

# Urban Forestry Victoria P/L

Arboricultural Consultation



## Arboricultural Construction Impact Assessment



**66 & 72 Miller St, Preston VIC 3072**

Date of Report 8/03/2024

Report version 1.0

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<sup>a</sup> I Mr. Trevor Moulynox, consent to having my personal information (name, phone number) contained in this document submitted as part of an application for a planning permit, be made available electronically in accordance with the public availability requirements of the Planning and Environment Act 1987. I understand that if I wish to withdraw my consent at any time, I need to notify Council's Statutory Planning Unit in writing.

Urban Forestry Victoria P/L

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## Executive Summary

There is a total of fourteen (14) trees included in the assessment. Of these,

- Seven (7) trees are located within the subject site.
- No trees are located within neighbouring property.
- Seven (7) trees are located within municipal property.

The Construction Impact Assessment makes the following conclusions based on the condition of the subject trees within the context of the proposed design.

- Seven (7) trees located within the subject site are proposed to be demolished. Tree 1, 2, 4, 5, 6, 7, and 8.
  - One (1) tree will require a permit to remove, destroy, or lop. Tree 8.
  - Six (6) trees will not require a permit to remove, destroy, or lop. Tree 1, 2, 4, 5, 6, and 7.
- Five (5) trees within municipal property will be impacted. Tree 3, 9, 10, 11, and 14.
  - One (1) tree will remain viable with no mitigation of impact. Tree 3.
  - Three (3) trees require construction methodology specifications for viable retention. Tree 10, 11, and 14.
  - One (1) tree cannot be retained and will require approval by the responsible authority to demolish. Tree 9.

Construction methodology specifications and/or design revision recommendations are included within the *Recommendation* section of this report.

## Introduction

### Report Objective

The objective of this report is to identify and evaluate the potential impact of the proposed development on trees that meet the assessment criteria. The assessments conducted in this report adhere to the guidelines set forth by the Australian Standard, Protection of Trees on Development Sites (AS 4970-2009).

### Methodology

Urban Forestry Victoria was engaged to assess the construction impact of the proposed design on trees that meet the following criteria.

- All trees surpassing a height of 3 meters within the subject site, exhibiting one or relatively few main stems, as defined in the Australian standard for the protection of trees on development sites (AS4970-2009).
- All neighbouring trees surpassing a height of 3 meters with one or relatively few main stems, as defined in the Australian standard for the protection of trees on development sites (AS4970-2009), which may be affected by the proposed development.
- All municipal trees bordering the subject site, regardless of size.
- The subject site includes No. 66, and No. 72 Miller St, Preston.
- The site inspection was conducted on 14/02/2024.

Vegetation that does not meet the criteria is not included within the scope of this Construction Impact Assessment.

The data presented in this report was collected through a ground-level visual inspection.

### Reviewed documentation

- Existing and Demolition Plan, 07/03/24, The Ellis Group Architects
- Proposed Site Plan, 07/03/24, The Ellis Group Architects

Trees on the subject site were assigned numerical or other identifiers by Urban Forestry Victoria, without any reference to additional site documentation.

The assessment of trees included in this report was conducted during the inspection and utilized the metrics outlined in the Glossary section of the Appendices.

Encroachment percentages were calculated utilizing Microsoft Excel and Bluebeam Revu software tools. The aforementioned processes and tools were employed to ensure accuracy and consistency in the evaluation of the trees in question.

## Limitations

- All information presented in this report, as supplied by Urban Forestry Victoria, is deemed accurate to the best of our knowledge at the time of inspection. It is assumed that all information provided to Urban Forestry Victoria for the purpose of this report is accurate.
- The assessments of trees may be subject to limitations or estimations based on factors such as access or visibility. Tree identification may be constrained by seasonal variations or restricted access to certain areas.
- The encroachment percentages specified in this report are approximate figures, relying on the accuracy of the provided plans and measurements obtained by the arboricultural consultant.
- Risk assessment is general in methodology unless otherwise specified.
- While recommendations are offered for the protection of trees during construction phases, it is important to note that this report does not serve as a Tree Protection Plan. If the responsible authority stipulates the inclusion of such a plan within the permit or requests it, a comprehensive Tree Protection and Management Plan, based on the data and recommendations provided in this report, must be completed prior to commencing any development activities within the subject site.
- In the event that revised development plans are produced subsequent to the completion of the construction impact assessment, it is the client's responsibility to notify Urban Forestry Victoria and determine if an amendment to the construction impact assessment is necessary.

## Description of the proposal

The design is a proposed childcare development.

## Municipal tree control

The subject site is located within a General Residential Zone (GRZ2) of Darebin Council.

### Tree Protection on Private Property Local Law - NO. 01 of 2019

#### PART TWO – PROTECTION OF TREES

##### 8. Permit Requirement

- 1) A person must not without a permit:
  - a) prune, remove or do anything or allow pruning that could result in damage or the destruction of a protected tree on private property; or
  - b) undertake any works within the Tree Protection Zone.
- 2) In addition to complying with any conditions of a permit, a person who has obtained a permit under subclause (1) must comply with the requirements of the Council's current Management of Tree Protection on Private Property Policy 2019.

## 9. Exemptions

A permit is not required under this Local Law:

- if the removal of a tree requires a permit under the Darebin Planning Scheme and a permit has been obtained; or
- if works are deemed by the Authorised officer to be minor pruning.
- if the owner of the private property has notified an Authorised Officer that a protected tree or part of a protected tree poses an immediate risk to people or property and the Authorised Officer is satisfied that the protected tree is an immediate risk to people or property.
- If the owner is removing dead palm fronds only

“Protected Tree” means a tree with a single or combined trunk circumference greater than 100 centimetres (32cm DBH) measured at 1.5 metres above ground level and having a height greater than 8 metres, but excludes species that are declared Noxious Weeds.

“Noxious Weeds” has the same meaning as in the Land Catchment and Protection Act 1994.

FIGURE 1: ZONE MAP, VICPLAN, 08/03/24



## Observations

### Site Description

The subject site includes two properties,

- 66 MILLER STREET PRESTON 3072
- 72 MILLER STREET PRESTON 3072

Both properties are situated on the north side of Miller St. 72 Miller St is situated at the corner of Miller St Devon St.

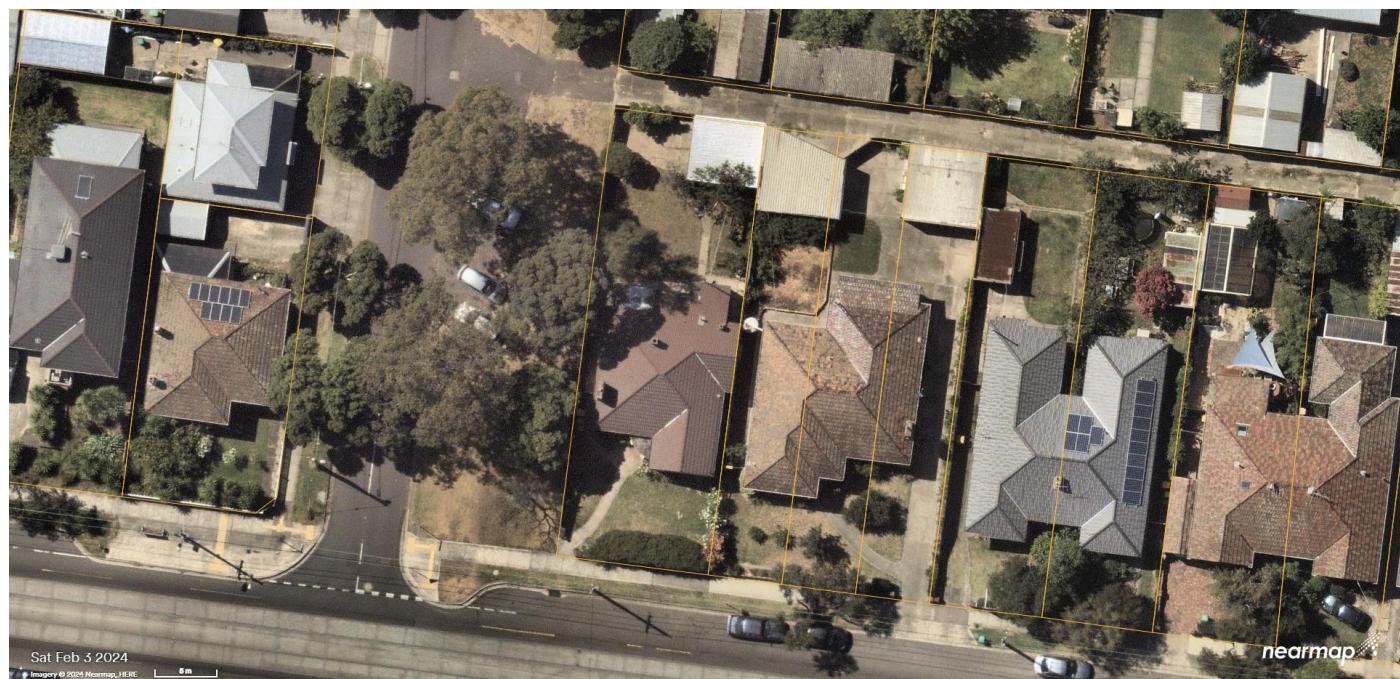
There is a larger than typical road reserve on the west boundary of 72 Miller St. This is a concrete road immediately to the north of both properties. The topography of both properties is predominantly flat.

66 Miller St has a concrete crossover at the southeast corner with a concrete driveway extending along the east boundary to a brick garage situated in the northwest corner. The concrete extends out to a pad cover the northeast corner of the property. There is a brick and weatherboard shed in the northwest corner of the property. There is a single storey brick residence situated centrally on the block.

72 Miller St has no crossover. There is a brick garage situated at the northeast corner of the property with a concrete driveway on the west side, running to the property boundary. There is a single storey brick residence situated centrally on the block.

The road reserve to the west includes two sections of angle parking. One section between Trees 13, and 14, and one section to the north of Tree 14. The section on the north side of Tree 14 is amalgamated with the road immediately to the north of the subject site(s).

FIGURE 2: AERIAL IMAGE (VERTICAL), NEARMAP, 03/02/24



## Construction Impact Assessment Overview

**High Retention Value:** There are two (2) trees assessed as having a high retention value.

Tree	Common Name	Protected <sup>a</sup>	Proposal <sup>b</sup>	Retainable <sup>c</sup>	SRZ (m)	TPZ (m)	TPZ area (m <sup>2</sup> )	Impact area (m <sup>2</sup> )	Proposed Impact
13	River Red Gum	Yes, Municipal	Retain	Yes	3.0	8.2	209.2	0.0	0%
14	River Red Gum	Yes, Municipal	Retain	Refer to Discussion	3.1	8.4	221.7	68.9	31%

**Medium to High Retention Value:** There are two (2) trees assessed as having a medium to high retention value.

Tree	Common Name	Protected	Proposal	Retainable	SRZ (m)	TPZ (m)	TPZ area (m <sup>2</sup> )	Impact area (m <sup>2</sup> )	Proposed Impact
8	She-oak	Yes	Demolish	No	2.0	3.0	27.4	17.4	64%
11	Prickly Paperbark	Yes, Municipal	Retain	Refer to Discussion	2.6	5.5	95.7	17.5	18%

**Medium Retention Value:** There are two (2) trees assessed as having a medium retention value.

Tree	Common Name	Protected	Proposal	Retainable	SRZ (m)	TPZ (m)	TPZ area (m <sup>2</sup> )	Impact area (m <sup>2</sup> )	Proposed Impact
3	Willow Myrtle	Yes, Municipal	Retain	Yes	2.8	7.7	185.3	2.2	1%
10	Yate	Yes, Municipal	Retain	Refer to Discussion	2.8	5.8	104.2	22.5	22%

**Medium to Low Retention Value:** There are four (4) trees assessed as having a medium to low retention value.

Tree	Common Name	Protected	Proposal	Retainable	SRZ (m)	TPZ (m)	TPZ area (m <sup>2</sup> )	Impact area (m <sup>2</sup> )	Proposed Impact
1	Feijoa	No, Exempt	Demolish	No	1.7	2.2	15.5	15.5	100%
2	Ornamental Pear	No, Exempt	Demolish	Yes	1.5	2.0	12.6	0.7	6%
5	Apricot	No, Exempt	Demolish	No	1.5	2.0	12.6	12.6	100%
9	Spotted Gum	Yes, Municipal	Demolish	No	1.5	2.0	12.6	12.6	100%

**Low Retention Value:** There are four (4) trees assessed as having a low retention value.

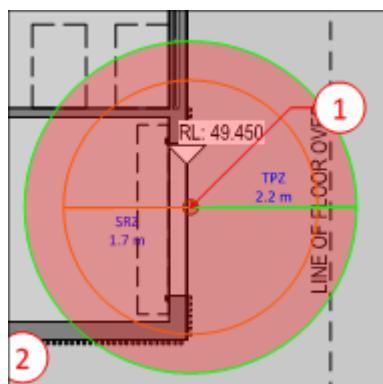
Tree	Common Name	Protected	Proposal	Retainable	SRZ (m)	TPZ (m)	TPZ area (m <sup>2</sup> )	Impact area (m <sup>2</sup> )	Proposed Impact
4	Nectarine	No, Exempt	Demolish	No	1.6	2.0	12.6	12.6	100%
6	Camellia	No, Exempt	Demolish	No	1.8	2.4	18.5	18.5	100%
7	Melaleuca	No, Exempt	Demolish	No	1.6	2.0	12.6	12.6	100%
12	Dead	Yes, Municipal	Retain	Yes	1.9	2.6	21.9	0.0	0%

<sup>a</sup> Refers to the tree's protection status under municipal tree controls (Yes/No). Neighbouring and municipal trees are designated as protected, regardless of species or condition.

<sup>b</sup> Indicates the intended tree management approach based on the proposed design (Retain/Demolish).

<sup>c</sup> Denotes whether the tree is retainable within the context of the proposed design and may require reference to the discussion section of the report.

## Discussion<sup>a</sup>

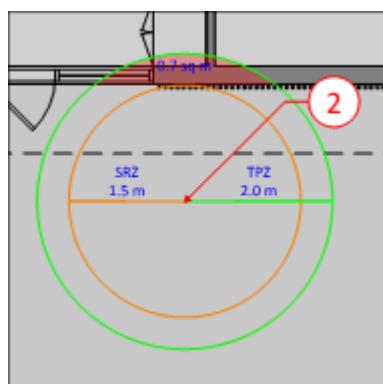


- Tree 1 is a mature, non-native Feijoa of medium to low retention value and low significance, located on the subject site (No. 66). The tree is of typical health and structure for its species, age, and location.

There is no existing prohibitive encroachment within the TPZ.

The tree is within the footprint of the proposed childcare facility and cannot be retained. The tree is proposed to be demolished and will not require approval by the responsible authority to remove as it has a combined trunk circumference less than 100 centimeters (32cm diameter) measured at 1.5 meters above ground level and

has a height of less than 8 meters.

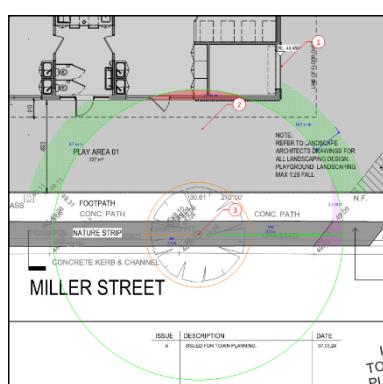


- Tree 2 is a semi-mature, non-native Ornamental Pear of medium to low retention value and low significance, located on the subject site (No. 66). The tree is of typical health and structure for its species, age, and location.

There is no existing prohibitive encroachment within the TPZ.

Within the context of the proposed design, the tree will incur an approximate  $0.7m^2$  (6%) prohibitive TPZ area impact from the proposed childcare facility.

This is a minor TPZ area encroachment in accordance with AS4970-2009. The tree is proposed to be demolished and will not require approval by the responsible authority to remove as it has a combined trunk circumference less than 100 centimeters (32cm diameter) measured at 1.5 meters above ground level and has a height of less than 8 meters.



- Tree 3 is a mature, Australian native Willow Myrtle of medium retention value and moderate significance, located in the road reserve of Miller St. The tree has been pruned for powerline clearance.

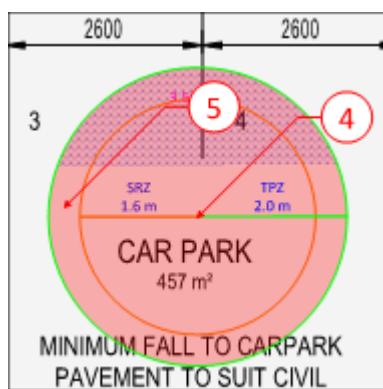
There is  $2.1m^2$  existing semi-prohibitive encroachment within the TPZ from the concrete crossover.

Within the context of the proposed design, the tree will incur an approximate  $2.2m^2$  (1%) prohibitive TPZ area impact from the proposed childcare facility.

This is a minor TPZ area encroachment in accordance with AS4970-2009. The tree is proposed to be retained and no design revision, or construction methodology specifications are necessary for the viable retention of the tree within the context of the proposed design.

<sup>a</sup> See full size plans at the end of this document for further markup details and markup keys.

The proposed impact will be compensated for by 20.2m<sup>2</sup> of contiguous open space within 1.5m of the TPZ on the subject site.

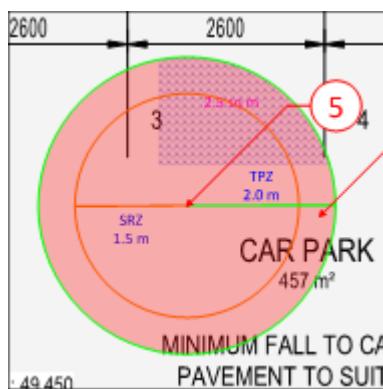


- **Tree 4** is a semi-mature, non-native Nectarine of low retention value and low significance, located on the subject site (No. 72). The tree is showing symptoms of physiological decline.

There is 3.5m<sup>2</sup> existing prohibitive encroachment within the TPZ from the brick garage.

The tree is within the footprint of the proposed car park and cannot be retained. The tree is proposed to be demolished and will not require approval by the responsible authority to remove as it has a single trunk circumference less than 100 centimeters

(32cm diameter) measured at 1.5 meters above ground level and has a height of less than 8 meters.

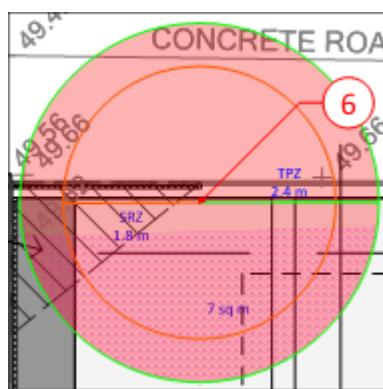


- **Tree 5** is a semi-mature, non-native Apricot of medium to low retention value and low significance, located on the subject site (No. 72). The tree is of typical health and structure for its species, age, and location.

There is 2.5m<sup>2</sup> existing prohibitive encroachment within the TPZ from the brick garage.

The tree is within the footprint of the proposed car park and cannot be retained. The tree is proposed to be demolished and will not require approval by the responsible authority to remove as it has a combined trunk circumference less than 100 centimeters

(32cm diameter) measured at 1.5 meters above ground level and has a height of less than 8 meters.



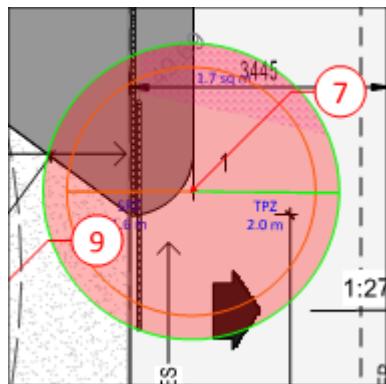
- **Tree 6** is a mature, non-native Camellia of low retention value and low significance, located on the subject site (No. 72). There are cavities throughout the stem and canopy.

There is 7.0m<sup>2</sup> existing semi-prohibitive encroachment within the TPZ from the concrete driveway.

The tree is within the footprint of the proposed car park and cannot be retained. The tree is proposed to be demolished and will not require approval by the responsible authority to remove as it has a combined trunk circumference less than 100 centimeters

(32cm diameter) measured at 1.5 meters above ground level and has a height of less than 8 meters.

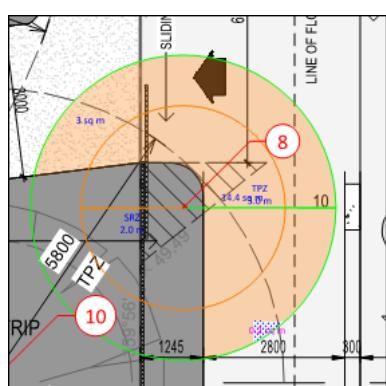
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- Tree 7 is a semi-mature, Australian native Melaleuca of low retention value and low significance, located on the subject site (No. 72). The tree is showing symptoms of physiological decline.

There is 1.7m<sup>2</sup> existing semi-prohibitive encroachment within the TPZ from the concrete driveway.

The tree is within the footprint of the proposed car park and cannot be retained. The tree is proposed to be demolished and will not require approval by the responsible authority to remove as it has a combined trunk circumference less than 100 centimeters (32cm diameter) measured at 1.5 meters above ground level and has a height of less than 8 meters.



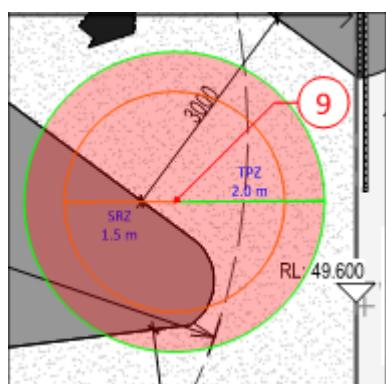
- Tree 8 is a mature, Victorian native She-oak of medium to high retention value and moderate significance, located on the subject site (No. 72). The tree is of typical health and structure for its species, age, and location.

There is 0.2m<sup>2</sup> existing prohibitive encroachment within the TPZ from the brick residence.

Within the context of the proposed design, the tree will incur an approximate 17.4m<sup>2</sup> (64%) combined TPZ area impact and an impact of the SRZ from the proposed

- Crossover, 3.0m<sup>2</sup> (11%) semi-prohibitive impact (SRZ impact)
- Car park, 14.4m<sup>2</sup> (53%) semi- prohibitive impact (SRZ impact)

This is a major TPZ area encroachment in accordance with AS4970-2009. The tree is proposed to be demolished and will require approval by the responsible authority to remove.

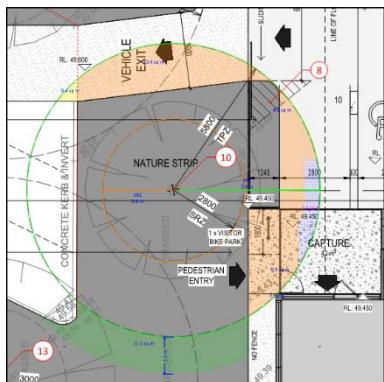


- Tree 9 is a young, Australian native Spotted Gum of medium to low retention value and low significance, located in the road reserve of Devon St. The tree is of typical health and structure for its species, age, and location.

There is no existing encroachment within the TPZ.

The tree is within the footprint of the proposed crossover and cannot be retained.

The tree is proposed to be demolished and will require approval by the responsible authority to remove.



- **Tree 10** is a mature, Australian native Yate of medium retention value and moderate significance, located in the road reserve of Devon St. There is a cavity within the stem base.

There is 2.3m<sup>2</sup> existing prohibitive encroachment within the TPZ from the brick residence.

Within the context of the proposed design, the tree will incur an approximate 22.5m<sup>2</sup> (22%) combined TPZ area impact from the proposed

- Crossover (west of kerb), 0.4m<sup>2</sup> (<1%) like-for-like impact
- Crossover (east of kerb), 10.4m<sup>2</sup> (10%) semi-prohibitive impact
- Car park, 4.8m<sup>2</sup> (5%) semi-prohibitive impact
- Pedestrian entry, 6.9m<sup>2</sup> (7%) semi-prohibitive impact

This is a major TPZ area encroachment in accordance with AS4970-2009. The tree is proposed to be retained, however, may not remain viable within the context of the proposed design. For the viable retention of the tree within the context of developing the subject site, it will be necessary to implement the following recommendations.

- 1) Prior to any excavation occurring for the crossover, a trench must be dug by hand or by other non-destructive means (pneumatic, or hydro-excavation) along the south edge of the vehicle exit within the TPZ of Tree 10 to the same depth as the proposed road base. During the works:
  - Excavation must be supervised by the Project Arborist.
  - No roots greater than 20mm diameter are to be cut without prior approval from Council's Parks Department.
  - Any roots found must be pruned at the edge of the trench closest to the tree using sharp saw or secateurs. Any machinery not specifically designed to prune roots must not be used.
  - Any exposed roots must not be allowed to desiccate. Exposed roots must be covered with pre-moistened thick hessian or jute matting and pinned. The covering must be kept moist until such a time as the roots are permanently covered.
- 2) Prior to any excavation occurring for the car park and pedestrian entry, a trench must be dug by hand or by other non-destructive means (pneumatic, or hydro-excavation) along the west edge of the car park and pedestrian entry within the TPZ of Tree 10 to the same depth as the proposed sub base. During the works:
  - Excavation must be supervised by the Project Arborist.
  - Any roots found must be pruned at the edge of the trench closest to the tree using sharp saw or secateurs. Any machinery not specifically designed to prune roots must not be used.
  - Any exposed roots must not be allowed to desiccate. Exposed roots must be covered with pre-moistened thick hessian or jute matting and pinned. The covering must be kept moist until such a time as the roots are permanently covered.

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- 3) All surfaces within the TPZ of Tree 10 must be constructed at the existing natural grade. Excavation must not exceed the minimum amount required to achieve a vegetation site scrape.
- 4) All surfaces within the TPZ of Tree 10 must be constructed with a permeable material.
- 5) No in-ground services must be installed within the TPZ of Tree 10.

If the above listed recommendations are implemented, the tree will remain viable within the context of the proposed development as existing root systems beneath the proposed built form can be retained and continue to function naturally.

The proposed impact will be compensated for by 11.1m<sup>2</sup> of contiguous open space within 1.5m of the TPZ on the municipal property. The contiguous open space does not compensate entirely for the proposed encroachment, however, the existing root systems beneath the proposed built form can be retained and continue to function naturally.



- **Tree 11** is a mature, Australian native Prickly Paperbark of medium to high retention value and moderate significance, located in the road reserve of Devon St. The tree is of typical health and structure for its species, age, and location. There is 1.5m<sup>2</sup> existing prohibitive encroachment within the TPZ from the brick residence. Within the context of the proposed design, the tree will incur an approximate 17.5m<sup>2</sup> (18%) combined TPZ area impact and an impact of the SRZ from the proposed

- a) Childcare facility, 7.8m<sup>2</sup> (8%) prohibitive impact
- b) Path, 9.7m<sup>2</sup> (10%) semi-prohibitive impact

This is a major TPZ area encroachment in accordance with AS4970-2009. The tree is proposed to be retained, however, may not remain viable within the context of the proposed design. For the viable retention of the tree within the context of developing the subject site, it will be necessary to implement the following recommendations.

- 1) Prior to any excavation occurring for the path, a trench must be dug by hand or by other non-destructive means (pneumatic, or hydro-excavation) along the west edge of the path within the TPZ of Tree 11 to the same depth as the proposed sub base. During the works:
  - a. Excavation must be supervised by the Project Arborist.
  - b. Any roots found must be pruned at the edge of the trench closest to the tree using sharp saw or secateurs. Any machinery not specifically designed to prune roots must not be used.
  - c. Any exposed roots must not be allowed to desiccate. Exposed roots must be covered with pre-moistened thick hessian or jute matting and pinned. The covering must be kept moist until such a time as the roots are permanently covered.

## Arboricultural Construction Impact Assessment – 66 &amp; 72 Miller St, Preston VIC 3072 -13

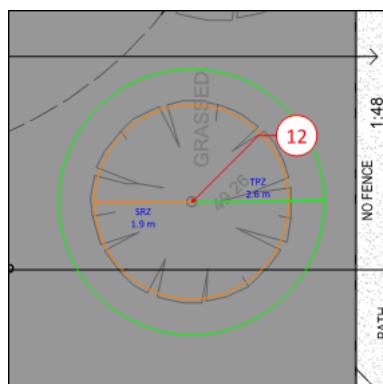
2) The path within the TPZ of Tree 11 must be constructed at the existing natural grade. Excavation must not exceed the minimum amount required to achieve a vegetation site scrape.

3) The path within the TPZ of Tree 11 must be constructed with a permeable material.

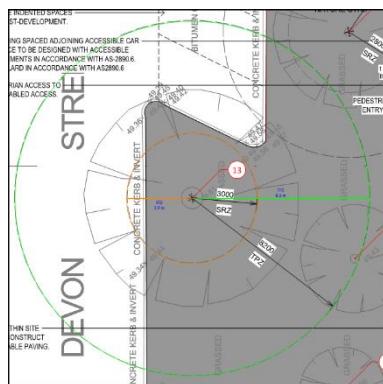
4) No in-ground services must be installed within the TPZ of Tree 11.

If the above listed recommendations are implemented, the tree will remain viable within the context of the proposed development as existing root systems beneath the proposed path can be retained and continue to function naturally.

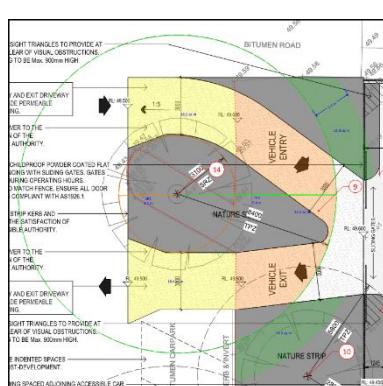
The proposed impact will be compensated for by 52.2m<sup>2</sup> of contiguous open space within 2.0m of the TPZ on the municipal property.



- Tree 12 is an Australian native Dea tree of low retention value and low significance, located in the road reserve of Devon St. The tree is dead. There is no existing encroachment within the TPZ. Within the context of the proposed design, the TPZ will not be impacted. The tree is proposed to be retained and no design revision, or construction methodology specifications are necessary for the viable retention of the tree within the context of the proposed design.



- Tree 13 is a mature, Victorian native River Red Gum of high retention value and high significance, located in the road reserve of Devon St. The tree is showing symptoms of physiological decline. There is existing semi-prohibitive encroachment within the TPZ from the concrete kerb, asphalt parking bay, and road. Within the context of the proposed design, the TPZ will not be impacted. The tree is proposed to be retained and no design revision, or construction methodology specifications are necessary for the viable retention of the tree within the context of the proposed design.



- Tree 14 is a mature, Victorian native River Red Gum of high retention value and high significance, located in the road reserve of Devon St. The tree is of typical health and structure for its species, age, and location. There is existing semi-prohibitive encroachment within the TPZ from the concrete kerb, asphalt parking bay, and road. Within the context of the proposed design, the tree will incur an approximate 68.9m<sup>2</sup> (31%) combined TPZ area impact from the proposed
  - Crossover (north of Tree 14, west of kerb), 18.2m<sup>2</sup> (8%) like-for-like impact

- b) Crossover (south of Tree 14, west of kerb), 18.4m<sup>2</sup> (8%) like-for-like impact
- c) Crossover (east of kerb), 32.3m<sup>2</sup> (15%) semi-prohibitive impact

This is a major TPZ area encroachment in accordance with AS4970-2009. The tree is proposed to be retained, however, may not remain viable within the context of the proposed design. For the viable retention of the tree within the context of developing the subject site, it will be necessary to implement the following recommendations.

- 1) Prior to any excavation occurring for the crossover, a trench must be dug by hand or by other non-destructive means (pneumatic, or hydro-excavation) along the edge of the vehicle entry and exit closest to the tree, within the TPZ of Tree 14 to the same depth as the proposed road base. During the works:
  - a. Excavation must be supervised by the Project Arborist.
  - b. No roots greater than 20mm diameter are to be cut without prior approval from Council's Parks Department.
  - c. Any roots found must be pruned at the edge of the trench closest to the tree using sharp saw or secateurs. Any machinery not specifically designed to prune roots must not be used.
  - d. Any exposed roots must not be allowed to desiccate. Exposed roots must be covered with pre-moistened thick hessian or jute matting and pinned. The covering must be kept moist until such a time as the roots are permanently covered.
- 2) All surfaces within the TPZ of Tree 14 must be constructed at the existing natural grade. Excavation must not exceed the minimum amount required to achieve a vegetation site scrape.
- 3) All surfaces within the TPZ of Tree 14 must be constructed with a permeable material.
- 4) No in-ground services must be installed within the TPZ of Tree 14.

If the above listed recommendations are implemented, the tree will remain viable within the context of the proposed development as existing root systems beneath the proposed crossover can be retained and continue to function naturally.

The proposed impact will be compensated for by 22.8m<sup>2</sup> of contiguous open space within 2.0m of the TPZ on the municipal property. The contiguous open space does not compensate entirely for the proposed encroachment, however, the existing root systems beneath the proposed built form can be retained and continue to function naturally.

- No other trees meeting the assessment criteria within the subject site, neighbouring properties, or municipal properties will be affected by the proposed development.

## Conclusion & Recommendation

The Construction Impact Assessment makes the following conclusions based on the condition of the subject trees within the context of the proposed design.

- Seven (7) trees located within the subject site are proposed to be demolished. Tree 1, 2, 4, 5, 6, 7, and 8.
  - One (1) tree will require a permit to remove, destroy, or lop. Tree 8.
  - Six (6) trees will not require a permit to remove, destroy, or lop. Tree 1, 2, 4, 5, 6, and 7.
- Five (5) trees within municipal property will be impacted. Tree 3, 9, 10, 11, and 14.
  - One (1) tree will remain viable with no mitigation of impact. Tree 3.
  - Three (3) trees require construction methodology specifications for viable retention. Tree 10, 11, and 14.
  - One (1) tree cannot be retained and will require approval by the responsible authority to demolish. Tree 9.

The Construction Impact Assessment makes the following construction methodology specifications and/or design revision recommendations for the viable retention of the trees proposed for retention.

### Specifications to demolition/site preparation methodology.

- Prior to any excavation occurring for the crossover, a trench must be dug by hand or by other non-destructive means (pneumatic, or hydro-excavation) along the south edge of the vehicle exit within the TPZ of **Tree 10** to the same depth as the proposed road base. During the works:
  - Excavation must be supervised by the Project Arborist.
  - No roots greater than 20mm diameter are to be cut without prior approval from Council's Parks Department.
  - Any roots found must be pruned at the edge of the trench closest to the tree using sharp saw or secateurs. Any machinery not specifically designed to prune roots must not be used.
  - Any exposed roots must not be allowed to desiccate. Exposed roots must be covered with pre-moistened thick hessian or jute matting and pinned. The covering must be kept moist until such a time as the roots are permanently covered.
- Prior to any excavation occurring for the car park and pedestrian entry, a trench must be dug by hand or by other non-destructive means (pneumatic, or hydro-excavation) along the west edge of the car park and pedestrian entry within the TPZ of **Tree 10** to the same depth as the proposed sub base. During the works:
  - Excavation must be supervised by the Project Arborist.
  - Any roots found must be pruned at the edge of the trench closest to the tree using sharp saw or secateurs. Any machinery not specifically designed to prune roots must not be used.

## Arboricultural Construction Impact Assessment – 66 &amp; 72 Miller St, Preston VIC 3072 -16

- Any exposed roots must not be allowed to desiccate. Exposed roots must be covered with pre-moistened thick hessian or jute matting and pinned. The covering must be kept moist until such a time as the roots are permanently covered.
- All surfaces within the TPZ of **Tree 10** must be constructed at the existing natural grade. Excavation must not exceed the minimum amount required to achieve a vegetation site scrape.
- Prior to any excavation occurring for the path, a trench must be dug by hand or by other non-destructive means (pneumatic, or hydro-excavation) along the west edge of the path within the TPZ of **Tree 11** to the same depth as the proposed sub base. During the works:
  - Excavation must be supervised by the Project Arborist.
  - Any roots found must be pruned at the edge of the trench closest to the tree using sharp saw or secateurs. Any machinery not specifically designed to prune roots must not be used.
  - Any exposed roots must not be allowed to desiccate. Exposed roots must be covered with pre-moistened thick hessian or jute matting and pinned. The covering must be kept moist until such a time as the roots are permanently covered.
- The path within the TPZ of **Tree 11** must be constructed at the existing natural grade. Excavation must not exceed the minimum amount required to achieve a vegetation site scrape.
- Prior to any excavation occurring for the crossover, a trench must be dug by hand or by other non-destructive means (pneumatic, or hydro-excavation) along the edge of the vehicle entry and exit closest to the tree, within the TPZ of **Tree 14** to the same depth as the proposed road base. During the works:
  - Excavation must be supervised by the Project Arborist.
  - No roots greater than 20mm diameter are to be cut without prior approval from Council's Parks Department.
  - Any roots found must be pruned at the edge of the trench closest to the tree using sharp saw or secateurs. Any machinery not specifically designed to prune roots must not be used.
  - Any exposed roots must not be allowed to desiccate. Exposed roots must be covered with pre-moistened thick hessian or jute matting and pinned. The covering must be kept moist until such a time as the roots are permanently covered.
- All surfaces within the TPZ of **Tree 14** must be constructed at the existing natural grade. Excavation must not exceed the minimum amount required to achieve a vegetation site scrape.

### Specifications to construction methodology.

- All surfaces within the TPZ of **Tree 10** must be constructed with a permeable material.
- No in-ground services must be installed within the TPZ of **Tree 10**.
- The path within the TPZ of **Tree 11** must be constructed with a permeable material.
- No in-ground services must be installed within the TPZ of **Tree 11**.
- All surfaces within the TPZ of **Tree 14** must be constructed with a permeable material.
- No in-ground services must be installed within the TPZ of **Tree 14**.

### General methodology

- No excavation, constructions works or activities, grade changes, surface treatments or storage of materials of any kind are permitted within the TPZ unless otherwise approved within the permit or further approved in writing by the responsible authority.
- No trenching is allowed within the TPZ for the installation of utility services unless non-destructive installation methods such as hydro-excavation or hand excavation have been approved by the Responsible Authority.
- The installation of protection measures for trees to be retained must be done in accordance with a Tree Protection and Management Plan (TPMP).

## Appendices

### Tree Data<sup>a</sup>

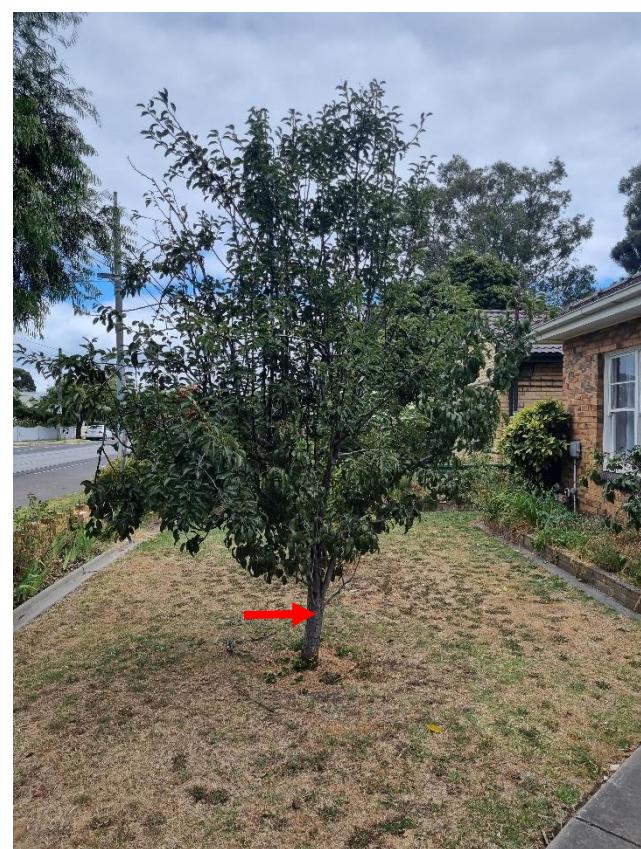
Tree No.	Common Name	Botanical Name	Origin	Height (m)	Width (m)	DRF (cm)	SRZ (m)	DBH (cm)	TPZ (m)	Health	Canopy	Stem	Age	Significance	ULF	Retention Value	Location
1	Feijoa	<i>Acca sellowiana</i>	Non-native	3	4	20	1.7	19x	2.2	G	G	G	M	L	>20	M-	
2	Ornamental Pear	<i>Pyrus calleryana</i>	Non-native	3	3	13	1.5	10x	2.0	G	G	G	SM	L	>25	M-	
3	Willow Myrtle	<i>Agonis flexuosa</i>	Aus. native	5	8	67	2.8	64	7.7	G	F	G	M	M	>15	M	Municipal
4	Nectarine	<i>Prunus persica</i> var. <i>nucipersica</i>	Non-native	4	4	17	1.6	12	2.0	F	G	G	SM	L	<20	L	
5	Apricot	<i>Prunus americana</i>	Non-native	3	4	12	1.5	9x	2.0	G	G	G	SM	L	>20	M-	
6	Camellia	<i>Camellia</i> sp.	Non-native	3	5	24	1.8	20x	2.4	G	F	F	M	L	>10	L	
7	Melaleuca	<i>Melaleuca</i> sp.	Aus. native	3	3	19	1.6	16x	2.0	F	G	G	SM	L	<20	L	
8	She-oak	<i>Allocasuarina</i> sp.	Vic. native	14	7	30	2.0	25x	3.0	G	G	G	M	M	>20	M+	
9	Spotted Gum	<i>Corymbia maculata</i>	Aus. native	5	1	7	1.5	5	2.0	G	G	G	Y	L	>25	M-	Municipal
10	Yate	<i>Eucalyptus cornuta</i>	Aus. native	14	11	67	2.8	48	5.8	G	G	F	M	M	>15	M	Municipal
11	Prickly Paperbark	<i>Melaleuca styphelioides</i>	Aus. native	8	8	54	2.6	46	5.5	G	G	G	M	M	>20	M+	Municipal
12	Dead	N/A	Aus. native	6	5	28	1.9	22	2.6	P	P	P		L	<0	L	Municipal
13	River Red Gum	<i>Eucalyptus camaldulensis</i>	Vic. native	16	15	78	3.0	68	8.2	F	G	G	M	H	<15	H	Municipal
14	River Red Gum	<i>Eucalyptus camaldulensis</i>	Vic. native	18	15	85	3.1	70	8.4	G	G	G	M	H	>20	H	Municipal

## Photos

Tree 1



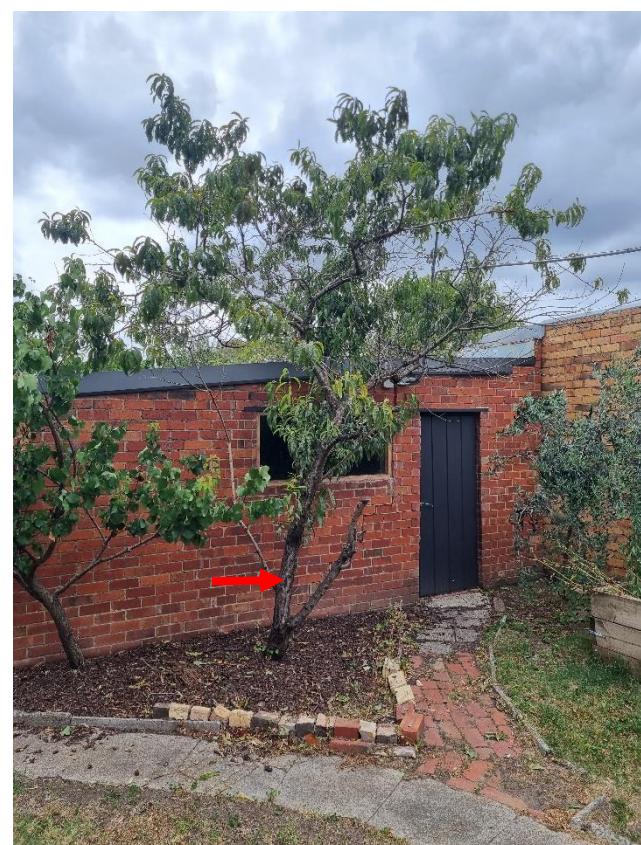
Tree 2



Tree 3



Tree 4



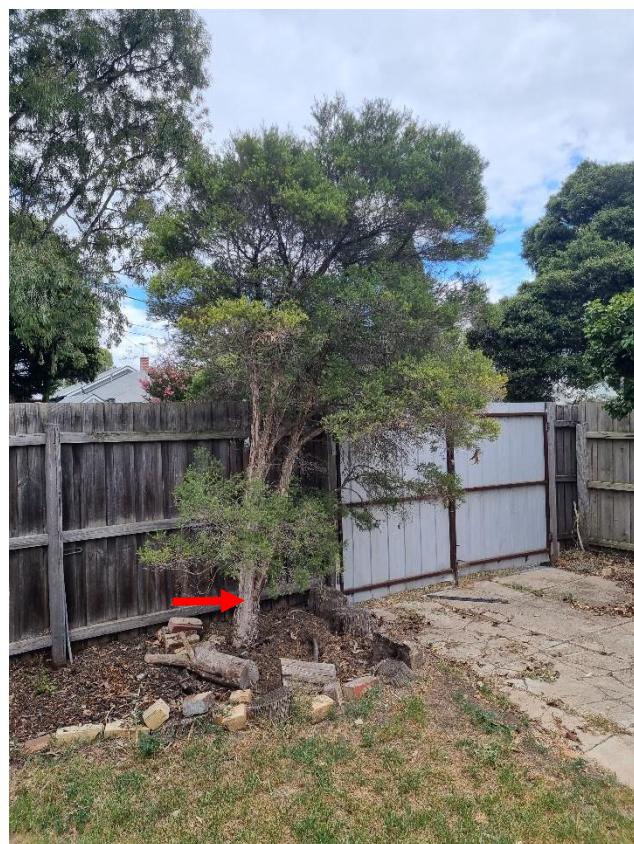
Tree 5



Tree 6



Tree 7



Tree 8



Tree 9



Tree 10



Tree 11



Tree 12



Tree 13



Tree 14



## Glossary

Item	Terminology
Age	Y- Young - Juvenile tree and/or recently planted. Will grow to the maximum amount the conditions allow. SM – Semi mature - Tree is steadily growing into its mature shape and structure. M – Mature - Specimen has reached approximately 70% full size in situation but can continue to grow at a reduced rate in the mature stage of its life, depending on conditions. LM – Late mature - Tree is senescent. Over mature and in decline, may still put-on small amounts of growth in some areas of the tree, or it may still be healthy with one or more major structural faults.
Botanical Name	The genus and species of the tree. sp. = species. ssp. = sub-species. var. = variety
Branch Structure	G – The tree has no observable structural faults within the canopy. F – The tree has structural faults within the canopy that could likely be mitigated. The tree has some species typical structural faults within the canopy that may become deleterious. P – The tree has structural faults within the canopy that likely cannot be mitigated.
Common Name	A name commonly associated with the tree, that may vary.
Contiguous Open Space	The area of open space contiguous with the circumference of the TPZ. The contiguous open space is calculated for all impacted trees proposed for retention. The limit of available contiguous open space is determined by the assessed ULE of the tree (i.e. 5-year ULE = 0.5m limit to contiguous open space (COS). 10-year ULE = 1.0m limit to COS. 15-year ULE = 1.5m limit to COS. Etc.)
DBH (cm)	Diameter of the stem measured at breast height (approximately 1.4m) using a diameter tape or tape measure. Expressed in centimetres. DBH with an 'x' following the number indicates a multi-stemmed tree. Where multiple trunks are present only the four largest stems are recorded. DBH with an 'e' following the number indicates an estimate due to access or sight restrictions.
DRF (cm)	Diameter of the stem measured at the top of the root flare using a diameter tape or tape measure. Expressed in centimetres. Where multiple trunks are present the measurement is taken at ground level. DRF with an 'e' following the number indicates an estimate due to access or site restrictions.
Existing encroachment	Prohibitive encroachment – Existing encroachment of the TPZ which is likely to have created a physical barrier to root growth. Root growth is unlikely to be present within or beyond the footprint of the built form. Semi-prohibitive encroachment – Existing encroachment of the TPZ which is likely to have created a partial physical barrier (horizontal within the soil profile) to root growth. Root growth may be present within (below) or beyond the footprint of the built form. Non-prohibitive encroachment – Existing encroachment of the TPZ which has not created a physical barrier to root growth. Root growth may be present within or beyond the footprint of the built form.
Health	G – The tree has no observable constraints to its typical physiology. F – The tree has physiological issues that could likely be remediated. P – The tree has physiological issues that likely cannot be remediated.
Height (m)	H= Estimated height to upper most point of canopy.
Origin	Aus. native (Native to Australia with no part of its natural range within Victoria) Vic. native (Native to Australia with all or part of its natural range within Victoria) Non-native (No part of its natural range within Australia)
Proposed impact	Prohibitive impact – Proposed encroachment into the TPZ which results in a physical barrier to root growth. Generally, more than 300mm below natural ground level. Semi-prohibitive impact – Proposed encroachment into the TPZ which results in a partial physical barrier to root growth, in which roots may still pass beneath the obstruction. Generally, less than 300mm below natural ground level. Non-prohibitive impact – Proposed encroachment into the TPZ which is above the natural grade and will not result in a physical barrier to root growth. No excavation of the natural grade necessary (excepting post holes to support above grade, built form).
Retention Value	H – High – The tree is worth retention and worth being a constraint on development of the subject site. M – Medium - The tree may be worth retention. L – Low - The tree is not worth retention and should not be a constraint on development of the subject site. A '+' or '-' This means the description is in-between ratings e.g., M+ means the rating is medium to high, M- means the rating is medium to low.
SRZ (m)	Structural Root Zone: The minimum area of roots required for tree stability. The SRZ is measured as a radius out from the centre of the trunk. Expressed in meters.
Significance	L - Low – Declining health or structure. Generally considered to be a weed species. No aesthetic contribution to the landscape. Young and/or easily replaceable. Ubiquitous species. Problematically located within the environment. M - Moderate – Typical health or structure. Not commonly found on weed lists. Some aesthetic contribution to the landscape. Well established. Commonly planted natives and non-natives. H - High – Typical to good health or structure. Native/remnant trees of fair to good condition. Clear aesthetic contribution to the landscape. Trees of exceptional age, size, or condition for their species.
TPZ (m)	Tree Protection Zone: The area required for the protection of the tree during construction to maintain its health. The TPZ is measured as a radius out from the centre of the stem. Expressed in meters.
Trunk Structure	G – The tree has no observable structural faults within the stem. F – The tree has structural faults within the stem that could likely be mitigated. The tree has some species typical structural faults within the stem that may become deleterious. P – The tree has structural faults within the stem that likely cannot be mitigated.
ULE Years	Useful Life Expectancy – in the trees current condition, without environmental changes or remedial works, it would (<) be reasonable to remove the tree within X years. (>) not be reasonable to remove the tree within X years. <i>This assessment is outside of the context of construction impact.</i>
Width (m)	W= Estimated width of canopy at its widest point. Expressed in meters.

## Full Scale Plan Markups

Full scale markups of the following documents are attached below.

- Existing and Demolition Plan, 07/03/24, The Ellis Group Architects
- Proposed Site Plan, 07/03/24, The Ellis Group Architects

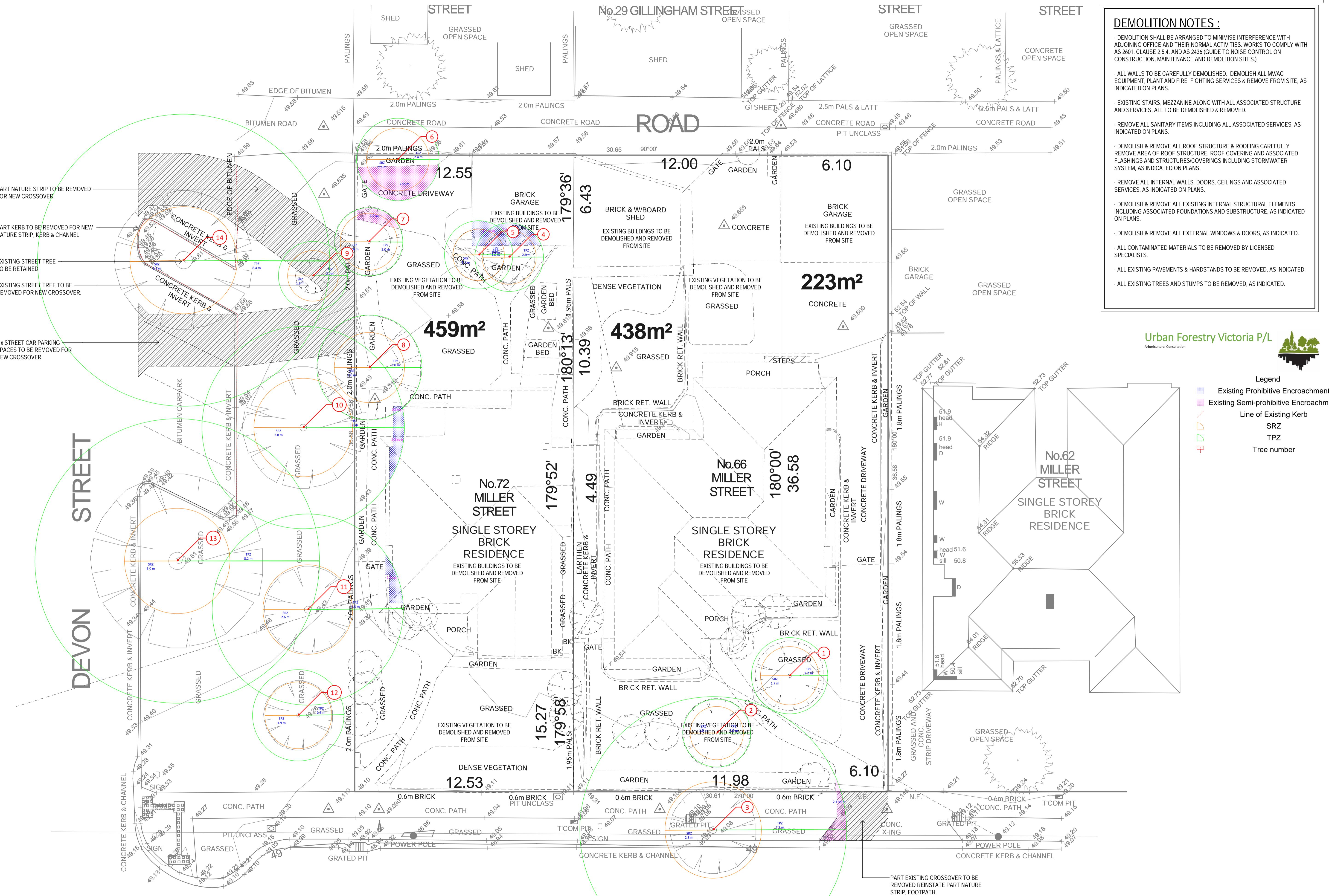
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The qualifications of the report author are as follows:

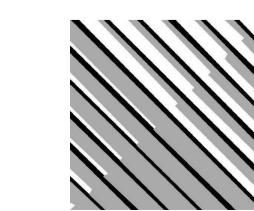
Mr. Trevor Moulynox. Director, Urban Forestry Victoria Pty Ltd.

- Diploma of Arboriculture (AQF level. 5), Melbourne Polytechnic (2017).
- Certificate III in Horticulture (Arboriculture), The University of Melbourne (2005).
- Registered user of Quantified Tree Risk Assessment (QTRA) since 2017.





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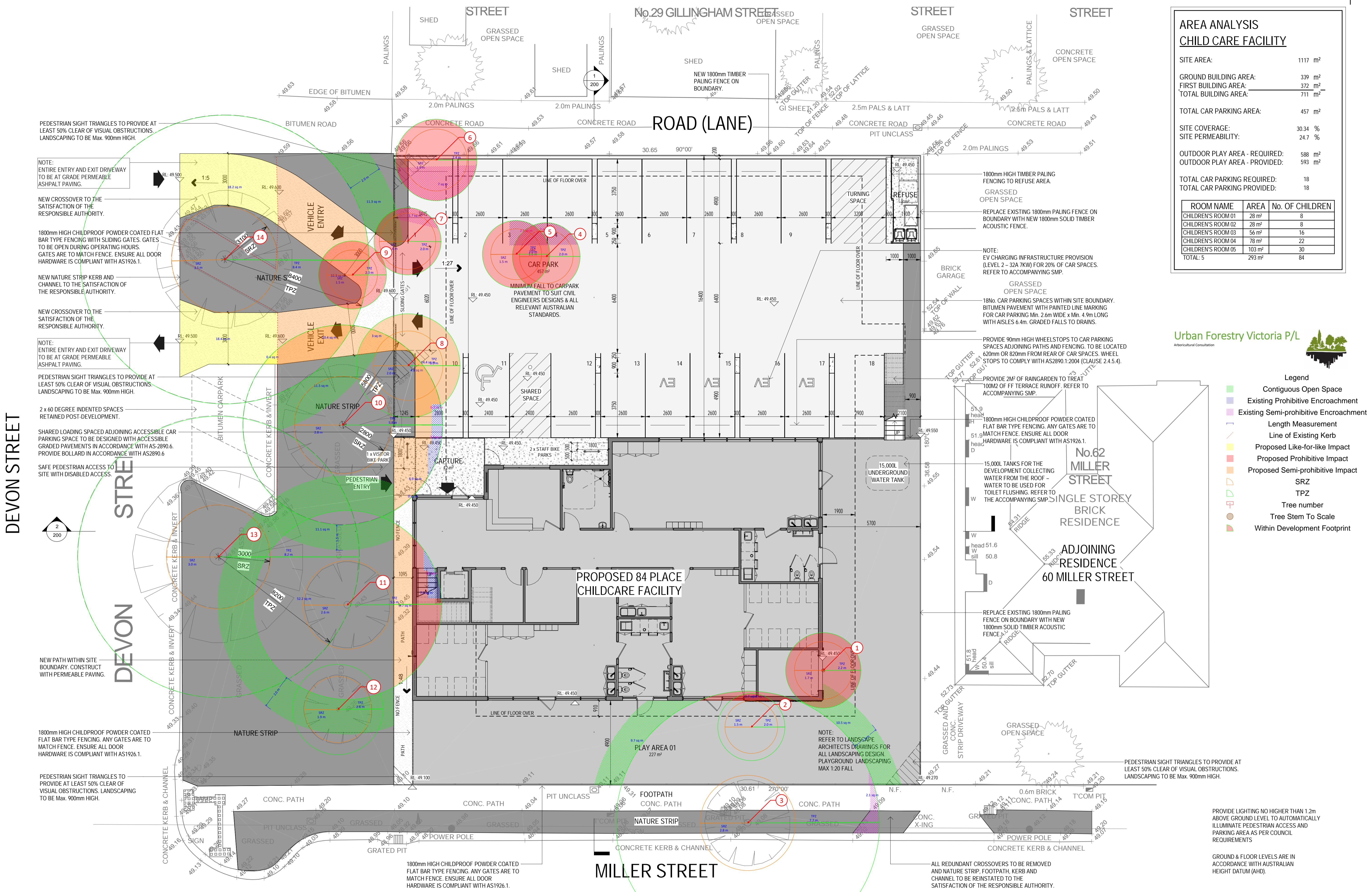
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ISSUE	DESCRIPTION	DATE
A	ISSUED FOR TOWN PLANNING.	07.03.24

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 PURPOSES ONLY

PROPOSED CHILDCARE DEVELOPMENT  
 66 & 72 MILLER STREET,  
 PRESTON, VIC. 3072.  
 EXISTING AND DEMOLITION PLAN  
 Date. 07.03.24 Drawn. LJ  
 Job No. 3253 Scale@A1 1 : 100

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ISSUE	DESCRIPTION	DATE
A	ISSUED FOR TOWN PLANNING.	07.03.24

ISSUED FOR  
TOWN PLANNING  
PURPOSES ONLY

SED CHILDCARE DEVELOPMENT  
MILLER STREET,  
ON, VIC. 3072.  
SED SITE PLAN  
7.03.24 Drawn. LJ  
253 Scale @ A1 1 : 100