CITY OF NEDLANDS

5 MAR 2014

# Hollywood Private Hospital Masterplan

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Prepared for Ramsay Health Care

By Landvision



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#### **EXECUTIVE SUMMARY**

In order to meet the health and wellbeing needs of the expanding population who use the Hospital's services, the Masterplan has been created with future expansion and development of services to aim to ensure Hollywood Private Hospital can continue to provide first – class health services to the community.

The Masterplan concentrates on several key factors including future development, access and parking, building height and appearance, neighbourhood amenity, landscaping outdoor spaces, parking and connectivity to public transport.

The Masterplan provides excellent access between the community and the hospital, between the buildings on the hospital grounds and within the buildings themselves. Access in and around the hospital is enhanced by good signage, pedestrian walkways between buildings and the provision of secure and weather-proof links.

Planning for the hospital has considered proposals for future improvements to the availability of public transport, primarily buses but also a potential light rail system. This will ensure that patients and visitors will have increased access to public transport while the existing approximately 1500 car parking bays (which can be expanded to be up to 1800 bays) will ensure both staff and the public have adequate onsite parking facilities together with improved "end of trip" facilities.

The Masterplan shows areas of proposed works which will be likely to be developed within the next 5 years and include:

- expansion of the Hollywood Clinic;
- expansion of the theatre, together with new kitchen and additional wards;
- a research facility;
- a multistorey carpark; and
- an additional floor of parking on the existing multistorey carpark.

In addition the Masterplan shows a number of Future Development Areas where buildings and facilities are likely to be renovated or replaced in the future over a period of more than 15 years. It is not proposed to specify what each Future Development Area will be developed for other than for hospital and allied services. Health operators must respond to the changing needs of the community and are not in a position to "lock in" the exact nature of the future use of Future Development areas but it must be consistent with the provisions and standards of the Masterplan.

The Hospital Masterplan delivers or provides guidance on:

- A planning and design framework regarding the principles and parameters for the future long-term use and development of the Hospital campus;
- The desired future character of the Hospital campus;
- Integration with surrounding land uses, infrastructure and street patterns;

## Hollywood Private Hospital Masterplan 2014

- Entry and exit points to the site and analysis of the impacts on the existing road network;
- Management of stormwater and other infrastructure on the site;
- Guidance for developing a sustainable built form and open space setting;
- Background input into the development of statutory plan amendments for the assessment of detailed development applications regarding the site through the adoption of the Masterplan; and
- Ongoing management of infrastructure and public areas on the site.

HPH seeks the adoption of the Masterplan to guide future growth and development of the site and will continue to monitor the Masterplan and its implementation. From time to time HPH may seek to modify the Masterplan.

## The Masterplan comprises:

- Hollywood Private Hospital Master Plan -February 2014

#### which includes:

Appendix 1:

Strategic Planning Context

Appendix 2:

Report on Landscaping at HPH, Pullyblank Pty Ltd

Appendix 3:

Lighting Management Strategy, January 2014,

**Electronic Technology Consultants** 

## 1.0 INTRODUCTION

Over the past years development has occurred at Hollywood Private Hospital (HPH) on an 'as needed' basis and in November 2009 the Council of the City of Nedlands determined that it is no longer willing to approve further development until an overall Masterplan has been approved. Prior to this the Council approved a Masterplan for the Hospital campus in 2005 which now requires updating and modification to meet the future development program for HPH.

A modified Masterplan submitted to Council with a proposed Scheme Amendment (the Amendment did not proceed) prepared by Ramsay Health Care was considered by Council in December 2009. The Council resolved that before any future development is approved a revised or new Masterplan was required with several matters needing to be satisfactorily addressed including the following:

- the Masterplan should in its presentation and detail eg. refer to height from an agreed datum or mean average base level in area;
- be accompanied by a base plan which shows only the existing building footprints, parking etc. without added data;
- produce a modified version of the proposed Masterplan together with an east west, north

   south profile to show and measure building heights in each of the Precincts to make it easy
   to get to show or determine the maximum height over the whole Precinct in future;
- show proposed development setbacks;
- a plan showing all existing areas of landscaping, its percentage of the site; and
- produce a simple Masterplan with no buildings shown dividing the site into simplified subprecincts if there are common areas.

The above Masterplan will then establish the existing development standards for the whole site. This report presents a proposed Masterplan which illustrates the potential future development of the whole HPH site for consideration.

The Masterplan shows areas of proposed works which will be likely to be developed within the next 5 years and which include:

- expansion of the Hollywood Clinic;
- expansion of the theatre, together with new kitchen and additional wards;
- a research facility;
- a multistorey carpark; and
- an additional floor of parking on the existing multistorey carpark.

HPH seeks the adoption of the Masterplan to also guide future growth and development of the site beyond 15 years time and will continue to monitor the Masterplan and its implementation. From time to time HPH may seek to modify the Masterplan.

## 1.1 Background

HPH was constructed during World War II by the Commonwealth Government as a 500 bed hospital to care for service men and women and was first occupied in 1941. In 1947, control of the hospital was passed to the Repatriation Commission to provide acute care for veterans and war widows and it became the Repatriation General Hospital Hollywood.

Ramsay Health Care, an Australian owned company, became the owner – operator in 1994 and remains the current owner. From its modest beginnings the Hospital has emerged as an acknowledged Centre of Excellence in several medical specialities including orthopaedics, urology, cardiology, psychiatry and oncology. The hospital currently has a licence to treat 492 overnight patients and 167 day patients or a total of 659 patients in any one day providing care for private patients and entitled war veterans and war widows. The licence to treat a specified number of patients is issued annually by the Department of Health.

Over the past 5 years HPH has carried out a major redevelopment of its hospital facilities, access and parking which is reflected in Figure 6 – Masterplan.

The improvements include:

- upgrading theatre staff accommodation and the sterile supply department;
- construction of a new gastroenterology unit;
- construction of new operating theatres;
- construction of a new ward block;
- construction of a multi- storey car park;
- construction of an additional Day Surgery, Day Procedure Unit and Accommodation;
- construction of Hollywood Medical Centre (dedicated Specialist suites); and
- extensive landscaping of the Verdun Street verge in cooperation with the City of Nedlands.



# 2.0 MASTERPLAN, VISION, GOALS AND OBJECTIVES

## 2.1 What is a Masterplan?

A Masterplan is a high level plan designed to provide a coordinated approach to future development. Masterplans contain a series of illustrations and explanatory text to specify the planning principles and controls within a particular area as a whole. Their intent is to guide landowners, government and the community on how and where development should occur.

The Masterplanning process will determine how HPH can best be used in the future, considering heritage, setting, existing uses, future uses and sustainability. The HPH Masterplan is a long term vision for the site and will take many years to implement.

#### 2.2 Vision

The vision for the HPH campus is to:

- Develop a distinctive and attractive campus that capitalises on its existing natural, building and heritage assets to uniquely position itself within the region;
- Take advantage of an ongoing improvement of the public transport system that is able to support the intensification of employment and patients numbers;
- Provide a Masterplan which requires that future facilities are flexible enough to adapt to
  continuous changes in the health care delivery system and to support rapid technological
  advances and to increase the efficiency of the hospital operations, help manage costs and
  improve service to patients.

#### 2.3 Goals

The goals for the Masterplan include:

- 1. Prepare a Masterplan to guide growth and development through to the year 2030 and beyond:
  - Provide opportunities for public review and comment;
  - Prioritise future improvements and new development; and
  - Provide certainty to neighbouring property owners and the City of Nedlands.
- 2. Create an aesthetically pleasing and highly functional hospital campus environment.
  - Continue to enhance the main entry from Monash Avenue;
  - Create an integrated, internal circulation system for all vehicles (includes emergency vehicles) and pedestrians;

- Provide sufficient onsite parking for all users while creating initiatives to reduce the general reliance on private cars for access, increasing the use of public transport as the services are improved;
- Provide high quality, sustainable landscaped buffers and walkways;
- Support public transport services; and
- Minimise exhaust, light and noise relating from hospital operations.

## 3. Remain a good neighbour

- Control and manage vehicle access to the campus to reduce traffic in adjacent residential neighbourhoods;
- Provide landscaped buffers and visual screening where they would reduce the visual impact on neighbouring property owners;
- Consolidate the footprint of hospital buildings to maximise the amount of open space;
- Setback higher buildings to the centre of the campus and away from residential buildings;
- Build lower buildings at the perimeter that complement the architecture of and provide for transition to the adjacent neighbourhood (Note: this is more important along Verdun Street where the majority of adjacent homes are located); and
- Enhance portions of the campus edge with desirable and usable places benefitting patient care, caregivers and the surrounding neighbourhood.

# 2.4 Objectives

- 1. Prepare a Masterplan to inform Council and the public and other stakeholders of the future development of Hollywood Private Hospital;
- 2. To prepare a Masterplan consistent with the requirements of the Town Planning Scheme No. 2 and develop a set of conditions to be listed in the Masterplan which once approved by Council provides the development requirements of future development; and
- 3. Reflect the findings of the Traffic Impact Statement, the Drainage Management Plan, and the Masterplan and make any relevant recommendations in this respect.

The HPH Masterplan provides a framework for guiding the development of the hospital campus. In preparing this Masterplan the following was taken into consideration:

- Relevant State Planning policies;
- The City of Nedlands Local Planning Strategy and Scheme and Policies;
- The Traffic Impact Statement (See Part 2: Background Reports);
- The Drainage Management Plan (See Part 2: Background Reports);
- Health and medical research and education;
- The adjacent QEII Medical Centre Masterplan 2010 by Hassell;
- The general and urban environment;
- Traffic and access;
- The neighbouring urban form;
- Site functions such as stormwater and utility infrastructure; and
- Statutory Planning Context.

## 3.0 PLANNING CONTEXT

The subject land is private freehold land and zoned 'Special Use' in Town Planning Scheme No. 2 (TPS No. 2), City of Nedlands. 'Special Use' zones are listed in Schedule V – 'Special Use' Zone (see Figure 2) as follows:

Schedule V – Special Use Zone AMD 97 GG 22/11/86

(A)	(B)		
DESCRIPTION OF SITE	PERMITTED USES AND PROVISIONS APPLYING TO		
	SPECIAL USE SITES		
Pt. Loc 1715 and Pt. Loc 8697 Monash Avenue,	i. Hospital and ancillary facilities; and		
Nedlands (Hollywood Repatriation Hospital)			
	ii. (ii) Aged persons housing and frail aged		
AMD 97 GG 22/11/96	persons hotel, subject to being		
	advertised in accordance with the		
	provisions of Clause 6.3.3 and 6.3.4.		

Clause 3.10 Special Use Zone states that:

"No person shall use the land or any building or structure thereon in a Special Use zone, except for the purposes set against that land in Schedule 5 and subject to compliance with any conditions specified in the Schedule with respect to the land".

As the building footprints, shown within the Future Development Areas on Figure 6, are indicative only it is proposed that the only variation which would be accepted by Council without a formal amendment would be for a variation to the indicative building footprint when:

- a) the modified building footprint remains within the Future Development Area; and
- b) the area of the modified building footprint is equal to or less than the area shown on Figure 6.

All development is to align with the Masterplan except as otherwise provided for in the Masterplan.

Any proposed development and development standards which are inconsistent with TPS No. 2 or the approved Masterplan would require an amendment and modifications to Schedule V, column (B) or to the Masterplan. When there is a discrepancy between TPS No. 2 and the Masterplan, the Masterplan shall prevail.

As the Hospital is <u>not</u> on a Regional Reserve the development does not require approval of the Western Australian Planning Commission (WAPC). It is noted however, that at its meeting held on 19 June 2007 the Statutory Procedures Committee of the WAPC adopted in principle the Queen

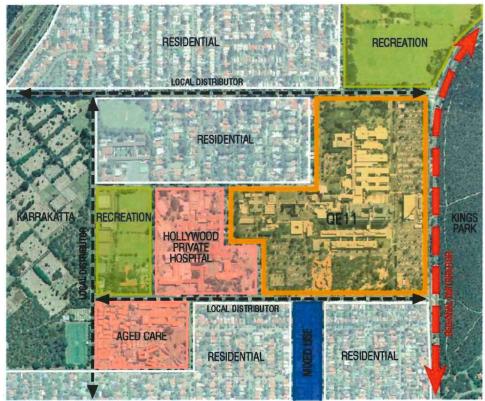
Elizabeth II Medical Centre Access and Structure Plan (9 February 2007) as a guide to the future planning and development of the Queen Elizabeth Medical Centre Precinct which includes HPH.

The WAPC stated in its decision that 'it considers without the required bus services the planned expansion of the QE II Medical Centre site would not be acceptable on planning, transport and sustainability grounds`.

Although the expansion of QE II is proceeding and this issue has been resolved the public transport available to staff and visitors to HPH still does not cater to the specific demands of both groups, in particular staff, which results in the ongoing demand for onsite parking.

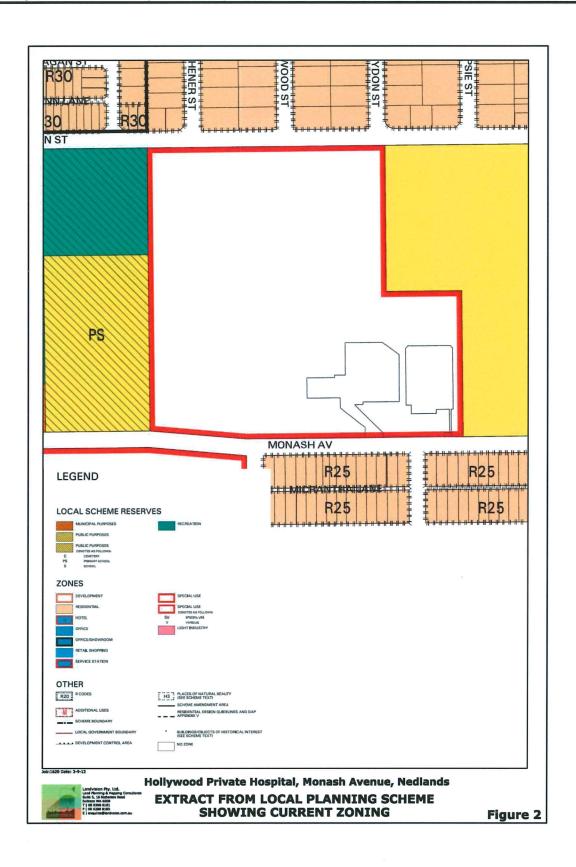
Of particular relevance to the forward planning of HPH the following condition was adopted as part of the WAPC resolution:

'8. Advise the City of Nedlands and Hollywood Private Hospital that the Commission is aware of the maximum limit of 1,800 car parking spaces in the approved site structure plan. The Commission would wish to be consulted on any proposal which would lead to a total number of car parking spaces exceeding 1,800 bays. The Commission further would be minded to introduce a Clause 32 resolution requiring any development exceeding 1,800 bays to be referred to the Commission for its determination'.



Source:QEII MedicalCentre MasterPlan-Hassell 2010

HOLLYWOOD PRIVATE HOSPITAL LOCAL PLANNING CONTEXT



A meeting with the relevant officers of the Department of Planning for the WAPC confirmed that:

- i) the WACP can call in the proposal if necessary; and
- ii) if the Masterplan proposed parking (together with existing parking) which in total does <u>not</u> exceed 1,800 car parking spaces the WAPC/DoP does not need to be consulted or involved in the formulation and assessment of the Masterplan.

Parking and access has emerged as significant issues to be addressed at Activity Centres. A discussion paper has been prepared by the DoP which seeks to use parking as a tool to help balance a variety of access demands for major activity centres.

The discussion paper "Activity Centres Parking" and the responses received when advertised is leading to a formalised policy that sets the new approach to parking supply and management and may formalise parking caps (maximums) for QEIIMC including HPH.

Appropriate parking supply and management, combined with increased access via alternative modes and mass transit allows a centre to grow beyond the levels that the physical capacity of the local and regional road network would otherwise allow.

Whilst the focus of the discussion paper is on major centres identified in SPP 4.2, namely Perth Capital City, Primary, Strategic Metropolitan and Specialised (eg. QEIIMC and HPH), the policy position described can also be applied to smaller centres and centres in regional areas.

The need for a SPP has arisen from policy gaps identified in preparation of parking and access strategies for a number of major centres including Stirling, Midland, UWA/QEII, Murdoch and Bentley/Curtin. The proposed SPP, together with Directions 2031 and SPP 4.2, would guide development of access and parking for major centres in the metropolitan area as part of a broad policy framework.

## 3.1 Property Description

The overall site comprises 3 titles with a total area of 11.7381 ha and which includes a number of easements.

## **Titles**

A summary table of lot details is provided below and shown on Figure 3.

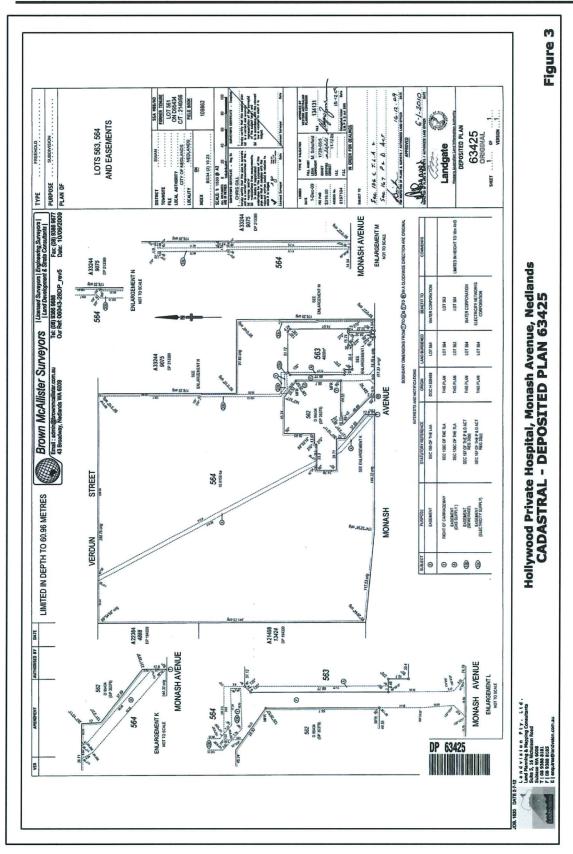
Lot	Diagram/Deposited Plan	Volume	Folio	Area (ha)	Owner Details
564	DP 63425	2735	137	10.6198	Ramsay Hospital Holdings Pty Ltd
563	DP 63425 Strata Plan 58316	-	-	0.6621	Hollywood Medical

					Centre
562	DP 66453	2140	97	0.4600	Hollywood
	DIA 95434				Specialist
					Centre

# **Easements and Rights of Carriageway**

The following encumbrances being easements and rights of carriage are interests and notifications shown on the titles which impact the properties.

Purpose	Statutory Reference	Origin	Land Burdened	Benefit To	Comments
Easement	Sec 195 of the	DOC H	Lot 564	Water	
	LAA	505459		Corporation	
Right of	Sec 136C of the	This Plan	Lot 564	Lot 563	
Carriageway	ILA				
Easement (Gas	Sec 136C of the	This Plan	Lot 563	Lot 564	Limited in
Supply)	ILA				Height to
					18m AHD
Easement	Sec 167 of the P	This Plan	Lot 564	Water	
(Sewerage)	& D Act REG 33			Corporation	
	(b)				
Easement	Sec 167 of the P	This Plan	Lot 564	Electricity	
(Electricity	& D Act REG 33			Networks	
Supply)	(c)			Corporation	
Easement Gas	Section 136 of	PD 63495	Common	Lot 564	
Supply	the TLA		Property		
Easement	Section 195 of	DP 63495	Lot 562	Water	Right to
(Waste Water	the LAA			Corporation	Enter
Pipeline)					



## 4.0 EXISTING DEVELOPMENT AND SERVICES

Hollywood Private Hospital has been significantly renovated and refurbished over the past few years but still utilises a number of relatively old buildings lacking modern facilities and standards.

Ramsay Health Care plan to continue its ongoing upgrading program and has recently completed construction of new medical facilities ward block, multi - storey car park and a new medical centre on the HPH site.

HPH provides substantial services to the Perth Region and the wider State with a licence to treat patients, either as in-patients or in a wide range of day services.

There are more than 830 accredited specialists utilising or based at HPH in a wide range of disciplines together with a pharmacy, specialist centre, clinic, aged care and rehabilitation, palliative care and full surgery services.

In addition there are valuable specialists providing on site services which include:

- after hours GP service;
- Diagnostic Nuclear Imaging;
- Hollywood Fertility Centre
- Hollywood Functional Rehabilitation Clinic
- Perth Bone and Tissue Bank;
- Perth Cardiovascular Institute; SKG Radiology and
- Western Diagnostic Pathology

The HPH undertakes a number of community initiatives and has established an Environmental and Waste Management Committee and has a commitment to:

- eliminate unnecessary waste;
- provide responsive waste disposal eg. recycling, worm farm,;
- develop water efficiency management;
- the Greening Hollywood Program which has resulted in over 8,500 native trees, shrubs and grasses being planted onsite over the past decade;
- the installation of many bird boxes encouraging native bird activity;
- encourage staff to use alternative transport solutions (minimising single car drivers as the
  preferred travel method to get to work), the HPH has developed and introduced the Travel
  Smart program;
- aim to reduce all pollutants; and
- comply with all relevant standards and regulations.

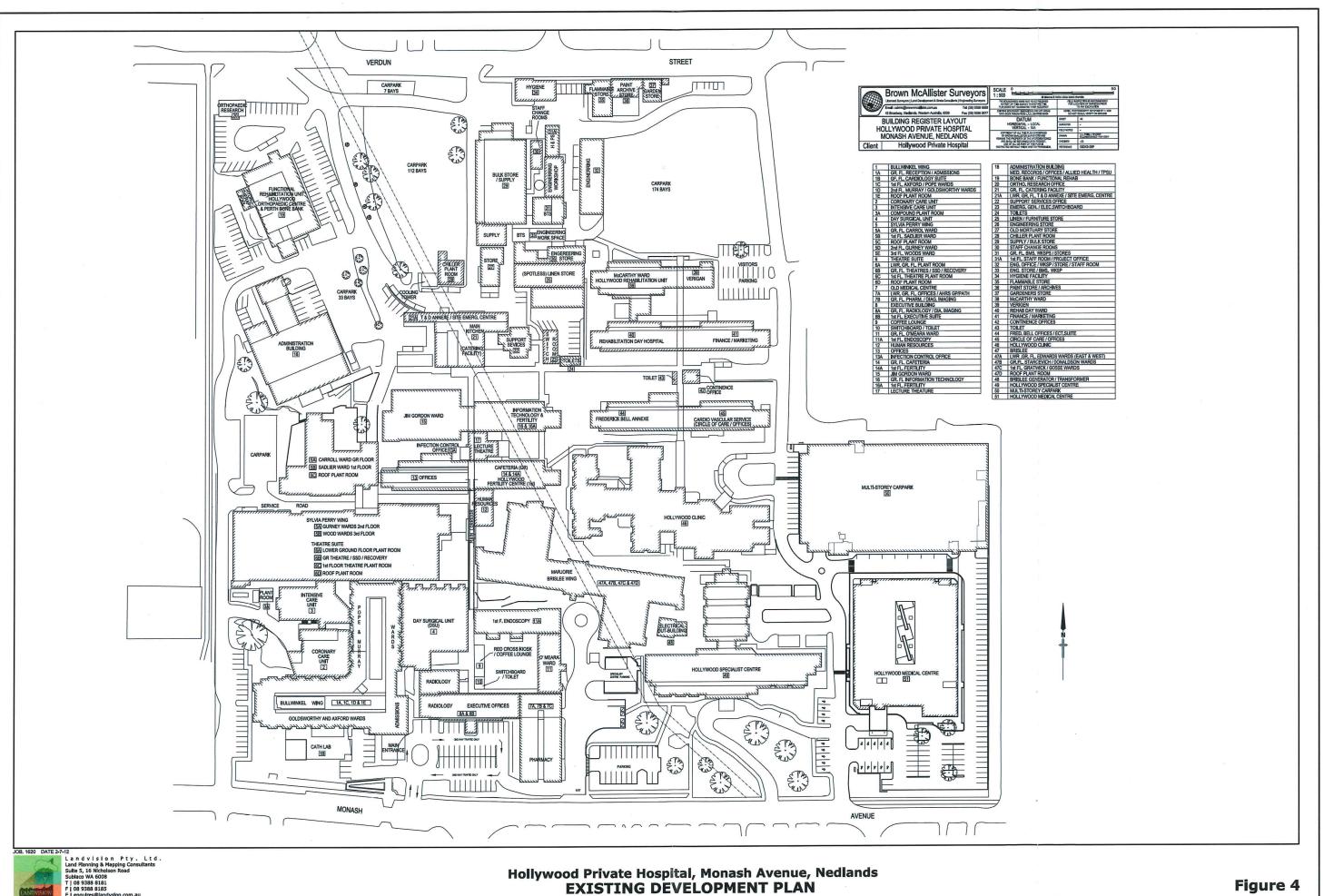
HPH actively encourages and supports clinical research as part of its role as a private teaching hospital.

## Hollywood Private Hospital Masterplan 2014

HPH has important research facilities on site for Alzheimer's disease (The Sir James McCusker Alzheimer's Disease Research Unit).

Significant medical research is also undertaken in many other areas such as cardiology, orthopaedics, urology, mental health, oncology, palliative care and respiratory medicine. This is conducted often in collaboration with the major teaching hospitals and universities.

The focus on research provides an environment in which HPH clinicians can maintain their knowledge and expertise at the forefront of clinical practice.





1620 Date: 9-7-13



Hollywood Private Hospital, Monash Avenue, Nedlands AERIAL PHOTO SHOWING EXISTING DEVELOPMENT

Figure 5

## 5.0 STRATEGIC PLANNING CONTEXT

# 5.1 State Planning Policy

HPH is located immediately adjacent to the QEII Medical Centre that is currently being significantly expanded which is consistent with being identified as a "Specialised Centre". The planning for QE II MC has included strategic planning direction for HPH.

Specialised Centres are identified and addressed in State Planning Policy 4.2 Activity Centres for Perth and Peel (See Appendix 1 for more detail).

# 5.2 Nedlands 2023, 2013 – 2023 Strategic Community Plan

As part of the City of Nedlands fulfilment of the Integrated Planning and Reporting Framework the Council has engaged the community in setting a vision and priorities for the coming decade.

The City has formulated a Strategic Community Plan which highlights particular priorities which Council will focus on, chiefly:

- Protecting the special character of Nedlands and its distinctive place in the urban fabric of the Western Suburbs and metropolitan Perth; and
- Continuing to provide the community infrastructure (such as roads and community facilities) to a standard befitting a liveable and thriving City.

The Masterplan shows that the future growth and development of HPH will contribute to the Council's vision in a positive manner.

HPH has a responsible relationship with the community as illustrated in the Masterplan. It aims to support the communities vision and seeks to minimise any adverse impacts on the surrounding residential amenity by being a good neighbour.

## 5.3 Cultural and Indigenous Heritage

A desktop assessment indicated that there have been no sites of indigenous heritage significance identified on the site.

## 6.0PROPOSED HOLLYWOOD PRIVATE HOSPITAL MASTERPLAN

## 6.1 Description of Masterplan

Development currently under construction or planned for construction as soon as possible is:

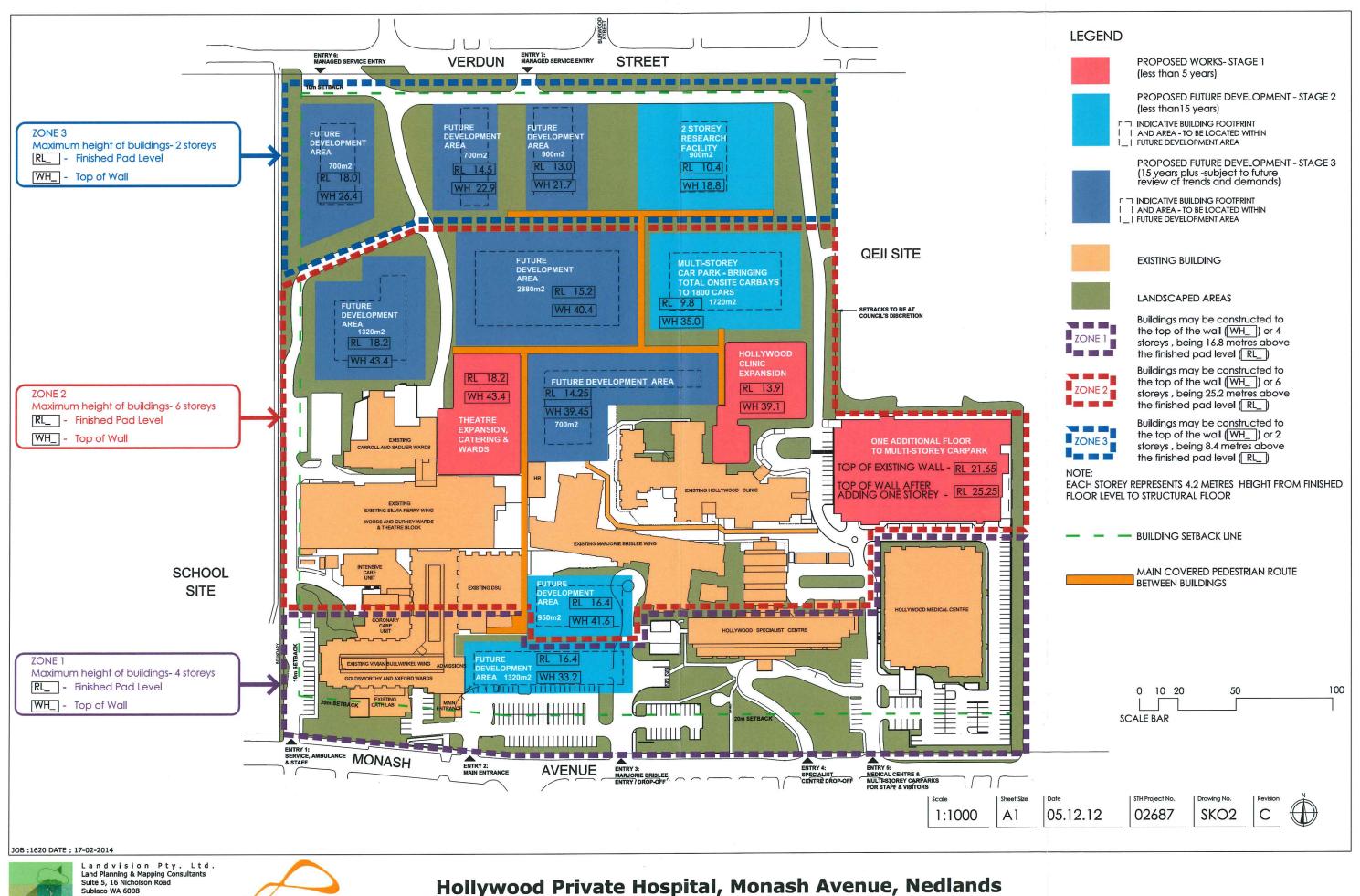
- the redevelopment of the Acute Adult Voluntary Mental Health Unit (now completed); and
- a new theatre block including kitchen and 60 bed wards (currently in preliminary planning stage).

Although there is no current long term building program proposed Council requires the preparation of a Masterplan for the hospital campus to:

- show existing development and those areas where redevelopment and new development may occur:
- establish the maximum height of buildings which would be permitted which is shown on Figure 8 as three distinct precincts which confine taller buildings to the central portions of the subject land;
- identify access and egress points and show the vehicle and pedestrian movement throughout the site;
- identify parking areas and the parking management requirements for the site;
- show perimeter boundary setbacks; and show landscaping throughout the campus.

The Masterplan shows that there are 3 distinct zones where building height (refer to Section 6.5.6 for detail) is identified:

- a) Zone 1 An area adjacent to Monash Avenue extending into the site by between 60 metres on the western boundary to 80 metres on the eastern boundary where new buildings will be restricted to a maximum wall height of four storeys or 16.8 metres from an agreed structural floor level shown as RL \_ on Figure 6 and so that any point does not exceed 18.3m above the RL;
- b) Zone 2 The balance of the subject lot is the central portion where much of the land is lower than areas adjacent to Verdun Street and Monash Avenue and where buildings will be hidden in most cases by buildings closer to the roads. In this area new buildings would be permitted to be constructed to a maximum wall height of 6 storeys or 25.2 metres above an agreed structural floor level shown as RL \_ on Figure 6 and so that any point does not exceed 26.7m above the RL.
- c) Zone 3 An area adjacent to Verdun Street extending 80 metres into the subject site where new buildings would be restricted to a maximum height of two storeys or 8.5 metres high from an agreed structural floor level shown as RL \_ on Figure 6 and so that any point does not exceed a height of 10.0m above the RL;



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silver thomas hanley

In addition the Masterplan shows:

#### a) Setbacks

All buildings are to have a minimum setback of 10 metres from the southern, western and northern boundaries unless otherwise agreed by Council. It is noted that the building setback along the eastern boundary with QEII is not a significant issue and shall be determined by Council and the new multi storey car park has a reduced setback along its northern face. There are no privacy, overshadowing, overlooking or other amenity issues along the eastern boundary as the adjacent use is also a major hospital site on which buildings already exist which are significantly taller and in some cases closer to the shared boundary than the standards proposed for HPH;

## b) Proposed Works

The next stages of building includes the four proposed new buildings shown on Figures 6 and 8 as:

- expansion of Hollywood Clinic already in progress
- theatre expansion/new kitchen and wards planned for construction in 2013;
- a new four storey research facility planned for 1 5 year timeframe;
- a multi storey car park adjacent to Verdun Street to be constructed; and
- to add an additional floor to the existing multi storey carpark planned within the next 5 years.

#### c) Future Development Area

HPH has recently completed a significant building and improvement programme and has only a limited future development programme to be reflected in the Masterplan. Future development currently in the planning stages is shown on the Masterplan and described in b) above.

The Future Development Areas (FDA) cover portions of the campus where existing buildings may be renovated or replaced in the future and which must be consistent with the standards for development (setback, building height etc) in the approved Masterplan. HPH is not currently in a position with its long term planning to specifically designate proposed uses for each FDA and so the Masterplan shows the area within which future buildings would be located. An indicative building footprint and area have also been shown to assist in determining compliance with parking, plot ratio and other development standards.

d) Existing development shown on the Masterplan includes the recent improvements. Any future building would need to comply with the Masterplan including the agreed maximum building heights.

# **6.2** Summary of Development Standards

As each new development or redevelopment of buildings on the campus is proposed it will be subject to a new Application for Planning Approval which shall be consistent with the approved Masterplan as follows:.

Development Standard	Masterplan Response Masterplan requireme	
Required		
Parking: The Hospital requires  1 bay per 4 beds — see  Schedule 3, TPS No. 2.  As the Scheme has no standard for day patients the proposed allocation to provide for day patients, staff, visitors and doctors is 1 bay per 4 patients.  The Medical Centre and Specialist Centre were required to provide 416 bays (@ 4.75 bays per 100m² g.l.a) when approved. These bays were provided and licenced for those purposes (See Notes at the end of this table).	There are a total of 1492 currently constructed bays on site comprising ambulance, service vehicle, doctors, disabled, general public (1209)) drop off, loading goods and motorcycle bays.  The hospital has 492 beds ÷ 4 = 123 bays for overnight patients, staff and visitors.  Day patients = 167 ÷ 4 = 42 bays.  The Medical Centre and Specialist Centre when approved provided 416	Based on parking requirements of 1 bay/4 patients the current parking surplus on site is 911 bays.  Maximum total number of bays permitted to be built on site:1800  All future car parking demand for new development provided for in the masterplan to be in accordance with the current town planning scheme.
Setbacks: 4.5 metres from all boundaries but greater if adjoining residential use.  The site does not adjoin residential zones.	parking bays as required by the City of Nedlands.  Therefore the existing developments require a total of 581 bays on site and there are currently 1492 bays on site which is a surplus of 911 bays to provide for future development.  At proposed setbacks of Front (Monash Ave): 20.0m  Westside: 10.0m  Verdun St: 10.0m  Setbacks are equal to or greater than the minimum	Front (Monash Ave): 20.0m Westside: 10.0m Verdun St: 10.0m East boundary: nil setback
	setbacks required East boundary: Adjoins QE II where no setback is	

	considered necessary and much taller buildings with small or no setbacks exist.	
Plot Ratio – Maximum plot ratio: 0.75 (Table 11 in TPS) for other than Residential development. There is no standard specified for a Hospital.	Due to large size of the site and the variety of existing buildings with different heights the plot ratio is not very relevant however the maximum plot ratio is 0.75 in TPS 2 which is inadequate for a hospital. The existing plot ratio is 0.72. Future development will result in replacement of existing buildings in many cases. The plot ratio proposed is 1.0.	• Max Plot Ratio for site = 1.0
Building Height As per Clause 5.11 Maximum Building Heights	See Part 6.5.6 in the Report	In accordance with Clause 6.5.6 and Figure 6
Open Space and Landscaping (5.4.2).  No minimum specified.  Must landscape between street boundary and setback line.	The plan shows extensive areas of landscaped open space including the areas between the property boundaries and the setback line, which has been increased to 10.0m. The site in the Masterplan is estimated to show 25% as landscaped open space. See Appendix 2 for a full description and plan.	In accordance with Appendix 2 of the Masterplan with a minimum of 25% of the site.

## **Notes: Medical and Specialist Centre Parking**

In 2009 a license was issued to establish the parking for the Hollywood Medical Centre and the Hollywood Specialist Centre. Although part of the HPH campus the centres are on separate strata lots. The licence states the following:

**Lot 562 Car Parking Requirements** means that the provision of adequate car parking for Lot 562, and any associated uses or development on Lot 562, in perpetuity for the approved use on Lot 562, such car parking to comprise not less than 100 car bays to be provided on Lot 564.

**Lot 563 Car Parking Requirements** means the provision of adequate car parking for Lot 563, and any associated uses or development on Lot 563, in perpetuity for the approved use on Lot 563, such car parking to comprise no less than 316 bays

to be provided on Lot 564, in accordance with Condition 3 and advice note 7 of the Subdivision Approval.

The Car Parking Licence Deed is a Deed made between:

- The Owners of Hollywood Specialist Centre (Lot 562);
- The Owners of Hollywood Medical Centre (Lot 563); and
- The City of Nedlands.

The deed formalised the requirement to provide and retain a minimum of 416 car parking bays on Lot 564 which is owned by Ramsey Hospital Holdings. Lot 564 comprises the whole of the hospital campus excluding the Medical Centre and Specialist Centre.

Ramsey Hospital Holdings granted a licence in favour of the owners of each Strata Company owning Lots 562 and 563 to ensure their individual parking requirements are met for the use of the proprietors and/or the occupiers of the Medical Centre and Specialist Centre.

## 6.3 Services Infrastructure

Ongoing upgrading of infrastructure will be required to accommodate future development. This will be a combination of both capacity and plant, in order to ensure that adequate electrical, hydraulic, communications services, chilled water and steam, waste collection and various other services will be available for future development.

Figure 3 shows there is an easement crossing the subject land from approximately the north – west to south – east corner which contains the sewer line and any development must ensure ongoing access to the sewer is retained. This easement is vested in the Water Corporation.

As part of the preparation of the Masterplan BPA Engineering provided a Local Water Management Strategy (LWMS) for the future development of the Hollywood Hospital located in Nedlands (See Part 2: Background Reports).

The Strategy outlines the quantity and quality measures for the proposed future development of Ramsay Hollywood Private Hospital to meet the design requirements of the Department of Water (DoW) and Better Urban Water Management (October 2008).

Water quantity management outcomes were based on design principles found in Australian Rainfall and Runoff (AR & R 1987). Peak flows were calculated using the rational method utilizing the latest rainfall data and catchment area for the proposed development. The design storms in accordance with the City of Nedlands requirements were the 100 year ARI (Average Recurrence Interval) for flood prevention of future buildings with the 1 in 20 ARI stored on site.

Water quality will be managed in accordance with DoW by providing Best Management Practices for the storm event (1 Yr 1 Hr ARI) that is expected to contain the highest concentration of pollutants.

It is proposed to best manage stormwater quantity and quality through the provision of stormwater retention systems.

In respect to stormwater drainage geotechnical investigations have been carried out as part of previous development on the site. The site is generally SP sand (Spearwood) with good drainage characteristics. Soakage via soak wells or underground stormwater retention systems are proposed to best manage stormwater quality and quantity.

Existing storm water drainage is via soak wells. The existing buildings on the site have local storage for 1:10 year storm with overland flow path for greater storm events. This is in line with the City of Nedlands Development Approval and building license conditions at the time of approval.

Any new structures will have as a minimum, local storage via soak wells for a 1:20 year storm event with overland flow for a greater storm event or to store the 1 in 100 year event. This is the current City of Nedlands requirement.

All overland flow resulting from storm events that exceed the designed on-site storage capacity shall be disposed of to the satisfaction of the City, with no discharge from the property being permitted to flood into the QEII site.

Additional underground storage using stormtech drainage cells or similar system can be provided at the boundary with Sir Charles Gardiner hospital if required.

# 6.4 Parking and Vehicle and Pedestrian Circulation

## 6.4.1 Existing Parking and Access

HPH is highly accessible due to its favourable location in terms of the regional transport network. However parts of the road network servicing the site already experience significant congestion during peak periods and any expansion of development at HPH that will generate additional traffic will impact on this congestion. Future development on the site will therefore be limited by the capacity of the transport network to provide access to the site. This is directly related to the amount of car parking provided for traffic arriving at (and leaving) the site during peak periods.

#### 6.4.2 Future Access and Parking

There will be 1500 parking bays on site following construction of the Acute Adult Voluntary Mental Health Unit. The proposed Masterplan (Figure 6) shows that the majority of the parking will be provided in the existing multi – storey car park and a future 2 deck car park. A small percentage of the parking will be retained at grade, primarily along Monash Avenue. In addition it is proposed to construct one extra level of parking to the existing multi – storey car park.

Retaining 1500 parking bays as shown on the Masterplan is consistent with the resolution of the WAPC discussed in Part 2: Background Reports and which is as follows:

"Advise the City of Nedlands and Hollywood Private Hospital that the Commission is aware of the maximum limit of 1800 car parking spaces in the approved site structure plan. The Commission would wish to be consulted on any proposal which would lead to a total number of car parking spaces exceeding 1800 bays. The Commission further would be minded to introduce a Clause 32 resolution requiring any development exceeding 1800 bays to be referred to the Commission for its determination)".

In addition a travel plan (incorporating a parking management plan) has been developed and occasionally reviewed which sets out the specifics of parking allocation, pricing, funding, staging and contributions and other relevant matters.

The QEIIMC Access and Structure Plan relevant to the strategy to manage parking at QEII and HPH is only going to be successful in reducing the reliance on private vehicles if the availability and frequency of public transport increases to cater for increased demand and a 24 hour service.

In the QEII/UWA/HPH Public Transport Masterplan, the following is stated:

"To achieve the mode share targets for public transport use to and from UWA, QEIIMC and HPH, it is essential that the whole plan be adopted. Bus priority is an integral part of the plan and should accompany the proposed service improvements. The bus priority projects should be seen as a complete package which will ensure consistency of running times throughout the day, add to the reliability of the services for passengers and afford the minimum ongoing operating costs to government"

The primary access/egress points for the QEII Medical Centre are presently from Aberdare Road and Monash Avenue, with no direct vehicle access available from Winthrop Avenue. The proposed multi deck carpark is proposed to directly access Winthrop Avenue, with no through access to Hospital Avenue or the surrounding at-grate car park except for emergency vehicles.

As part of the QEII Medical Centre Masterplan, a traffic study was undertaken in order to assess the traffic impacts of an expansion of the Medical Centre site.

The studies were undertaken in 2007 and 2009, with further revisions undertaken in 2010. An overview of the results of the studies indicates that the road network has sufficient capacity to accommodate the increase in traffic resulting from the expanded Medical Centre site, and that the proposed entrance directly from Winthrop Avenue will not adversely affect traffic flow in this location.

Extrapolating these findings to the minor increase in traffic generated by any expansion of HPH can be accommodated with only minor impacts on surrounding roads. In assessing traffic studies for QEII, the City of Subiaco concluded that the roads and intersections which would be affected have sufficient capacity to accommodate the anticipated increase in traffic volumes.

Until public transport can provide an adequate 24 hour service HPH will continue to rely mainly on the use of private vehicles, albeit while seeking to increase the modal split and reduce reliance on the use of private vehicles. To ensure that the future development of HPH would not adversely affect the surrounding road and cycle network Cardno prepared a transport assessment reproduced in full in Part 2: Background Reports. In summary the Hollywood Private Hospital Transport Assessment, Cardno June 2013 advised the following:

"The scope of this report was discussed with the City of Nedlands in May 2013 and agreement reached on the level of assessment for each of the scenario years and the critical intersections to be assessed.

Three scenarios of committed and possible future development have been considered in this assessment, as follows:

- > 0-5 years (2018 assessment year) Short term, committed development
- > 6-15 years (2028 assessment year) Medium term, potential development under consideration but not finalised
- > 16+ years (beyond 2028) Long term, possible future development

The 2018 assessment year is considered in detail as all land uses are committed. The 2028 assessment year is also considered in detail, based on assumptions about the likely form and scale of development during this period. The purpose of this assessment is to demonstrate that the scale of potential future development in this time period will not have significant impacts upon the surrounding road network. Detailed assessment of possible future development beyond 2028 has not been undertaken as this future development is subject to future changes in trends in health care provision and commercial viability.

As part of this report, an analysis was undertaken to determine the impact that each stage of the HPH Masterplan is likely to have on the surrounding road network. Background traffic growth was assumed to increase proportionally to the increase in the QEII parking cap as this is the only major traffic generator in the vicinity of the study area, while the increase in development traffic was estimated using traffic generation rates determined from surveys of existing site traffic during the AM and PM peak hours.

The analysis found that the development traffic is not likely to have any significant impacts on the surrounding traffic network for the 2018 and 2028 assessment years. For the 2028 assessment year, it was found that delays for traffic turning right from Monash Avenue into Smyth Road during the PM Peak Hour increase to approximately 45 seconds, with an average queue length of approximately 9 vehicles. Construction of a small roundabout at this intersection would reduce the delays for right turning vehicles and improve the operation of the intersection. However, it must be noted that if background traffic growth is lower than the conservative estimate then any delays for right turning vehicles will be lower than stated above.

Traffic generation at HPH beyond 2028 will generally be restricted by the availability of parking on site. As the 1800 space parking cap is reached by 2028, any further person trips generated by development at HPH will need to be

accommodated either in off-peak times when parking is available on site or by alternative modes such as public transport, walking and cycling. To assist with mode shift, HPH has been operating with a Green Transport Plan since 2004 and it is proposed that this Plan will be reviewed and updated by Cardno in 2013 to reflect current conditions. Consistent with this plan, significant improvements to end of trip facilities are proposed as part of the Stage 1 (2018) development and further improvements will be provided as part of future development beyond 2018.

An appraisal of public transport accessibility for workers and visitors to HPH has been undertaken. HPH has reasonable accessibility by public transport compared to most other locations in Perth, however it does suffer from longer walking distances from most bus routes compared to neighbouring Queen Elizabeth II Medical Centre (QEIIMC) which is the focal point for public transport in the area. Recommendations have been made for gradual improvements over time to ensure that an appropriate level of service is provided to encourage HPH visitors and employees to shift from driving to sustainable transport modes".

The majority of arrivals by private transport will arrive at the entrances off Monash Avenue. Visitors and patients may park in designated areas on Monash Avenue or by direct access to the multi – deck carpark via Gate 5 on Monash Avenue. No change to the existing entry and exit driveway crossovers along Monash Av was considered necessary by Cardno in its Traffic Assessment, June 2013 reproduced in the Part 2: Background Reports.

Incremental increases of traffic volumes to and from the site onto Verdun Street require Council approval. The approval will be based on the principle that Verdun Street is a local access road and accordingly is restricted in its capacity to carry traffic volumes.

Major bus routes service the hospital and surrounding areas being Routes 23, 24 and 25 which operate 7 days per week with regular services from Perth and East Perth. The main gap in this service is from about 11:05pm to 5.27 am.

Accepting that HPH is a major trip generator, HPH has sought to reduce single occupancy car travel to and from the Hospital and to encourage 'green' alternative modes of travel. Key initiatives include preparing and implementing a "Green Transport Plan" (see 6.4.3) and monitoring activity to assist in the future planning and management of parking and access.

The current and ongoing redevelopment of the site has made managing travel and parking demand a pertinent issue. As the facilities continue to grow, so too will the number of people accessing the site on a day to day basis. Proactively dealing with the issue before it becomes critical is a priority for HPH. The ongoing work by HPH to manage parking and access is reflected in the Masterplan which anticipates a range of possibilities for a modal shift from car to more sustainable travel modes while providing sufficient parking in the short term to cater for the particular needs of HPH.

Apart from the multi-storey car park the balance of parking for visitors, patients, doctors, specialists and staff is provided at grade (ground level) (See Figure 7). There is a second multi – storey car park which will be developed when required and it will replace parking lost as redevelopment occurs.

To minimise the impact on adjacent residents the proposed two deck car park has been relocated to be setback approximately 80 metres from housing on Verdun Street. The proposed Research Facility has been located at least 10 metres back from Verdun Street and in front of the multi – storey car park.

A requirement for any future multi – level car parking facility aimed to reduce the impact of noise on the neighbours will be that a construction method will be used for the proposed facility that will not generate the noise associated with vehicles driving over metal plates.

As shown on the Masterplan the proposed developments would have a positive impact on the site by maximising the efficiency of land used for parking purposes, which increases the availability of land within the site for the expansion of medical facilities. It will also improve its operation and function.

Emergency vehicles, patients, visitors and staff primarily enter and leave the campus via one the of the 5 entries along Monash Avenue. These access points are well spread and signposted along the almost 400 metres frontage to Monash Avenue.

There are only two other entry/exit points which are located on Verdun Street and which are used by most of the service vehicles. As an initiative to reducing the impact on residences on Verdun Street these entries are only open during working hours for 5 days per week (excludes weekends).

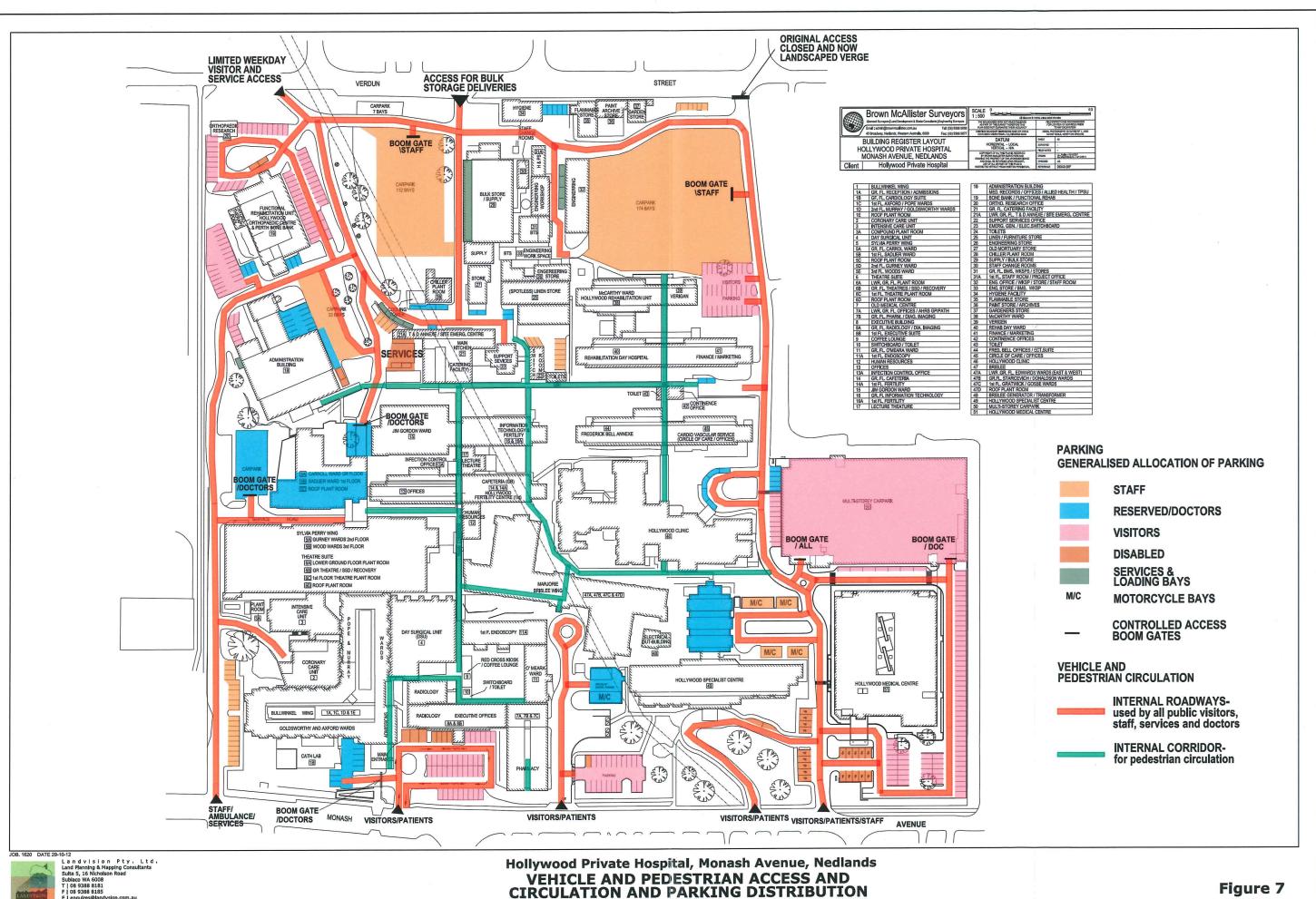
The Masterplan would assist in ensuring that the objectives of the Western Australian State Government for HPH through the QEIIMC Masterplan and Access and Structure Plan could be achieved, and would ultimately assist in ensuring that the redevelopment of the overall site could be achieved. This is as without the development of up to 1800 car parking bays, the function and operation of HPH is likely to be greatly affected.

During the formulation of the Masterplan and consideration of parking and access, the publics' comments in respect to the forward plan for QEII and the proposed multi-deck car park have been considered. In light of the publics' comments above, the following has been the aim:

"to coordinate and ensure that development is of a high quality and is undertaken in an efficient and environmentally responsible manner which:

- i. makes optimum use of the city's infrastructure and resources;
- ii. promotes an energy efficient environment; and
- iii. respects the natural environment. "

The provision of car parking to service HPH is intended to limit vehicle movements to a level which is based upon a significant reduction in employees travelling to work by private car. This will assist in ensuring that the traffic movements associated with the expanded facility do not result in negative impacts to the surrounding road network, and will also contribute to energy efficiencies and other environmental benefits through reduced car usage.



**CIRCULATION AND PARKING DISTRIBUTION** 

The dependence on private vehicles will be further reduced by the improvement and increased availability of public transport including the potential development and alignment of a light rail network close to HPH. If constructed, it would assist in reducing dependence on private vehicles by employees travelling to work.

It is therefore concluded that the increase in traffic to HPH will be insignificant when compared to that generated by the expansion of QEII Medical Centre.

## 6.4.3 Green Transport Plan

The Department of Health has developed the "Access and Parking Strategy for Health Campuses in the Perth Metropolitan Area" (APSHC), July 2010.

This Strategy provides a framework under which each public health campus in the metropolitan area can deliver consistent policies and practices towards access management. Although as a private hospital HPH is not listed, HPH has developed a "Green Transport Plan" which is consistent with the intent of the APSHC requirements for a Travel Plan.

The Green Transport plan has been discussed in Part 2: Background Reports and will be reviewed in 2013 to reflect current conditions. Significant improvements are planned for end of trip facilities up to completion of and beyond Stage 1 (2018).

HPH has had a green transport plan in operation since October 2004. The aim of the plan is to encourage and facilitate changes in their workers' transport practices to more healthy and environmentally friendly forms of transport to and from work, i.e. cycling, car-pooling, public transport and walking. The success of the plan relies on people making changes to their existing commuting travel arrangements. The hospital supports our workers in making the change easier by way of better information, facilities and incentives.

The following details the last five years of worker participation levels in the Travel Smart Program:

Year	Total participants	Total kms travelled	Total trips	Average km per trip
2012	173	151905	9852	15.42
2011	171	114796	7972	14.40
2010	121	80997	5453	14.85
2009	86	49545	3480	14.24
2008	101	70395	4856	14.50

The success of the program is demonstrated by the increased awareness and participation by employees in the program. HPH will continue to develop initiatives to increase the use of alternatives to private vehicle use for access to HPH.

Access to HPH via alternative forms of transport will be regularly subject to review as the public transport availability improves. The initiative of the State government to develop a light rail service along Thomas Street with a station close to Monash Avenue will result in further reduction in the reliance on private vehicles..

## 6.4.4 End of Trip Facilities

As part of encouraging modal shift to bicycles and walking HPH has provided and has plans to expand end of trip facilities.

Existing end of trip facilities at HPH include:

- > Over 500 lockers, currently used mainly by theatre and ward staff who get changed and/or shower before or after a shift
- > Approximately 25 showers, including a mixture of male, female and unisex facilities
- > Approximately 50 u-rail bicycle parking spaces
- > Hairdryers, irons and laundry service (for theatre staff)

Many of these facilities are provided in the course of enabling staff to fulfil their hygiene obligations, or enable to staff to change to/from uniforms at the start or end of shifts. However, these facilities are not restricted to only staff who need them for work, they can be used by any staff member as desired.

## **Future Provision**

HPH recognises the importance of high quality end of trip facilities to encourage mode shift towards cycling. Therefore, as part of the Stage 1 (2018) development, the following improvements are proposed to the existing end of trip facilities:

- > Approximately 100 secure undercover bicycle parking spaces located within 3 'cage' facilities to be spread around the site. These will be intended for staff use.
- An additional 50 u-rail type bicycle parking spaces to be located near the entrances of each building to ensure high user convenience and passive surveillance. These will be intended for visitors, deliveries and other short term users who do not require secure parking.
- > An increase in the number of lockers to over 600.
- > An additional 5-10 showers.
- > Investigate the provision of a dry cleaning or laundry service over the weekend, so that staff who cycle to/from work do not need to transport their clothes to/from work.

In addition to providing new facilities, existing facilities will be more widely publicised to ensure that staff are aware of their options for changing their travel behaviour. This is one of many strategies to be incorporated in the revised HPH Green Transport Plan.

The proposed end of trip facilities will be of significant benefit to staff who currently cycle to/from work and act as a large incentive for other staff to shift to cycling where possible.

As future development progresses beyond 2018, further end of trip facilities will be provided in existing and new buildings to cater for the increase in staff and expected increase in staff cycling to work. The details of these measures will be determined at the DA stage of future developments.

## 6.4.5 Pedestrian Way-finding and access

Pedestrian way finding is a key feature of the existing hospital design (as shown in Figure 8). The hospital is planned around a north-south corridor which links all major functions and vertical circulation nodes. This simplifies way-finding and allows patients and visitors to orientate themselves easily which reduces stress and improves the hospital experience. The simple and direct internal way-finding is mirrored externally where key public entrances and car parking provisions are linked to the main internal corridors via simple and obvious access pathways.

The proposed new expansion of the hospital builds on both the internal and external way-finding precepts already established.

Successful way-finding and access should be largely intuitive and self-explanatory but the hospital will complement the way-finding strategy with highly visible colour coded signage appropriately designed and located.

### 6.5 Urban Design Principles

#### 6.5.1 Site Planning

The current Hollywood Clinic expansion proposal and future site redevelopment opportunities continue to respond to the Hospital's evolving clinical needs and address an aging building stock and consolidation of existing site facilities. Any future redevelopment identified as part of the Masterplan will explore opportunities to enhance the streetscape along Monash Avenue and Verdun Street within its boundaries and by agreement with the City of Nedlands to improve the adjacent street verges. Recently, the verge along Verdun Street was landscaped by HPH.

Opportunities to enhance the streetscape along Verdun Street and Monash Avenue include, but would not be limited to:

- a) Maintaining and improving the landscaping in the front setback and other areas;
- b) Maintain and improve all signage along both streets;

- Note that the signage along Monash Avenue has been recently upgraded to a very high standard.
- c) Continue to develop new buildings consistent with the Masterplan which requires buildings with a lower height closer to Monash Avenue and Verdun Street (2 Storey max and 4 Storey max respectively), taller buildings up to 6 storeys would be developed in the central lower portion of the site; and
- d) Continue to develop all new buildings to have a high standard of visual amenity and presentation within the site.

#### 6.5.2 Built Form

The proposed new developments within the HPH site will contribute to and support the established architectural language along Monash Avenue. A blend of contemporary and traditional materials such as masonry, glass, and facade panels binds the new and existing buildings on the site.

As an example, a peripheral building, the proposed Hollywood Clinic extension, offers the opportunity to continue with the aesthetic of the existing single storey clinic by the use of masonry, pitched tiled roof and punched windows.

## 6.5.3 Safety and Security

Numerous levels of security exist on the site and will be incorporated into any new development including:

- Maximise the opportunity for passive surveillance through building and open space design;
- Installation and monitoring of a CCTV security system site wide;
- Electronic control of all key access points;
- After hours lockdown of selected access points;
- Lighting to be designed to illuminate all pedestrian and vehicle paths, roads and corridors;
- Avoidance of obstacles and landscaping which may impede visual control of public areas through sensitive design cognisant of design to prevent crime and improve individual safety on the campus; and
- Vandal proof material selection and treatments.

At present no perimeter security fencing is being considered for the site.

## 6.5.4 Sustainable Design Features

Environmentally Sustainable Design (ESD) is a key priority for future developments on the HPH site. There are many opportunities being considered or which will be considered for all future development regarding ESD. Initiatives and design should aim to provide:

- Overall energy reduction and direct reduction in running costs;
- High performance facades which facilitate daylight penetration;
- Reduced lighting and small power loads;
- Improved indoor air quality through improved material selection and filtration;
- High efficiency HVAC systems;
- Renewable energy systems such as solar thermal and solar photovoltaic;
- · Enhanced and effective commissioning and building tuning;
- Advanced technology vertical transportation;
- Metering and measuring outcomes;
- Interior design and procurement strategies which utilise green building products;
- · Material selection and recycling; and
- Training staff on correct building operation.

#### 6.5.5 Universal Access

As a hospital the principles of Universal Access for people of all abilities are implicitly relevant. All aspects of current and future developments will embody the aspirations of the Universal Access Policy as well as the regulatory requirements of the BCA and the Disability Standards on Access to Premises.

## 6.5.6 Building Height

The current TPS No. 2 includes provisions to limit the maximum height of vertical walls to 8.5m and the overall height of building to 10.00m. These provisions work for average sized lots however the HPH site is over 11.0ha.in area and has a significant fall from the western to the eastern boundary adjacent to QE11MC. The overall fall along Monash Avenue is 13.0 metres and along Verdun Street approximately 11.2 metres. There is an even greater fall across the site from 26m in the south-west corner to 7.8m in the north-east corner. To further complicate the slope analysis to determine maximum height of buildings and to establish a "relative level" from which it is measured the site undulates having highs and lows within its boundaries.

In addition when undertaking redevelopment new buildings must also be designed to connect to existing floor level services and other facilities. In view of these considerations and to avoid any future confusion the Masterplan divides the site into three zones to make it easier to determine a relative ground level more consistent with the existing and adjacent development.

As shown on Figure 6 the site is divided into three zones:

Zone 1: This zone is adjacent to Monash Ave and is limited in height to 4 storeys. To further clarify the maximum building height the RL (relative level) for each building footprint has been determined and is shown on the plan for each zone. In addition the maximum wall height is shown as "Top of the Wall" and has been measured from the finished pad level (shown as the RL) eg. based upon 4.2 metres per storey the maximum wall height or top of the wall is RL 16.4m + 16.8m (for 4 storeys) = WH 33.2m or 34.7 metres to the roof ridge line.

- Zone 2: Comprises the middle portion of the site where the maximum building height or top of the wall is 6 storeys or 25.2 metres above the RL or 26.7 metres to the top of the roof ridge line eg. RL = 18.2m + 25.2 for 6 storeys = 43.4m to top of the wall or 44.9 metres to the roof ridge line.
- Zone 3: Comprises the area closest to the houses along Verdun Street where a lower building height is proposed to be 2 storeys or 8.4 metres wall height or 10.0m to the roof ridge line eg. RL = 18.0m + 8.4m for 2 storeys = 26.4 metres to top of the wall or 27.9 metres to the roof ridge line.

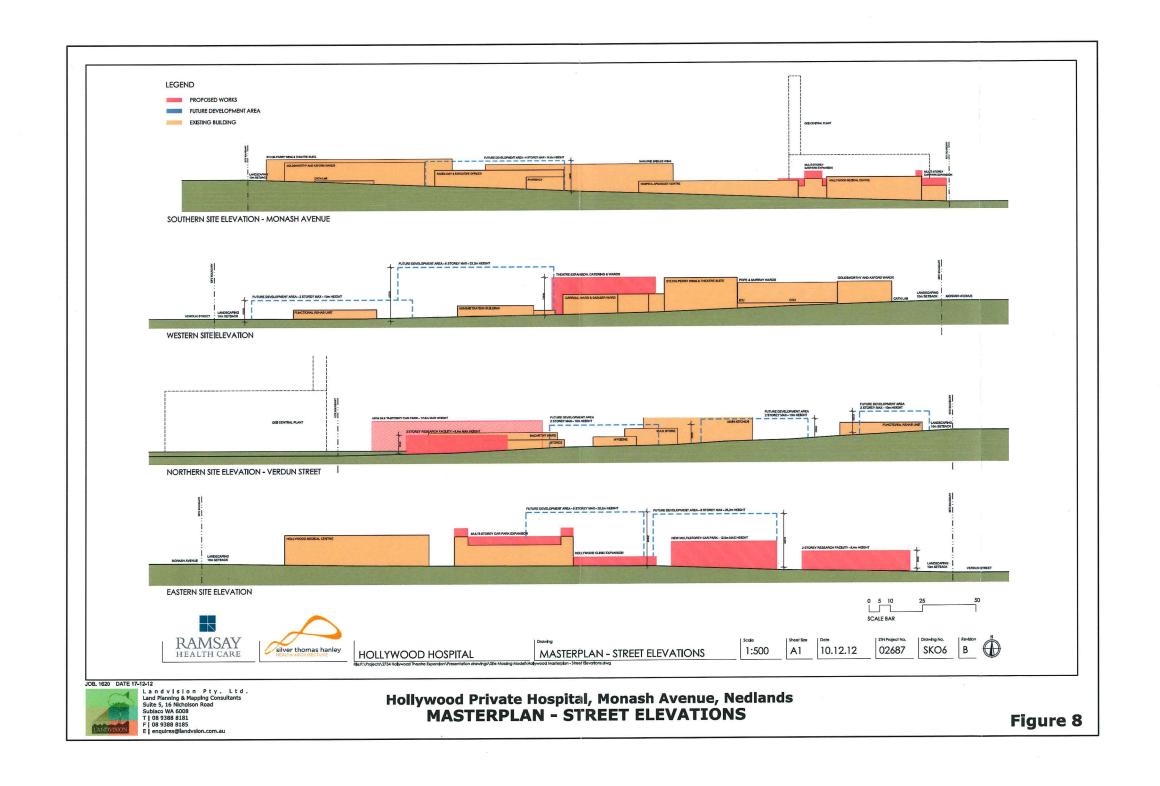
The planning and design of buildings and the proposed limitation to heights aims to prevent as much as possible any adverse impacts on the adjacent residential amenity on Verdun Street (see Figures 8 and 9). The western boundary is adjacent to Hollywood Primary School and recreation grounds, the southern boundary is opposite Monash Avenue and the Hollywood Village and QE 11 adjoins the eastern boundary where buildings are already significantly higher than proposed in this Masterplan. Accordingly it is reasonable to support the proposed maximum building heights shown on the Masterplan as with significant setbacks and the proposed limit on building heights there will be little impact, if any, on surrounding properties.

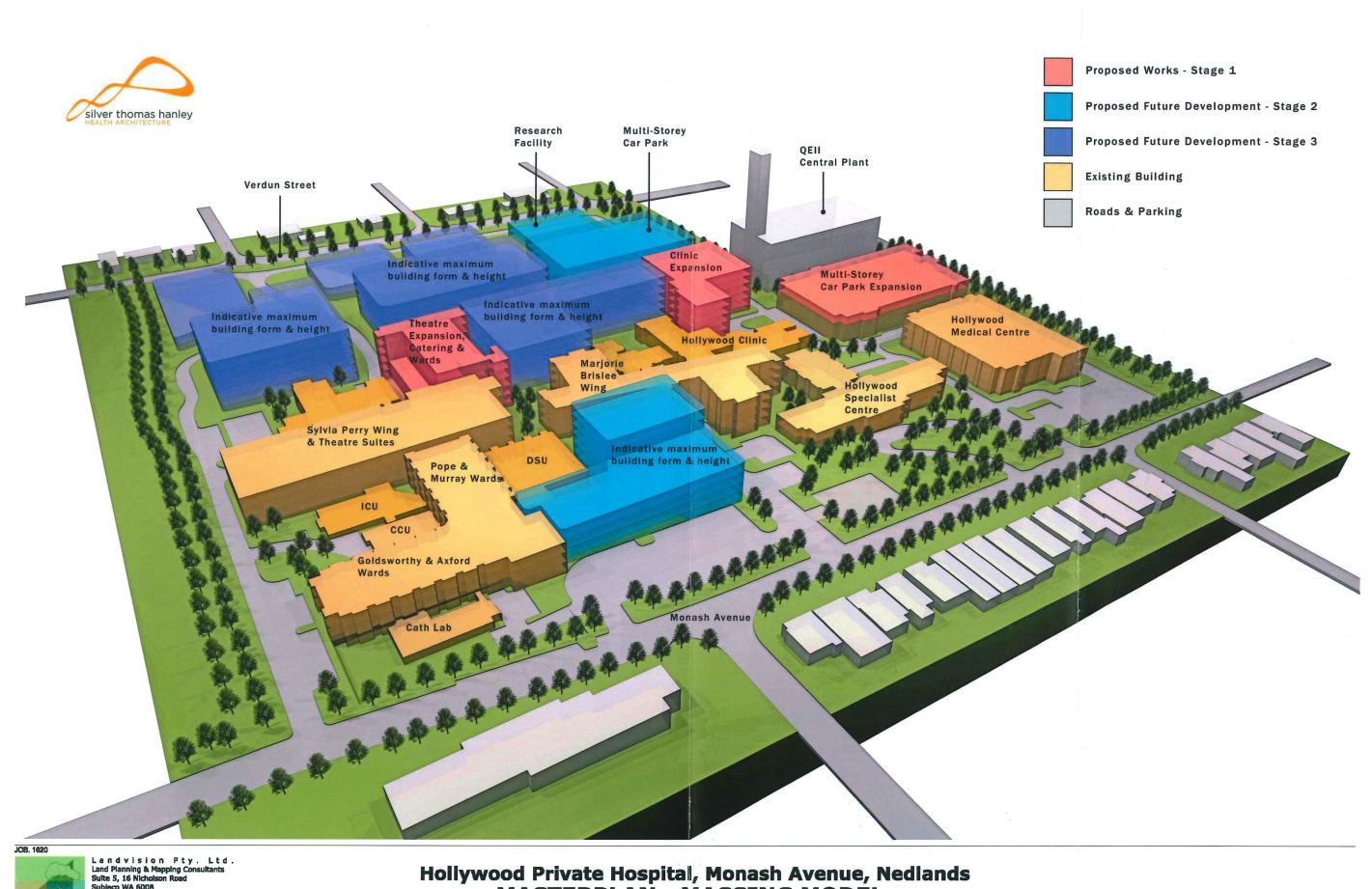
## 6.5.7 Landscaping

The existing landscape areas predominantly provide a landscaped garden edge with some screening hedges at pedestrian level around much of the site and discrete landscaped shelter areas for visitors, patients and staff, in court yards and between buildings. The Site Analysis in the HPH Landscape Plan in Appendix 2 shows existing features including landscaped areas and the many mature trees on the site.

The existing and ongoing landscaping will reflect the following principles:

- retention of existing mature trees wherever possible;
- providing attractive and usable garden areas;
- looped and shaded pathways;
- shading and shade trees including in tree planter boxes;
- water and other features;
- water wise planning;
- diverse and well maintained gardens
- areas to be enjoyed by patients and visitors for rest and contemplation;
- appropriate signage and lighting; and
- varied and interesting hard landscaping, paving design and texture.





The Masterplan shows that existing and future landscaped areas total 25% of the site.

The Masterplan shows that the landscaping, signage and bordering walls successfully integrate the campus with Monash Avenue. The existing landscaping on Monash Ave will be maintained in its current form, with clear sight-lines, lighting and signage for pedestrians and vehicles entering and leaving the property. The internal perimeter road on the western boundary is adjacent to a pedestrian access lane and does not have a negative impact on this area.

There is an internal perimeter road adjacent to Verdun Street which is set behind landscaping reducing any visibility from Verdun Street.

The perimeter road continues along the eastern boundary adjacent to QE11 and in this location has no impact on the surrounding residential area.

In any new or redevelopment of carparking areas adjacent to Monash Avenue shade trees are to be provided at a rate of one tree for every four carbays in the car parking areas.

Appendix 2 includes the overall landscaping concept for the site based on maintaining the indigenous landscape to enhance and create habitat for the local fauna and flora. This particularly applies to the boundary landscapes which have been used as a link in the flight path between Kings Park and Bold Park on the Karaki Biirdi Trail. The landscape of the hospital is of even more significance as the new development on the adjoining hospital site have eliminated a significant amount of tree canopy which were previously an important part of the trail. With respect to the landscapes contained within the site most of these are small and localized sites relating to the function of the adjoining hospital. The landscape will use local West Australian plans to economise on water use and minimise maintenance programs whilst providing amenity for the hospital staff, patients and visitors.

Appendix 2 also includes an assessment of the landscaping along Verdun Street and makes recommendations for its improvement to revitalize the landscape.

## 7.0 MODIFYING THE MASTERPLAN

As future developments are progressed from planning to construction they shall be consistent with the approved Masterplan. If consistent with the Masterplan Council could support the Development Application without the need to advertise such an application. Any application which is not consistent with the approved Masterplan could be refused, approved with conditions or at Councils' discretion may require advertising for public comment and a modification to the Masterplan but would be assessed on its merits by Council. When Council requires that the approved Masterplan must be modified it should follow the procedures included in Section 8.3 Procedures for Making or Amending a Local Planning Policy in TPS No. 2.

Occasionally HPH may submit an application for development which varies from the approved Masterplan. For example a building may be proposed within a Future Development Area but which has a building footprint which varies the indicative building footprints shown on Figure 6.

It is Council's intention that the modifications to the Masterplan shall require amendment to the Masterplan with the exception for a variation to an indicative building footprint within the Future Development areas when;

- The modified building footprint is contained within the Future Development area; and
- The area of the modified building footprint is equal to or less than the area of the footprint shown on Figure 6.

## 8.0 CONCLUSION

The adoption of the proposed Masterplan is consistent with the Special Use zoning of Hollywood Private Hospital and the provision in Schedule V of TPS No. 2 allowing the Council to approve a new Masterplan from time to time. Adoption of the Masterplan is also consistent with the Councils' requirement that a new Masterplan shall be prepared before any further building approvals are issued.

The Masterplan will allow all future development to be assessed taking the wider parameters of the site and locality into consideration. It gives all decision – making authorities, service agencies and the community secure knowledge of what to expect from the future expansion and redevelopment of the HPH campus.

Ramsey Health Care, the operators of HPH seek to continue to provide a high standard of facilities and services while responding to the growing demands of the community.

The Masterplan presents the short, medium and long term building program and shows that this can be achieved without having any significant adverse impact on the locality. In particular, it demonstrates that the site has sufficient area to allow for growth without overshadowing residents and neighbours. It also concludes that there will be little noticeable impact on local traffic.

# Appendix 1

Strategic Planning Context

## **Strategic Planning Context**

## **State Planning Policy**

HPH is located immediately adjacent to the QEII Medical Centre that is currently being significantly expanded which is consistent with being identified as a "Specialised Centre". The planning for QE II MC has included strategic planning direction for HPH.

Specialised Centres are identified and addressed in State Planning Policy 4.2 Activity Centres for Perth and Peel.

The Western Australian State Government, specifically the Department of Health, has investigated the future requirements of the Queen Elizabeth II Medical Centre (QEIIMC) and the possible redevelopment of the site. This has involved the preparation of documents including the State Government Health Reform (Reid Report), the QEIIMC Access and Structure Plan and the QEIIMC Masterplan. These documents have outlined among other things, the requirement for the construction of a new multi - deck car park (recently completed) on Winthrop Avenue, a new children's hospital (under construction), a new women's hospital and a new central energy plant on the western side of the QEIIMC site.

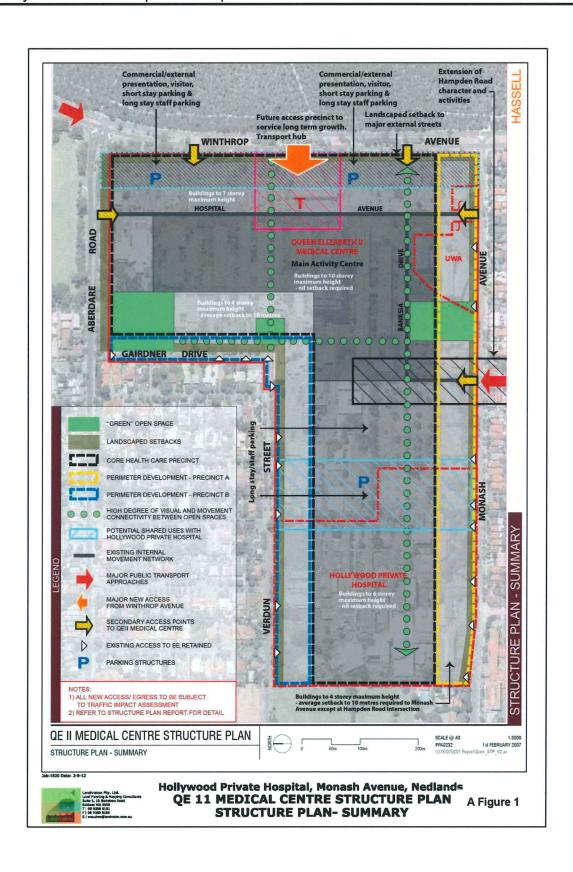
In November 2005, the Department of Housing and Works on behalf of the Department of Health (DoH) initiated an access and structure planning process to provide for the future development requirements of the QEIIMC.

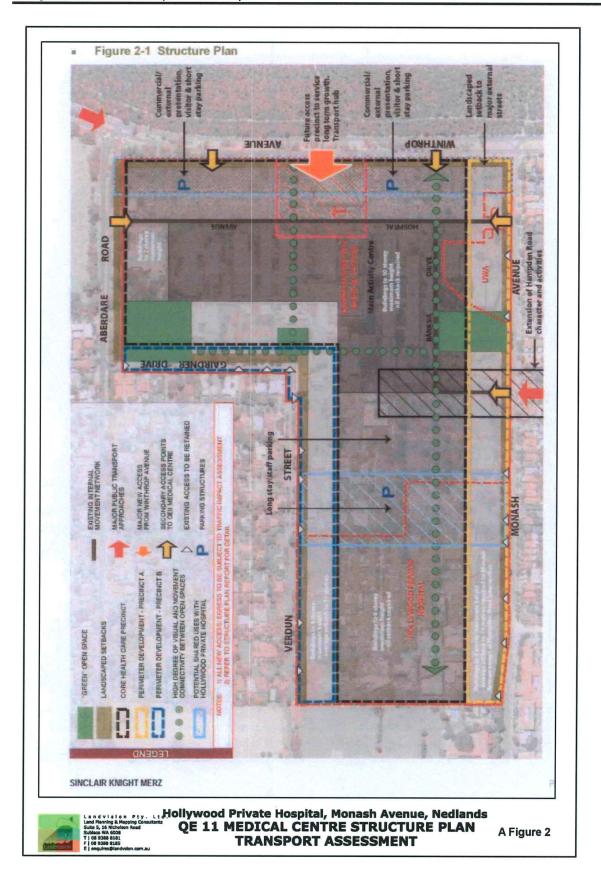
The need for forward and strategic planning had arisen through work in two main areas:

- 1. Implementation of health reform initiatives identified in the "Reid Report". Redevelopment of the site is proposed that will accommodate the best of health care delivery services for Western Australians into the future; and
- Agreement with the Western Australian Planning Commission (WAPC) that a structure plan incorporating a parking management and access plan would be prepared for the QEIIMC that could be used to determine the implications of future development.

Structure plans have been prepared for QEIIMC which also make recommendations for HPH(see Figures 6 & 7). A structure plan was therefore required that would test and provide for the new scale of development and associated infrastructure requirements (including traffic and transport), and for the detailed planning of a high quality built environment in the context of surrounding residential, recreation and commercial land uses.

Included in the health reform proposals was the possibility of King Edward Memorial Hospital (KEMH) being relocated from its current site in Subiaco to the QEIIMC. Not included in the proposals but remaining as a possibility as a result of further detailed clinical services planning, was the collocation of Princess Margaret Hospital (PMH) with KEMH.





While the core focus of the study area is the QEIIMC, the very close proximity of Hollywood Private Hospital is such that analysis and general structure planning has also addressed that site as part of the secondary study area. All access and structure planning has taken place in the context of proximity to the University of Western Australia (UWA) and the surrounding area.

The relationships and potential relationships between QEIIMC, HPH and UWA offer much potential, and planning cannot ignore them. Additionally, all three sites are major employers and generators of staff, visitor and service traffic that combine to have a major impact on the locality. The regional planning implications of the QEIIMC as an "Activity Centre" offer the opportunity for a review of the broader planning context between the Department of Planning and the affected local authorities.

Planning control over development on the QEIIMC site rests with the WAPC because it is development by a public authority and is on land reserved under the Metropolitan Region Scheme. In comparison, HPH is a privately owned development on zoned land and hence falls within the planning jurisdiction of the City of Nedlands. For this reason, the elements of this Structure Plan that relate to HPH can be recommendations only which have been considered in the formulation for the Masterplan for HPH.

As discussed elsewhere in the Amendment report Figures 1 and 7 are extracts from these plans and (ie. Queen Elizabeth Medical Centre Access and Structure Plan, prepared for the Department of Health, February 2007) and show key features reflected in the Masterplan for HPH including:

- maximum building heights with 4 storeys along Monash Avenue, 6 storeys in the centre of the site and 4 storeys along Verdun Street although HPH proposes only 2 storeys along Verdun Street to minimise visual impacts on residential areas opposite HPH;
- access from Verdun Street, which is restricted to day time use on week days during working hours only to minimise impacts on the nearby residents;
- areas with potential to share uses, such as parking in an area where QEII and HPH share a common boundary;
- a common axis parallel to Monash Avenue with a high degree of visual and movement connectivity between open spaces; and
- maintaining the existing vehicle and pedestrian access points to HPH along Monash Avenue and Verdun Street.

# Appendix 2

Report on Landscaping at HPH

by

Pullyblank Pty Ltd

## **Hollywood Hospital**

## Landscape

#### Introduction

The hospital is a dynamic, evolving and vibrant element of the community and the landscape needs to evolve and change to adapt to the ever fluctuating site usage. Buildings become outdated and health practices change, requiring the site to be flexible and ever changing.

The landscape of the hospital is diverse with landscapes dating from the Repatriation Hospital days of post WW1 to today with the emphasis changing from exotic water consumptive trees and shrubs to an indigenous landscape of frugal water demand. The main feature of the site is the presence of a large number of mature trees, the broad open grounds have resulted in an extensive tree planting and protection program now evident on site.

The hospital landscape has a number of benefits ranging from the presence of large trees giving the local community a view into a green treed site, to providing habitat to transient avifauna. It also provides aesthetic appeal for the visitors, patients and staff on site.

The benefit of gardens to health care is being recognized more and more. The cooling relaxing aspect of a garden with shady trees and colourful shrubs provides valuable supplement to the health care delivered on site.

Hollywood Hospital has the stated objective of providing dynamic evolving landscape tailored to the changing demands of a modern hospital. The new landscape on site has and will continue to be installed in all possible practical open spaces on site. Spaces whether they be small pockets in and around buildings or temporary spaces created by site demolition will be landscaped. This philosophy will allow the landscape and building opportunities to be maximised.

A key feature of great significance; the majority is Australian plants, including indigenous species which form a key link in the Karaki Biirdi Trail. The significant landscape areas are in the north-west of the site and along the boundaries, it plays an important role in providing a connecting landscape for the Karaki Biirdi Trail a stepping stone for Carnaby Cockatoos and other birds moving to and from Kings Park and Bold Park to the coast.

Over the last year the trail has been further fragmented with the new projects in Sir Charles Gairdner Hospital requiring significant tracts of trees to be removed. Most of these trees have been Australian trees and many indigenous specimens. The removal of these trees has placed even more pressure on the Hollywood landscape to retain the link.

The range of plant species in the hospital landscape is diverse and their health varies significantly, all forming a valuable environment for the local avifauna. Canopy trees dominate the site but there are significant areas of understory planting.

In addition to the Australian landscape there is a limited area of old exotic planting dating back to the Repatriation Hospital days, this is mainly on the Monash Avenue frontage. This landscape

reflects the original Nedlands landscape of early to mid-20th century with large Ficus macrophylla – Morton Bay Figs, Lophostemon confertus – Queensland Brush Box and Erythrina indica - Flame Trees, with rolling lawns and under planting of shrubs. It is a feature of the site and valued by the hospital population and the local community.

The overall landscape is comprised of Australian plants most native to south Western Australia. This provides a great benefit as it provides habitat and is relatively easily established.

## Landscape Philosophy

The landscape philosophy for the project matches the local natural system of constant change. New trees and understory will be constantly planted to ensure the landscape evolves, gaps will be filled in the understory and new trees will be planted alongside well established specimens to ensure that the impact of removing trees and or landscape is minimised.

Over mature trees seen as safety hazards will be removed when they are identified. Unfortunately older trees with hollow stems and branches are good habitat for birds, bats and insects but they are safety hazards and in many cases need to be removed for safety reasons. The hospital will continue its policy of providing nesting boxes which will help to overcome this unfortunate circumstance. The nesting boxes presently on site have been very effective and most are well used by the local fauna including Galahs, Parrots, and other birds and bats.

The landscape philosophy for the site is to retain the theme of Australian plants and continue to upgrade the landscape with local species. The only exception being the established old Nedlands exotic landscapes focused on Monash Avenue these will be retained and enhanced.

In a number of areas, phasing out inappropriate exotic trees where they are superfluous and intrusive, will be a key focus. Species such as Cupressus macrocarpa – Monterey Cyprus and similar are examples of inappropriate species that draw large volumes of water and restrict the establishment of landscape within close proximity.

A major landscape initiative is to keep planting vacant ground with new gardens thus allowing the site to be developed as appropriate to a hospital. By planting vacant ground on a yearly basis, any lost landscape or plant material is regularly replaced providing a semi natural environment that does not depend upon the old aging landscapes. This process allows development to occur at the appropriate time for the hospital whilst not compromising the landscape resource. All of the landscape areas will have a cross section of material ages and hence be a better landscape and habitat.

Each building project on site has its particular needs and where ever possible and practicable the theme will be West Australian. The landscape will be designed to meet the specific needs of the associated project.

#### **Zones**

There are a range of distinct landscape areas on the site, all possessing significant trees and most have areas of shrub planting and each will be addressed individually.

All of them contain mature or maturing trees that form the character of the zone.

#### Zone 1

Running along the north south boundary interface with Charlie Gardiner Hospital this relatively large area is a food and habitat sanctuary for local fauna particularly avifauna. The hospital has implemented a planting program for the area culling inappropriate species and using local species comprised of a mixture of trees and shrubs. This initiative will be continued building the habitat and sanctuary qualities. The rejuvenation of this area will make it a permanent feature of the site. Its location and the presence of the underground services mean that it is extremely unlikely to come under development pressure.

The present planting is comprised of a scattering of mature trees, Ficus hillii – Weeping Fig, Quercus subur – Cork Oak, Eucalyptus gomphocephala and a range of understory plants mostly indigenous species of varying maturity. The opportunity is to establish a succession of planting materials that will provide a food source for local birds particularly the cockatoos and small parrots.

The removal of sickly and vigor growing specimens has improved the quality of the habitat. Presently the area on the service alignment is only sparsely planted with the main focus being on the edge of the ring road the new planting will be extended to take in the whole of the space available and a regular program of planting is planned to ensure the best landscape results are achieved for the hospital and local fauna.

#### Zone 2

The feature trees of this area vary from Australian trees such as Cinnamomum camphora – Camphor Laurel, Eucalyptus marginata – Jarrah, Eucalyptus camaldulensis – Red River Gum, Lophostemon confertus – Queensland Brush Box to Cupressus macrocarpa – Monterey Pine all are robust trees but a number are at or beyond maturity and will be phased out.

The indigenous species such as the Jarrah will be retained and enhanced with supplementary planting of new Eucalyptus marginata. This will allow any old and over mature trees to be removed before they become a safety risk. Also the constant changes to the site with roads and structure have meant that some of the trees are now vulnerable and showing signs of stress, new trees will planted to minimise the risk of future site works impacting upon them.

The Cypress are difficult trees imposing trees but have the capacity to strip the nutrients from the site, they draw large volumes of precious water out of the subgrade and they do not match with the aesthetic of this zone. Located on Verdun Street the most significant tree impacts on the landscape of the street and will be removed and replaced with better habitat trees of local origin.

Other exotic Australian species will also be replaced over time trees such as Eucalyptus camaldulensis – Red River Gum and Lophostemon confertus – Queensland Brush Box will be replaced as they mature and the new planting gets to a size that it can replace the older trees. The Brush Box in particular does not thrive in Perth and needs significant supplementary water to survive our hot desiccating summers. A number have already died in this area the new plantings will allow the replacement of any that die in the future.

A significant part of landscape in this area has been upgraded with new planting of West Australian species. The planting varies with its success and the area has significant regeneration of intrusive

species such as Eucalyptus cladocalyx, this material will be removed prior to any new planting being installed in the area.

The new planting to this area will further build the park environment and provide an appropriate landscape for the hospital and the residences fronting Verdun Street. Colourful shrub planting and trees will be installed providing a vibrant landscape to about 1m in height with a clear understory to 2m. Where plants do not fit this model they will be pruned where necessary to ensure a safe work environment. This planting philosophy will ensure clear and safe site lines for the secure perimeter of the hospital. Some ornamental trees species such as Eucalyptus macrocarpa and Eucalyptus rhodantha have been planted into the area these small trees will provide colour and interest and although they only do hold there foliage in the 2 to 4m range the transparent nature of the canopy offers no security problem but it does at significantly to the visual quality of the landscape and the habitat.

Within the hospital boundary the dominant understory plant is Scaevola crassifolia which has thrived in this harsh landscape of tree competition and shade. This plant will be used elsewhere on the site as it thrives in the location.

The main structure trees will be Acacia acuminata, Eucalyptus marginata, Eucalyptus foecunda, and Allocasuarina fraseriana all of these trees are indigenous to the area.

#### Zone 3

This area is most successful area for habitat and is used extensively as habitat for a range of cockatoos, parrots and native birds, the trees mostly Corymbia citriodora and Eucalyptus cladocalyx are regularly visited by Black Cockatoos, Galahs and other large cockatoos. These trees have also tended to regenerate with a proliferation of Eucalyptus cladocalyx crowding out some of the understory native planting.

Whilst the existing trees in this area are good habitat for nesting and feeding the trees have a reputation and history of being notoriously unstable and in order to allow landscape and project development in this area and in line with the landscape philosophy for the site supplementary planting using local tree will be implemented. Large trees species such as Corymbia calophylla and Eucalyptus marginata will be the main planted species.

The understory planting will comprised of colourful low growing species with a maximum height of 1m or less. The planting that thrives in this area includes Calothamnus quadrifidus — low growing selection, Acacia ashbyae, Acacia lasiocarpa and Anigozanthos sp. are examples of some of the understory planting. All of the low growing species add to the habitat and food sources for small birds.

Nesting Boxes are a feature of this area and they have been installed by the hospital to supplement the natural tree habitat. The Nest Boxes have been extremely successful and all are occupied by local indigenous bird species which offers the opportunity to remove some of these older trees in replacement of younger and more vigorous specimens.

#### Zone 4

This area is dominated by large trees Eucalyptus robusta - Mahogany and Ficus hillii — Hills Weeping Fig with an assortment of understory plants generally struggling to survive under these imposing trees. The landscape of this area is controlled by these trees and will continue to struggle but the trees are so imposing and important to the site they will be retained and the landscape modified to survive these particular site conditions.

## Zone 5

The dominant species is Agonis flexuosa – Peppermint with a number of, Eucalyptus cladocalyx – Sugar Gum, Eucalyptus robusta – Swamp Mahogany, and Ficus rubiginosa. All of these trees present as healthy candidate for retention

In a number of areas the understory is dominated by regrowth from the Peppermint and Sugar Gum with very little presence of shrub or ground cover layer. The density of the regrowth will be gradually reduced and replaced with low growing plants such Scaevola crassifolia — Beach Fan Flower, Callistemon phoeniceus — Fiery Callistemon, Ricinocarpus tiberculatus — Wedding Bush.

#### Zone 6

This zone is dominated by lawn and old mature Jacaranda mimosifolia - Jacaranda is the dominant tree in the area but there are a number of Eucalyptus marginata – Jarrah trees which are important habitat. All of the trees in this area are stressed and suffering from lack of water and undergoing treatment to reinstate their vigour. This process will include increase in water application to the root zone of the Jacaranda and mulching of the surrounds for the Jarrah. In addition more Jarrah will be planted to ensure there is a succession in the planting to ensure habitat trees are present in this zone into the future.

### Zone 7

The landscape in this zone is comprised of a mixture of types the frontage to Monash Avenue is a relatively new planting providing amenity for people using the shelter located in the centre of the garden. The garden is comprised of a mixture of native plants, this theme will be retained and regular planting will keep it fresh and vibrant.

Some established trees are a feature of this area including the statuesque Corymbia citriodora — Lemon Scented Gum which is a landmark at the entry to the hospital and a Eucalyptus cladocalyx nana — Dwarf Sugar Gum is also an outstanding specimen and will be protected to ensure it thrives.

#### Zone 8

This area is a remnant of the old Hollywood repatriation hospital garden with Cupressus macrocarpa – Monterey Cypress, Cupressus sempervirens – Pencil Pine, Lophostemon confertus – Queensland Brush Box, Eucalyptus gomphocephala – Tuart, Jacaranda mimosiifolia – Jacaranda this diverse range of trees are generally planted into lawns and provide a park like setting.

In any new or redevelopment of carparking areas adjacent to Monash Avenue shade trees are to be provided at a rate of one tree for every four carbays in the car parking areas.

#### Zone 9

This landscape was recently planted incorporating some of the existing trees Eucalyptus torquata – Coral Gum, Eucalyptus caesia and Eucalyptus macrandra these trees are small growing specimens with attractive seasonal colour. They grow well in the area and provide valuable food source for the local small birds. There have been a number of trees that have died in this area and they will be replaced ensuring a strong tree planting along the Monash Avenue boundary.

The shrub planting is made of a range of plants including Olearia axillaris and Grevillea crithmifolia both of these plants have grown exceptionally well and the grey foliage adds another dimension to the landscape.

## Regeneration

The species used in this regeneration will provide quality habitat to protect small birds and some mammals as well as providing a future food source for the passing parrot and cockatoo population. The list will be comprised of the following for the new planting.

#### Trees

Acacia acuminata – Jam Wattle

Agonis flexuosa – Peppermint

Allocasuarina fraseriana -

Banksia menziesii -

Corymbia calophylla - Marri

Eucalyptus caesia -

Eucalyptus foecunda

Eucalyptus gomphocephala – Tuart

Eucalyptus macrocarpa – Mottlecah

Eucalyptus marginata - Jarrah

Eucalyptus rhodantha -

Eucalyptus synandra -

Eucalyptus torquata - Coral Gum

Eucalyptus websteriana -

Nuytsia floribunda – WA Christmas Tree

#### Shrubs and Ground Cover

Acacia lasiocarpa – Glow Wattle

Acacia pulchella -

Anigozanthos var. - Kangaroo Paw

Banksia blechnifolia -

Banksia sessilis –

Billardiera heterophylla – Bluebell Creeper

Callistemon phoeniceus

Calothamnus quadrifidus - One Sided Net Bush

Conostylis candicans - Cotton Head

Eremophila glabra - Tar Bush

Grevillea crithmifolia

Grevillea nudiflora

Grevillea preissii
Guichenotia ledifolia – Western Rose
Guichenotia macrandra Kennedia prostrate – Running Postman
Lepidosperma gladiatum – Coast Sword Sedge
Lomandra ordii –
Olearia axillaris
Patersonia occidentalis – Purple Flag Lily
Ricinocarpus tiberculatus – Wedding Bush
Scaevola crassifolia – Beach Fan Flower
Westringia dampieri
Xanthorrhoea preissii – Grass Tree

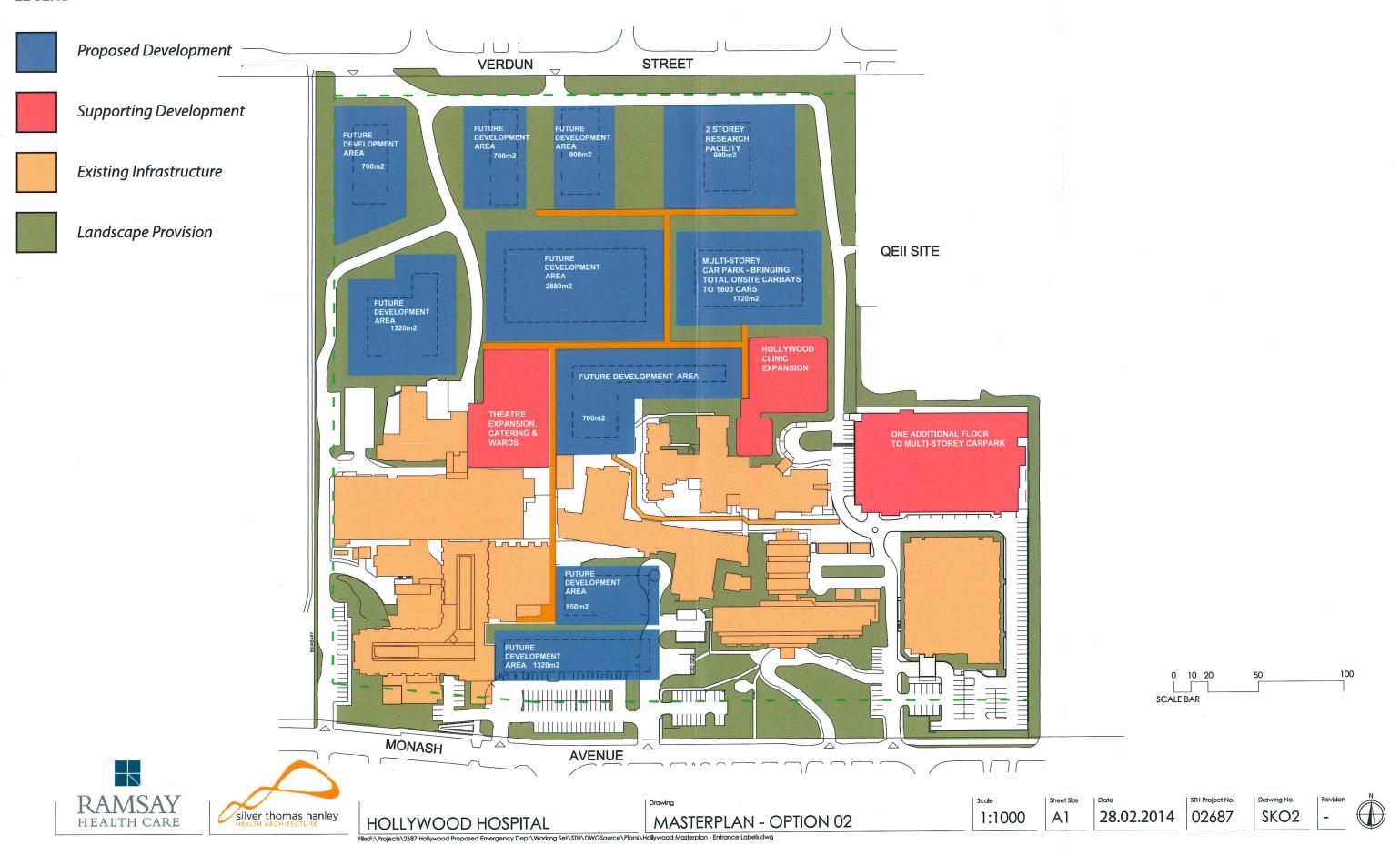
Note the following species are presently on site and will be maintained but will not be planted in the future.

Callistemon citrinus – Eastern Bottlebrush
Casuarina cunninghamiana – River She-oak
Corymbia citriodora – Lemon Scented Gum
Cupressus macrocarpa – Monterey Pine
Eucalyptus camaldulensis – Red River Gum
Eucalyptus cladocalyx – Sugar Gum
Eucalyptus robusta – Swamp Mahogany
Ficus hillii – Weeping Fig
Ficus rubiginosa – Port Jackson Fig
Ouercus suber – Cork Oak

#### Conclusion

The overall concept for the site is based on maintaining the indigenous landscape to enhance and create habitat for the local fauna and flora. This particularly applies to the boundary landscapes which have been used as a link in the flight path between Kings Park and Bold Park on the Karaki Biirdi Trail. The landscape of the hospital is of even more significance as the new developments on the adjoining hospital site have eliminated a significant amount of tree canopy which were previously an important part of the trail. With respect to the landscapes contained within the site most of these are small and localized sites relating to the function of the adjoining hospital. The landscape will use local West Australian plants to economise on water use and to minimise maintenance programs whilst providing amenity for the hospital staff, patients and visitors.

# **LEGEND**



# **LEGEND**



Proposed Development



Supporting Development



Existing Infrastructure



Significant Exisiting Trees



Karaki Biirdi Trail



# **LEGEND**



Proposed Development



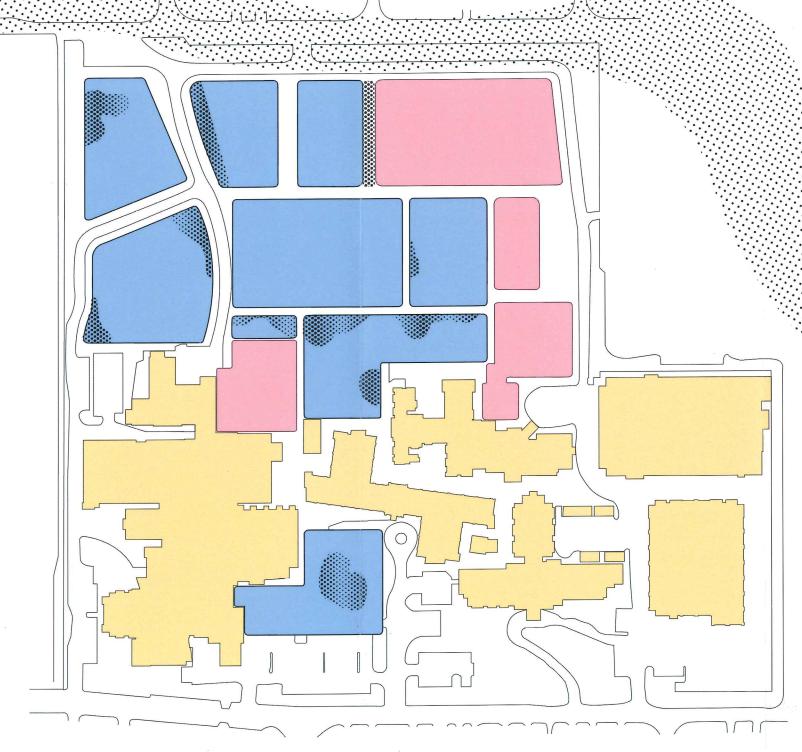
Supporting.Development.



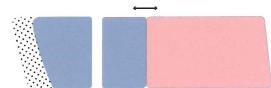
Existing Infrastructure



Impact Zones



Consolidate blocks to maximise and enhance landscape site.









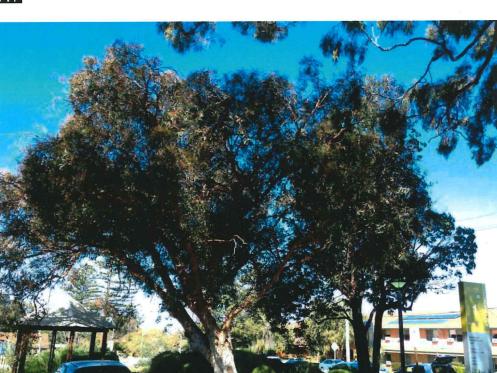


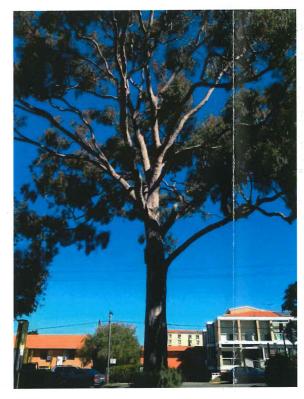
5.4











*7.5*:

7.2



# SHRUBS + GROUNDCOVERS

Billardiera heterophylla - Bluebell Creeper

Conostylis candicans - Silver Sunrise

Kennedia prostrata - Running Postman

Patersonia occidentalis - Violet native Iris

Acacia pulchella - Western Prickly Wattle

Conostylis aculeata - Cotton Head

Acacia ashbyae -

Banksia blechnifolia -

Eremophila glabra -

Grevillea preissii -

Callistomen phoeniceus -

Xanthorrhoea preissii -



Billardiera heterophylla



Conostylis candicans



Kennedia prostrata



Patersonia occidentalis



Acacia pulchella



Conostylis aculeata



Acacia ashbyae



Banksia blechnifolia



Eremophila glabra



Grevillea preissi



Callistomen phoeniceus



Xanthorrhoea preissii

# **TREES**

Banksia menziesii - Firewood Banksia

Allocasuarina fraseriana - Western Sheoak

Corymbia calophylla - Marri

Eucalyptus gomphocephala - Tuart

Eucalyptus marginata - Jarrah

Eucalyptus rhodantha -

Eucalyptus macrocarpa -

Eucalyptus synandra -

Nuytsia floribunda -

Eucalyptus caesia -

Agonis flexuosa -

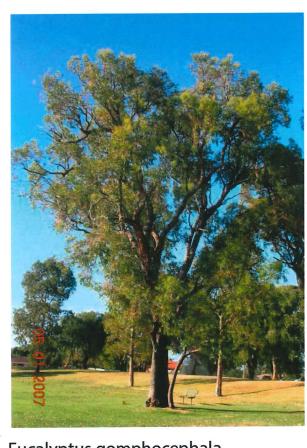
Eucalyptus citriodora -



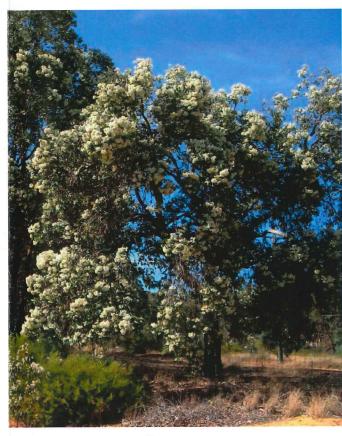
Banksia menziesii



Allocasuarina fraseriana



Eucalyptus gomphocephala



Corymbia calophylla



Eucalyptus marginata



Agonis flexuosa





9 10

JECT NO: ####-##
SCALE 1:500@ A3
20m

HOLLYWOOD HOSPITAL
PLANT LIST







Eucalyptus macrocarpa



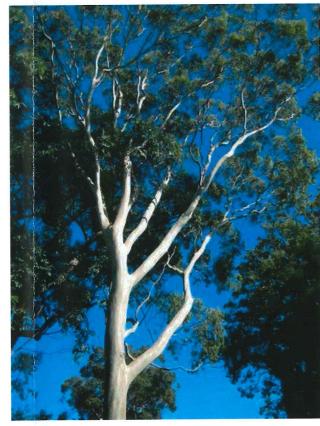
Eucalyptus synandra



Nuytsia floribunda



Eucalyptus caesia



Eucalyptus citriodora



22<sup>nd</sup> May 2012

## **Hollywood Hospital Landscape**

#### **Verdun St**

#### Overview

Verdun Street landscape requires some attention in order to enhance the existing condition which will develop a more unified landscape connection for native wildlife and residents. Previous work in this area specified the use of a range of local vegetation which is suited to the Northern exposure and provides a habitat buffer between the Hospital and the residences on Verdun Street. Over time this area has become overgrown, with self-seeding Eucalypts, weeds and exotic plant material. Several species have thrived but many have been lost as a result of the above. The approach for this landscape is to offer advice on how to improve the existing asset.

#### **Trees**

The landscape on Verdun St verge is dominated by invasive adventitious Acacias, Eucalyptus species, ranging from seedlings to trees 3-4m high. The established Eucalypts within Hollywood Hospital have self-seeded and proliferated throughout the verge of Verdun. There are additional incidental exotic species that have infiltrated this area, such as Jacaranda mimosifolia, Nerium oleander - Oleander, Washingtonia robusta – Cotton Palm and Ulmus parvifolius – Chinese Elm all of which detract from the intended theme using Western Australian species in the plant pallet.

There are also a number of dead trees which detract from the landscape and need to be removed.

Two trees, in particular, which currently have a major and detrimental impact on the landscape Verdun St landscape, are the Cypress macrocarpa – Monterey Cyprus. Due to the scale of each tree, the extensive canopy and root system they are preventing the establishment of the desired landscape.

#### **Existing Shrubs**

Throughout this area the plants are struggling when they should be thriving. They present a disjointed, stressed and fragmented landscape for both the hospital and the residents fronting Verdun Street. There are examples of plants which have established well including Grevillea thelemanniana, Ricinocarpus tuberculosis — Wedding Bush, Acacia ashbyae, Callistemon phoeniceus Scaevola crassifolia along Verdun, however in general, landscape is in a poor condition. The larger shrubs, which have run rampant in some instances, are preventing the development of other species surrounding them. A significant amount of existing shrub material needs to be removed and replaced by species which are in line with the landscape concept, West Australian species.



#### Recommendations

Further to the review of the Verdun Street landscape, please find below the recommendations for the revitalizing of the Landscape.

- Remove all intrusive, dead and over mature vegetation identified
- Remove the two Cypress macrocarpa. If necessary approach the council to get approval to remove the trees. Pullyblank can assist if necessary.
- Remove unwanted vegetation
- Prepare the site weed, cultivate if necessary, and re-mulch. It should not be necessary to cultivate except in the areas vegetation is removed.
- Prune the retained vegetation to improve the aesthetics and health of the plants.
- Review and repair the irrigation
- Install the planting and fertilise as per Pullyblank Plan and recommendations yet to be prepared.
- Implement planting plan.
- Implement management strategy.

# FOR INFORMATION

	DWG NAME	SCALE @ A1	REV
L00	COVER SHEET	1:750	Α
L01	PLANTING PLAN	1:200	Α
L02	PLANTING PLAN	1:200	Α
L03	PLANTING DETAILS	1:10	Α

ALL COMPLETED WORKS TO BE PROTECTED AND MAKE GOOD ANY DAMAGE TO EXISTING WORKS CAUSED AS PART OF THIS CONTRACT, ALL WORK WITHIN DRIPLINES OF EXISTING TREES IS TO BE DONE BY HAND.

ALL SET OUT IS TO BE DONE BY A LICENSED SURVEYOR, THESE DRAWINGS WILL BE MADE AVAILABLE DIGITALLY UPON REQUEST.

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LEGEND

NOTES

WORKS BOUNDARY

LOCATION PLAN

ISSU	DATE	REV
FOR INFORMATION	22.05.2013	Α

4/61 Hampden Rd Nedlands, WA 6009 ph: (08) 94667933 web: www.pullyblan **PULLYBLANK**<sup>§</sup>

AUTHOR: MH CHECKED:

CHECKED: TL PROJECT NO: PLA1304

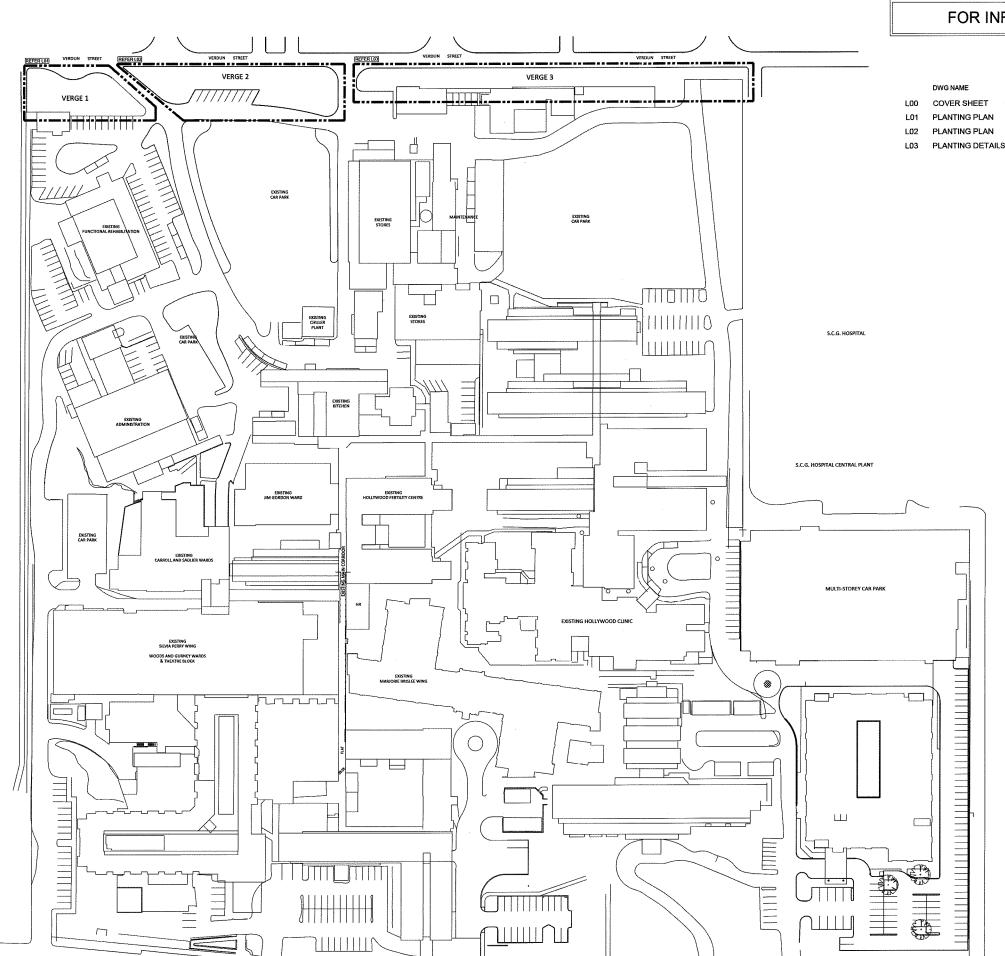
HOLLYWOOD HOSPITAL
CLIENT: HOLLYWOOD
HOSPITAL

**COVER PAGE** 



R PAGE

SCALE @ A1: 1:750



MONASH AVENUE

TREES

**SHRUBS** 

Aas

Ару

Bre

Gth

Symbol Species

Symbol Species

Eucalyptus macrocarpa

Eucalyptus rhodantha

Anagozanthos pulcherrimus x flavidus (Yellow Gem)

Acacia ashbyae

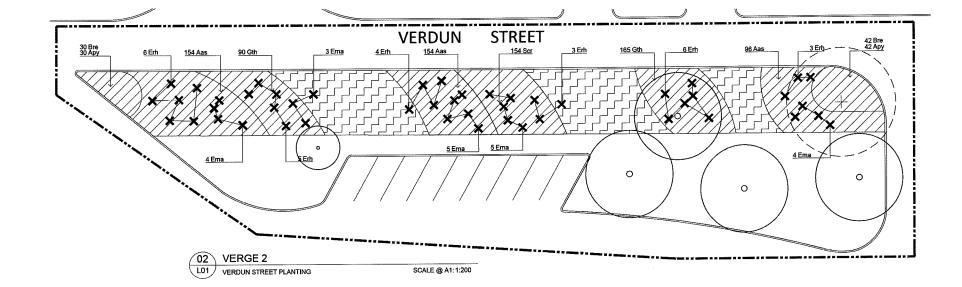
Banksia repens

Grevillea thelemanniana

Scaevola crassifolia 'Flat Freddy'

01 VERGE 1
VERDUN STREET PLANTING

SCALE @ A1:1:200



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WORKS BOUNDARY

X TREE PROPOSED

Pot Size As Shown Total

C/S Sqm Total

3

3

195

171

171

686

1217

15ltr

15ltr

Size

140mm

140mm

140mm

140mm

140mm

TREE EXISTING



TREE TO BE REMOVED





EXISTING VERGE PLANTING

LOCATION PLAN



ISSU	DATE	REV
FOR INFORMATIO	22.05.2013	Α

**PULLYBLANK**<sup>§</sup>

AUTHOR: MH

CHECKED: TL

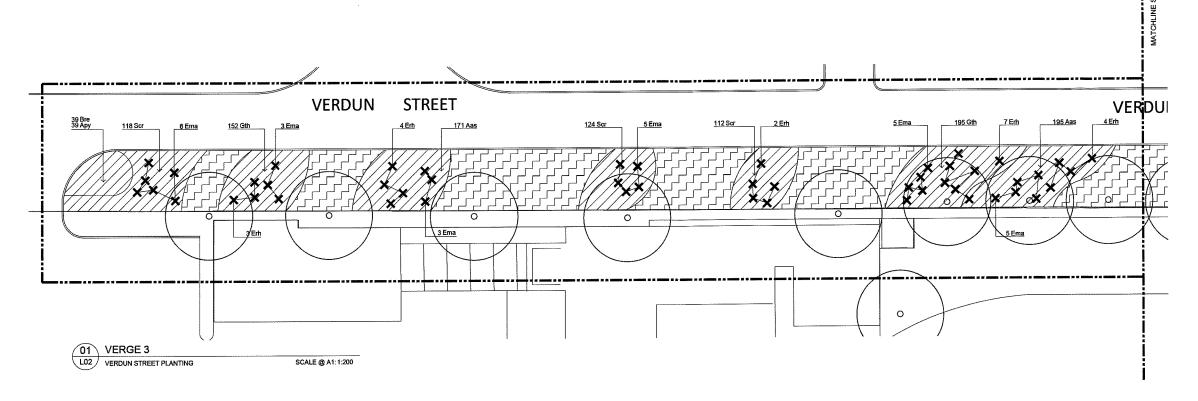
PROJECT NO: PLA1304

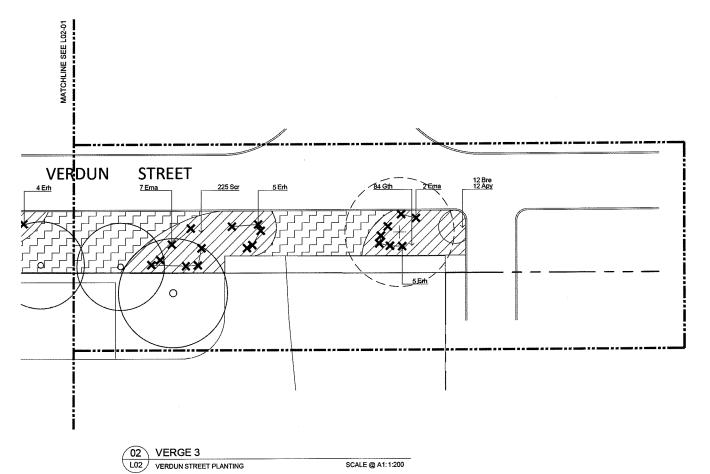
HOLLYWOOD HOSPITAL

CLIENT: HOLLYWOOD HOSPITAL PLANTING PLAN



SCALE @ A1: 1:200





Symbol	Species	Pot Size	As Shown	Total
Ema	Eucalyptus macrocarpa	15ltr		68
Erh	<b>Eucalyptus rhodantha</b>	15ltr		65
SHRUBS				
Symbol	Species	Size	C/S Sqm	Total
Aas	Acacia ashbyae	140mm	3	195
Ару	Anagozanthos pulcherrimus x flavidus (Yellow Gem)	140mm	3	171
Bre	Banksia repens	140mm	3	171
Gth	Grevillea thelemanniana	140mm	3	686
Scr	Scaevola crassifolia 'Flat Freddy'	140mm	3	1217

NOTES

LEGEND

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WORKS BOUNDARY

X TREE PROPOSED

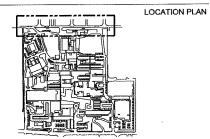
TREE EXISTING



TREE TO BE REMOVED



EXISTING VERGE PLANTING



REV	DATE	ISSUE
A	22.05.2013	FOR INFORMATION

4/61 Hampden Rd Nedlands, WA 6009 ph: (08) 94667933 web: www.pullyblank

# **PULLYBLANK**

AUTHOR: MH

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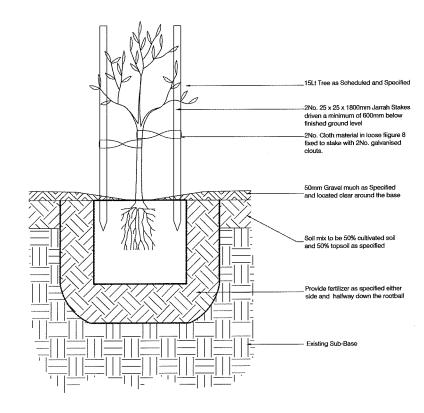
# HOLLYWOOD HOSPITAL

PLANTING PLAN





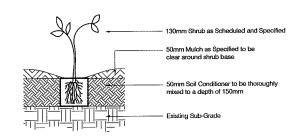
SCALE @ A1: 1:200



01 TREE DETAIL

L03 TYPICAL TREE IN MULCH

SCALE @ A1:1:10



02 SHRUB DETAIL

TYPICAL SHRUB IN MULCH

SCALE @ A1: 1:10

NOTES

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LEGEND

ISSU	DATE	REV
FOR INFORMATION	22.05.2013	Α

# **PULLYBLANK**<sup>9</sup>

AUTHOR: MH

CHECKED: TL

PROJECT NO: PLA1304

HOLLYWOOD HOSPITAL CLIENT: HOLLYWOOD HOSPITAL

**DETAILS** 



LOCATION PLAN

SCALE @ A1: 1:10



Western end of Verdun Street generally overgrown and unkempt.



Eucalyptus
macrocarpa should
be preserved and
surrounding area
should be planted
out.



Self-seeded
Eucalyptus should be removed as they will eventually impact on the richer landscape below.



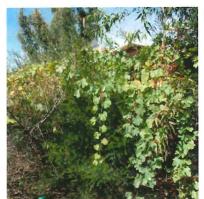
Jacaranda to be removed to maintain native theme.
Potential for this tree to be relocated to another area on site.



Generally poor quality with many larger shrubs dying back and past their peak.



Damaged Eucalypt compromised by Washingtonia robusta. The palm should be removed to protect the Eucalyptus.



Grape vine which is impeding on the local flora. This is to be removed. As with all exotics.



Hibiscus to be removed and bare ground to be planted out with new material. Surrounding shrubs to be pruned and managed appropriately.



Dead trees existing within the area should be removed.



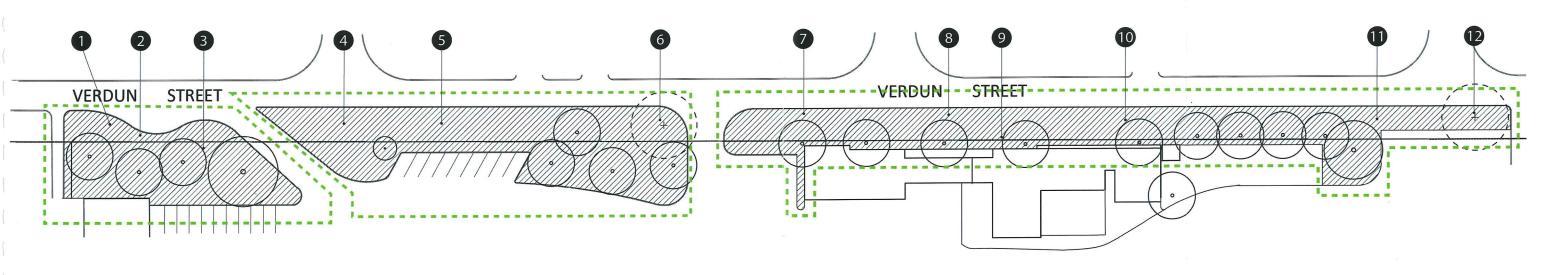
Existing Cypress currently impacts the landscape and should be removed and replaced with a variety of local flora.



Existing Oleander along boundary should be removed. Sparse area adjacent should be planted out.



Existing Cypress at the eastern end of Verdun street needs to be removed to strengthen the native planting which will be established through the rest of Verdun.









Acacia ashbyae

Dense, spreading, rounded shrub. Grows to 1.5-2m high, yellow flower, bird attracting, endemic species.



Eucalyptus rhodantha

Low spreading tree up to 4m, impressive flower, bird attracting, silver foliage.



Scaevola crassifolia 'Fat Freddie'

Ground cover, to 0.2m high, small blue flowers, this has thrived on site.



Grevillea thelemaniana

Grows to 1.5m high, endemic to Western Australia, bird attracting, red/pink flower.



Banksia repens

Small shrub, to 1m high, orange and yellow flower, bird attracting, endemic specie.



Eucalyptus macrocarpa

Spreading/sprawling mallee, 0.8-5m high, smooth bark, red-pink flower, bird attracting.



Anigozanthus flavidus

West Australian native, perenial flower, to 0.5-3m high, yellow flower, bird attracting.



Western end of Verdun Street generally overgrown and unkempt.



Eucalyptus macrocarpa should be preserved and surrounding area should be planted

4



Self-seeded Eucalyptus should be removed as they will eventually impact on the richer landscape below.



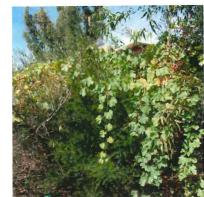
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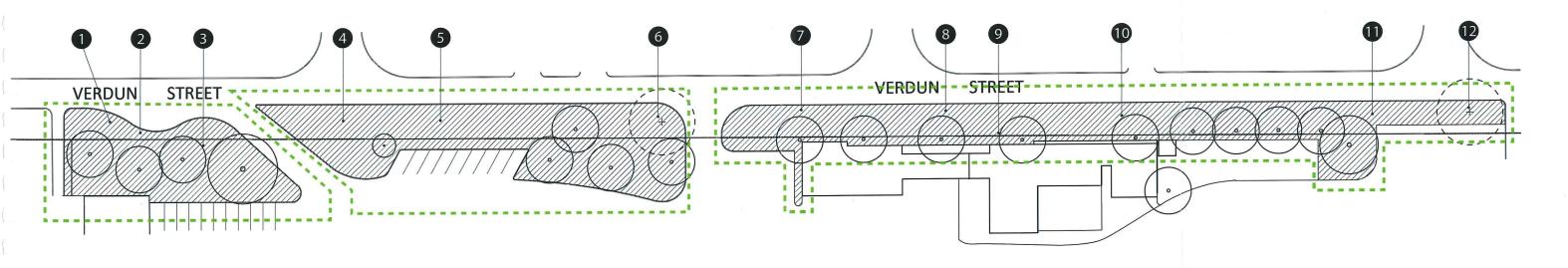
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1-750 @ A3









# Appendix 3

**Hollywood Private Hospital** 

Lighting Management Strategy

January 2014

# HOLLYWOOD PRIVATE HOSPITAL LIGHTING MANAGEMENT STRATEGY



Prepared By:

**David Moran** 

Client:

Silver Thomas Hanley Architects

Date:

31st January 2014

Revision:

0

Job No:

6818.3

Reviewed/Approved:

Robert Milburn



# **REVISION REGISTER**

Date	Clause No.	Revision Details	Originator	Reviewed	Approved
13/12/13	-	Draft	DM	RM	КМС
31/01/14	-	Final	DM	RM	KMC
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	13/12/13	No. 13/12/13 -	No. Revision Details  13/12/13 - Draft	13/12/13 - Revision Details Originator  Draft DM	13/12/13 - Praft DM RM

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#### 1 INTRODUCTION

## 1.1 Scope

The scope of this Lighting Management Strategy (LMS) includes the following Hollywood Private Hospital Campus site and facilities:

- 1) Existing Hollywood Main Hospital
- 2) Hollywood Medical Centre
- 3) Hollywood Specialist Centre
- 4) SKG Radiology

#### 2 OBJECTIVES

The objectives of the Hollywood Private Hospital LMS moving forward are to:

- 1) Comply with the Australian Standards and Legislation with regards to lighting.
- 2) Conform to Hollywood Private Hospital's "Vision, Motto & Values" and Ramsay Health Care's Business Code of Conduct.
- 3) Avoid adverse lighting impacts on the local community.

The strategies adopted to achieve the objectives include:

- 4) Minimize light emissions, light pollution and total night time glow from the Hospital Campus through appropriate upward waste light, glare and spill light mitigation control measures as part of design equipment selections and environmental design consideration.
- 5) Maintain lighting levels and lighting fixtures throughout the Hospital site sufficient to provide the necessary security and safe working environment without adversely affecting community amenity
- 6) Minimize the adverse visual impact of stationary lighting intensity through the appropriate selection and positioning of lighting fixtures.
- 7) Respond promptly and courteously to any lighting issues raised by the community.
- 8) Develop a periodic Inspection and maintenance program for the Site Lighting System to ensure continued application of the lighting management strategy.

#### 3 RESPONSIBILITIES

It is the responsibility of all employees and contractors working for or on behalf of Hollywood Private Hospital to conform to the objectives of this strategy.

Particular responsibilities in relation to the implementation of this strategy are summarised below.

Responsibilities	Role
Implementation of this Management Strategy	Hollywood Hospital Board of Governance and Key Stakeholders
Periodic review of this Management Strategy	Hollywood Hospital Facility Management Group
Lighting system design, selection, installation and maintenance.	Site Engineering and Technical Staff. Electrical Consultants, Electrical Contractors



#### 4 LEGISLATION AND OTHER REQUIREMENTS

# 4.1 Legislative Requirements

By definition, lighting which affects the reasonable comfort and convenience of a section of the public is classed as a public nuisance under *Section 3.1* of the WA *Local Government Act 1995*. Under this Act, a council may abate a public nuisance or order a person responsible for a public nuisance to abate it

#### 4.2 Australian Standards

Australian Standards relevant to the design management and maintenance of outdoor lighting are AS/NZS 1158.0.2005 Lighting for Roads and Public Spaces, other Standards of the 1158 series AS/NZS 4485 Security for Health Care Facilities and AS 4282-1997 Control of Obtrusive Effects of Outdoor Lighting.

AS/NZS 1158.0:2005 Lighting for roads and public spaces sets out definitions and lighting categories applicable to roads and outdoor public areas, and for the movement of vehicles and pedestrians. It also serves as a general introduction to other Standards in the AS/NZS 1158 series, which refer to the performance and installation design requirements for roads, carparks, pedestrian areas, hazards such as steps, stairs, ramps etc.

AS 4485.1-1997 Security for Health Care Facilities sets out Guidelines for maintaining effective internal and external protective and safety lighting to ensure illumination to all areas of access/egress, parking and any other service or activities provided by the facilities in their normal business. Lighting that has a deterrent effect on potential intruders and enhances the potential of detection. Illumination of potential concealment areas for guards or security personnel performing their roles.

AS 4282-1997 Control of Obtrusive Effects of Outdoor Lighting sets out guidelines for the control of obtrusive effects of outdoor lighting and gives recommended limits for the relevant lighting parameters to contain these effects within tolerable levels. This Standard also refers to the potential effects of lighting systems on nearby residents, and users of adjacent roads and transport signaling systems, and on astronomical observations. It does not apply to road lighting; internally illuminated advertising signage; brightly lit surfaces (e.g. floodlit buildings and advertising signs); lighting systems installed for the purposes of television broadcasting; or lighting systems that are of a cyclic or flashing nature.

#### 5 MANAGEMENT STRATEGIES

## 5.1 Potential Lighting Impacts - General

Lighting associated with the operations of the Hospital site are predominately fixed lighting for safety, security and operational purposes at night.

Potential lighting impacts from glare or spill light are associated with flood lighting and roadway lighting of key operational areas and as such will utilise low glare full cut off luminaire.

General lighting shall be provided strategically around main buildings, structures, amenities and key work places and processes.

Lighting shall be kept to a minimum but at a level sufficient to maintain a safe functional environment for Hospital Staff and Visitors.



Moving forward the key areas of the site where adherence to the strategy will be incorporated are:

#### 5.1.1 Monash Avenue

The Monash Avenue perimeter of the Hospital Site includes the Hospital Main Entrance (Site Entrance 2), Ambulance Entrance (Site Entrance 1), Brislie Wing Entrance (Site Entrance 3), Hollywood Specialist Centre Entrance (Site Entrance 4) and the Hollywood Medical Centre Entrance (Site Entrance 5).

This portion of the site is opposed by residential properties and as such has an imposed one (1) Lux at curfew times (after 11pm and before 6am) this area is highlighted on the attached plan in orange.

#### 5.1.2 Verdun Street

The Verdun Street perimeter of the Hospital Site include single level Hospital Car park and two secondary entrances onto the site, the Engineering and Services entrance and the Hollywood Functional and Rehabilitation Clinic entrance.

This portion of the site is opposed by residential properties and as such has an imposed one (1) Lux at curfew times (after 11pm and before 6am) this area is highlighted on the attached plan in orange.

## 5.1.3 St. Charles Gardiner Hospital

The St. Charles Gardiner Hospital perimeter of the site including the internal road way, Hollywood Private Hospital Multi Story Car Park and new Medical Clinic.

This portion of the site bounded by Commercial Properties and as such has an imposed four (4) Lux at curfew times (after 11pm and before 6am) this area is highlighted on the attached plans in blue.

#### 5.1.4 Hollywood Primary School

The Hollywood Primary School perimeter of the site includes internal road way and service access only.

This portion of the site bounded by Commercial Properties and as such has an imposed four (4) Lux at curfew times (after 11pm and before 6am) this area is highlighted on the attached plans in blue.





Site Preliminary Plan identifying Illumination requirements associated with curfew hours.

# 5.2 Implemented Light Management and Control Measures

Lighting management and control measures to be adopted for particular areas identified in the site preliminary plan are detailed in the table below.

COMMERCIAL: Curfewed Hours 4 Lux.

Area/Road	Potential Lighting Impacts	Controls
Monash Avenue - General Boundary Lighting	Indirect light impact from fixed lighting.	Lighting directed down, height of lighting kept to a minimum, vegetation screening along boundary.
Monash Avenue – Hospital Main Entrance (2)	Indirect light impact from entry lighting (spill). Direct light impact (glare) (from vehicles).	Lighting directed down, height of lighting poles kept to a minimum, possible shrouding, vegetation screening.
Monash Avenue – Ambulance Entrance (1)	Indirect light impact from entry lighting (spill). Direct light impact (glare) (from vehicles).	Lighting directed down, height of lighting poles kept to a minimum, possible shrouding, vegetation screening.
Monash Avenue – Brislie Wing Entrance (3)	Indirect light impact from entry lighting (spill). Direct light impact (glare) (from vehicles).	Lighting directed down, height of lighting poles kept to a minimum, possible shrouding, vegetation screening.
Monash Avenue – Hollywood Specialist Centre	Indirect light impact from entry lighting (spill). Direct light impact	Lighting directed down, height of lighting poles kept to a minimum, possible shrouding,

Area/Road	Potential Lighting Impacts	Controls	
Entrance (4)	(glare) (from vehicles).	vegetation screening.	
Monash Avenue – Hollywood Medical Centre Entrance (5)	Indirect light impact from entry lighting (spill). Direct light impact (glare) (from vehicles).	Lighting directed down, height of lighting poles kept to a minimum, possible shrouding, vegetation screening.	
Verdun Street – General Boundary Lighting	Indirect light impact from fixed lighting (spill).	Lighting directed down, height of lighting poles kept to a minimum, vegetation screening.	
Verdun Street – Internal Hospital Site Car Park	Indirect light impact & night glow.	Lighting directed down, height of lighting poles kept to a minimum.	
Verdun Street – Hospital Engineering and Service Entrance	Direct light impact from entry lighting. (Minimal)	Lighting directed down, height of lighting poles kept to a minimum, possible shrouding, vegetation screening.	
Verdun Street - Hollywood Functional & Rehabilitation Clinic Entrance	Direct Light impact from entry lighting. (Minimal)	Lighting directed down, height of lighting poles kept to a minimum, possible shrouding, vegetation screening.	
St. Charles Gardiner Hospital - (East Perimeter)	Indirect light impact, night glow	Lighting directed down, height of lighting poles kept to a minimum.	
Hollywood Primary School – (West Perimeter)	Indirect light impact, night glow	Lighting directed down, height of lighting kept to a minimum, vegetation screening.	

## 5.3 Light Management Strategy Effectiveness

The effectiveness of this Lighting Management Strategy is to prevent adverse impacts on the local community and shall be maintained by;

- 1) Maintaining the currency and relevance of this Plan;
- 2) Maintaining lighting facilities and apparatus in good order through a routine maintenance and inspection regime;
- Responding promptly and effectively to any matter raised by a community member, carry out standards based assessment and reporting back via the appropriate management channels.
- 4) Selection of light fittings, installation criteria, design and community impacts remain a key consideration for all new and existing lighting arrangements.

#### **6 MONITORING**

## 6.1 Light Effectiveness Review

Improvements in lighting management are identified through:

- 1) Inspection
- 2) Community Complaints (Log Maintained); and
- 3) Lighting Surveys and Assessments.



The improvements should be assessed against the applicable standards, reviewed by the key stakeholders and recommended for change or implementation.

# 6.2 Light Management Plan Review

The Lighting Management Strategy should be reviewed on a regular basis or earlier as needed, and always in conjunction with works or redevelopment to the site.

#### 7 REPORTING

Non-Conformances with this LMS and community complaints are considered an 'event' and should be recorded with actions undertaken and responsibilities assigned with status of actions tracked through completion and sign off. An area of the standard Hollywood suggestion for improvement form will be added to incorporate lighting.

#### 8 REFERENCES

- 1) Hollywood Private Hospital "Vision, Motto and Values"
- 2) Ramsay Health Care "The Ramsay Way Values"
- 3) AS/NZS 1158.0.2005 Lighting for Roads and Public Spaces
- 4) AS4282:1995 Control of Obtrusive Effects of Outdoor Lighting
- 5) AS4485 Security for Health Care Facilities
- 6) Local Government Act 1995
  <a href="http://www.austlii.edu.au/au/legis/wa/consol\_act/lga1995182/sch3.1.html">http://www.austlii.edu.au/au/legis/wa/consol\_act/lga1995182/sch3.1.html</a>

