

FORMIGA1

Schematic Design Report

Project: S250401 - OPAL Bayview Gardens

Location: Annam Road, Bayview NSW 2104

Completed For: Bloompark Pact PM





On Behalf of: OPAL HealthCare

Date: 18th August 2025

Revision Number: B

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Revision Schedule				
Revision	Date	Report Information		
A	08/08/2025	Reason for Revision	Initial Schematic report	
			Prepared by	Reviewed by
		Name	Luke Jesiotr	Scott Naylor
		Signature		
B	18/08/2025	Reason for Revision	Schematic report updated to include addressed items	
			Prepared by	Reviewed by
		Name	Luke Jesiotr	Scott Naylor
		Signature		

This report has been prepared and checked by the experienced team at Formiga1. For any queries regarding this report, please contact our office.

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1. Introduction

Formiga1 has been engaged by Bloompark Pact PM on behalf of OPAL Healthcare to provide a Schematic Design (SD) review of the proposed 177 bed RACF.

The proposal to construct this new building has a number of technical considerations to address as part of any proposed work. These have been developed by establishing a process for the assessment of the work outlined in the Environmental Planning and Assessment Act 1979. The Act gives a number of requirements and considerations for existing and new works and how the building assessment provisions are usually applied.

2. Purpose

The purpose of this report is to provide a high level design guide on an approach to building compliance assessment and establish scope for some of the aspects. The advice contained within this report provides guidance as to how BCA compliance can be achieved in accordance with the Environmental Planning and Assessment Regulation 2021, Section 19. We understand that the proposed development will be subject to a State Significant Development Application and this Schematic Design Report will form part of the DA submission to the Department of Planning, Housing and Infrastructure for their determination.

This report seeks to outline the basis from which performance solutions can be developed for a number of aspects. An exhaustive list of variations to individual prescriptive measures will need to be completed as the design is further developed and performance solutions compiled. This scenario will likely require a fire engineered strategy for the building to achieve compliance with the current building assessment provisions.

3. Scope, Limitations and Exclusions

The scope of this assessment is limited to the current design documentation and will require further development of the building's design. The aspects noted for compliance are based on generic examples gleaned from similar buildings that comply using a combination of prescriptive and performance measures. It should be expected that individual aspects will vary in any detailed design though wider concepts and characteristics will make a similar contribution, particularly to overall fire safety.

This report is limited to the design documentation supplied and is only intended to outline the services that will be required.

This Schematic Design Report does not address safety provisions enforced under the Local Government Act, such as, Occupational Health and Safety Act, Water, drainage, gas, telecommunications and electricity supply authority requirements, etc. The application of the Disability (Access to Premises) Standard 2010 has been assessed as part of this report, however, no other provisions of the Disability Discrimination Act 1992 have been reviewed.

4. Approval Methodology

The Environmental Planning and Assessment Regulation 2021 outlines the approval processes for different types of buildings and the method by which they are assessed. These works have been assessed against the Building Code of Australia 2022 (+A2) that is currently enforced. However, as a requirement of the EP&A Regulation, Section 19, the final design for approval is to be assessed against the BCA enforced at the date of the application for the Construction Certificate. Therefore, the advice provided in this report may become outdated if a revised BCA is released before the Application for a Construction Certificate is received.

The application of the Disability (Access to Premises) Standard and provision for access for people with disabilities will need to be addressed against the current BCA. As this is based in Commonwealth Legislation, State regulatory transitional provisions do not apply and compliance with the current code is required. Please note that the Deemed to Satisfy Provisions of the BCA are not the only method of compliance and a Performance Solution is expected as part of any work in any building. Generally, compliance with BCA Part D4 will be required throughout.

Development Consent from Council or other Consent Authority will be required prior to the start of any work on site. Other referrals such as Fire and Rescue NSW referral under EP&A Regulation, Section 25-29 will form part of the Application for a Construction Certificate process.

The FRNSW referral process is as follows:

- Once the Construction Certificate Application, plans and the FER are sent through, we can submit the documentation to FRNSW within **3 working days**.
- Formiga1 then carries out our CC BCA assessment of the proposed works and sends out a Request for Further Information Letter outlining any non-compliances or further information required in order to complete the assessment. *If the design is required to be considerably altered to achieve compliance then a new FRNSW referral is required to be submitted.*
- FRNSW will then send out a notification stating that they have received our submission within **2 working days** of Formiga1 making the submission.
- Within **10 working days** of receiving the submission, FRNSW must respond advising whether or not they will be assessing the works.
- If they do not choose to assess the works, we can issue the CC (provided all other CC items have been closed out).
- If they choose to assess the works, FRNSW has **25 working days** from receiving the submission to provide comments from their assessment.
- If the 25 day period lapses and no comments are received, we can issue the CC (provided all other CC items have been closed out).
- If FRNSW provides comments, they must be incorporated into the design OR be justified by a peer review from a third party fire engineer.

NOTE: The 25 working days begin from the day after the submission has been accepted by FRNSW.

5. Building Compliance

The assessment has been based on Architectural plans by Calderflower Architecture, Project Number 24110, Date 24/07/2025 and mark ups for associated services.

NOTE: *Some items identified in our previous revision of this report were addressed either directly during the design meeting or were provided as part of Mark Up Plans for BCA.*

This assessment has been tabulated and items identified in relation to Action, Consider and Note, meaning the following:

- **Action** - Requires action on your behalf to either address a non-compliance and/or provide further information on how compliance is proposed to be met for the item;
- **Consider** - Full details are not yet documented and the item should be considered as the design is developed to ensure compliance is met;
- **Note** - A general note stating that compliance has been achieved for the item.

5.1. Principal Building Characteristics

Aspect	Building
Existing Classification	South Building - Class 9a Nursing Home Middle Building - Class 3 Hostel North Building - Class 3 Aged Care Hostel Aveo Managed Building - Unknown. Additional Information required.
Proposed Classification	Basement Carpark - Class 7a Lower Ground Floor - Class 5/9c - Back of House areas/Residential Aged Care Ground Floor - Class 9c - Residential Aged Care Level 1 - Class 9c - Residential Aged Care Level 2 - Class 9c - Residential Aged Care NOTE: Wellness and Cafe areas located on Ground Level are measured <10%, therefore are not identified as separate Class 6.
Rise in Storeys	4 Storeys
Effective Height	9.9m <i>NOTE: BCA Schedule 1 defines "effective height" as vertical distance between the floor of the lowest storey included in the calculation of rise in storeys and the floor of the topmost storey (excluding topmost storey if it contains heating, ventilating, lift or other equipment/service units).</i>
Construction Type	Type A
Compartment Limit	Fire Compartments - 5,000m ² or 30,000m ³ Smoke Compartments - 500m ² <i>NOTE: Class 7a carpark - maximum compartment size not applicable if sprinkler protected</i>
Maximum Compartment Sizes	Fire Compartments - 3,543.22m ² Smoke Compartments - 561m ²
Occupants	Occupant numbers will be determined based on the design intent of this building as this is more suitable than the table outlined in D2D18.

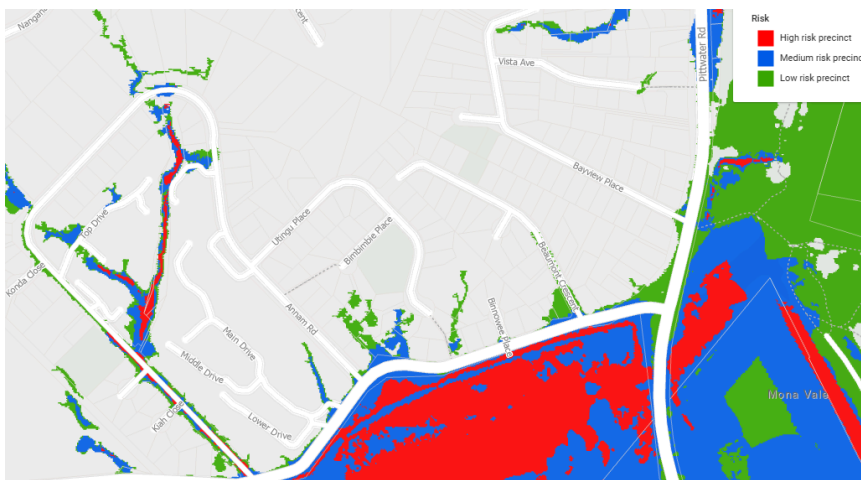
5.2. Building Code of Australia Assessment

Comments	Consider/ Action/ Note
BCA Section B - Structure	
The building is to be designed to an importance level of 3 as the building is Class 9c Aged Care of Type A construction.	Consider
Further information will be required at the Approval Stage on how the treatment of non-structural elements have been designed to the earthquake provisions of AS1170.4 as required under BCA B1D3 is being achieved (ie. walls that are not part of the seismic force resisting system, appendages including parapets, gables, verandahs, chimneys and the like, partitions, ceilings, mechanical and electrical components including smoke control systems, fire suppression systems, boilers, escalators, transformers and the like).	Consider

The building has been identified as being located in a flood hazard area and is Class 9c. Therefore additional structural and design requirements are enforced for this building by ABCB's Construction of Buildings in Flood Hazard Areas 2012.3 Standard. This covers items such as:

- Resistance to hydrostatic, hydrodynamic, debris and wave actions.
- Erosion and scour.
- Habitable floors above flood hazard levels and non-habitable floors <1m below the defined flood level unless approved otherwise by Council.
- Footings.
- Openings for enclosures below the flood hazard level.
- Restriction of certain materials below the flood hazard level.
- Restrictions for certain electrical and mechanical services below the flood hazard level.

Design certification will be required from the Structural, Mechanical, Hydraulic and Electrical Engineers as well as the Architect. Please note that this standard only applies to projects with a velocity flow no greater than 1.5m/s. If greater than 1.5m/s, then a Performance Solution is required.



Confirmation from the town planner was provided noting that the site does not form part of 1% AEP flood extent and as such the proposed building is not directly impacted.

The Structural Engineer is to provide a Design Certificate prior to the approval stage certifying that the building has been designed to the above requirements.

Consider

Consider

BCA Section C - Fire Resistance

Part C2

Building is Type A construction with a general FRL of 120 minutes throughout. Construction is required to be in accordance with clauses S5C11 - S5C20 of Specification 5 including non-combustibility for a number of aspects.

Consider

S5C11

Generally the required minimum FRLs are as follow:

- a. External Loadbearing Wall <1.5m from a fire source feature - **120/120/120**
- b. External Loadbearing Wall >1.5m but <3m from a fire source feature - **120/90/90**
- c. External Loadbearing Wall >3m from a fire source feature - **120/60/30**
- d. External Non-loadbearing Wall <1.5m from a fire source feature - **--/120/120**
- e. External Non-loadbearing Wall >1.5m but <3m from a fire source feature - **--/90/90**
- f. External Non-loadbearing Wall >3m from a fire source feature - **No requirement**
- g. External Loadbearing Columns - **120/--/--**
- h. External Non-loadbearing Columns - **No requirement**
- i. Fire Walls - **120/120/120 - TBC if any fire walls are proposed**
- j. Internal Loadbearing Fire-resisting Shaft Walls - **120/120/120**

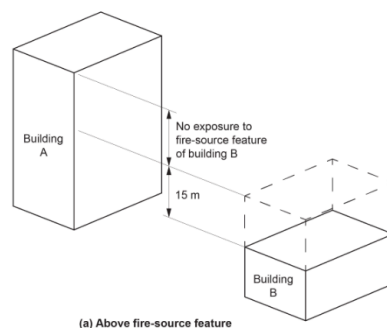
Consider

- k. Internal Non-loadbearing Fire-resisting Shaft Walls - --/120/120
- l. Internal Loadbearing Walls bounding public corridors, public lobbies, sole-occupancy units, etc - 120/--/-- & 60/60/60 (concessioned below)
- m. Internal Non-loadbearing Walls bounding public corridors, public lobbies, sole-occupancy units, etc - **No requirement**
- n. Other Internal Loadbearing Walls, Beams, Trusses & Columns - 120/--/--
- o. Floors - 120/120/120
- p. Roofs - **No requirement (concessioned below)**

NOTE: Refer to BCA Spec 5 (S5C2) for guidance relating to the exposure of the building to fire source features.

Discussions with the design team provided information that the separation between OPAL building and AVEO building will be a Torrents Title Boundary which triggers the above identified FRL requirements. Confirmation was provided that DtS and fire engineered methods will be used to ensure that compliance is achieved. Note

Exposure to fire-source feature as identified in BCA Specification 5 include another building located <15m above the highest part of the external wall. Plans show that AVEO Community Room will impact the eastern corner of the proposed building triggering requirement for provision of FRL to exposed building elements as identified above. This item was discussed during a design meeting with confirmation provided that the separation between OPAL building and AVEO building will be a Torrents Title Boundary which triggers the 3m separation to boundary. If this separation was only a strata boundary then 6m requirements would be triggered. FRL requirements will be assessed at a later stage but compliance is achievable. Consider



The roof concession under BCA Spec 5 to not achieve an FRL may be triggered provided that its covering is of a non-combustible construction, and the building has sprinklers throughout. To claim this concession, parts of the building that do not require sprinklers would need them to be installed. Alternatively as the proposed building effective height is less than 25m the roof concession may be applied if the ceilings immediately below the roof have a resistance to the incipient spread of fire to the roof space of not less than 60 minutes. Consider

If the roof FRL concession is applied and the building does not have an effective height of >25m, all internal columns and walls (other than fire/shaft walls) in the floor immediately below the roof can have their FRL reduced to 60/60/60. Consider

All loadbearing internal walls and fire walls must be constructed from concrete, masonry or fire-protected timber. In addition to this all non-loadbearing internal walls required to be fire-resisting as mentioned above, the wall must be non-combustible. Consider

<p>Enclosure of shafts at the top and bottom will require compliance with BCA Spec 5 (S5C8) by achieving the same FRL as the shaft walls. A fire-rated top is not required if it extends beyond the roof covering and a fire-rated bottom is not required if it is laid directly on the ground. However, a fire-rated top is still required to fire-isolated stairs.</p>	Consider
<p>Non-combustibility of elements is outlined in BCA C2D10, being:</p> <ol style="list-style-type: none"> External walls and common walls (including facade, framing, insulation, etc.). Flooring and floor framing of lift pits. Fire-rated non-loadbearing internal walls. Non-loadbearing shafts. 	Consider
<p>Attachments to the external walls must also be non-combustible unless they form part of the concessions within BCA C2D14.</p>	Consider
<p>Fire hazard properties are required to comply with BCA C2D11 and BCA Spec 7.</p>	Consider
<p>Part C3</p>	
<p>Compartment limits for this building are outlined in BCA Table C3D3. The Class 9c portion has a floor area limit of 5,000m² and 30,000m³. The maximum proposed fire compartment size is 3,543.22m²</p>	Note
<p>Further to the above requirements, Class 9c parts of the building are required to comply with BCA C3D6 (3) for smoke compartmentation and construction in accordance with BCA Specification 11. The Deemed to Satisfy provisions require smoke compartments to have a maximum floor area of 500m². Plans show provision of the following oversized smoke compartments:</p> <ol style="list-style-type: none"> Lower Ground - 543m² Ground Floor - 561m² Level 1 - 505m² Level 2 - 542m², 534m² 	Note
<p>It is our understanding that this non-compliance will be addressed in the proposed fire engineered Performance Solution.</p>	
<p>BCA NSW C3D6 (3) requires all internal walls bounding SOUs and public corridors must:</p> <ol style="list-style-type: none"> Be lined on each side with 13mm standard grade plasterboard or equivalent. Loadbearing walls that are concrete, masonry or fire-protected timber do not require this plasterboard. Non-combustible insulation. Extend to the underside of the floor/roof/13mm plasterboard ceiling above. Do not incorporate any penetrations above the door head height unless smoke sealed. Be smoke sealed with an intumescent putty along all construction joints. 	Consider
<p>Kitchens(>30m²), laundries containing gas fire dryers and medical record storage areas (>10m²) are to be fire separated from SOUs by smoke-proof walls in accordance with BCA Spec 11 (including smoke doors). Provided plans appear to show compliance.</p>	Note
<p>The building is proposed to be provided with a sprinkler system throughout and does not require vertical separation in accordance with BCA C3D7. However, if fire sprinkler coverage is not provided to all areas then vertical fire separation must be provided on all floors in accordance with this Clause. Consideration should be given to sealing cavity/curtain walls around the edges of the slab and the vertical ends of fire and smoke walls, as the slab is required to achieve fire separation between storeys. The design team provided clarification that this item will be included in the proposed fire engineered performance solution.</p>	Note

<p>The provisions for separation of classifications in the same storey and different storeys in BCA C3D8 and C3D9 do not apply to the separate Class 5, 7a and 9c parts as these classifications require the same FRLs.</p>	<p>Note</p>
<p>Services are required to be separated in accordance with BCA C3D13 and C3D14 (ie. fire pumps, power sources sustaining emergency equipment, etc.).</p>	<p>Consider</p>
<p>Part C4</p>	
<p>Due the external wall of the building requiring an FRL, the following openings require protection in accordance with BCA C4D5 as they are within 3m of site boundary:</p>	<p>Note</p>
<ul style="list-style-type: none"> a. Basement Level - Doorway to the AVEO Parking area adjacent to the Existing Dinning-AVEO b. Lower Ground & Ground Level - Window opening to a sitting area located at the end of corridor serving 24 beds section, 	
<p>The design team provided confirmation that a fire engineered performance solution will be utilised to address this item.</p>	
<p>Smoke doors are required to comply with C4D5 and Spec 12 (eg. swing in the direction of egress or both directions, fitted with a self closing device, etc.). Updated plans appear to show a compliant smoke door swing.</p>	<p>Note</p>
<p>Smoke reservoirs (minimum of 400mm in depth) are required above all smoke doors to both sides in accordance with BCA Spec 11.</p>	<p>Consider</p>
<p>Penetrations to fire rated barriers (shafts, walls, floors) are required to be in accordance with BCA C4D15.</p>	<p>Consider</p>
<p>BCA Section D - Access and Egress</p>	
<p>Part D2</p>	
<p>This building has the required minimum of 2 exits from each storey.</p>	<p>Note</p>
<p>Exits are generally required to be fire-isolated or external stairs in lieu of fire-isolated stairs in this building as per BC D2D3. Exits connecting only two storeys are permitted to be non-fire isolated.</p>	<p>Consider</p>
<p>Please consider the layout and protection of the discharge path in conjunction with these requirements. Fire isolated stairs are required to have a fire resistant enclosure to the top.</p>	<p>Consider</p>
<p>It is currently not clear if the stair located in the northern part of the building are egressing directly to an open space or if they are proposed to discharge through the building. Confirmation provided with a 3D rendering of this area and discharge is confirmed to be an open space.</p>	<p>Note</p>
<p>Additionally, it is not clear if sufficient separation of rising and descending stair flights is being provided. A confirmation was provided that separation is to be provided.</p>	
<p>External stairs in lieu of fire-isolated stairs need to remain open on the external face to ensure that they cannot become smoke logged. Generally sufficient openness can be taken from BCA D3D6, being an area of unobstructed openings equalling the floor area of all landings and be a minimum of 75% open above a height of 1m on each storey. All stairs appear to achieve this openness.</p>	<p>Consider</p>
<p>The external stairs in lieu of fire-isolated stairs appear to make provision for compliance with regard to separation (ie. walls separating this stair from the building being 60/60/60, not incorporating openings <3m from the building and openings >3m but <6m from the protected in accordance with BCA C4D5.</p>	<p>Consider</p>

<p>Exit travel is generally 20m to single exit or 20m to a point of choice and 40m to the first exit, as well as 30m to a single exit serving a storey at the level of access to a road or open space. Distance between alternative exits is limited to 60m. The following areas do not meet this requirement:</p> <ul style="list-style-type: none"> a. Lower Ground Floor - Balcony attached to team room is >10m² thus it is identified as occupiable outdoor area, distance to a point of choice is >20m (21.20m measured), b. Lower Ground Floor - Balcony opening to Dining - Non MCN appears to have one compliant egress path and one maintenance path that is <1m with a gate measured to be <850mm, creating distance to a point of choice >20m (32.11m measured), c. Ground Floor - South wing (29 beds) 2x most eastern SOUs >20m to a point of choice (21.56m & 24.40m measured), d. Level 1 - North Wing 2x bed single SOUs >20m to a point of choice (21.90m & 23.01m measured), e. Level 1 - Distance between alternative exits >60m (74.87m measured), f. Level 2 - North Wing 2x bed single SOUs >20m to a point of choice (21.60m & 22.96m measured), g. Level 2 - South western part, balcony adjacent to Bed Superior >20m to a point of choice (23.38m measured), h. Level 2 - Distance between alternative exits >60m, two non compliance identified (68.90m & 65.90m). <p>The design will need to be amended to meet the DTS provisions of the BCA. However, the BCA is a performance based code and compliance can be achieved through means of Performance Solutions. The design team provided confirmation that fire engineered performance solution will be utilised to address this non-compliance.</p>	<p>Note</p>
<p>Discharge from fire-isolated stairways is required to be protected as per BCA D2D12. Plans show provision of two stairs from the Basement Level. Paths of discharge from these stairs appear to be passing within 6m of the proposed building with a number of window and door openings identified. It is unclear at this stage if alternative discharge pathways are to be proposed or if fire engineering is to be utilised to address this requirement. The design team provided confirmation that fire engineered performance solution will be utilised to address this non-compliance.</p>	<p>Note</p>
<p>Minimum dimensions for exits (clear width) are 1m though the minimum width and increased if the population of storeys are more than 100 persons.</p>	<p>Note</p>
<p>Lower Ground Level contains an Occupiable Outdoor Area which previously was provided with two alternative paths of travel to an exit. This area now is provided with one compliant egress pathway and one path which contains a gate that is measured 550mm and corridor <1m wide. The design will need to be amended to meet the DTS provisions of the BCA. Confirmation was provided that this path is maintenance access only and the extended travel distance from this area will be addressed by a fire engineered performance solution.</p>	<p>Note</p>
<p>Increased corridor widths of 1.5m as well as increased door widths for class 9c areas have been achieved.</p>	<p>Note</p>
<p>Discharge and protection of people egressing appears compliant with BCA D2D15. Further details are to be developed as the design progresses.</p>	<p>Consider</p>
<p>Part D3 Fire-isolated stairs in this building are required to have the ascending and descending stairs separated in accordance with BCA D3D5. Plans indicate that this has been addressed.</p>	<p>Note</p>
<p>Installations in the path of travel are required to comply with D3D8.</p>	<p>Consider</p>

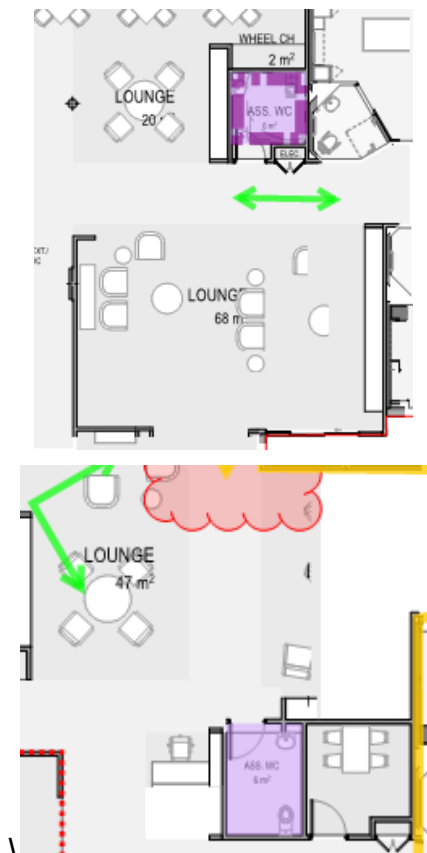
Cupboards or similar enclosed spaces have not been proposed underneath stairs.	Note
Stairs are required to comply with BCA D3D14 for tread construction and BCA D4D5, which references AS1428.1, Clause 11. Please refer to further comments in D4D5.	Consider
Ramps throughout the property must not exceed a gradient of 1:14 and must be slip-resistant in accordance with BCA D3D15.	Consider
Door thresholds throughout resident use parts of Class 9c of the building must not incorporate a step, except where a ramp with a maximum gradient of 1:8 is provided for a maximum height of 25mm. as per BCA D3D16.	Consider
Door thresholds throughout the accessible paths of travel must not incorporate a step, except where a threshold ramp with a maximum gradient of 1:8 is provided to an external door for a maximum height of 35mm for a maximum length of 280mm and located within 20mm of the door that it serves as per BCA D3D16.	Consider
Balustrades are to be a minimum height of 1m as per BCA D3D17-D3D21. Additionally, where the floor level is >4m from the falling surface below, no climbable elements are permitted between the heights of 150mm and 760mm.	Consider
D3D22 requires handrails to both sides of every corridor used by residents. Corridor handrails have not been proposed to both sides of all corridors. It is assumed that a performance solution will be utilised to address this non-compliance but further confirmation will be required. The design team provided confirmation that a performance solution will be utilised to address this item.	Note
Door swing is required to comply with BCA D3D25. Where building entrances are also exits, consideration should be given to compliance with D3D24 – D3D26, including door swing, sliding doors and the like. (ie. The automatic sliding doors in the main entrance shall be manually openable with a force <100N and open automatically upon activation of the detection system). The provisions of BCA D3D26 will apply to the common area balconies and courtyard areas meaning that the doors cannot be locked from the inside unless they are fitted with a fail-safe device. Please note that a call button will not be sufficient to act as a fail-safe device but both can be installed as fail-safe device will only operate in an emergency.	Consider
Where openable windows with falls of >4m occur, a minimum barrier height of 865mm is required, ensuring that no horizontal elements (including window sills and the like) are located between 150mm and 760mm in accordance with BCA D3D29. Generally 1m has been shown to these spaces.	Consider
Part D4	
This building is required to be accessible to and within resident use areas. Paths connecting this building with other buildings, disabled car spaces and main pedestrian entry points along the boundary shall also comply with AS1428.1.	Consider
Please see our Access Assessment Report for further comments.	Consider
BCA Section E - Services and Equipment	
Part E1	
Fire hydrant coverage is required to all areas in accordance with AS 2419.1. Please note that the comments on compartment size and the impacts this may have on the supply of water and that the hydraulic design has compartmentation consistent with other plans. Other aspects of compliance (flows and pressures) are assumed at this time.	Consider

Separation of the hydrant booster to electricity, gas and other hazardous elements as per AS2419.1 will need to be considered.	Consider
Consideration should be given to AS2419.-2021 cl 3.2.2.2 for hydrant clearances in stairs that have the potential to contain a fire hydrant (ie. >500mm from the door swing, etc.).	Consider
The hydrant pump is required to open directly to a road or open space <u>or</u> directly into an airlock that leads to a fire-isolated stair. If a fire isolated stair is proposed from the pump room then requirement for protection of discharge must be taken into consideration as the plans currently show that discharge will be passing within 6m of the building including a number of openings. BCA permits use of external stairs in lieu of fire isolated stairs but requirement for airlock would be still applicable. The design team provided confirmation that a fire engineered performance solution will be utilised to address this non-compliance.	Note
The Class 9c and Class 5 areas of the building do not require Fire Hose Reels as outlined under BCA E1D3, however, Fire Hose Reel coverage will be required to the Class 7a carpark area.	Consider
This building is required to be sprinkler protected throughout and be installed in accordance with AS2118.4. Activation of the Building Occupant Warning System and the monitored main stop valve is required for the system. This shall be detailed in the design for approval.	Consider
Fire extinguishers will be required in accordance with E1D14 of the BCA.	Consider
A fire control room is not required for this building.	Note
Part E2 Smoke detection and alarms are required for this building in accordance with E2D3-E2D13 of the BCA and AS1670.1. This includes a Building Occupant Warning System, Manual Call Points, Fire Brigade monitoring, automatic shutdown of air-handling systems and Mimic Panels/Annunciators in each smoke compartment.	Consider
Stair pressurisation is not required as no fire-isolated exits are being proposed.	Note
This building has not been considered an “other assembly building” in accordance with E2D15-E2D20. As such, there are no additional requirements for smoke hazard management.	Consider
Part E3 At least one lift will need to comply with AS 1735.12 for accessibility. Similarly, at least one lift will need to comply as a stretcher lift.	Consider
The lift does not require any fire service controls as it is <12m effective height.	Consider
Part E4 Emergency lighting and illuminated exit signage is required for this building. Compliance has been assumed at this time.	Consider
An EWIS is not required for this type of building under BCA E4D9.	Consider
BCA Section F - Health and Amenity	
Part F1 Stormwater drainage must comply with AS3500.3.	Consider
Waterproofing membranes for external above ground use must comply with AS4654 Parts 1 & 2.	Consider

<p>Subfloor ventilation is required to be provided in accordance with BCA Table F1D8.</p>	<p>Consider</p>
<p>Part F2 Waterproofing to wet areas shall be provided in accordance with BCA F2D2 and AS3740. It is noted that the standard Opal ensuite pod design does not comply with the new AS3740-2021 due to the extremity of the shower area being <200mm from the ensuite door. This item was discussed with the design team and confirmation was provided that OPAL will be providing a performance solution to address this issue.</p>	<p>Note</p>
<p>Where a floor waste is installed, the floor must be provided with a continuous sloping surface to the floor waste between 1:50 & 1:80 in accordance with BCA F2D4. It is not possible for an installation of a BCA Floor Waste within an accessible sanitary compartment to comply with the DtS provisions of AS1428.1 and BCA F2D4.</p>	<p>Consider</p>
<p>Part F3 BCA Performance Requirement F3P1 for weatherproofing of external walls will need to be addressed by a Performance Solution as there are no DTS provisions relating to F3P1 for materials outside of BCA F3D5 i.e. FC cladding.</p>	<p>Consider</p>
<p>Masonry, autoclaved aerated concrete or metal wall cladding used as the external cladding must comply with AS3700, AS5146.3 or 1562.1 in order to be deemed to satisfy with no Performance Solution.</p>	<p>Consider</p>
<p>Part F4 This building requires a fixed or mobile bath, clinical handwash basin (1 per 16 residents), laundry (shown on plans), slop hopper (one per 60 residents or part thereof on every storey) and disinfection appliance (one per 60 residents or part thereof on every storey) as per BCA F2.1. Reasonable provisions appear to have been allowed including mobile bath.</p>	<p>Note</p>
<p>Occupant numbers are required to be established prior to facility calculations. The numbers provided will be assessed further but are assumed to be compliant at this time. Some WC's may require lift off hinges.</p>	<p>Consider</p>
<p>Sanitary facilities for staff will need to have their location, gender allocation and whether they are accessible ambulant or regular confirmed in order to determine compliance. Plans appear to show provision of staff gendered sanitary compartments within the Team Change Rooms located on the Lower Ground Level including what can be assumed ambulant compartments and accessible compartment.</p>	<p>Consider</p>
<p>Appropriate allowances have been shown for accessible sanitary facilities complying with BCA F4D4 and AS1428.1. Accessible sanitary compartments are not required in common areas as these sanitary compartments are not required under BCA F4D3. If they are provided with signs labelling them accessible, then they must conform to all requirements of BCA F4D4 and AS1428.1. Please note that the additional toilets shown to common areas are not required and as such can be identified as either accessible or regular sanitary compartments.</p>	<p>Consider</p>
<p>Part F5 Room sizes have been assumed compliant. Ceiling heights are not confirmed at this time. Minimum heights are generally 2.1 and 2.4m under BCA Part F3.</p>	<p>Consider</p>
<p>Part F6 Natural light is required to all bedrooms at 10% of the floor area under BCA Part F4. Ventilation may be achieved by natural or mechanical means. Compliance is assumed at this time.</p>	<p>Consider</p>

Sanitary compartments have restrictions on where they can open directly to, particularly in public and shared areas. **Please consider this as design is developed, particularly the airlock/screening requirement from public areas. Plans appear to show that the WC located on Ground Floor and Level 1 is opening directly into a lounge area with no screening provided. As discussed with the design team, similar previous projects for OPAL were provided with doors angled 90 degrees to common areas in lieu of opening directly. This item is capable of compliance and will be assessed at a later stage to ensure compliance.**

Consider



Part F7

Acoustic separation is required in accordance with F5. Walls separating SOUs from other SOUs or separating SOUs from kitchens, bathrooms, sanitary compartments, laundries, plant rooms and utility rooms (not within the same SOU) are required to achieve a minimum sound rating level of Rw45.

Consider

Part F8

Part F8 is only applicable to Class 2 and Class 4 part of a building.

Note

BCA Section G - Ancillary Provisions

Limited minor structures and coldrooms are not proposed as part of this scope of work.

Note

Provision for cleaning windows as the building is 3 or more storeys above ground is required by BCA NSW G1D5. This is satisfied by including provisions to clean windows from the inside of the building or provision is made for the cleaning of the windows by a method complying with the Work Health and Safety Act 2011 and regulations made under that Act.

Consider

This building is not located within bushfire prone land and will not require compliance with BCA Part G5.

Note

Common balcony areas >10m² are deemed to be occupiable outdoor areas as per BCA Part G6.	Consider
BCA Section J - Energy Efficiency	
Generally, new buildings and new parts to existing buildings are required to comply with Part J4 for the building fabric and glazing. The extent of the conditioned space and the walls, floors and roof that bound it will need to be established so that these can be specified for compliance.	Consider
The building enclosure is required to be appropriately designed in accordance with BCA Part J5.	Consider
The mechanical ventilation is required to be appropriately designed in accordance with BCA Part J7.	Consider
As the building is >2500m ² , it is required to contain facilities for energy monitoring as per BCA J9D3.	Consider
Please note the new requirements for provision for the future installation of solar panels and electric vehicle charging under BCA J9D4 and J9D5. Confirmation was provided that 8 parking spots for EV are to be provided in the basement level.	Consider

6. Conclusion

This report provides an assessment of the referenced architectural documentation against the Environmental Planning and Assessment Act, referenced Australian Standards, as well as, the Performance Requirements and the Deemed to Satisfy provisions of the National Construction Code Series, Building Code of Australia (Volume 1) for the proposed development.

Key compliance issues have been identified through this assessment. These issues are to be resolved prior to the approval stage by means of; Performance Solutions, altered design documentation or clarification of information on building plans.

Notwithstanding the above, it is considered that compliance with the provisions of the BCA is readily achievable, provided the above matters are appropriately addressed by the project team. Additionally, it is considered that the matters raised can be adequately addressed in the preparation of the Construction Certificate Approval documentation without resulting in any foreseeable inconsistencies with the Development Approval.