25 October 2018

State Planning Commission
Via email: DPTI.PlanningEngagement@sa.gov.au

Dear Sir / Madam

State Planning Commission’s Discussion Papers on Environment and Natural Resources & Integrated Movement Systems – for Consultation

Council wishes to thank the State Planning Commission for the opportunity to comment on the Commission’s Environment and Natural Resources & Integrated Movement Systems Discussion Papers. It is acknowledged that the objective of these Discussion Papers is to recommend policy directions to inform the development of the draft Planning and Design Code.

The City of Charles Sturt has taken the opportunity to consider the Discussion Papers. A copy of Council’s specific comments on the Papers is provided in the attached document (refer to Appendix A).

Thank you once again for the opportunity to provide feedback on the above Discussion Papers. Council looks forward to the opportunity to review the Commission’s other anticipated Discussion Papers on ‘People and Neighbourhoods’ and Productive Economy Policy’ as they are released for consultation and ultimately the draft Planning and Design Code during the implementation of the Planning Reforms.

Please don’t hesitate to contact Jim Gronthos on [Contact Information] should you wish to discuss this matter in further detail.

Yours sincerely

[Signature]

Paul Sutton
Chief Executive Officer

Our ref. 18/322804
## Appendix A

### Environment and Natural Resources Policy Discussion Paper

#### General comments

<table>
<thead>
<tr>
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</table>
| Page 8 – Relevant government strategic directions | The Paper highlights a number of relevant government strategic directions that have fed into the issues highlighted in the Discussion Paper. There are several strategic documents that have previously been prepared by Council and/or in collaboration with its regional partners that identify relevant emerging issues and strategic directions. These should be reviewed by the Commission to inform the development of the draft Code. These documents include Living Green to 2020 and AdaptWest, Western Adelaide region, Climate Change Adaptation Plan, 2016. A copy of these documents is provided via the web-links below:  
| Page 10 – Climate change mitigation and adaptation | The Paper highlights the importance that soft landscaping has on development to assist in reducing temperatures. The consideration of future development densities need to address this opportunity in reducing the heat island effect by ensuring future allotment sizes and building envelopes provide for tree planting opportunities.  
The AdaptWest, Western Adelaide Region, Climate Change Adaptation Plan was endorsed by Council in 2016. The report identified adaptation options to prepare for the impacts of climate change. Under key themes, the following actions were identified that require policy planning considerations.  
<table>
<thead>
<tr>
<th>Theme</th>
<th>Pathway – Immediate Actions</th>
<th>Relevant Extract from AdaptWest Climate Adaptation Plan (2016)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Landscapes (coastal)</td>
<td>Amend land use planning policy</td>
<td>Major infrastructure projects and land division associated with projects including the Northern Connector and saltfields residential development, should consider how to protect coastal assets and tidal wetlands that will be part of the Adelaide International Bird Sanctuary (p.29)</td>
</tr>
<tr>
<td>Public coastal built assets</td>
<td>Amend land use planning policy</td>
<td>Within five years, amendments to land use planning policy will be required, with the aim of</td>
</tr>
<tr>
<td>Stormwater management infrastructure</td>
<td>Amend land use planning policy requiring finished floor levels</td>
<td>An immediate priority adaptation option for completion within the coming 5 years is to amend land use planning policy regarding finished floor levels. This will ensure that new building constructed in areas at risk from flooding caused by more intense rainfall events as well as storm surge exacerbated sea level rise, will have ground floor levels at elevations that reduce inundation risk. In particular this should consider how access to buildings or facilities occupied or visited by people with vulnerabilities may be impacted by flooding of adjacent roads. (p.37)</td>
</tr>
<tr>
<td>Urban Living</td>
<td>Reform standards, regulations and land use planning policy to promote and encourage development, urban design and public realm that is climate resilient</td>
<td>Within the coming five years, reform of standards, regulations and land use planning policy to promote and encourage development, urban design and public realm that is climate resilient is required. This should then be used to direct future development and potentially limiting or preventing development in areas at risk of coastal or flood inundation and will require engagement with the building and development industry as well as the broader community. (p.44)</td>
</tr>
</tbody>
</table>

- The matters highlighted above are not isolated to Charles Sturt and should be addressed at a State level through the rollout of the P&D Code. Arguably, the type of policies discussed will not be unique to the Western Adelaide Region (WAR) and would also be equally relevant to other (mainly coastal) regions of Adelaide and South Australia.
Feedback questions:

Are there any other key opportunities and challenges that you think the Code should respond to?

- One of the challenges is understanding how the revised Code will achieve improved environmental outcomes and how the state environmental targets will be achieved. An overview of the mandatory requirements and their contribution to improved environmental outcomes would be useful.

- Although climate change is included in the Discussion Paper it does not have its own theme. There is merit in including climate change as a separate theme to ensure that mitigation and adaptation are being adequately addressed.

Are there any other ideas for Code policy solutions you would like to recommend?

- A requirement that a suitably qualified professional must be engaged to prepare planning application material for the sustainable development themes.

- This must also require that appropriate referral processes are triggered to assess the sustainable development components of applications.

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**Theme 1: Sustainable and Liveable Urban Environments**

<table>
<thead>
<tr>
<th>Ref. No.</th>
<th>Key opportunities &amp; challenges</th>
<th>Proposed response</th>
<th>Comment</th>
</tr>
</thead>
</table>
| 1A       | **Councils that have converted to the SAPPL have introduced provisions that support the inclusion of WSUD principles in urban areas, including stormwater management. It is important to review and transition these to the Code.** | **Review, refine and transition existing SAPPL WSUD policy where appropriate.** | - Agree. These current WSUD policies should apply across as general policy as part of the roll out of the Planning and Design Code.  
- To assist with implementation and communicating expectations, guidelines should be developed to accompany the WSUD policies. |
| 1B       | **There is increasing recognition of the value of GI in creating cooler, more liveable and economically viable neighbourhoods. To this end, GI policies were introduced in 2017 to some higher density mixed use zones in Development Plans in metropolitan Adelaide. There is an opportunity to transition these over to the Code, where appropriate.** | **Review and transition existing SAPPL GI policy where appropriate.** | - In 2017 the Minister released the Inner and Middle Metropolitan Corridor (Design) DPA for consultation. As detailed in the Paper this DPA introduced some key GI policies but was limited in its application applying only to Urban Corridor Zones which is currently not contained in the Charles Sturt Council Development Plan.  
- The inclusion of GI policy as part of the future Planning and Design Code should be included in all zoned areas that can accommodate 3+ storey residential/mixed use development. The City of Charles Sturt has a number of zones/policy areas that should be supported by GI policies (eg. Urban Core Zone, Suburban Activity Node Zone, West Lakes Medium Density PA |
| IC | There is inconsistent development across some performance outcomes and, in some cases, WSUD policy is
| Develop new 'Deemed' policy for WSUD and GI, with a regulatory and compliance framework and not just as an optional feature. |
| WSUD and GI need to be integrated in all planning and development decisions |
| Policy review should assess the adequacy of private open space requirements in particular for cooling and reducing stormwater runoff. |
| Policy review of green infrastructure policies should include objectives for preserving regulated trees that demonstrate significant cooling and shading functions. |
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| GI policy should clearly identify how planning will contribute to the State planning policy target to increase urban green cover. Planning policy and objectives must also align with the Natural Resource Management (NRM) reforms to ensure that planning is not unknowingly acting as a barrier to achieving NRM policy objectives and targets. |
| Regulated and Significant Tree policy should be reviewed as part of the review of existing SARP GI policy. In particular, the main consideration for assessing whether a tree can be removed is not more balanced decision making framework is required. |
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19. Integrated Medium Density PA 20, Woodville Medium Density PA 21, Cheltenham Park PA 22, Woodville West PA 23, Mixed Use Zone, and parts of the District Centre Zone.)
• Support the proposal that WSUD policy is scalable so it can be used for a variety of development types and locations.

• Support for performance outcomes policy for WSUD and GI – however would need to consider when more detail is provided during consultation still to be undertaken in this area.

• These performance measures should not only cover stormwater volume, but also include stormwater quality improvements to meet stormwater runoff pollutant reduction targets and water conservation (potable water reduction above building code requirements should be encouraged – as without this any objective for water conservation is not achieving an outcome that is above “business as usual”).

• Requirements should also include the modelling of combined detention and retention for high density developments to increase potable water use and reduce pressure on the stormwater system.

**Green Infrastructure**

• Deep soil areas should require canopy tree planting (number based on site size) for medium and high density developments and should be incorporated in the requirements for a green cover performance measure and assessment tool. This should give regard to the quality and function of the green infrastructure for play, cooling and biodiversity.

• Canopy tree planting requirement in front and rear setbacks should be explored for their contribution to creating green corridors throughout neighbourhoods.

• Green infrastructure policy should have requirements to ensure the quality of the proposed GI approach – with applications specifying the function of the development’s GI approach and this...
| 1D | In infill areas, where there is limited private land, there may be an opportunity to consider off-site GI and WSUD solutions where appropriate. This may provide an efficient and affordable model for delivering urban green cover and tree canopy targets in line with The 30-Year Plan for Greater Adelaide and state WSUD objectives. | Explore policy that connects the ability of road reserves to accommodate tree planting or other suitable GI in lieu of provision on private allotments. | - Exploring offsets for GI is supported however this should also include exploring WSUD offsets. Offsets for GI should not be limited to exploring the potential of road reserves to accommodate tree planting as these areas are already under strain. Infill is resulting in the loss of GI and an increase in impervious surfaces and this could be addressed by having maximum impervious area (limits) and minimum green space requirements. This should ensure that as individual sites increase in density it does not result in the cumulative impact of whole streets with increased impervious surfaces with very little vegetation on private land, extra reliance on street trees and the creation of areas that are more vulnerable to urban heat island impacts. Offsets need to demonstrate local benefit in the area of the development, and not be remotely located. |
---|---|---|---|
**Discussion Question**

*Should existing WSUD and GI policies also apply to regional areas and for all development scales and types?*

They should apply to different scales, types, geographic locations and building classes. Due to the need to employ WSUD and GI to capture water, reduce pollution to waterways, increase vegetation and cool our environments an integrated approach should be taken to ensure that appropriate functions are being achieved which may differ in regional areas compared to urban areas.

| 1E | These policies are relatively sound and are ready for transition. | Review existing SAPPL energy efficiency policies and undertake consolidation and minor refinement where necessary. | - Refinement of existing SAPPL energy efficiency policies requires the inclusion of objectives and principles that create climate resilient/responsive buildings. This should include performance requirements and an assessment process to ensure that buildings and occupants are better able to cope during hot weather, including during power outages. This must include requirements for natural ventilation (particularly for medium and high density developments) to provide evidence to demonstrate how they achieve effective natural ventilation, including cross flows in habitable spaces), adequate and appropriate external shading, and an improved |
Building envelope that requires less artificial heating and cooling.

- Just relying on the National Construction Code (NCC) does not facilitate improved energy efficient design because it encourages a minimum compliance pathway. In terms of climate change adaptation, the NCC assumes the home will be air conditioned. The flow-on effect of this is that homes are designed to be heated and cooled only with air-conditioning and often perform poorly with inadequate protection from extreme conditions in the absence of electricity (for example if the grid is to fail in the hottest day in February). In addition it does not adequately account for air permeability, thermal comfort and heat wave conditions. Nor does the current regulatory framework mandate that energy efficiency provisions described in the NCC actually be checked or commissioned prior to hand-over.

- Energy efficiency under the NCC is based on past climate data and not future predicted climate analogues. Because of this it does not account for the future environment that our built form will be required to operate in thus leaving many buildings exposed and vulnerable to climate change impacts both from a heat and rain deluge perspective amongst others.

- Planning controls need to recognise the deficiency of the NCC and provide minimum performance requirements at the planning stage and not rely on Building Rules Consent when the NCC comes into play.

| 1F | There is an opportunity to better apply energy efficiency policies to non-residential buildings such as consulting rooms, offices, educational establishments, retail | Review energy efficient policies relating to non-residential building types. | Energy efficiency policies should apply to non-residential buildings. Climate resilient building requirements should also apply to these building types (see above comments in regard to climate resilient buildings and the NCC). This is particularly important for commercial and public buildings that act as community heatwave and other... |
and community, where there is a high level of human use. emergency response refuges.

• The approach of new sustainable design policies to achieve better outcomes for all relevant development/land use types is supported. This should include an overarching framework to assess the sustainable design components as a whole (including green infrastructure) and ‘measure’ the sustainability (beyond just energy efficiency) of the development. A requirement for an environmental management plan/report to be submitted with planning applications should be included to demonstrate this and the sustainability statement for the development.

• Consideration should also be given to how a development will impact on neighbouring solar gain capacity by having a consistent requirement for modelling of direct sunlight on the winter solstice to habitable rooms and private open space on the same and adjacent allotments.

Discussion Questions

1. What role should the planning system play regarding preservation of sunlight to solar panels from adjacent development?
The planning system should assist with preserving solar access for solar panels – this could be through shadow diagrams and modelling to indicate how much the proposed development would reduce the solar generation potential of neighbouring panels. This should also encourage applicants to consider the proposed position of their solar panels giving regard to potential future overshadowing – based on permitted neighbouring building heights.

2. Should the Code introduce incentives for developments that can incorporate passive solar design (siting) techniques, green infrastructure and WSUD?
Minimum Code requirements (as discussed above) should be mandatory and assessed as part of the planning application. Incentives should be considered for applicants that incorporate sustainable design techniques in their developments above Code requirements – and showcase sustainable design excellence. This includes incentives for lot consolidation where development layout and design achieves greater environmental and social outcomes.

3. How can planning policy contribute to reduced carbon emissions from the built environment sector?
To be able to measure how developments are contributing to reducing carbon emissions compared to business as usual an assessment tool should be used. Such as the Built Environment Sustainability Scorecard (BESS) used by Councils in Victoria. This also encourages applicants to assess the suite of measures they could use that would best suit their development.
This approach would support the current policies in the Code that ensure roof pitches facilitate renewable energy – as it would allow applicants to assess the renewable energy generation potential of their development early on in the planning process where it is most cost effective and has better sustainability outcomes.

The Code should also encourage development to provide a contribution to environmental outcomes not just reduce impacts, such as carbon positive buildings and biodiversity plus developments.

In addition, the Code should encourage sustainable choices with regard to embedded energy of the materials chosen for use in construction and adaptive re-use of existing materials to contribute to reduced carbon emissions from the built environment sector.

### 1.3 Waste Management

**1H** These policies are relatively sound and are ready for transition.

**Review existing SAPPL policies and consider minor refinement where necessary.**

- Existing SAPPL policies should include:
  - The waste management hierarchy applied to the development and the requirement for this to be demonstrated in a demolition and construction management plan including minimum performance standards for recovery/recycling and re-use.
  - Specify that waste storage areas for completed developments are to have adequate ventilation and located to be easily and safely accessed by residents and where applicable, for waste collection.
  - Encouragement for garden areas to include space for on-site composting.
  - A requirement for the suite of council waste collection services to be included in the design (general waste, commingled recycling, organics recycling) to eliminate the need for private waste and recycling service.
  - Strengthen the planning policy links with EPA and Green Industries SA waste policies.

- To assist with implementation and communicating expectations, guidelines should be developed to accompany the waste management policies.

**1I** Some buildings (particularly high-rise) have inadequate space to store and/or sort the refuse and recycling generated

**Review existing SAPPL policies, consider best practice council policies that focus on dealing with waste in a higher density environment and**

- The City of Charles Sturt adopted in 2010 its Waste and Recycling Guidelines for New Developments. The Guidelines were prepared with assistance from key stakeholders such as the Adelaide City Council, KESAB,
by them. This needs to be considered as part of the development from the beginning. Policy also needs to provide enough flexibility to respond to new technologies (for example smaller/more adaptable waste relocation vehicles).

identify opportunities for improvement.

Zero Waste SA and others.

- The Guidelines objective is to assist in the development of effective and efficient waste and recycling systems for new developments at the design phase, and provides flexibility in options to allow site-specific waste and recycling solutions to be put forward for larger residential developments.

- It is recommended that the Commission review these Guidelines to inform future policy for the Planning and Design Code. A copy of these Guidelines is available from the following web-link:


- Waste management requirements must be strengthened for medium and high density developments and require a waste management plan be submitted to ensure adequate and orderly provision of a council waste collection service. Waste sorting, storage and collection must be considered as part of building design and development design and layout.

- With increased density verge space is increasingly coming under pressure for a variety of needs and uses, including for bin presentation areas, increased cross overs and for green space. To ensure that these valuable green corridors are not eroded, early in the design process development design must consider waste management. This includes storage area for hard waste, reducing crossovers and addressing design requirements for onsite waste collection (where applicable) with consideration to on road vehicle parking and through traffic.

- A waste management plan should be required, to be prepared by a suitable qualified professional for medium and
How do we plan for current waste removal practices and technologies and provide flexibility for innovative future solutions?

Waste and recycling collection is an essential, ongoing service. Increased medium and higher densities will see more shared bin services between residents of a development which, if inadequately managed, create contamination in waste and recycling streams. This collection service must be orderly, safe and economic. When waste collection services cannot be provided locally a private service results in an extra cost for the residents of the development. This is an equity issue and the planning system must include requirements that ensure that waste management is addressed equitably.

Theme 3: Biodiversity

**Ref. No.** 3E

**Key opportunities and challenges**
- It is important to delineate and maintain areas with significant environmental values; protect landscape health; preserve biodiversity; and improve development certainty and transparency. There is an opportunity to improve the associated mapping and incorporate it into future generations of the Code.

**Proposed response**
- Develop policies and maps of the environmental and character values associated with specific nature protection and complementary developed areas.

**Comment**
- The Charles Sturt Council Development Plan includes the Metropolitan Open Space System Zone that encompasses the area of the Torrens River System within Charles Sturt. This area is unique in what it offers the community as open space, biodiversity and habitat conservation. It is recommended that this current zone be transitioned into the future Planning and Design Code.

Theme 3: Biodiversity

**Discussion questions**

*Can the Code protect biodiversity in areas not identified as native vegetation and in modified landscapes with biodiversity value?*

Yes, if this is guided by mapping, principles and a decision making framework that identifies which values are trying to be retained and enhanced, noting that urban ecology has a significant role in built environments. Applications would need to include a vegetation and fauna impact assessment that identifies the biodiversity and other values that the site provides and how these will be protected and enhanced, and how impacts arising from the development will be mitigated.

*Can planning policy assess the cumulative impact of development on biodiversity?*

Yes, if this is combined with mapping of priority and significant biodiversity areas as a baseline with development impacts and increases in biodiversity values measured over time. This mapping would help inform decision making and assessment. Development would identify opportunities for enhancing or creating biodiversity sites.

*Can planning policy play a role in protecting and encouraging backyard biodiversity?*

Yes, but firstly it must acknowledge the current attrition of urban habitats due to development which
further limits biodiversity options placing additional stresses on urban ecology. Recognising the value of trees, including these as part of a planning assessment, and quantifying (in monetary terms) would be one way to protect and enhance backyard biodiversity – however, this needs to be done at scale and not be isolated to the individual lot level.

Protecting and enhancing backyard biodiversity should be combined with a strengthened tree and other vegetation assessment of a site. Applications should demonstrate how they protect any existing biodiversity values and create stepping stones to habitat corridors (including street tree corridors, and other backyard gardens – as biodiversity does not exist in isolation but is part of a larger landscape) and highlight the function of their landscape plan – such as how it provides functional habitat and reduces threats to particular animal species.

This approach could be strengthened by a funded backyard biodiversity program on a state level to assist with information provision and support for councils and residents. At the planning stage, developments could commit to signing up to being a backyard biodiversity site as part of their landscape plan.

**Do we need a policy to protect and encourage development of roadside vegetation?**

As the pressure on roadside vegetation increases due to increasing density policy to protect and increase this vegetation is supported.

<table>
<thead>
<tr>
<th>Theme 4: Coastal Environments</th>
<th>Ref No.</th>
<th>Key opportunities and challenges</th>
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<th>Comment</th>
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</thead>
<tbody>
<tr>
<td>4A</td>
<td>The transition to the Code creates an opportunity to refine policies in order to minimise different interpretations.</td>
<td>Review and consolidate existing variations to Coastal Areas, Coastal Conservation, Coastal Open Space and Coastal Settlement SAPPL general and zone modules and ensure appropriate and consistent site and floor level requirements.</td>
<td>• Agreed – consistent spatial mapping that informs site and FFL is required. Impacts to neighbouring developments also need to be given consideration</td>
<td></td>
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<tr>
<td>4B</td>
<td>There is an overlap between the ‘High Water Mark’ and ‘Low Water Mark’ in Development Plans and there is an opportunity to deal with this as part of the transition to the Code.</td>
<td>Resolve the ‘High Water mark’ and ‘Low Water Mark’ overlap between Land Not Within A Council Areas (Coastal Waters) and other Development Plans.</td>
<td>• The roll-out of the Code should provide for clarity for future development assessments over the locations of high water mark and low water mark.</td>
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<tr>
<td>4D</td>
<td>The increasing impacts of climate change are reinforcing the need for policies to better protect, preserve and provide space for migration of coastal features and habitats</td>
<td>Ensure policy requires adequate consideration of climate change risks, including provision of space for migration of coastal features such as beaches, dunes and mangroves where appropriate.</td>
<td>• Agreed - this needs to be incorporated into planning policy in terms of both managing development in areas that are modelled to have impact from erosion due to climate events and also infrastructure required to mitigate these circumstances.</td>
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</table>
adapting to sea level rise (e.g. the migration of dune systems and mangroves).

| 4E | Existing policy needs to have more clarity about what land-use activities are envisioned for these areas. | Resolve policy to apply to Land Not Within A Council Area (Coastal Waters), including providing clearer guidance regarding envisaged uses (such as aquaculture, tourism and recreation). |
| 4F | Within rising sea levels, the risk of inundation increases. Therefore the spatial application of where this risk applies needs reviewing and updating. | Ensure policy requires soakage trenches associated with waste water disposal to be located appropriately in relation to potential inundation. |

Discussion question

*Does current planning policy adequately address the risk of new development from climate change impacts for at-risk coastal settlements?*

No. Policy creation regarding planned retreat versus stay and defend with regard to at risk coastal settlements needs to be prioritised to ensure certainty of approach to future climate impacts for local governments as the planning authority.

**Theme 5: Natural Hazards**

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<tr>
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<th>Comment</th>
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<tbody>
<tr>
<td>5B</td>
<td>Flood mapping needs to be consistent across and within different jurisdictions (including the mapping methodology) and be linked with the new Code. Consistency of terminology for flood-related policy is also needed. Acid sulphate soil areas could be applied as an overlay (using mapped areas in existing Development Plans), subject to consistency of data.</td>
<td>Review and refine the mapping of hazards in current Development Plans and transition into spatial layers with associated overlays, including: - Mapped flood areas as a new Flood Risk Overlay - A Bushfire Overlay - Other hazards currently mapped such as coastal hazards and acid sulphate soils.</td>
<td>Agree, other matters to consider as Overlays include: - Soil types - Corrosion (coastal areas) - Cadmium affected areas - Known pug hole locations - Native Title claim - Historic Conservation Areas - Local Heritage and State Heritage Places</td>
</tr>
</tbody>
</table>
Comment
Current planning policies related to hazards do not include heatwaves. This should be included in the
Code particularly as urban heat mapping becomes more standardised across the state. Heatwave
policies should refer back to vulnerability assessments incorporating urban heat island mapping and
require developments to incorporate cooling functions, building materials and passive solar design
that reduces heatwave impacts. Developments in high risk areas must indicate how their design
mitigates the urban heat island effect.

Theme 6: Environment Protection and Public Health

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<tr>
<th>Ref No.</th>
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<th>Comment</th>
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</thead>
</table>
| 6.1 Site Contamination
6A | The transition to the Code creates an opportunity to refine policies in order to minimise different interpretations. | Review and transition relevant SAPPL site contamination policies to the Code. | • Agree the existing policy contained in the SAPPL should be maintained as State-wide policy. |
| 6.2 Interface including noise and air emissions
6C | There is an opportunity to review policies relating to interface, particularly in light of recent policy amendments and movement towards more mixed use zoning, e.g. residential areas alongside industry or commercial uses. | Review and refine the SAPPL Interface Module as required. | • The Charles Sturt Council Development Plan has applied the SAPPL Noise and Air Emissions Overlay over several, recently undertaken Development Plan Amendments where mixed land uses were envisaged in close proximity to railway lines and arterial road networks.
- These locations have the potential to create noise through normal traffic use and heavier vehicle movements. The Noise and Air Emissions Overlay provides policies to protect new sensitive development (residential land uses) from noise and air emission generated from major transport corridors (road and rail) and mixed land uses.
- The applications of the SAPPL’s Air and Noise Emissions Overlay/policy should be considered in the transition to the Code over all future zones that envisage mixed use development and in locations adjacent to arterial roads and fixed public transport lines.
- The spatial application of higher density mixed-use zones along appropriate key transport corridors also needs to be considered in the context of managing health concerns (e.g. exposure to particulate matter along major transport corridors); and whether the current policy within the SAPPL Air and Emissions Overlay suitably addresses this issue. |
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<tbody>
<tr>
<td>Page 10 – Liveability, wellbeing and inclusion</td>
<td>• In reference to paragraph 3, &quot;density also underpins the creation of walkable neighbourhoods by bringing destinations closer together and providing a customer base to ensure that local shops, services and public transport remain viable.&quot; While density is important, other 'enablers' of walkable neighbourhoods include land use diversity, and the quality and design of the public realm (e.g. connected systems to minimise trip lengths, quality of walking surfaces, micro environment, amenity, shelter and shade, grades, trip points etc). In other words, while density is important, so are a range of other factors, which should be reflected in the planning policy responses delivered from this exercise.</td>
</tr>
<tr>
<td>Page 10 – Liveability, wellbeing and inclusion</td>
<td>• In reference to paragraph 4, &quot;the interface between busy corridors and residential neighbourhoods must be carefully managed to avoid health impacts through exposure to emissions, noise and vibration.&quot; This important issue needs to be further explored and discussed under Theme 1 on page 20 (see below).</td>
</tr>
<tr>
<td>Page 14</td>
<td>• The last paragraph on page 14 seems to imply that advances in information and communication technologies, home-based work practices, and mixed use precincts have and will continue to put downward pressure on traffic volumes. The evidence suggests that there has been an increase in traffic volumes on Adelaide roads in the past decade, notwithstanding a low rate of population growth.</td>
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<tr>
<td>Page 20</td>
<td>• The discussion under Theme 1: Aligning SA’s growth with transport infrastructure signals a continuation of the current and past policy of encouraging higher density housing adjacent to major traffic corridors. What is missing is an acknowledgement of the amenity and health concerns of such a strategy, particularly in terms of long exposure to particulate matter (as acknowledged on page 10 – see dot point 2 above). The notion of 'managing the interface between busy corridors and residential neighbourhoods' needs to be unpacked and more carefully considered to determine what further planning policy responses may be required to mitigate health and amenity impacts. Certainly, this should happen before &quot;further application of these zones along underutilised transport corridors...&quot; is considered, as mentioned on page 20.</td>
</tr>
<tr>
<td>Page 21</td>
<td>• Theme 3: Sustainable mobility, car parking and the impact of technology discusses, in part, the importance of the planning system containing policies that promote walking and cycling to ensure travel mode shift. What is missing is a discussion on the importance of the quality and design of movement systems to encourage and facilitate such a mode shift, as well as the environmental dividends of improved road design (e.g. the integration of WSUD measures, street trees and other landscaping measures). While there is some discussion of the 'link and place' approach to street design (see page 11), this is not reflected in any of the Themes.</td>
</tr>
<tr>
<td>Climate change reference</td>
<td>• There is little mention of climate change in the Discussion Paper. The reduction of emissions from the transport sector is recognised as an objective of integrated land use planning. Climate change mitigation and adaptation for a future climate that is likely to include extreme heat impacts on transport infrastructure, should be a policy driver.</td>
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<td>• In addition, vulnerable communities or those who do not have access to private</td>
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motor vehicles and who rely on public transport, will be placed at higher vulnerability to extreme heat, as public transport infrastructure (i.e. bus shelters) are not designed to protect occupants in these conditions.

- An overarching plan is required that provides a roadmap that is linked to dedicated, ongoing infrastructure spending (and political will) to reduce the carbon footprint of the transport sector.
- It is important that the link between land use planning and transport engages and encourages the development sector to deliver built form outcomes aligned with reduced carbon footprint and climate change mitigation. Also that clear signals and requirements are in place to create a new baseline for developments – and not seen as a sustainability objective that is pushed back against because it is perceived to impact on the ‘bottom line’.

| Theme 1: Aligning SA’s growth with transport infrastructure |
|---|---|---|
| No. | Key opportunities and challenges | Proposed response | Comment |
| 1A | In 2012, a suite of higher density, mixed use zones were introduced into the SAPPL which have been spatially applied to a small number of areas adjacent to key transport corridors and centres. These zones help to integrate land use and transport systems and can provide the foundation for this outcome in the new planning system. | Transition zones that promote improved integration of land use with major transport corridors (for example: Urban Corridor Zone, Urban Core Zone, Residential High Density Zones and Mixed Use Zones). The spatial application of these zones is unlikely to be substantially changed as part of the application of Generation 1 of the Code. | Generally agree with this approach. However, the concerns recently addressed in relation to the Urban Corridor Zone (eg visual impact and design, on-site landscaping, active frontages etc) also need to be considered and, if necessary, policy responses applied to other zones (eg Urban core Zone, Suburban Activity Node Zone, Mixed Use Zone). |
| 1B | A minimum threshold of population density to ensure public transport and local shops and services are viable and can be located within walking distance of where people live needs to be identified. | Review the inclusion of minimum net residential densities in Suburban Neighbourhood Zones, Urban Core Zones, Urban Corridor Zones and Suburban Activity Node Zones. Further discussion and consultation needs to be undertaken to identify the appropriate net residential densities in the context of evolving demographics, market dynamics and development. | Question the need for and benefit of being too prescriptive regarding density ambitions. Such an approach may in fact discourage densification if, for example, the prescribed minimum densities do not align with market expectations. Suggest that it’s more important to focus on form (ie building heights, setbacks etc) and allow sufficient policy flexibility for changing markets to respond. |
| 1C | Some transport corridors are currently underutilised and | Investigate the spatial application of higher density ambitions. | This needs to be considered in the context |
could benefit from better integration with supporting land uses. | density mixed-use zones (such as those listed above) along appropriate key transport corridors, adjacent activity centres, in urban renewal areas and key strategic sites. | of managing health concerns (e.g. exposure to particulate matter along major transport corridors).

Other Issues Requiring Attention

- There remain concerns about the impact of front loaded row dwellings (e.g. number of crossovers, impact on pedestrian environment, limiting street trees, minimising on-street car parking, streetscape impacts generally). This issue requires further policy attention to:
  - Encourage rear loaded row dwellings, and/or
  - Encourage design responses that address the above impacts (e.g. wider frontages, combined crossovers, the use of balconies, the design of front fences etc.

- Maximising the value of existing infrastructure networks should consider methods of modifying existing road transport infrastructure so that it behaves like mass transit. For example having dedicated bus lanes that exclude other traffic allowing the bus network to operate as efficiently as possible.

Theme 2: Capitalising on strategic transport infrastructure

<table>
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<th>2.1 Strategic Transport Facilities</th>
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<td><strong>Ref No.</strong></td>
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<td>Discussion Question</td>
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*How should planning policy balance the need for airports in strategic locations against the impacts of these facilities on adjacent land owners?*

Adelaide Airport both impacts on, and is impacted by, the surrounding urban environment. Adelaide Airport is particularly exposed to climate change impacts. The surrounding urban infill pressures create more hard surfaces and less infiltration potential. This results in increased storm water impact. Scenarios that include a confluence of adverse events, made more likely by climate change, could potentially have negative impacts on airport operations.

**2.2 Strategic Transport Corridors**

| 2E | Currently, the spatial extent of land required for future road widening requirements is not included in Development Plans. | Work with DPTI Transport to review, transition and map road widening provisions and investigate whether they can be incorporated as an overlay or similar in the Code. | Agree that this needs to be further explored. However, this needs to be considered in the context of adequate community consultation in the identification of road widening requirements in the first instance. |

| 2F | Moving into a new planning system, there is a need to ensure that land uses are appropriately supported | Transition the Policy intent of the existing strategic Transport Routes Overlay. This will involve: 1. reviewing policy and | Agree that this needs to be further explored. |
by transport options and that our transport corridors remain efficient.

mapping for strategic transport corridors
- refining policy (where required) with regard to access requirements, freight routes and road hierarchy.

Targeted consultation with affected stakeholders plus general engagement as part of the Code development.

Discussion Question

How can the Code work to protect the operation of major transport facilities whilst managing the impacts on adjacent development opportunities?

Climate Change will have an impact on strategic freight routes – this is particularly relevant to the intermodal hubs / wharf facilities and road freight routes of Inner and Outer Harbor.

Minimising impacts on surrounding land uses should include buffer strips that are ideally planted with trees that are hardend to the impacts of both climate change and the harsh environment presented by freight operations.

Other Issues Requiring Attention

- Planning policy needs to address the state specific infrastructure that exhibits high vulnerability to climate change. Impacts associated with flooding and extreme heat need to be taken into account against the examples that are given in this section –airport, sea port, intermodal and bulk handling facilities, mass transit corridors and strategic freight routes.

Theme 3: Sustainable mobility, car parking and the impact of technology

3.1 Walking, cycling and other non-motorised transport

3A The current walking and cycling SAPPL policy is well placed to be transitioned into the Code.

Transition the SAPPL off-street bicycle parking and the end-of-trip facilities (such as showers, changing facilities and clothes storage).

- Agree that this should occur.

3B Cycling routes are not universally incorporated into Development Plans.

This leads to inconsistency of application of design rules etc. relating to cycling.

Incorporate identified cycling routes into the Code.

- It's not clear what the "application of design rules etc. relating to cycling" means in relation to the planning system. There needs to be a clear demonstration of the benefit and purpose of incorporating cycling routes into the Code. For example, the CCS recently removed 'BikeDirect' routes from the Development Plan maps because there were no
### Other Issues Requiring Attention

- There needs to be more policy attention to the design of road networks to facilitate and encourage walking and cycling, as well as other policy ambitions (eg WSUD, landscaping, road widening etc). Currently, the planning system enables the expression of such policy objectives principally through Desired Character statements and Concept Plans. Both policy expression methods (and their equivalent) need to be transitioned into the Code or this level of policy detail will be lost.

- How are innovations expected to transform the current requirements of the planning scheme should be identified.

- Policies that promote cycling and walking should not be “where possible” – but be strategically integrated. Cycling infrastructure has been a significantly underfunded component of the road transport system for decades. To address this situation a re-orientation of the budgets associated with active transport needs consideration. Without safe and convenient transport orientated infrastructure, many people will not adopt cycling for transport. The ongoing funding for infrastructure projects so the network can be expanded is required for this transport mode to be used, without it the current status-quo will remain.

### 3.2 Car parking and emerging mobility technology

| 3C | As travel behaviours continue to change, the demand for car parking will also change. It is important that new buildings and structures, particularly multi-level car parks, are adaptable for future uses. | Transition the existing SAPPL policy on the design of car parking structures so they are adaptable for new uses in the future. | Agree with this intent. However, this does raise issues about the future adaptability of under-croft car parking (and their access ways). |
| 3D | Car parking rates in current planning policy are often inflexible and do not consider innovative design or proximity to other transport options. | Rationalise and transition existing car parking rate policies which allow for variation to prescribed minimum parking rates for development proposals which satisfy specific design and transport option criteria. | The CCS Development Plan currently allows some flexibility in car parking standards, as well as historically low rates in some circumstances (eg for residential development in the Urban Core Zone in Bowden). While it is acknowledged that this area is in a state of transition, the evidence to date is that this approach has resulted in |
significant demand for on-street parking. In Bowden, on-street car parking is time limited (to discourage all day parking and encourage turnover of vehicles). This, in turn, has resulted in complaints to Council by residents seeking space to park their second vehicle. So while planning policy should encourage sustainable behaviour and choices, there remains the risk that demands for car parking will shift from a private to a public responsibility.

| 3F | Planning policy has a role to play in encouraging and supporting the uptake of technology which helps future-proof our neighbourhoods. | Develop policy that encourages new developments, in higher density or mixed use zones, to incorporate electric vehicle charging provisions and ensure appropriate infrastructure is in place. | Agree with this intent in part. However, these facilities need to be publicly accessible and not privatised to the exclusion of use by the broader public. |
| 3G | It is important to ensure that planning policy is in place to help facilitate the uptake of emerging technologies that support better car parking efficiency. | Develop policy for new car parking areas (of a certain size) which encourages the adoption of technologies which can better manage impacts. | Agree with this intent. However, anticipating future technological innovations is difficult if not impossible. Perhaps a better approach is to focus on the undesirable impacts and ensure that future planning policy does not preclude the adoption of particular technologies. |