

7.0 Issues

7.1 Height and Urban Design Considerations

The proposed development has been designed to achieve a desirable urban design outcome for the development of this site in the manner contemplated by *RLEP 2010* and Part 4.2 of *DCP 2010* in the context of the desired future character of the area established by the adjoining contemporary mixed-use development on 82-102 Belmore Street.

The design has been formulated following pre-application consultations held with Council's officers, its Pre-Lodgement Panel and its Design Review Panel on 11 December 2009 and 31 March and 6 May 2010.

The development has been designed with modulated and articulated elevations, both vertically and horizontally, and architectural elements and finishes that will create an attractive and interesting streetscape element when viewed from both Porter and Belmore Streets and will significantly enhance the streetscapes in this locality.

The buildings have been designed to provide a satisfactory and appropriate juxtaposition between them and the approved buildings on adjoining and surrounding properties.

No significant trees need to be removed to facilitate the proposed development.

The proposal is to incorporate improvements in the public domain, including the establishment of a public footpath between Belmore and Porter Streets, the renewal of footpaths and street tree planting.

The buildings are to be of a scale and setback that provides a satisfactory interface with surrounding properties and the public domain in both Porter and Belmore Streets.

Shadow diagrams for the winter solstice have been prepared in respect to the proposal and this analysis indicates that the proposal will not unreasonably or unduly overshadow adjoining or surrounding properties.

The proposal will not have any significant effect on the amenity of surrounding properties in terms of overshadowing, loss of privacy, view loss or visual impact.

The proposal is, in fact, likely to significantly enhance the amenity of the area by:

- the removal of obsolete industrial development from the site; and
- their replacement with a development consistent with the desired future character of development in this locality.

Clause 4.3(2) of *RLEP 2010* provides for a building height standard of 15.5m.

The objectives of this standard are:

- to maintain desired character and proportions of a street within areas;
- to minimise overshadowing and ensure a desired level of solar access to all properties;
- to enable the built form in denser areas to create spatial systems that relate to human scale and topography;

- to enable focal points to be created that relate to infrastructure such as train stations or large vehicular intersections; and
- to reinforce important road frontages in specific centres.

The proposed buildings are to have a building height of up to 19.3m.

Clause 4.6(2) of the *Plan* enables consent to be issued for development that varies from the height standard if it can be demonstrated that:

- compliance with the standard is unreasonable or unnecessary in the circumstances of the case; and
- there is sufficient environmental planning grounds to justify the variation.

In addition, Part 4.2 of *DCP 2010* contains Section E which specifies building heights along both Porter and Belmore Streets and the number of storeys to be contained in buildings which, in this area, is between four (4) and five (5) storeys.

The objectives of the height controls in *DCP 2010*, expressed in Section 4.2 - Architectural Characteristics of Part 4.2, are:

- to protect views to and from the Parramatta River and foreshore, and of the Meadowbank ridgeline to the north;
- to protect and reflect the existing built scale of the *MEA*; and
- to optimise views from and through sites to vistas of the Parramatta River and beyond.

Section E in Part 4.2 of *DCP 2010* indicates building heights:

- rising progressively with the topography of land in this area from RL 23.2 to RL 40.3 along Belmore Street and from RL 26.7 to RL 39.3 along Porter Street from Wells Street to the northern boundary of 82-102 Belmore Street, the land immediately to the south of the site; and
- up to RL 39.3 and RL 40.3 on 82-102 Belmore Street adjacent to its common boundary with the site.

The buildings nearing completion on 82-102 Belmore Street have been approved and constructed to a height of RL 41.3.

While the height controls in Part 4.2 indicate a maximum building height of five (5) storeys on 82-102 Belmore Street, buildings with a height of up to seven (7) storeys have been approved and constructed on that land as a result of a voluntary planning agreement that has been entered into by the developer of that land and Council in accordance with Section 3 of Part 4.2 of *DCP 2010*.

Section 3 specifically provides for a variation of the *Plan*'s height controls in circumstances where a planning agreement is entered into to provide a public benefit.

Section E indicates that buildings on the site the subject to this application should be restricted to between RL 35.1 and RL 36.1, i.e. between 5.2m and 6.2m below the existing and approved buildings on 82-102 Belmore Street.

Such a height variation would be jarring from an urban design and streetscape perspective.

This application seeks to achieve:

- a desirable urban design outcome for the development of this land;
- a degree of consistency in the form of contemporary development in this area when viewed from both Porter Street and Belmore Street; and
- buildings of a height consistent with that of the recently completed buildings on 82-102 Belmore Street.

Plan No.Sk12f to be submitted with the application provides a streetscape analysis of the approved and proposed development on this land in the context of the existing development on 82-102 Belmore Street.

To achieve this urban design outcome, the applicant is offering to enter into a voluntary planning agreement with Council for:

- the transfer of a stratum of the land adjacent to the site's northern and Porter Street boundaries, with an area of 499m², to Council, free of cost, for a public pathway;
- the construction of the pedestrian pathway on that land which links Belmore and Porter Streets in accordance with Council's public domain guidelines to make it an integral part of the Council's pedestrian network;
- the re-construction of the pathway through Hayes Reserve in accordance with Council's public domain guidelines to provide a continuous, convenient and consistently presented public pathway connecting Belmore Street to Church Street;
- the maintenance of the pathway through the site for a period of ten (10) years; and
- the payment of cash contributions as required by Council's *Section 94 Contribution Plan No.1 (2003 Amendment)*.

This agreement will result in the creation of a significant public benefit with the establishment of the public access infrastructure linking Belmore Street to Church Street in the manner fostered and promoted in *DCP 2010*.

The buildings proposed in this application:

- will contribute to the desired future character of this area as contemplated by *RLEP 2010* and *DCP 2010*;
- will complement and reflect the scale of the buildings nearing completion on the land immediately adjoining the site to the south on 82-102 Belmore Street to produce a united and cohesive urban design outcome for development in this area;
- will not have any undue or unreasonable effect on the level of solar access enjoyed on surrounding properties; and
- will not have any effect on views to and from the Parramatta River and its environs or of the Meadowbank ridgeline to the north of site.

In this context, the proposed buildings will meet the objectives of the height controls contained in both *RLEP 2010* and *DCP 2010*, despite varying from their numerical values, and will provide a satisfactory and appropriate urban design response to development of the land.

The public benefit arising from the significant improvement in the access infrastructure serving the area as a result of the proposed voluntary planning agreement provides an added justification for the variation of the height standard and controls on environmental planning grounds.

In these circumstances, the height standards contained in *RLEP 2010* and the height controls contained in *DCP 2010* are unreasonable and unnecessary and there is sufficient environmental planning grounds to approve the application in accordance with the provisions contained in those *Plans*.

7.2 Access, Traffic and Parking

A traffic and parking assessment of the proposal has been carried out by Varga Traffic Planning Pty Ltd, Transport, Traffic & Parking Consultants, a copy of which is to be submitted with the application.

The assessment indicates that:

- two-way traffic flows in Well Street, east of Porter Street, are typically in the order of 500 vehicles/hour (*vph*) during the morning peak and 860 *vph* during the afternoon peak period;
- two-way traffic flows in Porter Street are typically in the order of 190 *vph* during the morning peak and 250 *vph* during the afternoon peak period;
- two-way traffic flows in Junction Street are typically in the order of 270-370 *vph* during peak periods;
- based on the traffic generation rates contained in the Roads and Traffic Authority of NSW's *Guide to Traffic Generating Developments, October 2002*, the development is expected to generate 31 vehicle trips/hour (*vtph*) during peak periods;
- discounting the volume of traffic which could reasonably have been expected to be generated by the former use of the site using the RTA's *Guide*, the proposal is expected to result in an increase in traffic generation by some 11 *vtph* during peak periods;
- an assessment of impact of the development on the performance of the Porter/Well Street and the Porter/Junction Street intersections using the INTANAL software program indicates that the intersections currently operate at a *Level of Service A*, with a total average vehicle delay in the order of 3 seconds/vehicle, and will continue to operate with this degree of efficiency;
- the application of the car parking requirements contained in Part 9.3 - Car Parking of *DCP 2010* requires one hundred and ten (110) car parking spaces to be provided on the site and the proposal is to incorporate one hundred and eleven (111) spaces;

5. Meadowbank

5.1 Analysis of Existing Character

5.1.1 Introduction to the Meadowbank Town Centre

Meadowbank is located in the City Of Ryde local government area approximately 14 km west of Sydney. It is strategically located near several of Sydney's centres of economic activity. It lies midway between the Sydney CBD and Parramatta, and close to Sydney Olympic Park and the Rhodes commercial precinct. The area is a gateway into Ryde.

This public domain plan applies to the Meadowbank town centre as shown in Figure 1. It extends from Meadow Crescent west of the Northern Rail Line to Church Street on the east. It is bounded by Constitution Avenue and Junction Street to the north and fronts the Parramatta River to the south.

Meadowbank has a unique and evolving character when compared to the other town centres in the City of Ryde. It is undergoing a fundamental change from an industrial area to an urbanised, predominantly residential area. However, it is not a dormitory suburb. Meadowbank is developing the commercial, retail and public facilities that an active urban residential suburb requires. The changes to the built form and the public domain are occurring rapidly. However, it retains much of its old character and remains an employment area.

Meadowbank is relatively unaffected by the major roads and associated traffic that characterise the other town centres in the City Of Ryde. However, the original small retail centre on Constitution Road is divided by the Northern railway line. Most of the changes in Meadowbank are occurring on the eastern side of the railway in the Meadowbank Employment Area (MEA).

The Public Domain Manual complements the Ryde LEP120 and the DCP Part 4.2 – Meadowbank Employment Area and it should be read in conjunction with these planning instruments.

5.1.2 Historical Overview of the Meadowbank Town Centre.

Land originally granted to Surgeon William Balmain in 1794, in the district of the Field of Mars, was given the name 'Meadow Bank'. By 1819 both the 'Meadow Bank Estate' and 'Chatham Farm' to the north, belonged to John Bennett. In 1823 he was joined by his nephew William Bennett. John Bennett died in July 1829, a bachelor, and his nephew inherited his estate, building Meadowbank House around 1835. The opening of the railway from Strathfield to Hornsby in 1886 provided impetus for development in the area. The estate was subdivided in the late 1880's either side of the railway line.

East of the railway line Meadowbank developed into an important industrial and manufacturing centre for the Sydney region because of its good rail, road and harbour links. This started with the Meadowbank Manufacturing Company in 1890. The 1950's began a renewal of Meadowbank as a manufacturing precinct with companies such as the Hoover establishing factories in the area.

The latter part of the 20th century saw a decline of the heavy industrial and manufacturing businesses. This was caused by several factors including increases in land values, competition from other areas, a loss of transport amenity and a general reduction in local manufacturing.

West of the railway line remained residential and in the 1950s and 1960s developed into a medium density housing precinct. These buildings remain largely intact.

A commercial/ retail centre developed on Constitution Road either side of the railway station. This remained a small local centre due to the proximity of the nearby West Ryde and later Top Ryde shopping centres.

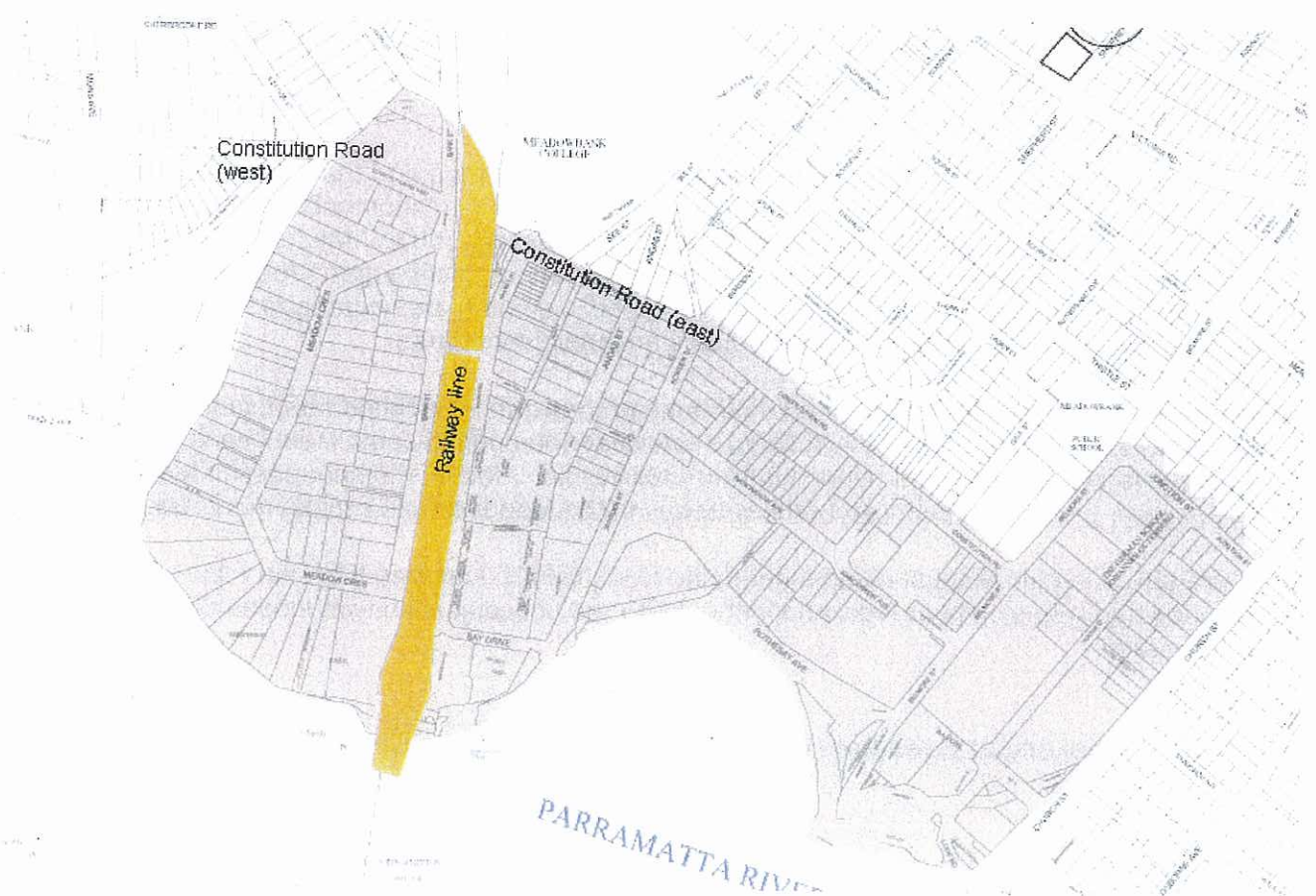


Figure 1. Extent of Public Domain Plan

5.1.3 Existing Character

Built environment

The Meadowbank area still contains a large number of post world war two industrial buildings that have dominated and contributed to so much of the character of the area. Many of these are vacant or underutilised. The area is characterised by large footprint low rise industrial buildings with an infill of smaller footprint buildings housing smaller light industrial businesses. The oldest building on the site is the former Hoover Building, a handsome Deco style low rise rendered building. There is no consistency in style or quality throughout Meadowbank.

Medium density residential buildings now feature significantly near the foreshore. These residential areas include retail and commercial components and there is now an active local shopping centre at Bay Drive. The built forms vary in height from four to seven storeys, stepping down to the water. The buildings are similar in style, characterized by large balconies with a mixture of face brick and render. While the form of the buildings are broken up when viewed from the north and south (largely as a result of view sharing to the water), the buildings appear 'long' when seen from the east or west.

Outside the Employment area the Meadowbank Campus of the Northern Sydney Institute of TAFE is a substantial contributor to the character of the local area. The location of the TAFE adjacent to the railway station makes it accessible to public transport. West of the railway, the residential area consist mainly of 3 storey walk-ups dating from the 1960's.

There has recently been significant upgrade of the public domain in Meadowbank particularly around the foreshore. This has resulted in a series of high quality public spaces that have made the foreshore more accessible to the local community. These spaces are linked to existing parks west of the railway.

Destinations, Topography and Views

The primary destinations for visitors to Meadowbank are the employment areas and the TAFE College. The open spaces around the foreshore are increasingly becoming destinations for visitors and residents alike. Other important destinations include:

- The retail facilities and restaurants at Bay Drive.
- The railway station
- The ferry wharf
- The shops on Constitution Road

The topography of Meadowbank is undulating but generally falls from a high point at the ridgeline near the railway station down to the river edge. This ridge is an important element of the Meadowbank town centre.

There are a number of areas where steep gradients occur. This includes Constitution Road that falls to a central low point east of Bowden Street. There are also a number of significant gradient changes caused by the levelling of large sites to accommodate the existing industrial buildings.

The topography combined with the built form restricts district views out to other areas in Ryde. However, there are significant views across Parramatta River along the foreshore. Additionally a number of streets have vistas down to the water including Bowden Street and Belmore Street.

There are a number of minor vistas through some of the newer residential developments and there is also potential to create views into the recently created open spaces around the foreshore and at the original Constitution Road shops.

Open Spaces and Street Activation

Open spaces play an important role in creating a high quality public domain and providing opportunities for community interaction. Street activation is often related to the success of the open space network and this is now being encouraged in Meadowbank. The extent of street activation is mixed; recent developments have improved street activation with sympathetic building design, on-street retail outlets, and spaces for outdoor dining. This contrasts with streets where the older industrial buildings dominate. These were generally designed to discourage public/private interaction and pedestrian activity. In addition, several of these sites are now vacant. The steep gradient of some streets such as Constitution Road and Belmore Street makes it difficult for buildings to interact with the street at grade.

The major open spaces include the existing waterfront and parks developed over the past few years. There are also linkages to waterfront parks to the east and west of the site. Waterfront park lands and the significant stands of figs are important open space and landscape features of this area. These larger green spaces provide opportunity for events such as markets and festivals in the town centre.

The other opportunity for open space is the existing street network. There are current projects underway to create new urban open spaces along the street network. The first stage includes a public plaza at the eastern railway station entrance. This plaza is complete and includes terraces for outdoor dining.

Meadowbank lacks a variety of small open urban spaces within the town centre, particularly on the western side of the railway. The urban spaces that do exist are currently well used and there is demand for more urban open spaces throughout the town centre.

Paving types

The quality of paving in Meadowbank varies considerably. For example in the new parks and around the recent residential buildings the paving quality is good. In other areas there is only a grass verge. The key paving types are as follows:

- Brick paving predominates around the shops on the west side of the railway line.
- Grey granite predominates around the shops on the east side of the railway line.
- Concrete, concrete pathway within a nature strip, or grass verge in the intact industrial areas.
- Asphalt and clay paver banding.
- Sandstone in special areas and riverside parks.

Street Tree Network and Street Furniture

Street trees play an important role in creating a high quality public domain. Tree lined streets are attractive and can visually soften hard urban spaces. In the older area of the Meadowbank town centre there are few street trees. The recently developed residential areas have the basis of an effective urban street tree network. Both the established and new foreshore parks have a

good network of trees. West of the railway there are a number of mature trees, however more consistent planting could strengthen the streetscape throughout the town centre.

Overall the street tree network is incomplete and there is no strong boundary planting to delineate the centre.

The availability and appearance of street furniture is mixed. Again the streets and parks closest to the foreshore are well serviced by street furniture. In other areas east of the railway line street furniture is limited. The western side of the railway is better serviced around the local shops.

Pedestrian Network, Safety and Amenity

In the past, Meadowbank has not had a strong pedestrian network. However, recent and planned improvements to the public domain have enhanced pedestrian amenity and provided a new network along the foreshore.

Pedestrian activity is focused on the station entries and along Railway Road, which links the station to the new development on Bay Drive. There is also significant activity along the foreshore. The pedestrian traffic is serviced by the public car parks in Bay Drive shopping centre and along the foreshore. The west side of the railway line has fewer attractions and correspondingly less pedestrian activity.

In Meadowbank the pedestrian activity has improved community interaction with open spaces (public and private). High levels of pedestrian activity and associated street activity improve personal and property security.

However there are a number of instances where the safety and amenity of pedestrians could be improved:

- The pedestrian connection between the two sides of the railway is poor.
- There are potential pedestrian/traffic conflicts along either side of the railway station along Constitution Road.
- The pedestrian network away from the station and foreshore could be better defined and upgraded to match the recent improvements along Parramatta River.

Social and Cultural Resources

- The new community facilities in the Meadowbank Town Centre provide a social hub for the local community. These facilities include a supermarket and associated shops, restaurants, commercial offices and a Council owned community centre.
- There are currently a number of examples of public art in the Meadowbank town centre associated with the foreshore parks.

5.1.4 Cycleways

The Ryde Bicycle Strategy and Masterplan (2007) shows the proposed regional and local bike network within Meadowbank and surrounding suburbs. Facilities for cyclists such as convenient bike parking and change facilities are encouraged in the town centre.

Recreational bike paths have been created along the foreshore and linking with the regional routes. However, more facilities are required to meet demand for parking and refreshment / change areas.

The Ryde Riverwalk Masterplan Report (2007) details bike paths, pedestrian paths, planting, furniture and signage for the entire foreshore. This is being implemented in stages.

5.2 Urban Design Concepts

5.2.1 Vision and Structure Plan

This section presents design concepts and strategies for the improvement of the public domain. The secondary purpose of this section is to provide guidance to developers on how new developments should respond to public domain requirements.

Goals

Public spaces in the Meadowbank town centre will meet the needs of the community while creating an attractive, robust and durable character for the area. Community needs will be met by a range of public spaces that will support passive and active recreation. These will include small, intimate pocket parks, widened footpaths for outdoor dining, pedestrian through-site links, and large foreshore parks. Connectivity and permeability will be improved.

Objectives

- Provide a comfortable, people orientated place
- Enhance the existing fabric
- Provide a sense of place which draws on the character of the area
- Enhance the foreshore character of the area and appropriately link in with the ongoing Shepherds Bay foreshore improvements
- Provide a sense of renewal and excitement drawing on recent development in the area
- Give consideration to the access and recreation needs of local residents, daily employment workforce, tourists, commuters and cyclists
- Be realistic and affordable in relation to costs, ongoing maintenance and local conditions

Visual Quality Issues

- Developing an identity for the Meadowbank town centre
- Maintaining and enhancing water views
- Provision of unique design themes for public spaces
- Providing consistent design and quality of streetscape elements, e.g. street furniture, lighting, street tree plantings
- Selection of a standard colour palette to provide harmony/drama

Materials

The selection of materials and furnishings for the Meadowbank town centre is consistent with recent upgrades to the public domain, guiding the future development of the area as well as existing site and environmental conditions.

Central to the development of the future character of the area are the MEA Master Plan and MEA Development Control Plan (DCP). These documents collectively encourage a mixed use of development with an emphasis on high quality design, environmental sustainability and a desire to create a vibrant and desirable locality. Permeating this vision is a desire to enhance local environment and character, typified by an industrial heritage and a riverside setting.

The selection of materials therefore draws on two definable elements. Firstly it is reflective of a contemporary urban village, with high quality architecture and an industrial heritage. Secondly, the river environment and its geology are represented by natural materials such as granite, sandstone and timber. Landscaping and a healthy tree cover are vital to modify the microclimate and provide shade, wind control, habitat and beauty.

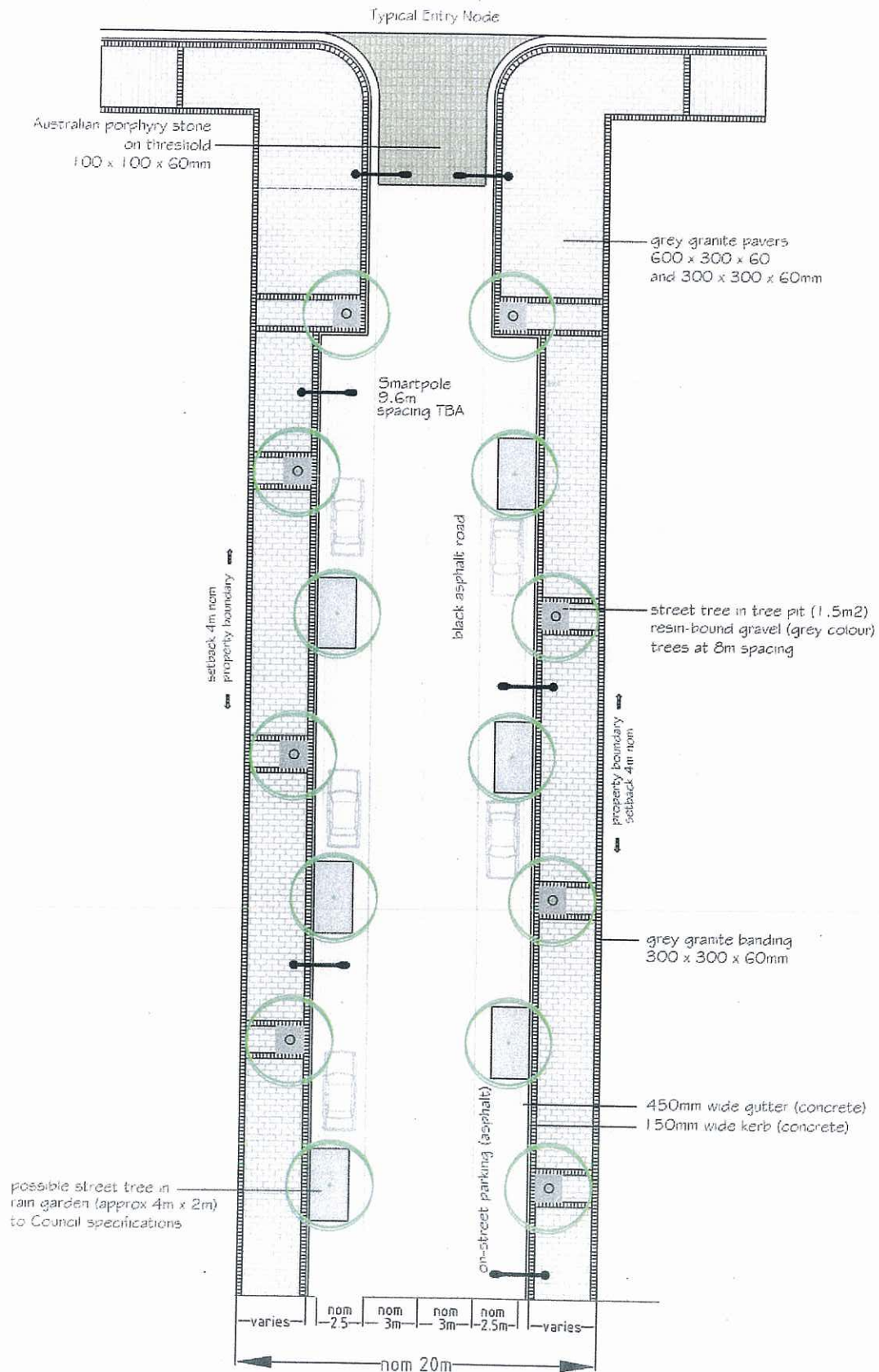
5.2.2 Design Concepts

This section shows typical street plans and sections for the public domain in Meadowbank.

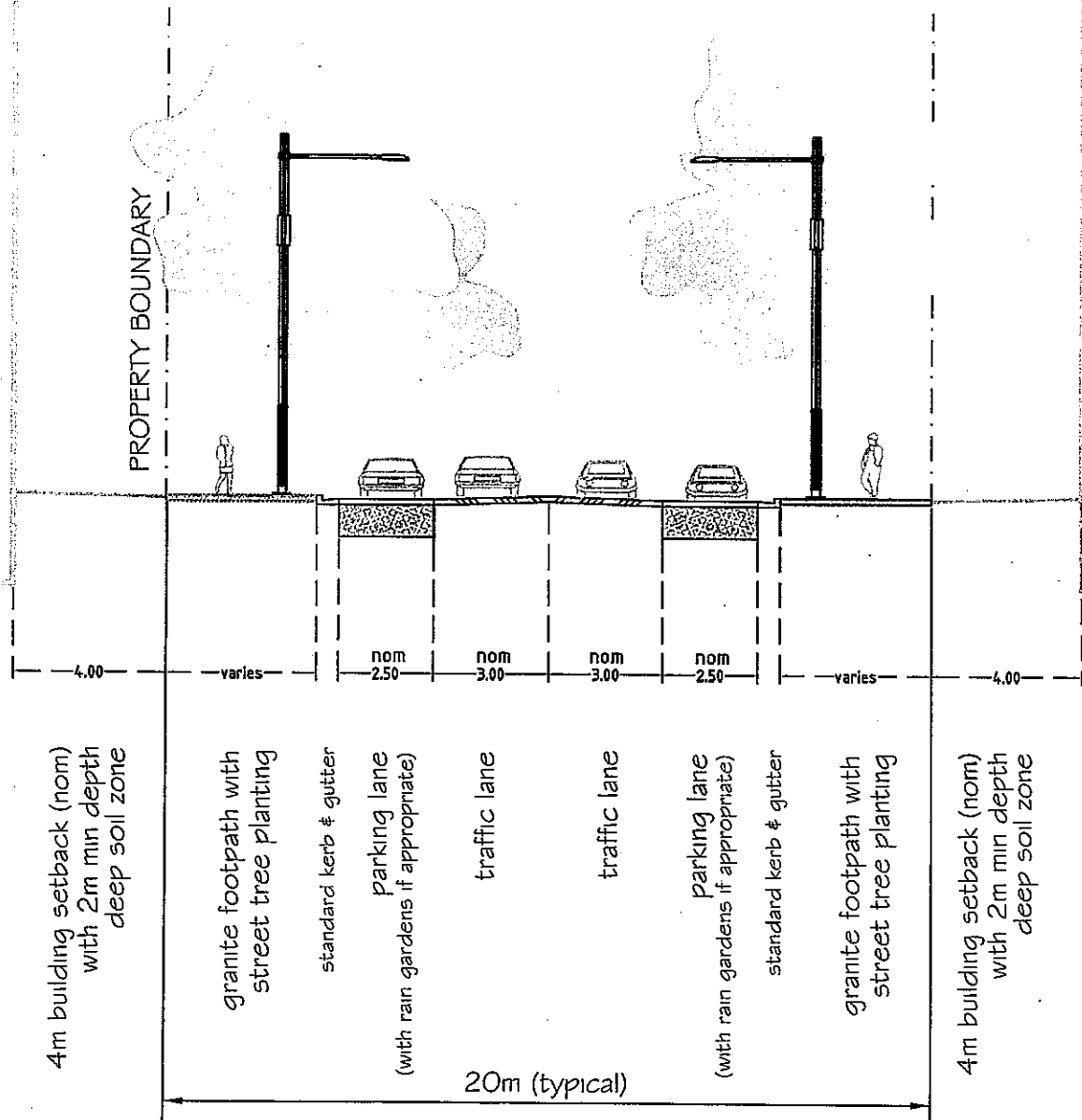
The first plan and section diagrams are for Nancarrow Road and new streets.

The 'typical street plan' and 'typical street section' are for all other streets in Meadowbank.

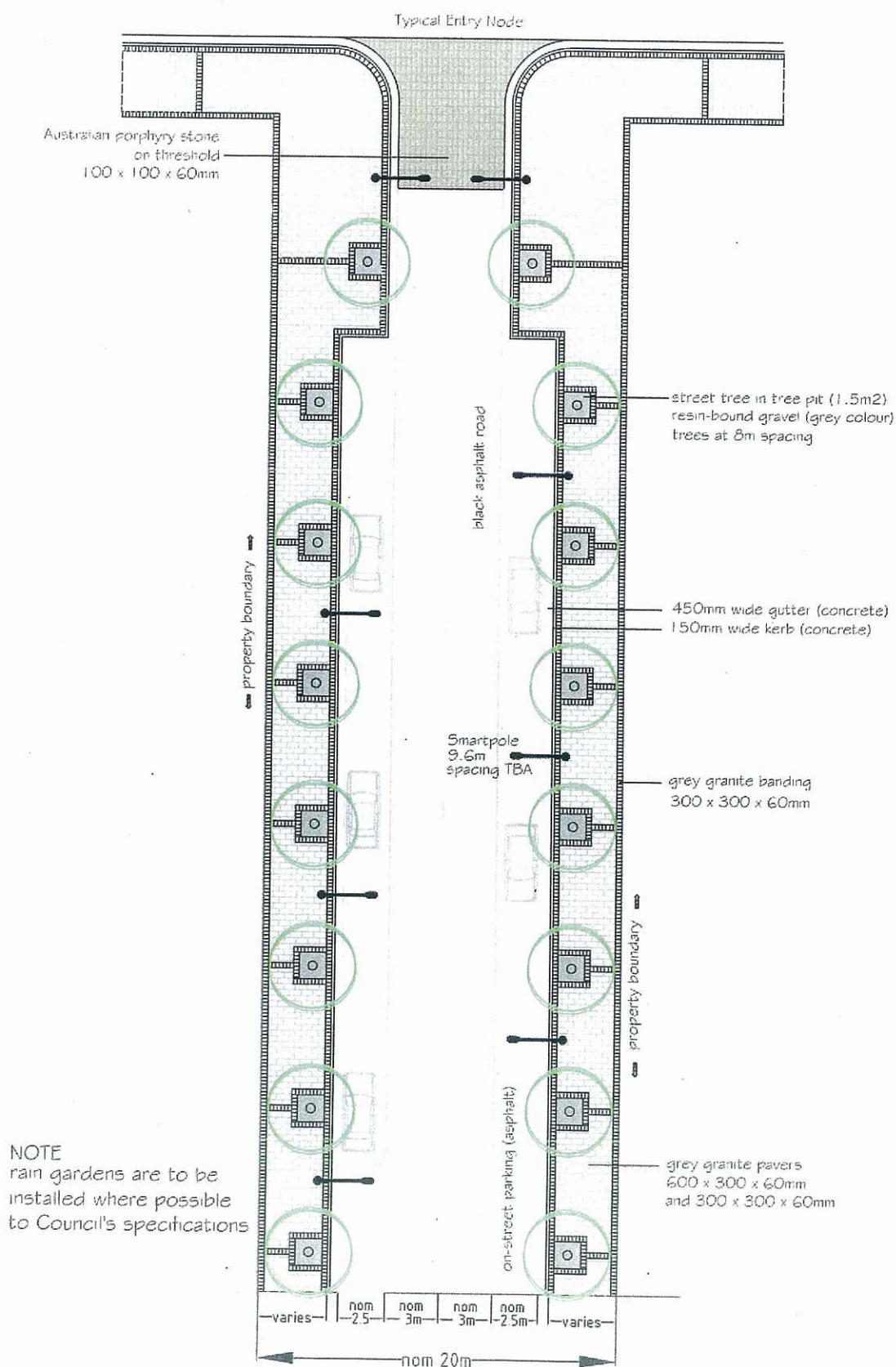
Nancarrow Road and new streets (plan)



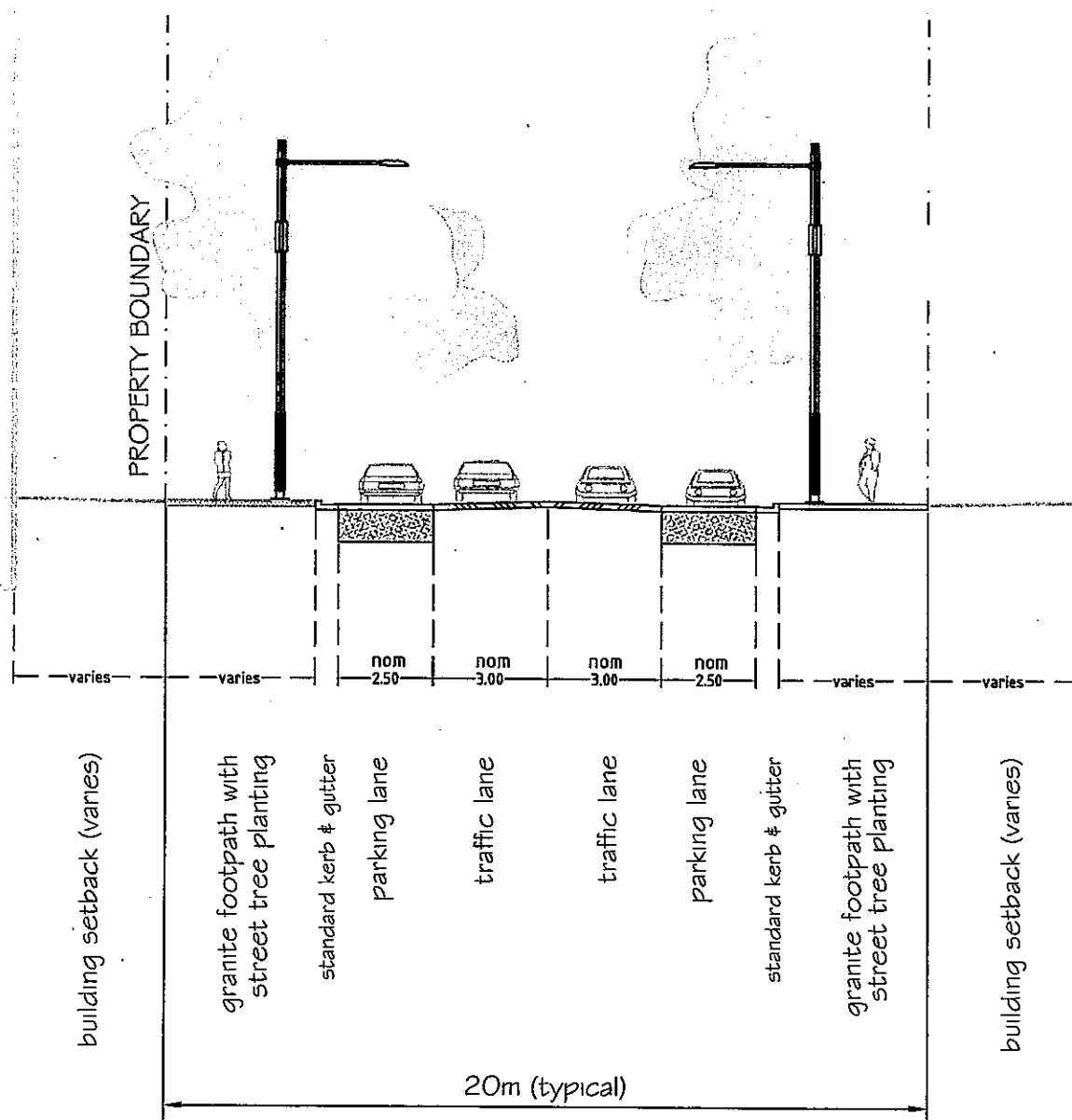
Nancarrow Road and new streets (section)



Typical Street Plan for all other streets in Meadowbank



Typical Street Section for all other streets in Meadowbank



5.2.3 **Street trees, Paving and Street Furniture**

Improving the streetscape quality has a direct and immediate benefit for the public domain. The opportunities for improving the streetscape are noted in Section 5.1.

The scope and general requirements for street trees, paving and street furniture are noted below. Refer to Council's Public Works Department for detailed specifications of these items. The detailed specifications should be considered when preparing development application documents. It is important these elements are coordinated between the public and semi-public domains.

Pavements

Materials Palette— Summary

Footpaths: grey granite paving.

Kerb & gutter: in-situ concrete.

Carriageway (typical): asphalt.

Foreshore pedestrian/cycleway: natural concrete.

Thresholds: Australian porphyry stone.

Special places: sandstone paving.

Tree pits: resin-bound gravel.

Footpaths

Main paver: grey granite 600 x 300 x 60mm & 300 x 300 x 60mm.

Banding: grey granite 300 x 300 x 60mm.

Concrete compressive strength $\leq 25\text{Mpa}$.

Thresholds

Australian porphyry stone 100 x 100 x 60mm laid at 30° to kerb.
Concrete in-situ kerb.

Special places (low pedestrian traffic)

Sandstone paving 600 x 300 x 100mm.

Tree pits and permeable paving

Resin-bound gravel (grey colour).

Pedestrian/cycleways

3m wide natural concrete.

Note: this plan must be read in conjunction with the Public Domain Infrastructure Manual for construction details.



Grey granite paving at Railway Road, Meadowbank.



Natural concrete shared pedestrian/cycleway, Parramatta River foreshore, Meadowbank.

Note sandstone paving provides a setting for artworks (special place).



Australian porphyry stone for thresholds.



Sandstone paving 600 x 300 x 100mm (Ryde Wharf Park).

[illegible]

Existing street trees to be assessed in light of this plan and retained if appropriate

Fraxinus griffithii (Evergreen Ash)
Fraxinus oxycarpa 'Raywoodii' (Claret Ash)

Syncarpia glomulifera (Turpentine)

Tristramopsis laura 'luscious' (Wata

Melaleuca sp. (paperbarks)

Angophora floribunda (Rough-barked

Eucalyptus tereticornis (Forest Red Gum)

Corymbia maculata (Spotted Gum)

Angophora costata (Sydney Red G)

Cuparnopsis anacardioides (Tucker)

Pyrus calleryana (Ornamental Pear)

Magnolia grandiflora ("Little Gem")

Street trees and rain gardens

Fraxinus griffithii (Evergreen Ash)

Recently planted as street trees on Railway Road, Meadowbank



Rain garden

Recently planted on the corner of Railway Road and Constitution Road, Meadowbank



Rain garden

Within parallel parking
Pymont

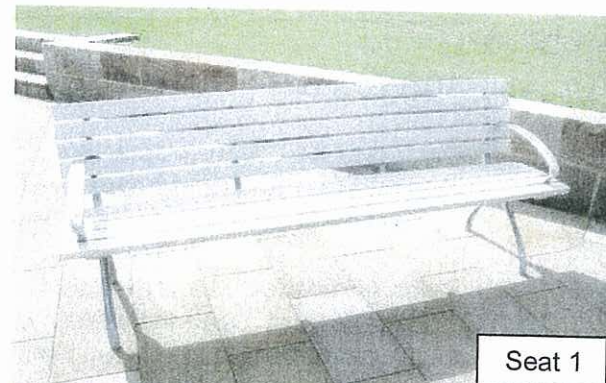


Furniture

(numbers shown are from the Public Works Technical Infrastructure Manual currently being prepared by Council).

Seats (Seat 1)

Urban Seat 11 (aluminium)
Botton and Gardiner urban furniture
ph (02) 9667 8100



Bins (Bin 1)

Council's standard double bin.

Bollards (Bollard 4)

1300mm high x 150mm dia
1.6mm thick 316 stainless steel
Core drilled to depth of 400mm.

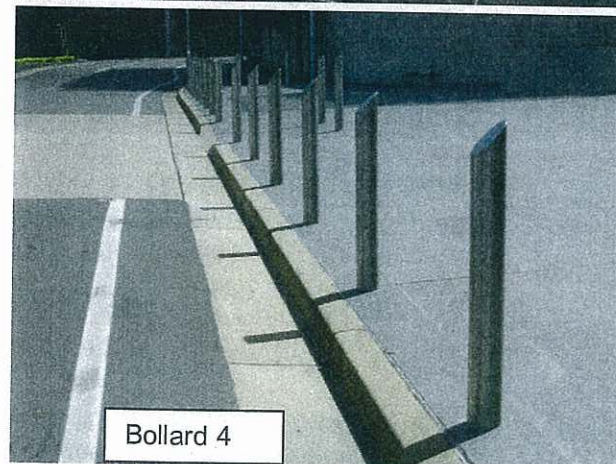
Colorfen Constructions
Ph (02) 9545 4284



Trellis (Trellis1)

Stainless steel uprights 1200mm high at intervals of 1200mm. Five tensioned wires at 220mm horizontal intervals.

Sub-surface mounted trellis within planter bed.
Concrete footing for each post.



Pedestrian & Vehicular Lighting

Street lighting

Mounted on 9.6m Smartpoles™ or approved equivalent. Finish on poles to match existing poles in Belmore Street.

Poles to be provided with 1.5m banner arm, Rexel Optispan Aeroscreen luminaires complete with low loss ballasts and PE cells, and metal halide lamps.

Pedestrian/park lighting

For areas such as shared bikeway/pedestrian pathways and plazas. Mounted on 4.8 m Smartpoles™ or approved equivalent. BEGA-8081 luminaires and metal halide lamps.

Solar lighting for parks

Supplier: Solar G
Pole: galvanised utility pole
Light fittings: "Streetwalker" on 1metre outreach arm
Lamps: 2x 14W fluorescent (T5 fluorescent technology, 96 lumens per watt).

General requirements

Street and park lighting to be in accordance with AS/NZS 1158 to minimum lighting levels of subcategory V3 (collector roads), V5 (secondary streets) and P2 (cycle and footpath areas). Higher lighting levels where required by the standard (eg. transport interchanges, pedestrian crossings).

Weatherproof lockable cubicle to be provided to Energy Australia's requirements to house the switchboard and meter.

Connection to Energy Australia network to Energy Australia's requirements.

Spare 63mm dia electrical conduit to run between Smartpoles™ for future use.



Street light at Parsonage St, Meadowbank



Pedestrian light at Meadowbank station plaza



Solar light at Meadowbank