



Design and Place State Environmental Planning Policy

UDIA NSW Submission

February 2022

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ABOUT THE UDIA

Established in 1963, the Urban Development Institute of Australia NSW (UDIA) is the peak industry body representing the leading participants in urban development in NSW. Our more than 450 member companies span all facets of the industry including developers, consultants, local government and state agencies. We have a strong commitment to good growth in the regions. A quarter of our members are based in regional NSW, and we have active Chapters in the Hunter, Central Coast, and

Illawarra Shoalhaven. Our advocacy is based on creating liveable, affordable and connected smart cities.

EXECUTIVE SUMMARY

The Design and Place State Environmental Planning Policy (DP SEPP) is the most comprehensive reform of the NSW planning system since the unsuccessful 2013 White Paper: A new planning system for NSW. It attempts to introduce a principles-based framework to drive design and environmental outcomes across development of all scales and typologies in NSW. It will impact on strategic planning (rezoning) and development applications alike across metropolitan, infill and greenfield locations, and regional and rural locations. Attempting to provide blanket controls for the entire state of New South Wales (NSW).

UDIA has worked constructively with Government, the NSW Government Architect (GANSW) and the NSW Department of Planning and Environment (DPE) with a taskforce of members to address the major issues with the DP SEPP since the exhibition of the Explanation of Intended Effect (EIE) in February/March 2021. We commend the level of consultation that has occurred with industry and stakeholders since that period. However, the package as exhibited fails to address our major concern, being the impact on development feasibility, and will be disastrous for housing supply and delivery in NSW, adding time, cost and complexity to an already broken system. As such the DP SEPP is not supported by UDIA NSW. **We are calling on the Government to cancel the policy due to its unacceptable impacts on housing supply and affordability.**

UDIA modelling has shown that to meet the increased BASIX standards (thermal requirements) alone will add **an additional \$30,000 or more to the cost of building a new home**. The imposition of new standards under the Apartment Design Guide (UDG), the introduction of the new Urban Design Guide (UDG) and requirement to prepare a site-specific Development Control Plan (DCP), the requirement for more detailed technical information upfront for Design Review Panels (DRP) and demonstrating compliance with the SEPP will increase costs and complexity of development proposals and **add up to 6 months to the process**. This will contribute further to the NSW planning systems reputation as the worst in the country.

UDIA remains a strong advocate for improved design outcomes, advancing Aboriginal cultural heritage and the move towards Net Zero and increased environmental standards. We will continue to work with Government to proceed with aspects of the reforms which have merit, but on the whole the DP SEPP and supporting package fail to have adequate regard to development feasibility and the impact on housing supply and delivery.

UDIA NSW is calling on Government to:

- **Immediately cancel the Design and Place SEPP and supporting package due to the disastrous impact it will have on housing supply and delivery in NSW.**

- **Work with industry to develop a pathway to deliver improved design outcomes, increased Aboriginal cultural heritage and increased environmental standards aligned with the plan for NetZero that has regard to development feasibility and the impact on housing supply and delivery.**

Our submission provides a detailed analysis of the impact of the DP SEPP and supporting package, drawn from the experiences of our 450 members in many sectors including, development, consultancy, local government, and state agencies. We have constructively engaged with Government during the development of the DP SEPP. However, the package as exhibited fails to acknowledge our main point of concern, that being the impact it will have on new housing supply, delivery and household affordability. We have critically assessed each component of the DP SEPP and supporting package and have provided recommendations to proceed where possible, noting the cancellation of the policy is the best course of action for NSW.

If the policy is not immediately cancelled, this submission recommends amendments that must be implemented to ensure the worst impacts on housing supply and delivery are avoided. The policy must be delayed until such time as these recommendations are adopted and a pathway forward mapped out in consultation with industry.

Recommendations:

Draft Design and Place SEPP:

1. **Delay the introduction of the DP SEPP until such time as revised principles can be developed which are practical and achievable under the NSW system.**
2. **The DP SEPP be amended to reinstate ‘consideration’ with the design principles as the appropriate test for consent authorities when determining an application.**
3. **Implement an extensive and ongoing education program for local government assessing officers to provide them with the skills and confidence to apply the ADG in a flexible outcome-focused manner.**
4. **The DP SEPP be updated to reference the new Employment Zones currently being transitioned to by local government.**
5. **The savings and transitional arrangements be redrafted to ensure the DP SEPP does not apply to a development application that is part of a concept development consent, or to a modification if the original consent was issued prior to the commencement of the DP SEPP.**
6. **Establish an industry working group to define ‘urban design development’ having regard to the significant requirements of the DP SEPP and UDG and scale, type and geographical location of development.**

Environmental Planning and Assessment Amendment (Design and Place) Regulation 2021:

7. **The definition of urban designer be expanded to include a person who has a qualification in urban design with 10 years’ experience in precinct or master planning and a ‘registered surveyor’ with 5 years’ experience in precinct or master planning.**

8. The requirement for who can prepare a design verification statement involving public and common space, irrespective of size, be expanded to include urban designers, architects and town planners.
9. Government should work with industry to establish a pathway forward for increased environmental standards, including the uptake of electric vehicles, which has regard to development feasibility and the impact on housing supply and delivery.

Section 91 Direction:

10. DPE coordinate its internal teams to avoid the potential undermining of the reforms of one team by the efforts of the DP SEPP team, improving the planning proposal/rezoning process without introducing new complexity into the process. Furthermore, DPE to work with industry to development an improved planning proposal/rezoning process which makes NSW more competitive.

Revised Apartment Design Guide (ADG):

11. Remove the 225° test as it creates perverse outcomes and does not deliver the desired intent to establish a simple DTS solution for natural cross ventilation.
12. Clarify what the intent of study room requirements are and whether only those defined as a habitable room, meeting the width and size criteria and having a door, are acceptable and added to the minimum apartment size.
13. The solar access window be extended to 4pm on 22 June.

Urban Design Guide (UDG):

14. Do not proceed with the UDG as drafted under the DP SEPP due to the added time, cost and complexity and impact on housing supply and delivery. Reinstate the UDG principles as guidance to inform early precinct planning and master planning processes without statutory weight.
15. Industrial development be excluded from strict compliance with the UDG and the design criteria and guidance be used to inform design rather than restrict it.
16. Use the widely accepted Net Developable Area as the basis to determine residential density and open space provisions.

Residential Sustainability (BASIX):

- 17. The increased environmental standards and update to BASIX should be paused until an industry working group is established to develop a staged pathway forward having greater regard to development feasibility and the impact on housing supply and delivery.**
- 18. See recommendation 17.**
- 19. A revised cost benefit analysis be undertaken in conjunction with industry once a refined pathway forward for increased standards is prepared and all detail is made publicly available.**
- 20. Not proceed with the increased standards until such time as the Materials Index is made available to industry, its impacts can be tested and a staged introduction which has regard to feasibility mapped out.**
- 21. Establish an industry working group to co-design an approach to improving resilience in the NSW planning system.**
- 22. The update to BASIX be halted until such time as the NatHERS software tools are released and the climate files updated.**
- 23. The increased environmental standards be put on hold until such time as a pathway for implementation can be developed with industry and adequate savings and transitional arrangements finalised to limit the impact on development feasibility.**

Design Review Panel Manual for Local Government:

- 24. Do not require industrial developments to undertake a design review process due to the limited benefit this would add to outcomes while increasing time and cost.**

Connecting to Country

- 25. Work with industry to map a process where DPE and a local government lead engagement on Aboriginal cultural heritage, as part of the preparation of Local Environmental Plans and Strategic Plans.**

BACKGROUND

Throughout the course of the past 12 months UDIA has expressed ongoing concerns that the policy does not have adequate regard for development feasibility and would be disastrous for housing supply and delivery in NSW. The policy continues to focus on overly ambitious design outcomes even after internal modelling for the proposed ADG changes has demonstrated the devastating impact this would have on development feasibility. Good public policy must balance the introduction of new provisions to deliver on the desired intent, with the negative impacts associated with the new requirements. The

development of the DP SEPP failed to do this from the outset. The Cost Benefit Analysis (CBA) exhibited in support of the policy, is a high-level summary and affords little to no detail on the assumptions that underpin the modelling. It provides industry and stakeholders with no ability to adequately interrogate the results. We have on numerous occasions through numerous routes, requested access to the complete CBA. This has been refused. As such UDIA cannot support the outcomes of this modelling and is calling on Government to act according to their own commitment to public consultation and release the full detailed analysis.

The release of the policy could not come at a worse time for NSW as we are struggling to recover from the impact of the COVID-19 pandemic, construction shutdowns, worker shortages, supply chain issues and increased cost of materials. The increased cost of materials alone is having a devastating impact on development throughout NSW. Developers of all sizes are not immune to these impacts. The DP SEPP runs the very real risk of significant damage to the construction industry and resultant loss of jobs, decrease in housing supply, worsening affordability and decline in state productivity. This is a dramatic statement and we do not make it for effect. Our members across all sectors are telling us this.

The inadequate consultation, lack of transparency in the process and exhibition material are cause enough for the policy to be cancelled. If the package is not cancelled the introduction of the provisions must be delayed until such time as all the detailed material, including the CBA modelling and environmental standards, are released and can be critically assessed. A genuine assessment will enable all the trade-offs (environment, affordability, design benefit etc.) to be evaluated.

The policy, to be workable, must be amended to ensure it does not devastate an already fragile housing supply. UDIA remains committed to working with Government to ensure a path forward for the beneficial aspects of the reform, such as improved environmental performance. Industry alongside Government can seek to deliver on the intent of the reforms in a way that truly improves the NSW planning system, reduces timeframes, costs and complexity and encourages investment in NSW. A simpler and more efficient system will promote confidence, reduce red tape and risk, and in turn reduce upfront costs, including those incurred by increasing fees and charges, technical requirements and holding costs.

CONSULTATION PROCESS

The development of the DP SEPP and supporting package, has been a failure in stakeholder consultation and is at odds with the NSW Government's own stated commitment to public engagement. The policy direction was set prior to the exhibition of the EIE, prioritising design with little regard to development feasibility. It seeks to deliver subjective enhanced aesthetic outcomes through the introduction of additional complexity, increased costs and time, in an already broken planning system.

To the Government's credit, we acknowledge that the consultation process following the exhibition of the EIE was improved, through the introduction of policy working groups and UDIA and its members responded to this with a full commitment to participate. However, the working groups were poorly

coordinated, affording little to no opportunity to comment on policy changes prior to each session. Ultimately, the process felt like a tokenistic attempt to appease industry, rather than offer of genuine engagement to develop and improve policy. The Apartment Design Guide (ADG) policy working group was a notable exception to this. However meaningful changes only occurred following internal financial modelling that corroborated what industry had been stating all along, that the original proposed changes would have made apartment development in NSW unfeasible.

The additional policy working groups on the new Urban Design Guide (UDG), changes to the design review panel process and increased environmental standards (BASIX) afforded little to no detailed information to engage with and respond to. The development of the DP SEPP and supporting package was rushed through to exhibition behind closed doors, without addressing the fundamental concerns of industry, that it will negatively impact the supply and delivery of housing in NSW.

It is damning to note that the information released as part of the exhibition of the DP SEPP and supporting package, still lacks fundamental details required for industry and all stakeholders to critically assess the policy. The detailed cost benefit analysis undertaken by Government, and in accordance with NSW Treasury requirements Better Regulation Statement, has not been made available. Rather a summary of the modelling has been provided which highlights increased costs to individuals and utilises the Wider Economic Benefits (WEBs) to society to justify the policy. This lack of transparency is alarming and supports the cancellation of the policy until such time as this is released and can be adequately assessed.

The increased environmental standards (via BASIX) has also failed to provide all necessary information for assessment during this exhibition period. The BASIX sandbox tool, which is the beta version of the BASIX tool, has not been released for multi-dwellings at the time of writing this submission. It is critical to understand the impact of the proposed increased standards across all development types. UDIA has been supportive of environmental standards which deliver improved outcomes for the environment, homeowner and community, however this failure to release the sandbox tool makes it impossible to support the changes at this time.

UDIA NSW remains supportive of the intent to deliver improved design, Aboriginal cultural awareness and environmental outcomes. We are committed to working with Government to progress certain aspects of the reform, having greater consideration to development feasibility and the impact on housing supply and delivery. In order to do this, Government must act on its commitment to genuinely engage with industry and map a pathway forward which has greater regard to development feasibility.

DRAFT DESIGN AND PLACE SEPP 2021

Introduction of a Principles Based Policy in NSW

The DP SEPP is attempting to be the first principles-based SEPP in NSW, introducing detailed design and environmental principles into the policy to promote consistent outcomes across the state. While the intent to improve design and environmental outcomes and promote consistency across the state is supported, the DP SEPP will ultimately fail to achieve this. The policy and supporting package fail to acknowledge the huge impost this will have on local planning authorities, in particular the level of

resourcing and training that would be required to upskill assessing officers and the need for monitoring to ensure any inconsistency in the nature in which principles will be applied is avoided.

In an attempt to provide more information, the DP SEPP includes detailed design considerations for each of the design principles. However, these considerations are worded in such a way that an assessing officer will have little to no chance of determining if a development is consistent with them and ultimately the design principles.

For example:

16 Design consideration—culture, character and heritage

The consent authority must consider whether—

(a) the development detracts from the desired character of the area, and

For areas where a Local Character Statement has not been prepared, vacant greenfield locations or areas experiencing change, an assessing officer could not reasonably make this determination. In established areas, assessment is equally fraught. The definition of “Desired Future Character” has been subject to numerous NSW Land and Environment Court (LEC) matters and the many judgments and case law demonstrate the contested nature of this issue. This will lead to conflict and greater discrepancies as different authorities determine ‘consistency’ in their own jurisdiction. This will likely result in more development applications being referred to the LEC to make a judgement and set a precedent as to how the principles are considered and consistency determined.

UDIA recommends:

- 1. Delay the introduction of the DP SEPP until such time as revised principles can be developed which are practical and achievable under the NSW system.**

Consent authority to be satisfied that development is consistent with Design Principles

The Draft DP SEPP elevates the test for consent authorities when assessing a proposal against the design principles. The current wording in *State Environmental Planning Policy No 65 – Design Quality of Residential Apartment development (2002 EPI530)* requires a consent authority to take into consideration the design quality in accordance with the design quality principles prior to issuing a consent.

28 Determination of development applications

(2) In determining a development application for consent to carry out development to which this Policy applies, a consent authority is to take into consideration (in addition to any other matters that are required to be, or may be, taken into consideration)—

- (a) the advice (if any) obtained from the design review panel, and*
- (b) the design quality of the development when evaluated in accordance with the design quality principles, and*
- (c) the Apartment Design Guide.*

The wording in the Draft DP SEPP elevates the consent authority’s assessment from ‘consideration’ of the design principles to being ‘consistent’ with the design principles.

13 Consideration of design principles and design considerations by consent authority

(1) *Development consent must not be granted for development to which this Policy applies unless the consent authority is satisfied that the development is consistent with the design principles.*

This is a major elevation in the test to comply with the design principles. It will cause significant difficulty for assessing officers to determine consistency and provides for no flexibility. For example, how will a Planning Authority be satisfied that the subjective principle of “aesthetics” has been satisfied? Planning Panel advice is only one opinion. Flexibility is a fundamental requirement in a principles-based policy, as it needs to acknowledge the differing scope and breadth of developments across the entire state and allow instances where a departure from one of the stated principles will result in a better design or environmental outcome.

UDIA recommends:

2. The DP SEPP be amended to reinstate ‘consideration’ with the design principles as the appropriate test for consent authorities when determining an application.

Flexible application of the Apartment Design Guide (ADG)

The DP SEPP seeks to ensure the flexible application of the ADG through the inclusion of the following provisions in the SEPP.

30 Objectives of Apartment Design Guide

(3) *In determining whether development meets the objectives of the Apartment Design Guide, the consent authority must—*

(a) *apply the design criteria and design guidance set out in the Apartment Design Guide flexibly and consider alternative solutions, and*

(b) *consider the objectives of the Apartment Design Guide only in relation to the particular development application.*

While the intent to ensure the ADG is applied flexibly is strongly supported, UDIA remains concerned that the inclusion of these provisions will do little to ensure that flexibility is considered during the application process. The ADG advises that the objectives can be achieved by meeting the design criteria and guidance which include metrics that set minimum base line standards for design and environmental outcomes. An assessing officer who is unable or unwilling to make a judgement-based merit assessment, is likely to default to the stated metrics when determining an application. This situation already prevails in many planning authority assessments with the current ADG and it is likely that it will continue to be the case even with the inclusion of the proposed provisions.

To ensure the flexible application of the ADG is used to its fullest extent, an extensive and ongoing education program is required to upskill assessing officers to give them confidence to make merit-based decisions. This will require a cultural change within planning in NSW, from a system which is risk adverse, to one that is outcome focused.

UDIA Recommends:

- 3. Implement an extensive and ongoing education program for local government assessing officers to provide them with the skills and confidence to apply the ADG in a flexible outcome focused manner.**

New Employment Zones

The DP SEPP makes reference to the existing business and industrial zones. Local Governments are currently in the process of transitioning to the new employment zone framework introduced by DPE back in May 2021. The DP SEPP was exhibited seven months after this.

UDIA recommends:

- 4. The DP SEPP be updated to reference the new Employment Zones currently being transitioned to by local government.**

Savings and transitional provisions

The savings and transitional provisions for concept development applications and modifications to a development consent outlined within the DP SEPP are inadequate and will cause significant harm to the realisation of projects and housing supply and delivery. UDIA does not support these provisions as drafted.

Concept DAs are often lodged for large scale multiple stage developments. Each stage can require multiple years to proceed to the development application stage, rolled out sequentially from the initial concept approval. The proposed provisions would require DAs lodged more than 2 years after the concept approval to apply the new provisions of the DP SEPP. This may require a significant reworking of the proposal to comply with the new provisions and will add to the time and cost to deliver projects. It will impact on development feasibility and certainty, and slow down the delivery of housing in NSW.

The application of the DP SEPP provisions to modifications of consent lodged after 2 years from the original development consent, is also not supported. This will have the same impact as the concept approval concern we note above. It will require a significant reworking of projects to comply with the new provisions. This will deter applicants from lodging modifications to improve development outcomes, as the application of the new provisions will add time and cost to a proposal.

UDIA Recommends:

- 5. The savings and transitional arrangements be redrafted to ensure that the DP SEPP does not apply to a development application that is part of a concept development consent, or to a modification if the original consent was issued prior to the commencement of the DP SEPP.**

Meaning of Urban design development

The definition of 'urban design development' as proposed with the DP SEPP is too broad.

6 Meaning of "urban design development"

- (1) In this Policy, urban design development means the following development—**

- (a) development on land that is not in an industrial zone that has a site area greater than 1 hectare,
- (b) development on land in an industrial zone that has—
 - (i) a capital investment value of \$30 million or more, and
 - (ii) a site area greater than 1 hectare,
- (c) development in relation to which an environmental planning instrument requires a development control plan or master plan to be prepared for the land before development consent may be granted for the development

Notwithstanding this confused phraseology, the use of a single metric for non-industrial sites greater than 1 hectare is not appropriate in all circumstances. In rural and regional locations this will capture very basic subdivisions of possible 2 or 3 lots and require compliance with the Urban Design Guide (UDG) and likely preparation of a site-specific Development Control Plan (DCP). The metric will also capture procedural subdivisions where the subdivision will occur on ‘paper’ but have no material development. This will add time, cost, and complexity to these basic subdivisions, impacting not only the proponents who have to prepare additional information but also the consent authority that needs to assess the application and the community, as housing supply and delivery is impacted.

The definition also captures development on land in an industrial zone with a Capital Investment Value (CIV) of \$30 million or more and a site area greater than 1 hectare. Many basic warehouse type industrial developments will meet these requirements and be subject to the DP SEPP and UDG provisions. Industrial developments of this scale largely consist of warehousing and distribution facilities which have a consistent ‘big box’ form. The need to comply with the provisions of the UDG will significantly impact development yield, increase costs and delay the delivery of these projects which are crucial to the state’s economic function (employment, servicing communities and state GDP).

UDIA recommends:

6. Establish an industry working group to define ‘urban design development’ having regard to the significant requirements of the DP SEPP and UDG and scale, type and geographical location of development.

ENVIRONMENTAL PLANNING AND ASSESSMENT AMENDMENT (DESIGN AND PLACE) REGULATION 2021

Definition of urban designer

The definition of an urban designer proposed will only include a qualified town planner, landscape architect or architect with 5 years’ experience in precinct or master planning.

[1] Clause 3 Definitions

urban designer means the following—

- (a) a qualified town planner with at least 5 years’ experience in precinct or master planning,
- (b) a landscape architect with at least 5 years’ experience in precinct or master planning,
- (c) an architect with at least 5 years’ experience in precinct or master planning.

This definition should be expanded to include someone who is a qualified urban designer and who has 10 years relevant experience in urban design irrespective of whether they have a planning, architecture, or landscape architecture qualification. The additional experience is recognition of the lack of a professional body specific to urban designers.

Many Registered Surveyors also have extensive experience in precinct and master planning. A Registered Surveyor with 5 years' experience in this area should be included in the definition of urban designer.

UDIA Recommends:

- 7. The definition of urban designer be expanded to include a person who has a qualification in urban design with 10 years' experience in precinct or master planning and include a 'registered surveyor' with 5 years' experience in precinct or master planning.**

Design verification statement

The requirements under Clause 57 outlining when a design verification statement (DVS) is needed and who can prepare one are overly prescriptive. Clause 57 (4) provides that only a landscape architect can prepare a design verification statement for a development involving public or common space of more than 1,000sqm. This will require engaging separate consultants, all at added expense and time, to prepare separate aspects of the DVS. An urban designer, architect or town planner, as defined within the regulations, should be sufficiently capable of preparing a DVS for public or common open space irrespective of the size.

UDIA recommends:

- 8. The requirement for who can prepare a design verification statement involving public and common space, irrespective of size, be expanded to include urban designers, architects and town planners.**

Condition relating to charging facilities for electric vehicles

The inclusion of conditions of consent requiring car parking to be electric vehicle ready, is an upfront cost on development which may not deliver any tangible benefit to its residents in the short term. While UDIA support 'future proofing' development the uptake of electric vehicles in Australia is slow and any benefit in providing the infrastructure to support future charging is offset by the increased cost to development and impact on housing supply and delivery in the short term. Government should work with industry to establish a pathway forward for increased environmental standards, including the uptake of electric vehicles, which has regard to development feasibility and the impact on housing supply and delivery. Future benefits need to be assessed against immediate additional costs.

UDIA recommends:

- 9. Government should work with industry to establish a pathway forward for increased environmental standards, including the uptake of electric vehicles, which has regard to development feasibility and the impact on housing supply and delivery.**

SECTION 91 DIRECTION

Application of the Direction

The Ministerial Direction seeks to ensure the provisions for DP SEPP and in particular the UDG are considered early in the planning process, including during planning proposals. Furthermore, the broad application of the Direction to apply when a planning authority prepares a planning proposal affecting land greater than 1 hectare in area and within an existing or proposed residential, commercial, mixed use or industrial zone, will capture a large proportion of development in the state.

It will ensure the additional requirements of the DP SEPP and UDG must be considered and assessed as part of a planning proposal. However, it will come at a huge administrative expense, extended timeframes and effort for all parties. Rather than improving the NSW planning system, these requirements only add to the complexity of the system, introducing new processes and requirements, adding to cost and time delays.

Of significance, the development of the Draft DP SEPP and Ministerial Direction appear to have been done without regard to DPEs own reform program to improve the planning proposal/rezoning process. This work needs to be aligned, as any improvement to the planning proposal process will be undermined by the introduction of additional requirement under the DP SEPP.

UDIA recommends:

10. DPE coordinate its internal teams to avoid the potential undermining of the reforms of one team by the efforts of the DP SEPP team, improving the planning proposal/rezoning process without introducing new complexity into the process. Furthermore, DPE to work with industry to development an improved planning proposal/rezoning process which makes NSW more competitive.

Further explanation of the major issues with the application of the Ministerial Direction are contained in the DP SEPP and UDG sections of this submission.

REVISED APARTMENT DESIGN GUIDE (ADG)

As noted earlier in this submission the development of the revised ADG was a singular point of constructive engagement in the development of the DP SEPP. While the worst aspects of the proposed ADG have been removed, the UDIA remains concerned about a number of proposals which remain. These are further explained below.

A full assessment of the proposed ADG changes is attached as Appendix A. It highlights areas where the ADG will still have an impact on development feasibility.

Natural Cross Ventilation

The exhibited ADG requires that for an apartment to meet the deemed to satisfy (DTS) solution for natural cross ventilation, they must be either:

- a cross-through, corner and roof-window,
- or it must provide 225° wind exposure to openings; AND have limited obstruction to the wind from the building form; AND have opening distribution and sizes that satisfy EOA 5% etc.

This was demonstrated to be an impractical test during the policy working groups and subsequent follow up meetings, where many award-winning apartment projects would not comply.

The 225° test does not allow for any designs with 7 or more apartments with a single core and a rectangular floorplate to be a DTS solution. Every building will either automatically require 2 cores or must go down the alternative pathway of wind testing. This will be detrimental for all building designs but extremely high impact for mixed use buildings with several residential buildings on top of a podium (where the intent is to minimise the impacts of lifts/stairs through the non-residential floorplates). Such dramatic building requirements will further impact development yield and feasibility, housing supply, delivery and affordability.

Ironically, the requirements are so severe they will now require Masterplan and building design to prioritise wind as the first goal. Other equally important goals (e.g solar access, public domain, open space, streetscape and good urban outcomes) will be relegated to a distant second. It will deliver perverse outcomes and is the opposite of how good urban design should be thought about.

UDIA recommends:

11. Remove the 225° test as it creates perverse outcomes and does not deliver the desired intent to establish a simple DTS solution for natural cross ventilation.

Study Rooms as a Habitable Room

The proposed ADG provisions are not clear as to what the requirements are for a study room. The provisions as drafted appear to require Study Rooms to be a minimum width of 2.4m, be a minimum 7sqm and to have a door to be considered a habitable room. GANSW has also stated that the 'habitable room' would need to be added on top of the minimum apartment size. Applying this logically would mean that a study nook without a door can be more flexible in size and width and doesn't need to be added on top of the minimum apartment sizes.

This may lead to perverse outcomes whereby removing a door or window or having the study space completely internal with borrowed light would be a more acceptable solution under the proposed DP SEPP.

UDIA recommends:

12. Clarify what the intent of study room requirements are and whether only those defined as a habitable room, meeting the width and size criteria and having a door, are acceptable and added to the minimum apartment size.

Solar access

The GANSW acknowledged the advice of industry during the policy working groups and extended the solar access provisions from 9am to 8am. This is a meaningful and practical change which will deliver improved design and environmental outcomes. However, GANSW have been steadfast in its refusal to extend the provisions from 3pm to 4pm. This refusal is unjustified. The increased hour in the afternoon will not increase overshadowing of adjacent properties. It only seeks to give more flexibility in the apartment designs for west orientations and less reliance on angling walls just because the site orientation is not ideal.

UDIA recommends:

13. The solar access provisions be extended to 4pm on 22 June.

URBAN DESIGN GUIDE (UDG)

The introduction of the Urban Design Guide (UDG) is not supported. The consultation process following the EIE and during the development of the guide was grossly inadequate. Little to no detail was provided during the consultation stage, affording no opportunity to critically assess what was proposed and provide constructive feedback. Accordingly, the UDG which has been exhibited will increase time, cost and complexity in the system and negatively impact housing supply and delivery.

While it is imperative that urban design outcomes are considered during a precinct planning and master planning process, these considerations should guide outcomes rather than be mandated through state policies. Industry alongside government is already incorporating these principles into their design and delivering good outcomes without the need for added complexity and red tape in the system.

Application of UDG to Development Applications

The introduction of the UDG will significantly increase approval timeframes, particularly in areas which are already subject to site specific DCPs and neighbourhood plans. Guidance contained in the UDG are considerations during precinct planning and master planning processes, which is the appropriate time to consider high level strategic outcomes across any given area. The application of the UDG at the development application stage will only add to time, cost and complexity of the system. In greenfield precincts it will add an unnecessary third step: DCP; Neighbourhood Plan and then UDG. A single development application should not be subject to duplicitous provisions which serve little benefit to the broader community. The impost on proponents and assessing authorities alike will be substantial.

Furthermore. Some provisions will result in reduced yields due to tree canopy requirements up to 40%, maximum block lengths of 250 metres and mid-block connections of no more than 130 metres apart, requiring additional time and costs for engaging consultants and added assessment timeframes. This runs contrary to the stated intent to improve the NSW planning system and create a more streamlined process.

Consideration of urban design outcomes during precinct planning and master planning processes is appropriate and the UDG could be used to guide discussion during early stages of these processes.

However, it should not be given statutory weight through a state policy and not be applied at the DA stage.

UDIA recommends:

- 14. Do not proceed with the UDG as drafted under the DP SEPP due to the added time, cost and complexity and impact on housing supply and delivery. Reinstate the UDG principles as guidance to inform early precinct planning and master planning processes without statutory weight.**

Impact of the UDG on Industrial Development

As stated above the application of the UDG will require extensive additional assessment and documentation, adding to DA timeframes and cost. This is especially true for industrial development. Many of the UDG objectives and criteria are inappropriate to the industrial/warehouse building typology, but will apply, nonetheless.

The UDG is clearly drafted with a primary focus on commercial and residential development. It includes requirements such as reduced site areas to support walkability and permeability; street activation and parking required to rear of the site which are problematic or inappropriate for industrial developments to comply with.

The requirements for 15% deep soil and 25% to 35% canopy cover required for industrial/warehouse sites will require significantly more land to deliver a warehouse of the same Gross Floor Area (GFA). This will ultimately result in additional and unsustainable urban sprawl. The requirement for additional land further reduces the competitiveness of industrial/warehouse development in NSW compared with other states. Efficient land use consolidation, rather than requiring more site area to deliver industrial/warehouse uses, would free up land for higher order alternative uses or public recreation.

The additional land needed to deliver the same industrial development outcome will increase the cost in delivery of employment activities in NSW, which will be passed on to the sector in rents or sales and ultimately be felt by end users. Importantly, it will make NSW uncompetitive for footloose investment that can simply “vote with its feet” and invest and locate in neighbouring states that are more welcoming.

The additional deep soil and canopy cover requirements, particularly for brownfield/infill site redevelopment, would remove incentive for replacing old contaminated industrial development with cleaner more sustainable warehouse development.

UDIA recommends:

- 15. Industrial development be excluded from strict compliance with the UDG and the design criteria and guidance are used to inform design rather than restrict it.**

Gross developable Area

The use of Gross Developable Area (GDA) as the basis to determine density and open space provisions, rather than the universally used Net Developable Area (NDA) is not supported.

NDA has now been adopted throughout Precinct planning in NSW. It is embodied in legislation, LEPs, DCPs and VPAs. Using a gross figure will create unnecessary confusion. Importantly, it will cause different sites to provide disproportionate open space and densities, due to other land uses being permitted within the GDA definition. Density and open space should only really apply to residential land uses. The density requirements using GDA would see development outcomes inconsistent with the type of built form.

UDIA recommends:

- 16. Use the widely accepted Net Developable Area as the basis to determine residential density and open space provisions.**

RESIDENTIAL SUSTAINABILITY (BASIX)

UDIA NSW is a strong advocate for improved environmental outcomes and recognises and supports the NSW Government's pathway to NetZero. Our members are leaders in providing energy and water efficient developments that benefit residents and the broader community alike. While we are calling for the cancellation of the DP SEPP and the supporting package, including the increased environmental standards and update to BASIX, we are committed to working with Government to establish a pathway forward on this agenda, which has greater regard to development feasibility. Working with industry will enable a staged approach which delivers improved outcomes and a more timely and efficient manner, without negatively impacting on housing supply and delivery.

UDIA recommends:

- 17. The increased environmental standards and update to BASIX should be paused until an industry working group is established to develop a staged pathway forward having greater regard to development feasibility and the impact on housing supply and delivery.**

Inadequate exhibition material

As discussed earlier in this submission the material provided as part of the exhibition package for the increased environmental standards and the update to BASIX are inadequate. They do not make it possible to critically assess the impact of the changes and therefore cannot be supported. The sandbox tool for multi-dwellings has not been released as part of the exhibition package. It is now stated that this will be released later in 2022. Industry needs to assess the impact of the proposed changes utilising the sandbox tool now, before any increased standards can be supported.

In addition to the sandbox tool the introduction of a materials index which has regard to embodied emissions is a huge change for NSW and will have significant ramifications for developers, builders, manufacturers and supply chains. This is not a proposal that can be rushed to adoption without significant consideration and industry collaboration. Industry needs to be involved in the development of the materials index to ensure it is introduced appropriately, affording time to test and develop

materials, alter supply chains and understand the impact on building costs. Introducing this at a time when the cost of building materials is skyrocketing will further worsen the housing supply and affordability crisis.

UDIA recommends:

18. (Recommendation 17) The increased environmental standards and update to BASIX should be paused until an industry working group is established to develop a pathway forward having greater regard to development feasibility and the impact on housing supply and delivery.

Cost Benefit Analysis

The Cost Benefit Analysis prepared by ACIL ALLEN in support of the increased BASIX standards states that for an average home to meet the higher BASIX standards it will cost an additional \$7,000 AUD with the benefits to be recouped over the life of a mortgage.

However, any additional upfront costs will have an impact on development feasibility. Development feasibility does not, and cannot, consider long term Lifecycle costs. The developer generally exits the development upon completion of construction. They take their profit at that time and any lifecycle savings are not realisable. Furthermore, purchasers rarely consider Lifecycle costs as the average length of ownership (if a dwelling) is only 7 years and lifecycle costs play no role in the consideration of price by either a vendor or purchaser. To compound matters, where a property is an investment that generates income, lifecycle costs are depreciated further negating their contribution to a genuine cost benefit analysis.

Ultimately, at a time when industry is facing massive supply chain disruptions and rapidly increasing cost for materials as a result of the COVID-19 pandemic, adding costs to construction is illogical. These costs will squeeze margins and may make development unviable, reducing the supply of housing in NSW and worsening the affordability crisis. The notion that costs can be passed on to home purchasers and accepted is not supported. Home purchasers are already financially overextended due to rapidly increasing house prices and do not have the means to absorb continued added costs. Should interest rates and inflation increase in the foreseeable future, as expected, this crisis will worsen.

Internal modelling detailed in Appendix B highlights that to meet the increased thermal requirements alone, this may add an additional \$30,000 AUD to an average home. This discrepancy in financial modelling outcomes demonstrates why it is crucial for industry to be involved in determining the pathway forward for increased environmental standards. Industry has the experience and expertise to test scenarios and deliver improved outcomes, while having regard to development feasibility which is at the core of their business.

UDIA recommends:

19. A revised cost benefit analysis is undertaken in conjunction with industry once a refined pathway forward for increased standards is prepared and all detail is made publicly available.

Introduction of a Materials Index

The exhibition package proposes to introduce a Materials Index but provides very little information. The introduction of a Materials Index without any detail is of great concern to the development of class 1 buildings due to its potential cost and supply implications. It is imperative that industry has access to the materials index to assess changes required for proposed compliance and impact on procurement pipelines.

Time is also needed for manufacturers to understand the Index and ensure their products can meet the desired standards or know the future standards to which new products will be measured and the transition timeframes associated.

UDIA recommends:

- 20. Do not proceed with the increased standards until such time as the Materials Index is made available to industry, its impacts can be tested and a staged introduction which has regard to feasibility mapped out.**

Design for Resilience

Very little information has been released on designing for resilience. This is an extremely important matter for industry and the community and something which needs to be introduced correctly. The impacts of recent fires, floods and the pandemic are front and centre of public debate and the industry is grappling to understand what direction Government wishes to take with this initiative. UDIA is supportive of initiatives to improve designs which incorporate resilience, but to date not enough information has been provided.

UDIA recommends:

- 21. Establish an industry working group to co-design an approach to improving resilience in the NSW planning system.**

NatHERS

Most of the NatHERS software tools have not been provided as part of the exhibition and therefore there is no ability to test the impacts against the updated climate files and star bands. Furthermore, the updated standards are using climate files from 1990 – 2015. These are grossly out of date and need to be updated.

UDIA recommends:

- 22. The update to BASIX be halted until such time as the NatHERS software tools are released and the climate files updated.**

Implementation and transition to Increased standards

The transitional and savings arrangements for the increased environmental standards and the changes to BASIX are unclear. It is not defined when the changes would be introduced or how this would impact on modifications and/or contracts. Many new home purchasers are signing contracts for builds to be

completed over the next 12 to 18 months. The increased environmental standards when introduced will have an immediate impact on the cost of delivering these new homes and must be worn by either the developer or new home buyer. Therefore it is crucial the savings and transitional arrangements are appropriately worked through to enable industry to assess the full impacts of the changes and map a pathway forward which has the least impact on housing supply and delivery.

UDIA recommends:

- 23. The increased environmental standards be put on hold until such time as a pathway for implementation can be developed with industry and adequate savings and transitional arrangements finalised to limit the impact on development feasibility.**

DESIGN REVIEW PANEL MANUAL FOR LOCAL GOVERNMENT

Design Review Panel Requirements for Industrial Development

Industrial/warehouse developments are a typology with limited architectural options. They generally consist of a warehouse, hardstand, car park and perimeter landscaping. These parameters are set by their function. Therefore, the value that would be added by a Design Review Panel is questionable.

The role of the Panel Assessment would essentially be a façade design exercise. As there are limited architects with Industrial experience, it is questionable whether Panel members will have relevant experience to appropriately assess industrial/warehouse development.

There is also a genuine concern that a Panel, with limited understanding of the functional requirements of industrial/warehouse development, may assess the DA through the lens of commercial or residential developments and provide inappropriate feedback on design which would be problematic to address in proposed schemes. Due to the limited value the DRP process would add, compared to the time and cost impost, it should not be applied to industrial developments.

It should be noted that due to the competition amongst industrial developers to provide market leading products to attract customers, and the fact that ownership is often retained, there is increasing incentive for warehouses to present as attractively as possible with good amenity and landscaping. Blue chip architects are increasingly being used to design warehouse facades. As the industry is motivated to provide state of the art facilities, it further questions the need to have local Panels scrutinise proposed designs.

Finally, as we note in earlier comments above, the NSW industrial development sector competes with other states for investment and industry location. Importantly, it will make NSW uncompetitive for footloose investment that can simply “with its feet” invest and locate in neighbouring states that are more welcoming and offer shorter approval times and cheaper buildings.

UDIA recommends:

- 24. Do not require industrial developments to undertake a design review process due to the limited benefit this would add to outcomes while increasing time and cost.**

CONNECTING TO COUNTRY

UDIA is supportive of the intent to improve and promote Aboriginal cultural heritage and awareness through the NSW planning system. We acknowledge the draft Connecting to Country framework, and principles of partnering with and working with the appropriate First Nations representatives in the collation and assessment of cultural heritage in a Local Government Area. The value of respecting Aboriginal connection to country through the planning system cannot be understated and is supported.

However, the framework does have issues to overcome. Currently there are inadequate resources in the consultant space to deal with the issues appropriately and have adequate respect for the local First Nations representatives. To improve the process DPE and/or a local government should lead the process, guiding development in their respective areas as part of the preparation of their Local Environmental Plans or Strategic Plans.

UDIA recommends:

25. Work with industry to map a process where DPE and a local government lead engagement on Aboriginal cultural heritage, as part of the preparation of Local Environmental Plans and Strategic Plans.

CONCLUSION

UDIA remains supportive of the intent to improve design and environmental outcomes and elevate Aboriginal cultural awareness in the planning system. We have worked constructively with Government, GANSW and DPE to reshape the DP SEPP and supporting package into a positive policy for NSW. However, the package as exhibited has failed to address our fundamental concerns and will be disastrous for housing supply and delivery in NSW.

The DP SEPP must not be proceed at this time while industry and the community seek to recover from the impacts of the COVID-19 pandemic, construction shutdowns, worker shortages, supply chain disruptions and rising material costs. To do so would cripple housing supply and delivery in NSW, have a significant impact on the State's economy and only worsen the housing affordability crisis.

UDIA is committed to working with Government to support the introduction of the beneficial aspects of the policy in a considered and practical way, which has regard to development feasibility and supports an increase in housing supply and delivery.

Should you have any questions or wish to arrange a meeting to further discuss a path to proceed with the policy, please contact Michael Murrell, UDIA NSW Planning Policy Manager at mmurrell@udiansw.com.au or 0413221195.

APPENDIX A

DETAILED ASSESSMENT OF PROPOSED ADG PROVISIONS AND UDIA RECOMMENDATIONS

	Current ADG 2015	Exhibited ADG 2021	Impact on feasibility	UDIA recommendation
	<p><i>About this guide</i></p> <p><i>Application of the design quality principles</i></p> <p><i>The SEPP 65 design quality principles must be considered by design professionals when designing residential apartment development, by design review panels when giving advice on proposals and by consent authorities.</i></p>	<p><i>About this guide</i></p> <p><i>Apartment development must be consistent with the DP SEPP</i></p> <p><i>Residential apartment development in NSW must be consistent with the DP SEPP principles and considerations.</i></p> <p><i>The Apartment Design Guide objectives are derived from the DP SEPP principles and considerations and provide further detailed guidance applicable to the design and assessment of residential apartment development.</i></p>		<p>The ADG along with the DP SEPP must be redrafted to remove the requirement to demonstrate 'consistency' as this is a significant elevation of the test for assessing officers and revert back to having consideration.</p>
Site and context analysis	<p><i>1B Local Character and context &</i></p> <p><i>1C Precincts and individual sites</i></p> <p><i>3A Site analysis</i></p>	<i>1.1 Site and context analysis</i>		No comment
Building separation	<p><i>2F Building Separation</i></p> <p><i>3F Visual Privacy</i></p> <p><i>Up to 4 storeys (approximately 12m):</i></p> <ul style="list-style-type: none"> • <i>6m between non-habitable rooms</i> • <i>9m between habitable and non-habitable</i> • <i>12m between habitable rooms/balconies</i> <p><i>5 to 8 storeys (approximately 25m):</i></p> <ul style="list-style-type: none"> • <i>9m between non-habitable rooms</i> • <i>12m between habitable and non-habitable</i> • <i>18m between habitable rooms/balconies</i> 	<p><i>1.2 Built form and siting – Design Criteria</i></p> <p>No change in <u>minimum</u> separation distances.</p>		<p>See comments relating to 'building height' and Figure 1.2.7</p>

	Current ADG 2015	Exhibited ADG 2021	Impact on feasibility	UDIA recommendation
	<p><i>9 storeys and above (over 25m):</i></p> <ul style="list-style-type: none"> • <i>12m between non-habitable rooms</i> • <i>18m between habitable and non-habitable</i> • <i>24m between habitable rooms/balconies</i> 			
Building height and proportion separation	<p><i>2F Building Separation</i> <i>3F Visual Privacy</i> <i>2F. Increase building separation proportionally to the building height to achieve amenity and privacy for building occupants and a desirable urban form</i></p>	<p><i>1.2 Built form and siting – Building Height</i></p> <p>Figure 1.2.7 shows 25m (not 24m) separation for a 17-18 storey building and notes “<i>Setbacks and minimum building separation distances should increase proportionally to the building height</i>”</p> <p><i>Accommodate the following within the permissible building height: rooftop communal open space including lift and stair access and shade structures articulated roofs designed to enhance design quality.</i></p> <p><i>Table 1.2.2 and Figure 1.2.8 and Table recommend 3.6m floor to floor height for first floor residential in mixed-use</i></p>	High	<p>Redraw Fig 1.2.7 to approx. correct proportions and delete misleading doted V-line between the buildings. Text should be “Minimise multiple steps in tall buildings.”</p> <p>Exempt rooftop communal open space from LEP heights.</p> <p>Correct Figure 1.2.8 by deleting 2.7m floor to floor height for Residential habitable at 2nd floor.</p>
Site access and address	<i>3G Pedestrian access and entries</i>	<i>1.3 Site access and address</i>		No comment
Relationship to the street	<i>3C Public domain interface</i>	<i>1.4 Relationship to the street</i>		No comment
Deep soil	<p><i>3E Deep soil zones – Design Criteria</i></p> <p><i>Deep soil 7% of site area</i> <i>Minimum dimensions for site area:</i> <i><650m² – n/a</i> <i>650m² – 1,500m² = 3m</i> <i>> 1,500m² = 6m</i></p> <p><i>Design Guidance</i></p>	<p><i>1.5 Green Infrastructure – Design Guidance</i></p> <p><i>Deep soil per site area < 1,500m²</i> <i>Minimum dimension = 3m</i> <i>Deep soil = 10% of site area</i> <i>Minimum canopy target = 15% site area</i></p> <p><i>>1,500m²</i></p>	High	<p>The increased criteria and design guidance will have a significant impact on development yield.</p> <p>The provisions should revert back to those contained</p>

Current ADG 2015		Exhibited ADG 2021	Impact on feasibility	UDIA recommendation
	<p><i>Deep soil 10% of site area 650m² – 1,500m²</i> <i>Deep soil 15% of site area > 1,500m²</i></p>	<p><i>Minimum dimension = 3m, with 6m wide <u>contiguous</u> portion for at least 25% of the minimum deep soil area</i> <i>Deep soil = 15% of site area</i> <i>Minimum canopy target = 20% site area</i></p>		in the current 2015 ADG.
Tree canopy and retention	<p><i>40 Landscape design – ‘recommendation’</i></p> <p><i><850m² site area: 1 medium/ 50m² deep soil (@ 7% = 1 tree)</i> <i>850m² – 1500m² site area: at least 1 large or 2 medium trees/ 90m² deep soil (@ 10% = 1-2 large or 2-4 medium trees)</i> <i>>1500m² site area: at least 1 large or 2 medium trees/ 80m² deep soil (@ 15% = >3 large or 6 medium trees)</i> <i>Objective 40-2 Design guidance</i> <i>Significant landscape features should be protected by: tree protection zones appropriate signage and fencing during construction</i></p>	<p><i>1.5 Green Infrastructure – Design Guidance</i></p> <p><i>Tree canopy</i></p> <p><i><650m² site area: at least 1 small tree for every 350m² or part thereof</i> <i>650m² – 1500m² site area: at least 1 medium trees for every 350m² or part thereof</i> <i>>1500m² site area: at least 1 large or 2 medium tree for every 575m² or part thereof</i></p>	Low - similar to 2015 ADG	No comment
		<p><i>Retaining trees</i> <i>Retain and protect existing trees, including those on adjoining sites.</i> <i>Locate building envelopes, basements and driveways in order to maximise the number of trees able to be retained on site.</i></p>	HIGH	if taken too literally – how is maximised to be defined? A better word may be ‘optimised’. Explicitly state ‘retain where developmentally feasible’ and allow for Tree Replacement Ratios from 1:1 as an option otherwise
Planting on structure	<i>4P Planting on structures</i>	<i>1.5 Green Infrastructure – Design Guidance</i>		300-450mm for ground covers is inconsistent with

Current ADG 2015		Exhibited ADG 2021	Impact on feasibility	UDIA recommendation
	<i>Ground covers require min 300-450mm soil depth</i>	<i>Planting on structures Table 1.5.4</i> <i>Similar requirements to 2015 ADG</i>		extensive Green roofs which are generally less than 300mm deep. Amend Ground covers to 200-450mm.
Car parking	<i>3J Bicycle and car parking 3H Vehicle access</i> <i>Minimum car parking rates in the Guide to Traffic Generating Developments (RTA 2002) or Council rates (which ever is less).</i>	<i>1.6 Parking – Design Guidance Car parking</i> <i>No change in minimum Make provision for 'EV-ready' connections for all residential car parking spaces as outlined in Part 3.1: Energy efficiency. Provide a shared EV connection to 10% of visitors spaces, or 1 space if <10 spaces</i> <i>Ensure safe movement by: providing pedestrian pathways separate to vehicular access where possible, to minimise use of vehicular ramps by pedestrians marking pedestrian crossing zones over vehicle circulation and using bollards</i>		Requirements for car parking remain unclear and need to be developed with industry having regard to development feasibility.
Bicycle parking	No min bicycle parking requirement	<i>1.6 Parking – Design Guidance Bicycle parking</i> <i>Provide minimum 1 bicycle parking/ dwelling or DCP requirement, whichever is greater located at Ground, L1 or Basement 1.</i> <i>Residential – 1 space/ dwelling. Class A or B</i> <i>Commercial – 1 space/ 200m². Class B</i> <i>Visitor – 1 space/ 10 dwellings. Class C</i>	Low	This provision should support reduce parking rates. The requirements for Class A contributes to residential storage requirements (outside of apartments) runs contrary to the decision to require electric vehicle readiness. DPE should remove metrics and rather have generic guidance.

Current ADG 2015		Exhibited ADG 2021	Impact on feasibility	UDIA recommendation
Lifts/ apartments	<p><i>4F Common circulation and spaces – Design criteria</i></p> <p><i>The maximum number of apartments off a circulation core on a single level is eight. For buildings of 10 storeys and over, the maximum number of apartments sharing a single lift is 40. Where design criteria 1 is not achieved, no more than 12 apartments should be provided off a circulation core on a single level.</i></p>	<p><i>2.1 Common circulation – Design guidance</i></p> <p><i>Lift handling capacity and anticipated waiting times, demonstrated in a vertical transportation report to ISO 8100-32:2020 Lifts for the transportation of persons and goods – Part 32:</i></p> <p><i>average waiting time: 60 seconds or less</i></p> <p><i>handling capacity: 7 per cent or more</i></p> <p><i>No change to preferred maximum 8 - 12 apartments/core</i></p> <p><i>Require access and circulation spaces to achieve Liveable Housing Australia silver performance level.</i></p>		
Common and fire stairs	No criteria for natural light and ventilation to fire stairs	<p><i>2.1 Common circulation – Common stairs</i></p> <p><i>locate and design common stairs (including fire stairs) for ease of movement and with adequate amenity for daily use, including natural light and ventilation.</i></p>	High	<p>Remove proposed provision.</p> <p>Added construction cost and reduced affordability as it uses valuable façade area, requires upgraded finishes.</p> <p>Improved amenity in fire stairs is not a worthy pursuit during a housing supply and affordability crisis.</p> <p>Risks health and safety.</p>
Common circulation daylight and natural ventilation	<p><i>4F Common circulation and spaces – Design guidance</i></p> <p><i>Daylight and natural ventilation should be provided to all common</i></p>	<p><i>2.1 Common circulation – Design guidance</i></p> <p><i>For daylight and natural ventilation, provide:</i></p> <p><i>min glazed area of 10% and equivalent open area (EOA)</i></p>		DPE to provide examples of how to achieve design guidance

	Current ADG 2015	Exhibited ADG 2021	Impact on feasibility	UDIA recommendation
	<i>circulation spaces that are above ground Windows should be provided in common circulation spaces and should be adjacent to the stair or lift core or at the ends of corridors</i>	<i>of 2% of the common circulation floor area served 2+ sources of natural ventilation/ daylight for floorplates > 7 apartments where glazing is to a slot or façade indent the width-to-length ratio 1:3 or wider and be open to the sky</i>		
Communal open space	<p><i>3D Communal and public open space</i></p> <p><i>Communal open space has a minimum area equal to 25% of the site.</i></p> <p><i>Developments achieve a minimum of 50% direct sunlight to the principal usable part of the communal open space for a minimum of 2 hours.</i></p>	<p><i>2.2 Communal spaces</i></p> <p><i>8m²/ dwelling up to 25% of the site area.</i></p> <p><i>At 21 June 9am-3pm, achieve minimum 2h solar access to 50% of communal open space</i></p> <p><i>At 21 Dec 9am-3pm, achieve minimum 2h shading to 50% of communal open space</i></p> <p><i>Min dimension 4m for sites <650m², 6m for sites >650m²</i></p> <p><i>Doesn't have to be collocated with deep soil</i></p>	High	<p>Demonstrated to be unachievable especially in master planned sites where open space has been provided outside of the new site boundaries.</p> <p>Develop new guidance having regard to broader precinct and master plan outcomes.</p>
Apartment Mix	<p><i>4K Apartment mix</i></p> <p><i>No minimum and maximum apartment mix</i></p>	<p><i>2.3 Apartment mix & diversity – Apartment mix</i></p> <p><i>Development > 20 dwellings, provide min 3 different dwelling types.</i></p> <p><i>Where the development includes only three dwelling types, provide a mix of the types so:</i></p> <p><i>Each type >10% of the total</i></p> <p><i>Studio + 1 bed < 50% of total</i></p> <p><i>Min 20% to Liveable Housing Australia (LHA) Design Guidelines Silver Level</i></p>	High	<p>Blanket requirement has no consideration for market characteristics, consumer preferences and locale.</p> <p>Allow market to determine bedroom mix.</p> <p>Promote greater diversity of apartments through incentives such as floor space or height bonuses.</p>
Family Friendly Apartments	<p><i>4K Apartment mix</i></p> <p><i>4L Ground floor apartments</i></p> <p><i>N/A requirement for larger apartments</i></p>	<p><i>2.3 Apartment mix & diversity – Family friendly apartments</i></p> <p><i>Provide 20% of 2+ bedroom apartments as family-friendly apartments to</i></p>		<p>Allow market to determine preference for apartment sizes.</p> <p>Promote greater diversity of</p>

Current ADG 2015		Exhibited ADG 2021	Impact on feasibility	UDIA recommendation
		<p><i>accommodate the needs of families with children. Design solutions could include:</i></p> <p><i>> min apartment sizes 1 bedroom sized >12m² clear to accommodate a study desk or crib</i></p> <p><i>Multiple living rooms or main bedrooms</i></p>		apartments through incentives such as floor space or height bonuses.
Study Rooms	<p><i>4K Apartment mix</i></p> <p><i>No minimum study area or dimensions</i></p>	<p><i>2.3 Apartment mix & diversity – Study Rooms</i></p> <p><i>minimum 7m² and 2.4m clear if to be considered a habitable room</i></p>	High	Delete this section as it is overly prescriptive and provides no benefit at all – it will reduce layout diversity and amenity.
Apartment configuration	<i>4D Apartment size and layout</i>	<p>2.4 Apartment configuration</p> <p>Minimum internal sizes not changed</p> <p>Kitchens not regarded as habitable rooms for ceiling heights</p> <p><i>Where minimum apartment sizes and room dimensions are not achieved, demonstrate apartment planning is efficient, usable and functional, as indicated by realistically scaled furniture layouts and circulation areas</i></p>		<p>Kitchen provisions are Positive.</p> <p>Minimum apartment size provisions may be a positive outcome if councils accept the alternative solution.</p>
Private open space	<p>4E Private open space and balconies</p> <p>Studio apartments</p> <ul style="list-style-type: none"> • Minimum area = 4m² • Minimum depth = n/a <p>1 bedroom apartments</p> <ul style="list-style-type: none"> • Minimum area = 8m² • Minimum depth = 2m <p>2 bedroom apartments</p> <ul style="list-style-type: none"> • Minimum area = 10m² 	<p><i>2.5 Private open space and balconies</i></p> <p>No change to total area.</p> <p><i>Increase min. depth of private open space:</i></p> <p><i>studio units min = 1 m</i></p> <p><i>1-bed units min = 2 m (no change)</i></p> <p><i>2-bed units min = 2.4 m</i></p> <p><i>3+ bed units min = 2.4 m (no change).</i></p>	High	<p>Additional requirements will increase costs and reduce affordability if there is no flexibility.</p> <p>Address communal space strategically across a development/ precinct.</p> <p>Allow consumer choice and support</p>

Current ADG 2015		Exhibited ADG 2021	Impact on feasibility	UDIA recommendation
	<ul style="list-style-type: none"> • Minimum depth = 2m 3+ bedrooms apartments • Minimum area = 12m² • Minimum depth = 2.4m 	<p><i>Design single aspect balconies so they do not project beyond the façade</i></p> <p><i>Clothes drying areas, storage are in addition to the minimum areas</i></p> <p><i>A/C units are to be located away from POS</i></p>		<p>apartments at various price points.</p> <p>Allow for design elements to deal with wind mitigation.</p>
Solar Access	<p><i>4A Solar and daylight access</i></p> <p><i>70% solar access (2h/3h) 9am-3pm 21 June and max 15% south facing apartments</i></p> <p><i>No provisions for mandatory shading to facades</i></p>	<p><i>2.6 Sunlight, daylight, shade & thermal comfort</i></p> <p>No change to solar access and south facing apartments, but window extends to 8am in certain circumstances</p> <p><i>Where glazing > 30% of the apartment facade on any aspect (measured on internal face), provide external sun shading to max 30% of the exposed glazing in a wall to block 30% of summer sun.</i></p> <p><i>Where solid material on an apartment facade in an individual aspect is >70 % no additional shading is required for glazing on that aspect.</i></p> <p><i>Where a covered balcony min 1m depth extends across the length of a glazed facade or opening, this is considered to provide the shading necessary for all facade orientations apart from +/- 30° of west.</i></p> <p><i>For all balconies oriented +/- 30° of west, incorporate operable shading to protect glazing >30% of facade</i></p>		<p>Extend solar access window to 4pm in same circumstances as that for 8am.</p>
Natural Ventilation	<p><i>4B Natural ventilation</i></p> <p><i>At least 60% of apartments are naturally cross ventilated in the first nine storeys of the building. Apartments at</i></p>	<p><i>2.7 Natural ventilation</i></p> <p>No change to 60% for 9 storeys and deemed c/v > 10 storeys, however:</p> <p><i>No slots or façade indentations are deemed to</i></p>	High	<p>Retain existing ADG standards and delete 225° test as it is not possible to pass the test and not 1 example has been provided of a</p>

	Current ADG 2015	Exhibited ADG 2021	Impact on feasibility	UDIA recommendation
	<p><i>ten storeys or greater are deemed to be cross-ventilated only if any enclosure of the balconies at these levels allows adequate natural ventilation and cannot be fully enclosed</i></p> <p><i>Overall depth of a cross-over or cross-through apartment does not exceed 18m, measured glass line to glass line</i></p>	<p><i>generate natural cross-ventilation</i></p> <p><i>An EOA of 5% of floor area served must include allowances for flyscreens and opening restrictors</i></p> <p><i>Courtyards or building indentations require a width to depth ratio <2:1</i></p> <p><i>Apartments DTS natural cross-ventilation are:</i></p> <p><i>Cross-through, corner and roof-window.</i></p> <p><i>Otherwise apartments must provide 225° wind exposure to openings; AND</i></p> <p><i>Have limited obstruction to the wind from the building form; AND</i></p> <p><i>Have opening distribution and sizes that satisfy EOA 5% etc</i></p>		<p>DTS 8 apts/single core/ regular floorplate or apartment that isn't a DTS type that can pass the 225° test.</p> <p>Confirm that ratio is depth: width and not width: depth.</p>
Acoustic amenity	<p><i>4H Acoustic privacy</i></p> <p><i>4J Noise and pollution</i></p>	<p><i>2.8 Acoustic privacy, noise and pollution</i></p> <p>Appears to be similar to ADG 2015</p> <p><i>Apartments requiring an alternative natural ventilation solution to meet acoustic amenity requirements can be excluded from calcs for cross-ventilation and solar access</i></p>	No comment	No comment
Visual amenity	3F Visual privacy	2.9 Visual amenity	N/A	N/A
Storage	<p><i>4G Storage</i></p> <p><i>Studio = 4m³</i></p> <p><i>1 Bedroom = 6m³</i></p> <p><i>2 Bedroom = 8m³</i></p> <p><i>3+ Bedrooms = 10m³</i></p>	<p><i>2.10 Storage</i></p> <p><i>Studio = 6m³ (min 2m³ int)</i></p> <p><i>1 Bedroom = 8m³ (min 3m³ int)</i></p> <p><i>2 Bedroom = 10m³ (min 4m³ int)</i></p> <p><i>3+ Bedroom = 12m³ (min 5m³ int)</i></p> <p><i>One storage space must have min dims:</i></p>	High	<p>Increased storage will require more basement area/depth and put more pressure on deep soil, increasing costs and reducing affordability.</p> <p>Retain existing ADG standards.</p>

Current ADG 2015		Exhibited ADG 2021	Impact on feasibility	UDIA recommendation
		<p><i>Studio/1 Bed: 0.6D x 0.9W x 2.4H</i> <i>2 Bed+: 0.6D x 1.2W x 2.4H</i></p> <p><i>Decrease the minimum amount to be provided inside to 1/3 (from 50%) (i.e. the additional amount can be provided outside the unit).</i></p> <p><i>DA drawings need to highlight, dimension and label volume of int/ext. storage.</i></p>		
Building Articulation	4M Facades 4N Roof Design	2.11 Building articulation	N/A	N/A
All-electric building	N/A	<p><i>3.1 Energy efficiency – All-electric building</i></p> <p><i>Use low-carbon, low-emission systems, construction processes and materials to deliver energy-efficient apartment developments, where possible</i></p> <p><i>Locate heat pumps in a central location to reduce urban heat-island effects.</i></p>		<p>This cannot be reasonably confirmed at this stage of design and even if proposed may change post consent. This should be removed.</p> <p>No comment</p>
Rooftop solar	N/A	<p><i>3.1 Energy efficiency – Rooftop solar</i></p> <p><i>Provide maximum solar energy generation on roof space that is not allocated to common open space or roof gardens</i></p> <p><i>On low-rise, large-footprint buildings, rooftop solar panels should be provided for each apartment, directly connected to provide power behind the meter</i></p>		
Electric vehicles	<p><i>3J Bicycle and car parking</i></p> <p><i>Conveniently located charging stations are provided for electric vehicles, where desirable</i></p>	<p><i>3.1 Energy efficiency – Electric vehicles</i></p> <p><i>(see 1.6 Parking)</i></p> <p><i>Make provision for EV-ready connection for each car parking space allocated to residents:</i></p>		<p>Likely to add cost with little benefit to residents.</p> <p>Revert to existing ADG guidance and develop a pathway for increased</p>

Current ADG 2015	Exhibited ADG 2021	Impact on feasibility	UDIA recommendation
	<p><i>Provide sufficient size/quantity of EV DBs in each storey of car park complete with charging control system and connection to main switchboard.</i></p> <p><i>Provide space for cable trays to support future installation of 32A single-phase final subcircuits for each EV parking space.</i></p> <p><i>Locate EV DBs so any future EV charger requires a cable < 50 m from parking bay to the EV-ready connection.</i></p> <p><i>Provide a shared EV connection for all carshare spaces.</i></p> <p><i>Where EV-ready provision is made for visitor parking, a minimum of 7 kW AC EV chargers should be installed</i></p>		environmental standards.
Water management	<p><i>4V Water management and conservation</i></p> <p><i>Rainwater should be collected, stored and reused on site.</i></p> <p><i>A number of the following design solutions are used: runoff is collected from roofs and balconies in water tanks and plumbed into toilets, laundry and irrigation porous and open paving materials is maximised on site stormwater and infiltration, including bio-retention systems such as rain gardens or street tree pits</i></p>	<p>3.2 Water</p> <p><i>Connect rainwater to all non-human contact uses (third pipe or purple pipe), including toilets and washing machines. Laundry tubs should be connected to potable water.</i></p> <p><i>Size rainwater tanks to intercept a 10% annual exceedance probability (AEP) 6-hour storm and to allow full use of all rainwater collected in this event. In metropolitan areas, enable top-up of rainwater to be switched to recycled water infrastructure with min. cost and disruption.</i></p>	<p>Medium</p> <p>Address water management at the precinct level. These are the matters the UDG should address and not burden individual development sites which may be part of a broader plan or constrained.</p>
Waste management	<p><i>4W Waste management</i></p>	<p>3.3 Waste – Waste collection</p> <p><i>Integrate all waste management facilities and collection infrastructure</i></p>	<p>Red</p> <p>Recognise that for smaller developments this</p>

Current ADG 2015	Exhibited ADG 2021	Impact on feasibility	UDIA recommendation
	<p><i>within the built form of the development to improve amenity for residents and the neighbourhood.</i></p> <p><i>Waste storage</i></p> <p><i>Locate collection infrastructure for council waste collection services wholly within the development's basement and within close proximity to the onsite loading dock to permit unobstructed access for collection contractors.</i></p>	<p>Taking trucks down to a basement will increase basement sizes and excavation depths</p>	<p>may not be possible.</p> <p>Remove requirement for collection infrastructure to be located in basements when ground level in a podium would meet the same objectives.</p>
Building and landscape maintenance	<p><i>4X Building maintenance</i></p> <p><i>General design guidance provided.</i></p>	<p><i>3.4 Materials and maintenance</i></p> <p><i>Require a Building and Landscape Maintenance schedule (Appendix 7) to document maintenance regimes showing: maintenance paths and entry points to access building facade, roof, landscaped areas and outdoor communal spaces.</i></p> <p><i>Include a description of any maintenance equipment that will need to move through these spaces, including vehicles where required.</i></p> <p><i>Landscape maintenance tasks seasonally.</i></p> <p><i>Detail the maintenance requirements for green walls or roofs</i></p>	<p>Remove requirement. Ongoing management of building and maintenance is not a planning matter. This is an overreach.</p>

APPENDIX B

7 STAR HOMES PRICE TABLE – FEBRUARY 2022

Single Storey			
Item	Material/Product	Area m2	Additional Cost to 7 Stars
Ceiling Insulation (E/O from our current Basix package)	R7.0	205	\$ 5,839
External Walls (E/O from our current Basix package)	R2.7	120	\$ 1,286
Internal Walls	R2.5	80	\$ 1,365
Glazing	Double Glazing	Yes	\$ 6,345
			\$ 14,835

Double Storey			
Item	Material/Product	Area m2	Additional Cost to 7 Stars
Top Floor Ceiling Insulation (E/O from our current Basix package)	R7.0	180	\$ 5,127
GF Ceiling	R2.7	130	\$ 5,352
External Walls (E/O from our current Basix package)	R2.7	198	\$ 2,122
Internal Walls	R2.5	140	\$ 3,672
Glazing	Double Glazing	Yes	\$ 10,857
			\$ 22,003

KDR Double			
Item	Material/Product	Area m2	Additional Cost to 7 Stars
Top Floor Ceiling Insulation (E/O from our current Basix package)	R7.0	205	\$ 5,839
GF Ceiling	R2.7	205	\$ 8,440
External Walls (E/O from our current Basix package)	R2.7	260	\$ 2,786
Internal Walls	R2.5	190	\$ 4,983
Glazing	Double Glazing	Yes	\$ 14,241
			\$ 30,450

Notes

All pricing includes builders margin & GST

** R2.7 internal wall insulation does not fit within a 70mm stud wall

For current Basix assessment no internal wall or ground floor ceiling insulation is required which is why this cost is so high

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