XURBAN

Sunbury South Precinct Structure Plan

Landscape and visual review

For: Hi-Quality Quarry Products Pty Ltd

August 2017 | Final

Sunbury South Precinct Structure Plan

Landscape and visual review

Client	**Hi-Quality Quarry Products Pty Ltd**
Project No	15073
Version	Final
Signed	
Approved by	Allan Wyatt
Date	14 August 2017

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1. Introduction

The Sunbury South Precinct Structure Plan (PSP) seeks to guide the future development of the land to the north and south of Sunbury Road. A Planning Scheme Amendment (C207) has been prepared by the Victorian Planning Authority and the City of Hume which will incorporate the PSP into the Hume Planning Scheme.

Hi-Quality Quarry Products Pty Ltd and Trantaret Pty Ltd has land on the northern side of Sunbury Road, between Sunbury Road and Emu Creek, which is included within the PSP. This land will be referred to in the report as the Hi-Quality land.

Expert Evidence – Practice Note

I acknowledge that I have read and complied with the Guide to Expert Evidence, Planning Panels Victoria. In compliance with this Guide, I provide the following information.

Name & address

Allan Wyatt – Landscape Architect
XURBAN
Suite 1103, 408 Lonsdale Street
Melbourne, Victoria, 3000.

Qualifications

I am a registered Landscape Architect with over 30 years' experience and I have a Grad.Dip.L.D. from RMIT (1980) and I am a member of the Australian Institute of Landscape Architects.

I have given expert evidence on landscape, urban design and visual impact assessment at the former Administrative Appeals Tribunal (AAT) and VCAT and provided expert evidence before planning panels in Victoria. I have also given expert evidence before Planning Appeal bodies in NSW, South Australia, Tasmania, Queensland and New Zealand.

A Curriculum Vitae is attached as Annexure A to this report.

Instructions

Allan Wyatt of XURBAN has been engaged by Norton Rose Fulbright, on behalf of Hi-Quality Quarry Products Pty Ltd to review the landscape and visual characteristics of the Hi-Quality land.

There are significant areas of the land which are currently affected by an Environmental Significance Overlay (ESO1 and ESO10). It appears that the PSP adopts the present boundaries of the ESO1 and the ESO10 as a constraint.

I have been instructed to review the landscape and visual values of the existing land within the ESO1 and ESO10 to determine if there are existing landscape values that would support the continued protection of this land within the PSP.

The PSP also provides a proposed end use configuration for the Hi-Quality land. I have also been instructed to review the proposed development configuration within the PSP and to determine if other development strategies may be appropriate that would improve the eventual end-use outcome.

The following report seeks to show the visual impact implications of the existing topography and describe design responses that ensures that the subdivision responds to this setting.

Firstly, the report analysis the extent to which the existing Hi-Quality land is visible from Sunbury Road and what views, if any, are available from Sunbury Road across the site towards Emu Creek.

Based on this visual analysis, subdivision concepts are suggested that are designed to respond to these constraints and opportunities.

Facts, matters and assumptions

The facts, matters and assumptions, on which the opinions expressed in this report are based, include:

- Hume Planning Scheme;
- Sunbury South PSP;
- Documents relating to Amendment C207;
- Delivering Melbourne's Newest Sustainable Communities, Background Technical Report 4: Landscape Values, June 2009;
- Rural Areas Strategy Plan, Towards 2011, Shire of Bulla, June 1993;
- Sunbury Hume Integrated Growth Area Plan (HIGAP), Detailed Options Paper (August 2011, Hume City Council; and
- Hume Council submission and other submissions.

Site inspections

I have visited the site on the 28th September 2016 and subsequently on the 10th August 2017. The photographs used in this report were taken during these site visits.

Declaration

I have made all the inquiries that I believe are desirable and appropriate and no matters of significance which I regard as relevant have, to my knowledge, been withheld from the Panel.

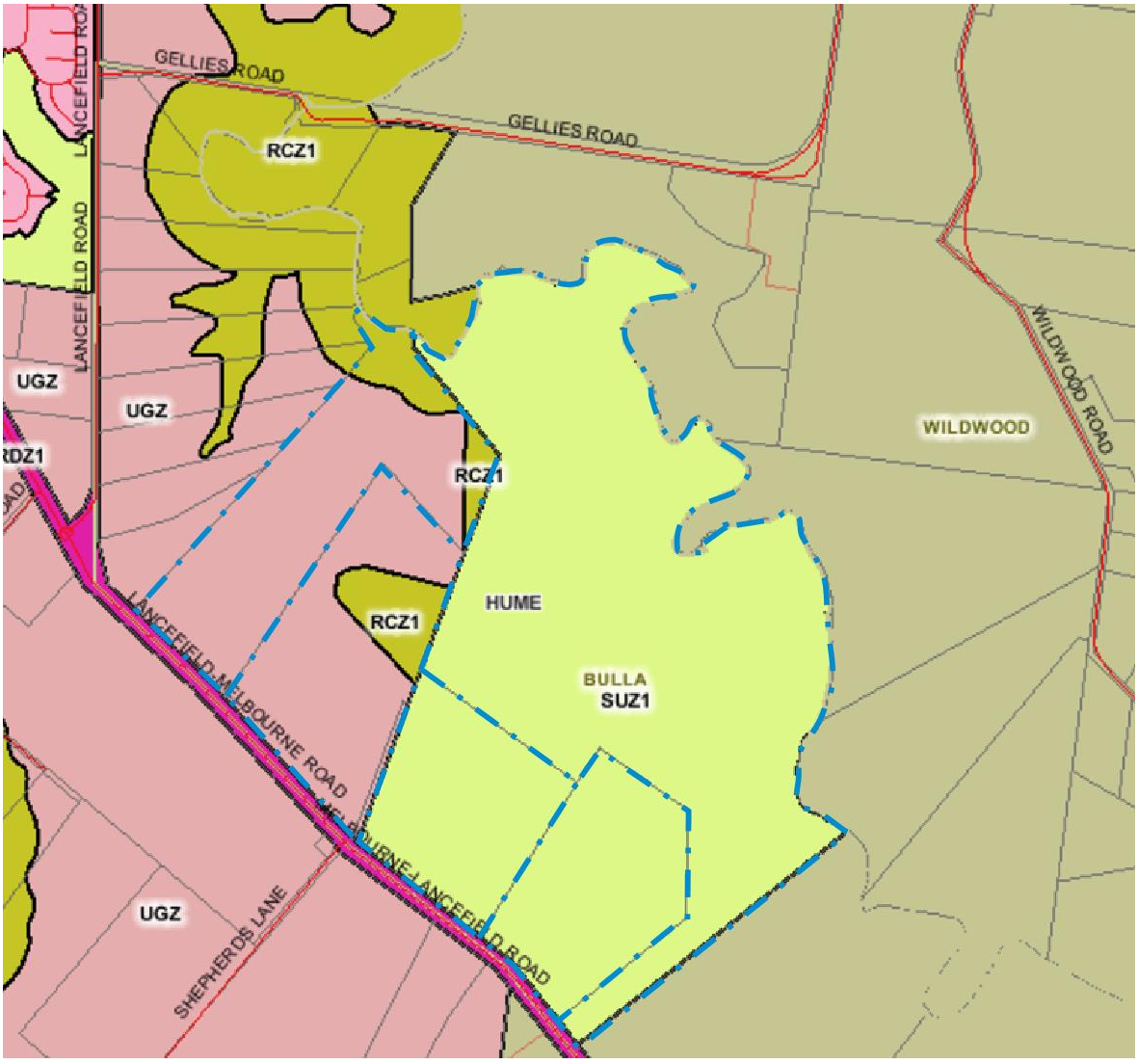
2. Planning background

The subject site is within the City of Hume.

Zoning

Figure 1 shows the current zones and the blue dashed line designates the extent of the Hi-Quality land.

Figure 1 *Zoning*



The allotments to the south and east are currently zoned Special Use Zone (SUZ1). The Hi-Quality land also includes two lots to the west of the area zoned SUZ. These two lots are within the Urban Growth Zone (UGZ) with small parcels being zoned Rural Conservation Zone (RCZ1). The land on the southern side of Sunbury Road is zoned Urban Growth Zone (UGZ).

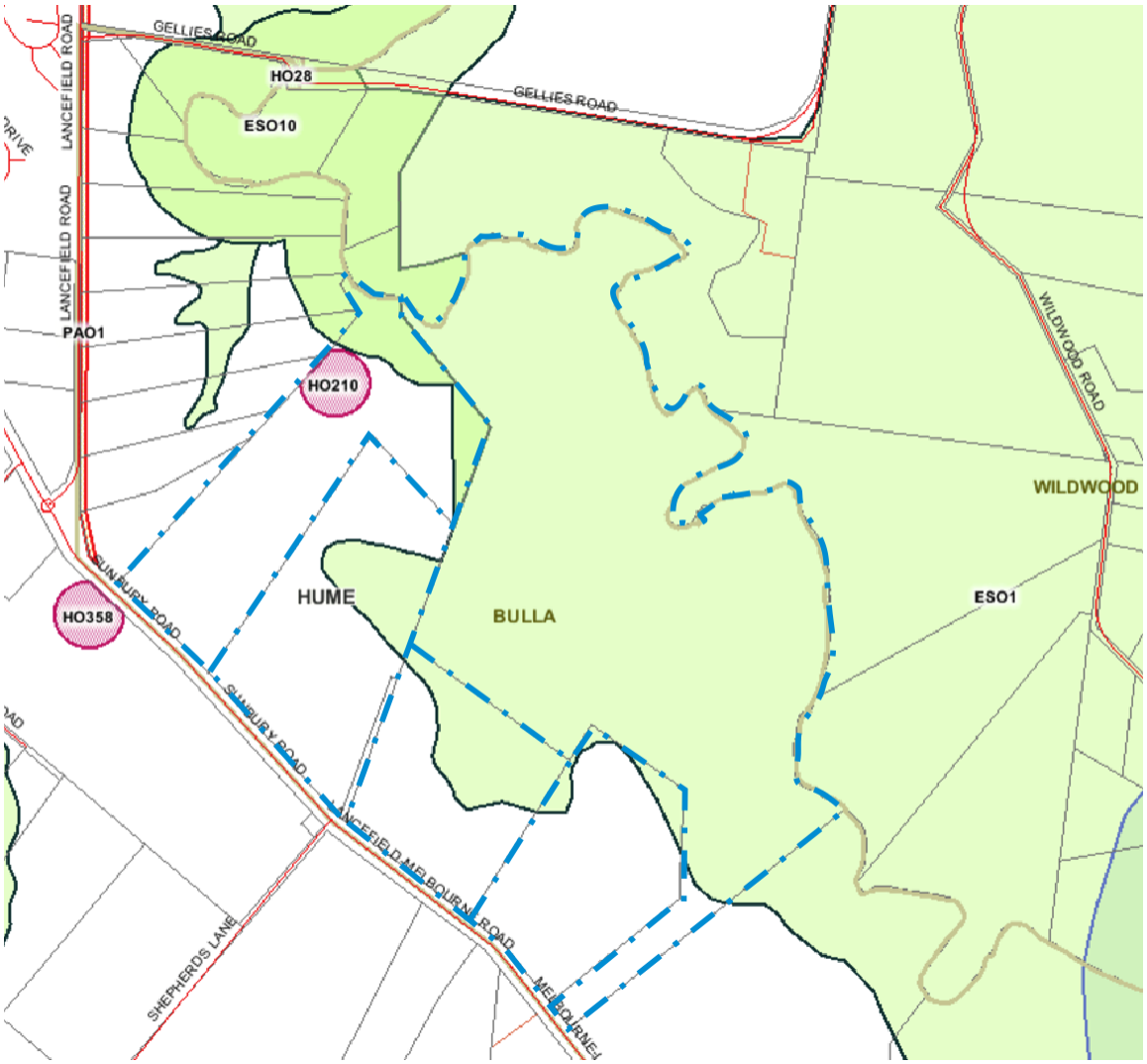
The land to the east and south of the Hi-Quality land is zoned Green Wedge Zone (GWZ).

Sunbury Road runs along the southern edge of the subject site and is designated as a Road Zone (RDZ1).

Overlays

Figure 2 shows the Environmental Significance Overlay (ESO1) which applies to land on or adjacent to the subject site. A small section of the Hi-Quality land in the north west is affected by ESO10.

Figure 2 Overlays



Environmental Significance Overlay (ESO1)

Much of the subject site is covered by Environmental Significance Overlay Schedule 1 (ESO1). The Landscape character protected by this ESO is stated as:

- *To protect and enhance the natural and visual character of waterway corridors, deeply incised valleys and their surrounding environs.*
- *To ensure that the scenic qualities and visual character of waterway corridors, creek valleys and their surrounding environs are not compromised by the inappropriate siting of buildings, the placement of fill, the removal of soil, or lack of screening vegetation.*
- *To restore those sections of the waterway corridor which have been man modified to create artificial bed, banks and landforms to more natural, visually attractive and ecologically diverse landscapes.*

The Decision Guidelines within the ESO1 include:

- *The effect of the proposed removal of any native vegetation on the habitat value, wildlife corridor, and long term viability of remnant and revegetated areas along the waterway corridor.*
- *The significance of the native vegetation area, including the significance of plant communities or significant plant and animal species supported.*
- *The reasons for removing the native vegetation and the practicality of alternative options which do not require the removal of the native vegetation.*
- *The effect of the height, bulk and general appearance of any proposed buildings and works on the environmental values and visual character of the waterway.*
- *The need for landscaping or vegetation screening.*
- *The need to ensure that buildings or works do not disturb known sites of Aboriginal heritage or areas likely to contain Aboriginal heritage.*
- *The need to protect trees with Aboriginal trunk or branch scars.*
- *The need to retain native vegetation and natural features which contribute to the health and water quality of the waterway and the visual character of the waterway corridor.*
- *The extent that buildings or works are designed to enhance or promote the environmental values of the waterway and the visual character of the waterway corridor.*

The ESO1 is applied to land along Emu Creek and to land which is currently used for quarry and land fill.

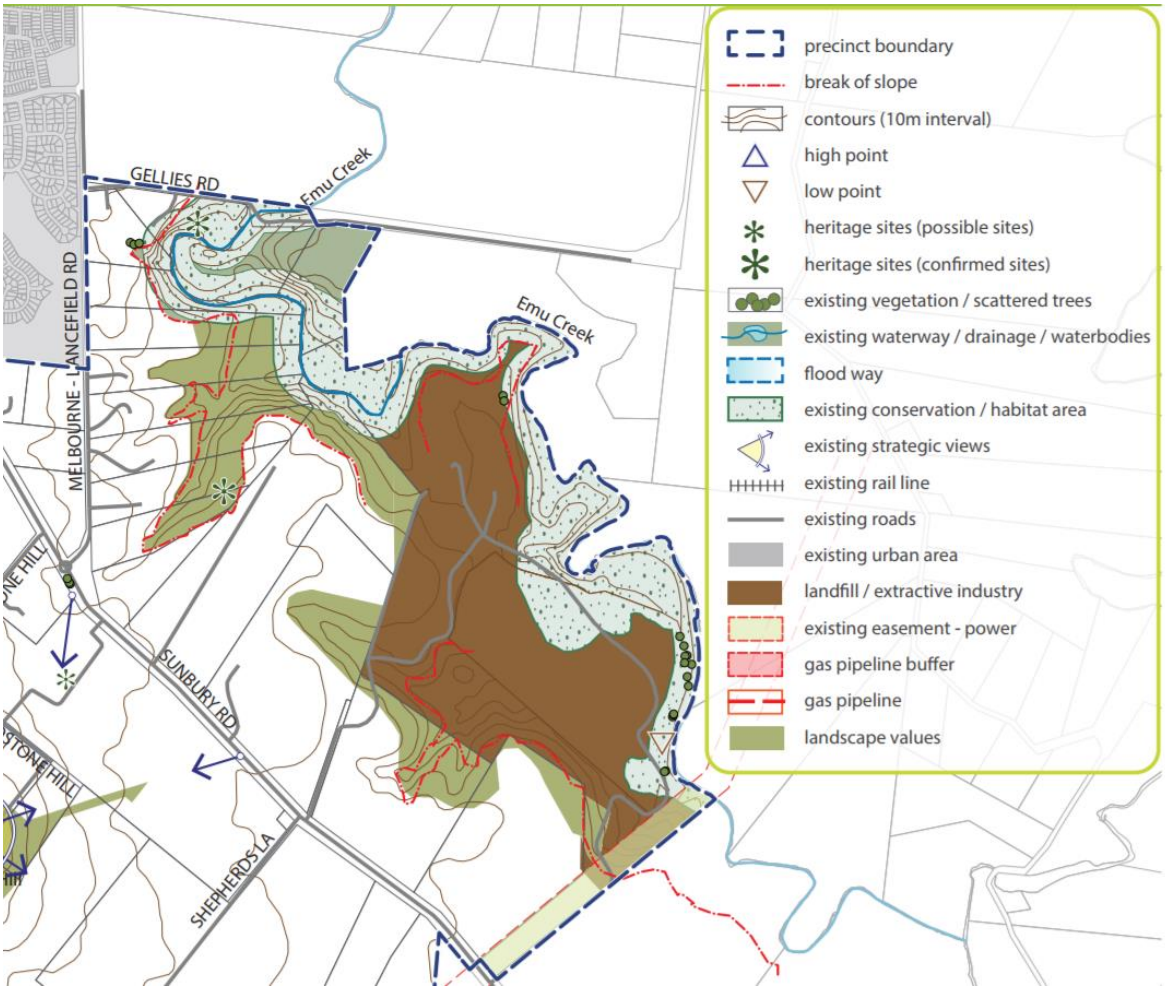
Environmental Significance Overlay (ESO10)

Part of the Hi-Quality land is also affected by ESO10. The environmental objectives to be achieved under ESO10 are:

- *To protect and improve the viability of habitats, ecological communities, flora and fauna and genetic diversity.*
- *To enhance the environmental and landscape values of the area.*
- *To ensure that any use, development or management of land within and adjacent to areas of biological significance are compatible with their long-term maintenance and conservation and will not have detrimental impacts on biodiversity values.*
- *To encourage ecological restoration, regeneration and revegetation with indigenous species within the site.*
- *To maintain and enhance habitat connectivity for listed threatened species.*
- *To prevent a decline in the extent and quality of native vegetation and native fauna habitat.*
- *To ensure that the siting and design of any buildings and works maintains the environmental integrity of the land.*
- *To maintain and enhance the integrity of sites of environmental significance.*
- *To provide for the long term preservation of the flora and fauna and associated habitat of environmentally significant areas.*

The PSP has seemed to adopt these overlays (ESO1 and ESO10) as a basis for the description of this land as having "*landscape values".* This area includes the landfill extractive industry area and the conservation / habitat area along Emu Creek.

Figure 3 Precinct Features (Source: PSP, Plan 2)

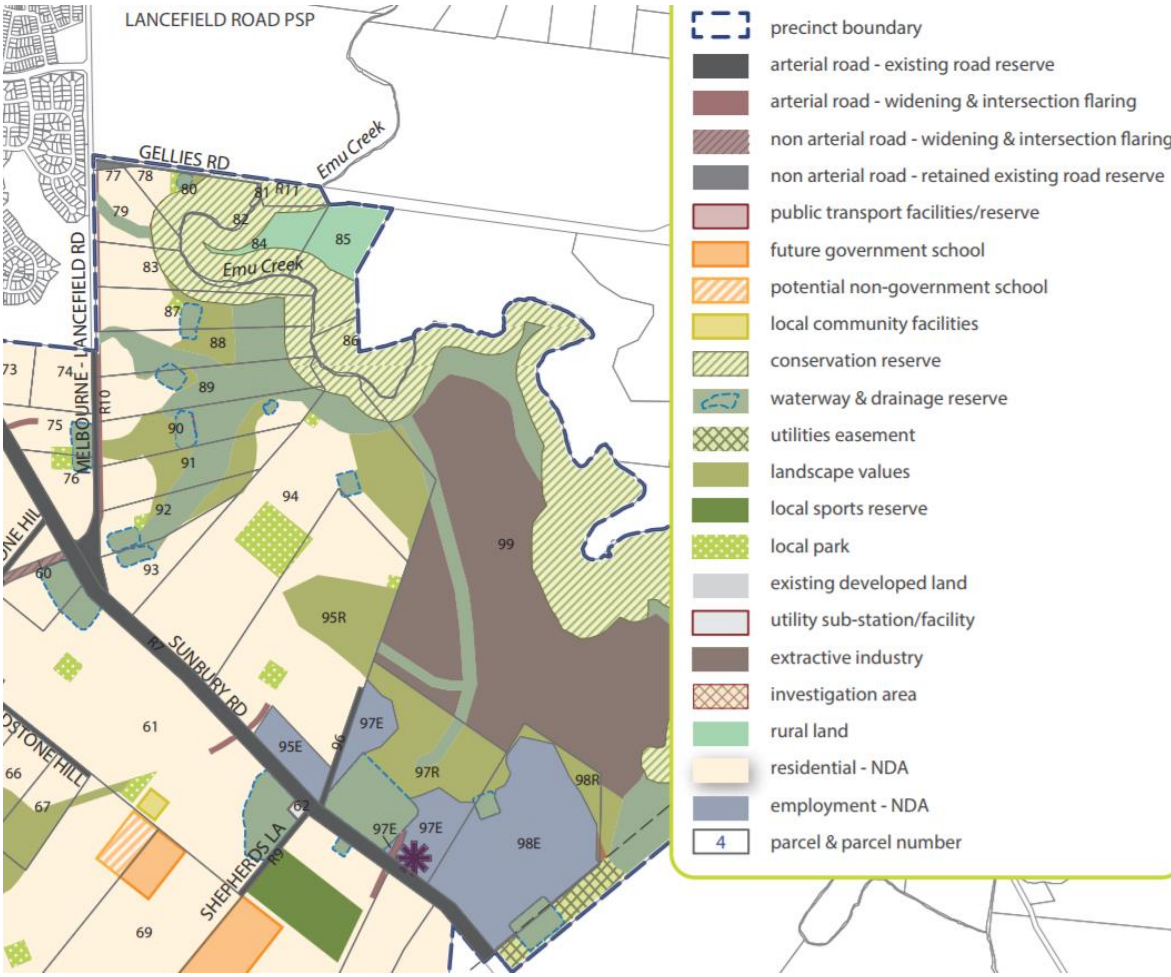


The extent of the “landscape values” area follows that of the original designation of the ESO1 in the upper areas of the Hi-Quality land and includes the area above the ESO10 to the ‘break of slope’.

The area designated as “landscape values” does not follow a particular contour line but broadly includes two incised valleys and the land between the ‘break of slope’ and the area designated as “existing conservation / habitat area’ in the north east section of the Hi-Quality land.

However, this boundary was then used to define the edge of the developable land within the Land Use Budget (PSP, Plan 4), which is reproduced in ***Figure 4***.

Figure 4 *Land Use Budget (Source: PSP, Plan 4)*



The areas of land designated 95R and 97R on Plan 4 are derived from the Precinct Features Plan which in turn was derived from the ESO. There is no evidence supporting this boundary within the PSP.

The basis for this description is not supported by evidence in the PSP because of the existing environmental values on the Hi-Quality land. A landscape and visual assessment of this area designated 'landscape values' will be discussed in the following section of this report.

3. The subject site & environs

An analysis of the subject site and environs may provide an understanding as to the rationale behind the designation of areas as having ‘landscape values’.

In **Figure 5** the boundary of the Hi-Quality land is shown by a blue dashed line. The green shaded area shows the extent of the land designated as ‘Landscape Values’ within the PSP.

Figure 5 *Landscape values (Source: Google Earth, Imagery 28 October 2015)*

The areas designated 95R and 97R as ‘Landscape Values’ within the PSP are two incised valleys which contain little vegetation. The undesignated ‘landscape value’ area in the northwest is that land from the existing ‘break of slope’ as defined within the PSP. The areas sometimes extend over title boundaries (see 98R) into the ‘landfill / extractive industry’ areas whilst in other locations the title boundary appears to define the edge of the areas.

There appears to be no vegetative or topographical reason for their inclusion as areas of landscape value as overlaying the areas designated as 'landscape values' within the PSP and the aerial provides no obvious correlation or reason for their designation.

Topography

The site is gently undulating and Sunbury Road is located on its southern boundary on a low ridge. The Hi-Quality land is to the north of Sunbury Road and is outline3d by a red dashed line. Emu Creek lies to the north of Sunbury Road and Jacksons Creek to the south. Redstone Hill is a low hill on the south of Sunbury Road. These creeks and Redstone Hill are shown in **Figure 6**.

Figure 6 *Contours*

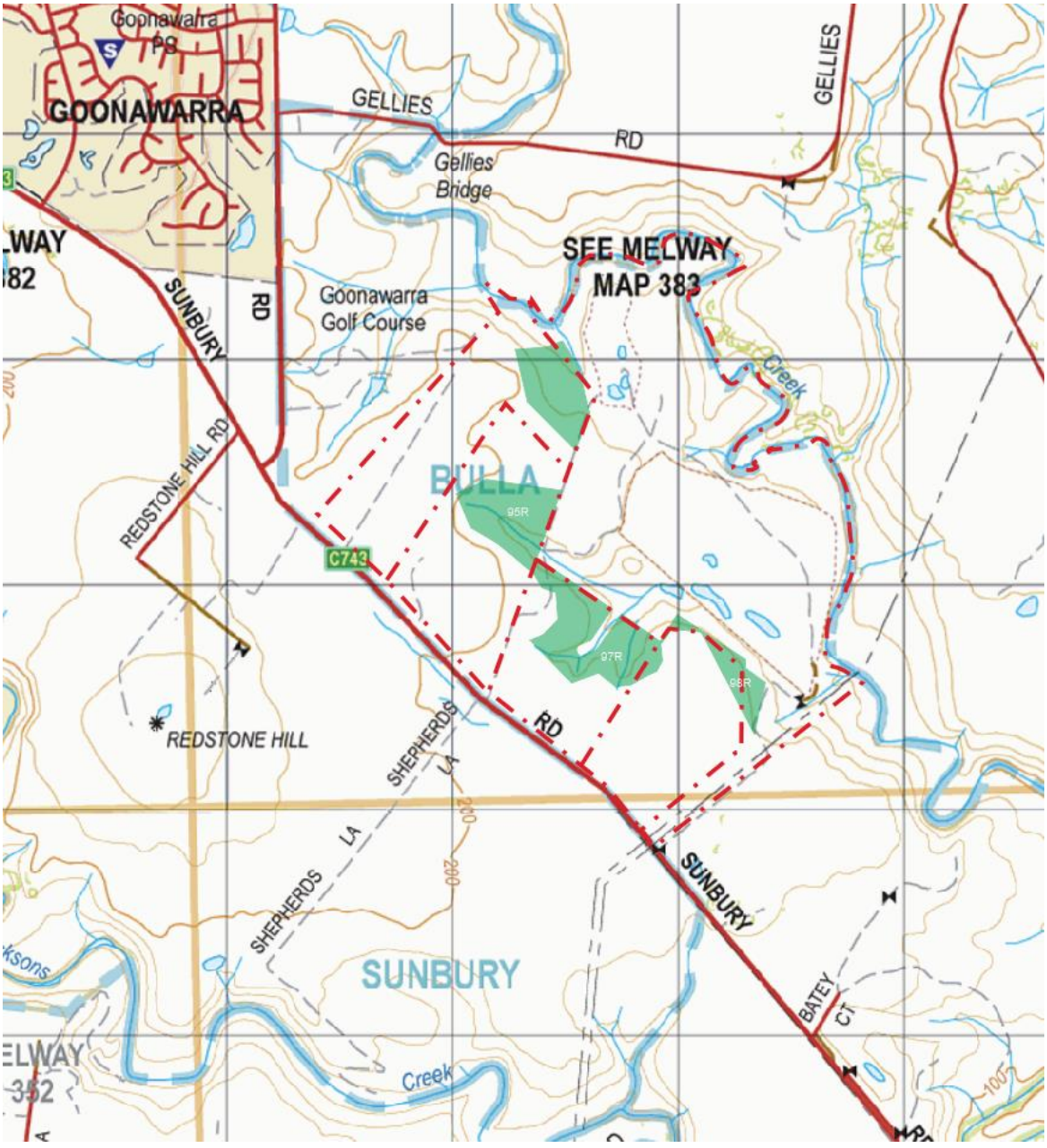


Figure 6 also shows those areas designated as 'landscape values' within the PSP. These areas were originally part of areas designated within the ESO1 and ESO10, which was more extensive and extended across Emu Creek to the land further north (Refer **Figure 2**).

Examining areas designated as 95R and 97R on the PSP. The original SLO areas have been roughly truncated at the title boundary within the PSP. An existing permit allows filling and modification of the existing valleys to the north of the title boundary. This remnant area does not have a landscape basis for its inclusion into areas designated as having 'landscape values'.

Examining the undesignated area to the north west, it is apparent from the contours that this area is not consistent with the contours and the 'break of slope' definition used within the PSP is not parallel to, or aligned with, either the 180m or 200m contour. This area does not have 'landscape value'.

There is no doubt that Emu Creek has considerable landscape values. These are demonstrated in the photographs below.

Figure 7 *Emu Creek valley*

Figure 7 shows the view of Emu Creek from Gellies Road looking south (towards the Hi-Quality land) and north. This incised valley is a major feature of the area and along with Jacksons Creek is a landscape that is, and should be, protected.

The smaller valleys and sloping land designated as 'landscape values' within the PSP are not similar landforms.

Vegetation

There is limited vegetation on the Hi-Quality land, as most of the land has been cleared for farming and the northern portion of the site is used for landfill.

There is some vegetation along the incised valleys which are evident on the aerial photograph, but much of this is weed species.

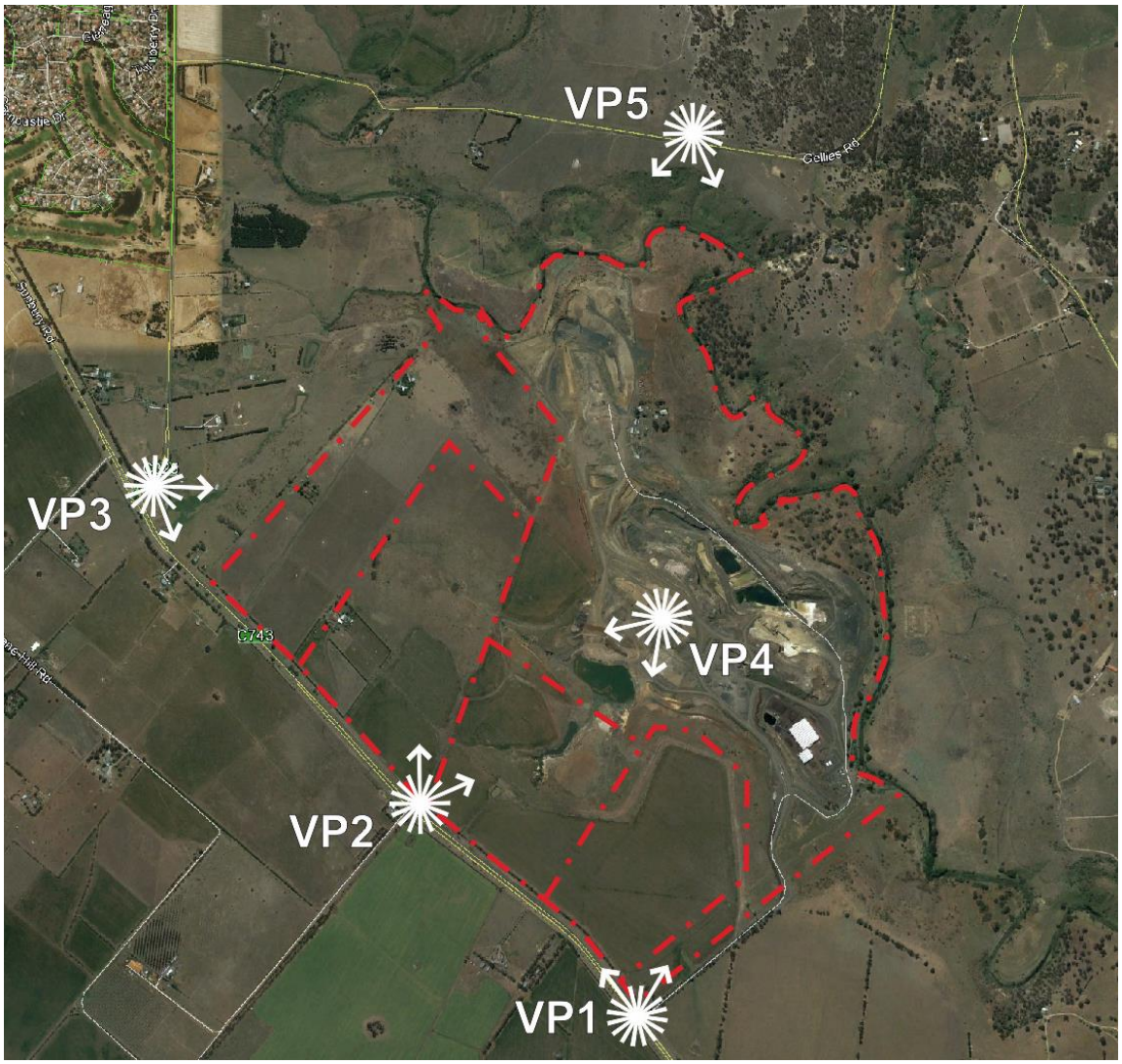
There would seem to be no vegetative reason for the designation of 'landscape values'.

Visual implications

Topography limits views from Sunbury Road to Emu Creek and to the incised valleys that are within the ESO.

I have visited the site and inspected viewing locations along Sunbury Road to ascertain if the visibility of these valleys could be such that they have a ‘landscape value’ which may have been the reason for their inclusion into the initial ESO and incorporation into the PSP.

Figure 8 *Viewpoints*



Each of these viewpoints (VP1-VP5) is discussed below.

Viewpoint 1

Viewpoint 1 (VP1) shows an example of the view from Sunbury Road is shown in **Figure 9**. This location (VP1) is taken from the intersection of Sunbury Road and the existing haul road to the quarry / landfill.

Figure 9 *Viewpoint 1*

This section of Sunbury Road has a tree line adjacent to the road. But even when viewing through this tree line, the existing topography screens views from Sunbury Road to these incised valleys and the incised valleys are not evident.

The tree row continues along Sunbury Road to the intersection of Shepherds Lane.

Viewpoint 2

Viewpoint 2 (VP2) This is the closest location to the incised valleys along Sunbury Road and is at the intersection of Sunbury Road and Shepherds Lane at the location where the tree row adjacent to Sunbury Road terminates.

There is an existing entry gate to the subject site on the opposite side of the road. The incised valleys are to either side of the fence line alignment visible in the centre of **Figure 10**.

Figure 10 *Viewpoint 2*

At this location, the incised valleys are screened from view. As this is the closest location to Sunbury Road it is the most exposed location. From a landscape perspective, the valleys are completely inconspicuous.

Viewpoint 3

Viewpoint 3 (VP3) is taken from the intersection of Sunbury Road and Lancefield Road. The nearest location of the ESO / 'landscape value' boundary is approximately one kilometre from this viewpoint.

Figure 11 Viewpoint 3

A truck is just visible on Sunbury Road to the right of **Figure 11**. The incised valleys are not visible from this location, nor from further along Lancefield Road.

Viewpoint 4

Viewpoint 4 is taken from the top of an area within the landfill that has reached the anticipated final level. This viewpoint is within private land, on a elevated location within an operating landfill. It is a view looking to the south west, along the line of the incised valley to a point where it branches to the south and north-west, looking over the quarry / landfill areas. It is the terminal sections of these valleys that were included within the SLO and now within the PSP.

Figure 12 Viewpoint 4

Sunbury Road would be on the ridge in the distance. Whilst the incised valley is visible, it is part of the backdrop to the landfill areas and even where visible it is not a dramatic feature that would seem to require its protection.

Viewpoint 5

Viewpoint 5 is taken from Gellies Road looking south over the land fill areas to Sunbury Road.

Figure 13 Viewpoint 5

Sunbury Road would be on the ridge in the distance. Whilst the top of slope of the Emu Creek valley is visible, the smaller incised valleys that are designated as having 'landscape values' are not discernible. As mentioned earlier the lower sections of these two valleys also will change due to the current permits within the landfill area. They are not a dramatic feature that would seem to require protection now, and, in the future, the remnants would be even less significant.

Implications for the 'landscape values'

These smaller incised valleys are not a significant landscape feature nor are they important to the experience a driver would have of the Bulla area whilst driving along Sunbury Road or along Gellies Road to the north. They are not perceptible from other local roads. They are not visually significant.

Even when looking from the south from within private land in the landfill area, they are discernible but they are small features in a board expansive landscape and the upper slopes that are protected are a small component of the valley that has already an existing permit within the quarry / landfill area.

Therefore, the designation of 'landscape values' is not supported by the preceding analysis. They are not visual, topographic or vegetative assets that would require future protection or should sterilise their use for development / open space and drainage.

4. Design response

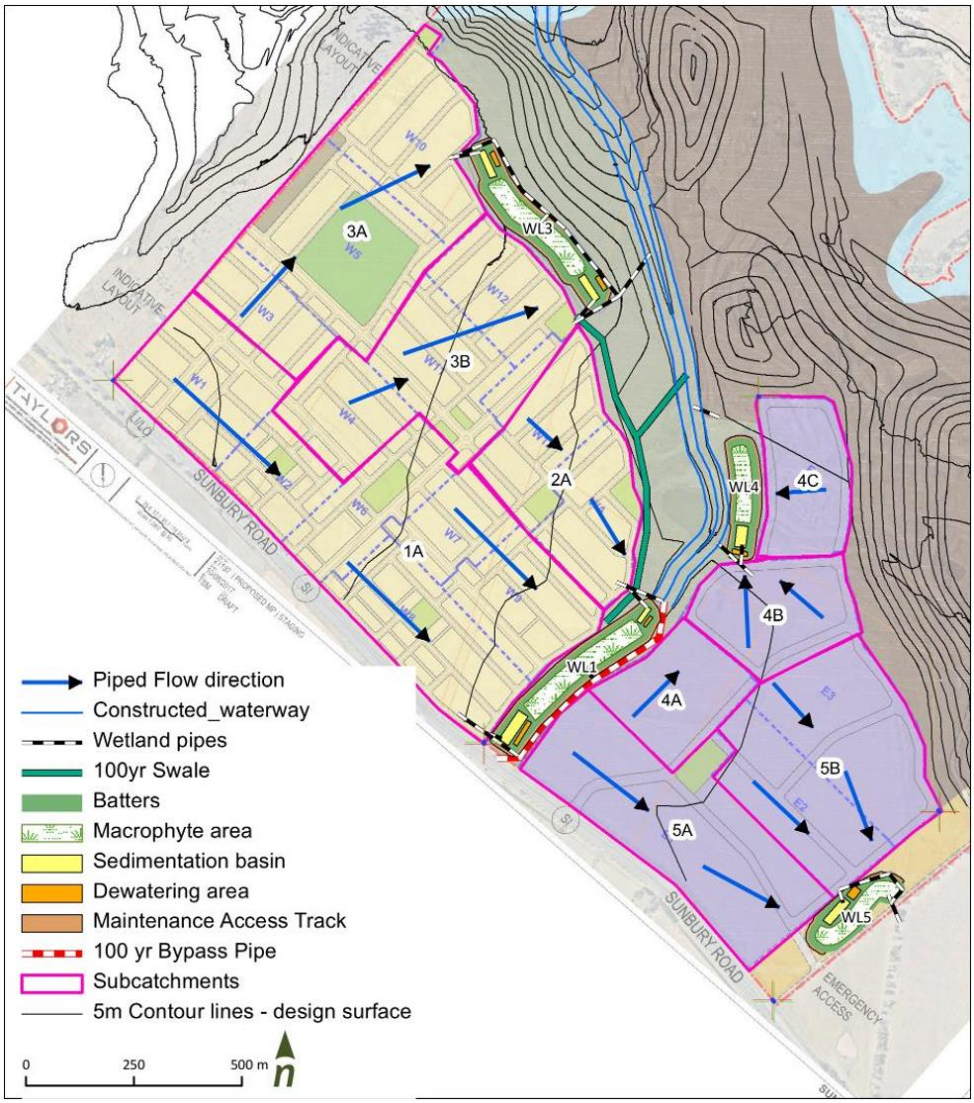
The PSP recognises the inherent landscape values of Emu Creek. Emu Creek, along with Jacksons Creek to the west of Sunbury Road, are recognised within the PSP as important linear connections. The PSP recognises that the Hi-Quality land on the northern side is suitable for future residential use but limits the eastern edge of the residential area preserving land with 'landscape values'. The reasons for this boundary is not apparent in the preceding analysis

The question that needs to be addressed in the design response is, if the PSP boundary is re-aligned, then would a better urban design / open space outcome be possible?

Drainage strategy

It is recognised that a drainage strategy needs to be in place, so that the storm water from these residential areas can be treated in wetlands and discharged appropriately. There is also the opportunity for the drainage strategy to work hand-in-hand with an open space strategy. The proposed draft drainage strategy is illustrated in **Figure 14**.

Figure 14 *Proposed drainage treatment (Source: Alluvium, August 2017)*



This drainage strategy provides a wide drainage swale and open space corridor linking Sunbury Road and Emu Creek. Allied with this corridor a series of wetlands are proposed at the top of the slope which drain southwards along a 100yr swale to the corridor. These wetlands are proposed at the edge of the "break of slope". This break of slope line is based on the existing contours and is more accurate than that shown on the PSP.

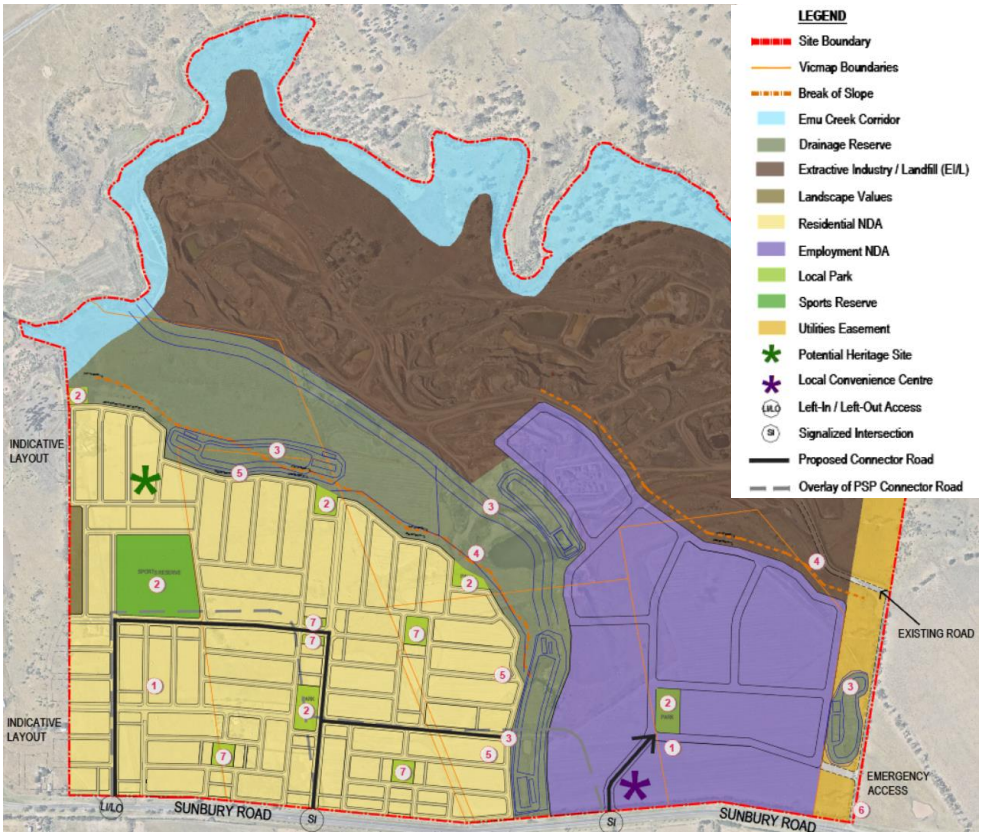
This proposal integrates the future open space network with a drainage strategy that sees a strong and positive link with Emu Creek and the future town centre.

The junction of this drainage corridor and wetlands is approximately 100m wide where it abuts Sunbury Road. This will provide a view corridor from Sunbury Road down the wetlands / drainage reserve.

Indicative subdivision

This drainage strategy was then incorporated into the proposed indicative subdivision layout prepared for this amendment. This indicative subdivision layout prepared by Taylors is shown in **Figure 15**.

Figure 15 *Proposed masterplan (Source: Taylors, 10 August 2017)*



The indicative layout shown in **Figure 15** illustrates a road side verge treatment for much of the proposed subdivision roads along the edge of the break of slope / drainage swale. The break of slope line shown in **Figure 15** is from the PSP. An accurate break of slope line based on the existing contours is shown on the Alluvium plan (refer **Figure 14**).

Open space areas (local parks and sports reserves) are broadly in accordance with those shown in the PSP.

Proposed changes

Proposed changes would improve the interface between the drainage corridor and the proposed subdivision. Currently the plan shows a minor road parallel to the drainage reserve, although in sections allotments are backed to the drainage reserve.

Recommended changes include:

- Provide a boulevard running continuously along the drainage corridor edge. This could show a smoother edge to the open space, but generally in alignment with the current road shown on the subdivision masterplan.
- Provide pedestrian pathway networks which use both the upper edge (adjacent to the proposed wetlands and swale) as well as linking Sunbury Road and Emu Creek along the drainage corridor).
- Relocate the major open space sports area adjacent to the drainage corridor to add to the perceptual size of this major recreation area. The large open space shown on the eastern side of the masterplan (Sports Reserve) could possibly be relocated to the east or the north, perhaps aligning with the proposed fill areas in the east, but more importantly along the proposed boulevard edge.
- Ensuring direct linkages to the outer boulevard from the vehicular entries into the residential land.

An example of the masterplan modified to reflect these potential alternatives is shown in **Figure 16**.

Figure 16 *Sketch of road layout & pedestrian pathway option*

Figure 16 shows that a boulevard running around the perimeter of the residential land that affords an opportunity for views into the drainage reserve and associated wetlands as well as Emu Creek valley which, in the future, will be a major environmental linkage with high landscape values.

A section through the proposed boulevard and drainage edge is shown in **Figure 17**.

Figure 17 *Proposed boulevard treatment*

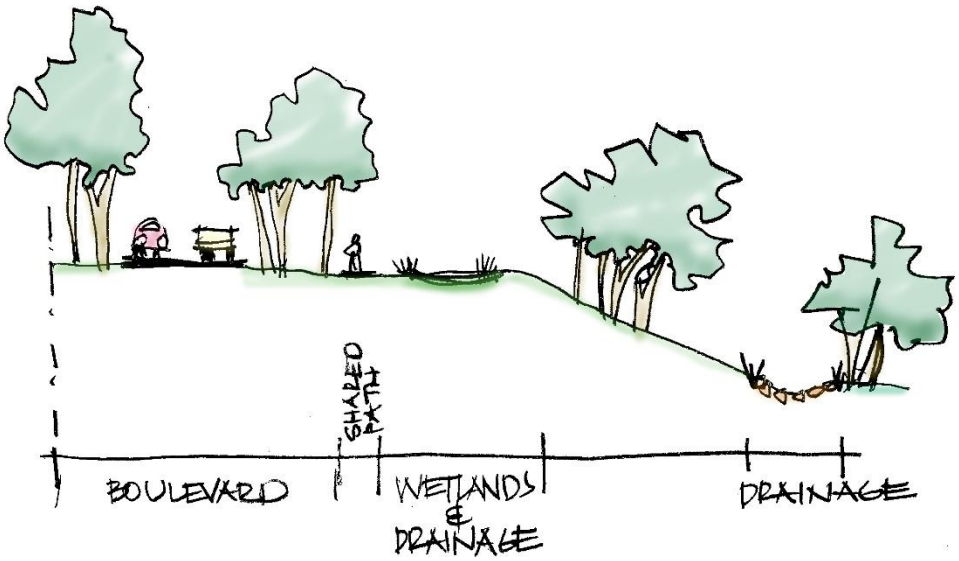


Figure 17 also shows that as a result of the drainage swale and wetland where proposed, the boulevard is set back from the break of slope. I do not believe that this distance should be specified as in the PSP. The specified distance of 20.2m (PSP) seems arbitrary and the boulevard should meander adjacent to the drainage reserve, sometimes closer and sometimes further from the 'break of slope'.

It is stressed that these ideas are conceptual and based on a landscape perspective. Their primary intention is to link the Emu Creek valley and its immense visual, landscape and environmental values with the proposed residential development, on both sides of Sunbury Road.

The pedestrian or shared pathways shown are purely indicative but would provide future linkages along the creek and also connecting via the drainage reserve to Sunbury Road and to the proposed town centre.

Such linkages may take a long time to deliver but I believe that the future residential communities would be enhanced by the planning and linking of future green infrastructure.

.

5. Conclusion

The proposed redevelopment is adjacent to Sunbury Road and drainage issues have created the need for a drainage corridor from Sunbury Road to Emu Creek.

The proposed amendment should enhance the sense of place that will result from the new residential areas by providing views over the drainage corridor to Emu Creek.

The design response creates a future residential precinct with a strong sense of place and the potential to strongly link with the creek and drainage corridor.

The drainage corridor also has the potential to provide a pedestrian link from Emu Creek to the future town centre (and potentially to Jacksons Creek).

Rather than simply applying an edge that was derived from a plan that does not appear to have an obvious rationale, a better strategy is to use the land creatively to provide a much better design outcome.

Annexure 1

Allan Wyatt – Curriculum vitae

Allan Wyatt - Curriculum Vitae

Allan has extensive experience in the masterplanning, detailed design documentation and contract administration of a variety of projects both in Australia and overseas.

More recently, Allan has specialised in large scale masterplanning and urban design work with major projects being undertaken for local government, boards of management as well as for private developers both in Australia and in China, Hong Kong, India and Malaysia. Much of this work has involved the integration of sustainable development principles in the masterplan. Allan has a particular interest in wetlands design which has often been a feature as well as an integral component of these masterplans.

Allan regularly appears before independent panel hearings, the Victorian Civil and Administrative Tribunal (VCAT) and other appellant bodies as an expert witness in the areas of urban design, visual assessment and landscape architecture.

2015 to present

Landscape Architect - XURBAN

1997 to 2015

Environmental Resources Management Pty Ltd Partner & Practice Leader - Urban Design and Landscape Architecture - Asia Pacific

1989 to 1996

Ratio Consultants Pty Ltd Partner

1980 to 1989

Allan Wyatt Pty Ltd - Principal

1976 to 1979

Public Works Department, Victoria - Landscape Architect

1974 to 1976

Peter Jones Architect & Landscape Consultant - Landscape Architect

Professional Affiliations and Registrations

Associate, Australian Institute of Landscape Architects

Fellow, Victorian Planning and Environmental Law Association

Fields of Competence

Urban Design

Landscape Architecture

Visual Assessments.

Education

Graduate Diploma Landscape Design (RMIT) 1979

Languages

English

Publications

Community perception studies as a means of evaluating landscape quality, NZ Wind Energy Conference.

Photomontages and perceptual accuracy, NZ WE Conference paper.

Visual assessment and environmental restoration of mine and quarry operations, paper presented to the joint VPELA and Victorian Chamber of Mines

Trees in the urban jungle and other Neighbourhood conflicts, paper represented to joint AILA/VPELA/RAPI Seminar.

Concerns regarding statutory control on tree planting in our cities, published in Victorian Planning and Environmental Law Association Newsletter.

Key Projects

Some examples of key projects are listed below.

Mines, quarries & landfill

Preparation of end use masterplans as well as staged rehabilitation plans for large long term mining and quarrying projects. Many of these projects have also involved a visual assessment of the proposal and integrated this visual assessment with proposed staging and rehabilitation works.

Chiltern Quarry

Visual assessment as well as a landscape proposal which sought to replicated the landscape pattern of the surrounding countryside.

Mount Shamrock Quarry, Pakenham

Visual and Landscape assessment for proposed Works Authority extension to existing quarry. The work involved Landscape Rehabilitation and Mitigation Planting to address environment and visual issues.

Uranium Mine, Northern Territory, Australia

Preparation of 3D modelling, photomontages based on a conceptual site layout and landscape plans for a confidential client in Australia.

Montrose Quarry

Development of end use guidelines and rehabilitation recommendations for Montrose Quarry.

Gold mine, WA

Preparation of confidential end use plans for mining tenements that were reaching completion.

Grantville Sand Quarry

Staged rehabilitation plans for this sand quarry, particularly the slimes storage areas.

Yea Sand & Gravel Quarry

Quarry rehabilitation of an area subject to flooding and adjacent to the Yea River.

Sunshine Quarry

The rehabilitation of this quarry involved the creation of a nine-hole golf course as well as special landscape treatments for the extensive battered slopes on the Maribyrnong River.

Niddrie Quarry redevelopment masterplan

Residential and recreational land use planning of the quarry.

Mt Martha Quarry redevelopment masterplan

Landscape and visual assessment. ***Victory Road, Clarinda***

Landscape masterplan and visual assessment.

Melbourne Regional Landfill, Truganina

Landscape masterplan and visual assessment of an ex-quarry site.

Open space planning

Karkarook Lake and Wetlands

The masterplanning & documentation of the lake and wetlands of the largest man-made wetlands in Melbourne and treats urban run-off as well as providing a substantial recreation resource.

Confidential project, Taiwan

Preparation of a Landscape Master Plan and Sustainable Landscape Design Guidelines for a confidential new city development in Taiwan.

Croydon Open Space Study

The City of Croydon contained many areas of open space derived from residential contributions. This study examined their ecological value and made recommendations for future development.

Tarneit Wetlands, Victoria, Australia

Masterplanning of a large new wetlands system at the head of the Werribee River to deal with stormwater retention, habitat creation and is to create community open space for the surrounding residential developments.

Botanica Springs, Melbourne, Australia
Concept and detailed design of an ornamental wetlands system associated with a large residential development.

Urban design, masterplanning & golf courses

Tai Shan Resort and town centre, China

A masterplan for a community on the edge of one of China's most sacred mountains.

Dalingshan, Dongguan Provence, China

Urban design for a city expected to grow to 3 million. As a central component of the urban planning for the revitalisation of this City, open space provided contiguous corridors for both recreational needs, flood management and pollution control.

Nanjing Lake and the Purple Mountain

The masterplanning of this central 44 km^2 area in central Nanjing involved heritage issues as well as ideas to dramatically retreat major freeways that were dividing the historic precinct in central Nanjing.

Pukou, Central China

This 21 km^2 new urban area in central China was designed around LEED ND principles and incorporated a new arterial road network as well as urban planning for a design population of 200,000 along with commercial and employment nodes.

Royal Palms, Goregaon, Mumbai, India

The masterplanning of this 90 ha precipitous quarry site in India encompassed a golf course, a 5 star and a 4 star hotel, luxury housing and condominiums set in a high quality lake and parkland setting.

Integrated Tourism Resort, Powai, India - Stage 2

Preparation of a site masterplan for a golf course, hotels, convention centre, time share and residential apartments, golf lodges, aquarium, butterfly house and cultural village. The site was on a steeply sloping volcanic ridge.

Pearl Island Golf & Country Club, Penang, Malaysia

Following the masterplanning of this site and the subsequent documentation of the golf course, ERM has been engaged to create the extensive landscape spaces which are to be an integral part of this major facility

PPH Resorts, Penang, Malaysia

Landscape and masterplanning options as well as on-going documentation and contract administration of a major 18 hole golf course and associated facilities in a mountainous region of Malaysia.

***Queenscliff Coastal Action Plan ***

Undertake a study of future land use options, pedestrian and vehicular strategies for the on-going development of one of Victoria's premier coastal resorts for the Central Coastal Board. Community and stakeholder consultation was a key component of the study.

City of Casey Planning and Urban Design

Various structure plan reviews and urban design works examining built form, streetscape, traffic and landscape improvements to increase the identity, character and pedestrian amenity of the City of Casey.

Victoria Racing Club (VRC), Melbourne, Victoria, Australia

Flood wall treatments along the Maribyrnong River were followed with the masterplanning, documentation and contract administration for the new wetlands at Flemington Racecourse, Melbourne. The entries on Flemington Road were also part of this project.

Eli Waters, Hervey Bay, Queensland

Landscape Masterplan for this large residential estate in Queensland, which focuses on an 18-hole golf course and an extensive wetlands and lakes system.

Dalian Waterfront, Dalian, China

Design team for a new waterfront including parklands and commercial facilities.

Clifton Park, Victoria

Project coordination and contract administration for the construction of a large community park in Brunswick.

HK University Ideas Competition, Hong Kong

Preparation of landscape masterplan for the existing university campus and the proposed western expansion.

Residential project, Wo Shang Wai, Hong Kong

Preparation of a Landscape Master Plan and Sustainable Landscape Design Guidelines for a confidential project near a sensitive wetland environment in Hong Kong.

Infrastructure

Urban Design Framework, East West Link, Melbourne

Undertake a study to inform tenderers on this project of the standard expected in the final urban design outcomes. These included key objectives for new 'gateways' to Melbourne, as well as for open space and wetland redesign as well as future bike and pedestrian linkages.

Melbourne Desalination Plant

Landscape and visual assessment for this major infrastructure project that also involved the assessment of a 220kV transmission line and a pipeline easement cutting through residential and rural landscapes.

Yarra Pedestrian Bridge

Urban design and landscape involvement on this major pedestrian link between the MCG and Birrarung Marr.

LNG Terminal, South Soko, Hong Kong

Landscape and Visual Assessment components within an EES that also included a fly through model of the proposed development on South Soko Island.

Channel Deepening Project, Port of Melbourne (POMC)

Visual assessment of this major piece of Victorian infrastructure which included an examination of the visual impacts of the plume created by dredging activities in Port Philip Bay.

Basslink

Visual assessment of proposed transmission line options and associated components for major inter-connector between Tasmania and Victoria.

Parramatta Rail

Visual assessment and the development of subsequent site design and documentation for key nodal areas on this railway line upgrade.

Wind Farm Visual Assessments

Undertake the visual assessment and the preparation of photomontages for more than 30 wind farms in Victoria, South Australia , NSW and New Zealand.

Bass Link

Strategic siting as well as detailed visual assessment of the selected route as well as landscape mitigation for this major interconnection between the electrical grids of Tasmania and Victoria.

Various Road projects

Allan has been the Project Director within ERM for various road projects which have included highway bridge duplication in NSW as well as more recently providing visual assessment input and providing the photomontages for the Geelong Bypass and working on the Urban Design Framework for East West Link.

Airports at Cairns, Broken Hill, Alice Springs and Devonport

Site and landscape design of pedestrian and entry treatments. Typically these projects involved extensive external landscape treatment for visual amelioration and, in the case of Broken Hill, the landscape treatment was critical for dust control.

Mallacoota Boat Launching Ramp & foreshore masterplan

Responsible for the revised Masterplanning in response to a visual assessment for this foreshore redevelopment project.

Skifields

Mt Buller Local Planning Policy Framework Study and Urban Design Framework

A study examining the land use planning and urban design guidelines for Victoria's premier ski resort.

Mt Buller Village Square.

Involved in the design and documentation of the central pedestrian square for the ski resort. This has been constructed in Stages over the past five years.

Falls Creek Skifield Study

A study examining the urban design guidelines for development within a large Victorian skifield.