

03 April 2014

Mr Tom Hutchison
Meriton Group
Level 11, Meriton Tower
528 Kent Street
SYDNEY NSW 2000

Dear Sir,

BCA COMPLIANCE CAPABILITY STATEMENT - S.75W MODIFICATION APPLICATION
RIVERFRONT APARTMENTS - 330 CHURCH STREET, PARRAMATTA

Reference is made to the development proposal at the above mentioned property, which is to be the subject of a Section 75W modification application to the Department of Planning and Infrastructure. A preliminary BCA assessment has been undertaken on the development application plans referred to below, for compliance capability with the Building Code of Australia (BCA) 2012, being the version of the BCA applicable to the subject development. In support of the modification application, we provide the following description and statements:

1.0 BCA DESCRIPTION

1.1 Classification (A3.2)

<u>Level</u>	<u>Proposed</u>
Basement Levels 01-04	Class 7a Carpark
Ground - Mezzanine Level 00	Class 6 Retail
	Class 7b Loading Zone
	Class 2 & 3 Residential Lobby
Levels 01-03 Podium	Class 7a Carpark
	Class 2 & 3 Residential Apartments
Level 4	Class 9b Pool / Gymnasium
	Class 2 & 3 Residential Apartments
Levels 5-30	Class 2 & 3 Residential Apartments
Level 31	Class 2 & 3 Residential Apartments
	Class 2 & 3 Plant & Services
Levels 32-53	Class 2 & 3 Residential Apartments
Level 54	Class 2 & 3 Plant & Services

1.2 Effective Height (A1.1)

The building has an effective height of greater than 25m.

Level 53	RL 175.4m (AHD)
Parking Level 01	RL 4.4m (AHD)
Effective Height	171.0m

1.3 Type of Construction (C1.1)

Type A construction is applicable.

1.4 Rise in Storeys (C1.2)

The building has a rise in storeys of fifty six (56).

2.0 FIRE RESISTANCE

2.1 Compliance with the BCA requirements for fire resistance is considered to be readily achievable.

Type A construction is applicable to the proposal. Fire resistance levels are to comply with Table 3 of Specification C1.1 of the BCA, and in particular the following:

1. Floors between the commercial use applying a class 6 if used for retail are to achieve an FRL of 180/180/180 or if class 5 offices 120/120/120.
2. Floors separating the car park from the commercial/residential components of the building must achieve and FRL of 120/120/120.
3. Floors separating sole occupancy units need achieve and FRL of 90/90/90.
4. Floors separating the plant/garbage areas need achieve an FRL of 240/240/240 and also where store areas occupy more than 10% of the floor levels. Additionally the loading dock on ground level must be fire separated from the remainder of the level by 4 hour fire rated construction.
5. Where the floors separate different classification of building such as between the commercial and plant floors, and plant and residential they must attain the higher FRL.
6. Internal walls bounding sole occupancy units, bounding public corridors, lobbies or the like, and any shafts need achieve an FRL of 90/90/90 where load bearing and in the Class 2 & 3 residential parts of the building, 180/120/120 in the Class 6 retail

part, 120/90/90 in the Class 9b swimming pools / gymnasiums, and 240/120/120 in the Class 7b storage & loading areas. This is decreased should walls be non-load bearing.

7. External walls less than 1.5m from fire source features need to achieve an FRL of 90/90/90 for Class 2 & 3 residential parts, 120/120/120 for class 7a carpark & Class 9b pool / gym parts, 180/180/180 for Class 6 Retail and 240/240/240 for Class 7b storage / loading docks. This FRL is decreased progressively dependent upon the proximity from the fire source feature and applies to all levels of the proposal.
8. Lift and stair shafts need be fire rated as per Table 3.
9. Electricity substations and main switchboards sustaining emergency equipment such as the booster assembly and the fire control room at Ground Level 00 and main switch room at Parking Level 01 need be separated by fire resistant construction achieving an FRL of 120/120/120 with -/120/30 doors.

Portions of the building will be exposed to a fire source feature being common boundaries to the east & south. Building elements that are exposed to a fire source feature are required to have the appropriate fire resistance.

The building will consists of multiple classifications which necessitates appropriate fire compartmentation to achieve the required separation. The Class 2 & 3 residential and Class 7a car park portions of the building are not subject to compartmentation limitations, however bounding construction requirements apply to the residential sole-occupancy units.

Protection of openings needs to be applied in accordance with BCA Clause C3.4. In general windows to the southern and eastern elevation and adjacent to the south eastern and south western corners will be less than 3.0m from a fire source feature and therefore would require protection.

3.0 ACCESS AND EGRESS

- 3.1 Compliance with the BCA requirements for access and egress is considered to be readily achievable. At least two exits must be provided from each storey and need comply with the following exit travel distances need comply with the following:

1. Sole occupancy unit doors to the residential parts of the building are to be within 6m of an exit or a point of choice to two exits. Common areas need to be not more than 20m from a point of choice. The residential levels appear to exceed the 6m requirement,

however provided that the distance is not more than 10-12m this could be dealt with by an alternative fire engineered solution.

2. In the remaining, class 6, 7a, 7b and 9b parts of the building no point on the floor is to be more than 20m from a point of choice, and not more than 40m to one of the exits. Compliance is readily achievable.
3. In the class 6 parts of the development the distance to a single exit serving a storey at the level of egress to the road or open space must not be more than 30m
4. The maximum distance between exits permitted is 45m apart in the class 2 & 3 parts of the building and 60m within the other classifications. Compliance is achieved.
5. The unobstructed width of exits and paths of travel to exits must be 1m.

4.0 SERVICES AND EQUIPMENT

- 4.1 Compliance with the BCA requirements for services and equipment is considered to be readily achievable. The following is a summary of the applicable services and equipment required by the BCA.

Fire Hydrants

Compliant fire hydrant coverage is to be supplied in accordance with AS2419.1-2005.

Fire Hose Reels

Compliant fire hose reel coverage is to be supplied in accordance with AS2441-2005, and located within 4m of an exit.

Sprinklers

Sprinklers must be designed and installed in accordance with clause E1.5 and Specification E1.5 of the BCA and AS2118.1-1999.

Smoke Hazard Management

An automatic smoke detection and alarm system is required to be installed.

Fire isolated exits are required to be provided with an automatic stair pressurisation system compliant with in accordance with clause E2.2a and Specification E2.2a of the BCA and AS/NZS 1668.1.

A zone smoke control must be provided in accordance with clause E2.2a of the BCA and AS/NZS 1668.1 to the class 6 and 7b parts of the building.

Mechanical ventilation is to be supplied to the basement compliant with AS1668.2 and Clause 5.5 of AS/NZS1668.1.

A building occupant warning system must be installed compliant with Specification E2.2a and clause 3.22 of AS1670.1

Lift Installations

As the building is over 25m in effective height an emergency lift must be installed in accordance with Part E3 of the BCA and AS1735.1, AS1735.2, AS1735.12.

Emergency Lighting, Exit Signs and Warning Systems

Emergency lighting and exit signs need be located in accordance with clauses E4.2, E4.4, E4.5, NSW E4.6, E4.8 of the BCA and AS/NZS 2293.1-2005.

The building must be fitted with a sound system and intercom system for emergency purposes compliant with clause E4.9 of the BCA and AS1670.4-2004.

5.0 HEALTH AND AMENITY

- 5.1 Compliance with the BCA requirements for health and amenity is considered to be readily achievable. The construction certificate documentation will need to demonstrate compliance with the requirements of Part F of the BCA; specifically in relation to Damp and Weatherproofing, Sanitary and Other Facilities, Room Sizes, Light and Ventilation, Sound Transmission and Insulation.

6.0 ENERGY EFFICIENCY

- 6.1 Compliance with the BCA requirements for energy efficiency is considered to be readily achievable. The building is to be constructed compliant with the following:

1. Part J1 – Building Fabric
2. Part J2 – Glazing*

3. Part J3 – Building sealing
4. Part J5 – Air Conditioning and Ventilation System
5. Part J6 – Artificial lighting*
6. Part J7.2 – Hot Water Supply
7. Part J7.3 – Swimming Pool Heating and pumping
8. Part J7.4 – Spa Pool heating and pumping (only where spa pool has capacity of 680L or more)
9. Part J8.2 & J (a) 5.2 – Access for maintenance
10. Part J8.3 – Facilities for Energy Monitoring (not applicable within class 2 sole occupancy units)

*Not applicable to the class 2 residential portions of the building

BASIX also needs to be supplied relative to the class 2 portions of the building.

7.0 BCA COMPLIANCE CAPABILITY

This statement has been provided to accompany the Section 75W Modification Application submission. It is our opinion that the proposed building works are capable of complying with the provisions of the Building Code of Australia 2012. Compliance capability of the proposed building works is subject to the resolution of minor non-compliances.

The non-compliances will be addressed prior to the issue of the Construction Certificate. Detailed construction drawings are to be provided at Construction Certificate application stage, demonstrating compliance with the BCA.

A preliminary assessment has revealed that the general design may also incorporate performance based solutions. The deemed to satisfy provisions of the BCA require sole occupancy unit doors to the residential parts of the building to be within 6m of a single exit or a point of choice to two available exits. The preliminary design indicates sole occupancy unit doors on residential levels appear to exceed the deemed to satisfy requirement of 6m. In this regard, it is anticipated that compliance with the performance requirements of the BCA can be achieved by the development of an alternative fire engineered solution.

8.0 PLANS ASSESSED

Drawings prepared by Tony Caro Architecture P/L:

Plan Title	Drawing No	Issue	Date
Cover	A000	13	20/03/14
Site Analysis	A001	9	12/02/14
Plan Parking Level 04	A096	9	19/02/14
Plan Parking Level 03	A097	10	19/02/14
Plan Parking Level 02	A098	10	19/02/14
Plan Parking Level 01	A099	12	19/02/14
Plan Level 00 Retail	A100	21	20/03/14
Plan Level 00 Mezzanine	A100.1	5	20/03/14
Plan Level 01 Podium	A101	8	20/03/14
Plan Level 02 Podium	A102	8	20/03/14
Plan Level 03 Podium	A103	8	20/03/14
Plan Level 04	A104	14	20/03/14
Plan Level 05 Typical Tower Lower	A105	12	06/03/14
Plan Typical Tower Middle	A106	10	06/03/14
Plan Typical Tower Upper	A107	10	06/03/14
Plan Level 4	A148	10	18/02/14
Plan Levels 5	A148.2	2	18/02/14
Plan Levels 6-16	A149	10	18/02/14
Plan Levels 6-23	A149	9	12/02/14
Plan Levels 17-23	A149.1	10	18/02/14
Plan Levels 24-27	A149.2	3	18/02/14
Plan Levels 28-30	A150	10	18/02/14
Plan Levels 31	A151	10	18/02/14
Plan Levels 32-33	A152	10	18/02/14

Plan Levels 34-52	A153	10	18/02/14
Plan Level 54 Plan	A154	10	06/03/14
Plan Level 55 Roof	A155	10	06/03/14
Plans Podium Levels 1-3	A156	5	06/03/14
Plans Podium Levels 1-3	A157	5	06/03/14
Elevations – Site	A300	13	12/02/14
Elevations – Podium	A350	13	06/03/14
Elevations – Podium	A351	11	06/03/14
Elevations – East Tower	A352	6	26/02/14
Elevations – East Tower	A353	6	26/02/14
Elevations – West Tower	A354	9	20/03/14
Elevations – West Tower	A355	8	05/03/14
Detailed Elevations – Podium	A400	8	25/02/14
Detailed Elevations – Podium	A401	10	25/02/14
Detailed Elevations – Podium	A403	8	25/02/14
Detailed Elevations – Podium	A404	10	25/02/14
Detailed Elevations – East	A405	6	26/02/14
Detailed Elevations – East tower	A406	6	26/02/14
Detailed Elevations – East Tower	A407	6	26/02/14
Detailed Elevations – West Tower	A408	8	25/02/14
Detailed Elevations – West Tower	A409	8	25/02/14
Detailed Elevations – West Tower	A410	8	25/02/14
Shadow Diagrams – Winter 9am	A501	2	27/06/13
Shadow Diagrams – Winter 12pm	A502	2	27/06/13
Shadow Diagrams – Winter 3pm	A503	2	27/06/13
Shadow Diagrams – Equinox	A504	2	27/06/13
Shadow Diagrams – Summer	A505	2	27/06/13

Diagram – GFA Areas	A550	12	20/03/14
Site Analysis – Comparative Building Heights	A551	3	19/12/13
Diagrams – SEPP 65 Compliance Solar	A552	2	19/12/13
Diagrams SEPP 65 Compliance Ventilation	A553	7	19/12/13
Diagram GFA Areas	A554	1	21/02/14

Should you need to discuss any aspect, please do not hesitate to contact the undersigned on (02) 8270 3500.

Prepared by:



Darren Bugg
On behalf of City Plan Services
A2 Accredited Certifier
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