

DRAFT CONSTRUCTION METHODOLOGY

1. Overview

The 5 Blue Street development is an adaptive re-use of an existing office building in North Sydney, located on the corner of Blues Point Road & Blue Street, over the North Sydney (heavy rail) Train Station. The building consists of a thirteen-level tower (above Miller St), three basement levels, and a podium to the eastern side. It's a conventional reinforced concrete structure with a precast façade and 'punch' aluminium windows.

Our proposal is to retain most of the existing structure with only some minor additions & alterations to the tower, for balconies & new services risers. Most importantly the new tower design has been adapted to work within the constraints of the existing foundations and basement configuration. There is no significant increase to the overall building load, so the existing foundations can be retained for the new building.

Therefore, access to the (below) rial corridor won't be required except to undertake survey works including an extensive dilapidation survey, and structural verification of the existing structural elements.

Over 95% of the existing building structure is retained which will significantly reduce traffic movements to and from the project when compared to a full 'new build.' This also means a significant reduction to vertical movements and impact to all adjoining stakeholders, consequently we are proposing to utilise just one Construction Zone in Blues Point Road to maintain the current Sydney Buses configuration in Blue St.

2. Construction Methodology

2.1.1 Pre-commencement

Prior to the commencement of any works on site, Multiplex will undertake Dilapidation surveys of the adjoining properties and Public Domain areas.

Any underground services in the adjacent roadway and or footpath will be identified, location & depth of each service will be recorded.

Vehicle routes to & from site will be agreed with the Council and other stakeholders.

Management Plans will be submitted to the relevant parties for approval.

Permits will be sought for the Construction Zones, Site Hoardings, Tower Crane erection and other temporary works.

2.1.2 Demolition

Prior to the commencement of existing facade removal and partial demolition works Multiplex will establish:

- 'B' Class hoardings to the existing building footprint on Blues Point Road & Blue Street.
- A steel Gantry over the Philips Drive to maintain vehicular access to the Southern easement.
- 'A' Class hoardings to the Eastern portion of the site.
- Temporary lighting will be provided to all hoardings for 24/7 public access.

The demolition scaffold can then be erected from the hoardings (North & West) & steel gantry on the southern side of the building. Then scaffold will be encapsulated in mesh & shed cloth to control debris and / or dust.

A construction zone will be established along Blues Point Road along with a gate to access the existing basement car park.

We will use the existing passenger lifts for worker vertical movements.

Traffic Management Plans will be submitted to the relevant authorities; all traffic and pedestrian movements will be managed by licenced traffic controllers.

2.1.3 Accommodation

For the demolition works Multiplex will establish site accommodation including amenities on the B Class hoarding in Blues Point Road & Blue Street. Then as the project progresses, we will supplement this with further site accommodation in the existing basement car park or retail areas.

2.1.4 Cranes

Due to the constraints within and around the project, we propose to establish an electric tower crane on the roof of the existing building. This will be supported on a steel grillage connected to the existing concrete lift core, we have undertaken a similar type of establishment on other projects, and this would be of course subject to engineering approval.

The tower crane installation will be facilitated by a mobile crane from Blues Point Road.

Deliveries to & from site will be lifted from the proposed Blues Point Road construction zone.

2.1.5 Materials Handling

As previously mentioned, we will use the existing passenger lifts for vertical transport during the demolition & strip out works. We will utilise this arrangement until we establish twin builders' hoists on the Eastern side of the tower building.

Concrete will be pumped to site from a mobile concrete pump in the construction zone.

Loading platforms will be used for the loading of Façade & Fitout materials to the tower levels, along with removal of rubbish.

2.1.6 Noise, Dust & Vibration Control

As noted earlier for dust control during demolition works the building will be fully encapsulated in scaffold & shade cloth. Concrete sawing & pulverising methods will be used where possible to minimise vibration during the demolition stage.

There is a reasonable separation or distance to the adjoining properties/ stakeholders therefore we don't foresee any significant issues noise and/ or vibration. However, Noise & Vibration monitors will be installed at sensitive receiver locations and monitored during working hours.

2.1.7 Building re-use

The 5 Blue Street development retains most of the existing structure so there is no basement excavation required, which eliminates a significant amount of potential noisy & disruptive works. No need for any temporary shoring and the main superstructure is retained with minor additions for balconies & the roof structure.

Therefore, the amount of vehicle movements to and from the site will be significantly less than a 'new' build, and the large plant associated with a basement construction won't be required.

Most of the new structural works are to create the new balconies and services penetrations, with some localised strengthening of tower columns and slabs to evenly disperse the building loads onto the existing foundations.

2.1.8 Construction

Once the structural modifications & upgrades have been completed the curtain wall façade will be installed using conventional methods. Scaffold will be retained on the eastern elevation for the construction of the new balconies, installation of balustrades and façade cladding.

New services risers will be created by coring and/ or concrete sawing, & light-weight partitions will be used for the construction of apartment walls. New timber floors in the apartments will create a provision for set-down to the apartment wet areas, for membrane & tiling.

A spatial provision has been made of the roof for new plant which will be lifted into place prior to removal of the tower crane. The courtyard landscaping works will be completed along with any public domain works once the scaffolding and 'B' Class hoardings have been removed.

2.1.9 Services

The existing sub-station & Switchroom will be retained, and new vertical risers will need to be created for distribution of power. New risers will also be required for the stair pressurisation system & hydraulic services to the tower.

Split system air-conditioning will be added to the apartments. Along with kitchen & bathroom mechanical exhaust which will exit horizontally through the new curtain wall façade.

The existing building has a sufficient floor to floor height to accommodate the hydraulic services stack work require for the apartments, including acoustic treatment.

3. Stakeholder management

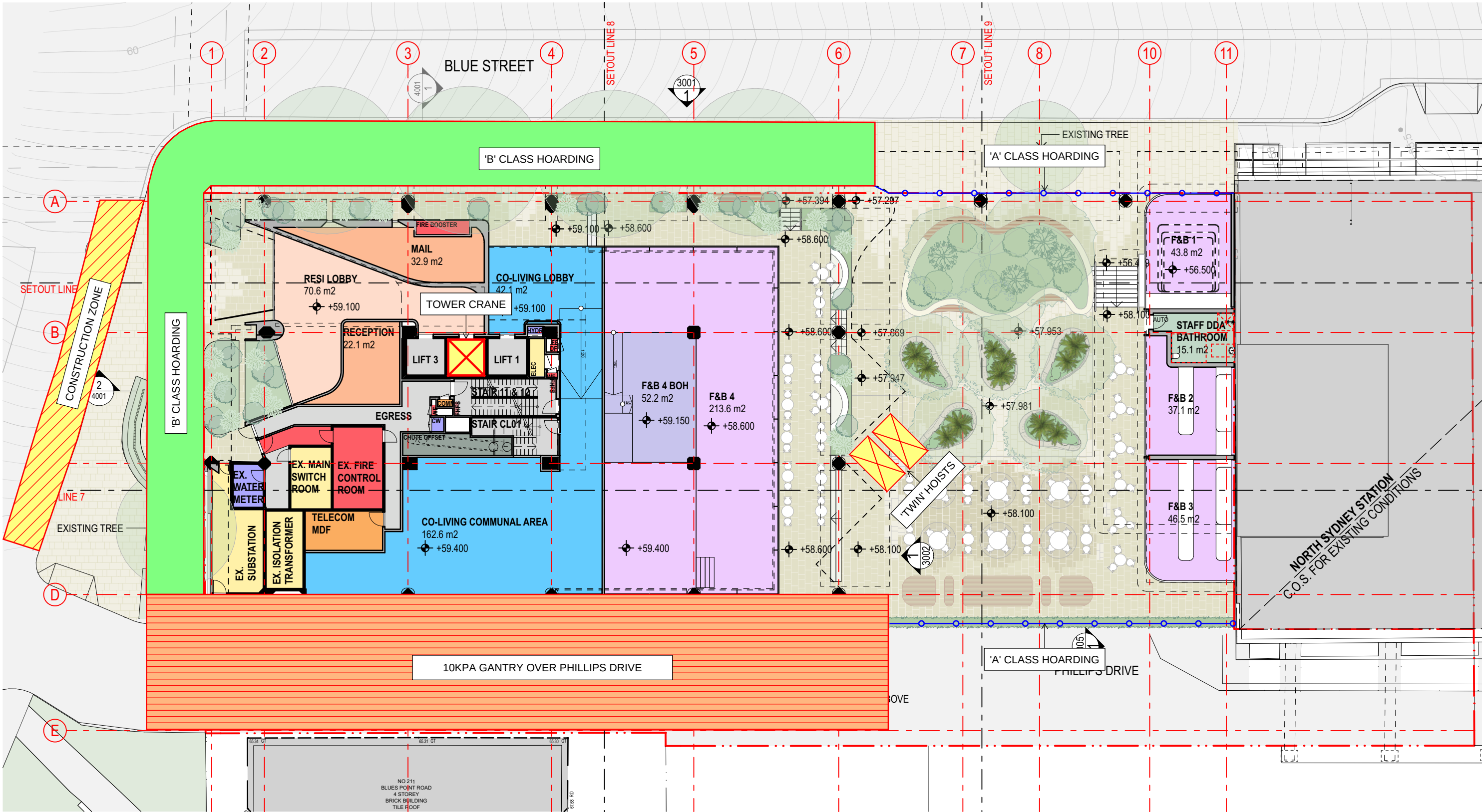
We are committed to effective stakeholder engagement as a means of building better relationships with all users, resulting in improved business planning and performance, creating a positive flow on effect for the community. We understand how to address conflicting stakeholder requirements and how to mitigate their concerns and would continue to engage with all parties throughout the course of the project.

The key issues surrounding community include:

- » Maintain the existing Philips Drive easement.
- » Maintain the use of the Blue Street bus stop during construction
- » Traffic management during construction
- » Program completion dates and staging.
- » Noise, vibration, dust on neighbours
- » Nearby businesses that may be negatively impacted

Please see the flowing attachments:

- 5 Blue St - Adaptive Reuse Indicative Program_May26
- 5 Blue St Redevelopment_Mpx Site Establishment Plan_ Rev. 1
- 5 Blue St Redevelopment_Mpx Building Section Rev.1



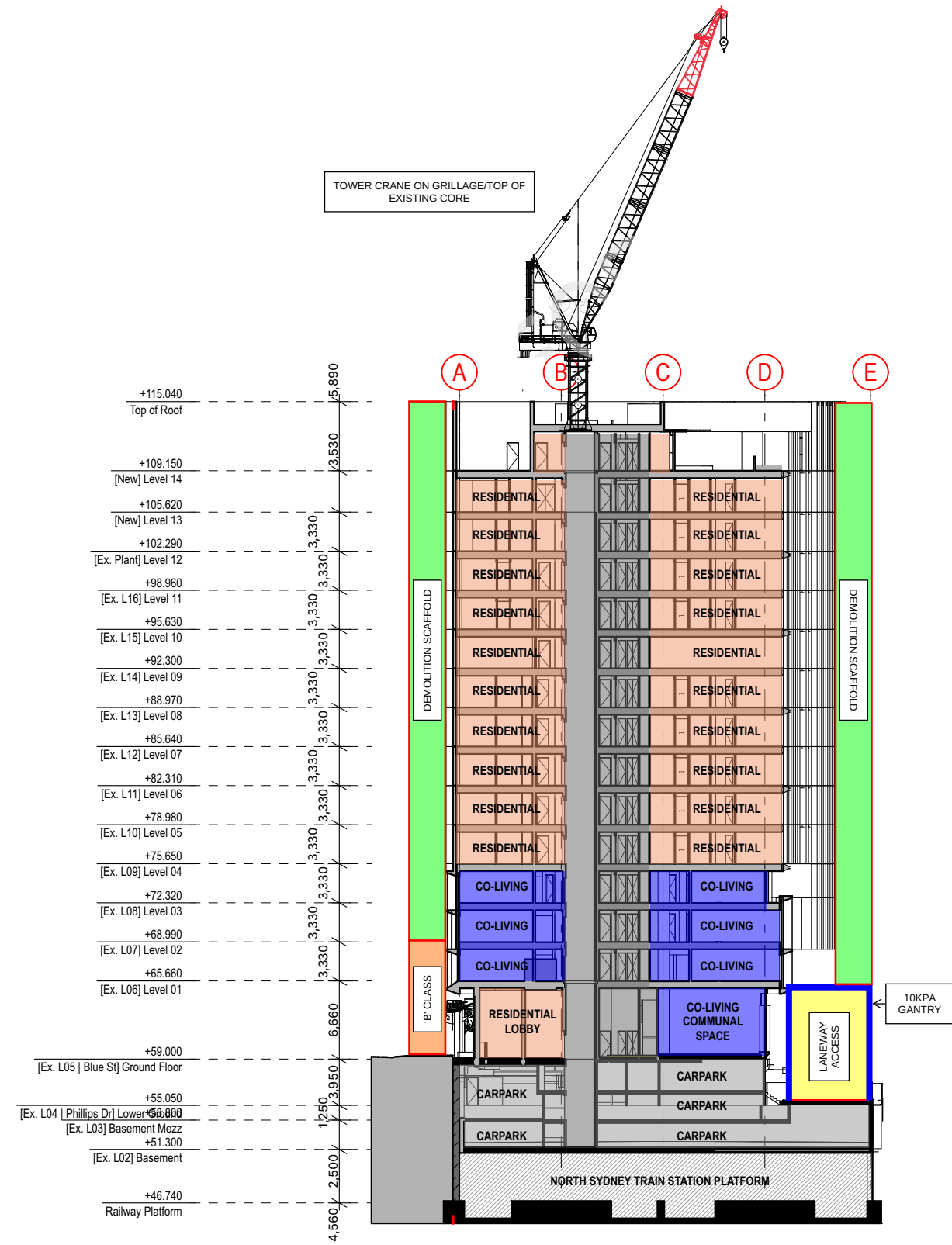
5 Blue St
Cammeraygal
5 Blue St North Sydney NSW 2060

Ground Floor Plan
General Arrangement Plans

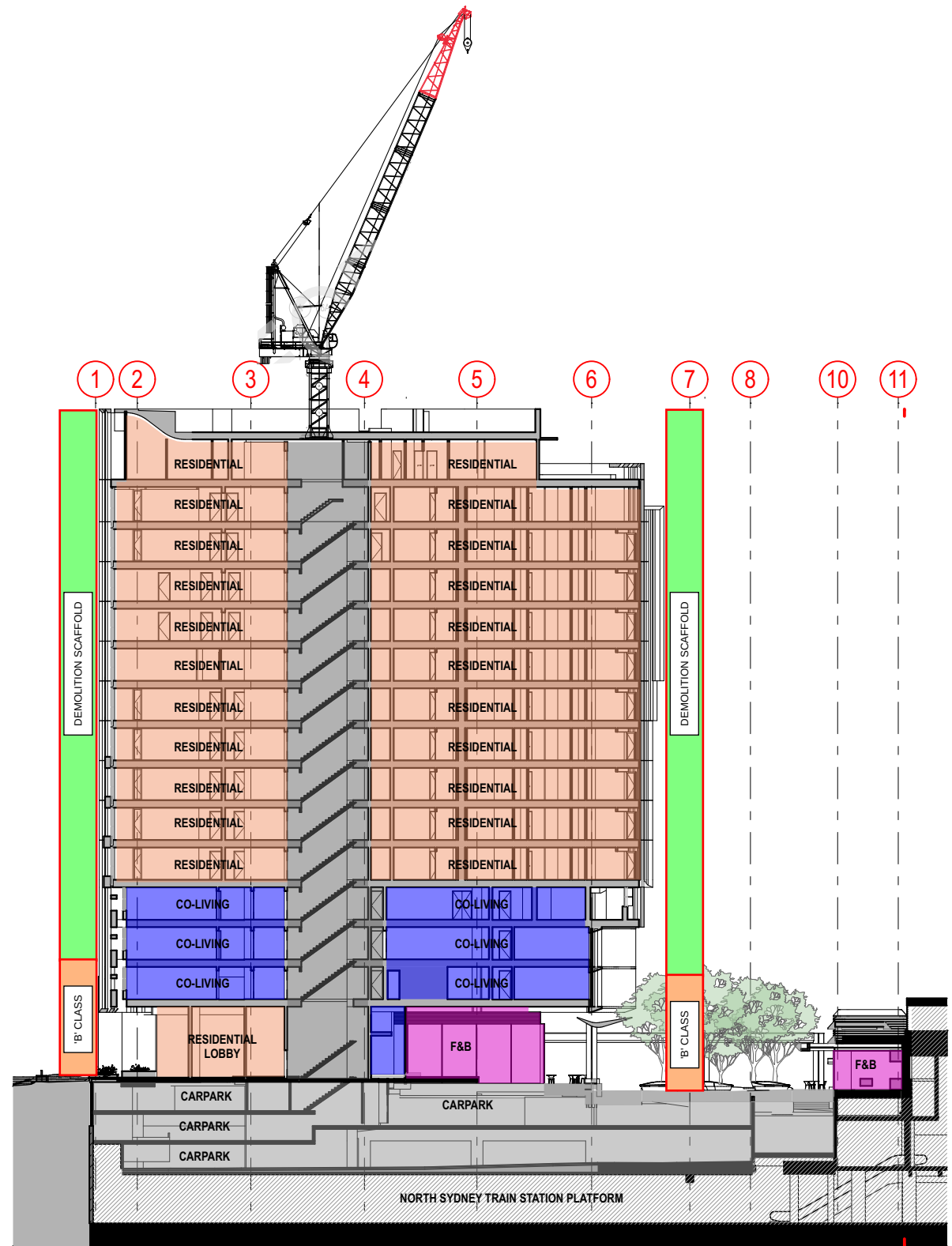
Existing
New

Rev Date Description
01 -

NZ



N-S Section
1:500



E-W Section
1:500

PRELIMINARY

5 Blue St Cammeraygal 5 Blue St North Sydney NSW 2060	Sections 1:500 Sections	Rev Date Description 01 - Work in Progress WIP Progress	By Chk NZ	Scale 1:250 @ A3	Code z5b	Sheet 4001	Rev 01 - WIP	0 2.5 5 10m	
---	----------------------------	---	--------------	---------------------	-------------	---------------	-----------------	-------------	--

Adaptive Re-use Indicative Program

