410 COOPER STREET AND 315 O'HERNS ROAD, EPPING

DEVELOPMENT PLAN

410 Cooper Street and 315 O'Herns Road, Epping Development Plan

The Development Plan was approved by the City of Whittlesea on 14 October 2019, in accordance with Clause 43.04 Schedule 24 of the Whittlesea Planning Scheme.

14/10/2019

Signature of the Responsible Authority



410 COOPER STREET AND 315 O'HERNS ROAD, EPPING

DEVELOPMENT PLAN

Client	Frasers Property Industrial Constructions Pty Ltd
Project	410 Cooper Street and 315 O'Herns Road, Epping – Development Plan Submission
Version	3.0
Prepared By	Lucy Botta
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CONTENTS

1	Introduction		
2	Contex	t and Issues	3
	2.1	Existing site conditions and surrounds	3
	2.2	Planning and Policy Context	9
	2.3	Key Issues And Opportunities	9
3	Propos	ed Development Plan	12
	3.1	Development Plan Requirements	12
4	Suppor	ting Plans and Documents	18
	4.1	Land Use/ Employment Plan	18
	4.2	Staging Plan	18
	4.3	Traffic Impact Assessment Report & Road and Pedestrian Network Plan	18
	4.4	Preliminary Geotechnical Assessment	22
	4.5	Environmental Site Assessment	23
	4.6	Dry Stone Wall Assessment And Management Plan	24
	4.7	Stormwater and Drainage	24
	4.8	Arborist Report	25
	4.9	Landscape Concept Plan	26
	4.10	Servicing Report	29
	4.11	Environmental Audit Report	30
	4.12	Design Guidelines	31
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FIGURES

- Figure 2 Existing Conditions
- Figure 3 Survey Plan
- Figure 4 Cooper Street West Position Paper Precinct 4 Gateway
- Figure 5 Development Plan
- Figure 6 Movement Plan
- Figure 7 Road Cross Sections
 Figure 8 Tree Removal/Retention Plan
- Figure 9 Landscape Concept Plan

APPENDICES

- Appendix 1 Traffic Impact Assessment Report
- Appendix 2 Preliminary Geotechnical Assessment
- Appendix 3 Environmental Site Assessment
- Appendix 4 Drystone Wall Assessment and Management Plan Appendix 5 Stormwater Strategy Appendix 6 Arborist Report

- Appendix 7 Servicing Report
- Appendix 8 Environmental Audit Report





1 INTRODUCTION

Mesh Planning on behalf of Frasers Property Industrial Constructions Pty Ltd has prepared this Development Plan for 410 Cooper Street and 315 O'Herns Road, Epping. The Development Plan has been prepared in response to the requirements of Schedule 24 of the Development Plan Overlay that is contained within Whittlesea Planning Scheme. The Development Plan is intended to be used as the guiding plan that will facilitate development of the land for a range of employment purposes.

This role is consistent with the objective of the Development Plan Overlay (schedule 24) which is:

'To facilitate the orderly use and development of the land for employment/industrial purposes taking into account the surrounding land uses and to ensure the appropriate road infrastructure is provided for the precinct and the surrounding area.'

Preparation of the Development Plan follows recent rezoning of the subject land from Farming Zone to the Industrial 1 Zone (*Amendment C113*) which is in accordance with Council's Municipal Strategic Statement (MSS) and Draft Cooper Street West Position Paper (*April 2016*).

In support of this submission, a number of specialist reports are provided for Council's consideration:

- Traffic Impact Assessment Report;
- Preliminary Geotechnical report;
- Environmental site assessment;
- Drystone Wall Assessment and Management Plan
- Stormwater Strategy;
- Arborist Report; and
- Servicing report.

2 CONTEXT AND ISSUES

2.1 EXISTING SITE CONDITIONS AND SURROUNDS

The land that is included within this Development Plan comprises two titles (410 Cooper Street and 315 O'Herns Road, Epping). Both titles are located on the north side of Cooper Street immediately to the west of the Craigieburn Bypass (Hume Freeway). In its broader strategic context, the subject land is located to the west of the developed part of the Cooper Street employment area, to the north of the Biodiversity Business Park and the Melbourne Wholesale Fruit and Vegetable Markets. Land to the west of the subject land comprises a mix of uses including former landfill, an active quarry, a concrete batching plant, a materials recycling centre and the RSPCA Epping. Land to the north-west is subject of a current rezoning request which proposes to rezone land from the Farming Zone to the Industrial 1 Zone (north side of O'Herns Road).

When viewed in its broader strategic context, it is evident that the subject land forms a logical extension of the existing/emerging employment land use in the locality (see Table 1 and Strategic Context Plan).

Figure 1 - Strategic Context Plan

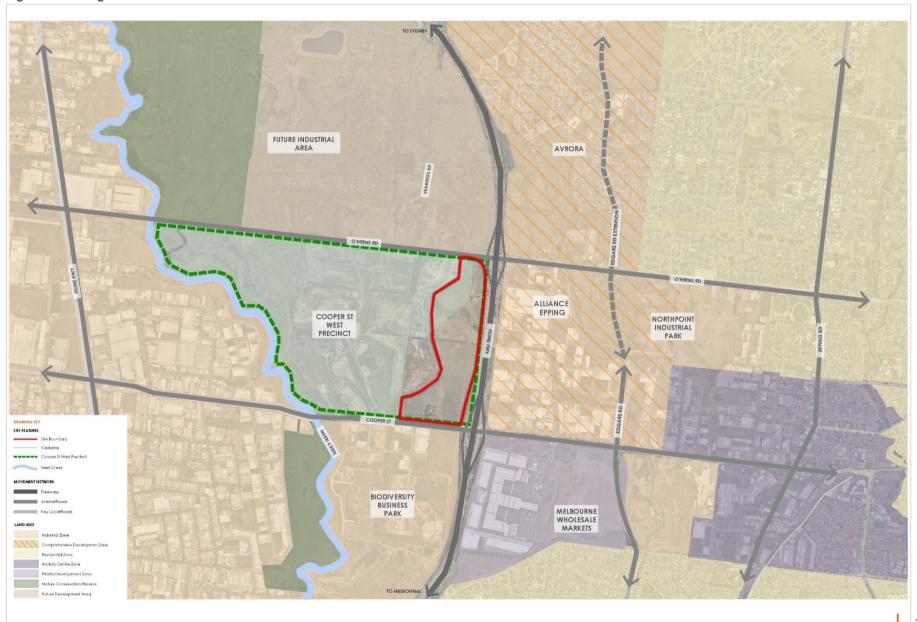


Table 1 provides an overview of the existing site conditions and the important surrounding/nearby land uses and other conditions. The site conditions are also shown in the attached survey plan (see *Figures 2 and 3*).

Table 1 - Existing Conditions

Total site area	61 hectares (approx.)	
Land titles	410 Cooper Street, Epping (formally Lot 3 PS504517); and	
	315 O'Herns Road, Epping (formally Lot 1 PS518286)	
Shape	The combined titles constitute an irregular area of land which has a relatively narrow frontage to O'Herns Road and a wider frontage to Cooper Street.	
	The width of the developable area is variable but generally decreases in width beyond the Cooper Street frontage as it follows an irregular western boundary.	
Zoning +	Industrial 1 Zone (IN1Z)	
overlays	Development Plan Overlay Schedule 24 (DPO24)	
	Design and Development Overlay Schedule 2 (DDO2)	
Topography	Gently undulating land with a slight fall from the north and south into the middle, which falls to the east toward the Craigieburn Bypass.	
Vegetation & Biodiversity	Sparse native (planted) and exotic vegetation mainly associated with the former use of the land for agricultural purposes.	
	Part of the land Golden Sun Moth habitat.	
Cultural Heritage	Four Victorian Heritage Inventory Sites located within and adjacent to the subject land.	
Access	Existing access is provided to the subject land via O'Herns Road and Cooper Street.	
	Cooper Street and O'Herns Road form part of the declared arterial road network and the Hume Freeway forms part of the National Highway network.	
	A full diamond interchange exists at the intersection of Cooper Street and the Hume Freeway and a new full diamond interchange is proposed between O'Herns Road and the Hume Freeway.	
	Part of the disused Vearings Road road reserve remains to the north of Cooper Street however the road reserve is not in place through to O'Herns Road.	
Easements	A high-pressure gas pipeline extends through the site on a north/south alignment (known as Keon Park to Wollert T47.1) and 315 O'Herns Road contains a short section of the Somerton Gas Pipeline (T102).	
Buffers	Land is partially within the active quarry buffer and the majority of the land is within the buffer from the former landfill site.	
Surrounds	Notable land uses in the locality include:	
	Melbourne Wholesale Fruit and Vegetable Market;	
	A range of highway related uses including new car dealerships;	
	Biodiversity Business Park;	
	Large scale warehousing and manufacturing;	

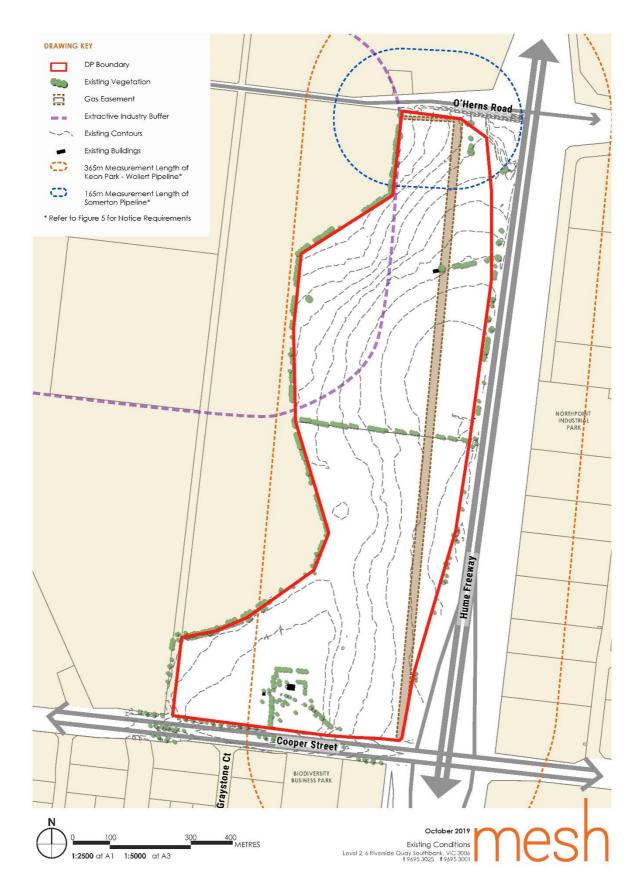


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Quarry (active);
Former quarry and land fill sites;
Concrete batching plant;
Materials recycling centre;
RSPCA Epping; and
Northpoint Business Park.



Figure 2 – Existing Conditions





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2.2 PLANNING AND POLICY CONTEXT

Cooper Street West Position Paper

The Cooper Street West Position Paper was adopted by Council in June 2017. The paper establishes the City of Whittlesea's policy position with regard to the future use of land within this Precinct. The Position Paper identifies industrial activities located adjacent to Cooper Street including large scale warehousing, manufacturing and distribution activity and states that the proximity of the precinct to national road, rail, air and port transport linkages, makes the Cooper Street West precinct an ideal location for industrial development that is reliant on good transport networks and freight movement. The subject land is located within the Cooper Street West Precinct and, more specifically, is contained within 'Precinct 4 Gateway – Emerging Industry' (see Figure 4).

Amendment C113

Amendment C113 of the Whittlesea Planning Scheme was gazetted on 11 October 2018. This amendment rezoned the subject land from Farming Zone to the Industrial 1 Zone and applied the Development Plan Overlay (Schedule 24) in addition to the Design and Development Overlay.

2.3 KEY ISSUES AND OPPORTUNITIES

A summary of the issues and opportunities which relate to the subject land are documented below and have been considered during preparation of the Development Plan.

Issues

- > Irregular site with variable internal dimensions;
- > Limited access potential to O'Herns Road taking into account plans to deliver a full diamond interchange with the Hume Freeway at O'Herns Road;
- > Existing north-south high pressure gas pipeline easement running through the land;
- > Existing active quarry to the west separated by former land fill land (currently partially occupied by a concrete crushing/batching plant);
- > Former extractive/landfill land to the immediate west;
- > Potential for further employment based activity to the west and north north west;
- > Proximity to Hume Freeway interchange requires careful management of planned access to Cooper Street;
- > Golden Sun Moth habitat will need to be offset;
- > Remnant Red Gum trees (planted) in mid part of the land;
- > Existing stone walls are of variable quality and are unlikely to be able to be retained in situ;
- Land will need to be set aside for drainage purposes and access will be required to any facility that is constructed for maintenance purposes;
- > Gateway/high profile location; and
- > Current pedestrian access is limited.

Opportunities

- > Subject land occupies high profile, gateway location and is suitable for immediate development for a range of employment purposes;
- > Development of the land will increase the supply of employment land in the short-term;
- > The land can accommodate a range of lot sizes/occupiers;
- > Planned full diamond interchange with the Hume Freeway and O'Herns Road will significantly increase the access potential of the surrounding area however access to the interchange will be restricted in the



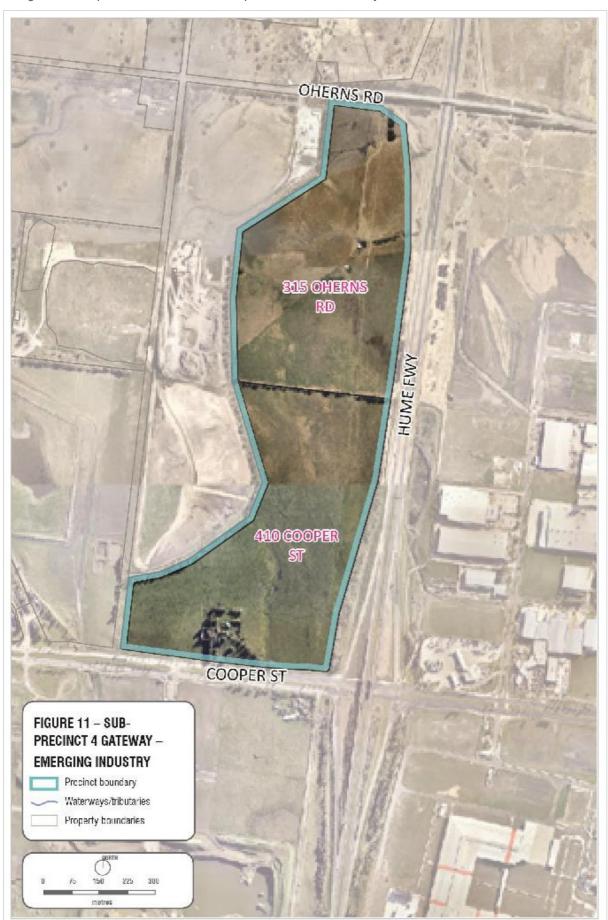
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short to medium term from the subject land; a left in, left out access point to O'Herns Road can be provided with a new north-south connector road from the subject site;

- > A future connection to Vearings Road can also provide access to the site;
- > Co-ordinated, signalised access onto Cooper Street has the potential to provide controlled access for the subject land and surrounds, including the south side of Cooper Street;
- > Development of the subject land will encourage further extension of physical services (sewer and water) beyond the subject land;
- > Future duplication of O'Herns Road (east of the Hume Freeway) and extension of Edgars Road along with the ultimate upgrade of Cooper Street will complete the arterial road network in the locality;
- > The internal transport network can make provision for future connections to the west;
- > Implementation of design guidelines and a landscape plan will ensure that the quality of development in the Cooper Street employment precinct is carried across onto the subject land; and
- > Development of the subject land may increase the likelihood of further development of land to the west for employment purposes.



Figure 4 – Cooper Street West Position Paper – Precinct 4 Gateway





3 PROPOSED DEVELOPMENT PLAN

Schedule 24 to the Development Plan Overlay contains specific requirements for preparation of a Development Plan as setout below. Other than the specific Development Plan requirements that must be attended to, it is a general requirement of Schedule 24 that any Development Plan must be 'generally in accordance with the Concept Plan which forms part of this Schedule'. Whilst a response is set out below to explain how the development of the land will achieve the Key Objectives of the Schedule, this Development Plan is considered to be generally in accordance with the Concept Plan.

3.1 DEVELOPMENT PLAN REQUIREMENTS

Schedule 24 of the Development Plan Overlay requires a single Development Plan to be prepared for 410 Cooper Street and 315 O'Herns Road Epping and approved by the Responsible Authority (Whittlesea City Council). The schedule requires the Development Plan to be supported by a number of plans and reports.

Response to Key Objectives of the Development Plan Overlay

A Development Plan has been prepared and is included (see Figure 5) containing both land parcels, which proposes to guide development of the subject land for industrial purposes. The proposed internal movement network has been designed generally in accordance with Cooper Street West Employment Precinct 1 Concept Plan and the potential road links identified in the Cooper Street West Position Paper.

A response to the key objectives contained in the DPO Schedule 24 is provided below:

Table 2 DPO Schedule 24 - Key Objectives Response

Objectives	Response
To provide for a subdivisional layout and road hierarchy that supports a mix of industrial and employment generating uses that consider the neighbouring activities;	Taking into account the irregular shape of the land, the Development Plan incorporates an internal road network that responds to the site constraints, providing 2 north south roads and 3 east west roads. Connections to O'Herns Road and Vearings Road can also provide access in and out of the subject land. A single point of signal controlled access is proposed at Cooper Street that will align with the existing access on the south side of Cooper Street. A potential connection to the adjoining land to the south-west has been accommodated in the layout to ensure that access can be gained to the signalised intersection on Cooper Street. The east-west street in the northern part of the land also offers potential connectivity to the west. The site has the potential to be subdivided into a range of lot sizes depending on the requirements of potential occupiers. The layout maximises the opportunity for large footprint businesses to establish on the site as that is typical of freight and logistics industries.
To restrict the establishment of Restricted Retail and sensitive uses throughout the precinct, particularly along arterial roads and buffer areas;	The land use plan provides guidance in terms of where sensitive uses will be restricted. This includes the northern part of the land that falls within the extractive industry buffer where all of the uses that are considered to be sensitive (see description below) will be restricted.





Objectives	Response
	These sensitive uses are to be discouraged from locating within the extractive industry buffer area and their location in these areas would not be consistent with the objectives of the schedule or generally in accordance with the requirements of this development plan.
To achieve high quality built form and landscaped developments throughout commensurate with the high visibility of this precinct along Cooper Street, Craigieburn Bypass (Hume Freeway) and O'Herns Road;	The gateway location of the land is acknowledged, and the development plan allows for activated frontages to Cooper Street. Extracts from the Cooper Street Design Guidelines have been incorporated into the Development Plan to ensure that a high standard of built form and landscaping is achieved throughout the estate and a landscape master plan forms part of the Development Plan. The Landscape Masterplan demonstrates the landscape theme and does not reflect the actual layout for the internal roads. In terms of visibility from the Craigieburn Bypass, it is noted that the Concept Plan that forms part of the Schedule to the Development Plan Overlay incorporates a continuous rear abuttal to the Bypass. The rear abuttal may have presented negative visual impacts however taking into account that the majority of the Bypass is at grade and the proposal in the Development Plan, for approximately half of the abuttal to the Bypass to be occupied by a retarding basin and associated land and including the parallel gas easement, it is considered that an improved outcome can be achieved. It is also noted that the existing vegetation within the Bypass reserve partially screens the subject land which can be supplemented with the proposed planting within the drainage reserve.
Provision of the fourth leg of the signalised intersection at Cooper Street and Graystone Court;	A four-way future signalised intersection is identified at Cooper Street and Greystone Court. It is accepted that delivery of the signalised intersection will be achieved in association with development of the subject land for employment purposes. It is highlighted that the southern third leg of the intersection does not currently have full movement. Land to the south will have this benefit provided as a contribution from the development of the subject site.
To provide for future connectivity to the west at appropriate locations;	Two east-west connection points are proposed – one to the north and one to the south of the western boundary which will provide sufficient connectivity to the west. The potential locations for the future connectivity to the west have been subject of a preliminary geotechnical assessment to assess the likely ability to deliver the connections (see further information following).
To provide a north and south collector road between the Cooper Street intersection and O'Herns Road;	A north-south connector road is proposed between Cooper Street and O'Herns Road with a potential link to a left in, left out intersection at O'Herns Road.
To facilitate the connection to the future southerly extension of Vearings Road and intersection requirements to enable full access to the site from O'Herns Road;	Plans for the southerly extension of Vearings Road have been mooted for some time. Whilst it is noted that the Vearings Road road reserve is not contiguous between O'Herns Road and Cooper Street, the broader strategic issues in relation to Vearings Road are:





Objectives	Response
	What is the role of Vearings Road noting that north-south connectivity is provided by the Craigieburn Bypass with the added advantage of short term delivery of the full diamond interchange at O'Herns Road;
	What is the need for Vearings Road given that there is limited land use intensification potential due to current and former use of the land to the south of O'Herns Road; and
	> What is appropriate alignment of Vearings Road particularly as it approaches Cooper Street where there is a definite need to co-ordinate access.
	It would appear that the role of Vearings Road between Cooper Street and O'Herns Road might be best described as a local access function for the viable sections rather than a more strategic role as was originally intended.
	In this context, the Development Plan makes provision for two east-west connections and preserves the opportunity for on-going discussion and resolution of the role and alignment of Vearings Road.
To ensure that development/subdivision	To determine and assess the environmental values and constraints on the land, the following specialist reports have been prepared:
responds to the environmental values and constraints on the	Arborist Report
land; and	Ecological & Cultural Heritage Assessment
	Dry Stone Wall Assessment and Management Plan
	Preliminary Geotechnical Assessment
	Environmental Audit in accordance with Section 53V of the <i>Environment Protection Act 1970</i>
	In addition to these site specific assessments the presence of the existing high pressure gas pipelines has been noted and taken into account along with proximity to the former landfill site to the west. A voluntary Environmental Audit to assess the risk to the environmental from landfill gas migration was undertaken (see Appendix 8). The outcomes of this audit were that there is low risk and landfill gas does not present a risk associated with the future development of the area.
	A summary of the findings of the site specific assessments (environmental values) is:
	There are no patches of native vegetation;
	 The project is being assessed under the Commonwealth Environment Protection and Biodiversity Conservation Act 1999 (EPBC ACT) through 'preliminary documentation' given the proposed impacts on the EPBC Act listed Golden Sun Moth. The final approval by the Commonwealth Department of the Environment and Energy under the EPBC Act is anticipated in early 2019;
	 There are remnant scattered (planted) trees of variable quality – only 2 high quality red gum trees have been recorded and the rest of the trees have been recorded as moderate retention value (83 trees) or low retention value (79 trees); or no retention value (40) trees;
	The northern title contains some remnant stone walls of generally poor quality;



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Objectives	Response
	The subject land is located in area of cultural sensitivity under the Aboriginal Heritage Regulations 2018 r.25 – being land within 50m of a registered cultural heritage place, and the proposed development is a high impact activity r.49 – being subdivision of land. Therefore, under the Aboriginal Heritage Act 2006 the preparation of a Cultural Heritage Management Plan is mandatory.
	 There are four Victorian Heritage Inventory (VHI) sites located within and adjacent to the subject area.
	In response to the site conditions and taking into account the nature of the planned land use, the following is proposed within the Development Plan:
	 Retention of the windrow of planted trees, including one of the high value redgum trees, through the mid part of the land but removal of the remainder of the trees unless there is an opportunity to retain a proportion of the moderate value trees during the planning permit phase;
	 Obtain planning permit approval to remove the stone walls from the northern parcel with the opportunity to stockpile the material for potential re-use on site or elsewhere at the time of development;
	 Comply with any specific offset and/or management requirements in relation to the Federal Approval in relation to the Golden Sun Moth;
	 Obtain consent from Heritage Victoria to disturb the sites of heritage importance (noting that one site is not located on the subject land) including preparation of a detailed archaeological survey and heritage assessment which includes recommendations for the future interpretation of significant individual sites; and
	Comply with any requirements of the approved Cultural Heritage Management Plan at the planning permit stage.
	In terms of environmental risks or constraints on the land, the high pressure gas pipeline (north south) has been preserved within its easement and the pipeline will be protected during construction in consultation with APA.
	The quarry and land fill buffers will be managed through restriction of sensitive uses and management during the construction phase to ensure that the gas collection network is not impacted. The preliminary geotechnical assessment provides further information in relation to the two planned western connections.
To manage the interface parts of the land with uses with adverse amenity potential, if applicable at time of development.	The subject land adjoins land that was formerly used for extractive and landfill purposes further to the west there is an active quarry and a resource recovery centre. The schedule to the Development Plan Overlay identifies a range of land uses that are considered to be sensitive to the adjoining and nearby uses. These uses include:
	Adult Sex Book Shop
	Animal Husbandry Art and Our fire Control
	Art and Craft Centre Caretakera House
	Caretakers HouseCemetery

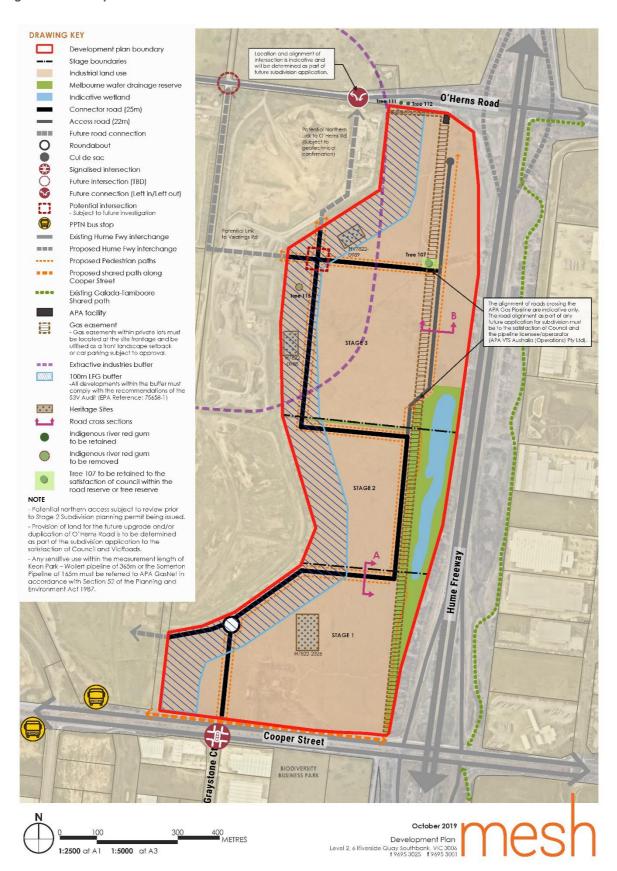


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Objectives	Response	
	Child Care Centre	
	Commercial Car Wash	
	Education Centre	
	Fuel Depot	
	Leisure and Recreation	
	Milk Depot	
	Office (excludes Office ancillary to other uses)	
	Place of Assembly	
	Restricted Retail Premises	
	Retail Premises	
	Rural Industry.	
	These are discretionary uses within the Industrial 1 Zone, and given the site is to be developed as a freight and logistics industrial park, these uses are not appropriate for the subject site.	



Figure 5 - Development Plan





4 SUPPORTING PLANS AND DOCUMENTS

In accordance with the requirements of Schedule 24 to the Development Plan Overlay a range of supporting investigations have been completed and associated specific plans have been prepared. A summary of each report is set out along with any relevant plans.

4.1 LAND USE/ EMPLOYMENT PLAN

The schedule to the Development Plan Overlay identifies a range of land uses that are considered to be sensitive particularly in relation to the continued operation of the active quarry to the west. Whilst the Development Plan cannot make a discretionary use within the zone prohibited guidance can be provided in terms of preferred and non-preferred locations for such uses.

Taking into account the imprecise alignment of the quarry buffer, and for ease of future reference and assessment, it is proposed that all of the sensitive uses that are contained within the schedule to the Development Plan Overlay will be restricted on the northern title (stage 2 and 3 as per the stages shown in the development plan).

Restriction of the sensitive uses will ensure there is no conflict with the continuing extractive industry and will confirm that the rear title is to be used for a range of industrial, warehouse and associated uses.

Specifically, with regard to restricted retail use on the balance of the land, such uses are preferred to be located along the Cooper Street frontage but also noting that a high standard of building/landscape design will be required in this location. The size of lots along the Cooper Street frontage will be determined based on the requirements of occupiers – the likely outcome being a string of smaller lots along the frontage or 1-3 large lots that will occupy the entire frontage.

4.2 STAGING PLAN

It is proposed to divide the subject site into three stages as shown on the development plan. Three stages will ensure that the associated planning permit applications cover a large enough area to ensure that well planned, integrated outcomes can be achieved

4.3 TRAFFIC IMPACT ASSESSMENT REPORT & ROAD AND PEDESTRIAN NETWORK PLAN

A comprehensive Traffic Impact Assessment Report has been prepared by GTA (see Appendix 1).

A summary of the key findings is provided below:

- > The subject site at 410 Cooper Street & 315 O'Herns Road forms part of the Cooper Street West Employment Area.
- > The proposed development plan will allow for a future subdivision of the subject land for warehouse uses, together with supplementary office floor area.
- > The proposed land uses are expected to generate approximately 6,150 to 7,700 vehicles per day. Peak hour traffic generation is expected to be in the order of 769 traffic movements to/from the site.
- > As part of the delivery of the project, the subdivision and development of the subject site will provide the following transport infrastructure:
 - Delivery of a fourth (north) leg and signalisation of the Cooper Street/Graystone Court intersection; the additional leg north of Cooper Street forms the site access.
 - The funding or delivery of a shared path along the site frontage on the north side of Cooper Street
 - o An internal system of roads, footways and bicycle lanes, designed in accordance with contemporary standards and guidelines.
- > It is noted that the frontage road at Cooper Street is expected to be at or close to capacity at the time of the proposed development on the subject site becoming operational (2021). In particular, the Cooper





Street/Biodiversity Boulevard intersection is expected to operate poorly by this time, under baseline road and traffic conditions (without the proposed development).

- > This being the case, it is apparent that the widening of Cooper Street to a general six lane midblock crosssection is a short to medium-term requirement.
- > The development proposal to signalise the Cooper Street/Graystone Court/Site Access intersection, includes the provision of a right-turning facility out of Graystone Court, towards Hume Freeway.
- > This alleviates pressure on Biodiversity Boulevard and allows more signal green time to be devoted to Cooper Street as the key arterial traffic movement. This additional green time also allows the development traffic to be accommodated at the Cooper Street/Biodiversity Boulevard intersection.
- > The site access intersection performs acceptably at the developments' opening year, 2021, noting that additional through lanes are required along Cooper Street to locally manage vehicle queues. These additional lanes are proposed to be delivered through the development of the subject site.
- > The site access intersection has also been tested at a future design year of 2031. By this point, for the purposes of this assessment, it is assumed that Cooper Street has been widened to a six-lane midblock cross-section.
- > An assessment of the 2031 design year scenario identifies that intersections considered within this study will perform suitably.
- > A long-term high-level development contribution methodology has been outlined in this report, based on estimated traffic volumes using future-planned infrastructure items.
- > Infrastructure costs and apportionment should be captured in a S.173 agreement under the Development Plan Overlay covering the sites involved.

The traffic report prepared by GTA Consultants contains a Road and Pedestrian Network Plan. This plan has been reproduced and is included in support of the Development Plan (see Figure 6 – Movement Plan and Figure 7 Road Cross Sections).



Figure 6 - Movement Plan

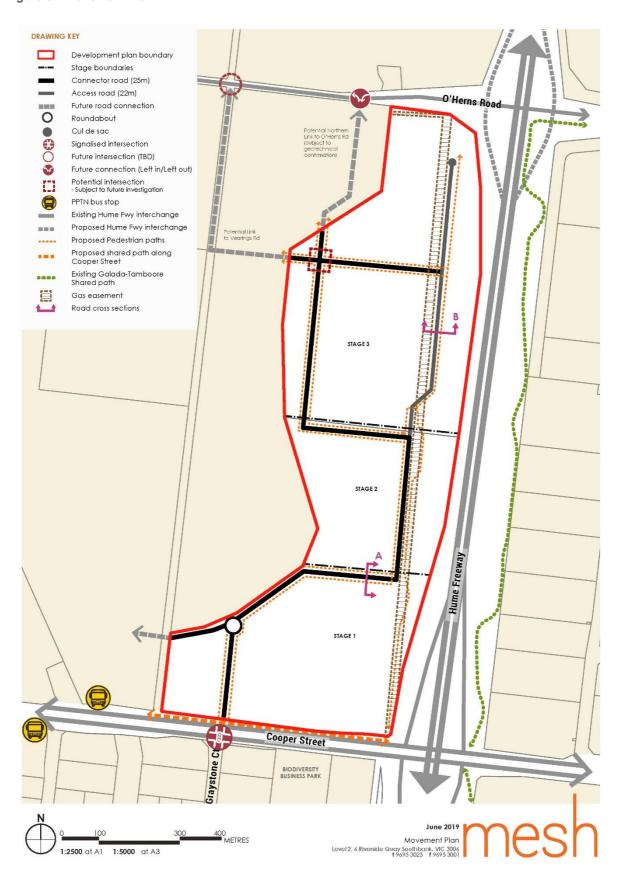
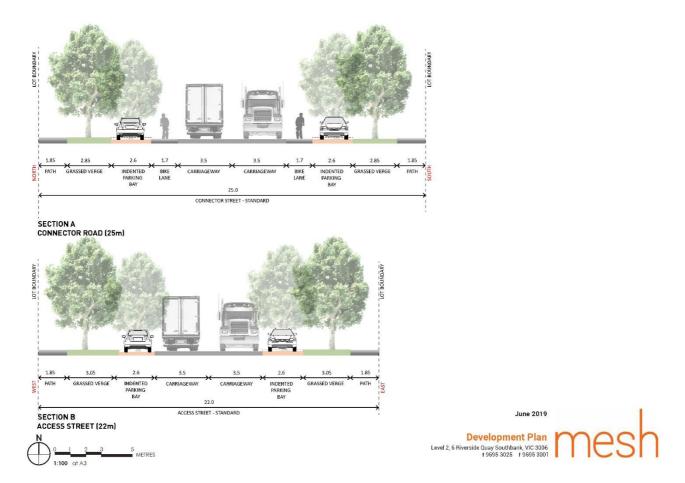




Figure 7 – Road Cross Sections





High Pressure Gas Pipeline

The development plan has been designed having regard to *The Guideline for Planning and Development of Land in the Vicinity of High Pressure Natural Gas Pipelines in Victoria, 2014.* The requirements for construction within proximity to the pipeline will be incorporated into the detailed construction plans and discussions with the pipeline operator are well progressed.

4.4 PRELIMINARY GEOTECHNICAL ASSESSMENT

A preliminary geotechnical assessment was undertaken by Golder Associates (see Appendix 2). The preliminary assessment was conducted specifically in relation to the two westerly connection points.

A summary of the key findings is set out below:

General

- > Construction of roads directly over the landfill cells would involve significant geotechnical and environmental risk, as well as elevated construction costs and where practical is best avoided.
- > If construction of roads over the landfill cells is proposed, then further detailed geotechnical and environmental investigation and assessment would be required.
- > The final planning layout for any road connection trough the adjacent land will require discussion and agreement with third parties such as the City of Whittlesea (Council) and site operators.

North Link Road

- > Based on the findings of the desktop assessment the consultants consider that there is evidence of quarry and landfill works to the north of the proposed Northern road link.
- > The LiDAR indicates only minor ground changes in elevation within the footprint of the proposed roadway.
- > Figure P4 (see attached report) shows an area of minor ground disturbance partially intersecting the road alignment, however the alignment does not appear to intersect the major quarry and land fill cell areas indicated on the available historical aerial photographs.
- > Recent aerial photographs show changed conditions along the alignment associated with the stockpiling of materials from the existing crushing plant operation.
- > The depth of ground disturbance from these activities is presently unknown, however it is likely to be mostly related to surface works.
- > It is expected that intrusive investigation will be undertaken to assess the sub surface conditions prior to construction of the roadway.
- > It is noted that a landfill gas transfer pipeline appears to intersect the proposed roadway alignment.

Southern Road Link

- > Based on the findings of the desktop assessment the consultants consider that there is no evidence of significant quarry or landfill works between the site and the existing road linking to Cooper Street to the south within the proposed Southern Link road alignment.
- > Although the proposed roadway is not in an area of significant quarry or landfill works there may be localised areas of ground disturbance associated with previous site use towards the western end of the alignment as shown on Figure P8 (see attached report).
- > It is expected that intrusive investigation will be undertaken to assess the sub surface conditions prior to construction of the roadway.

The preliminary geotechnical assessment was commissioned in order to assist in assessing the viability of the two proposed western road connections. Based on the findings of the preliminary assessment it is apparent that the southern connection is less problematic than the northern and that the northern link will require on-going



consideration in consultation with Council and the current occupier. The proposed staging that has been adopted in the Development provides opportunity for such negotiations.

4.5 ENVIRONMENTAL SITE ASSESSMENT

Ecological and Cultural Heritage Investigations have been completed (see Appendix 3).

A summary of the key points that are contained within the assessment are provided below:

- > There are no patches of native vegetation and the land is predominately covered with a declared environmental weed Chilean Needle Grass;
- > The project is being assessed under the Commonwealth Environment Protection and Biodiversity Conservation Act 1999 (EPBC ACT) through 'preliminary documentation' given the proposed impacts on the EPBC Act listed Golden Sun Moth. The final approval by the Commonwealth Department of the Environment and Energy under the EPBC Act is anticipated in 2019;
- > There are remnant scattered (planted) trees of variable quality only 2 high quality red gum trees have been recorded and the rest of the trees have been recorded as moderate retention value (83 trees) or low retention value (79 trees); or no retention value (40) trees;
- > The northern title contains some remnant stone walls of generally poor quality;
- > The subject land is located in area of cultural sensitivity under the Aboriginal Heritage Regulations 2018 r.25 being land within 50m of a registered cultural heritage place, and the proposed development is a high impact activity r.49 being subdivision of land. Therefore, under the Aboriginal Heritage Act 2006 the preparation of a Cultural Heritage Management Plan is mandatory.
- > There are four Victorian Heritage Inventory (VHI) sites located within and adjacent to the subject area:
 - H7822-2326 Goodmans Stone Cottage Remnants (VHI description: Site consists of several stone features including a rectangular cellar or well structure, path (possibly cobbled), round well, stone and brick features that are likely to be the cottage building remnants, a more extensive stone rubble area that may be stable remnants and a stone enclosure that may be stable yards);
 - H7822-0269 Cooper Street Wall 1 (VHI description: Drystone wall, approx. 100 metres long. Mostly less than 90 centimetres high. Boxthorn on fenceline.);
 - H7822-0988 Clonard: Stone Cottage Remnants (VHI description: Piles of bluestone and handmade bricks. Remnants of early stone cottage); and
 - H7822-0989 Clonard: Sheep Yards Remnant Dry Stone Walls (VHI description: Deteriorated basalt drystone wall network of enclosures).

In response to the site conditions and taking into account the nature of the planned land use, the following is proposed within the Development Plan:

- > Retention of the windrows of planted trees, including one of the high value redgum trees, through the mid part of the land but removal of the remainder of the trees unless there is an opportunity to retain a proportion of the moderate value trees during the planning permit phase;
- > Obtain planning permit approval to remove the stone walls from the northern parcel with the opportunity to stockpile the material for potential re-use on site or elsewhere at the time of development;
- > Comply with any specific offset and/or management requirements in relation to the Federal Approval in relation to the Golden Sun Moth;
- Obtain consent from Heritage Victoria to disturb the sites of heritage importance (noting that one site is not located on the subject land) including preparation of a detailed archaeological survey and heritage assessment which includes recommendations for the future interpretation of significant individual sites; and



> Comply with any requirements of the approved Cultural Heritage Management Plan at the planning permit stage.

4.6 DRY STONE WALL ASSESSMENT AND MANAGEMENT PLAN

A dry stone wall assessment and management plan has been prepared (see Appendix 4).

A summary of the key points contained within the report are provided below:

- > 13 drystone walls were recorded DSW 1-13.
- > Several dry stone walls within the study area have been identified as historically and aesthetically significant at a local level, as visual reminders of the region's pastoral history.
- > These walls include DSW 9 DSW 10, DSW 11 and DSW 12.
- > They make a visual contribution to the landscape character of Whittlesea municipality.
- > The condition and integrity of DSW 1, DSW 2, DSW 3, DSW 4, DSW5, DSW 6, DSW 7, DSW 8 and DSW 13 is such that these walls no longer make a significant contribution to the visual character of the area.
- > None of the walls are considered to be of high archaeological value and their scientific value is limited as they provide very limited evidence of refined techniques and styles of construction.
- > The specific DSW management recommendations are:
 - DSW-1 Condition of wall is poor. Wall mostly collapsed. Wall to be removed.
 - DSW-2 Condition of wall is poor. Wall mostly collapsed. Wall to be removed.
 - DSW-3a Condition of wall is poor. Wall mostly collapsed. Wall to be removed.
 - DSW-3b Condition of wall is poor. Wall mostly collapsed. Wall to be removed.
 - DSW-4a Condition of wall is poor. Wall mostly collapsed. Wall to be removed.
 - DSW-4b Condition of wall is poor. Wall mostly collapsed. Wall to be removed.
 - DSW-5 Condition of wall is poor. Wall mostly collapsed. Wall to be removed.
 - DSW-6 Condition of wall is poor. Wall mostly collapsed. Wall to be removed.
 - DSW-7 Condition of wall is poor. Wall mostly collapsed. Wall to be removed.
 - DSW-8 Condition of wall is poor. Wall mostly collapsed. Wall to be removed.
 - DSW-9 Fairly well-preserved -but subdivision makes it difficult to retain.
 - DSW 10 Fairly well-preserved -but subdivision makes it difficult to retain.
 - DSW-11 Well preserved To be removed as it is within the Melbourne Water drainage basin.
 - DSW-12 To be retained Relocation and Reconstruction/stabilisation.
 - DSW-13 Condition of wall is poor. Wall mostly collapsed. Wall to be removed.

The DSW assessment and management plan includes the mapped locations of the dry stone walls and includes other specific recommendations that can be implemented at the planning permit stage. It is noted that the recommendation to retain DSW 12 coincides with the proposal to retain the planted windrow through the mid part of the land.

4.7 STORMWATER AND DRAINAGE

A Stormwater Strategy has been prepared by Incitus (see Appendix 5).

A summary of the key points contained within the report are provided below:

> The land is contained predominately in Melbourne Water's Edgars Creek Development Services Scheme;



- > The site has two catchments: Edgars Creek Development Services Scheme and Central Creek. Majority of the land in the Edgars Creek catchment drains east across the Hume Freeway and a portion of the land drains south-west towards Central Creek.
- A wetland will be constructed to the eastern boundary of the site, generally located central to the boundary. This wetland will contain a retarding basin to minimise the extent of stormwater runoff discharging to the downstream catchment.
- > Existing culvert crossing of the Hume Freeway will accommodate outfall discharges from the subject site in accordance with the directions of Melbourne Water's Edgars Creek DSS. This outfall will be permanent and therefore no temporary outfall is required for the site.

4.8 ARBORIST REPORT

An arborist report has been prepared by Tree Logic (see Appendix 6).

A summary of the key findings is set out below:

- > 204 tree features were assessed including 193 individual trees and 11 tree groups comprising approximately 260 individual trees.
- > The tree population consists of mainly of introduced planted natives including planted River Redgum (*Eucalyptus Camaldulensis*) with a variety of mixed Australian native and Exotic specimens predominantly Cypress trees (*Cupressus sp*).
- > One (1) remnant River Red Gum and one mature River Red Gum were recorded.
- > All trees were attributed an arboricultural rating which reflects the retention value of the trees:
 - Two (2) trees were attributed an arboricultural rating of High. One of these trees is being retained.
 - Eighty three (83) tree features were attributed an arboricultural rating of Moderate. These trees
 are suitable to be retained and should be incorporated into the proposed design where possible.
 - Seventy nine (79) trees features were attributed an arboricultural rating of Low. These trees are not worthy of being a constraint on reasonable design intent and outcome.
 - Forty (40) tree features were attributed an arboricultural rating of None (see Appendix 6 for the mapped locations of the trees).
- > Retention suitability will be partially dependent on the proposed landscape setting in which trees are intended to be retained. The following recommendations are provided for consideration in the design process.
- > The decision on which trees are to be retained or removed should be based on sound arboricultural advice and be guided by the arboricultural rating attributed to each tree which relates to the combined tree condition factors, including age, health, structure, useful life expectancy and retention value.
- > On the basis of future site safety and potential amenity, preference should be given to retaining trees primarily of High and Moderate arboricultural value in built areas, or areas of increased target potential.

During the course of preparing the Development Plan careful regard has been given to the location of trees of High and Moderate retention value having particular regard to the proposed land use. In accordance with practice elsewhere in the City, priority has been directed toward retention of remnant trees that will not be compromised by encroachment by services, built form or constructed hard stand surfaces.

Retention of remnant vegetation in an employment setting is particularly challenging in this regard due to the need for large flat sites with significant areas of hardstand including road construction.

The attached plan (see Figure 8) shows the location of the trees that are proposed for retention and removal. The priorities for retention are:

The east-west planted windrow;





• Individual moderate value trees that have the potential to be retained within widened road reserves.

It is noted in this context that retention of the planted windrow in the mid part of the site offers connectivity to the retarding basin.

4.9 LANDSCAPE CONCEPT PLAN

A landscape concept plan has been prepared taking into account the findings of the arborist report and illustrates a theme for the planting within the estate. The landscape theme will be applied to the eventual estate road layout in accordance with the development plan. The landscape concept plan (see Figure 9) has the following features:

- > Street tree planting on all of the internal roads;
- > Retention of the windrow of planted natives in the central section of the estate;
- > New landscape/tree planting in the retarding basin; and
- > Retention of some of the individual, moderate value trees in widened road reserves (subject to detailed design at the planning permit stage).



Figure 8 - Tree removal/retention plan

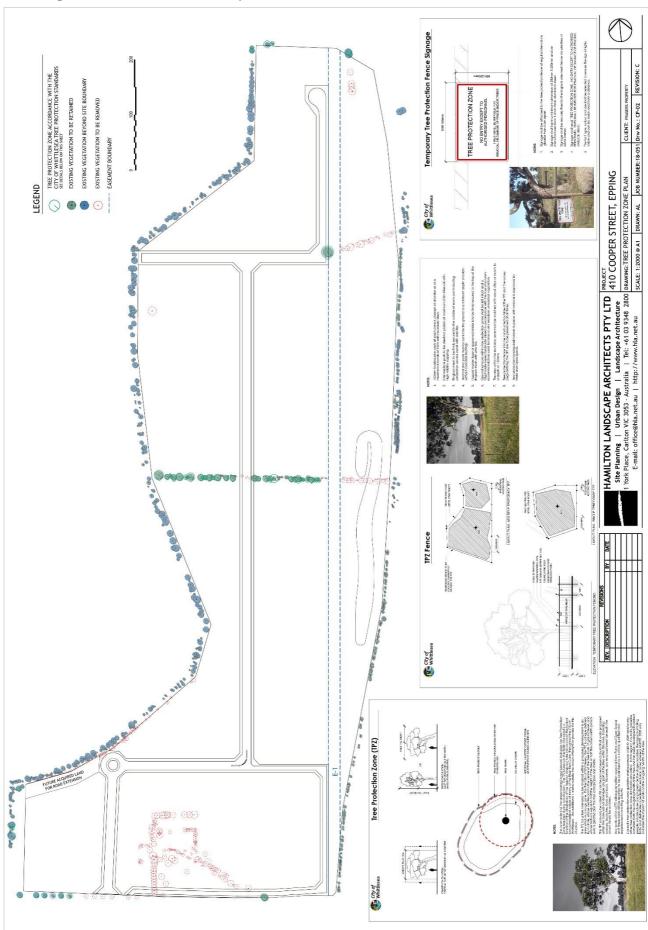
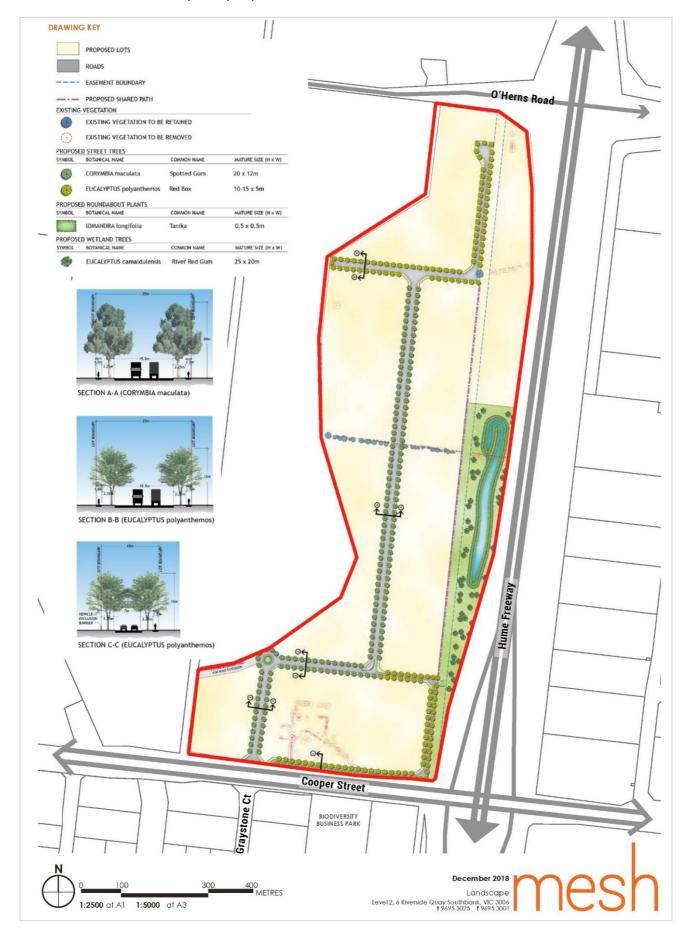




Figure 9 – Landscape Concept Plan (internal roads to be approved at subdivision stage and will be consistent with development plan)





4.10 SERVICING REPORT

A servicing report has been prepared by BPD (see Appendix 7).

A summary of the key findings is set out below.

- > Yarra Valley Water (YVW) is the water authority for this area in the Epping corridor.
- > YVW have confirmed via their most recent Development Servicing Plan dated Sept 2018 that initially this development could be serviced by connecting into the existing water supply to the south of this site along Cooper Street. This would enable immediate servicing for Stage 1 direct off Cooper Street and could then also service Stage 2 further north.
- > This watermain on Cooper Street is an existing 225mm diameter main currently located on the south side of the duplicated road. This will require a bored extension to the north and is sufficiently sized to cater for commercial – industrial development at this proposed site.
- > The current sizing of the watermain also allows for unimpeded staged development for the three stages without issue.
- > Yarra Valley Water (YVW) are not mandating recycled water within their commercial / industrial corridors due to low take up rates hence it is unlikely this will be required within the Epping area and in this development precinct.
- > The site currently has an existing sewer in Cooper Street toward the south east corner of the site. A 300mm diameter branch sewer (Vearings Road Branch Sewer) is proposed to extend north up through the site to the northern boundary and O'Herns Road that will provide ultimate sewer servicing for this site.
- > The south-west corner of the site falls away quite sharply to the west and a detailed analysis of existing and proposed finished levels and the depth of invert to the existing sewer will be required to confirm that this area can be serviced back east into the proposed Vearings Road Branch Sewer.
- > This south west corner of the site may require some filling and retaining walls along its western most boundary to ensure connection to the gravity sewer can be achieved.
- > The initial staging proposal of Stage 1 and 2 within the 410 Cooper Street site and then Stage 3 in the 315 O'Herns Road site lends itself well to connection into the existing sewer and then extension to the north as per the Yarra Valley servicing advice.
- > The site contours offer generous fall across the site from the north and south of the site to the middle of the site where an elongated retarding basin and wetland is proposed for the site on the east side of the existing gas pipeline and the western boundary of the Craigieburn By-Pass.
- > This retarding basin is proposed to restrict developed flows back to pre-developed levels where it can then be discharged east under the Craigieburn By-Pass and into an existing Melbourne Water main drain that then extends further east along Cooper Street to Edgars Creek.
- > Melbourne Water (MW) have an existing drainage scheme for the overall area for this site being the Edgars Creek DS (4440).
- > A Storm Water Management Strategy has been prepared for the overall area in consultation with Melbourne Water to ensure all storm water outfall matters are considered and addressed in particular with interface with the Hume Freeway – Craigieburn By-Pass.
- > Electricity service is available from existing assets within Cooper Street and to the south of this site.
- Site 1 410 Cooper Street there is an existing HV underground cable along the frontage within Cooper Street. There is a 300kVa substation (Cooper Street West) out the front of this site however advice from Plan B Services is that this kiosk will have little or no spare capacity.
- > This can be managed for the Stage 1 works with the introduction of additional kiosks throughout the site within Stage 1. No major upgrades are expected to service this site.



- > Site 2 315 O'Herns Road there is an existing 22kV HV overhead line running along the front of this property within the road reserve. The conductor size is 19/2.25 AAC which has been confirmed as being suitable to service this site for commercial industrial development
- > Both sites will need updated servicing to be confirmed at the time of network applications to Ausnet Services as circumstances can change between predevelopment and the development phase of works.
- > All commercial / industrial lots will be provided with underground electrical connections as part of the development process with a number of kiosk substations required throughout the development depending on the nature of the specific end use of the lots (i.e.: type of commercial / industrial built form).
- > Gas reticulation is available from the existing 125mm gas main east of the Craigieburn By-Pass and bridge that currently services the Melbourne Market, however this is a complex connection has been investigated previously by another developer and considered as uneconomical at the time.
- > In addition to this also there is a complex arrangement of existing gas lines that traverse off the existing 600mm Gasnet transmission pipeline that runs through this existing site. The main sizes vary in size from 50mm, 200mm and 300mm and may be able to provide gas servicing to this development ultimately.
- > This gas investigation will require a detailed assessment and proposal prepared by APA Group. This process involves the preparation of a cost estimate to extend and provide gas throughout the estate where typically all installation costs are borne by the developer.
- > If the gas is deemed viable to be supplied from the north to service Stage 1 then an alignment will need to be determined to service the Stage 1 site direct off Cooper Street. This may require the reticulation gas to be placed within the transmission easement (subject to GasNet approval) or within a future road reserve.
- > This would then create a live gas service within the future Stage 2 land ahead of the Stage 1 works.
- > Telecommunications infrastructure is available from existing assets located within surrounding roads and the neighbouring developments to the east of this site.
- > Existing surrounding communications infrastructure is deemed adequate to cater for future growth and development across this area.

The servicing report has confirmed that the subject land can be serviced with standard extensions to existing infrastructure.

4.11 ENVIRONMENTAL AUDIT REPORT

An environmental audit report was prepared by Golder Associates (see Appendix 8).

A summary of the key findings/recommendations are set out below:

- > The site is identified as 'low risk'. Landfill gas is not seen to present an unacceptable risk associated with the future development of the subject land for commercial purposes;
- > Within 100m of the landfill property boundary, additional protection measures are recommended to allow for residual uncertainties around future conditions;
- Appropriate protection measures are contained in the report. A combination of gas solution measures are identified for different types of buildings. The design, installation and operation of the measures must be verified before proceeding to construction;
- > With the exception of sewer covers, service trench covers within the protection measure zone are to be grated (i.e not a solid cover) to provide adequate venting points. The design, installation and operation of the covers must be verified before proceeding to the next stage of construction. Sewer trench covers are to meet specifications in accordance with Yarra Valley Water requirements.
- Service trench workers operating within the protection measure zone must adopt appropriate confined space protocols to adequately address potential hazardous atmosphere present within the service trenches.



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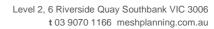
- > All buildings within the protection measure zone are to be construction with a slab floor at existing grade or higher. No basements are to be incorporated into the building.
- > All future owners of sites within the protection measure zone must be provided with a copy of this Audit report prior to purchasing the site to inform them of the required protection measures.

4.12 DESIGN GUIDELINES

To ensure a high standard of development is delivered, future permit applications will be assessed against the Cooper Street West Employment Design Guidelines.

5 CONCLUSION

The various supporting site specific investigations have confirmed that the subject land is suitable for the intended purpose and that the land can be developed in accordance with the purpose of the Industrial 1 Zone. This Development Plan responds to each of the objectives of the Development Plan Overlay and will serve to guide the issue of planning permits and development of the land for a range of industrial and employment purposes.





APPENDIX 1 – TRAFFIC IMPACT ASSESSMENT





APPENDIX 2 – PRELIMINARY GEOTECHNICAL ASSESSMENT





APPENDIX 3 - ENVIRONMENTAL SITE ASSESSMENT



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APPENDIX 4 - DRYSTONE WALL ASSESSMENT AND MANAGEMENT PLAN



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APPENDIX 5 – STORMWATER STRATEGY





APPENDIX 6 – ARBORIST REPORT





APPENDIX 7 – SERVICING REPORT





APPENDIX 8 – ENVIRONMENTAL AUDIT REPORT