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Executive summary

The City of Sydney (the City) supports the introduction of the Design and Place SEPP (the SEPP) and the integration of SEPP 65 and SEPP BASIX subject to the modifications recommended in this submission.

In 2019 the City declared climate change a national emergency. The City believes that good design of our urban places is critical to responding to this unfolding emergency. The SEPP will be a key mechanism for transforming the State's urban areas to make them not just resilient to global heating but also regenerative. Independently the proposed functioning of the SEPP can create integrated economic, social and environmental benefits to NSW by minimising risk and maximising the benefits realised through our substantial capital investment in development.

The City supports most aspects of the proposed SEPP and associated documents. In particular the City would like to note its support for:

- The aims of the SEPP including embedding the Connecting with Country Framework
- Requirement for design skills i.e. expanded involvement of registered design professionals including architects, landscape architects and urban designers
- Expansion and improvement of design review processes
- Integration of the planning pathway to Net Zero emissions
- Improved tree canopy and green infrastructure
- Improving the amenity standards in the Apartment Design Guide (ADG)
- Review of BASIX
- The proposal to create an Urban Design Guide (UDG)

To ensure the SEPP drives the change in the performance of our urban places to address increasing resilience, improving energy, water and waste efficiency and creating regenerative places some aspects discussed in the Explanation of Intended Effects (EIE) need to be addressed.

The City's key recommendations are below with additional detailed recommendations in **Attachment 1**:

- 1. Define clear standards, preferably in the SEPP and a robust variation mechanism. The SEPP must be drafted with strong measurable standards with clear objectives for the most important performance aspects of a design that cannot be replaced or substituted. The standards must ensure the SEPP drives improved amenity, sustainability and resilience performance and does not allow these to be weakened with consideration of aesthetics, innovation (i.e. breaking the rules), viability (i.e. insufficient due diligence) or market expectations under the banner of flexibility or merit. Certainty around these standards including provision of public goods like affordable housing will ensure that they are priced into land transactions. To this end:
 - a. Adopt a statutory framework of clear simple measurable design standards (including core standards in the SEPP) and a clear pathway for planning merit-based variation to provide certainty where required and flexibility where appropriate – this will provide a high level of certainty and appropriate flexibility and ensure that SEPP standards are on a strong footing where they may be in conflict with LEP standards
 - b. Clarify through accompanying guidance notes that Standard Instrument LEP Cl. 4.6 is the pathway for varying the standards based on planning merit to provide flexibility

- 2. Fully integrate the planning pathway to net zero energy into the SEPP for all development types.
- 3. Include measurable standards in the UDG that:
 - a. require land use intensity and transport alignment to reduce transport energy use (by prioritising walking, cycling and public transport and reduce service for private driving)
 - b. introduce a zero minimum rate and reduce the proposed maximum parking rates in line with public transport accessibility levels
 - c. require local services (10 minute walkable neighbourhoods that support the '30 minute city')
 - d. require local area traffic management to make walking safer and easier than driving for local trips
 - e. address urban heat (including BASIX), flooding and strengthen tree canopy and deep soil requirements
 - f. require precinct planning to dedicate minimum proportions of land for streets and parks
- 4. Enhance certain standards in the ADG to drive passive sustainable climate responsive design tied to Thermal Comfort to improve resilience to the impacts of global heating. To support this, design for Thermal Comfort must be clearly moved to the ADG. BASIX should continue to calculate Thermal Performance the estimation of mechanical energy demand required to maintain comfort levels after passive design measures have been applied but improved modelling tools are needed, and governance of their use must be improved.
- 5. Re-form and clarify the interaction between the proposed Principles, Mandatory Matters for Consideration (MMfC) and standards:
 - a. Establish the Principles as aims of the SEPP
 - b. Redescribe the MMfCs as mandatory matters (outcomes) that must <u>be achieved</u> (rather than just considered)
 - c. Introduce the UDG, ADG and Evaluation Guide(s) as matters for consideration consistent with the Act
 - d. Ensure the Aims, Objectives and Principles capture the full range of design issues
 - e. Remove the link between Principles and specific MMfCs
 - f. Remove the (exclusive) link between specific MMfCs and Scales of Development
 - g. Clarify the relationship between Principles, MMfCs and standards to prioritise standards that improve performance
- 6. Expand the Principles and MMfCs to ensure all good design issues are covered:
 - a. Create new Principles and MMfCs for:
 - Connecting with Country
 - Health, safety and accessibility
 - Amenity and comfort
 - Climate responsive design
 - b. Include minimising embodied energy and adaptive reuse in the description of the *Design* sustainable and greener places Principle
- 7. Address funding issues relating to improving climate resilience (principally to sea level rise, fire, flood and extreme heat), creation of public places (streets, parks and public buildings) and process improvements.

The EIE is expansive in its scope so the City has provided detailed recommendations and comments in a tabular format in **Attachment 1** with direct reference to the text of the EIE. **This document and Attachment 1 must be read together.**

The City's submission to the 2014 review of SEPP 65 and Guide is directly relevant to the issue of defining clear standards and it is provided in **Attachment 2** and excepts included below.

An excerpt from the City's submission the Productivity Commission Green Paper is included in **Attachment 3**.

A 2014 draft of what standards could look like in the SEPP is included in Attachment 4.

Key recommendations

Recommendation 1

Define clear standards, preferably in the SEPP and a robust variation mechanism. The SEPP must be drafted with strong measurable standards and clear objectives for the most important performance aspects of a design that cannot be replaced or substituted. The standards must ensure the SEPP drives improved amenity, sustainability and resilience performance and does not allow these to be weakened with consideration of aesthetics, innovation (i.e. breaking the rules), viability (i.e. insufficient due diligence) or market expectations under the banner of flexibility or merit. Certainty around these standards including provision of public goods like affordable housing will ensure that they are priced into land transactions. To this end:

- a. Adopt a statutory framework of clear simple measurable design standards (including core standards in the SEPP) and a clear pathway for planning merit-based variation to provide certainty where required and flexibility where appropriate this will provide a high level of certainty and appropriate flexibility and ensure that SEPP standards are on a strong footing where they may be in conflict with LEP standards.
- b. Clarify through accompanying guidance notes that Standard Instrument LEP Cl. 4.6 is the pathway for varying the standards based on planning merit to provide flexibility.

The City has consistently advocated for strong measurable design performance development standards (standards) for SEPP 65 and the ADG to ensure amenity outcomes. This position also applies more broadly to issues that will be addressed by the new SEPP and subsidiary documents including the UDG.

Good design is inherently performance based, and where performance can be objectively measured. Codifying the core amenity standards allows proponents and regulators to proceed efficiently. This is particularly helpful in that developers can value land with a high degree of certainty and delay and conflict in assessment/approval processes is minimised. It also maintains community confidence in the planning system which is imperative in a time where substantial change is occurring in urban areas.

The risk of a Principles only based SEPP

The part of the property market that interacts with speculative development is not an efficient market. Competition is limited for a large range of reasons. This means that without strong regulation, speculative development will gravitate toward the lowest risk most profitable products with limited diversity and quality. Melbourne's apartment market, prior to the recent introduction of limited regulation, is a clear example of this.

The City is of the opinion that without clear and strong standards, the design and performance qualities of most development will be lower than the SEPP is aiming to achieve, and consent authorities will not be able to refuse development or defend refusals in court.

The Principles, in and of themselves, are not clear performance standards and will be ineffectual in the LEC as a mechanism for delivering good design and amenity outcomes.

The City draws DPIE's attention to ICAC's 2012 *Anti-corruption safeguards and the NSW planning system* report that highlights the corruption risk of high levels of discretion in planning decisions as well as the March 2021 report into Canterbury Council.

Reframe the Principles

The idea of a Principles based SEPP is appealing but most development should simply meet or exceed the standards that the community sets but not reference good, but from a performative basis unclear, Principles.

This then raises the question, what is the purpose of the Principles? Most SEPPs include aims (and many include objectives). The City supports the Principles acting as aims of the SEPP and supports them being succinctly addressed in Design Verification Statements but not as a mechanism for varying from or circumventing quality standards.

Strong standards with a clear framework for variation

If the standards are set appropriately, which the ADG standards have been, then designers can meet or exceed the standards in almost all situations. If a framework where the standards are located in the SEPP is adopted, then variation can be managed through Cl. 4.6 process that provides an existing reporting mechanism (recording variations, by how much, where and why) for transparency which will support community confidence in the planning system.

If another framework is adopted where the standards are located in guides, then the process of defining the strength of the standards in the SEPP and for varying from the standards and the considerations for doing so must be carefully spelt out.

In principle standards should only be subject to variation where there are contextual constraints (including the site and good design response to the urban context described as part of the site analysis) that are extrinsic to the project brief. For example, the slope of land or overshadowing by neighbours are contextual constraints but wanting to orient to a view or limit the number of vertical cores are not. Additionally, the request to vary a standard should be supported by evidence of the contextual constraint(s) and the degree of variation substantiated by documented multi-criteria options analysis showing that the response is optimal considering all of the constraints. This process should be guided by clear practice notes and consideration by DRPs and consent authorities should be made public to enhance consistency and transparency.

An additional benefit of clearly elevating core metrics to SEPP development standards is that they will act on a more even level with LEP development standards. This will increase the likelihood that amenity and good design will be achieved where these standards do not align.

The following excerpt in green from the City's submission to the 2014/5 review of SEPP 65 directly relates to the discussion above.

1.3 Common Arguments against Regulating for Quality

Common but flawed arguments that are mounted against maintaining design quality standards in the SEPP 65 and the RFDC are:

1.3.1 Argument 1: Quality and Amenity Standards Decrease Land Supply

Land supply for medium density residential development is not affected by the application of design quality standards. Land supply is affected by strategic planning decisions made by local plan making authorities guided by the metropolitan strategy and in brown field sites, resolution of affectations such as flooding and contamination. The housing market operates as a series of sub-markets that are geographically, typologically and price-point specific. Currently, infrastructure, supply and transport availability, not diminution of quality, is what affects land supply.

1.3.2 Argument 2: Quality and Amenity Standards Increase Construction Costs

The Reserve Bank of Australia in its February 2014 submission to the Senate References

Committee Inquiry into Affordable Housing¹ showed development analysis that construction costs for infill development (predominantly apartment buildings) is lower in Sydney inclusive of design quality standards under SEPP 65 than in Melbourne which currently has no design quality standards. This would tend to indicate that construction costs are subject to other more relevant drivers than quality standards of design and construction. It is also apparent that NSW apartment design standards have not resulted in a competitive economic disadvantage between cities. Data shows that land costs and government charges are higher in Sydney. Land cost relates primarily to supply, and developer competition for pipeline is subject to other finance and regulatory decisions that are largely unaffected by design quality standards.

Claims from some sectors that continued application of the standards in SEPP 65 and the RFDC will drive up cost are unsubstantiated. In any case, what little cost can be attributed to date has already been absorbed into land valuations since 2002. No evidence has been provided that the very minor changes proposed in the ADG will have any impact on development cost. Additionally, there is little evidence that the existing standards increase costs.

1.3.3 Argument 3: Increased Construction Costs Reduces Affordability

This criticism ignores the central part that developers play in delivering apartments and their economic imperatives. In economic theory developers are referred to as 'profit takers'. This refers to their objective to maximise profits within given constraints (they are businesses, not not-for-profit organisations). The classic strategies for maximising profit are to offer the highest competitive price for land in order to secure raw inputs; minimise all subsequent costs (including construction and design performance) and to maximise sale price in a given market appetite. When savings are made through lowering design standards, there is no incentive to pass the savings on through lower prices to consumers, if the capacity is there to achieve higher returns in a seller's market. This means that any reduction in costs will be absorbed as profits or higher prices for the next site acquisition leading to no improvement in affordability.

The NSW Property Council in correspondence to the NSW Department of Planning and Infrastructure (19 July 2011) noted that their members thought that:

The standards sought under the SEPP 65 framework were seen to have had only a relatively minor impact on the affordability of dwellings

Moreover, there is no evidence that if numeric code components (standards) were reduced that any savings will be in fact passed on to a purchaser as a saving. This is because in the current market, price is more strongly influenced by capacity to pay and investor demand through property tax breaks (capital-gain seeking investors and negative-gearing seeking investors outstripping shelter seekers) than competition.

1.3.4 Argument 4: Regulation Increases Uncertainty

This argument is only true of unclear regulation. Clear regulation that is easily interpreted and consistently applied increases certainty. The BCA is a good example of clear regulation leading to certainty. The City's proposal is to make the "core" development standards very clear and easily interpreted.

1.3.5 Argument 5: Regulation increases approval times

When regulation is unclear, compliance with regulatory standards is difficult to assess

¹ Submission to the Inquiry into Affordable Housing Senate Economic References Committee, February 2014 http://www.rba.gov.au/publications/submissions/inquiry-affordable-housing/pdf/inquiry-affordable-housing.pdf

leading to uncertainty and increased approval times. As noted above, if regulation is clear easily interpreted and consistently applied, then processing of approvals will be faster.

1.3.6 Argument 6: Regulation stifles innovation

The development industry has demonstrated strong resistance to innovation in apartment building design. In contrast, true innovation is being developed in construction techniques which is governed by a strong regulatory framework (the BCA) unaffected by design quality regulation. The McKinsey Global Institute's 2014 report *A Blueprint for Addressing the Global Affordable Housing Challenge* identified construction costs as the second most significant barrier to affordable housing provision. The first is land cost which is addressed above.

1.3.7 Argument 7: Registered Architects can ensure design quality without the need for standards

Architects are subject to the instructions and demands of their clients. In the absence of measurable standards in an environment of vague principles, architects can at most ensure within these professional constraints that quality is maximised. However, they are in a weak servant position with contractual arrangements to meet milestones and cannot in themselves ensure an even standard of quality is maintained against the instructions of their client. More simply, only clear standards can empower architects to design the quality which they are trained to deliver.

1.3.8 Argument 8: Design Quality Regulations Conflict with LEP Controls

Well tested controls effectively mitigates conflict. If the minimum controls are specified in the SEPP, then any conflict is clearly removed. The issue is perceived rather than actual and despite the apparent complexity the ADG provides a clear solution.

Where the relationship between the height control (equivalent in storeys) and FSR is less than 3:1 [this ratio is possibly closer to 2.5:1], then a purely residential development will require design skill to resolve, less skilled designers will increase the risk to approval. This simple test should trigger a potential purchaser of a site to hire a team including a skilled architect and planner to develop a simple concept plan consistent with SEPP 65 development standards to assess yield prior to purchase.

High density development requires skill to design successfully and some sites, particularly in business zones (including mixed use areas), may be unsuitable for purely residential development.

This section has addressed some of the most common criticisms of development standards that ensure design quality. The next section focuses on what all the stakeholders agree on: everyone supports design quality and everyone wants certainty. Some sectors incorrectly see the two issues as being in competition and so set the balance more toward certainty (of profitability) over quality, but, as will be explained, this conflict is perceived and not real.

1.4 Strong professional and industry support for development standards for design quality and certainty

The relevant professional institutes, Australian Institute of Architects, the Planning Institute of Australia and Australian Institute of Landscape Architects are unanimous in their advice that only a policy framework that provides strong measurable development standards will provide certainty and ensure that quality design outcomes will be delivered.

The peak development industry groups, either agree or concede that SEPP 65 and the standards and guidance in the RFDC have increased the quality of apartment buildings.

Previously major residential flat building developer Harry Triguboff said he opposed design quality requirements. Now he supports it because 'design sells'.

In 2011 the NSW Property Council wrote to the NSW Department of Planning and Infrastructure:

Over 85% of respondents considered that the implementation of SEPP 65 and the RFDC have led to the improved design of residential flat buildings.

The greatest driver of this improvement was the guidance provided in the RFDC

Source: NSW Property Council to NSW Department of Planning and Infrastructure, 19 July 2011

In a recent opinion piece published in the Sydney Morning Herald, Chris Johnson CEO of the Urban Taskforce said:

... by making apartments up to 25 metres code-assessable [based on clear standards] ... through a change to the NSW housing codes to set standards to be complied with leading to faster approvals.

Chris Johnson, Density done well, Sydney Morning Herald 20 April 2014

The push for clear standards has been a consistent theme. In 2013 Mr Johnson wrote in a submission on the Planning White Paper:

We are of the firm belief that most forms of development can be considered as code assessable development [based on clear standards] including residential apartment and commercial buildings in appropriate, clearly defined locations.

Urban Taskforce, Planning White Paper Submission, 28 June 2013, p28

The development industry clearly advocates for quality and certainty delivered through clear standards in codes.

The City's experience of the planning assessment process generally shows that developers who are willing to embrace the standards and seek high quality outcomes experience a more straightforward and quicker pathway through the approval process. Conversely, those developers who resist complying with the standards or seek to challenge their intent typically experience a more complex and longer pathway that absorbs time, cost and creates uncertainty. The City's experience is that a collaborative relationship with developers who are willing to meet the standards upheld by the City leads to a quicker, more streamlined process that is more efficient and satisfactory to all parties.

1.5 No Quality Standards = Poor Quality Outcomes (the Melbourne Experience)

The City of Melbourne has recently completed a review of the poor quality housing outcomes that have resulted from their largely unregulated market operating in a very permissive planning system. The report titled *Understanding the Quality of Housing Design*² completed in early 2013 concluded that only 16% of developments could be described as 'good' (attached for reference). Common issues identified in recent developments resulting from unregulated market pressures included:

- 1. Small apartment sizes
- 2. Lack of apartment choice
- 3. Dominance of car parking
- 4. Poor Internal Amenity:
 - (a) Poor light
 - (b) Poor natural ventilation
 - (c) Visual privacy
- 5. Poor building layout

²http://www.melbourne.vic.gov.au/BuildingandPlanning/FutureGrowth/Documents/Understanding Quality Housing Design.pdf

- 6. Poor apartment layout
- 7. Limited flexibility and adaptability
- 8. Poor environmental performance
- 9. Limited communal space and facilities
- 10. Lack of storage and utility spaces

City of Melbourne, Understanding the Quality of Housing Design, 2013, p29

The report's main conclusion was that:

The quality of new housing in the City of Melbourne is just as important as the number of new homes built. Housing design is a key element in helping to accommodate successfully the proposed population growth in the City of Melbourne and create a positive legacy of city living for future generations.

City of Melbourne, *Understanding the Quality of Housing Design*, 2013, p13

The importance of good housing design ... [is that] it can add social, economic and environmental value and help create neighbourhoods and communities which are robust enough for future challenges and change. Securing high quality housing is essential to successfully transform our urban renewal areas and provide 45,000 new homes which meet the daily needs of residents, are fit for purpose in the long term and designed to accommodate the changing needs of occupants throughout their lifetimes.

ibid, p75

This report and its assessment of the poor outcomes resulting from lack of design quality standards directly led to the Victorian Government developing standards for residential flat buildings that emulate and improve on SEPP 65 and the RFDC [this didn't eventuate]. Although an early draft was leaked early in 2014 which set back the timetable for adoption it has not halted internal progress. The Victorian Government's resolve to improve on the standards in SEPP 65 and the RFDC is also because these are regarded as resulting in Sydney's competitive advantage in delivering quality housing. In July Victorian Minister for Planning the Hon. Matthew Guy MP told 774 ABC Melbourne that if the standards were revised, they would address things like natural light and size:

The Government architect has put a proposal to us that all the bedrooms need to have a form of natural light.

The concept of just building apartments with just bedrooms that have borrowed light, either from lift wells or balconies sourced through another living room, is not one that is going to lead to a greater level of amenity.

Melbourne is in the midst of quite a substantial building boom. There is a huge level of demand which is greater than people realise.

As a consequence, we need to have some improved standards around what we're building.

Source: ABC News, 23 July 2014

Minister Guy's comments clearly indicate that in an unregulated market, design quality can be reduced to very low levels. Some of the 'innovations' that the Minister referred to, include rooms with no windows, are present in recent development applications to the City from Melbourne based developers unfamiliar with SEPP 65 and the RFDC. Some national developers have recently indicated in their discussions with the City Planning team that it was not possible to compete in the Melbourne CBD market with quality designs that include features such as balconies, windows to bedrooms and internal storage, against what is being built. With the introduction of new Victorian development standards this situation will be resolved.

More consistent apartment standards attract owner-occupiers as well as investors. Lower standards (as experienced in Melbourne) attract investors who are return sensitive through rental rates. A mixed tenure is a better proposition for any city's liveability standards.

1.6 Who bears the Cost of Poor Quality Apartments?

The most internationally respected building quality regulation organisation CABE from the UK sums up the argument for ensuring design quality:

Past failures to achieve good housing design are clearly recognisable – badly-designed places impose costs on their occupiers, their neighbours and society. At a time of scarce resources, design costs are in effect social costs, born by all and requiring careful justification.

<u>Design Council CABE, The Bishop Review – The Future of Design in the Built Environment, 2012, 6.3, p21.</u>

CABE's excellent series *Building for Life* demolishes the arguments for ever reducing standards. Their evidence based analysis shows that unclear or overly flexible standards reduce long term flexibility and utility of the final asset. In unregulated markets consumer preferences are often not matched by available products. The evidence for providing clear standards is well summarised in the Greater London Authority's 2010 publication *Housing Design Standards Evidence Summary*.

1.7 Conclusions on the need to Maintain Design Quality

- SEPP 65 and the RFDC have delivered significant value across social, economic and environmental spheres and are critically important for the successful delivery of the NSW State Plan and the Sydney Metropolitan Strategy.
- ii. The arguments against setting and maintaining development standards are flawed and inconsistent.
- iii. The relevant professional associations and peak development industry groups support development standards that deliver certainty and quality.
- iv. It is in the public's interest to introduce clear standards as demonstrated by the Victorian Government's example of a deregulated market failure.

The recommendations in Section 2 of this submission seek to support and strengthen SEPP 65 and the RFDC (ADG) and the critical development standards that they contain.

An alternative approach

If the core standards do not move to the SEPP and/or Principles can be used to substantially vary from the quality outcomes provided by the standards:

- Clearly identify the measurable standards in the UDG and ADG and provide a linking clause to the SEPP that makes it clear that they are of greater than or at least equal in weight to a DCP control
- Provide a clause in the SEPP that describes a performance based pathway for proposing a variation to the standard in the UDG and ADG that provides a better planning/environmental outcome than the outcomes under the standards and is not inconsistent with them (described in the EP&A Act 4.15(3A)(b) - noting the importance of the objects of the standards)

- Include a section in the UDG and ADG that describes a very robust general methodology for assessing applicant proposed variations to standards based on contextual constraints (described above)
- Provide technical verification methods within the ADG to support four critical standards being: daylight (sunlight already has a clearly understood verification method), natural ventilation, natural cross ventilation and minimum apartment size
- Set up technical committees like the BCA to draft technical verification methods to develop additional performance criteria as required

What could standards in the SEPP look like?

As part of the 2014 review of SEPP 65 the City submitted a rough draft of what the core apartment amenity standards could look like if located in SEPP 65. This draft is provided for information at **Attachment 4**.

Recommendation 2

Fully integrate the planning pathway to net zero energy into the SEPP for all development types.

The City supports MMfC 17 and recommends that the SEPP adopt the performance standards and timing to net zero energy buildings developed by City of Sydney with industry and government for some land uses to achieve net zero emissions sooner than 2050 presented at the *Planning for Net Zero Energy Buildings Briefing* on 11 March 2021 for office, multi-unit residential, hotel and shopping centre developments to transition to net zero energy by 2026:

The performance standards are step change improvements in energy performance to transition to net zero energy buildings. These improvements are through:

- energy efficiency
- on-site renewable energy
- off-site renewable energy

recognised in the planning system.

Specialist consultants developed a robust independent evidence base to support the performance standards. This included:

- energy modelling of three typologies for each land use that represented similar development across Greater Sydney
- construction costing by a quantity surveyor
- a cost benefit analysis to meet NSW Government Treasury requirements
- extensive stakeholder engagement with industry and government.

Refer to the summary table of performance standards, development thresholds and timing below.

The City recommends that the SEPP provide options to demonstrate compliance with an energy performance requirement for non-residential development rather than only NABERS Energy i.e.:

- NABERS Energy rating with a Commitment Agreement
- maximum energy intensity with review by the NABERS Commitment Agreement panel of independent consultants
- Green Star Buildings rating meeting Credit 22: Energy Use requirements

or equivalent

Additionally, changes should be made to BASIX to expand the multi-unit residential apartment categories above 6 storeys for BASIX Energy. For example, for 6-10 storeys, 11-20 storeys and 21-30 storeys. The *Planning for Net Zero Energy Buildings Briefing* on 11 March 2021 identified strong cost benefit analysis results for those ranges.

The City also recommends that DPIE work with the development industry and councils via a robust, well governed method to regularly update their tools (BASIX and NABERS) to implement the performance standards, maintain relevance as industry adapts to higher standards and to improve compliance and consider using the same methodology for the development of the performance standards for other development uses (eg. industrial, residential aged care, schools etc), as suitable design and planning tools become available that allow options to demonstrate compliance with standards.

The City supports recognising emerging technologies and biannual tool updates and recommends DPIE regularly update and publicly disclose the emissions factors in the BASIX and NABERS tools, in line with the biannual tool update.

Summary net zero energy performance standards and development thresholds

Proposed	Development size trigger for performance standards	Performance standards	
use		Step one	Step two
		Applications submitted between 1 January 2023 – 31 December 2025	Applications submitted from 1 January 2026 onwards
Office (Base building)	A new office building containing a net lettable area (NLA) of 1,000m² or more	maximum 45.0 kWh/yr/m² of Gross Floor Area (GFA), or 5.5 Star NABERS Energy Commitment Agreement (CA) + 25%, or certified Green Star Buildings rating with a "credit achievement" in Credit 22: Energy Use, or equivalent	- maximum 45.0 kWh/yr/m² of GFA, or - 5.5 Star NABERS Energy CA + 25%, or - certified Green Star Buildings rating with a "credit achievement" in Credit 22:
	A refurbishment to an existing office building that contains a NLA of 1,000m² or more		Energy Use, or - equivalent AND - renewable energy procurement
	An addition of 1,000m ² or more of NLA that results in 50% or more additional NLA to the existing office building		equivalent to "net zero energy" or a maximum of 45.0 kWh/yr/m² of GFA
Retail (applies to Shopping Centre base building only)	A new shopping centre containing a gross lettable area – retail (GLAR) of 5,000m² or more	 maximum 55.0 kWh/yr/m² of GFA, or 4 star NABERS Energy CA, or certified Green Star Buildings rating achieving the "minimum expectation" in Credit 22: Energy Use, or equivalent 	maximum 45.0 kWh/yr/m² of GFA, or 5 star NABERS Energy CA, or certified Green Star Buildings rating with "exceptional performance" in Credit 22: Energy Use, or equivalent
	An addition of 5,000m² or more of GLAR that results in 50% or more additional GLAR to the existing shopping centre		AND - renewable energy procurement equivalent to "net zero energy" or a maximum of 45.0 kWh/yr/m² of GFA

Hotel (whole of building)	A new hotel of 100 rooms or more A refurbishment to an existing hotel that contains 100 rooms or more An addition of 100 or more hotel rooms that results in 50% or more additional hotel rooms to the existing hotel	 maximum 245.0 kWh/yr/m2 of GFA, or 4 star NABERS Energy Commitment Agreement (CA), or certified Green Star Buildings rating achieving the "minimum expectation" in Credit 22: Energy Use, or equivalent 	- maximum 240.0 kWh/yr/m² of GFA, or - 4 star NABERS Energy CA + 10%, or - certified Green Star Buildings rating with a "credit achievement" in Credit 22: Energy Use, or - equivalent AND - renewable energy procurement equivalent to "net zero energy" or a maximum of 240.0 kWh/yr/m² of GFA
Multi-unit residential (whole of building)	6-10 storeys 11-20 storeys	- BASIX Energy 40 - BASIX Energy 35 - BASIX Energy 30	- BASIX Energy 45 AND - renewable energy procurement equivalent to "net zero energy" or a maximum of 85.0 kWh/yr/m² of GFA - BASIX Energy 40 AND - renewable energy procurement equivalent to "net zero energy" or a maximum of 90.0 kWh/yr/m² of GFA - BASIX Energy 35
	21-30 storeys (may include 30+)		AND - renewable energy procurement equivalent to "net zero energy" or a maximum of 95.0 kWh/yr/m² of GFA
Mixed use	where one or more of the above thresholds for each proposed use apply	the above performance standards apply for each proposed use	the above performance standards apply for each proposed use

Refurbishment means carrying out of works to an existing building where the resultant change is to at least half the total volume of the building measured over its roof and walls. In calculating the extent of the change to the total volume of the building, the proposed works and all other building work completed or authorised within the previous three years is to be included.

Recommendation 3

Include measurable standards in the UDG that:

- require land use intensity and transport alignment to reduce transport energy use (by prioritising walking, cycling and public transport and reduce service for private driving)
- b. introduce a zero minimum rate and reduce maximum parking rates in line with public transport accessibility levels
- c. require local services (10 minute walkable neighbourhoods that support the 30 minute city)
- d. require local area traffic management to make walking safe and easier than driving for local trips

- e. address urban heat (including via BASIX), flooding and strengthen tree canopy controls
- f. require precinct planning to dedicate minimum proportions of land for streets and parks

Good urban design is critical to ensure that urban areas are healthy, resilient and minimise energy use particularly through land use and transport integration.

The SEPP/UDG should define standards for the relationship between public transport accessibility levels (or access to opportunities and services) and:

- Land use intensity
- Maximum parking rates

This will assist government and community discussions about appropriateness of rezonings and relationships to infrastructure and services.

The UDG must mandate walkable neighbourhoods that support improved physical activity and health outcomes for the community. Walkability requires good urban structure/layout but also that services that support daily life like small parks, schools, supermarkets, green grocers and bus stops are within easy walking distance. For most people this is within a 10 minute walk (a 20 minute round trip). It also requires that walking is safe and easier for local trips than driving, which requires local area traffic management (including speed and pedestrian priority management). An atlas that shows existing areas that are walkable would be useful and the City will share any information that may assist in this regard.

The UDG must address urban hazards including urban heat (the greening proposals are very welcome) and flooding but also noise, air quality and fire.

The City has some concern about the modifying language ("where possible") in relation to achieving tree canopy and retention and replacement of trees. This language should be strengthened as the SEPP is developed to clarify that achieving high levels of retention and canopy are some of the highest-level considerations.

The City proposes some changes to the proposed UDG terminology and categories and would welcome dialogue to ensure consistent language is used and category errors do not result in contradictions and confusion.

Information in the EIE about the specific content of the UDG was (understandably) limited. The City has significant corporate knowledge about urban design across the organisation including successes and failures and requests working involvement in the further development of the UDG.

Recommendation 4

Enhance the standards in the ADG to drive passive sustainable climate responsive design tied to Thermal Comfort to improve resilience to the impacts of global heating. To support this, design for Thermal Comfort must be clearly moved to the ADG. BASIX should continue to calculate Thermal Performance – the estimation of mechanical energy demand required to maintain comfort levels after passive design measures have been applied – but improved modelling tools are needed, and governance of their use must be improved

The City strongly supports mandating standards that promote passive sustainable climate responsive design to ensure resilience and increase passive survivability during heatwaves with power outages. Minimum passive design standards for base buildings must not be "traded off" as this will have health and safety impacts on future residents.

The merging of the ADG and BASIX is very positive in this regard in that their relationship can be clarified. However, the underlying tension that results from lack of definition about the term Thermal Performance must be resolved and issues with the governance of NatHERS addressed and its limitations recognised.

Thermal Comfort

The City recommends that Thermal Comfort is removed as terminology in BASIX and the term Thermal Performance (or preferably Thermal Efficiency) is used in its place.

The measure for 'thermal comfort' in BASIX is MJ/m2 of energy required for space heating and cooling. This is actually a measurement of thermal performance and energy demand and is not a valid proxy for thermal comfort. The City's experience is the BASIX is not fit for purpose to measure or regulate thermal comfort and this is borne out through discussions with architects.

The use of the term Thermal Comfort on BASIX certificates conflicts with the BASIX SEPP, which refers to only Thermal Performance when giving no effect to competing provisions in other environmental planning instruments.

This confusion should be remedied in the SEPP by restricting BASIX to informing only Thermal Performance, which is quantified by energy flux and demand, and not Thermal Comfort, which is measured by temperature and thermal sensation.

Trade-offs

As noted above the City does not support the trading off of Thermal Comfort for more solar PV (or anything else) since this reduces the resilience and safety of dwellings.

Trading is only supported with more efficient equipment/services if BASIX is limited to considering Thermal Performance, and the trade-off does not include Thermal Comfort. Thermal Comfort is fundamental to amenity and passive survivability and must be considered separately to energy. We again reinforce that BASIX is not fit-for-purpose on thermal comfort and recommend this be exclusively considered in the ADG.

Finally, when urban heat controls are developed, they must apply in addition to requirements for both Thermal Comfort and Thermal Performance of dwellings since urban heat controls relate to impacts on health and safety external to development and should not be subject of trade-offs.

Other changes to BASIX

The City does not support adjustment to the way energy and water are benchmarked in BASIX, other than potentially setting a contemporary NSW benchmark for per capita residential water use and greenhouse gas emissions. The benchmarking to NSW state average consumption is appropriate and makes BASIX outcomes more readily able to be ground-truthed than the abstracted benchmarks in the NCC which are likely to be found in the NatHERs whole of home tool. The City strongly supports continuing the current BASIX approach for energy and water and draw DPIE's attention to the significant weakness introduced by NatHERS. The City recommends significant caution in ceding this critical planning control in NSW to the federal direction and administration of NatHERS. The ABCB are investigating alternative thermal assessment pathways for apartment buildings for NCC 2022 and this is overdue, but any new pathway must not create the same governance and tool integrity issues that exist for the apartment sector in the current NatHERS scheme.

Improvements to amenity standards in the ADG

The City strongly supports the proposed enhancements to amenity standards that improve passive sustainable design of dwellings including:

- Maintaining natural ventilation and daylight related standards including ceiling height, room depth, window opening size etc for health and amenity all year round
- Increasing the natural cross ventilation standard to promote comfort in summer

- Introducing maximum window to wall ratio and minimum external sun shading standards to promote comfort in summer
- Introduction of a requirement for ceiling fans

However, the City is concerned that the exhibited changes to solar access may result in much lower comfort and amenity in winter and that a meaningful discussion of thermal mass has not been included.

Embodied Energy

The City strongly supports dealing with embodied energy and promoting adaptive reuse and would welcome discussion relating to both in the exhibited SEPP.

Recommendation 5

Reform and clarify the interaction between the proposed Principles, Mandatory Matters for Consideration (MMfC) and standards:

- a. Establish the Principles as aims of the SEPP
- b. Redescribe the MMfCs as mandatory matters (outcomes) that must <u>be achieved</u> (rather than just considered)
- c. Introduce the UDG, ADG and Evaluation Guide(s) as matters for consideration consistent with the Act
- d. Ensure the Aims, Objectives and Principles capture the full gamut of design issues
- e. Remove the link between Principles and specific MMfCs
- f. Remove the (exclusive) link between specific MMfCs and Scales of Development
- g. Clarify the relationship between Principles, MMfCs and standards to prioritise standards that improve performance

As noted above the City is concerned that the structure of the SEPP outlined in the EIE will not result in an enforceable and clear framework that will improve design quality and performance.

The framing and interaction of the Principles, MMfCs and design considerations and standards should create a clear and strong framework for regulation of design quality of development to ensure good design outcomes.

Establish the Principles as aims of the SEPP

As noted above the Principles should be framed as aims of the SEPP. In this way it is clear that they are not a primary part of the regulatory framework but that they establish the purpose of everything within it.

In the vast majority of circumstances applications should not need to do more than provide a simple acknowledgement of consistency with the Principles.

Re-describe the MMfCs as outcomes that must be achieved

Decisions by the LEC have shown that matters for consideration can be considered and then set aside as not determinative.

For this reason, the City suggests a stronger formulation where the consent authority must be satisfied that certain matters (or outcomes) have been <u>achieved</u> rather than just "considered" before consent can be granted.

- e.g. Development consent must not be granted unless the consent authority is satisfied that—
- a. Tree canopy ... detail of outcomes to be achieved
- b. Another matter ... details of outcomes to be achieved
- c. Etc

Some of the MMfCs will need to be modified to describe a series of outcomes to be achieved.

Introduce the UDG, ADG and Evaluation Guide(s) as matters for consideration consistent with the Act

The EIE is correct that the SEPP should establish matters for consideration. Consistent with the usual formulation under the Act (4.15(1)), matters for consideration are instruments, DCPs and the like that include controls and standards.

In the case of the SEPP, the UDG and ADG should be matters for consideration and their core standards made equivalent in status to LEP development standards and the balance of the design guidance equivalent to a DCP. DPIE should also consider making the Evaluating Good Design document a matter for consideration and revising it to describe how to evaluate achieving the recast MMfCs.

Ensure the Aims, Objectives and Principles capture the full gamut of design issues

The City recommends that the Aims and Objectives of the SEPP, including the Principles, be carefully worded to ensure they capture the breadth of issues involved in good design and that subsidiary modifying language associated with the Principles that could in any way restrict the breadth of meaning be removed. More specific Principles should be provided in each guide and if these are met the proposal should be deemed to comply with the higher-level Principles.

Remove the link between Principles and specific MMfCs

Similarly, the link between the specific Principles and the MMfCs potentially restricts their meaning. The clearest example is the proposed Connectivity MMfC which should relate to Principles 2 through 5 but in the draft is restricted to Principle 2: *Design inviting public spaces*. The linkages restrict the meaning of the MMfC in a very undesirable way and should be removed.

Remove the (exclusive) link between specific MMfCs and Scales of Development

In the City's experience the issues addressed in the MMfC do not neatly match the scales of development in the way outlined in the EIE. The SEPP should not artificially restrict the issues considered in relation to a development. The City recommends that this relationship be redescribed to show the likelihood/strength of consideration (stronger to weaker) but not turn off any considerations from any scales of development.

Clarify the relationship between Principles, MMfCs and standards to prioritise standards that improve performance

The City recommends that the Principles, MMfCs (re-described as matters that must be achieved), New Matters for Consideration and SEPP standards all be addressed in all development assessment. A guide should be developed that illustrates the appropriate levels of documentation for different types of development.

As noted above, the City strongly opposes a framework where reference to the Principles (or MMfCs) could override consideration of standards without reference to a process mirroring that undertaken for evaluating a Cl. 4.6 variation.

Recommendation 6

Expand the Principles and MMfCs to ensure all good design issues are covered:

- a. Create new Principles and MMfCs for:
 - Connecting with Country
 - Health, safety and accessibility
 - Amenity and comfort
 - Climate responsive design
- b. Include minimising embodied energy and adaptive reuse in the description of the Design sustainable and greener places Principle

Caring for Country must be elevated to the highest order within the SEPP and not be subsidiary to beauty and character and should become the (new) first principle of the SEPP – (*Design to*) *Connect with Country*. It must also have its own MMfC.

Throughout the document health and safety are referenced as important overarching themes and the City agrees that they are very high order objectives. This must also be complemented with accessibility being a key issue of dignity. This must be recognised by elevating them to have their own (shared) principle – *Design healthy, safe and accessible places*. They must also have their own MMfC.

Similarly, creating places with high amenity and comfort is one of the main concerns of good design and are the main considerations of the standards in the ADG but apply equally to all other types of development. This must be recognised by elevating them to have their own (shared) principle – *Design comfortable places with good amenity*. They must also have their own MMfC.

Again, creating climate responsive (passively designed) places is one of the main concerns of good design and included in some of the main considerations of the standards in the ADG but apply equally to all other types of development. This must be recognised by elevating it to have its own principle – *Design climate responsive places*. It must also have its own MMfC.

Principle 4 that deals with sustainability needs to increase its scope to include:

- Minimising embodied energy
- Adaptive reuse (also addressing embodied energy)

These aspects must be reflected in the descriptive text of the Principle and included embodied energy and adaptive reuse integrated into MMfC 17.

Recommendation 7

Address funding issues relating to improving climate resilience (principally to sea level rise, fire, flood and extreme heat), creation of public places (streets, parks and public buildings) and process improvements.

The City strongly supports the objectives of the SEPP to improve resilience, create great public places and ensure good design of private development through development assessment and approval processes (including expanded design review for example).

The costs of achieving the above will be substantial for local government. The capacity of local government to fund these activities under current income constraints will be difficult or impossible. The City urges DPIE to establish likely resource requirements and work with local government to ensure funding is available to support these important improvements to our planning and development outcomes.

The City's detailed recommendations are at Attachment 1.

Attachments 1-5

