provide voice amplification), as required by Part D3.6 and Specification D3.6 of the BCA, will be provided at construction certificate stage.</p> | <p>YES at CC stage</p> |

Furniture and Fitments

| University Access Policy Review | Complies |
|--|-------------------|
| 56. Details concerning the provision of accessible workstations, counters, kitchenettes as specified by the University Access Policy will be provided at construction stage. | Can Comply |

Appendix A – Statement of Expertise



CONSULTANCY PROFILE & STATEMENT OF EXPERTISE

Accessibility Solutions consultancy offers a range to services to provide advice for clients to develop new and modify existing buildings, facilities and services to be accessible to people with disabilities to comply with legislation and regulations relevant to people with disabilities.

Relevant legislation and regulations that underpins advice includes the Disability Discrimination Act (DDA) Building Code of Australia, Australian Standards 1428, DDA Premises Standards, DDA Transport Standard, State Environment Planning Policy No. 5 Housing for Older People or People With a Disability (SEPP 5) / Seniors Living Policy, SEPP 65 – Residential Flat Buildings Design Code and various local government DCP's.

The scope of services provided by Accessibility Solutions includes:

- Plan Appraisals and design advice
- Access Reports for development applications and construction certificates
- Expert Reports for Court evidence
- Access Auditing of existing buildings, facilities, transport conveyances and infrastructure
- Policy and document reviews and development of Disability Action Plans
- Staff training in access auditing

The services consider issues concerning people with all types of disability including; physical; vision; hearing, intellectual and other cognitive impairments that may affect access for people with a disability consistent with the Disability Discrimination Act.

As principle consultant Mark Relf has considerable experience and expertise in a wide range of access related projects and is a recognised Access Adviser approved by the NSW Ageing and Disability Department and has attained accreditation with the Association of Consultants in Access Australia for the purposes of providing advice concerning access to the built environment and services for people with disabilities.

His expertise has been gained over 20 years working in management and advocacy roles within the disability sector and since 1994 providing advice to clients on access issues. Mark also participates on various key committees concerning access for people with disabilities. His qualifications and affiliations are:

- Accredited Member of the Association of Consultants in Access Australia.
- Member, Standards Australia ME/64 Committee responsible for the AS1428 suite and AS4299 – Adaptable Housing.
- Member, NSW Heritage Office's – Fire, Access and Services Advisory Panel.

