RANDWICK CITY COUNCIL
DEVELOPMENT CONTROL PLAN

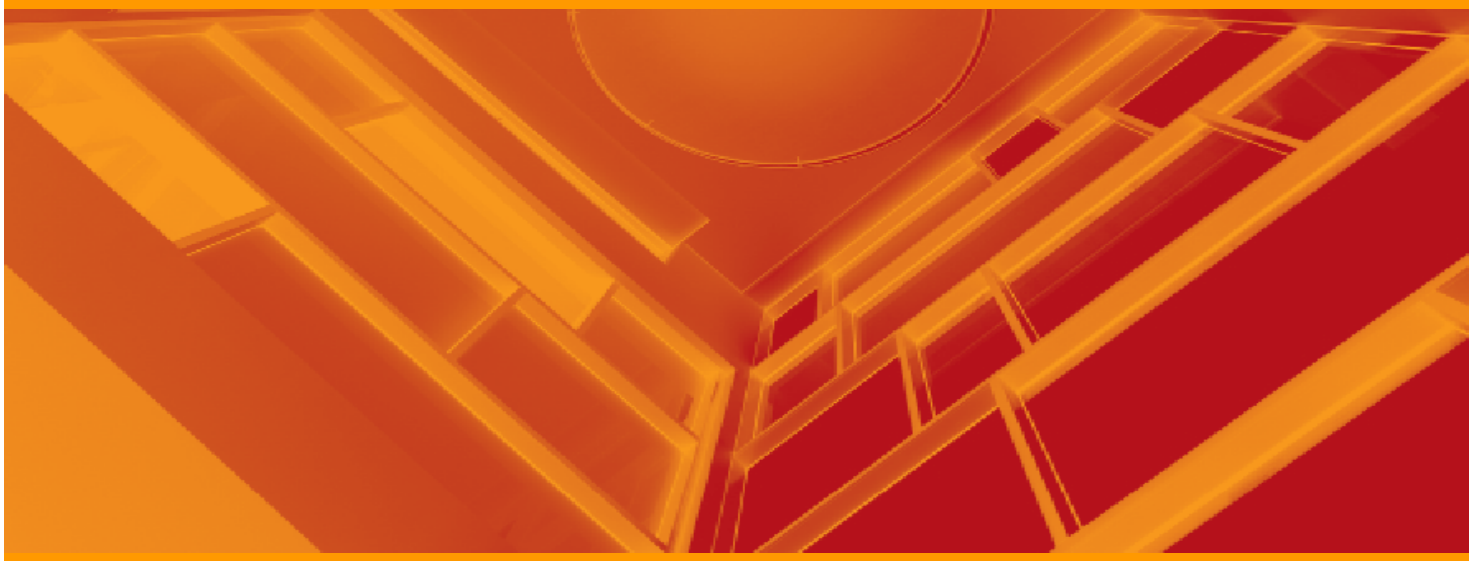
E Specific Sites

E1 Bundock Street, Randwick

E2 Randwick Education and Health Specialised Centre

E3 Royal Randwick Racecourse

E4 Prince Henry site, Little Bay



Bundock Street, Randwick E1

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1 Introduction

This section of the DCP guides the built form and the environmental and amenity standards and requirements for redevelopment of part of the Defence site at Bundock and Avoca Streets, Randwick.

This section of the DCP applies to the land indicated in Figure 1. This land is zoned R1 General Residential and SP1 Special Purposes (Defence). The Commonwealth Department of Defence, as owner of this land identified for redevelopment, has indicated that the SP1 zoned land is now to be retained for defence purposes. The controls set out in this section remain relevant to any redevelopment that Defence may propose on the SP1 zoned land (e.g. defence housing). Any significant variation from this DCP section will require a revised master plan / DCP to be prepared by Defence, consistent with Clause 6.12 of RLEP relating to the preparation of DCPs.

This section of the DCP is based on a master plan for the Defence Site land adopted by Council on 13 November, 2001 with variations.

This section of the DCP must be read in conjunction with:

- Part A - Introduction and Part B - General Controls; and
- Other sections of the DCP for specific development types, locations or sites, if relevant to the application.

To the extent of any inconsistency between this section and any other DCP sections, this section will prevail.

2 Land Subdivision – Lot Size and Orientation

Objectives

- To provide a range and mix of lot sizes with areas and dimensions suitable for the permitted land uses and a variety of building types.
- To enable lot sizes that facilitate housing diversity and choice.
- To promote and facilitate ecologically sustainable development and micro climate management by providing lots that are appropriately oriented.
- To ensure that all lots have a primary street frontage.
- To arrange lots in a manner that facilitates personal and property safety and security.
- To ensure lots have total areas and dimensions that allow dwellings, ancillary buildings, private outdoor open space;

landscaped open space and vehicle access and parking to be located and constructed appropriately.

Controls

i) Lots with direct vehicle access to car parking areas from a public road are to have a minimum width of 9 metres (this control does not apply if parking access is not on the primary street frontage).

ii) Lots with rear boundaries adjoining Holmes Street properties are to respect the subdivision pattern of lots on Holmes Street within the same block.

iii) Corner lots are to have a size and shape that can accommodate development that results in a positive response to the prominent position of the corner and its frontage to two streets.

iv) All lots are to provide frontages oriented to streets and public open spaces to provide a clear address and so that personal and property security, deterrence of crime and vandalism, and surveillance of footpaths and public open space is facilitated.

v) Lots are to be oriented so that dwellings can take advantage of microclimatic benefits and can have dimensions that allow adequate on-site solar access and access to breezes.

vi) Lots are to be designed to maximise efficiency in house plans and useable external areas by having a regular shape.

vii) Subdivision must not include battleaxe blocks.

3 Residential Building Location and Design

Explanation

The key elements of residential building location and design are the floor space ratio, height, landscaped open space and building envelope controls. The building envelope represents the potential maximum limit of the built form. The limit may not be achieved in certain circumstances due to the combination of floor space, height, landscaped open space and solar access controls.

The building envelope is the three dimensional space within which a residential building can be constructed. The footprint of the building envelope is subject to a combination of setback, garden zone and landscaped open space controls. Wall, building, podium and attic heights further define the size of the building envelope. The building envelope includes the primary building zone, the articulation zone and any single storey element at ground floor level to the rear of the primary building zone.

The controls in this section will result in streetscape consistency and a coordinated built environment characterised by front garden zones, regular street alignments, defined building zones and rear garden zones. The rear garden zones together provide a contiguous area of green capable of accommodating private outdoor recreation space and mature tree landscaping of shared amenity value.

Built form controls are expressed in **Figures 2 to 15** and in illustrative diagrams throughout the text. **Figure 2** illustrates building density zones where gross floor area is expressed as a potential maximum floor space ratio. **Figure 3** tabulates floor space ratio, height and landscaped open space and illustrates some building envelopes. **Figure 4** indicates architectural consistency. **Figure 5** indicates setback and garden zone controls.

Figures 6 to 15 are block studies that illustrate the building envelope, setback and garden zone controls for various blocks. In some cases there are inconsistencies between the site wide studies **Figures 3 and 5** and the block studies **Figures 6 to 15.** This is because of the topographic or other features of a block which have been addressed in the more detailed block studies.

Note:

Where controls other than height, landscaped open space or floor space ratio differ, Figures 6 to 15 prevail to the extent of any inconsistency

Building envelope:
The three dimensional space within which residential development may take place. It is defined by combining building setback, landscaped area and height controls for the site. It includes the primary building zone, the articulation zone, any single storey element at ground floor level to the rear of the primary building zone and building elements to the front of the primary building zone as indicated on Figures 7-15.

Maximum building depth:
The maximum depth of any part of a residential building above ground floor level containing gross floor area.

Primary building zone:
The depth of a residential building above ground floor level excluding any articulation zones.

Articulation zone:
The zones indicated on Figures 3 and 7-15 provide an area for architectural expression and modulation within which, balconies, terraces, porches, bay windows, planters and the like are permitted.

Roof zone:
The zones indicated on Figures 3 and 7-15 within which pitched, curved or flat roofs, gables, dormers, sky-lights, roof terraces, decks, balconies, planters and the like are permitted.

Attic:
The area contained wholly within the roof envelope where the roof envelope has a maximum pitch of 36 degrees except on the side of a building where the wall of an attic abuts an existing or a simultaneously constructed party wall.

3.1 Density

Objectives

- To control the bulk and scale of development.
- To ensure building bulk is compatible with the surrounding built form and minimizes the impact of building bulk on existing buildings in the locality, open spaces and streetscape.
- To set appropriate density controls that reflect the desired future character of the area.
- To encourage a mix of dwelling sizes and types.

Controls

i) The maximum floor space ratio for a residential building in any density zone must not exceed the floor space ratio indicated for that density zone in Figure 2.

3.2 Height

Objectives

- To ensure building height relates to the context of the building including the street type, park frontage (where applicable) and density zone.
- To ensure that buildings fronting existing streets are compatible with the character and form of dwellings in these streets. Building height at the street frontage must maintain a compatible scale with adjacent and opposite development.
- To minimise the impact of development on adjoining and nearby land and areas of natural heritage conservation significance.
- To control the bulk and scale of development through appropriate height limits.
- To ensure that there is sympathetic transition to the prevailing scale and character of buildings in the neighbourhood.
- To ensure appropriate ceiling heights for all habitable rooms.
- To allow for some variation in massing and height to create visual interest.

Controls

i) The external wall height of a residential building of any density zone indicated on **Figure 2** must not exceed the wall height for that density in the table in **Figure 3** unless varied because of site specific features in **Figures 7 to 15**.

Wall height:

The vertical distance from the highest point as an external wall to the ground level of that wall. Each external wall height measurement must include gable ends and attic walls with an area over 6 square metres and dormer windows that protrude horizontally from the roof more than 2.5m.

ii) The building height in any density zone on **Figure 2** must not exceed the height indicated for that density zone in the table on **Figure 3** unless varied because of site specific features by Figures **7 to 15**.

iii) The number of storeys in a residential building in any density zone indicated on **Figure 2** must not exceed the number of storeys indicated for that density on the table in **Figure 3**.

iv) A minimum ceiling height of 2.7m is required for all habitable rooms (except those within an attic).

A storey is any floor or part of a floor regardless of use, but does not include an attic or a basement that does not protrude more than 1.2 metres above ground level.

3.3 Building Footprints and Landscaped Open Space

Street frontage setbacks relate to the character of the streetscape and are discussed in Sub-section 3.4.

Landscaped open space:

The part of a site area which is used, or capable of being used, for outdoor recreation or garden areas (such as lawns, gardens, unroofed swimming pools, clothes drying areas, barbecue areas, footpaths and the like) and includes landscaped podium areas and water tanks located at ground level. It does not include areas used for parking, driveways, balconies, rooftop gardens or areas used for garbage or recycling material storage or sorting.

Objectives

- To locate buildings so that the provision and use of outdoor areas is maximised.
- To provide a degree of consistency in building alignments, heights and garden areas so that a neighbourhood character can be established, while allowing sufficient diversity and variety in housing types and design.
- To ensure building setbacks from the public street are generally consistent with those of adjoining development and relate to streetscape components such as buildings, street trees, the width of the road reserve, park frontages and street character.

Neighbourhood refers to the land to which this section of the DCP applies and is outlined in heavy red on Figure 1

- To provide a built form that optimises solar access and cross ventilation.
- To minimise the impact of development on adjoining land.
- To provide adequate space for landscaping, visual and acoustic privacy, sunlight penetration and private open space.
- To provide equity and certainty with building locations.
- To provide side and rear setbacks that are related to the nature of dwellings proposed and ensure adequate separation between buildings.
- To encourage rear landscaped open space that contributes to contiguous garden zones at the rear of lots.
- To limit the length of side boundary walls consistent with neighbours.

Controls

i) The percentage of a site area that is to be landscaped open space must not be less than the percentage indicated in the table at **Figure 3** for the site's density zone.

ii) Front building setbacks and rear garden zones must be no less than the dimensions shown on **Figures 3, 5 and 7 to 15**. Building setback is measured from the property boundary to any part of a building including parts of a building within the articulation zone.

iii) At least 50% of the front building setback is to be soft landscaping.

Soft landscaping:

An area of unimpeded deep soil landscaping including gardens, lawns and mature tree planting and excluding areas over podiums and basement car parking, swimming pools, paving, garbage storage or sorting areas, sheds and the like.

iv) Building articulation is to be provided within the articulation zones indicated on **Figures 3 and Figures 7 to 15** or within the primary building zone. It may include gross floor area where that gross floor area does not exceed 30% of the area of the articulation zone of any floor on any façade. Bay windows are not suitable in an articulation zone if the setback is less than 3 metres from a side or rear boundary. The ground floor area of an articulation zone can be occupied by building where indicated on **Figures 3 and 7 to 15**.

v) The primary building zone is to have a depth of typically 12 metres as indicated in **Figures 3 and 7 to 15**.

vi) Walls are acceptable on side boundaries behind the primary building zone where they:
- contain no windows overlooking other properties; and
- have an average height of no more than 3 m, a maximum height of 3.5 m, and a length no greater than 55% of the distance between the primary building zone and the rear boundary, unless they:
  - are a higher existing or simultaneously constructed wall; and
  - are in accordance with an approved building envelope plan submitted as part of a subdivision application.

3.4 Neighbourhood Character and Architectural Quality

Objectives

- To ensure buildings are of high visual quality, enhance the streetscape and complement good quality development in the neighbourhood.
- To promote high quality contemporary architectural designs that avoid inappropriate historical copies and inappropriately remote styles.
- To integrate appropriate environmental design and building orientation with architectural character.
- To arrange buildings in a manner that addresses the street and enhances personal and property safety and security.
- To ensure that garages, parking structures and parking areas are located and designed so they do not dominate the street frontage.
- To ensure fences on street frontages are designed to address the amenity of the street, surveillance and safety, security of private property, and the use of front garden space.

Controls

Building Appearance and Neighbourhood Character

i) Building fronts and entries are to be readily apparent from the street and convey a sense of address. Buildings fronting the public street must have their main entrance and windows from some habitable rooms facing the street. Building detailing and articulation must enable individual dwellings to be identified from the street.

ii) Buildings are to be aligned predominantly parallel to the street boundary and predominantly to the street setback line.

iii) Building facades are to provide environmental amenity through sun shading devices, privacy screens and noise barriers combined with useable outdoor areas.

iv) Where the ground floor units of multi unit housing address the street, at least 50% of those ground floor units are to have a separate direct entrance from the street.

v) The maximum unarticulated building length is 9 metres along the primary street frontage **(Figure 5)** and 15.6 metres for secondary street frontages **(Figure 5).** Punctuation by bay windows, verandahs, balconies or wall offsets is considered to be adequate articulation.

vi) At least one third of the face area of podium walls more than 1.2 metres above ground are faced with mechanically fixed sandstone (anticipates 100mm to 75mm minimum thickness). Adhesive fixing must not be used.

vii) Building facades to streets are to incorporate the following design characteristics:
- Well proportioned and spaced windows appropriate to their orientation;
- Architectural features at ground level that reinforce dwelling address such as entrance porches;
- Well balanced projected and recessed sections of balconies;
- Use of appropriate environmental controls such as verandahs, sliding screens, window hoods and the like;
- Coordinated and compatible materials and finishes where neutral colours predominate with strong colours limited to accent elements up to a maximum of 10% of the façade area;

viii) Building design is to achieve the architectural consistency principles indicated on **Figure 4**. "Integrated manner", where referred to on **Figure 4**, means that development shall be designed to be compatible with the existing development on adjoining sites within the relevant block or with future development in accordance with this section on those adjoining sites.

ix) Buildings should avoid the use of applied historical façade elements and their combination.

x) Buildings should generally accord with existing or future neighbouring developments in terms of:
- Wall and building heights;
- Setbacks;
- Scale of elements
- Overly discordant building forms are discouraged.

Roof Design

i) Solar collectors, mechanical plant (including lift plant), communications devices, water storage tanks and other similar elements located on roofs must be either flush with the roof or integrated into the built form so they are screened from view from the public street.

Garages

i) Carports and garages fronting public streets are to:
- have a maximum opening width of 6 m or 1/3 of the width of the lot, whichever is less;
- be set at least 1 metre behind the street edge of the primary building zone.

ii) Carports and garages are to be located off private rear lanes or in basements where lots have frontage width less than 9 metres.

iii) Carports and garages fronting public streets are to be integrated with building design;

Fences

i) Solid fences facing the street or between the street and the primary building zone are to be no higher than 1.2 metres. This may be increased to 1.8 metres where the fence has openings that make it at least 50% transparent.

ii) Solid front fences up to a maximum of 1.8 metres are only permissible where the site fronts Avoca Street. Design of such fences should be modeled and integrated with landscape treatment and appropriately signify building entry.

iii) Solid fences to walkways, easements and lanes (that are not also primary frontages) are to be no higher than 1.8m.

3.5 Activity Strip

Objectives

- To enable certain non-residential uses permitted by RLEP, such as neighbourhood shops, medical centres or restaurants / cafes on land marked as an activity strip within **Figure 2**.
- To encourage neighbourhood convenience type retail use with active frontages.
- To ensure non residential use of land does not have an adverse effect on residential amenity.
- To provide for small scale businesses and services which primarily serve the local community.

Controls

i) The non-residential use is limited to the ground floor area of a building on a site marked with an activity strip on **Figure 2**.

ii) The build to line is to be observed consistently along the street frontage.

iii) All ground floor units along an activity strip are to have fronts addressing the street and predominantly glass shop fronts.

iv) Designs are to provide easy conversion between residential uses and non-residential uses.

v) Awnings over a public footway are to be:
- a minimum clear height of 3 metres above the footpath
- a depth of 2 metres where non-residential uses adjoin
- not less than 600mm from the edge of the road/kerb

vi) Adequate provision is to be made for natural lighting, ventilation, internal storage needs, waste storage, collection and servicing.

4 Environmental Design

4.1 Landscaped Open Space and Water Management

Explanation

Landscaped open space provides the context and setting for locating buildings, works and services. Landscaped open space includes both private and communal open space and is an important component of overall design. It contributes to the relationship of a building to adjoining and nearby development and contributes significantly to the level of amenity and quality of life.

Landscaping can be used to reduce the impact of a building on adjoining development and is a useful mechanism in implementing microclimate objectives. Landscaping should help to provide 'outdoor rooms' suitable for a range of uses and activities.

The design of the landscape and the species that are selected can also have a significant effect on the quality and quantity of the stormwater leaving the site and on the amount of water needed for irrigation and watering.

Objectives

- To ensure that adequate landscaped open space is provided for new development.
- To ensure that landscaped open space enhances and contributes to the desired future character of the locality.
- To ensure that landscaped open space softens the visual impact of development, both to the street and to adjoining properties.
- To provide landscaped open space that is capable of supporting substantial vegetation and large tree planting.
- To use landscape elements to blend new development into the streetscape and local neighbourhood.
- To promote the use of local native plant species grown from local provenance seed and therefore to protect against the loss of unique gene pools.
- To encourage landscape design that minimises water, fertilizer and herbicide use and demand.
- To encourage landscape design that contributes positively to stormwater management and reduces areas of hard paving.

Controls

i) Landscape designs are to respond to the microclimatic characteristics affecting the site to ensure that species survive in such conditions.

ii) Landscape designs are to suit the scale of the space and surrounding buildings and are to reflect and facilitate the likely predominant functions of the landscaped open space.

iii) At least 1 tree capable of growing to a minimum mature height of 12 metres for each 80 square metres of soft landscaped area is to be provided.

iv) At least two thirds of the area occupied by external carparks, driveways, courtyards, pathways and the like are to be laid with porous paving. Areas above underground parking and driveway ramps steeper than 1 in 10 are excluded from the calculation for this requirement.

v) Trees and shrubs are to be selected and positioned to maximise solar penetration in winter and minimise it in summer (e.g deciduous plants on the north side of private open space).

vi) Landscaping must include a predominance of:
- Native landscape plant species grown from local provenance seed.
- Species that are drought resistant, and require minimal watering once established, or species with water needs that match rainfall and drainage conditions;
- Water conserving landscape practices / designs;
- Native ground covers and grasses in garden beds and path surrounds. Turf is to be confined to useable outdoor areas; and

vii) Landscape species are to be selected and located to promote safety and surveillance of the street and pedestrian access ways.

viii) Landscaped open space must include an area dedicated to on-site composting of a size relevant to the number of dwellings and the landscaped area it serves.

ix) Landscaped open space is to be contoured to encourage stormwater runoff to infiltrate to ground.

x) Ground or seepage water is to be disposed of on site to either an irrigation or infiltration system.

Note:

Shrubs, groundcovers, trees and ornamental grasses are not to be placed within Council's nature strip without its prior written approval

4.2 Private Open Space

Objectives

- To ensure that the private open space provided is adequate to serve the needs of the residents of the development and meet user requirements for privacy, access, outdoor activities and landscaping.

- To set appropriate standards for the size, shape and location of private open space.

- To ensure a variety of private open spaces are provided for each dwelling such as primary open spaces off living rooms, secondary balconies off bedrooms and screened service balconies off kitchens and laundries.

Controls

i) Each dwelling house or ground floor unit in medium density housing (i.e. residential flat buildings, multi-dwelling housing and attached dwellings) must have an area of useable private open space, or private courtyard area at ground or podium level that has direct private access from a living area of the dwelling. Other forms of housing (such as units above ground floor) are to have private open space in the form of a balcony, deck or roof garden, directly accessible from the dwelling.

ii) A ground level or podium level courtyard is to have a minimum area of 25 square metres and a minimum dimension of 3.6 metres.

iii) The location of the private open space must take into account factors such as access to sunlight, outlook, privacy and the location of adjoining dwellings and their windows.

iv) Private open space should be provided between the front of the building and the street only where building setback, landscaping and fence design achieve a sympathetic relationship with the street.

v) Private open space for units above ground level in the form of balconies, verandahs, terraces, roof gardens and the like is to be provided at, or greater than the rate of 15% of the gross floor area of the unit. A single space with minimum dimensions of 2 x 4 metres directly accessible from the primary living areas of the dwelling is to comprise part of this required private open space. Common open space areas are to be in addition to this minimum requirement.

vi) Primary above ground private open spaces are not to have a south orientation.

vii) Screening to private open space up to 1.8 metres in height can be provided where necessary and where there are no other design alternatives to ensure privacy. The design and materials for screens must be compatible with the streetscape, the primary built form and its articulation.

4.3 Privacy

Objectives

- To recognise the importance of both visual and acoustic privacy in the design of residential development.

- To ensure that new development respects the existing level of privacy of adjoining and nearby properties and minimizes adverse privacy impacts.

- To ensure that new development is designed so that its occupants will enjoy a reasonable degree of privacy within the development.

- To locate noise-sensitive rooms and secluded private open spaces away from noise sources, and to protect them through appropriate noise-shielding techniques.

- To encourage building design that assists in minimising sound transmissions through the buildings, and particularly protects sleeping and living areas from possible noise intrusion.

Controls

Visual Privacy

i) Direct overlooking of main internal living areas and private open spaces of other dwellings is to be minimised by building layout, location and design of windows and balconies, screening devices, landscape elements or remoteness. Effectively locating windows and balconies to avoid overlooking is preferred to screening devices, high sills or obscured glass. Where these are used, they should be integrated with the building design and have minimal negative effect on residents' or neighbours' amenity.

ii) Habitable room windows with a direct outlook to the habitable room windows of any floor above ground floor in an adjacent dwelling within 12 m:
   - Are to be offset from the edge of one window to the edge of the other by a distance sufficient to limit views into the adjacent windows;
   - Have appropriate permanent privacy screening;
   - Have sill heights of 1.6 m above floor level; or
   - Have fixed obscure glazing in any part of the window below 1.6 m above floor level.

iii) The outlook from windows, balconies, stairs, landings, terraces and decks or other private, communal or public areas within a development is to be obscured or screened where a direct view is available into the private open space of an existing or other proposed dwelling.

   If screening is used, sight lines are to be provided in DA plans and sections to demonstrate its effectiveness.

   No screening is required where windows are in:
   - Bathrooms, toilets, laundries, storage rooms or other non-habitable rooms and they have translucent glazing or sill heights of at least 1.6 m;
   - Habitable rooms and they have sill heights of 1.6 m or more above floor level or translucent glazing to any part of a window less that 1.6 m above floor level.

iv) Windows and balconies of an upper-level dwelling are to be designed to prevent overlooking of more than 50% of the

private open space of a lower-level dwelling directly below and within the same development.

v) Direct views may be obscured by solid translucent screens, perforated panels, trellises or the like which have a maximum of 25% openings, and which are:
- Permanent and fixed;
- Of durable materials;
- Designed and painted or coloured to blend in with the development.

Acoustic Privacy

ii) Dwellings affected by noise sources (eg Avoca Street and flight paths, refer to master plan and Air Services Australia) shall be designed in accordance with relevant Australian Standards, such as:
- Australian Standard 3671: “Acoustics - Road traffic noise intrusion”
- Australian Standard 2021: “Acoustics - Aircraft noise intrusion”.

iii) Where bedroom windows are within 3m from shared streets, driveways or parking areas, additional acoustic and privacy measures are to be incorporated.

iv) All mechanical plant and equipment is to be acoustically screened to minimise noise to neighbours.

v) Noise level from mechanical plant is not to exceed 5dBA above ambient background noise level measured at the property boundary.

4.4 Solar Access

Objectives

- To provide living areas, private open space areas and public open space with adequate sunlight.
- To allow reasonable solar access for the purpose of water heating and electricity generation for new development and adjoining properties.
- To minimise undue overshadowing of neighbouring sites.

Controls

i) The landscaping, orientation, siting and dwelling layout are to ensure solar access to living areas and private open space and maximise use of cooling breezes.

ii) The design of a development is to minimise overshadowing of neighbours’ dwellings, their private open space or any solar collectors.

iii) Windows are to be located, sized and shaded to maximise sunshine access and penetration in winter and exclude it in summer, with large windows facing a northerly direction. Western and south western orientation of large expanses of

glass is to be generally avoided or minimised and protected with effective shading devices.

iv) Window shading devices are to be provided and designed for the window's orientation and exposure to hot summer sun. Shading devices can include external screens, hoods, overhanging balconies, eaves, verandahs or pergolas.

v) Trees and plants are to be selected and planted to provide shade in summer yet also allow winter sun entry.

vi) For 1 and 2 storey developments:
- The principle living room is to have at least 2 hours sunlight reaching 2 square metres of glazing to that room between 9.00am and 3.00pm on June 21;
- sunlight is to be available to the principal area of ground level private open space for at least 2 hours between 9.00am and 3.00pm on June 21.

vii) For 3 or more storey developments at least 75% of residential units are to have one living room which has at least 2 hours of sunlight reaching 2 square metres of glazing to that room between 9.00am and 3.00pm on June 21.

4.5 Energy Efficiency

Objectives

- To minimise demand for energy and promote renewable and energy efficient energy use in residential development, while achieving year round comfort and utility. (Note: Electricity produces about 5 times as much CO^2 than gas, per unit of energy at the point of use).

- To use the natural climatic advantages of the coastal location such as cooling summer breezes, and exposure to unobstructed winter sunlight to minimise energy need.

Controls

i) Buildings are to have an area of roof with appropriate orientation and pitch, suitable for installing solar collectors.

ii) Where timber is used in construction it is to be plantation, recycled or regrowth timber. No rainforest or old growth timber is to be used.

iii) Minimise the visual impact of solar hot water heaters by integrating them into building design. Solar water heaters are to be positioned in a suitable position back from the street frontage, ensuring that mature trees will not shade the heater and that the colour is complementary to that of the roof.

iv) Open fire places are not to be installed.

v) External drying areas are to be available and readily accessible to all dwellings and sited to receive good winter sun and breezes.

vi) Windows and building layout should facilitate summer cooling by cross ventilation. No dwelling is to rely solely on air-conditioning for thermal comfort.

vii) Internal rooms reliant on artificial lighting and mechanical ventilation should be minimised.

viii) Except along activity strips, all carparking areas should be naturally ventilated.

ix) Doors and windows and their openings are to have adequate means of draught control.

x) Where practical and appropriate, skylights and/or wind powered ventilators are installed to enhance natural light and ventilation.

xi) Materials selection takes into account the life cycle effect of their manufacture, use and disposal.

xii) The use of PVC should be minimised.

The following measures are encouraged:

- The use of alternative energy sources such as rooftop photovoltaic cells to meet some of the dwellings' electricity demand.

- Dimmers for all lighting.

- Automatic turn-off switches for outdoor lighting.

- Motion-detectors for lighting external entrances and outdoor security.

4.6 Water Efficiency

Objectives

- To encourage water sensitive practices in building and landscape design.

Controls

i) Water smart and water sensitive urban design practices are to be implemented. As a minimum the following are required:

  - Areas that do not drain to the wetland are to be incorporated into the overall stormwater strategy.
  - Overflow from the rainwater storage must be directed wherever possible to an on-site infiltration system/trench. When site conditions do not permit on-site infiltration the overflow must be connected to the public stormwater drainage system.
  - Stormwater is to be drained to a silt arrestor pit prior to discharging to either an infiltration area or the public stormwater drainage system.

- Rainwater storage and supporting structure must be visually screened and integrated into the building design.
- Rainwater storage must be mosquito proofed.
- Rainwater storage water supply taps and any other fixtures must be marked “Rainwater - Not for human consumption”.

ii) In-sink food and waste disposal systems are not to be installed.

4.7 Safety and Security

Objectives

- To promote community safety through appropriate design.
- To enable children, the elderly and frail persons to enjoy residential living that minimises threats from assault or burglary.
- To discourage crime in residential areas.

Controls

i) Footpaths, landscaped open space, and driveways must provide opportunities for surveillance and allow safe movement of residents around the site.

ii) Dwellings which face the street must allow for casual surveillance of footpaths and driveways which is important for the safety of residents and passing pedestrians, and for the security of the neighbourhood.

iii) High walls around residential buildings and parking structures which obstruct views into the development are to be avoided.

iv) Dwelling and building entries are to be visible from the street.

v) The demarcation between public, communal and private areas in a development is to be clearly recognisable.

vi) Medium density housing developments (i.e. residential flat buildings, multi-dwelling housing and attached dwellings) must have adequate lighting in common and access areas.

vii) Signage is to be clear and easy to understand.

viii) Shared entries should serve a limited number of dwellings and be able to be locked.

ix) Dwelling houses are to be designed to allow residents to see who approaches their dwelling without the need to open the front door.

x) Secure car parking is provided in medium density housing developments (i.e. residential flat buildings, multi-dwelling housing and attached dwellings).

xi) Splay corners are to be provided to the street corners of lots along the proposed bus route in accordance with Council guidelines.

5 Facilities and Access

5.1 Parking

Objectives

- To provide adequate and convenient parking for both residents and visitors.
- To provide bicycle access and facilities.
- To ensure car parking areas provide parking spaces for people with a disability.
- To limit the amount of the site devoted to driveways and parking.
- To integrate parking and driveways with landscape and building design.

Controls

i) Parking provision is to be in accordance with the Parking Section with the exception of visitor parking which is to be provided on street.

ii) Accessible, safe and secure storage facilities for bicycles are to be provided:
   - within the storage areas of each dwelling; or
   - within the designated parking space of each dwelling; or
   - in a separately secured purpose built facility provided in the basement (if any) or on the ground floor of dwellings in medium density housing developments (i.e. residential flat buildings, multi-dwelling housing and attached dwellings) capable of storing a bicycle for each dwelling.

5.2 Driveways and Manoeuvring Areas

Objectives

- To provide adequate space for efficiently moving vehicles within a site.
- To minimise potential conflict between vehicles and pedestrians.

- To integrate driveway and manoeuvring areas with landscape features.
- To minimise the detrimental visual impacts of parking and driveway areas.
- To design driveway gradients for vehicle and pedestrian safety.
- To ensure site planning and building layout minimise the area designated for driveways and manoeuvring areas.
- To limit the width of kerb crossings to maintain on street parking and minimize impacts on pedestrian amenity.

Controls

i) Vehicles are to be able to enter and leave the site of residential flat buildings and multi-dwelling housing development in a forward direction at all times.

ii) Surface materials and external finishes are to be consistent and compatible with those used throughout the development.

Note:

Shared driveways between attached dwellings are encouraged to minimise kerb cuts and avoid impacts on street trees.

5.3 Storage

Objectives

- To ensure new development is provided with adequate storage space.
- To ensure new development includes readily accessible and separately contained storage areas for each dwelling.

Controls

i) 8% of the floor space of each dwelling is to be provided for storage. Half of the storage area can be in garages, semi-basement enclosures or located externally. Internal storage areas may include linen cupboards, laundry cupboards, under stair areas and built in wardrobes, but kitchen and bathroom storage is excluded from the 8% calculation.

5.4 Utilities/Site Facilities

Objectives

- To ensure ancillary site facilities are convenient and visually attractive.
- To ensure utilities and ancillary site facilities blend in with the development and streetscape character and require minimal maintenance.

Controls

i) Mailboxes are to be provided in accordance with the delivery requirements of Australia Post. Mail boxes are to be

integrated into the entrance way or entrance pathway to residential flat buildings and multi-dwelling housing rather than along the fence facing the primary street frontage.

ii) A suitably screened single common television/radio antenna (or other types of communication reception device) is to be provided to service all dwellings in a development.

iii) Electricity services are to be provided in accordance with the requirements of Energy Australia. All electrical reticulation is to be underground, and meter boxes are to be placed in positions acceptable to the applicable energy service provider and screened from the street.

iv) A reticulated gas supply to a meter for each dwelling and to optimum service points for cooking and space heating is to be provided.

v) Water and sewerage connections are to be provided in accordance with the requirements of Sydney Water.

vi) Telephone lines are to be installed in accordance with the requirements of the service provider.

vii) Laundry and Drying Facilities:
- A dedicated laundry is to be provided for each dwelling.
- Outdoor clothes drying facilities are to be accessible to all residents and screened from the street and public places.
- Alternatively, a retractable or demountable clothes line is to be provided in the courtyard or on a screened service balcony of each dwelling.

viii) Communal secure bulk item storage facilities are to be provided in residential flat buildings and multi-dwelling housing to store unwanted items that are awaiting clean up collection.

5.5 Off-Site Traffic Management Works

As a consequence of development on the land to which this Section relates, or to overcome existing problems in the surrounding road network, there maybe a need for off-site traffic management works.

Based on the master plan for the Defence Site adopted by Council on 13 November 2001 (the Master Plan). **Figure 16** shows the staging for the off-site traffic management improvement devices and controls for development in accordance with the Staging Plan for development within the site **Figure 17**.

Objective

- To ensure that any required off-site traffic management devices and controls are in place prior to development taking place.

Controls

i) Any application for consent to subdivide land to create streets and development blocks generally in accordance with **Figure 6** must be accompanied by a report indicating proposed on-site and off-site traffic management devices and controls.

ii) This report shall have regard to the staged provision of off-site traffic management devices and controls identified in **Figure 16**, which in turn relates to the staging of the development **Figure 17**.

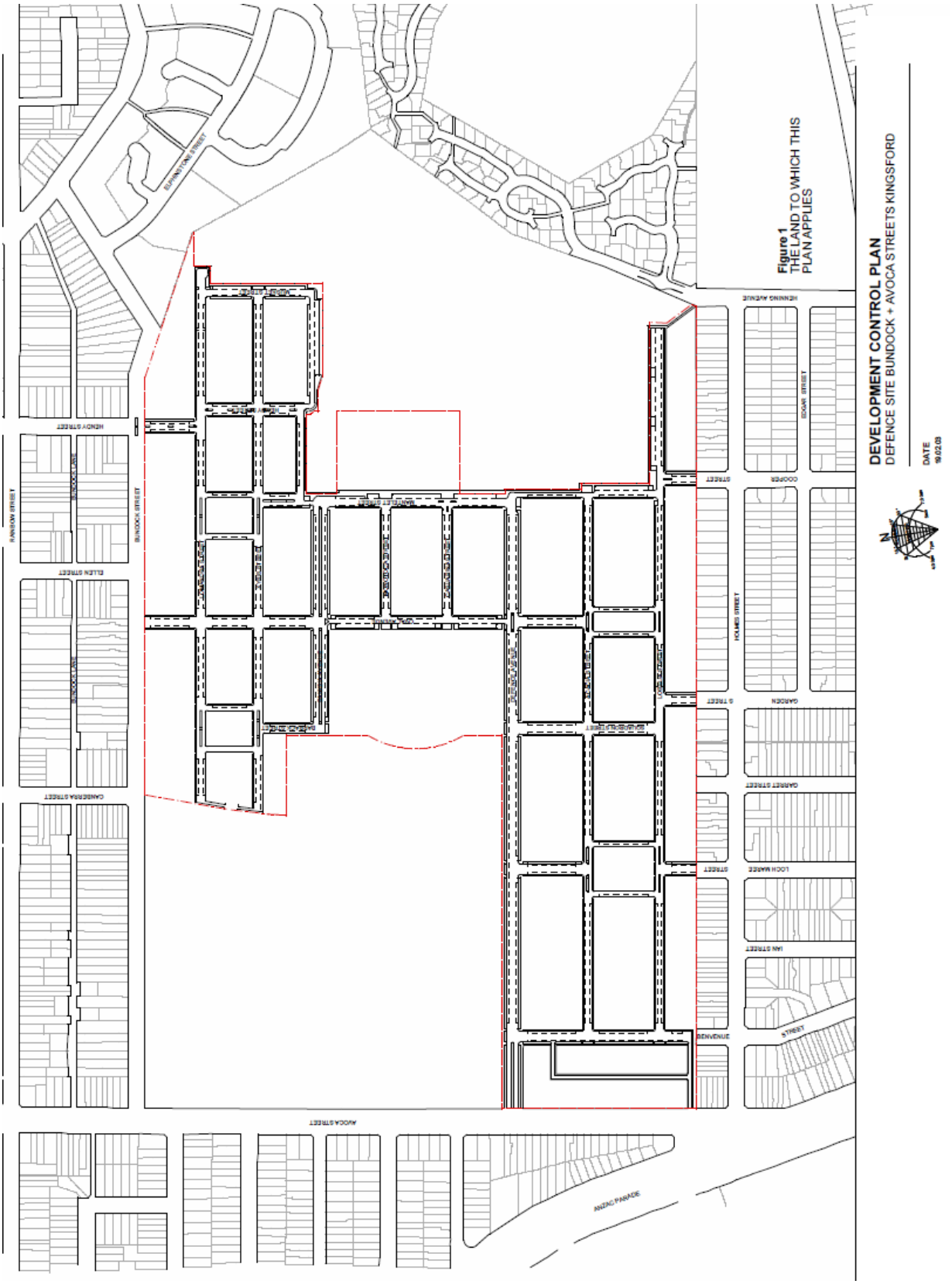


Figure 1 The Land to Which This Plan Applies

Figure 1a Master Plan Overview

Figure 2 Density Zones

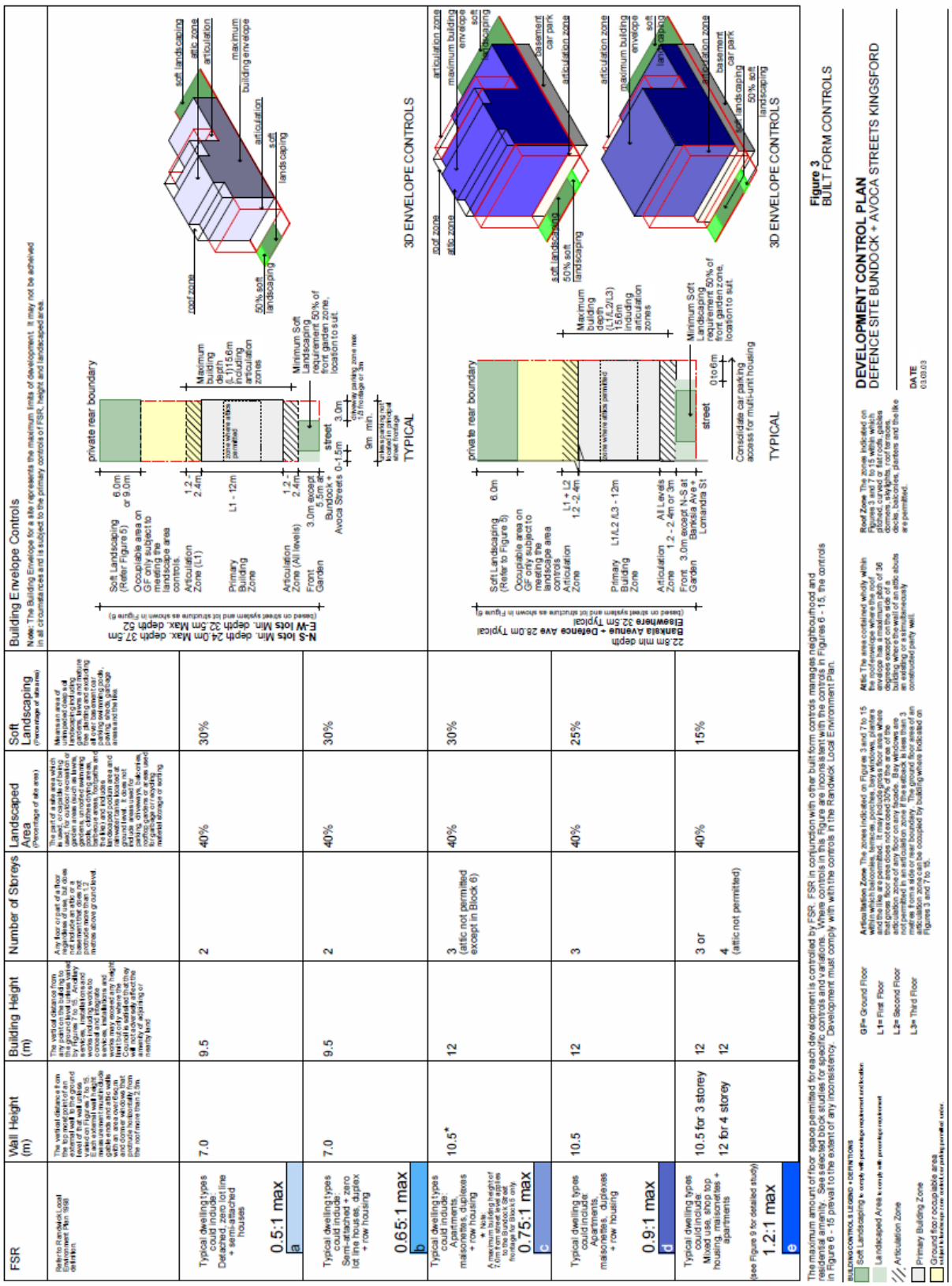


Figure 3 Built Form Controls

Figure 4 Architectural Consistency

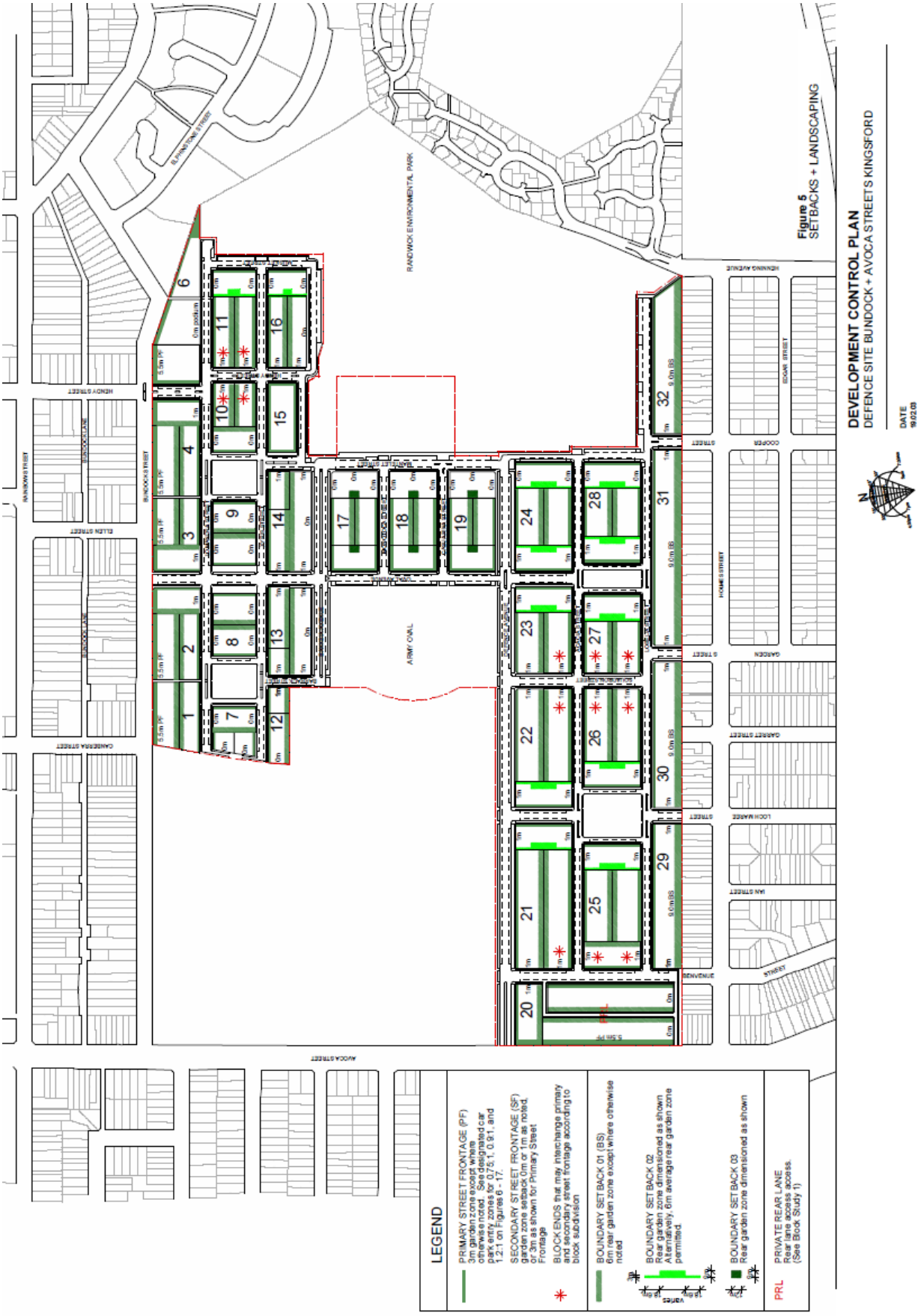


Figure 5 Setbacks and Landscaping

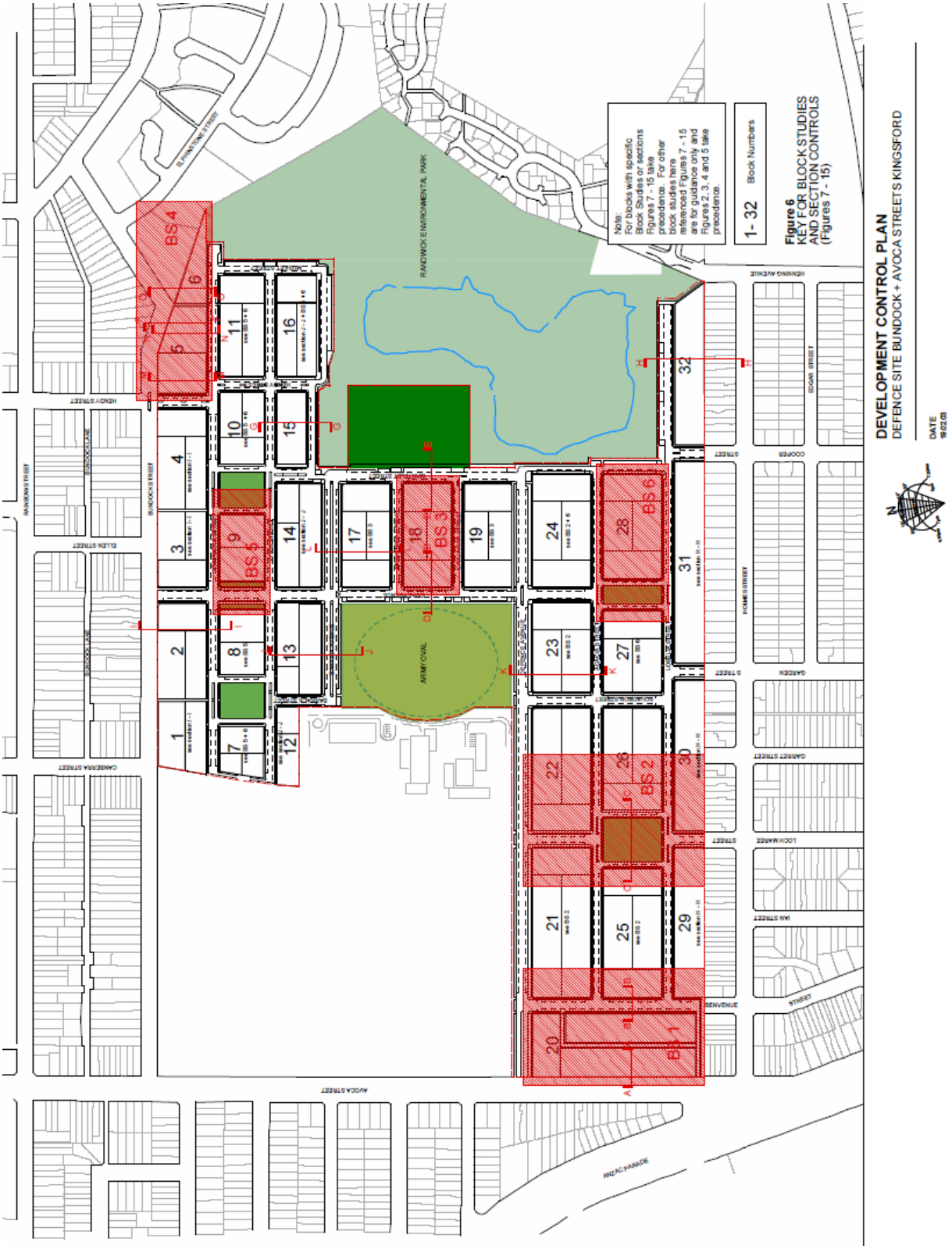


Figure 6 Key for Block Studies and Section Controls (Figures 7 – 15)

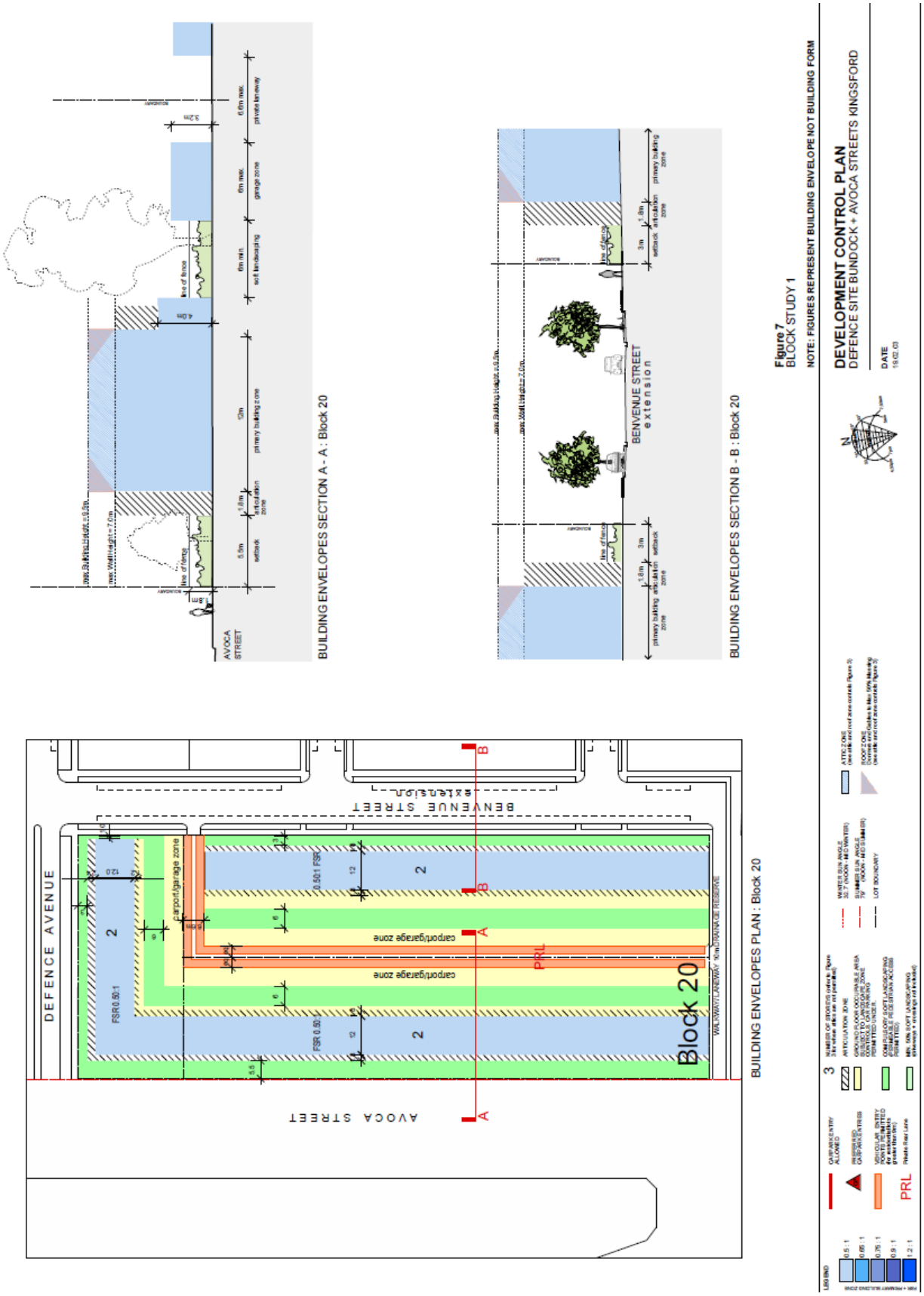


Figure 7 Block Study 1

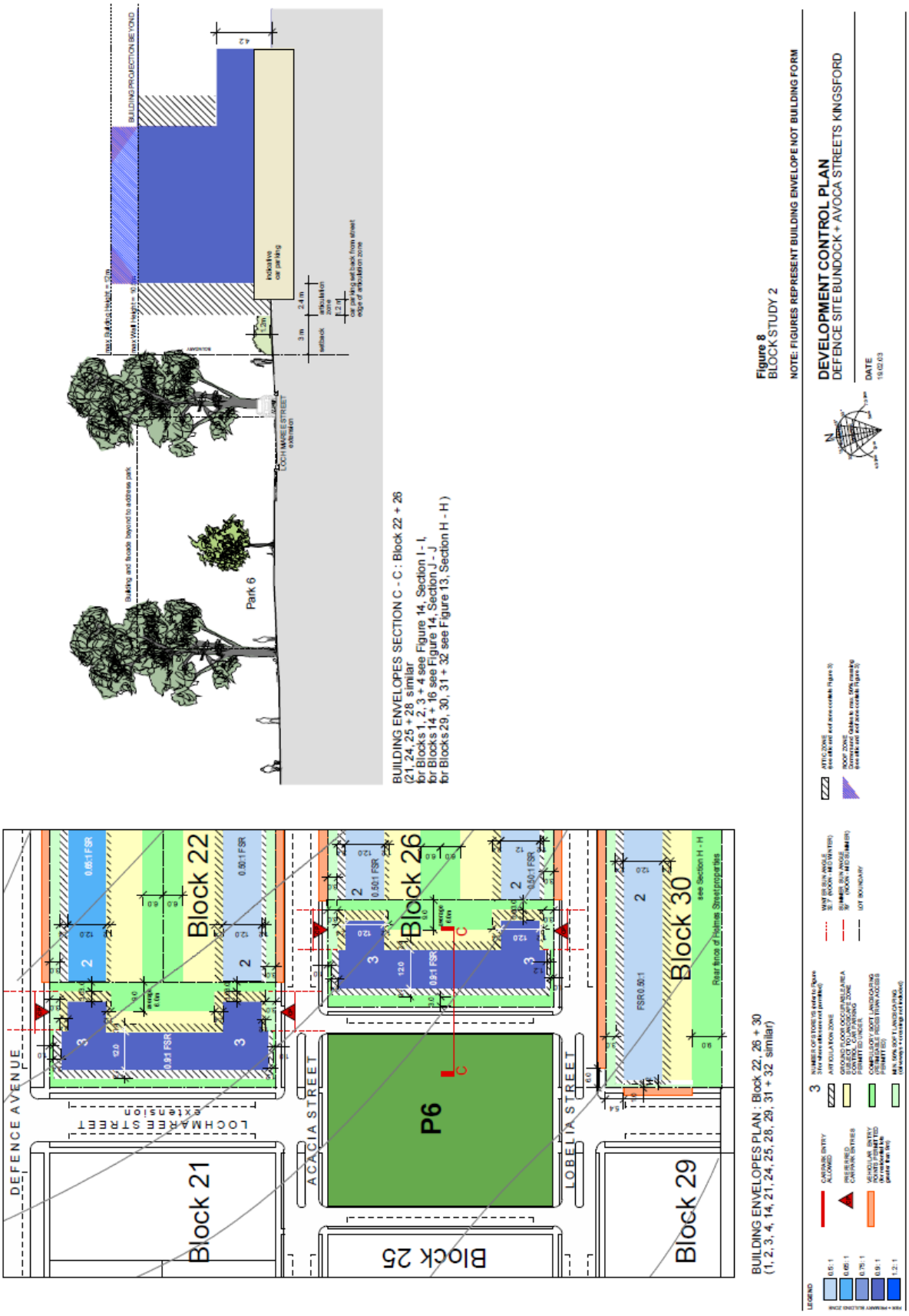


Figure 8 Block Study 2

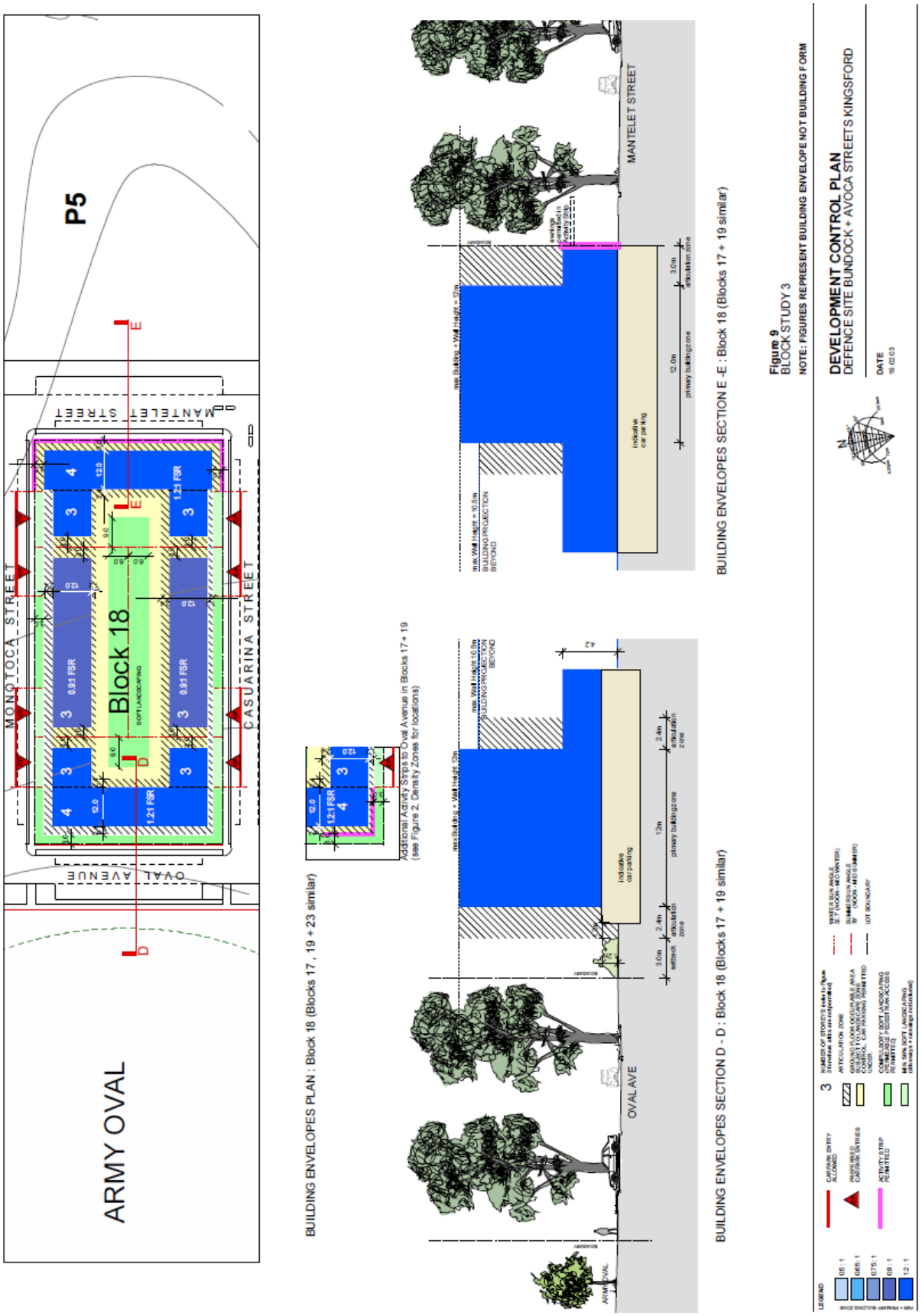


Figure 9 Block Study 3

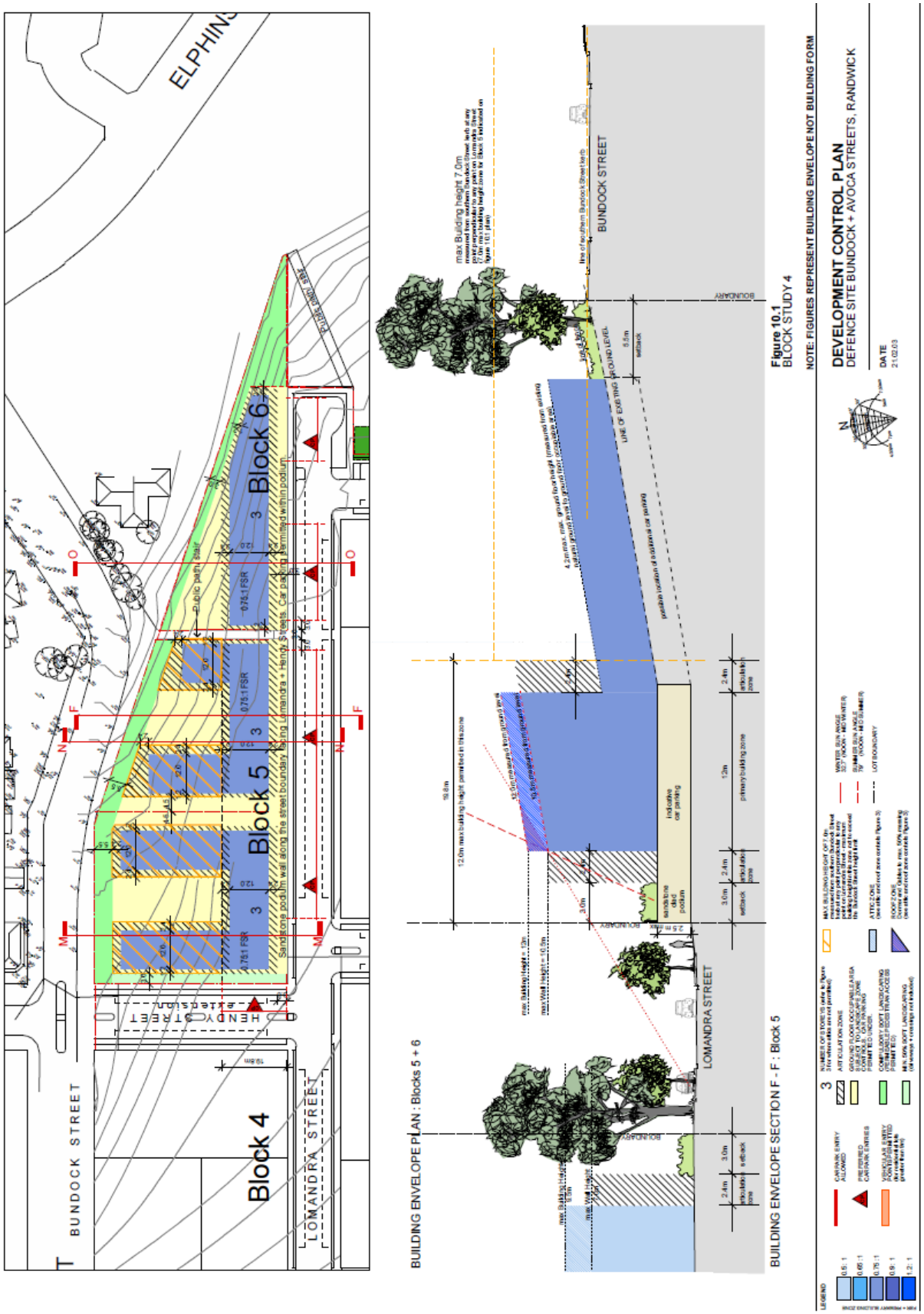


Figure 10.1 Block Study 4

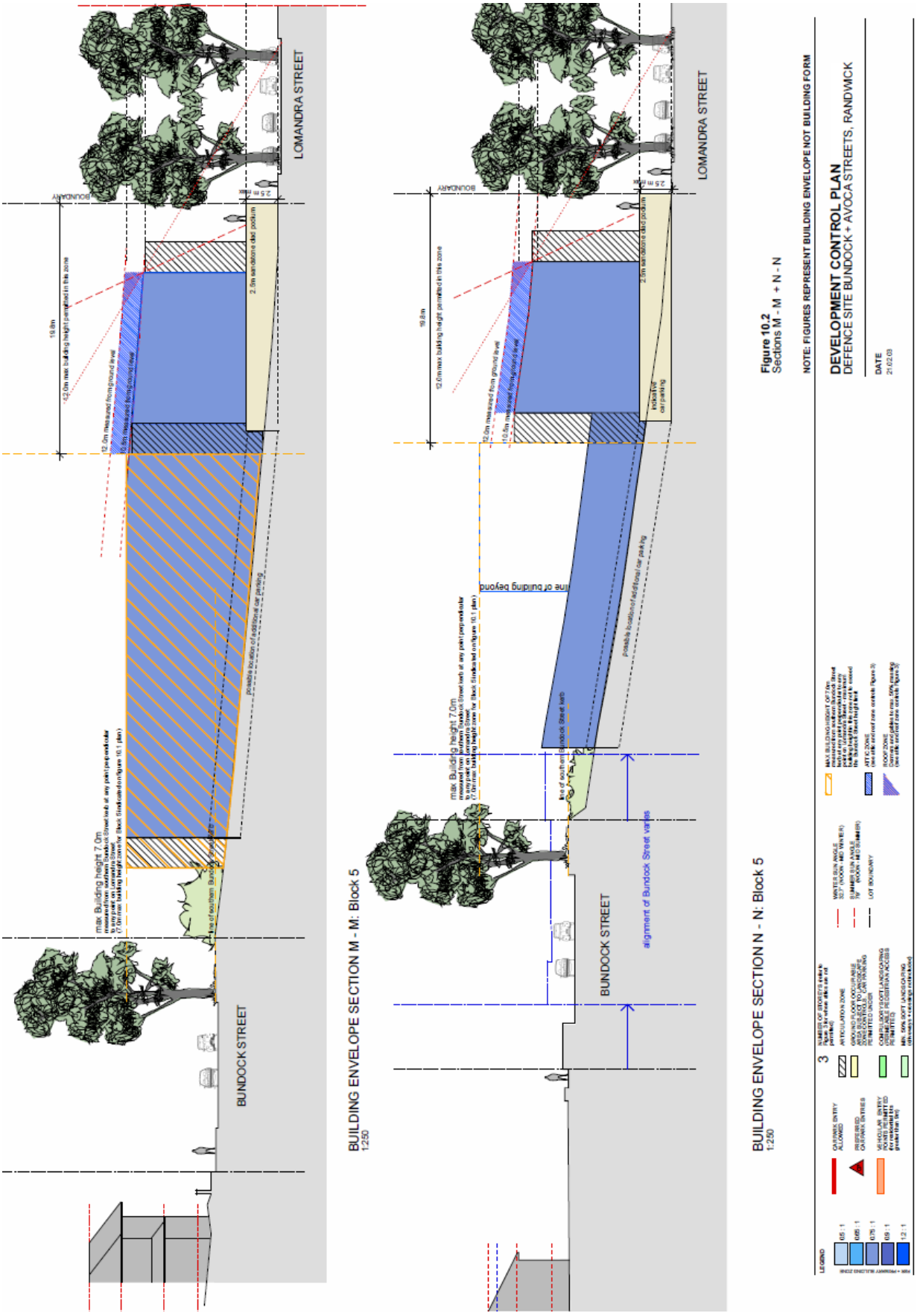


Figure 10.2 Sections M-M + N-N

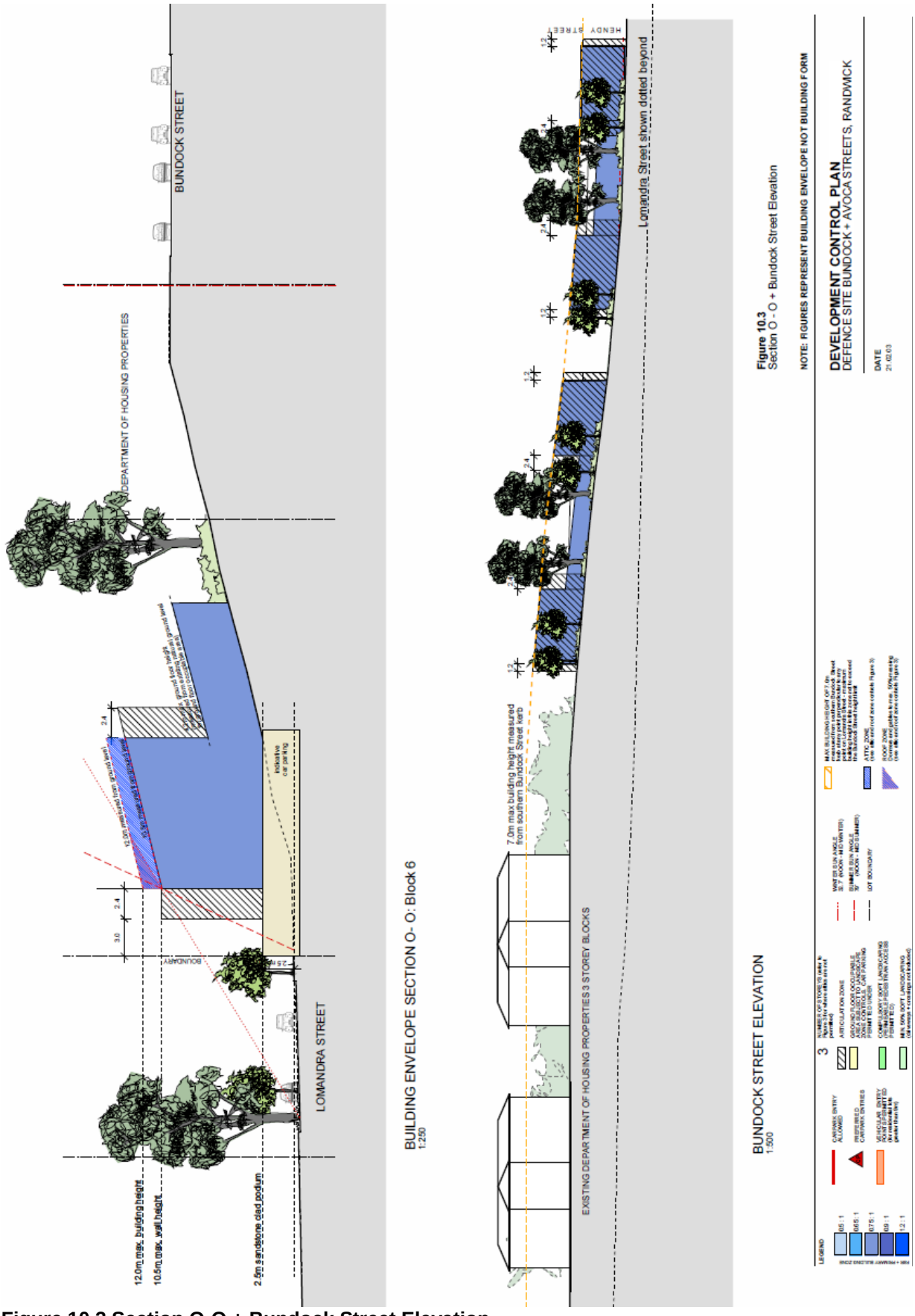


Figure 10.3 Section O-O + Bundock Street Elevation

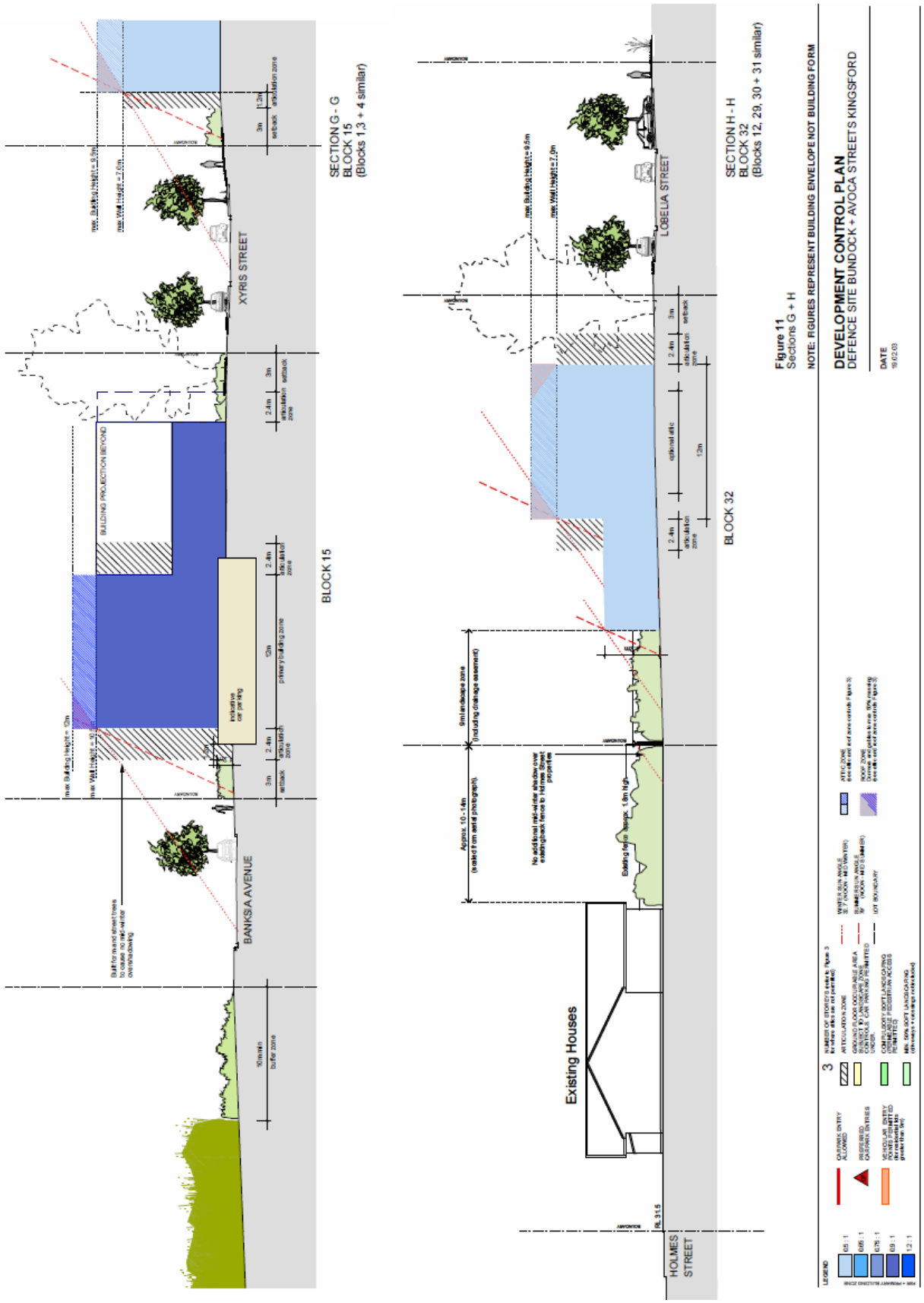


Figure 11 Sections G + H

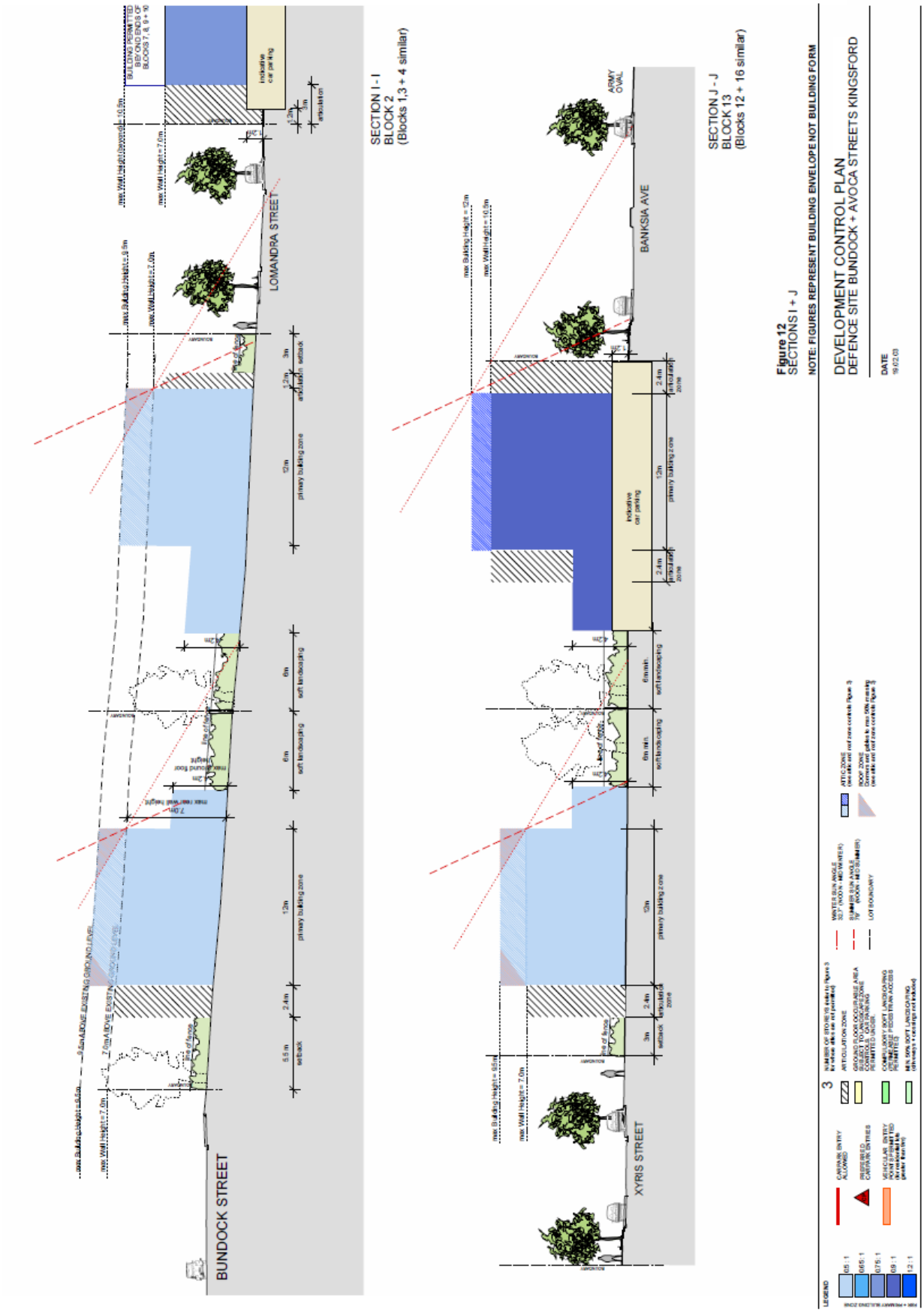


Figure 12 Sections I + J

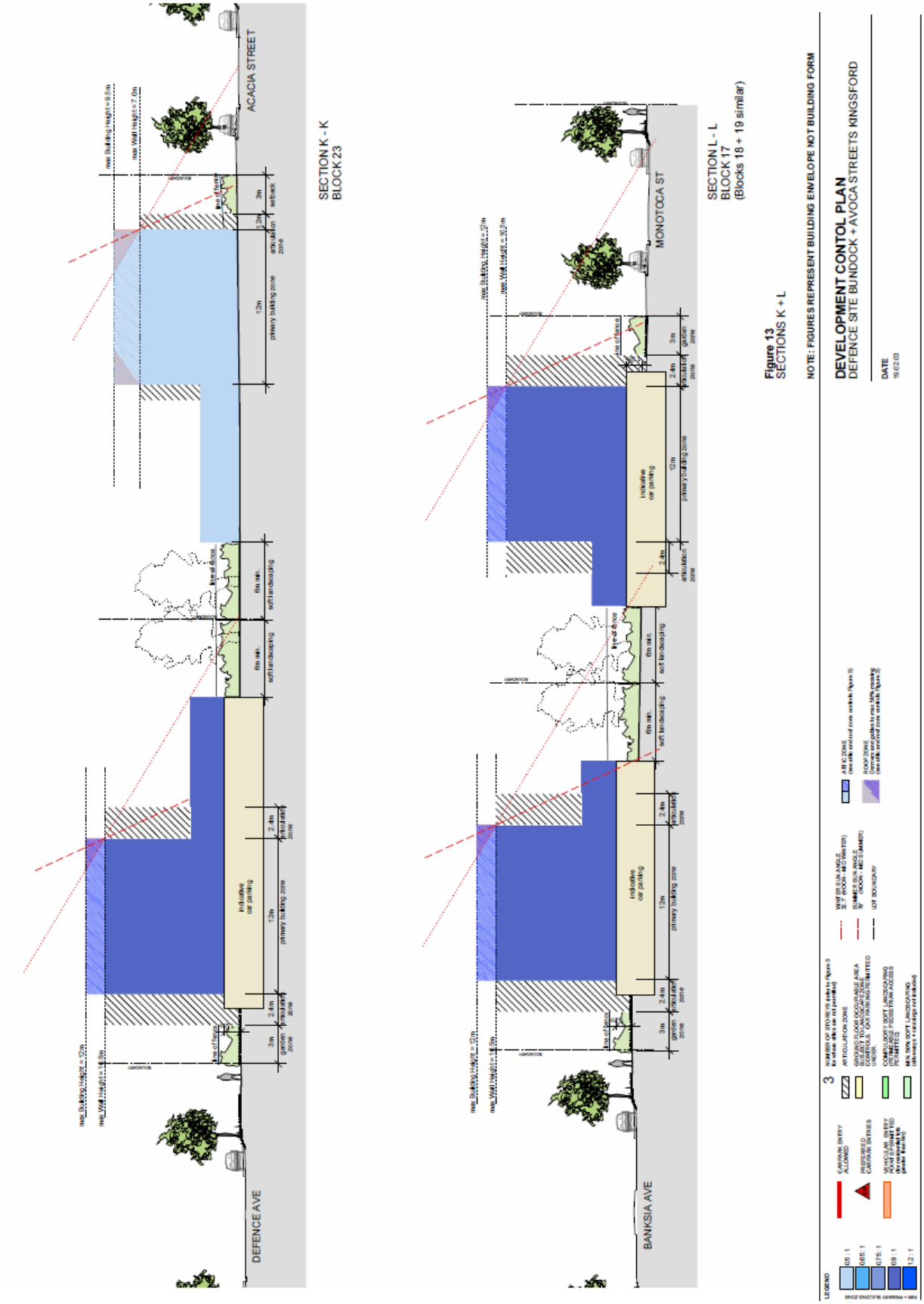
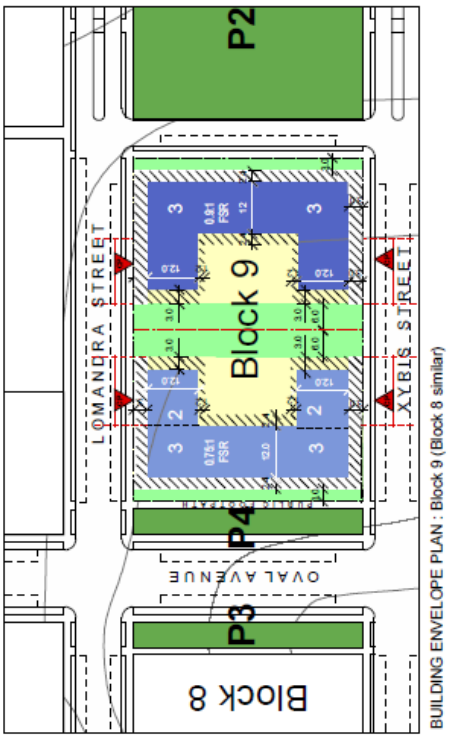


Figure 13 Sections K + L



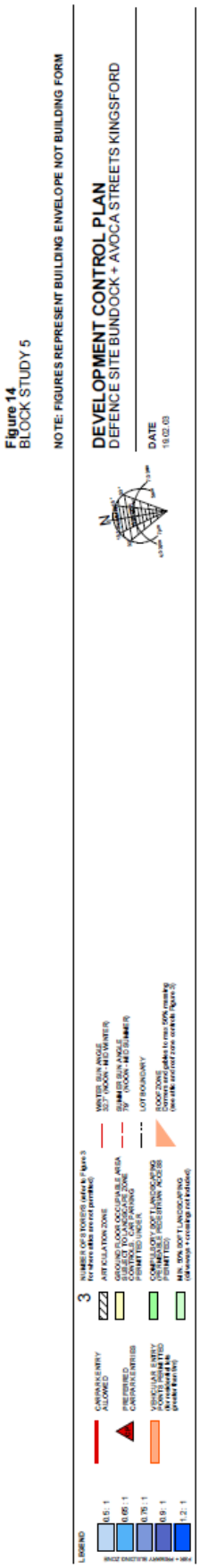
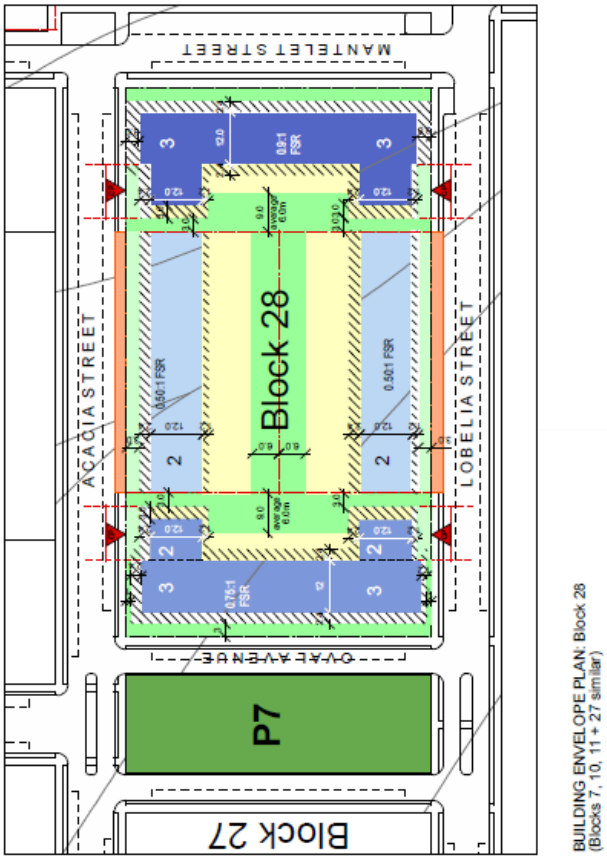


Figure 14 Block Study 5



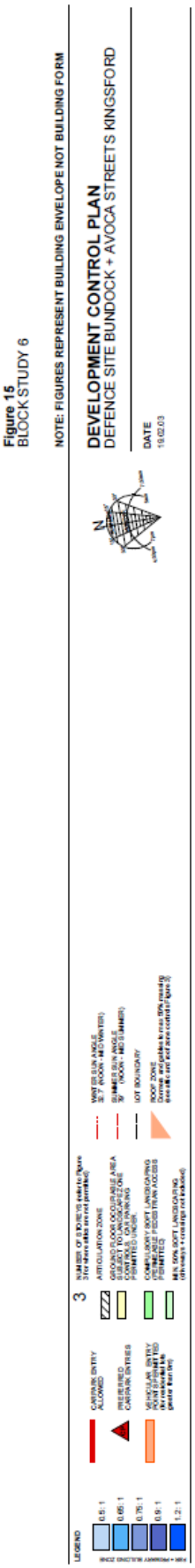


Figure 15
BLOCK STUDY 6

Figure 15 Block Study 6

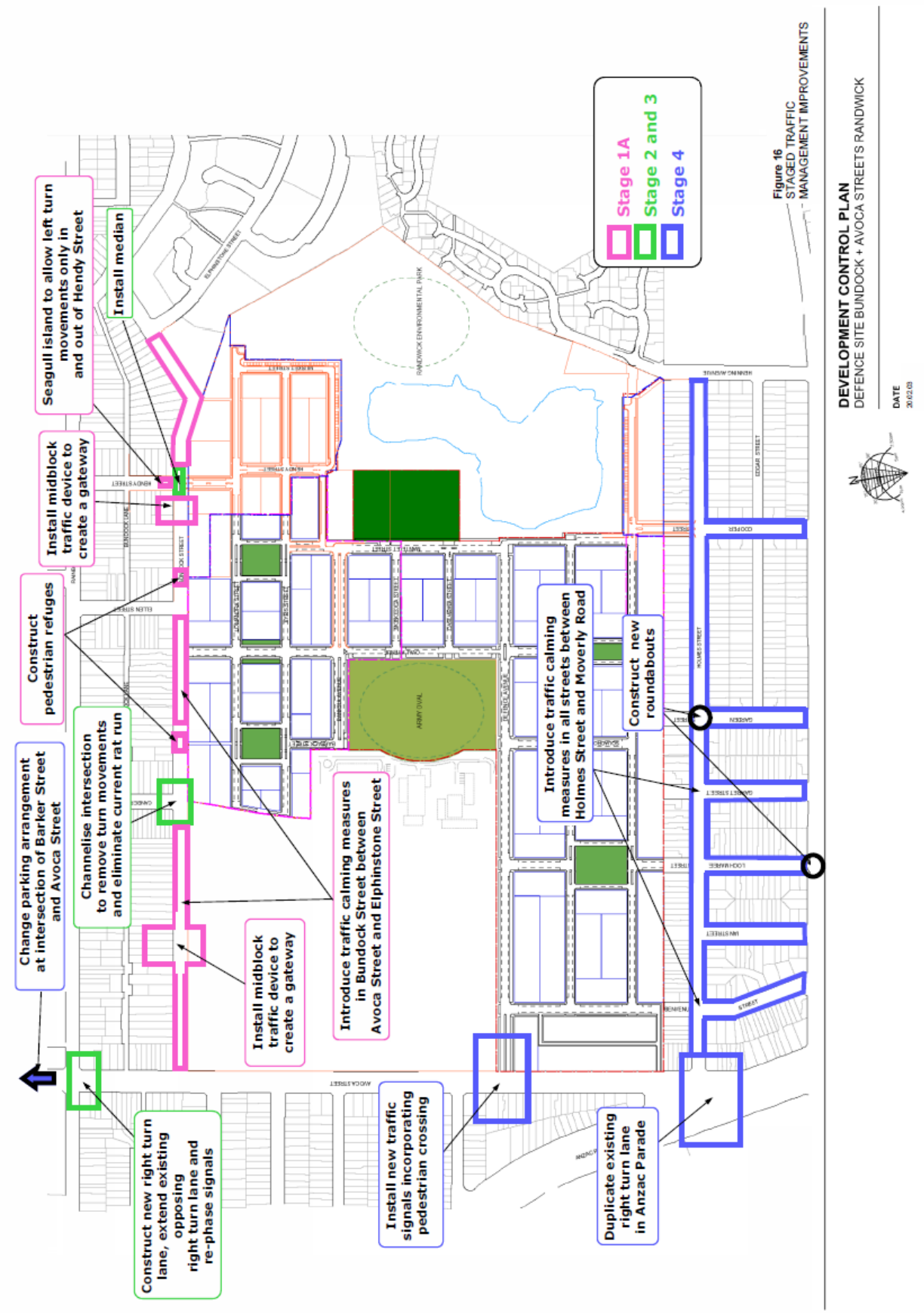


Figure 16 Staged Traffic Management Improvements

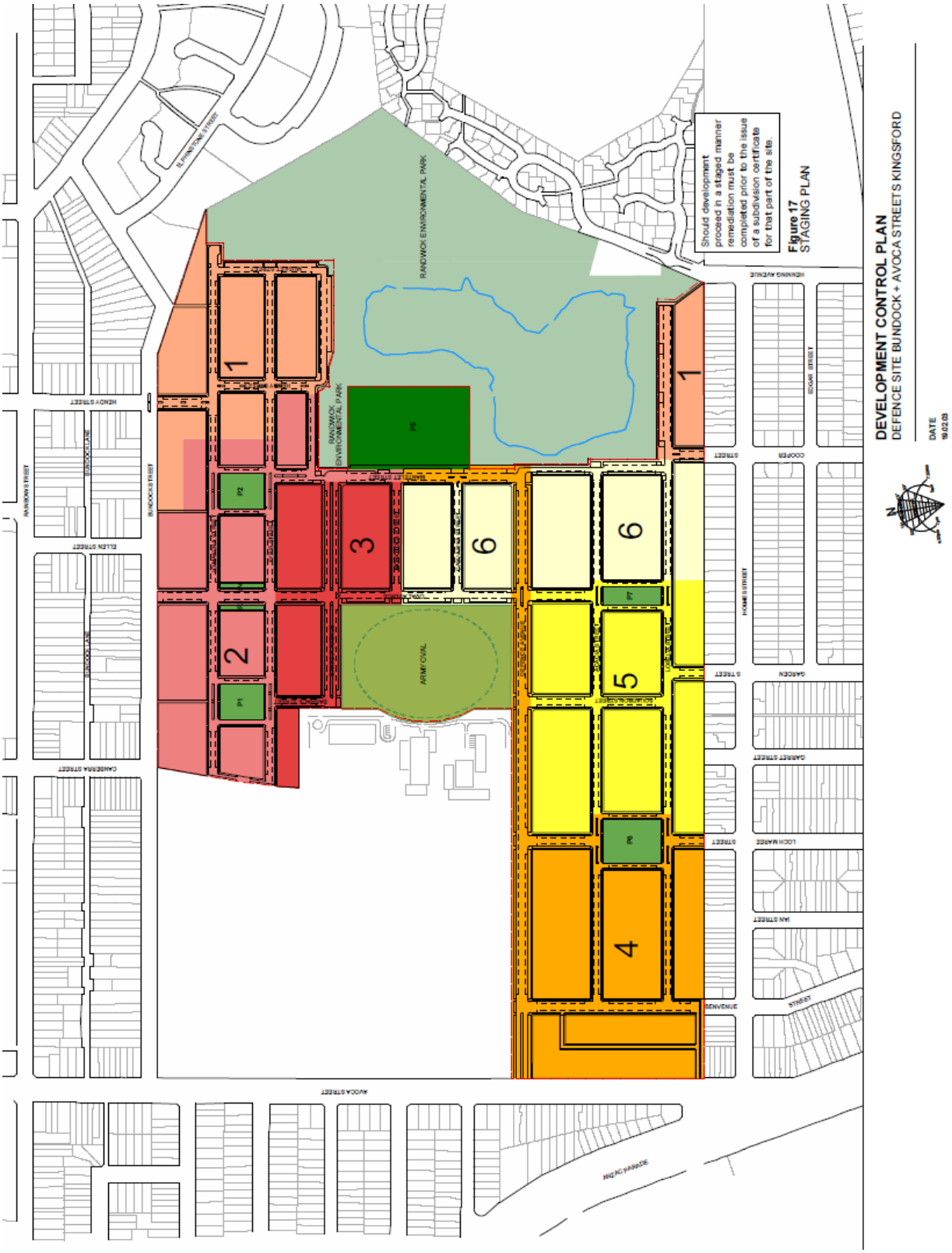


Figure 17 Staging Plan