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EDMONDSON PARK SOUTH_ CONCEPT PLAN APPLICATION EA_ VISUAL ASSESSMENT

Prepared for Landcom
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Contact

Deborah Eastment Principal
deastment@hassell.com.au

HASSELL
61 Little Collins Street
Melbourne VIC
Australia 3000
T +61 3 8102 3000
F +61 3 9654 1422
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HASSELL Limited
ABN 24 007 711 435

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Executive Summary

HASSELL has prepared this visual assessment for Landcom to determine the visual impact of proposed development at Edmondson Park South to create a new town centre and residential lands.

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The Visual Assessment Methodology used in this report is described in Section 2. It utilises a well-recognised approach to visual quality assessment that is systematic, consistent, and based on professional value judgement of commonly adopted and accepted criteria. The visual impact of the proposed development is determined by evaluating the visual effect of the development in the context of the visual sensitivity of the surrounding land use areas from which the proposed development may be visible. Visual effect is a measure of the change that will be perceived between the existing and proposed landscape characters, and visual sensitivity is a measure of the importance of the visual environment to different user groups based on frequency, duration, distance and repetition of views

An outline of the existing visual character of the Edmondson Park South landscape, and of the anticipated changes following development is provided in Section 3. These descriptions provide the basis for understanding the degree of change anticipated in the landscape. Views and viewer locations are determined and mapped based on topographical analysis and a number of site inspections undertaken in July/August 2010. An assessment of visual impact is determined for each of these views and viewer locations and presented in tabular format. These are based on the potential effect that the proposed development will have on the visual environment without any ameliorative landscape treatment.

A range of visual impacts are determined which are typical of greenfield development for new housing. Each assessment is accompanied by a series of recommendations to mitigate the impact of development. These strategies can be implemented in order to ensure that acceptable outcomes are achieved with respect to the anticipated visual impact. They include recommendations for:

- _influencing the built form and landscape treatments to preserve view lines and view corridors;
- _providing landscape setbacks in rural lots to allow establishment of canopy trees on private land;
- _influencing, where possible, materials selection, colour and quality in low and medium density residential development areas;
- _preparing integrated master plan designs for open space and community lands comprising schools and other community facilities to allow preservation of existing trees where possible and to ensure provision of adequate additional canopy landscaping; and
- _providing for the protection, augmentation and effective long term management of existing significant site vegetation.

01 Introduction

1.1 Introduction

This visual assessment has been prepared by HASSELL to accompany a Concept Plan Application under Part 3A of the Environmental Planning & Assessment Act, 1979 (EP&A Act) and a proposal for State Significant Site listing under Schedule 3 of State Environmental Planning Policy Major Development 2005 (SEPP Major Development) in relation to the former Ingleburn Army Base and certain adjoining lands within the Edmondson Park South Release Area of the South West Growth Centre (referred to herein as 'Edmondson Park South').

Landcom is proposing to deliver a new diverse and sustainable urban community at Edmondson Park South. Once complete, Edmondson Park South will accommodate a mix of land uses, a diversity of housing (approximately 3,200 dwellings), a new town centre incorporating 35,000 – 45,000m² retail, business and commercial floor space with employment opportunities for 1,000 people, multi-purpose community and education facilities, a new 150 hectare Regional Park, a number of other local parks and environmental conservation areas.

The new urban community at Edmondson Park South will meet's the State Government's objectives to increase housing supply, provide community benefits and create jobs.

The purpose of the Concept Plan is to secure statutory approval for the overall planning framework for the site and to further resolve a number of remaining site-wide infrastructure delivery and land use planning issues. The Project Application (submitted concurrently with the Concept Plan) for early works, infrastructure and subdivision relating to the initial phases of the development will enable site works to begin in 2010.

An important objective of the development proposal is to manage visual impact to acknowledge and properly consider the key natural and cultural landscapes of Edmondson Park South. Preliminary visual observations and topographic analysis has already informed the master planning of the subdivision. Further scrutiny of visual impact will determine the areas of highest impact and will produce mitigation recommendations that can maximise the opportunity to preserve those key natural and cultural landscapes

1.2 The Site

The subject site comprises an area of approximately 413.3 hectares and forms part of the larger Edmondson Park Release Area within the South West Growth Centre. It is located to the north-west of the M5 Motorway and lies approximately 40 km to the south west of Sydney CBD. Approximately 260.4 hectares of the site is located within the Liverpool LGA and approximately 152.9 hectares is located within the Campbelltown LGA.

Refer to **Figure 1_Location Plan**.

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Dwg Name: Metropolitan Context
Date: 23 Aug 2010

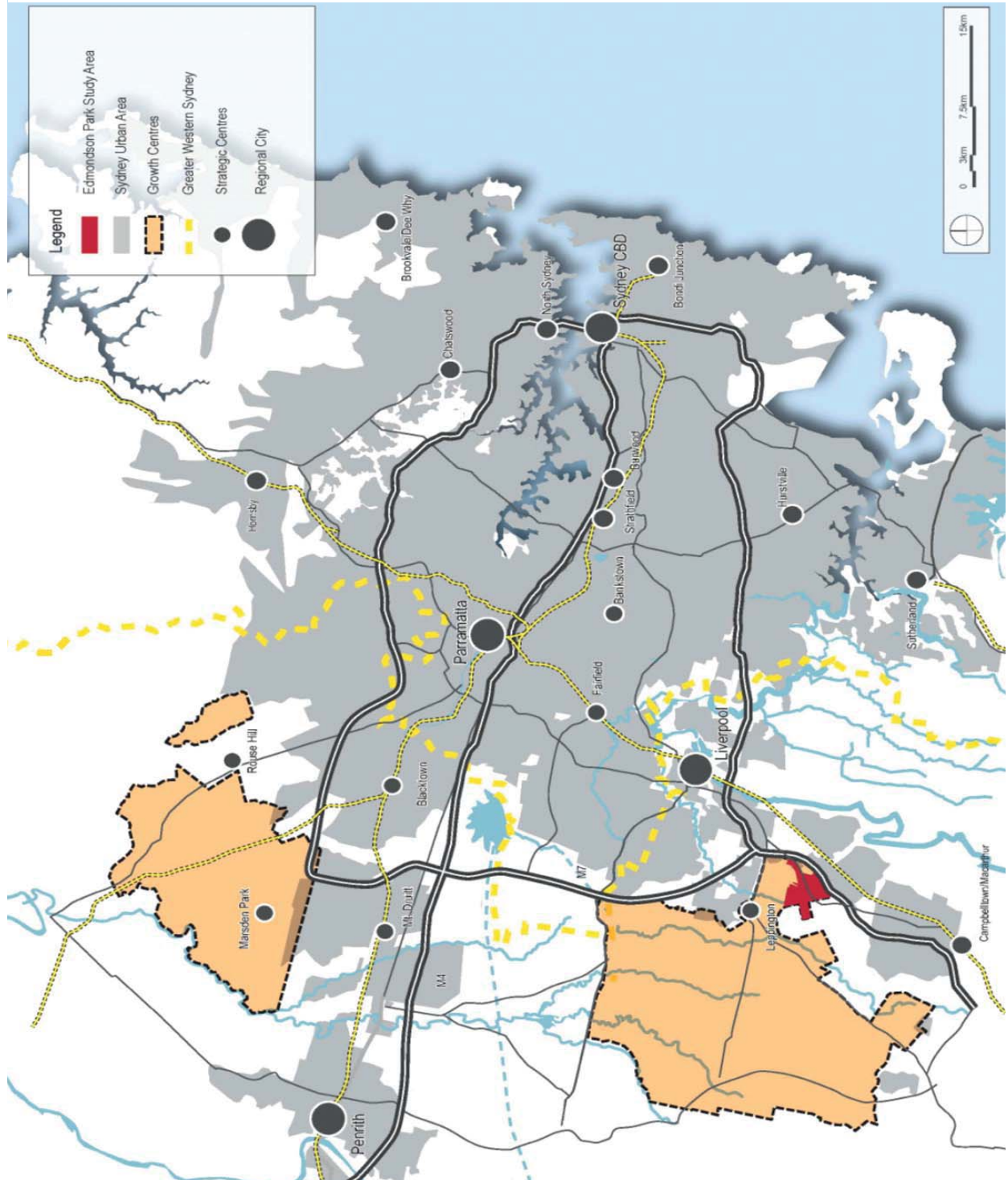


Figure 1_Location Plan

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The majority of the site is currently owned by the Commonwealth (Department of Defence) and was formerly used as an army camp (the Ingleburn Army Camp) up until the 1990s when it was identified as surplus to Defence requirements. Since this time it has been progressively vacated. The project is intended to be carried out once ownership or control of the former Ingleburn Army Camp land has passed to the State. Other land within the site is owned by Landcom, the Minister Administering the EP&A Act, the Minister for Education, Training and Youth Affairs, the RTA, along with several roads owned by Liverpool City Council and Campbelltown City Council.

The site is largely vacant. Remnants of military facilities (i.e. cottages, former building slabs, internal roads, training facilities etc) associated with the site's former Defence use are scattered through-out the site. There are a number of cottages / houses previously used by Defence personnel in an area of the site generally referred to as "Ingleburn and Bardia Villages". The Ingleburn North Public School (1.835 hectares) is located on the southern and the Bambi Preschool on the northern side of Campbelltown Road.

The site is undulating to steep. It slopes from its highest point (80 m AHD) at the intersection of Zouch and Campbelltown Roads to its lowest point (40 m AHD) at its eastern corner and to a similar elevation adjacent to the M5 Motorway in the south-west corner. The central portion of the site along Campbelltown Road forms a ridge with gentle falls to the north and south.

The condition of existing vegetation on the site varies from exotic pasture with negligible ecological value to areas of good condition vegetation with high recovery potential. The existing cleared portions of the site generally contain non native species.

The site is at the top of three catchments. Maxwell Creek, Bunbury Curran Creek and Cabramatta Creek pass through the site, with associated riparian zones and some woodland habitat (notably Cumberland Plain Woodland).

Refer to an Aerial Photo of the site at **Figure 2**.

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Figure 2_Aerial Photo

01 Introduction

1.3 Planning Background

The Edmondson Park Release Area, including the site, has been the subject of broad strategic planning investigation and environmental assessment over a number of years by Liverpool and Campbelltown City Councils, the Department of Planning, the Department of Defence (the current landowner of the Ingleburn Army Camp) and Landcom (owner of certain lands).

The whole of the Edmondson Park Release Area has been released for urban development by the Minister for Planning. Part of the site; the Ingleburn Army Camp, is currently the subject of a 'delayed' rezoning for urban purposes under Liverpool Local Environmental Plan 2008 and Campbelltown (Urban Area) Local Environmental Plan 2002.

In June 2010 the Minister for Planning considered a Preliminary Assessment Report for the Edmondson Park South Project that provided justification for the planning, assessment and delivery of the project to occur under Part 3A of the EP&A Act, having regard to the demonstrated contribution that the project will have to achieving State and regional planning objectives.

Subsequently, on 23 July 2010, pursuant to Clause 6 of SEPP Major Development, the Minister for Planning formed the opinion that the Edmondson Park South Project constitutes a Major Project to be assessed and determined under Part 3A of the EP&A Act, and also authorised the submission of a Concept Plan for the site. In doing so, the Minister also formed the opinion that a State Significant Site (SSS) study be undertaken to determine whether to list the site as a State Significant Site in Schedule 3 of SEPP Major Development.

The Part 3A process under the EP&A Act allows for the Edmondson Park South Project to be planned, assessed and delivered in a holistic manner, with a uniform set of planning provisions and determination by a single consent authority. Given the scale of the proposal, the Concept Plan and SSS listing provide the opportunity to identify and resolve key issues such as land use and urban form, development staging, infrastructure delivery and environmental management in an integrated and timely manner.

This report has been prepared to fulfil the Environmental Assessment Requirements issued by the Director General for the inclusion of the Edmondson Park South site as a State Significant Site under SEPP Major Development, and for a Concept Plan approval for the development.

Specifically, this report addresses the following requirements:

Key Assessment Requirements:

(5) Assess the visual impact of the proposed development when viewed from the surrounding areas.

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1.4_The Concept Plan

The Concept Plan establishes the overall planning framework for the site, including:

- _land use type and distribution;
- _a mix of housing types and densities (approximately 3,200 dwellings);
- _concept location of and approximately 35,000 – 45,000 m² of retail / business / commercial floor space within the new Edmondson Park Town Centre;
- _identification and location of open space and drainage corridors, environmental conservation lands (to form the new Regional Park), and local active and passive recreation facilities, including levels of embellishment;
- _expanded Ingleburn North Primary School and new combined Primary/High School to the north of the site;
- _road network layout;
- _pedestrian and cycleway network layout;
- _pedestrian bridge over the south western railway;
- _Campbelltown Road corridor including the establishment of key intersection locations and configuration;
- _utilities (including power, telecommunications and gas), infrastructure strategy, potable water strategy, sewer concept plan and water cycle management plan;
- _location and dimensions of Bushfire Asset Protection Zones;
- _appropriate interpretation of European and Aboriginal heritage located on the site;
- _erection of signage and billboards;
- _remediation works; and
- _demolition.

The Concept Plan also sets out an approval framework that will enable the carrying out of the works necessary to remediate the site in accordance with a Remediation Strategy without the need for undertaking further environmental assessment.

A variety of housing types is proposed to be delivered. This will provide for a range of housing price points and will include moderate income housing and housing for seniors.

It is proposed to develop the Edmondson Park South site progressively in stages over a 15-20 year period. The Concept Plan will address the staging and delivery of the overall development having regard to the progressive delivery of necessary infrastructure, services and facilities; and market demand.

The Concept Plan is accompanied by a proposal with respect to the future developer contributions framework for the provision of local facilities and services within the Liverpool and Campbelltown LGAs as well as State Infrastructure.

The Concept Plan proposal is shown in **Figure 7** (page 24) .

1.5_Resource Information

Information for this study was collected by:

- _Visiting the site and surrounding areas from nearby vantage points and identifying significant views within the site and surrounding area in August 2010;
- _Reviewing topographical maps (1:25,000) and aerial photographs;
- _Reviewing the updated concept plans for the proposed development prepared by Cox Richardson Architects.
- _Review of background information provided by the project team (refer Appendix A).

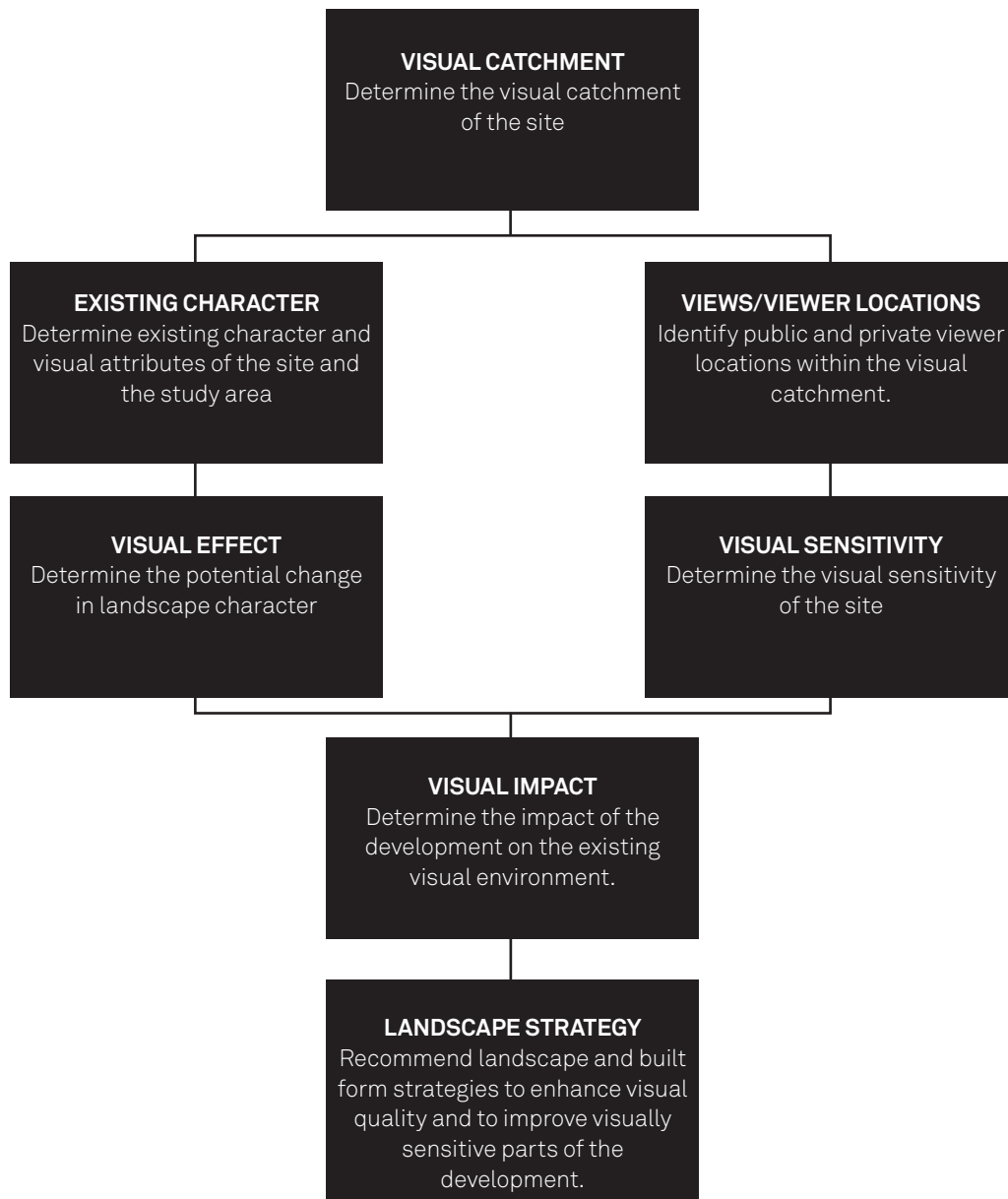
02 Visual Assessment Methodology

2.1 Description of Visual Assessment Methodology

The objective of visual and landscape assessment is to identify scenic resources that should be protected because of their value to the community.

This report uses a well-recognised approach to visual quality assessment that is systematic, consistent and based on professional value judgement of commonly adopted and accepted criteria.

The visual impact of the proposed development is determined by evaluating the visual effect of the development in the context of the visual sensitivity of the surrounding land use areas from which the proposed development may be visible. The following chart describes the visual assessment methodology undertaken for this project, which is then described in more detail in the following pages.



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10 Once environmental constraints including those imposed by visual and landscape significance have been assessed, detailed strategies for their conservation and management can be developed. These can be incorporated into a Development Control Plan (DCP) for the Edmondson Park South release area and may include:

- _built form controls which enhances the local visual environment (including setbacks, form, height, scale, mass, street pattern, street frontage);
- _maintenance of significant views, vistas, landmarks and other key features;
- _open space;
- _streetscape treatments; and
- _landscaping treatments.

2.2_Visual Catchment

The visual catchment of a site is the extent of the landscape that can be viewed from the site and likewise the extent of locations from which the site can be seen. Vegetation, land use and landform play key roles in determining visual catchment. For example, where a development is surrounded by vegetation, the visual catchment is likely to be significantly restricted. Conversely, grazing land does not create the same impediment to views.

The visual catchment fro Edmondson Park South was initially approximated by topographic analysis. Where possible, ground truthing was then undertaken to ascertain the influences of the surrounding vegetation and land use, and to adjust the catchment if necessary. Some private (rural) lands located within the nominated visual catchment area, but outside the site, were not accessible and were not able to be accurately ground truthed.

The extent of the visual catchment area determined for Edmondson park South is shown in **Section 3**.

2.3_Landscape Character

Landscape character is the recognisable pattern of elements that occurs in a particular landscape. Variations in geology and soils, landform, land use and vegetation, land use and settlement patterns and building styles, give rise to different landscapes each with its own distinctive character and unique sense of place. The landscape character of the Edmondson Park South release area was assessed as the basis on which to determine the degree of change to landscape character that would occur as a result of the proposed development.

2.4_Visual Effect

Visual effect is the expression of the change in landscape character created by the interaction between the development and the existing environment. It represents the level of contrast between the development and the visual setting within which it is placed. Critical issues are:

- _changes to landform;
- _changes to vegetation patterns; and
- _the nature, density and scale of existing and proposed development.

A high visual effect would result if the development is a major element and contrasts strongly with the existing landscape. In such a situation there is little or no natural screening or integration, such as could be provided by vegetation or topography. In situations where the existing environment is heavily modified by the proposed development, for example through the large-scale removal of vegetation, a high visual effect would also result.

02_____ Visual Assessment Methodology

A moderate visual effect occurs if the proposed development is moderately integrated with the landscape. This would occur if the surrounding vegetation and/or topography provide some measure of screening, background or other form of visual integration of the development with its setting.

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A low visual effect occurs where there is minimal contrast and a high level of integration of form, line, shape, pattern, colour or texture values between the development and the environment. This can occur through constructed integration of the development with the landscape or by substantial preservation of the existing visual setting.

2.5_Viewer Locations

Viewer locations are public or private places where the proposed development site can be viewed. Illegal or uncommon use of land which results in a view of the site has not been considered. Viewer locations within the visual catchment area and representative views from a particular area were marked on a topographic plan as well as the extent of the view of the site (refer **Section 3**).

2.6_Visual Sensitivity

Visual sensitivity is a measure of the importance of the visual environment to different user groups and areas or locations. The function of each area affects the significance with which potential changes are viewed. The visual sensitivity of the development depends on a range of user-group characteristics and the authors' knowledge and experience of public perception of the quality of particular land uses and landscapes.

The characteristics considered in this study are:

- _the perceived cultural value of the visual environment and elements within it;
- _user groups (residents, motorists, recreation users etc);
- _frequency (refers to the number of viewers that will be affected by changes in their views. If more people will be affected, the visual impact is likely to be higher);
- _duration of view (refers to how long the viewers spend viewing the proposed development); and
- _the distance of the proposed development from viewers.

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2.6.1_Frequency

Frequency is the number of people who might view the proposed development. Three categories were determined:

- _low frequency (residences where there are few inhabitants and visitors to private properties);
- _medium frequency (roads, public walkways or parks that have medium usage by the general public),
- _high frequency (public places and thoroughfares that have high usage).

2.6.2_Duration

Different levels of view duration at various view locations were identified and qualitative descriptions were determined:

- _Short - views from naturally vegetated (forested) areas or industrial areas that area partially obscured by topography, landscaping or structures.
- _Short to moderate - views from local roads where the duration of the view is short to moderate, many of the viewers are frequent users of the road, and their visual sensitivity is constrained because the orientation of the viewer is focussed on the road for much of the time (a viewer travelling in a vehicle only has a 20° angle of visual either side of the centre view of the road at speeds of 100km/hr and a focusing distance of 600m, Road Traffic Authority, 1991).
- _Long - Long duration views from residential and public recreational areas. Views include elements that dominate the landscape.

Long duration views from housing, or views from public places that have high visitation, would have highest visual impact. Short duration views, which are partially or largely obscured by existing topography, landscape or structures, would have the lowest visual impact.

2.6.3_Distance

Distance zones were determined around the proposed development site within the visual catchment area. The distance zones are as follows:

- _foreground zone - areas within 0-300 metres of the viewer - within this range the observer experiences maximum discernment of landscape details eg. such as shape, colour and contrast.
- _middle ground zone - areas between 300 metres and 1 kilometre - within this range, vegetation textures and land use patterns are visible to the observer).
- _background zone - areas greater than 1 kilometre from the proposed development - within the range, textures and patterns are indistinct to the observer). The viewer is unaware of individual details and discerns broader landscape units as patterns of light and dark.

Viewer locations that fall within the foreground zone are considered to be in the zone of highest visual impact because the proposed development would be part of their ground views. Changes to views in the middle ground are considered to be important, but less important than in the foreground. This is because the subject site is further from the viewer and would therefore occupy a lower proportion of the total view from the identified viewer location. It is considered that visual impact or viewer locations within the background zone is of least significance, however, still worthy of consideration. In some cases, wholesale change of broad distant views in terms of colour, texture and pattern can still be significant.

02 Visual Assessment Methodology

2.7 Visual Impact

Visual impact is a measure of the potential effect that the proposed development (including both natural and built elements) will have on the visual environment without any ameliorative landscape treatment.

Visual impact depends upon the visual catchment area (extent of visibility), visual sensitivity (the number of views and viewers affected, duration of views, and distance) and visual change (the degree of visual intrusion or obstruction that will occur). These visual impacts can be positive or negative.

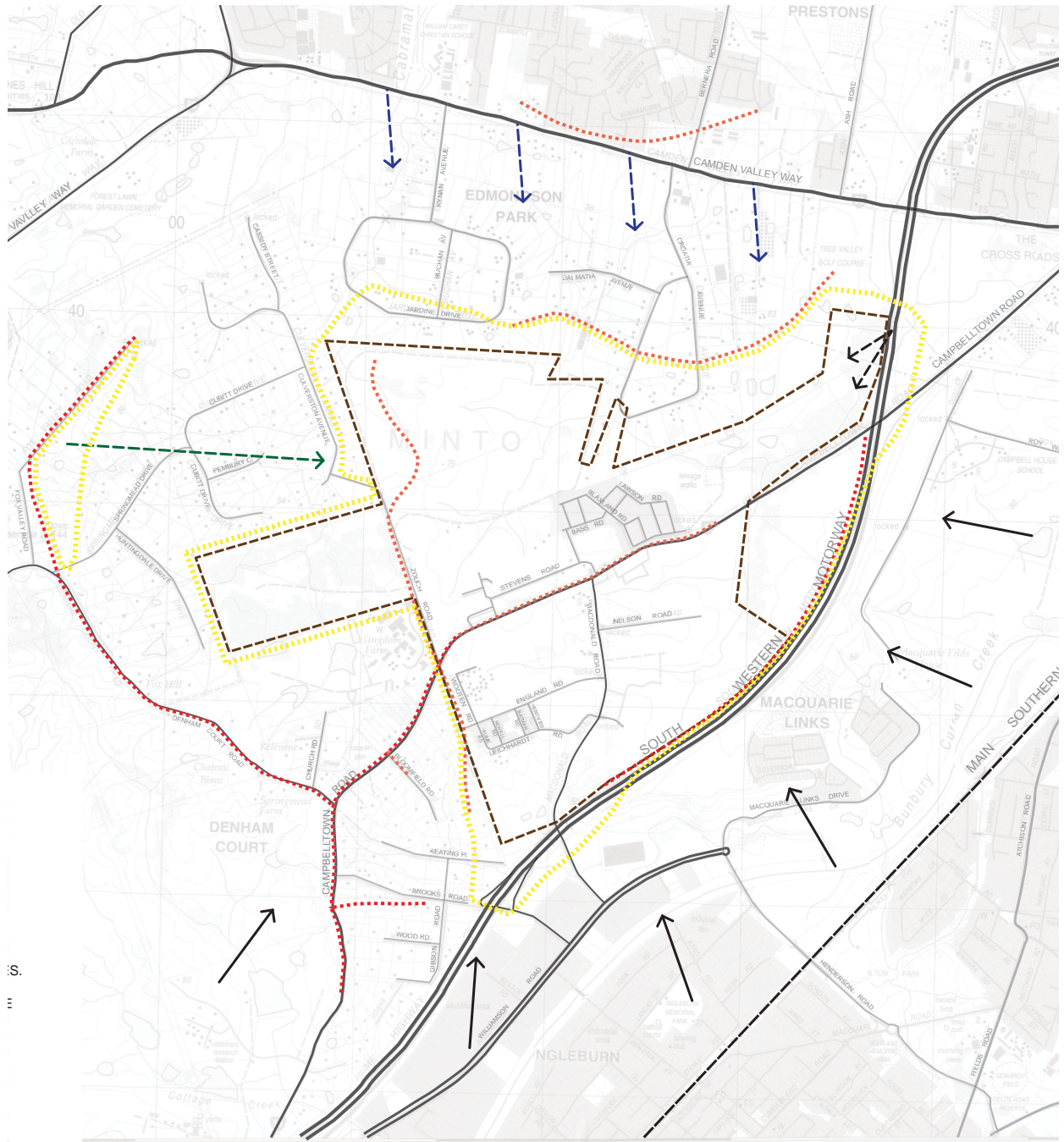
The table below illustrates the visual impact as a result of the relationship between visual effect and visual sensitivity.

Visual Effect Levels				
Visual Sensitivity Levels		HIGH	MODERATE	LOW
	HIGH	High impact	High impact	Moderate impact
	MODERATE	High impact	Moderate impact	Low impact
	LOW	Moderate impact	Low impact	Low impact

Matrix for Determining the Visual Impact of Proposed Development

03 Visual Assessment

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-  SITE BOUNDARY
-  VISUAL CATCHMENT
-  RIDGELINES
-  VIEWS FROM SOUTH WEST & EAST ARE LARGELY OBSCURED BY EXISTING LANDFORM & VEGETATION
-  VIEWS FROM THE NORTH ARE FILTERED BY VEGETATION AND LOW RELIEF CHANGES. FUTURE VIEWS OF THE ELEVATED TOWN CENTRE DEVELOPMENT WILL BE POSSIBLE
-  FILTERED VIEWS OF THE SITE ARE AVAILABLE FROM THE M5 MOTORWAY
-  DISTANT SITE VIEWS FROM ELEVATED RIDGELINE

Figure 3_Visual Catchment diagram