

Attachment 1 - PLN17/0585 - Locality plan

Locality Map – 3 Station Street, Fairfield – PLN17/0585



Attachment 2 - PLN17/0585 - Plans Part 1

DRAWING SCHEDULE

- TPA01 MASTER PLAN AREA ANALYSIS
- TPA02 BASEMENT FLOOR PLAN
- TPA03 GROUND FLOOR PLAN
- TPA04 FIRST FLOOR PLAN
- TPA05 ELEVATIONS, MATERIALS AND FINISHES SCHEDULE
- TPA06 SECTION A-A
- TPA07 DETAILED SITE ANALYSIS - NEIGHBOURHOOD AND SITE DESCRIPTION
- TPA08 DETAILED SITE ANALYSIS - DESIGN RESPONSE GARDEN AREA ANALYSIS
- TPA09 DETAILED SHADOW ANALYSIS - 9AM, 12NOON, 3PM SEPTEMBER 22ND
- TPA10 CLAUSE 55.07 ASSESSMENT
- TPA11 CLAUSE 55.07 ASSESSMENT

AREA ANALYSIS

SITE AREA: 307.8M<sup>2</sup>  
 NO. OF PROPOSED APARTMENTS: 107 NO. OF COMMON AREAS: 10M<sup>2</sup>  
 BUILDING BALCONY: 523.5  
 OVERDECK/PARKING AREA: 17.7  
 REPAIRABLE SITE AREA: 300.1  
 GARDEN AREA: 33.3%

UNIT No.	FLOOR	DESCRIPTION	AREA	Q.S.
APARTMENT 1	GROUND	1 BEDROOM, BATHROOM, COURT/YARD, LAUNDRY, 1 CARSPACE	36.8m <sup>2</sup> (7.4m)	76.5m <sup>2</sup> (7.4m)
APARTMENT 2	GROUND	2 BEDROOMS, BATHROOM, COURT/YARD, LAUNDRY, 1 CARSPACE	7.7m <sup>2</sup> (7.4m)	35.0m <sup>2</sup> (7.4m)
APARTMENT 3	GROUND	1 BEDROOM, BATHROOM, COURT/YARD, LAUNDRY, 1 CARSPACE	36.7m <sup>2</sup> (6.4m)	32.8m <sup>2</sup> (6.4m)
APARTMENT 4	GROUND	2 BEDROOMS, BATHROOM, COURT/YARD, LAUNDRY, 1 CARSPACE	36.8m <sup>2</sup> (6.0m)	67.2m <sup>2</sup> (6.0m)
APARTMENT 5	GROUND	2 BEDROOMS, BATHROOM, COURT/YARD, LAUNDRY, 1 CARSPACE	36.4m <sup>2</sup> (7.5m)	42.9m <sup>2</sup> (7.5m)
APARTMENT 6	FIRST	2 BEDROOMS, BATHROOM, BALCONY, LAUNDRY, 1 CARSPACE	78.8m <sup>2</sup> (8.7m)	8.6m <sup>2</sup> (8.7m)
APARTMENT 7	FIRST	2 BEDROOMS, BATHROOM, BALCONY, LAUNDRY, 1 CARSPACE	36.9m <sup>2</sup> (7.4m)	8.6m <sup>2</sup> (7.4m)
APARTMENT 8	FIRST	1 BEDROOM, BATHROOM, BALCONY, LAUNDRY, 1 CARSPACE	49.8m <sup>2</sup> (5.5m)	8.0m <sup>2</sup> (5.5m)
APARTMENT 9	FIRST	2 BEDROOMS, BATHROOM, BALCONY, LAUNDRY, 1 CARSPACE	70.0m <sup>2</sup> (7.8m)	17.1m <sup>2</sup> (7.8m)
APARTMENT 10	FIRST	2 BEDROOMS, BATHROOM, BALCONY, LAUNDRY, 1 CARSPACE	31.0m <sup>2</sup> (8.6m)	8.0m <sup>2</sup> (8.6m)



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PLANNING APPLICATION FOR PROPOSED APARTMENT DEVELOPMENT  
**3 STATION STREET, FAIRFIELD**  
 DRAWING TITLE  
 MASTER PLAN, AREA ANALYSIS  
 TPA 01 - 1 OF 11 DATE: 12TH OCTOBER 2017 DRAWN BY: SL  
 JOB NO: 17 - 72 SCALE: 1:200 REQUEST FOR INFORMATION  
 ALL LEVELS ARE TO AUSTRALIAN HEIGHT DATUM

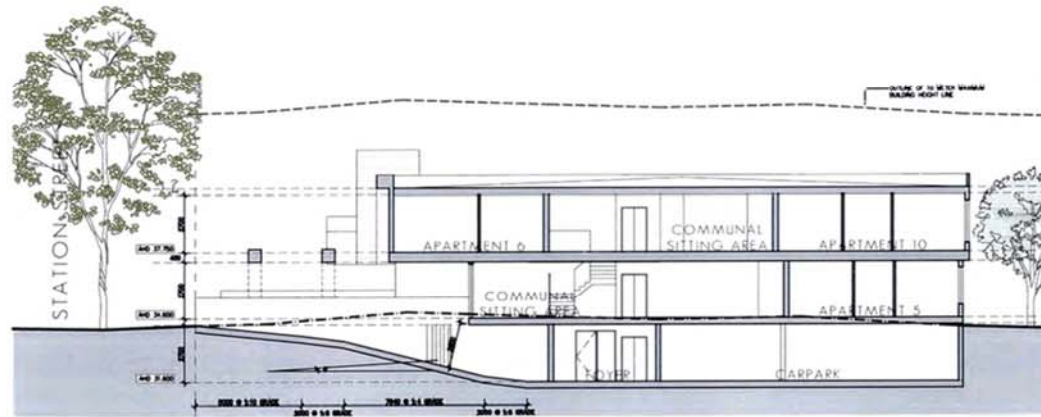








Attachment 2 - PLN17/0585 - Plans Part 1



SECTION A-A

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PLANNING APPLICATION FOR PROPOSED APARTMENT DEVELOPMENT  
**3 STATION STREET, FAIRFIELD**  
DRAWING TITLE  
**SECTION A-A**  
PAGES: 6 OF 11  
JOB NO. 17 - 72  
DATE 12TH OCTOBER 2017  
SCALE 1:100  
DRAWN BY: SL  
REQUEST FOR INFORMATION

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AUSTRALIAN HEIGHT DATUM



Attachment 3 - PLN17/0585 – Plans Part 2





Attachment 3 - PLN17/0585 – Plans Part 2

- A PROPOSED LANDSCAPE INCLUDING 15 PRIVATE SEASIDE TREES TO BE PLANTED TO DEVELOPER
- B EXISTING ON-STREET CURBSIDE PARKING SPACES TO BE RETAINED AS IS
- C UNDESIRABLE COLOURS AND FINISHES PROPOSED AND RECOMMENDED GREAT ALL ROUND EXPOSURE, 20% MINIMUM AREA
- D SIGN FACILITY AREAS ARE LOCATED TO THE REAR OF THE FLOOR PLANS NOT VISIBLE FROM THE STREET OR FROM ADJACENT STREETS OR FROM PUBLIC SPACES
- E SIDE SURVEILLANCE OF STATION STREET PARKING FROM FRONT AND REAR SIDES
- F LEVEL OF FINISHES OF NEW BATES INFLUENCED BY LEVEL OF FINISHES OF EXISTING BATES. NEW FINISHES MUST BE PHYSICAL AND VISUAL ACCESS TO THESE FINISHES AND BUILDINGS
- G LEVEL OF FINISHES OF NEW BATES IDENTIFIED IN DESIGN DEVELOPMENT PHASE. PLANTS OF LIGHT AND DARK TONES ARE TO BE USED TO CONTRAST, ESPECIALLY IN BROWN TONES
- H NEW COMPRISES AVAILABLE ON SITE. NEW FINISHES TO BE USED WHERE NECESSARY TO MATCH EXISTING
- I SIGNAGE FACILITIES CONCEALED IN LANDSCAPE AMONG PUBLIC TREES
- J DEVELOPMENT OF EXISTING PROPERTIES SHOWN THROUGHOUT OF PREVIOUS STAGES AND PROPOSED BATES AND EXISTING BUILDINGS AND EXISTING BATES
- K EXISTING CONSIDERED TO BE RELOCATED SLIGHTLY

DESIGN RESPONSE

THE PROPOSED DEVELOPMENT RESPONDS TO THE EXISTING ENVIRONMENT AND PROVIDES THE FOLLOWING:  
 - MAINTAINS THE EXISTING STREET AND TREE CANOPY  
 - MAINTAINS THE EXISTING PARKING SPACES  
 - MAINTAINS THE EXISTING BUILDINGS AND PROPOSED BATES AND EXISTING BUILDINGS AND EXISTING BATES  
 - MAINTAINS THE EXISTING CHARACTER AND IDENTITY

GENERAL NOTES

DESIGN & CONSTRUCTION AND RESPONSE TO THE EXISTING ENVIRONMENT AND PROVIDES THE FOLLOWING:  
 - MAINTAINS THE EXISTING STREET AND TREE CANOPY  
 - MAINTAINS THE EXISTING PARKING SPACES  
 - MAINTAINS THE EXISTING BUILDINGS AND PROPOSED BATES AND EXISTING BUILDINGS AND EXISTING BATES  
 - MAINTAINS THE EXISTING CHARACTER AND IDENTITY

GARDEN AREA ANALYSIS

ANALYSIS OF THE GARDEN AREA AND PROVIDES THE FOLLOWING:  
 - MAINTAINS THE EXISTING STREET AND TREE CANOPY  
 - MAINTAINS THE EXISTING PARKING SPACES  
 - MAINTAINS THE EXISTING BUILDINGS AND PROPOSED BATES AND EXISTING BUILDINGS AND EXISTING BATES  
 - MAINTAINS THE EXISTING CHARACTER AND IDENTITY



DESIGN RESPONSE

STREETSCAPE ELEVATION (I.E. FACING STATION STREET)

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PLANNING APPLICATION FOR PROPOSED APARTMENT DEVELOPMENT  
**3 STATION STREET, FAIRFIELD**  
 DRAWING TITLE  
 DETAILED SITE ANALYSIS - DESIGN RESPONSE  
 TRAOB - 8 OF 11 DATE: 12TH OCTOBER 2017 DRAWN BY: SL  
 JOB NO: 17 - 72 SCALE: 1:300-1:200 COUNCIL SUBMISSION: REQUEST FOR INFORMATION

ALL LEVELS ARE TO AUSTRALIAN HEIGHT DATUM



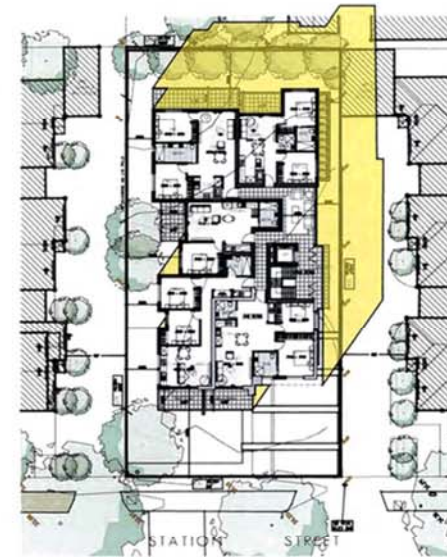
Attachment 3 - PLN17/0585 – Plans Part 2



DETAILED SHADOW ANALYSIS -  
9AM, 22 SEPTEMBER



DETAILED SHADOW ANALYSIS -  
12NOON, 22 SEPTEMBER



DETAILED SHADOW ANALYSIS -  
3PM, 22 SEPTEMBER

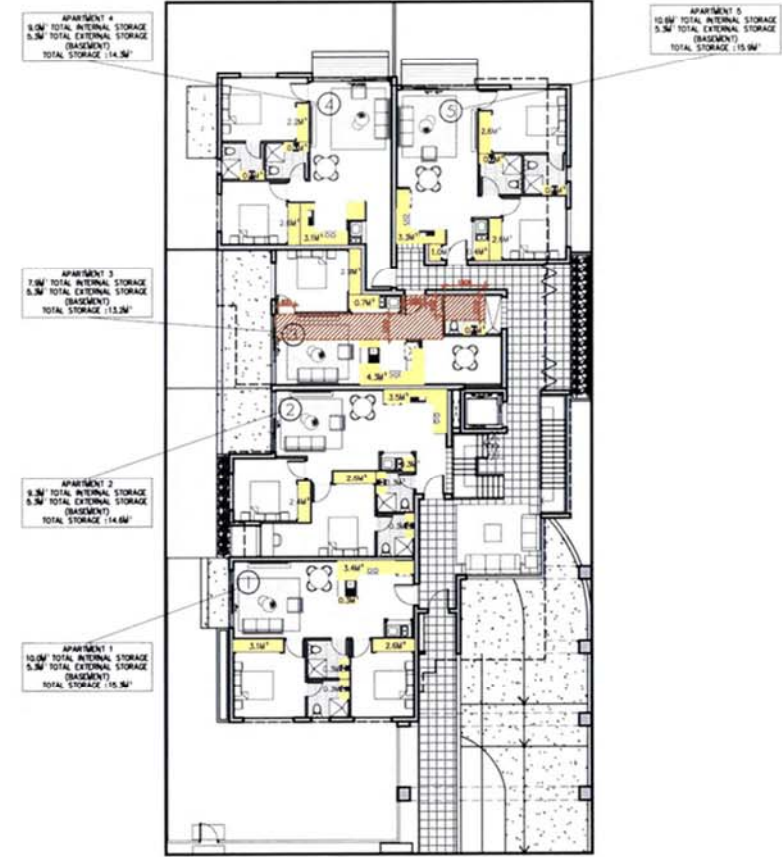
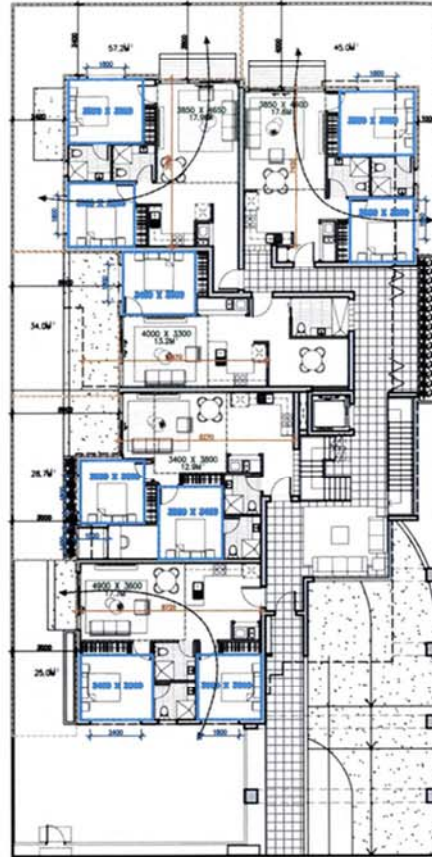
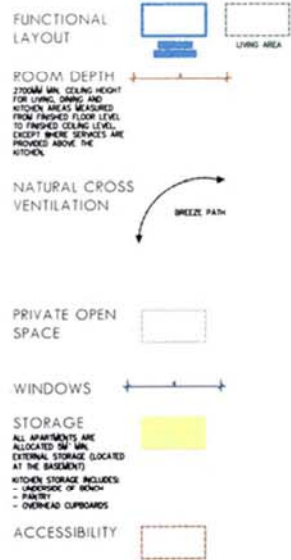
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DRAWING TITLE  
DETAILED SHADOW ANALYSIS - 9AM, 12NOON, 3PM, SEPTEMBER 22  
TPA 09 - 9 OF 11 DATE: 12TH OCTOBER 2017 DRAWN BY: SL  
JOB NO: 17 - 72 SCALE: 1:200 COUNCIL SUBMISSION REQUEST FOR INFORMATION  
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Attachment 3 - PLN17/0585 – Plans Part 2

BAD ASSESSMENT  
LEGEND



GROUND FLOOR PLAN

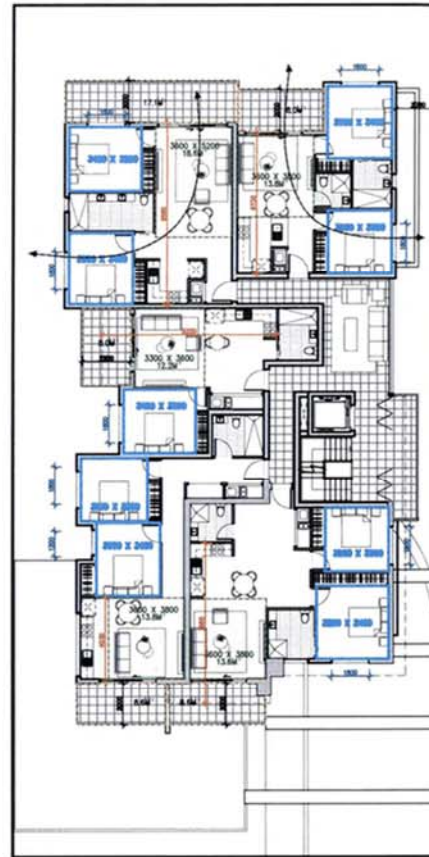
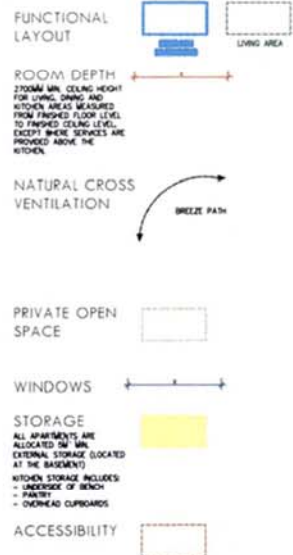
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PLANNING APPLICATION FOR PROPOSED APARTMENT DEVELOPMENT  
**3 STATION STREET, FAIRFIELD**  
 DRAWING TITLE: **CLAUSE 55.07 ASSESSMENT**  
 TRA 10 - 10 OF 11  
 DATE: 12TH OCTOBER 2017  
 SCALE: 1:100  
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 ALL LEVELS ARE TO AUSTRALIAN HEIGHT DATUM



Attachment 3 - PLN17/0585 – Plans Part 2

BAD ASSESSMENT  
LEGEND



FIRST FLOOR PLAN

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PLANNING APPLICATION FOR PROPOSED APARTMENT DEVELOPMENT  
**3 STATION STREET, FAIRFIELD**  
 DRAWING TITLE:  
**CLAUSE 55.07 ASSESSMENT**  
 (PA II) - 11 OF 11  
 DATE: 12TH OCTOBER 2017  
 SCALE: 1:100  
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## Attachment 4 - PLN17/0585 - Engineering comments



## MEMO

**To:** Gary O'Reilly  
**From:** Artemis Bacani  
**Date:** 28 November 2017  
**Subject:** Application No: PLN17/0585  
 Description: Double Storey Building - 10 Dwellings  
 Site Address: 3 Station Street, Fairfield

I refer to the above Planning Application received on 2 November 2017 in relation to the proposed development at 3 Station Street, Fairfield. Council's Engineering Services unit provides the following information:

**TRAFFIC GENERATION**

The traffic generation for the site could be adopted as follows:

Proposed Use	Adopted Traffic Generation Rate	Daily Traffic	Peak Hour	
			AM	PM
Resident (10 Dwellings)	3.0 trips per dwelling per day Peak hour volume is 10% of daily traffic volume	30 trips per day	3 trips per hour	3 trips per hour

The traffic volumes generated by the development are not unduly high and should not adversely impact on the operation of the surrounding road network

**DEVELOPMENT LAYOUT DESIGN****Layout Design Assessment**

Item	Assessment
<b>Access Arrangements</b>	
Development Entrance	The development entrance has a width of 3.0 metres and satisfies <i>Design standard 1 – Accessways</i> of Clause 52.06-9.
Visibility	The plantation adjacent to the north edge of the vehicle crossing contains a garden bed which would provide a sight line for exiting motorists. The plantation within the garden bed should be maintained at a height of no more than 900 mm.
Headroom Clearance	Not dimensioned on the drawings.
Internal Ramped Accessway Width	Ramped accessway is 3.0 metres wide. No kerbs are provided on the sides of the accessway.

**Attachment 4 - PLN17/0585 - Engineering comments**

**DEVELOPMENT LAYOUT DESIGN**  
**Layout Design Assessment**

Item	Assessment
<b>Access Arrangements</b>	
Vehicle Passing Movements – Internal Ramped Accessways	Swept path diagrams for vehicle passing movements within curved internal ramps not provided.
<b>Car Parking Modules</b>	
Parking Spaces	The dimensions of the at-grade parking spaces (4.9 metres by 2.6 metres) satisfy <i>Design standard 2: Car parking spaces</i> .
Aisles	The 6.4 metre aisles satisfy the requirements of <i>Table 2: Minimum dimensions of car parking spaces and accessways</i> of Clause 52.06-9.
Column Depths and Setbacks	Not dimensioned on the drawings.
Clearances to Walls	Clearances of no less than 400 mm have been provided.
<b>Gradients</b>	
Ramp Grade for First 5.0 metres inside Property	The ramp grade for the first 5.0 metres inside the building line is 1 in 10 and satisfies <i>Design standard 3: Gradients</i> .
Ramp Grades and Changes of Grade	The ramp grades and the changes of grade for the ramped accessway satisfy <i>Design standard 3</i> .
<b>Other Items</b>	
Undersized Parking Spaces	The parking spaces along the south side of the car park have a depth of 4.4 metres.

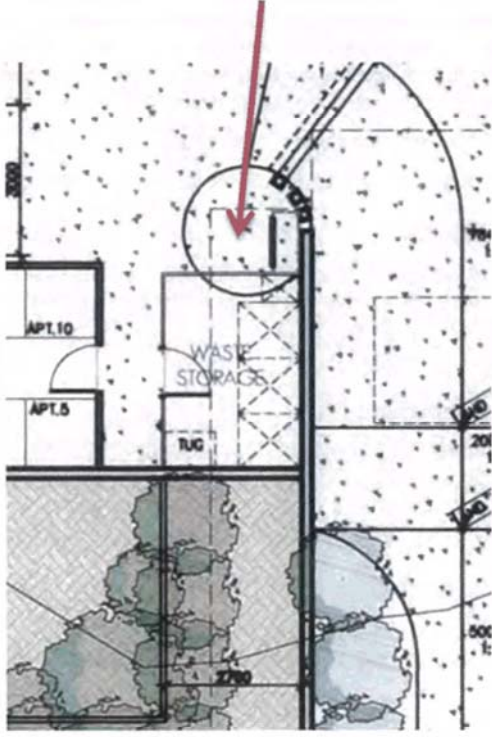
**Design Items to be Addressed**

Item	Details
Headroom Clearance	To be dimensioned at the development entrance and for the basement car park.
Vehicle Passing Movements – Internal Ramped Accessways	Swept path diagrams for a B99 design vehicle and an oncoming B85 design vehicle are to be provided for vehicle passing movements within the curved internal ramps.
Internal Ramped Accessway Width	A 300mm wide kerb should be provided along the southern edge of the accessway. The kerb must be constructed from the front edge of the columns.
Column Depths and Setbacks	To be dimensioned on the drawings.
Undersized Parking Spaces	The depth of the parking spaces along the southern side of the car park should have a minimum depth of 4.9 metres to satisfy <i>Design standard 2 – Car parking spaces</i> of Clause 52.06-9.

**Attachment 4 - PLN17/0585 - Engineering comments**

Visitor Parking	The visitor parking spaces should be easily accessible for visitors. It is recommended for the two visitor spaces to be relocated in the spaces that are allocated for apartments 1 and 2.
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**Design Items to be Addressed**

Item	Details
Car Space Adjacent to Lift	Applicant to designate the use of this space. Could this space be a visitor space and have a separate space for the car share?
Basement Circular Feature	<p>Information is required on the circular feature shown below.</p> 

**IMPACT ON COUNCIL ROAD ASSETS**

The construction of the new buildings, the provision of underground utilities and construction traffic servicing and transporting materials to the site will impact on Council assets. Trenching and areas of excavation for underground services invariably deteriorates the condition and integrity of footpaths, kerb and channel, laneways and road pavements of the adjacent roads to the site.

It is essential that the developer rehabilitates/restores laneways, footpaths, kerbing and other road related items, as recommended by Council, to ensure that the Council infrastructure surrounding the site has a high level of serviceability for residents, employees, visitors and other users of the site.

The footpath and kerb and channel along the development's Gwynne Street frontage require reconstruction once all works have been completed. Invariably, footpaths and kerbing outside development sites would be trenched and cut open for utility service connections and tapplings.

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**Attachment 4 - PLN17/0585 - Engineering comments**

More often than not, the footpath and kerb and channel would be damaged during development works.

**ENGINEERING CONDITIONS****Civil Works**

Upon the completion of all building works and connections for underground utility services,

- The footpath along the property's Station Street road frontage must be reconstructed to Council's satisfaction and at the Permit Holder's cost. The footpath must have a cross-fall of 1 in 40 or unless otherwise specified by Council.
- Before the building is occupied, or by such later date as approved in writing by the Responsible Authority, any area/s of any damage caused by the development works and associated utility service trenching in relation to the development along Station Street must be re-sheeted for the full width (with any areas of pavement failure as a consequence of construction traffic must be reinstated with full depth pavement):
  - at the permit holder's cost; and
  - to the satisfaction of the Responsible Authority.

**Road Asset Protection**

- Any damaged roads, footpaths and other road related infrastructure adjacent to the development site as a result of the construction works, including trenching and excavation for utility service connections, must be reconstructed to Council's satisfaction and at the developer's expense.

**Construction Management Plan**

- A Construction Management Plan must be prepared and submitted to Council. The Plan must be approved by Council prior to the commencement of works. A detailed dilapidation report should detail and document the existing and post construction conditions of surrounding road infrastructure and adjoining private properties.

**Impact of Assets on Proposed Development**

- Any services poles, structures or pits that interfere with the proposal must be adjusted, removed or relocated at the owner's expense after seeking approval from the relevant authority.
- Areas must be provided inside the property line and adjacent to the footpath to accommodate pits and meters. No private pits, valves or meters on Council property will be accepted.

**Discharge of Water from Development**

- Only roof runoff, surface water and clean groundwater seepage from above the water table can be discharged into Council drains.
- Contaminated ground water seepage into basements from above the water table must be discharged to the sewer system through a trade waste agreement with the relevant authority or in accordance with EPA guidelines.
- Contaminated groundwater from below the water table must be discharged to the sewer system through a trade waste agreement from the relevant sewer authority.
- Council will not permit clean groundwater from below the groundwater table to be discharged into Council's drainage system. Basements that extend into the groundwater table must be waterproofed/tanked.



**Attachment 4 - PLN17/0585 - Engineering comments**

**NON-PLANNING ADVICE FOR THE APPLICANT**

**Legal Point of Discharge**

The applicant must apply for a Legal Point of Discharge under Regulation 610 – Stormwater Drainage of the *Building Regulations 2006* from Yarra Building Services unit. Any storm water drainage within the property must be provided and be connected to the nearest Council pit of adequate depth and capacity (legal point of discharge), or to Council's satisfaction under Section 200 of the *Local Government Act 1989* and Regulation 610.

**Protection of Basement**

The Permit Holder/developer is responsible for the management and protection of their building from groundwater.

The developer needs to ensure that the basement car park and any portions of the development at or below natural surface level have a level of protection to minimise the seepage of subterranean water (groundwater) or any rainfall run-off from penetrating the walls or floors of the site.

In the event that any contaminated groundwater seeps through the walls of the basement, this water must not be discharged into Council's stormwater drainage system under any circumstances. Any contaminated groundwater that is present within the site must be treated and disposed of in accordance with a Trade Waste Agreement and as per EPA guidelines and Melbourne Water/City West Water guidelines.

It is also the Permit Holder's onus and responsibility to ensure that rainfall run-off does not enter the property in the event of a heavy storm. Adequate measures should be in place to prevent backwash from entering the property.

**Street Tree**

The existing street tree on Station Street is situated close to the site's property line. The applicant must liaise with Council's Open Space unit regarding lateral distance of the street tree.

**Attachment 4 - PLN17/0585 - Engineering comments**



Regards

Artemis Bacani  
Civil Roads Engineer  
Engineering Services Unit

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**Attachment 4 - PLN17/0585 - Engineering comments**

**O'Reilly, Gary**

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**From:** Bacani, Artemis  
**Sent:** Tuesday, 22 May 2018 7:57 AM  
**To:** O'Reilly, Gary  
**Subject:** D17/191701 : PLN17/0585 - 3 Station Street Fairfield - Engineering comments  
**Attachments:** PLN17 0585 - 3 Station Street Fairfield - Engineering comments.DOCX; PLN17 0585 - 3 Station Street Fairfield - Engineering comments.tr5

Hi Gary

Further to our discussion yesterday, please find edited version of my comments.

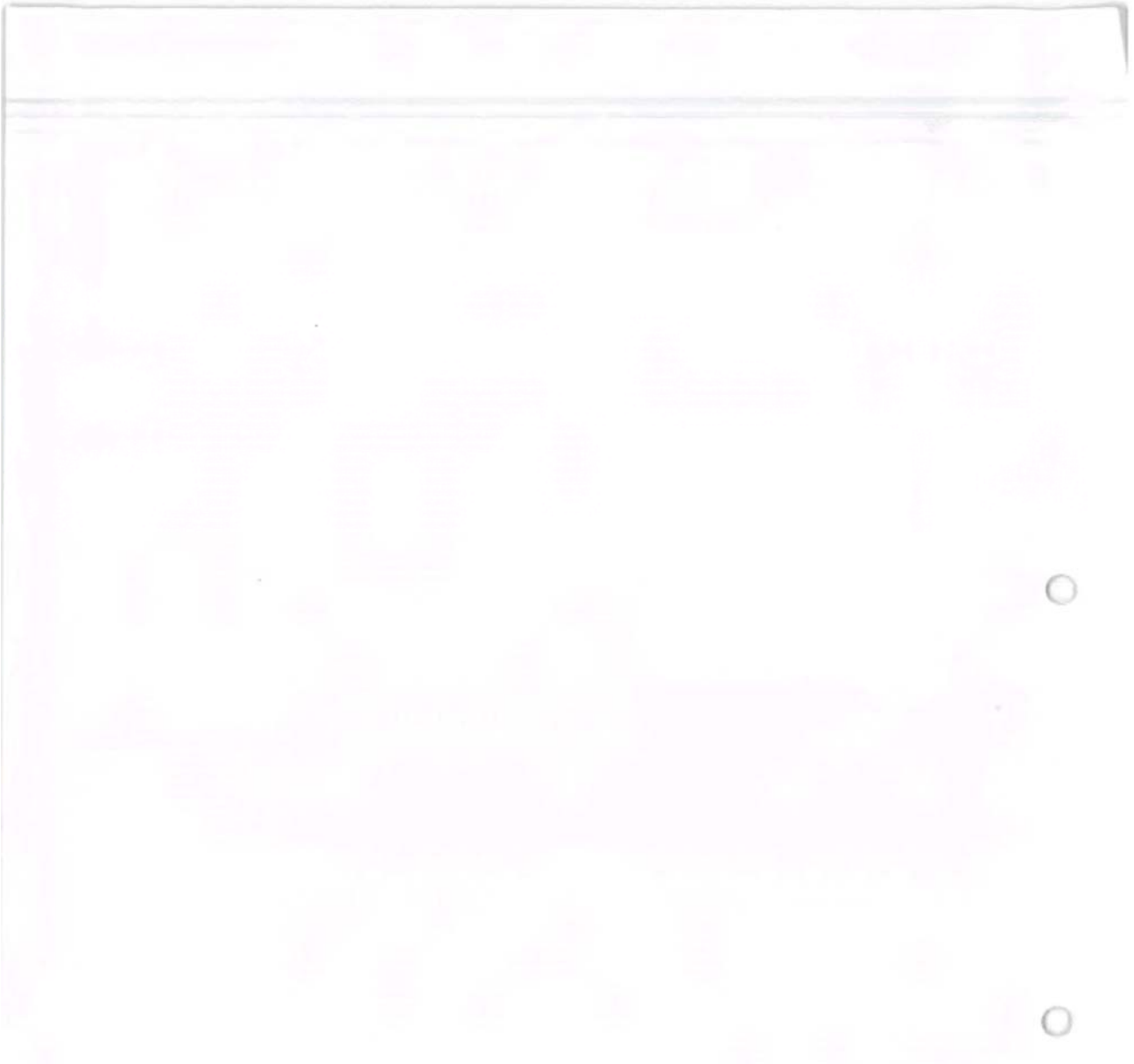
I have included in my comments that the applicant must extend the length of the spaces along the south side of the car park to 4.9 metres and an aisle width of 6.4 metres to be maintained.

Alternatively, the aisle width could be reduced to 5.9 metres (with 4.9 metre long spaces), provided that the spaces  be widened to 2.8 metres.

Please let me know if you have any questions regarding the edited memo.

Regards  
Artemis

**Attachment 4 - PLN17/0585 - Engineering comments**



## Attachment 5 - PLN17/0585 - ESD comments

## Sustainable Management Plan (SMP)

Referral Response by Yarra City Council



### ESD in the Planning Permit Application Process

Yarra City Council's planning permit application process includes Environmentally Sustainable Development (ESD) considerations. This is now supported by the ESD Local Policy Clause 22.17 of the Yarra Planning Scheme, entitled *Environmentally Sustainable Development*.

The Clause 22.17 requires all eligible applications to demonstrate best practice in ESD, supported by the Built Environment Sustainability Scorecard (BESS) web-based application tool, which is based on the Sustainable Design Assessment in the Planning Process (SDAPP) program.

As detailed in Clause 22.17, this application is a 'large' planning application as it meets the category *Residential 1. Ten or more dwellings*.

### What is a Sustainable Management Plan (SMP)?

An SMP is a detailed sustainability assessment of a proposed design at the planning stage. An SMP demonstrates best practice in the 10 Key Sustainable Building Categories and;

- Provides a detailed assessment of the development. It may use relevant tools such as BESS and STORM or an alternative assessment approach to the satisfaction of the responsible authority; and
- Identifies achievable environmental performance outcomes having regard to the objectives of Clause 22.17 (as appropriate); and
- Demonstrates that the building has the design potential to achieve the relevant environmental performance outcomes, having regard to the site's opportunities and constraints; and
- Documents the means by which the performance outcomes can be achieved.

An SMP identifies beneficial, easy to implement, best practice initiatives. The nature of larger developments provides the opportunity for increased environmental benefits and the opportunity for major resource savings. Hence, greater rigour in investigation is justified. It may be necessary to engage a sustainability consultant to prepare an SMP.

### Assessment Process:

The applicant's town planning drawings provide the basis for Council's ESD assessment. Through the provided drawings and the SMP, Council requires the applicant to demonstrate best practice.

The following comments are based on the review of the architectural drawings, prepared by Petridis (*advertised set*) and the accompanying SMP, prepared by Passivenergy (*advised set*).

**Attachment 5 - PLN17/0585 - ESD comments**



**Table of Contents**

Assessment Summary: .....3

1. Indoor Environment Quality (IEQ) .....5

2. Energy Efficiency.....7

3. Water Efficiency .....8

4. Stormwater Management .....9

5. Building Materials .....10

6. Transport .....11

7. Waste Management .....12

8. Urban Ecology .....13

9. Innovation .....14

10. Construction and Building Management .....15

Applicant Response Guidelines .....16

## Attachment 5 - PLN17/0585 - ESD comments

## Sustainable Management Plan (SMP)

Referral Response by Yarra City Council



## Assessment Summary:

Responsible Planner:	Gary O'Reilly		
ESD Advisor:	Euan Williamson		
Date:	23.11.2017	Planning Application No:	PLN17/0585
Subject Site:	3 Station Street, Fairfield, VIC		
Site Area:	Approx. 809m <sup>2</sup>	Site Coverage:	100%
Project Description:	Ten dwellings.		
Pre-application meeting(s):	None.		

**The standard of the ESD does not meet Council's Environmental Sustainable Design (ESD) standards.** Should a permit be issued, the following ESD commitments (1) and deficiencies (2) should be conditioned as part of a planning permit to ensure Council's ESD standards are fully met.

*Furthermore, it is recommended that all ESD commitments (1), deficiencies (2) and the outstanding information (3) are addressed in an updated SMP report and are clearly shown on Condition 1 drawings. ESD improvement opportunities (4) have been summarised as a recommendation to the applicant.*

**(1) Applicant ESD Commitments:**

- Minimum 6.9 Star average NatHERS Star rating for dwellings.
- A STORM report with a 129% STORM score has been submitted that demonstrates best practice and relies on ~417m<sup>2</sup> of roof connected to 15,000 litres in rainwater storage for flushing of toilets in dwellings with 20 bedrooms.
- 5 kWp solar PV array to contribute to onsite electricity generation.
- Energy efficient hot water, heating/cooling and lighting.
- Water efficient fixtures and taps.

**(2) Application ESD Deficiencies:**

- Daylight to most habitable rooms is adequate with the exception of the living area of Apartment 3 that has an internal dining area and Bed 1 in Apartment 2 will also have poor access to daylight. Recommend that Apartment 2 is redesigned to reduce the depth of Bed 1 from the façade, and Apartment 3 is internally reconfigured to move the dining room closer to the façade and improve its' access to daylight.
- Most dwellings will have good natural ventilation, either cross ventilation or single sided, except Apartment 3 that has a deep floor plate and a flat un-articulated façade. Bed 1 in Apartment 2 will also have poor natural ventilation. Recommend that Apartment 3 is redesigned to allow better natural ventilation (with partially inset balcony offsetting openings and encouraging better air flow). Ensure that all habitable rooms have an operable window and that these are clearly marked on plans. Recommend extraction fans to kitchen ranges (not re-circulating type).
- Substantial areas of glazing exposed to northerly, west and east facing summer sun angles. Install suitable exterior shading to all exposed north, west and easterly facing glazing, or demonstrate that no dwelling's cooling loads exceed the 30MJ/m<sup>2</sup> BADS standard.
- Only 2 secure bicycle parking spaces in basement. This is not a satisfactory number of bike spaces. Strongly recommend increase the number of spaces to one-per-dwellings (10) plus spaces for visitors.

**(3) Outstanding Information:**

- A Car Share arrangement within the development is claimed within the BESS report. Please note the location of the car share on plans and provide detail.

**Attachment 5 - PLN17/0585 - ESD comments**

**Sustainable Management Plan (SMP)**

Referral Response by Yarra City Council





- The BESS Report submitted is in 'Draft' status in the software. Please 'Finalise' the project and re-submit the report. BESS Users can always save a copy into a new Draft project if changes are required in the future.

**(4) ESD Improvement Opportunities**

- Consider gas boosted solar hot water.
- Consider electric vehicle charging infrastructure.
- Consider specifying low-VOC internal finishes, sealants, carpets and flooring, wall and ceiling coverings, as well as low or zero formaldehyde content in engineered timber products
- Consider that all timber to be certified by FSC as sustainable.
- Consider recycled concrete component and low embodied energy steel.
- Consider recycled materials in building components such as insulation.
- Recommend providing a composting system for dwellings.
- Recommend a comprehensive commissioning and tuning of all major appliances and building services.
- Recommend a Building Users Guide explaining optimal usage of building services and sustainability features within the development including rainwater tanks, energy systems, etc.

**Further Recommendations:**

The applicant is encouraged to consider the inclusion of ESD recommendations, detailed in this referral report. Further guidance on how to meet individual planning conditions has been provided in reference to the individual categories. The applicant is also encouraged to seek further advice or clarification from Council on the individual project recommendations.



**Attachment 5 - PLN17/0585 - ESD comments**

**1. Indoor Environment Quality (IEQ)**

**Objectives:**

- to achieve a healthy indoor environment quality for the wellbeing of building occupants.
- to provide a naturally comfortable indoor environment will lower the need for building services, such as artificial lighting, mechanical ventilation and cooling and heating devices.

Issues	Applicant's Design Responses	Council Comments	CAR*
Natural Ventilation and Night Purging	Most dwellings will have good natural ventilation, either cross ventilation or single sided, except Apartment 3 that has a deep floor plate and a flat un-articulated façade. Bed 1 in Apartment 2 will also have poor natural ventilation.	<p>Recommend that Apartment 3 is redesigned to allow better natural ventilation (with partially inset balcony offsetting openings and encouraging better air flow).</p> <p>Ensure that all habitable rooms have an operable window and that these are clearly marked on plans.</p> <p>Recommend extraction fans to kitchen ranges (not re-circulating type).</p>	2
Daylight & Solar Access	Daylight to most habitable rooms is adequate with the exception of the living area of Apartment 3 that has an internal dining area and Bed 1 in Apartment 2 will also have poor access to daylight.	Recommend that Apartment 2 is redesigned to reduce the depth of Bed 1 from the façade, and Apartment 3 is internally reconfigured to move the dining room closer to the façade and improve its' access to daylight.	2
External Views	External views from all dwellings.	-	1
Hazardous Materials and VOC	No information has been provided.	Consider specifying low-VOC paints, internal finishes, sealants, carpets and flooring, as well as low or zero formaldehyde content in engineered timber products.	4
Thermal Comfort	<p>Good thermal comfort is determined through a combination of good access to ventilation, balanced passive heat gains and high levels of insulation.</p> <p>The application proposes:</p> <ul style="list-style-type: none"> <li>- Mostly good access to natural ventilation</li> <li>- Some external shading proposed</li> <li>- Good thermal efficiency standards.</li> </ul>	Please refer to section on, <i>NCC Energy Efficiency Requirements Exceeded and Effective Shading</i>	2

**\* Council Assessment Ratings:**

1 – Design Response is **SATISFACTORY**; 2 – Design Response is **NOT SATISFACTORY**  
 3 – **MORE INFORMATION** is required; 4 – **ESD IMPROVEMENT OPPORTUNITIES**

**References and useful information:**

SDAPP Fact Sheet: [1. Indoor Environment Quality](#)  
 Good Environmental Choice Australia Standards [www.geca.org.au](http://www.geca.org.au)

## Attachment 5 - PLN17/0585 - ESD comments

Australian Green Procurement [www.greenprocurement.org](http://www.greenprocurement.org)  
Residential Flat Design Code [www.planning.nsw.gov.au](http://www.planning.nsw.gov.au)  
Your Home [www.yourhome.gov.au](http://www.yourhome.gov.au)

**Attachment 5 - PLN17/0585 - ESD comments**

**2. Energy Efficiency**

**Objectives:**

- to ensure the efficient use of energy
- to reduce total operating greenhouse emissions
- to reduce energy peak demand
- to minimize associated energy costs.

Issues	Applicant's Design Responses	Council Comments	CAR*
NCC Energy Efficiency Requirements Exceeded	Minimum 6.9 Star average NatHERS Star rating for dwellings.	-	1
Hot Water System	5 Star gas water system to all dwellings.	Consider gas boosted solar hot water.	4
Peak Energy Demand	Peak demand reduced through various initiatives.	-	1
Effective Shading	Substantial areas of glazing exposed to northerly, west and east facing summer sun angles.	Install suitable exterior shading to all exposed north, west and easterly facing glazing, or demonstrate that no dwelling's cooling loads exceed the 30MJ/m <sup>2</sup> BADS standard.	2
Efficient HVAC system	Energy efficient 5 Star gas heating and 5 Star AC cooling systems.	-	1
Efficient Lighting	Energy efficient lighting.	-	1
Electricity Generation	5 kWp solar PV array to contribute to onsite electricity generation.	-	1
Other	-	-	-

**\* Council Assessment Ratings:**

1 – Design Response is **SATISFACTORY**; 2 – Design Response is **NOT SATISFACTORY**  
 3 – **MORE INFORMATION** is required; 4 – **ESD IMPROVEMENT OPPORTUNITIES**

**References and useful information:**

- SDAPP Fact Sheet: [2. Energy Efficiency](#)  
 House Energy Rating [www.makeyourhomegreen.vic.gov.au](http://www.makeyourhomegreen.vic.gov.au)  
 Building Code Australia [www.abcb.gov.au](http://www.abcb.gov.au)  
 Window Efficiency Rating Scheme (WERS) [www.wers.net](http://www.wers.net)  
 Minimum Energy Performance Standards (MEPS) [www.energyrating.gov.au](http://www.energyrating.gov.au)  
 Energy Efficiency [www.resourcesmart.vic.gov.au](http://www.resourcesmart.vic.gov.au)

**Attachment 5 - PLN17/0585 - ESD comments**

**3. Water Efficiency**

**Objectives:**

- to ensure the efficient use of water
- to reduce total operating potable water use
- to encourage the collection and reuse of rainwater and stormwater
- to encourage the appropriate use of alternative water sources (e.g. grey water)
- to minimise associated water costs.

Issues	Applicant's Design Responses	Council Comments	CAR*
Minimising Amenity Water Demand	Water efficient taps and fittings throughout, including: <ul style="list-style-type: none"> <li>- 5 Star toilets</li> <li>- 5 Star tapware</li> <li>- 3 Star showers &lt;5 litres/min</li> <li>- 5 Star dishwashers</li> </ul>	-	1
Water for Toilet Flushing	A 15,000 litre rainwater tank connected to toilets for flushing.	-	1
Water Meter	Water metering for individual dwellings and all major common area uses.	-	1
Landscape Irrigation	Rainwater also used for irrigation also.	-	1
Other	-	-	-

**\* Council Assessment Ratings:**

1 – Design Response is **SATISFACTORY**; 2 – Design Response is **NOT SATISFACTORY**  
 3 – **MORE INFORMATION** is required; 4 – **ESD IMPROVEMENT OPPORTUNITIES**

**References and useful information:**

- SDAPP Fact Sheet: [3. Water Efficiency](#)  
 Water Efficient Labelling Scheme (WELS) [www.waterrating.gov.au](http://www.waterrating.gov.au)  
 Water Services Association of Australia [www.wsaa.asn.au](http://www.wsaa.asn.au)  
 Water Tank Requirement [www.makeyourhomegreen.vic.gov.au](http://www.makeyourhomegreen.vic.gov.au)  
 Melbourne Water STORM calculator [www.storm.melbournewater.com.au](http://www.storm.melbournewater.com.au)  
 Sustainable Landscaping [www.ourwater.vic.gov.au](http://www.ourwater.vic.gov.au)

**Attachment 5 - PLN17/0585 - ESD comments**

**4. Stormwater Management**

**Objectives:**

- to reduce the impact of stormwater runoff
- to improve the water quality of stormwater runoff
- to achieve best practice stormwater quality outcomes
- to incorporate Water Sensitive Urban Design principles.

Issues	Applicant's Design Responses	Council Comments	CAR*
STORM Rating	A STORM report with a 129% STORM score has been submitted that demonstrates best practice and relies on ~417m <sup>2</sup> of roof connected to 15,000 litres in rainwater storage for flushing of toilets in dwellings with 20 bedrooms.	-	1
Discharge to Sewer	-	-	-
Stormwater Diversion	-	-	-
Stormwater Detention	The 15,000 litres of rainwater tanks detailed above will partially act in a detention capacity.	-	1
Stormwater Treatment	-	-	-
Others	-	-	-

**\* Council Assessment Ratings:**

1 – Design Response is **SATISFACTORY**; 2 – Design Response is **NOT SATISFACTORY**  
 3 – **MORE INFORMATION** is required; 4 – **ESD IMPROVEMENT OPPORTUNITIES**

**References and useful information:**

SDAPP Fact Sheet: [4. Stormwater Management](#)  
 Melbourne Water STORM calculator [www.storm.melbournewater.com.au](http://www.storm.melbournewater.com.au)  
 Water Sensitive Urban Design Principles [www.melbournewater.com.au](http://www.melbournewater.com.au)  
 Environmental Protection Authority Victoria [www.epa.vic.gov.au](http://www.epa.vic.gov.au)  
 Water Services Association of Australia [www.wsaa.asn.au](http://www.wsaa.asn.au)  
 Sustainable Landscaping [www.ourwater.vic.gov.au](http://www.ourwater.vic.gov.au)

**Attachment 5 - PLN17/0585 - ESD comments**

**5. Building Materials**

**Objectives:**

- to minimise the environmental impact of materials used by encouraging the use of materials with a favourable lifecycle assessment.

Issues	Applicant's Design Responses	Council Comments	CAR*
Reuse of Recycled Materials	No information has been provided.	Consider recycled materials in building components such as insulation.	4
Embodied Energy of Concrete and Steel	No information has been provided.	Consider recycled concrete component and low embodied energy steel.	4
Sustainable Timber	No information has been provided.	Consider that all timber be certified by FSC or AFS as sustainable.	4
Design for Disassembly	No information has been provided.	Consider a small pallet of materials and construction techniques that can assist in disassembly.	4
Other	-	-	-

**\* Council Assessment Ratings:**

1 – Design Response is **SATISFACTORY**; 2 – Design Response is **NOT SATISFACTORY**  
 3 – **MORE INFORMATION** is required; 4 – **ESD IMPROVEMENT OPPORTUNITIES**

**References and useful information:**

- SDAPP Fact Sheet: [5. Building Materials](#)
- Building Materials, Technical Manuals [www.yourhome.gov.au](http://www.yourhome.gov.au)
- Embodied Energy Technical Manual [www.yourhome.gov.au](http://www.yourhome.gov.au)
- Good Environmental Choice Australia Standards [www.geca.org.au](http://www.geca.org.au)
- Forest Stewardship Council Certification Scheme [www.fsc.org](http://www.fsc.org)
- Australian Green Procurement [www.greenprocurement.org](http://www.greenprocurement.org)

**Attachment 5 - PLN17/0585 - ESD comments**

**6. Transport**

**Objectives:**

- to minimise car dependency
- to ensure that the built environment is designed to promote the use of public transport, walking and cycling.

Issues	Applicant's Design Responses	Council Comments	CAR*
Minimising the Provision of Car Parks	Car parking in car basement	-	1
Bike Parking Spaces	2 secure bicycle parking spaces in basement.	This is not a satisfactory number of bike spaces. Strongly recommend increase the number of spaces to one-per-dwellings (10) plus spaces for visitors.	2
End of Trip Facilities	No information has been provided.	-	NA
Car Share Facilities	A Car Share arrangement within the development is claimed within the BESS report.	Please note the location of the car share on plans.	3
Electric vehicle charging	No information has been provided.	Consider electric vehicle charging infrastructure.	4

**\* Council Assessment Ratings:**

1 – Design Response is **SATISFACTORY**; 2 – Design Response is **NOT SATISFACTORY**  
 3 – **MORE INFORMATION** is required; 4 – **ESD IMPROVEMENT OPPORTUNITIES**

**References and useful information:**

SDAPP Fact Sheet: [6. Transport](#)

Off-setting Car Emissions Options [www.greenfleet.com.au](http://www.greenfleet.com.au)

Sustainable Transport [www.transport.vic.gov.au/doi/internet/icy.nsf](http://www.transport.vic.gov.au/doi/internet/icy.nsf)

Car share options [www.yarracity.vic.gov.au/Parking-roads-and-transport/Transport-Services/Carsharing/](http://www.yarracity.vic.gov.au/Parking-roads-and-transport/Transport-Services/Carsharing/)

Bicycle Victoria [www.bv.com.au](http://www.bv.com.au)

**Attachment 5 - PLN17/0585 - ESD comments**

**7. Waste Management**

**Objectives:**

- to ensure waste avoidance, reuse and recycling during the design, construction and operation stages of development
- to ensure long term reusability of building materials.
- to meet Councils' requirement that all multi-unit developments must provide a Waste Management Plan in accordance with the *Guide to Best Practice for Waste Management in Multi-unit Developments 2010*, published by Sustainability Victoria.

Issues	Applicant's Design Responses	Council Comments	CAR*
Construction Waste Management	No information has been submitted.	Recommend a CWMP with a minimum 70% recycling/reuse target for construction and demolition waste.	4
Operational Waste Management	Space for general waste and recycling bins.	Recommend providing a composting system for dwellings	4
Storage Spaces for Recycling and Green Waste	Area for bins can be identified on the plans.	-	1
Others	-	-	-

**\* Council Assessment Ratings:**

1 – Design Response is **SATISFACTORY**; 2 – Design Response is **NOT SATISFACTORY**  
 3 – **MORE INFORMATION** is required; 4 – **ESD IMPROVEMENT OPPORTUNITIES**

**References and useful information:**

- SDAPP Fact Sheet: [7. Waste Management](#)
- Construction and Waste Management [www.sustainability.vic.gov.au](http://www.sustainability.vic.gov.au)
- Preparing a WMP [www.epa.vic.gov.au](http://www.epa.vic.gov.au)
- Waste and Recycling [www.resourcesmart.vic.gov.au](http://www.resourcesmart.vic.gov.au)
- Better Practice Guide for Waste Management in Multi-Unit Dwellings (2002) [www.environment.nsw.gov.au](http://www.environment.nsw.gov.au)
- Waste reduction in office buildings (2002) [www.environment.nsw.gov.au](http://www.environment.nsw.gov.au)



**Attachment 5 - PLN17/0585 - ESD comments**

**8. Urban Ecology**

**Objectives:**

- to protect and enhance biodiversity
- to provide sustainable landscaping
- to protect and manage all remnant indigenous plant communities
- to encourage the planting of indigenous vegetation.

Issues	Applicant's Design Responses	Council Comments	CAR*
On Site Topsoil Retention	There is no productive topsoil on this site.	-	NA
Maintaining / Enhancing Ecological Value	Some landscaping will marginally improve the ecological value of the site.	-	1
Heat Island Effect	No specific information has been submitted.	-	1
Communal Spaces	Communal sitting area.	-	1

**\* Council Assessment Ratings:**

1 – Design Response is **SATISFACTORY**; 2 – Design Response is **NOT SATISFACTORY**  
 3 – **MORE INFORMATION** is required; 4 – **ESD IMPROVEMENT OPPORTUNITIES**

**References and useful information:**

SDAPP Fact Sheet: [8. Urban Ecology](#)  
 Department of Sustainability and Environment [www.dse.vic.gov.au](http://www.dse.vic.gov.au)  
 Australian Research Centre for Urban Ecology [www.arcue.botany.unimelb.edu.au](http://www.arcue.botany.unimelb.edu.au)  
 Greening Australia [www.greeningaustralia.org.au](http://www.greeningaustralia.org.au)  
 Green Roof Technical Manual [www.yourhome.gov.au](http://www.yourhome.gov.au)

**Attachment 5 - PLN17/0585 - ESD comments**

**9. Innovation**

**Objective:**

- to encourage innovative technology, design and processes in all development, which positively influence the sustainability of buildings.

Issues	Applicant's Design Responses	Council Comments	CAR*
Significant Enhancement to the Environmental Performance	-	-	-
Innovative Social Improvements	-	-	-
New Technology	-	-	-
New Design Approach	-	-	-
Others	-	-	-

\* Council Assessment Ratings:

1 – Design Response is **SATISFACTORY**; 2 – Design Response is **NOT SATISFACTORY**  
 3 – **MORE INFORMATION** is required; 4 – **ESD IMPROVEMENT OPPORTUNITIES**

**References and useful information:**

SDAPP Fact Sheet: [9. Innovation](#)  
 Green Building Council Australia [www.gbca.org.au](http://www.gbca.org.au)  
 Victorian Eco Innovation lab [www.ecoinnovationlab.com](http://www.ecoinnovationlab.com)  
 Business Victoria [www.business.vic.gov.au](http://www.business.vic.gov.au)  
 Environment Design Guide [www.environmentdesignguide.com.au](http://www.environmentdesignguide.com.au)

**Attachment 5 - PLN17/0585 - ESD comments**

**10. Construction and Building Management**

**Objective:**

- to encourage a holistic and integrated design and construction process and ongoing high performance

Issues	Applicant's Design Responses	Council Comments	CAR*
Building Tuning	No specific information has been submitted.	Recommend a comprehensive commissioning and tuning of all major appliances and building services.	4
Building Users Guide	No specific information has been submitted.	Recommend a Building Users Guide explaining optimal usage of building services and sustainability features within the development including rainwater tanks, energy systems, etc.	4
Contractor has Valid ISO14001 Accreditation	No specific information has been submitted.	-	1
Construction Management Plan	No specific information has been submitted.	Recommend that an Environmental Management Plan be developed by the building contractor to monitor and control activities undertaken during construction.	4
Others	-	-	-

**\* Council Assessment Ratings:**

1 – Design Response is **SATISFACTORY**; 2 – Design Response is **NOT SATISFACTORY**  
 3 – **MORE INFORMATION** is required; 4 – **ESD IMPROVEMENT OPPORTUNITIES**

**References and useful information:**

SDAPP Fact Sheet: [10. Construction and Building Management](#)  
 ASHRAE and CIBSE Commissioning handbooks  
 International Organization for standardization – ISO14001 – Environmental Management Systems  
 Keeping Our Stormwater Clean – A Builder's Guide [www.melbournewater.com.au](http://www.melbournewater.com.au)

## Attachment 5 - PLN17/0585 - ESD comments

**Sustainable Management Plan (SMP)**  
for planning applications being considered by Yarra Council



## Applicant Response Guidelines

### Project Information:

Applicants should state the property address and the proposed development's use and extent. They should describe neighbouring buildings that impact on or may be impacted by the development. It is required to outline relevant areas, such as site permeability, water capture areas and gross floor area of different building uses. Applicants should describe the development's sustainable design approach and summarise the project's key ESD objectives.

### Environmental Categories:

Each criterion is one of the 10 Key Sustainable Building Categories. The applicant is required to address each criterion and demonstrate how the design meets its objectives.

### Objectives:

Within this section the general intent, the aims and the purposes of the category are explained.

### Issues:

This section comprises a list of topics that might be relevant within the environmental category. As each application responds to different opportunities and constraints, it is not required to address all issues. The list is non-exhaustive and topics can be added to tailor to specific application needs.

### Assessment Method Description:

Where applicable, the Applicant needs to explain what standards have been used to assess the applicable issues.

### Benchmarks Description:

The applicant is required to briefly explain the benchmark applied as outlined within the chosen standard. A benchmark description is required for each environmental issue that has been identified as relevant.

### How does the proposal comply with the benchmarks?

The applicant should show how the proposed design meets the benchmarks of the chosen standard through making references to the design brief, drawings, specifications, consultant reports or other evidence that proves compliance with the chosen benchmark.

### ESD Matters on Architectural Drawings:

Architectural drawings should reflect all relevant ESD matters where feasible. As an example, window attributes, sun shading and materials should be noted on elevations and finishes schedules, water tanks and renewable energy devices should be shown on plans. The site's permeability should be clearly noted. It is also recommended to indicate water catchment areas on roof- or site plans to confirm water re-use calculations.

**Attachment 6 - PLN17/0585 - Urban Design comments**



# MEMO

**TO:** Gary O'Reilly  
**FROM:** David Pryor  
**DATE:** 13 November 2017  
**SUBJECT:** 3 Station Street, Fairfield  
**APPLICATION NO:** PLN17/0585  
**DESCRIPTION:** Construction of 10 dwellings in a two storey building with basement carparking

Urban design advice has been sought in relation to the above application.

**COMMENTS SUMMARY**

This proposal is supported in principle, subject to the improvements outlined below, including the following:

- Delete the large entry arch;
- Consider the provision of an individual entry to Unit 1;
- Review the eave/wall configuration at the southwest corner;
- Replace (some of) the glass balustrades with a material of more tactile and domestic character;
- Introduce deep window recesses and/or projecting sunshades to provide shadow and articulation at a finer scale.

**Site and Context**

The site sits within a Garden Suburban Residential area, where Clause 21.08-6 promotes:

- *Maintain the existing pattern of front setbacks*
- *Reinforce the garden character of the streetscape*
- *Accommodate ... second storeys of new buildings within an envelope that maintains the low, horizontal form of existing dwellings.*

The site is zoned NRZ2. No overlays apply, but HO328 abuts the east (rear) boundary.

A substantial single storey dwelling currently occupies the site. Other development in the street ranges from large detached Victorian houses to a 3-storey apartment block, and from tree-dominated sites to commercial development fronting Heidelberg Road.

**Site Layout**

The proposal is for a two storey building with modest setbacks from all boundaries. There are five apartments on each floor, with vehicular access and pedestrian circulation located toward the south side of the building.

## Attachment 6 - PLN17/0585 - Urban Design comments

### Built Form and Massing

The building is reasonably well articulated, with a range of cladding materials reinforcing the steps in plan and elevation.

The front setback appears to match the 6.2m setback of both adjoining properties, stepping back to an 8m setback at First Floor level.

### Presentation to the Street

I have not assessed the proposed planting, but note that, to “reinforce the garden character of the streetscape”, it will be important that substantial trees can flourish around the building, given the proposal’s relatively high site coverage and bulk. To achieve this, it is important that the basement does not significantly extend beyond the building footprint above. This is generally achieved.

The entry arch, located less than two metres from the front boundary and spanning almost half the width of the site, reinforces the presence of built form on the site rather than *garden character*, and is not supported. The carpark entry would be easily found without the arch, and the large scale of the arch does not make it a suitable way of identifying the pedestrian entry.

There is an opportunity to provide an individual entry to Unit 1, directly from the footpath. This would achieve a finer grain of activation to the street and be consistent with Clause 55.07-8 Building entry and circulation objectives, which include *To provide each dwelling and building with its own sense of identity*.

### Building Design and Finishes

The projecting eave to the southwest corner seems to unnecessarily encroach into the Rescode setback envelope and increase overshadowing of the adjoining property without corresponding improvement to the design. I would support the screened wall at this corner extending up into a simple parapet more typical of the rest of the building.

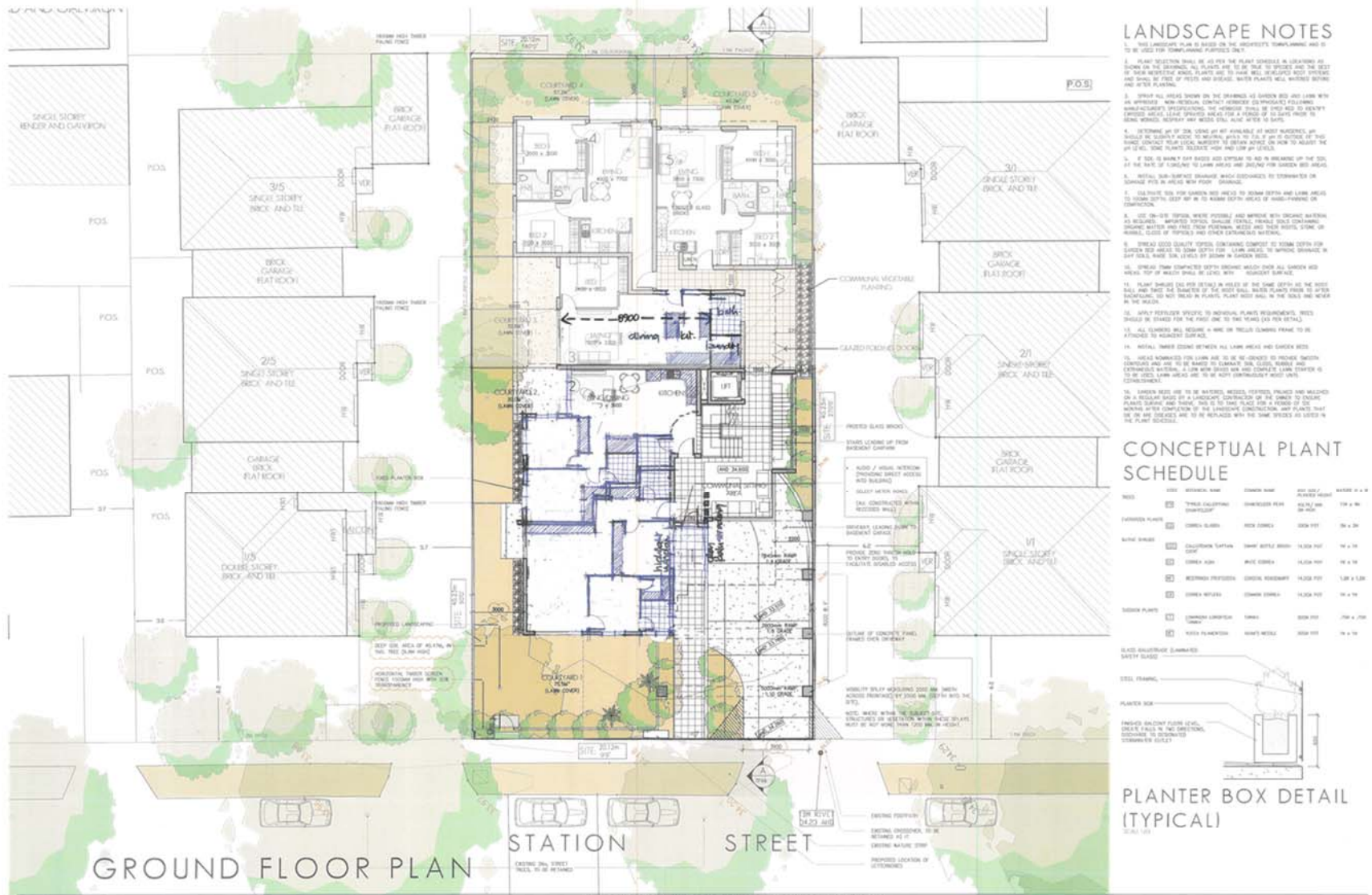
The design could be enhanced through the introduction of deep window recesses and projecting sunshades, contributing depth, shadow and articulation at a finer scale as well improving environmental performance.

The proposed glass balustrades give a commercial character to the development. It is recommended that at least some of these be replaced with a material of more tactile and domestic character such as timber slats, which would be comparable to the front fence. Differentiation between the balustrades of Units 6 and 7 would contribute to the building’s articulation and obviate the need for the expressed blade wall which currently separates the balconies of these front units.

There may be opportunities to add character and a sense of history to the development by reusing components from the existing dwelling. This could include the new entry paving, which does not appear to be stipulated.

The above advice is limited to urban design issues, and does not address ESD, amenity or heritage, for example.

Attachment 7 - PLN17/0585 - Sketch Plan - 5 March 2018

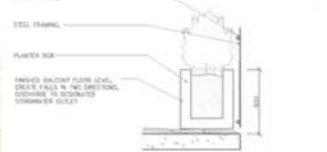


LANDSCAPE NOTES

1. THIS LANDSCAPE PLAN IS BASED ON THE ARCHITECT'S TERRAINING AND IS TO BE USED FOR COMPLIANCE PURPOSES ONLY.
2. PLANT SPECIFICATIONS SHOWN ON THIS PLAN SHOULD BE LOCATED AS SHOWN ON THE DRAWINGS. ALL PLANTS ARE TO BE TRUE TO SPECIES AND THE BEST OF THEIR RESPECTIVE KINDS. PLANTS ARE TO BE WELL DEVELOPED AND FREQUENT AND SHALL BE FREE OF PESTS AND DISEASE. WATER PLANTS WILL BE INSTALLED WITHIN AND WITHIN PLANTING.
3. SPECIFY ALL AREAS SHOWN ON THE DRAWINGS AS GARDEN BEDS AND LAWN WITH AN APPROVED, NON-WEAVING, CONTACT MEMBRANE OR PROTECTIVE FOLIOLE. UNDESIRABLE WEEDS/PLANTS, THE GROWING POINTS OF WHICH ARE TO BE EXCLUDED, SHOULD BE EXCLUDED FROM ALL AREAS. ALL AREAS TO BE EXCLUDED SHOULD BE EXCLUDED FROM ALL AREAS. ALL AREAS TO BE EXCLUDED SHOULD BE EXCLUDED FROM ALL AREAS.
4. DETERMINE THE SOIL USING AN APPROPRIATE SOIL ANALYSIS. IF THE SOIL IS FOUND TO BE UNSUITABLE FOR PLANTING, CONTACT YOUR LOCAL COUNCIL TO OBTAIN ADVICE ON HOW TO ADJUST THE SOIL. CONTACT YOUR LOCAL COUNCIL TO OBTAIN ADVICE ON HOW TO ADJUST THE SOIL. CONTACT YOUR LOCAL COUNCIL TO OBTAIN ADVICE ON HOW TO ADJUST THE SOIL.
5. IF SOIL IS FOUND TO BE UNSUITABLE FOR PLANTING, CONTACT YOUR LOCAL COUNCIL TO OBTAIN ADVICE ON HOW TO ADJUST THE SOIL. CONTACT YOUR LOCAL COUNCIL TO OBTAIN ADVICE ON HOW TO ADJUST THE SOIL. CONTACT YOUR LOCAL COUNCIL TO OBTAIN ADVICE ON HOW TO ADJUST THE SOIL.
6. INSTALL 100MM COMPACTED GRANULAR MATERIAL OVER THE EXISTING SOIL TO PROVIDE A DRAINAGE LAYER. CONTACT YOUR LOCAL COUNCIL TO OBTAIN ADVICE ON HOW TO ADJUST THE SOIL. CONTACT YOUR LOCAL COUNCIL TO OBTAIN ADVICE ON HOW TO ADJUST THE SOIL. CONTACT YOUR LOCAL COUNCIL TO OBTAIN ADVICE ON HOW TO ADJUST THE SOIL.
7. USE 100MM COMPACTED GRANULAR MATERIAL OVER THE EXISTING SOIL TO PROVIDE A DRAINAGE LAYER. CONTACT YOUR LOCAL COUNCIL TO OBTAIN ADVICE ON HOW TO ADJUST THE SOIL. CONTACT YOUR LOCAL COUNCIL TO OBTAIN ADVICE ON HOW TO ADJUST THE SOIL. CONTACT YOUR LOCAL COUNCIL TO OBTAIN ADVICE ON HOW TO ADJUST THE SOIL.
8. USE 100MM COMPACTED GRANULAR MATERIAL OVER THE EXISTING SOIL TO PROVIDE A DRAINAGE LAYER. CONTACT YOUR LOCAL COUNCIL TO OBTAIN ADVICE ON HOW TO ADJUST THE SOIL. CONTACT YOUR LOCAL COUNCIL TO OBTAIN ADVICE ON HOW TO ADJUST THE SOIL. CONTACT YOUR LOCAL COUNCIL TO OBTAIN ADVICE ON HOW TO ADJUST THE SOIL.
9. SPREAD GOOD QUALITY TOPSOIL CONTAINING COMPOST AT 100MM DEPTH FOR LAWN AND 150MM DEPTH FOR PLANTING. CONTACT YOUR LOCAL COUNCIL TO OBTAIN ADVICE ON HOW TO ADJUST THE SOIL. CONTACT YOUR LOCAL COUNCIL TO OBTAIN ADVICE ON HOW TO ADJUST THE SOIL. CONTACT YOUR LOCAL COUNCIL TO OBTAIN ADVICE ON HOW TO ADJUST THE SOIL.
10. SPREAD 100MM COMPACTED GRANULAR MATERIAL OVER THE EXISTING SOIL TO PROVIDE A DRAINAGE LAYER. CONTACT YOUR LOCAL COUNCIL TO OBTAIN ADVICE ON HOW TO ADJUST THE SOIL. CONTACT YOUR LOCAL COUNCIL TO OBTAIN ADVICE ON HOW TO ADJUST THE SOIL. CONTACT YOUR LOCAL COUNCIL TO OBTAIN ADVICE ON HOW TO ADJUST THE SOIL.
11. PLANT SHOULD BE PLANTED IN LINES OR GROUPS OF THE SAME SPECIES AS THE NOTES AND THE NUMBER OF PLANTS SHOULD BE AS SHOWN ON THE DRAWINGS. CONTACT YOUR LOCAL COUNCIL TO OBTAIN ADVICE ON HOW TO ADJUST THE SOIL. CONTACT YOUR LOCAL COUNCIL TO OBTAIN ADVICE ON HOW TO ADJUST THE SOIL. CONTACT YOUR LOCAL COUNCIL TO OBTAIN ADVICE ON HOW TO ADJUST THE SOIL.
12. ALL PLANTS MUST BE PLANTED IN LINES OR GROUPS OF THE SAME SPECIES AS THE NOTES AND THE NUMBER OF PLANTS SHOULD BE AS SHOWN ON THE DRAWINGS. CONTACT YOUR LOCAL COUNCIL TO OBTAIN ADVICE ON HOW TO ADJUST THE SOIL. CONTACT YOUR LOCAL COUNCIL TO OBTAIN ADVICE ON HOW TO ADJUST THE SOIL. CONTACT YOUR LOCAL COUNCIL TO OBTAIN ADVICE ON HOW TO ADJUST THE SOIL.
13. APPLY MULCH SPECIFIC TO INDIVIDUAL PLANT REQUIREMENTS. MULCH SHOULD BE APPLIED FOR THE FIRST YEAR (SEE DETAILS).
14. ALL PLANTS MUST BE PLANTED IN LINES OR GROUPS OF THE SAME SPECIES AS THE NOTES AND THE NUMBER OF PLANTS SHOULD BE AS SHOWN ON THE DRAWINGS. CONTACT YOUR LOCAL COUNCIL TO OBTAIN ADVICE ON HOW TO ADJUST THE SOIL. CONTACT YOUR LOCAL COUNCIL TO OBTAIN ADVICE ON HOW TO ADJUST THE SOIL. CONTACT YOUR LOCAL COUNCIL TO OBTAIN ADVICE ON HOW TO ADJUST THE SOIL.
15. INSTALL 100MM COMPACTED GRANULAR MATERIAL OVER THE EXISTING SOIL TO PROVIDE A DRAINAGE LAYER. CONTACT YOUR LOCAL COUNCIL TO OBTAIN ADVICE ON HOW TO ADJUST THE SOIL. CONTACT YOUR LOCAL COUNCIL TO OBTAIN ADVICE ON HOW TO ADJUST THE SOIL. CONTACT YOUR LOCAL COUNCIL TO OBTAIN ADVICE ON HOW TO ADJUST THE SOIL.
16. AREAS MARKED FOR LAWN ARE TO BE GRADED TO PROVIDE A FINISH GRADE AND TO BE PLANTED TO LAWN SEED. CONTACT YOUR LOCAL COUNCIL TO OBTAIN ADVICE ON HOW TO ADJUST THE SOIL. CONTACT YOUR LOCAL COUNCIL TO OBTAIN ADVICE ON HOW TO ADJUST THE SOIL. CONTACT YOUR LOCAL COUNCIL TO OBTAIN ADVICE ON HOW TO ADJUST THE SOIL.
17. GARDEN BEDS ARE TO BE PLANTED WITH PLANTS AS SHOWN ON THE DRAWINGS. CONTACT YOUR LOCAL COUNCIL TO OBTAIN ADVICE ON HOW TO ADJUST THE SOIL. CONTACT YOUR LOCAL COUNCIL TO OBTAIN ADVICE ON HOW TO ADJUST THE SOIL. CONTACT YOUR LOCAL COUNCIL TO OBTAIN ADVICE ON HOW TO ADJUST THE SOIL.

CONCEPTUAL PLANT SCHEDULE

NO.	CODE	RECOMMENDATION	COMMON NAME	HT. (M)	SPREAD (M)	WATER IN A WEEK
1	100	3000	3000	3000	3000	3000
2	200	2000	2000	2000	2000	2000
3	300	3000	3000	3000	3000	3000
4	400	4000	4000	4000	4000	4000
5	500	5000	5000	5000	5000	5000
6	600	6000	6000	6000	6000	6000
7	700	7000	7000	7000	7000	7000
8	800	8000	8000	8000	8000	8000
9	900	9000	9000	9000	9000	9000
10	1000	10000	10000	10000	10000	10000



PLANTER BOX DETAIL (TYPICAL)

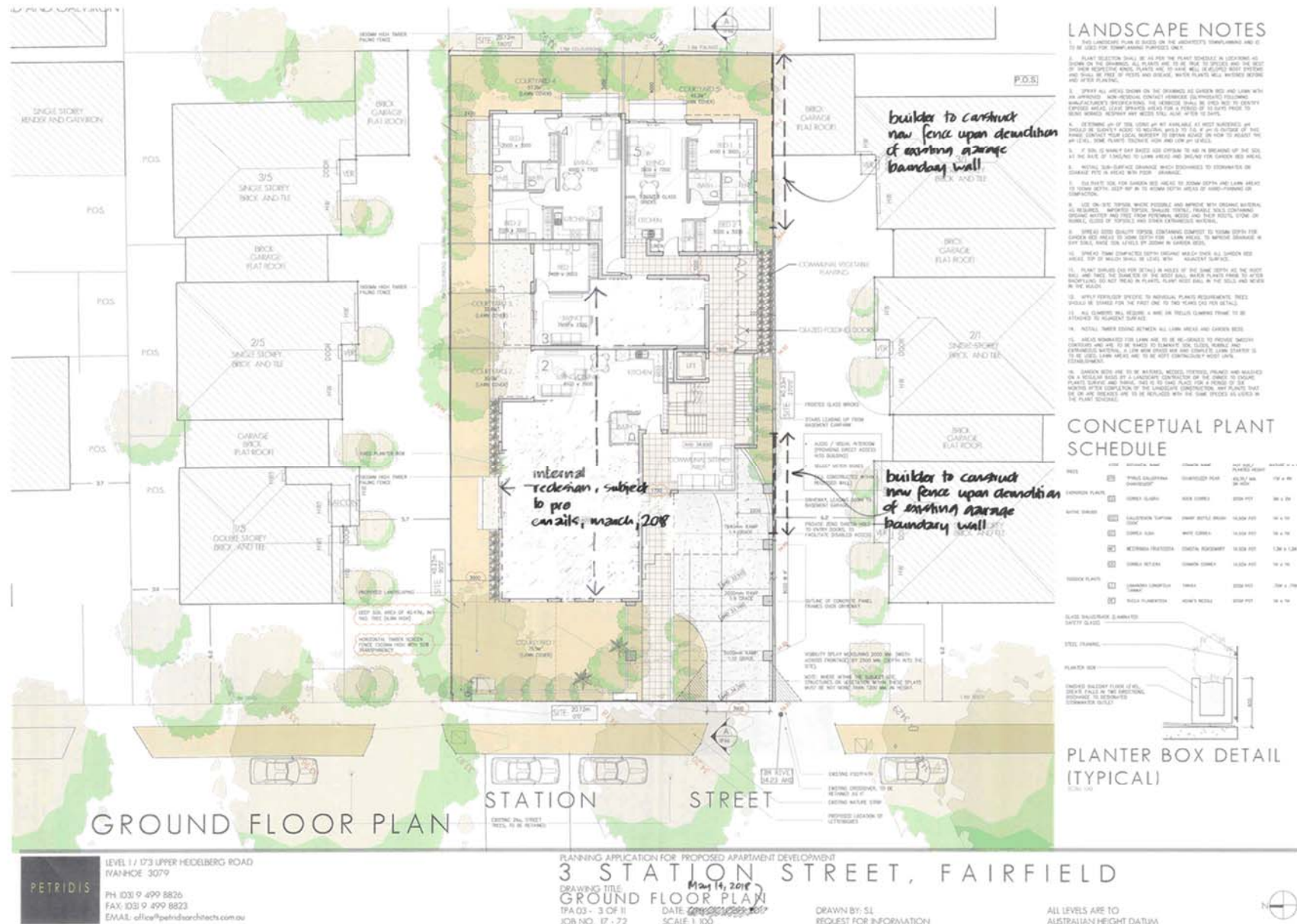
GROUND FLOOR PLAN

LEVEL 1 / 173 UPPER HEIDELBERG ROAD  
IVANHOE 3079  
**PETRIDIS**  
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PLANNING APPLICATION FOR PROPOSED APARTMENT DEVELOPMENT  
**3 STATION STREET, FAIRFIELD**  
DRAWING TITLE  
TPA 03 - 3 OF 11  
JOB NO. 17 - 72  
DATE: 05/03/2018  
SCALE: 1:100

**3 STATION STREET, FAIRFIELD**  
DRAWN BY: SL  
REQUEST FOR INFORMATION  
ALL LEVELS ARE TO AUSTRALIAN HEIGHT DATUM

Attachment 8 - PLN17/0585 - Sketch Plan - 15 May 2018





Attachment 8 - PLN17/0585 - Sketch Plan - 15 May 2018



ESD NOTES

- ESD NOTES**
- WATER REQUIREMENTS**
    - PLANT WHICH HAVE COMBINED IN THE SHED AREA, THIS IS TO BE COMPILED WITH THE CIVIL ENGINEER'S DRAWINGS AS WELL AS THE SCULPTOR'S REQUIREMENTS.
    - PLANTING DENSITY TO BE 10 PLANTS PER SQUARE METRE.
    - WATER EFFICIENT LANDSCAPING: A LANDSCAPING PLAN PREPARED BY A QUALIFIED LANDSCAPE ARCHITECT TO NOMINATE WATER SENSITIVE PLANTS, WHICH ARE LARGE WATER EFFICIENT LOW MAINTENANCE PLANTS (MEDIUM TO SHORT) SHOULD BE COMPILED WITH PLANTING PLAN. PLANTING SHOULD BE LOCATED WITHIN THE 10% WIND BREAK AREA AND BE 10% WIND BREAK AND SELF-MULCHING PLANTS.
    - SMALL PLANTS ACCORDING TO THEIR WATERING NEEDS.
    - PLANTING SHOULD BE A COMBINATION OF AUTUMN AND WINTER DECIDUOUS AND SEMI-DECIDUOUS PLANTS TO PROVIDE SHADING AND TO ALLOW LIGHT TO PENETRATE TO THE SOIL TO INCREASE MOISTURE.
    - ATTENTION SHOULD BE GIVEN TO THE PLANTING PLAN TO ENSURE PLANTS ARE PLANTED AT THE CORRECT DEPTH AND AT THE CORRECT DISTANCE FROM EACH OTHER.
    - PLANTING SHOULD BE 10% WIND BREAK AND SELF-MULCHING PLANTS.
    - PLANTING SHOULD BE 10% WIND BREAK AND SELF-MULCHING PLANTS.
  - ENERGY**
    - THE UNIT'S SHADING DEVICES SHOULD BE DESIGNED TO BE EASILY ADJUSTED TO PROVIDE AN APPROPRIATE LEVEL OF SHADING TO EACH WINDOW.
    - SHADING DEVICES SHOULD BE DESIGNED TO PROVIDE AN APPROPRIATE LEVEL OF SHADING TO EACH WINDOW.
    - SHADING DEVICES SHOULD BE DESIGNED TO PROVIDE AN APPROPRIATE LEVEL OF SHADING TO EACH WINDOW.
    - SHADING DEVICES SHOULD BE DESIGNED TO PROVIDE AN APPROPRIATE LEVEL OF SHADING TO EACH WINDOW.
  - ESD OVERVIEW**
    - A STRATEGIC TREATMENT OF THE BUILDING IS REQUIRED TO ENSURE THAT THE BUILDING IS A SUSTAINABLE AND ENERGY EFFICIENT BUILDING.
    - THE BUILDING SHOULD BE DESIGNED TO PROVIDE AN APPROPRIATE LEVEL OF SHADING TO EACH WINDOW.
    - THE BUILDING SHOULD BE DESIGNED TO PROVIDE AN APPROPRIATE LEVEL OF SHADING TO EACH WINDOW.
- NOTE TO WATER SENSITIVE URBAN DESIGN FOR WIND MITIGATION**
- WIND MITIGATION QUALITY DESIGN**
- DESIGN GLAZING SHOULD BE DESIGNED TO PROVIDE AN APPROPRIATE LEVEL OF SHADING TO EACH WINDOW.
  - DESIGN GLAZING SHOULD BE DESIGNED TO PROVIDE AN APPROPRIATE LEVEL OF SHADING TO EACH WINDOW.
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  - DESIGN GLAZING SHOULD BE DESIGNED TO PROVIDE AN APPROPRIATE LEVEL OF SHADING TO EACH WINDOW.
- WIND MITIGATION MANAGEMENT STRATEGY**
- DESIGN GLAZING SHOULD BE DESIGNED TO PROVIDE AN APPROPRIATE LEVEL OF SHADING TO EACH WINDOW.
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LEVEL 1 / 173 UPPER HEIDELBERG ROAD  
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PLANNING APPLICATION FOR PROPOSED APARTMENT DEVELOPMENT  
**3 STATION STREET, FAIRFIELD**

DRAWING TITLE: **FIRST FLOOR PLAN**  
DATE: **May 14, 2018**  
SCALE: 1:100

TRA 04 - 4 OF 11  
JOB NO. 17 - 72

DRAWN BY: SL  
REQUEST FOR INFORMATION

ALL LEVELS ARE TO AUSTRALIAN HEIGHT DATUM

PETRIDIS

Attachment 8 - PLN17/0585 - Sketch Plan - 15 May 2018



MATERIALS AND FINISHES SCHEDULE AND SAMPLES

- ROOF: (01) FLAT ROOF, SHEET STEEL ROOFING, ENCAUSTIC FINISH
- WALL: (02) SMOOTH GYPSUM RENDER, COLOR "PEYTON QUARTZ" R10  
(03) EXTERIOR GLAZING UNITS WITH "WATERS" EXTERNAL SLIDING DOUBLE "TITANIUM QUARTZ"  
(04) AIRLIFT PANEL, NON-VISOR TO SCREEN, HANDBRAKE R10  
(05) EXTERIOR GLAZING UNITS WITH "WATERS" EXTERNAL GLAZING DOUBLE "SLASH"
- CLADDING COLUMN: (06) SMOOTH GYPSUM RENDER, COLOR "TARTAN"

- FINISH: (07) SMOOTH GYPSUM RENDER, COLOR "PEYTON QUARTZ"
- GLAZING: (08) TINTED-PRISMATIC GLASS
- SCREENING: (09) COLORGLASS "SUNWAVE"
- SCREENING: (10) ALUMINUM FRAMES, NATURAL ANODIZED FINISH
- SCREENING: (11) BRASS SCREEN FINISH
- SCREENING: (12) BRASS ANODIZED, METAL, "WALNUT"
- SCREENING: (13) LASSER CUT STEEL, FINISH WITH FEATHER



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PLANNING APPLICATION FOR PROPOSED APARTMENT DEVELOPMENT  
**3 STATION STREET, FAIRFIELD**  
 DRAWING TITLE  
 ELEVATIONS, MATERIALS AND FINISHES SCHEDULE  
 TPA 05 - 5 OF 11  
 DATE: 05/05/2017  
 SCALE: 1:100  
 DRAWN BY: SL  
 REQUEST FOR INFORMATION  
 ALL LEVELS ARE TO AUSTRALIAN HEIGHT DATUM