



City of Nedlands

# Technical Services Reports


Committee Consideration – 14 June 2016

Council Resolution – 28 June 2016

## Table of Contents

Item No.		Page No.
<b>TS08.16</b>	Sayer Street Road Closure .....	1
<b>TS09.16</b>	Removal and Replacement of Street Trees Adjacent to 27 Leon Road, Dalkeith.....	9
<b>TS10.16</b>	Aberdare Road, Railway Road, Shenton Park Busway Black Spot Project (City of Subiaco) .....	14

<b>TS08.16</b>	<b>Sayer Street Road Closure</b>
----------------	----------------------------------

<b>Committee</b>	14 June 2016
<b>Council</b>	28 June 2016
<b>Applicant</b>	City of Nedlands
<b>Officer</b>	Jacqueline Scott
<b>Director</b>	Mark Goodlet - Director Technical Services
<b>Director Signature</b>	
<b>File Reference</b>	TS-034330
<b>Previous Item</b>	22 September 2015: item 13.3 and 28 July 2015 Ordinary Meeting of Council: items 14.2 & 14.3.

### Executive Summary

At the Council meeting of 22 September 2015 Council resolved to close Sayer Street between a point approximately 100 metres west of the intersection with Jameson Street and to a point approximately 100 metres east of the roundabout with Dune Court.

This closure has now undergone the statutory consultation process required under Section 3.50 of the Local Government Act 1995 and Council is required to consider the responses to confirm the resolution to close the road. The closure is due to be effected on 26 July 2016.

### Recommendation to Committee

Council resolves to:

1. **Proceed with the closure of Sayer Street on 26 July 2016 with the following conditions:**
  - a. **that the closure shall be effected on a portion of Sayer Street between Jameson Street and the rear of 5 Horizon Court;**
  - b. **that emergency access on the closed portion complies with the requirements of the Department of Planning Guidelines for Planning in Bushfire Prone Areas.**
2. **Consider funding of \$135,000 for the closure in the 2016/17 budget.**

## Strategic Plan

KFA: Natural and Built Environment

The Council resolution indicated that the closure is proposed to allow reinstatement of the natural bushland where Sayer Street traverses Class A Reserve. As discussed further on in this report the opportunity to completely reinstate this thoroughfare to natural bushland is not possible due to the requirement to maintain a sealed emergency access along Sayer Street. However, the closed portion of this road will become more pedestrian friendly as the Whadjuk Beach to bush Trail crosses Sayer Street in the closed portion. It will also become safer and easier for fauna to cross, with no traffic to impede this movement.

## Background

Sayer Street is a thoroughfare under the care and control of the City of Nedlands. At the east and west ends the thoroughfare sits within road reserve vested in the City. In the middle section the thoroughfare passes through lots 177, 178 and 202, which are part of Class A reserve no. 19283, also vested in the City. Lots 177 and 178 were part of a road reserve for Sayer Street, but were included within the Class A reserve on 5 November 1926. This bushland is known locally as the Allen Park bushland.



Figure 1. Sayer Street with its portion of A Class reserve shaded in green.

### Key Relevant Previous Council Decisions:

22 September 2015 Ordinary Meeting of Council, item 13.3:

*Council*

1. *Resolves:*

- a) *to close Sayer Street on 26 July 2016;*
- b) *that the reasons for the road closure are:*

- i. to reinstate the area to its original natural state for park and recreational use;*
    - ii. to address a serious concern regarding a major increase in traffic on Sayer Street post development of Seaward Village;*
    - iii. because the planning of the new subdivision can incorporate a secondary access road without impacting on current residents;*
  - c) that the closure shall be effected on a portion of Sayer Street between Jameson Street and the rear of 5 Horizon Court; and*
2. Approves additional budget expenditure of \$20,500 for investigation, consultation and design purposes, with funds to be included in the midyear budget review.

28 July 2015 Ordinary Meeting of Council, item 14.3:

1. *The City consults with all stakeholders on the closure of that part of Sayer Street, Swanbourne (A Class reserve 19283) which is not a dedicated road and traverses a reserve and the reinstatement of the area to its original natural state.*
2. *Report to be prepared for the Council Meeting of 22 September 2015.*

28 July 2015 Ordinary Meeting of Council, item 14.2:

1. *The City inform DHA that vehicular access to any future development/redevelopment of Seaward Village shall not be through A Class reserve 19283;*
2. *The City erect two street signs on either side of Sayer Street Swanbourne at A Class Reserve 19283, as follows:  
'You are traversing an A Class Reserve created for the purpose of Parks and Recreation. Please protect our wildlife'.*

## Consultation

Required by legislation:                      Yes                       No   
Required by City of Nedlands policy:      Yes                               No

The consultation was undertaken in accordance with the statutory requirements of the Local Government Act s3.50. A public notice was placed in the 7 May 2016 issue of the Post and was exhibited at administration and the libraries. A letter drop was undertaken to those properties that would lose a secondary access as a result of the closure, and to prescribed organisations. Further to these statutory requirements the consultation was also advertised on the City's Your Voice website. A summary of the Your Voice engagement is provided in Figure 2.

The consultation was conducted between 7 May 2016 and 16 May 2016. As yet not all prescribed organisations have responded. Due to relatively short statutory timeframe of the consultation, it is expected that submissions will continue to be received after the drafting of this report. Council will be updated on any late submissions received prior to the Council decision date.

The Department of Defence (Defence) have advised that they intend to provide a response, and that where relevant it will be similar to that previously provided by Urbis

on behalf of Defence Housing Australia (DHA). A copy of this is provided in attachment 1.

At the time of drafting this report a response had not been received from the Department of Fire and Emergency Services (DFES).

The community response to the consultation was 93.5% in favour of the closure: 43 out of 46 respondents supported the closure.

Key reasons given in favour of the proposals were:

- Improving the integrity of the A class reserve
- Improved security for Seaward Village residents (improved privacy)
- Improved road safety due to perceived safety issues with existing road
- If an alternative exit route is required from Seaward Village it shouldn't be via Sayer Street.

Key reasons given against the proposals were:

- Decreased security for Seaward Village resident (no secondary escape route).
- It is the best route for access to local amenities from Seaward Village.

The table below shows the level of interest in this issue through the City’s Your Voice web page.

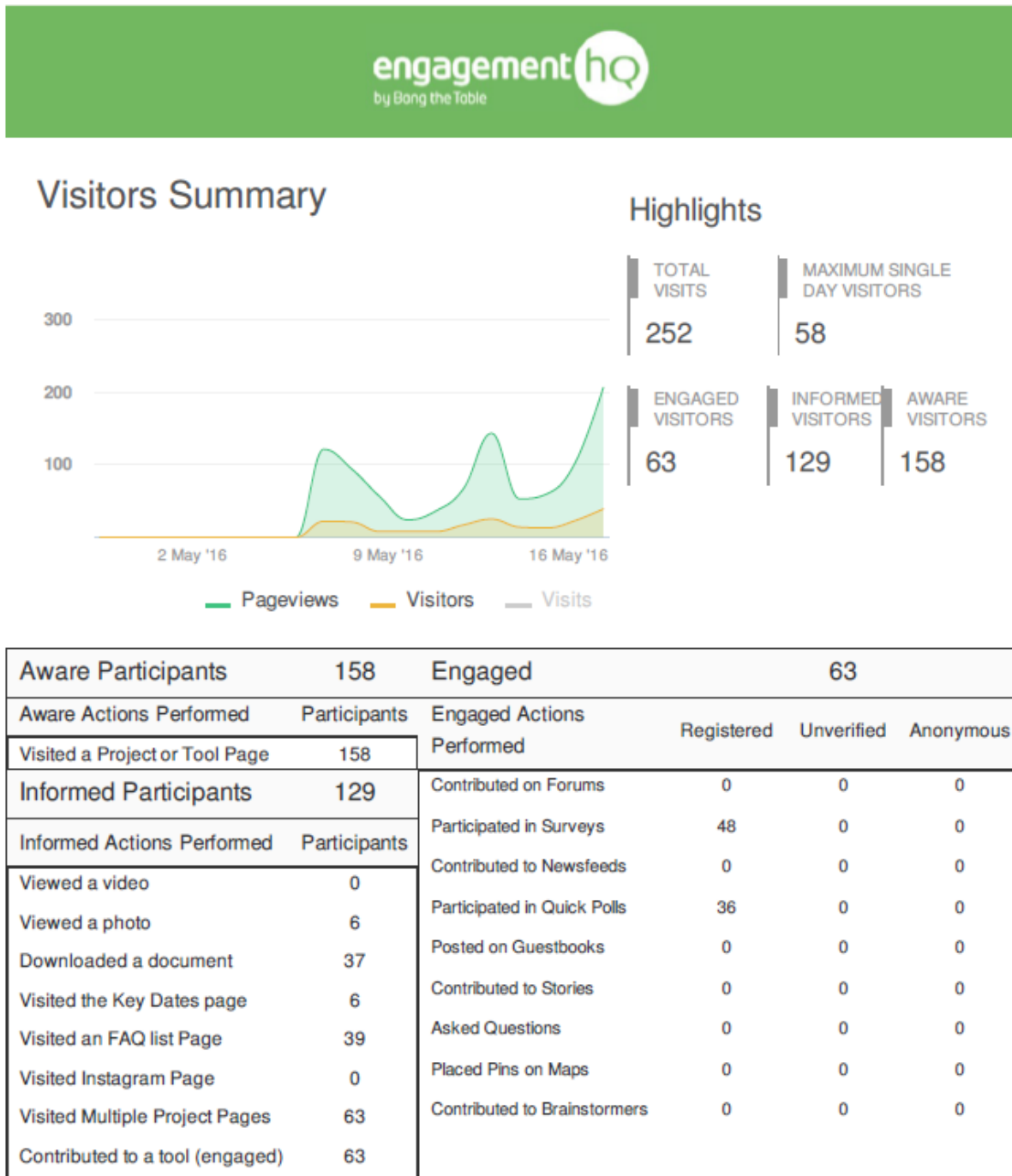


Figure 2: Summary of engagement via Your Voice Nedlands

## Legislation / Policy

The *Local Government Act 1995* s3.50 and the *Local Government (Functions and General) Regulations* section 4 stipulate the requirements for consultation in the event of a road closure.

It is noted that part (4) of section 3.50 of the Act applies to closure of any “thoroughfare” that the local government manages. This is not specific to a dedicated road reserve and the consultation requirements are applicable to this road, as it fits the definition of thoroughfare.

Ultimately the City of Nedlands or the Minister for Local Government is able to revoke a road closure, under section 3.50 of the Act.

## Budget/Financial Implications

Within current approved budget:	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Requires further budget consideration:	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

It is anticipated that the closure will be funded in the 2016/17 budget, with a budget of \$135,000. This will fund the infrastructure requirements for a permanent closure including appropriate signage, gates, and properly sized turning-head arrangements to enable vehicles to turn around.

## Risk Management

Local government road closures are protected from compensation payment for damages under section 3.23 of the *Local Government Act 1995*, although this must be carried out in a manner that is not considered negligent.

Implementation of the road closure in a safe manner will be managed through the provision of professional design services and application for approval to Main Roads WA for the proposal. This mitigates the liability from negligence for which a local government can be liable under section 9.57 of the *Local Government Act 1995*.

The closure will require that an emergency access be retained. This should be designed in accordance with the Department of Planning Guidelines for Planning in Bushfire Prone Areas. An extract of these guidelines is provided as attachment 3 (p.67), detailing the requirements for emergency accesses. The guidelines require the emergency access road to be 6m wide and with a sealed pavement. The need for sealing rests in the requirements for the access to be accessible at all times and to be substantial enough to be permanently available in the years to come. The grade of the road on the east side of Melon Hill is such that if it were unsealed water runoff would quickly wreck the pavement.

## Discussion

The closure was originally resolved for three supporting reasons. Two of these related to the proposed redevelopment of Seaward Village by DHA. It has now been announced that DHA will instead undertake a major refurbishment program. (attachment 2). This may be a consideration for Council.

The remaining reason for the closure is “*to reinstate the area to its original natural state for park and recreational use*”. This has been demonstrated to be an outcome valued by the community in the responses to the consultation.

It should however be noted that the bushfire access requirements will prevent Sayer Street from being removed in its entirety. It must be designed to meet the requirements the Department of Planning Guidelines for Planning in Bushfire Prone Areas. Sayer Street is in excess of the maximum grade of 1 in 10, and to provide continued emergency access on a road of this grade requires it to be sealed.

Emergency access gates are required to be unlocked. Emergency access will therefore be available to both Defence, DFES and the public in the event of an emergency. This will provide alternative emergency egress in the event of either bushfire or a security incident related to Defence.

The closure will provide for improved pedestrian access across Sayer Street, but the effectiveness of the closure in reinstating the bushland will be limited by the requirement to retain the emergency access.

### **Closure Date**

Key timeline elements are:

Council Confirmation Report	June 2016
Approval of Budget	June 2016
<b>Road Closure</b>	<b>26 July 2016</b>
Closure Construction activities	August to September 2016

### **Cost Benefit Analysis**

Standard cost benefit analysis for traffic route options typically compares the total saved travel time, converted to \$. This is done by estimating the volume of traffic and the extra cost to travel the distance and comparing them. In this case approximately 250 vehicles per day use Sayer St and the extra travel distance is about 600m via Seaward Avenue. In a day Sayer Street is therefore saving these vehicles collectively about 225km. At the rate of \$0.65/km (business costs) this is about \$97 per day. Over a year, this totals \$35,587.

There would be additional environmental benefits derived in terms of vehicle emissions saved by keeping Sayer Street open. These savings would be in the order of 12.6 tonnes of CO<sup>2</sup> per year (0.23kg/yr standard vehicle CO<sup>2</sup>) through keeping Sayer Street open.

It is understood however, that based on the community consultation, the community is willing to forego these direct cost benefits and environment benefits in favour of the benefits it believes it will achieve by closing Sayer Street.

In light of this community preference a recommendation has been put forward to enable Council to meet the expectations of the community to close Sayer Street, while meeting the standards for



## **Conclusion**

This report provides feedback on the statutory consultation for Council consideration. The proposed recommendation provides a framework for the continued implementation of the road closure as resolved by Council in September 2016.

## **Attachments**

1. Letter from Urbis on behalf of DHA opposing the Sayer Street road closure.
2. Department of Defence Ministers Media Release 26 April 2016.
3. Department of Planning, “Guidelines for Planning in Bushfire Prone Areas – Appendices”, Element 3.
4. Notice of Proposal of Intention to Close Road.

Attachment 2: Letter from Urbis opposing Sayer Street Road Closure



28 July 2015

Mayor and Councillors  
City of Nedlands  
Via email [council@nedlands.wa.gov.au](mailto:council@nedlands.wa.gov.au)

Dear Mayor and Councillors

**Re: 28 July 2015 Ordinary Council Meeting – Proposed Sayer St Closure**

I write on behalf of DHA regarding the proposed motions listed at Items 14.2 and 14.3 of the Agenda for your Ordinary Council Meeting of 28 July 2015.

In considering these items, we respectfully request that Councillors note the following:

1. Any redevelopment of Seaward Village will require two access points in/out of the estate for fire and emergency purposes (as identified in the Officer report and as per State planning requirements).
2. The draft *Bush Fire Management Guidelines 2014* (to commence 1 September 2015) note that any new development/subdivision within a bushfire prone area is to ensure that there is suitable access/egress from a site in the case of a fire. Under A3.1 of the Guidelines, the acceptable solution with respect to two access routes, states that *"two different vehicular access routes are provided, both of which connect to the public road network, provide access and egress to two different destinations and are available to all residents/the public at all times and under all weather conditions"*.
3. New legislative amendments to the *Fire and Emergency Services Act 1998* and new bushfire regulations prepared under the *Planning and Development Act 2005* (which also take effect in September 2015) will have the effect of identifying and designating bushfire-prone areas across Western Australia, and establishing planning requirements that will apply for such areas.
4. Melon Hill and the bushland surrounding Seaward Village have been identified as being a bushfire prone area by DHA's Bushfire Management Consultant and therefore these criteria and standards apply.
5. It is our position that the Department of Lands will also have due regard to the above requirements when considering any proposed road closure or closure of A Class reserve 19283.

Accordingly, should Sayer Street be closed to Seaward Village, another access point out of the estate will need to be provided. The only potential options for this are either another access point to the north through Campbell Barracks, or to the south through Allen Park and the associated recreation areas.

DHA has raised this matter with Defence who have advised a public road through Campbell Barracks will not be supported. Should Council believe there is a workable alternative access option through Allen Park, we would welcome the opportunity to work with City of Nedlands planners to arrive at such an alternative; however it is our understanding from the strong community sentiment to date that such a solution would be unpalatable.



As such, it is DHA's strong preference to retain the Sayer Street connection to Seaward Village as part of the overall redevelopment plans. We acknowledge concerns associated with likely increases in vehicular traffic should Sayer Street remain open, but also remain committed to arriving at a design solution that minimises any traffic impacts.

Should you wish to discuss these matters further, please do not hesitate to contact me on 08 9346 0508.

Yours sincerely

A handwritten signature in black ink, appearing to read "Kris Nolan".

Kris Nolan  
Associate Director

cc: Greg Trevaskis - [gtrevaskis@nedlands.wa.gov.au](mailto:gtrevaskis@nedlands.wa.gov.au)  
Peter Mickelson - [pmickelson@nedlands.wa.gov.au](mailto:pmickelson@nedlands.wa.gov.au)  
James Wallace - [james.wallace@dha.gov.au](mailto:james.wallace@dha.gov.au)

Defence

Ministers

Navy

Army

Air Force

---

**Department of Defence Ministers****McCormack Media Release**

---

**Assistant Minister for Defence – Government announces Seaward Village housing upgrade**

26 April 2016

A refurbishment program will be undertaken and upgrades made to the existing houses at Seaward Village Assistant Minister for Defence Michael McCormack MP and Minister for Foreign Affairs Julie Bishop MP announced today.

An independent review into Defence Housing Australia's proposed redevelopment of Seaward Village was announced last November following concerns being raised by residents and the local community.

The review, conducted by Lieutenant General (Retired) Mark Evans AO, DSC examined the proposed redevelopment and evaluated a long-term housing solution for Campbell Barracks.

"Lieutenant General Evans has undertaken a comprehensive review into the proposed redevelopment and examined a range of issues which have been raised through consultation with stakeholders and the local community," Mr McCormack said.

"The report recommends the refurbishment option should be pursued rather than the knockdown and rebuild redevelopment proposal Defence Housing Australia has proposed. After careful consideration I have accepted this recommendation."

Minister for Foreign Affairs and Federal Member for Curtin Julie Bishop said the review received a wide range of submissions from community groups, Defence personnel, family members and other stakeholders.

"Community concerns have been voiced with 85 submissions made to the review of the redevelopment proposal for Seaward Village," Ms Bishop said.

"Today's announcement reflects the views of the local community and will maintain the connection between Seaward Village and Campbell Barracks, while also meeting the needs of Defence, Defence families and Swanbourne residents.

"Our priority is the security and welfare of the Defence members and their families living in Seaward Village who make an important contribution to our ADF capability."

Defence Housing Australia will now begin planning an upgrade program of the residences ensuring quality, long-term and sustainable housing for Australian Defence Force members and their families.

A redacted copy of the [Report on Review of Proposed Redevelopment of Seaward Village](#) is available on the Assistant Minister for Defence's website.

**Media contacts:**

Rachel Obradovic (Ms Bishop) 0478 488 874

Ruby Cameron (Mr McCormack) 0455 091 557

## ELEMENT 3: VEHICULAR ACCESS

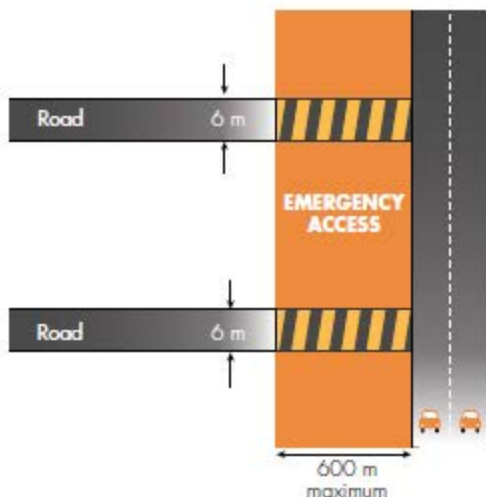
### EXPLANATORY NOTES

#### E3.6 Emergency access way

An emergency access way is not a preferred option however may be used to link up with roads to allow alternative access and egress during emergencies where traffic flow designs do not allow for two-way access. Such access should be provided as a right-of-way or easement in gross to ensure accessibility to the public and fire emergency services during an emergency.

The access should comply with minimum standards for a public road and should be signposted. Where gates are used to control traffic flow during non-emergency periods, these must not be locked. Emergency access ways are to be no longer than 600 metres and must be adequately signposted where they join public roads.

Where an emergency access way is constructed on private land, a right of way or easement in gross is to be established.



**Figure 21:** Minimum design requirements for an emergency access way

Two different vehicular access routes, both of which connect to the public road network, should be available to all residents at all times



**Figure 22:** Emergency access ways may be used to link up with roads to allow alternative access during emergencies



# Intention to Close Road Under Section 3.50

*Local Government Act 1995*

## **Sayer Street, Swanbourne**

The City of Nedlands gives notice of its intention to close Sayer Street, Swanbourne, from a point approximately 100m west of the intersection with Jameson Street to a point approximately 100m east of the roundabout with Dune Court, to come into effect on 26 July 2016.

The purpose and effect of this closure is to prevent access between Jameson Street and Seaward Village and allow the area to be reinstated to its natural state.

Further information is available and may be inspected at or obtained from the City's Administration Office, 71 Stirling Highway, Nedlands between 8:30am and 5:00pm Monday to Friday and from the City's website [nedlands.wa.gov.au](http://nedlands.wa.gov.au).

Submissions may be made to the Chief Executive Officer, City of Nedlands, 71 Stirling Highway, Nedlands by no later than 5pm on 16 May 2016.

**Greg Trevaskis**  
Chief Executive Officer

# *Public Notice*

5 May 2016

<p><b>TS09.16    Removal and Replacement of Street Trees Adjacent to 27 Leon Road, Dalkeith</b></p>
---

<b>Committee</b>	14 June 2016
<b>Council</b>	28 June 2016
<b>Applicant</b>	City of Nedlands
<b>Officer</b>	Andrew Dickson – Manager Parks Services
<b>Director</b>	Mark Goodlet – Director Technical Services
<b>Director Signature</b>	
<b>File Reference</b>	PAR-009143
<b>Previous Item</b>	Council Minutes 27 October 2015 – item 12.4 report CPS24.15

**Executive Summary**

This report seeks Council’s approval to remove two (2) Hills Weeping Fig street trees adjacent to 27 Leon Road, Dalkeith and replace them with four (4) new street trees.

**Recommendation to Committee**

**Council approves the removal of two (2) Hills Weeping Fig (*Ficus microcarpa var. hillii*) street trees adjacent to 27 Leon Road, Dalkeith subject to replacement by four (4) street trees of a species suitable for the location.**

**Strategic Plan**

KFA: Natural and Built Environment  
 Governance and Civic Leadership

The determination of this request provides good governance through appropriate risk management and determination with consideration to the natural and built environment.

**Background**

Council’s Street Tree Policy provides for Council to consider requests for removal and replacement of street trees which are considered unsuitable for nature strips. These two street trees are considered unsuitable for their location on the basis they are of a species having an association with a high potential to cause damage to infrastructure and/or the built environment through root system growth.

### Key Relevant Previous Decisions:

Council Minutes 27 October 2015 – item 12.4 report CPS24.15. Council approved the following policies:

- a) Nature Strip (Verge) Parking Adjacent to Vacant Lots; and
- b) Street Trees (dated 21 October 2015).

### Consultation

Required by legislation: Yes  No   
Required by City of Nedlands policy: Yes  No

Consultation type:

Administration is consulting with the property owner at 27 Leon Road. Dependent on Council's resolution, Administration will consult with the property owner in regard to a suitable replacement species of street tree and will notify surrounding residents and Council prior to removal of the Hills Weeping Figs.

### Legislation / Policy

- Local Government Act 1995
- Street Trees Policy

### Budget / Financial Implications

Within current approved budget: Yes  No   
Requires further budget consideration: Yes  No

If Council approves the request, costs for tree removal and replacement tree planting will be carried within the existing Parks Services street trees operational budget.

### Risk Management

Should Council not approve the removal and replacement of the two trees it will be necessary to implement measures to manage the root systems. The available options for managing the root systems are unlikely to be effective in maintaining the viability of the trees whilst resolving the root system impacts. In the event root management measures were implemented and were ineffective the City would likely be liable for any claims for damage to private property arising as a result of the tree roots.



## Discussion

The City has received written correspondence from the owner of 27 Leon Road raising a number of issues that are impacting them in regard to two Hills Weeping Figs street trees. The trees are located on the Robert Street nature strip adjacent to their property. Both trees are semi-mature and are inopportunistically located less than two (2) metres from the private property boundary. The property owner has requested the City take measures to minimise potential damage to their property. They have advised they do not object to the trees being removed and replaced with a more suitable species.



View of Hills Weeping Figs from Robert Street



Overhead Site Plan

The City’s qualified arborist has inspected the trees and advises their proximity to the property boundary, dividing fence and City infrastructure is unfavourable given the growth characteristics of the species and the age of the trees. Assessment of the surrounding built environ has identified significant existing root plate damage to the adjacent footpath and road surface that will require remediation. The City’s arborist has advised that, as the trees mature and increase in size, it is entirely predictable the adjacent property will be adversely affected to some degree, if measures are not take to address the root related issues.

The options, and their effectiveness, for addressing current and future impacts relating to the root systems of both trees are detailed below:

1. Selective root pruning of identified problem roots on an ongoing basis –  
 Due to the proximity of the trees to the property boundary in combination with the vigorous, extensive and invasive nature of root growth associated with this species, this option could not be regarded as practicable or efficacious. This approach would provide no assurance in regard to preventing future damage to the adjacent built environment. It would also convey a high probability of unacceptable tree stability, reduced tree viability and, as a consequence, unproductive use of resources.
2. Selective root pruning and installation of a root barrier system –  
 This option is not regarded as practicable as detailed above in option 1.

3. Removal and replacement with a species more suitable for the location –

As detailed in both options above, the arboricultural techniques available for managing the trees root systems are not regarded practicable as these would significantly diminish the viability of the trees. In the absence of suitable root management options, removal and replacement of the two (2) Hills Weeping Fig street trees is recommended as the most appropriate option to address current, and prevent future, root system impacts.


## **Conclusion**

In giving consideration to the physiological characteristics of the Hills Weeping Fig, the proximity of the trees to the adjacent property and the likely outcomes of root management options, removal and replacement of the trees can be considered the most appropriate and practicable option for resolving current root plate impacts and assuring prevention of future damage to the adjacent built environment.

## **Attachments**

1. Confidential correspondence from owner of 27 Leon Road (not to be published).

<p><b>TS10.16      Aberdare Road, Railway Road, Shenton Park Busway Black Spot Project (City of Subiaco)</b></p>
--

<b>Committee</b>	14 June 2016
<b>Council</b>	28 June 2016
<b>Applicant</b>	City of Nedlands
<b>Officer</b>	Wayne Mo - Design Engineer
<b>Director</b>	Mark Goodlet - Director Technical Services
<b>Director Signature</b>	
<b>File Reference</b>	TS-GRA-00007 (Note: this project is being driven by the City of Subiaco)
<b>Previous Item</b>	Nil.

### Executive Summary

The City of Subiaco is seeking direction from the City of Nedlands on how to proceed with a Black Spot project at the intersection of Aberdare Road and Railway Road. They have provided two options for Council to consider. The first option has the effect of straightening the intersection to a greater degree than the second, which is a desirable outcome. The second option is significantly cheaper, but requires the removal of several significant street trees in Aberdare Road.

### Recommendation to Committee

**Council supports option 2 – widening on the south side of Aberdare Road and associated street tree removals with the conditions:**

- 1. The City of Subiaco seek additional or more suitable funding opportunities to deliver the project; and**
- 2. The City of Nedlands allocates an additional \$50,000 to the project in order to replace those street trees removed as part of the proposal.**

### Strategic Plan

#### KFA: Transport

This is a Blackspot project providing cost effective safety improvements to intersections with a history of crashes. This is supported the Strategic Community Plan which aims for safer and more efficient roads.

## Background

The Railway Road / Aberdare Road intersection has had 49 accidents within the past 5 years. This level of crashes makes this intersection a strong candidate for Blackspot funding.

The City of Subiaco has taken the lead on the design of the intersection improvements. They have produced two options for consideration by the City of Nedlands.

### Key Relevant Previous Council Decisions:

Nil.

## Consultation

Required by legislation: Yes  No   
 Required by City of Nedlands policy: Yes  No

This report forms part of the City of Nedlands response to the City of Subiaco’s consultation on the project, as they are the lead designer.

## Legislation / Policy

Local Government Act 1995. The City of Nedlands is responsible for the management and maintenance of roads within its district.

## Budget/Financial Implications

Within current approved budget: Yes  No   
 Requires further budget consideration: Yes  No

### CURRENT SCENARIO

This Subiaco project has approved 2014/2015 state black spot funding for the amount of \$275,000. Under the standard funding split, Main Roads WA are responsible for 2/3 and the Councils are responsible for 1/3 of the costs.

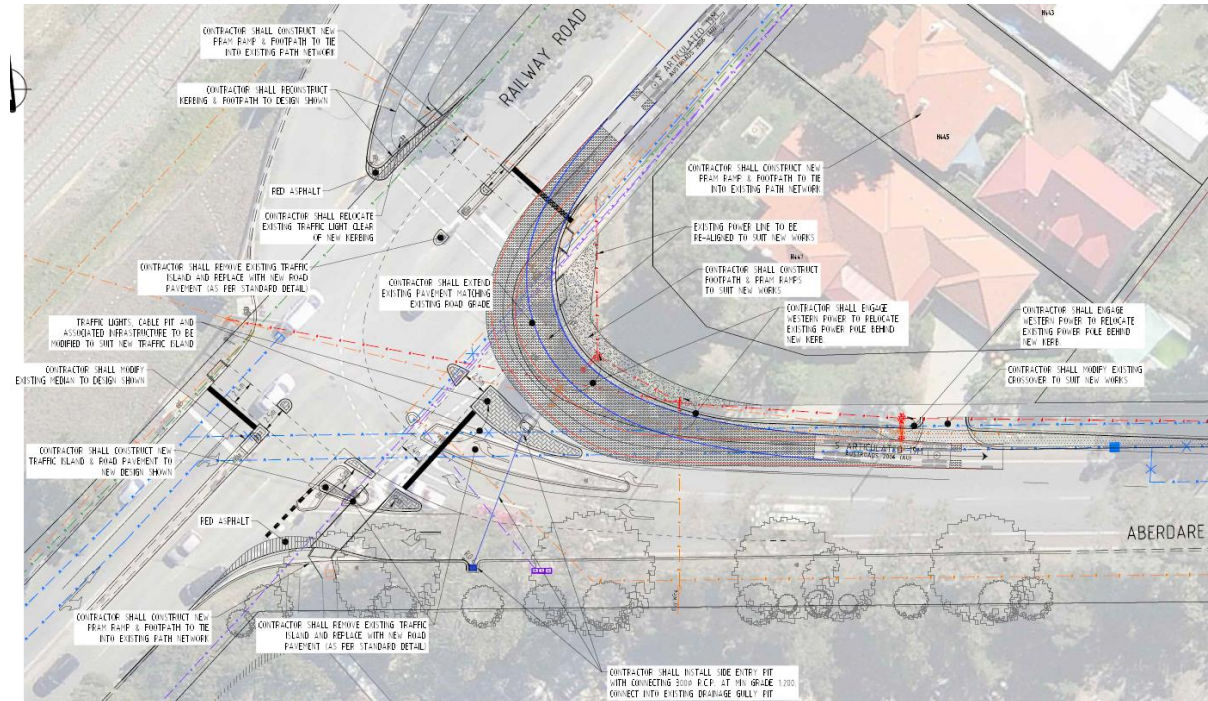
As Aberdare Road is a boundary road between Subiaco and Nedlands the Council contributions are shared (50% each) resulting in the City’s contribution requirements as details in the table below:

Black Spot Funding Requirements			
Project Total	Main Roads WA	City of Subiaco	City of Nedlands
	2/3 Contribution	1/3 Contribution	
\$275,000		50%	50%
	\$183,334	\$45,833	\$45,833

After investigation, the City of Subiaco have provided revised estimated costs for the two options below. Based on the revised higher estimates, the project cannot be

delivered within the current funding provisions and will need to be re-submitted for state funding consideration.

**OPTION 1 – Road widening on the northern (City of Subiaco) side without affecting the southern road kerbline \$749,586**

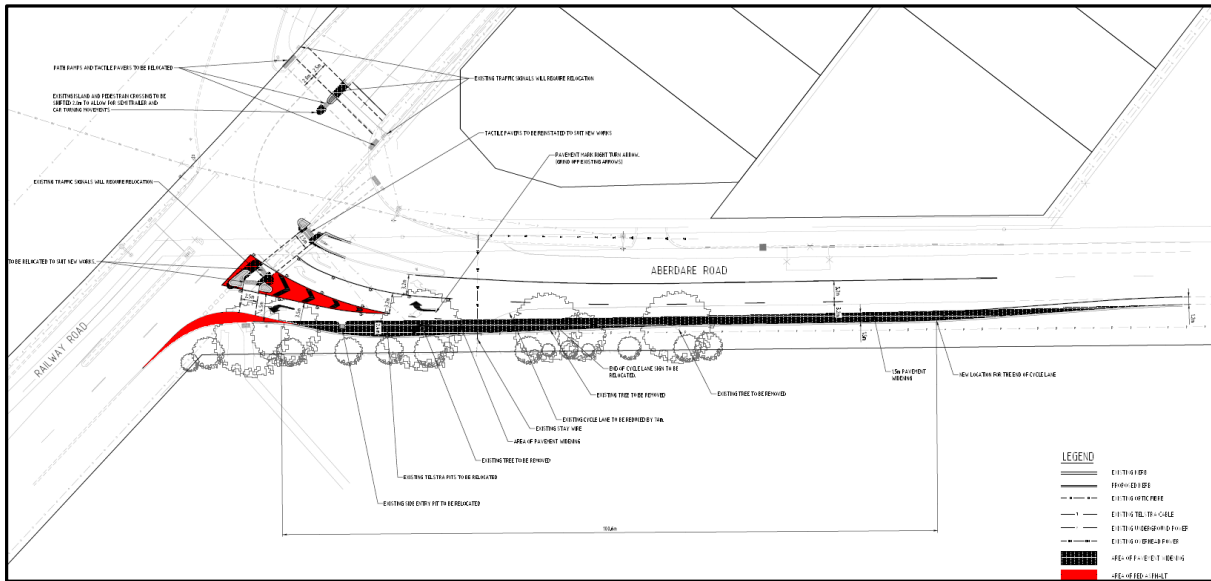


**Option 1 Layout – no kerb realignment on southern side of Aberdare Road**

See attachment 1 for full the plan. There are significant Western Power assets in the Subiaco verge and significant costs (an extra \$305,000) are involved in the necessary relocations.

Black Spot Funding Requirements			
Project Total	Main Roads WA	City of Subiaco	City of Nedlands
	\$750,000	2/3 Contribution	
		50%	50%
\$500,000		\$125,000	\$125,000

**OPTION 2 – Road widening on the southern (City of Nedlands side) \$301,817**



**Option 2 – Layout with kerb realignment on southern side of Aberdare Road**

See attachment 2 – There are expected to be 5 significant trees requiring removal to facilitate the widening and further trees requiring root removals, Administration suggest an additional cost of \$50,000 be included in the project to replace removed street trees. A more suitable and appropriate species of street trees can be selected, and a more mature tree than is standard would be proposed.

Black Spot Funding Requirements			
Project Total	Main Roads WA	City of Subiaco	City of Nedlands
	2/3 Contribution	1/3 Contribution	
\$350,000		50%	50%
	\$233,334	\$58,333	\$58,333

**Risk Management**

**Option 1 is unlikely to gain state government funding.** Given the high cost, the Benefit Cost ratio would be too low for the project to have a realistic chance of being approved for funding.

The less expensive option 2 warrants consideration as the estimated costs are within 10% of the original submission (excluding the street tree replacement component) and this option will provide a product that will benefit the wider community and Councils being:

1. Significant cost savings compared with the first option (\$350,000 vs \$750,000)
2. Reduced congestion
3. Improved safety at all approaches
4. Opportunity to use state funding (2/3)

It is unlikely that the City of Subiaco will agree to fund any more of the project than its commitment under option 1. Should the City of Nedlands wish to support option 2 this would leave the City of Nedlands to pay \$458,333 as shown below.

State Government contribution	=	\$233,333 (based on option 1)
City of Subiaco contribution	=	\$ 58,333 (based on option 1)
City of Nedlands contribution	=	<u>\$458,334</u> (opt. 1 contbn + balance of opt. 2)
TOTAL		\$750,000

It is accepted that whilst there is a loss of significant street trees for option 2, this may be overcome by ensuring larger street trees be planted to replace the removed ones. This would be done by topping up the City’s contribution to the project by \$50,000 and purchasing and planting these trees in suitable locations on the southern side of Aberdare Road.

## Discussion

With option 1, there are significant costs associated with this proposal as the Western Power component is \$305,000. Whilst this option does not impact on the street trees on the Nedlands side, the project costs are high at \$749,586.

With option 2, there are impacts to several significant street trees on the southern side. These trees are significant but some are now in decline or in poor condition. Refer to attachment 3 for information on the state of the impacted trees. Whilst the removal of street trees is significant, the overall aim of this project is to reduce crashes, reduce congestion and improve safety. It is proposed that an additional cost of \$50,000 is included in the project costing to allow replacement of those trees removed.

Discussions have taken place with the Public Transport Authority in regards to a future Bus Lane in terms of co-contribution or to provide advice, however they have not been able to commit to or assist towards the project due to other higher priority projects on their program.

## Conclusion

In consideration of value for money, improved safety, reduced congestion and the opportunity for street tree replacements option 2 is proposed for approval subject to the inclusion of replacement street trees.

## Attachments

1. Option 1 plan.
2. Option 2 plan.
3. Assessment of trees identified for removal under Option 2.



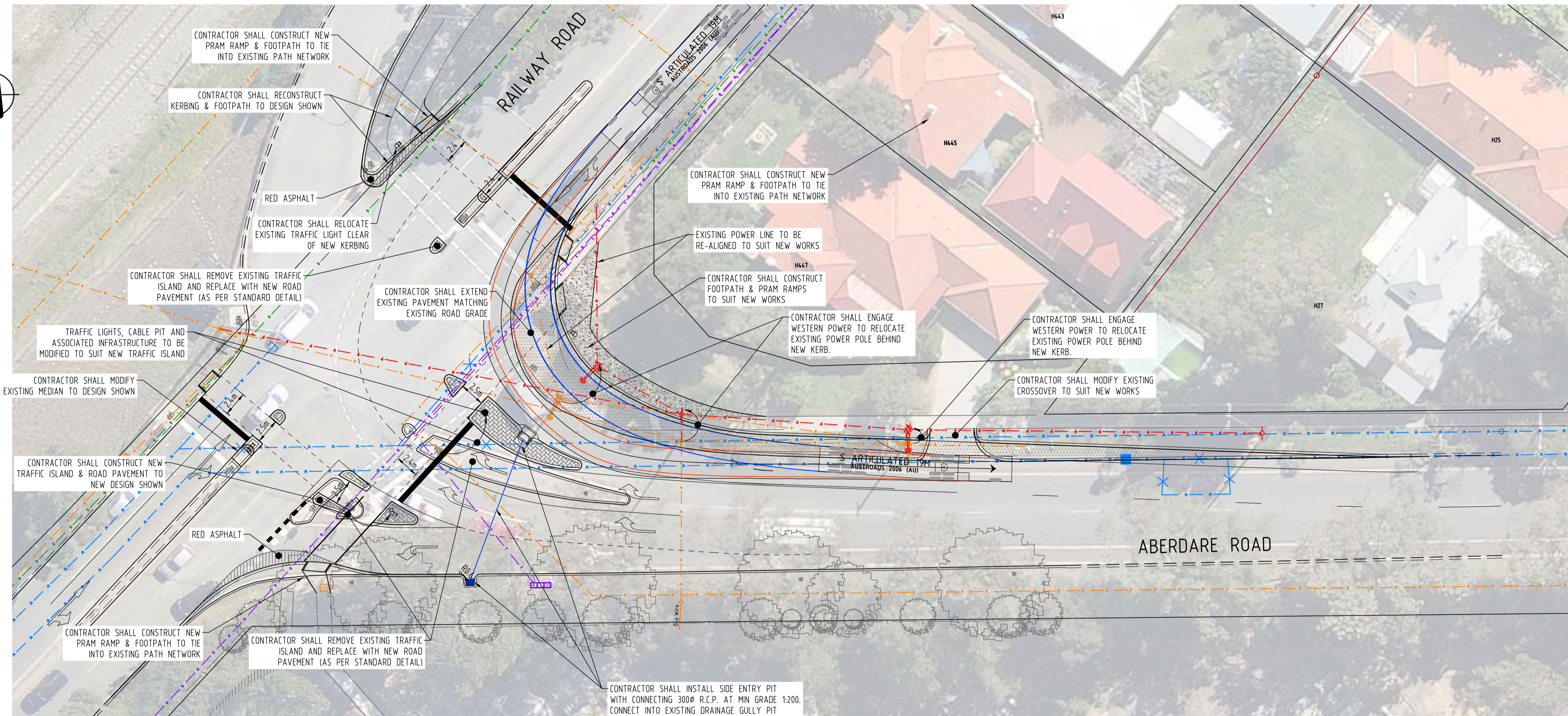
ROAD NOTES

1. VERTICAL DATUM : AUSTRALIAN HEIGHT DATUM.
2. HORIZONTAL DATUM : MGA94
3. CO-ORDINATE THE LOCATION OF ALL EXISTING AND PROPOSED SERVICES PRIOR TO COMMENCEMENT OF WORK. ANY CONFLICTS ARE TO BE REPORTED TO THE ENGINEER IMMEDIATELY.
4. LOCATE ALL LEVELS FROM EXISTING SURVEY MARKS.
5. ALL SURVEY MARKS ARE TO BE PROTECTED.
6. ALL KERBING TO BE SEMI MOUNTABLE UNLESS OTHERWISE NOTED.
7. SERVICES SUCH AS SEWER, WATER, GAS, TELEPHONE, ELECTRICITY, AND DRAINAGE MAY BE ENCOUNTERED DURING CONSTRUCTION OF THE WORKS. SERVICES INFORMATION SHOWN ON DRAWINGS IS INDICATIVE ONLY AND MAY NOT BE COMPLETE. BEFORE EXCAVATION COMMENCES THE LOCATION OF ALL SUCH SERVICES SHALL BE OBTAINED FROM THE RELEVANT AUTHORITIES.
8. SIGN POSTS AND PLATES TO BE SUPPLIED AND INSTALLED TO LOCAL AUTHORITY REQUIREMENTS.
9. THE CONTRACTOR SHALL SPOT OUT THE LINE MARKING. THE CONTRACTOR SHALL ADVISE MAIN ROADS WHEN THE SITE IS READY FOR LINEMARKING AND SIGNAGE INSTALLATION. LINE MARKING AND SIGNING TO BE UNDERTAKEN BY MAIN ROADS.
10. PROVIDE ALL SIGNING, LIGHTING AND FLAGMEN NECESSARY TO ENSURE SAFETY OF THE PUBLIC AND OF THE WORKS.
11. EXISTING VERGES SHALL NOT BE DISTURBED BEYOND THE EXTENT OF WORK.
12. BRICK PAVING SHALL BE CLAY HIGH PERFORMANCE 76mm PAVERS LAID IN HERRINGBONE 45° UNLESS OTHERWISE SHOWN. COLOUR TO BE SPECIFIED BY THE ENGINEER.
13. ALL WORKS TO BE CONSTRUCTED IN ACCORDANCE WITH THE PROJECT SPECIFICATION, BUT WHERE NO DETAIL PROVIDED, TO THE REQUIREMENTS OF THE LOCAL AUTHORITY.
14. THE IN OF NEW SURFACE TO FINISH FLUSH WITH EXISTING SURFACE.
15. THE CONTRACTOR SHALL PREPARE AS-CONSTRUCTED ROADS DRAWINGS (INCLUDING SURVEY) TO THE SATISFACTION OF THE LOCAL AUTHORITY. AS CONSTRUCTED PLANS TO BE ISSUED TO THE ENGINEER FOR SIGNING AND PRESENTATION TO THE LOCAL AUTHORITY.
16. IT IS DEEMED THAT THE AS CONSTRUCTED DOCUMENTS FORM PART OF THE WORKS. PRACTICAL COMPLETION CAN NOT BE AWARDED IF ACCEPTABLE AS CONSTRUCTED DOCUMENTS HAVE NOT BEEN PROVIDED TO THE ENGINEER.

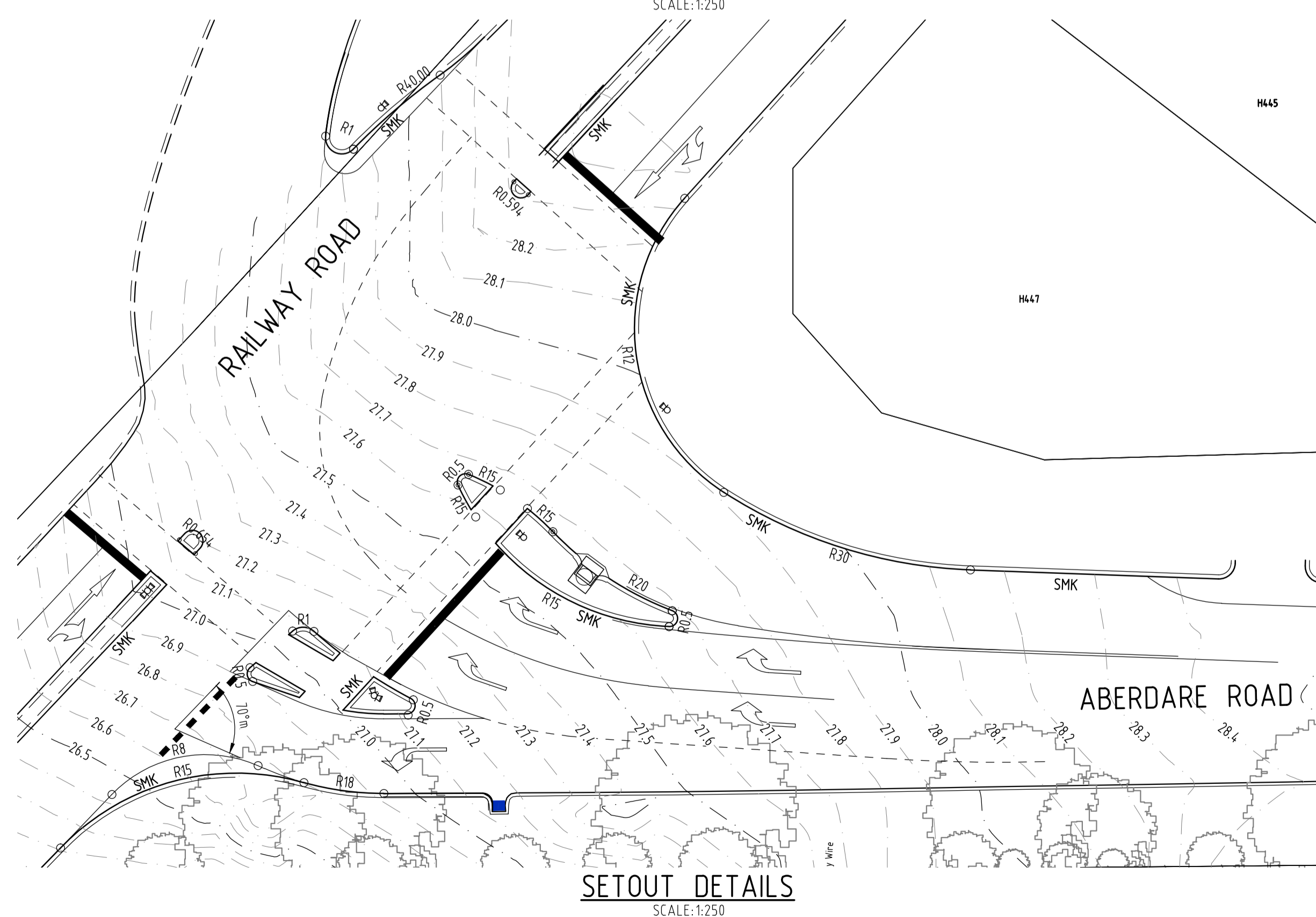
**NOTE**  
ROAD AND DRAINAGE AS CONSTRUCTED DETAILS TO BE PROVIDED IN 'R' AND 'D' SPEC FORMAT AS PER CITY OF SUBIACO REQUIREMENTS

LEGEND

- GROUND CONTOUR (0.1m INTERVAL)
- PROPOSED PAVEMENT
- EXISTING PAVEMENT
- EXISTING PATH
- EXISTING OPTIC FIBRE
- EXISTING GAS LINE
- EXISTING TELSTRA CABLE
- EXISTING WATER MAIN
- EXISTING POWER LINE
- PROPOSED POWER LINE RE-ALIGNMENT
- EXISTING DRAINAGE LINE
- EXISTING OVERHEAD POWER LINES
- EXISTING HIGH PRESSURE GAS MAIN
- MK DENOTES MOUNTABLE KERB
- SMK DENOTES SEMI MOUNTABLE KERBING
- 4.4.88 DENOTES SETOUT POINTS
- R100 DENOTES SETOUT RADIUS
- AREA OF PAVEMENT WIDENING
- AREA OF NEW RED ASPHALT
- AREA OF CONCRETE PATH/CROSSOVER
- AREA OF BRICK PAVE INFILL



ROAD LAYOUT PLAN  
SCALE: 1:250



SETOUT DETAILS  
SCALE: 1:250



PROJECT: **ABERDARE ROAD & RAILWAY ROAD SUBIACO**

DATE	ISSUED FOR APPROVAL	BY
07-11-14		

**COPYRIGHT**  
COPYRIGHT IN THIS DRAWING IS THE PROPERTY OF THE CONSULTANT. THE CLIENT HAS LICENSE TO USE THIS DRAWING FOR THE PROJECT ONLY. THE USER SHALL BE RESPONSIBLE FOR "SITE CHECKING" ALL OPERATIONS BEFORE COMMENCEMENT OF WORK. (AS DRAWINGS DO NOT MANUALLY ALTER)  
ONLY PLANS WITH NUMERICAL REVISION REV '1' OR HIGHER AND SIGNED AS APPROVED SHALL BE USED FOR CONSTRUCTION.

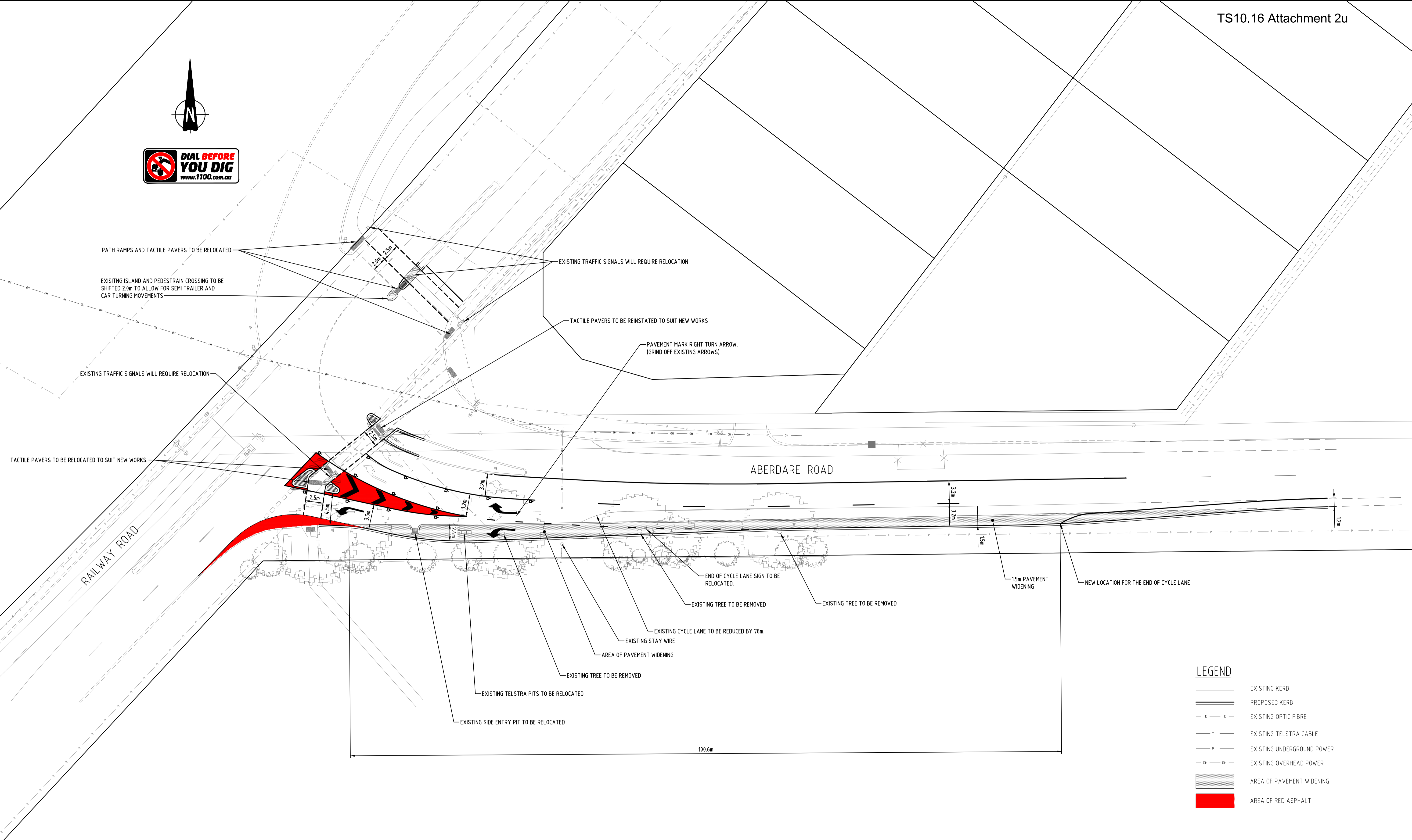
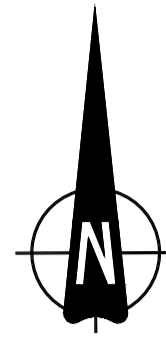
**Porter Consulting Engineers**  
Level 2 Fishermans Court  
50 Kilburn Road  
M5 Pinesland 6553 WA  
PO Box 9036  
Canning Bridge 6153 WA  
Tel (08) 9315 9955  
Fax (08) 9315 9959  
Email: office@portereng.com.au  
www.portereng.com.au

CLIENT: **CITY OF SUBIACO**

DRAWING: **ROAD LAYOUT PLAN**

SCALE	1:250	DRAWING No.	14-6-94/400	REV No.	A	ORIGINAL DRAWING SIZE	A1
DATE	NOV '14	FILE NAME: S:\ACTIVE PROJECTS\14-06-09\ACAD\14-6-94-400.dwg					
DESIGN							
DRAWN							
CHECK	APPD						

STATUS: **FOR APPROVAL**



**LEGEND**

	EXISTING KERB
	PROPOSED KERB
	EXISTING OPTIC FIBRE
	EXISTING TELSTRA CABLE
	EXISTING UNDERGROUND POWER
	EXISTING OVERHEAD POWER
	AREA OF PAVEMENT WIDENING
	AREA OF RED ASPHALT



PROJECT: **ABERDARE RD - RAILWAY RD INTERSECTION UPGRADE**

B	25-2-2016	2 LANES @ 3.2m WIDE CYCLE LANE SHIFTED 100.6m BACK	MJV
A	23-2-2016	PRELIM PLOT FOR APPROVAL	MJV
No.	DATE	REVISION	BY

**COPYRIGHT**  
 COPYRIGHT IN THIS DRAWING IS THE PROPERTY OF THE CONSULTANT. THE CLIENT HAS LICENSE TO USE THIS DRAWING FOR THE PROJECT ONLY. THE USER SHALL BE RESPONSIBLE FOR "SITE CHECKING" ALL DIMENSIONS BEFORE COMMENCEMENT OF WORK. LAD DRAWING DO NOT MANUALLY ALTER.  
 ONLY PLANS WITH NUMERICAL REVISION (REV '1' OR HIGHER) AND SIGNED AS APPROVED SHALL BE USED FOR CONSTRUCTION.

**Porter Consulting Engineers**  
 Level 2 Kishora Court  
 50 Kishora Road  
 Mt Pleasant 6153 WA  
 PO Box 1036  
 Canning Bridge 6153 WA  
 Tel (08) 9375 9955  
 Fax (08) 9375 9959  
 Email office@portereng.com.au  
 www.portereng.com.au

CLIENT: **CITY OF SUBIACO**

DRAWING: **LAYOUT PLAN**  
 STATUS: **FOR APPROVAL**

SCALE: 1:250	DRAWING No.	REV No.	ORIGINAL DRAWING SIZE
DATE: FEB 2016	<b>14-6-94/800</b>	<b>B</b>	<b>A1</b>
DESIGN: ELW	FILE NAME: S:\ACTIVE PROJECTS\14-06-094\ACAD\14-94-800.dwg		
DRAWN: MJV	APPD		
CHECK:			

**Address of inspection:** Aberdare & Railway Intersection **Sharepoint Ref:** PAR-009155

Tree Asset ID	19899					
Botanic Name	<i>Eucalyptus rudis</i>					
Common Name	Flooded gum					
Height (m)	18.000000000000					
Width (m)	15.000000000000					
DBH (cm)	80					
Tree Value (\$)	4156.800000000000					
Health	Good	Fair	Poor	Very Poor	Dead	
Canopy Size	Very large	Score (1-5)	5			
Form	Average/indifferent	Score (1-5)	3			
Importance	Considerable Importance	Score (1-5)	4			
Other Trees	Many	Score (1-5)	2			
Setting	Very Suitable	Score (1-5)	4			
Expected Life	40-100 years	Score (1-5)	4			

Date of Assessment: 23 March 2016

Assessment by: Chris Batchem  
Parks Coordinator - Arboriculture

**Scores for Canopy Size**

Assessment Description	Score
Very Small	1
Small	2
Medium	3
Large	4
Very Large	5

**Scores for Form**

Assessment Description	Score
Very Poor	1
Poor	2
Average/indifferent	3
Good	4
Very Good	5

**Scores for Importance**

Assessment Description	Score
Very Little Importance	1
Little Importance	2
Some Importance	3
Considerable Importance	4
Great Importance	5

**Scores for Other Trees**

Assessment Description	Score
Woodland	1
Many	2
Some	3
Few	4
None	5

**Scores for Setting**

Assessment Description	Score
Totally Unsuitable	1
Moderately Unsuitable	2
Just/Fairly Suitable	3
Very Suitable	4
Particularly Suitable	5

**Scores for Expected Life**

Assessment Description	Score
Less than 2 Years	1
2 to 5 Years	2
5 to 40 Years	3
40 to 100 Years	4
More than 100 Years	5

**NOTES:**Tree impacted on edge. Measurement shown 1.5m from existing kerb (plus 100mm kerb to be installed)



Photo taken from GIS approx. 2013

Heavily impacted trees highlighted in yellow



Taper from 1.5m down to 700mm near person in background, to tie into kerb further down road. Plus 100mm Kerb to road side



**Address of inspection:** Aberdare & Railway Intersection **Sharepoint Ref:** PAR-009154

Tree Asset ID	19902					
Botanic Name	<i>Eucalyptus rudis</i>					
Common Name	Flooded gum					
Height (m)	22.000000000000					
Width (m)	24.000000000000					
DBH (cm)	100					
Tree Value (\$)	9352.800000000000					
Health	Good	Fair	Poor	Very Poor	Dead	
Canopy Size	Very large	Score (1-5)	5			
Form	Good	Score (1-5)	4			
Importance	Considerable Importance	Score (1-5)	4			
Other Trees	Many	Score (1-5)	2			
Setting	Very Suitable	Score (1-5)	4			
Expected Life	40-100 years	Score (1-5)	4			

Date of Assessment: 23 March 2016  
 Assessment by: Chris Batchem  
 Parks Coordinator - Arboriculture

**Scores for Canopy Size**

Assessment Description	Score
Very Small	1
Small	2
Medium	3
Large	4
Very Large	5

**Scores for Form**

Assessment Description	Score
Very Poor	1
Poor	2
Average/indifferent	3
Good	4
Very Good	5

**Scores for Importance**

Assessment Description	Score
Very Little Importance	1
Little Importance	2
Some Importance	3
Considerable Importance	4
Great Importance	5

**Scores for Other Trees**

Assessment Description	Score
Woodland	1
Many	2
Some	3
Few	4
None	5

**Scores for Setting**

Assessment Description	Score
Totally Unsuitable	1
Moderately Unsuitable	2
Just/Fairly Suitable	3
Very Suitable	4
Particularly Suitable	5

**Scores for Expected Life**

Assessment Description	Score
Less than 2 Years	1
2 to 5 Years	2
5 to 40 Years	3
40 to 100 Years	4
More than 100 Years	5

NOTES: Tree impacted on edge. Measurement shown 1.5m from existing kerb (plus 100mm kerb to be installed)





Photo taken from GIS approx. 2013









**Address of inspection:** Aberdare & Railway Intersection **Sharepoint Ref:** PAR-009153

Tree Asset ID	19905					
Botanic Name	<i>Eucalyptus rudis</i>					
Common Name	Flooded gum					
Height (m)	22.000000000000					
Width (m)	23.000000000000					
DBH (cm)	120					
Tree Value (\$)	4676.400000000000					
Health	Good	Fair	Poor	Very Poor	Dead	
Canopy Size	Very large	Score (1-5)	5			
Form	Good	Score (1-5)	4			
Importance	Considerable Importance	Score (1-5)	4			
Other Trees	Many	Score (1-5)	2			
Setting	Very Suitable	Score (1-5)	4			
Expected Life	40-100 years	Score (1-5)	4			

Date of Assessment: 23 March 2016

Assessment by: Chris Batchem  
Parks Coordinator - Arboriculture

**Scores for Canopy Size**

Assessment Description	Score
Very Small	1
Small	2
Medium	3
Large	4
Very Large	5

**Scores for Form**

Assessment Description	Score
Very Poor	1
Poor	2
Average/indifferent	3
Good	4
Very Good	5

**Scores for Importance**

Assessment Description	Score
Very Little Importance	1
Little Importance	2
Some Importance	3
Considerable Importance	4
Great Importance	5

**Scores for Other Trees**

Assessment Description	Score
Woodland	1
Many	2
Some	3
Few	4
None	5

**Scores for Setting**

Assessment Description	Score
Totally Unsuitable	1
Moderately Unsuitable	2
Just/Fairly Suitable	3
Very Suitable	4
Particularly Suitable	5

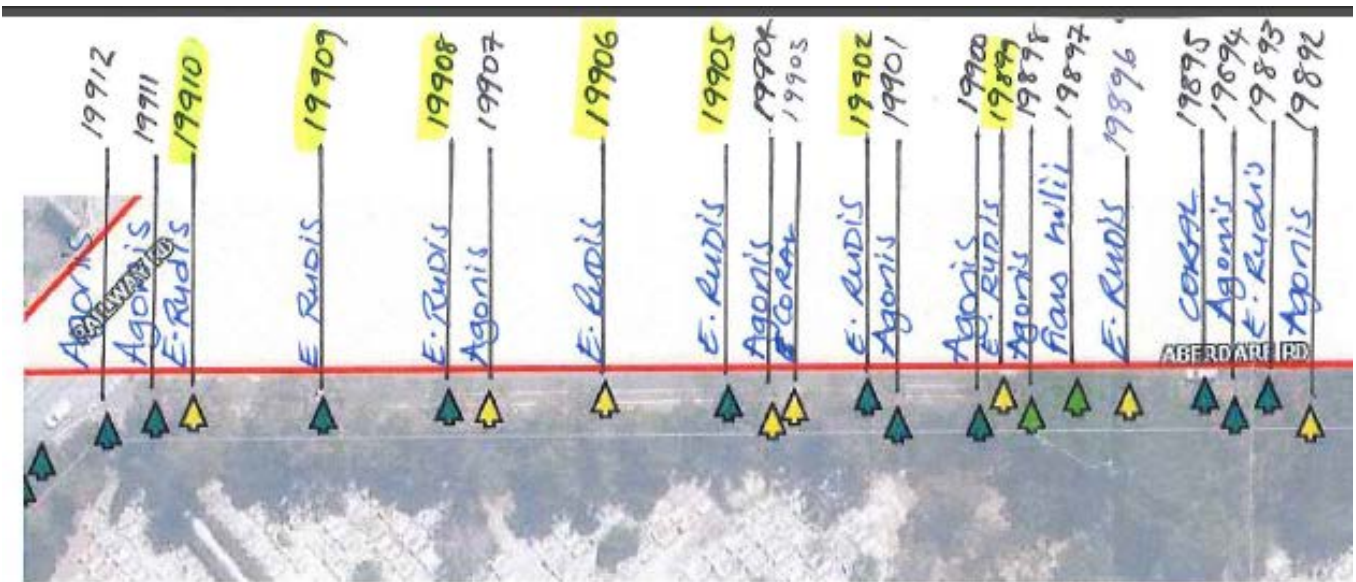
**Scores for Expected Life**

Assessment Description	Score
Less than 2 Years	1
2 to 5 Years	2
5 to 40 Years	3
40 to 100 Years	4
More than 100 Years	5

**NOTES:** Tree impacted on edge. Measurement from existing kerb 1.6m (plus 100mm kerb to new road edge)



Photo taken from GIS approx. 2013







**Address of inspection:** Aberdare & Railway Intersection **Sharepoint Ref:** PAR-009152

Tree Asset ID	19906					
Botanic Name	<i>Eucalyptus rudis</i>					
Common Name	Flooded gum					
Height (m)	23.000000000000					
Width (m)	16.000000000000					
DBH (cm)	95					
Tree Value (\$)	2078.400000000000					
Health	Good	Fair	Poor	Very Poor	Dead	
Canopy Size	Very large	Score (1-5)	5			
Form	Average/indifferent	Score (1-5)	3			
Importance	Considerable Importance	Score (1-5)	4			
Other Trees	Many	Score (1-5)	2			
Setting	Very Suitable	Score (1-5)	4			
Expected Life	40- 100 years	Score (1-5)	4			

Date of Assessment: 23 March 2016

Assessment by: Chris Batchem  
Parks Coordinator - Arboriculture

**Scores for Canopy Size**

Assessment Description	Score
Very Small	1
Small	2
Medium	3
Large	4
Very Large	5

**Scores for Form**

Assessment Description	Score
Very Poor	1
Poor	2
Average/indifferent	3
Good	4
Very Good	5

**Scores for Importance**

Assessment Description	Score
Very Little Importance	1
Little Importance	2
Some Importance	3
Considerable Importance	4
Great Importance	5

**Scores for Other Trees**

Assessment Description	Score
Woodland	1
Many	2
Some	3
Few	4
None	5

**Scores for Setting**

Assessment Description	Score
Totally Unsuitable	1
Moderately Unsuitable	2
Just/Fairly Suitable	3
Very Suitable	4
Particularly Suitable	5

**Scores for Expected Life**

Assessment Description	Score
Less than 2 Years	1
2 to 5 Years	2
5 to 40 Years	3
40 to 100 Years	4
More than 100 Years	5

**NOTES:**

**Proposed design 14-6-94/800 REV B:** requires the complete removal of this tree to achieve design. Road extended by 2.2m (does not include 100mm Kerb to road edge).



Photo taken from GIS approx. 2013

Trees heavily impacted highlighted in yellow





**Address of inspection:** Aberdare & Railway Intersection **Sharepoint Ref:** PAR-009151

Tree Asset ID	19908					
Botanic Name	<i>Eucalyptus rudis</i>					
Common Name	Flooded Gum					
Height (m)	23.000000000000					
Width (m)	18.000000000000					
DBH (cm)	90					
Tree Value (\$)	1385.600000000000					
Health	Good	Fair	Poor	Very Poor	Dead	
Canopy Size	Very large	Score (1-5)	5			
Form	Good	Score (1-5)	4			
Importance	Considerable Importance	Score (1-5)	4			
Other Trees	Many	Score (1-5)	2			
Setting	Very Suitable	Score (1-5)	4			
Expected Life	40- 100 years	Score (1-5)	4			

Date of Assessment: 23 March 2016

Assessment by: Chris Batchem  
Parks Coordinator - Arboriculture

**Scores for Canopy Size**

Assessment Description	Score
Very Small	1
Small	2
Medium	3
Large	4
Very Large	5

**Scores for Form**

Assessment Description	Score
Very Poor	1
Poor	2
Average/indifferent	3
Good	4
Very Good	5

**Scores for Importance**

Assessment Description	Score
Very Little Importance	1
Little Importance	2
Some Importance	3
Considerable Importance	4
Great Importance	5

**Scores for Other Trees**

Assessment Description	Score
Woodland	1
Many	2
Some	3
Few	4
None	5

**Scores for Setting**

Assessment Description	Score
Totally Unsuitable	1
Moderately Unsuitable	2
Just/Fairly Suitable	3
Very Suitable	4
Particularly Suitable	5

**Scores for Expected Life**

Assessment Description	Score
Less than 2 Years	1
2 to 5 Years	2
5 to 40 Years	3
40 to 100 Years	4
More than 100 Years	5

**NOTES:**

**Proposed design 14-6-94/800 REV B:** requires the complete removal of this tree to achieve design. Road extended 2.2m as represented by orange line in photo below (does not include 100mm Kerb to road edge).



Photo taken from GIS approx. 2013 - Tree 19908.

High impact on trees highlighted in yellow







**Address of inspection:** Aberdare & Railway Intersection **Sharepoint Ref:** PAR-009147

Tree Asset ID	19909					
Botanic Name	<i>Eucalyptus rudis</i>					
Common Name	Flooded gum					
Height (m)	24.000000000000					
Width (m)	28.000000000000					
DBH (cm)	130					
Tree Value (\$)	2078.400000000000					
Health	Good	Fair	Poor	Very Poor	Dead	
Canopy Size	Very large	Score (1-5)	5			
Form	Good	Score (1-5)	4			
Importance	Considerable Importance	Score (1-5)	4			
Other Trees	Many	Score (1-5)	2			
Setting	Very Suitable	Score (1-5)	4			
Expected Life	40-100 years	Score (1-5)	4			

Date of Assessment: 23 March 2016

Assessment by: Chris Batchem  
Parks Coordinator - Arboriculture

**Scores for Canopy Size**

Assessment Description	Score
Very Small	1
Small	2
Medium	3
Large	4
<b>Very Large</b>	<b>5</b>

**Scores for Form**

Assessment Description	Score
Very Poor	1
Poor	2
Average/indifferent	3
<b>Good</b>	<b>4</b>
Very Good	5

**Scores for Importance**

Assessment Description	Score
Very Little Importance	1
Little Importance	2
<b>Some Importance</b>	<b>3</b>
Considerable Importance	4
Great Importance	5

**Scores for Other Trees**

Assessment Description	Score
Woodland	1
<b>Many</b>	<b>2</b>
Some	3
Few	4
None	5

**Scores for Setting**

Assessment Description	Score
Totally Unsuitable	1
Moderately Unsuitable	2
Just/Fairly Suitable	3
<b>Very Suitable</b>	<b>4</b>
Particularly Suitable	5

**Scores for Expected Life**

Assessment Description	Score
Less than 2 Years	1
2 to 5 Years	2
5 to 40 Years	3
<b>40 to 100 Years</b>	<b>4</b>
More than 100 Years	5

**NOTES:**

**Proposed design 14-6-94/800 REV B:** requires the complete removal of this tree to achieve design.

Road extended by 2.2m (does not include 100mm Kerb to road edge).



Photo taken from GIS approx. 2013

Trees heavily impacted highlighted in yellow.



**Orange mark shows proposed 2.2m road extension (does not include 100mm road kerb)**



**Address of inspection:** Aberdare & Railway Intersection **Sharepoint Ref:** PAR-009145

Tree Asset ID	19910					
Botanic Name	<i>Eucalyptus Rudis</i>					
Common Name	Flooded gum					
Height (m)	20.000000000000					
Width (m)	23.000000000000					
DBH (cm)	95					
Tree Value (\$)	3117.600000000000					
Health	Good	Fair	Poor	Very Poor	Dead	
Canopy Size	Very large	Score (1-5)	5			
Form	Good	Score (1-5)	4			
Importance	Considerable Importance	Score (1-5)	4			
Other Trees	Many	Score (1-5)	2			
Setting	Very Suitable	Score (1-5)	4			
Expected Life	40-100 years	Score (1-5)	4			

Date of Assessment: 23 March 2016  
 Assessment by: Chris Batchem  
 Parks Coordinator- Arboriculture

**Scores for Canopy Size**

Assessment Description	Score
Very Small	1
Small	2
Medium	3
Large	4
<b>Very Large</b>	<b>5</b>

**Scores for Form**

Assessment Description	Score
Very Poor	1
Poor	2
Average/indifferent	3
<b>Good</b>	<b>4</b>
Very Good	5

**Scores for Importance**

Assessment Description	Score
Very Little Importance	1
Little Importance	2
Some Importance	3
<b>Considerable Importance</b>	<b>4</b>
Great Importance	5

**Scores for Other Trees**

Assessment Description	Score
Woodland	1
<b>Many</b>	<b>2</b>
Some	3
Few	4
None	5

**Scores for Setting**

Assessment Description	Score
Totally Unsuitable	1
Moderately Unsuitable	2
Just/Fairly Suitable	3
<b>Very Suitable</b>	<b>4</b>
Particularly Suitable	5

**Scores for Expected Life**

Assessment Description	Score
Less than 2 Years	1
2 to 5 Years	2
5 to 40 Years	3
<b>40 to 100 Years</b>	<b>4</b>
More than 100 Years	5

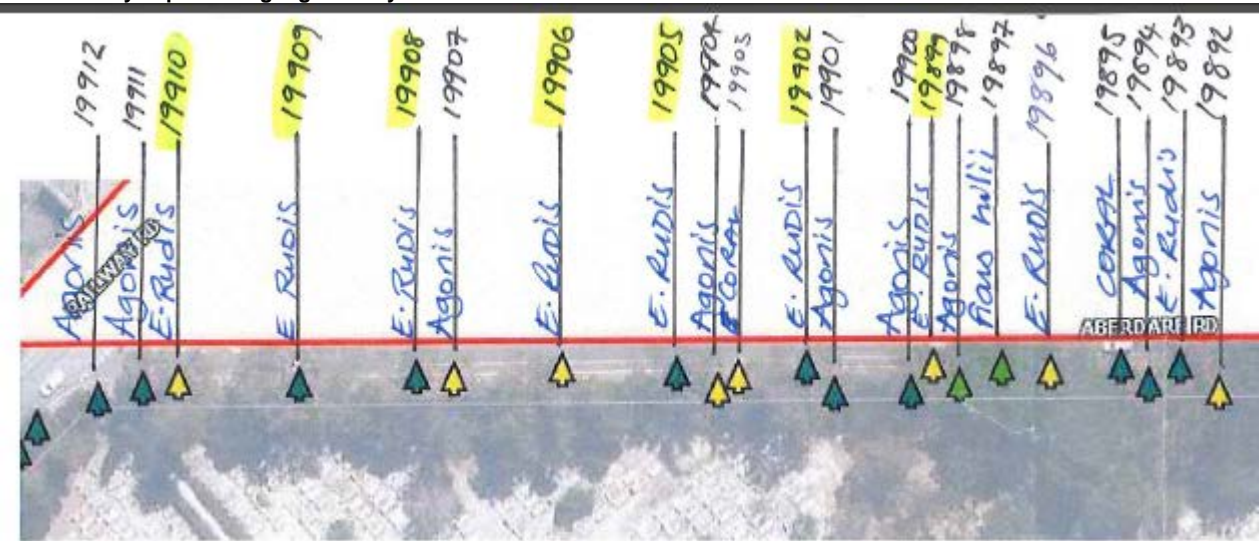
**NOTES:**

Proposed design 14-6-94/800 REV B: **requires the new kerb to tie into existing kerb as shown below.**



Photo taken from GIS approx. 2013

Trees heavily impacted highlighted in yellow.



New kerb line ties into existing kerb at arrow point

