Environment, Energy and Science (EES) comments on draft Wilton Development Control Plan 2019

EES provides the following advice regarding the draft Wilton Development Control Plan (DCP), and detailed comments by Section in Tables 1-4.

Partnering to create a sustainable Wilton

Process and engagement

The Department of Planning, Industry and Environment (DPIE) through the EES Division and Sustainability Advantage program has been working with Wollondilly Shire Council since 2017 on sustainability matters within Council's development processes. This work has been in response to the needs as identified by Council to balance and manage the growing development needs of the local government area, and to protect and enhance social and environmental outcomes.

Partnering to create a sustainable Wilton Part 1

In November 2018, OEH in partnership with Wollondilly Shire Council and the then Department of Planning and Environment (DPE) coordinated a workshop to identify a vision for Wilton for these stakeholders and the Wilton developers to work towards. Through this workshop, four key priorities were determined for inclusion within the vision for the draft DCP. The priorities included:

- Enhancing water sensitive urban design
- Enhancing biodiversity
- Enhancing liveability and community, and
- Low carbon and climate resilience

Within each of these priority areas, stakeholders identified various facets that will enable Wilton to be more sustainable and liveable, based on best practice. With the often interconnected objectives and outcomes, there was an emphasis on identifying actions with multiple benefits.

Following the workshop there was interest from these stakeholders to continue collaborating.

Partnering to create a sustainable Wilton Part 2

On 29 May 2019, a second workshop was conducted. The purpose of the second workshop was to develop specific objectives and controls for the Wilton DCP which will enable the stakeholders and developers to deliver on the vision for Wilton as a sustainable and liveable community. This workshop was specifically designed to facilitate the development of objectives and controls for the Wilton draft DCP, at the request of the former DPE.

This workshop was facilitated by experts in sustainable development, Jason Twill from Urban Apostles, and Stella Whittaker from Jacobs Group. Contributing their time and expertise to this workshop included approximately 12 high-profile subject matter experts in the fields of water management, biodiversity, carbon and community resilience and liveability to ensure that the objectives and controls were well-informed and based on evidence and best-practice. There were more than 60 participants on the day including experts from Wollondilly Shire Council, NSW Government agencies, private sector, development and the developers.

During the workshop, participants discussed and refined draft objectives and controls for consideration in the draft DCP. Through this process and after the workshop, objectives and controls were narrowed down, collated and provided to DPE for inclusion in the draft DCP.

Sustainability

DCP Structure

It is noted that the provisions in Section 5 relate to all different stages of the planning process, which leads EES to recommend that the provisions in Section 5 should be integrated into the other sections rather than being stand alone. It is somewhat confusing that some sustainability controls are in Section 5, whilst others are included in Sections 2, 3, and 4.

Enhancing Sustainability

The draft DCP acknowledges and presents the key priorities, vision and values as determined in the visioning workshop conducted in November 2018 and displayed in figure 36 of Section 5.1 (page 110). In addition, the draft DCP captures most intended outcomes for sustainability within the objectives of 5.1; and references some relevant government policies, including the commitment to net zero carbon emissions by 2050. This could go further by referencing other key NSW Government policies such as the NSW Circular Economy Policy Statement, 2019 to drive waste recovery and resource efficiency.

Suitability of controls

Overall the proposed controls in the draft DCP for 5.1 alone do not provide enough direction and clarity to meet the stated objectives of the draft Wilton DCP. Controls that contain statements consisting of ‘Consideration should be given to’, ‘design of new buildings shall be encouraged’, and ‘aim to achieve’ are ambiguous in their meaning. As such it is unlikely that the proposed controls will deliver the objectives of the draft DCP.

Controls should be specific

Through the workshops, there was preference among all stakeholders for specified minimum standards, benchmarks and targets for sustainability outcomes reflected in the DCP that would facilitate the implementation of the controls. Through the workshop process, a range of specific controls were

proposed for inclusion in the DCP. However, very few of the controls in 5.1 have standards, benchmarks and targets assigned, which makes it difficult to implement, monitor and deliver.

Transportation and carbon emissions

Public transportation and active transport, while reflected in the objectives for 5.1 is not addressed in these controls or elsewhere in the DCP. Carbon emissions from transportation will likely to be one of the largest sources of emissions for the community and residents of the Wilton New Town, therefore effective planning and delivery of low carbon transport is essential. There should be a specific control regarding the implementation of active and public transport in the DCP. 5.1 Controls 9, 10 and 11 (page 112) are misplaced (under Water Cycle Management).

Climate change

There is little mention of climate change risk or the need to implement adaptation measures to mitigate against the likely impacts of climate change in the draft DCP. There are some climate change objectives and controls that relate to specific elements for e.g. bushfire, flood, green canopy and threats to biodiversity from climate change, however, the approach is not integrated or comprehensive and doesn't mention the change of risk over time. The blue and green grid and water sensitive urban design are also considered but not in a holistic way and climate change projections are not mentioned or considered.

EES recommends that the DCP requires Climate Change Risk Assessments be prepared for Precinct Planning and Neighbourhood Plans. NARCLiM data and XDI maps are available to show the areas at risk of either singular or multiple climate change risks over the next 20, 50 and 100 years. Communities, infrastructure and natural assets all need to be prepared and more resilient to the following impacts – bush fire, heatwaves, increased flooding, increased storm activity and high winds.

EES recommends the following climate change objective for Precinct Planning be included into Section 2, with controls developed to apply to preparation of Structure Plans and Neighbourhood Plans:

> *Council will enable communities, natural and physical assets, infrastructure and services to be more prepared and resilient to short and long term impacts of climate change by avoiding/minimising development in areas of high risk and/or requiring adaptation measures to reduce those risks.*

Biodiversity

Management of biodiversity impacts until the CPCP is finalised

Until such time as the CPCP is finalised, all development in Wilton will be required to consider impacts on biodiversity values. Depending on the timing of a development application, this will either be under Interim Designated Area (IDA) provisions (*Threatened Species Conservation Act, 1995*) prior to 25

November, transitional arrangements following commencement of the *Biodiversity Conservation Act 2016* (BC Act) on 25 November 2019 or under the BC Act if outside of the transitional period.

Whilst Section 1.4.3 of the draft DCP summarises the biodiversity assessment framework in general terms, it does not provide controls which would assist proponents in preparing Neighbourhood Plans or Development Applications. EES Group recommends that the DCP include provisions for ecological assessment which reflect the legislative framework which applies until such time as the land is certified.

Avoid and minimise

The DCP should include objectives and controls to ensure that the Neighbourhood Plan and future subdivision and development of the site avoids and minimises the clearing of native vegetation including trees and that remnant native vegetation is protected and conserved in conservation areas, riparian corridors, open space, landscaped areas, the streetscape and private lots.

In Section 5.3.2, Principle 12 states: "Avoid, where possible, or minimise impacts on threatened species and endangered ecological communities within the Growth Area, including any areas identified as conservation lands in Wilton 2040, zoned Environmental (E2) or otherwise identified as an environmentally sensitive area". This Principle does not accurately reflect the BC Act purpose of: "to establish a framework to avoid, minimise and offset the impacts of proposed development and land use change on biodiversity (s.1.3(k)). Under the BC Act there is no reference to "where possible" and "or". In addition, the inclusion of 'where possible' weakens the intent of the provision. EES therefore requires the draft DCP to be amended to reflect current biodiversity legislation requirements.

DCP Structure

Section 5.3 Biodiversity is inconsistent with the structure of the other sections of the draft DCP. In particular, the objectives and controls have been included in the same section. It is noted that the biodiversity controls have been separated in the DCP and included in Appendix I. EES is of the view that separating the biodiversity controls may lead to confusion applying the DCP. Therefore, EES would recommend that the biodiversity controls be incorporated into the main body of the DCP.

Development of land zoned E2 and land adjoining land zoned E2

The DCP should be reviewed for consistency with the Growth Centres SEPP. For example, the Vegetation Management Plan requirements of Part 7 of the South East Wilton Precinct Plan (Appendix 14 to the SEPP) and the North Wilton Precinct Plan (Appendix 15 to the SEPP) appear to conflict with the requirements of 'Residential Lots Adjacent to the Land Zoned E2 Environmental Conservation' in Schedules 1 and 2 of the draft DCP.

Residential Lots Adjacent to the Land Zoned E2 Environmental Conservation

The objectives for Schedule 2 North Wilton refer to non-certified land. As the Wilton GA has not been biodiversity certified all land within the GA is non-certified.

EES recommends that backyards of dwellings and other private land should not abut land zoned E2.

As the *Threatened Species Conservation Act 1995* has been repealed, all references to the TSC Act and Property Management Plans (PMP) under the act should be deleted.

Pathways in conservation land

EES does not support the proposed network of pathways within Environmental Conservation areas. The shared pathways proposed for North Wilton and Wilton South East will lead to fragmentation of vegetation and a degradation of biodiversity values as a result of disturbance and weed invasion. Further, EES considers these pathways are inconsistent with OEH's *Conserving Koalas* principles for the separation of development (including associated threats from dog attack) from koala habitat.

Consequently, the following need to be considered:

- The control which requires that pathways are "safe, well lit, clearly defined, functional and accessible to all" will likely increase impacts well beyond the 2.5m minimum width specified, due to the need to provide lighting (well lit) and bridges, cut and fill (accessible to all).
- EES recommends instead that pathways be placed in the buffer to conservation land and within the asset protection zone (APZ). If this approach is adopted, it would require amendment to the Notes in Schedule 2, Section 3.2.2, page 16: "For roads adjacent to riparian corridors or other similar non-residential land the verge on the non-residential side may be reduced to 1.0m wide". The verge will instead need to be wide enough to accommodate the buffer, with APZ and pathway.
- Control No. 6 (Schedule 2, Section 3.2.2, pages 18-19) is problematic in that it encourages infrastructure within the bushland areas: "bird hides, look outs, informal resting spots and the like are encouraged to provide opportunities for increased activation within the bushland area". EES instead recommends that these facilities be focussed around open space, e.g. the Regional Open Space.
- Any pathways and facilities in the E2 zone will need to be assessed as an impact, including in the CPCP.

Koala

As noted above, proposed pathways in E2 zoned land are inconsistent with OEH's *Conserving Koalas* principles for the separation of development (including associated threats from dog attack) from koala habitat.

Specific objectives and controls for koala and koala fencing are only provided for a part of the South East Wilton Precinct. EES expects koala protection provisions to also apply to North Wilton also given that both parts of the Growth Area (GA) contain core koala habitat. EES recommends that the following objective also apply to the North Wilton Precinct: "To ensure the Koala is protected from residential development" (Schedule 1, Section 2.6.2, page 20).

Landscaping

EES recommends the DCP include objectives and controls for landscaping /planting of open space areas, landscaped areas, street planting and development lots which require planting of *a diversity of local provenance species (trees, shrubs and groundcovers) from the relevant local native vegetation communities that occur, or once occurred on the site rather than use exotic or non-local native species*

Floodplain Risk Management

DCP Structure

The draft DCP combines provisions for Water Cycle Management and Floodplain Risk Management. However, there is a difference between stormwater quantity management and floodplain development management. Stormwater quantity management is the management of nuisance inundation and excess runoff produced due to the increase of impervious areas from urbanisation. Floodplain management is the management of flood risk to development and managing risk to life. Accordingly, it is recommended that the DCP has a standalone Floodplain Risk Management sub-section under Section 2.5 which includes fit for purpose controls that address varying flood constraints.

Flood prone land

Section 9.1 Direction 4.3 under the *Environmental Planning and Assessment Act 1979* requires development of flood prone land to be consistent with the NSW Government's *Flood Prone Land Policy* and the principles of the *Floodplain Development Manual 2005*. The primary objective of the Flood Prone Land Policy is to reduce the impact of flooding and flood liability on individual owners and occupiers of flood prone land and reduce private and public losses resulting from floods. The most appropriate method to assess the development of flood prone land is through the floodplain risk management process (FRMP), a risk-based assessment that provides sound understanding of the nature of existing future and continuous risk to people and properties for the full range of flooding and addresses measures to manage this risk.

Through the floodplain risk management process, flooding behaviour in the vicinity of the Wilton precinct should be comprehensively identified and documented. This would enable the consent authority to strategically manage the potential increase in flood risk from future development on the floodplains within the Wilton GA, including earthworks (cut/fill), urban development and associated infrastructure, and green infrastructure. The FRMP should inform the draft DCP to ensure that fit for purpose controls are developed in consideration of best available information and the variation of flood constraints across the floodplain based on an understanding of flood behaviour.

Recommended controls

Refer to Table 1 below for EES recommended controls for the draft DCP with respect to Floodplain Risk Management and Water Cycle Management.

Aboriginal Cultural Heritage

EES supports the objective of Section 2.6, "To manage Aboriginal and European heritage values to ensure enduring conservation outcomes" (page 23) and notes that proponents are required to address Aboriginal cultural heritage in the preparation of Precinct Structure Plans and Neighbourhood Plans. However, it is not clear from Section 2.6 that this is the case, as the controls only refer to development applications.

By the time a development design is under preparation for a subdivision DA, the ability of a development to conserve Aboriginal cultural heritage values is limited. Therefore, EES recommends that the DCP controls at Section 2.6 clearly include controls requiring this be done at Structure Plan stage if one has not yet been prepared, or if a Structure Plan is already in place, at Neighbourhood Plan stage.

EES recommendations to ensure alignment of the draft controls with the requirements of the *National Parks and Wildlife Act 1974* with respect to impacts on Aboriginal objects are at Table 1.

Table 1. Detailed comments on the draft DCP

Section and page reference	Comments
Section 1.3, Figure 1, page 8	The legend to Figure 1 shows 'urban development and conservation' mapped as pink. It is recommended the conservation land is shown as a separate colour to the urban development.
Section 1.4.4, page 11	<u>Growth Centres Biodiversity Certification</u> As the Growth Centres Biodiversity Certification does not apply to Wilton, it is probably not worth mentioning it in the DCP.
1.7, pages 13-15 2.4, pages 17-18	<u>Neighbourhood Plans</u> • Clarification is sought as to whether Neighbourhood Plans constitute a DCP amendment, as this is ambiguous in Sections 1.7 and 2.4. If they are, then Step 3 should state that once the Council has reviewed the Neighbourhood Plan that it should prepare a DCP amendment to include the Plan in the DCP. • EES recommends that Section 2.4 makes it clear that a Neighbourhood Plan is required for all developments greater than 2 ha. • 3rd paragraph in Section 2.4.1 makes reference to "minor inconsistency" although there is no definition of minor. This is ambiguous and may lead to uncertainty.
Section 2.5.1, pages 19-21	<u>Floodplain Risk Management and Water Cycle Management</u> EES recommends the following controls be included in the draft DCP for Floodplain Risk Management and Water Cycle Management: **2.5.1 Floodplain Risk Management** **Objectives** ▪ To ensure that development is compatible with the flood behaviour, flood hazard and flood emergency management. ▪ To minimise the potential of flooding impacts on development. ▪ To ensure the safety of people and development from flood risk. ▪ To ensure that development does not impact on flood behaviour, flood risk and emergency management risk to the detriment of the existing community. ▪ To utilise the best available flood information to define flood behaviour and the variation of flood constraints within the precinct in the development of the flood impact assessment. **Controls - General** 1. Development in floodways will not be supported, including the filling of land, within the floodway due to its function as the main flow path for flood waters once the main channel has overflowed and the possibility of a significant threat to life and property in a major flood.

Section and page reference	Comments
	2. No residential allotments are to be located at a level lower than the 1% Annual Exceedance Probability (AEP) flood level plus a freeboard of 500mm (i.e. at flood planning level - FPL). Filling of the floodplain to achieve the required FPL should be assessed through an adequate flood impact assessment. 3. Filling of flood storages should only be permitted with compensatory storage determined through an adequate flood impact assessment to ensure no adverse impact on adjacent areas. 4. Flood planning level for sensitive uses to be at the PMF level to ensure continued operation of services during flood. 5. Any sensitive uses buildings located below the level of the PMF are to be constructed of flood compatible materials and designed to ensure that the building structure can withstand floodwater forces and buoyancy up to the PMF level. 6. Pedestrian and cycle pathways and open space may extend within the 1% AEP flood level, provided the emergency management measures including safe access criteria contained in the NSW Floodplain Manual are met. 7. Consider flood events above the 1% AEP for the full range of flood so that emergency response can be properly considered and planned. <u>Inconsistencies with Floodplain Development Manual</u> In section 2.5.1 (page 19), the point which states "Prone Land figure in the relevant Precinct's Schedule shows indicatively the extent of the 1% AEP flood level" should be deleted. The Flood Prone Land definition in the dot point and Note is incorrect. The flood Prone Land as identified by the Floodplain Development Manual (2005) is land susceptible to flooding by the PMF event. Flood prone land is synonymous with flood liable land. EES requires these inaccuracies to be amended. **2.5.2 Water Cycle Management** **Objectives** ▪ To manage the flow of stormwater from urban parts of the Precinct to replicate, as closely as possible, pre-development flows. ▪ To promote, at Precinct and Growth Area scale, an integrated approach to the provision of potable water, and the management of wastewater and stormwater. ▪ To protect high value waterways and riparian vegetation. ▪ To ensure that water management measures for development incorporate key principles of water sensitive urban design being to: o protect existing hydrological and ecological processes of natural features and systems including watercourses, wetlands, lagoons and aquatic, riparian and groundwater dependant ecosystems o maintain the natural hydrological behaviour of the catchment o protect the water quality of surface and groundwaters o minimise demand on reticulated water supply system

Section and page reference	Comments
	○ integrate water into the landscape to enhance ecological, visual, social, economic and cultural values. **Controls – General** 1. Stormwater is to be managed primarily through the street network in accordance with Council's Design and Construction Specification. 2. Roads on primary drainage lines shown on the Key elements of the water cycle management and ecology strategy figure, in the relevant Precinct Schedule, are to be constructed in the locations shown, and are to be designed in accordance with specifications of Council in relation to management of stormwater flows and quality. 3. Roads are generally to be located above the 1% AEP level. 4. Management of 'minor' flows using piped systems for the 20% AEP (residential land use) and 10% AEP (commercial land use) shall be in accordance with Council's Design and Construction Specification. Management measures shall be designed to: • prevent damage by stormwater to the built and natural environment • reduce nuisance flows to a level which is acceptable to the community • provide a stormwater system which can be economically maintained, and which uses open space in a compatible manner • control nuisance flooding • minimise urban water run-off pollutants to watercourses • meet the standards for a 20% AEP flood level. EES recommends the following amendments: 5. Management of 'major' flows using dedicated overland flow paths such as open space areas, roads, waterways and riparian corridors for ~~all~~ (*) flows in excess of the pipe drainage system capacity and above the 20% AEP shall be in accordance with Council's Design and Construction Specification. Management measures shall be designed to: • prevent both short term and long-term inundation of habitable dwellings • manage flooding to create lots above the designated flood level with ~~flood free~~ (**) access to a public road located above the 1% AEP flood level • control flooding and enable access to lots, stabilise the land form and control erosion • provide for the orderly and safe evacuation of people away from rising floodwaters • stabilise the land form and control erosion • meet the standards for a 1% AEP flood level • protect high value waterways and riparian vegetation. 6. Where practical, development shall attenuate up to the 50% AEP peak flow for discharges into the local tributaries, particularly Category 1 and 2 creeks. This will be achieved using detention storage within water quality features and detention basins. 7. The developed 1% AEP peak flow is to be reduced to pre-development flows through the incorporation of stormwater detention and management devices.

Section and page reference	Comments
	8. The trunk stormwater system is to be constructed and maintained to achieve water quality targets set by the Office of Environment and Heritage (OEH) in Table 4. 9. Where development on land affected by local runoff or local overland flooding – major drainage is proposed, it must be designed in accordance with Council's Design and Construction Specification. 10. Applications may be required to indicate that permanent fail-safe, maintenance-free measures are incorporated in the development to ensure the timely, orderly and safe evacuation of people from the area should a flood occur. In addition, it may also be necessary to demonstrate that the displacement of these people during times of flood will not significantly add to the overall community cost and community disruption caused by the flood. * The sentence in its current status, means to include all flows up to the probable maximum flood not up to the 1% AEP as the 2nd last dot point (the standard for a 1% AEP flood level). ** Amend this sentence. Flood free access means above the PMF level not the 1% AEP flood level. Roads are generally designed to be above the 1% AEP. EES also recommends that the DCP include a provision that any new stormwater detention and management devices are located offline and outside the riparian corridors to prevent impacts on the aquatic and riparian environment.
Section 2.5.2	For completeness and ease of reference the DCP should include a copy of Figure 10 rather than the reader needing to refer to Wilton 2040.
Section 2.6, Pages 23-24	<u>Aboriginal and European Heritage</u> • EES recommends that the controls refer to Section 4.46 of the EP&A Act, specifically that an Aboriginal Heritage Impact Permit (AHIP) is required under Part 6 of the *National Parks and Wildlife Act 1974* when: (a) an Aboriginal object referred to in that Part is known, immediately before the development application is made, to exist on the land to which the development application applies, or (b) the land to which the development application applies is an Aboriginal place within the meaning of that Act immediately before the development application is made. • EES recommends amending amend Objective (b) to add the following italicised text: To ensure areas identified as archaeologically or culturally significant are ***protected and*** managed appropriately
Section 2.7	<u>Native Vegetation and Ecology</u> EES recommends that the objectives and controls for Section 2.7 are amended as follows: Amend the Objectives to add the following: a. ***To avoid and minimise the clearing of native vegetation and*** to conserve and rehabilitate the remaining native vegetation on urban capable land within the Wilton Growth Area.

Section and page reference	Comments
	e. To ensure subdivision conserves and retains existing native trees to provide urban tree canopy in the streetscape, individual lots and open space. Amend the Controls to add the following italicised text: 2. ~~Where practical~~ Prior to development commencing applicants are to: • provide for the appropriate re-use of ***existing*** native plants ***by collecting native seed and transplanting native plants to conservation areas and open space and/or landscaped areas*** and ***remove*** topsoil that contains known or potential native seed bank ***and reuse it in the conservation, open space and/or landscaped areas*** • *ensure a pre-clearance survey is undertaken by a suitably qualified ecologist for native fauna immediately prior to any clearing of native vegetation* • ***ensure*** *a licensed wildlife carer* ***is on site prior to any clearing and earthworks commencing to*** *appropriately capture and* relocate native animals from development site ***to appropriate habitat locations.*** Applicants should refer to OEH's Policy on the Translocation of Threatened Fauna in NSW 5. A Landscape Plan is to be submitted with all subdivision Development Applications identifying: • ***a diversity of local provenance species (trees, shrubs and groundcovers) from the relevant local native vegetation communities that occur, or once occurred on the site are to be used in the site landscaping. The applicant needs to demonstrate that the plant species list comprises local provenance plant species from the relevant vegetation community*** • Footpath design should allow for ***the retention of existing native trees and*** the planting of street trees in accordance with Council's Tree Strategy. • ***The pot size of the local native trees to be planted. Advanced and established local native trees with a plant container pot size of 100-200 litres or greater should preferably be using in the street planting*** • ***sufficient area/space is provided to allow the trees to grow to maturity*** • ***The use of invasive turf (such as kikuyu) must not be used in areas adjoining conservation areas, remnant vegetation within open space areas and riparian corridors*** Control 5 refers the planting of street trees in accordance with Council's Tree Strategy, EES recommends Council's Tree strategy requires that remnant native trees are retained as street trees and a diversity of local native provenance tree species are used in any street planting rather than use exotic or non-native plant species 6. The selection of trees and other landscaping plants is to ~~consider~~: • <u>The</u> use ***of a diversity*** of locally ***provenance*** ~~indigenous~~ species ~~where available~~ ***(trees, shrubs and groundcovers) from the relevant local native vegetation communities that occur, or once occurred on the site rather than plant exotic or non-local native species.***

Section and page reference	Comments
Section 2.8	<u>Bushfire Hazard Management</u> Control 5 indicates vegetation outside the areas zoned Environmental Conservation E2 is to be designed and managed as a 'fuel reduced zone'. The control needs to clarify if riparian corridors, public open space and landscaped areas and private lots which retain or plant native vegetation are to be managed as a fuel reduced zone. To protect native vegetation from being cleared residential houses should not share a direct boundary with the E2 zoned land, riparian corridors and open space areas and local roads should be located between these areas and the housing.
Section 3.1	<u>Residential Density and Subdivision</u> Control No. 5 States: *Provide at least 40% canopy coverage of the entire street block with a minimum mature height of 8m at the completion of development. Existing mature trees are to be retained where possible.* Is this requesting 8 metre trees be planted prior to occupation certificate? Or prior to the whole precinct being completed? Or seedlings being planted that reach a height of 8 metres at maturity. This needs to be clarified. Trees should be planted that have a chance of survival need to give pot sizes. Control Number 6 states "*At least 50% of landscaped area shall provide canopy cover for each lot with a minimum mature height of 2m at the completion of the development".* Same comments as above Figure 5 shows large trees retained in the 'suburban' streetscape but large trees are not shown in colour for the 'garden suburban' streetscape and it is unclear why. Figure 5 should be amended so that the 'garden suburban' streetscape also retains large trees. Section 3.1.2 - Block and Lot - Control (5) requires the canopy cover of the entire street block to have a minimum mature height of 8m. Clarification is required as to whether electricity power lines are to be located above ground or below ground. In terms of street trees achieving and maintaining a minimum mature height of 8m, electricity power lines should be located underground to avoid trees being lopped and the benefits of urban tree canopy being degraded Control (13) requires the main residential and road entry to front open space or drainage land. The inclusion of this control is supported as residential frontages which face the open space or drainage land will facilitate APZ requirements and passive surveillance of the open space. This will assist to prevent the dumping of rubbish, lawn clippings, vandalism etc and the potential degradation of remnant native vegetation

Section and page reference	Comments
	Control 18 should be amended to include the following italicised text: Street planting is to: • be durable and suited to the street environment and ~~wherever appropriate include endemic~~ ***use a diversity of local native provenance*** species • ***provide sufficient space/area to allow the tree to grow to maturity*** Objective (c) is amended to include the following italicised text: (c) To ensure that fill material is not contaminated ***or infested with the seeds of exotic weeds*** and does not adversely affect the fertility or salinity of soil, or the quality of surface water or groundwater ***or native vegetation and the habitat it provides***
Section 4.1.3	<u>Sustainable building design</u> EES recommends the controls are amended to include the following: (2) ***the building design incorporates a Green Roof, Cool Roof and/or Green Wall into the design to reduce the heat island effect***
Section 4.2.5	<u>Dwelling Height, Massing and Siting</u> EES recommends Control 1 is amended as follows: (1) Dwellings are to be generally a maximum of 2 storeys high. Council may permit a 3rd storey if it is satisfied that: • the dwelling is located adjacent to a neighbourhood or local centre, public recreation or drainage land, a golf course, or a riparian corridor; ***and is not likely to impact on the drainage land or riparian land by shading etc***
Section 4.2.6	<u>Landscaped Area</u> EES recommends Objective (a) is amended as follows: (a) To encourage the use of ***local*** native ***provenance*** flora species and low maintenance landscaping Control (2) and (4) amended as follows: 2. Plans submitted with the DA must indicate the extent of landscaped area and nominate the location of any trees to be retained or planted ***and the plant species*** 4. Use of low flow watering devices is encouraged to avoid over watering. Low water demand drought resistant vegetation is to be used for the majority of landscaping, including ***local*** native ***provenance*** salt tolerant trees.

Table 2. Detailed comments on Schedule 1 South East Wilton

Section and page reference	Comments
Overall	Figures are blurry and text is not readable. EES recommends that street planting in the Precinct should use a diversity local native species (rather than exotic and non-local native species).
Section 2.1, page 6	<u>The South East Wilton Precinct – Vision</u> There is no vision statement, however Schedule 2 does include a vision statement.
Figure 2-6, page 12	<u>Open Space and Recreation Network</u> This Figure is blurry – EES would like clarification of the Environmental Conservation and Environmental Conservation – Accessible areas labelling. It looks as if OEH is referred to in the legend and EES would like an opportunity to review this.
Section 2.5, pages 14-19	To minimise potential impacts on native fauna that use the riparian corridors, EES recommends that pedestrian pathways and cycleways in the SE Wilton precinct should be located outside the riparian corridors rather than locating pathways within the corridors s (also see Clause 2.5.2 of Schedule 1, page 18).
Section 2.6.2, page 20	<u>Residential Lots Adjacent to the Land Zoned E2 Environmental Conservation</u> • More details of the design of fencing are required. • Figure 3-5 – it is unclear how was this fencing designed. EES is concerned that the fence is not contiguous, and dogs will be able to access the koala habitat from the south.
Section 2.7, page 24	<u>Ecological and Riparian Controls</u> These controls are quite general. It is likely that developers will have difficulty knowing how to comply and similarly difficult for Council to assess compliance with the controls. For example, what constitutes minimal clearing of vegetation or minimal impacts on water quality?

Table 3. Detailed comments on Schedule 2 North Wilton

Section and page reference	Comments
All	EES recommends that street planting in the North Wilton Precinct should use a diversity local native species (rather than exotic and non-local native species).
3.3.2, page 20	Residential Lots Adjacent to the Land Zoned E2 Environmental Conservation • The objectives refer to non-certified land. As the Wilton GA has not been biodiversity certified all land within the GA is non-certified. • EES recommends that backyards of dwellings and other private land should not directly abut land zoned E2. • The *Threatened Species Conservation Act 1995* has been repealed. All references to the TSC Act and Property Management Plans (PMP) should be deleted.
3.3.3, Page 22	Acoustic Amenity and Precinct Interface Control No. 4 is part of control no. 3.
Section 3.4, page 24	Special Urban Areas It is unclear why these controls are required. What are the values of a Special Urban Area?
Section 3.6 Page 28	Local Centre Development Principles It is unclear why street tree planting in the northern local centre may include the use of exotic species rather than use local native species and why a contrast needs to be provided to the rural, native character established elsewhere. It is recommended Control No. 18 is amended to use a diversity of local native species.

Table 4. Detailed comments on the Appendices

Section	Section or page reference	Comments
Appendix B	Page 12	Amend Appendix B as follows: The neighbourhood plan must include ***scaled*** plans and documentation showing: *The location of watercourses, top of highest bank, riparian corridor widths, remnant native riparian vegetation, watercourse crossings and* the management of the water cycle, including stormwater drainage and riparian areas

Section	Section or page reference	Comments
Appendix C	Pages 13 onwards	Amend Table 2 in Appendix C as follows: Location of natural features including watercourses, ***riparian corridors***….. Table 3 in Appendix C indicates a Habitat Management Plan should be prepared but no details are provided for 'the description' and 'what the plan is required for' (page 17). In this regard, it is noted in Appendix I that a Habitat Management Plan covers protected habitat, Koala Management Areas and Riparian Management Areas. It is recommended that the relevant sections of the DCP be consistent. EES also recommends that a separate plan, a Vegetated Management Plan, should be provided for the protection, rehabilitation and management of the riparian corridors. It is recommended that Table 3 is amended as follows to include the requirement to prepare a Vegetation Management Plan: ***A Vegetation Management Plan should be prepared to protect and restore the riparian corridors along watercourses at the site. The plan should include:*** • ***a scaled plan which locates the watercourses; top of highest bank; existing native vegetation along the creeks; the riparian corridor widths proposed along the watercourses (measured from the top of the highest bank); the development footprint and proposed Asset Protection Zones*** • ***details on the native vegetation communities and plant species that currently occur along the watercourses*** • ***details on the local native provenance plant species (trees, shrubs and groundcovers) to be planted – a diversity of local native provenance species should be planted*** • ***include details on the location and number of trees and other plants that are proposed to be planted*** • ***specify that plants are to be propagated from locally sourced seeds to ensure genetic integrity.***
Appendix H – Wilton Green Plan Principles		<u>Green Plan</u> • EES requests the opportunity to review the Green Plan in order to better understand how the Green Plan will influence development of the Wilton GA. • There are inconsistencies between the Green Plan Principle 2, APZ and Fire Protection (page 62), Section 2.8 Bushfire Hazard Management and controls relating to residential development adjoining E2 land (Draft DCP Schedules 1 and 2). The inconsistencies relate to the way that the interface between E2 and UDZ land is proposed to be developed and managed. • EES does not support 'Koala Sensitive Urban Design' (Principle 3), and the dot points could be refined so as to clearly articulate what the intention of the principle is. For example, the discussion of pinch-points and lookout points. • Principle 7 Cooling Wilton is supported however it is considered that managing urban heat and enhancing the tree canopy should be included the main part of the draft DCP including how this relate to Section 3.1.2 Block and Lot Layout of the draft DCP.

Section	Section or page reference	Comments
Appendix I – Section 1 Biodiversity objectives	Section 1.5 Page 67	Amend objectives (a) and (f) as follows: a Retain and restore native vegetation ***and native fauna habitat*** within the riparian management areas ***including the placement of logs and tree hollows in the corridor from trees that have been removed elsewhere on the site and/or the placement of appropriate nest boxes*** f Ensure that development does not adversely impact upon ***watercourses and*** the riparian management area and to protect conserve, enhance and manage: • bed and bank stability. ***Hard engineering solutions should not be used to stabilise the bed and banks of watercourses, the creeks should mimic natural systems*** • ***watercourse crossings should preferably use bridges rather than culverts. The bridge crossings should be designed to maintain and improve riparian/terrestrial connectivity along watercourses and the design includes the following:*** o ***The bridge is an elevated structure and spans the full width of the riparian corridor to avoid or reduce the need to clear and/or disturb remnant native vegetation along the creek.*** o ***The design maximises light and moisture penetration under the structure to encourage native plant growth, for example the bridge could include a grate in the structure*** • ***If a bridge crossing is not possible, the culvert should be designed to maintain connectivity and provide fauna passage and it includes the following into the design:*** o ***elevated "dry" cells to encourage terrestrial movement, and recessed "wet" cells to facilitate the movement of aquatic fauna*** o ***maximises light penetration into the culvert by the use of skylights or grates in the culvert structure.*** o ***a naturalised base along the bed of the wet cells.*** o ***'fauna furniture' (such as rocks, logs, ropes and ledges) to facilitate fauna movement***.
	Section 2.4 Page 74	Waterways and riparian areas - add the following amendment to Section 2.4 ***Where it is intended to remove/realign a watercourse as part of the development application, a report is required to be submitted and it must:*** • ***provide details on the watercourses effected by the works including stream order/ whether the creeks are ephemeral or perennial; are flowing or retain existing pools of water at the time of the works and the condition of the watercourses and existing riparian vegetation*** • ***describe background conditions for any water resource likely to be affected by the development including hydrology, including volume, frequency and quality of discharges at proposed intake and discharge locations*** • ***assess the existing environmental assets provided by the watercourse(s)***

Section	Section or page reference	Comments
		• ***assess the environmental impacts of dewatering/removing the watercourses on native fauna and flora species (including any water dependent species) and include:*** - ***details on native fauna and flora species known to occur or potentially inhabit or use the creeks and downstream environment*** - ***mitigation measures to mitigate impacts on native fauna including details on the location and adequacy of the proposed relocation sites for any impacted fauna*** • ***assesses the impacts on water quality*** • ***assesses the impact of the development on hydrology including:*** ○ ***effects to the downstream environment / stream channel dynamics and morphology*** ○ ***effects to downstream ecological functions / water-dependent fauna and flora*** ○ ***impacts to natural processes and functions within watercourses*** ○ ***mitigating effects of proposed stormwater and wastewater management during and after the proposed works on hydrological attributes such as volumes, flow rates, management methods and re-use options.*** ○ ***identification of proposed monitoring of hydrological attributes***

Section	Section or page reference	Comments
	Section 2.5 Page 75	Dam dewatering - amend Section 2.5 as follows ***The dam de-watering report should:*** • ***provide details on the farms dams to be dewatered; removed or retained on site; including size, volume, depth and whether the dams are located online (ie on watercourses) or offline*** • ***assess the existing environmental assets provided by the farm dams*** • ***assess the environmental impacts of dewatering/removing the dams on native fauna and flora species (including any water dependent species) and includes:*** - ***details on native fauna and flora species known to occur or potentially inhabit or use the dams/ the area surrounding the dams; or the creeks and downstream environment*** - ***mitigation measures to mitigate impacts on native fauna including details on the location and adequacy of the proposed relocation sites for any impacted fauna*** • ***assesses the impacts of the development on water quality including:*** o ***the nature and degree of impact on receiving waters including:*** - ***assess impacts on water quality including the potential to release nutrient rich water; water with low oxygen levels; blue-green algae etc; aquatic weeds downstream*** - ***the potential to disturb bottom sediments; increase turbidity and release sediment / organic loads downstream etc*** - ***assess the potential impact on the instream habitat below the dams*** o ***identification of proposed monitoring of water quality and instream habitat*** • ***assesses the impact of the development on hydrology including:*** o ***effects to the downstream environment / stream channel dynamics and morphology*** o ***effects to downstream ecological functions / water-dependent fauna and flora*** o ***impacts to natural processes and functions within watercourses*** o ***mitigating effects of proposed stormwater and wastewater management during and after the proposed works on hydrological attributes such as volumes, flow rates, management methods and re-use options.*** o ***identification of proposed monitoring of hydrological attributes***

Section	Section or page reference	Comments
	Section 2.6 Page 75	Development Setbacks Add to Section 2.6.1 Infrastructure such as ***perimeter roads***, urban stormwater basins and passive recreation areas shall be collated in the APZ
	Section 3.2	Fencing and Barriers Amend Objective (d) as follows: (d) Ensure that, where appropriate fencing, barriers or other measures are used to limit or control access by humans ***and companion animals*** to environmentally sensitive areas In relation to Control (6) it is unclear how long it is proposed to monitor and maintain the fencing for. If monitoring and maintenance is proposed in perpetuity to control should be amended to state this.