



Community Housing Industry
Association NSW

Submission on the draft Design and Place SEPP and supporting documents

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About this submission

The Community Housing Industry Association NSW (CHIA NSW) welcomes the opportunity to provide a submission on the draft Design and Place State Environmental Planning Policy (DP SEPP) and associated policy framework. This submission provides a consolidated set of responses relating to the exhibition package, including:

- Draft Design and Place SEPP 2021 (DP SEPP)
- Draft Urban Design Guide (UDG)
- Revised Apartment Design Guide (ADG)
- Proposed higher BASIX standards
- Proposed changes to the Environmental Planning and Assessment Regulation (DP Regulation)

This submission has been informed by engagement with community housing providers. CHIA NSW has also been assisted by Stanton Dahl Architects, who undertook a critical analysis of the revised ADG. Further details of this engagement and review process are outlined in Attachment 1.

Although CHIA NSW is broadly supportive of the aims of the draft DP SEPP, it is concerning that certain aspects of the proposals will impose additional barriers on community housing development. This submission outlines changes needed to the DP SEPP and supporting documents to better balance design outcomes with other important outcomes, including the critical need for more social and affordable housing to ensure people are not forced to remain in substandard housing.

CHIA NSW welcomes the opportunity to discuss our feedback and recommendations with the Department of Planning and Environment (DPE) in more detail.

About CHIA NSW and community housing providers

CHIA NSW is the peak body representing 94 registered, not-for-profit community housing providers (CHPs) in NSW. Our members currently own or manage more than 51,000 homes across NSW for individuals and families who cannot afford to rent or purchase a home on the private market. Since 2012, CHPs have delivered more than 4,400 new affordable homes across NSW, representing an investment of over \$1.6 billion. This new development activity encompasses a range of development types, including townhouses, terraces, apartments, boarding houses and seniors housing.

CHPs are committed to delivering well-designed developments that foster sustainable and mixed communities. Priorities for CHIA NSW and its members include:

- Reducing complexity in the planning policy framework and streamlining approvals pathways.
- Improving outcomes for tenants by delivering good quality housing that is comfortable and safe during extreme weather and affordable to operate.
- Improving opportunities for tenants by focusing on place-making that connects people to transport, services, and employment and education opportunities.
- Design requirements which are feasible and do not impose additional costs on the delivery of much needed social and affordable housing.

Sustained investment in social and affordable rental housing is critical to tackling the housing affordability crisis in NSW, noting that the COVID-19 pandemic has not eased affordability pressures for vulnerable households. Pre-COVID, modelling undertaken by the University of NSW (on behalf of CHIA NSW) showed that, across NSW, an additional 317,000 social and affordable rental housing properties are needed by 2036 to meet current and future demand¹.

¹ L. Troy, R. van den Nouwelant and B. Randolph (2019) *Estimating need and costs of social and affordable housing delivery*, City Futures Research Centre, University of NSW, Sydney.

Part 1 - Key comments on the draft SEPP framework

Recognising good design outcomes include affordable housing outcomes

CHIA NSW broadly supports the overarching aims of the draft DP SEPP and its five design principles. The delivery of social and affordable housing is critical to supporting productive and connected places that enable communities to thrive. Rightfully, the draft DP SEPP identifies affordable neighbourhoods as an essential component of good design.

CHIA NSW welcomes inclusion in the draft DP SEPP of a requirement for consent authorities to consider whether residential development contributes to local housing needs (Section 18: Design consideration – vibrant and affordable neighbourhoods). This requirement needs to explicitly extend to consideration of whether proposals contribute to meeting *affordable* housing needs.

CHIA NSW makes the following recommendations for how the draft DP SEPP and supporting documents can be strengthened to better recognise and support affordable housing delivery as part of good design outcomes:

- Amend section 18(b) of the draft DP SEPP to require consideration of whether development contributes to meeting local affordable housing needs.
- Include a requirement in the UDG requiring affordable housing needs to be considered early, as part of the planning and design of large sites. This needs to include consideration of the specific mechanisms that will be used to support affordable housing delivery – such as mandatory zoning requirements or other planning incentives. Design controls also need to be tested, as they are being established, to ensure they support the feasibility of new affordable housing.
- Within the revised ADG, or a unified housing design guide, include guidance on the design of mixed-tenure development. This should draw on research² and best practice on the design of ‘tenure-blind’ developments. Early decisions about management and maintenance and the apportionment of responsibilities are critical to the success of mixed tenure schemes. This will require the involvement of CHPs early in the design process.

Getting the balance right

CHIA NSW is concerned that aspects of the proposals impose additional barriers to delivering new social and affordable housing. This runs counter to the aim of achieving affordable neighbourhoods that contribute to local housing needs. The delivery of fewer affordable homes will also mean more people are forced to remain in substandard housing, or, at worst, experience homelessness.

CHIA NSW’s concerns include:

- Additional or increased design requirements which, if applied rigidly, would increase upfront and ongoing costs for CHPs and/or reduce dwelling yield. These include requirements relating to building heights, landscaping, bike parking, electric vehicles, lift capacity, storage, shading control, and natural ventilation.
- A lack of flexibility to enable community housing schemes to be tailored to specific housing needs. This includes requirements governing apartment sizes, car and bike parking, and communal spaces.
- A significant increase in specialist reports and documentation needing to be submitted with

² Stubbs, J, Storer, J, Lux, C, Storer, T, and Ireland, L (2017) Best Practice in Multi-Tenure Development. Judith Stubbs & Associates <http://communityhousing.org.au/wp-content/uploads/2018/07/SUMMARY-MULTI-TENURE-REPORT-170703.pdf>

applications. In addition to the extra costs and complexity for applicants, and potential delays in the planning process, this will create a burden for consent authorities who will be required to review the extra documentation.

- Additional steps and matters for consideration in the development application process that will reduce efficiency and lengthen approval timeframes.

While well-intentioned, the proposed changes to design requirements need to be carefully balanced with the real and pressing need to increase the supply of genuinely affordable housing. This is especially critical at a time when the cost of land and building materials are rising alongside increases to operating costs, such as insurance premiums.

While DPE have asserted that the proposals will only have a marginal impact on development costs, the detailed testing that informed the Cost Benefit Analysis (CBA) of the proposals has not been released. CHIA NSW is concerned that the testing has not considered the particular development parameters of not-for-profit community housing development.

The community housing development context

CHPs retain most of their housing stock for the long-term. As not-for-profit organisations delivering lower-cost housing, designing developments that are cost-effective is an integral component of a CHP's financial viability. CHPs do not receive a market return from the housing they build. They typically have an operating margin of 2-3%, which is primarily comprised of rental revenue received from tenants on very low to moderate incomes. Most tenants will contribute 25%-30% of their income towards rent. CHPs have limited scope to increase the rents they charge to cover additional construction or operating costs.

Furthermore, outside Metropolitan Sydney, CHPs have identified additional cost burdens associated with getting workers and materials to regional and remote areas. It is not clear if this has been accounted for in the CBA, which only tested a small number of case study locations and appears to have focused on the Greater Sydney context.

The rental revenue that CHPs receive is not sufficient to cover the costs of delivering new affordable housing. CHPs rely on public subsidy, grant, planning concessions and access to discounted land to cover the funding gap and make new affordable housing schemes feasible. As such, community housing developments are very sensitive to increases in development costs.

Additional design and construction costs imposed on CHPs through the new policy reforms will increase the public subsidy needed to make schemes feasible and/or or reduce the amount of social and affordable housing that can be delivered.

Community housing schemes also have design requirements which differ from private housing. Social and affordable housing developments are often built to respond to identified gaps in provision with a specific tenant profile in mind. A key focus is on innovative design that delivers comfortable and secure homes, which require less maintenance, and deliver cost savings to their tenants. This means that design requirements intended for private housing are not always a good fit for community housing schemes.

Furthermore, the challenges CHPs face in acquiring development sites means the land they are able to access can be more constrained than the sites for-profit developers are able to acquire. This will make it more challenging to achieve generic design requirements.

Improving flexibility

In this regard, a flexible policy framework is critical to ensuring CHPs are strongly positioned to continue building fit-for-purpose social and affordable housing. Although CHIA NSW supports the

move towards a more principle-based approach that focuses on the delivery of outcomes, several aspects of the proposals do not sufficiently support such an approach. These include:

- The language used in the draft DP SEPP is stronger than under SEPP 65 – Design Quality of Residential Apartment Development. Whereas SEPP 65 requires consent authorities to “*take into consideration*” the design principles and ADG, the draft DP SEPP prevents consent authorities approving a development unless they are “*satisfied that development is consistent with*” the design principles and “*meets the objectives of*” the ADG. This stronger wording doesn’t allow for consent authorities to apply the DP SEPP flexibly, and risks developments being refused if they achieve anything less than 100% compliance with the design principles and considerations. This is compounded by the subjective wording of the design considerations.

There will be instances where achieving all the design considerations in full is not possible, or where achieving one design outcome may conflict with others – for example, on heritage sites or where the delivery of affordable housing could be maximised with some design concessions. Proposals need to be assessed on their merits.

- The wording of the draft DP SEPP also appears to give more weight to the design considerations relating to public spaces, resilience, and diverse land uses. For these, consent authorities “*must be satisfied*” each requirement is achieved. Whereas for the remaining design considerations, consent authorities appear to have more discretion in how they are assessed.
- The DP SEPP must deliver sufficient flexibility to enable the UDG and ADG to be used for guidance only. The DP SEPP needs to be clearer on the distinction between Design Criteria and Design Guidance. While the wording of the revised ADG implies that Design Guidance has a lower weight than Design Criteria, this is not reflected in the wording of the draft DP SEPP. To demonstrate compliance with the ADG, section 30(2) of the draft DP SEPP requires both the design criteria and design guidance in the ADG to be met in order to demonstrate compliance with the ADG objectives. Furthermore, while design criteria are required to be applied to ‘the extent possible’, a similar qualifier is not applied to design guidance. This implies the design guidance should be implemented prescriptively. CHPs’ experience is that guidance can be applied rigidly by consent authorities even though it is not intended as a mandatory requirement. The DP SEPP needs to ensure this does not occur.
- The revised ADG incorporates certain concessions for development delivered through the Housing SEPP. Principally, these allow some flexibility with respect to apartment mix, layout, private open space, and storage. While welcomed, these concessions only apply to a limited range of matters. The circumstances in which they apply is also not clear. Currently, the Housing SEPP only requires build-to-rent housing to be considered flexibly against the ADG. It does not contain similar provisions for in-fill affordable housing. In some cases, the design requirements imposed by the Housing SEPP are more onerous than those in the ADG – for example, the landscaping requirements at section 18(2)(b) of the Housing SEPP. The DP SEPP and ADG need to support increased flexibility for all community housing development.

CHIA NSW recommends:

- Amending section 13 of the draft DP SEPP to make it clear that the design principles and considerations must be applied flexibly, to the extent possible. Consent authorities must be required to take into consideration site constraints and the broader merits of a proposal.
- Amending section 30(1) to read: “*In determining a development application for residential apartment development, a consent authority must consider whether development meets the*

objectives of the Apartment Design Guide.”

- Amending section 30(2) of the draft DP SEPP to make it clear that the Design Guidance are not mandatory requirements and should be applied reasonably by consent authorities. While the introduction of alternative design solutions is welcomed, section 30(2)(b) also needs to be amended to require alternative design solutions to be assessed for general consistency with the ADG objectives, rather than against the design criteria and guidance.
- Amending the Housing SEPP, and/or the wording of the ADG, to extend design concessions to all affordable housing delivered by not-for-profit social housing providers. When applying the ADG to community housing schemes, consent authorities must consider:
 - The nature of affordable housing need in the local area and the needs of residents intended to be housed.
 - The need to support the feasibility of fit-for-purpose affordable rental housing, recognising the funding gap that exists.
- CHIA NSW strongly recommends revising the Housing SEPP so that design requirements for in-fill affordable housing are not more onerous than those outlined in the revised ADG.
- The ADG should provide additional guidance on the circumstances where alternative design solutions may be warranted and include examples of alternative approaches.

Design review reforms

CHIA NSW supports measures to bring robustness and consistency to design review and ensure that it is better integrated with the development assessment process. Despite proposals being fully compliant with planning requirements, CHPs have experienced protracted approvals processes, including delays that have resulted from inefficient design review processes. Unnecessary delays in the application process have increased costs, created project viability risks, and delayed project delivery.

CHIA NSW supports a design review process modelled on the Government Architect NSW’s State Design Review Panel. Our members have found it to be a significantly faster process and cost less than processes implemented by some councils. The process was collaborative, and feedback was immediate and enabled an upfront conversation around trade-offs. The changes that were requested as a result of the process were meaningful and improved development outcomes.

CHIA NSW agrees that design review is most effective when it occurs early in the development process. However, CHIA NSW is concerned by guidance in the Draft Local Government Design Review Panel Manual (DR Manual) that provides scope for panels to request to review proposals on multiple occasions before a DA is lodged. This would add to the costs and design work required at a time when there is least certainty as to the outcomes of the assessment process. If panel meetings are not frequent enough, this would also add considerable delays to the planning process.

CHIA NSW is further concerned that the DR Manual also provides scope for councils to request additional panel sessions after lodgement of a DA. This includes the potential for referral to panels post-determination of a DA – it is not clear what the scope of such a review would be. This is contrary to the purpose of the reforms, creates uncertainty, and increases the cost and administrative burdens on both applicant and consent authorities.

Given the potential additional costs, documentation, and time that the process entails, CHIA NSW recommends a threshold is implemented so that only larger, more complex developments are required to go through design review. For example, CHIA NSW questions the need for apartment developments as small as three storeys and four dwellings to go through the process, as is currently

proposed. A CIV threshold of \$30m could be used instead, which is consistent with the threshold proposed for other types of development.

CHIA NSW is disappointed that the proposals do not include a review of local council architectural design competition processes. The requirements for competitive processes vary across councils. In some areas, even moderate scale development such as medium rise housing can be subject to a design competition. While CHPs are committed to delivering design excellence, the experience of our members is that competitive design processes add considerable costs and delays to the development process. These processes do not necessarily achieve better outcomes than architect-designed schemes that are subjected to review by a design review panel – particularly for more routine development typologies, such as apartments.

Competitive design processes should be limited to key sites and major projects of state or regional significance. At the very least, a scaled-down, streamlined process should be piloted for more routine developments, such as medium-rise affordable housing schemes.

CHIA NSW recommends:

- Amending the draft DP SEPP/DP Regulation to only require larger, more complex apartment developments, with a CIV over \$30m, to go through a design review process. This will support the delivery of smaller community housing schemes and reduce the administrative burden on councils.
- Clear parameters are established to avoid proposals being stuck in an endless cycle of design review throughout the assessment process. Applicants should be able to revise proposals to address panel advice without having to refer proposals back again, particularly for less complex applications. Referral to panels post lodgement of DAs should only be required in exceptional circumstances. Panels must also be operated in a way that ensures sufficient availability and timeliness of design review meetings.
- Local design excellence processes are reviewed to bring consistency in practice across councils.

Changes to BASIX standards and related proposals

As ongoing managers of affordable housing, CHPs are committed to environmental sustainability and the reduction of costs for tenants. Although CHIA NSW recognises the need to improve environmental performance standards, it is critical these are undertaken in a staged and incremental way to avoid creating additional financial and regulatory barriers to affordable housing delivery.

CHPs have expressed concerns at the potential additional costs of meeting the proposed higher standards, particularly when combined with other aspects of the DP SEPP framework that will add to development costs. In inland regional areas, concerns also extend to additional costs associated with getting workers and materials to more remote areas. It is unclear if this has been factored into the CBA that informed the BASIX proposals.

Support from the NSW Government in the form of subsidies and capacity building programs is likely to be needed to facilitate the effective roll-out of increasingly higher standards.

Conflicts with Apartment Design Guide requirements

A central tenet of the BASIX scheme is to provide flexibility in how performance standards are met. The draft DP SEPP, like the existing BASIX SEPP, nullifies any 'competing provisions' in planning instruments or development control plans (DCP) that impose a standard or requirement for reducing water use, energy use, or greenhouse gas emissions.

CHIA NSW is concerned that the revised ADG includes competing provisions that impact how BASIX obligations could be met, contrary to the intent of the SEPP. For example, Part 3.2 of the revised ADG specifies numeric standards for the sizing of rainwater tanks, requires tanks to be connected to all non-human contact uses, and have the capacity for connection to future recycled water infrastructure.

These requirements could impact development feasibility, particularly for constrained sites. Recent experience of our members demonstrates that the provision of on-site water reuse for laundry, toilet, and common area irrigation, can add significantly to construction costs and realise only marginal water savings to tenants. A flexible approach will enable developers to select the best measures for a particular site, considering their relative costs, benefits, and ongoing maintenance requirements.

Energy systems

While the benefits of roof-top solar are acknowledged, CHPs have reported it can be difficult to find sufficient roof space for solar energy generation, particularly on small, constrained sites. It is unclear how achievable the increased BASIX targets are without the provision of on-site solar PV. As such, CHIA NSW recommends that allowances be made for the use of off-site solutions (e.g. green energy agreements) in circumstances where a development cannot fully achieve sustainability targets on-site due to challenging conditions.

Requirements for non-BASIX residential development

The BASIX requirements do not apply to certain residential uses, such as large boarding houses or hostels. The proposed energy and water use standards for non-residential development will also not apply. However, development applications for these uses would still need to submit embodied emissions and net zero statements under requirements in the draft DP Regulation. This includes evidence that buildings have the necessary infrastructure and space to achieve net zero emissions by 1 January 2035.

It is not clear how these requirements are intended to be applied to residential development to which BASIX does not apply. Further guidance is needed on the scope of emissions to be counted in the net zero commitment for these development types, which include both common areas and individual tenancies. CHIA NSW is concerned that the absence of agreed targets or benchmarks tailored to these uses will create uncertainty in the design and assessment process and could lead to the misapplication of the requirements.

CHIA NSW recommends:

- A review of the feasibility of increasing BASIX requirements in inland regional areas, to ensure the CBA has accounted for additional cost burdens in these locations.
- Deployment of a government support package, in the form of subsidies and capacity building program for industry, to facilitate the roll-out of the higher targets. This should start with a pilot project targeting community housing.
- To provide certainty to industry, establish a forward trajectory that clearly sets out the incremental increases in performance targets that will occur over time, towards the goal of net zero carbon emissions by 2050.
- The ADG provides clarity that criteria and guidance on energy efficiency and water use are suggested design options and should not be interpreted as mandatory requirements, which would compete with BASIX.
- A toolkit is developed that showcases cost-effective ways to achieve the higher BASIX targets across a range of development types and scales, including apartment development on small sites where it can be difficult to achieve BASIX targets.

- Flexibility be provided for the use of off-site solutions (e.g. green energy agreements) in circumstances where a development cannot fully achieve sustainability targets on-site due to challenging conditions.
- Guidance be issued on how embodied emissions and net zero requirements are intended to be applied to non-BASIX residential accommodation. This guidance needs to be developed in consultation with industry.

Car parking

CHIA NSW supports measures to reduce car parking in locations with good access to public transport and/or where site-specific strategies to manage demand are put in place. Car parking adds considerably to the cost of construction, particularly where it is provided in a basement, and takes up space that could otherwise be used to provide additional social or affordable housing or residential amenities. Reducing the provision of car parking will also contribute towards other desired design outcomes, such as increasing deep soil provision and tree canopy.

CHIA NSW supports the inclusion in the DP SEPP of a design consideration aimed at encouraging sustainable transport and minimising the provision of car parking. The related objectives in the draft UDG and revised ADG are also supported.

The 2021 Explanation of Intended Effect (EIE) for the DP SEPP proposed a broader range and application of measures to lower parking rates than what is now being proposed. It is disappointing that several of the measures proposed have not been incorporated in the draft SEPP and supporting guides.

CHIA NSW questions the merits of limiting the use of green travel plans to lower parking provision (section 33 of the draft DP SEPP) to sites with the very highest public transport accessibility level (PTAL 6). It is not clear from the exhibition material the extent of developable land that is classified as PTAL 6, but it is likely to be sites located in or close to metropolitan centres in Greater Sydney.

There will be circumstances, outside of PTAL 6 locations, where a reduction in car parking could be justified. This includes sites with access to car share services, where there is an oversupply of on-street parking, or sites close to town centres (but which may not be classified as PTAL 6).

The option to negotiate reduced car parking through a green travel plan should be available to a broader range of locations. The scale of any reduction in parking would be determined having regard to the measures proposed and the nature of transport and services in proximity to a site. Where car share schemes are provided, a reduction in the order of 10 to 12 resident car spaces for each car share space provided should be applied, reflecting recent case law on the issue³.

Further reductions need to also be available for social and affordable housing development to support its feasibility, recognising that car ownership tends to be lower amongst social and affordable housing tenants. It is also noted that, unlike market housing, CHPs operating an income-based rental model will not realise additional revenue from car parking that can help offset the costs of its construction.

Electric vehicle requirements

CHIA NSW has some reservations about proposed requirements for 'EV-ready' buildings. These requirements are higher than those being proposed through the 2022 update to the National Construction Code (NCC) and will have several cost and space implications for CHPs, including:

- Additional electrical infrastructure needing to be installed from day 1.

³ Turner Architects v City of Botany Bay Council [2016] NSWLEC 1186:
www.caselaw.nsw.gov.au/decision/5743ae70e4b0e71e17f51a04

- The additional electrical capacity required may trigger the need for a substation to be provided in a scheme that would not otherwise require one. This will have both a space and cost implication. CHIA NSW is concerned that energy providers may require the substation to be implemented up front, at significant additional cost.
- Charging units required for 10% of visitor spaces, and potentially any car share spaces.
- For other parking spots, sufficient space will need to be set aside for future installation, which could lead to a need for bigger basements. It could also limit opportunities for external storage units to be provided at the end of car spaces, making it more difficult to meet external storage requirements (which are proposed to be increased).
- Charging facilities for vehicles other than cars, including 1 per 4 bike parking spaces, needing to be installed from day 1.

These requirements represent a considerable outlay for infrastructure that may not be taken up by future owners, particularly if rates of car ownership decline as a result of increased take-up of car share and autonomous vehicle technology. CHPs retain long-term ownership of the housing they deliver. As such they are well placed to identify the EV needs of their tenants and manage retrofit as part of their long-term asset management plans.

CHIA NSW recommends:

- Amending section 33 of the draft DP SEPP so that the option for reducing car parking provision through green travel plans is not limited to sites with a PTAL of 6. At a minimum, it should be opened to sites that meet the accessibility requirements of the Housing SEPP or are in proximity to a town centre. Further guidance should be provided through the UDG and ADG on the nature of reductions that could be supported in different contexts. This should draw on the options for reducing car parking outlined in the 2021 EIE.
- Lowering the minimum requirements for EV-ready buildings for development delivered by or on behalf of a social housing provider, recognising that car ownership tends to be lower amongst occupants of social and affordable housing.
- Alternatively, the introduction of requirements should be phased in over time as there is more certainty about the technology and likely take-up. In this regard CHIA NSW notes that the proposed NCC 2022 only requires buildings to provide capacity for 25% of car spaces to be retrofitted with EV chargers, with no chargers required up front. An incentive-based approach, tied to reductions in overall parking provision, could also support take-up.

Relationship of the SEPP with local planning controls

Application to strategic planning

To optimise outcomes, the design principles need to be embedded as early in the planning process as possible. In addition to master plans, rezoning proposals and DCPs, the DP SEPP and UDG need to be considered in broader strategic planning undertaken by councils, including preparation of local strategic planning statements and local housing strategies. Clarity is also needed as to how the SEPP and UDG apply to comprehensive reviews of local environmental plans (LEPs) by councils.

CHIA NSW recommends that councils be required to demonstrate how these proposals are consistent with the design principles and considerations. This will support the feasibility of future developments to realise the desired design outcomes.

Conflicts between local controls and the ADG

The additional tests for development introduced through the DP SEPP along with the UDG and ADG objectives, criteria and guidance, will add significantly to the complexity of planning and development assessment, and has the potential to introduce additional conflict where they do not resonate with local policy.

The draft DP SEPP and revised ADG set out matters which override or switch off local controls (such as car parking and apartment sizes) or where local controls take precedence (such as deep soil or apartment mix). However, there remain several matters where the relationship between the ADG and local controls is not clear. This includes controls relating to communal spaces, built form and siting, and building articulation. To avoid confusion or inconsistent implementation, further clarity is needed on these aspects of the ADG.

Part 2 of the current ADG includes a series of guidance to inform the setting of local design controls, including building heights and floor space controls. While some of this guidance has been transferred into the draft UDG, much of it seems to have been omitted or recast as requirements for individual development applications. This guidance must be reinstated in the final DP SEPP framework as matters for councils to consider when setting local development controls. This will ensure height, floor space and other key development controls factor in the design outcomes sought by the ADG, supporting feasibility and reducing conflicts between planning documents.

Conflicts between local controls and the UDG

While planning authorities will be required to consider the draft DP SEPP and UDG when preparing DCPs, it is not clear how inconsistencies between local controls and the UDG are to be treated. Unlike for the ADG, the draft DP SEPP does not specify any matters for which the UDG takes precedence over local controls. This could lead to confusion in the assessment process where there are conflicts between documents.

CHIA NSW recommends:

- Councils be required to demonstrate how strategic plans, including local strategic planning statements, local housing strategies and comprehensive LEP reviews implement the design and place principles and considerations.
- Councils be required to consider the objectives of the ADG when preparing new LEP and DCPs.
- The omitted guidance from Part 2 of the ADG, relating to setting local development controls, be reinstated and established as matters for consideration when DCPs and LEPs are prepared.
- The DP SEPP identify matters for which the UDG takes precedence over local controls.

Transitional arrangements

CHIA NSW agrees that transitional arrangements are needed to provide sufficient time for industry to prepare for the introduction of the DP SEPP framework. Lead times must be commensurate with the nature and scale of the changes, including the impacts on development costs, and the time needed for necessary supply chains, skills, and construction practices to be established. For major changes, such as increased environmental performance targets, a lead time of several years may be needed.

CHIA NSW supports the delayed commencement of the DP SEPP. A deferred commencement period of 6 months is considered the absolute minimum necessary to avoid impacting the feasibility of proposals that are well advanced in their planning and design before the SEPP is finalised. The inclusion of savings provisions exempting development applications lodged before the SEPP commences from the

new requirements, is also supported. These transitional arrangements need to extend to the application of the revised ADG and new UDG.

Implementation

The proposed reforms will not be successful unless consent authorities have the necessary skills and capacity to implement the new policy framework as intended. CHIA NSW is concerned that many consent authorities are already under resourced. The number and complexity of additional requirements introduced through the DP SEPP and supporting guides will only increase the burden on consent authorities.

The NSW Government must provide ongoing training and support to consent authorities to ensure the DP SEPP framework is implemented as intended and avoids creating further delays in the planning process. This needs to include a focus on:

- Moving away from a rigid application of supporting guides, as is currently common practice, and ensuring a consistent understanding of how the framework is to be applied flexibly.
- The consideration and assessment of alternative design solutions.
- Ensuring the design review reforms operate efficiently and effectively.
- Providing consent authorities with the necessary expertise and support to assess additional technical information and requirements in a timely manner, such as those relating to natural cross-ventilation. Many consent authorities will not have this capacity presently.

Training needs to be delivered before the SEPP’s commencement and support continue to be provided to consent authorities throughout the initial years of its operation to ensure it is being implemented as intended. The Government Architect must prioritise an early review of the SEPP and its impact on development to enable adjustments to be made in a timely manner.

CHIA NSW recommends:

- Extending transitional arrangements, including the delayed commencement of new requirements, to the application of the revised ADG and new UDG.
- The implementation of the new policy framework be supported by an early and ongoing program of training and capacity building for industry and consent authorities.

Part 2 - Further comments on specific documents

Draft Design and Place SEPP

Section	Comment	CHIA NSW recommendation
Section 7 - Meaning of non-residential development	The term “residential purposes” at subsection 7(d) is not defined in the draft SEPP or Standard Instrument LEP.	To improve clarity, provide a definition for “residential purposes”, consistent with the definition of “residential accommodation” under the Standard Instrument LEP.
Section 8 - Land to which Policy applies	There appears to be drafting errors in the references provided in subsection 8(3).	Correct references so that it is clear to what development types Part 3, Division 3 of the draft SEPP applies.
Section 13 - Consideration of	As drafted, this section could lead to the unnecessarily rigid application of	Redraft section 13, as follows: “(1) <i>In determining a development</i>

Section	Comment	CHIA NSW recommendation
design principles and design considerations by consent authorities	<p>design principles and considerations, removing the real benefits of a merits-based approach that principles-led planning systems can deliver.</p> <p>Design outcomes must be considered in the context of site constraints and other policy priorities.</p> <p>Refer to further comments in Part 1 of this submission.</p>	<p><i>application for consent to carry out development to which this Policy applies, a consent authority must consider whether development is generally consistent with the design principles.</i></p> <p><i>(2) In assessing whether development is generally consistent with the design principles, the consent authority must take into account the design considerations for each principle, having regard to the matters at sections 14-23 (in addition to any other matters that are required to be, or may be, taken into consideration)."</i></p>
Sections 17, 22 and 23	<p>It is unclear why for some design considerations consent authorities "<i>must be satisfied</i>" that all the requirements are met. Whereas for the others there appears to be more discretion in how they may be considered. This difference in the wording creates uncertainty and reduces flexibility.</p>	<p>In section 17, 22, 23 replace "<i>must be satisfied that</i>" with "<i>must consider whether</i>", to be consistent with the other design considerations.</p>
Section 14(d) – overall design quality	<p>CHIA NSW supports the requirement for consent authorities to consider whether development represents an effective and economical use of space that responds to the constraints of the site. This will enable a more balanced consideration of design outcomes.</p>	<p>This requirement needs to be applied broadly to the assessment of applications against all of the design considerations in the SEPP.</p>
Section 15(a) – comfortable, inclusive, and healthy places	<p>It is unclear how "<i>maximise passive heating and cooling</i>" is to be interpreted given energy use and thermal performance standards are outlined at sections 26 and 27 of the draft SEPP.</p>	<p>For the avoidance of doubt, include a note after subsection 15(a) to make it clear that achieving the minimum energy and thermal performance standards outlined in the SEPP satisfies this consideration.</p>
Section 16(a) – culture, character, and heritage	<p>CHIA NSW is concerned that consideration of "<i>desired future character</i>" has been misused by consent authorities to refuse schemes where there is community opposition to development due to stigma with a particular use.</p>	<p>Clear guidance is needed for how consent authorities are to apply this consideration, particularly where the desired future character of an area has not been clearly defined in a planning instrument or strategy.</p>

Section	Comment	CHIA NSW recommendation
Section 17 – public spaces and public life	<p>The requirement, at 17(c) for development to not have an adverse impact on open space is subjective. It would be unreasonable for this to extend to inconsequential impacts, such as minor overshadowing.</p> <p>Development involving public space needs to be guided by local council plans and strategies. There may be justification for the development of public space in some circumstances, such as to enable the delivery of another community use.</p> <p>With regard to 17(d), there will not always be scope for development to contribute to connectivity between landscape corridors, public spaces and active transport networks. Such outcomes will not always be achievable on small or isolated sites.</p>	<p>Amend the draft SEPP so that it is clear the matters at Section 17 are not mandatory requirements that must be satisfied in all cases.</p> <p>Require consent authorities to consider relevant local open space strategies when applying section 17.</p> <p>Amend 17(c) to focus consideration on “<i>significant</i>” adverse impacts on open space.</p> <p>Apply consideration 17(d) to large sites only (over 1ha).</p>
Section 18 – Vibrant and affordable neighbourhoods	<p>CHIA NSW welcomes the recognition that meeting housing needs is fundamental to achieving good design outcomes. This needs to include consideration of affordable housing needs.</p> <p>With respect to 18(c), it is not clear how the requirement for development to contribute to a “<i>diverse mix of uses and active streets</i>” close to train stations and town centres is intended to be applied. Land use outcomes need to be determined having regard to zoning controls and local plans and strategies.</p>	<p>Insert at the end of subsection 18(b): “<i>including for affordable housing.</i>”</p> <p>Amend subsection 18(c) to require consideration of the land use mix outcomes sought by relevant local plans or strategies (LSPS, LHS, LEP, or DCP).</p>
Section 19 – Sustainable transport and walkability	Refer to comments in Part 1 of this submission.	Refer to Part 1 of this submission.
Section 20 – Green infrastructure	Clarity is needed on what is intended by “ <i>maximises tree canopy cover</i> ” at 20(b). Although CHIA NSW recognises the importance of increasing tree canopy cover, there may be limited opportunities for provision on some sites, such as in	To avoid introducing uncertainty into the assessment process, it is recommended subclause 20(b) be amended to read: “ <i>whether the development contributes to tree canopy and provides sufficient deep</i> ”

Section	Comment	CHIA NSW recommendation
	high density areas. The SEPP needs to recognise this.	<i>soil to support the tree canopy."</i>
Section 21 – Resource efficiency and emissions reduction	The considerations relating to minimising greenhouse gas emissions and maximising water reuse need to be applied with regard to the environmental standards outlined at sections 26 and 27 of the draft SEPP.	For the avoidance of doubt, include a note at the end of section 21 to make clear that achievement of the SEPP’s energy, water and thermal performance standards satisfies the requirement for minimising greenhouse gas emissions and maximising water reuse.
Section 23 – Optimal and diverse land uses	The considerations at 23(a) and 23(b) are more appropriately applied to large development sites. It is not clear how these would be applied to smaller scale in-fill sites/strata subdivision. For infill development, the mix of uses should be guided by local plans and strategies, including applicable zoning controls.	Amend the draft SEPP so that subsections 23(a) and 23(b) apply to urban design development, consistent with the application of subsection 23(c).
Section 24 – Objectives of Urban Design Guide	CHIA NSW supports the requirement for consent authorities to apply the UDG flexibility, to the extent possible.	Refer to further comments on the UDG below.
Division 2 - BASIX	Refer to comments in Part 1 of this submission.	Refer to comments in Part 1 of this submission.
Section 30 – Objectives of ADG	Refer to the comments in Part 1 of this submission.	Refer to the recommendations in Part 1 of this submission.
Section 33 – Green travel plans	Further to the comments in Part 1 of this submission, CHIA NSW is concerned that the wording of subsection 33(2) will prevent consent authorities and applicants from negotiating lower levels of provision through other mechanisms, such as a variation under clause 4.6 of LEPs or using provisions under a DCP. This would reduce flexibility and impose unnecessary constraints on negotiating lower rates on sites in the most accessible locations.	Extend the option to reduce car parking through green travel plans to other locations (refer to Part 1 of this submission). Amend subsection 33(2) to read: <i>“Development consent must not may be granted unless if the consent authority is satisfied that a plan (a green travel plan) that complies with subclause (3) has been prepared...”</i> Section 33 should also apply to the parking criteria set out in the ADG, in addition to those in LEPs and DCPs.
Section 34 – Design review	Refer to comments in Part 1 of this submission.	Amend Section 34(1)(e) to apply a CIV threshold of \$30m to residential apartment development.
Section 35 – Design	Clarify what is meant by <i>“the development”</i> in subsection 35(1)(a).	Amend subsection 35(1)(a) to make it clear that a development

Section	Comment	CHIA NSW recommendation
review panel advice	Applicants should be able to make revisions to a proposal to incorporate panel advice without having to resubmit it for review.	application that is lodged does not need to be identical to the proposal reviewed by a design review panel.
Section 36 – Design verification statements and design review reports	CHIA NSW is concerned that the wording of section 36 enables a consent authority to ignore a DVS or DRP if they are inclined to refuse a development application.	Amend section 36 to read: “ <u>A consent authority must not determine a development application for development consent must not be granted to development to which this Part applies unless the consent authority has considered a design verification statement or design review report that accompanied the development application...</u> ”
Part 4 – Design Review	Refer to comment in Part 1 of this submission.	Refer to comments in Part 1 of this submission.
Transitional arrangements	Refer to comment in Part 1 of this submission.	Refer to comment in Part 1 of this submission.

Draft Urban Design Guide

Section	Comment	CHIA NSW recommendation
About this guide (pages 8 and 9)	<p>CHIA NSW welcomes the acknowledgement that each project will have a unique response and the criteria and guidance in the UDG are not intended to be exhaustive.</p> <p>The UDG will be applied to a broad range of sites. The extent to which the design criteria and guidance can be implemented will depend on the scale and context of each proposal. Clearer guidance on this is needed throughout the UDG.</p> <p>Section 24 of the draft DP SEPP only requires compliance with the Design Criteria of the UDG, to the extent possible, to demonstrate it has met the design objectives. Clarity is therefore needed on the role and weight to be applied to the Design Guidance in the UDG.</p>	<p>Throughout the UDG, clarify the scale and type of development to which criteria and guidance are to be applied. The UDG should distinguish between:</p> <ul style="list-style-type: none"> • master planning/rezoning, where controls are being set. • development applications, where established controls are being relied. • smaller sites versus larger sites. • Greenfield versus urban in-fill contexts. <p>The UDG also needs to be clear that any information or documentation requirements need to be tailored in scope and detail to the size and complexity of proposals.</p>
Part 2.3 – Proximity to transport services (page 23)	It is not clear how the guidance seeking homes to be located within 400m/800m of public transport is to be applied to less accessible sites	Clarify that this guidance only applies to large rezoning proposals or where uplift in density is sought.

Section	Comment	CHIA NSW recommendation
	<p>that have already been zoned for residential use.</p> <p>CHIA NSW is concerned that this could present an unnecessary barrier to development of homes on sites already earmarked for housing under established plans and strategies - particularly in regional or remote areas, which tend to not be as well serviced as metropolitan locations.</p>	
<p>Part 3 – Neighbourhood density (page 26)</p>	<p>CHIA NSW supports, in principle, target residential densities being established to support the efficient use of land. However, CHIA NSW questions the usefulness of a ‘one-size-fits-all’ approach.</p> <p>It is noted that the proposed targets are minimum gross residential densities. However, in high density locations, such as within metropolitan centres, there will be potential for much higher than 30 dwellings a hectare.</p> <p>To provide certainty and better inform community expectations, the UDG needs to provide a more nuanced set of benchmarks tailored to different urban contexts.</p>	<p>Provide additional guidance, or establish additional benchmarks, for residential development in larger centres or on sites close to high frequency rapid transport, such as metro.</p>
<p>Part 3.3 – Mixed and diverse neighbourhoods (page 27) and Part 5.13 (page 73)</p>	<p>CHIA NSW supports the guidance that development on large sites should provide a mix of housing types to address local housing needs, promote affordability for families, and ageing in place.</p>	<p>Include Design Criteria requiring mechanisms for the delivery of affordable housing to be identified at an early stage in the planning and design of large sites.</p> <p>Refer to further comments and recommendations in Part 1 of this submission.</p>
<p>Part 5 – Walkable neighbourhoods and public open space accessibility (page 34)</p>	<p>While CHIA NSW recognises the importance of proximity to transport, services, and open space, it is not clear how the proposed minimum walking distance requirements are to be applied to sites that have already been zoned or identified for housing.</p> <p>It will not always be feasible to provide this infrastructure on-site, particularly on smaller sites. CHIA</p>	<p>Clarify that this guidance only applies to larger precincts (over 5ha), rezoning proposals or where uplift in density is sought.</p>

Section	Comment	CHIA NSW recommendation
	NSW is concerned that the criteria could present a barrier to the delivery of housing - particularly in regional or remote areas less well serviced by infrastructure.	
Part 8.2 – Electric vehicles (page 43)	The guidance for providing 2% of parking spaces with EV-charging equipment is inconsistent with the requirements for EV-ready buildings in the revised ADG.	Clarify that for residential apartment development, the guidance in the ADG takes precedence. Refer to further comments in part 1 of this submission.
Part 10 – Tree canopy targets (pages 50 - 52)	The UDG needs to make clear that tree canopy targets are to be applied with regard to the constraints of a site and its development context. In this regard, CHIA NSW welcomes the guidance on alternative design solutions for constrained sites. CHIA NSW questions the feasibility of the guidance that canopy targets should ensure no net loss of baseline canopy. While this may be appropriate across larger precincts, it may be difficult to achieve when applied to individual development sites – for example where a low-density site is being redeveloped for higher density uses.	Make clear that tree canopy targets need to be informed by consideration of: <ul style="list-style-type: none"> • development type and scale • site context and constraints, and • desired future character of an area.
Part 12 – Public open space provision (page 60)	CHIA NSW supports a more flexible approach to open space provision on sites under 5ha. However, further clarity is needed on how the criteria relating to the mix of open space types is to be applied to smaller sites, given their space constraints. The proposed exemptions in Appendix 2 only cover the size of local parks required. It is not clear how requirements for small parks and district parks are to be satisfied on smaller sites.	Provide further exemptions for sites under 5ha relating to requirements for small parks, district parks and green corridors. These should provide added flexibility for how open space needs are satisfied, having regard to local open space strategies and development contribution plans.
Part 19 – Renewable energy (page 84)	The basis for requiring the provision of onsite renewable energy equivalent to 20% of electricity demand is unclear. This seems an arbitrary figure and conflicts with BASIX requirements that prevent	Make clear the renewable energy targets are aspirational, and for residential development BASIX requirements take precedence.

Section	Comment	CHIA NSW recommendation
	other planning documents setting competing requirements.	
Part 19.2 – Deliver net zero emissions neighbourhoods (page 85)	The guidance relating to delivering net zero emissions is unclear. As above, CHIA NSW is concerned this contradicts provisions relating to the implementation of BASIX.	For residential development, the transition towards net zero needs to be guided by gradual changes to BASIX requirements.

Draft Apartment Design Guide

Section	Comment	CHIA NSW recommendation
About this guide (page 8)	CHIA NSW welcomes the acknowledgement that each project will have a unique response and the criteria and guidance in the ADG are not intended to be exhaustive. As outlined in Part 1 of this submission, further clarity is needed as to how design guidance is intended to be applied.	Make clear that the guidance provides suggested design options and not mandatory requirements. The ADG also needs to be clear that any information or documentation requirements need to be tailored in scope and detail to the size and complexity of proposals.
Part 1.2 – Building separation (page 14)	There appears to be a drafting error in the introductory wording to Table 1.2.1. The table identifies minimum separation distances between buildings, not between buildings and site boundaries (which would be half the distances identified in Table 1.2.1).	Redraft the Design Criteria to be consistent with the current ADG. Make clear that when applying the separation distances to buildings on adjoining sites, half the minimum separation distance listed Table 1.2.1 should be applied, measured to the site boundary (referencing Figure 1.2.5).
Part 1.2 – Siting (page 15)	The design guidance to articulate the skyline using a variety of building heights and staggered built form should only be applied to large sites where multiple towers are proposed. If applied to small in-fill sites, this could unfairly impact development potential.	Move this guidance to the Urban Design Guide and/or amend the ADG to make it clear the guidance only relates to large development sites where multiple towers are proposed.
Part 1.2 – Building height (page 18)	The revised ADG includes guidance requiring rooftop communal open space and articulated roofs to be accommodated within the permissible building heights. Strict application of this guidance could unnecessarily reduce the number of floors that can be delivered, impacting yield.	This guidance should be converted to a consideration for councils when setting local planning controls. It should not be used to assess individual development applications. Alternatively, amend the guidance to include the words “ <i>where possible</i> ” or “ <i>unless otherwise justified</i> ” to make it clear that site-specific

Section	Comment	CHIA NSW recommendation
	<p>Minor exceedance of height limits to enable access to roof-top open space rarely cause significant visual or overshadowing impacts, as any structures are typically located within the middle of buildings.</p> <p>Roof top communal areas and associated access should be exempted from LEP height controls, in a similar way that architectural roof features are under cl 5.6 of LEPs.</p>	<p>variations should be considered on their merits under clause 4.6 of LEPs.</p>
<p>Part 1.2 – Building height (page 18)</p>	<p>The proposed design guidance seeking the alignment of floor-to-floor heights of new development with existing built form is unrealistic. Different land uses will require different floor to floor heights (e.g., an apartment building will not have the same requirements as a neighbouring hotel or commercial building). As drafted, the proposed guidance could reduce yield by unnecessarily limiting the number of floors in a building.</p>	<p>Remove proposed guidance, or amend to require consideration of aligning floor to floor heights with neighbouring buildings <i>of the same use</i>, taking into account the desired future character of an area.</p>
<p>Part 1.4 – Utilities and building services (page 27)</p>	<p>Restricting building services to secondary building frontages will reduce design options and could make it harder to meet technical standards and regulations governing infrastructure like fire hydrants.</p> <p>It could also unnecessarily impact development yield if, for example, larger side setbacks are required to accommodate necessary access and buffer zones.</p>	<p>The location of building services should be guided by applicable technical standards and requirements.</p> <p>Rather than unduly restricting where building services are located, reinstate current ADG guidance which encourages their concealment and integration with the building façade.</p>
<p>Part 1.5 – Deep soil (page 28)</p>	<p>CHIA NSW is concerned that increased deep soil targets will be difficult to achieve without impacting development footprint/yield – particularly if councils set even higher requirements than those in the ADG under local controls.</p> <p>While reducing the minimum dimension for deep soil areas to 3 metres could alleviate this impact to some degree, local council requirements could override this.</p>	<p>Increased targets must not be implemented without the associated reduction in the minimum dimension for deep soil areas. This minimum dimension must also apply to deep soil targets set by local councils.</p> <p>Where local controls apply lower targets in response to local circumstances, these should take precedence over those in the ADG.</p> <p>For clarity, the ADG needs to include additional commentary on the types</p>

Section	Comment	CHIA NSW recommendation
	<p>CHIA NSW supports the use of alternative options on sites where it is not possible to achieve deep soil targets due to site constraints. The revised ADG needs to expand the list of sites where alternative approaches may be warranted, consistent with the current ADG.</p>	<p>of sites where it is likely to be difficult to meet deep soil targets, including contaminated or otherwise constrained sites, and sites in inner-city and high-density areas.</p> <p>The guidance on alternative design solutions must be extended to local council deep soil targets.</p>
<p>Part 1.5 – Retaining trees (pages 29 and 30)</p>	<p>CHIA NSW recognises the importance of tree canopy. However, a balanced approach needs to be taken to achieving tree canopy targets.</p> <p>While the current ADG seeks the retention of existing <i>significant</i> trees, the consultation draft appears to require the retention of <i>all</i> existing trees.</p> <p>Having this as a starting expectation is problematic, particularly for higher density building forms such as apartments. Where vegetation is spread across many parts of a site, this requirement, if applied rigidly, would significantly impact yield.</p> <p>It is also unclear how the guidelines would be applied to trees which are classified as a noxious weed.</p>	<p>Retain current ADG guidance focusing on the retention of <i>significant</i> existing trees.</p> <p>The tree canopy cover targets should be achieved through a combination of retention of existing trees and replacement planting.</p> <p>AS 4970-2009 provides a sound basis for arborists to determine a tree’s significance.</p>
<p>Part 1.6 – Car parking (pages 34 and 35)</p>	<p>Refer to comments in Part 1 of this submission regarding reducing car parking and ‘EV ready’ requirements.</p>	<p>Refer to comments in Part 1 of this submission.</p>
<p>Part 1.6 – Bike parking (page 36)</p>	<p>CHIA NSW recognises the importance of supporting active transport. However, like car parking, over-supply of bike parking is an impost that reduces a CHP’s available investment for housing supply. The experience of CHPs is that bike parking spaces provided in schemes are often under-used.</p> <p>While the proposed rates are lower than those suggested in the 2021 EIE, CHIA NSW believes that parking rates should be determined having regard to local context. The need for parking is likely to be higher in urban areas with good levels of supporting</p>	<p>CHIA NSW recommends that the ADG enable bike parking provision to be determined based on the anticipated demand of occupants, taking into account availability of active transport infrastructure. The provision of bike-share facilities should be considered as a replacement for individual bike storage spaces, consistent with the proposed treatment of car share spaces.</p> <p>It is also recommended that the ADG allows more flexibility in how bike parking is provided, particularly on constrained sites. For example,</p>

Section	Comment	CHIA NSW recommendation
	<p>infrastructure, such as cycleways.</p> <p>While some types of bike storage will count towards external storage requirements, these requirements are also proposed to be increased.</p>	apartment balconies/private open spaces could provide a secure storage option.
Objective 2.1 – Common circulation	CHIA NSW is concerned with the wording of this objective. A focus on <i>maximising</i> amenity in common circulation areas could compromise the delivery of other desirable design outcomes, as outlined below. It is questionable whether such a priority should be given to spaces which are used for short periods of time.	Amend Objective 2.1 to read: <i>“Maximise the Achieve a good level of amenity of in common circulation areas and provide services for maximum building occupancy to create socially inclusive, secure, and safe circulation spaces.”</i>
Part 2.1 – Lifts (page 39)	<p>CHIA NSW is concerned that the proposed criteria for lift capacity and waiting times could significantly impact the cost of delivering community housing.</p> <p>While well intentioned, analysis by Stanton Dahl Architects found that for smaller community housing developments, the proposed requirements could double the number of lifts required (refer to Attachment 1).</p> <p>This would reduce the building footprint available for housing and add significant additional costs to the delivery and maintenance of community housing.</p> <p>A lower standard that still maintains a satisfactory level of service would avoid this unintended outcome.</p>	<p>To support the feasibility of community housing, exclude buildings of 10 storeys or over, or 40+ dwellings from the proposed criteria.</p> <p>CHIA NSW notes that in the 2021 EIE it was tower typologies that were identified as being underserved by lifts.</p> <p>Alternatively, more flexibility should be provided to community housing development.</p>
Part 2.1 – Common stairs (page 41)	While well intentioned, CHIA NSW is concerned that providing windows and natural ventilation in common stairs will add significantly to development costs, particularly for stairs which need to be fire-rated.	Amend the guidance to read: “For lower floors, <i>where practical, consider opportunities</i> to locate and design common stairs....”
Part 2.1 – Daylight and natural ventilation in common circulation spaces (page 41)	<p>CHIA NSW is concerned the proposed specifications for providing daylight and natural ventilation in common circulation spaces will impact dwelling yield.</p> <p>Analysis by Stanton Dahl Architects</p>	<p>Amend the ADG to make it clear the specifications for achieving daylight and natural ventilation in common circulation areas are not mandatory requirements.</p> <p>While well intended, the provision of</p>

Section	Comment	CHIA NSW recommendation
	<p>found that having two or more sources of natural ventilation would prevent building ends being used for larger dual aspect units (refer to Attachment 1).</p> <p>The proposed guidance is also likely to increase the amount of glazing required on building facades, with resultant impacts on heat load and shading requirements.</p> <p>Furthermore, any potential amenity benefit from natural ventilation would be reliant on windows being opened and closed at appropriate times. This will create an additional operational burden for CHPs.</p> <p>The proposed guidance seems excessive given that circulation corridors are only used for short periods of time.</p>	<p>daylight and natural ventilation to common circulation spaces should be balanced against other desirable outcomes, including maximising social and affordable housing.</p>
<p>Part 2.2 – Communal open space criteria (pages 44 and 45)</p>	<p>CHIA NSW supports the revised target for communal open space (COS) provision. The removal of the requirement for COS to be co-located with deep soil is also supported. These proposals will provide additional flexibility, particularly for smaller schemes.</p> <p>However, CHIA NSW is concerned that any benefit gained from the above changes will be negated by increased sunlight access and minimum dimension requirements. As drafted, the revised mid-winter sunlight access criteria will have the effect of increasing the amount of COS required to achieve the standard – from 50% of the “<i>principal usable part</i>” of COS to 50% of <u>all</u> COS provided on site.</p> <p>This could be difficult to achieve without reducing building footprints and impacting yield.</p>	<p>Retain current ADG solar access and minimum dimension requirements.</p>
<p>Part 2.2 – Range of spaces (page 45)</p>	<p>Clarity is needed on how the proposed guidance seeking a range of communal open spaces offering a variety of activities for multiple</p>	<p>CHIA NSW prefers the current ADG objective for communal open space which is more focused on designing versatile spaces that allow for a</p>

Section	Comment	CHIA NSW recommendation
	<p>groups of people, is to be applied to small sites which will have fewer opportunities for provision.</p> <p>CHPs have also raised concerns with some councils being overly restrictive with respect to what is counted as communal open space, for example excluding communal space which is also accessible by the public. This forces more open space onto roofs, impacting the ability to maximise rooftop solar.</p>	<p>range of activities. A focus on versatility rather than quantum will provide more flexibility in how this outcome could be delivered.</p> <p>Provide guidance on what can be counted as communal open space. To provide flexibility, allow some publicly accessible areas to be counted as communal open space where they provide recreation opportunities for residents. This guidance should prevail over local controls.</p>
<p>Part 2.2 – Communal indoor space (page 46)</p>	<p>CHIA NSW notes Objective 2.2.2 of the revised ADG seeks the provision of <i>“safe and resilient communal spaces that support a range of activities and contribute to the wellbeing of residents.”</i></p> <p>CHIA NSW supports a qualitative approach to the provision of communal facilities, allowing provision to be tailored to the need of each scheme.</p> <p>While no numeric target is proposed, the revised ADG includes guidance seeking the provision of multiple communal indoor spaces, distributed across multiple levels and locations.</p> <p>For community housing schemes, key considerations include the anticipated tenant profile, ensuring provision is safe and secure by maximising passive surveillance, and ongoing operational costs. For certain schemes, this means prioritising outdoor/semi-outdoor spaces over indoor facilities.</p>	<p>Provide additional flexibility for social and affordable housing developments, recognising the different needs and priorities of these schemes.</p>
<p>Part 2.3 – Family friendly apartments (page 50)</p>	<p>CHIA NSW favours a flexible approach to the provision of family friendly apartments, which responds to the expected tenant profile of a development.</p> <p>Some of the proposed design measures, if mandated, would increase development costs and/or reduce the amount of affordable</p>	<p>Amend the ADG to make it clear that the listed design solutions for family friendly apartments are optional and are not required to be implemented in combination in a development.</p> <p>Provide flexibility for community housing schemes in terms of how many apartments are provided as family friendly, aligned to the specific</p>

Section	Comment	CHIA NSW recommendation
	<p>housing that could be delivered. For example, requiring 20% of 2+ bedroom apartments to have larger bedrooms would use up space that could otherwise be used to provide additional amenity for residents, or additional affordable housing.</p> <p>The potential impacts would be compounded if multiple design solutions are required to be implemented in combination.</p>	<p>needs of the tenants that will be housed.</p>
<p>Part 2.3 – Apartment mix in community housing development (page 51)</p>	<p>Social and affordable housing developments are often built with a specific tenant profile in mind, to respond to identified gaps in provision. This means the apartment mix of these developments often needs to differ from built-for-sale market housing.</p> <p>As such, CHIA NSW welcomes additional flexibility to enable community housing schemes to respond to identified housing needs.</p> <p>However, the guidance on varying apartment mix needs to be improved so that it is clearer what type of development the concessions apply. Many local housing strategies do not provide a detailed breakdown of the specific dwelling mix requirements for affordable housing. The reference to “<i>relevant housing strategy</i>” therefore needs to be expanded to include consideration of social and affordable housing waiting lists.</p>	<p>Amend the apartment mix alternative design response guidance as follows:</p> <p><i>“Development that includes social housing, or is delivered by <u>or on behalf of</u> a community housing provider, may incorporate an alternative approach to apartment mix, aligned with relevant housing strategies <u>or the profile of applicants on social and affordable housing waiting lists</u>”.</i></p>
<p>Part 2.3 – Alternative design response for development delivered under the Housing SEPP (page 51)</p>	<p>Refer to comments in Part 1 of this submission.</p> <p>Currently, the Housing SEPP only provides concessions to build-to-rent housing with regard to apartment mix. Similar concessions need to be applied to affordable housing delivered under the Housing SEPP.</p>	<p>Amend the apartment mix alternative design response guidance as follows:</p> <p><i>“Where <u>affordable housing proposals are considered under State Environmental Planning Policy (Affordable Rental Housing) 2009 2021</u>, the consent authority may <u>should</u> be flexible in applying the design guidance for the provision of apartment mix and configuration.”</i></p>

Section	Comment	CHIA NSW recommendation
Objective 2.4 – Apartment configuration (page 52)	CHIA NSW questions the wording of this objective. Although CHIA NSW agrees with the intent, requiring the provision of apartments with “generous internal dimensions and proportions” could, if interpreted strictly, compromise the consideration of alternative design solutions involving smaller apartments.	Amend Objective 2.4 to read: <i>“Design apartments that are functional and flexible over the life of the building, with <u>generous</u> internal dimensions and <u>proportions that support</u> a high level of internal amenity, natural ventilation, and daylight access.”</i>
Part 2.4 – Room depth criteria (page 53)	The proposals to link maximum room depth to window-head height, instead of ceiling heights, will have an impact on achieving sufficiently sized rooms (refer to Attachment 1). If window sizes are increased to compensate, CHIA NSW is concerned this could increase the need for shading devices to manage summer heat load, adding to building costs. CHIA NSW is concerned that any potential benefit of the proposed change will be marginal, compared to the additional costs and impacts on room sizes.	Retain the current ADG design criteria, linking habitable room depths to ceiling height only.
Part 2.4 – Apartment configuration – alternative design response (page 54)	CHIA NSW supports a pathway being established for variations to apartment sizes. CHIA NSW agrees this should focus on demonstrating apartment layouts are efficient, functional, and maintain a good level of amenity. However, CHIA NSW cautions against adopting too narrow a definition of amenity. Consent authorities need to take a proportionate approach when considering appropriate design responses, having regard to the nature and scale of variation sought and the broader merits of proposals. For example, it is questionable whether the provision of higher levels of <u>both</u> private and communal open space should be the default requirement.	The ADG should enable flexibility in the measures employed to offset smaller apartments, taking into consideration the nature and scale of the variation sought. The guidance on smaller apartment sizes must allow alternative design solutions for sunlight access, daylight, shading, natural ventilation, and storage to be used. This includes the application of any concessions provided for affordable housing.

Section	Comment	CHIA NSW recommendation
Part 2.5 – Balcony depths (pages 56 and 57)	<p>CHIA NSW is concerned that increasing the minimum balcony depth to 2.4 metres for 2-bedroom units will make it more difficult to achieve solar access requirements. This is already the case for 3-bedroom units which have the same 2.4 metre requirement.</p> <p>A balcony with a minimum depth of 2 metres is appropriate for 1 and 2 bedroom apartments and fits a table and 2-4 chairs.</p>	<p>Include the option of a 2-metre balcony depth for 2 bedroom apartments, as per the current ADG, where this is necessary to meet solar access requirements.</p>
Part 2.5 – Clothes drying areas on balconies (page 58)	<p>It is not clear why areas used for clothes drying areas need to be excluded from the minimum balcony size calculations. Clothes drying is a temporary use of space and is consistent with the desired uses of balconies identified in Objective 2.5.1 of the revised ADG.</p> <p>Excluding these areas from the minimum size calculations will discourage opportunities for their integration into building design (such as through the use of screening devices) and makes the design criteria more onerous to achieve.</p>	<p>Amend the ADG to count areas that can be used for clothes drying, but capable of being used for other activities at other times, towards meeting minimum balcony size criteria.</p>
Part 2.5 – Alternative design responses for private open space and balconies (page 59)	<p>CHIA NSW supports additional flexibility for affordable housing delivered under the Housing SEPP. However, as noted above, the Housing SEPP currently only provides design concessions for build-to-rent housing. These concessions need to be extended to affordable housing. Consent authorities need to be flexible in considering both design criteria and guidance.</p>	<p>Require consent authorities to be flexible in considering how community housing proposals comply with design criteria and guidance for private open space. This may require an amendment to the Housing SEPP.</p> <p>Refer to the detailed comments in Part 1 of this submission for further discussion.</p>
Part 2.6 – Shading control (pages 60, 62 and 63)	<p>CHIA NSW is concerned that any potential benefits from the revised requirements for external shading control will be marginal compared to the additional costs and added complexity they will create. This will be compounded by other revisions to the ADG that will likely</p>	<p>Retain current ADG guidance on shading control, which is simpler and provides more flexibility compared to the more prescriptive revised guidance.</p> <p>Enable the option of planting to be used as a shade device, consistent with the current ADG.</p>

Section	Comment	CHIA NSW recommendation
	<p>increase the amount of glazing required on buildings, thereby increasing the amount of shading devices needed. This includes new cross-ventilation requirements and changes to room depth criteria.</p>	
<p>Part 2.7 – Natural ventilation</p>	<p>The stated aim of revising guidance on natural ventilation is to provide a clearer and more consistent methodology for measuring cross-ventilation.</p> <p>However, this is not reflected in the wording of the revised guidance. A review by Stanton Dahl Architects has identified aspects of the proposals that, as drafted, will introduce more complexity into the design process and make it harder to achieve cross-ventilation (refer to Attachment 1). This includes additional requirements relating to building obstructions, primary air path length, and doorways.</p> <p>CHIA NSW is concerned this will have a significant impact on development costs and the amount of affordable housing that can be delivered, particularly on irregularly shaped or otherwise constrained sites.</p> <p>CHIA NSW is also concerned with the minimum ventilation rates and complex testing required to support an alternative design response. This seems an onerous requirement to impose on community housing schemes, particularly if only a minor variation is sought. It is also concerning that no alternative design pathway is available for apartments which do not meet the prescribed requirements for sizing and distributing openings (per Figure A4.2.1).</p> <p>The amenity outcomes from the increased requirements need to be balanced against achieving other desirable outcomes.</p>	<p>Redraft the design guidance, and provide additional illustrations, so that the methodology for demonstrating compliance with the natural cross-ventilation requirements is simpler and clearer.</p> <p>To provide sufficient flexibility, a broader range of design solutions must be permitted, particularly on challenging sites.</p> <p>It needs to be clearer that the option of an alternative design solution is available to all sites, not just those affected by ambient noise and pollution. A broader range of alternative design solutions should be supported, including the option of offsetting lower levels of cross-ventilation against other design outcomes, such as good levels of natural ventilation.</p> <p>Proposals seeking minor variations to requirements must not be required to go through a complex testing and verification process, particularly for smaller apartment developments. Variations should be justified on the overall merits of a proposal.</p> <p>It is recommended that the ADG include more examples of how the cross-ventilation requirements can be achieved under a variety of site conditions, without compromising yield or significantly increasing development costs.</p>

Section	Comment	CHIA NSW recommendation
Part 2.10 – Storage (page 76 – 78).	<p>The proposed increases to storage requirements will have space and cost implications for CHPs, particularly if larger basements are required as a result.</p> <p>CHIA NSW is also concerned that proposed revisions to storage guidance will unnecessarily reduce flexibility to thoughtfully address storage needs. This includes the proposed minimum dimensions for storage spaces/cupboards, and excluding storage integrated into balconies from counting towards the storage volume in an apartment.</p> <p>While some flexibility is proposed for development delivered under the Housing SEPP, the concessions are limited to internal storage. The rationale for this is unclear.</p> <p>Refer also to concerns outlined in Part 1 of this submission about concessions currently only being available to build-to-rent housing.</p>	<p>Require consent authorities to be flexible in considering alternative design solutions for community housing schemes, recognising that not all households require the same amount of storage. The concessions must be applied to <u>both</u> internal and external storage requirements to reduce the necessity of large basements.</p> <p>The ADG needs to be clear that recommended dimensions for storage areas are suggested guidelines only and not mandatory requirements.</p> <p>Storage areas integrated into balconies should be counted towards meeting minimum storage volume requirements, particularly on constrained sites and where this supports optimal affordable housing delivery.</p>
Part 3.1 Energy efficiency	Refer to comments in Part 1 of this submission.	ADG design requirements must not exceed BASIX requirements.
Part 3.1 – Rooftop solar (page 86)	While the benefits of roof-top solar are acknowledged, CHPs have reported it can be difficult to find sufficient roof space.	The ADG needs to recognise that the potential for roof-top solar may be limited due to the need to accommodate communal spaces and building services.
Part 1.6 (page 35) & Part 3.1 (page 86) – Electric vehicles	Refer to comments in Part 1 of this submission.	Refer to Part 1 of this submission.
Part 3.2 - Water	Refer to comments in Part 1 of this submission.	ADG design requirements must not exceed BASIX requirements.
Part 3.2 – Rainwater reuse (page 89)	Refer to comments in Part 1 of this submission.	Refer to Part 1 of this submission.

DP Regulation

Section	Comment	CHIA NSW recommendation
Cl 16(3) – Content of a DCP	Refer to comments in Part 1 of this submission.	Amend this clause to require councils to consider the objectives of the revised ADG when preparing DCPs.

Section	Comment	CHIA NSW recommendation
CI 57 – Design verification statements	The DP Regulation, as drafted, requires certain proposals to submit multiple design verification statements. This will increase the documentation burden and lead to duplication.	Amend the DP Regulation to enable the option of a combined DVS to be submitted, which incorporates contributions from the required design professionals.
CI 57A – Additional requirements for design verification statements	<p>It is not clear how a DVS can satisfy the requirement to “<i>verify that the design of the development incorporates the design review panel’s advice</i>” where it proposes to not take forward all the advice received, under the provisions of cl 57A(1)(c).</p> <p>CHIA NSW is also concerned that there is potential for different interpretations on whether a development is consistent with the design advice. This creates uncertainty. It risks a DA being refused or invalidated by a consent authority if they form the opinion that the DRV has not addressed every point of inconsistency.</p>	<p>Amend cl 57A(a) (and similar clauses in the draft DP Regulation) to:</p> <ul style="list-style-type: none"> Require design verification statements to explain how the design of development has considered the design review panel’s advice rather than verify that the advice has been incorporated. <p>Insert an additional provision into cl 57(A) clarifying that DAs are not invalidated and should not be refused simply because a consent authority is of the opinion that a DRV has not identified or addressed all inconsistencies with the design review panel’s advice.</p>
CI 57C and 57D – Embodied energy and Net zero statement	Clarity is needed on how these requirements apply to residential development that is not ‘BASIX affected development’.	Refer to Part 1 of this submission.
CI 99 – Conditions relating to EV charging facilities	Refer to comments in Part 1 of this submission.	Refer to Part 1 of this submission.
CI 99A – Condition relating to green travel plans	<p>This proposed condition is onerous and unworkable.</p> <p>It is not clear if the ongoing review of the green travel plan is to be undertaken by the consent authority, the applicant, or the owners.</p> <p>Additionally, the intended focus of the review is unclear. If it is intended that a green travel plan is updated post review, this could trigger the need for a modification to the development consent.</p> <p>This would be onerous and would impose additional administrative burdens on both consent authorities</p>	Amend subclause 99A(2) to read: “(2) <i>It is a condition of the development consent that measures to facilitate sustainable transport and achieve the targets for modal share are implemented as specified in the green travel plan.</i> ”

Section	Comment	CHIA NSW recommendation
	<p>and applicants.</p> <p>CHIA NSW is also concerned with the proposed condition requiring green travel plans to be <i>“implemented in a way that ensures the targets for mode share specified in the green travel plan are achieved.”</i></p> <p>While CHPs will implement the measures identified within green travel plans in good faith and to the best of their ability, it is not clear how delivery of the mode share targets can be guaranteed given this is ultimately dependent on the behaviour of future occupants.</p>	
CI 268D – Functions of a design review panel	CHIA NSW supports design review panels being required to provide their advice within 14 days.	Supported.
Schedule 1 – CI 2(3A) - Site analysis	CHIA NSW notes that the requirements for site analysis differ from those outlined in the revised ADG.	<p>Documentation requirements need to be commensurate with the scope and complexity of proposals.</p> <p>Amend the DP Regulation to allow photomontages of the streetscape to be used in lieu of drawings.</p>

Attachment 1 – Advice from Stanton Dahl Architects



Stanton Dahl Architects

24 January 2022

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Attention: Michael Carnuccio

Dear Michael

Re: Advice on proposed reforms to the Apartment Design Guide

Stanton Dahl Architects (**SDA**) has been engaged by the Community Housing Industry Association NSW (**CHIA**) to undertake a review of the proposed reforms to the Apartment Design Guide (**ADG**) released in December 2021 by the Department of Planning, Industry and Environment as part of the Draft State Environmental Planning Policy (Design and Place) 2021 (**SEPP**). This draft policy sets out NSW Government policy for improving the design quality of the built environment, including residential apartment development.

Who are we?

Stanton Dahl Architects has designed and delivered thousands of buildings across a range of sectors – with the common aim of making a difference in people’s lives – something we call Architecture in the Service of People (**AISOP**). We have been involved in a significant number of housing types within the social, affordable and community housing sectors including boarding houses, group homes, seniors living, social housing, women’s housing, crisis accommodation, student housing and many other housing types, applying respect and know-how to these frequently budget-constrained projects. Today, most of our projects are community and ethically focused with our clients including NSW Land and Housing Corporation and numerous Community Housing Providers (**CHPs**).

Aims of Reform

Both **SDA** and **CHIA** acknowledge the aims of this reform in improving the built environment. Following our assessment of the draft **ADG** – which is described below – we found particular value in the introduction of mechanisms that enable the flexible application of **ADG** objectives as well as merit based pathways for BASIX and sustainability measures. Both of these will encourage greater creativity and innovation and will eventually create resilient and future-proofed places that suit the needs of the site and its context.

Assessment Framework

SDAs assessment of the draft **ADG** was undertaken collectively with **CHIA** as a peak body within the social and affordable housing sector. **SDA** with **CHIA** established the frames of reference for the assessment and then undertook a series of workshops and meetings including a roundtable discussion attended by a large number of **CHPs** whose contribution was invaluable to both the process and the outcome.

The workshops and their focus were:

- Workshop-01 Frame of Reference 14th Dec 2021
- Workshop-02 Roundtable discussion 16th Dec 2021
- Workshop-03 Preliminary observations 22nd Dec 2021
- Workshop-04 Findings and conclusion 19th Jan 2022

The objectives of our assessment of the draft **ADG** were:

- (a) to understand the proposed design principles and objectives of the proposed **SEPP** and compare them to the current **ADG** (and SEPP 65),
- (b) to outline the likely impacts on social & affordable industry offerings, particularly yield, cost and potential difficulties, and
- (c) to provide recommendations for the consideration of policy makers'

Assessment Method and Conclusion

The method adopted for our assessment of the draft **ADG** involved the proposed changes being applied to actual projects and compared with the outcomes achieved under the current **ADG** – a method we felt safeguarded the integrity of the process and its findings. The key issues that were identified through the assessment have been summarized and attached to this letter whilst a comprehensive analysis has been documented and delivered to **CHIA**.

We are grateful to **CHIA** for giving us the opportunity to contribute to this process and together look forward to an improved design quality for our built environments.

Yours faithfully,
Stanton Dahl Architects



Shayne Evans
CEO, Architect 7686

Key issues

Part 1.2 Building Height (page 18)	Requirement to accommodate rooftop communal open space, lift and stair access, shade structure and articulated roofs within permissible height limits.	Unless considered in the LEP HOB controls, it will likely lead to loss of floors and yield. Rooftop communal open spaces requires lifts and stairs access, lift overrun will be 4.2m-4.6m from the last reachable floor. The inclusion of this structure is a significant reduction in the number of floors.
Part 1.4 Utilities and building services (page 27)	Where building services are required to be located at or above ground level, including waste facilities, loading areas, car parking vents, rainwater goods, and infrastructure for electrical, fire, hydraulic or mechanical services, ensure they are: <ul style="list-style-type: none"> - visually and physically recessive - <i>integrated with the development's built-form and landscape</i> - <i>not in front of the primary building frontage</i> - <i>screened with planting or other design elements.</i> 	Substations and fire hydrants' location, spatial and distances from other buildings is dictated by NCC BCA and energy providers' guidelines. Having some of these services not in front of the primary frontage may require increased side setbacks to accommodate access requirements and separation distances.
Part 1.5 Deep soil (page 29)	Increased deep soil zone percentage.	Increased percentage will likely reduce building footprint. We note that the decreased minimum dimension of 3m may alleviate this impact to some degree.
Part 1.5 Retaining trees (pages 29 and 30)	Change in wording to reference requirement to retain all trees and not just significant trees.	Could impact yield to achieve tree protection zones for underground levels and to achieve adequate clearances from tree canopies at the above levels. Current ADG requires the retention of 'significant' trees only. AS 4970-2009 provides sound base for arborists to determine trees significance, along with the newly introduced tree canopy targets will achieve the purpose without the retention of insignificant trees that may hinder developments.
Part 2.1 Lifts (page 39)	Lift handling capacity and anticipated waiting times, demonstrated in a vertical transportation report prepared by a suitably qualified person, comply with the minimum standards in ISO 8100-32:2020 Lifts for the transportation of persons and goods – Part 32: <ul style="list-style-type: none"> — average waiting time: 60 seconds or less — handling capacity: 7 per cent or more. 	Proposed AWT and HC requirements could trigger the need for additional lifts – for schemes below 40 this could double requirements over current requirements – this could have cost and space implications. A comparison between current and proposed controls for a development comprises 30 units (3 x1B + 15 x 2B + 3 x 3B). <ul style="list-style-type: none"> - Current ADG will require 1 lift as it's under 40 apartments. - The same development required 2 lifts to achieve the proposed AWT & HC.

**Part 2.1
Natural ventilation
in common
circulation spaces**
(page 41)

Daylight and natural ventilation in common circulation spaces that are above ground provide:

- 2 or more sources of natural ventilation and daylight, where the floorplate has 7 or more apartments per floorplate, with the distance between openings maximised to encourage air movement

Having two sources of ventilation will likely impact yield as this won't allow utilising building ends for larger units with dual-aspects across the entire building width.

**Part 2.2
Sunlight access
requirements to
COS**
(page 44)

At any time between 9 am and 3 pm in midwinter (21 June), ensure at least half the communal open space area receives 2 hours solar access.

Current ADG *"Developments achieve a minimum of 50% direct sunlight to the principal usable part of the communal open space for a minimum of 2 hours between 9 am and 3 pm on 21 June (mid winter)"*

Requiring 50% of the entire COS as opposed to 50% of 'the principle usable part' as per current ADG – could reduce building footprint/yield.

**Part 2.4
Depth of habitable
rooms**
(page 53)

Depth of habitable rooms is limited to a maximum of 2.5 times the ceiling height or primary window-head height, whichever is lower.

Linking the room depth to the window-head height as opposed to ceiling height in the current ADG will have an impact on achieving sufficiently sized rooms.

Where living and dining rooms are combined, habitable room depth is limited to a maximum of 3 times the ceiling height or primary window-head height, whichever is lower. This excludes depth occupied by storage space or a kitchen benchtop on the room's farthest wall.

For example, a combined living, dining, kitchen space having a ceiling height of 2.7m and a window-head height of 2.4m (common practice) will limit the space depth to 7.2m only compared to 8m in the current ADG.

**Part 2.5
Balcony depths**
(page 56)

Proposed 2.4m depth requirement for 2 bedrooms units.

Will make it difficult to achieve solar access requirements, as is currently experienced with 3-bedroom apartments for most orientations.

We note that Figure 2.5.2 requires more than the minimum balcony dimensions, and the exclusion of the cloth drying areas from the minimum balcony size.

**Part 2.7
Natural ventilation**
(pages 64-67 and
Appendix 4)

The proposed changes are likely to have a significant impact on yield and cost, for example;

- Eliminating treatments such as indentation and slots to single-aspect units
- Introducing unobstructed exposure to wind and its calculations
- Requirements for primary air path to be not less than 5m,
Coupled with
- Requirements for 2 or more sources of natural ventilation and daylight for common circulation spaces (Part 2.1)

Will make corner and cross-through units the only qualified units to be counted as cross-ventilated. Other types with such as units with clerestory roof-window will likely struggle to achieve EOA of 2% of total

habitable floor space to be considered as a second aspect.

Cross-over (up and over) units are usually not suitable for social & affordable houses due to inefficiencies and accessibility challenges.

That said, the proposed changes will likely lead to use multiple-core solutions that requires more lifts and additional cost. Or reduced yield to achieve the required number of cross-ventilated units.

the proposed restrictors/flyscreen reduction factor Table A4.1 between 5% and 55% will lead to increased windows sizes,

Calculations' complexity will require approximately 25%-30% additional drawings/hours to demonstrate compliance.

Alternative pathway for natural ventilation requires additional CFD and wind tunnel testing, those are additional consultants needed for all developments on busy roads or rail corridor.

Part 2.10
External storage
(Page 76)

increased storage requirements

The proposed increased storage requirements resulted in 25% increase in the storage areas in total and approximately 51% increase of the external storage area assuming internal areas remains unchanged. This change will likely lead to increased basement area/cost.