

**Ibbotson Street, St. Leonards**

Preliminary Infrastructure Servicing Assessment

October 2014

Prepared by Spiire Australia Pty Ltd

On behalf of ABC Project Management Pty. Ltd.

**This report has been prepared by the office of Spiire**

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**Acknowledgements and Recognition**

<b>Issue Date</b>	<b>Revision No.</b>	<b>Author</b>	<b>Checked</b>	<b>Approved</b>
10 October 2014	Rev A	Jamie Forssman		

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## 1. Introduction

Spiire Australia Pty. Ltd. has been engaged by ABC Project Management Group to provide a brief report on infrastructure servicing advice relating to the western half of Growth Area 2 as nominated in the February 2014 St. Leonards Structure Plan.

The servicing scope of will briefly investigate the following services to residential development of the area:

- Drainage;
- Sewerage Reticulation;
- Potable Water Supply;
- Recycled Water Supply;
- Electricity Network;
- Gas Supply; and
- Telecommunications Network.

This report provides information on the location of existing service infrastructure adjacent to the site and commentary on potential servicing requirements of development.

Applications for service connections and conditions have not been lodged with service authorities at the time of this report, and service locations have been based on information received from service authorities and have not been located on site.

Prior to any development of the site the proponent is to confirm service requirements with the relevant authorities based on the development proposal and have all services physically located on site so that requirements are fully understood.

## 2. Existing Conditions

### 2.1 Site Location and Existing Conditions

The subject site has an area of approximately 37Ha and is located on the eastern side of Ibbotson Street between Murradoc Road and Levians Road to the north and Bluff Road to the south.

The site generally slopes toward the north, however a ridgeline bisects the property approximately 400m north of Bluff Road over which the land slopes to the south.



**Figure 1 – Site Location**

## 2.2 Drainage

City of Greater Geelong is responsible for drainage in the area.

The provision of advice in relation to drainage infrastructure is the subject of other reports however the following should be noted.

Development of the area will require stormwater retardation back to pre-developed flows and water quality treatment to meet best practice outcomes as required by Clause 56 of the City of Greater Geelong Planning Scheme.

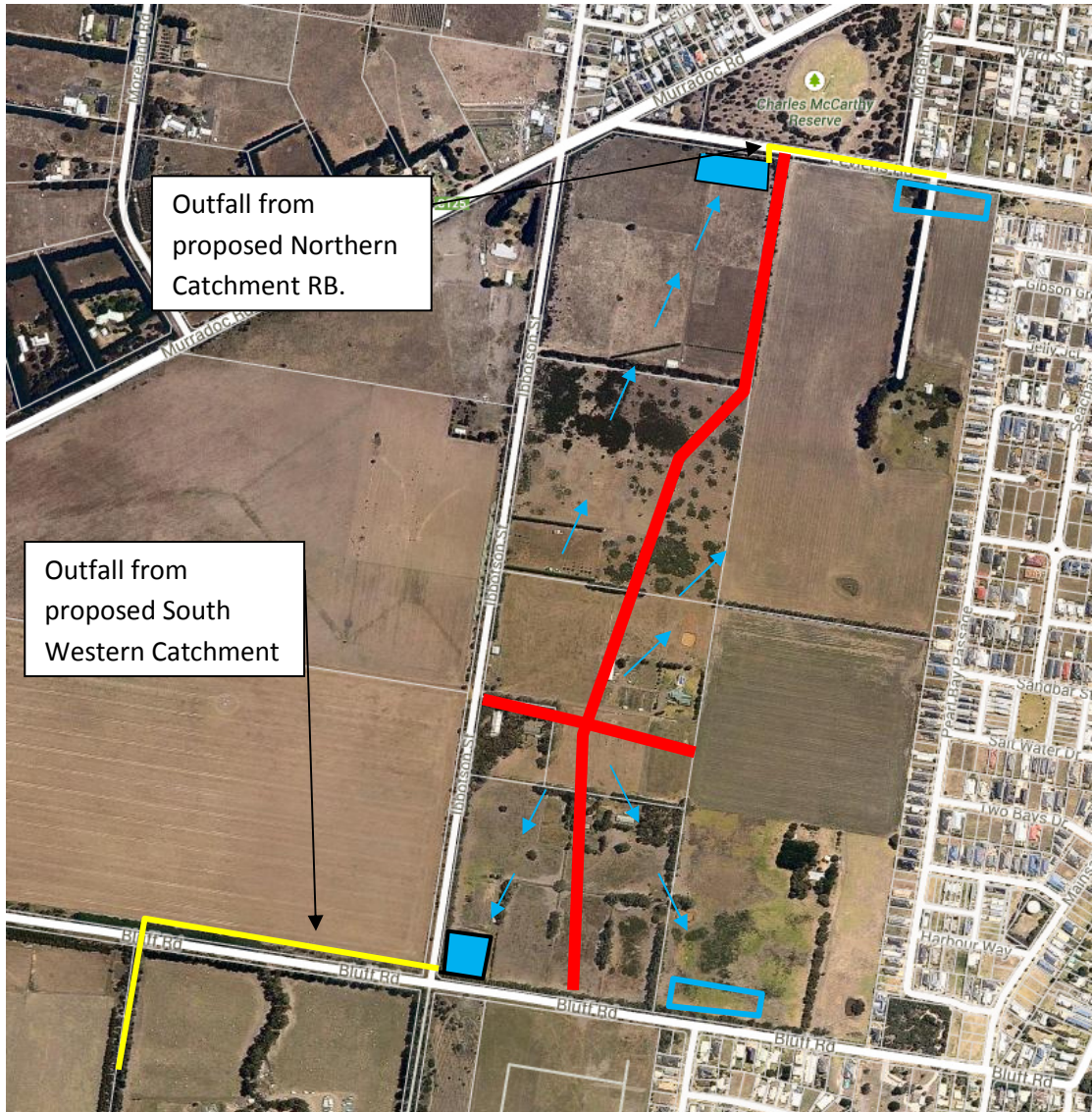
ABC Project Management have provided a Draft Report from Afflux Consulting (September 2014) for review. We note the below mentioned points following a review of the report:

- The basis of the report is sound although it appears incomplete. Water Quality Modelling and treatment concepts were not included in the report provided.
- There does not appear to be robust discussion of the outfall requirements of developed conditions from the treatment areas (i.e. pipe networks downstream of the treatment basins).

The investigation site falls into two catchments, north and south. The draft report proposes retardation basins in the north east corner and the south west corner of the investigation site along with northern and southern retarding basins within the eastern side of the growth area.

It would appear likely that downstream pipe infrastructure may be required to provide an outfall to development on the site. The report does not provide any discussion around this item.

The following diagram summarises the information in the Afflux Consulting report (September 14) that is applicable to the investigation area.



**Figure 2 – Drainage Outfall Connection (Preliminary Only)**

Ultimately the drainage strategy for the growth area will be developed over time with as part of the planning approval and urban design process.

All drainage infrastructure associated with the development of the site would be required to be provided by the developer, and be designed and constructed in accordance with City of Greater Geelong requirements and in line with the Council approved Stormwater Management Plan.

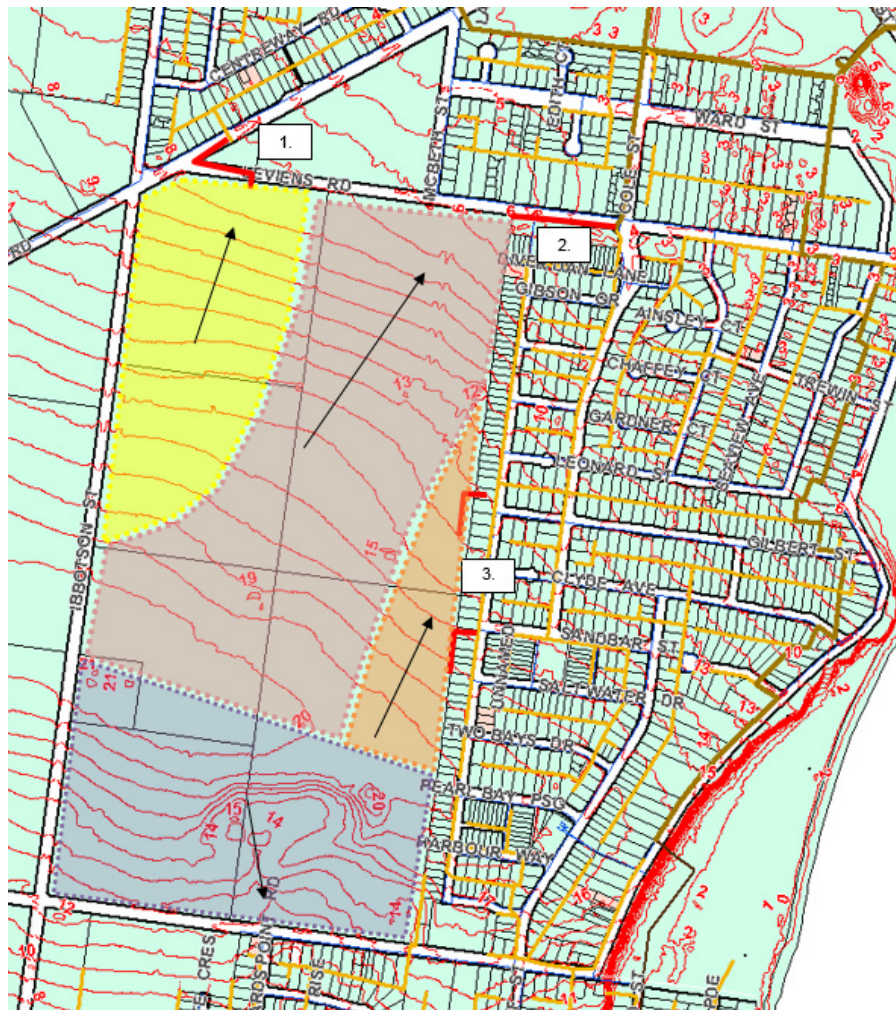
### 2.3 Sewerage Reticulation

Barwon Water is the responsible authority for sewerage reticulation in the area.

There is reticulated sewer located north of the subject site within residential properties on Ibbotson Road north of Murrodoc Road, and also south of the subject site within properties on Edwards Point Road.

Barwon Water advise that there is adequate capacity within the sewerage reticulation system to support development of the subject area.

The following diagram indicates potential sewerage outfall connections to the overall growth area.



**Figure 3 – Sewer Outfall Connections (Preliminary Only)**

All sewerage infrastructure required to facilitate development of the site is required to be provided by the developer and is to be designed and constructed in accordance with Barwon Water requirements.

### 2.4 Recycled Water Supply

There is no reticulated recycled water infrastructure available to the area.

## 2.5 Electricity Supply

Powercor is the responsible authority for electricity supply in the area.

There is an existing overhead electrical supply on the south side of Bluff Road across the frontage of the development. Overhead lines also run along the west side of Ibbotson Street from Murradoc Road.

Underground electrical infrastructure required to facilitate development of the site will be provided by the development and be required to be designed and constructed in accordance with Powercor requirements.

## 2.6 Gas Reticulation

Sp-Ausnet is the responsible authority for gas supply in this area.

Gas mains are located within Murradoc Road adjacent to Ibbotson and Levians Road and in Bluff Road adjacent to Edwards Point Road.

Extension of the gas network from these locations would be required to facilitate supply to the investigation area.

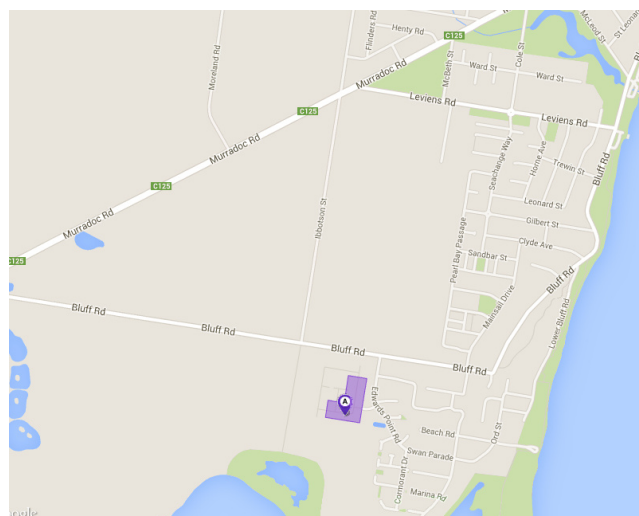
Sp-Ausnet at present supply pipe only to development with trenching being required to be provided by the developer.

## 2.7 Telecommunications

Telstra and NBN Co. are the responsible authority for telecommunications in this area.

The development is likely to qualify for fibre to the home through NBN as it will likely meet the current NBN service policy requirements of being over over 100 lots. Pit and pipe infrastructure will be required to be provided by the developer with fibre haul currently being provided free of cost by NBN Co.

Swan View Estate to the south east of the site is an existing optic fibre connected developments in the area.



**Figure 4 – Existing NBN Connected Development**

## Conclusion

Spiire has reviewed the site and reports undertaken by others. Although no formal applications for supply have been undertaken, we offer the following to advise regarding the provision of services to the site;

- Sewerage reticulation is available to the site via extensions to the existing system. There is sufficient capacity within the network to facilitate initial development of the site.
- Potable water supply is available to the site. There is sufficient capacity within the network to cater for development of the site.
- No recycled water supply (third pipe) is available.
- Electricity supply is available to the development area.
- Gas supply is available to the site.
- Telecommunications (NBN) are available to the site.
- Stormwater retardation and water quality treatment will be required to be provided as part of the development of the overall growth area. Development of the site will be required to be in accordance with the final approved site stormwater management plan.

Based on the investigations and provision of information from service authorities, we conclude that there is no service infrastructure constraints to residential development of the site.