

SMEC INIERNAL REF. 30049113

High Level Utility Servicing Assessment

## Casey Fields South \& Devon Meadows PSP

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## 1. Introduction

SM EC has been engaged by the Victorian Planning Authority (VPA) to prepare a High Level Utility Servicing Assessment for the Devon M eadows and Casey Fields South Precinct Structure Plan (the PSP).
The purpose of this servicing assessment is to provide existing servicing information and future requirements of the area with respect to sewer, water, power, gas, electrical and telecommunications assets for the precinct.

For avoidance of doubt, stormwater management and road infrastructure do not form part of the scope of this servicing assessment. We understand that the VPA have engaged other consultants to provide stormwater strategies and traffic assessments for this Precinct. This report also does not provide a review of, or recommendations, with regards to any Integrated Water M anagement Strategy being proposed for the Precinct.
The information in this report is preliminary and has been obtained from discussion with key stakeholders and service authorities and is current at the time of writing this report. The servicing assessment is subject to change upon final confirmation of utility servicing strategies adopted by the relevant service authorities and following further review of detailed inputs by VPA (e.g. property investigations, feature and level survey, detailed engineering design and future planning decisions). SMEC does not accept a duty of care or any other legal responsibility whatsoever in relation to the current servicing plan or any subsequent changes to the servicing strategy.

### 1.1 Background

The Casey Fields South Employment and Devon M eadows PSP is located approximately 50 kilometres south-east of M elbourne's CBD, at the edge of M elbourne's Urban Growth Boundary in Casey City Council. The Casey Fields South and Devon M eadows PSP is made up of two contiguous PSPs that share the South Gippsland Highway as a border that divides the two PSP areas. The precinct is located on the edge of the urban growth boundary within the City of Casey municipality. These two precincts have unique distinctive features as well as differing visions/purposes as follows:

## Casey Fields South

- Aims to become a flexible next generation employment precinct, delivering benchmark standards of design quality and amenity.
- Aims to deliver 4,200 jobs for the south east region's growth areas.
- Will have a compact high amenity urban core and network of flexible employment sub precincts for a diverse mix of industry and businesses.


## Devon Meadows

- Aims to be a walkable residential neighbourhood to nearly 10,000 residents living in 3,000 homes.
- Formed around Devon Road acting as a high amenity ‘spine' to the precinct, with future Activity centres to anchor both ends of Devon Road.
- Branching streets will align with a network of waterways and open spaces creating a balanced blend of open character and modern urban living.
- Neighbourhoods will be connected to the wider network of walking and cycling trails and pedestrian-friendly streets will give convenient access to local destinations and regional attractions such as Clyde Creek major activity centre and the Royal Botanic Gardens.
The Casey Fields South Employment precinct encompasses an area of 288 hectares and is bounded by Ballarto Road to the north, Clyde Five Ways Road to the east, and the South Gippsland Highway to the south-west.

The Devon M eadows precinct encompasses an area of 261 hectares and is bounded by the South Gippsland Highway to the north-east, Craig Road to the west, and the Urban Growth Boundary to the south (immediately to the north of Browns and Facey Roads).

Considering the VPA (formerly the Growth Areas Authority - GAA) South East Growth Corridor Plan (refer to Figure 1 below) prepared in 2012, the Casey Fields South Employment precinct is designated as 'regionally significant industrial land', as such the PSP will provide industrial and employment opportunities. The Devon M eadows precinct is identified as 'urban - land use to be determined', as such the PSP is likely to provide residential and commercial opportunities to complement existing and future surrounding development.


Figure 1: Devon M eadows and Casey Fields South Precinct (South East Growth Corridor Plan, GAA 2012)

The existing land uses within the Casey Fields South precinct are predominantly agricultural, with open grazing and supporting rural industries/business. The Lighthouse Christian College Cranbourne is located on South Gippsland Highway and there is an existing service station on the corner of Ballarto Road andClyde Five Ways Road.
Within Devon M eadows precinct, there is a variety of land uses including low density residential, rural type industries, logistics and transport business, wholesale businesses (egg and flower farms), Caravan Storage/ Sales and a Place of Worship.

Refer to Aerial photo in Figure 2 for more information.


Figure 2- Aerial Photo (Source M etromaps- Sept 2022)

### 1.2 Purpose

The purpose of this report is to provide a high-level utility servicing review of the Devon M eadows and Casey Fields South precinct to provide information on utility infrastructure and delivery staging requirements for the following services:

- Sewer Reticulation;
- Potable Water;
- Recycled Water;
- Electricity;
- Gas, and
- Telecommunications.

In consultation with the relevant authorities, the capacity of existing services and the likely future infrastructure requirements has been assessed by SM EC and the constraints have been identified in this report.

For avoidance of doubt, stormwater management and road infrastructure do not form part of the scope of this servicing assessment. This report also does not provide a review, or recommendations, with regards to an Integrated Water M anagement Strategy for the Precinct.

### 1.3 Background Documents

The information within this report has been collated from the following sources:

- $\quad$ South East Growth Corridor Plan (GAA 2012).
- Casey Fields South Devon M eadows Precinct Structure Plan Vision \& Purpose (VPA June 2022).
- Before You Dig Australia (BYDA) formally Dial Before You Dig Australia - information received 25/08/202231/08/2022
- Melbourne Water Preliminary Servicing Advice (email dated 6/10/2022)
- NBN Co Servicing Assessment (dated Sept 2022)
- APA Group (Gas) Preliminary Servicing Advice (dated 15/11/2022)
- South East Water Preliminary Servicing Advice (dated 21/10/2022)
- AusNet (Electrical) Preliminary Servicing Advice (dated 2/12/2022)


### 1.4 Key Stakeholders

During preparation of this report several key stakeholders have been requested to provide inputs. These stakeholders have been summarised in Table 1 below.

Table 1: Summary of Key Stakeholders

| Name | Detail |
| :--- | :--- |
| VICTORIAN PLANNING AUTHORITY | Sponsor of the High Level Utility Servicing Assessment |
| SOUTH EAST WATER | Sewer, Potable Water and Recycled Water Service Authority |
| MELBOURNE WATER | Main Drainage Authority |
| AUSNET SERVICES | Electrical Service Authority |
| APA GROUP | Gas Reticulation Authority |
| NATIONAL BROADBAND NETWORK (NBN), TELSTRA | Telecommunications Authorities |

### 1.5 Methodology

SM EC have prepared this servicing assessment in accordance with the methodology presented in Figure 3 below.


Figure 3: Delivery Methodology

## 2. Sewer, Potable Water \& Recycled Water

### 2.1 Introduction

South East Water (SEW) is the responsible authority for the provision of sewer, potable water and recycled water supply infrastructure to service the Devon M eadows and Casey Fields South precinct.

As development within the precinct area progresses, each developer will be required to extend services from the designated network connection location in accordance with South East Water's developer deed conditions.

Preliminary Servicing Advice has been received from SEW to ascertain their requirements to service the PSP precinct, dated 21 October 2022.

South East Water's written response (refer Appendix 1) is prefaced as follows, "This preliminary servicing advice has been prepared based on information available at the time, however we reserve the right to vary this advice in the future as circumstances change without further notification".

It should be noted that internal drinking water mains, recycled water mains and sewer mains for developments are to be designed and sized by the developer.

As the Precinct Structure Plan (PSP) has not been finalised for this area, and is not anticipated to be until 2024, the below strategy / works may be subject to change as the PSP progresses.

### 2.2 Potable Water

### 2.2.1 Current Conditions

The initial source of supply for the Casey Fields South Employment and Devon M eadows PSP Area is the 375 mm diameter reticulated drinking water main in South Gippsland Highway and the 600 mm diameter reticulated drinking water main in Ballarto Road.

The existing 375mm diameter reticulated drinking water main in South Gippsland Highway only has sufficient capacity for initial development of the PSP area.

### 2.2.2 Servicing Strategy

To service the developed PSP area, a 600mm diameter reticulated drinking water main (shown as 'A-B') and a 450 mm diameter reticulated drinking water main (shown as ' $\mathrm{B}-\mathrm{C}^{\prime}$ ) will be required to be installed as development in the area progresses, refer Figure 4 below. These works are currently estimated to be required in 2040.
To service the proposed Casey Fields South Employment PSP Area with adequate drinking water facilities, the following works will be required:

- Connect into the existing 600 mm diameter reticulated drinking water main in Ballarto Road and construct approximately 1,870 metres of 450 mm diameter reticulated drinking water mains in Clyde-Fiveways Road, refer Figure 4 below (shown 'C-D-E') and
- Connect into the existing 600 mm diameter reticulated drinking water main in Ballarto Road and construct approximately 1,115 metres of 300 mm diameter reticulated drinking water mains, refer Figure 4 below (shown as 'F-G-H' and 'G-D').

To service the proposed Devon M eadows PSP Area with adequate drinking water facilities, the following works will be required:

- Connect into the existing 375mm diameter reticulated drinking water main and construct approximately 800 metres of 300 mm diameter reticulated drinking water mains, refer Figure 4 (shown as ' $I-\mathrm{J}^{\prime}$ ').


Figure 4- Potable Water Infrastructure- Existing and Proposed

### 2.3 Recycled Water

### 2.3.1 Current Conditions

The initial source of recycled water for the Casey Fields South Employment and Devon Meadows PSP Area is the 300 mm diameter and the 225 mm diameter reticulated recycled water mains in Ballarto Road.

### 2.3.2 Servicing Strategy

To service both the Casey Fields South Employment and Devon M eadows PSP Area construction of approximately 3,675 metres of 300 mm diameter reticulated recycled water mains along South Gippsland Highway is required, as shown 'A-B' on Figure 5 below.

To service the proposed Casey Fields South Employment with recycled water facilities, it will be necessary to undertake the following works:

- Connect into the existing 225mm diameter reticulated recycled water main in Ballarto Road and construct approximately 645 metres of 225 mm diameter reticulated recycled water mains in Clyde-Fiveways Road, refer to Figure 5 below (shown as 'B-C-D'); and
- Connect into the existing 225 mm diameter reticulated recycled water main in Ballarto Road and construct approximately 1,520 metres of 225 mm diameter reticulated recycled water mains, refer to Figure 5 below (shown as 'E-F-G' and 'C-F').
To service the proposed Devon M eadows PSP area with recycled water facilities, it will be necessary to complete the following works:
- Connect into the proposed 300 mm diameter reticulated recycled water main in South Gippsland Highway and construct approximately 2,200 metres of 225 mm diameter reticulated recycled water mains, refer to Figure 5 below (shown as 'H-l').


Figure 5: Recycled Water Infrastructure (Existing and Proposed)

### 2.4 Sewer

### 2.4.1 Current conditions

The Casey Fields South Employment and Devon M eadows PSP area has minimal existing sewer infrastructure, given its current rural land use.

There are existing sewer networks around the periphery of the PSP area, that have been constructed as part of the residential estates to the west of Craig Road and north of Ballarto Road. There are also sewer assets in Browns Lane that serves the rural residential precincts south of Browns Lane.

### 2.4.2 Ultimate Servicing Strategy

The proposed Casey Fields South Employment and Devon M eadows PSP Area will ultimately discharge into the proposed Yallambee Road Pump Station.

The following works, refer to Figure 6 below, will be required to service the proposed Devon M eadows PSP Area:

- Construction of approximately 2,600 metres of 450 mm diameter reticulated sewerage mains (shown as 'A-B)';
- Construction of approximately 1,450 metres of 375 mm diameter reticulated sewerage mains, (shown as 'B-C'); and
- Construction of approximately 2,800 metres of 300 mm diameter reticulated sewerage mains, (shown as 'C-D').

The following works, refer to Figure 6 below, will be required to service the proposed Casey Fields South Employment PSP Area:

- Construction of approximately 3,000 metres of 450 mm diameter reticulated sewerage mains, (shown as 'A-E'); and
- Construction of approximately 2,100 metres of 375 mm diameter reticulated sewerage mains, (shown as ' $\mathrm{E}-\mathrm{F}^{\prime}$ ); and
- Construction of approximately 1,100 metres of 300 mm diameter reticulated sewerage mains, (shown as ‘ $\mathrm{F}-\mathrm{G}$ ').


### 2.4.3 Interim Servicing Strategy

South East Water has advised that the Yallambee Road Sewer Pump Station is not anticipated to be completed until 2028 or later, therefore an interim temporary sewer pump station and an interim rising main, discharging to Ballarto Road Sewer Pump Station, may service the proposed Casey Fields South Employment and Devon M eadows PSP Area until the Yallambee Road SPS is commissioned.

Refer to Figure 6 below (shown as 'H-I-J').


Figure 6: Sewer Infrastructure (Existing and Proposed)

## 3. Drainage

It is noted that a separate drainage investigation is being prepared by others as part of the PSP project. The information provided below is only high-level commentary, based on preliminary information received from M elbourne Water only.
SM EC have not had any communications with Council or other authorities in relation to stormwater infrastructure.

### 3.1 Main Drainage- Melbourne Water

M elbourne Water have advised that currently there is no existing Drainage Scheme for the Devon M eadows and Casey Fields PSP area, however, a development drainage scheme is currently under preparation. There are a number of neighbouring Drainage Schemes with Botanic Ridge DS and Clyde Township DS covering a small portion of the PSP area, as shown in Figure 7 below.

Preliminary Servicing Advice was been received from M elbourne Water and this advice is including in Appendix 2 of this report.


Figure 7- M elbourne Water Drainage Scheme Map (Source: M elbourne Water 2022)

## 4. Electricity

### 4.1 Introduction

Ausnet Services is the responsible Authority for the provision of electrical supply services in Casey Fields and Devon M eadows PSP area.

Preliminary Servicing Advice has been received from AusNet Services and this advice is included in Appendix $\mathbf{3}$ of this report.

### 4.2 Current Conditions

There are existing overhead 22 kV electrical feeder assets throughout the PSP area (along the major roads through, and on the periphery of the PSP area), as shown in Figure 8 below, and as follows:

Devon M eadows PSP area:

- South Gippsland Highway
- Devon Road (part)
- Browns Road
- Facey Road
- Craig Road (part)

Casey Fields South PSP area:

- Ballarto Road
- Clyde Five Ways Road
- South Gippsland Highway,

The Casey Fields and Devon Meadows PSP area is currently supplied from the Clyde North Terminal Station which is located approx. 2.5 kilometres north of the PSP area, on Berwick Cranbourne Road, near the intersection of Heather Grove.


Figure 8- Existing Electrical Layout (supplied by AusNet Services)

### 4.3 Servicing Strategy

## Preliminary advice from Ausnet is as follows:

"New feeders typically have a lead time of 18 months to 2 years.
It is expected that the bulk of the new feeder will be financed by AusNet as it will be shared by multiple customers.
The new estate will be supplied from an underground 22 kV cable supplying kiosk substations within the development area. Kiosk reserves on title will be required. On average, one kiosk will be required for every 125 lots. The standard kiosk reserve is $5.2 \mathrm{~m} \times 8 \mathrm{~m}$ while the larger inter feeder kiosk reserve is $5.6 \mathrm{~m} \times 8 \mathrm{~m}$. Low voltage distribution will be via underground LV cables and pits."


Figure 9- Electricity Infrastructure- Existing and Proposed

### 4.3.1 No Gas Development

SM EC note that the provision of gas is no longer considered as an essential service requirement. The provision of gas will be up to the individual land developers within the area. SM EC understand that an increased electrical reliance will be required, if gas services remain absent in the precinct.
SM EC's previous experience in this area has determined that, in consultation with service authorities, the impact of No-Gas development on authority allowances for energy consumption will be an increase from 20 amp per household (assuming gas cooking, heaters and hot water) to 40 amps per household (all electrical). This is expected to result in an increase in Kiosk Substation and Cabling size which can be catered for by the Power Authority. Default kiosk size to be increased from 315 kVa to 500 kVa .

Further consultation with Ausnet Services (Electrical) would be required to determine appropriate servicing for the area under the above circumstances.

## 5. Gas

### 5.1 Introduction

APT O\&M Services P/L (APA Networks), operating as a subsidiary of APA Group, manages and operates the gas reticulation assets within the Southern region on behalf of Australian Gas Networks (AGN).

Preliminary Servicing Advice has been received from APA Networks and this is included in Appendix 4 of this report.

### 5.2 Current Conditions

The Devon M eadows and Casey Fields PSP area has existing gas supply via various supply lines located as follows:

- A 100mm steel main on the south side of the South Gippsland Hwy running through the middle of the PSP area;
- A 180mm main running along the western edge of the PSP area on the west side of Craig Road;
- To the north east, there is a 180 mm main in Clyde Five Ways Road about 400m north of Ballarto Road.

Refer to Figure 10 for more details on existing gas assets.


Figure 10- Existing and Potential Gas Infrastructure

### 5.3 Servicing Strategy

APA Networks have advised that while the PSP area is at the southern fringe of the network it is reasonably well supplied at present, although future augmentation works of the wider Cranborne netw ork will be needed to supply the entire future PSP area.

These augmentation works will not be fully attributed to this PSP and it is likely that they will be absorbed into the normal augmentation plans for the wider network to be undertaken by APA Networks who are responsible for works where there is a wider impact.
It is suggested that the existing 180 mm dia main in Clyde Five Ways Road (near Twyford Drive) could be extended into the PSP area.

### 5.3.1 No Gas Developments

SM EC note that the provision of gas is no longer considered as an essential service requirement. The provision of gas will be up to the individual land developers within the area. SM EC understand that an increased electrical reliance will be required, if gas services remain absent in the precinct.
Refer to previous comments made within Section 4.3 .1 of this report in relation to no gas developments.

## 6. Telecommunications

### 6.1 Service Provider Considerations

As of 1st January 2011, National Broadband Network Co. (NBN) is responsible for the deployment of fibre infrastructure in broad-acre developments that are within the NBN Co. long term footprint.

It will be the responsibility of the developer to provide pit and pipe infrastructure ("fibre ready") in new any developments. The developer will be responsible for the trenching, supply and installation of pits and pipes followed by engagement of either NBN Co, or a private operator, to supply and install optical fibre cables to each lot.

### 6.2 Current Conditions

### 6.2.1 Optic Fibre

The entire PSP precinct is located within the NBN roll out area as shown below in Figure 11.


Figure 11- NBN Co Network Rollout Map (Service available - purple area)

## NBN Co have advised that:

"This area currently sits across both the Fixed-Line and W ireless - Satellite footprints of the NBN network.
The NBN Fixed-Line is available on the perimeters of the identified area (refer Figure 12 below for the fixed line area). Fixed-Line Network access is currently available on Ballarto Road, Craig Road \& Clyde - Five Ways Road. M inimal cable infrastructure build is required to connect the initial stages of the precinct. The existing fixed line network has limited capacity and may require additional fibre to be deployed to meet additional servicing needs."


Figure 12- NBN Service Area - Fixed- Line Footprint (supplied by NBN)
Outside of the existing NBN infrastructure in place, there is also a combination of providers with assets in the precinct including Opticomm, Optus and Telstra. There may be opportunities to utilise these existing assets which are in South Gippsland Highway, Craig Road, Clyde- Five Ways Road, Ballarto Road. The Telstra assets within the precinct as shown in Figure 13 below.


Figure 13- Communications- Existing and Proposed

### 6.3 Servicing Strategy

NBN Co have advised that "...Currently there are no plans to install or upgrade any infrastructure within this precinct. NBN do not foresee any constraints or issues with future standard infrastructure installation. There are no plans to extend the network to the precinct area unless customer initiated. Overall, NBN Co consider it highly unlikely the need to implement any new key infrastructure.

In relation to future servicing, NBN Co advise that:

- "The Casey Fields South \& Devon M eadows Precinct will connect to the NBN co-located 3CBN FAN site near the corner of South Gippsland Hwy \& Grace St Cranbourne.
- The FAN site currently has capacity to service the Precinct.
- Servicing of the Precinct would be planned on a case-by-case application basis and driven primarily by customer-initiated demand, utilising new NBN build also developer supplied \& shared trenching arrangements within the precinct.
- Any new build (conduit \& cable) to this precinct is planned to connect via Ballarto Road, Craig Road \& Clyde Five W ays Roads entries of the Precinct.
- It is envisioned that new pit \& pipe infrastructure is required within the entire precinct.

NBN Co is open to working with the other USPs, governments and other entities to cater for growth in the Precinct. They would also consider significant one-off investments if deemed necessary to accommodate future growth. Opportunities may arise to facilitate possible trench sharing opportunities either with Council/Road Authorities or other Utilities.

Some difficulties may exist with the NBN network being located on both sides of the South Gippsland Hwy, so NBN Co would be interested in being involved in any additional service crossings that occur. NBN are constrained by boundaries such as railways, freeways, and watercourses so any additional crossings enable NBN to increase the robustness of the network.

NBN Co considers its best planning approach to cater for growth is a consistent staged rollout in a particular direction, e.g. out from the FAN, and would be interested in any future planning that takes place so that they can plan works on their network accordingly.

Some of the opportunities that would benefit NBN are:

- working with other USPs when working on additional crossings of roads and waterways
- encouraging additional space in any road restructuring and widening to enable future telecommunications work
- installing additional conduits and ducts for future cables where possible."


## 7. Staging Recommendations

### 7.1 Proposed Development Sequence

The proposed development sequencing for both the Casey Fields and Devon Meadows precinct should consider the following:

- Location of existing services.
- Location of proposed trunk services.
- Siting of major drainage facilities (although not the subject of this Services Plan reporting).
- Ability to connect to an ultimate drainage outfall.
- Road connections to facilitate suitable "entry" points to initial development.
- Developer landholding split and readiness of developers to initiate development.
- Location of proposed open space.

South East Water trunk infrastructure planned for the Casey Fields and Devon M eadows Precinct, along with Councils assets (major roads and drainage) will play a major part in formulating the development sequencing for the two PSP areas.
Typically, South East Water general principles in determining an Infrastructure Sequencing Plan for services (sewer and water) within a growth area are as follows:

- Maximising the use of any spare capacity in existing infrastructure adjacent or proximate to a growth area.
- Servicing lots on land abutting existing infrastructure.
- Maximising servicing of lots which are located in the same gravity catchment / pressure zone as existing infrastructure.
- Servicing whole gravity catchments / pressure zones where spare capacity exists.
- For parcels of land (in single developer ownership) that straddle catchments / pressure zones, prioritising the portion which utilises gravity flow to existing infrastructure with spare capacity or that which can be most cost efficiently augmented.
- Where the "spare capacity" in existing infrastructure has been consumed - the most efficient and economic augmentation of the system is preferred. The preferred augmentation is one which delivers the most developable lots per dollar invested (i.e. Lowest $\$ \mathrm{NPC} / \mathrm{lot}$ ). This is likely to produce a priority order of augmentations over the life of the project.
- Growth of areas and subsequent servicing to be determined by growth area forecasts which will outline a per year rate for development.


### 7.1.1 Initial Locations for Development

The initial locations for development should consider the following:

- Land which abuts established major roads (South Gippsland Highway, Clyde- Five Ways Road, Devon Road and Craig Road); NB: It is assumed that future road upgrades to Clyde- Five W ays Road are likely to be considered as part of the Clyde South Precinct Structure Plan.
- Land serviced by the existing potable water main infrastructure located in Ballarto Road and South Gippsland Highway.
- Land in close proximity and that can be serviced by the proposed Interim Sewer Pump Station to the east of Clyde Five Ways Road (refer Figure 14).
- For Casey Fields PSP area; this is likely to encourage a potential development front moving northwards and north-westerly from the south-east corner of the PSP area.
- For Devon M eadows PSP area; this will encourage early development within the south east portion of the PSP area, bounded by Devon Road and the South Gippsland Highway (also serviced by potable water).

In general, the servicing requirements for electricity, communications and gas, are typically less vital in development staging, however this should be confirmed as part of development supply requests.
A general direction of future development front, based on the sewer and water servicing requirements are shown in Figure 14 and Figure 15.


Figure 14- Direction of assumed future development front (blue arrows), based on future sewer servicing requirements


Figure 15- Direction of assumed future development front (blue arrows), based on future water servicing requirements

### 7.2 Land Allocation

Servicing authorities have varying requirements with regards to land allocation for their assets. We make comments in this regard as follows:

## Sewer \& Water:

- Typically, potable water recycled water and sewer reticulation assets (including trunk assets) are located within road reserves and do not require specific land allocations, however, road reserves may need to be wide enough to accommodate larger trunk assets following detailed design of the asset.
- In some instances it may be more appropriate to located sewer and water assets within a dedicated easement within public land such as an open space reserve or drainage corridor. The size of the easement required depends on the size of the assets and is subject to detailed design.
- Without the benefit of detailed design, an area of $50 \mathrm{~m} \times 50 \mathrm{~m}\left(2000-2500 \mathrm{~m}^{2}\right)$ is a reasonable allowance for each of the sewer pump station locations (CRPS1, CRPS \& Lift PS on the Sewer Strategy Plan).
- Without the benefit of detailed design, an area of $60 \mathrm{~m} \times 60 \mathrm{~m}\left(3000-4000 \mathrm{~m}^{2}\right)$ is a reasonable allowance for each of the water pump station locations - assuming underground storage on site.
- Water authorities have a preference to avoid the siting of their sewer pump station assets within conservation or wetland areas, however, adjacent to these areas would be acceptable.
- Assets that are located within allotments and other non-road reserves locations will be required to be within easements of width and size that suits the relevant asset.


## Electricity:

- Generally, assets are located within road reserves and are underground in URD areas up to and including 22kV lines. 66 kV lines are generally overhead if relocating of the asset is required, however new 66 kV lines (installed by authority) for Network upgrading are generally required to be underground through residential developments.
- Typical URD Kiosk Substation reserves are $7.2 \mathrm{~m} \times 7.2 \mathrm{~m}$ within public open space or $7.2 \mathrm{~m} \times 4.8 \mathrm{~m}$ within residential allotments. These reserves may increase if there are switch yards/indoor transformers required. However, these are normally only required for high rise buildings or heavy duty manufacturing plants.
- Rapid Earth Fault Current Limiters (REFCLs) will generally be installed at the 22 zone substations across regional Victoria. As part of the REFCL system Isolating Transformers (ISO) may need to be installed in large estates with multiple stages to mitigate high capacitance. These REFCL ISO's can be pole mounted or ground mounted and if ground mounted may need a reserve size in the order of $10 \mathrm{~m} \times 12 \mathrm{~m}$.


## 8. Conclusion

SM EC has been engaged by the Victorian Planning Authority (VPA) to prepare a High Level Utility Servicing Assessment for the Devon M eadows and Casey Fields South Precinct Structure Plan (the PSP).

The purpose of this servicing assessment is to provide existing servicing information and future requirements of the area with respect to sewerage, water, power, gas, electrical and telecommunications for the precinct.
For avoidance of doubt, stormwater management and road infrastructure do not form part of the scope of this servicing assessment. We understand that the VPA have engaged other consultants to provide stormwater strategies and traffic assessments for this Precinct. This report also does not provide a review of or recommendations with regards to any Integrated Water M anagement Strategy being proposed for the Precinct.

The information in this report is preliminary and has been obtained through discussion with key stakeholders and service authorities at the time of writing this report. The servicing assessment is subject to change upon final confirmation of utility servicing strategies adopted by the relevant service authorities and following further review of detailed inputs by VPA (e.g. property investigations, feature and level survey, detailed engineering design and future planning decisions). SMEC does not accept a duty of care or any other legal responsibility whatsoever in relation to the current servicing plan or any subsequent changes to the servicing strategy.

Based on the Company's experience and the investigations carried out, SMEC believes that the subject land is capable of being serviced, subject to constraints identified in the report, with all services typically required for urban development.

## Appendix 1- Preliminary Servicing Advice- South East Water

SMEC
E-mail: justine.williams@smec.com

Dear SMEC,

## PRELIMINARY SERVICING ADVICE FOR CASEY FIELDS SOUTH \& DEVON MEADOWS PSPS AREA OUR REFERENCE: CASE NUMBER 42610916 FILE 21PD6851 YOUR REFERENCE: 30049113

I refer to your application requesting Preliminary Servicing Advice for the provision of South East Water's drinking water, recycled water and/or sewerage facilities to the above area. We are able to provide you with the following general servicing advice for the proposed Casey Fields South Employment and Devon Meadows PSP Area based on the information provided.

This preliminary servicing advice has been prepared based on the information available at the time, however we reserve the right to vary this advice in the future as circumstances change without further notification.

## DRINKING WATER

The initial source of supply for the Casey Fields South Employment and Devon Meadows PSP Area is the 375 mm diameter reticulated drinking water main in South Gippsland Highway and the 600mm diameter reticulated drinking water main in Ballarto Road.

As the existing 375mm diameter reticulated drinking water main in South Gippsland Highway only has sufficient capacity for initial development of the PSP area, a 600 mm diameter reticulated drinking water main (shown ' $\mathrm{A}-\mathrm{B}$ ') and a 450 mm diameter reticulated drinking water main (shown ' $\mathrm{B}-\mathrm{C}$ ') will be required to be installed as development in the area progresses. These works are currently estimated to be required in 2040.

To service the proposed Casey Fields South Employment PSP Area with adequate drinking water facilities, the following works will be required:

- Connect into the existing 600mm diameter reticulated drinking water main in Ballarto Road and construct approximately 1,870 metres of 450 mm diameter reticulated drinking water mains in ClydeFiveways Road, as shown 'C-D-E' on the attached 'Drinking Water Plan'; and
- Connect into the existing 600 mm diameter reticulated drinking water main in Ballarto Road and construct approximately 1,115 metres of 300 mm diameter reticulated drinking water mains, as shown 'F-G-H' and 'G-D' on the attached 'Drinking Water Plan'.

To service the proposed Devon Meadows PSP Area with adequate drinking water facilities, the following works will be required:

- Connect into the existing 375 mm diameter reticulated drinking water main and construct approximately 800 metres of 300 mm diameter reticulated drinking water mains, as shown between 'I-J' on the attached 'Drinking Water Plan'.

Internal drinking water mains for developments are the be design and sized by the developer.
As the Precinct Structure Plan (PSP) has not been finalised for this area, and is not anticipated to be until 2024, the above strategy / works may be subject to change as the PSP progresses.

## RECYCLED WATER

The initial source of recycled water for the Casey Fields South Employment and Devon Meadows PSP Area is the 300 mm diameter and the 225 mm diameter reticulated recycled water mains in Ballarto Road. To service both the Casey Fields South Employment and Devon Meadows PSP Area construction of approximately 3,675 metres of 300 mm diameter reticulated recycled water mains along South Gippsland Highway is required, as shown 'A-B' on the attached 'Recycled Water Plan'.

To service the proposed Casey Fields South Employment with recycled water facilities, it will be necessary to undertake the following works:

- Connect into the existing 225 mm diameter reticulated recycled water main in Ballarto Road and construct approximately 645 metres of 225 mm diameter reticulated recycled water mains in ClydeFiveways Road, as shown 'B-C-D' on the attached 'Recycled Water Plan'; and
- Connect into the existing 225 mm diameter reticulated recycled water main in Ballarto Road and construct approximately 1,520 metres of 225 mm diameter reticulated recycled water mains, as shown ' $\mathrm{E}-\mathrm{F}-\mathrm{G}$ ' and 'C-F' on the attached 'Recycled Water Plan'.

To service the proposed Devon Meadows PSP area with recycled water facilities, it will be necessary to complete the following works:

- Connect into the proposed 300 mm diameter reticulated recycled water main in South Gippsland Highway and construct approximately 2,200 metres of 225 mm diameter reticulated recycled water mains, as shown 'H-I' on the attached 'Recycled Water Plan'.

Internal recycled water mains are the be design and sized by the developer.
As the Precinct Structure Plan (PSP) has not been finalised for this area, and is not anticipated to be until 2024, the above strategy / works may be subject to change as the PSP progresses.

## SEWER

The proposed Casey Fields South Employment and Devon Meadows PSP Area will ultimately discharge into the proposed Yallambee Road Pump Station.

The following works will be required to service the proposed Devon Meadows PSP Area:

- Construction of approximately 2,600 metres of 450mm diameter reticulated sewerage mains, as shown between 'A-B' on the attached 'Sewer Plan';
- Construction of approximately 1,450 metres of 375 mm diameter reticulated sewerage mains, as shown between 'B-C' on the attached 'Sewer Plan'; and
- Construction of approximately 2,800 metres of 300 mm diameter reticulated sewerage mains, as shown between 'C-D' on the attached 'Sewer Plan'.

The following works will be required to service the proposed Casey Fields South Employment PSP Area:

- Construction of approximately 3,000 metres of 450 mm diameter reticulated sewerage mains, as shown between 'A-E' on the attached 'Sewer Plan';
- Construction of approximately 2,100 metres of 375 mm diameter reticulated sewerage mains, as shown between 'E-F' on the attached 'Sewer Plan'; and
- Construction of approximately 1,100 metres of 300 mm diameter reticulated sewerage mains, as shown between 'F-G' on the attached 'Sewer Plan'.

As the Yallambee Road Sewer Pump Station is not anticipated to be completed until 2028 or later, an interim temporary sewer pump station and an interim rising main, discharging to Ballarto Road Sewer Pump Station, may service the proposed Casey Fields South Employment and Devon Meadows PSP Area. These works are shown between 'H-I-J' on the attached 'Sewer Plan'.

Internal sewer mains for developments are the be design and sized by the developer.
As the Precinct Structure Plan (PSP) has not been finalised for this area, and is not anticipated to be until 2024, the above strategy / works may be subject to change as the PSP progresses.

Any discharge being accepted by South East Water is subject to the Owner entering into a trade waste agreement and the effluent complying with South East Water's trade waste guidelines. For further details and prior to finalising any plans, please contact the trade waste department on 95523662 or trade.waste@sew.com.au.

## GENERAL

This Preliminary Servicing Advice is assessed on a lot/s basis only for the proposed development.
To obtain hydraulic/plumbing servicing advice please apply for conditions via South East Water online portal 'PropertyConnect' or contact South East Water's Property Development Group on 95523770.

## Contributions

New Customer Contributions will apply to this development. The current rates are available on South East Water's website www.southeastwater.com.au/developmentprices

## Formal Conditions

To obtain South East Water's formal financial and servicing conditions apply on line via
www.southeastwater.com.au
$\rightarrow \quad$ PropertyConnect
$\rightarrow \quad$ Land Development
$\rightarrow$ Works Agreement
All works are to be carried out in accordance with the Melbourne Retail Water Agency (MRWA) edition of the Water Services Association of Australia (WSAA) Codes.

If you require further information, please contact Megan Rave on +6139552 3327.

Yours sincerely


Damien Sherlock
DEVELOPMENT SOLUTIONS MANAGER




## Appendix 2- Preliminary Servicing Advice- M elbourne Water

| From: | Melbourne Water [No_reply@melbournewater.com.au](mailto:No_reply@melbournewater.com.au) |
| :--- | :--- |
| Sent: | Wednesday, 12 October 2022 5:13 PM |
| To: | Justine WILLIAM S |
| Cc: | jacob.zamora@vpa.vic.gov.au |
| Subject: | Response to your application for Pre-development advice - M WA-1264561 - Devon |
|  | Meadows and Casey Fields South PSP |
| Attachments: | RE Application for Predevelopment advice M WA1264561.msg |
|  |  |
| Follow Up Flag: | Follow up |
| Flag Status: | Flagged |

## This message Is From an External Sender

Please do not click the links or attachments and do not respond to this message if you are unsure of its origin.

Dear Justine Williams,

Please refer to the attached correspondence in regards to the following application:
Your Melbourne Water reference number: MWA-1264561
Application purpose: Pre-development advice
Application submission date: 25/08/2022
Location: Devon Meadows and Casey Fields South PSP
To respond to us regarding this application, please use DevConnect@melbournewater.com.au quoting MWA-1264561 in the subject line.

This email is sent from a notification-only email address that does not accept incoming email.
For general development enquiries contact our Customer Service Centre on 131722.
Regards,
Rebecca Nguyen | Catchment Strategy | Melbourne Water T: 131722 | 990 La Trobe Street, Docklands, VIC 3008 | PO Box 4342 Melbourne VIC 3001 | melbournewater.com.au

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If you have received this email in error, please notify the sender by return email, delete it from your system and destroy any copies.

| From: | Justine WILLIAM S [Justine.Williams@smec.com](mailto:Justine.Williams@smec.com) |
| :--- | :--- |
| Sent: | Wednesday, 12 October 2022 2:09 PM |
| To: | Rebecca Nguyen |
| Cc: | David M UTTON |
| Subject: | RE: Application for Pre-development advice M WA-1264561 |

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Thank you Rebecca
Justine Williams
Project M anager - Property Advisory, Urban Communities
M +61411481079 T +61 398690846 E Justine.Williams@smec.com
Collins Square, Tower 4, Level 20, 727 Collins St, M elbourne, VIC, 3008, Australia
Proud to be part of SM EC's Flexible Work Arrangements and working Wednesday, Thursday and Friday.

From: Rebecca Nguyen <Rebecca.Nguyen@ melbournewater.com.au>
Sent: Tuesday, 11 October 2022 3:36 PM
To: Justine WILLIAMS বustine.Williams@smec.com>
Cc: David M UTTON <David.M utton@smec.com>
Subject: RE: Application for Pre-development advice MWA-1264561
Hi Justine,
GIS layers with disclaimer of use attached. I'll also attach this email thread to the MWA case for our records. Anything else, please let me know.

Disclaimer: The feasibility information provided in this email is conceptual/indicative only and must be used in conjunction with an informed catchment analysis when undertaking the detailed design.

Under the QA process the Consultant is required to perform their own informed catchment analysis and calculations for the design of scheme assets which reflects the actual development and on ground conditions. As a part of the functional design process your calculations, assumptions, models and catchment analysis are to be submitted for our acceptance/records.

Please note that as schemes develop and Melbourne Water receives additional information, the conceptual/indicative advice you have been provided as part of the feasibility request may now be outdated. Under the QA process it is the responsibility of the consultant to certify that all information provided to Melbourne Water is correct having completed their own detailed catchment analysis.

Melbourne Water reserves the right to alter any or all of the information provide in this letter.

Regards,
Rebecca Nguyen | Strategies Engineer | DSS Inception \& Review Services, Statutory Developer Services | Waterways and Catchment Operations | Melbourne Water

T: (03) 96796998 | 990 LaTrobe Street, Docklands, VIC 3008 | PO Box 4342 Melbourne VIC 3001 | melbournewater.com.au

In response to growth in the Development Industry, the Statutory Developer Services group are recruiting and onboarding significant additional staff members and implementing transformative measures to respond to the exceptional increase in complexity and demand for our Services. Please see our dedicated website for our latest team updates \& information about current service levels: Statutory Developer Services | Melbourne Water

In order to assist the Statutory Developer Services team with adjusting to blended working, all meetings will be conducted online via Teams or Zoom. We thank you for your cooperation, this will enable our Services to be provided in a more timely way.

Statutory Developer Services provides the essential regulatory water planning decisions for Metropolitan Melbourne's urban and greenfield development sector. If you are the applicant and have an escalation regarding a technical aspect of your project, you can contact Nino Polon on 131722 to discuss.

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From: Justine WILLIAM S «ustine.Williams@ smec.com>
Sent: Thursday, 6 October 2022 4:31 PM
To: Rebecca Nguyen [Rebecca.Nguyen@melbournewater.com.au](mailto:Rebecca.Nguyen@melbournewater.com.au)
Cc: David M UTTON $\varangle$ David.M utton@smec.com>
Subject: RE: Application for Pre-development advice MWA-1264561
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Thanks for the prompt response Rebecca. That is great.
I didn't realise that you had already supplied information to the VPA. Could I please get a copy of what you have already issued to them.

We are compiling a report for them to address all authorities requirements at the moment.
Regards,

## Justine Williams

Project M anager - Property Advisory, Urban Communities
M +61411481079 T +61 398690846 E Justine.Williams@smec.com
Collins Square, Tower 4, Level 20, 727 Collins St, M elbourne, VIC, 3008, Australia

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From: Rebecca Nguyen $<$ Rebecca.Nguyen@melbournewater.com.au>
Sent: Thursday, 6 October 2022 4:16 PM
To: Justine WILLIAMS «ustine.Williams@smec.com>
Cc: David M UTTON <David.M utton@smec.com>
Subject: RE: Application for Pre-development advice MWA-1264561
Hi J ustine,

Thanks for your email.
We are pretty behind in all applications at the moment!
But I am happy to sort this one out for you. I've just given you a call, as normally, predev advice applications come through when we have development potential (ie. Gazetted PSP, and final Drainage Scheme in place). In this case, our Drainage Scheme strategy is still in the works, and basically, there are no Melbourne Water infrastructure information available other than some flood mitigation works that are outside of the UGB, and high level flood extents along existing channels (screen shot below) which has already been supplied to VPA.

Can you specify what information exactly are you after? Happy for you to give me a call back.


Many thanks.

Regards,
Rebecca Nguyen | Strategies Engineer | DSS Inception \& Review Services, Statutory Developer Services | Waterways and Catchment Operations | Melbourne Water

T: (03) 96796998 | 990 LaTrobe Street, Docklands, VIC 3008 | PO Box 4342 Melbourne VIC 3001 | melbournewater.com.au

In response to growth in the Development Industry, the Statutory Developer Services group are recruiting and onboarding significant additional staff members and implementing transformative measures to respond to the exceptional increase in complexity and demand for our Services. Please see our dedicated website for our latest team updates \& information about current service levels: Statutory Developer Services | Melbourne Water

In order to assist the Statutory Developer Services team with adjusting to blended working, all meetings will be conducted online via Teams or Zoom. We thank you for your cooperation, this will enable our Services to be provided in a more timely way.

Statutory Developer Services provides the essential regulatory water planning decisions for Metropolitan Melbourne's urban and greenfield development sector. If you are the applicant and have an escalation regarding a technical aspect of your project, you can contact Nino Polon on 131722 to discuss.

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From: Justine WILLIAM S «ustine.Williams@ smec.com>
Sent: Thursday, 6 October 2022 12:17 PM
To: Rebecca Nguyen [Rebecca.Nguyen@melbournewater.com.au](mailto:Rebecca.Nguyen@melbournewater.com.au)
Cc: David M UTTON <David.M utton@smec.com>
Subject: FW: Application for Pre-development advice M WA-1264561
CAUTION: This email originated from outside of the organisation. Do not click links or open attachments unless you recognise the sender and know the content is safe.

## Hi Rebecca

I got your contact details from Jacob Zamora at VPA.
SM EC are representing VPA on the Casey Fields Sth \& Devon M eadows PSP.
I have sent an email today to the DevConnect generic address to follow up our request for Pre development advice, lodged on 25/8/2022.

Are you able to assist me please or provide an update on when we can expect M elb Water's response.
Thank you in advance,
Justine Williams
Project M anager - Property Advisory, Urban Communities
M +61411481079 T +61398690846 E Justine.Williams@ smec.com
Collins Square, Tower 4, Level 20, 727 Collins St, M elbourne, VIC, 3008, Australia

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From: Justine WILLIAM S
Sent: Thursday, 6 October 2022 12:02 PM
To: devconnect@melbournewater.com.au

Cc: David M UTTON <David.M utton@smec.com>
Subject: FW: Application for Pre-development advice M WA-1264561
Hi Case Officer

## MW Ref: MWA- 1264561

Please advise on the status of pre-development advice for this PSP area. SM EC act on behalf of the Victorian Planning Authority.

This was expected to be completed by 22/9/2022, which has now past.
I await your response, thank you in advance
Justine Williams
Project M anager - Property Advisory, Urban Communities
M +61411481079 T +61 398690846 E Justine.Williams@smec.com
Collins Square, Tower 4, Level 20, 727 Collins St, M elbourne, VIC, 3008, Australia
Proud to be part of SM EC's Flexible Work Arrangements and working Wednesday, Thursday and Friday.

From: M elbourne Water $\langle$ No reply@melbournewater.com.au>
Sent: Thursday, 25 August 2022 10:34 AM
To: Justine WILLIAMS 〔ustine.Williams@smec.com>
Subject: Application for Pre-development advice MWA-1264561
Dear Justine Williams,
Thank you for submitting your application. This is a courtesy reply to acknowledge the receipt of your application. Please do not respond to this message.

## Application summary

Your Melbourne Water reference number: MWA-1264561
Please use this reference number for any future correspondence with us.
Application purpose: Pre-development advice
Location: Casey Fields South and Devon Meadows PSP

Application fee is $\$ 0.00$

For any future enquiries in relation to this application, please email us at DevConnect@melbournewater.com.au quoting MWA-1264561 in the subject line.

## Check the status of your application.

Melbourne Water is committed to responding to all applications within agreed timeframes.

Melbourne Water respects the privacy of your personal information and we collect and handle it in accordance with Victoria's privacy laws. You may access your personal information at Melbourne Water.

This email is sent from a notification-only email address that does not accept incoming email.
For general development enquiries contact our Customer Service Centre on 131722.
Regards,

## Customer Service Centre | Melbourne Water

T: 131722 | 990 La Trobe Street, Docklands, 3008 | PO Box 4342 Melbourne VIC 3001 | melbournewater.com.au

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## Appendix 3- Preliminary Servicing Advice- AusNet Services

| From: | Lyle Chamberlain <Lyle.Chamberlain@ ausnetservices.com.au> |
| :--- | :--- |
| Sent: | Thursday, 1 December 2022 3:57 PM |
| To: | Justine WILLIAMS |
| Cc: | Jacob Zamora (VPA); Sarah Doring (VPA); David MUTTON |
| Subject: | Ausnet Response- Casey Fields South \& Devon M eadows PSP - High Level Utility |
|  | Servicing Assessment |

## This message Is From an External Sender

Please do not click the links or attachments and do not respond to this message if you are unsure of its origin.

Hi Justine,
Our existing feeders to not have the capacity to support this development and therefore a new feeder will be required from the existing Clyde North terminal station.
New feeders typically have a lead time of 18 months to 2 years.
It is expected that the bulk of the new feeder will be financed by AusNet as it will be shared by multiple customers.
The new estate will be supplied from an underground 22 kV cable supplying kiosk substations within the development area. Kiosk reserves on title will be required.
On average, one kiosk will be required for every 125 lots.
The standard kiosk reserve is $5.2 \mathrm{~m} \times 8 \mathrm{~m}$ while the larger inter feeder kiosk reserve is $5.6 \mathrm{~m} \times 8 \mathrm{~m}$.
Low voltage distribution will be via underground LV cables and pits.
Light types will be determined by council.
Discuss with your client what style of lantern is preferred. A lot of developers are moving away from non-standard lighting and going with standard lights. Possibly a commercial decision as it is unclear if non-standard lights add anything to the selling price and most councils charge a significant premium per light pole for any non-standard lights installed to cover future increased replacement costs.

Regards,
Lyle Chamberlain
Energy Project Coordinator

## AusNet

[^0]From: Justine WILLIAM S «ustine.Williams@ smec.com>
Sent: Thursday, 10 November 2022 10:09 AM
To: lyle.chamberlain@ausnetservices.com.au
Cc: Jacob Zamora (VPA) «acob.Zamora@vpa.vic.gov.au>; Peter Cooper (VPA) [Peter.cooper@vpa.vic.gov.au](mailto:Peter.cooper@vpa.vic.gov.au); David MUTTON <David.M utton@smec.com>
Subject: FW: VPA -Casey Fields South \& Devon M eadows PSP - High Level Utility Servicing Assessment Importance: High

Hi Lyle
I have just spoken to Andrew Webber who advises that this matter is with you. Could you please advise timing, as VPA need to finalise the future servicing requirements ASAP.

I will also call you today, as Andrew gave me your contact details
Regards,

## Justine Williams

Project M anager - Property Advisory, Urban Communities
M +61411481079 T +61 398690846 E Justine.Williams@smec.com
Collins Square, Tower 4, Level 20, 727 Collins St, M elbourne, VIC, 3008, Australia
Proud to be part of SM EC's Flexible Work Arrangements and working Wednesday, Thursday and Friday.

From: Justine WILLIAM S 〔ustine.Williams@ smec.com>
Sent: Friday, 21 October 2022 9:38 AM
To: andrew.webber@ausnetservices.com.au
Cc: David M UTTON <David.M utton@smec.com>; Jacob Zamora (VPA) 〔acob.Zamora@vpa.vic.gov.au>
Subject: FW: VPA -Casey Fields South \& Devon M eadows PSP - High Level Utility Servicing Assessment
Importance: High
Hi Andrew
Hope you are well.
This is another follow up to my email to my original request dated 25 August 2022.
Could you please advise or forward onto the relevant department ASAP so that we can receive back the preliminary servicing information from Ausnet.

VPA may contact you directly to follow up as well
Regards,

## Justine Williams

Project M anager - Property Advisory, Urban Communities
M +61 411481079 T +61 398690846 E Justine.W illiams@smec.com
Collins Square, Tower 4, Level 20, 727 Collins St, M elbourne, VIC, 3008, Australia

From: Justine WILLIAM S «ustine.Williams@ smec.com>
Sent: Thursday, 6 October 2022 3:00 PM
To: andrew.webber@ausnetservices.com.au
Cc: David M UTTON <David.M utton@smec.com>
Subject: RE: VPA -Casey Fields South \& Devon M eadows PSP - High Level Utility Servicing Assessment
Importance: High
Hi Andrew- hope you are well. I am following up my email from 25 Aug 2022.
Could you please advise when we can expect a servicing response from Ausnet, (or if this is not you- please direct me to the right person to follow up)

Thanks Andrew
Justine Williams
Project M anager - Property Advisory, Urban Communities
M +61411481079 T +61 398690846 E Justine.W illiams@ smec.com
Collins Square, Tower 4, Level 20, 727 Collins St, M elbourne, VIC, 3008, Australia

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From: Justine WILLIAM S 〔ustine.Williams@ smec.com>
Sent: Thursday, 25 August 2022 9:58 AM
To: andrew.webber@ausnetservices.com.au
Cc: David M UTTON <David.M utton@smec.com>
Subject: VPA -Casey Fields South \& Devon M eadows PSP - High Level Utility Servicing Assessment
Importance: High
Hi Andrew,
We have recently been engaged by the Victorian Planning Authority to undertake a Utility Servicing Assessment for the Casey Fields South \& Devon M eadows PSP areas.

As part of this engagement we will need to provide commentary on the provision of electrical services to this future precinct.

Can you please provide some preliminary servicing advice as the basis for the trunk servicing recommendations and any upgrading of existing infrastructure.

The future urban structure plan is currently development at this point in time, however, the attached document should give context to this request.

Kind regards,

## Justine Williams

Project M anager - Property Advisory, Urban Communities
M +61411481079 T +61 398690846 E Justine.Williams@smec.com
Collins Square, Tower 4, Level 20, 727 Collins St, M elbourne, VIC, 3008, Australia

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SM EC acknowledges the Traditional Custodians of Country throughout Australia and their connections to land, sea and community. We pay our respect to their elders past, present and emerging and extend that respect to all First Nations peoples today.

# We are extremely proud to announce SMEC's 2022 Client Choice Award wins in the following two categories: 

\author{

- Best Built \& Natural Environment Consulting Firm (>200m revenue) <br> - Best Professional Services Firm (>200m revenue) <br> Thank you to our staff, clients and partners for this outstanding achievement.
}

[^1]
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| From: | Justine WILLIAMS |
| :--- | :--- |
| Sent: | Friday, 16 December 2022 10:27 AM |
| To: | Justine WILLIAMS |
| Subject: | FW: Ausnet Response- Casey Fields South \& Devon M eadows PSP - High Level Utility |
|  | Servicing Assessment |
| Attachments: | Casey Fields South Devon Meadows Existing and New.pdf |

From: Lyle Chamberlain <_yle.Chamberlain@ ausnetservices.com.au>
Sent: Friday, 9 December 2022 10:59 AM
To: Justine WILLIAMS 孔ustine.Williams@smec.com>
Subject: RE: Ausnet Response- Casey Fields South \& Devon M eadows PSP - High Level Utility Servicing Assessment

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Please refer attached.
Blue is existing 22 kV and red is new feeder.
Regards,
Lyle Chamberlain
Energy Project Coordinator

## AusNet

## Australia

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E lyle.chamberlain@ausnetservices.com.au
W www.ausnetservices.com.au


## Appendix 4- Preliminary Servicing Advice- APA Networks

| From: | Free, Julieanne [julieanne.free@apa.com.au](mailto:julieanne.free@apa.com.au) |
| :--- | :--- |
| Sent: | Tuesday, 15 November 2022 11:46 AM |
| To: | Justine WILLIAM S |
| Cc: | David M UTTON |
| Subject: | Prelim Servicing Advice Casey Fields South \& Devon M eadows PSP |
|  |  |
| Follow Up Flag: | Flag for follow up |
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## Hi Justine,

Thank you for your enquiry to APA Networks' servicing requirements for the proposed Casey Fields South \& Devon Meadows PSP.

APT O\&M Services P/L (APA Networks), operating as a subsidiary of APA Group, manages and operates the gas reticulation assets within the Southern region on behalf of Australian Gas Networks (AGN).

In relation to your request APA Networks can furnish the following advice based upon the staging plans you have provided:

While this area is at the southern fringe of the network, it is reasonably well supplied with a 100 mm steel main in the South Gippsland Hwy running through the middle, a 180 mm main running along the western edge in Craig Rd. To the north east there is a 180 mm main in Clyde Five Ways Rd about 400 m north of Ballarto Rd that could be extended south into the PSP area.

It is likely that in the future there will need to be some augmentation of the wider Cranbourne network to supply all of this PSP but it would not be fully attributed to this PSP and will be absorbed into the normal augmentation plans for the wider network as we would undertake work that had a wider impact.

Regards

Julieanne Free
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## always powering ahead

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## Appendix 5- Preliminary Servicing Advice- NBN Co

# Servicing Assessment Casey Fields South \& Devon Meadows PSP 

nbn-Confidential: Commercial | Rev 0.1 | SEPT 2022
Owner: Daryl Martinez: Senior Planner

## Servicing Assessment

Scope<br>Undertake a High-Level Servicing Assessment for the Casey Fields South \& Devon Meadows PSP area<br>\section*{Existing Network}

This area currently sits across both the Fixed-Line and Wireless - Satellite footprints of the NBN network. The NBN Fixed-Line is available on the perimeters of the identified area. Fixed-Line Network access is currently available on Bullarto Road, Craig Road \& Clyde - Five Ways Road. Minimal cable infrastructure build is required to connect the initial stages of the precinct. The existing fixed line network has limited capacity and may require additional fibre to be deployed to meet additional servicing needs

## Proposed network upgrades

Currently there are no plans to install or upgrade any infrastructure within this precinct. NBN do not foresee any constraints or issues with future standard infrastructure installation. There are no plans to extend the network to the precinct area unless customer initiated.
Overall, NBN Co consider it highly unlikely the need to implement any new key infrastructure.

## Servicing the precinct area

The Casey Fields South \& Devon Meadows Precinct will connect to the NBN co-located 3CBN FAN site near the corner of South Gippsland Hwy \& Grace St Cranbourne. The FAN site currently has capacity to service the Precinct.
Servicing of the Precinct would be planned on a case-by-case application basis and driven primarily by customer-initiated demand, utilising new NBN build also developer supplied \& shared trenching arrangements within the precinct.

Any new build (conduit \& cable) to this precinct is planned to connect via Bullarto Road, Craig Road \& Clyde - Five Ways Roads entries of the Precinct.
It is envisioned that new pit \& pipe infrastructure is required within the entire precinct.

## Opportunities

NBN Co is open to working with the other USPs, governments and other entities to cater for growth in the Precinct. They would also consider significant one-off investments if deemed necessary to accommodate future growth. Opportunities may arise to facilitate possible trench sharing opportunities either with Council/Road Authorities or other Utilities.

Some difficulties may exist with the NBN network being located on both sides of the South Gippsland Hwy, so NBN Co would be interested in being involved in any additional service crossings that occur. NBN are constrained by boundaries such as railways, freeways, and watercourses so any additional crossings enable NBN to increase the robustness of the network.

NBN Co considers its best planning approach to cater for growth is a consistent staged rollout in a particular direction, e.g. out from the FAN, and would be interested in any future planning that takes place so that they can plan works on their network accordingly.

Some of the opportunities that would benefit NBN are:

- working with other USPs when working on additional crossings of roads and waterways
- encouraging additional space in any road restructuring and widening to enable future telecommunications work
- installing additional conduits and ducts for future cables where possible.


## Risks-Issues

Heritage - Environmental overlays


Figure 1. NBN Service Area-Fixed-Line Footprint


Figure 2. Indicative connection routes

Member of the Surbana Jurong Group


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