



23 February 2018

Victorian Planning Authority
Level 25, 35 Collins Street
Melbourne VIC 3000

amendments@vap.vic.gov.au

[via email](#)

Dear Sir or Madam

RE: AMENDMENT C234 TO CARDINIA PLANNING SCHEME PAKENHAM EAST PRECINCT STRUCTURE PLAN

This submission is made in response to your email dated 22ND January 2018 titled "Exhibition of Draft Pakenham East Precinct Structure Plan", along with the linked explanatory reports and plans.

APT O&M Services Pty Ltd, (APA Networks), operating as a subsidiary of APA Group, manages and operates the gas reticulation assets on behalf of Australian Gas Networks (Vic) Pty Ltd (previously known as Envestra), and has reviewed the affect this proposal will have on the future gas reticulation development in this area.

Please note that there are two separate entities within APA managing different classes of gas assets. APA Networks, on behalf of AGN, predominantly manages the gas reticulation networks while APA Transmission manages the Declared Transmission System (DTS) gas transmission assets. Therefore, in relation to the effect on gas development and assets, it is recommended that both APA Networks and APA Transmission are consulted.

With reference to PAKENHAM EAST PRECINCT STRUCTURE PLAN – DECEMBER 2017 Plan 3 Future Urban Structure, in order to supply the area system augmentation will be required. This includes, (though is not limited to) a gas City Gate, without which the development of reticulation to this area will be compromised. Timing and delivery of the City Gate will depend on the rate of development in the precinct. For planning purposes, one suitable location is in the vicinity of the intersection of Dore Rd and Princes Highway adjacent to the APA Transmission easement. With reference to Pakenham East Background Report January 2018 section 15.5, development east of Deep Creek will require the installation of the new City Gate.

There is currently limited or no reticulation in the immediate vicinity that can be made available to service the development area. Adequate lead time will need to be provided to extend AGN's gas network assets, inclusive of gaining the appropriate third party approvals. The exact timing with which gas reticulation is extended into an area depends upon a number of factors such as the sequence of land release, estate staging and location of service entry, and other third party development activities eg road creation.

A cost contribution by developer(s) is likely to be required to service this area. This cannot be evaluated until an application for natural gas is received by us from developers.

Significant lengths of trunk (large diameter and high capacity) gas pipelines will need to be planned to supply the Pakenham East Precinct. Proposed trunk gas pipeline alignments may conflict with other existing and future infrastructure. Therefore, it is important to engage with APA Networks early to avoid complications and delays.

Gas reticulation (as distinct from trunk main) is typically situated in road reserve or pathway within a standard alignment of 2.1 to 2.6m from the property boundary, and laid common trench with water utilities. It would be preferred that vegetation (such as street trees) is minimised within this location, or selected to have non-invasive root balls, or protection provided by root barriers. APA Networks has other standard requirements such as depth of cover, access and protection over our gas assets. Please consult with APA Network to work out these details.

APA Networks has a number of responsibilities and duties to perform under a complex framework of legislation, standards and controls across Federal, State and Local Government landscapes. APA Networks is happy to work with Council and developers to achieve mutually acceptable and compliant outcomes. Any interested parties are strongly encouraged to contact APA Networks as early as possible.

Should you wish to discuss the contents of this correspondence, or have any further queries, please contact Rachael Lim on (07) 3215 6684 rachael.lim@apa.com.au or Rebecca May (03) 9463 8349 rebecca.may@apa.com.au .

Yours faithfully,



Rachael Lim
Acting Planning Manager
Nat Planning & Engineering

Melissa Allan

From: Mielczarek, Michael <Michael.Mielczarek@apa.com.au>
Sent: Tuesday, 27 February 2018 11:52 AM
To: amendments
Cc: Ben Hawkins
Subject: FW: APA VTS submission to Amendment C234 to the Cardinia Planning Scheme - Pakenham East PSP
Attachments: LO 16244 APA response to Pakenham East PSP Amendment C234 Cardina PS.pdf

Dear Sir/Madam

I just realised that our submission was sent to an incorrect email address. Please find attached our submission along with the original email below.

If you require any clarification regarding this matter please feel free to contact me and I apologise for the error.

Kind Regards,

Michael Mielczarek
Senior Urban Planner

APA Group

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From: Mielczarek, Michael
Sent: Friday, 23 February 2018 4:33 PM
To: 'amendments@vap.vic.gov.au' <amendments@vap.vic.gov.au>
Subject: APA VTS submission to Amendment C234 to the Cardinia Planning Scheme - Pakenham East PSP

Dear Sir/Madam

Please find attached APA VTS submission to Amendment C234 to the Cardinia Planning Scheme - Pakenham East PSP
Please feel free to contact me to discuss further, APA would also be happy to meet with the VPA and try to resolve our matters before Panel.

Regards,

Michael Mielczarek
Senior Urban Planner

APA Group

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23 February 2018

APA Reference: 16244
Your Reference: Amendment C234 – Pakenham East PSP

Victorian Planning Authority
Level 25,
35 Collins Street
MELBOURNE VIC 3000

EMAIL OUT: amendments@vap.vic.gov.au

Dear Sir/Madam,

RE: Amendment C234 to the Cardinia Planning Scheme – Pakenham East PSP

Thank you for your correspondence received on 22 January 2018 in relation to Amendment C234 to the Cardinia Planning Scheme – Pakenham East Precinct Structure Plan.

APA Group (APA) is Australia's largest natural gas infrastructure business and has direct management and operational control over its assets and investments. APA's gas transmission pipelines span across Australia, delivering approximately half of the nation's gas usage. APA owns and operates over 15,000 km's of high pressure gas transmission pipelines across Australia.

APA has three pipelines located through the structure plan area being the Longford – Dandenong, Bunyip – Pakenham and Pakenham - Wollert Transmission Pipelines (see table 1 for details):

Table 1: Transmission gas pipelines in the area of consideration

Pipeline	Pipeline Licence	Easement Width (m)	Diameter (mm)	Measurement Length (m)
Longford - Dandenong	PI 75 (T060)	24.4	750	700
Bunyip - Pakenham	PI 135 (T060)	24.4	750	700
Pakenham – Wollert	PL 141 (T061)	27	750	700

Note: measurement length is applied to either side of the pipeline.

APA's Role

As a Licensee under the Pipelines Act 2005 (VIC), APA is required to operate high pressure gas transmission pipelines (**HPGTP**) in a manner that minimises adverse environmental impacts and protects the public and property from health and safety risks. Once a HPGTP is in place, APA is required to constantly monitor both the pipeline easement and also a broader area within which we are required to consider land use changes and development and to assess what such changes means to the risk profile of the HPGTP.

APA has a number of responsibilities and duties to perform under a complex framework of legislation, standards and controls across Federal, State and Local Government landscapes. In particular, our

HPGTs are required to be operated in accordance with Australian Standard 2885 (Pipelines – Gas and Liquid Petroleum) (AS2885). In discharging our regulatory responsibilities, APA needs to continuously review what is happening around its assets, what land use changes are occurring and what development is taking place to ensure it remains in a position to comply with applicable operational and safety standards and legislation whilst meeting its commercial obligations and imperatives.

Pipeline Risk Profile and the Measurement Length

In managing HPGT's and considering land use changes, APA must focus on that area geographically defined by AS2885 as the Measurement Length (**ML**). The ML area is the heat radiation zone associated with a full-bore pipeline rupture. APA is mandated to consider community safety in the ML due to the high consequences of pipeline rupture to life, property and the economy.

The ML is determined by taking account a number of factors including the design criteria of the pipe (driven by the environment within which it was designed for at the time of construction) and the Maximum Allowable Operating Pressure (MAOP) of the pipe. APA must consider any changes of land uses within the ML area to determine the effect of a new use on the risk profile of the pipeline.

For reference, the ML of the all three pipelines in the structure plan area is 700 metres. Note that the ML is a radial dimension, and therefore applies to both sides of the pipe.

Sensitive Uses

APA seeks to limit sensitive uses from establishing within the ML so as to retain a high level of compliance with applicable safety standards. AS2885 defines a sensitive use as one which may increase the consequences of failure due to its use by members of the community who may be unable to protect themselves from the consequences of a pipeline failure.

To this end, APA's preferred position is that all land uses listed below be located outside of the ML:

- Aged Care Facilities.
- Retirement villages.
- Child care / family day care centres.
- Cinema based entertainment facility.
- Schools or other educational establishments.
- Prisons / corrective institutions.
- Hospitals and medical centres.
- Place of assembly or worship.
- Retail premises.
- Service station.
- Higher density residential uses – typically 30 dwellings per hectare or greater than 3 stories high.
- Other uses, as determined by the relevant decision maker, as substantially used by community members unable to protect themselves from the consequences of pipeline failure.

Easement Management

APA, is the beneficiary of 2 easements within the study area. To ensure compliance with the safety requirements of AS2885, APA needs to ensure our easement is managed to an appropriate standard. This includes:

- Ensuring the easement is maintained free of inappropriate vegetation and structures.
- Place warning signs at various mandated points along the pipeline route, including any change in property description/boundaries.
- Maintain a constant line of sight between warning signs.
- Undertake physical patrols and inspections of the easement.

APA will not accept outcomes that do not enable us to achieve our safety responsibilities to the surrounding community.

Any works within the easement must be approved by APA through our Third Party Works Authorisation process. This process will ensure all works are undertaken in a safe manner that does not physically impact on the pipeline. If you are seeking to undertake works on property containing a pipeline, or are seeking details on the physical location of the pipeline, please contact Dial Before You Dig on 1 100 or APA directly at APAProtection@apa.com.au.

Roads and services over easement

It is APA's preference that roads being constructed over pipeline easements be avoided wherever possible. The creation of roads over pipeline easements results in the following issues:

- Loss of control over easement area which has been secured through a legally enforceable easement agreements.
- Increased potential for external interference with the pipeline due other parties utilising the road reservation for infrastructure (water, sewer etc.) over or around the pipeline.
- Increased difficulty accessing the pipeline due to the need for access approval from Council or other roads authorities.
- Increased cost in accessing the pipeline due to the need to make good a road reserve.
- Loss of ability to duplicate or loop the pipeline in the future.

APA will consent, in principle (and subject to detailed assessment), to periodic road or services crossings over the easement on the basis that Council and other utility operators (as relevant) enter into an agreement with APA to maintain our existing easement rights in the area to be covered by road.

The proponent must demonstrate that the number of crossings has been minimised. Crossings are to be as perpendicular as possible to the pipeline to minimise the area of impact.

Comments

APA would like to make the following comments on the Draft Pakenham East PSP:

1. Given the outcome of the SMS conducted for the PSP and the high design quality of the APA pipelines rupture of the pipelines is deemed to be non credible and therefore for the purposes of triggering sensitive land use permits, the trigger area can reasonably be applied to the areas of highest possible consequence/risk rather than the full measurement length. Therefore APA can accept an area of 50m either side of the APA gas pipeline easements be applied and shown on plan 3 "Future Urban Structure", rather than the full Measurement Length of 700m. This area is also to be shown on the map in the schedule 5 to clause 37.07 as has been the practice in a number of recent PSP's which have included high pressure gas pipelines. This area could be labelled gas pipeline notification zone to avoid confusion with the full measurement length. The relevant referral schedules would also need to be amended to reflect a "pipeline notification zone" rather than measurement length. Please note that these comments are only relevant to the APA assets and not the Origin gas pipeline, it is therefore suggested that Origin are consulted with what their preferred "pipeline notification zone" is.
2. The intersection proposed on the APA gas pipeline easement (to the west of Dore Road) needs to be clearly relocated off the easement (either to the north or south). As outlined above APA will permit road crossings at 90 degrees but would not support an intersection/roundabout on the easement.
3. The 45 degree angled road cutting across the APA gas pipeline easement should be at a 90 degree angle. Please note that there is an increased risk of road crossings at 45 degrees and as such additional protective measures would be required e.g. side slabbing which can be expensive.
4. The parallel road running along the APA gas pipeline easement from Deep Creek is to be relocated off the gas pipeline easement.
5. The APA VTS/Origin Energy facility at Dore Road is noisy and also vents gas at times as part of the design and normal operation of the plant. Therefore any residential development directly abutting the facility needs to demonstrate to APA VTS and Origin Energy that any such development will not be impacted by the operations of the existing facility. There may be a need to identify a noise buffer surrounding the facility requiring new development to be appropriately designed with regard to noise and amenity matters. It is our understanding that a noise assessment is being carried out as part of the PSP process and the findings of any such study need to be implemented into the final PSP.
6. APA VTS requires to retain access to the Dore Road facility. At present access is provided from Dore Road. Given the location of equipment at the facility the access points need to remain as currently located. Therefore either access must be maintained from Dore Road or an alternate road access must be provided to this facility at the same entry points.
7. The design of the wetland facility to the north of the town centre is required to be designed as per the discussions with APA in January 2017 and Stormy Water Solutions.

8. G13 to be amended to include the following dot point;
 - Be located outside the pipeline notification buffer as identified on plan 3

This is a similar guideline to the one proposed in the Sunbury South PSP.

9. Include the following requirement "Other than perpendicular road crossings of the gas transmission pipeline easement no road or carriageway easements are to be created on the gas pipeline easement unless to the satisfaction of the pipeline licensee/operator.
10. Include the following requirement "Any utility infrastructure constructed adjacent to or crossing the gas transmission pipeline easement shown on Plan 3 must cross at 90 degrees and be engineered to protect the integrity of the pipeline to the satisfaction of the gas transmission pipeline owner or operator."
11. Include the following requirement "Landscaping and development adjacent to the existing gas transmission pipeline easement shown on Plans 3 and 10 must not jeopardise the integrity of the pipeline."
12. Include the following requirement "Any construction activity deeper than 300mm and within 3 metres of a gas transmission pipeline or within a gas transmission pipeline easement must be granted a permit to work by the gas transmission pipeline owner or operator."
13. An additional requirement outlining the following is to be included "The APA VTS gas transmission pipeline easement is not to be utilised by other infrastructure/utilities services, other than service crossings which are required to be approved by the gas transmission pipeline owner or operator".
14. An additional requirement outlining the following is to be included "The APA VTS gas transmission pipeline easement is not to be utilised for a carriageway easement for any adjoining developments e.g. footpaths/paper roads etc for rear loaded properties fronting the gas easement".
15. Change guideline 59 into a requirement with the following wording "Any drainage infrastructure running adjacent to or crossing a high pressure gas transmission pipeline easement as shown on Plan 3 and Plan 10 must cross the pipeline at 90 degrees and be engineered to protect the integrity of the assets to the satisfaction of the pipeline owner or operator." This is generally consistent with the recently exhibited Sunbury South PSP.
16. Change guideline 65 into a requirement with the following wording "Any utility infrastructure constructed adjacent to or crossing the gas transmission pipeline easement shown on Plan 3 and Plan 10 must cross at 90 degrees and be engineered to protect the integrity of the pipeline to the satisfaction of the gas transmission pipeline owner or operator."
17. As per previous PSP's the following guideline is to be included in the PSP with regard to the gas transmission pipelines;
 - Vegetation should not be planted within 3 metres of the existing gas transmission pipeline, as shown on Plans 3 and 10 where practical. Where vegetation is proposed to

be planted within 3 metres of the pipeline alignment, it must be shallow rooted and must not exceed 1.5 metres in height once mature. Line of sight must be maintained between high pressure gas pipeline awareness markers.

18. Guideline 53 to include the wording "...with the consent of the gas transmission pipeline owner or operator".
19. Requirement R94 requires all public open space to be finished to a standard that satisfies the requirement of the Responsible Authority which includes "Removal of all existing and disused structures, foundations, pipelines and stockpiles". If the APA gas pipeline easement is included in a linear open space reserve vested with Council as suggested in APA Comment 14 (see above) then this requirement needs to be amended to remove reference to "pipeline".
20. R39 Refers landscaping proposed within the gas easement must align with "Appendix E: Easement cross sections" however easement E refers to high voltage powerline easements only, this offers no guidance with regard to how the gas pipeline easement is to be treated. A suitable gas pipeline cross section must be developed and incorporated into the PSP with input from APA VTS. R39 also needs to refer to the gas pipeline owner/operator rather than coordinating gas authority.
21. Any cross section which refers to the APA gas pipeline needs to include the following notes "Any footpaths or cycling paths within the easement for gas pipeline are not to be encumbered with a road (R1) or carriageway easement status. Any vegetation within the easement for gas pipeline must be approved by the gas pipeline owner or operator.

Draft Controls

22. Map 1 to Schedule 5 Clause 37.07 needs to include the Gas Transmission Pipeline "pipeline notification zone" as mentioned in point 1 of this submission. This will ensure a clear point of reference is provided in the Planning Scheme and has also been the practice in a number of recent PSP's including Kororoit/Plumpton and Sunbury South PSP's.
23. Alter all references within the proposed planning scheme ordinance from measurement length to pipeline notification zone as mentioned in point 1 of this submission.
24. Amend Schedule 66.04 and 66.06 respectively so that rather than notice being given the pipeline owner/operator is given recommending referral status under "Clause 66.04". This is in line with the recommendation of the Planning Panel for the Sunbury South PSP and Plumpton/Kororoit PSP.
25. For the purpose of transparency, legibility and consistency with previous panel recommendations the proposed Urban Growth Zones is required to include a clause with the following referral requirement:

Specific provision – Referral to gas transmission pipeline operator. An application to use land or construct a building or carry out works associated with any of the following uses within the 'gas pipeline notification zone' shown on Plan 3 in the incorporated *Pakenham East Precinct Structure Plan* must be referred to the gas transmission pipeline operator in accordance with Clause 66.04:

- Accommodation (other than a dwelling)
- Child care centre
- Cinema based entertainment facility
- Corrective institution
- Education centre
- Hospital
- Place of assembly
- Retail premises
- Service station.

26. Need to include depended persons unit in the list of sensitive land uses included in Clause 66.04 required to be referred to the pipeline owner/licensee.

APA is happy to meet with Council and the VPA to discuss how the proposal PSP can be satisfactorily amended please contact us to arrange a time to meet.

APA VTS notes that an APA subsidiary company, APT O&M Services Pty Ltd (APT) may have interests in the study area. APA VTS recommends that you refer the proposal onto APT for assessment. This response in no way represents the views or interests of APT O&M Services.

Please contact the APA VTS Urban Planning team at PlanningVic@apa.com.au should you have any enquiries in relation to this correspondence.

Yours faithfully,



MICHAEL MIELCZAREK
SENIOR URBAN PLANNER
INFRASTRUCTURE PLANNING AND PROTECTION
APA GROUP