



Part C1: Site Planning and Design Principles

Provision	Comment
<u>Site Planning</u>	
A Site Analysis Plan should be prepared in accordance with the DCP.	A Site Analysis Plan has been prepared by Hill Thalys and included in Appendix B. A site analysis has also been included in Section 2 of the Statement of Environmental Effects.
<u>Design Principles</u>	
<p><i>Building Form – Height, Bulk and Scale.</i></p> <ul style="list-style-type: none"> • Context. • Character. • Articulation. • Overshadowing. • Setbacks / Separation. • Building Façade Treatment. • Roof Design. 	<p>Design principles for the Concept Plan are established in the Urban Design Report prepared by Hill Thalys and provided in Appendix B.</p> <p>Design principles including indicative built form is also discussed in Section 4 of the SEE.</p>
<p><i>Responding to the Sites Topography and Landform</i></p> <p>Applicants must demonstrate how the development responds to the natural topography and landform of the site based on analysis drawings.</p>	<p>The Concept Engineering Plans showing indicative cut and fill. The Concept Housing Plans show sections of indicative housing design which can be accommodated on the site subject to future engineering works.</p> <p>This information demonstrates how development can respond to the natural topography.</p>
<i>Safety and Security</i>	The consistency of the Concept Plan with CPTED principles has been discussed in Section 8.1.3 of the SEE.

Part C2: Vegetation Management

Provision	Comment
<u>Preservation of Trees and Vegetation</u>	
Development consent is required for removal of trees in accordance with the LEP.	No removal of trees is proposed as part of this application. Future tree removal will be required to facilitate works in accordance with the Concept Plan and approval will be sought through the relevant Stage 2 DA.
A Tree Survey and Assessment Report is required for removal of trees.	Refer above.
<p><i>Trees and New Development</i></p> <p>The siting and layout of a development should consider, at the initial concept stage, the location of trees and other vegetation and favour</p>	The Concept Plan considers the current vegetation on the site and future landscaping. This is discussed further in Section 8.2 and Section 8.6. Substantial retention of Cumberland Plains Woodland has been prioritised as part of the Concept Plan.



Provision	Comment
their retention.	
<u>Bushfire Management</u>	
<p><i>Planning for bushfire protection</i></p> <p>If land is identified as 'bushfire prone land' on the Bushfire Prone Land Map, then any development application on that land must address the bush fire protection measures set out in the document 'Planning for Bushfire Protection 2006</p>	The Bushfire Protection Assessment report prepared by Travers is provided in Appendix E. This report includes assessment against the relevant provisions of 'Planning for Bushfire Protection 2006'. This is also discussed in Section 8.8 of the SEE.
<p><i>Bushfire Assessment Report</i></p> <p>A Bushfire Assessment Report, prepared in accordance with the PBP, must accompany all development applications on land identified as bush fire prone land.</p>	Refer above.

Part C3: Water Management

Provision	Comment
<p><i>Catchment Management and Water Quality</i></p> <p>1) Approval to Discharge Contaminants Water discharge from any development must not contain contaminants, unless necessary licences and/or approvals are obtained from relevant government authorities.</p> <p>2) Addressing Potential Catchment Impacts All applications to Council, where there is the potential to impact upon a water system, are required to identify in the application the relevant water systems in the catchment area and any impacts.</p> <p>3) Water Quality for all Land Uses Where any development could result in water quality impacts in nearby surface water systems, the water quality at that system is to be monitored for pollutants prior to the commencement of works, and at regular intervals during construction and/or operation.</p>	<p>The Preliminary Engineering Report provides the following details in accordance with the DCP on water management and Council's comments:</p> <ul style="list-style-type: none"> • Catchment data. • Stormwater management strategies. • On site water detention. • Water quality management. • WSUD.



Part C4: Land Management

Provision	Comment
<u>Site Stability and Earthworks</u>	
<p>Any development application that proposes earthworks and therefore changes to the levels of a site, is required to clearly address the following in the Statement of Environmental Effects or a Geotechnical Report.</p> <p>a) Earthworks to create a building platform shall not be undertaken where excavation and/or filling would exceed 1m from the existing natural ground level of the site.</p> <p>b) On sloping sites, site disturbance is to be minimised by using split level or pier foundation building designs (see Figure C4.1).</p> <p>c) All retaining walls proposed for the site are to be identified in the development application for the proposed development. Retaining walls are to be kept to a minimum to reduce earthworks. Use of materials that complement the natural environment is encouraged.</p> <p>d) During any earthworks, any topsoil should be preserved on site for re-use and should be stockpiled and covered to avoid dust or loss of topsoil. Refer to the Landscape Design Section of this Plan for controls on stockpiling topsoil on site.</p>	<p>The existing topography of the site is generally steep. To facilitate residential development cut and fill will be required. Detailed design and specifications of the earth works required will be developed as part of a Stage 2 Development Application. This is discussed further in Section 8.5 of the SEE. Future earthworks will:</p> <ul style="list-style-type: none"> • Facilitate development envisaged by the Concept Plan which is consistent with the identification of the site within the Caddens Release Area. • Provides an appropriate response to the topography while maintaining a high level of residential amenity. • Provide a connective street network with an open edge estate design. <p>Split level housing typologies will be incorporated where possible as indicated in the Urban Design Report provided in Appendix B.</p>
<u>Erosion and Sedimentation</u>	
<p>All applications for subdivision and development which involve site disturbance must be accompanied by an Erosion and Sediment Control Plan.</p> <p>The ESCP must be submitted in accordance with best practice guidelines for erosion and sediment control, including Landcom’s, Managing Urban Stormwater – Soils and Construction, 2004.</p> <p>Where an application is for a site over 2,500m² and there will be substantial earthworks, the applicant is required to address a number of additional measures in the ESCP.</p>	<p>The Concept Civil Engineering Plans prepared by SMEC and provided in Appendix D provide concept erosion and sediment control plans. These plans indicate how erosion and sediment can be managed across the site during construction.</p> <p>These plans will be developed further once the detailed earthworks have been resolved in a Stage 2 DA and will be in accordance with Council’s DCP requirements.</p>



Provision	Comment
<u>Contaminated Lands</u>	
<p>Any application must provide appropriate information relating to past, present and proposed land uses.</p> <p><i>Stage 1 – preliminary investigation</i></p> <p>Where contaminating activities are suspected to have had an impact on the land, some initial sampling and analysis will need to be undertaken to confirm and support any conclusions reached from the site history appraisal.</p>	<p>The past and present uses of the site are discussed in the Stage 1 Preliminary Site Investigation prepared by APP and provided in Appendix H. This is also discussed in Section 8.9 of the SEE.</p> <p>The Stage 1 report includes the following: <i>These potentially impacted soils are likely to be removed as part of the site preparation works for the development. APP considers that further detailed site investigation is not warranted prior to the start of development works.</i></p>

C5 Waste Management

Provision	Comment
<u>Waste Management Plans</u>	
<p>Applicants are to submit a Waste Management Plan when lodging a development application.</p> <p>The Waste Management Plan must be supported by scaled waste management drawings that are to assist in demonstrating compliance with the provisions of this Plan.</p> <p>The Waste Management Plan must include details of:</p> <p>a) The types and volumes of wastes and recyclables likely to be generated as a result of the development;</p> <p>b) How waste and recyclables will be stored and treated on site;</p> <p>c) How the residual non-reusable or non-recyclable wastes and recyclables are to be disposed of; and</p> <p>d) How ongoing waste management will operate once the development is complete (for the life of the development)</p>	<p>A Waste Management Plan is provided in Appendix K and discussed in Section 8.11 of the SEE. The Waste Management Plan provides:</p> <ul style="list-style-type: none"> • Indicative waste volumes. • Waste storage areas. • Recycling. • Waste management. • Collection of waste.

Provision	Comment
<u>Development Specific Controls</u>	
<i>Waste Bin Storage Area Size</i>	<p>The Waste Management Plan has taken into consideration the requirements of the DCP and ensured that future development can comply. Future detail on waste management will be provided in detailed Stage 2 Development Applications.</p> <p>The Waste Management Plan provides details on indicative storage area size.</p>
<i>Waste Bin Storage Area Location</i>	Refer above. The Waste Management Plan provides details on indicative future waste locations.
<i>Waste Bin Area Layout</i>	The Waste Management Plan provides details on indicative storage area layout.
<ul style="list-style-type: none"> • Dwelling houses and dual occupancies waste requirements • Multi Dwelling Housing waste requirements 	The Waste Management Plan provides details on indicative waste management procedures for different housing products in accordance with the DCP.

C6: Landscape Design

Provision	Comment
<u>DA Requirements</u>	
<p>The proposal constitutes Category 3. The following are required:</p> <ul style="list-style-type: none"> • Site Analysis. • Tree Survey. • Landscape Concept Plan. • Landscape Detailed Plan. 	<p>A Landscape Concept Plan is provided in Appendix C and discussed further in section 8.2 of the SEE. This includes a site analysis and identifies existing tree locations and trees to be removed. This has been informed by a Flora and Fauna Assessment which is provided in Appendix I. A Vegetation Management Plan is also provided in Appendix J.</p>
<u>Protection of the Environment</u>	
<p>Council requires that all landscape designs promote best practice Environmentally Sustainable Development principles.</p> <p>a) Planting deciduous trees - These are best planted on northern and western aspects. This will allow the sun in during winter, and provide shelter from the sun in summer and morning sun year round adding to energy efficiency;</p>	<p>A Landscape Concept Plan is provided in Appendix C and discussed further in section 8.2 of the SEE. This provides examples of deciduous planting, low maintenance species.</p>

Provision	Comment
<p>b) Selecting low water/low maintenance plants, including drought tolerant species;</p> <p>c) Planting native or indigenous plants – These plants have lower water requirements and have evolved to cope best with the existing conditions, hence reducing maintenance, fertilising and watering requirements;</p> <p>d) Using irrigation systems that utilise drip irrigation systems;</p> <p>e) Using recycled and biodegradable products in the landscape design - Such elements could include recycled soils and other hard paving features;</p> <p>f) Allowing for composting, mulching and worm farms on site;</p> <p>g) Using quality, long lasting materials; and</p> <p>h) Using soils and mulches manufactured with recycled waste.</p>	
<p><i>Conserving Site Soil</i></p> <p>a) Where it is necessary to remove areas of topsoil as a result of cut and fill requirements, this should not be removed from the site but stockpiled in another part of the site for reuse in the landscaping process. This is both beneficial for the environment and saves money.</p>	<p>The detailed cut and fill and stockpiling requirements will be provided as part of a Stage 2 Development Application. Indicative cut and fill is provided in the Civil Engineering Report and discussed further in Section 8.5 of the SEE.</p>

C7 Culture and Heritage

Provision	Comment
<u>Development in the Vicinity of a Heritage Item</u>	
<p>1) A Heritage Impact Statement shall be lodged with a development application for buildings or works in the vicinity of a heritage item or heritage conservation area. This clause extends to development that:</p> <p>a) May have an impact on the setting of a heritage item or conservation area, for example, by affecting a significant view to or from the item or by overshadowing; or</p>	<p>The adjacent UWS Kingswood Campus is listed as a local heritage item under the Penrith LEP 2010.</p> <p>The heritage listing for the UWS Kingswood Campus relates to the 'Kingswood Public School' and 'Teachers residence (former)'.</p> <p>The subject site and future development under the Concept Plan will not impact on the adjacent heritage item with consideration of the following:</p> <ul style="list-style-type: none"> • The school and residence are located together adjacent to Second Avenue in the far north west of the University

Provision	Comment
<p>b) May undermine or otherwise cause physical damage to a heritage item; or</p> <p>c) Will otherwise have any adverse impact on the heritage significance of a heritage item or any heritage conservation area within which it is situated.</p>	<p>site.</p> <ul style="list-style-type: none"> • Accordingly, the actual items to which the listing relates are located approximately 700m from the site. • The site is separated from the heritage items by new development including a number of buildings which has occurred on the university site. • Development on the subject site will not be viewed in context of the heritage items nor will it impact on the curtilage of the items. • Construction on the site will not impact on the heritage items due to the significant separation. • The site has previously been identified as being within the Caddens urban release area and therefore suitable for residential consistent with that which is proposed. <p>With consideration to the above, a Heritage Impact Statement is not considered necessary as part of this proposal.</p>
<p><u>Potential Aboriginal Archaeological Sites</u></p>	
<p>Figure C7.2 depicts which parts of the City have the potential to be archaeologically sensitive.</p>	<p>The site is not identified on the map of potential aboriginal archaeological sites.</p>

C10 Transport Access and Parking

Provision	Comment
<p><u>Transport and Land Use</u></p>	
<p>1) A Transport Management and Accessibility Plan (TMAP) is to be prepared for all significant developments.</p> <p>2) New development that will have potential significant public transport patronage (especially residential, commercial and employment generating uses) is to be located close to existing or proposed transport nodes or networks.</p> <p>3) A range of uses are to be provided or integrated in mixed-use areas to provide a range of services in a single location and minimise the need for additional travel.</p> <p>4) Public transport use is to be enhanced by providing good pedestrian connections from places of</p>	<p>A Transport Impact Assessment is provided in Appendix F and discussed in Section 8.6 of the SEE. The TIA provides details on public transport networks and pedestrian access.</p>

Provision	Comment
residence or employment to transport networks or nodes.	
<u>Traffic Management and Safety</u>	
<p>Any Traffic Report or Traffic Impact Statement is required to address the following issues:</p> <ul style="list-style-type: none"> i) The objectives of this section relating to transport and land use; ii) The objectives of this section relating to traffic management and safety; and iii) The objectives and controls of this section relating to traffic generating developments. 	The TIA address the key sections of the DCP through the report.
<i>Road Safety</i>	The TIA provides a summary of road safety based on the proposed road sections including access and parking.
Proposed roads must comply with the road configurations set out in Table C10.1. These configurations apply to private and community title roads as well as all public roads.	
<u>Parking, Access and Driveways</u>	
<p><i>Dual Occupancy</i> 2 spaces per dwelling (2 or more bedrooms) – stack or tandem parking acceptable</p> <p><i>Multi Dwelling Housing</i> On-site resident parking for each dwelling: 1 car space per 1 bedroom 1.5 car spaces per 2 bedrooms or part thereof 2 car spaces per 3 or more bedrooms</p> <p>In addition, visitor parking is to be provided for developments that have 5 or more dwellings: 1 space for every 5 dwellings (or part thereof)</p> <p><i>Dwelling House</i> 2 spaces per dwelling – stack or tandem parking acceptable</p>	<p>This is discussed further in the TIA which states that future development will comply with the above requirement.</p> <p>While the DCP does not specify on-street parking requirements, it is proposed to provide 270 parking spaces in the road network within the CWG development site.</p>

C11 Subdivision

Provision	Comment
<p><i>General Provisions – Site Planning</i></p> <ul style="list-style-type: none"> Existing vegetation and natural drainage lines should be retained and enhanced, where possible. Existing dams should be retained, where possible. Long and narrow allotments should be avoided. Allotments should have a maximum of 4:1 depth to width ratio. 'Battle-axe' allotments are discouraged by Council. No more than two allotments shall be served by a shared access corridor. Applications for subdivision need to demonstrate that each of the proposed allotments can support the proposed development/buildings by providing a Potential Development Area Plan. Applications should be accompanied by landscape plans. New allotments should be located so as to protect, enhance or conserve areas of high scenic or recreational value. 	<p>Existing vegetation is predominantly retained across the site as discussed in Section 8.7 of the SEE.</p> <p>Concept Housing Plans support the proposed yield sort on the site and demonstrate how housing may be accommodated in the future.</p> <p>No battle axe lots are proposed as part of this application.</p> <p>The application is accompanied by a Concept Landscape Plan and indicative housing typology plans.</p> <p>The Concept Plan structure has been designed to enhance views to adjacent landscape and the wider Blue Mountains.</p>
<p><i>General Provisions – Vegetation Management</i></p> <p>A subdivision application on land identified as or adjacent to 'bushfire prone land' will need to address the controls set out in the Vegetation Management Section.</p>	<p>The site is identified as bushfire prone and contains EEC. The proposal includes a Vegetation Management Plan and a Concept Landscape Plan prepared in accordance with the DCP.</p>
<p><i>General Provisions – Water Management</i></p> <p>a) Any subdivision proposal is required to address the objectives and controls set out in the Water Management Section.</p> <p>b) Council will not approve any subdivision of lots where it is evident that a flood free building envelope and safe internal access from/to the public road cannot be provided. The building envelope for any dwelling should be flood free in a 1:100 Average Recurrence Interval (ARI) flood.</p> <p>c) Council will not support the subdivision of any land located in a floodway or areas of high flood hazard.</p>	<p>Water management on the site has been the subject of ongoing consultation with Council. The Preliminary Civil Engineer Report provides details on indicative stormwater management on the site. The site is not considered flood prone.</p>
<p><i>General Provisions – Land Management</i></p> <p>Any subdivision proposal is required to address the objectives and controls set out in the Land Management section with particular focus on ensuring that the proposed subdivision is</p>	<p>Refer response to Section C4 Land Management.</p>

Provision	Comment
<p>appropriate taking into consideration:</p> <ul style="list-style-type: none"> i) Site instability due to geology, slope or landfill; ii) The need for excavation and fill to create developable allotments; iii) The potential for erosion and sedimentation; and iv) The potential for salinity. 	
<p><i>General Provisions – Access and Transport</i></p> <p>Any subdivision proposal is required to address the objectives and controls set out in the Transport, Access and Parking section.</p>	<p>Refer response to Section C10 Traffic Access and Parking.</p>
<p><i>Allotment Orientation</i></p> <ul style="list-style-type: none"> 1) Staggering of allotments and extensive use of landscaping are encouraged to reduce adverse wind impacts and achieve maximum exposure to cooling breezes in summer, and create streetscape variety and interest. 2) The allotment orientation shall take into account: <ul style="list-style-type: none"> a) The various types of dwellings which may be constructed on them. Potential living and private open space areas of any dwelling can be oriented to the north. b) The possible overshadowing impact on existing and/or future adjoining buildings. c) Road orientation, which is an important factor in influencing allotment orientation to achieve energy efficient subdivision. <ul style="list-style-type: none"> i) Roads running close to east-west provide for good orientation of allotments for solar access to dwellings and private open space, while maintaining a narrow allotment frontage. ii) On roads running north-south, allotments may need to be widened to provide solar access and prevent overshadowing of dwellings and private open space. 	<p>Only super lots are proposed as part of this application. Road orientation and design has been developed based on the topography of the site and calibrated by their width and arrangement. This includes key north south roads and main east west connections.</p> <p>A variety of strata lots sizes are envisaged for the site to promote housing diversity and appropriate visual amenity.</p> <p>Cut and fill to accommodate the road design and future strata lots will be determined at Stage 2 detailed DA stage.</p>
<p><i>Site Frontage</i></p> <ul style="list-style-type: none"> 1) Site frontage shall be sufficient to permit vehicular and pedestrian access. 2) Access to major roads may be restricted and can potentially affect the proposed subdivision layout. 3) Along collector and major roads, it is desirable to reduce the number of vehicle access points. In such situations, a minimum allotment frontage of 25m is preferred. 	<p>The site frontage has been designed to permit appropriate vehicular and pedestrian access.</p> <p>O’Connell Street is not a collector road.</p> <p>Each new future strata lot created will demonstrate satisfactory depth-to-frontage ratio and long narrow lots will be discouraged.</p> <p>Corner allotments will have double road frontage but this does not relate to the front and rear.</p>

Provision	Comment
<p>4) Alternatively, a service road running parallel to the main road may be required.</p> <p>5) While minimum frontage requirements are not specified in this section, each new lot created shall have satisfactory depth-to-frontage ratio and long narrow lots will be discouraged.</p> <p>6) Allotments with double road frontage (i.e. front and rear) are discouraged.</p>	
<p><i>Allotment Dimensions</i></p> <p>Residential lots less than 400m²</p> <p>2) In determining the suitability of any subdivision application for small lots (i.e. less than 400m²), special consideration of the following matters will also be taken:</p> <p>a) Cost of providing services and the capacity of existing services;</p> <p>b) The advantages of building to a boundary and using attached and semi-detached forms of housing;</p> <p>c) That adequate privacy can be assured for each proposed dwelling; and</p> <p>d) That adequate provision is made for access to natural light for each proposed dwelling.</p>	<p>The Concept Plan does not seek approval for strata lots. However, the indicative lots vary from with the smallest terrace housing lot being 135sqm. This is considered appropriate with regard to:</p> <ul style="list-style-type: none"> • The approach for the Concept Plan envisages smaller lots which facilitates a more urban environment which is supported by a high level of public domain amenity. • The concept housing designs demonstrate that appropriate private open space can be provided to support a smaller housing product. • Solar access has been reviewed and the majority of housing will have a high level of solar access to living spaces.
<p>1) The road network shall conform to a strategic plan for the area showing an existing and proposed major road network above the level of collector which satisfies projected district and regional travel.</p> <p>2) The road network shall provide for access to bus routes within acceptable walking distance from all dwellings. Unless prescribed otherwise, no more than 10% of allotments shall be more than 250m straight line or 400m walking distance from a proposed bus route.</p>	<ul style="list-style-type: none"> • The site is currently serviced by Busways Route 770 running between Penrith and Mt Druitt railway stations via St Marys railway station. • Routes 774, 775 and 776 each operate between Penrith and St Marys Station via Second Avenue before dispersing to various routes. The bus stop at the O'Connell Street / Second Avenue intersection is approximately 250 metres walking distance to the proposed access at O'Connell Street.
<p><i>Road Design</i></p> <p>1) Connections between roads</p> <p>a) The minimum distance from an access place or road to a collector road shall be 60m if the junction is on the same side of the road or 40m if the junction is staggered on opposite sides of the road.</p> <p>b) Intersections shall be either T junctions or roundabouts.</p> <p>2) Controls – road capacity</p> <p>a) A share-way shall serve a maximum of 8 single dwelling allotments, or 6 single dwelling allotments</p>	

Provision	Comment
<p>if it is a cul-de-sac.</p> <p>b) An access place serving allotments greater than 400m² shall serve a maximum of 24 single dwelling allotments.</p> <p>c) An access place serving allotments less than 400m² shall serve a maximum number of 30 allotments.</p> <p>d) An access street shall serve a maximum of 200 single dwelling allotments or generate no more than 1,500 vehicle movements per day based on an average of 7 vehicle movements per dwelling unless a lower rate can be demonstrated. Lower rates may be applied to multi dwelling housing.</p>	

D2 Residential Development

As discussed in Section 7.4 of the SEE, the residential controls provided under D2 of the DCP do not anticipate the housing typologies considered appropriate for the site.

Accordingly, a summary of the provisions of the DCP and the proposed controls are provided below.

TABLE 1 – RESIDENTIAL BUILT FORM CONTROLS

Heading	General	Secondary Dwelling	Multi Dwelling Housing	Dual Occupancy
Minimum Lot size	400sqm	450sqm		
Front Setback	5.5m or 3m on secondary frontages on corner lots		5.5m	6m
Rear Setback	4-6m		6m	6m
Side Setback	5.5m			
Solar Access	Demonstrate that dwellings meet acceptable solar standards and that existing neighbouring and proposed private open spaces receive adequate solar access			
Landscaping	40%	40%	40%	40%

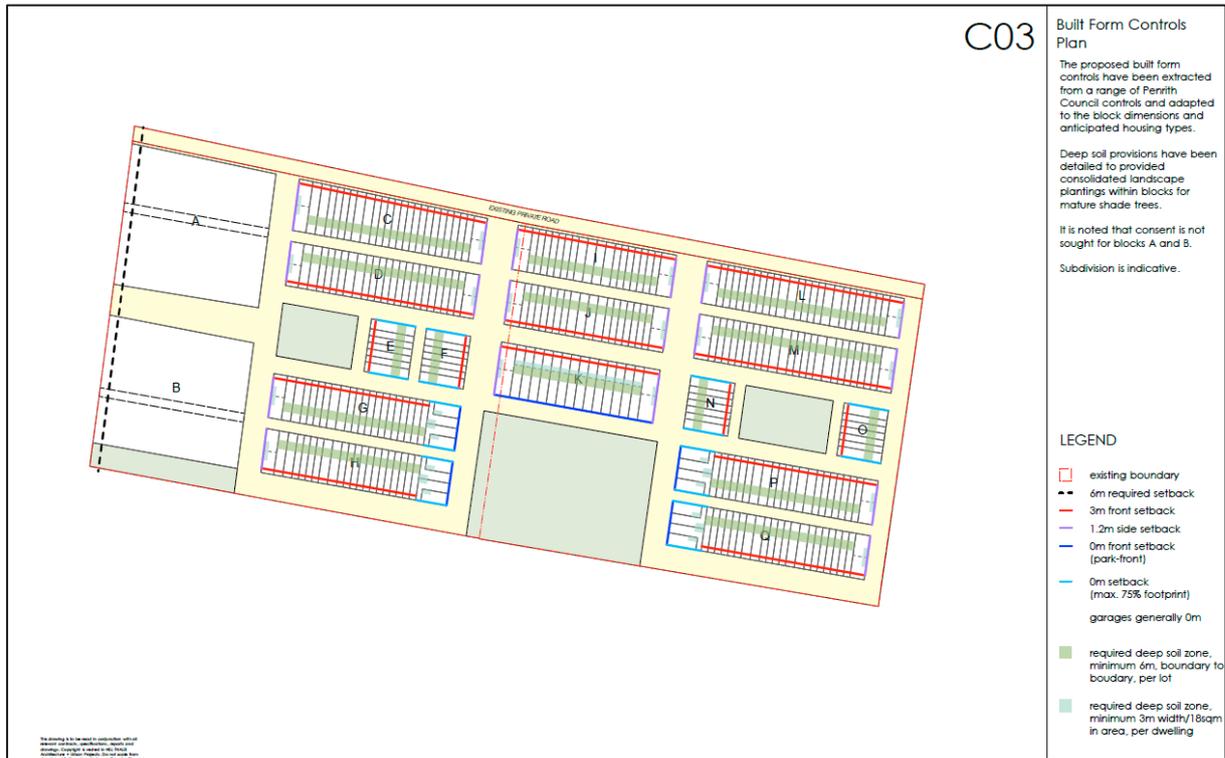
In order for the approach to the Concept Plan to be affective and the smaller strata lot scheme to achieve a functional and appropriate built form with appropriate private open space and amenity, the following variations are envisaged as part of future housing on the site:

- The minimum lot size for a secondary dwelling is 135 to 187sqm.
- Reduced front setback from 6m to 3m for terrace housing (multi dwelling housing).
- Reduced side setbacks from 5.5m to 1.2m on secondary frontages for corner lots.
- 0m setback proposed for park fronting lots.

Dwellings meet acceptable solar standards with dwellings achieving solar access to living areas and with minimal impact to existing neighbouring and proposed private open spaces.

This is discussed further in Section 7.4 and Section 8.1 of the SEE.

FIGURE 1 – PLANNED BUILT FORM CONTROLS



E1 Caddens Precinct

It should be noted that the yield for Lots A and B which are located within the Caddens Town Centre are not included as part of this application. The DCP has been reviewed in context of the street layout and requirements for Concept Plan.

Variations to the street network are discussed in Section 7.4 and Section 8.1 of the SEE.