



# ABERLINE TO HORNE GROWTH CORRIDOR LANDSCAPE STRATEGY

WARRNAMBOOL CITY COUNCIL  
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DRAFT

## Inspiring people and places



The *Aberline to Home Growth Corridor Landscape Strategy* was commissioned by Warrnambool City Council and was prepared by Spiire Australia, Level 4, 469 La Trobe Street PO Box 16084 Melbourne Victoria 8007

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# 01 INTRODUCTION

The City of Warrnambool is the major regional centre within south-western Victoria. It is located approximately 330km south west of Melbourne. In 2013, Warrnambool City Council (WCC) prepared a housing strategy to guide population growth within the City of Warrnambool to the year 2031. Warrnambool City is forecast to grow at 1.4% per annum over the next 16 years. By 2031, the City is expected to be home to over 44,000 people. Based on forecast growth and household sizes, approximately 225 new dwellings need to be constructed per year to meet demand. Most of these dwellings are projected to be constructed within growth areas. The Aberline to Horne Growth Corridor has been identified by Warrnambool City Council as a preferred area to accommodate residential growth.

## SCOPE OF THE REPORT

Spiire was engaged in April 2018 by WCC to develop a landscape strategy for the Aberline to Horne Growth Corridor to inform the development of a Precinct Structure Plan for the area. The Strategy provides guidance for appropriate development that protects and reinforces scenic amenity, natural values and landscape character within the precinct including:

- ▶ Identification of areas of environmental and landscape significance recommended for conservation
- ▶ Identification of key views and vistas and options to retain them for community appreciation
- ▶ Identification of special landscape features and options to retain them for community appreciation
- ▶ Identification of existing vegetation recommended for retention
- ▶ Siting of recommended walking and cycling corridors and open spaces within the precinct
- ▶ Recommended interface where future development will adjoin Tozer Reserve and Russell Creek
- ▶ Assessment of views to/from the existing urban/suburban interface along Aberline Road, Boiling Down Road and Gateway Rd
- ▶ Assessment of views to/from the rural/urban interface along Wangoom Road and the precinct boundary east of Horne Road

## PURPOSE OF THE REPORT

The purpose of this report is to provide expert landscape advice suitable for incorporation into the Precinct Structure Plan for Aberline to Horne Growth Corridor and for the consideration of WCC as apart of the precinct structure planning process.

The report builds upon the advice given in the *Aberline to Horne Growth Corridor Landscape and Viewshed Assessment*, 2018 that was prepared by Spiire Pty Ltd for WCC. Together the two reports provide context and advice to assist in ensuring that the Aberline to Horne Growth Corridors' unique visual and landscape amenity is protected from incompatible land uses. This is in response to recommendations for further study as set out in the Warrnambool City Council's *Long term Growth Area Background Report*, 2016. The findings will promote a unified approach to landscape planning, design and management effectively linking recommendations for landscape character and visual amenity to existing planning policies, and influencing future planning policy and subsequent development.

## THE STUDY AREA

The Study Area is the area identified by the WCC as the Aberline to Horne Growth Corridor for the purposes of this report (Fig 1). The Study Area is located between Wangoom Road to the north, Dales Road to the south, Aberline Road to the west, and Horne Road to the east. The growth corridor covers approximately 360 hectares of land. The northern boundary of the growth corridor abuts the municipal boundary of Moyne Shire. The corridor is positioned centrally to other key development sites identified in the Warrnambool Planning Scheme, being the Eastern Activity Precinct and the Horne Road Industrial Precinct. It is situated approximately 4km to the east of the centre of Warrnambool and is bordered by residential, farming and industrial land.

In order to provide holistic advice, areas outside the study area were considered as a part of the investigation including:

- ▶ existing recreational facilities; active open spaces and play spaces that may help service the proposed future growth area
- ▶ existing and proposed future pedestrian and cycling networks that the growth area will need to integrate with
- ▶ existing and proposed future nearby destinations including schools, universities and shopping and/or activity centres.



Figure 1. Location plan

# 02 LANDSCAPE VISION

The landscape vision for the Aberline to Horne Growth Corridor is one of a new community with a sense of place defined by an iconic central open space. The precinct will be organised around the open spaces, with Russell Creek forming the primary spine, and Tozer Reserve the secondary spine. Tozer Reserve will be retained as a place for conservation and education. It's bio-link value will be enhanced by the addition of the substantial open space strung along Russell Creek. Four distinct neighbourhoods will be formed, with the new open spaces and the topography giving each a unique feel. The strong network of open spaces will be accessible to all residents via a network of shared user paths.

The open spaces will be located where they maximise the opportunity for shared views across them, so that the presence of a 'leafy' neighbourhood is felt from as many vantage points as possible. Main residential 'connector' roads will be orientated perpendicular to Russell Creek where possible to allow shared views down the valley, to the open space. Existing vegetation that provides significant landscape amenity will be retained within open spaces, schools and road reserves so that it continues to provide amenity and contribute to a positive neighbourhood character while the precinct establishes.



Figure 2. Four distinct neighbourhoods each with a unique feel informed by the topography and the new open space network.

# 03 PROPOSED OPEN SPACE NETWORK

The following sections explain the proposed open space network for the Aberline to Horne Growth Corridor. The plan on the following page (fig. 3) illustrates the proposal.

## 3.1 RUSSELL CREEK

The amenity and environmental health of Russell Creek will be enhanced by flattening and widening the creek bed, revegetation with native species and provision of rocks and logs to increase habitat. The 'Russell Creek Linear Reserve' will be a minimum of forty metres wide as recommended in the *Flora and Fauna Assessment: Aberline to Horne Growth Corridor*, 2018. Shared user paths will be located along each side of the creek and regular pedestrian and cyclist crossings will be provided to maximise connectivity. Where possible shared user paths should be located in proximity to interface roads for passive surveillance. Vehicular crossings of the creek will be avoided to ensure the continuity of the open space isn't interrupted and views aren't obscured. A local level play space is proposed to be located within a widened section of the corridor, rather than adding an additional local park.

## 3.2 TOZER RESERVE

Tozer Reserve is retained as a place for conservation and education. It's environmental value will be enhanced by the addition of open space strung along Russell Creek, which will form a substantial biolink (refer *Flora and Fauna Assessment: Aberline to Horne Growth Corridor*, 2018). The interface roads along the west and east will be hard edges to aid weed control within Tozer Reserve. Planted vegetation within these 'control lines' should be consistent with the values and ambitions of Tozer Reserve.

Shared paths running the length of Tozer Reserve, in the interface road reserve, will allow Tozer Reserve to function as a linear corridor and contribute to the recreational value of the precinct. One point of access through the reserve, for pedestrians and cyclists, is provided at a location that would necessitate the minimum amount of vegetation removal. The connection will be an important link between otherwise segregated neighbourhoods. Two local level parks/ play spaces are sited next to Tozer Reserve with the intention that the facilities complement each other.

## 3.3 DISTRICT ACTIVE & PASSIVE OPEN SPACES

The district active and passive open spaces are located to:

- ▶ build upon the open space network established by Russell Creek and wetlands/ retardation basins 1,2,3 and 5

- ▶ maximise shared views over the 'green' space and contribute to a positive precinct character
- ▶ be located south of Russell Creek to maximise vehicular accessibility from all four neighbourhoods within the precinct and from the established communities to the west and south
- ▶ be reasonably centrally located within the precinct to maximise pedestrian and cyclist accessibility for all residents
- ▶ be readily accessible via the existing Russell Creek Walking Path
- ▶ potentially contribute to the flood water storage area.

The Active Open Space Reserve (AOS) provided is approximately 8,000m<sup>2</sup> and located on the flattest ground adjacent to Russell Creek. The grade is approximately 1:50. Vehicle access is available at the east and west end of the reserve. Two football ovals are indicatively shown where they can likely be graded effectively without impacting the nearby cypress windrows.

The district level passive open space reserve is sited immediately south of the AOS so that the two together form a distinct destination. The reserve is sited on the edge of a ridge-line; from where residents are likely to have substantial views to the north over the reserve, the AOS, Russell Creek and to the next ridge-line to the north (Wangoom Road). The Reserve is on the side of a relatively steep slope towards Russell Creek which will add interest to the park and maximise shared views over the 'green' space from the other side of the creek. Large existing Cypress windrows can be retained within the reserve to provide substantial amenity and contribute to character.

The district level passive open space reserve will include a district level play space. The play space will leverage the amenity of the reserve and, be a 'destination' play space, which will service an indicative catchment of 4km. A district level play space is justified in this location given the absence of one in the new communities to the east and south of the precinct. A district level play space would generally cater to children aged 2-12 and provide opportunities for children of all abilities. Natural play would typically be included. A fair construction budget for a district level play space is approximately \$350,000-\$500,000 (2018 prices/ subject to CPI). A district level play space would typically be accompanied by a shelter and picnic facilities including barbecues and a drinking fountain. It might also include an multi-purpose sports court at WCC's discretion.

## 3.4 INTERFACE ROADS

All open spaces to have 'active' edges i.e. adjacent buildings facing them (rather than rear fences). This can be achieved by either surrounding open spaces with a road edge or, in the case of medium density, with rear-loaded vehicle access and pedestrian access to the front via the park. The active frontages will maximise passive surveillance, increase the feeling of safety and help deter anti-social activity.

The main interface roads that flank the open space corridors of Tozer Reserve, Russell Creek and surrounds will also function as neighbourhood defining boulevards. They will be sized to accommodate large tree species and may include shared user paths.

## 3.5 LOCAL LEVEL PARKS

Local parks will ensure residents have open and play spaces within a short walk from their home. Where possible local parks will be located on shared user path routes to increase their accessibility and on elevated land to facilitate views.

Local parks should be at least one hectare in size to provide a reasonable level of amenity. Given their limited size, controls to prevent overshadowing of local parks should be established. Parks and their associated play spaces are to be located away from incompatible land uses such as industrial land, service utilities, arterial roads and possible future truck routes including Aberline Road, Boiling Down Road, Horne Road and Wangoom Road (refer *Warmambool Industrial Land Use Review*, 2010).

All local parks will include paths, trees, seating and play spaces with a variety of play opportunities. Typically, barbecues, shelters and sports courts may be provided at WCC's discretion. A fair construction budget for a local level play space is approximately \$80,000-\$120,000 (2018 prices/ subject to CPI). Play opportunities should generally be focused on younger children, typically 3-7 year olds. Residents would be expected to use a local level play space for 30-90 minutes per visit.

Where a park is adjacent to a drainage reserve (i.e. wetland/ retardation basin 4) the two reserves will be designed holistically to achieve an integrated, high amenity outcome.



### LEGEND

- Vegetation recommended to be retained
  - Proposed Off-road shared path
  - Proposed On road bicycle lanes
  - Proposed district level play space
  - Proposed local level play space
  - Possible future long views to open space facilitated by new roads
  - Proposed Russell Creek Linear Reserve
  - Proposed Public park
  - Proposed Active Open Space (AOS) Reserve
  - Proposed Drainage Reserve
  - Proposed Tozer Linear Conservation Reserve
  - Proposed interface road
  - Other land within the precinct; residential, education etc
  - Existing water treatment ponds
- 
- 1** Proposed AOS Reserve sized 8,000m2 & indicative location for football/ cricket ovals
  - 2** Proposed district level passive open space/ park with destination play space
  - 3** Proposed widened Russell Creek Linear Reserve
  - 4** Proposed local level park with play space adjoining Conservation Reserve
  - 5** Proposed local level park with play space adjoining Drainage Reserve
  - 6** Proposed local level park with play space
  - 7** Proposed wetland/ retardation basin 1, refer *Stormwater Management Report*, 2018
  - 8** Proposed wetland/ retardation basin 2, refer *Stormwater Management Report*, 2018
  - 9** Proposed wetland/ retardation basin 3, refer *Stormwater Management Report*, 2018
  - 10** Proposed wetland/ retardation basin 4, refer *Stormwater Management Report*, 2018
  - 11** Proposed wetland/ retardation basin 5, refer *Stormwater Management Report*, 2018
  - 12** Proposed shared user trail connection to the Russell Creek Walking Trail, Warrnambool College and Albert Park
  - 13** Proposed shared path crossing Aberline Road at Whites Road
  - 14** Proposed future pedestrian and cyclist connection to Gateway Plaza shopping precinct and Our Lady Help of Christians Primary School
  - 15** Proposed future pedestrian and cyclist connection to Deakin University and Hopkins River frontage
  - 16** Proposed future extension of the Russell Creek corridor and shared user trail (refer Warrnambool Open Space Strategy, 2014) and possible future link to Deakin University via disused railway corridor (refer Warrnambool Industrial Land Use Review, 2010).
  - 17** Proposed shared path to connect residents recreation amenities
  - 18** Proposed shared path route through Tozer Linear Conservation Reserve
  - 19** Proposed future pedestrian and cyclist connection to King's College
  - 20** Retain existing Cypress windrows as a part of passive and active open spaces
  - 21** Retain existing native trees in future road reserve
  - 22** Retain existing vegetative buffer that is screening water treatment ponds
  - 23** Retain existing native trees by incorporating into proposed schools or other community facilities

Figure 3. Proposed open space and shared path network



# 04 PROPOSED OPEN SPACE COVERAGE



Figure 4. Service area of proposed play spaces (400m radius)

## 4.1 PLAY SPACE COVERAGE

A conventional target for play space coverage is that 95% of residents are within 400m safe walking distance from a park and play space.

The proposed open space network achieves 94% coverage as illustrated above.



Figure 5. Service area of Active Open Space Reserve (1,000m radius)

## 4.2 ACTIVE OPEN SPACE COVERAGE

A conventional target for Active Open Space coverage is that 95% of residents are within 1000m safe walking distance from the AOS.

The proposed open space network achieves 74% coverage as illustrated above. While the coverage is less than ideal, the proposed location is still preferred for the reasons given in section 3.3.



Figure 6. Service area of Russell Creek and Tozer Reserve linear corridors (1,000m)

## 4.3 OPEN SPACE CORRIDOR COVERAGE

A conventional target for linear parks and trails is that 95% of residents are within 1000m safe walking distance from the corridor.

The proposed open space network achieves 97.5% coverage as illustrated above.

# 05 VIEW ANALYSIS



## LEGEND

-  Substantial existing view, challenging to retain in a built-up condition.
-  Substantial existing view, options to retain, to some extent, in a built-up condition.
-  Possible substantial view from elevated area, further investigation required.
- 1** View to south-east when approaching Russell Creek (southbound) from Aberline Road.
- 2** View east from Horne Road of Russell Creek downstream, refer Fig 8.
- 3** Views from Boiling Down Road (near corner of Aberline Road) to the north, refer Fig 12.
- 4** Views from Boiling Down Road to the north, refer Fig 14.
- 5** View when approaching Russell Creek (northbound) from Horne Road, refer Fig 16.
- 6** View west from Horne Road of Russell Creek downstream, refer Fig 16.
- 7** View to south-west when approaching Russell Creek (southbound) from Horne Road.
- 8** View from Wangoom Road to across farmland to south, refer Fig 18.
- 9** View from Wangoom Road to across farmland to south-east.
- 10** View from Wangoom Road to across farmland to south-east, refer Fig 19.
- 11** View from Tozer Reserve to the west and south, refer Fig 20.
- 12** View from Tozer Reserve to the south-east, refer Fig 21.
- 13** View upstream along Russell Creek from Tozer Reserve, refer Fig 23.
- 14** Potential substantial view to south from gentle mound (currently obscured by vegetation).
- 15** Potential substantial views to south-west, south and south east from ridge-line (currently inaccessible).

Figure 7. Significant existing views

## 5.3 EXISTING VIEW ANALYSIS

### 1 ABERLINE ROAD

Views from Aberline Road to existing urban interface to the west are constrained by housing. Aberline Road is generally not elevated enough to permit longer views above house roof lines. The small open space at the intersection of Aberline Road and Russell Creek, permits a medium length view across the reserve which could be considerably improved by the planting of scattered trees.

Views from Aberline Road to the east are medium length views across farmland. Views near the intersection of Russell Creek are punctuated by the features of the creek upstream and the slopes of the adjacent farmland. Limiting the earthworks associated with the proposed drainage infrastructure upstream will help retain views. The embankment wall proposed as a flood water storage option in the *Stormwater Management Report*, 2018 would likely obscure the view.

### 2 GATEWAY ROAD

Views from Gateway Road to existing urban interface to the west are constrained by housing. Long views to the south to the Verdon Street tower are facilitated by Gateway Road.

Views from Gateway Road to the existing farmland to the east are medium length. Longer views are impeded by the water treatment ponds but the topography is generally too flat to allow long views.



Figure 8. Views from Aberline Road across the open space surrounding Russell Creek downstream to the existing urban area to the west.



Figure 9. Views from Aberline Road across Russell Creek to the existing farmland to the east.



Figure 10. Views from Gateway Road to existing urban condition to the west and south.



Figure 11. Views from Gateway Road to across existing farmland to the west.

### 3 BOILING DOWN ROAD

Boiling Down Road is generally elevated enough to permit long views across the farmland to the north. There are views to the other side of Russell Creek and further to the ridge-line near Wangoom Road. The land immediately adjacent Boiling Down Road is fairly flat, which means that the long views will be difficult to maintain with the introduction of buildings and fences. Roads in the north/ south orientation may facilitate long views once the area is built-up.



Figure 12. Views from Boiling Down Road (near the corner of Aberline Road) across farmland to the north and north-east



Figure 13. Views from Boiling Down Road (near the corner of Gateway Road) across farmland to the north



Figure 14. Views from Boiling Down Road across farmland to the north

### 4 ROGERS ROAD

The topography in the vicinity of Rogers Road is generally flat. Medium length views of farmland are dominant.



Figure 15. View from Rogers Road across farmland to the north-west

## 5 HORNE ROAD

Views from Horne Road to the west are medium-long length views across farmland. Views near the intersection of Russell Creek are long and are punctuated by the features of the creek, the slopes of the adjacent farmland and stands of vegetation. Views to the slopes on the opposite side of creek are strong from both the north and south approach to the creek crossing.

Views from Horne Road to the existing farmland to the east are medium length. Longer views are impeded by a gentle ridge-line that exists near the precinct boundary. Limiting earthworks (fill) between Horne Road and the precinct boundary to the east could minimise the visual impact of the development on the adjacent farmland, with the ridge-line serving as a natural screen.

## 6 WANGOOM ROAD

Wangoom Road rests on a natural ridgeline. The land falls away steadily to the south, permitting good long views across the Growth Corridor, including the slopes on the opposite side of Russell Creek and beyond. These views will be challenging to maintain in a new built-up condition, the effectiveness of the following should be investigated and controls put in place accordingly:

- ▶ Limiting earthworks (fill) immediately south of Wangoom Road
- ▶ Lower density housing fronting Wangoom Road (between Tozer Reserve and Aberline Road), with setbacks for building envelopes

New roads in the north/ south orientation may facilitate long views once the area is built-up, especially to the proposed new district passive and active open space reserve on the opposite side of Russell Creek.

Views from Wangoom Road to existing farmland to the north (Moyne Shiire) are constrained by the flat topography, the wide unused road reserve and substantial planting.



Figure 16. View when approaching the Russell Creek crossing (northbound) and views across the creek and existing farmland west of Horne Road



Figure 17. Views from Horne Road across existing farmland to the east.



Figure 18. Views from Wangoom Road (immediately west of Tozer Reserve) to the south across existing farmland.



Figure 19. Views from Wangoom Road (near the corner of Aberline Road) to the south-east across existing farmland.

## 7 TOZER RESERVE

There are some substantial views from the perimeter of Tozer Reserve across existing farmland. From the western perimeter there are long views across existing farmland to the south-west and to existing built-up area to the west. There are also good medium length views from the western and eastern perimeter to the south-west and south-east respectively as pictured in Figures 21 and 22.



Figure 20. View from the west side of Tozer Reserve across existing farmland to the south-west and to existing built-up area to the west.



Figure 21. View from the west side of Tozer Reserve across farmland to the south-west.



Figure 22. View from the east side of Tozer Reserve across farmland to the south-east.

## 8 RUSSELL CREEK

From the southern perimeter of Tozer Reserve there are good medium views upstream along the Russell Creek until they are interrupted by the Horne Road crossing. Views downstream are obscured by vegetation but are likely to also be good medium views up until the intersection with Aberline Road. Avoiding vehicular crossings of the creek between Aberline and Horne Road will help maintain views.



Figure 23. Views of Russell Creek, downstream and upstream, from Tozer Reserve.

# 06 DRAINAGE RESERVES

With all drainage reserves abutting passive and active open space reserves, shaping of the wetland/retardation basins needs to ensure high amenity. The size of the reserves shown in the *Stormwater Management Report, 2018* may need to be increased slightly to ensure the amenity of the adjacent open spaces isn't negatively impacted.

## Recommendations:

- ▶ For the wetlands/retardations basins 1,2,3 and 5, utilise the existing slope towards Russell Creek
- ▶ Limit the grade of all exposed batters to a maximum of 1:6 so they don't look obviously unnatural and to encourage good plant coverage
- ▶ Where possible include islands, peninsulas or a series of water bodies that can be planted to achieve a more natural look
- ▶ Use a combination of cut and fill to achieve a more natural look
- ▶ Limit the amount of fill in any one location to minimise the likelihood of views being blocked.

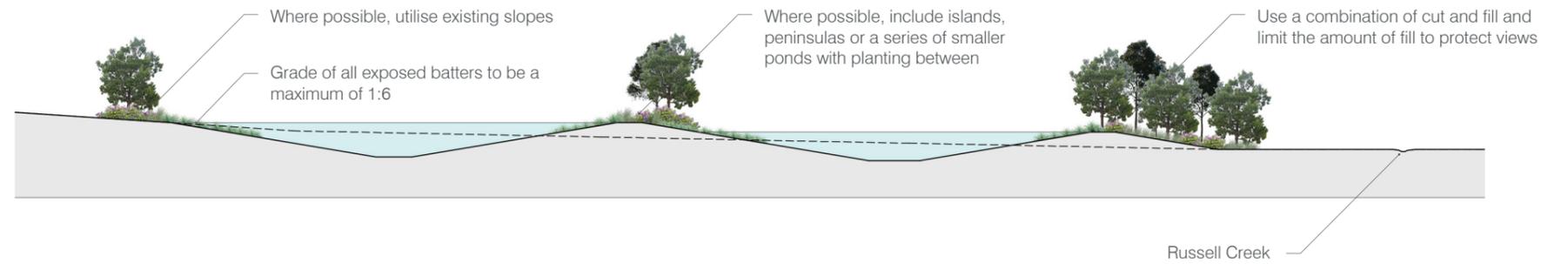


Figure 24. Recommended shaping of wetlands/retardation basins for improved amenity

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