

4 The proposal

This Section provides a detailed description of the proposal.

4.1 Introduction

The proposal seeks consent from the Minister for Planning for bulk earthworks, infrastructure and subdivision of the Western Precinct of Potts Hill. The subject site is a 'State Significant Site'. The proposal has been developed in accordance with the approved Concept Plan MP 07_0099 and the State Significant Site listing under Schedule 3 of the Major Development SEPP.

This section should be read in conjunction with the plans and documentation provided at **Appendix A to W**.

4.2 Project overview

Major Project MP 08_0116 seeks consent from the Minister for Planning for Stage 2 Civil Works on the Western Residential Precinct of the Potts Hill development for the following staged subdivision and works:

- Three (3) stage subdivision of the subject site into 225 lots to accommodate a maximum 450 dwellings, including:
 - 217 low density residential lots;
 - Two (2) medium density residential lots;
 - Six (6) lots for open space;In the following three (3) stages:
 - Stage 1 – Lots 1 to 165 including one (1) medium density lot and Brunker Road Park.
 - Stage 2 – Lots 201 to 317 including linear Cooper Road Park and Canal Park.
 - Stage 3 – Lots 401 to 441 including two (2) lots for stormwater detention basin; and one (1) medium density lot.
- Dedication of roads, stormwater infrastructure and public domain areas to Bankstown City Council at registration of the subdivision plans.
- Site establishment works including:
 - The provision of site office and amenities during construction;
 - Compounds for materials and equipments; and
 - Sheds and bunded areas for storage of materials.

These temporary structures are most likely to be located on the subject site, close to the existing Cooper Road entrance. Other site-wide proposed works include:

- The installation of erosion and sediment control measures;
- Any agreed environment monitoring equipment required; and
- Relevant construction traffic controls.

- Bulk earthworks (in stages) including:
 - Total earthworks movement to prepare site for urban uses in excess of 350,000 cubic metres;
 - Earthworks to result in an approximate surplus of 250,000 cubic metres of material (storage of material most likely to be retained on Sydney Water lands. This is subject to ongoing discussions).
 - Stockpiling of excavated material;
 - Off-site disposal of a small proportion of surplus materials;
 - Compaction, regrading and remodelling of the site; and
 - Traditional cut and fill to make lots suitable for development.
 - Construction of retaining walls where required along the boundaries of the site.
- Striping and stockpiling works, including:
 - Removal, treatment and disposal (if and when required) of noxious weeds, surface grass, vegetation (as approved), building waste; and
 - Striping and stockpiling of top soil (as described under bulk earthworks).
- Construction of roads (in stages) and associated infrastructure including:
 - Construction of all roads, laneways and shared zones to be dedicated to Bankstown City Council upon completion of subdivision and associated site works;
 - Street lighting and public domain works including street furniture and associated servicing infrastructure;
 - Cycleway in the existing verge of Cooper Road (not within the site and runs adjacent to properties along Cooper Road); and
 - Road-tie-in works to Cooper Road (roundabout and 'T' intersection) and Brunker Road (modified seagull intersection).
- Embellishment and construction of all public domain areas and structures (in stages) including:
 - Revegetation/enhancement of remnant native vegetation in Brunker Road Park;
 - Embellishment of public domain areas in accordance with the Public Domain Plans provided at **Appendix S**; and
 - Construction of all public domain structures in accordance with the public domain plans, including community kitchen facilities, barbeque areas, paths, walking and cycling tracks, shade structures and street/public domain furniture.
- Establishment of all stormwater quality management and on-site detention facilities, to be dedicated to Bankstown City Council including:
 - Stormwater drainage network;
 - Three (3) stormwater detention basins in accordance with the Concept Civil Design Plans provided at **Appendix I**; and

- Bio-retention swales in Brunker Road Park in accordance with the Public Domain Plans provided at **Appendix S**.
- Provision of servicing infrastructure to residential lots including:
 - Potable (drinkable) and recycled water (dual pipe system);
 - Gas;
 - Sewerage;
 - Electricity; and
 - Telecommunications.

Detailed plans and drawings will be prepared prior to the issue of a Construction Certificate.

- Landscaping and bush regeneration works, including:
 - Bush regeneration over a number of years in the batter area near Brunker Road Park.
 - Planting of street trees along roads and at entry points.
- Appropriate security and residential fencing to the retained lands and surrounding residential properties.
- Site disestablishment works including:
 - Removal of site offices, sheds, amenities, compounds and rehabilitation of those areas.

Future planning applications

Future planning applications will be required for the following works:

- The development of individual residential dwellings and medium density residential development (either as Complying Development or a Development Application to Bankstown City Council).

4.3 Plans and drawings

This section provides a schedule of drawings that have been referred to in the preparation of this Environmental Assessment. The schedule is provided in **Table 4**. Reduced copies of these plans are attached as Appendices to this document (as referred to throughout the Environmental Assessment). Full size copies of these plans are provided with the Major Project application under separate cover.

Table 4 Schedule of plans and drawings

Drawing number	Description	Prepared by	Issue	Date
Civil and stormwater infrastructure drawings				
600246-001	COVER SHEET AND DRAWING SCHEDULE	Cardno Limited	2	13 November 2009
600246-002	GENERAL NOTES	Cardno Limited	2	13 November 2009
600246-010	SITE PLAN	Cardno Limited	2	13 November 2009
600246-011	GENERAL ARRANGEMENT PLAN – 1 OF 2	Cardno Limited	2	13 November 2009
600246-012	GENERAL ARRANGEMENT PLAN – 2 OF 2	Cardno Limited	2	13 November 2009
600246-015	TYPICAL ROAD SECTIONS SHEET 1 OF 2	Cardno Limited	2	13 November 2009
600246-016	TYPICAL ROAD SECTIONS SHEET 2 OF 2	Cardno Limited	2	13 November 2009
600246-017	TYPICAL ROAD SECTIONS SHEET 3 OF 3	Cardno Limited	1	13 November 2009
600246-020	INDICATIVE CUT AND FILL PLAN EXISTING SURFACE TO DESIGN SURFACE	Cardno Limited	2	13 November 2009

Drawing number	Description	Prepared by	Issue	Date
600246-025	INDICATIVE LOT TREATMENT PLAN	Cardno Limited	2	13 November 2009
600246-026	PROPOSED LOT TREATMENT DETAILS SHEET 1 OF 3	Cardno Limited	2	13 November 2009
600246-027	PROPOSED LOT TREATMENT DETAILS SHEET 2 OF 3	Cardno Limited	2	13 November 2009
600246-028	PROPOSED LOT TREATMENT DETAILS SHEET 3 OF 3	Cardno Limited	2	13 November 2009
600246-030	ROAD LONGITUDINAL SECTIONS MC01 CH 0 TO 600	Cardno Limited	2	13 November 2009
600246-031	ROAD LONGITUDINAL SECTIONS MC01 CH 600 TO 758.782 & MC02 CH 0 TO 300	Cardno Limited	2	13 November 2009
600246-032	ROAD LONGITUDINAL SECTIONS MC02 CH 300 TO 600	Cardno Limited	2	13 November 2009
600246-033	ROAD LONGITUDINAL SECTIONS MC02 CH 600 TO 1082.261	Cardno Limited	2	13 November 2009
600246-034	ROAD LONGITUDINAL SECTIONS MC03 CH 0 TO 600	Cardno Limited	2	13 November 2009
600246-035	ROAD LONGITUDINAL SECTIONS MC03 CH 600 TO 1053.771	Cardno Limited	2	13 November 2009
600246-036	ROAD LONGITUDINAL SECTIONS MC04, MC05, MC06, MC07 & MC08	Cardno Limited	2	13 November 2009
600246-037	INDICATIVE TRAFFIC CONTROL LOCATIONS	Cardno Limited	2	13 November 2009
600246-040	CATCHMENT PLAN	Cardno Limited	2	13 November 2009
600246-041	DETENTION BASIN No. 1 PLAN & DETAILS	Cardno Limited	2	13 November 2009
600246-042	DETENTION BASIN No. 2 ARRANGEMENT PLAN	Cardno Limited	2	13 November 2009
600246-043	DETENTION BASIN No. 2 DETAILS	Cardno Limited	2	13 November 2009
600246-044	DETENTION BASIN No. 3 PLAN	Cardno Limited	2	13 November 2009
600246-045	DETENTION BASIN No. 3 DETAILS	Cardno Limited	2	13 November 2009
600246-050	CONCEPT SEWER LAYOUT SHEET 1 OF 2	Cardno Limited	2	13 November 2009
600246-051	CONCEPT SEWER LAYOUT SHEET 2 OF 2	Cardno Limited	2	13 November 2009
600246-052	CONCEPT POTABLE WATER LAYOUT	Cardno Limited	2	13 November 2009
600246-053	CONCEPT STORMWATER LAYOUT SHEET 1 OF 2	Cardno Limited	2	13 November 2009
600246-054	CONCEPT STORMWATER LAYOUT SHEET 2 OF 2	Cardno Limited	2	13 November 2009
600246-055	EROSION AND SEDIMENT CONTROL PLAN SHEET 1 OF 2	Cardno Limited	2	13 November 2009
600246-056	EROSION AND SEDIMENT CONTROL PLAN SHEET 2 OF 2	Cardno Limited	2	13 November 2009
600246-057	EROSION AND SEDIMENT CONTROL – DETAILS	Cardno Limited	2	13 November 2009
Public Domain Landscape Drawings				
Page 12	LANDSCAPE MASTERPLAN (LANDSCAPE CONCEPT REPORT)	Place Design Group	-	16 November 2009
Page 15	CANAL PARK LANDSCAPE CONCEPT PLAN (LANDSCAPE CONCEPT REPORT)	Place Design Group	-	16 November 2009
Page 16	CANAL PARK INDICATIVE 3D ARTIST'S IMPRESSION (LANDSCAPE CONCEPT REPORT)	Place Design Group	-	16 November 2009
Page 17	CANAL PARK LONG SECTION (LANDSCAPE CONCEPT REPORT)	Place Design Group	-	16 November 2009
Page 19	COOPER ROAD AND LINEAR PARK LANDSCAPE CONCEPT PLAN (LANDSCAPE CONCEPT REPORT)	Place Design Group	-	16 November 2009
Page 20	LINEAR PARK LONG SECTION (LANDSCAPE CONCEPT REPORT)	Place Design Group	-	16 November 2009
Page 21	COOPER ROAD AND LINEAR PARK CROSS SECTIONS (LANDSCAPE CONCEPT REPORT)	Place Design Group	-	16 November 2009
Page 23	BRUNKER ROAD PARK AND BASIN LANDSCAPE (LANDSCAPE CONCEPT REPORT)	Place Design Group	-	16 November 2009
Page 24	BRUNKER ROAD PARK CROSS SECTIONS (LANDSCAPE CONCEPT REPORT)	Place Design Group	-	16 November 2009

Drawing number	Description	Prepared by	Issue	Date
Page 26	STREETSCAPE TREE PLANTING PLAN (LANDSCAPE CONCEPT REPORT)	Place Design Group	-	16 November 2009
Page 27	STREETSCAPE SECTIONS (LANDSCAPE CONCEPT REPORT)	Place Design Group	-	16 November 2009
Page 28	BOUNDARY EDGE TREATMENTS KEY PLAN (LANDSCAPE CONCEPT REPORT)	Place Design Group	-	16 November 2009
Page 29	BOUNDARY EDGE TREATMENTS SECTIONS (LANDSCAPE CONCEPT REPORT)	Place Design Group	-	16 November 2009
Page 30	BOUNDARY EDGE TREATMENTS SECTIONS (LANDSCAPE CONCEPT REPORT)	Place Design Group	-	16 November 2009
Page 31 & 32	INDICATIVE PLANTING SCHEDULE (LANDSCAPE CONCEPT REPORT)	Place Design Group	-	16 November 2009
Subdivision drawings				
600246 SA-101	PLAN OF PROPOSED STAGE 1 SUBDIVISION OF PROPOSED LOT 106 IN A PROPOSED SUBDIVISION AT COOPER ROAD, POTTS HILL (SHEET 1 OF 2)	Cardno Limited	B	12 November 2009
600246 SA-102	PLAN OF PROPOSED STAGE 1 SUBDIVISION OF PROPOSED LOT 106 IN A PROPOSED SUBDIVISION AT COOPER ROAD, POTTS HILL (SHEET 2 OF 2)	Cardno Limited	B	12 November 2009
600246 SA-201	PLAN OF PROPOSED STAGE 2 SUBDIVISION OF PROPOSED LOT 106 IN A PROPOSED SUBDIVISION AT COOPER ROAD, POTTS HILL (SHEET 1 OF 3)	Cardno Limited	B	12 November 2009
600246 SA-202	PLAN OF PROPOSED STAGE 2 SUBDIVISION OF PROPOSED LOT 106 IN A PROPOSED SUBDIVISION AT COOPER ROAD, POTTS HILL (SHEET 2 OF 3)	Cardno Limited	B	12 November 2009
600246 SA-203	PLAN OF PROPOSED STAGE 2 SUBDIVISION OF PROPOSED LOT 106 IN A PROPOSED SUBDIVISION AT COOPER ROAD, POTTS HILL (SHEET 3 OF 3)	Cardno Limited	B	12 November 2009
600246 SA-301	PLAN OF PROPOSED STAGE 3 SUBDIVISION OF PROPOSED LOT 106 IN A PROPOSED SUBDIVISION AT COOPER ROAD, POTTS HILL (SHEET 1 OF 3)	Cardno Limited	B	12 November 2009
600246 SA-302	PLAN OF PROPOSED STAGE 3 SUBDIVISION OF PROPOSED LOT 106 IN A PROPOSED SUBDIVISION AT COOPER ROAD, POTTS HILL (SHEET 2 OF 3)	Cardno Limited	B	12 November 2009
600246 SA-303	PLAN OF PROPOSED STAGE 3 SUBDIVISION OF PROPOSED LOT 106 IN A PROPOSED SUBDIVISION AT COOPER ROAD, POTTS HILL (SHEET 3 OF 3)	Cardno Limited	B	12 November 2009

4.4 Numerical overview

A numerical overview of the proposed development is provided in **Table 5** below.

Table 5 Numerical overview

Total site area (Western Precinct)	23.08 hectares
Residential development area	12.51 hectares
Open space area	5.02 hectares
Shared zone area	0.43 hectares
Road area	4.88 hectares
Stormwater Basin 1	0.24 hectares
Total number of lots	225
Single residential lots	217
Medium density residential lots	2
Public domain/ open space lots to be dedicated to Council	6

4.5 Environmental Sustainable Development (ESD)

This section of the report provides an overview of the development in regards to the five accepted ESD principles used by the NSW Department of Planning in the assessment of projects.

The Integration Principle

The proposal integrates social, environmental and economic factors. These factors have informed the design and development of the proposal and are discussed in detail throughout this report. This has been achieved through State and local government and community consultation, mitigation against the impacts of the proposed works and the assessment of key issues identified by the Director-General's Requirements in **Section 7** of this report.

Precautionary Principle

No part of this proposal will cause any serious or irreversible environmental damage. The likely environmental impacts of the proposed works have been assessed throughout this report and in the attached documentation.

Inter-generational Principle

As stated under **Section 1.5** of this report, the proposal will have positive economic, environmental and social impacts, resulting in a well maintained and improved site condition for the benefit of future generations. Such benefits include:

- Access to new areas of open space;
- Increase in residential housing choice in the locality; and
- More efficient use of surplus government land.

Biodiversity Principle

The conservation of the biological diversity and ecological integrity of the site is a key component of this application. The proposal is assessed under the relevant ecological and biodiversity protection legislation and appropriate management plans including the Vegetation Management Plan (**Appendix L**) and Preliminary Construction Environmental Management Plan (**Appendix G**), seek to minimise impacts on biodiversity and the ecological environment.

Valuation Principle

The costs and mechanisms of safeguarding, maintaining and revegetating environmental attributes of the site are provided in the Vegetation Management Plan (**Appendix L**) and Preliminary Construction Environmental Management Plan (**Appendix G**).

Other ESD measures

The urban design and planning for the subject site addresses the environmental, economic and social Triple Bottom Line Policy of Landcom.

Energy efficiency is achieved through the orientation and layout of lots and the requirement for all future dwellings to meet BASIX targets.

The site is in close proximity to public transport. Enhanced pedestrian and cycling facilities are proposed through the site, connecting the site to the local and regional pedestrian and cycling networks. Such measures encourage non-vehicular transport methods and reduced resource consumption.

4.6 Urban design and planning principles

This section of the report outlines the key urban design and planning principles that form the basis of this Project Application. The urban design and planning principles include:

- Integrate the site with the surrounding established community and environment.
- Create the opportunity for views to parks, vegetation and heritage elements from the public domain.
- Remodel the land to accommodate urban development.
- Create a high quality public domain.
- Minimise impacts of surrounding development on future occupants of the site.

These principles are described in detail below. An Urban Design Principles drawing is provided at **Figure 16**.

Integrate the site with the surrounding established community and environment.

Public road access, public open space, pedestrian footpaths and a 'shared zone' all form part of the interface between the subject site and the surrounding area. These uses will allow for a publicly accessible existing community/new estate interface, by encouraging public access from Cooper Road and Brunner Road, into the proposed development. This will ensure Potts Hill does not become an enclosed or exclusive community whilst improving local amenity for the existing surrounding community.

Create the opportunity for views to parks, vegetation and heritage elements from the public domain.

To create a level of visual interest and variation between the natural and built environment, the road and subdivision layout has been designed to create terminating or edge views from all roads and public domain areas into parks, vegetation or to the historic house located on the retained Sydney Water land. This also results in casual surveillance to these areas, creating a safe and visually interesting environment.

Remodel the land to accommodate urban development.

The subject site will be remodelled to provide a more appropriate topography for urban development. This will be achieved through remediation and grading of the site to ensure geotechnical stability of the site given the current topographical constraints of the site. The existing topography is uncompacted fill resulting from the construction of the Sydney Water reservoirs. Remodelling of the site will ensure stable, orderly and efficient use of land available for residential and public domain development, compatible with the surrounding urban context.

Create a high quality public domain

The proposal seeks to create a high quality public domain of well landscaped streetscapes and open space. Public open space will accommodate a range of passive and active recreational opportunities with the provision of facilities such as vegetation, paths, sculptural elements, barbecue areas and children's play areas.

Minimise impacts of surrounding development on future occupants of the site.

The northern portion of the site is bounded by the Southern Sydney Freight Line, a freight railway line connecting southwest Sydney to Port Botany. Regular freight services operate on this line, potentially resulting in negative acoustic impacts on future occupants of the northern portion of the subject site.

To mitigate against potential noise impacts, appropriate acoustic control measures have been incorporated into the residential design guidelines to ensure an acceptable degree of amenity is provided to future residents close to the northern boundary of the site.

Urban Design and Planning refinements to Concept Plan

Following the approval of the Concept Plan MP 07_0099 Landcom held an internal Visioning Workshop on the Western Residential Precinct of the Potts Hill development where a number of key concepts emerged. These included the following:

- Creating a sense of place and arrival,
- Creating a gathering place for the greater community at the heart of the development,
- Strong links between the new development and the existing community were considered important,
- A strong linear link park through the development emerged as an important concept to be incorporated.
- Heritage, water and woodland of the site to be celebrated in the design.
- Vistas, quality open space, streetscapes and the street hierarchy should create value from the amenity they add.
- Diverse and innovative housing options are desirable.
- Interfaces and connections beyond the site are important.

The urban design approach to the proposed subdivision reflects the outcomes of the Visioning Workshop particularly by creating a sense of place with a community gathering space at its heart and strong connections to the wider community. There is also a focus on the landscape, maximising the amenity it provides, with a number of very different public green spaces for diversity and interest. The green spaces reflect the nature of the site, from informal and natural to more manicured usable space, as well as those for water retention and treatment, all celebrating water and its movement over the site.

The street layout is structured around providing views towards green space along each street and a green linear park providing the main pedestrian link into the site. Views into the site from Cooper Road are

towards green space as well. The entry from Bruncker Road is adjacent to a significant park with good westerly views.

Importantly the new main park is located at the top of the hill on an attractive flat area with maximum amenity. It capitalises on borrowed views to the woodland to the east, potential distant views to the west, and includes the heritage rail siding, a number of existing significant trees and views to the retained lands. This new open space has been combined with the previously approved triangular open space to create a much more usable orthogonal area.

The linear link park connecting the community to the main park is directly in line with the view of the heritage house on the Sydney Water land. It also provides a direct pedestrian connection for the Sydney Water industrial area staff to the train station. The linear park will have at its lower portion a water detention and treatment park which will be developed as a usable landscaped feature adding to the amenity of this park as well as the north-south street which divides the park.

The street layout is a reflection of its context and the surrounding area which is predominantly a straight orthogonal grid with the main roads running north-south. The streets in the new scheme are based on the Landcom Street Design Guidelines 'local street' with adequate width to include footpaths and street trees on both sides, on-street parking on both sides and a two-way carriageway. Traffic calming is achieved by this design and by intersection and landscaping treatments at selected locations. The northern entry off Cooper Rd will be a celebratory boulevard leading up the hill to the main community open space.

To further enhance the vegetated character of the new development, a dedicated continuous three (3) metre landscaped strip within the new lots backing onto Cooper Road is proposed. The aim of the strip is to enhance the vegetated presentation of the site from Cooper Road and to retain the green backdrop for the residents along Cooper Road currently enjoy as well as to provide additional separation from the new houses backing on to them as these lots will be deeper, including the landscaped zone as well as normal rear setbacks.

A diverse range of housing products is proposed in order to address different demographics and price points. These include detached houses on lots designed to accommodate typical project homes and capable of approval through the Housing Code when over 450m². Some additional lot depth is provided on east-west lots to accommodate the level changes across the site. There are also a range of rear access products proposed including attached townhouses/terraces around the park and a combination of duplexes and manor houses, some with the potential to include accessory dwellings over garages. These will also potentially improve streetscapes by keeping garages out of sight.

The two areas previously approved for medium density Residential development have the potential to include apartments as previously proposed, or other forms of medium density development.

The benefits of the refined subdivision layout and plan are summarised as follows:

- The creation of a 'sense of place';
- The provision of a community 'heart' and gathering space;
- Provision of more usable public open space;
- Better connected into the surrounding community;
- A significantly more green landscaped solution, celebrating context, site, vegetation, water and heritage;
- Layout minimises negative impact of triangular and angled shape of site which is primarily absorbed in making a rectangular open space at the top of the site, allowing streets and lots to be more rational and orthogonal shapes;
- Clearer street layout with a strong hierarchy, compliant with the Landcom Street Guidelines and all streets terminating with views of parks or conservation areas; and
- Presents a vegetated character from Cooper Road.



Figure 16 Urban design principles

The proposal seeks to maximise the amenity of the public domain within the site, and integrate future development with the existing community surrounding the site.



Figure 17 Illustrative Master Plan

The illustrative master plan illustrates the dwelling layout, mix and the overall design of the site including open space, residential areas and roads.

4.7 Subdivision

It is proposed that the site be subdivided in stages into 225 lots in accordance with the subdivision plans provided at **Appendix D** to accommodate a maximum 450 dwellings. The subdivision includes:

- 217 low density residential lots;
- Two (2) medium density lots;
- Six (6) open space lots; and

It is proposed that the subdivision be undertaken over three (3) major stages, as outlined below:

- **Stage 1** – Lots 101 to 168 (southern portion of the site including Brunker Road Park);
- **Stage 2** – Lots 201 to 317 (central portion of the site including Canal Park and Cooper Road Park); and
- **Stage 3** – Lots 401 to 441 (northern portion of the site including northern stormwater detention Basin 1).

The Stage 3 subdivision plan, also illustrating proposed Stages 1 and 2 is provided at **Figure 18** below.

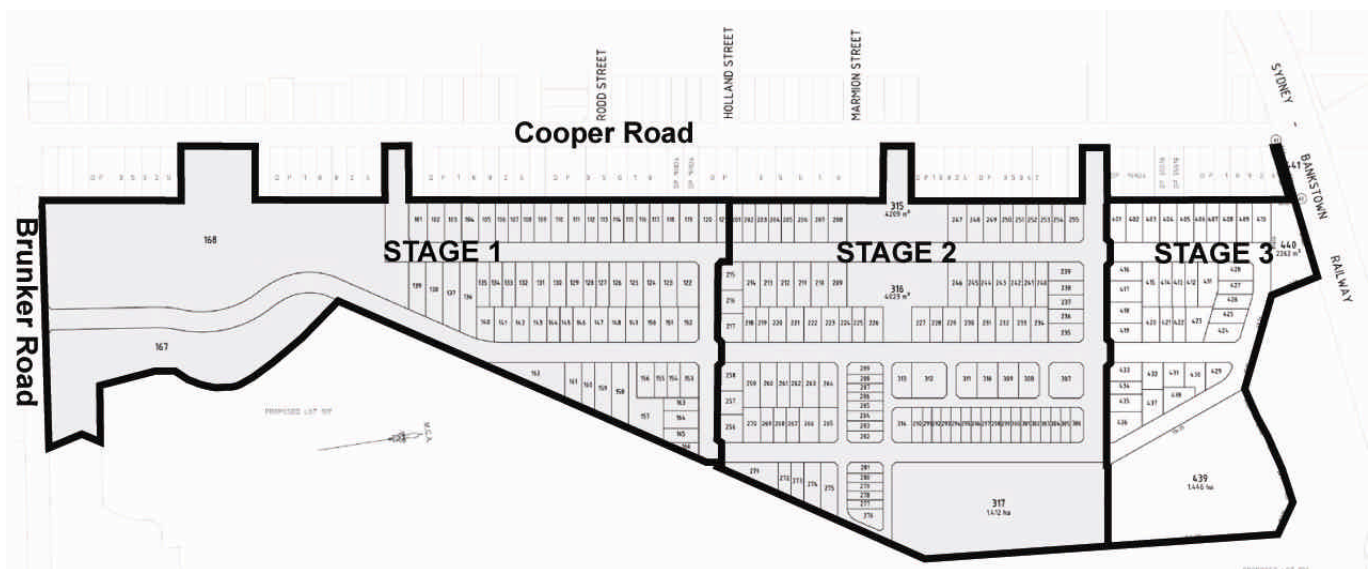


Figure 18 Subdivision and staging plan

This plan illustrates the proposed subdivision and staging plan.

Source: Subdivision plan prepared by Cardno Limited

Notwithstanding the above subdivision staging, Landcom may elect to undertake works on the site in sub-stages.

4.8 Staging of works

It is anticipated that bulk earthworks are likely to occur across the site following completion of demolition and remediation works (subject to a separate Section 75W Modification Application to MP 08_0069_MOD1).

A preliminary estimate of the staging of construction works is provided in the Construction Environmental Management Plan provided at **Appendix G**. The preliminary staging of works is as follows:

1. Site establishment (approximately 1 to 2 weeks) – Involving the facilities and amenities required for construction works. Such facilities are to be located close to the Cooper Road entrance to the site.
2. Stripping and stockpiling (approximately 1 to 2 weeks) – Removal, treatment and disposal of noxious weeds, surface grasses, vegetation (as approved), building waste and stripping of top soil.
3. Earthworks (approximately 22 to 26 weeks) – As described under **Section 4.9** of this report.
4. Subdivision and construction of servicing infrastructure (in accordance with subdivision staging (discussed above), or in sub-stages (approximately 12 months) – Including the construction of linear infrastructure including water supply, sewerage, stormwater, gas, electricity and telecommunications infrastructure; construction of the cycle way along Cooper Road; and construction of roads and road infrastructure including street furniture.
5. Landscaping and bush regeneration (to occur progressively over a period of up to several years) – Including regeneration of vegetation in Brunker Road Park.
6. Site disestablishment (1 to 2 weeks) – Removal of site offices, sheds, amenities, compounds and rehabilitation of those areas.

Staging of site infrastructure works for utilities and services (point No 4 above) are likely to occur in three (3) stages (or sub-stages), generally following the subdivision staging discussed at **Section 4.7** of this report.

Refer to the Construction Environmental Management Plan at **Appendix G**, staging plans provided as part of Concept Civil Design Plans at **Appendix I** and the staged subdivision plans at **Appendix D**.

4.9 Land uses

The proposed subdivision will facilitate the following land uses:

- Residential (12.51 hectares);
- Public Open Space and detention Basin 1 (5.25 hectares); and
- Internal roads and shared zones (5.31 hectares).

The proposed land uses have been approved under the Concept Plan 07_0099 and are permissible under Schedule 3 of the Major Development SEPP.

Residential

The residential uses on the site will comprise a mix of low density housing lots, and two medium density super lots.

The number of low density residential lots totals 217. These lots consist of a mix of 'lot types', including:

- Detached house lots;
- Attached terraces and townhouses;
- Duplexes and Triplexes; and
- In some locations, accessory dwellings.

An additional two (2) lots will accommodate medium density or apartment development.

The residential lots will accommodate a maximum 450 dwellings (in accordance with the approved Concept Plan 07_0099) including 239 low density dwellings and up to 211 medium density dwellings and apartments.

The lot types and mix are discussed in detail under **Section 4.9** of this report and outlined in summary in **Table 7**.

Public open space

Approximately 5.02 hectares of land will be used for public open space. This is greater than the 3.94 hectares of open space approved under the Concept Plan 07_0099, providing an improved public benefit.

The public open space areas include:

- **Canal Park** – located at the central eastern end of the site, adjacent to the retained Sydney Water lands;
- **Cooper Road Park** – Towards the centre of the site, along the pedestrian link between Canal Park and Cooper Road. This park incorporates a stormwater detention basin; and
- **Brunker Road Park** – A large park located in the southern portion of the site. This park includes a series of stormwater detention basins fronting Cooper Road.

An additional 0.23 hectares in the northern portion of the site will be used for stormwater detention.

A description of the public open space lots is provided under **Section 4.10** of this report.

Table 6 outlines the area of the proposed parks under the Concept Plan approval and this application. The proposal provides an additional 1.08 hectares of open space.

Table 6 Area of parks under Concept Plan approval and Project Application

Park	Concept Plan approval	Project Application proposal	Increase in area (sqm) (%)
Canal Park	0.46 hectares	1.412 hectares	0.952 hectares (+207%)
Cooper Road Park*	0.83 hectares	0.82 hectares	-0.1 hectare (-12%)
Brunker Road Park	2.65 hectares	2.783 hectares	0.133 hectares (+5%)
TOTAL	3.94 hectares	5.02 hectares	1.08 hectares (27.4%)

* Note: The area of Cooper Road Park was not committed to as further design studies were required. This area represents the area in-lieu of 3.94 hectares committed to, and the committed areas of Canal Park and Brunker Road under the Preferred Project Report.

Internal roads

An internal road network is proposed for the subject site. Roads will be constructed and dedicated to Council.

A detailed description of the road types is provided under **Section 4.18** of this report. Road details and sections are provided as part of the Concept Civil Design Plans at **Appendix I**.

4.10 Residential lot types and mix

This section provides an overview of the proposed residential lot types.

The proposed residential lot types and mix is outlined in **Table 7** below and illustrated at **Figure 19**.

The Residential Design Guidelines at **Appendix R** provide design guidelines for each lot type.

Table 7 Residential lot types and dwelling mix

Lot type	Number of lots (proportion of total number of lots)	Number of dwellings (proportion of total number of dwellings)
Detached house lots	165 (76%)	165 (36.7%)
Attached terrace and townhouse lot	31 (14.3%)	31 (6.8%)
Duplex lots	16 (7.4%)	32 (7.2%)
Manor home lots	3 (1.4%)	11 (2.4%)
Apartment lots	2 (0.9%)	211 (46.9%)
Total Residential lots	217 (100%)	450 (100%)



Figure 19 Housing lot mix

The proposed subdivision will accommodate a mix of residential lot types including detached single and double garage homes; duplexes; manor homes; terrace houses and apartments.

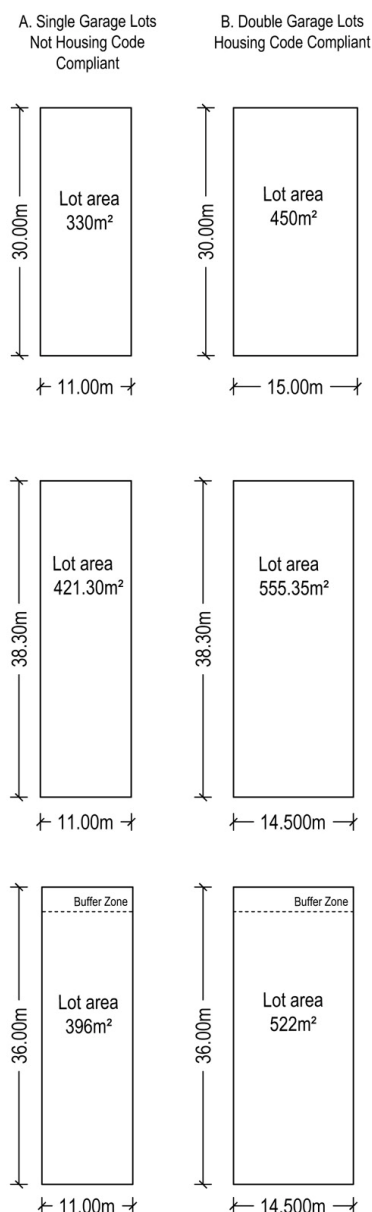


Figure 20 Various types of detached lots
59% of the detached housing lots will be capable of accommodating complying development under the NSW Housing Code.

Detached house lots

A total of 165 lots (76% of total residential lots) will accommodate 165 detached residential dwellings. These lots are provided across the northern and central portions of the site. Detached lot examples from the Residential Design Code at **Appendix R** are illustrated at **Figure 20**.

Detached house lots will accommodate single detached dwellings, and will have depths generally of 30 metres, 36 metres or 38.5 metres. These lots generally range in size from 330sqm to 555sqm and will accommodate a mix of single and double garage houses (approximately 40/60 split).

Generally, single garage lots will not be capable of accommodating residential development that is 'complying development'. These lots generally range in size from 330sqm to 421sqm and have a lot frontage of 11 metres, compared to the minimum 450sqm lot area and 12 metre frontage required for complying development under the NSW Housing Code and State Environmental Planning Policy (Exempt and Complying Development Codes) 2008. As such, development on these lots will require development consent from Bankstown City Council under Part 4 of the EP&A Act.

Double garage lots will generally be capable of accommodating 'complying' residential development. Double garage lots generally range in size between 450sqm to 555sqm with lot frontages of at least 14.5 metres. Accordingly, developments on such lots will not require development consent.

A number of detached house lots are irregular in size given their location within the subdivision. The irregular shaped detached house lots are up to 1168sqm in size.

Of the 165 detached house lots, a total 98 (59%) lots will be capable of accommodating development in accordance with the NSW Housing Code and the Exempt and Complying SEPP, given that their area is greater than 450sqm and the lot frontage is greater than 12 metres.

Attached terraces and townhouses

A total of 31 lots (14.3% of total residential lots) will accommodate 31 townhouse/ terrace dwellings. All lots have rear lane access and are located along Road 6 and 11, opposite Canal Park, and along Road 9, adjacent to the Shared Zone.

Attached terrace house/townhouse lots will generally accommodate dwellings that are attached on one or both sides to another dwelling. These lots will typically be 30 metres deep and between 7.5 metres and 9.5 metres wide. The area of these lots will generally range between 225sqm and 280sqm.

A maximum row of five dwellings may be attached, with setbacks required between each group of dwellings. All terraces or townhouses must be attached on at least one side.

All attached terraces and townhouse lots will have rear lane access, with a double garage located off the rear (secondary) lane/street. Secondary dwellings may be located above selected rear lane garages.

An example of terraces at 'The Ponds' development in North West Sydney is illustrated at **Figure 21** and the types of terraces to be provided on the subject site under the Residential Design Guidelines are illustrated at **Figure 24**. The figures are intended to illustrate the desired character of the townhouses. All housing will be in accordance with the Residential Design Codes at **Appendix R** and subject to separate applications.



Figure 21 Example of terraces

This example of terraces is located at The Ponds development, in North West Sydney. This illustrates the character of development envisioned at Potts Hill

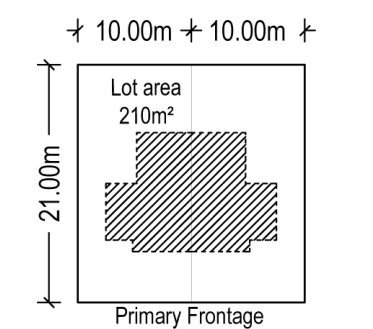


Figure 22 Duplex lot with front access

Duplex lots with front access are generally 20 metres wide by 21 metres deep.

Refer to Residential Design Guidelines prepared by Architectus at **Appendix R**.

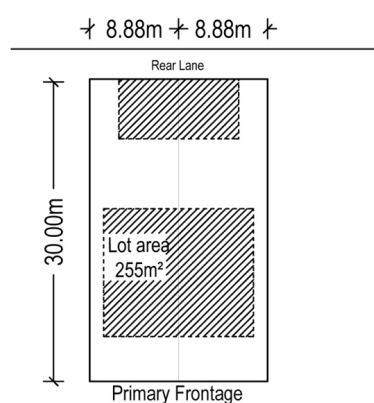


Figure 23 Duplex lot with rear lane access

Duplex lots with rear lane access are generally up to 18 metres wide by 30 metres deep.

Refer to Residential Design Guidelines prepared by Architectus at **Appendix R**

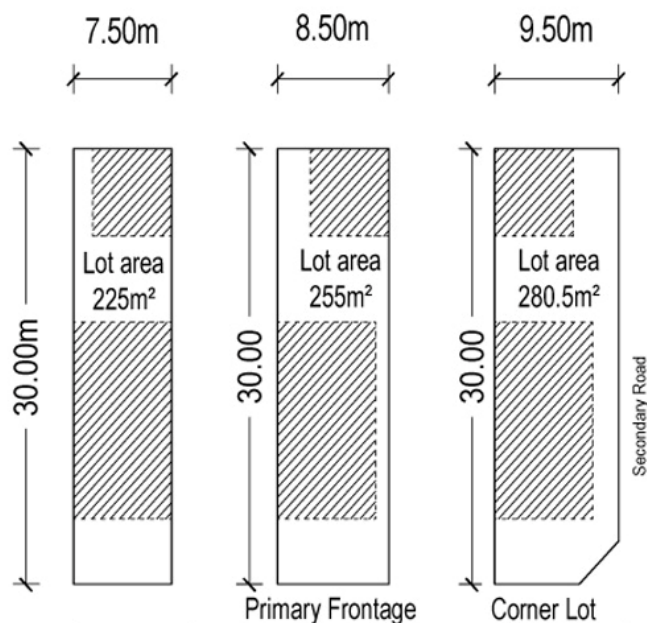


Figure 24 Types of terrace/townhouse lots

Terrace and townhouse lots are attached to adjoining dwellings on one or both sides. All terrace/ townhouse lots will have rear lane vehicular access.

Refer to Residential Design Guidelines prepared by Architectus at **Appendix R**

Duplexes

A total of 16 lots (7.4% of total residential lots) will accommodate 32 duplex dwellings. Duplex lots are located throughout the northern and central portions of the subject site.

Duplex lots will be provided to maintain the low density character of the area, whilst providing for more affordable housing product. Duplex lots will accommodate two dwellings per lot, with the land area for each dwelling generally ranging between 210sqm to 270sqm with widths ranging between 8.9 metres and 10 metres, and depths between 21 metres and 30 metres. Some corner lots may be wider.

Duplex lots with either front or rear access will be provided.

The two types of duplex lots (rear access and front access) are illustrated at **Figure 22** and **Figure 23**.

Manor homes

A total of three (3) manor home lots will provide up to 11 residential dwellings. One manor home lot of four attached dwellings is located in the area bounded by Roads 1, 8, 8A and 3; another lot of four dwellings is located in the area bounded by Roads 8B, 8, 9 (and the shared zone) and 3; and a third manor home lot is located in the central portion of the site with access to Road 3.

Manor homes comprise three or four attached Torrens Title dwellings, combined into one building to appear as one single large house. Generally, a four dwelling manor home will have lot dimensions of 30 metres by 30 metres.

Such dwellings will generally be provided with rear lane access (double or single garages).

An indicative manor lot layout is provided at **Figure 25**.

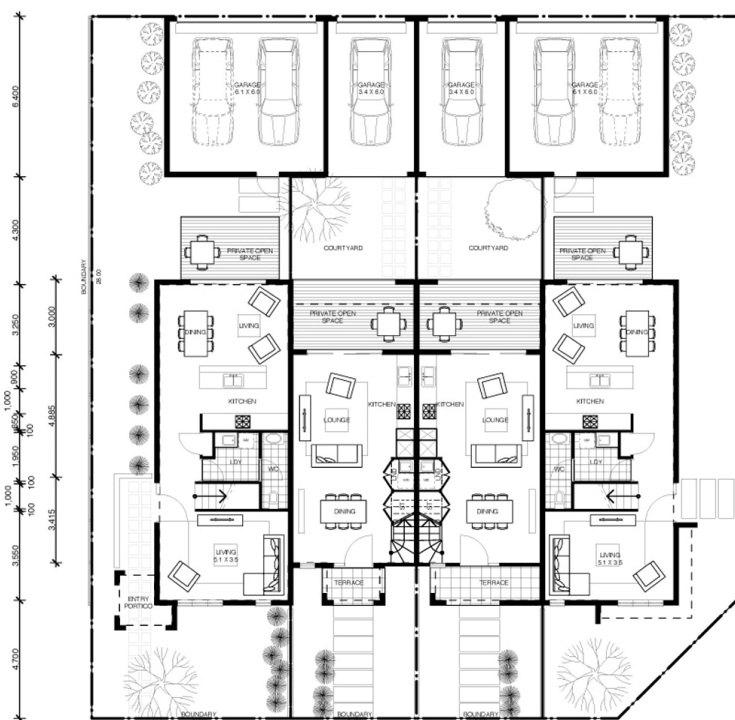


Figure 25 Indicative manor home layout

Manor homes will generally accommodate three or four dwellings, combined into one building, with rear lane access as shown in the indicative layout above.

Refer to Residential Design Guidelines prepared by Architectus at **Appendix R**

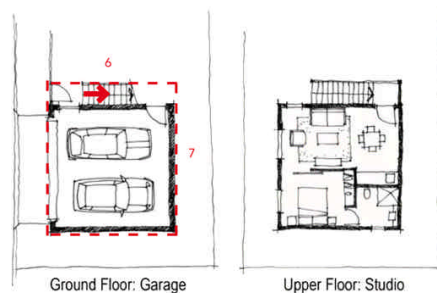


Figure 26 Secondary dwelling layout

Secondary dwellings are located above double garages and are accessible off rear lanes.

Refer to Residential Design Guidelines prepared by Architectus at **Appendix R**

Secondary dwellings

Secondary dwellings are located above selected double garages on rear lanes. These dwellings will form part of the same lot as the main residence and will not be titled separately.

These dwelling types will allow for passive surveillance to the laneways, provide housing diversity and affordable housing options and add visual interest to the laneways.

Secondary dwellings will generally be 6 metres by 7 metres and have an area of at least 38sqm.

An example of secondary dwellings is illustrated at **Figure 27**. An indicative floor plan of a secondary dwelling is provided at **Figure 26**.



Figure 27 Example of secondary dwellings

This example of secondary dwellings is located at the Park Central development in South West Sydney. Secondary dwellings are located above double garages.

Housing affordability strategy

The Strategic Social Plan provided at **Appendix U** outlines the advantages of providing affordable housing products on the subject site. These include:

- The site is well located, close to public transport, services and job opportunities;
- The surrounding area has a highly diverse range of housing types, tenure and pricing;
- The Bankstown LGA is considered a high need area by Housing NSW.

The proposed housing mix on the subject site will encourage a mix of future residents. Small lot housing, apartments and secondary dwellings support more affordable housing choice.

The housing and lot mix has been informed by the Draft Housing Diversity Guide, currently being prepared by Landcom. The Guide sets out key considerations in planning and designing subdivisions for affordability and diversity. These factors include:

- Providing a mix of housing and land sizes;
- Place small lots close to open space; and
- Appropriate lot orientation for energy efficiency and solar access.

The proposed subdivision and housing layout will provide a diverse housing range, supporting the objectives of Landcom's Housing Diversity Guide. The range of houses to be provided in the subject site range from secondary dwellings (granny flats), apartments, townhouses/villas and manor homes (detailed above).

In addition to the proposed housing mix which will result in affordable housing options, the following will also be taken into consideration at the residential development stage, upon recommendation of the Strategic Social Plan provided at **Appendix U**:

- Appropriate sites in the subject site be investigated and identified to tender to community housing providers for the provision of affordable rental housing.
- Northern medium density site may be tendered to registered aged care providers for the provision of aged housing.
- Depending on the delivery model proposed, Landcom in consultation with builders, may facilitate the provision of some housing products which meet universal housing requirements.

The proposed housing mix and further investigation into the above recommendations will assist in providing more affordable and appropriate housing to meet the needs of the community. Further work will be required to ensure that an appropriate proportion of affordable housing price points are achieved.