

To: Amy Hodgen Date: 25/2/19
Cc:
From: Scott Willey
Subject: Review of revised SMP and drawings of the application for an amendment to a planning permit

File:	PLN17/0703
Subject Site:	626 Heidelberg Road, Alphington

Amy,

The revised drawings and ESD report for the above project have been reviewed with comments provided on:

- proposed changes – for buildings with significant planning changes or changes to facades
- revised SMP – in response to permit conditions
- revised drawings – in response to permit conditions

The revised ESD report covers considerably more ground than that previously submitted, but still contains a lack of clarity of the degree of commitments in some areas discussed. Some sought items are promised in future stages, though there is no submission requirement noted in the current conditions for post construction. It is suggested that a condition be added which captures all items not submitted before any amended permit is issued. This would include: Section J report, JV3 energy modelling, glazing calculator, photovoltaic specification etc.

The revised drawings contain a considerable lack of clarity around the provision of shading in general, and a lack detail on the provision of best practice natural ventilation for the proposed changes to commercial facades, and that of the school and civic spaces.

As discussed, some condition response should be passed for internal referral. This includes:

- Transport – for relevant bicycle facilities and electrical vehicle charging
- Engineering – for review of the MUSIC model

Please find comments for each of these below, and please let me know if you wish to discuss the proposal.

Regards,

Scott Willey

Environmental Sustainable Development Advisor

Assessment

The following revised documents were reviewed against the permit conditions that relate to ESD:

- Architectural drawings - prepared by NHA/Bird de la Coeur Architects / Architectus, Project 01234, TP drawings - Revision 4
- Sustainable Management Plan - prepared by Norman Disney & Young, dated 21/11/18
- Waste Management Plan - prepared by Salt3, dated 20/11/18

Further information is needed before the project proposal could be considered to meet Council's conditions relevant to ESD and/or best practice.

Comment on proposed changes

- **Effective shading** – The proposed facades indicate unprotected glazed areas which would be subject to significant summer solar gain. Effective external shading is sought to prevent undesirable summer solar heat gain, though allow winter sun. Provision of effective shading, for sun-exposed glazing is sought to be demonstrated for the following (e.g. north-facing glazing - for the summer solstice at midday, and for west-facing glazing – at 3pm):
 - Residential – habitable rooms of apartments and serviced apartments including common corridors, and entry lobbies
 - Commercial and civic – habitable spaces as well as common corridors, and entry lobbies
- **Natural ventilation** – New façade elements are proposed without sufficient explanation of how these facades will encourage natural ventilation to decrease the need for, and reliance on, mechanical ventilation, heating and cooling.
 - Windows – indicate operable window sashes to all habitable rooms and common corridors for buildings where facades are proposed to be altered.
 - Passive – Provide details of strategies to encourage utilisation of a passive ventilation over mechanised ventilation

Comment in response to ESD relevant Permit Conditions

Condition 1

Condition 1(g) Additional external shading systems applied on all east, west and north facing facades of the Urban Anchor and Living Matrix;

- *Not satisfactory – External shading is lacking or not obviously effective. Provide typical façade details that demonstrate external shading is effective in preventing solar heat gain in warmer months. Indication of shading effectiveness on the summer solstice is sought - for north-facing glazing at noon, for east facing glazing at 10am (AEST) and west – at 3pm (AEST).*

Condition 1(h) Location and size of the water tank;

- *Satisfactory - Shown on Lower Ground Level.*

Condition 1 (i) Roof plan showing location of all solar panels;

- *Satisfactory – The 85kW noted on page 6 of SMP is matched by 24kW shown on the school (Level 8), and 61kW shown on apartments (Level 14)*

Condition 1 (j) provision and location of a minimum of 40 electric vehicle charging points;

- *Refer to Transport comments*

Condition 9 Sustainable Management Plan

Before the development commences, an amended Sustainable Management Plan (SMP) to the satisfaction of the Responsible Authority must be submitted to and approved by the Responsible Authority. When approved, the amended Sustainable Management Plan will be endorsed and will form part of this permit. The amended SMP must be generally in accordance with the Sustainable Management Plan prepared by Norman Disney Young and dated 14 February 2018, but modified to include or show:

- *See comments on the SMP report in the matrix below.*

Condition 9(a) Bicycle numbers updated to reflect the plans i.e. 484 bicycle spaces;

- *Refer to Transport*

Condition 9(b) All car parking areas with the potential to be electrically wired to be 'EV ready', with a minimum 40A single phase electrical sub circuit installed to the each of these areas;

- *Refer to Transport*

Condition 9(c) Size of the rainwater tank described consistently within the SMP;

- *Satisfactory – 100kL noted page 13 of SMP*

Condition 9(d) Evidence to demonstrate that SPEL proprietary products are effective in local Victorian conditions or provide a different approach for managing stormwater;

- *Not satisfactory – Information sought was not provided.*

Condition 9(e) Separate water metering for all major common area uses, tenancies and dwellings;

- *Satisfactory – Page 13 of the SMP notes this is done*

Condition 9(f) Comprehensive commissioning and tuning of all major appliances and building services

- *Satisfactory – Page 18 of the SMP notes Commissioning and tuning will be undertaken following project completion.*

Condition 9(g) Environmental Management Plan Monitor and control activities undertaken during construction;

- *Satisfactory – Page 18 of the SMP notes an EMP is contained within the Construction Management Plan*

Condition 9(h) Use of recycled materials e.g. insulation;

- *Not satisfactory – Several valid material choices are noted page 17 of SMP, however the text commits to only one of these – which could result in only minor change to single material. Given the magnitude of the project, and the volume of materials to be used, commitment to several of the more significant items is sought, and separate to those noted items noted in Condition 9(i), and 9(l).*

Condition 9(i) Recycled content of concrete and steel; and

- *Not satisfactory – Commitments to reduce the impacts of concrete and steel on page 17 of SMP are sought to be substantial, and over and above any commitments given under Condition 9(h) above. While there is some mention of hardscaping – the intent of this condition is project wide.*

Condition 9(j) A sample of dwellings demonstrating that NatHERS annual cooling loads do not exceed the 21MJ/M2 threshold (Moorabbin area);

- *Satisfactory – Consultant Advice on pages 73-75 of the SMP summarise findings on preliminary modelling.*

Condition 9(k) Provision for stormwater retention within open space areas;

- *Not satisfactory – Landscape plans indicate raingardens in the Town Square at Ground Level, and Level 3 podium between the Living Matrix and Sculptural Building, however no cross-sections or other details of these raingardens are provided.*

Condition 9(l) FSC certified sustainable or recycled timber for all timber uses where ever possible onsite; and

- *Not satisfactory – Page 17 of the SMP notes engineering timber will be certified, though the project appears likely to be constructed of reinforced concrete, with other certified timber noted as a potential option. There is no commitment to utilise timber as per the intent of the condition.*

Condition 9(m) Provision of a facilities for organic residential waste collection.

- *Satisfactory – Page 7 of the SMP notes organic waste collection from residents, and organic waste bins appear on the Ground Floor plan.*

Condition 10. The provisions, recommendations and requirements of the endorsed Sustainable Management

- *Not satisfactory – See comments below:*
 - *Report unpublished - The project is required to be 'published' from the BESS website to allow it to be reviewed. This can be done by clicking the 'review and submit' tab in the widget on the left hand side of the screen. Publishing the BESS report will create a snapshot of the project for the information entered.*
 - *Drawing annotation – The BESS report notes at its end, 'Items to be marked on floorplans'. While the report offers clarity on the provision of many items, these are not necessarily apparent in the revised drawings. Provide notes on the drawings included in a cover sheet (or similar) to cover the items notes.*
 - *Natural ventilation – The BESS report makes reference to drawings TP-2D-802 for typical apartment natural ventilation, which appears to be an error. Drawings TP-2E-804 and TP-2E-805 appear to provide this detail however appear to confuse sliding glass door as 'operable windows'. Clarify where operable windows are provided as opposed to doors. A minimum of one operable window sash is sought for each habitable room to be naturally ventilated with the strong preference that it can be locked ajar.*
 - *Energy efficiency - The BESS report indicates that preliminary Section J / NABERS energy modelling has been performed. Provide this modelling.*
 - *Lighting – The SMP notes a commitment to a lighting power density reduction of 10% however it is noted that the NCC 2019 draft proposes at a minimum to far exceed the 2016 provisions. Consider committing to meeting the proposed 2019 minimum standards.*
 - *Clotheslines – The BESS Energy credit 3.4 notes the inclusion of clothesline. Indicate these on the typical drawings.*
 - *Third pipe – The BESS Water Profile Questions notes a third pipe / water recycling system has been provided on-site although this is not noted elsewhere. Provide details of this.*
 - *Waterless chillers – Further to BESS Water credit 4.1 - provide detail of the level of commitment to waterless chillers*
 - *Fire test water - Further to BESS Water credit 4.1 - provide detail of the commitment to fire test water capture and reuse*