

Security:	Public	Date:	19 March 2019	File Ref: ED1
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Subject:	Comment on Elizabeth Drive Subdivision (SSD 8859) - Elizabeth Drive, Cecil Park			

1. INTRODUCTION

The subdivision of 1111-1141 Elizabeth Drive (Elizabeth Drive Business Hub) into 14 allotments, including demolition of existing structures, clearing of vegetation, rehabilitation of riparian corridors, stormwater and civil works and road works. It is envisaged that complimentary commercial uses (subject to future DA) would include service station, hotel/motel accommodation, industrial/warehouse units, medical/child care centres, high-end office space for the aviation industry, etc. Jemena owns and operates two high pressure gas transmission pipelines which are on or near the proposed Elizabeth Drive Business Hub .Refer Figure 1 (Eastern Gas Pipeline (EGP) shown in blue, Jemena Licence 1 Trunk Pipeline is yellow).

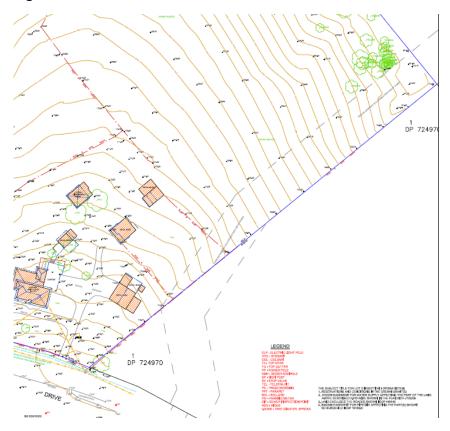
- a) EGP has a measurement length of 766m.
- b) Jemena Licence 1 Trunk Pipeline has a measurement length of 766m.

As land use changes occur around pipelines, it becomes important to manage and control development to ensure pipeline safety and minimise risk.

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Figure 1. Gas pipelines and development plan

Figure 2. Jemena EGP easement



2. AS2885.1 2018

Jemena operates its pipelines in accordance with Australian Standard 2885 Gas and liquid petroleum (AS2885) Based on part AS2885.1 2018 each pipeline segment is assigned a location class of either: T1, T2, R1 or R2. This classification is based on the land use within the 'Measurement Length' (ML). The ML is the distance from the pipeline that a full bore rupture would affect the surrounding area causing serious injuries to people and damage to property ,environment. This standard requires physical and procedural mitigation measures to be applied during design and operation. The number of physical and procedural measures required depends on the location classification and is mandatory for new pipelines. For existing pipelines, the standard requires assessment against the criteria for "no rupture" and maximum energy release rate in High Consequence Areas (HCAs).

3. RISKS ASSOCIATED WITH PIPELINES

Sensitive developments - Schools, child care centres, accommodation, town centres, places of assembly, shopping centres, administrative centres, industrial complexes, service stations.

High Consequence Area. A location along the pipeline where sensitive developments are present pipeline rupture can be expected to result in multiple fatalities or significant environmental damage.

The proposed development along the EGP and Licence 1 pipeline routes will have impacts on the safety and risk profile of the pipelines. In particular the inclusion of 'sensitive developments' within the measured length of a pipeline will result in locations along the pipeline considered as HCAs. For pipeline segments located within the HCA the risk level may be unacceptable and risk mitigation measures would be required.

4. EFFECT OF ELIZABETH DRIVE BUSINESS HUB ON JEMENA PIPELINES

The proposed development will change the Location Class along the pipeline from R2 to T2.In addition the inclusion of *sensitive developments* within the measurement length of 766m will have the development considered as a High Consequence Area.

4.1 CONSIDERATIONS FOR DEVELOPMENT WITHIN THE MEASUREMENT LENGTH

Jemena submits consenting authorities and the developer should consider the following requirements and recommendations for development within the measurement length.

- 4.1.1 Sensitive Developments within 766m of Jemena's pipeline easement boundary must undergo a Safety Management Study for the purpose of identifying, considering and addressing the implications to the pipeline as well as to the community and environment.
- 4.1.2 Jemena strongly recommends the consenting authority do not approve Sensitive Developments within 76m of Jemena's pipeline easement boundary.
- 4.1.3 Should the consenting authority approve *sensitive developments* within 76m of Jemena's pipeline easement boundary, additional protection measures such as: pipeline relocation, protective concrete slabbing of pipeline would be required. All costs associated with the additional protection measures would be borne by development proponent/third party.
- 4.1.4 All development proposed (including roads, utilities, boundary fences) within Jemena's pipeline easement will require Jemena's review and acceptance.

5. JEMENA TENURE

Jemena has a registered interest (Easement) within the allotment situated at 1111 Elizabeth Drive, Cecil Park and having the real property description as being Lot 2 Section 4 on DP 2954. Jemena will be seeking to enforce its rights to own, operate, access and undertake maintenance to the Eastern Gas Pipeline under the conditions of easement detailed in DP1016620 and as authorized under the Pipelines Act 1967.

4.2.7 Infrastructure

Under existing conditions:

- The Jemena Eastern Gas Pipeline is located in a 20 metre easement along the site's south-eastern boundary (see Appendix 6); and
- Infrastructure services are available in existing suburban residential development approximately 500 metres to the south-eastern, on the eastern side of the Westlink M7.

Further investigations into infrastructure are to be conducted as part of the subsequent EIS process. It is anticipated that investigations will identify:

- Appropriate treatment of the Eastern Gas Pipeline, be it at subdivision stage or development stage.
- Adequate measures for the delivery of critical infrastructure, such as through the extension of existing services available to the south east.

