Department of Planning, Transport and Infrastructure (Public Transport Projects Alliance)

Oaklands Park Railway Station and rail corridor at Diagonal Road, Addison Road and Railway Terrace, Warradale; and Morphett Road, Crozier Terrace, Diagonal Way and Murray Terrace, Oaklands Park

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SCAP AGENDA ITEM: 2.2.1

Application Summary	
Application No:	100/V053/18
KNET Reference:	12732533
Applicant:	Department of Planning, Transport and Infrastructure (Public Transport Projects Alliance)
Proposal:	Oaklands Crossing Rail Project: Preliminary Works Package (Stage 1)
Subject Land:	Oaklands Park Railway Station and rail corridor at Diagonal Road, Addison Road and Railway Terrace, Warradale; and Morphett Road, Crozier Terrace, Diagonal Way and Murray Terrace, Oaklands Park
Relevant Authority:	Minister for Planning
Role of the Commission:	Section 49(7)&7(c): the State Commission Assessment Panel must undertake an assessment of the proposal and report to the Minister for Planning.
Zone / Policy Area:	Residential Zone [PA12: Medium Density & PA16: Regeneration] and the Neighbourhood Centre Zone
Categorisation:	Merit
Notification:	Yes - development cost exceeds $4m
Representations:	5 representations (4 wish to be heard)
Lodgement Date:	20 March 2018
Council:	Marion Council
Development Plan:	Marion Council Development Plan Consolidated – 20 February 2018
Referral Agencies:	Commissioner of Highways, Government Architect
Recommendation:	Recommend to the Minister for Planning that development approval be granted subject to conditions

Executive Summary

The application relates to the preliminary stage of works for the Oaklands Crossing Rail Project: the grade separation of Morphett and Diagonal Roads from the Seaford railway line. The $174m project has been jointly funded by Commonwealth, State and Local Governments, and was previously recommended under the Integrated Transport and Land Use Plan to improve the safety and efficiency of the metropolitan transport network.

Stage 1 works comprise tree damaging activities to 61 regulated and significant trees (with 33 trees to be removed and pruning or root zone impacts to 28 further trees). In addition, temporary and permanent carparking areas are to be established to provide dedicated commuter carparking during construction and where relevant, project completion.

The main planning issue is the extent of tree removals and impacts proposed – primarily to the southern side of the existing rail corridor – to enable the realignment and grade separation works to be undertaken (and to ensure that existing passenger services can be maintained during the construction period). The mature trees to be removed form a notable visual element within the landscape, providing shade, habitat and a high level of amenity.

The development was publicly notified and five submissions were received. All submissions opposed the development, on the basis that the existing stand of mature trees need not be removed if works were confined to the existing rail corridor. The Marion Council – whilst supportive – resolved that an alternative alignment should be considered, existing regulated and significant trees be retained and that off-street carparking be increased.

The concerns raised by representors and council are noted, but the proposed impacts to regulated and significant trees can be supported on the basis of the design solution selected, various site constraints, operational needs, safety requirements and the overall public transport benefits to be delivered. The majority of mature trees within the project area retained, and a comprehensive landscaping strategy and replacement planting program is to be adopted.

Based on an assessment of the development application, a review of relevant planning policies (specifically those policies which relate to regulated and significant tree impacts), public submissions, council comments and the technical advice of referral bodies, the proposal demonstrates sufficient merit to be recommended for approval, subject to conditions and a comprehensive revegetation and landscaping strategy.

Assessment Report

1. Strategic Context

The South Australian Government is providing support to projects that provide for improved access (to transport services and providing better connectivity between modes of transport and localities), reduced travel times (to enhance economic productivity), minimise travel related carbon footprints; and improve safety with upgraded rail crossings for pedestrians and people in vehicles.

The *Integrated Transport and Land Use Plan (July 2015)* identified and prioritised the importance of grade separated road crossings of the passenger rail line at key locations in the Adelaide metropolitan area between Brighton and Elizabeth – including at Oaklands (p125) – to be completed within a 5-15-year timeframe. The proposal to separate the passenger rail and arterial road networks at Oaklands is consistent with the implementation of this plan and the anticipated timing of works.

The *30-Year Plan for Greater Adelaide (2017)* seeks the revitalisation of existing neighbourhoods, concentrated new development around transit corridors, and proposed new mixed-use precincts to bring jobs, services and public transport closer to where people will live. One of the key challenges of a more compact form is to identify new development opportunities within established suburbs.

The Oaklands Rail Crossing Project seeks to improve the amenity and safety of a major public transport station and interchange by improving connections to adjacent development and encouraging mixed-use development and housing diversity in close proximity. The Marion Council's *Housing Diversity DPA* seeks to introduce a Suburban Activity Node in accordance with these objectives to encourage a more compact urban form and take advantage of future investments in new public (transport) infrastructure.

At Oaklands Crossing, buildings of up to four storeys in height are envisaged. Shops, cafes and other non-residential land uses are encouraged at street level to provide increased activity and a pedestrian-friendly environment, while residential apartments will be located on upper floors.

Oaklands Crossing Rail Project

The project is being undertaken by the Public Transport Project Alliance, which is a partnership between the owner, DPTI, and industry partners Arup and Mott McDonald working in conjunction with constructor participant McConnell Dowell. The Federal Government is contributing $95 million, the State Government $74.3 million and the Marion Council $5 million, with construction expected to begin in mid-2018.

The proponent has advised that the *'delivery of this project has been designed in a manner that seeks to minimize short term disruption and disturbance whilst maximizing the resultant social, economic and environmental benefits'.*

Project Objectives / Community Benefits

- Separating road and rail traffic (with the railway line lowered) and reducing congestion / waiting times at the Morphett Road / Diagonal road level crossing for vehicles.
- Reducing conflict points between trains, road vehicles, bicycles and pedestrians
- Allowing the use of longer trains (with a new and extended station platform) to increase passenger capacity and reducing travel related carbon footprint
- Providing for enhanced connectivity between trains and buses for patrons moving between destinations and making public transport a more attractive option.
- Providing pedestrian and cycling connections through this precinct via a widened shared path under Morphett Road adjacent to the rail underpass
- Providing an improved attractive, safe and inviting public realm, including a plaza space to enable increased activation of the immediate locality; and
- Providing a public transport node that will unlock future opportunities for a more diverse range of housing options and urban renewal projects.

2. Description of Project

The Oaklands Crossing Rail Project consists of: rail infrastructure, bus and interchange infrastructure, road and pedestrian infrastructure, utility service infrastructure, structures integral to the rail lines operation, and tree damaging activity components. A copy of the overall precinct plan is provided on the next page (for the overall development).

Current application – Stage 1 (preliminary works)

Taking in account existing exemptions for the removal and installation of rail infrastructure in Schedule 3, Schedule 4 and Schedule 14 of the *Development Regulations 2008*, those elements of the proposed Stage 1 works that require development approval comprise:

- tree damaging activities involving the removal of 33 regulated and significant trees[1], and impact to an additional 28 regulated and significant trees (pruning, tree protection zone intrusion) within the rail corridor; and

- the establishment of both permanent and temporary on and off-street carparking areas to service the development.

The rationale for 18 regulated and 17 significant trees to be removed is set out below:

- 25 trees (15 regulated and 10 significant) due to direct impact of the tree trunk and structural root zone within the excavation zone of the new lowered railway.

- 2 trees (1 regulated and 1 significant) due to direct impact of the tree trunk and structural root zone associated with the installation of new services.

6 trees (2 regulated and 4 significant) due to direct impact of the structural root zone associated with retaining wall structures of the new lowered railway.

[1] One additional significant tree is to be removed due to the direct impact of the tree trunk and structural root zone within the excavation zone associated with the new lowered rail does not require formal approval under the Development Act (being the subject of road widening / alteration works on Morphett Road exempted by *Schedule 14 – Clause 1(1)(v) of the Development Regulations 2008*).


Oaklands Crossing
Precinct Plan
Legend
Existing Tree to be retained
New Tree
Opportunity for New Street Tree (To Be Confirmed)
Dryland Grass
Irrigated Garden Bed
High Quality Insitu Concrete Pavement
Segmental Feature Paving
Segmental Pavement with Pattern to Bridge
Kanmantoo Feature Paving
Greenway - Exposed Aggregate Concrete / Asphalt
City of Marion Standard Pedestrian Paving - Segmental Paving to match into existing
City of Marion Standard Concrete Pedestrian Paving to match into existing
New Asphalt Car Parking
Key
Reinstate Park post construction
Existing planting with new trees, planting and mulch wherever disturbed
Existing on road greenway link
Station North Forecourt
Station South Forecourt
New Car Parking
New Bus Stops
Improved access to Marion precinct (by Council)
Shared Use Pedestrian / Cyclist Bridge
Mounted Bridge
New Car Parking
Temporary car parking
Improved safety of pedestrian crossing
EXTENT OF WORKS
MORPHETT ROAD
DIAGONAL ROAD
25 MAY 2018
URBAN DESIGN REPORT
PREPARED BY PTPA
PTP

Associated works will also involve (but not be limited to) the clearance of non-regulated vegetation, earthworks, temporary signage, carparking (reconfiguration of existing areas) and service relocation.

Following application – Stage 2 (urban design and public realm works)

The Stage 2 application will cover the balance of the elements requiring a planning approval, including station canopy, public toilet and driver facilities, bicycle storage, bridge and station structures (architectural elements), public realm improvements, landscaping, pathways, and reinforced abutment walls. This application was lodged on 29 May 2018.

Project Summary

(a) Rail infrastructure

- New double track rail alignment to the south east of the existing line.
- New enhanced amenity station on both sides of the railway line (150m platform).
- New station canopy providing approximately additional shelter coverage.
- New platform furniture and passenger facilities (public toilet, driver amenities, bicycle storage, passenger information displays, CCTV and lighting.
- Demolition of the old Oaklands Station.
- Signalling, overhead wiring, traction power, drainage infrastructure.
- Enhanced public realm – design enhancements, landscaping, architectural features
- Noise mitigation measures (where required)
- New perimeter / corridor fencing, emergency maintenance egress.

(b) Bus and interchange infrastructure

- New bus shelters and passenger information displays
- New pathways and connection points to and from station, carparking areas, shared use paths and adjacent residential areas.
- Public lighting, CCTV, landscaping.
- Public carparks and set-down areas.

(c) Road and pedestrian infrastructure

- Improved connectivity to Marino Rocks Greenway
- Realigned shared use pedestrian and cycleway.
- Public lighting, landscaping, new carparking areas.

(d) Utility service infrastructure

- Relocation, protection and/or modification of all utility services to enable construction and the safe operation of the completed project.

(e) Essential operational infrastructure

- Bridge structure supporting elevated road and pathways over Seaford line – including elevated walkway providing a connection to the carpark and station plaza.
- Reinforced soil walls abutments at either end of bridge structure.

(f) Temporary builders' office, work amenities compound and hoardings.

(g) Tree damaging activity components

- the impact to 28 regulated and significant trees (12 regulated and 16 significant) associated with pruning or impact to more than 10% of tree protection zones (TPZ) associated with the development, which will be managed by implementation of design and construction methodologies that are considerate of tree health.

3. Subject Land & Project Area

The Oaklands Crossing Project involves land within the existing rail corridor and a number of private land holdings to the west of Morphett Road. A temporary commuter carpark will also be established on land at 416 Morphett Road, Warradale during construction works.

Table 1 (below) defines the subject land parcels:

Section/Lot	Plan	Road	Locality	CT Reference
A150	FP218080	Murray & Crozier Terrace	Oaklands Park	CT 6171/660
A2	DP12512	Morphett Road	Oaklands Park	CT 6149/961
A91	FP208467	Railway Terrace	Warradale	CT 5787/701
A3	DP36909	Railway Terrace	Warradale	CT 6168/475
A16	DP77101	Morphett Road	Warradale	CT 6008/494
A14	DP77101	Addison Road	Warradale	CT 6008/492
A15	DP77101	Addison Road	Warradale	CT 6008/493
A23	FP146151	Addison Road	Warradale	CT 6204/567
A94	FP147328	Dyer Road	Oaklands Park	CT 5854/339
A510	DP33064	Morphett and Diagonal Roads	Warradale	CT 5062/304
A507	DP33064	Morphett and Diagonal Roads	Warradale	CT 6021/139

The immediate locality is defined by the Oaklands Railway Station (on the Adelaide to Seaford Rail Passenger line) and low-scale, one to two-storey residential development (including earlier residential flat buildings and more recent two-storey townhouses) situated either side of the railway corridor along Murray Terrace and Crozier Terrace.

The Oaklands Railway station was first opened in 1913 and until 1953 was serviced by a single track (which was then duplicated to Oaklands). The island platform and asbestos shelter was demolished and a new station built closer to Diagonal Road (opened in 2008).

The station environs contain a number of carparking areas for park and ride commuters and incidental use from rail patrons. A number of mature trees (of a significant and regulated size) are located on each side of the existing railway tracks. They provide a high level of local amenity, being large trees with extended canopies.

The Seaford (broad gauge) line runs south from Adelaide Railway Station, and then south-west from Goodwood Junction, through the suburbs of Edwardstown, Oaklands Park and Marion to the coast at Brighton, where it heads south to Marino, Hallett Cove, Noarlunga Centre, Seaford Meadows and Seaford. The line has a double track arrangement throughout and is 36 kms long.

All inbound and outbound trains on the Seaford line to and from Adelaide (except those to Tonsley) allow passengers to alight and board at Oaklands Station.

Daily boarding numbers are approximately 1350 passengers. The first weekday service arrives (inbound to the city) at 5.45am, the last service (outbound) at 12.21am. Weekday services range from 30mins (after hours) to 5 mins at peak times. Weekend and public holiday services are every 30mins.

Oaklands Railway Station is not a designated interchange, however a range of bus services that connect through to the Marion Centre interchange that travel along Morphett and Diagonal Road, connecting with key destinations: Flinders University, Old Reynella, Aberfoyle Hub, the City Centre, West Lakes, Arndale, Colonnades and Glenelg.

A total of 286 carparking spaces are currently provided in a number of locations to the north and south of the existing alignment within the rail corridor.

The Marino Rocks Greenway (bike / pedestrian route) extends along the southern side of the rail corridor, whilst automated crossings for pedestrians to provide north-south connectivity are located either side of the dual-platform station.

The greenway provides a direct (off-road) connection between the city and/or Mike Turtur Bikeway and the Coast to Vines Trail. Existing footpaths adjacent to the Oaklands railway station on either side of Morphett Rd were upgraded in May 2015.

A small neighbourhood centre is to the north-west of the station, to the west of Morphett Road (and either side of Diagonal Road). The centre has a mix of retail tenancies and shops – including a Coles Supermarket – consulting rooms, health centre, chemist, dance studio, real estate agent, offices and therapeutic services.

To the south is the Marion Regional Centre, with the State Aquatic Centre, GP Plus Clinic, multi-deck carpark and Marion Cultural centre the closet of its public facilities.

To the south-west, a single storey building, located adjacent to a private grade-level carpark, accommodates the Vietnam Veterans' Federation. It's meeting rooms are to be relocated and the building demolished.

To the south-east, the Dwyer Road (Council) reserve is being mobilised for site offices and worker amenities areas to service the Oaklands Crossing Project.

No listed heritage places or sites of cultural significance are directly impacted by the works.

The nearest State Heritage Place – the Shri Ganesha Temple (the state's first traditional Hindu Temple) - is located at 3A Dwyer Road, Oaklands Park (two streets removed from the development site), with the nearest local heritage place being a dwelling located at 11-13 Walkley Avenue, Warradale (being 360m north-west of the development site).

The development parcels contain a small number of easements in relation to unrestricted rights of way and utility services.

There are no heritage or land management agreements on the subject land.

Plate 1 / Plate 2: Existing mature vegetation adjacent Murray Terrace to be retained.

Plate 3 / Plate 4: Existing mature vegetation adjacent Crozier Terrace to be removed.

Plate 5: The vegetation to be removed exhibits a high amenity value, with the tallest trees and most expansive canopies within the locality.

Plate 6: View from pedestrian crossing to Oaklands Station – existing station will be kept in service and then demolished.

Plate 7: Morphett Road – railway line will be lowered (to left of picture).

Plate 8: Temporary commuter carparking area adjacent Morphett / Diagonal Road.
Plate 9: Site compound and worker amenities area on Dwyer Reserve.

4. Previous applications

The current Oaklands Railway station was rebuilt in 2008.

In 2006, a crown development application (DA 49/100/0009/06) was lodged by TransAdelaide for the removal of 49 and the pruning of 71 significant*[2] trees. Another 31 non-significant trees were also proposed are to be removed. The trees to be removed and pruned were located within the environs and adjoining rail corridor of the Oaklands Park Railway Station. This corridor extended from Diagonal Road, at the southern end of the site, in a north-easterly direction to the terminus of Johnstone Road.

For those significant trees to be removed, 14 were classified as dead, 30 posed an 'unreasonable' public safety risk and 5 were in a poor or degraded state. The greatest amenity impact was at the southern end of Murray Terrace, adjacent to Morphett Road, where 13 trees were to be removed

This application was not subject to a public notification process under the *Development Act 1993*, but was conditionally supported by the Marion Council, and then considered by the former Development Assessment Commission on 11 January 2007. Approval was recommended and then granted (subject to conditions) by the Minister for Urban Development and Planning on 8 February 2007.

A separate application (49/100/0013/06) was lodged for the construction of a new train station (station platform and shelters) at Oaklands Park at a new site adjacent to Morphett Road and the decommissioning and demolition of the old station on 29 November 2006.

These works also included remediation of the site, with associated landscaping, carparking, access paths and security / safety lighting. This application did not require public notification (being under $4m in development cost). The Council was supportive of the development. Approval (subject to conditions) was granted on 17 April 2007

5. Design Review

The Oaklands Rail Crossing Project has not undergone a formal design review process but has been the subject of close involvement with the Office of Design and Architecture SA (ODASA). Staff members have been involved the in the initial scope, tendering and engineering solution for the development (and produced a high level urban design statement). For a copy of this design statement, refer to the ATTACHMENTS.

6. Procedural Matters

The application was lodged by a state agency and assessed in accordance with the provisions of Section 49 of the *Development Act 1993*. As all stages of the Oaklands

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[2] ** At the time of lodgement, a 'significant tree' had a trunk with a circumference of 2.0 metres or more or, in the case of trees with multiple trunks, that have trunks with a total circumference of 2.0 metres or more and an average circumference of 625 millimetres or more, measured at a point 1.0 metres above natural ground level.*

This definition was changed in 2009 (under the Development (Regulated Trees) Amendment Act 2009 and the Development (Regulated Trees) Variation Regulations 2011), with trees having a trunk circumference of between 2m and 3m being 'regulated' trees, and if over 3m, being a 'significant' tree. Council-wide policies were also amended to reflect the different types of regulated tree and the policy thresholds which applied in each case.

A Development Plan amendment was then brought into interim operation in November 2011, and then confirmed via a gazette notice on 15 November 2012. The DPA introduced policies into all metropolitan Development Plans that outlined the circumstances under which removal of a regulated tree and/or tree-damaging activity in relation to a regulated tree may be warranted.

Crossing Rail Project will exceed $4m in development cost, public notification of the proposal was required, along with referral of the application to the Marion Council.

7. Council Comments

Marion Council

At its meeting of 22 May 2018, the Marion Council considered the application and has advised that it supports – in-principle - the Development application, but requests that the proponent take the following comments into account:

- Find an alternate railway alignment within the existing railway corridor, so that the impact on trees is minimised
- Retain existing regulated and significant trees
- Increase off-street parking as part of the project.

Council members considered a report prepared by staff which recommended conditional support be provided for the current and future stages, with those specific comments for Stage 1 works reproduced below:

- The environmental, aesthetic and character contribution that the trees proposed to be removed is significant. They also offer a substantial wildlife corridor rarely seen within suburbia. The age and contribution of these trees has not been fully considered when offering vegetation replacement numbers. Sites beyond the work zone should be considered for new vegetation in addition to the promised 200 replacements.
- Council requests that consideration be given to the integration between the landscape and urban design of the project area with the City of Marion Streetscape Design Guidelines.
- Council encourages the consideration of other modes of transport to the rail station including the installation of a taxi stand.
- Council encourages further investigations be undertaken in regards to a temporary shared car parking arrangement with adjoining properties to ensure sufficient car parking is available during the construction phase of the project for both commuters and construction workers. There is perhaps an opportunity to commence a Commuter Demand Management Program
- A traffic and parking impact study covering both the during construction and post construction phases would provide greater certainty in regards to the adequacy of car parking numbers and traffic impacts on the surrounding areas.
- A Carpark Site Drainage Plan should be provided.
- The carpark widths should be 2.5m, rather than 2.4 m, to allow for convenient passenger access to parked cars. The proposed 2.4 m width is more suitable for all day employee parking, who are more familiar with the carpark and the adjacent users. This is not necessarily the case for the project carparks, which have a use more consistent with long-term city and town centre parking adjacent random vehicle owners. The carpark classification is therefore more consistent with User Class 2, Table 1.1 AS2890.1:2004.

Applicant response:

- The design of the project was fully investigated, including a range of potential options for achieving the grade separation of the railway line and Morphett Road during both concept and tender phases.
- The balance sought was to ensure that construction impacts, loss of vegetation, disruption to commuters, traffic delays, value for money and property acquisition was appropriately and practically considered.

- Regardless of the *possible* options considered on or near the existing alignment, the works required would still require the removal of at least 15-25 regulated and significant trees, the potential closure of the railway line for 5 months, require additional funds, require 24/7 construction and night works, and reduce the amount of land available for future development.
- None of the 19 options considered for the grade separation project retained all the existing regulated and significant trees within the rail corridor land.
- The selected design has gone through multiple iterations to ensure impacts were minimised through staging of works, temporary construction requirements, relocation of utility services, amendments to carpark designs, and earthworks scope.
- Fifty additional carparks are provided with the proposal – this will help to address the current overflow issues with park and ride patrons.

Council advice and the applicant's response is contained in the ATTACHMENTS.

8. Agency Referrals

Government Architect
No objection. The Oaklands Crossing Project has not been presented for design review, however the Strategic Design and Project Services sections of ODASA have been engaging with the PTP Alliance. Whilst no issues are raised – given the nature of the preliminary works – consideration should be given to incorporating water sensitive urban design features within the at-grade carparking spaces that are proposed with the application.

Commissioner of Highways
No objection. The proposed Stage 1 works form part of the Public Transport Projects Alliance project, with access to off-street carparks being from the local road network. DPTI has no comment to make on the application.

Technical Regulator
A signed declaration form was provided by the applicant in accordance with Schedule 5, Clause 2A, of the *Development Regulations 2008.*

Copies of agency responses are contained in the ATTACHMENTS.

9. Public Notification

Pursuant to Section 49(7d) of the *Development Act 1993*, as a development with a project cost (when all stags are complete) exceeding $4m the application was publicly notified in the Adelaide Advertiser and Coast City Weekly Messenger.

A total of 5 representations were received. None of the representations were made *directly* from any residents, business operators or landowners of the adjoining suburbs of Oaklands Park or Warradale.

Summary of concerns:

Rep No	Matters Raised	Applicant response
R1 – ER	▪ Many of the trees were planted to commemorate men who fought and were killed in World War I. ▪ Works should be undertaken on the existing line and alignment only (and keep damage to existing trees to a minimum).	The applicant provided a combined response to all issues raised covering five main issues: 1. Justification for removal 2. Heritage value of trees 3. Ecological value of trees 4. Tree retention options 5. Postponement of project

	▪ Line disruption can be managed by substitute bus services. ▪ Trees should also be retained for habitat, character and amenity reasons.	Justification for removal ▪ 17 potential options were explored through the detailed design of the project, which had to balance safety, accessibility, amenity, connectivity, service continuity and road transport flows with the intersection. ▪ A multi-criteria analysis recommended the optimal solution was to lower the railway line and construct a new line to the south of the existing alignment. ▪ Experience from previous projects has shown that broader community value continuity of service (and not longer commute times and increased reliance on car use during projects). ▪ Projects must also be cost-effective and maintain safety of the construction workforce. ▪ Selection of the preferred option then involved intensive design analysis to minimise tree impacts, through the engagement of expert design teams (EBS Ecology, Arborman Tree Services, Cox Architects). ▪ Design process resulted in 70 of 105 regulated trees in the project area being retained. 35 trees requiring removal are largely unavoidable due to the excavation of the railway. ▪ Landscape design includes 100 replacement trees, animal boxes for replacement habitat, retention of existing logs for re-use. ▪ Project has secured funding to respond to community concerns for a station / crossing upgrade. Heritage value of trees ▪ Adelaide to Brighton line opened in 1913 (and bisected existing farmland for grazing). ▪ The trees planted are Sugar Gums, which are not endemic to the Oaklands area. ▪ None of the trees to be removed are listed on any heritage register or have a designated "Special Value Tree" significance.
R2 - DC	▪ Not a public transport but a road project. ▪ Project is a short-term fix (that does not address more significant urban problems). ▪ Works should be delayed until 2028 (when the life expectancy of the trees is closer to their estimated date). ▪ Larger amenity trees need to be planted now (in expectation of a delayed timeframe and more generally across the council area for residents). ▪ Support the People for Trees submission.	
R3 - PFT	▪ Trees planted to commemorate ANZAC service (with signage lost). ▪ Alternative design should be considered. ▪ Benefit of trees has been long established in urban environments: provide shade, shelter, amenity, ecological value [biodiversity, habitat]. ▪ Utilise existing alignment (or go under/over roadway) with temporary bus replacement.	
R4 – CASA	▪ Project does not accord with objectives of the Marion Development Plan (natural resources). ▪ Trees are home to large numbers of native birds and other small creatures that have created / part of an urban ecosystem. ▪ Application does not show any alternatives to re-site the railway line enabling the preservation of the trees.	
R5 - YP	▪ Development not in accordance with Marion Development Plan. ▪ Significant trees should be	

	preserved and tree damaging activity should not be undertaken. ▪ Alternative development options have not been sufficiently demonstrated. ▪ For example, the roadway could be undergrounded and ensure that most of the trees could be retained. ▪ Why cannot the existing station platforms be extended to support longer trains? ▪ Planning department's reputation will be tarnished if approval were granted. ▪ Destruction of so many trees reduces sustainability and resilience to climate change.	▪ Council has confirmed that there is no evidence that the trees were planted for WW1/WW2 veterans or any other commemorative reason. <u>Ecological value of trees</u> ▪ The majority of mature vegetation is to be retained within the project area (and enables existing habitat to be retained). ▪ New trees and landscaping forms a component of the new works. <u>Tree retention options</u> ▪ Extensive list of project options have been investigated under a multi-criteria analysis. ▪ An underground option (as sought by one representor) would result in 20-25 trees being removed, whilst an alternative alignment would also result in tree loss. <u>Postponement of project</u> ▪ The Oaklands level crossing works have been sought by the local council and community over many years. ▪ Delays to the project would not meet the state's strategic landuse and transport planning goals. ▪ Improved rail services and customer amenity will help to increase patronage, reduce car use and emissions.

A copy of representations and applicant response is contained in the ATTACHMENTS.

10. Policy Summary

The Oaklands Station and environs (where the permanent and temporary works are to take place) are located in the Residential Zone [PA12: Medium Density & PA16: Regeneration] and the Neighbourhood Centre Zone under the Marion Development Plan.

<u>Residential Zone & Policy Areas</u>

The Residential Zone seeks a range of dwelling types (including affordable housing) at increased densities in close proximity to centres, public and community transport routes and public open spaces. Within the Medium Density Policy Area, development should not result in the removal of mature street trees in a road reserve that contribute positively to the landscape character of the locality (Desired Character statement).

The Regeneration Policy Area seeks significant change to the existing urban fabric to achieve 'strategic goals such as improved living conditions, environmental outcomes, and community services and infrastructure, as well as provide economically viable housing

choices for the changing demographics of our population and make more efficient use of land and infrastructure within the Metropolitan area'.

Neighbourhood Centre Zone

The Neighbourhood Centre Zone seeks the provision of a range of facilities to meet the shopping, community, business, and recreational needs of the surrounding neighbourhood. Such centres should provide the main focus of business and community life outside a district centre and provides for the more frequent and regularly recurring needs of a community. A centre accommodating residential development in conjunction with non-residential development is also appropriate.

General Policies

Regulated and Significant Trees

For significant trees that demonstrate any of the following:

(a) make an important contribution to the character or amenity of the local area;
(b) are indigenous to the local area and its species is listed under the National Parks and Wildlife Act 1972 as a rare or endangered native species
(c) represent an important habitat for native fauna
(d) are part of a wildlife corridor of a remnant area of native vegetation
(e) are important to the maintenance of biodiversity in the local environment
(f) form a notable visual element to the landscape of the local area.

new development should seek to preserve such attributes.

For regulated trees to be removed, such works should only occur if:

(a) the tree is diseased and its life expectancy is short
(b) the tree represents a material risk to public or private safety
(c) the tree is causing damage to a building
(d) development that is reasonable and expected would not otherwise be possible
(e) the work is required for the removal of dead wood, treatment of disease, or is in the general interests of the health of the tree.

For significant trees to be removed, such works should only occur if:

(i) the tree is diseased and its life expectancy is short
(ii) the tree represents an unacceptable risk to public or private safety
(iii) the tree is within 20 metres of a residential, tourist accommodation or habitable building and is a bushfire hazard within a Bushfire Prone Area
(iv) the tree is shown to be causing or threatening to cause substantial damage to a substantial building or structure of value
(v) all other reasonable remedial treatments and measures have been determined to be ineffective
(vi) it is demonstrated that all reasonable alternative development options and design solutions have been considered to prevent substantial tree-damaging activity occurring.

In cases of pruning and root impacts, such works should seek to maintain the health, aesthetic appearance and structural integrity of each regulated or significant tree.

Other Council-Wide policies of relevance to the assessment of the application include: design and appearance, crime and prevention, transportation and access, landscaping,

fences and walls, siting and visibility, natural resources, orderly and sustainable development and infrastructure.

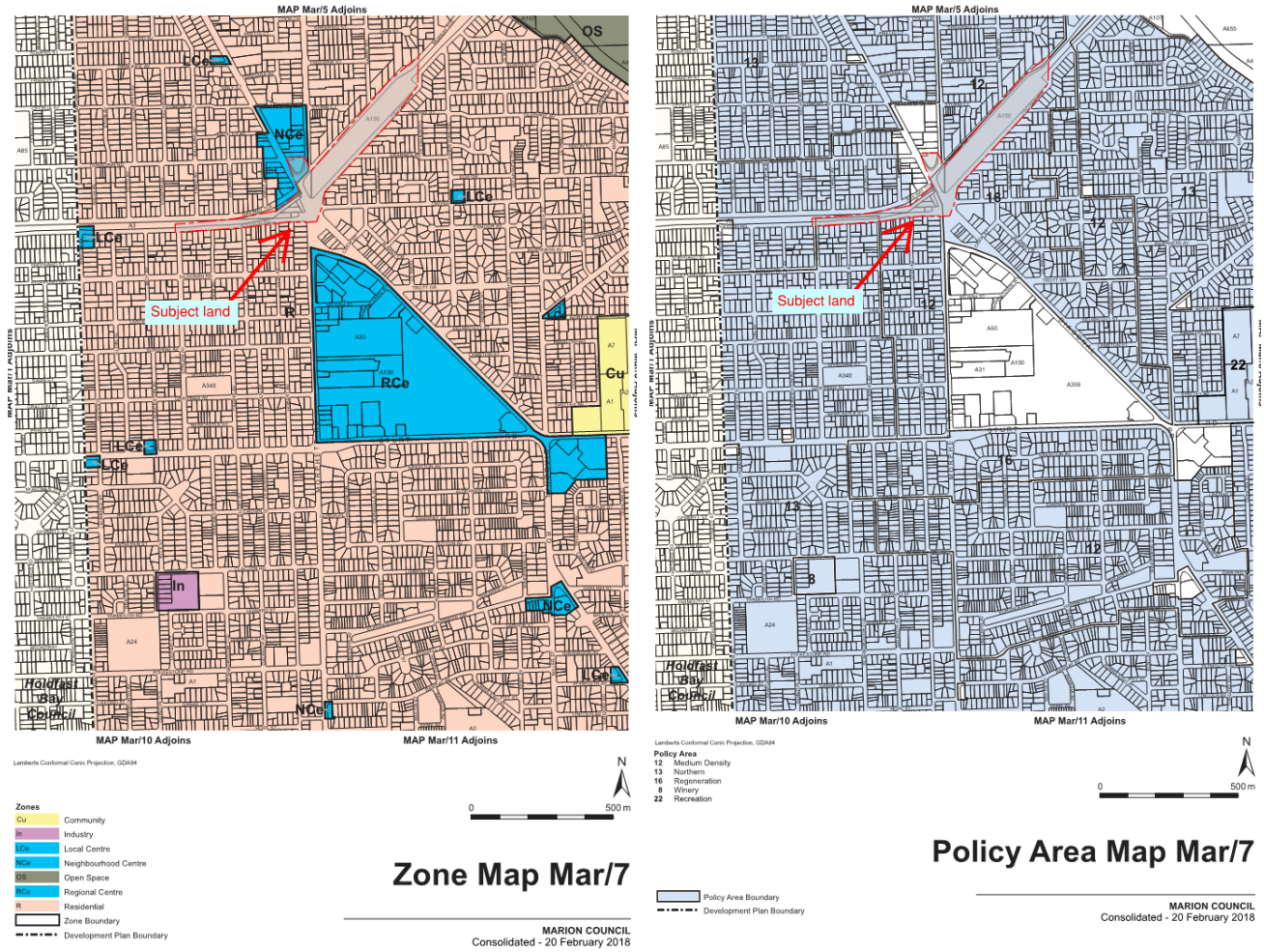


Figure 5/6: Zoning – Policy Area Maps

Precincts: N/A

Overlays: The Oaklands station site is within Zone D in respect to airport building heights – no referral is required as no building or structure exceeds 45m.

Relevant planning policies are contained in APPENDIX ONE.

11. Planning Assessment

The following planning policies are considered to be of relevance to the assessment of the proposal against the Marion Council Development Plan.

Tree damaging activities
The application proposes the removal of 33 regulated and significant trees and impacts to an additional 28 regulated and significant trees (pruning, critical root zone intrusion etc) within the rail corridor. Those 'regulated' trees within the arterial road corridor do not require approval under the *Development Act 1993.*

The PTP Alliance summarised the ecological assessment undertaken:

The Oaklands Crossing Project is located in a highly modified rail corridor adjacent to a residential area with nearby recreational facilities and a large commercial shopping centre. A large number of Sugar Gums "Eucalyptus cladocalyx" were identified with the majority located on the south side of Murray Terrace and the north side of Crozier Terrace. The majority of the vegetation to the west of the crossing outside of the rail corridor along Addison Road and Railway Terrace was comprised of planted exotic trees and shrubs, with scattered mature planted Red Gums. Street trees within the survey area were predominantly planted trees of non-native species with the exception of some large scattered River Red Gums south of the shopping centre and along Morphett Road, south of the level crossing.

A Vegetation Survey and Aboricultural Impact Assessment was undertaken by EBS Ecology and Arborman Tree Solutions (respectively), the latter provided recommendations as to tree protection, monitoring and management for those trees to be impacted but retained. A total of 110 trees formed the project area of the two surveys.

The list of species identified in the survey area are summarised below:

Botanic Name	Common Name	Number of Trees	Origin
Eucalyptus caladocalyx	Sugar Gum	69	Australian Native
Eucalyptus camaldulensis	River Red Gum	16	Local Native
Corymbia citriodora	Lemon Scented Gum	4	Australian Native
Eucalyptus leucoxylon	South Australian Blue Gum	3	Australian Native
Eucalyptus globulus ssp maidenii	Maiden's Gum	3	Australian Native
Brachychiton acerifolius	Illawarra Flame Tree	3	Australian Native
Agonis flexuosa	Willow Myrtle	3	Australian Native
Phoenix canariensis	Canary Island Date Palm	2	Exotic
Eucalyptus saligna	Sydney Blue Gum	2	Australian Native
Corymbia maculata	Spotted Gum	2	Australian Native
Melaleuca armillaris	Bracelet Honey Myrtle	1	Australian Native
Ficus macrophylla	Moreton Bay Fig	1	Australian Native
Eucalyptus sideroxylon	Mugga or Red Ironbark	1	Australian Native
Olea europaea ssp	Olive	Amenity Groups	Weed
Schinus molle	Pepper Tree	Amenity Groups	Weed

The trees to be removed – being a mixture of Sugar Gums (*Eucalyptus cladocalyx*), Blue Gums *(Eucalyptus leucoxylon; Eucalyptus saligna, Eucalyptus globulus),* and Spotted Gums *(Corymbia maculata)* were rated for their structure and overall health, the majority being in fair to good condition. Only 3 trees had a useful life expectancy under 10 years.

In cases of pruning and root impacts, such works should seek to maintain the health, aesthetic appearance and structural integrity of each regulated or significant tree.

For the trees to be retained (but impacted with a greater than 10% encroachment into their critical root zones), the Aboricultural assessment concluded that *"the existing conditions and opportunities to incorporate tree friendly design and construction methodologies indicates that the impact of the proposal on the remaining 70 trees to be retained can be minimised such that their condition will not be compromised."*

In terms of observable habitat, the EBS report noted that *"hollows were found in the majority of the Sugar Gums and may provide potential habitat for fauna such as the Common Brush Tail Possum. Nest boxes were attached to some of the Sugar Gums, which may be used by fauna"*.

In respect to their visual attributes, the subject trees do make an important contribution to the character and amenity to the local area (in terms of their height, maturity, shelter, habitat and streetscape value), and are a notable feature of the railway station and its environs – although it is also noted that the majority of trees surveyed are to be retained.

With the exception of one River Red Gum tree[3], no remnant vegetation exists on the subject land having been previously planted in an east to west alignment, either side of the railway tracks. No rare or endangered species were identified in the vegetation survey.

The subject trees are not within 20 metres of a residential, tourist accommodation or habitable building and are not located within a Bushfire Prone Area; and are not causing or threatening to cause substantial damage to a substantial building or structure of value.

All of these reasons would allow regulated and significant trees to be removed (with reasonable justification), but do not apply in this instance, the merit of the application rests on the selected design option and its "reasonableness".

Design Options

The development was subject to a comprehensive assessment to identify a range of potential options for achieving the grade separation of the passenger railway line from Morphett Road / Diagonal Road during both concept and tender phases.

Both the public representations and the advice of the Marion Council has recommended that an alternative design solution be adopted to ensure a greater number of significant and regulated trees be retained as part of the project, with the Council remaining supportive of the overall aims of the development.

Planning policy only seeks the removal of regulated trees (in general) and significant trees (in particular) in limited circumstances, such as when the trees are diseased or dying, a risk to public safety, building integrity or for their treatment and health.

In addition, removal can be considered if it can be demonstrated that all *reasonable alternative development options and design solutions have been considered to prevent substantial tree-damaging activity occurring.*

For public infrastructure projects, particularly works within defined road or railway corridors, design options are often constrained due to land availability, design and engineering feasibility, staging requirements, utility relocations, worker safety, and service availability.

All of these factors can attract variable costs and benefits for which a balance must be struck. From the proponent's perspective, a number of design options were considered. These are detailed in their planning report and do not require detailed re-examination.

These include options for a road overpass, a rail overpass or underpass, with a number of design solutions for each and short and long-term options.

[3] This tree has been identified S-S34 and is a River Red Gum located in the road reserve and therefore does not require approval for removal by the Minister for Planning (i.e. exempted by regulation).

Shortlisted options were then subjected to a cost benefit analysis, with the report *taking into consideration such aspects as cost, traffic delays, safety, accessibility, environmental impacts, implications for urban development and constructability. This analysis identified that options that modified the rail alignment offered greater levels of positive outcomes than options that modified the road alignment under or over.*

Option Q (which comprised a rail underpass with the new track to be positioned south of the existing track alignment so that train services are not affected by construction (except for short term closures) and the road network remaining with the same connections), was considered *to incur less social impact on the assumption that lowered infrastructure will have minimal visual and noise impact on the surrounding area resulting in higher amenity value of the surrounding area and (enable) new development in the area.*

This option is not hypothetical, with the Stage 2 application having been lodged by the proponent with the State Commission Assessment Panel, and remains consistent with the works proposed and the extent of tree damaging activities sought in the Stage 1 DA.

In addition, the applicant has further advised that regardless of the possible options considered on or near the existing alignment, the extent of earthworks required for the rail underpass option (which would deliver the greatest net benefit), still requires the removal of at least 15-25 regulated and significant trees due the installation of revetment walls, relocated access paths, road works and other rail infrastructure.

Such an option would also require the closure of the railway line for 5 months (with its attendant disruptions), increase project costs, require extended construction hours, and limit the available land to the north for future mixed-use development.

The over-riding rationale – in terms of justifying tree damaging activities to the extent proposed – is the consideration given to the overall public benefits of the project. Infrastructure projects are unlike other development, in this case seeking to resolve both a level crossing issue and provide upgraded rail services and facilities in a defined location.

From the PTP Alliance report: *all the tree removal approvals are related to the permanent works for the project with the trees requiring removal due to the proposed excavation and retaining structures associated to the east and south of the existing railway line.*

On this basis, it can be concluded that all *reasonable* alternative development options were considered by the proponent, and on balance, the proposed tree damaging activities are not in conflict with the local Development Plan and can be considered for approval.

The offset proposed (in the form of replacement landscaping and revegetation works) will be discussed below under the assessment relating to *Landscaping, fences and walls*.

Tree Protection Zones

The applicant's consultant (Arborman) took into account the likely impacts of encroachment from infrastructure works and in accordance with *Australian Standard 4970-2009 Protection of trees on development sites* section 3.3.4.

This recognised standard takes the following matters into account -

a) Location of roots and root development.
b) The potential loss of root mass from the encroachment.
c) Tree species and tolerance to root disturbance.
d) Age, vigour and size of the tree.
e) Lean and stability of the tree.
f) Soil characteristics and volume, topography and drainage.

g) The presence of existing or past structures or obstacles affecting root growth.
h) Design factors.

A total of 28 regulated and significant trees are impacted (due to critical root zone encroachment) to some degree by the proposed infrastructure works, but do not require removal (as can be appropriately managed / maintained within the rail corridor).

The Aborman report notes that of the 105 Regulated and Significant Trees surveyed, 38 have no impacts, 5 have a minor impact (<10% TPZ), 10 have a major impact (10-40% TPZ), and eighteen have a substantial impact (40%> TPZ but does not impact upon the critical root zone or the trunk of the subject tree).

Those with a conflicted impact (34), or highest rating, are generally those trees being removed, given the extent of impact to their critical root zone and/or trunk, particularly in respect to those along the new alignment

However, some trees – whilst receiving a *higher* impact rating - are located within existing carparking areas adjacent Murray Terrace and are to be retained, where compaction impacts have already been established. As noted in the report:

> *The area around the eighty trees to be retained is highly modified and in the most part the trees are already subject to major encroachment. The existing encroachment and ground conditions are not conducive to root growth at or near the surface and it is expected that the trees have adapted to the conditions and are exploiting soil at a greater depth ….. (and) it is reasonable to suggest that even the trees with substantial and major encroachments can be successfully retained within the development without a substantial impact on their condition.*

Notwithstanding this advice, whether the carparks exist or are relocated, such areas can be more appropriately designed and managed in respect to more "tree friendly methodologies" – which should be incorporated into their final design: particularly where services, such as utilities, stormwater, CCTV, lighting etc that require trenching works to occur, are carefully planned for and installed to avoid additional impacts.

A number of specific design methods than can be adopted, including but not necessarily limited to the redesign of the carparks to create larger areas around the trees, reduce the number of carparks in the vicinity of trees, and use alternate materials to reduce the compaction and allow water and oxygen to infiltrate the soil.

It is noted that DPTI Planning has not been provided with any detailed engineered plans of the permanent carparks overlaid on the tree protection zones, whilst utility locations, drains, services, pavement treatments and detailed planting plans are absent from the documentation. These details should be provided for external review and approval prior to their construction / establishment (on the basis that the remaining trees remain at risk if project works are not undertaken in accordance with "tree friendly" methodologies).

The Aborman report recommends that a Project Arborist be appointed to assist in the design of infrastructure around trees to be retained and the compilation of a Tree Protection Plan as identified in *Australian Standard AS4970 2009 Protection of trees on development sites*. A Tree Protection Plan (that incorporates the Tree Protection Zone guidelines in the Arborman report) should also be included in all construction documents and in the induction program.

These requirements will form part of the recommended conditions of approval.

On the basis that appropriate tree management and protection policies are adopted, those trees indirectly and directly impacted by the development (but are to be retained), the

project remains consistent with those planning policies which seek the continued protection and maintenance of regulated and significant trees within the railway corridor land.

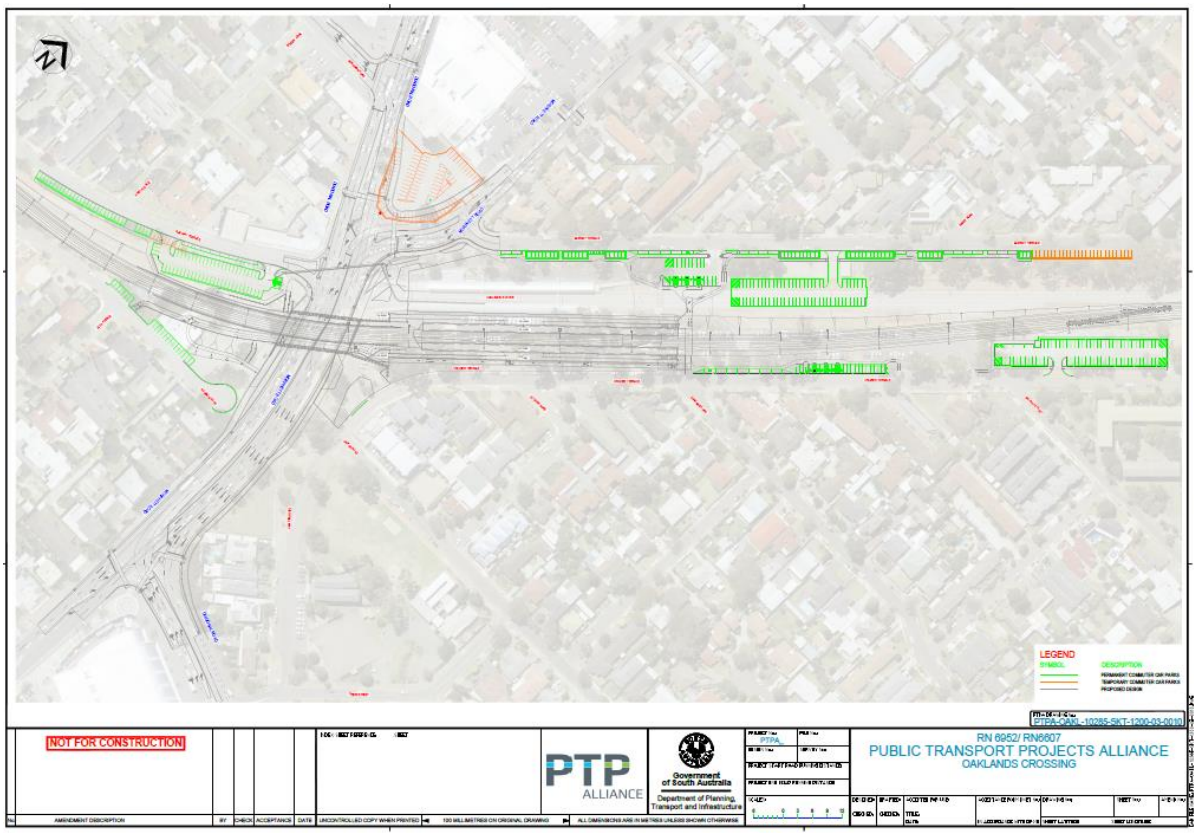
Transportation and Access

The Oaklands Park Railway Station currently provides a total of 256 carparks across a number of locations in the form of off-street spaces for patrons, visitors and commuters. An additional sixty (60) on-street parks are also available. These parking spaces will be either modified, removed or relocated as part of the project.

An analysis of rail patronage date has indicated that boarding activity is predominately inbound to the Adelaide CBD, with 20% outbound. Various travel modes are used to arrive and/or depart the station: 61% walk / kiss & ride; 25% park and ride; 12% bus transfer; and 2% by bicycle.

The applicant has advised that: *at present all parking at the (Oaklands) station is unpriced and has no time restrictions to their use. Site observations indicate that parking space use is very high, resulting in a large number of commuters parking on the surrounding street network or in a number of informal unmarked and unpaved areas surrounding the station.*

The Stage 1 development seeks to re-arrange carparking spaces, either on a temporary or permanent basis to compensate for those lost with the realignment of the railway.



New or refurbished permanent carparks (5) will be also established on Railway Terrace, Addison Road, Murray Terrace, Addison Road and Crozier Terrace. These are to be formed from land reclaimed from the current rail alignment, and parallel parking arrangements off Addison Road and Railway Terrace.

From the PTP Alliance Report:

Car Parking has been distributed along the corridor via a modification of the current on street parking (with some parallel parking being converted to right angle parking) and smaller clusters of off street parking where appropriately sized land parcels exist. This complies with the aim to provide like for like parking to that currently provided plus 50[4] spaces to seek to alleviate some on street parking in the locality by commuters while ensuring that substantial tracts of land surplus to requirements is available for future development to assist in the urban uplift of the precinct.*

No new access points are proposed to any arterial road, with carparking areas (now and in the future) to be accessed from the local (council) road network.

Two (2) temporary carparks with 108 spaces will be established – the first on vacant land behind the Coles Supermarket on Morphett Road, the second off Murray Terrace.

The total carparks to be provided post-construction will be 358 spaces – this will help alleviate some of the current on-street parking and commuter demand issues and address some of the concerns raised by Council. The distribution of these spaces is outlined in the PTP Alliance report – see below:

Parking area	Total spaces on street	Total spaces off street	Accessible spaces
1. Railway Tce	30	0	0
2. Railway Tce	8	55	2
3. Addison Road	22	0	0
4. Murray Tce	63	80	6
5. Crozier Tce	18	82	6

Dedicated motorcycle / scooter parking will be provided on Murray Terrace, with a kiss and ride area (6 spaces) and taxi bay (1 space) on both sides of the station. A total of 14 accessible spaces will be provided, with existing spaces not meeting relevant standards.

All parking areas will be constructed with a sealed asphalt surface and concrete kerb and gutter. White line marking will be applied to the pavement in all parking areas to formally define each parking space, shared areas and dead-end turnaround areas in accordance with AS2890. No dedicated landscaping is proposed inside the carparks.

Further capacity increases will be difficult, requiring either the purchase of private land, reduced (future) landscaping and/or removal of additional trees within the rail corridor.

Bicycle parking will remain unchanged whilst the current platform remains in operation, with the new facilities to include a dedicated swipe-card bicycle enclosure. No electric charging spaces nor dedicated car-share spaces are to be provided.

Pedestrian Connectivity

During construction, the existing level of pedestrian connectivity will be significantly constrained from the south, with access to the station for these residents resulting in

[4] Total additional carparking numbers are 72 (the business requirement was 50 spaces, but design development has exceeded this number by a further 22 spaces).

lengthy redirections – the Johnstone Road pedestrian crossing to the north-east, or a very circuitous route around the temporary workers amenities and site office on Dwyer Road then via Morphett Road to the station. This needs further clarification – both for pedestrians and cyclists – including the need to establish a temporary signalized crossing of Morphett Road at the earliest opportunity.

The Stage 2 application will need to carefully assess these arrangements.

Landscaping, fences and walls

The current proposal does not seek to undertake specific landscaping works – these being the subject of the follow-up Stage 2 application lodged with SCAP on 29 May 2018. Although an indicative landscaping plan was provided for the Stage 1 application, for member's information, the revised landscaping plan and schedule has been provided in the ATTACHMENTS.

On the basis approval is granted to remove a regulated or significant tree, planning policies (and accompanying regulations) require either an offset to be provided in respect to replacement plantings or the payment of a fee into the Planning and Development Fund.

The nominal replacement plantings for the development would be on a 3 to 1 basis for each significant tree removed, and a 2 for 1 basis for each regulated tree removed.

For this development, the *minimum* replacement plantings would be a total of 81 replacement trees (18x2 + 15x3 = 81). The current prescribed fee in those circumstances where a replacement fee is not planted is $87.50 (or if none are planted, $87.50 x 81 = $7087.50 and would be payable into the fund) [Refer Regulation 117].

The proponent has opted for replacement plantings, with over 250 trees to be established within the new station, carparks and environs. This exceeds the statutory requirement by over 150 trees.

Whilst the removal of mature and healthy vegetation is clearly not ideal – and should be avoided wherever possible – the scope and nature of the replacement plantings are equally important, as they need to do the "heavy lifting" in terms of native species, biodiversity and habitat values, install height vs mature height, shade and shelter etc to complement and reinforce the landscape and amenity values that will be significantly impacted in the short to medium term.

The species types, numbers and mature height levels are listed in the Table below.

Botanical Name	Number	Install height	Mature Height	Mature Spread
Allocasuarina verticillata	7	2.5m	5-8m	4-6m
Angophora hispida	9	2.5m	4-7m	3-4m
Celtis australis	22	2.5m	12-15m	5-8m
Cupaniopsis anacardioides	15	2.5m	7-8m	4-5m
Eucalyptus camaldulensis	23	2.5m	18-30m	8-15m
Eucalyptus leucoxylon ssp. leucoxylon	11	2.5m	8-15m	6-10m
Eucalyptus leucoxylon 'Euky Dwarf'	4	2.5m	5-6m	3-5m
Eucalyptus leucoxylon 'Rosea'	2	2.5m	8-20m	8-18m
Eucalyptus microcarpa	3	2.5m	8-15m	6-12m
Hymenosporum flavum	57	2.5m	6-10m	3-6m

Or alternatives TBC: *Eucalyptus torquata* *Corymbia ficifolia*			6-12m 6-10m	5-10m 3-5m
Koelreuteria paniculata	11	2.5m	7-10m	4-5m
Pyrus calleryana 'Chanticleer'	15	2.5m	7-11m	4-6m
Zelkova serrata 'Green Vase'	13	2.5m	10-14m	8-10m

The inclusion of red gums (23), blue gums (11) and grey box (3) is supported, with most to frame the station complex, and act as infill plantings along Murray Terrace that hold the promise of *future* height and extended canopies as they approach maturity.

These species are not typically planted within or along rail corridors (today), and at least match – in number – the trees to be removed, with other ornamental / formal plantings closer to the railway station and pedestrian paths (along with just under 10,000 shrubs, ground covers and grasses), that provide for a comprehensive response for all the vegetation to be removed, including those non-regulated plantings.

The proposed landscaping plan (see above) strikes an appropriate balance, through an enhancement – or at least *promise* of one – to local amenity (post-operation), using locally indigenous plant species in the main (Landscaping: OB1, PDC2), so as to complement existing vegetation, contribute to biodiversity values, promote soil and water conservation, provide shade and shelter, improve the appearance of road frontages and screen infrastructure (Landscaping: PDC1).

It is also noted that the proposed tub sizes / installed height of tree plantings (2.5m) result in trees that are more advanced than seedlings, a head-start in effect, with the amenity and landscaping benefits having a more immediate short-term benefit (whilst not compromising long-term growth and maturity).

Fencing: to restrict inadvertent pedestrian and commuter access to the rail corridor, perimeter and safety fencing up to 2.1m in height is exempted by regulation from requiring development approval. However, details will still be provided with overall landscaping plan submitted with the Stage 2 application lodged on 28 May 2018.

Walls: revetment and retaining walls – given the nature of a lowered station – are detailed in the Stage 2 application and will be assessed at that time. However, external walls (in form and finish) are proposed to comprise a mix of pre-cast, shotcrete (with broom finish), hand faced gabion, concrete post and panel and shotcrete scallop types.

Design, appearance, siting and visibility

The removal of significant and regulated trees within the southern extent of the rail corridor at Oaklands Station will have an immediate, short to medium term impact on local amenity with the total loss of vegetation for residents along Crozier Avenue.

A comprehensive landscaping plan has been developed to address these impacts, and new plantings are proposed along the street frontage and entrances into the redeveloped station complex. It is also noted, that as the existing railway line is to be lowered, along with the infrastructure that supports railway operations (particularly the gantries, poles and wires), in the medium to long term the maturity of the replanting and the siting of the infrastructure, should provide visual relief and improved amenity (as the commuter carparking is also removed from this area).

The PTP Alliance report seeks to highlight the benefits from "*an enhanced station precinct with greatly improved pedestrian and bicycle connectivity and safety along with high quality amenities that supports the state's mandate to increase public transport patronage …* (whilst) … the *ground plane is imagined as a 'green' place with a combination of landscaped strips and an extended urban plaza situated both north and south of the rail corridor adjacent to Morphett Road and connected via a wide pedestrian promenade hinged off Morphett Road. The Plaza provides clear sightlines to the station and adjacent properties and allows for maximum pedestrian circulation and navigation to the platforms and Greenway."*

The Stage 2 assessment will consider the architectural and built form features of the station complex and their suitability in more detail (with a further review to be undertaken by the Government Architect), although to assist members these plans have been provided for reference purposes, if only to outline the design solution proposed.

Natural resources

The project is to be developed in accordance with sustainability principles, such as Water Sensitive Urban Design, through the efficient management of stormwater and the protection or reinstatement of existing or replacement vegetation within and around the Oaklands Station precinct. Water quality improvements are currently being discussed with Marion Council, including means to improve water quality and discharge locations.

The removal of trees and associated hollows and nesting boxes will have an impact on existing habitat for local fauna. The applicant has undertaken to implement a fauna and flora management plan, which – amongst other initiatives - will form part of the project, including the *"capture and relocation of fauna living within the trees, and incorporation of hollows/nesting boxes within the development".*

In addition, *"cleared/removed vegetation will be reused within the project area or at another local location where possible to enhance habitat for local fauna or chipped for mulch and reused. Trunks with hollows may be donated to the Council or used onsite for*

use in habitat development through the Local Council Area to support the native fauna population". Submission of the fauna and flora management plan should be required before the commencement of construction to outline all mitigation measures.

The Stage 2 application will need to demonstrate those sustainability and energy efficiency measures to be incorporated into the final design of the station environs.

Crime and prevention

The applicant has advised that the design of each parking area will apply accepted CPTED principles. All areas have been placed in locations with unobstructed public visibility and close to residential streets with reasonable evening activity. All car parks will be illuminated to provide all hour's visibility, with dedicated CCTV coverage installed as part of the station security design. The main station development and connecting pathways will be considered with the Stage 2 assessment. Final plans for the carparking areas have been recommended as a condition of approval.

Orderly and sustainable development

There is no change in land use. The existing railway corridor retains its public transport use, the only exceptions being the relocation of temporary and permanent carparking within and adjacent to the rail corridor. The Oaklands Crossing Project is in general accordance with strategic level land-use planning and transport policies endorsed by the State Government.

The project seeks to achieve a number of objectives relating to the separation of road and rail traffic, enable the use of longer electric trains (with an increase in platform length) to provide greater passenger capacity, provide for enhanced connectivity between trains and buses, maximise pedestrian and cyclist connectivity within the wider precinct, establish a high quality public realm and station plaza, and enable future development opportunities for a more diverse range of housing options and urban renewal.

Infrastructure

The proposed development is consistent with Development Plan provisions that seek the economical provision of infrastructure (being the option selected) and to minimise its visual impact (with a lowered railway station) (CW: Infrastructure OB1, OB5). Existing services and utility connections remain available to the development, and infrastructure easements (where required) can be preserved or reinstated. Two trees (1 regulated and 1 significant) are required to be removed due to the direct impact of the tree trunk and structural root zone associated with the installation of new services. As previously stated, detailed plans for the carparks should be reviewed to ensure the installation of services avoid the critical root zones of the regulated and significant trees to be retained.

Heritage

There are no local or state heritage places that will be directly impacted by the development. No sites of cultural significance have been indemnified – although any statutory requirements of the Aboriginal Heritage Act continue to apply. One representation raised the issue of the Oaklands Station trees being planted in memory of fallen servicemen (ANZAC), however there is no direct evidence or documentation that can be identified to support this contention (noting the comments of the City of Marion and that most Avenues of Honour have generally been identified) and no records were provided by the representor. Marion Council has confirmed that the Railways Commissioner gave their permission for trees to be planted along the railway corridor in 1916, possibly because the previous land was subdivided at that time and existing trees cleared when the line was opened in 1913 (i.e. a suburban beautification rather than a commemorative measure).

12. Conclusion

The proposal seeks approval for a preliminary works package to enable the commencement of site works in relation to the Oaklands Rail Crossing Project. The Stage 2 application has recently been lodged and contains the full design details of the project and the permanent structural and public realm improvements for a realigned and lowered railway station.

The concerns raised by environmental and community groups in respect to the removal of mature and healthy regulated and significant trees is noted, as is the desire of elected members of Council to seek an alternative solution for a supported project. Based on the information provided, the applicant has demonstrated the reasonable and considered steps taken to investigate options and recommend a practical and cost-effective solution within a constrained rail corridor. The project has a range of benefits – both to road users, rail commuters and the local community, whilst also providing new development opportunities in accordance with the state's planning strategy to increase densities and harness existing infrastructure along public transit routes.

Public realm improvements, infrastructure upgrades, additional carparking, new facilities, enhanced landscaping (with suitable species) and improved amenity for residents, commuters, pedestrians and cyclists are key considerations in achieving an acceptable balance for the obvious short to medium term loss of mature vegetation, habitat and amenity that is proposed, particularly along Crozier Terrace.

The proposal is consistent with current and envisaged policies for the development of the land for public infrastructure purposes. A range of conditions have been recommended, particularly in respect to matters of detailed design for the carparks and the management of impacts during construction (i.e. tree management and protection).

13. Recommendation

It is recommended that the State Commission Assessment Panel:

1) RESOLVE that the proposed development is NOT seriously at variance with the policies in the Development Plan.

2) RESOLVE that the State Commission Assessment Panel is satisfied that the proposal generally accords with the related Objectives and Principles of Development Control for the redevelopment of existing public transport facilities to provide an enhanced user experience within the Residential Zone [PA12: Medium Density & PA16: Regeneration] and the Neighbourhood Centre Zone of the Marion Development Plan.

3) RESOLVE to recommend to the Minister for Planning that Development approval be granted to the proposal by the Department of Planning, Transport and Infrastructure (Public Transport Projects Alliance) to undertake tree damaging activities within the existing rail corridor and for the establishment of both permanent and temporary on and off-street carparking areas to service the Oaklands railway station subject to the following reserved matters, conditions and advisory notes.

Relevant documents and plans

1. Except where minor amendments may be required by other relevant Acts, or by conditions imposed by this application, the development herein approved consists of Oaklands Crossing Rail Project: Preliminary Works Package (Stage 1) for tree damaging activities within the existing rail corridor and for the establishment of both permanent and temporary on and off-street carparking areas to service the Oaklands railway station in general accordance with the details and plans, as submitted in Development Application number 100/V053/18:

   - Public Transport Projects Alliance – Oaklands Rail Crossing – Planning Report – Application for tree damaging activities (including removal) and new car parking (application no 1) Doc No: PTPA-OAKL-10810-REP-0000-PLN-0001 Project No: 2827 Rev C dated 20.3.18 (incorporating appendices A to L).
   - PTP Alliance Technical Note – Response to Representations dated 10 May 2018.
   - PTP Alliance Correspondence – Response to Marion Council dated 26 May 2018.
   - Tree Planting Plan SK-008 Rev E dated 24.5.18 prepared by ASPECT Studios.

Reserved Matters requiring final approval

2. Prior to the removal of any regulated or significant tree herein approved, the following information shall be submitted for the approval of the Minister for Planning:

   (a) a Tree Protection Plan shall be prepared in accordance with the recommendations of the *Arboricultural Impact Assessment – Oaklands Park Interchange Report – ATS4887-Oaklands RailDIR prepared by Arborman Tree Solutions dated 14 March 2018* and *Australian Standard AS 4970 2009 Protection of trees on development sites.*

   This plan shall contain a final map and schedule of all significant and regulated trees to be removed or impacted and/or retained within the project area. All tree protection zones must be identified for such trees to be retained and the strategies to be implemented (i.e. 'tree friendly' methodologies) to further minimise tree damage during the construction phase.

   (b) a Fauna Management Plan shall be prepared to manage and mitigate impacts in accordance with accepted environmental practices and outlines those strategies and methods in relation to the capture and relocation of fauna living within the trees to be removed, and incorporation of equivalent replacement hollows/nesting boxes within the project area.

3. Prior to the commencement of site works (excluding the removal of any regulated or significant tree herein approved), the following information shall be submitted for the approval of the Minister for Planning:

   (a) the final design of temporary and permanent carparking to provide rail patron and commuter carparks during the construction and operational phases of the development.

   The design shall include a detailed overlay of all tree protection zones for those regulated and significant trees to be retained that are within or directly adjacent to these carparking areas and demonstrate how all service connections (to be undergrounded), drainage systems, lighting and CCTV services, and paving treatments have been arranged to ensure that the long-term health and viability of retained and proposed trees is not further compromised.

It must also be demonstrated that all temporary and permanent carparks meet relevant Australian standards in relation to access, manoeuvrability, aisle and carpark widths, directional warning signage, public lighting, pedestrian movement and driver sightlines.

(c) provision of a carpark site drainage plan. This plan must demonstrate that stormwater can be appropriately discharged to existing infrastructure (or improved to meet Council requirements), and how water sensitive urban design principles have been incorporated into the design of the permanent carparks to ensure water quality impacts are minimised, and how overland flows can be reused or channelled to support the landscaping scheme.

General Conditions

4. A Construction and Environmental Management Plan (CEMP) shall be prepared and implemented to manage site and construction works for Stage 1, and shall address - but not be limited to the following:

   - Air quality controls: including management of dust.
   - Stormwater management: including erosion and sediment controls
   - Temporary traffic controls, parking and detours
   - Vehicle routes for haulage and equipment
   - Minimise noise impacts to adjoining owners and occupiers
   - Occupational health and safety.
   - Water quality controls and monitoring.
   - Operational hours that minimise amenity loss / level of disturbance to residents.
   - Establishment and maintenance of temporary fencing and hoardings.

   A copy of the CEMP must be provided to the Marion Council and the Minister for Planning prior to the commencement of site works.

5. A Soil Erosion and Drainage Management Plan (SEDMP) shall be prepared and implemented that details erosion controls aimed at preventing soil erosion in the first instance, and sediment controls aimed at capturing the soil particles once disturbed through soil erosion for Stage 1, prior to the commencement of site works. The SEDMP must reference and take guidance from relevant requirements and objectives of the *Environment Protection (Water Quality) Policy 2015.* A copy of the SEDMP must be provided to the Marion Council and the Minister for Planning.

6. All directional signage and line-markings in car parking/manoeuvring areas shall be maintained in good condition at all times and remain clearly visible.

7. All stormwater design and construction shall be in accordance with Australian Standard AS/NZS 3500.3:2015 (Part 3) to ensure that stormwater does not adversely affect any adjoining property or public road.

8. Wheel stopping devices (with the exception of temporary parking areas) shall be placed within each parking bay so as to prevent damage to adjoining fences, structures or landscaping.

9. All carparking and manoeuvring areas shall confirm to Australian/New Zealand Standards for off-street carparking; AS/NZS 2890.1:2004 Off-Street carparking and AS/NZ 2890.6: 2009 Off-Street parking for people with disabilities.

10. All Council, utility or state agency-maintained infrastructure (i.e. roads, kerbs, drains, crossovers, footpaths etc.) that is demolished, altered, removed or damaged during

the construction of the development shall be reinstated to council, utility or state agency specifications.

11. All canopy and root pruning shall be undertaken by a qualified arborist and in accordance with *Australian Standard 4373-2007: Pruning of Amenity Trees.*

12. A qualified arborist shall be present during excavation works affecting significant and regulated trees (to be retained) to determine the extent of existing tree roots in close proximity to impact zones, to undertake a visual inspection and initiate remedial works (where necessary) during construction work and to monitor the likely impacts on tree stability and health to ensure any disturbance issues are minimised.

13. Semi-mature tree species from 2.5m in height (and in general accordance with *Tree Planting Plan SK-008 Rev E dated 24.5.18 prepared by ASPECT Studios*) shall be planted on a minimum of a 2 for 1 basis to compensate for the removal of each regulated tree and a minimum of a 3 for 1 basis for each significant tree.

14. The critical root zones of regulated and significant trees to be retained shall be fenced and protected to prevent accidental damage and to ensure material stockpiling, incidental compaction or vehicle movements do not impact these trees. Furthermore, all relevant protection measures that comply with the *Australian Standard for Protection of Trees on Development Sites 4970-2009* shall be implemented and complied with at all times.

15. All external public and security lighting for carparking areas shall be designed and constructed to conform with Australian Standards and must be located, directed and shielded and of such limited intensity that no demonstrable nuisance or loss of amenity is caused to any person beyond the site. Note: Public areas must be provided with sufficient lighting to ensure the safe and secure movement of people and vehicles in accordance with *Australian Standard AS 1158 - Lighting for roads and public spaces* and *Australian Standard AS 4282 - Control of the obtrusive effects of outdoor lighting*.

16. The approved Tree Protection Plan shall be included in all construction documents and induction program.

17. All temporary carparking areas shall be closed and where required, the land reinstated or appropriately landscaped, within 3 months of the operational commencement of services on the realigned railway and new passenger station.

DEVELOPMENT ACT 1993 & DEVELOPMENT REGULATIONS 2008 REQUIREMENTS

i. Pursuant to Section 49(14) of the *Development Act 1993* before any building work is undertaken, the building work is to be certified by a private certifier, or by some person determined by the Minister for the purposes of this provision, as complying with the provisions of the Building Rules (or the Building Rules as modified according to criteria prescribed by the Regulations).

ii. The development must be substantially commenced within 12 months and fully completed within three years of the date of this Notification unless this period has been extended by the Minister for Planning.

ADVISORY NOTES

a. A current list of Registered Private Certifiers in South Australia is available here: http://www.sa.gov.au/topics/property-and-land/land-and-property-development/engaging-building-industry-professionals/private-certifiers

b. At completion of the project all certified documents should be retained by the responsible agency for the life of the asset.

c. For additional information relating to certification of government building projects, contact Infrastructure Delivery, Department of Planning, Transport and Infrastructure (telephone 8343 2511) Level 1, 77 Grenfell Street, Adelaide, 5000.

d. Any request for an extension of time must be lodged with the Assessment Branch prior to the time period specified above, Department of Planning, Transport and Infrastructure, GPO Box 1815 Adelaide SA 5001.

e. All Aboriginal sites and objects are protected under the *Aboriginal Heritage Act 1988* (the Act). It is an offence to damage, disturb or interfere with any Aboriginal site or damage any Aboriginal object (registered or not) without the authority of the Minister for Aboriginal Affairs and Reconciliation (the Minister). If the planned activity is likely to damage, disturb or interfere with a site or object, authorisation of the activity must be first obtained from the Minister under Section 23 of the Act. Section 20 of the Act requires that any Aboriginal sites, objects or remains, discovered on the land, need to be reported to the Minister. Penalties apply for failure to comply with the Act.

f. The applicant is reminded of its general environmental duty, as required by Section 25 of the *Environment Protection Act 1993*, to take all reasonable and practicable measures to ensure that the activities on the whole site, including during construction, do not pollute the environment in a way which causes or may cause environmental harm.

g. The applicant is reminded that works herein approved will need to be undertaken in accordance with Division 1 of Part 6 of the *Environment Protection (Noise) Policy 2007* at all times.

h. The applicant is reminded that the project will need to be undertaken in accordance with the *Environment Protection (Water Quality) Policy 2015.*

i. If regulated or significant trees are to be retained adjacent to the site, the applicant is advised to consult *Australian Standard AS 4970 – 2009 Protection of Trees on Development Sites* to ensure the incorporation of protective fencing, mulch and appropriate remedial treatments. Requirements of this standard include:

- The establishment of Tree Protection Zones to restrict activities including the dumping of waste, machine excavation, storage and preparation of chemicals, and physical damage to trees;
- The erection of protective fencing around a Tree Protection Zone prior to machinery or materials brought onto the site to prevent unauthorised entry and compaction of soils over critical root zones;
- The use of approved signs to identify the Tree Protection Zone;
- Mulching, watering and weed removal recommendations to maintain the Tree Protection Zone.

Regular monitoring of tree protection measures should be undertaken throughout the development and construction process to ensure that any trees to be retained on the site are carefully managed to ensure their long-term survival and growth.