Amendment C44: Statement addressing Clause 13.02 Bushfire for Carisbrook area

January 2020





1. Summary

The purpose of amendment C31 is to update flood controls using information from the Carisbrook Flood and Drainage Management Plan (2013).

All amendments require an assessment against Planning Policy Framework for Bushfire Clause 13.02 to ensure an amendment does not result in increased bushfire risk.

Based on the below assessment, it is concluded that there is no unreasonable net increase in risk due to the removal of portions of the LSIO from land within the study boundary. The below information and case examples provide commentary on the various areas affected by the amendment.

2. The Study Area

The study area has been reviewed against the objective of the State Planning Policy for Bushfire Clause 13.02 using methods for a bushfire hazard landscape assessment set out in *Planning Permit Applications Bushfire Management Overlay Technical Guide* (DELWP, September 2017) ('the Guide'). The Guide identifies four landscape typologies to provide a framework for identifying landscape risk consistently across Victoria. Using this methodology, the entire study area can be categorised as Landscape Type 1. Figure 1 in Appendix 1 shows the entire study area with reference to the Bushfire Management Overlay and shows the location and type of vegetation within the landscape through aerial photography.

Landscape Type 1 exhibits the following characteristics:

- There is little vegetation beyond 150 metres of sites within the study area (except grasslands and low-threat vegetation), with the nearest forested areas in most cases more than 200 metres from the existing flood overlay boundaries and more than 300 metres away from the new flood overlay. There are some areas where the existing flood overlay and the new flood overlay intersect with the Havelock State Forest, however the township of Carisbrook is located well over 1000 metres away from the bushland, so the increase in fire risk is negligible.
- Extreme bushfire behaviour is not likely in the study area which consists of urban areas, well-maintained peri-urban lifestyle blocks or open paddocks used for grazing.
- The type and extent of vegetation is unlikely to result in neighbourhood-scale destruction of property as grassland fires may only impact one or two streets into the township area and the balance of the study area is low-density peri-urban development or rural agricultural land with low-threat vegetation.
- Immediate access is available to evacuate the study area or travel to a place that provides shelter from bushfire. The study area can be evacuated in all directions via local roads and state highways. Neighbourhood Safer Places also exist at Dunolly, Maryborough and Talbot.

The landscape of the study area consists of a defined valley and floodplain of the Tullaroop Creek corridor which is a tributary of the Loddon River. Carisbrook and its surrounds is generally devoid of any steeply elevated land. There is approximately 45 metres of fall from the southern (upstream) boundary of the study area to northern (downstream) boundary along a roughly 25km reach of the Tullaroop Creek.



There are several areas where the existing or proposed flood overlays intersect with denser vegetation in the northwestern and southwestern reaches of the study area, however these areas are sparse and undeveloped. Other vegetation in the study area comprises only riparian vegetation along Tullaroop Creek. All other land within the study area is open grasslands.

More specifically, the study area can be characterized as having 10 different property types which are categorised and discussed in the next section. Example maps are shown in the figures in Appendix 2. The planning scheme requirements for a dwelling have been used for the purposes of assessing the net change in risk from bushfire. It can be seen in Figure 1 that the amendments to the LSIO are generally marginal increases or decreases in the overall extent. 31 out of 267* properties are proposed to have the overlay removed entirely, with the remainder of properties having the overlay boundary amended within their property boundary.

*Note: For the purposes of this bushfire assessment, only properties with existing LSIO have been assessed. There are additional properties affected by the amendment (e.g. had no existing LSIO, will now have LSIO applied) and any amount of properties referred to in this assessment <u>should not be taken to be the total</u> <u>number of properties</u> affected by the amendment.

3. Specific Property Types

Council has reviewed property characteristics in relation to bushfire in detail via a property-byproperty assessment conducted using GIS. It was deemed too exhaustive to document each of the 267 properties within the study area in this report* and so examples have been provided below that exhibit the characteristics of each property type instead. The area for assessment can be characterized as having 10 different property types outlined below.

Example maps are shown where necessary in the figures in Appendix 2. The planning scheme requirements for a dwelling have been used for the purposes of assessing the net change in risk from bushfire (excluding properties subject to a commercial zone – these are addressed specifically where necessary). Properties have been assessed as opposed to individual parcels to ensure the full potential for development of land in single ownership has been assessed.

*Note: All accompanying GIS information for each of the 267 properties for this assessment can be made available upon request.

Category 1 – Properties subject to existing LSIO and LSIO is to be removed entirely

Category 1 properties are affected by the existing Land Subject to Inundation Overlay (LSIO) and are proposed to have the LSIO removed entirely as the flood study shows no portion of the property to be affected by the 1% Annual Exceedance Probability (AEP) flood extent.

There are thirty-one (31) properties included in this category that can be sub-categorised as follows:

Sub-category 1.1 – Properties have an existing dwelling and additional development is unlikely.

There are **eleven** (**11**) **properties** in this sub-category. Two examples are described below and exhibit typical characteristics for properties in category 1.1:

1	10 Newmarket Road,	See Figure A. Property is approximately 23,000m ² and developed
	Carisbrook	with a dwelling and outbuildings. Any second dwelling on the lot or
		subdivision would require a permit.



2	20 Church Street	See Figure B. Property is approximately 2000m ² and developed with
	Carisbrook	a dwelling. The placement of the dwelling makes an additional
		dwelling unlikely and any second dwelling on the lot or subdivision
		would require a permit.

Sub-category 1.2 – *Property is vacant but has room outside existing overlay to accommodate a dwelling as of right.*

There are **nine (9) properties** in this sub-category. Two examples are described below and exhibit typical characteristics for properties in category 1.2:

3	683 Carisbrook- Eddington Road, Carisbrook	See Figure C. Property is approximately 93.3ha. Significant land exists outside the existing LSIO where a dwelling could be constructed without the need for a planning permit (under the LSIO, other triggers may apply).
4	90 Carisbrook- Eddington Road, Carisbrook	See Figure D. Property is approximately 10.4ha and developed with a dwelling and outbuilding. Significant land exists outside the existing LSIO where a dwelling could be constructed without the need for a
		planning permit (under the LSIO, other triggers may apply).

Sub-category 1.3 – *Property is a commercial property and already developed.*

There is **one (1) property** in this sub-category described below.

5	27 Landrigan Road,	See Figure E. Property is approximately 1.2ha and is in the Industrial 1
	Carisbrook	Zone. The lot is occupied by Southern Cross Feeds and is fully
		developed with outbuildings. It is unlikely to be further developed.

Sub-category 1.4 – *Property has the potential for a new dwelling.*

There are **eight (8) properties** in this sub-category described below.

6	435 Carisbrook- Eddington Road, Carisbrook	See Figure F. Property is approximately 35.4ha and is in the Farming Zone. The Central Goldfields Planning Scheme requires a permit for the construction of a dwelling in the Farming Zone on a lot of less than 40ha. Therefore, it is considered that the removal of the LSIO from the property is not likely to increase bushfire risk as other permit triggers exist for development (<u>https://planning-</u> <u>schemes.delwp.vic.gov.au/schemes/vpps/35_07.pdf</u>).
7	479 Carisbrook- Eddington Road, Carisbrook	See Figure G. Property is approximately 33.2ha and is in the Farming Zone. The Central Goldfields Planning Scheme requires a permit for the construction of a dwelling in the Farming Zone on a lot of less than 40ha. Therefore, it is considered that the removal of the LSIO from the property is not likely to increase bushfire risk as other permit triggers exist for development.
8	567 Carisbrook- Eddington Road, Carisbrook	See Figure H. Property is approximately 45.9ha and is in the Farming Zone. The property is currently undeveloped. The Bushfire Management Overlay exists on the western portion of the site due to the adjacent Havelock Nature Conservation Reserve, indicating that the risk posed by bushfire has already been considered in applying planning controls to this site. It could therefore be considered that additional bushfire management controls are not necessary at this



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		location. In addition, the Salinity Management Overlay applies to the entire site and requires a permit for any new dwelling(s) or outbuildings over 120m ² .
9	625 Carisbrook- Eddington Road, Carisbrook	See Figure I. Property is approximately 54.6ha and is in the Farming Zone. The property is currently undeveloped. The Bushfire Management Overlay exists on the western portion of the site due to the adjacent Havelock Nature Conservation Reserve, indicating that the risk posed by bushfire has already been considered in applying planning controls to this site. It could therefore be considered that additional bushfire management controls are not necessary at this location. In addition, the Salinity Management Overlay applies to the entire site and requires a permit for any new dwelling(s) or outbuildings over 120m ² .
10	76 Bucknall Street, Carisbrook	See Figure J. Property is split into two sections across Bucknall Road and has a combined area of approximately 6.2ha. The southwestern portion of the property comprises 3 parcels and is in the Farming Zone. The Central Goldfields Planning Scheme requires a permit for the construction of a dwelling in the Farming Zone on a lot of less than 40ha. The northeastern portion comprises many small parcels and is in the General Residential Zone. Four parcels are wholly covered by the existing LSIO which is to be removed entirely, enabling new development to occur on the parcels fronting Hood Street. This property would be categorized as Landscape Type One as set out in <i>Planning Permit Applications Bushfire Management Overlay Technical</i> <i>Guide</i> (DELWP, September 2017) and would be classified as an area surrounded by low-threat vegetation. Therefore it is considered that the removal of the LSIO from this property is not likely to increase bushfire risk.
11	31 Belfast Road, Carisbrook	See Figure K. Property is approximately 10,800m ² and is in the Rural Living Zone. The Central Goldfields Planning Scheme requires a permit for the construction of a dwelling in the Rural Living Zone on a lot of less than 2ha. Therefore, it is considered that the removal of the LSIO from the property is not likely to increase bushfire risk as other permit triggers exist for development.
12	18 Garden Street, Carisbrook	See Figure L. Property is approximately 4.5ha and is in the Rural Living Zone. The proposed LSIO will be removed from the lot entirely, enabling new development to occur. This property would be categorized as Landscape Type One as set out in <i>Planning Permit</i> <i>Applications Bushfire Management Overlay Technical Guide</i> (DELWP, September 2017) and would be classified as an area surrounded by low-threat vegetation. Therefore it is considered that the removal of the LSIO from this property is not likely to increase bushfire risk.
13	47 Newmarket Road, Carisbrook	See Figure M. Property is approximately 9.3ha and is in the Farming Zone. The Central Goldfields Planning Scheme requires a permit for the construction of a dwelling in the Farming Zone on a lot of less than 40ha. Therefore, it is considered that the removal of the LSIO from the property is not likely to increase bushfire risk as other permit triggers exist for development.



Sub-category 1.5 – Property is in a non-residential zone (i.e. industrial zone).

There are two (2) properties in this sub-category described below.

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14	2 Camp Street,	See Figure N. Property is approximately 2.3ha and is the Carisbrook
	Carisbrook	Primary School. Most of the property is in the Public Use Zone-
		Education, however a southeastern section is in the Industrial 1
		Zone. Use and development does not require a permit under the
		provisions of the zone provide the use or development is consistent
		with the purpose of that zone (i.e. education). Any additional
		development in the Industrial 1 Zone is likely to require a permit
		under the provisions of the Industrial 1 Zone. It is therefore
		considered that the removal of the LSIO will not likely to increase
		bushfire risk unreasonably.
15	35 Landrigan Road,	See Figure O. Property is approximately 1.2ha and is in the Industrial
	Carisbrook	1 Zone. The property appears to be used for industrial storage,
		however it could be further developed without a permit in future.
		This property would be categorized as Landscape Type One as set
		out in Planning Permit Applications Bushfire Management Overlay
		<i>Technical Guide</i> (DELWP, September 2017) and would be classified as
		an area surrounded by low-threat vegetation. Therefore it is
		considered that the removal of the LSIO from this property is not
		likely to increase bushfire risk.

Category 2 – Properties where the area affected by the LSIO is being <u>reduced</u>.

Category 2 properties are affected by the existing Land Subject to Inundation Overlay (LSIO) and are proposed to have the LSIO reduced to reflect the up to date 1% AEP flood extent as determined by the flood study.

There are **ninety-two (92) properties** included in this category that can be sub-categorised as follows:

Sub-category 2.1 – Properties already developed with a dwelling and additional development is unlikely.

There are **thirty-one (31) properties** in this sub-category. Two examples are described below and exhibit typical characteristics for properties in category 2.1:

16	190 Mullins Road, Eddington	See Figure P. Property is approximately 4.2ha and developed with a dwelling and outbuilding. Additional development or subdivision is likely to require a permit.
17	24 Church Street Carisbrook	See Figure Q. Property is approximately 5,400m ² and developed with multiples buildings. Additional development is likely to require a permit.

Sub-category 2.2 – Properties with existing development or with room to develop outside the existing LSIO.

There are **thirty-four (34) properties** in this sub-category. One example of such a property is shown below. As can be seen in Figure R, significant land exists outside the existing LSIO where a dwelling could be constructed without the need for a planning permit (under the LSIO, other triggers may



apply). The remaining thirty-three properties exhibit similar characteristics or have substantially more land outside the existing LSIO for new development.

18	747 Rodborough	See Figure R. Property is approximately 126ha. Significant land exists
	Road, Moolort	outside of the existing LSIO.

Sub-category 2.3 – Properties where the LSIO is proposed to be reduced and the potential for a new dwelling is likely.

There are **twenty-seven (27) properties** in this sub-category. Six properties which exhibit characteristics typical of sub-category 2.3 are described below.

10	002 Carichrook	Coo Figure C. Dreporty is approximately 152bs and is in the Family
19	992 Carisbrook- Eddington Road, Eddington	See Figure S. Property is approximately 152ha and is in the Farming Zone. There is one parcel of approximately 6ha in the southeastern segment of the property that is wholly covered by the existing LSIO and the proposed LSIO will be reduced significantly, enabling new development to occur. The Central Goldfields Planning Scheme requires a permit for the construction of a dwelling in the Farming Zone on a lot of less than 40ha. Therefore, it is considered that the removal of the LSIO from the property is not likely to increase bushfire risk as other permit triggers exist for development. Four more properties in sub-category 2.3 exhibit similar characteristics.
20	Tullaroop Creek Water Frontage, Mullins Road, Eddington	See Figure T. Property is approximately 4ha and is in the Farming Zone. The proposed LSIO will be reduced, however the lot is unlikely to be developed as it is a dedicated water frontage area. One more property in sub-category 2.3 exhibits similar characteristics.
21	25 Hood Street, Carisbrook	See Figure U. Property is approximately 3,100m ² and is in the General Residential Zone. The proposed LSIO will be reduced significantly, enabling new development to occur. This lot would be characterized as Landscape Type One as set out in <i>Planning Permit</i> <i>Applications Bushfire Management Overlay Technical Guide</i> (DELWP, September 2017) and would be classified as an area surrounded by low-threat vegetation. Therefore, it is considered that the removal of the LSIO from a portion of this lot is not likely to unreasonably increase bushfire risk. Four more properties in sub-category 2.3 exhibit similar characteristics
22	400 Carisbrook- Eddington Road, Carisbrook	See Figure V. Property is approximately 86ha and is in the Farming Zone. The northern parcel has a dwelling and multiple outbuildings, however the southern parcel of approximately 45.5ha is undeveloped, so reducing the LSIO could enable further development. This lot would be classified as Landscape Type One as set out in <i>Planning Permit Applications Bushfire Management</i> <i>Overlay Technical Guide</i> (DELWP, September 2017) and would be classified as an area surrounded by low-threat vegetation. Therefore, it is considered that the removal of the LSIO from a portion of this lot is not likely to unreasonably increase bushfire risk. One more property in sub-category 2.3 exhibits similar characteristics.



23	52 Victoria Street, Carisbrook	See Figure W. Property comprises four parcels and is approximately 2.7ha. It is in the Rural Living Zone. The Central Goldfields Planning Scheme requires a permit for the construction of a dwelling in the Rural Living Zone on a lot of less than 2ha – which is the case for all parcels in question. Therefore, it is considered that the removal of
		the LSIO from the property is not likely to increase bushfire risk as other permit triggers exist for development. Eight more properties in sub-category 2.3 exhibit similar characteristics.
24	36 Landrigan Road, Carisbrook	See Figure X. Property is approximately 11.5ha and is mostly in the Rural Living Zone, with a small southeastern section in the General Residential Zone. The reducing LSIO could enable further development. This lot would be classified as Landscape Type One as set out in <i>Planning Permit Applications Bushfire Management</i> <i>Overlay Technical Guide</i> (DELWP, September 2017) and would be classified as an area surrounded by low-threat vegetation. Therefore, it is considered that the removal of the LSIO from a portion of this lot is not likely to unreasonably increase bushfire risk. Three more properties in sub-category 2.3 exhibit similar characteristics.

Category 3 – Properties where the area affected by the LSIO is being increased.

Category 3 properties are affected by the existing Land Subject to Inundation Overlay (LSIO) and are proposed to have the LSIO increased to reflect the up to date 1% AEP flood extent as determined by the flood study.

There are sixty-three (63) properties included in this category.

As the overlay is being increased, these parcels affected by the amendment are unlikely to result in an increase in bushfire risk. No maps have been included for this category.

Category 4 – Properties where there is minimal (or no) change in risk caused by the amendment.

Category 4 properties are those affected by the existing Land Subject to Inundation Overlay (LSIO) and are proposed to remain in the LSIO or where the changes to the boundary of the LSIO will not result in a material increase in bushfire risk. These properties also include Crown Land and public land and therefore where no increase in risk is expected. An example of one of these properties is at 243 Baringhup Road, Carisbrook, and is shown in Figure Y. Figure Y shows the marginal changes to the LSIO boundary and is typical of the properties in Category 4.

There are **eighty-one (81) properties** included in this category.

4. Conclusions

The assessment in Section 3 above provided a more detailed look at property characteristics via a property-by-property assessment conducted using GIS. It was deemed too exhaustive to document each of the 267 properties within the study area and so examples were provided that exhibited the characteristics of each property type instead. Based on this assessment, it is concluded that there is no unreasonable net increase in bushfire risk due to the removal of LSIO from land within the study boundary.



Appendix 1: Figure 1



TIGISData/FLOODPLAIN/CENTRAL GOLDFIELDS/DUNOLLY/DUNOLLY PLANNING SCHEME AMENDMENT 2019/CMA DATA/Dunoly_Bashfre_Assessment.mxd



Appendix 2: Figures A to P Figure A





Figure B



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Figure C



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Figure D



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Figure E



TIGISData/FLOODPLAINCENTRAL GOLDFIELDS/DUNOLLY/DUNOLLY PLANNING SCHEME AMENDMENT 2019/CMA DATA/Dunolly_Bushtire_Assessment.mkd



Figure F



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Figure G



TIGISData/FLOODPLAINCENTRAL GOLDFIELDS/DUNOLLY/DUNOLLY PLANNING SCHEME AMENDMENT 2019/CMA DATA/Dunolly_Bushtire_Assessment.mkd



Figure H



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Figure I









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Figure K



TIGISData/FLOODPLAINCENTRAL GOLDFIELDS/DUNOLLY/DUNOLLY PLANNING SCHEME AMENDMENT 2019/CMA DATA/Dunolly_Bushtire_Assessment.mkd



Figure L



TSGISData/FLOODPLAIN/CENTRAL GOLDFIELDSIDUNOLLY/DUNOLLY PLANNING SCHEME AMENDMENT 2019/CMA DATA/Dunolly_Bushfire_Assessment.mkd



Figure M



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Figure N



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Figure O



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Figure P





Figure Q



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Figure R



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Figure T



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Figure U



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Figure W



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