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CENTRAL PRECINCT

LANDSCAPE MAINTENANCE & HANDOVER PLAN (LMAH)



Updated

March 2009

St Marys Development

CENTRAL PRECINCT LANDSCAPE MAINTENANCE & HANDOVER PLAN

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Executive Summary

The former Australian Defence Industries (ADI) site at St Marys was endorsed by the NSW Government for inclusion on the Urban Development Program (UDP) in 1993. The site was seen to present an opportunity to provide housing for Sydney's growing population within an environmentally sustainable framework.

The St Marys site is located approximately 45km west of the Sydney CBD, 5km northeast of the Penrith City Centre and 12km west of the Blacktown City Centre. The main western railway is located approximately 2.5km south of the site. The Great Western Highway is located another 1 km south and the M4 Motorway a further 1.5km south.

The overall site has an area of 1,545ha, and stretches roughly 7 kilometres from east to west and 2 kilometres from north to south, from Forrester Road, St Marys in the east to The Northern Road, Cranebrook in the west, and is bounded by Llandilo and Wilmot in the north and Cambridge Gardens/ Werrington County and the Dunheved Industrial Area in the south. Figure 1.1 illustrates the site and development precincts.

Given that the site straddles the boundary between two local government areas (Blacktown and Penrith), the Government decided that a regional environmental plan should be prepared for the site. Technical investigations into the environmental values and development capability of the land were commenced in 1994, and the Regional Environmental Plan for St Marys (Sydney Regional Environmental Plan No. 30 (SREP 30)) was gazetted in January 2001. It zoned the land for a combination of "urban", "employment", "regional open space", and "regional park" uses.

In view of the original scale of the residential and employment uses, a package of documents was prepared to guide and control development. It comprised SREP 30 (maps and written instrument), and an Environmental Planning Strategy (EPS) which sets out performance objectives and strategies to address key aspects associated with the site, including: conservation, cultural heritage, water and soils, transport, urban form, energy and waste, human services, employment, and land contamination.

A Deed of Agreement was entered into in December 2002, between the landowner and developers of the land (a Joint Venture comprising ComLand and Lend Lease Development) and the NSW Government setting out the developer's and State Government's responsibilities in providing services and infrastructure.

SREP 30 identified 6 development "precincts" (known as the Western Precinct, Central Precinct, North and South Dunheved Precincts, Ropes Creek Precinct and North and South Dunheved Precinct).

SREP 30 requires that a Precinct Plan be adopted by Council prior to any development taking place.

Planning for any precinct is to address all of the issues in SREP 30 and the EPS, including preparation of management plans for a range of key issues.

Executive Summary

(continued)

On 29th September 2006 the Minister for Planning declared the Ropes Creek, Central and Western Precincts as Release Areas, paving the way for the preparation of a Precinct Plan for this area.

The Landscape Maintenance and Handover Plan (LMAH) has been prepared in accordance with the requirements of SREP 30 and the St Marys EPS, and addresses all relevant legislation.



Figure 1 Location Plan of St Marys Development Precincts

Procedures for open space implementation, handover, and maintenance

The “performance requirements” for implementation of open space and landscape provision and embellishment are described in the Central Precinct Landscape and Open Space Masterplan (LOSM).

This report defines and outlines the steps of the approvals process to be undertaken by the Joint Venture and Council through to handover of open space and landscape areas. This includes a definition of the key steps including:

- Development Application approval
- Construction Certificate approval
- Maintenance and Establishment period
- Ongoing maintenance by Council or Community association

The relationship of the relevant approvals authorities relating to landscape and open space is also defined including their specific areas of interest and authority.

The report then further details the key phases for maintenance of open space and landscape treatments through its implementation. The report cross references maintenance performance criteria for open spaces and outlines summary requirements for maintenance related to the hierarchy of open space developed in the landscape and open space masterplan.



District Park



Neighbourhood Park



Local Park



Pocket Park



Corridors

Open Space Components

1.0 Introduction / background

1.1 Intent

This report provides a framework for the implementation, handover and ongoing maintenance of the open space and landscape components of the St Marys Central Precinct urban development.

The framework builds upon the strategies for open space provision and planning provided in the Landscape Handover and Maintenance Plan. In particular the report and the Ongoing maintenance requirements for open space areas (refer figure 3.3) builds upon the landscape presentation and maintenance standards developed in section 3 of the Open Space Masterplan.

It is intended that this report provides an agreed basis upon which the handover process for the open space component of the development proceeds. In addition the report provides an agreed basis for ongoing maintenance of open space within the development by the developer and ultimately by Council. This basis is important as it will provide a point of reference for design and materials application to open space and landscape implementation to ensure that landscape and recreational enhancement is sustainable for Council maintenance in the long term.

1.2 Application of the plan

Application of the plan will involve several key areas:

- recognition of a process for open space planning, design and implementation;
- estimation of approximate time frames that can be expected to be applied to the approvals stages; and
- establishment of maintenance regimes and recurrency for the open space types to be recognised in design and implementation and to be applied by Council in ongoing maintenance and management of open space within the Central Precinct.



2.0 Open space approvals procedures

2.1 Summary Chart

The chart below outlines the key phases in approvals procedures for open space in the St Marys development Central Precinct. These stages are discussed in further detail in section 2.2 – Approvals stages and time frames.

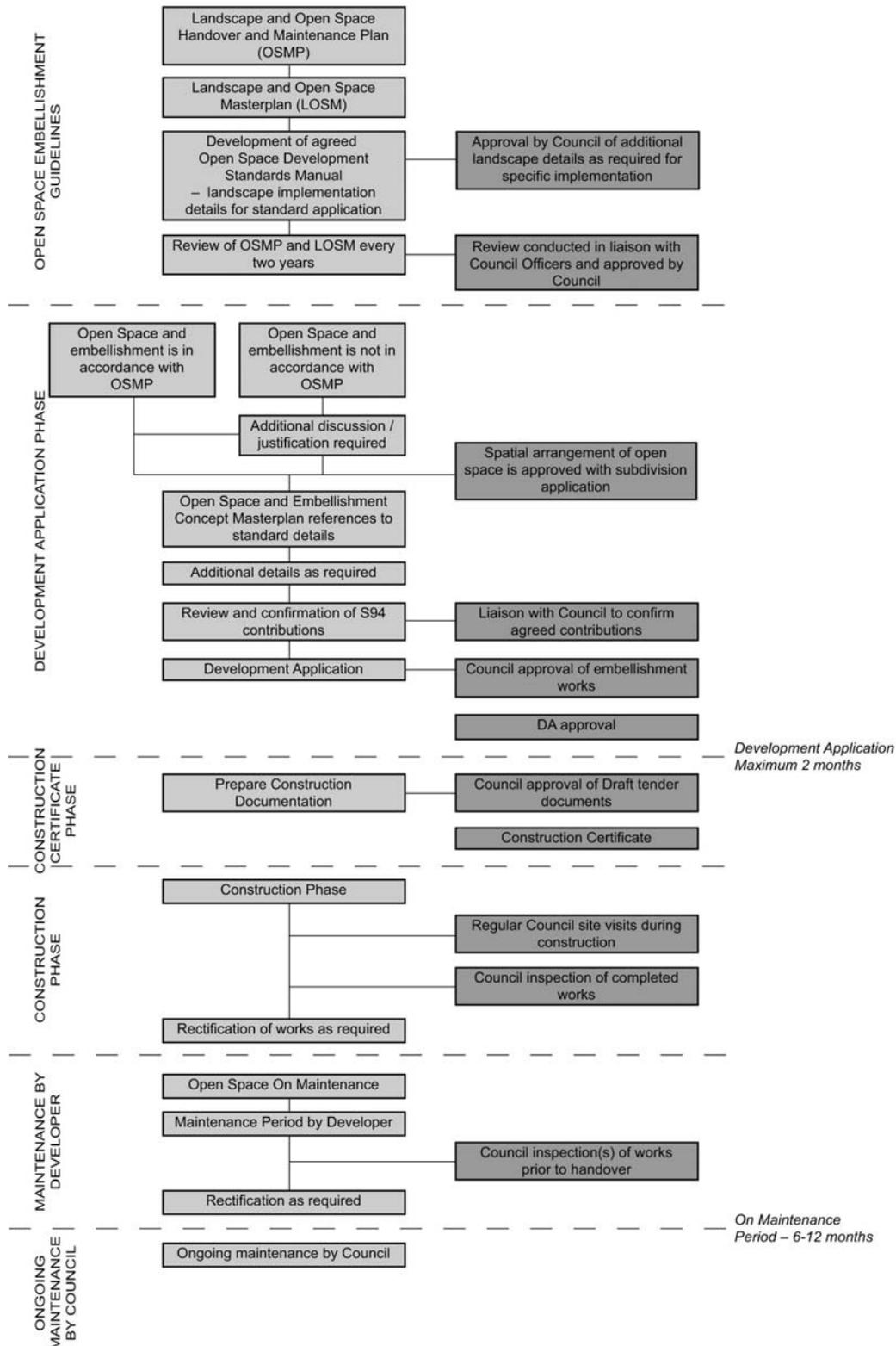


Figure 2.1 Approval Milestones

2.2 Approvals Stages and time frames

The key approvals stages are generally outlined following:

a) Open Space Embellishment Guidelines

Based on the agreed Open Space and Landscape Masterplan and the Landscape and Open Space Handover and Maintenance Plan, a series of standard guidelines will be prepared for open space embellishment. It is intended that once approved by Council that these standards would provide the basis for all ongoing design development and documentation.

Where required to meet site specific design conditions or embellishment needs, further guidelines would be prepared for approval and addition to an open space development standards manual.

b) Development Applications

Subdivision planning will be developed generally based upon the approved Precinct Plan (including Development Control Strategy DCS), Framework Plan, Landscape and Open Space Masterplan.

Development applications (DA's) will be prepared for the implementation of development stages to incorporate infrastructure and open space implementation for that stage. In addition the early stages of the development may incorporate additional infrastructure to serve the development including road systems and corridor enhancement.

Planning and design will be prepared in liaison with Council Officers to Sketch Design stage (generally 1:200 plans and sections for landscape works) incorporating plant species schedules along with preliminary drainage and grading works as part of overall strategies for the site.

DA Submission for Open Space / Streetscape Works

(items related to open space / landscape only)

- Checklist of Precinct Plan / DCS items of relevance to building and related compliance including explanation of non – compliances
- Site plan at 1:400 minimum size indicating
 - Site area and north point
 - Existing vegetation and trees
 - Existing and proposed levels
 - Proposed layout of paths and other major built elements (eg. walls)
 - Trees proposed to be removed
 - Arborists report for trees proposed to be removed

Note: for open space development DA Submissions should include:

- Extent of hard and soft surface finishes and general description of finishes
- General locations of proposed tree, and understorey planting zones with schedule identifying species, proposed installation size (including height and spread) and mature height and spread

DA submissions will refer to the standard open space embellishment guidelines as incorporated in the Open Space Development Standards Manual.

c) Construction Certificate

Construction Certificate stage (CC) follows approval of development application and will include the incorporation of any DA conditions relevant to open space / landscape included in Council's approval.

CC involves the development of design for open space and landscape implementation to a detailed stage incorporating the following:

- Plans at minimum 1:400 (minimum) developing level of detail provided at DA stage (including tree / vegetation removal, existing and proposed levels, surface finishes with a related key, services / infrastructure works, tree and garden plantings along with soft landscape surfaces (plant information to include botanical species, common name, supply pot size height and spread, planting density, and quantities
- Confirmation of standard details to apply from streetscape / Open Space Development Standards Manual
- Any additional hard and soft landscape construction details required for non standard items
- Materials and Technical specification

d) Construction Phase

For the St Marys Central Precinct it is proposed that the developer would be responsible for design and documentation along with construction of the works through a “works in kind” construction agreement. Ongoing meetings during the construction phase may be also attended by Penrith Council to enable monitoring of the construction phase and resolution of any design construction issues that arise during this time.

e) Practical Completion

At the Practical Completion of construction works for open space embellishment Council will inspect the works and confirm that works have been delivered in accordance with the requirements of the Deed of Agreement. Any required rectification works will be undertaken, and confirmation that the works are practically complete will be provided by Council to enable the contract maintenance period to be commenced.

f) On Maintenance Period – Contract Maintenance

The “On Maintenance” period shall involve all open space embellishment works being maintained by the developer. It is anticipated that On Maintenance Periods would vary between the landscape character types developed in the Landscape and Open Space Masterplan and identified in section 3.0

- Bushland character: 6 months
- Woodland character: 6 months
- Parkland character: 12 months
- Open Space Water character: 12 months
- Plazas / Square: 12 months

Note: stormwater drainage infrastructure will be subject to a 3 year “on maintenance” period.

g) Off Maintenance Period – Post Handover

Handover will be undertaken at the completion of the contract maintenance period and the inspection of the works by Council. If there are any items that Council believes do not meet the handover criteria as established in this report then these will be immediately identified and liaison between Council and the developer undertaken to resolve any required actions.

It is anticipated that embellishment works will be progressively implemented over the development area. In order to provide a more efficient handover process, final inspections and formal handover are proposed to be focussed on an annual basis commencing at the beginning of each financial year.

h) Ongoing Maintenance by Council

The proponent will submit to Council a Maintenance Management Plan and Schedule of Costing. The purpose of the Maintenance Management Plan and Schedule of Costing is to obtain an estimate of costings, maintenance tasks and estimated frequency of the required maintenance per year so that Council can factor these costs into its future budgets.

From handover as agreed between the parties, the ongoing maintenance of the open space areas and facilities by Council will commence based on the ongoing maintenance regimes identified in Figure 3.3 Maintenance Requirements for Open Space Areas.

2.3 Relationship of approvals authorities for open space

a) Penrith Council

Council has been involved in the planning process for the Precinct Plan through both a series of liaison meetings providing information on progress of the study, and an opportunity to provide feedback. In addition focussed consultation with key officers (with regard to this study) in the areas of environmental planning landscape has been undertaken.

Involvement will be ongoing following precinct plan approval through to the development application and construction certificate stages and construction works on site. In the case of the Central Precinct, the open space design and implementation will be undertaken by the developer. Council may carry out organised site visits to view progress and provide input where required to the construction phase.

b) Department of Water and Energy (DWE)

The Department of Water and Energy had the responsibility of administering the Rivers and Foreshores Improvement Act 1948 for inland (ie. non estuarine) waterways. Specifically this relates to the “protected land” which nominally includes a zone 40 metres from the top of bank of a “protected watercourse.

The Act provided for the protection of the watercourse as a functioning natural system, in particular the prevention of activities that may cause adverse impacts such as:

- Increased erosion or siltation of streams or lakes
- Bed lowering and bank collapse
- Diverting the course of a stream
- Obstructing or detrimentally affecting stream flow
- Ecological deterioration leading to long term river stability problems

The “Integrated Development Assessment System” (IDAS) came into effect on July 1st 1998 identifying a joint approval process usually involving a Council as the consent authority and other authorities as applicable to the site and nature of the project. Under IDAS a Council refers a development application to DWE when a permit is required under part 3A of the R&FI Act. This occurs when the proposed development or related works are within 40 metres of the top of bank or shore of protected waters.

The Water Management Act 2000 now contains requirements relating to foreshore development. The Act aims to provide for the sustainable and integrated management of the water sources of the state, in particular protecting water sources and associated ecosystems through effective management and ecological sustainable development practises. The Water Management Act identifies the role of Controlled Activity Approvals to replace the existing 3A Approval process for a specific activity in on or under waterfront land. Separate Aquifer Interference Approvals are required where activities involve excavation that may impact on underground aquifers.

c) Department of Environment and Climate Change (DECC) (National Parks and Wildlife Service)

It is noted that the Central Precinct adjoins extensive areas of Regional Park for which a plan of management is being developed by the Department of Environment and Climate Change (DECC).

DECC will own and manage the 900ha Regional Park. As part of this role DECC will administer the statutory requirements of the following:

- Threatened Species Act
- National Parks Act
- Aboriginal Heritage Management Guidelines

Threatened species management is dealt with under separate reporting for the Precinct Plan, however the issues of tree retention generally through the urban development, and the conservation of high biodiversity value vegetation stands (as also dealt with separately) have relevance to the open space planning process. The open space hierarchy has had regard for these issues, in particular in the development of the green corridors, and through performance standards for the various open space types.

The management of edge situations to the Regional Park are a key planning and management issue for both the Regional park and the urban development. The Open Space Masterplan identifies several potential scenarios for edge situations with an edge to residential development being the least preferred.

The development of the Plan of Management for the Regional Park will consider the appropriate balance of conservation and passive recreation objectives.

3.0 Maintenance and Handover of Open Space

3.1 Objectives

The objective of establishing criteria and guidelines for the maintenance of open space within the Central Precinct is to provide all parties involved with a clear framework for their responsibilities. This report aims to ensure that the processes are undertaken and finalised in a logical and timely manner based on an agreed set of outcomes.

Maintenance criteria relate to both the contract maintenance / plant establishment period to be undertaken by the developer in addition to ongoing maintenance by Council. The latter is important to be established in order that ongoing design and implementation of landscape works are sustainable within Council's regimes. Where the desired outcome of the developer is not achievable within this framework, alternative maintenance strategies are recommended.

In addition the agreement of ongoing maintenance levels is aimed to provide the new community with a level of assurance that the environment that they have moved into will not unreasonably be allowed to degrade over time.

3.2 Maintenance phases

a) On maintenance

Refers to the contract maintenance period that is included in the implementation of open space and embellishment works by the developer and shall generally be of six to twelve months duration depending on the park type (Urban Character Parks to generally have longer establishment maintenance).

The maintenance period will incorporate a Defects Liability Period for hard landscape works and a plant establishment period for soft landscape works. During this time defects including plant losses will be monitored and addressed prior to final inspection (by Council) and handover to Council.

Three copies of As Constructed drawings of the embellishment works will be provided to Council along with any applicable warranties etc.

b) Supplementary maintenance by developer

The developer may determine in agreement with Council that it is desirable to continue maintaining areas of open space for an extended period for a deferred handover. This may be necessitated due to proximity to ongoing works stages, or other issues that make it more practical for maintenance of the subject area to be continued by the developer

c) Off maintenance

Following handover inspection and formal handover to Council of open space, Council will become responsible for ongoing recurrent maintenance. This maintenance will be carried out in accordance with the agreed schedule of maintenance related to open space components as listed in Figure 3.1 (refer section 3.4)

Certain maintenance objectives that are deemed to fall outside the current scope of Councils capabilities and resources are identified as such with appropriate strategies for implementation identified.

3.3 Maintenance performance criteria

The Landscape and Open Space Masterplan identifies three broad landscape presentation and maintenance categories for the embellishment and maintenance of open space, developed for the Central Precinct. These are:

- Urban
- Suburban
- Natural

In conjunction with the landscape character type appropriate to the open space (also as identified in the Open Space Masterplan) these categories provide general direction to the level of maintenance required for open spaces. The table below indicate this relationship with shaded areas defining the maintenance standard generally applicable to the landscape character types.

		LANDSCAPE CHARACTER				OPEN SPACE WATER
		BUSHLAND	WOODLAND	PARKLAND	PLAZAS / SQUARES	
MAINTENANCE / PRESENTATION STANDARD	NATURAL					
	SUBURBAN					
	URBAN					

Figure 3.1 Landscape presentation and maintenance standards

The landscape presentation and maintenance standards approach is based on the application of several key criteria across the hierarchy of open space and in relation to the context of individual open space parcels in the development. The application of these criteria and the maintenance implications arising are summarised in Figure 3.2 below.

context within the development	from denser urban centre to less dense suburban outer areas	Public domain within the denser village centre should develop a more urban character in context with built form, density of development. This will be reflected in elements such as paved footpaths and a mix of deciduous and native evergreen plantings
the function and usage of the public domain	type and intensity of usage	Open spaces that cater for a higher intensity of usage (eg. the Civic Square should incorporate design and materials treatments that cater for high pedestrian traffic and recurrence of use during the week. Passive recreational open spaces in less dense suburban areas will have periods of peak usage (but of a more low key nature) ie. weekends, with recovery periods ie. during the week. As such native planting and tree canopy and an emphasis on soft landscape surfaces is appropriate
relationship of the public domain to the Regional Park	Whether the open space or streetscape has a visual or functional relationship to the Regional park	Open spaces and streetscapes that have a more direct relationship with the Regional Park must be compatible both in visual character and in usage of plant material that reflects the local indigenous plant communities and assists in conserving / enhancing biodiversity values

Figure 3.2 Criteria for maintenance levels

Council service levels for open space (refer appendix) indicate a typical approach to open space maintenance for local government based on available resources and current maintenance practises. The Open Space Maintenance Requirements chart (Figure 3.3) identifies for each open space type the appropriate service level of Councils current system along with any required additional servicing required to maintain landscape and recreational amenity at proposed ongoing standards. The maintenance levels and any identified additional requirements are based on the following performance criteria related to the maintenance phases:

a) On maintenance

Establishment of landscape quality setting

- Hard landscape finishes to be “settled in” and stable without deflections or drainage ponding
- Furniture elements maintained with firm fixings and any vandalism repaired, or damaged items replaced
- Soft landscape surfaces fully established (turf / grassed areas rolled, topdressed, and jointed), and any non-established areas replaced
- Turfed / grassed areas subject to weed control
- Turfed areas mown and watered to regular regime for establishment
- Plantings fully established and site hardened. Any non-established / failed items replaced
- Tree and garden bed plantings watered to regular regime for establishment
- Garden bed areas subject to weed control
- Garden plantings pruned / shaped as required
- All plantings fertilised as applicable
- Litter removal from open space
- Dumping removed

b) Supplementary maintenance by developer

Establishment and maintenance of quality landscape setting

- Hard landscape finishes to be “settled in” and stable without deflections or drainage ponding
- Impacts of adjoining works on existing finishes made good and “settled in”
- Furniture elements maintained with firm fixings and any vandalism repaired, or damaged items replaced
- Any non-established Soft landscape surfaces replaced
- Turfed areas mown and watered to regular regime for establishment
- Turfed / grassed areas subject to weed control
- Any non-established / failed Plantings replaced
- Tree and garden bed plantings irrigated to regular regime
- Garden bed areas subject to weed control and regular re-mulching
- Garden plantings pruned / shaped as required
- All plantings fertilised as applicable
- Litter removal from open space
- Dumping removed

c) Off maintenance – ongoing maintenance by Council

Maintenance of quality landscape setting

- Hard landscape finishes subject to weed management
- Any failure of hard landscape finishes to be identified and actioned
- Furniture elements monitored with firm fixings and any vandalism repaired, or damaged items replaced
- Turfed areas mown and irrigated to regular regime
- Garden bed areas subject to weed control
- Tree and garden bed vandalism actioned and replaced
- Litter removal from open space
- Dumping removed

3.4 Summary maintenance requirements for the open space areas

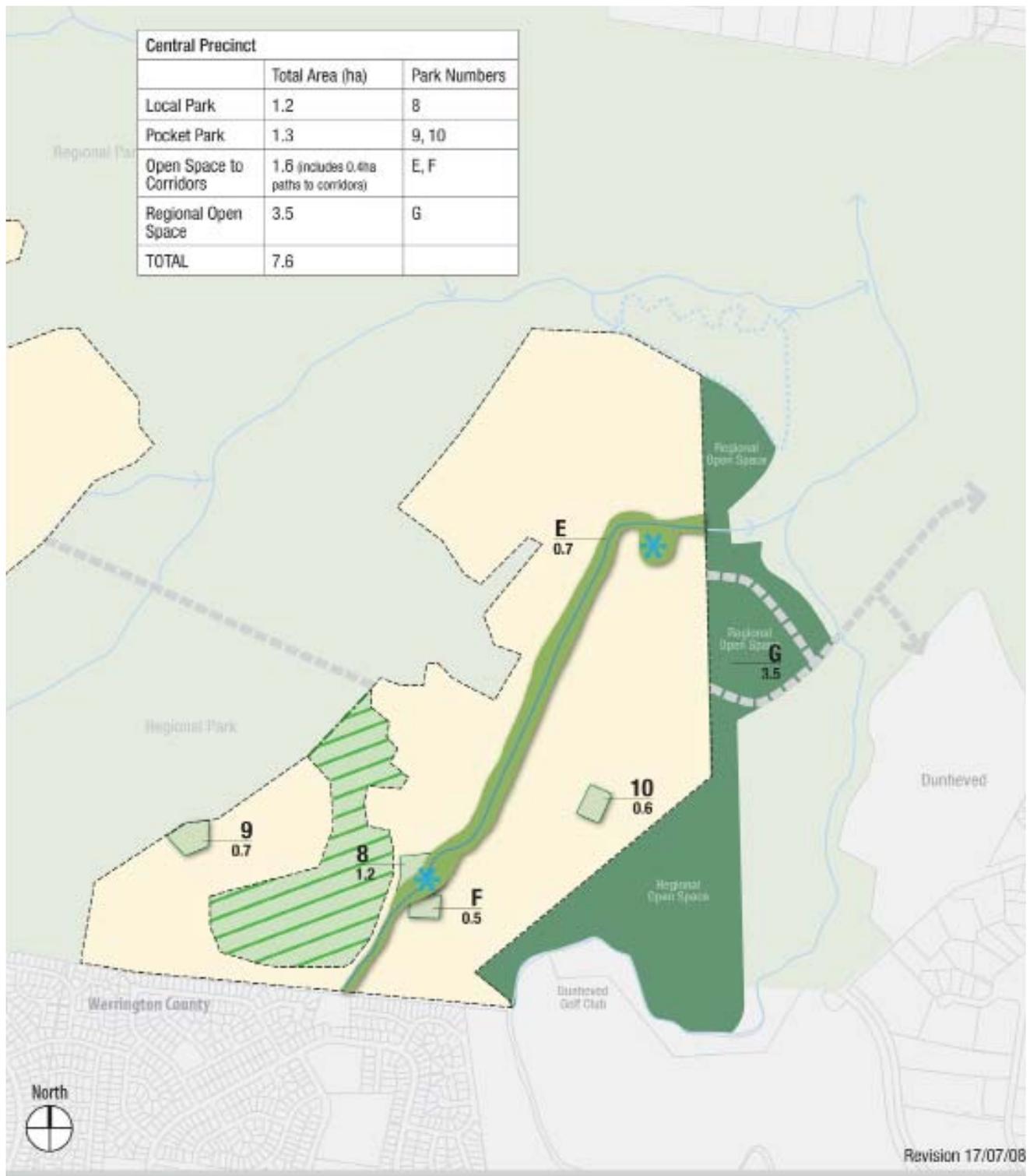
Figures 3.3 & 3.4 on the following pages – outline ongoing maintenance requirements for open space areas.

An explanation of the chart format for Figure 3.3 follows:

Item:	the open space area
Size:	area in hectares
Base level of embellishment:	base landscape and recreational embellishment of open space to be undertaken
Embellishment completed at handover:	items to be established at handover
Embellishment completed as part of Ongoing dev't:	items to be established following handover
Presentation / maintenance standard:	level as described in figure 3.1
Ongoing recurrent maintenance tasks For Council:	recurrent tasks in accordance with Council service levels
How serviced:	how maintenance is implemented by Council
Frequency – October – April:	frequency of maintenance tasks during Spring / Summer
Frequency – may – September:	frequency of maintenance tasks during Autumn / Winter
Additional recurrent maintenance tasks:	additional tasks to Council service levels to sustain landscape character / presentation levels of open space
How serviced:	how additional maintenance will be implemented

Key	Item	Possible Level of Recreation provision / Embellishment	Presentation / maintenance Level	Ongoing recurrent Maintenance task for Council	How Serviced	Frequency October - April	Frequency May - September
1.0	Regional Park	Interpretive centre Walking trails Bush setting picnic areas		NA			
2.0	District Facilities			Subject to development agreement			
3.0	Corridors						
	Corridors generally	Re-establishment of creekline Facilitate bush regeneration Selective regeneration Pedestrian / cycle path link Interpretive art / information	Natural	Rubbish removal Clear GPT / other devices Weed monitoring / spraying to OS edges Aquatic weed management Re-mulching as required Ongoing revegetation as required	Day labour Contract Day labour & contract Contract Day labour & contract Day labour & contract	Once per month Once per month Once per month Once per month Once per month Monitor every six months	Once per 2 months Once per 2 months Once per 2 months Once per 2 months Once per 2 months Monitor every six months
	Bushfire Protection Zone	Managed native grass and recreational grass understorey Selective native tree interplanting Pedestrian / cycle path links Interpretive art / information Limited local entries to regional park access network	Suburban	Rubbish removal Weed monitoring / spraying to OS edges Understorey control	Day labour & contract Day labour & contract Day labour & contract	Once per week Once per week Once per week Once per week Monitor every six months	Once per month Once per month Once per month Once per month Monitor every six months
	Drainage swales / WSUD measures to road corridors / open space	• Drainage structures / infrastructure • Littoral planting / revegetation	Natural	Maintenance of infrastructure / cleaning Rubbish removal	Day labour & contract Day labour & contract	Once per 4 weeks and after major events Once per 2 weeks	Once per 4 weeks and after major events Once per 2 weeks
4.0	District & Neighbourhood Parks						
	Oval	playing fields tennis courts basketball / netball courts Amenities block parking area Playing field irrigation	Suburban	Active Reserve Playing field grass cutting Cutting of surrounds Paved area weeding Edging of paths and kerbs Weeding of gardens Litter collection Dumped rubbish removal Amenities block cleaning Irrigation repair and maintenance	Day labour Day labour & contract Day labour & contract Day labour & contract Day labour Day labour & contract Day labour & contract Day labour Day labour	Once per week Once per week Once per 4 weeks Once per 4 weeks Once per 4 weeks Once per 4 weeks Before mowing Twice weekly Every six months	Once per 2 weeks Once per 4 weeks Once per 8 weeks Once per 8 weeks Once per 8 weeks Once per 8 weeks Before mowing Twice weekly Every six months
	Passive Parkland	Passive recreational grassland and supporting facilities		Landscaped Reserve Grass cutting Cutting of surrounds Paved area weeding Edging of paths and kerbs Gardens maintenance Litter collection Dumped rubbish removal Playground inspections and vandalism follow up BBQ inspections and cleaning	Day labour Day labour Day labour Day labour Day labour Day labour Day labour Day labour Day labour	Once per week Once per 2 weeks Once per 2 weeks Once per 2 weeks Once per 2 weeks twice per week Before mowing Monthly Weekly	Once per 2 weeks Once per 2 weeks Once per 2 weeks Once per 2 weeks Once per 2 weeks twice per week Before mowing Monthly Weekly
5.0	Local Parks						
	Local Parks generally	Kick about area Shaded seating area Toddlers and childrens playgrounds Path linkages Picnic / BBQ facilities Native canopy tree planting Limited garden bed planting Public art integrated with design 20 parking spaces on adjoining street frontage Garden bed and grassed area irrigation	Suburban & Natural	Landscaped Reserve Grass cutting Cutting of surrounds Paved area weeding Edging of paths and kerbs Gardens maintenance Litter collection Dumped rubbish removal Playground inspections and vandalism follow up BBQ inspections and cleaning	Day labour Day labour Day labour Day labour Day labour Day labour Day labour Day labour Day labour	Once per week Once per 2 weeks Once per 2 weeks Once per 2 weeks Once per 2 weeks twice per week Before mowing Monthly Weekly	Once per 2 weeks Once per 2 weeks Once per 2 weeks Once per 2 weeks Once per 2 weeks twice per week Before mowing Monthly Weekly
6.0	Pocket Parks						
	Pocket Parks generally	Open grassed area Shaded seating areas Internal / street Path linkages Native canopy tree planting Limited garden bed planting Public art integrated with design Garden bed and grassed area irrigation	Suburban	Passive Reserve Grass cutting Paved area weeding Edging of paths and kerbs Weeding of gardens Litter collection Dumped rubbish removal Playground inspections and vandalism follow up	Day labour Day labour & contract Day labour & contract Day labour Day labour & contract Day labour & contract Day labour	Once per week Once per 4 weeks Once per 4 weeks Once per 4 weeks Once per 4 weeks Before mowing Monthly	Once per 4 weeks Once per 8 weeks Once per 8 weeks Once per 8 weeks Once per 8 weeks Before mowing Monthly
7.0	Streetscapes / access						
	Streetscape generally	• Open grassed area • Internal / street path linkages • Native canopy tree planting • Garden bed planting • Public art integrated with design • Garden bed and grassed area irrigation	Suburban	Grass cutting Paved area weeding Edging of paths and kerbs Weeding of gardens Litter collection Dumped rubbish removal	Day labour Day labour & contract Day labour & contract Day labour Day labour & contract Day labour & contract	Once per week Once per 4 weeks Once per 4 weeks Once per 4 weeks Once per 4 weeks Before mowing	Once per 4 weeks Once per 8 weeks Once per 8 weeks Once per 8 weeks Once per 8 weeks Before mowing

Figure 3.3 Open space maintenance requirements



Open Space Master Plan

Scale 1:15,000m © A4 (approximate)
 0 100m 200m 500m

- Riparian Corridor / Parkland
- Passive Open Space
- Active Open Space
- Regional Park Passive Open Space Opportunity (approx. size 16ha)
- Water Management Basin/Lake

Note: Location of all elements indicative only, subject to confirmation via detailed design.

Figure 3.4 Central Precinct Open Space Masterplan