Appendix 2

Table of Assessment

Draft Medium Density Design Guide (MDDG)

ITEM	COMMENTARY AND RECOMMENDATION (ALL QUOTES FROM MDDG ARE SHOWN IN ITALICS)
Minister's Forward	*We need affordable housing solutions for families. We also need to increase the variety in the types of housing available to give people more choice, provide an interesting and vibrant built environment and ensure housing supply caters for the needs of changing demographics into the future.* This method of delivery through Complying Development does not mean that **affordable housing** will result in an area where high land prices and ongoing increase in demand, particularly by overseas investors able to pay high prices. Unaffordable prices for housing in Ku-ring-gai will remain regardless of dwelling type supply. For example, a DA approved site for 16 townhouses at 18-20 Bent Street, Lindfield sold for $13m to an overseas investor. The likely price of these dwellings will be over $1m each. The Minister makes reference to **aged population**; however the MDH Code SEPP and MDDG have no integrated standards on site design and access for people with a disability from street into housing. Ku-ring-gai has a requirement for 100% Liveable Housing with accessible paths of travel across sites. The Minister refers to *"a fast-track assessment process for development consistent with existing land zoning."* The proposed MDH Code SEPP and MDDG are **not** consistent with the intention of the zoning within Ku-ring-gai and many other local Councils. The R3 Zone in Ku-ring-gai has been applied as a planning mechanism to create a well-designed interface between high density development and low residential development. An interface zone that enables a new housing typology within Ku-ring-gai that integrates into the high quality local built fabric and is consistent with the Ku-ring-gai character of built form within a landscaped setting of substantial planting and tree canopy. The Ku-ring-gai DCP has a developed model for the delivery of multi-dwelling housing that integrates into the high quality local built and landscape fabric. The MDH Code SEPP and MDDG are in direct contrast to the local integrated models and stand to destroy the integrity of zoning application in this locality, particularly with regards to permitting Torrens title subdivision which will remove the ability to maintain long term homogeneity across medium density development particularly the retention of deep soil landscaping and consistent built form to streets. The Minister states that there was *"strong support…*(and) *had acted on that feedback, taking on board the wants from Councils, the community and industry."* However, no address or justification is given to the many **concerns** raised previously through response to the Discussion Paper exhibition. **No response** has been given to those Councils who are seeking to protect the local fabric and have requested the missing middle be delivered in a more transparent and accountable manner- in the way high density dwelling are delivered through SEPP65 and the Apartment Design Guide (ADG). **No justification or evidential testing** of how the Complying Development route will deliver quality housing that meets local character standards, or that is **aligned with State Policy**. *Councils also highlighted the importance of ensuring that development respects an area's existing local character and streetscapes. As a result, the draft Medium Density Design Guide includes proposed building height limits, setbacks, landscaping and other building standards to help ensure existing local character and neighbour privacy are maintained.* Removing Council's ability to set primary development standards for lot size, FSR, Height Limits, Site Coverage, Setbacks and Landscaping unfortunately effectively negates the entirety of the Minister's statement. The MDDG is not consistent with the local

	controls stipulated within Ku-ring-gai's and many other local DCPs. It is not possible for a 'one size fits all' to accommodate every area in NSW and its unique character. The MDDG operates on a lowest common denominator and basically enables swathes of quality areas to be wiped out and developed with little to no innovative thought or design. The only way to truly align the "missing middle" with local character is to ensure a delivery mechanism similar to SEPP 65 and the ADG, and not Complying Development. This way, Council's primary development standards will be retained.
PART 1. Introduction	
1.1 **About this Guide** **Aims of the Guide**	Comments regarding Objectives p4. *The MDD objectives are to:* • *deliver better quality design for buildings that respond appropriately to the character of the area, landscape setting and surrounding built form;* The intent to deliver design quality to all housing types is supported. However, the proposed Standards do not reflect this objective because they codify the very criteria that define an area's local character (Lot Size, FSR, Building Height, Setbacks etc.) Attempting to apply a 'one-size fits all' set of development controls fails to respond to first principle strategic planning for city and place making - local topography, differing street layouts, differing subdivision patterns, differing infrastructure, differing public domain assets and quality, and differing strategic planning objectives for different regions within a state. Inner Sydney LGAs are completely different to western Sydney, to the northern suburbs, to the western suburbs, to regional coastal and inland NSW cities and towns. This cannot be codified as if they are the same, without resulting in long term negative consequences throughout the State, and certainly will have detrimental impacts on local character. SEPP 65 Clause 6A and the ADG have successfully implemented design quality which should be at the forefront of all development as its legacy is for the next 50-100 years. SEPP 65 and the ADG are working well in our experience from both the architectural, developer, and assessment perspectives across all Councils. Similar design quality should be the aim and must be achieved with medium density housing. • *improve the quality of neighbourhoods and precincts;* The intent is supported in principle, but will not be achieved. In terms of urban outcomes, the long term effects the proposed Standards will have on Ku-ring-gai and Sydney will be detrimental to landscape, and the corresponding impacts that will result in ever increasing heat gain within the Sydney basin, poor amenity, pedestrian amenity, loss of streetscape, loss of connected biodiversity, increased water run-off, and increased energy demands etc. • *improve liveability through optimal internal and external amenity, including functional layouts, ceiling heights, solar access, natural ventilation and visual privacy;* The intent is supported in principle, but will not be achieved as amenity is less than is expected in higher density apartment

	design. This is counter intuitive and flawed. For example, the enabling of 2.4m ceiling heights to the upper floor habitable rooms which prevents installation of ceiling fans. The ADG has a 2.7m requirement. • *deliver improved sustainability, greater building adaptability and robustness, improved energy efficiency and water sensitive urban design;* The intent is supported in principle, but will not be achieved with the proposed Development Standards as there is no provision made for meaningful deep soil landscaping, which provides soil surface and vegetation that positively contributes to stormwater runoff and heat emissions. • *improve the relationship of dwellings to the public domain including streets, lanes and parks;* The intent is supported in principle, but will not be achieved because there is no scope for local Councils to plan for the proposed housing types strategically. The current wording and structure of the draft Code and proposed recommended types fail to address street and subdivision patterns existing in almost all of broader metropolitan Sydney, and NSW. There are no laneway networks anywhere except inner Sydney LGAs, and can only be controlled in master planning new housing subdivisions on greenfield or large brownfield sites. • *deliver design guidance and assist in providing a diverse housing mix and choice;* The intent is supported in principle but must result in strategic planning at local level that increases density in a controlled and coordinated way that responds to other NSW and Federal city policies. The proposed Code fails to achieve this. • *support councils in developing planning controls and master plans through improved guidance.* The proposed Code effectively removes the ability of local Councils to manage strategic planning responsive to local conditions. The strength of the proposed code is in application through master planning of large Brownfield and Greenfield redevelopments. It is inappropriate for established, high quality areas such as Ku-ring-gai, which has developed a suite of documents to enable development in a co-ordinated and responsible manner for the short and long term benefits of the locality and of the Sydney Basin.
1.2 **Structure of the Guide** **Part 2 Design Guidelines**	The overall structure of the document is generally supported; however, there is a contradiction between the stated intended application of the MDH Code Development Standards and LEP Development Standards. The stated intent in this section is for the MDDG to be used by Councils in establishing precinct plans and principal controls. However, the MDH Code contains development and site requirements that override LEP principle Development Standards. Councils need to retain principle Development Standards for: • Location of specific medium density types within strategically appropriate land use zones • Minimum parent lot size • Minimum applicable subdivided lot size • FSR • Setback

	• Landscape • Deep soil • Site coverage.
1.3 **Planning Context** **Role in Strategic Planning**	*The future character of an area is to be determined by the local council and community. The Design Guide encourages a design-led strategic planning process to determine the type, scale and built form of medium density housing permitted in an area. The development controls established as a result of this process will be expressed in the Local Environmental Plan (LEP) and Development Control Plan (DCP) that applies to the site. (p6)* This statement ignores the fact that many Councils and communities have already considered their areas future character and have integrated area wide strategic approaches reflected in their LEPs and DCPs. This is certainly the case for Ku-ring-gai. Council loses all strategic planning control for applications lodged under Complying Development in complete contradiction to the above statement. This will result in ad hoc, randomised applications that may be poorly located and be inconsistent with strategic planning of individual LGAs. In addition, there is no requirement for the developments to be designed by qualified people (registered architects), and enables private certifiers who do not have planning, architectural or legal qualifications to assess and apply due diligence in certifying developments under planning and other legislation. The result is that the majority of these developments will deliver nothing more than dwelling numbers and be regardless of the long term urban design, architectural and environmental benefits. Principal Development Standards for medium density housing should not be contained within SEPP Exempt and Complying Development (Codes SEPP) 2008. The SEPP Medium Density Housing should be structured similarly to SEPP 65 and clause 6A.
1.2 (cont'd) **Relationship with other Environmental Planning instruments for DAs**	The provisions of the following also relate to development applications to which this section applies: • *State Environmental Planning Policies applying to the land or development* • *The relevant Local Environmental Plan applying to the land.* *If inconsistencies exist between this guide and the above listed environmental planning instruments, the environmental planning instrument prevails.* (p6) There is persistent ambiguity about the status of LEPs as they are overridden by SEPP Development Standards. It is also unclear how the MDDG can be applied where there are multiple inconsistencies with its own Design Guidance and the MDH Code Development Standards that will not achieve the Nine Design Quality Principles. As discussed at Section 3.1 Principal Controls for 3.1B FSR where KLEP has significantly different FSR Standards to the Codes SEPP. The Complying Development pathway legitimises the randomised uptake of the MDH Code that has vastly different

	Development Standards to KLEP and KDCP. This will result in poor strategic planning outcomes affecting the huge majority of all land available for urban development that is land zoned R2 and R3 across the entire city and state. These types of inconsistencies and ambiguity raises concern regarding Court cases that will eventuate due to the interpretation and triggering of the word 'inconsistencies' between LEP and SEPP Standards and the effect on Local LEPs particularly where poor typologies, inadequate controls, and inconsistencies within the MDDG are contrary to the Nine Design Quality Principles at 1.5 of MDDG.
1.4 **Obtaining Consent**	The existing status is ambiguous as adoption of the MDDG is apparently optional. In practice, Council loses control of strategic planning because the two streams available to applicants are either: **Complying development Pathway:** All Council's principal development standards are overridden by the MDH Code and applicable to R2 and R3 zoned land. This forms the vast majority of land use zones in all LGAs except the City of Sydney. Ad hoc development disconnected from local strategic planning controls and objectives. The impact will be extensive due to the proportion of R2 and R3 zoned land within Council areas. Under the existing Codes SEPP development penalties for non-compliance are not a deterrent. The role of private certifiers in certifying Non-Compliant Development is becoming more and more evident, sometimes with serious impacts to personal safety. Small fines and the reluctance to require demolition of privately certified development makes it an attractive path for developers to build first and factor in a small fine to their construction costs should they be exposed. The process is therefore flawed and open to corruption. **Private Certification:** It is naïve to believe that the private certification process will achieve better quality outcomes than the traditional DA process. Certifiers in general are **not** qualified nor trained to undertake planning assessments of this complexity. Current training courses offered by universities in relation to planning and development assessment are inadequate and do not equip certifiers to undertake a meaningful planning compliance assessment. To expect certifiers to ensure "compliance with the Design Criteria" overestimates the abilities of most current certifiers. The question of independence and rigor of the private certification process remains. A private certifier has a fundamental conflict of interest in undertaking public responsibilities as a regulator and providing this as a service to a client for a fee. In this regard, the recently completed review of the Building Professionals Act identified a number of inherent weaknesses in the certification process that remain unaddressed. **Design:** Building Designers are also allowed to design these developments and there is no requirement for them to be designed by Architects only. Building designers have NO formal registration or accreditation requirements in NSW. ANYONE can practice as a Building Designer and there is no requirement to be qualified, have experience or have any credentials whatsoever. Accreditation by the Building Designers Association of Australia (BDA) in NSW is not regulated, is entirely voluntary and can be

	considered 'informal' at best (only Building Designers in Tasmania, Queensland and Victoria are regulated). It is also questionable whether Building Designers would be able to secure the necessary liability insurance as is required for architects. Architects must - • have a formal tertiary education / degree in architecture • be covered by the necessary liability insurance (this is required for registration) • be officially registered as an architect with the governing architecture body in their state or territory Building Designers have none of these requirements. Increased risk and liability issues are inevitable. In addition, this approach will have a detrimental impact on Heritage Items (HI) and Heritage Conservation Areas (HCA). Complying development must not be permitted on lots that adjoin, or are on opposite sides of the road, to HIs and/or HCAs. Substantial front, side and rear set-backs are required to separate any unsympathetic Complying Developments from Heritage properties to protect their curtilage. A landscape buffer is required to separate any proposed unsympathetic Complying Development from the established built form and garden setting of HIs and/or HCAs. Development Application Pathway: LEP and DCP set the strategic planning controls for the local area and deliver coordinated strategic planning outcomes. At present, it appears Council has a choice to adopt the MDDG for DA Pathway; however there is no certainty that this will be ongoing. This is of concern, as the MDDG development standards will not result in considered or integrated results for the local area. The best urban outcomes will be achieved by local strategic planning instruments retaining this role. Similar to the application of SEPP 65. Penalties that will be effective in deterring non-compliance should be mandated and be significant, given the profit margins associated with mass housing of this type.
Development Applications	The introduction of Private certifiers effectively removes the obligation to any DCP controls as these do not comprise the MDH Code development standards. This further reinforces the disconnect between sound strategic planning outcomes and ad hoc, randomised medium density development. Private certifiers are not qualified to assess the urban design merits and complexities associated with medium density design. As is, the single dwellings being delivered by private certifiers have poor architectural resolution and connection to a site, its streetscape and surroundings. The introduction of private certifiers effectively places control of local character and strategic planning into the hands of individual practitioners rather than under the coordination of Councils who are implementing planning policies that dovetail with State and Federal development objectives - a more complex urban design skill set that is best provided by Local Councils. Private Certifiers should play no role in the design approval stage. It is unclear whether the intended effect of a Council adopting the MDDG means it retains local control over LEP principal

	development controls and DCP for urban strategy and desired future character; or if not adopted, is the intent that Council loses the control over all principal development standards.
1.5 Design Principles	Rename as 'Design **Quality** Principles' to be consistent with Part 2 of the MDDG (and SEPP 65). They are sound urban design categories that are intended to improve design quality. They are consistent with the structure of SEPP 65 Design Quality Principles, which are achieving improved design outcomes for high density development. However, the proposed Medium Density Design Criteria performance requirements are inconsistent with achieving the Design Principles and as such significant amendments are required to many Design Criteria. See detailed comments in Section 3 Design Criteria of this table. Many of the Design Guidance points do not appear to have been tested and will lead to dire outcomes on many urban design indicators for amenity, environment, and streetscape.
PART 2. Design Guidelines	
2.1 Relationship to Design Quality Principles and Design Elements	This section should include the requirement for a site analysis as required in the ADG. Multiple terms with vague connectivity such as design criteria, development controls and design standards confuse comprehension of the document. The flow diagrams should relate more directly to all parts of the document. 2.1 The Matrix should include additional relationships: 4. Sustainability – C 5. Landscape – D, E and M 6. Amenity – C The Matrix as a tool has a poor relationship to the achievement of the design criteria in Part 3 and 4. None of the Design Guidelines can be initiated as they are merit based unless Councils retain strategic planning control and control of the principal Development Standards. They will not be delivered through the complying development pathway as the private certifier cannot make merit assessments. Setbacks are a critical element in Ku-ring-gai's landscape character, yet is absent from the Principal Development Controls. An amendment is required to include Site coverage and setbacks in Primary Development Controls
Principal Development Controls	Locally established and meaningful DCP Development Controls have no statutory effect in Complying Development if separate controls are contained within the MDH Codes SEPP. Therefore, all principal Development Controls should be removed from the MDH Codes SEPP and retained in the LEPs for Land Use, Height of Buildings, FSR, Landscaped area.
Setting and Testing the Controls	*The appropriate principal controls are the result of identifying future character, appropriate heights, building depths, spaces*

	between buildings and ensuring good amenity. Control testing should also consider: • *Orientation to control sunlight and daylight access and limit overshadowing;* • *Natural ventilation;* • *Visual and acoustic privacy;* • *Private open space;* • *Communal open space;* • *Deep soil zones;* • *Ceiling heights ;* • *Dwelling sizes;* • *Public domain interface; and* • *Noise and pollution.* *The controls must be checked to ensure they are co-ordinated and that the desired built form outcome is achievable. The controls should ensure the optimal density and massing can be accommodated within the building height and setback controls.* (p14) This testing as relates to the LEP and DCP has no effect under the proposed MDH Codes SEPP, which overrides LEP and DCP controls. Therefore, the inclusion of Land Use, Height of Buildings, FSR, and Landscaped Area in the MDH Codes SEPP assumes all medium density development will achieve the same results, which could in fact be quite contrary to the local existing and desired urban character. This has been the experience of development under SEPP (Housing for Seniors and People with a Disability) 2004 and SEPP (Affordable Rental Housing) 2009 for boarding house type development. Testing through Land and Environment Court Appeals is a poor method of strategic planning. Councils are best placed to retain these controls as they have a holistic understanding of the local area strengths and constraints, and are able to deliver development that preserves the long term integrity of its most precious resource- land. The performance criteria being tested must be robust and in the draft form, many of the proposed elements are inadequate or have demonstrated to achieve poor outcomes. All principal Development Controls should be removed from the MDH Codes SEPP and retained in the LEPs for Land Use, Height of Buildings, FSR, Landscaped area. See detailed comments Part 3 Design Criteria regarding quality of the design criteria performance benchmarks.
Complying Development	Amendments must be made to MDH Codes SEPP and MDDG for better amenity and meaningful performance benchmarks that will achieve the MDDG Design Quality Principles. Further, private certifiers do not have academic training through the rigour of a 5 year Town Planning degree study and therefore are ill placed to be assessing whether development outcomes are complying or acceptable across all layers (landscaping, stormwater, water management etc.) Private certification of medium density housing must not be permitted due to its complexity and cumulative impacts on local character, long term sustainability alignment with other local, state and federal plans. Private certifiers are not qualified, nor interested in the analysis required to determine whether testing of controls has been adequate, or even carried out. The premise of Complying Development is that it provides a simple checklist certification that

	does not need to consider any of the broader urban design considerations that are critical at local level in achieving the desired local planning objectives and urban outcomes. A separate SEPP for Medium Density Housing should be developed similar to SEPP 65 and the ADG that better manages the more complex urban design issues.
PRINCIPLE CONTROLS	
2.A **Building Envelopes – Heights and Setbacks**	**Building Envelope**s: The list of 'special sites' (p16) should include significant vegetation and watercourses. **Setbacks**: The proposed minimum dimensions for front, side and rear setbacks are insufficient to provide landscape area that enables retention of existing trees particularly large remnant gum trees that have tree protection zones in excess of 10m radius that are typical in Ku-ring-gai. (Guideline 15) (p19). The setbacks give a building footprint expectation to applicants and without strong tree preservation requirements; tree removal is the direct outcome. Ku-ring-gai Council is currently involved in a Land and Environment Court appeal for a development application to remove trees on a residential lot, with the only justification for their removal being to enable development under a CDC. If trees are retained on site, the Code SEPP minimum setbacks and tree protection requirements are inadequate for the preservation of significant trees and inconsistent with the Australian standard for Protection of trees on development sites (AS4970-2009). This is further evidence that this document has not been prepared with advice from the National Arborist Association of Australia. Guideline 15 makes reference to 'deep soil areas' which is not defined in the DMDDG or the Standard Instrument - Principal LEP. The setbacks in Figure 2.7 of 0.9m for front 15m is inconsistent with the design criteria (1.2m) Locally tested controls have no effect under Complying Development as the MDH Codes SEPP controls are imposed. Controls for building height and setbacks must be retained in local planning instruments to ensure some regard to local character.
Building Height Design Guidelines (DG)	Heights are supported generally. **Figure.2-6.2** is misleading as it **shows** medium density housing at the rear of the site and is not fronting a public road. **Figure 2-3** the dotted line is incorrect as it does not follow the natural ground line. **Figure 2-6 and 2.7** demonstrates a very poor building form for the type. It takes no account of aspect to north and the location of massing that may allow flexibility to minimise solar impacts to neighbouring properties. The second storey setback has very little advantage as no habitable room can fit within the form of the two end dwellings resulting in single storey end dwellings which will have to be very long and deep to accommodate the necessary internal layout. The terrace type is therefore seriously flawed in this context.
Setbacks Design Guidelines (DG)	Building separation and setbacks are related categories but are NOT the same as is implied in the description. Setbacks are about achieving landscape character; building separation is about achieving visual and acoustic amenity. **Figure 2-4** is diagrammatic and not based on real life testing. The positive is that there is a network of public streets with a

	generally shallow block pattern, although there are no footpaths, street tree planting that should accompany high levels of public domain pedestrian amenity. It also provides an example of an area that has potential for laneway types of medium density development. Unfortunately, this block pattern is not the condition found in the majority of the Ku-ring-gai LGA and misrepresents the possibility for the area. Analysing the building footprints, they appear to have very poor urban outcomes that reinforce the worst of current project home dwelling sizes (Australia has the largest dwelling sizes in the developed world including the US until just recently). Excessively large dwellings equate to loss of landscape through excessive site coverage. Street setbacks proposed as complying development will lead to a significant reduction in the current setbacks in Ku-ring-gai where setbacks are fundamental to the provision of deep soil landscaping and canopy trees which underpin the character of the locality. The role of private certifiers transfers the task of urban assessment to a person with no training, qualifications, or expertise. By implication, the whole purpose of Complying Development assumes the development is fully complying. A private certifier being paid by a developer does not have the broader public interest vested. The very nature of code based complying development approval is predicated on a checklist. Any requirement to consider existing urban context will rely on the Design Verification Statement that will only state that the proposed development satisfies the Design Criteria and will be regardless of whether or not the MDH Code SEPP controls are inconsistent with the local DCP or LEP. **Figure 2-5** proposed side setbacks demonstrates the Codes SEPP takes no account of existing urban character and does not enable any landscaping between buildings. This will have a negative impact in Ku-ring-gai where development controls for desired urban character are based upon each building being within a landscape setting on all sides between all neighbouring sites. To this effect Ku-ring-gai has developed models for both high density apartment buildings and medium density townhouse buildings that can integrate into the local landscape character while providing the required housing typology. Rear setbacks do not accurately reflect what is possible under the MDH Codes SEPP that could result in back yards with primary living areas separated by as little as 3m to the wall of an adjacent development or have openings to primary living areas only 6m apart separated at 3m by fencing (usually colorbond) due to low expense. Landscape, visual and acoustic privacy will be unacceptable. The fact that basic amenity will be far below that required for high density housing in SEPP 65 and the ADG is of great concern. Controls for building height and setbacks must be retained in local planning instruments. (See detailed comments and amendments for each of the related design criteria in Part 3)
2.B **Floor Space Ratio** **Design Guidelines (DG)**	Locally tested controls have no effect under Complying Development unless the local controls are being tested for new subdivisions and redevelopment requiring master plans. SEPP (Housing for Seniors and People with a Disability) 2004 and SEPP (Affordable Rental Housing) 2009 for boarding houses do not take into account local development standards for FSR, setbacks, landscape (deep soil). They are imposed regardless of the local context and has led to many Land and Environment Court appeals due to the disconnect between the SEPP based 'incentives' appropriated development controls that has so often been in conflict with surrounding urban character.

	These are prime examples of much of the failure of code based planning. Using the Court system to establish Planning Principles is a very poor mechanism for achieving high quality urban outcomes. Much of the "Guidelines" can be supported in principle, but cannot actually be implemented under the MDH Codes SEPP as the standards being put forward will not deliver those outcomes. Only well researched local LEPs and DCPS can deliver such principles as Local Councils have the data and local knowledge to undertake the analysis and specific controls for effective place making. Code SEPP imposed FSRs generally promote excessively large dwellings which are contrary to all other government policy on climate change, reducing energy consumption, affordability, greening of cities, reducing impermeable surfaces for sustainable water management etc. Ku-ring-gai has already seen substantial tree removal on sites preparing for Complying Development dwellings. **DG 9:** Refer to Appendix 5 of the MDDG which contains recommended examples of medium density types that should never be constructed as they deliver the worst urban outcomes from every perspective based on sound urban design, long-term health and well-being, and sustainability benchmarks. Control of FSR should be retained within the LEP.
2.C Landscaped Area Design Guidelines (DG)	The section should define 'landscaped area' as per the Standard Instrument - Principal LEP. The definition provided makes reference to 'deep soil'. Deep soil is not defined in the DMDDG or the Standard Instrument - Principal LEP, the Code SEPP or in the DMDDG. It is also not required as design criteria for Medium Density Houses under complying development. The Guidelines in 2.C recognise the importance of landscape areas for the preservation of the setting, streetscape and the natural environment, including significant existing trees. However this is not reflected in the guide as follows, • the inadequacy of the minimum landscape percentage requirements for medium density developments. • no consideration in Part 3 as part of the Design criteria of increasing the extent of landscaping in accordance with the character of the area despite it being described as an aim of the document • The failure to use deep soil area as a development standard for medium density development • The reliance on unlimited landscape area as planting on structures - a solution that is expensive to construct, maintain and is less sustainable than deep soil planting areas. • The reliance on street tree planting for landscape amenity in higher density areas putting the burden of maintenance for the development amenity on the local authority and in established streets, additional maintenance for tree pruning for overhead wires. • There are no diagrams provided in the document that promotes the benefits of retaining existing trees through an example of a development that has retained existing trees. • The illustration on the front cover is a poor example of sustainable medium density design and does not reflect the landscape principles and guidelines as listed in Part 2. The example should be of tree lined streets, houses in dappled shade of mature canopy trees and privacy, scale and visual amenity created by assorted screen planting of trees and

	shrubs. **Landscape guidelines** The guidelines in general are poorly written, confusing, too vague and unspecific, and are clearly written with little understanding of arboriculture, ecology, landscape architecture or the development assessment process. **Figure 2-10** is an attractive example that will not be achieved under the proposed Code within the allowable minimum lot size and other development setbacks. This picture should be removed as it misrepresents what is possible. **Figure 2-11** shows a large rear setback that is a best case scenario that exceeds the minimum rear setback requirements of the MDH Codes SEPP. Again, not an accurate representation of the reality. **Figure 2-12** is inconsistent with the MDH Codes SEPP as the front setback is insufficient to support trees. The trees are in fact in Council's nature strip. The design is highly articulated and demonstrates skills of an architect, detailing and materials are more costly and not representative of the reality the proposed Code is advocating. **Figure 2-13** a 4.5m front setback for new subdivision areas within established areas provides insufficient area for 'substantial planting' in the front setback and relies entirely on street tree planting. The design criteria only requires one tree with a mature height of 5 metres. Within an established LGA street tree planting is likely to be constrained by overhead wires unlike the more usual underground services provided in green field subdivisions. Historically therefore our planning policies have required a deep front setbacks primarily for the planting of canopy trees that reduce the dominance of the built form. The proposed minimum front setback is considered unsympathetic with our existing streetscape character. The street tree is in the driveway. **DG 9:** The MDH Codes SEPP landscape minimum does not enable locally based landscape requirements to be implemented as suggested in this Guideline. Council must retain landscape controls for both general landscape and deep soil if appropriate urban character is to be achieved. No private certification of medium density housing must be adhered. All diagrams should reflect the minimum Development Standards of the MDH Codes SEPP and MDDG and show illustrative sites in context with development at the rear and sides. In doing this, a very different context emerges that should lead to significant amendments to the SEPP and Design Criteria. The loss of every council's authority over landscape fails to consider the variety and specific character of each LGA throughout NSW and fails to provide a mechanism to achieve the variety that a city and NSW needs. Landscape is the single most important element that defines Ku-ring-gai's urban character. The MDDG Objectives and Design Criteria for landscape are manifestly inadequate for Ku-ring-gai. There is no requirement for any landscape to be deep soil. The required areas are inadequate and will not result in the trees being viable due to the high probability they will be removed, or replaced with smaller planting, or areas of paving extended post approval. Ku-ring-gai's urban character is predicated on the quality of its landscape, and has in place, detailed development objectives and controls for all setbacks, site coverage, total landscape area, deep soil and tree removal that ensure all development, of every scale is within a dominant landscape setting characterised by canopy trees and deep soil planting. The loss of landscape controls, therefore, has a particularly devastating

	impact on Ku-ring-gai's strategic planning of urban character. Protection of canopy trees that may have value in either providing links between areas of biodiversity significance, or contributing to the background view between allotments or internal site character is very important. This has a function as a public asset, which is not recognised in the Codes SEPP or MDDG. Local experience of development currently lodged under *SEPP Seniors and People with a Disability* and *SEPP Affordable Rental Housing* has seen the gradual loss and/or degradation of established trees and vegetation within the Council area where these developments occur. Unlike these two SEPPs, the Codes SEPP has **no** development standard requiring development consider and respond appropriately to existing and desired urban character for landscape nor can it be verified. The types of development that have had the greatest impact in Ku-ring-gai are those advocated in the MDDG that prioritise at-grade car parking deep within the site. These have a devastating impact on the protection of existing and diminishing landscape. These outcomes are in direct conflict with the NSW Government's *A Plan for Growing Sydney* and its *Urban Green Cover Policies*, commonwealth policies for Greening Cities and Housing adapted to climate change.[1] It is also worth noting, these are policies that are inconsistent with the United Nations, General Assembly *Draft outcome document of the United Nations Conference on Housing and Sustainable Urban Development (Habitat III) - New Urban Agenda*. Cumulative impacts resulting from the Landscaped Area development standard have the potential for loss of vegetation across NSW that will contribute to land surface temperature increases and the urban heat sink effect. The focus on streetscape landscape controls is important in achieving urban character, however, the policy fails to adequately value the rear yard landscape assets throughout NSW and in Ku-ring-gai specifically, and their importance climatically, their role protecting against further fragmentation of biodiversity significance and loss of green corridors, and their aesthetic contribution to urban character. Further to this, the local community demands its protection and the courts have recognised Ku-ring-gai's landscape character in its judgements.
Planting on Structures Design Guidelines (DG)	No deep soil provision shave been includes and there is no corresponding table for trees in deep soil conditions. Table 1 and Table 3 have not been tested with the MDH Codes SEPP setback controls. The nominated planting will not be achieved in the rear gardens in Ku-ring-gai due to the majority of the site landscape being in the 12-14m setback (this will be the general average within 40m as per MDH Codes SEPP). The effect will be that trees will be planted in the front setback with the building pushed to the far rear of the site and may result in parts of the rear boundaries being zero setback, or with a 3m setback that is highly likely to be paved over with no deep soil. The anticipated impact would be that very few if any large canopy trees will ever be planted in the rear setback zone irrevocably altering biodiversity connections, and landscape character. The dimensions of large trees will take up either the full extent of a rear of a site and overhang neighbouring properties and/or subdivision allotments where minimum site requirements and Development Standards are proposed. This effect will be exacerbated by Private Certifiers who will approve developments complying with the tree planting (tick the box

[1] See end of document for clauses of these policies

	of a tree on a drawing), with no expertise about the species suitability, the reality of the tree ever being planted or being viable for its particular root system. There's very limited opportunity to implement the Guidelines and questionable ability to verify compliance on Complying Development.
SITTING THE DEVELOPMENT	
2.D **Local Character and Context**	Generally, the intent can be supported but is only applicable where new subdivisions are proposed. Again, the Private Certifier is not trained or qualified in urban design and cannot certify that development is appropriate to the local context.
Desired Future Character	MDH Codes SEPP Development Standards for complying development take no account of local existing and/or desired context as reflected in local planning instruments. The one size fits all approach cannot have the capacity to address individual area context.
Understanding Influence of Existing Subdivision	*Subdivision and street patterns are very powerful influences on the existing urban fabric and potential future development. (p26)* MDH Codes SEPP Development Standards for complying development take no account of existing subdivision patterns. Street patterns define the subdivision pattern and both define the building types and both therefore are first order elements defining the urban fabric and development potential. The one-size-fits-all approach of the proposed complying development removes the analysis and nuances of subdivision and street patterns so that there is no scope to identify appropriate locations for medium density housing types. This fails the first order steps of sound strategic planning and urban design.
Design Guidance	The title Design Guidance is inconsistent with the title Guidelines appearing in sections of the MDDG. **DG 1**: .....i*n areas with deeper lots, consider how new streets and lanes could be introduced to increase permeability. (p27)*This is a sound strategy for increasing density of the housing types proposed under the MDH Codes SEPP, however it cannot be implemented unless on new subdivisions, or where master planning of large brownfields site occurs where there is control of the street network and subdivision pattern to match the desired housing/development typologies. The MDH Codes SEPP is not intended to amalgamate sites, so the opportunity to introduce new streets to establish a suitable street layout cannot be initiated. Likewise as Complying Development, the ad hoc implementation and certification process via a Private Certifier negates any possibility of addressing the street network and ultimate subdivision pattern suitable for most of the medium density typologies proposed. This is antithetical to sound strategic planning principles.

Public Domain Interface	Written description generally supported as promoting sound objectives for the Public Domain Interface. The Design Guidance cannot be implemented under Complying Development Standards. The impact of a Design Guideline that cannot be implemented will result in the loss of established landscape character due to private certifiers being unable to verify merit assessment. **Figure 2-21** shows an example that is not representative of what the Codes SEPP Design Standards for setbacks permit. This will not occur. **Figure 2-23** is more representative of the Codes SEPP development Standards for front setback. The streetscape does not enable sufficient deep soil for canopy street trees. The front setback demonstrates large canopy trees cannot be supported. This will lead to the destruction of biodiversity corridors throughout the suburbs. The Terrace type shown does not comply with the Codes SEPP side setback standard for the end terrace as it shows the end terrace at zero setback which is not permitted under the MDH Codes SEPP. Lot subdivision therefore incorrect and not representative of the Code.
Design Guidance (DG)	**DG 16:** substations do not appear as a consideration in any of the typologies recommended in Appendix 5 of MDDG. The built form for Complying Development will be certified by a Private Certifier who will have generally no investigation or information of energy upgrading requirements in early design of this scale (or even the majority of high density development), this is left to CC stage. Therefore, there is no way to control this clause and energy upgrading infrastructure will be certified by a Private Certifier and be fully visible in the front setback zone due to the proposed subdivided lot sizes in context of many existing parent lot widths and minimum setbacks permitted.
2.F **Internal Street – Pedestrian & Vehicle Access**	The section name 'Internal Streets' is misleading. Privatised, internal driveways are not streets. The section is about internal driveways. This typology has been and continues to be a failed model that results in poor outcomes to the urban fabric. It has arisen specifically due to inappropriate subdivision patterns, combined with inappropriate housing typologies for the subdivision pattern. This type is a direct response to absent or very poor strategic planning. **(**See also comments 2Q - Acoustic Privacy.) This typology is poor and must not be promoted as an exemplar of design quality. It is counter to the healthy functioning of a city as it privatises a major element that should be a public domain asset, it prevents establishing new through-block street networks – a critical aspect for much of Ku-ring-gai due to the excessively deep lot patterns and contrary to the Design Guidance for 2D Siting the Development. The only application where this typology could be successfully implemented is where all roads have functional public road reservations, where the internal roads are located according to a local strategic plan (as advocated part of DG 2), otherwise this typology should not be included. Historically, at grade vehicle access throughout a site continues to be one of the worst typologies leading to the worst urban outcomes. It prioritises vehicle access, which impacts and permeates the entire site due to AS 2890, visitor parking requirements, and general demand for 2-car garaging. This has very real and adverse flow-on impacts to landscape, ecology, biodiversity, water management, increased heat-sink effect, general well-being and amenity, not to mention urban character, and context.

Figure 2-26 taken from Linwood Estate, Honeysuckle, Newcastle is also not representative of the proposed minimum 'Internal Street' reservation as proposed. Measured from SixMaps, the reservation is a min 9m, and it still does not achieve any meaningful landscape. It should be further noted that the image is of a rear lane in the subdivision and that the dwellings actually address either a full street frontage and/or the Hunter River foreshore. Figure 2-26 is proposing less of a building separation, to be the primary streetscape character and address that is proposed by Figure 2-27. This is unacceptable as a primary aspect for any sort of housing.

Figure 2-27 greatly exceeds the 'street' reservations proposed in Figure 2-28 and is not representative of the proposed controls. **Figure 2-28** It should be emphasised that the proposed building separation for the 'Lane-shared Space' figure is:

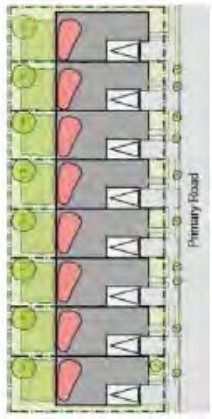
- 50% less than the minimum separations for SEPP 65 apartment development
- 50% less than KDCP 2016 6A.3 and 6A.4
- and notably 30% less than AMCORD the Commonwealth minimum amenity standards from the Department of Health, Housing and Community of the 1990s and early 2000s that was reviewed and replaced by SEPP 65 where the separation increased to current requirements).

It is of great concern that a design standard would be promoting such poor amenity at lower density where amenity arguably should be easily as good as, if not exceeding, high density development. The Carrington Estate on the northern side of the Hunter River at Newcastle shows new primary streets with landscaped medians with building separation of primary aspect to primary aspect of 35m. Note: Even though Carrington would be seen as a 'good example' only due to the subdivision structure of the street pattern of laneways, the amenity is almost entirely derived from the location on a major waterway and public foreshore greenbelt. The comparison of lost landscaped rear yards of the new subdivision compared to the existing housing subdivision that has smaller building footprints is typical of the outcome the MDH Codes SEPP will cause where more site coverage means less landscape.

See real life impacts of this typology demonstrating devastation of landscape, maximised hard paved areas, and overall loss of residential amenity.

As-built Multi-Dwelling Housing with garages facing the street

- Loss of on-street parking
- Narrow private road
- No footpath



Multi-Dwelling Housing (Terraces) with garages facing the street
(MDDG, p99)

Loss of- landscape, deep soil and impact on the streetscape and public amenity.

Design Guidance (DG)	**DG1** - read in conjunction with Figures 2-24 and 2-28 demonstrates no landscape buffer in the private domain with the dwelling to the building line. This places part of the entry portico into the common area. Depending on the width of the garage/carport space, AS2890 car parking requirements will result in wider areas of hard paving to reverse and turn a vehicle. **Figure 2-24** scaling of the internal street zone if at the minimum of 6m (allows for 3m of common landscape (theoretically) + 3m carriageway for a total of 6m leaving no landscaping along the side boundary because traffic requirements will not work. The Design Guidance is unrealistic and Figure 2.24 is not representative of the control. Figure 2-28 goes further proposing an unacceptable typology that will achieve no acoustic separation. **DG2 -** Supported but cannot be implemented. See comments above regarding strategic planning and impacts of proposed Development Standards and implementation of MDH Codes SEPP with Complying Development. **DG3 -** This conflicts with DG2. No dead ends or internal driveways should be permitted. **DG7-** None of the MDDG Appendix 5 recommended examples accommodates any service vehicles which DG7 stipulates. Again AS2890 and Council requirements under KDCP 2016 Section C Part 23.7, 23R.4, 23R.5 and 23R.6 will result in very different built outcomes. **DG10** The proposed reservations for both Lane and New Internal Street types (unless a one-way carriageway within the proposed 12m reservation) does not enable separation of pedestrian and vehicular movement, with any meaningful landscape. **DG11-** Garages will have to be setback from the building line to accommodate vehicle turning templates impacting as previously detailed. **DG12 -** In reality visitor parking will be accommodated at the end of the driveway to maximise FSR and minimise building separation (if any). **DG13 -** Landscape is a positive objective but can be demonstrated as unachievable with the proposed model. **DG14 -** There is insufficient landscape area for meaningful canopy trees within the proposed model unless a one-way carriageway is proposed within the 12m reservation as per DG 15. **DG16 -** This cannot be achieved as per previous condition. **DG17 -** This will not be achieved. The premise of private internal streets is predicated on accommodating vehicles. Therefore, site character, pedestrian amenity and general residential amenity are automatically impacted unless appropriate building separations and street design is mandated as a strategic plan.
2.G **Orientation and Siting**	Section description is supported but is irrelevant in Complying Development. There is no site analysis requirement under the proposed Development Standards. A private certifier is not required to and will not challenge whether a development has responded to the site conditions. **Figure 2-30** does not comply with the setback Standards of MDH Codes SEPP and not is representative of a real development. There is no car parking.

	Figure 2-31 is a poor image of this project. Dating from the 1990s, a more contemporary image shows street trees have now grown softening the built form. However, it is it an example of an inner city LGA, is very out of context with the vast bulk of existing outer ring suburbs and therefore inconsistent with the landscape objectives generally advocated in the MDH Codes SEPP and MDDG. It also appears to not comply with the Design Guidance at Figure 2-57 of 2M Private Open Space requiring a landscape zone separating the private open space from the street nor is it consistent with maximum building length.
Design Guidance (DG)	**DG 10** Delete reference to 'internal streets'. Private driveway networks are not internal if they are streets they require proper street reservations and layouts coordinated with the existing network to provide well located inter-block connections, and building separations to achieve the MDDG design quality objectives.
2.H **Building Separation**	**Figure 2-33** is diagrammatic with no orientation to north, or context. **Figure 2-34** the end terrace illustrates the point of building separation but represents an unrealistic and poor building form. There is insufficient width of the remaining second storey to accommodate a habitable room and thus unrepresentative of the intended outcome.
Design Guidance (DG)	**DG 9** Assumes DCP building controls would prevail for increased building separations than required in DG 10. **DG 10** should be read in conjunction with Visual Privacy at Design Criteria 3.1-P which provides controls entirely predicated on privacy screens. Privacy screen are a last resort for visual privacy not a first order solution. Good design avoids the necessity for any privacy screening. Experience has demonstrated that privacy screens are detrimental to achieving high levels of amenity as they impact on daylight, ventilation and outlook and indicate building separation is actually inadequate. Acoustic privacy is also impacted with inadequate building separation. The MDDG will result in a poorer level of amenity than is being achieved under current local development controls. The effect of Complying Development will be that the minimum building separations will prevail and under Design Criteria 3.1-P, and will be approved as compliant with by a private certifier. The result will be unacceptable for the desired urban character in Ku-ring-gai and throughout NSW. Local control of principal Development Standards must prevail. The building separations should be the same as SEPP 65 ADG for apartments. There is no justifiable reason based on sound urban design principles why a level of amenity less than that expected in apartment development is acceptable in a lower density housing type. If not, landscape will be the casualty with all the related flow-on impacts on social and environmental factors.
AMENITY	
2.I **Solar & Daylight Access**	**Figure 2-38** solar diagram is wrong. There is no solar access achieved at due east or due west in mid-winter, there is no orientation to north on the diagram and is generally meaningless. The diagram within the SEPP 65 ADG Appendix 5 solar diagram including sun altitude ratios must be included. **Figure 2-39** Require amendment**.** The maximum depth for all housing types must limit the depth for an open plan living room to 8m measured from the external window to the rear wall, and 6m to the rear wall of a kitchen/workbench from a window. This is a tried and tested model. The implied limitation applying to only single aspect dwellings promotes a poor dwelling type known as

	single aspect units, and enables excessively deep, dark plans for dual aspect dwellings. This is contrary to good design and contrary to sustainability and energy efficiency objectives.
Design Guidance (DG)	**DG 2** Single aspect dwellings should not be permitted in medium density housing typologies. The minimum subdivision sizes should achieve 100% cross ventilated dwellings in all but extreme site conditions and therefore should only be permitted seeking a variation to performance. **DG 7** refers to Design Criteria. There are no Design Criteria applicable for solar access other than those for Complying Development types in Part 3. The Design Guidance is inadequate and unacceptable as there are no measurable performance benchmarks. A private certifier is not trained, qualified, or experienced in assessing compliance of solar and daylight performance based on the MDDG. It is unclear whether the status of the MDDG, if adopted would therefore negate DCP controls in sections of the DCP that apply to multi dwelling houses. For example if KDCP 6C.3 solar and daylight access controls are also cancelled there will be no measurable solar access other than 15 minutes vaguely indicated by Figure 2-40. **DG 10** This must be deleted. It is inconsistent with DG 15. Excessively deep floor plans are contrary to good design and DG 15 rightly limits their use to service rooms therefore should be deleted. **DG 12** implies side windows of medium density housing in higher density areas should never be included in solar access analysis. The lack of performance benchmarks for basic solar and daylight amenity will result in Ku-ring-gai's medium density residential development area achieving a poorer amenity than high density development. **DG 15** is inconsistent with DG 10**.** Therefore include: **New DG:** There is no specific daylight Design Guidance. All habitable rooms are to have a window in an external perimeter wall. Light must not be borrowed from other rooms. Measurable performance benchmarks for solar and daylight access must be included and be equal to or exceed minimum performance requirements for high density housing under SEPP 65 ADG and apply to all medium density housing.
2.J **Natural Ventilation**	**Figure 2-45** Would need to show ventilation through the rear door to demonstrate true cross ventilation. The dwelling is only partially cross-ventilated with the kitchen and rear of the dwelling not being cross ventilated.
Design Guidance (DG)	**DG 8** Requires amendment**.** Reword to say: "Ceiling fans can help create air movement but do not achieve cross ventilation. They are a mechanical means of ventilation."
2.K **Ceiling Heights**	**Figures 2-49, 2-50 and 2-51** are all good examples; however they are not representative of what is achieved under the proposed Design Guidance. They all show ceilings far greater (1.5 to double) the permitted ceiling height.
Design Guidance (DG)	**DG 1** Requires amendment. All habitable rooms must have a minimum floor to ceiling height of 2.7m. 2.4m results in the perception of oppressive rooms and poor qualitative amenity and where a ceiling fan can be a safety hazard. The BCA

	minimum ceiling heights are not about quality but about safety and do not include provision for ceiling fans. The MDDG must advocate better design than minimum statutory safety standards. The overall maximum building height can more than accommodate full 2.7m floor to ceiling heights on all levels. A ceiling fan in a bedroom with a ceiling height of 2.4m results in the fan being at 2.1m and is a safety hazard as it can be readily touched with an outstretched arm such as when getting changed. Allow floor-to floor height to accommodate 0.4m structural depth for total 3.1m floor-to-floor height (and allows floor covering to be accommodated), resulting in internal ceiling height of minimum 2.7m. **DG 2** Requires amendment. Vague statement with no measurable performance benchmark. Include formula for increasing ceiling height commensurate with room depth. **DG 3** and **DG 4** are both good guidance but unlikely to be checked by a private certifier. **DG 6** Requires amendment. Poorly worded. Appears to permit 2.4m ceiling height in living area and possibly reduced to 2.1 in kitchen. Amend to ensure 2.7m is achieved through the living area with any bulkhead restricted to the kitchen with a minimum ceiling height of 2.4m permitted. **DG 7** and **DG 8** Requires amendment. Require that bulkheads do NOT intrude into habitable rooms at all. Otherwise conflicts with DG 1. Comments for DG 1 applicable. Oppressive internal amenity with low ceiling heights.
2.L **Dwelling Size & Layout** **Defining Floor Area**	Amend the title "Defining Floor Area". Change heading to "Defining Minimum Room Dimension". Floor area relates to FSR and is different to measuring minimum room dimensions. Floor area includes storage consistent with SI LEP and MDDG definition while minimum room dimension is exclusive of wardrobes and fixed joinery.
Design Guidance (DG)	**DG 2** Requires amendment. Clarify so that the larger floor area relates to amenity within rooms not inefficient dwelling layout. **DG 3** Requires amendment to read "A window must be visible from every point in a habitable room". **DG 4** A private certifier assessing a Complying Development is not trained or qualified to determine design on merit. Therefore the incentive is for applicants to claim compliance for certification while it may in fact fail the minimum room size test. This will lead to poor outcomes. **DG 5** Requires amendment to read "All living areas and bedrooms and all habitable rooms must be located on the external perimeter of a building and have a window in an external wall. No habitable room is to borrow light from another room." **DG 9** Requires amendment to read "Provide space for studies. Studies are habitable rooms and must have a visible window in an external perimeter wall that is not more than 8m from the rear wall of the study or study alcove."

2.M **Private Open Space**	**Figure 2-56.** Requires amendment. Windows on side boundaries do not comply with the BCA. **Figures 2-58 and 2-59** are well-designed examples by architects, which is supported as exemplars of high quality design. However, they are not representative of the Complying Development minimum Development Standards nor of what will be built generally and designed by less skilled practitioners. **Figure 2-57** The proposed landscape is unlikely to be able to support canopy trees either in the proposed nature strip or within the site.
Design Guidance (DG)	DGs general comment: Wording of Design Guidance generally contains no performance benchmarks. Words like 'should' 'can' place no obligation to meeting any of the DGs.
2.N **Storage**	DGs general comment: Wording of Design Guidance generally contains no performance benchmarks. Words like 'should' 'can' place no obligation to meeting any of the DGs.
2.O **Car & Bicycle Parking**	**Figure 2.66** shows a dimension of 5.5m from the garage door to the face of kerb. This dimension would be inadequate for vehicle parking/storage in front of the garage, and is likely to result in vehicles protruding into and obstructing pedestrian access on the footpath. The dimension would need to be 5.4m (min) between the garage door and the boundary. The caption under **Figure 2.66** does not relate to the image above it. *Onsite parking may be located:* • *Underground in basement parking;* • *Above ground fronting a primary road;* • *Above ground fronting a rear lane; and* • *Above ground fronting to a private street* (p50) The final point "Above ground fronting to a private street" must be deleted as it is known to deliver poor design outcomes. Examples of impacts to internal site character caused by vehicles within a site can be seen at MDDG Figure 2-78 which provides a prime example of a good architectural design with zero landscape character due to internal driveways.
Design Guidance (DG)	**DG 1** will not be achieved with the Development Standards for Complying Development. Unless there is a new subdivision or there fortuitously happens to be a rear lane with larger sites that are suitable for small lot subdivision. Most of the LGAs where this condition occurs are already of the housing densities proposed. **DG 4** this is supported to enable good streetscapes, however it will not be achieved with the Development Standards for Complying Development. It is inconsistent with 2E **Figure 2-23** where hard stand for a second car is located forward of the building line for all permitted front setbacks, and DG 8 that also allows hard stand parking forward of the building line. **DG 5** On-street parking may not be possible or available to residents in areas where R3 is permitted in Ku-ring-gai i.e. around railway stations and town centres (due to parking demand by commuters and employees), therefore reliance should not be

	placed that on-street parking may be available It may be worth considering the requirement for the applicant to introduce car-share vehicles adjacent to the site (subject to Council approval), to minimise the uptake of a 2nd vehicle and to avoid additional on-street parking pressures. Cannot be achieved with the Development Standards for Complying Development that permits 6m lot widths. This is insufficient space to accommodate on-street car parking and is the reason why the model fails the streetscape. It results in streets being dominated by cross-overs and the loss of existing on-street car parking, and the exacerbated problems of hard areas and issues around stormwater. **DG 6** On-street parking may not be possible or available to residents in areas where R3 is permitted in Ku-ring-gai i.e. around railway stations and town centres (due to parking demand by commuters and employees), therefore reliance should not be placed that on-street parking may be available It may be worth considering the requirement for the applicant to introduce car-share vehicles adjacent to the site (subject to Council approval), to minimise the uptake of a 2nd vehicle and to avoid additional on-street parking pressures. Cannot be controlled unless Councils retain strategic planning control and Medium Density Housing is removed from complying development. **DG 7** is inconsistent with the Development Standards for Complying Development that permits and claim 6m lot sizes that allow for garages/car parking plus the habitable rooms to address the street. 6m min lot width will only work with a rear lane or basement car parking. **DG 11** proposed landscape cannot be achieved with the Development Standards for Complying Development that permits 6m lot widths.
2.P **Visual Privacy**	Privacy screens should never be relied upon for visual privacy. They indicate inadequate building separation as a result of poor design resolution. Inadequate building separation also impacts on acoustic privacy, which is usually only then addressed by closing openings which then affect natural and cross ventilation. **Figure 2-75** Amend to present a true scenario under the MDH Codes SEPP. The scenarios are not representative of minimum separations permitted at 2H DG 10. Amend to show a 1.8m boundary fence separating the living areas of 2 dwellings each setback 3m from the boundary directly opposing. This will be the outcome for Complying Development as proposed by the MDH Codes SEPP and will lead to exceptionally poor residential amenity. **Figures 2-76 and 2-77** are excellent and good examples of medium density housing, however, they are not representative of the minimum Development Standards for Complying Development.
Design Guidance (DG)	**DG 1** contains no measurable performance benchmarks for visual privacy. **DG 3** Should be amended - Privacy screens may only be used where no alternative design options is available due to specific site constraints.
2.Q **Acoustic Privacy**	**Figure 2-78** is used as an exemplar of poor acoustic amenity. It actually demonstrates the proposed typology advocated by Guideline 2F – Internal Streets that would be compliant with the proposed design guidelines and will be constructed throughout NSW. It is also exemplar of poor landscape, sub-standard internal site character and communal amenity. This is evidence of the proposed policy impacts that are contrary to sustainability objectives, basic amenity, loss of biodiversity corridors through lost

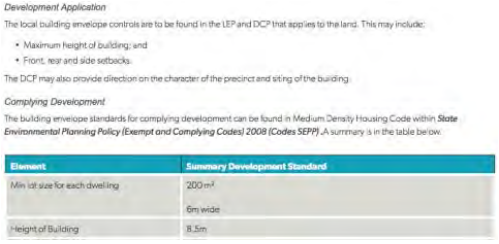
	landscape and critical deep soil. Despite the architectural merit of the built form in the example, the internal street housing type translated into low cost construction (that is without the architectural merit and high end construction quality). This will be a very poor outcome for Ku-ring-gai's landscape character, and more broadly expanded as a type across NSW, will have gross negative impacts counter to all sound strategic cities policies including designing for climate change, WSUD, Greening Cities and Liveable Cities. Refer to comments 2F - Internal Streets.
Design Guidance (DG)	**DG 1** The building separations at 2H are inadequate and should reflect SEPP 65 ADG. All medium density housing must achieve equal or better amenity than high density housing. **DG 5** Acoustic separation between dwellings is a BCA issue. This guideline implies that BCA acoustic standards do not provide sufficient acoustic privacy **DG 6** The proposed types for Complying Development will not meet this guideline and will be exacerbated by the min lot size where there is no rear lane. A bedroom will generally always be above an external garage due to constrained lots and built form and therefore will be less than 3m from self and neighbouring lot bedrooms on the first floor.
2.R **Noise and Pollution**	**Figures 2-79 and 2-80** and the description are generally supported as they demonstrate basic noise barrier planning principles. **Figure 2-81a** is a positive example but unlikely to be representative of actual built outcomes due to the lack of objective measurable performance benchmarks and general inadequacy of Development Standards for landscape, setbacks, deep soil.
Design Guidance (DG)	**DG 4 and General Comments:** There is an inherent conflict between cross ventilation and acoustic privacy for residential development subject to noise and pollution. Cross ventilation requires openings in opposing walls as demonstrated in Fig 2-79 but Acoustic Reports will require all openings be closed to achieve acoustic compliance. Strategic planning at local level must minimise if not avoid residential medium and high density development in adverse health environments.
2.S **Universal Design**	Universal Design is a sound initiative requiring support by the 3 tiers of government housing policies. Generally all the Design Guidance are sound but there is no requirement to provide anything past LHA Silver Level, which is easily attainable in medium density housing types but does not address actual adaptable housing. Ku-ring-gai has strengthened local requirements in KDCP 2016 at 6C.5, which is a good policy responding to emergence of lack of flexibility in much of the medium density housing typologies on the market. It must be noted that these are all compliant with BCA but do not address the functional housing needs of an aging population, or the specific needs of families with young children. Universal Housing under the Liveable Housing Guide is a positive policy (and under regular review as the market implements its strategies). The MDDG provides no measurable performance benchmark for providing adaptable housing. This is a lesser test than under SEPP 65 in the ADG and lesser than Ku-ring-gai's development controls.

	The wording of the MDDG does not reference local development controls around adaptable housing. Unlike SEPP 65, SEPP ARH, SEPP Seniors Development Standards, it will be possible for Complying Development and MDDG design guidance status to override local development controls and without a performance benchmark, there would be no actual requirement to meet the KDCP requirements. This could see a significant proportion of medium density housing, depending on the uptake of the SEPP, providing no adaptable housing and Ku-ring-gai losing the intended 15% adaptable housing (i.e. equating to 1 dwelling lost in every 2, 3 or 4 dwelling new medium density development under the MDH Codes SEPP.
2.T **Communal spaces**	**Figures 2-84 and 2-85** is a good example but not representative of the minimum building separations proposed at 2H Building Separation or the Development Standards for Complying Development. The architectural quality may be achievable within the Ku-ring-gai market but is of a much higher standard than will be rolled out throughout NSW. Again unrepresentative of what the Codes SEPP and MDDG actually permit. No objective measurable performance benchmarks are provided with the concurrent Torrens Title Subdivision being proposed through MDH Codes SEPP there will be no requirement or desire to provide communal open spaces within medium density development as increased sales value would be possible with attached land parcels. Further there is no mandated communal open space requirement.
2.U **Architectural Form & Roof Design**	Generally supported. **Figures 2-86 to 2-91** generally are all examples of architecturally designed medium density housing. Note they are all but one in new subdivisions, many adjacent to public open space. The design quality shows exemplars that are more likely to be constructed in an LGA such as Ku-ring-gai but are largely not representative of the housing stock likely and permitted to be built under the Complying Development Code.
2.V **Visual Appearance & Articulation**	Generally supported. **Figures 2-92 to 2-100** design quality shows exemplars (which is supported as examples of good design). They are models of medium density housing that is more likely to be constructed in affluent LGAs such as Ku-ring-gai. However, being more expensive to build, having the input of an architect (not mandated in the Codes SEPP), they are largely not representative of the housing stock likely and actual development permitted to be built under the proposed Complying Development Code and MDDG and as such are misleading inclusions to the document.
Design Guidance (DG)	**DG 20** Clarification is required. This guidance regards treatment of the third storey note *[Development Applications only]*. Unclear why this is here, if by implication all the other Design Guidance in Part 2 Guidelines is intended for Complying Development only and/or DAs.
2.W **Pools & Ancillary Development**	The section description is largely about rear lane studios but there is no corresponding Design Guidance (apart from Figure 2-105). Expand to clarify whether studios are intended **only** to be permitted where there is rear lane access as implied **and/or** permitted to abut the rear boundary consistent with the Development Standards for Complying Development. Loss of landscape will be a key impact on minimum lot subdivision and unsuitable in the suburban context of established areas such as Ku-ring-gai.

2.X **Energy Efficiency**	*Energy efficient design is about the ability of a dwelling to* *manage thermal performance (thermal comfort), reduce energy consumption and provide for sustainable energy sources. It can provide increased amenity to occupants and reducing energy costs.* (p72) The wording requires amendment as follows: "Energy efficient design considers the development in context of minimising cumulative impacts to urban environments. It is about the ability of a development as a whole, and each dwelling within it, to respond to climate change and sustainable water management; to minimise energy demand (and reduce energy costs); promote renewable energy sources; maximise thermal performance; maximise amenity for occupants; and maximise the liveability of our cities and towns into the future."
Design Guidance (DG)	**Figure 2-106** This is a poor example. While it's a good example of roof-mounted photovoltaics, the building has NO passive solar control of openings through sun-shading devices. **DG 1.** The wording is inadequate. Reword as follows: "Natural light and ventilation must be achieved to all habitable rooms; and to as many non-habitable rooms as possible. " **DG 9** second dot point. Reword: 'maximised' is repeated.
2.Y **Water Management & Conservation**	Section 2Y should contain a reference to locating development clear of overland flow paths associated with trunk drainage systems, watercourses and depressions. Avoiding easements does not achieve this, as watercourses, drainage lines and some older pipes are not always protected by or within easements. **DG. 3** should read "Water sensitive urban drainage systems are designed by a suitably qualified professional engineer." **DG. 4** Runoff from balconies is stormwater and cannot be used internally. **DG.7** appears to discourage the use of rainwater for toilet flushing, whilst encouraging its use for hot water. "Filtered" is not defined. Rainwater can and should be used directly for toilet flushing and cold water washing machine. The use of common rainwater for hot water is not recommended by authorities, according to the BASIX website https://www.planningportal.nsw.gov.au/planning-tools/basix . **Figure 2-115 -** The bioretention garden in the figure is wrongly labelled – it has capacity for retention and treatment of stormwater but not detention unless provided with an orifice plate. **Figures 2-110 to 2-116** images shown cannot be achieved with the proposed Development Standards and building separations at 2H Building Separation. Images are good examples but are not representative of the actual controls. **Figures 2-113 and 2-114** missing.
2.Z **Waste Management**	**Figure 2-117** is unrealistic. Image appears to show waste in vast parkland spaces that cannot be achieved with the proposed Development Standard
Part 3. Design Criteria	

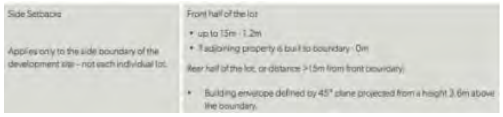
3.1 **Two Dwellings Side-by-Side**	These are commonly called 'semi-detached'. Unclear why the description has been changed. However, it is a type that could work well in Ku-ring-gai providing all dwellings have a frontage to a public road providing Council retains control of the minimum lot size so that deep soil landscape can be somewhat protected in the rear yard. (Codes SEPP provisions that permit tree removal for development have the potential for poor outcomes depending on the depth of the block and existing vegetation).
3.1 (cont'd) **CDC Pathway**	**CDC Pathway –** see discussion in *Review Table - Explanation of Intended Effects Proposed Medium Density Housing Code (MDH Code SEPP)* PCAs can approve development that theoretically must comply with the SEPP Development Standards and Design Criteria. There is no independent, transparent governance of the private certification process other than via costly court appeal. This is also unlikely to require demolition of already constructed development. (The Building Professionals Board has not demonstrated penalties are an adequate deterrent, nor has it effectively governed, enforced or penalised certifiers where proven non-compliant development has been certified. Existing penalties are not an effective deterrent in addressing the already existing serious problems arising from the current use of PCAs during the CC, Construction and Post Construction certification stages identified in National research (including from UNSW City Futures and joint research with the Australian Institute of Engineers). The CDC pathway provides the legal framework for a development process that fosters corruption. The use of PCAs replaces the existing independent, transparent assessment. Corruption within the approvals process of development in NSW has been an endemic feature of ICAC investigations with the common element being the lack of independence, transparency, and an environment of clear conflict of interest. Inconsistencies between the statements in the *Explanation of Intended Effects* for the intent that Council retains permissibility, FSR, building height, lot size, setbacks, are contradicted in the MDDG Part 3 Principal Controls, Council theoretically retains zoning and minimum lot size only. However, this does not appear to be the case because of *Part 3 General Housing Code Division 2 Development Standards for this Code*. All principal LEP and DCP Development Standards for FSR, setbacks, landscape are negated. All KDCP objectives and development controls under the headings nominated in the Design Criteria would be negated by the Codes SEPP. The wording and scope of development standards encapsulated in the Codes SEPP, effectively removes all local strategic planning control. The role of PCAs and ability for ad hoc randomised uptake throughout the LGA R2 and R3 zones will only escalate the impact. Currently KLEP 2015 Schedule 1 limits the number of properties that permit 'dual occupancy' which appear to be the sites nominated as being applicable. Clarification is required in regards to the legal definition of 'dwelling', 'dwelling House' and 'building' as applies to semi-detached types for Torrens or strata title because of impacts on Land Use permissibility. See accompanying document *Explanation of Intended Effects Table 1* (p10). Concurrent subdivision to Torrens title is the mechanism to permit the type. It appears that this type would not be permitted under the SI LEP definitions of 'dwelling', 'dwelling house' and 'building' but could be permitted under the Codes SEPP definition as currently defined. Therefore SEPP definitions

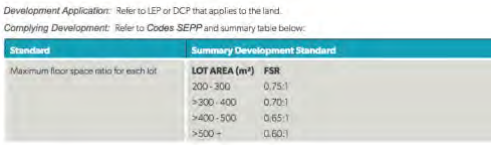
	have to be aligned with Standard Instrument Local Environmental Plans definitions. Ku-ring-gai is concerned about the ad hoc rear subdivision type shown at Figure 3-3, which is not a side-by-side type and unclear why it is included under this heading of Complying Development. Development lodged under the CDC pathway cannot be coordinated with Ku-ring-gai's development controls. **Codes SEPP and MDDG design quality compared to Ku-ring-gai's existing KLEPs and suite of DCPs -** Following the review of the Codes SEPP and MDDG, it is clear that the quality of urban outcomes, resident amenity, and public interest is far higher under Ku-ring-gai's existing LEPs and DCPs. All development lodged under the Codes SEPP therefore will be of a poorer standard than Ku-ring-gai can achieve under the DA pathway. The use of PCAs further erodes any oversight of poor outcomes as there is little to no coordination with council that is required, nor any independent verification of the certified development. **Recommendations:** a) Remove medium density development from the Codes SEPP and implement a new SEPP Design Quality for Medium Density Housing with a Design Code that achieves the design quality of the ADG. b) Retain local council as the consent authority. c) Require all medium density housing to be designed by a registered architect and suitable qualified and regulated professionals for other disciplines d) Ku-ring-gai to retain our LEPs and DCPs for all development submitted via the DA pathway.
3.1 (cont'd) **DA Pathway**	**DA Pathway-** Conflict and contradiction in Table 3-1 compared to 3.1A Development Application pathway. **Figure 3-1** the DA pathway says Council retains zoning and minimum lot size only. All principal Development Standards for FSR, setbacks, landscape would be negated. KDCP 2015 objectives appear to be retained but all local development controls relating to the DCP objectives appear negated by testing against the Design Criteria that becomes the *measurable Standard*. **3.1A Building Envelopes** DA pathway appears to retain all LEP and DCP controls in conflict with the Table 3-1 description. **Figure 3-3** Should be deleted. This is a poor model of the two dwelling housing type. It promotes battle-axe lots and devastates biodiversity corridors because the rear deep soil landscape is irrevocably lost. Rear garden deep soil landscape throughout Ku-ring-gai (and all suburban areas of NSW) defines the canopy tree corridor and urban landscape character. It is a type not permitted in the Site Requirements of Complying Development so must be removed. The example also does not

	reflect an actual development. It is schematic and will not achieve the landscape as proposed. The driveway requirements under AS2890 for swept paths of both vehicles requires approximately 6m driveway width and/or turning bays (depending on driveway, garage width etc.) for reversing. This has not been accommodated and the impacts will be exacerbated by the Codes SEPP small permitted minimum lot sizes and widths. **Figure 3-2** is inconsistent with the provision to avoid/not allow hard stand car parking for a second car forward of the building line. **General comment:** None of the diagrams contain a north point so the types may be completely inappropriate for aspect. **Principal Controls Comments - See Table 3.1 Two Dwellings Side-by-Side** They appear to trigger the Codes SEPP *General Housing Code* site requirements for Torrens title development only. My understanding is that Strata titled development would not comply with the definition of 'dwelling house' in context of the 'building' definition (similar to how an apartment development is understood – multiple dwellings contained vertically in one building, compared to multiple dwellings contained horizontally in one building). Note: If Councils adopt the MDDG 'in its entirety' or the Department imposes the adoption, it will have the effect of negating the existing suite of KDCPs that relate to Multi-Dwelling Housing. Clarification is required regarding actual pathway. Table 3-1 appear incorrect.
3.1A **Building Envelopes**  *Development Application* The local building envelope controls are to be found in the LEP and DCP that applies to the land. This may include: • Maximum height of building; and • Front, rear and side setbacks. The DCP may also provide direction on the character of the precinct and siting of the building. *Complying Development* The building envelope standards for complying development can be found in Medium Density Housing Code within ***State Environmental Planning Policy (Exempt and Complying Codes) 2008 (Codes SEPP)***. A summary is in the table below. **Element** / **Summary Development Standard** Min lot size for each dwelling / 200 m² 6m wide Height of Building / 8.5m	The development standards of the MDH Codes SEPP through Complying Development stand in direct conflict with the following KLEP and KDCP Clauses: Site requirements and min site area: KLEP Land Use Table; KLEP cl 2.6 (2); cl 4.1 (3)(3A); KLEP cl 6.6. **HoB:** KLEP cl 4.3 (2) Ku-ring-gai's KLEP and KDCPs deliver outcomes consistent with Ku-ring-gai's urban and landscape character, and are consistent with broader strategic policies including state and national direction (protecting and enhancing natural and built heritage, landscape, biodiversity/riparian corridors, long term public health outcomes for healthy, pedestrian focused cities/town and suburbs. Ambiguity/conflict about status of KLEP controls under Codes SEPP DA and CDC pathways at Figure 3-1 (p80) and statements for Council to retain min lot size and permissibility controls in *'Explanation of Intended Effects'* at p7 when compared to 3.1A (at left) Ambiguity/conflict when read with the *Explanation of Intended Effects'* for *Specified Developmen*t (p32) that states permitted on R2 zoned land. If this type of development is permitted under the SEPP definition of 'dwelling house', as CDC, the application of DCP Dwelling Houses (R2) &/or DCP Multi-Dwelling Housing (R3) would be negated **Comments on Site Requirements:** Minimum site width of 12m is too small when considering living room/entrance (4m wide x 2), garage (3m wide x 2) and side setback (2m x 2) equating to 18m to deliver a reasonable dual occupancy. Some R1, R2 (and R3 zone isolated sites) could be appropriate for semi-detached development type. Dual occupancy rear yard

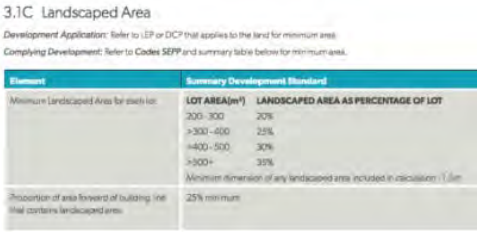
	subdivision type, should not be permitted unless on very large parent lots. Codes SEPP min lot size 200m2 and min width 6m is generally inconsistent with Ku-ring-gai's subdivision pattern and landscape character as Torrens Title. Potential positive outcome could be achieved where uptake is controlled in strategically appropriate locations. Only possible where Council retains the principal Development Standards for permissible uses, site requirements and lot size, FSR and landscape. As proposed, result will be randomised uptake and serious loss of landscape. The only R1 zoned sites in Ku-ring-gai are subject to site specific Master Plans, which are in single ownership and therefore coordinate and can control the broad range of permitted housing types within a specific major development precinct. Codes SEPP min site areas do not specify a min parent lot size suitable for subdivision – assume existing 400m2 lot size could be further subdivided. No specific KLEP standard for this type of subdivision (except those nominated Schedule 1 properties at 550m2 dual occupancy). Lots of 200m2 would significantly change existing subdivision pattern of all Ku-ring-gai R2 and R3 zones if broadly applied and lead to inconsistent streetscape character due to CDC process beyond Council. The min lot size is more compatible with R3 zone character but the type is theoretically compatible with R2 only as side by side on large lot. This type would not be taken up in R3 zone due to lower FSR than multi-dwelling housing currently permits. **Height of Building:** Height limit will result in habitable attic rooms. Attic and roof form standards will need to clear and avoid vertical external walls and balconies/widows walks which could result in adverse visual and acoustic privacy implications from that height. Allows for sufficient articulation of roof forms on flat sites. May be problematic on steep sites. 8.5m height is less than KLEP 2015 9.5m for R2 zone but less than generally permitted in R3 zones (9.5m-11.5m). See comments on Ceiling Heights 3.1K **Minimum Lot Size and Width** A typical lot within Ku-ring-gai with a single street frontage has a lot size of approx. 800-1200m2 and width 18-20m, which would result in 2 x 9-10m wide subdivision of 400-600m2. More attractive narrow side having street frontage (corner lots suitable for other types). Unlikely to result in Codes SEPP 200m2 min lot size for this type of development. 9-10m width can accommodate single car cross-over for each dwelling without seriously impacting the streetscape. KLEP 2015 cl 4.1 (3) minimum lot sizes are greater than Codes SEPP. CDC pathway would negate KLEP. KLEP cl 4.1 (3A) min lot widths (18m) conflict with Codes SEPP (12m [2x6m]).

	The minimum widths assume rear lane access which generally does not exist in Ku-ring-gai and a lot of other outer ring suburbs. The MDDG Appendix 5 example recommends min 15m lot width for sites where garages face street and is thus inconsistent with the proposed Standard that would override the MDDG and result in negative impacts to streetscape and dwelling frontage. Pressure from developers likely to advocate 'Market' demands for double garage, which result in poor outcomes for the streetscape character of existing subdivision lot widths. KLEP cl 4.1(4) min lot size does not apply to strata/community subdivision hence, 200m2 could be proposed as a side-by-side strata or community subdivision subject to permissibility under SI definitions of 'dwelling', 'dwelling house', 'building' in R2 zone. Unclear how this would apply subject to status of the SEPP over these site requirement LEP controls. Council's should be allowed to rezoning strategic areas within the LGA to R3 and amend the LEP to accommodate specific medium density housing types to correspond with desired outcome. The role of private certifiers lacks transparency without independent and effective governance of the certification, and codifies inherent conflict of pecuniary interest contrary to good governance and ICAC guidelines.
3.1A (cont'd) **Primary Road Setbacks** **Secondary Road Setbacks**  Primary Road Setback Where existing dwellings are within 40m : average of two closest dwellings Where no existing dwellings are within 40m then: LOT AREA (m²) SETBACK 300 - 300 3.5m >300 - 900 4.5m >900 - 1500 6.5m >1500+ 10m Secondary Road setback LOT AREA (m²) SETBACK 300 - 900 2m >900 - 1500 3m >1500+ 5m	The development standards of the MDH Codes SEPP through Complying Development stand in direct conflict with the following KLEP and KDCP Clauses: KDCP6A.3 Councils, such as Ku-ring-gai have developed LEPs and DCPs to deliver outcomes consistent with urban and landscape character, and are consistent with broader strategic policies including state and national direction (protecting and enhancing natural and built heritage, landscape, biodiversity/riparian corridors, long term public health outcomes for healthy, pedestrian focused cities/town and suburbs. Unclear how the Codes SEPP min lot size, if any resulted in Ku-ring-gai, would deal with the Primary Road and Secondary Road setbacks. Primary Road Setback inconsistent with KDCP 6A.3 (10m) and KDCP 4A.2 (12-14m). Two likely scenarios for the Primary Road Setback: 1) development will be pushed to the rear of a small site with all the landscape in the front setback; or 2) The min permitted setback will be proposed as compliant development. Both will have very poor outcomes for the either streetscape character or landscape internal to the site or both. The inclusion of 1500m2 subdivisions is curious. These are very large sites that seem to make little sense in context of a policy intended to result in small lots. Secondary Road Setbacks inconsistent with KDCP 6A.3 (8m) and KDCP 4A.2 (3.8-4.5m). Councils must retain existing setback controls for both DA and CDC pathways, as this is the only way the urban character of

	established areas, such as Ku-ring-gai, can be retained and managed. The one-size-fits-all approach cannot work with the vast geographical, demographical, economic, subdivision variations across NSW. The proposed street setbacks will materially impact Ku-ring-gai's urban landscape character. The role of private certifiers lacks transparency without independent and effective governance of the certification, and codifies inherent conflict of pecuniary interest contrary to good governance and ICAC guidelines.
3.1A (cont'd) **Side Setbacks** 	The development standards of the MDH Codes SEPP through Complying Development stand in direct conflict with the following KLEP and KDCP Clauses: KDCP 6A.3; KDCP 4A.2 Councils, such as Ku-ring-gai have developed LEPs and DCPs to deliver outcomes consistent with urban and landscape character, and are consistent with broader strategic policies including state and national direction (protecting and enhancing natural and built heritage, landscape, biodiversity/riparian corridors, long term public health outcomes for healthy, pedestrian focused cities/town and suburbs. Codes SEPP inconsistent with KDCP 6A.3 for 3m minimum (dependant on orientation of living/habitable rooms). Codes SEPP inconsistent with KDCP 4A.2 for 1.5m-2m. In Ku-ring-gai, if the KDCP setbacks prevails for DAs, under KDCP Part 6, 10m of the front 15m should be landscape) leaving only 5m at 1.2m side setback with the remaining portion according to height plane diagram. Under KDCP Part 4, 9-11m or 12-14m of the front 15m would be landscape leaving only 1-4m at 1.2m side setback and the remainder according to the height plane. Height plane diagrams can lead to very poor built form particularly for minimum lot widths. Ku-ring-gai's existing setback controls achieve the desired landscape character and promote landscape in all side setback zones. This will be lost under Codes SEPP. Councils must retain existing setback controls for both DA and CDC pathways. The proposed setbacks are inadequate in retaining landscape character of Ku-ring-gai and other established Council areas. The policy fails to understand the fundamental structure and value of Sydney's suburban landscape character, and Ku-ring-gai's in particular, that has a block pattern of public street-deep soil landscape front yard-built form-deep soil landscape-boundary-deep soil landscape-built form-deep soil landscape front yard-street. See Peter Meyers' analysis of Sydney suburbs reinforces Ku-ring-gai's approach. http://architectureau.com/articles/the-third-city/
3.1A (cont'd) **Rear Setback** **Lane Setback**	The development standards of the MDH Codes SEPP through Complying Development stand in direct conflict with the following KLEP and KDCP Clauses: KDCP 6A.3 ; KDCP 4A.2 Councils, such as Ku-ring-gai have developed LEPs and DCPs to deliver outcomes consistent with urban and landscape character, and are consistent with broader strategic policies including state and national direction (protecting and enhancing natural and built heritage, landscape, biodiversity/riparian corridors, long term public health outcomes for healthy, pedestrian focused cities/town and suburbs.

	These controls are totally inadequate and fail to achieve the desired landscape character for Ku-ring-gai if implemented at minimum standards. They fail every amenity test for visual and acoustic privacy, they fail every biodiversity corridor test, and they will result in rear 'landscape' zones largely being paved if the minimum lot sizes are approved. In Ku-ring-gai, the effect would be that all the landscape would in in the front addressing the street, but completely lost at the back. Dual occupancy type houses subdividing the rear garden should not be permitted. They prevent biodiversity corridors and result in loss of landscape that can never be re-gained.
3.1B Floor Space Ratio 	The development standards of the MDH Codes SEPP through Complying Development stand in direct conflict with the following KLEP and KDCP Clauses: FSR: KLEP cl 4.; Flow-on impacts to: KDCP Part 24 Water Management; Part 18 Biodiversity; Part 19R1 Greenweb Maps; Part 22 Landscape Design; Section C Part 24 Sustainability; Part 24 Water Management The proposed FSR is too high and not in character with most local government areas. An overriding clause should be inserted into the Codes SEPP to impose the Floor Space Ratio (FSR) development standard for Dual Occupancies in the relevant Councils Local Environmental Plan. Codes SEPP FSR ratios are far too high for the lot sizes in R2 zone (0.2 to 0.3:1) Codes SEPP FSR is less than KLEP 0.8:1 that generally applies to R3 zones. Proposed FSRs translate to the following dwelling sizes: - 150-225m2 on 200-300m2 site = OK - 210-280m2 on 300-400m2 site = should be maximum dwelling size for type - 260-325m2 on 400-500m2 site = maximum to irresponsible dwelling size - 330m2 on a 550m2 site = irresponsible dwelling size - 360m2 on a 600m2 site = irresponsible dwelling size Impacts will be to site coverage and landscape. KDCP site coverage for Multi Dwelling housing permits a maximum of 40% site coverage. Proposed FSRs are similar to current Codes SEPP for General Housing Code cl 3.10 and demonstrates the poor appreciation of the translation from code to built form. The proposed FSRs have not been tested. The FSR must be set to reflect responsible dwelling sizes for this type of housing and responds to and is coordinated with all State and Commonwealth sustainability, energy efficiency, and landscape policies. Proposed FSRs for the larger lots are completely inconsistent with the proposed dwelling sizes at 3.1L. Government policy that advocates single dwellings over 360m2 is deeply flawed and must be reduced. Impacts will be to site coverage and landscape and likely flow-on impacts to Ku-ring-gai's DCP initiatives.

3.1C
Landscaped Area



3.1C Landscaped Area

Development Application: Refer to LEP or DCP that applies to the land for minimum area.
Complying Development: Refer to **Codes SEPP** and summary table below for minimum area.

Element	Summary Development Standard	
Minimum Landscaped Area for each lot	LOT AREA(m^2)	LANDSCAPED AREA AS PERCENTAGE OF LOT
	200 - 300	20%
	>300 - 400	25%
	>400 - 500	30%
	>500+	35%
	Minimum dimension of any landscaped area included in calculation 1.5m	
Proportion of area forward of building line that contains landscaped area	25% minimum	

The principal controls for landscaped areas are virtually the same for all development types. Despite reference to variations being necessary dependant on the context (Guideline 9, Part 2C), the controls for landscaped area within the front setback and for each lot require no such sensitivity under the MDDG. The minimum width for landscaped areas of 1.5m is commendable. Unfortunately as there are no specific requirements for screen planting alongside setbacks there is little incentive to provide useful 600mm width garden beds for screen planting between buildings.

The objectives for landscape area are commendable though brief, however the design criteria are limited (there are more for front fences) and unlikely to benefit the residents or neighbours with no requirement for consideration of the landscape design guidelines.

The development standards of the MDH Codes SEPP through Complying Development stand in direct conflict with the following KLEP and KDCP Clauses: KDCP 4A.3 for Site Coverage; KDCP 4A.4 Landscape; KDCP 6A.4 Building Separation; KDCP 6A.5 Site Coverage; KDCP 6A.6 Deep Soil Landscape, KDCP Part 18 Biodiversity; Part 19R1 Greenweb Maps; Part 22 Landscape Design; Section C Part 24 Sustainability; Part 24 Water Management

Ku-ring-gai's KLEP and KDCPs deliver outcomes consistent with Ku-ring-gai's urban and landscape character, and are consistent with broader strategic policies including state and national direction (protecting and enhancing natural and built heritage, landscape, biodiversity/riparian corridors, long term public health outcomes for healthy, pedestrian focused cities/town and suburbs

KDCP for multi-dwelling housing requires 40% of the landscape area to be deep soil of a minimum 2 metre width. This component alone exceeds the total landscape area of a minimum 1.5m width for sites under proposed Codes Standards. This one Development Standard will have an unacceptable impact on Ku-ring-gai's landscape character if taken up across the LGA. Council's Deep Soil control should be retained and not be overridden by the MDH Codes SEPP and MDDG.

The FSR and landscape area as proposed within the MDH Codes SEPP and MDDG, is diametrically opposed to the Federal Government's 'Green Cities' policy (announced 01/2016 by Minister Greg Hunt)… *"cities with high levels of trees, foliage and green spaces — provide enormous benefits to their residents. Increasing urban canopy coverage decreases heat, which improves health and quality of life."*

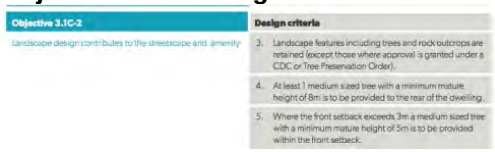
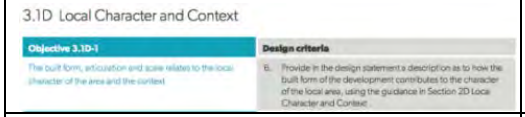
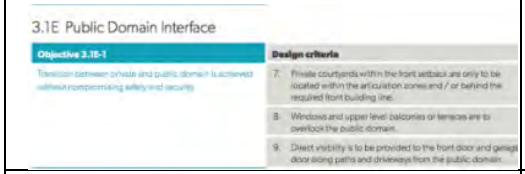
http://www.greghunt.com.au/Home/LatestNews/tabid/133/ID/3623/Long-term-planning-and-cities-for-the-next-century--Sydney-Business-Chamber.aspx

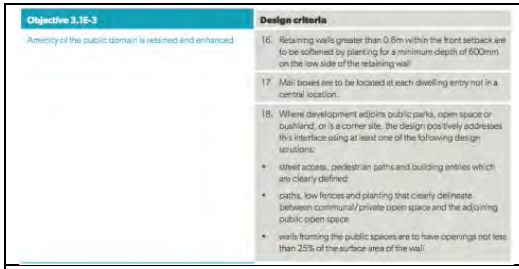
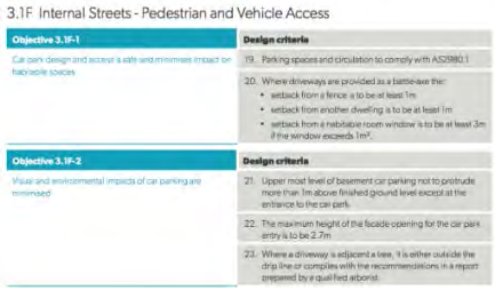
http://www.uts.edu.au/research-and-teaching/our-research/institute-sustainable-futures/news/new-alliance-promote-greening

The loss of every council's authority over landscape fails to consider the variety and specific character of each LGA throughout NSW and fails to provide a mechanism to achieve the variety that a city and NSW needs.

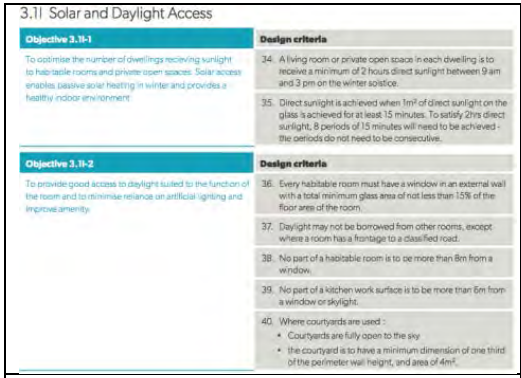
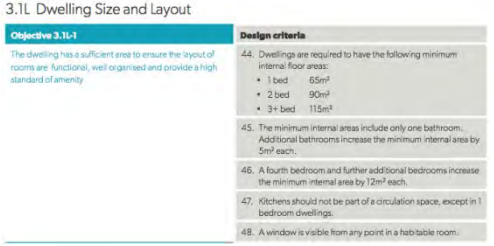
Landscape is the single most important element that defines Ku-ring-gai's urban character. The MDDG Objectives and Design Criteria for landscape are manifestly inadequate for Ku-ring-gai. There is no requirement for any landscape to be deep soil. The required areas are inadequate and will not result in the trees being viable due to the high probability they will be removed, or replaced with smaller planting, or areas of paving extended post approval. Ku-ring-gai's urban character is predicated on the quality of its landscape, and has in place, detailed development objectives and controls for all setbacks, site coverage, total landscape area, deep soil and tree removal that ensure all development, of every scale is within a dominant landscape setting characterised by canopy trees and deep soil planting. The loss of landscape controls, therefore, has a particularly devastating

	impact on Ku-ring-gai's strategic planning of urban character. Protection of canopy trees that may have value in either providing links between areas of biodiversity significance, or contributing to the background view between allotments or internal site character is very important. This has a function as a public asset, which is not recognised in the Codes SEPP or MDDG. Local experience of development currently lodged under *SEPP Seniors and People with a Disability* and *SEPP Affordable Rental Housing* has seen the gradual loss and/or degradation of established trees and vegetation within the Council area where these developments occur. Unlike these two SEPPs, the Codes SEPP has **no** development standard requiring development consider and respond appropriately to existing and desired urban character for landscape nor can it be verified. The types of development that have had the greatest impact in Ku-ring-gai are those advocated in the MDDG that prioritise at-grade car parking deep within the site. These have a devastating impact on the protection of existing and diminishing landscape. These outcomes are in direct conflict with the NSW Government's *A Plan for Growing Sydney* and its *Urban Green Cover Policies*, commonwealth policies for Greening Cities and Housing adapted to climate change. It is also worth noting, these are policies that are inconsistent with the United Nations, General Assembly *Draft outcome document of the United Nations Conference on Housing and Sustainable Urban Development (Habitat III) - New Urban Agenda*. Cumulative impacts resulting from the Landscaped Area development standard have the potential for loss of vegetation across NSW that will contribute to land surface temperature increases and the urban heat sink effect. The focus on streetscape landscape controls is important in achieving urban character, however, the policy fails to adequately value the rear yard landscape assets throughout NSW and in Ku-ring-gai specifically, and their importance climatically, their role protecting against further fragmentation of biodiversity significance and loss of green corridors, and their aesthetic contribution to urban character. Further to this, the local community demands its protection and the courts have recognised Ku-ring-gai's landscape character in its judgements.
3.1C-1 **Objectives and Design Criteria**  Objective 3.1C-1: Landscape design is viable and sustainable and supports healthy plant and tree growth Design criteria: 1. Ongoing maintenance plan is provided as part of the landscaped plan. 2. Minimum soil standards for plant sizes are provided in accordance with Table 1 in Section 2C.	The requirement for an ongoing maintenance plan is not feasible for two dwellings with little common area nor is it enforceable into the future. Landscape contractors provide at most a 6-12 month establishment plan. After that the maintenance of a development is a either private or communal responsibility. PCA's are not trained, qualified, or have required expertise to assess landscape maintenance plans.
	The requirement for minimum soil standards is directed to planting on structures. This is unlikely to be relevant for two dwellings (dual occupancy). There should also be criteria for preservation of existing trees in accordance with AS4970-2009, minimum width of garden beds to side and rear boundaries for screen planting, minimum width of garden beds to driveway. PCA's are not trained, qualified, or have required expertise to assess soil standards in relation to proposed vegetation requirements.

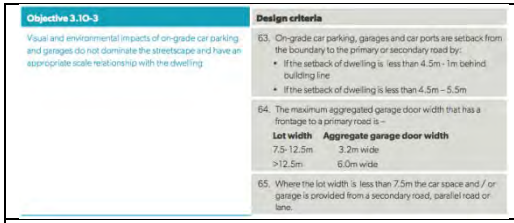
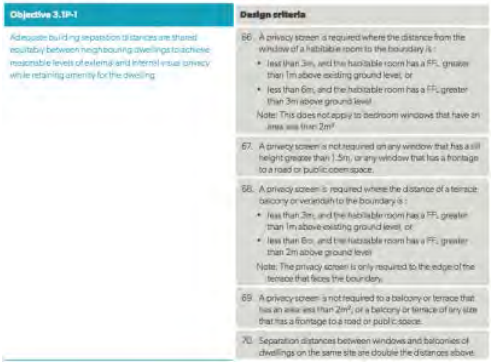
3.1C-2 **Objectives and Design Criteria**  Objective 3.1C-2 Landscape design contributes to the streetscape and amenity Design criteria 3. Landscape features including trees and rock outcrops are retained (except those where approval is granted under a CDC or Tree Preservation Order). 4. At least 1 medium sized tree with a minimum mature height of 8m is to be provided to the rear of the dwelling. 5. Where the front setback exceeds 3m a medium sized tree with a minimum mature height of 5m is to be provided within the front setback.	**Objective 3.1C-2** refers to contribution to streetscape and amenity; however this is unachievable with one 5 metre high tree in the front setback. There is no further requirement for any other shrubs, groundcover or lawn and instead 75% of the front setback is permitted to be paved. A 5m tree may be appropriate for front setbacks of 3.5m however this is not in keeping with larger lots with existing front setbacks. There is no requirement for street tree planting. The reference to 'tree preservation order' should be substituted with Clause 5.9 consistent with the Principal LEP. The CDC pathway negates Council's tree protections except where Biodiversity Act applies. However, PCAs are not trained, qualified or has the expertise to assess trees and landscape issues. Role of private certifiers and Complying Development has serious impacts to protecting biodiversity, and landscape character. Councils must retain assessment role of medium density type developments.
3.1D **Local Character and Context**  3.1D Local Character and Context Objective 3.1D-1 The built form, articulation and scale relates to the local character of the area and the context Design criteria 6. Provide in the design statement a description as to how the built form of the development contributes to the character of the local area, using the guidance in Section 2D Local Character and Context.	Requires PCAs to check a design statement is submitted but they are not trained, qualified, nor have the expertise to assess urban design and architectural merit of a design.
3.1 E-1 **Public Domain Interface**  3.1E Public Domain Interface Objective 3.1E-1 Transition between private and public domain is achieved without compromising safety and security Design criteria 7. Private courtyards within the front setback are only to be located within the articulation zones and / or behind the required front building line. 8. Windows and upper level balconies or terraces are to overlook the public domain. 9. Direct visibility is to be provided to the front door and garage door along paths and driveways from the public domain.	**7.** Impact of allowing private courtyards within the front setback will be only where minimum front setbacks are proposed. **8.** The requirement for windows and upper level balconies or terraces overlooking the public domain is supported. **9**. The requirement for direct visibility to be provided to the front door and garage door along paths and driveways from the public domain is support, however the impact of driveways into a lot must be minimised.
3.1 E-2 **Public Domain Interface**	**10.** The requirement for front fences to use visually permeable materials is supported. **11.** The maximum height of front fences should be limited to 1.2m above the existing ground level. **12.** The requirement for no more than 50% of allowable fence area should be solid (masonry, timber, metal or stone) contradicts criteria 10, which outlines that front fences are to use visually permeable materials. **13.** The high solid acoustic fencing should only be permitted on sites that have an actual street frontage to a classified road. The current wording does not make this clear – e.g. lots that are located on a side street off a classified road may try to have a front fence height of 2.1m to "shield the dwelling from the noise from the classified road". **14.** The requirement that unfinished timber paling and metal panel fences are not located within the front setback is supported. **15**. Generally supported. Elements of façade should be well coordinated with landscape treatment.
3.1 E-3 **Public Domain Interface**	**16.** Supported

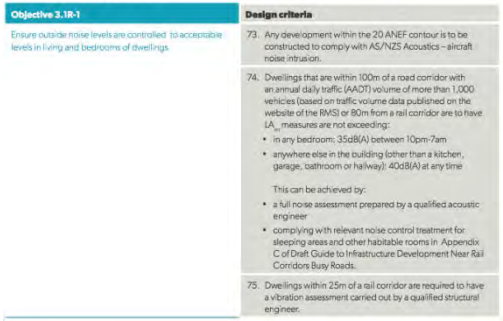
 Objective 3.1E-3 Amenity of the public domain is retained and enhanced Design criteria 16. Retaining walls greater than 0.6m within the front setback are to be softened by planting for a minimum depth of 600mm on the low side of the retaining wall 17. Mail boxes are to be located at each dwelling entry not in a central location. 18. Where development adjoins public parks, open space or bushland, or is a corner site, the design positively addresses this interface using at least one of the following design solutions: • street access, pedestrian paths and building entries which are clearly defined • paths, low fences and planting that clearly delineate between communal/ private open space and the adjoining public open space • walls fronting the public spaces are to have openings not less than 25% of the surface area of the wall.	**17.** Supported for smaller developments. Assumes all dwellings address the street, which may not be the case for large multi dwelling housing development. **18.** Supported.
3.1F **Internal Streets- Pedestrian and Vehicle Access**  3.1F Internal Streets - Pedestrian and Vehicle Access Objective 3.1F-1 Car park design and access is safe and minimises impact on habitable spaces Design criteria 19. Parking spaces and circulation to comply with AS2980.1 20. Where driveways are provided as a battle-axe the: • setback from a fence is to be at least 1m • setback from another dwelling is to be at least 1m • setback from a habitable room window is to be at least 3m if the window exceeds 1m². Objective 3.1F-2 Visual and environmental impacts of car parking are minimised Design criteria 21. Upper most level of basement car parking not to protrude more than 1m above finished ground level except at the entrance to the car park. 22. The maximum height of the facade opening for the car park entry is to be 2.7m 23. Where a driveway is adjacent a tree, it is either outside the drip line or complies with the recommendations in a report prepared by a qualified arborist.	**19.** The requirement that parking spaces and circulation comply with AS2980.1 is supported. **20.** Complying Development cannot have battle-axe type as all of this type of complying development MUST address the street. Conflicts with DC 24. **21.** Not applicable to type or scale of development. Basements not economically viable with less than 4 dwellings. This type only proposes 2 dwellings. **22.** Supported but not applicable. **23.** Supported but PCA has no training, expertise nor experience to assess arborist reports. Driveways adjacent to trees should require compliance with the Australian Standard for the protection of trees on development sites (AS4970-2009). **3.1F** Requires amendment. Internal 'Streets' are not streets, they are private driveways. They significantly impact landscape character by prioritising vehicles of over pedestrian and landscape amenity and devastate the internal site character by imposing expansive areas of hard stand. An internal street must have specific controls about reservation, design, functional and well located through-site connections to the public street network, no dead-ends. Councils must retain assessment role for medium density type developments. Councils provide independent, specialist expertise in all the relevant disciplines unlike a private certifier.
3.1G Orientation and Siting	**Objective 3.1G-3** – refers to minimizing earthworks, but it is followed by design criteria that allows excavation/filling up to 1m depth where 'not more than 1m from the boundary'. The control should be consistent with the current Codes SEPP which requires a minimum 600mm setback. **24.** The requirement for each dwelling to have frontage to a primary, secondary or parallel road is supported. **25.** Not supported. Delete. Rear garden subdivisions result in poor landscape outcomes on small lots. **26**. Generally supported but no reference to noise sources. **27**. The criteria should be amended to remove the requirement *"more than 3m from the boundary"* **28.** Supported.

 3.1G Orientation and Siting **Objective 3.1G-1** — Building types and layouts respond to the streetscape and site while optimising solar access within the development and maximise street surveillance and connectivity **Design criteria** 24. Each dwelling has a frontage to a primary, secondary or parallel road. 25. (Development Applications Only) A dwelling on a battle-axe block does not need a frontage to a road, but has an access to the primary road of at least 3m. 26. Every wall that faces the street has a window to a habitable room at each level. **Objective 3.1G-2** — Overshadowing of neighbouring properties is minimised during mid winter **Design criteria** 27. The window to a living room of an adjoining dwelling that is more than 3m from the boundary is to receive more than 2hrs of solar access between 9am and 3pm on the winter solstice (June 21). 28. Where the above criteria is not satisfied, the proposed development ensures solar access to neighbouring properties is not reduced by more than 20%. 29. Where living room windows of an adjoining dwelling cannot be verified the proposed development is accommodated within a building envelope defined by a 35° plane at 3.6m above the boundary. **Objective 3.1G-3** — The development responds to the natural landform of the site, reducing the visual impact and minimising earthworks **Design criteria** 30. On sloping sites the buildings are to respond to the topography with changes in floor level to minimise cut and fill. Unless a dwelling is over a basement, the ground floor is not to be more than 1.3m above ground level, and no more than 1m below ground level. 31. Excavation must not exceed a maximum depth measured from ground level (existing) if: • located nor more than 1m from any boundary - 1m • located more than 1m from any boundary - 3m 32. Fill outside the building footprint must not exceed a maximum height measured from ground level (existing) if: • located nor more than 1m from any boundary - 0.6m • located more than 1m from any boundary - 1m Note: For complying development the Codes SEPP contains development standards for earthworks, retaining walls and structural support.	**29**. Generally supported, but should be tested. Private Certifiers have no training, expertise nor experience to assess voracity of solar impacts. **30.** Generally consistent with KDCP 6C.6 but would permit adjacent ground to abut walls which is not supported. **31.** Poor outcome. Conflicts with DC 30. Housing type will not see basement car parking so control not applicable. Unclear what the excavation would be for in context of DC 30. **32.** Generally supported. Needs to be tested. Excavation would be permitted with nil setback from boundary compared to 2m under KDCP. Councils must retain assessment role for medium density development. Councils provide independent, specialist expertise in all the relevant disciplines unlike a private certifier.
3.1H **Building Separation**  3.1H Building Separation **Objective 3.1H-1** — Provide adequate space between buildings to allow for landscape, provide visual separation and daylight access between buildings **Design criteria** 33. The minimum separation between two or more buildings on the same lot is 3m. Note: • Building separation may need to be increased to provide adequate privacy (Section 3.1F) or solar access (Section 3.1I) • The minimum separation between the development and dwellings on adjoining land will be determined by the side and rear setbacks	**33.** This control is not relevant as side-by-side type will only have two attached dwellings that address a street. Completely inadequate as a control under 2H Visual Privacy. Dual occupancy rear yard subdivision not supported. There is no consideration of acoustic privacy in this control. This criteria requires amendment. The same building separations that apply to SEPP 65 should apply to multi-dwelling housing. Delete reference to buildings within the one site. Under R2 Land Use Table the parent lot would need to be subdivided to Torrens title under the SI LEP definitions of ‘building’, dwelling’ and ‘dwelling house’.
3.1I **Solar and Daylight Access**	**34.** Not supported. Test is less than applies to high density development. The criteria should be reworded to “A living room *and* private open space in each dwelling”… Controls 34 and 35, contains solar access requirements for living rooms and private open space, however the methodology for measuring direct sunlight applies to windows/living areas only. A methodology for measuring solar access to private open space should be included. **35.** Supported and only consistent with Design Criteria 34(above) if wording changed as suggested. **36.** Supported. **37.** Delete. …”except where a room has a frontage to a classified road.” Noise barrier planning principles must be implemented to ensure all habitable rooms have a window in an external wall. Wording implies habitable rooms can provide no window, which is unacceptable. Proposed amenity significantly less than expected for high density development. Conflicts with DC 36. **38**. Supported.

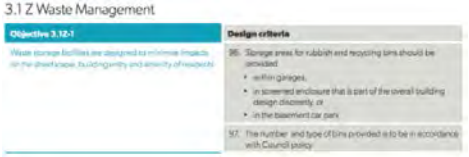
 3.1I Solar and Daylight Access **Objective 3.1I-1** To optimise the number of dwellings recieving sunlight to habitable rooms and private open spaces. Solar access enables passive solar heating in winter and provides a healthy indoor environment **Design criteria** 34. A living room or private open space in each dwelling is to receive a minimum of 2 hours direct sunlight between 9 am and 3 pm on the winter solstice. 35. Direct sunlight is achieved when 1m² of direct sunlight on the glass is achieved for at least 15 minutes. To satisfy 2hrs direct sunlight, 8 periods of 15 minutes will need to be achieved - the periods do not need to be consecutive. **Objective 3.1I-2** To provide good access to daylight suited to the function of the room and to minimise reliance on artificial lighting and improve amenity. **Design criteria** 36. Every habitable room must have a window in an external wall with a total minimum glass area of not less than 15% of the floor area of the room. 37. Daylight may not be borrowed from other rooms, except where a room has a frontage to a classified road. 38. No part of a habitable room is to be more than 8m from a window. 39. No part of a kitchen work surface is to be more than 8m from a window or skylight. 40. Where courtyards are used : • Courtyards are fully open to the sky • the courtyard is to have a minimum dimension of one third of the perimeter wall height, and area of 4m².	**39**. Supported and should be amended to add**:** …"Use is restricted to kitchens, bathrooms or service areas and acoustic and visual privacy must be achieved." **40.** Control 40 includes a requirement that courtyards be 'fully open to the sky'. This would prevent the installation of a pergola or other means of shading device. This control should be changed to refer to courtyards that are used to demonstrate compliance with the direct sunlight requirement only**.** All Design Criteria must ensure amenity is never less than SEPP 65 for high density housing.
3.1J **Natural Ventilation**  3.1J Natural Ventilation **Objective 3.1J-1** All habitable rooms are naturally ventilated **Design criteria** 41. Natural ventilation is available to each habitable room. 42. Each dwelling is to be cross ventilated.	**41.** Supported. **42.** Supported and should be amended to add**:** "Maximum building depth does not exceed 16m measured glass line to glass line unless ventilated." All Design Criteria must ensure amenity is never less than SEPP 65 for high density housing.
31.K Ceiling Height  3.1K Ceiling Height **Objective 3.1K-1** Ceiling height achieves sufficient natural ventilation and daylight access and provides spatial quality **Design criteria** 43. Measured from finished floor level to finished ceiling level, minimum ceiling heights are: • 2.7m to ground floor habitable rooms • 2.7m to upper level living rooms • 2.4m to upper level habitable rooms (excluding living rooms)	**43.** Amend 2nd dot point to "2.7m to upper level habitable rooms" instead of living rooms Delete 3rd dot point relating to 2.4m for upper level habitable rooms (excluding living rooms). All Design Criteria must ensure amenity is never less than SEPP 65 for high density housing.
3.1L-1 **Dwelling Size and Layout**  3.1L Dwelling Size and Layout **Objective 3.1L-1** The dwelling has a sufficient area to ensure the layout of rooms are functional, well organised and provide a high standard of amenity **Design criteria** 44. Dwellings are required to have the following minimum internal floor areas: • 1 bed 65m² • 2 bed 90m² • 3+ bed 115m² 45. The minimum internal areas include only one bathroom. Additional bathrooms increase the minimum internal area by 5m² each. 46. A fourth bedroom and further additional bedrooms increase the minimum internal area by 12m² each. 47. Kitchens should not be part of a circulation space, except in 1 bedroom dwellings. 48. A window is visible from any point in a habitable room.	**44.** The minimum internal floor areas are supported **45.** The addition bathrooms at 5sqm is supported. **46.** Supported. **47.** The requirement for kitchens to not be part of circulation space is supported. **48.** Supported. The above Design Criteria 44-48 are consistent with KDCP 6C.6 Dwelling sizes.
3.1L-2  **Objective 3.1L-2** Dwelling layouts are designed to accommodate a variety of household activities and needs and is appropriate for the number of occupants **Design criteria** 49. One bedroom has a minimum area of 10m² and other bedrooms 9m² (excluding wardrobe space). 50. Bedrooms have a minimum dimension of 3m (excluding wardrobe space). 51. Combined living and dining rooms are to have a minimum area of: • 1 and 2 bed 24m² • 3+ bed 28m² 52. Living room or lounge rooms are to have a minimum width of 4m (excluding fixtures).	**49.** Supported. **50.** Supported. **51.** Generally supported although 28m2 and 32m2 respectively would achieve better amenity and flexibility. It is noted that these areas are slightly smaller than combined living and dining areas under KDCP6A.6 – but can still be functional dependent on the layout and circulation.

	52. Supported. However, could result in more square shaped rooms in conjunction with minimum areas Design Criteria 51. Should be amended to add**:** "Room proportions should be rectangular preferably 2:3 to enable functional and efficient furniture layouts and accommodate circulation." All Design Criteria must ensure amenity is never less than SEPP 65 for high density housing.
3.1M **Private Open Spaces** 3.1M Private Open Spaces **Objective 3.1M-1** Dwellings provide appropriately sized private open space and balconies to enhance residential amenity **Design criteria** 53. All dwellings are required to have a primary private open space of at least 16m². 54. The minimum dimension of the included area is 3m, and excludes any storage space. **Objective 3.1M-2** Primary private open space and balconies are appropriately located to enhance liveability for residents **Design criteria** 55. The primary private open space is to be located adjacent to the living room, dining room or kitchen to extend the living space. 56. 50% of the primary private open space should be covered to provide shade and protection from rain.	**53.** The minim 16sqm private open space is inadequate unless differentiated between Torrens and Strata titles, as these result in very different private open space outcomes. The minimum should be increased commensurate with dwelling size and identify only applicable for Strata title development. Torrens title requires 50% of each dwelling lot to be private open space, as the proposed 16sqm private open space will be catastrophically inadequate in the Ku-ring-gai context if applied to Torrens titled development. **54.** Generally Supported. The dimensions are less than required in KDCP 6A.2, but will achieve reasonable minimum amenity **55.** Supported. **56.** Should refer to 50% of the minimum primary private open space area requirement, otherwise it would require substantial covered areas in the event that private open space areas greater than the minimum area are proposed.
3.1N **Storage** 3.1N Storage **Objective 3.1N-1** Adequate, well designed storage is provided in each dwelling **Design criteria** 57. In addition to storage in kitchens, bathrooms and bedrooms, the following storage is provided: • 1 bed 6m³ • 2 bed 8m³ • 3+ bed 10m³ 58. At least 50% of the required storage is to be located inside the dwelling. 59. Storage not located in dwellings is secure and clearly allocated to specific dwellings if in a common area.	**57**. The minimum storage requirements is supported. **58.** Supported. **59**. Supported.
3.1O-1 **Car and Bicycle Parking** 3.1O Car and Bicycle Parking **Objective 3.1O-1** Car parking is provided appropriate for the scale of the development **Design criteria** 60. Where parking is provided above ground, at least one car space is to be provided per dwelling. 61. [Development applications only] Car parking is to be provided at the rate required for a dual occupancy within a Development Control Plan that applies to the land, if there is no rate in a DCP - 1 space is to be provided.	**60.** Supported. Conditional on garage/car parking fronting the primary street to be maximum 1 car width. **61**. As per comments above, car parking on small width lots must be limited to single car width to protect streetscape character.
3.1O-2 **Objective 3.1O-2** Parking and facilities are provided for other modes of transport **Design criteria** 62. Covered space is to be provided for the secure storage of at least 1 bicycle per dwelling.	**62.** Supported. Generally, the side-by-side typology is low density and the requirement for secure storage of 1 bicycle is able to be accommodated within most R2 lot widths without unacceptable impacts on the streetscape (unlike some other types proposed and commented elsewhere.)
3.1O-3	**63**. Error – Repeated dot points *"If the setback of dwelling is less than 4.5m"* This needs to be clarified **64.** Amend**:** increase >12.5m frontage for 6m garage to >18m frontage. **65.** Double garaging results in poor outcomes to streetscapes. No dwelling should result in garaging being more than 50% of the

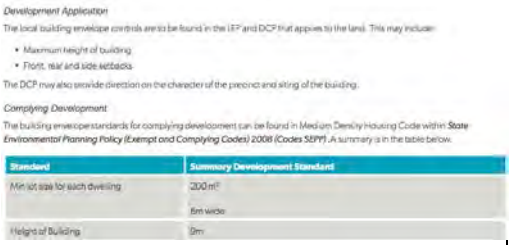
 **Objective 3.10-3** Visual and environmental impacts of on-grade car parking and garages do not dominate the streetscape and have an appropriate scale relationship with the dwelling **Design criteria** 63. On-grade car parking, garages and car ports are setback from the boundary to the primary or secondary road by: • If the setback of dwelling is less than 4.5m - 1m behind building line • If the setback of dwelling is less than 4.5m – 5.5m 64. The maximum aggregated garage door width that has a frontage to a primary road is – **Lot width** **Aggregate garage door width** 7.5-12.5m 3.2m wide >12.5m 6.0m wide 65. Where the lot width is less than 7.5m the car space and / or garage is provided from a secondary road, parallel road or lane.	façade.
3.1P **Visual Privacy** 3.1P Visual Privacy  **Objective 3.1P-1** Adequate building separation distances are shared equitably between neighbouring dwellings to achieve reasonable levels of external and internal visual privacy while retaining amenity for the dwelling **Design criteria** 66. A privacy screen is required where the distance from the window of a habitable room to the boundary is : • less than 3m, and the habitable room has a FFL greater than 1m above existing ground level, or • less than 6m, and the habitable room has a FFL greater than 3m above ground level Note: This does not apply to bedroom windows that have an area less than 2m² 67. A privacy screen is not required on any window that has a sill height greater than 1.5m, or any window that has a frontage to a road or public open space. 68. A privacy screen is required where the distance of a terrace, balcony or verandah to the boundary is : • less than 3m, and the habitable room has a FFL greater than 1m above existing ground level, or • less than 6m, and the habitable room has a FFL greater than 2m above ground level Note: The privacy screen is only required to the edge of the terrace that faces the boundary. 69. A privacy screen is not required to a balcony or terrace that has an area less than 2m², or a balcony or terrace of any size that has a frontage to a road or public space. 70. Separation distances between windows and balconies of dwellings on the same site are double the distances above.	The development standards of the MDH Codes SEPP through Complying Development stand in direct conflict with the following KLEP and KDCP Clauses: KDCP 6A.4, which achieves amenity similar to SEPP 65 and should prevail. Privacy should be primarily achieved through sound design resolution. Five controls around the use of privacy screens indicates visual (and acoustic) privacy is not achieved via the proposed building separations at 2H, which should be amended and increased consistent with SEPP 65 ADG separations. **66**. Delete. These conditions indicate inadequate setbacks from the boundary and should not be a condition that arises in this type of development. The setbacks should be increased, instead of requiring privacy screens to be added to habitable room windows. **67**. Supported. **68**. Delete. These conditions indicate inadequate setbacks from the boundary and should not be a condition that arises in this type of development. The setbacks should be increased, instead of requiring privacy screens to be added to balcony, verandah, and terraces. **69**. Supported. **70.** Ambiguous. Primary controls at 2H must be amended to address building separation to achieve adequate visual and acoustic privacy. **71**. Supported. Add**:** “Privacy screens must be operable and allow directional adjustment. “ The proposed controls requiring the addition of privacy screens to habitable windows and balconies demonstrates that the proposed setbacks and building separation is inadequate.
3.1Q **Acoustic Privacy**	**72.** Add to Objective: …”siting of buildings, building separation and building layout.”

3.1R **Noise and Pollution** 3.1R Noise and Pollution  **Objective 3.1R-1** Ensure outside noise levels are controlled to acceptable levels in living and bedrooms of dwellings **Design criteria** 73. Any development within the 20 ANEF contour is to be constructed to comply with AS/NZS Acoustics – aircraft noise intrusion. 74. Dwellings that are within 100m of a road corridor with an annual daily traffic (AADT) volume of more than 1,000 vehicles (based on traffic volume data published on the website of the RMS) or 80m from a rail corridor are to have LA_{eq} measures are not exceeding: • in any bedroom: 35dB(A) between 10pm-7am • anywhere else in the building (other than a kitchen, garage, bathroom or hallway): 40dB(A) at any time This can be achieved by: • a full noise assessment prepared by a qualified acoustic engineer • complying with relevant noise control treatment for sleeping areas and other habitable rooms in Appendix C of Draft Guide to Infrastructure Development Near Rail Corridors Busy Roads. 75. Dwellings within 25m of a rail corridor are required to have a vibration assessment carried out by a qualified structural engineer.	**73.** Supported. **74.** Supported. **75.** Supported.
3.1S **Universial Design** 3.1S Universal Design  **Objective 3.1S-1** Universal design features are included in dwelling design to promote flexible housing for all community members **Design criteria** 76. All dwellings are to include the Liveable Housing Design Guideline's Silver level universal design features.	**76**. Supported. The Design Criteria should also be amended to add a requirement for adaptable housing to Platinum Level for one dwelling on sites larger than 600m2.
3.1U **Architectural Form and Roof Design** 3.1U Architectural Form and Roof Design  **Objective 3.1U-1** The architectural form is defined by a balanced composition of elements. It responds to internal layouts and desirable elements in the streetscape. It is a considered 3-dimensional form **Design criteria** 77. Provide in the design statement a description as to how the architectural form reduces the visual bulk and responds and provides a cohesive design response. Note: Refer to Part 2 for guidance. **Objective 3.1U-2** The roof treatments are integrated into the building design and positively respond to the street **Design criteria** 78. The roof design is integrated harmoniously with the overall building form. 79. Skylights and ventilation systems are to be integrated into the roof design.	**77.** Supported but a PCA is not the appropriate person to be assessing design quality of architectural form. **78**. Supported, however PCA is not the appropriate person to be assessing design quality of architectural form. **79**. Supported., however PCA is not the appropriate person to be assessing design quality of architectural form. Councils and design review panels must retain assessment role for medium density development. Councils provide independent, specialist expertise in all the relevant disciplines. Private certifiers are not trained, qualified or experienced in assessing design quality of architectural form.
3.1V **Visual Appearance and Articulation** 3.1V Visual Appearance and Articulation  **Objective 3.1V-1** To promote well designed buildings of high architectural quality that contribute to the local character **Design criteria** 80. Provide in the design statement a description as to how the aesthetics and articulation contribute to the character of the local area. 81. An articulation zone of 1.5m is provided forward of the building line. The articulation zones includes one or more of the following: • Veranda / Porch • Balcony • Pergola • Entry feature or portico • Awnings or other features over windows • Eaves and sun shading • Window box treatment • Recessed or projecting architectural elements • Bay windows	**80.** Supported but a PCA is not the appropriate person to be assessing design quality of architecture. **81**. Supported, however PCA is not the appropriate person to be assessing design quality of architecture. Councils and design review panel must retain assessment role for medium density development. Councils provide independent, specialist expertise in all the relevant disciplines. Private Certifiers are not trained, qualified or experienced in assessing design quality of architecture.
3.1W-1 **Pools and Ancillary Development**	**82** Supported. Ambiguity about 'rear yard' for corner lots. **83** Supported.

3.1W Pools and Ancillary Development **Objective 3.1W-1**: The location of swimming pools and spas minimise the impacts of adjoining properties. **Design criteria** 82. Swimming pools and spas are located in the rear yard. 83. The coping around a swimming pool or spa is not be more than 1.4m above ground level (existing). 84. The decking or paved area around a swimming pool or spa (excluding a coping less than 300mm wide) is not be more than 0.6m above ground level (existing). 85. Water from a swimming pool or spa must be discharged in accordance with an approval under the Local Government Act 1993 if the lot is not connected to a sewer main. 86. The pump is housed in an enclosure that is soundproofed. Note: A child-resistant barrier must be constructed or installed in accordance with the requirements of the Swimming Pools Act 1992	**84** Supported. **85** Supported. **86** Supported.
3.1W-2 **Pools and Ancillary Development** **Objective 3.1W-2**: Detached studios, and outbuildings should not dominate the rear garden. They are useful to activate rear lanes providing visual surveillance. **Design criteria** 87. A detached studio or outbuilding must not have a building height of more than: • 3.6m or • if the studio is located within 0.9m of a lane - 6.5m 88. The side and rear setbacks for an outbuilding or detached studio are: • if the building is located within 0.9m of a lane - 0m to side and rear boundaries, otherwise, • 0m to side boundaries, and 3m to rear boundaries 89. The floor area of a detached studio or outbuilding must not be more than 36m² and is included in the overall gross floor area of for the site. 90. Any window in a detached studio where the floor level is more than 1.5m above ground level must not be greater than 2m² in any wall face. Note: Privacy and building separation and other design criteria still apply.	**87** Supported. **88** The control permits a 0m side setback from a detached studio or outbuilding should be increased to match the side setback requirements in the Building Envelopes controls as a 0m side setback at the high floor space ratios of 0.6-0.75:1 may lead to poor outcomes, particularly with respect to the provision of landscaping, tree impacts in backyards and visual impacts on adjacent properties. **89** Should be conditional on lot size. Possible for a 6m x 6m room that could extend across full extent of a min width lot but must provide a 3m setback to the rear boundary that serves no purpose and adds no amenity to the lot. One side setback should apply to only one side boundary and room should not occupy more than 30% of the lot width. **90** Not supported. If internal to a site, privacy could be controlled, if highlights provide outlook above roof lines of neighbouring site, there are no privacy impacts. Opening size should provide pleasing proportions in the façade composition.
3.1X Energy Efficency 3.1X Energy Efficiency **Objective 3.1X-1**: Development responsibly balances environmental design. **Design criteria** 91. Provide an outdoor area for clothes drying that can accommodate at least 15 lineal metres of clothes line for each dwelling. 92. Any clothes drying area should be screened from public and communal areas. Note: A CDC or DA for a dwelling is required to have a BASIX Certificate that applies a minimum energy consumption target.	**91** Supported but should be exclusive of calculated private open space. **92** Supported.
3.1Y Water Management and Conservation 3.1Y Water Management and Conservation **Objective 3.1Y-1**: Urban stormwater is treated on site before being discharged to receiving waters. **Design criteria** 93. All stormwater drainage collecting as a result of the erection of the development must be conveyed by a gravity fed or charged system to: • a public drainage system • an inter-allotment drainage system • an on-site disposal system 94. All stormwater drainage systems within a lot and the connection to a public or an inter-allotment drainage system must: • if approval is required under section 68 of the Local Government Act 1993, be approved under that Act • if an approval is not required under section 68 of the Local Government Act 1993, comply with any requirements for the disposal of stormwater drainage contained in a development control plan that is applicable to the land. **Objective 3.1Y-2**: Flood management systems are integrated into site design. **Design criteria** 95. Detention tanks are to be located under paved areas, driveways or in basements Note: A CDC or DA for a dwelling is required to have a BASIX Certificate that applies a minimum water consumption target.	This section has been taken directly taken from the proposed SEPP wording and is not a guide. In addition it is contradictory and too broad. The Guide should provide more guidance on achieving suitable outcomes rather than restating the exact wording of the SEPP. Some DCPs do not permit runoff from a medium density development to be managed by means of a charged system or on site disposal, so this requirement cannot achieve compliance with the second dot point following which requires compliance with Council's DCP. On site disposal is particularly unsuited to this type of multi-dwelling development due to the large impervious areas permitted. The Guide has to clearly state that an inter-allotment drainage system must legally benefit the site and contain a suitable pipe. There is no definition. Some certifiers do not understand the importance of the terms of an easement. Section 68 of the Local Government Act 1993 does not apply to Councils within Sydney Water's area of operations, so this criterion requires compliance with Council's DCP (should read "management and disposal of stormwater"). However this is not sufficiently

	clear. This applies to all Councils in the greater Sydney area and should be the first dot point, not the second.
3.1Z **Waste Management** 	**96** The control should specify garbage enclosures are not permitted within specified setback areas. **97** Supported.
3.2 **Terrace Houses**	Larger multi dwelling housing will result in common basements as described in the draft design guide. This arrangement cannot be conventionally subdivided (Torrens). It is difficult to see how a Torrens system could work for larger multi dwelling developments unless each dwelling had its own independent basement which would result in multiple basements addressing the street and excessive excavation and is not consistent with the local character and is not orderly economic development of land. It is recommended that Torrens title subdivision be prohibited for larger multi dwelling housing developments. See comments above regarding conflicts in CDC and DA pathways Figure 3-5 compared to statements in *Explanation of Intended Effects Table 1* (p7) regarding retention of local planning strategies and development controls. **Figure 3-6** demonstrates a very poor housing type that negatively impacts on the streets, by prioritising vehicles over pedestrian and removes public domain amenity by removing on-street car parking. This type should not be permitted. Row housing only works well with a network of public streets and rear laneways connected to the road network. **Figure 3-7** demonstrates the only acceptable block and site conditions for terrace housing proposing at-grade parking. **Figure 3-8** demonstrates an appropriate generic response to basement car parking for terrace housing in an R3 medium density land use zone. (Although they would not meet Ku-ring-gai's landscape controls for the side setback and driveway location). All options assume large developments of at least four amalgamated sites. This is the opposite to the stated intent for small size development *Explanation of Intended Effects* (p12) for development of *'similar scale to a dwelling house'.* The unintended impact to the entire of NSW will be substantial as the development will only be undertaken by medium to larger scale developers not small scale as intended unless it can be coordinated and managed by local planning instruments. The inclusion of R2 zoned land for this type is highly is problematic because the zone area and context varies so greatly around a local LGA let alone throughout the State. The likely uptake for terrace housing if permitted in R2 zones will be on the cheapest land, the furthest away from transport, employment, services and amenities. This is counter to fundamental strategic planning principles and conflicts with the stated intent for the uptake to be "*closer to centres and with the amenity that medium density housing can provide"* (p6) when it is strategically well located and controlled. This scale of development must not be certified under CDC by private certifiers.

3.2A
Building Envelopes



Development Application

The local building envelope controls are to be found in the LEP and DCP that applies to the land. This may include:

- Maximum height of building
- Front, rear and side setbacks

The DCP may also provide direction on the character of the precinct and siting of the building.

Complying Development

The building envelope standards for complying development can be found in Medium Density Housing Code within *State Environmental Planning Policy (Exempt and Complying Codes) 2008 (Codes SEPP)*. A summary is in the table below.

Standard	Summary Development Standard
Min lot size for each dwelling	200m² 6m wide
Height of Building	9m

The development standards of the MDH Codes SEPP through Complying Development stand in direct conflict with the following KLEP and KDCP Clauses: KLEP Land Use Table; KLEP cl 2.6 (2); cl 4.1 (3)(3A); KLEP cl 6.6 **HoB:** KLEP cl 4.3 (2)
Ku-ring-gai's KLEP and KDCPs deliver outcomes consistent with Ku-ring-gai's urban and landscape character, and are consistent with broader strategic policies including state and national direction (protecting and enhancing natural and built heritage, landscape, biodiversity/riparian corridors, long term public health outcomes for healthy, pedestrian focused cities/town and suburbs.

Comments on Site requirements:
Wording inconsistent with MDDG for requirements of minimum lot size. Explanation Of Intended Effects wording permits Terrace Housing on any parent lot with a site area of >200m2 .

MDDG wording and pathway at p98 states LEP land zoning and minimum lot size apply.

This has significant and broad-reaching negative implications through NSW.

Within Ku-ring-gai the R3 zones are suitable only for rear lane or basement terraces types. There is no limit to the number of dwellings in a row other than extent and connection of available R3 sites.

Figure 3-6 Poor streetscape character achieved for type *Terraces with garages fronting the street*.

The SEPP Development Standards would prevail over the site analysis, as the PCA is not qualified to question the Design Verification Statement that will support an application for at-grade separate garaging.

Loss of Setback and Landscape controls will lead to poor outcomes. As proposed, result will be randomised uptake with loss of landscape, loss of deep soil and inconsistent streetscape character reliant on PCA to assess.

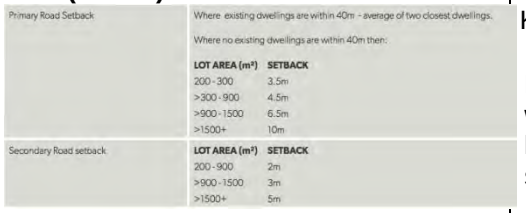
Terrace type is more compatible with R3 zone character. However, unlikely type to be taken up in R3 zone due to lower FSR than KMC's multi-dwelling housing currently permits.

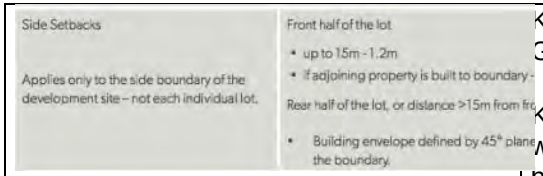
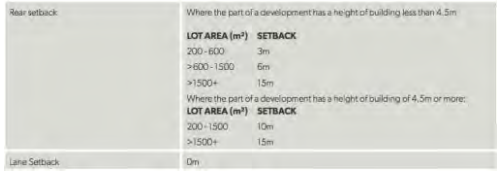
It will be attractive if seeking to avoid KMC's landscape requirements and/or avoid basement construction.

HoB: Allows for sufficient articulation of roof forms on flat sites. May be problematic on steep sites. 8.5m height is less than KLEP 2015 9.5-11.5m for R3 zone. See comments on Ceiling Heights 3.2K

The proposed CDC pathway is inconsistent between MDDG and Explanation Of Intended Effects. The zoning and minimum lot size development standards under Council's LEPs should be retained. MDDG pathway at p98 must prevail to avoid large-scale uncontrolled uptake on R3 zoned land in NSW.

KLEP 2015 cl 4.1 (3) minimum lot sizes are greater than Codes SEPP and KLEP cl 6.6 (2) min lot width (24m <1800m2 or 30m >1800m2) conflict with Codes SEPP.

	The proposed minimum widths assume rear lane access, which generally does not exist in Ku-ring-gai, or other established outer ring suburbs. The proposed at-grade separate garages addressing the street (not a rear lane or basement) will result in adverse impacts to the streetscape. The use of the terms '*primary', 'secondary'* and '*parallel'* to describe streets is risky as they will enable a second row of terraces in the rear of a deep site. This will have a devastating impact in Ku-ring-gai as it does throughout NSW. All references to street need to ensure it is a reference to a public street, and the term '*frontage*' is clearly defined to mean: "the full extent of the subdivided lot width and full extent of building that provides the entry to each dwelling", to prevent a loophole to enable a Terrace form of 'Mews' development to be permitted via CDC using a private driveway for access. Council's should be allowed to rezoning strategic areas within the LGA to R3 and amend the LEP to accommodate specific medium density housing types to correspond with desired outcome
3.2A (cont'd)  Primary Road Setback Where existing dwellings are within 40m - average of two closest dwellings. Where no existing dwellings are within 40m then: LOT AREA (m²) SETBACK 200 - 300 3.5m >300 - 900 4.5m >900 - 1500 6.5m >1500+ 10m Secondary Road setback LOT AREA (m²) SETBACK 200 - 900 2m >900 - 1500 3m >1500+ 5m	The development standards of the MDH Codes SEPP through Complying Development stand in direct conflict with the following KLEP and KDCP Clauses: KLEP cl2.6(2); cl 4.1(3) (3A); KLEP cl.6.6; KDCPA.3 Ku-ring-gai's KLEP and KDCPs deliver outcomes consistent with Ku-ring-gai's urban and landscape character, and are consistent with broader strategic policies including state and national direction (protecting and enhancing natural and built heritage, landscape, biodiversity/riparian corridors, long term public health outcomes for healthy, pedestrian focused cities/town and suburbs. Minimum lot size for development generally 1200m2 under KLEP. The Torrens title would be prevented by minimum lot size. The Primary Road Setback of 6.5m inconsistent with KDCP 6A.3 (10m) and Secondary Road Setback of 3m min will be proposed as compliant development to avoid KMCs 6-8m. Impacts on streetscape character and the controls are reliant on PCA to uphold existing urban character. There appears to be no mechanism to require urban character be taken into account other than via the checklist unlike *SEPP ARH* and *SEPP Seniors and People with a Disability* Councils must retain existing setback controls for both DA and CDC pathways. It is the only way the urban character of established areas, such as Ku-ring-gai, can be retained and managed. The one-size-fits-all approach cannot work with the vast geographical, demographical, economic, subdivision variations across NSW. The proposed Street setbacks will materially impact Ku-ring-gai's urban landscape character. This will be further exacerbated by permissibility of 3m excavation >1m from the boundary that would impact on any ability for meaningful trees.
3.2 A (cont'd)	The development standards of the MDH Codes SEPP through Complying Development stand in direct conflict with the following

	KLEP and KDCP Clauses: KDCP6A.3; Flow-on impacts to: KDCP Part 24 Water Management Part 18 Biodiversity Part 19R1 Greenweb Maps; Part 22 Landscape Design; Section C Part 24 Sustainability; Part 24 Water Management Ku-ring-gai's KLEP and KDCPs deliver outcomes consistent with Ku-ring-gai's urban and landscape character, and are consistent with broader strategic policies including state and national direction (protecting and enhancing natural and built heritage, landscape, biodiversity/riparian corridors, long term public health outcomes for healthy, pedestrian focused cities/town and suburbs. Side setbacks will have a significant impact to Ku-ring-gai's landscape character in R3 zones. The proposed 1.2m is manifestly inadequate in Ku-ring-gai, and other established suburbs. There is a possibility 0m will be attempted to the side boundaries using the argument that a neighbouring R3 site could do the same if Terrace Housing. Relies on PCA to prevent. Codes SEPP is inconsistent with KDCP 6A.3 for 3m minimum (which is also dependant on orientation of living/habitable rooms). Height plane diagrams can lead to very poor built form particularly for minimum lot widths. Ku-ring-gai's existing setback controls achieve the desired landscape character and promote landscape in all side setback zones. This will be lost under Codes SEPP. Councils must retain existing setback controls for both DA and CDC pathways. It is the only way the urban character of established areas, such as Ku-ring-gai, can be retained and managed. The one-size-fits-all approach cannot work with the vast geographical, demographical, economic, subdivision variations across NSW. The proposed Street setbacks will materially impact Ku-ring-gai's urban landscape character. The policy fails to understand the fundamental structure and value of Sydney's suburban landscape character, and Ku-ring-gai's in particular, that has a block pattern of public street-deep soil landscape front yard-built form-deep soil landscape rear yard-boundary-deep soil rear yard landscape-built form-deep soil landscape front yard-street. See Peter Meyers' analysis of Sydney suburbs reinforces Ku-ring-gai's approach. http://architectureau.com/articles/the-third-city/ Impacts also relate to site coverage and landscape and likely flow-on impacts to Ku-ring-gai's DCP initiatives for sustainable development and preventing further fragmentation of landscape.
3.2A (cont'd) 	The development standards of the MDH Codes SEPP through Complying Development stand in direct conflict with the following KLEP and KDCP Clauses: KDCP 6A.3; Flow-on impacts to: KDCP Part 24 Water Management; Part 18 Biodiversity; Part 19R1 Greenweb Maps; Part 22 Landscape Design; Section C Part 24 Sustainability; Part 24 Water Management Ku-ring-gai's KLEP and KDCPs deliver outcomes consistent with Ku-ring-gai's urban and landscape character, and are consistent with broader strategic policies including state and national direction (protecting and enhancing natural and built heritage, landscape, biodiversity/riparian corridors, long term public health outcomes for healthy, pedestrian focused cities/town and suburbs.

	These controls are consistent with KDCP for sites >600m2 but achieve very poor outcomes <600m2. No side or rear setback controls take into account the internal layout, use and aspect of rooms and will lead to poor outcomes. The only advantage will be to interface sites or sites with rear-to-south as it will concentrate development to the front of the site, and improve the amount of daylight reaching rear setback zone. Deep and/or irregular shaped development sites will lodge via DA to enable townhouse development where a basement is the desired outcome. Councils must retain existing setback controls for both DA and CDC pathways. It is the only way the urban character of established areas, such as Ku-ring-gai, can be retained and managed. The one-size-fits-all approach cannot work with the vast geographical, demographical, economic, subdivision variations across NSW. The proposed Street setbacks will materially impact Ku-ring-gai's urban landscape character. The proposed rear setback is inadequate in retaining Ku-ring-gai's landscape character and will lead to poor amenity. Impacts also relate to site coverage and likely flow-on impacts to Ku-ring-gai's DCP initiatives for sustainable development and preventing further fragmentation of landscape.
3.2B Floor Space Ratio 3.2B Floor Space Ratio *Development Application:* Refer to LEP or DCP that applies to the land. *Complying Development:* Refer to *Codes SEPP* and summary table below: Standard: Maximum floor space ratio for each lot Summary Development Standard: LOT AREA (m^2) / FSR 200 - 300 / 0.80:1 >300 - 400 / 0.75:1 >400 - 500 / 0.75:1 >500 + / 0.70:1	The development standards of the MDH Codes SEPP through Complying Development stand in direct conflict with the following KLEP and KDCP Clauses: FSR**:** KLEP cl 4.4 Ku-ring-gai's KLEP and KDCPs deliver outcomes consistent with Ku-ring-gai's urban and landscape character, and are consistent with broader strategic policies including state and national direction (protecting and enhancing natural and built heritage, landscape, biodiversity/riparian corridors, long term public health outcomes for healthy, pedestrian focused cities/town and suburbs. Impacts will be to site coverage and landscape. KDCP site coverage for multi dwelling housing permits a maximum of 40% site coverage. Proposed FSRs are similar to current Codes SEPP for General Housing Code cl 3.10 and demonstrates the poor appreciation of the translation from code to built form. Proposed FSRs for the larger lots are inconsistent with the proposed minimum dwelling sizes at 3.2L and results in excessive site coverage. The proposed FSRs have not been tested. They must be tested and set to reflect responsible dwelling sizes for this type of housing and responds to and is coordinated with all State and Commonwealth sustainability, energy efficiency, and landscape policies.

3.2C Landscaped Area

3.2C Landscaped Area

Development Application: Refer to LEP or DCP that applies to the land for minimum areas.

Complying Development: Refer to **Codes SEPP** and summary table below for minimum areas.

Standard	Summary Development Standard	
Minimum landscaped Area for each lot	LOT AREA (m²)	LANDSCAPED AREA AS PERCENTAGE OF LOT
	200 - 300	20%
	>300 - 400	25%
	>400 - 500	30%
	>500+	35%
	Minimum dimension of any landscaped area included in calculation - 1.5m	
Proportion of area forward of building line that contains landscaped area	25% minimum	

The development standards of the MDH Codes SEPP through Complying Development stand in direct conflict with the following KLEP and KDCP Clauses: KDCP 6A.4 Building Separation; KDCP 6A.5 Site Coverage; KDCP 6A.6 Deep Soil Landscape; KDCP Part 25 Water Management; Part 18 Biodiversity; Part 19R1 Greenweb Maps, Part 22 Landscape Design; Section C Part 24 Sustainability; Part 24 Water Management

Ku-ring-gai's KLEP and KDCPs deliver outcomes consistent with Ku-ring-gai's urban and landscape character, and are consistent with broader strategic policies including state and national direction (protecting and enhancing natural and built heritage, landscape, biodiversity/riparian corridors, long term public health outcomes for healthy, pedestrian focused cities/town and suburbs.

Multi-dwelling housing requires 40% of the landscape area to be deep soil. This component alone exceeds the total landscape area for the largest sites under proposed Codes Standards.

This one Development Standard will have an unacceptable impact on Ku-ring-gai's landscape character if taken up across the LGA.

Codes SEPP min dimension of 1.5m overrides KDCP definition of 2m (but appears to exclude *all* hard paving). It is unclear how stepping stones would be defined as a path and/or private open space terracing.

KMC's requirement for deep soil is not reflected in the Codes SEPP definition which is simplistic and fails to differentiate between landscape above structure and deep soil.

KDCP is more onerous and with more exclusions than under the Codes SEPP. This will be attractive to applicants seeking to avoid KDCP higher requirements.

Landscape control must reside in Council's control.

The MDDG Part 2 is largely performance-based and enables alternative solutions to design criteria. A PCA cannot determine an application on merit so will either ignore Part 2 or approve a non-compliant development.

FSR and landscape as proposed, is diametrically opposed to the Federal Government's 'Green Cities' policy (announced 01/2016 by Minister Greg Hunt)… *"cities with high levels of trees, foliage and green spaces — provide enormous benefits to their residents. Increasing urban canopy coverage decreases heat, which improves health and quality of life."*
http://www.greghunt.com.au/Home/LatestNews/tabid/133/ID/3623/Long-term-planning-and-cities-for-the-next-century--Sydney-Business-Chamber.aspx

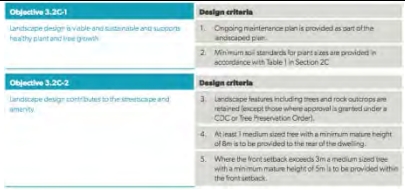
And the Greater Sydney Commission's *Towards our Greater Sydney 2056* at p6 core objectives for *A Sustainable Sydney:*

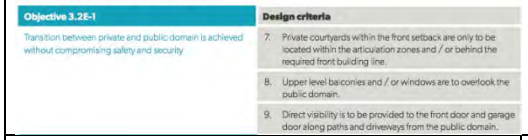
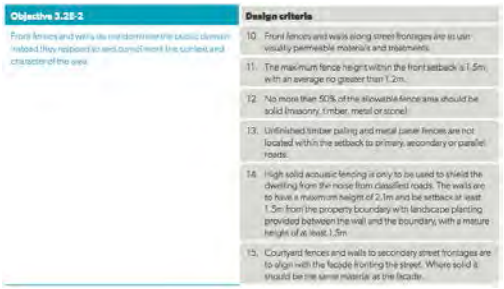
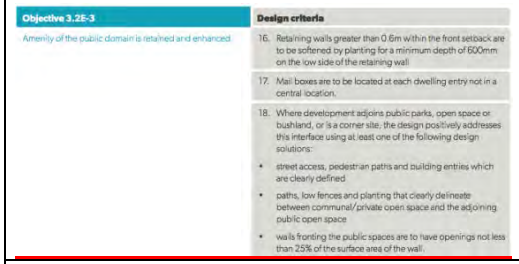
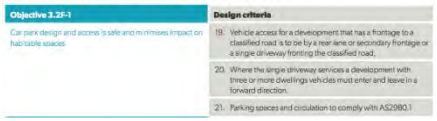
- *A city in its landscape*
- *An efficient city*
- *A resilient city*

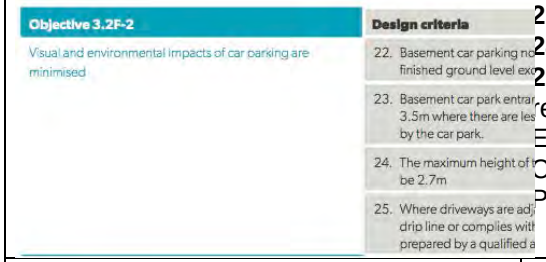
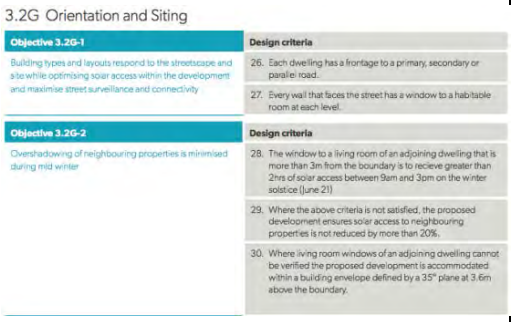
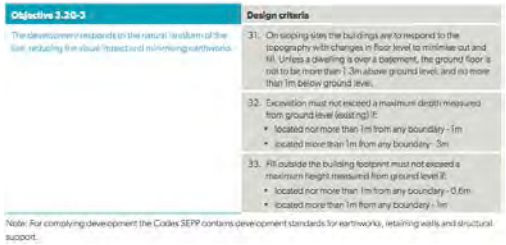
And at p12

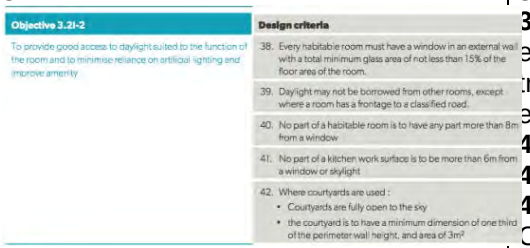
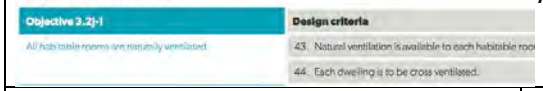
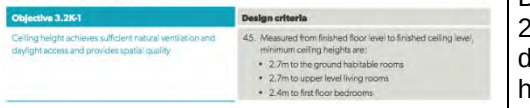
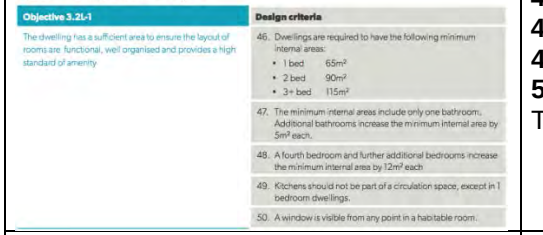
…It is important to recognise that natural environmental areas are productive and have an impact on communities, the economy and regional tourism. Viewing Greater Sydney as a city in its landscape allows us to think about how the diversity of social, cultural

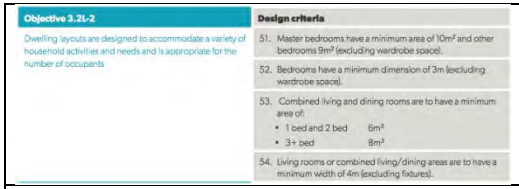
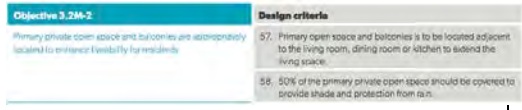
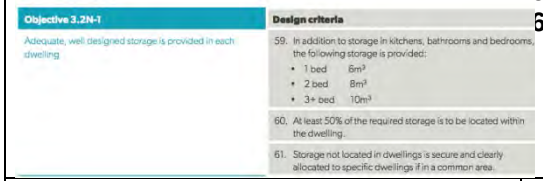
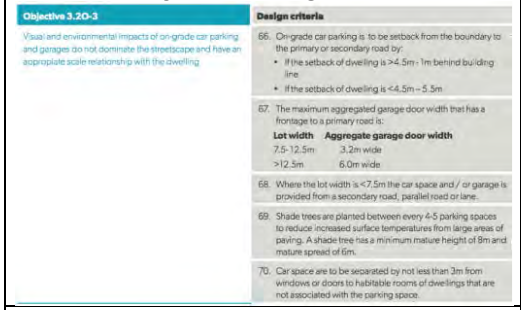
	and environmental conditions operate within this natural landscape *…while also looking at how we can green our streets, neighbourhoods and suburbs with new tree canopies. This metropolitan priority aims to:* *improve the health of waterways* *protect, extend and enhance biodiversity, regional and local open space systems, as well as scenic and cultural heritage together with productive landscapes* *increase access to open space, conserve the natural environment and enable healthy lifestyles and local food.* http://www.uts.edu.au/research-and-teaching/our-research/institute-sustainable-futures/news/new-alliance-promote-greening http://gsc-public.s3-ap-southeast-2.amazonaws.com/s3fs-public/towardsour2056_21161117.pdf?5045ajdpvf0jcInAS2KVJ63jV3k2W3O1 The loss of every council's authority over landscape fails to consider the variety and specific character of each LGA throughout NSW and fails to provide a mechanism to achieve the variety that a city and NSW needs. Landscape is the single most important element that defines Ku-ring-gai's urban character. The MDDG Objectives and Design Criteria for landscape are manifestly inadequate for Ku-ring-gai. There is no requirement for any landscape to be deep soil. The required areas are inadequate and will not result in the trees being viable due to the high probability they will be removed, or replaced with smaller planting, or areas of paving extended post approval. Ku-ring-gai's urban character is predicated on the quality of its landscape, and has in place, detailed development objectives and controls for all setbacks, site coverage, total landscape area, deep soil and tree removal that ensure all development, of every scale is within a dominant landscape setting characterised by canopy trees and deep soil planting. The loss of landscape controls, therefore, has a particularly devastating impact on Ku-ring-gai's strategic planning of urban character. Protection of canopy trees that may have value in either providing links between areas of biodiversity significance, or contributing to the background view between allotments or internal site character is very important. This has a function as a public asset, which is not recognised in the Codes SEPP or MDDG. Local experience of development currently lodged under *SEPP Seniors and People with a Disability* and *SEPP Affordable Rental Housing* has seen the gradual loss and/or degradation of established trees and vegetation within the Council area where these developments occur. Unlike these two SEPPs, the Codes SEPP has **no** development standard requiring development consider and respond appropriately to existing and desired urban character for landscape nor can it be verified. The types of development that have had the greatest impact in Ku-ring-gai are those advocated in the MDDG that prioritise at-grade car parking deep within the site. These have a devastating impact on the protection of existing and diminishing landscape. These outcomes are in direct conflict with the NSW Government's *A Plan for Growing Sydney* and its *Urban Green Cover Policies*, commonwealth policies for Greening Cities and Housing adapted to climate change. It is also worth noting, these are policies that are inconsistent with the United Nations, General Assembly *Draft outcome document of the United Nations Conference on Housing and Sustainable Urban Development (Habitat III) - New Urban Agenda*. Cumulative impacts resulting from the Landscaped Area development standard have the potential for loss of vegetation across NSW that will contribute to land surface temperature increases and the urban heat sink effect.

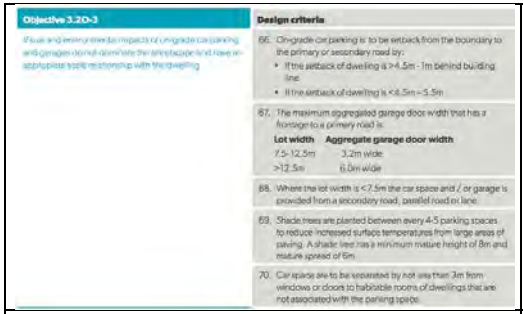
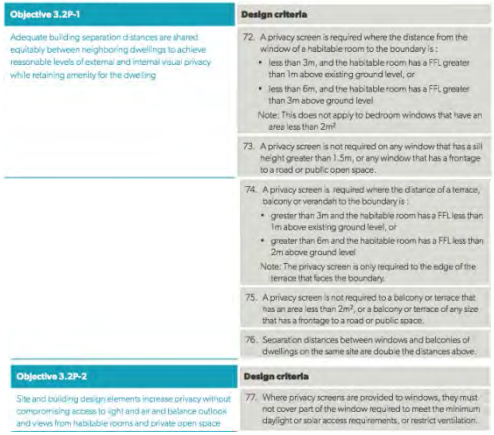
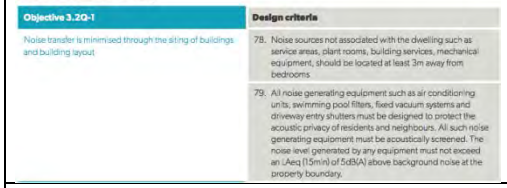
	The focus on streetscape landscape controls is important in achieving urban character, however, the policy fails to adequately value the rear yard landscape assets throughout NSW and in Ku-ring-gai specifically, and their importance climatically, their role protecting against further fragmentation of biodiversity significance and loss of green corridors, and their aesthetic contribution to urban character. Further to this, the local community demands its protection and the courts have recognised Ku-ring-gai's landscape character in its judgements.
Objectives and Design Criteria (DC)	
	**1** The requirement for an ongoing maintenance plan is not feasible for two dwellings with little common area nor is it enforceable into the future. Landscape contractors provide at most a 6-12 month establishment plan. After that the maintenance of a development is a either private or communal responsibility. PCA's are not trained, qualified, or have required expertise to assess landscape maintenance plans.
	2 The requirement for minimum soil standards is directed to planting on structures. This is unlikely to be relevant for two dwellings (dual occupancy). There should also be criteria for preservation of existing trees in accordance with AS4970-2009, minimum width of garden beds to side and rear boundaries for screen planting, minimum width of garden beds to driveway. PCA's are not trained, qualified, or have required expertise to assess soil standards in relation to proposed vegetation requirements.
	3 CDC pathway negates Council's tree protections except where biodiversity Act applies. However, role of PCAs relies on honesty of applicants in assessing tree worth as they are not trained, qualified or has the expertise to assess trees and landscape issues. Role of PCAs and Complying Development has serious impacts to protecting biodiversity, and landscape character. Councils must retain assessment role. Councils provide independent, specialist expertise in all the relevant disciplines unlike a PCA. The reference to 'tree preservation order' should be substituted with Clause 5.9 consistent with the Principal LEP.
	4 Proposed min setbacks will not support anticipated landscape for canopy trees and will not achieve Ku-ring-gai's landscape character.
	5 Objective 3.1C-2 refers to contribution to streetscape and amenity; this is unachievable with one 5 metre high tree in the front setback. There is no further requirement for any other shrubs, groundcover or lawn and instead 75% of the front setback is permitted to be paved. A 5m tree may be appropriate for front setbacks of 3.5m however this is not in keeping with larger lots with existing front setbacks. There is no requirement for street tree planting.
Sitting the Development	
3.2D Local Character and Context 3.2D Local Character and Context Objective 3.2D-1 / Design criteria The built form, articulation and scale relates to the local character of the area and the context 6. Provide in the design statement a description as to how the built form of the development contributes to the character of the local area, using the guidance in Section 2D *Local Character and Context*.	**6** PCAs will check a design statement is submitted but are not trained, qualified, nor have the expertise to assess urban design and architectural merit of a design. Urban character is not a principal development standard, and will be largely ignored. Councils must retain assessment role. Councils provide independent, specialist expertise in all the relevant disciplines unlike a PCA.
3.2E Public Domain Interface	**7** Impact will be where minimum front setbacks are less than KDCP DCP. **8** Supported. **9** The impact of driveways into a lot must be minimised. Ku-ring-gai's street character will be impacted by multiple driveway

3.2E Public Domain Interface  Objective 3.2E-1: Transition between private and public domain is achieved without compromising safety and security Design criteria: 7. Private courtyards within the front setback are only to be located within the articulation zones and / or behind the required front building line. 8. Upper level balconies and / or windows are to overlook the public domain. 9. Direct visibility is to be provided to the front door and garage door along paths and driveways from the public domain.	crossovers and facades dominated by garages. Terraces with garages facing the street should be deleted. They result in unacceptable impacts to streetscapes on public domain amenity through the loss of on-street car parking and street trees.
3.2E-2  Objective 3.2E-2 Design criteria: 10. Front fences and walls along street frontages are to use visually permeable materials and treatments. 11. The maximum fence height within the front setback is 1.5m, with an average no greater than 1.2m. 12. No more than 50% of the allowable fence area should be solid (masonry, timber, metal or stone). 13. Unfinished timber paling and metal picket fences are not located within the setback to primary, secondary or parallel roads. 14. High solid acoustic fencing is only to be used to shield the dwelling from the noise from classified roads. The walls are to have a maximum height of 2.1m and be setback at least 1.5m from the property boundary with landscape planting provided between the wall and the boundary, with a mature height of at least 1.5m. 15. Courtyard fences and walls to secondary street frontages are to align with the façade fronting the street. Where solid it should be the same material as the façade.	**10** Supported. **11**Front fences should be limited to 1.2m in height. **12** Supported. **13** Supported. **14** The control allows for the construction of 2.1m high fencing on frontages to classified roads. Tall fencing is unattractive, imposing and reduces safety through the loss of casual surveillance. The provision of high fencing is not required as reasonable internal noise levels can be achieved through construction techniques informed by a site specific acoustic assessment. **15** Generally supported. Elements of façade should be well coordinated with landscape treatment. Change all references to '*primary', 'secondary' and 'parallel' streets/roads/lanes* to *public* streets/road/lanes. Include definition of 'frontage' to mean the full width of a lot and full width of a building and dwelling from which the main entry to the building and dwelling directly faces a public street/road/lane and must be seen from the public street/road/lane. A private driveway is not a street and does not provide frontage. A path/gate/door to a dwelling or dwellings behind another does not provide a frontage.
3.2E-3  Objective 3.2E-3: Amenity of the public domain is retained and enhanced. Design criteria: 16. Retaining walls greater than 0.6m within the front setback are to be softened by planting for a minimum depth of 600mm on the low side of the retaining wall. 17. Mail boxes are to be located at each dwelling entry not in a central location. 18. Where development adjoins public parks, open space or bushland, or is a corner site, the design positively addresses this interface using at least one of the following design solutions: • street access, pedestrian paths and building entries which are clearly defined • paths, low fences and planting that clearly delineate between communal/private open space and the adjoining public open space • walls fronting the public spaces are to have openings not less than 25% of the surface area of the wall.	**16** Supported **17** Supported for smaller developments. Assumes all dwellings address the street, which may not be the case if the loop hole for the definition of 'streets' is not amended. **18** Supported.
3.2F **Internal Streets – Pedestrian and Vehicle Access** 3.2F Internal Streets - Pedestrian and Vehicle Access  Objective 3.2F-1: Car park design and access is safe and minimises impact on habitable spaces Design criteria: 19. Vehicle access for a development that has a frontage to a classified road is to be by a rear lane or secondary frontage or a single driveway fronting the classified road. 20. Where the single driveway services a development with three or more dwellings vehicles must enter and leave in a forward direction. 21. Parking spaces and circulation to comply with AS2890.1	Need controls to prevent creation of *Internal Streets* unless fully formed public streets and dedicated to Council. Private driveways are NOT streets. The inclusion of '*internal streets'* that are private driveways has the effect of an enabling clause for types of development not intended to be via PCA pathway. If the definitions are not changed, all development that proposes an internal street/road/lane must be determined by a DA to avoid very large developments being certified via PCA and excised from local strategic planning and in conflict with the intent of the policy. **19** Not supported. Must be assessed via DA pathway due to complexities of coordinating different government departments that are often involved. **20** The control should require that all vehicles enter and leave in a forward direction regardless of whether there is a single driveway or two or more driveways. Complying Development cannot be battle-axe type. The single driveway access must only service a development where it is for basement car parking. This clause enables a second, third, fourth etc. row of terraces behind each other. **21** Supported. **3.2F. I**nternal 'Streets' are not streets, they are private driveways. They destroy landscape character, prioritise vehicles of over pedestrian and resident amenity which is in conflict with and devastate the internal site character by imposing expansive areas of hard-stand. An *internal street* must have specific controls about being public, appropriate reservation width, landscape, design, coordination with public domain and public access and be strategically well located as through-site connections to the public street

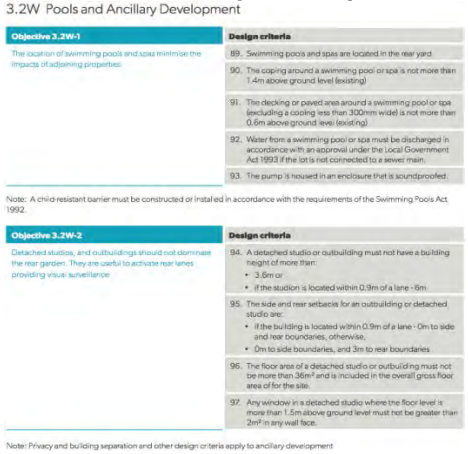
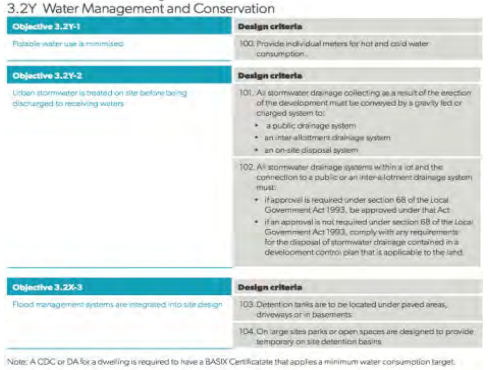
	network, no dead-ends. Councils must retain assessment role. Councils provide independent, specialist expertise in all the relevant disciplines unlike a PCA.
3.2F-2  Objective 3.2F-2 Visual and environmental impacts of car parking are minimised Design criteria 22. Basement car parking no finished ground level ex 23. Basement car park entrar 3.5m where there are les by the car park. 24. The maximum height of t be 2.7m 25. Where driveways are adj drip line or complies wit prepared by a qualified a	**22** Supported. **23** Supported. **24** Supported in principles but must be subject to confirmation by Council Engineers for garbage truck requirements. **25** Supported but PCA has no training, expertise nor experience to assess arborist reports. Driveways adjacent to trees should require compliance with the Australian Standard for the protection of trees on development sites (AS4970-2009). Excavation would be permitted within 1m from boundary compared to 2m under KDCP. Councils must retain assessment role. Councils provide independent, specialist expertise in all the relevant disciplines unlike a PCA.
3.2G – 2 & 3 **Orientation and Siting**  3.2G Orientation and Siting Objective 3.2G-1 Building types and layouts respond to the streetscape and site while optimising solar access within the development and maximise street surveillance and connectivity Design criteria 26. Each dwelling has a frontage to a primary, secondary or parallel road. 27. Every wall that faces the street has a window to a habitable room at each level. Objective 3.2G-2 Overshadowing of neighbouring properties is minimised during mid winter Design criteria 28. The window to a living room of an adjoining dwelling that is more than 3m from the boundary is to recieve greater than 2hrs of solar access between 9am and 3pm on the winter solstice (June 21) 29. Where the above criteria is not satisfied, the proposed development ensures solar access to neighbouring properties is not reduced by more than 20%. 30. Where living room windows of an adjoining dwelling cannot be verified the proposed development is accommodated within a building envelope defined by a 35° plane at 3.6m above the boundary.	**Objective 3.2G-3** – refers to minimizing earthworks, but it is followed by design criteria that allows excavation/filling up to 1m depth where 'not more than 1m from the boundary'. The control should be consistent with the current Codes SEPP requirement of a minimum 600mm setback. **26** Supported only if all street references are to <u>public</u> streets. Change all references to '*primary', 'secondary' and 'parallel' streets/roads/lanes* to *<u>public</u>* streets/road/lanes. Include definition of 'frontage' to mean the full width of a lot and full width of a building and dwelling from which the main entry to the building and dwelling directly faces a public street/road/lane and must be seen from the public street/road/lane. A private driveway is not a street and does not provide frontage. A path/gate/door to a dwelling or dwellings behind another does not provide a frontage. A garage or car port must not be more than 25% of a frontage of a lot or dwelling. **27** A window is insufficient. Garages must not dominate the frontage. **28** The primary aspect of a living should not be less than 6m from any boundary. **29** The control does not explain how compliance with this requirement is to be assessed, are the requirements in control 37 to be applied? Rewording is required. Does it mean if the adjoining dwelling does not currently receive 2hrs of solar access? **30** Needs to be tested.
3.2G- 3  Objective 3.2G-3 The development responds to the natural landform of the site, including the visual impact and minimising earthworks Design criteria 31. On sloping sites the buildings are to respond to the topography with changes in floor level to minimise cut and fill. Unless a dwelling is over a basement, the ground floor is not to be more than 1.3m above ground level, and no more than 1m below ground level. 32. Excavation must not exceed a maximum depth measured from ground level (existing) if: • located not more than 1m from any boundary - 1m • located more than 1m from any boundary - 3m 33. Fill outside the building footprint must not exceed a maximum height measured from ground level if: • located not more than 1m from any boundary - 0.6m • located more than 1m from any boundary - 1m Note: For complying development the Codes SEPP contains development standards for earthworks, retaining walls and structural support.	**31** Supported. Consistent with KMC's objectives. **32** Not supported. Excavation permitted within minimum 1 metre from the site boundary will impact on neighbour amenity. Excavation criteria should be consistent with current Code SEPP. **33** Not supported. Filling permitted within minimum 1 metre from the site boundary will impact on neighbour amenity. Filling criteria should be consistent with current Code SEPP. **34** Inadequate and not supported. There is no numerical or measurable separation to deal adequately with visual and acoustic privacy with this control or in Part 2.H. Building separation must use SEPP 65 separations dependant on internal layout, room use, and aspect of living areas. If not, privacy screens will be used as the first order solution and compliant with design criteria 3.2P. This advocates poor design outcomes and is inconsistent with the Design Quality Principles. **35** 45m is too long. Amend to 36m (KDCP 6C.8) A sketch should be provided to demonstrate the intended outcome of this control. All Design Criteria must ensure amenity is never less than SEPP 65 for high density housing.
Amenity	
3.2I Solar and Daylight Access	**36** Controls 36 and 37 contain solar access requirements for living rooms and private open space, however the methodology for measuring direct sunlight applies to windows/living areas only. A methodology for measuring solar access to private open space should be included. **37** Supported.

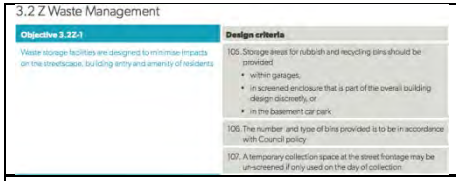
3.2I Solar and Daylight Access  **Objective 3.2I-1** To optimise the number of dwellings recieving sunlight to habitable rooms and private open spaces. Solar access enables passive solar heating in winter and provides a healthy indoor environment **Design criteria** 36. A living room or private c receive a minimum of 2 h and 3 pm at the winter sc 37. Direct sunlight is achieve glass is achieved for at le sunlight, 8 periods of 15 the periods do not need	
3.2I- 2  **Objective 3.2I-2** To provide good access to daylight suited to the function of the room and to minimise reliance on artificial lighting and improve amenity **Design criteria** 38. Every habitable room must have a window in an external wall with a total minimum glass area of not less than 15% of the floor area of the room. 39. Daylight may not be borrowed from other rooms, except where a room has a frontage to a classified road. 40. No part of a habitable room is to have any part more than 8m from a window 41. No part of a kitchen work surface is to be more than 6m from a window or skylight 42. Where courtyards are used : • Courtyards are fully open to the sky • the courtyard is to have a minimum dimension of one third of the perimeter wall height, and area of 3m²	**38** Supported. **39** Delete. …"*except where a room has a frontage to a classified road*." Noise barrier planning principles must be implemented to ensure all habitable rooms have a window in an external wall. A window can provide daylight but will need to be acoustically treated. Wording implies habitable rooms can provide no window, which is unacceptable. Proposed amenity significantly less than expected for high density development. Conflicts with DC 38. **40** Supported. **41** Supported. **42**Inconsistent use of terms *'courtyard', 'skylight'* p39 at design guidance 11 and 15, '*courtyard housing'* p191, and this Design Criteria. Can enable a habitable room to have primary aspect into courtyard if dwelling is defined as a 'courtyard housing' as advocated at p191 All Design Criteria must ensure amenity is never less than SEPP 65 for high density housing.
3.2J **Natural Ventilation** 3.2J Natural Ventilation  **Objective 3.2J-1** All habitable rooms are naturally ventilated **Design criteria** 43. Natural ventilation is available to each habitable roo 44. Each dwelling is to be cross ventilated.	**43** Supported. **44** Supported. Add**:** "Maximum building depth must not exceed 16m measured glass line to glass line to achieve cross-ventilation." All Design Criteria must ensure amenity is never less than SEPP 65 for high density housing.
3.2K Ceiling Height 3.2K Ceiling Height  **Objective 3.2K-1** Ceiling height achieves sufficient natural ventilation and daylight access and provides spatial quality **Design criteria** 45. Measured from finished floor level to finished ceiling level, minimum ceiling heights are: • 2.7m to the ground habitable rooms • 2.7m to upper level living rooms • 2.4m to first floor bedrooms	**45** Amend 2nd dot point "2.7m to upper level habitable rooms" Delete 3rd dot point – which will result in all upper levels being only 2.4m and identified as 'bedrooms'. 2.4m is the BCA minimum but achieves very poor qualitative amenity, feels oppressive and is not permitted in higher density development.2.4m ceiling height with a ceiling fan is unsafe regardless of where the fan is located. It does not enable sufficient height to dress and undress.2.4m ceiling height does not enable flexibility in medium density housing where rooms can be used as bedrooms or additional living rooms. This is inconsistent with objectives to promote flexibility for a family's changing needs and circumstances and DC 3.2L-2. All Design Criteria must ensure amenity is never less than SEPP 65 for high density housing.
3.2L Dwellings Size and Layout 3.2L Dwelling Size and Layout  **Objective 3.2L-1** The dwelling has a sufficient area to ensure the layout of rooms are functional, well organised and provides a high standard of amenity **Design criteria** 46. Dwellings are required to have the following minimum internal areas: • 1 bed 65m² • 2 bed 90m² • 3+ bed 115m² 47. The minimum internal areas include only one bathroom. Additional bathrooms increase the minimum internal area by 5m² each. 48. A fourth bedroom and further additional bedrooms increase the minimum internal area by 12m² each 49. Kitchens should not be part of a circulation space, except in 1 bedroom dwellings. 50. A window is visible from any point in a habitable room.	**46** Supported. **47** Supported. **48** Supported. **49** Supported. **50** Supported. The Design Criteria 44-48 are consistent with KDCP 6C.6 Dwelling sizes and SEPP 65 ADG.
3.2L-2	**51** Supported. **52** Supported.

	**53** Error – '*Combined living and dining rooms are to have a minimum area of: 1 bed and 2 bed = 6m3 and 3+bed = 8m3'.* This should be represented as area m2 and not volume m3. Requires amendment. Figures are for storage (DC 3.2N-1) not room size. **54** Supported and should be amended to add: "Room proportions must be rectangular to enable functional and efficient furniture layouts and accommodate circulation." However, it is noted that this could result in more square shaped rooms in conjunction with minimum areas DC 51.
3.2M -1 **Private Open Spaces** 3.2M Private Open Spaces 	**55** Inadequate. 20m2 would be better and assumes strata title where there is otherwise communal landscape elsewhere. Torrens title may result in poorer outcomes. **56** Outside terraced areas should be defined with the minimum dimension. And must provide setbacks to achieve landscape. The control enables a 3m setback to a boundary or internal fence of another dwelling to be fully paved. **57** Supported
3.2M – 2 	**58** The control should refer to 50% of the minimum primary private open space area requirement, otherwise it would require substantial covered areas in the event that private open space areas greater than the minimum area are proposed. The proposed Design Criteria 55 achieves significantly less than KDCP 6C.2 requirement of 25m2 and the Design Criteria 56 minimum dimension is less than KDCP 6A.2 of 4m The controls need to differentiate between hard paved terraces for a table and chairs and landscape areas for plants and strata and Torrens Title requirements.
3.2N Storage 3.2N Storage 	**59** Supported. **60** Supported. **61** Supported.
3.2O-1 **Car and Bicycle Parking** 	**62**Supported conditional on garage/car parking fronting the primary street to be maximum 1 car width. **63** The control specifies a low parking rate of 1 space per dwelling where no DCP applies. **64** The requirement that visitor parking is to be provided where a basement car park serves more than 10 dwellings is a low trigger point, particularly in light of the comments made regarding Section 2O and availability of on-street parking around railway stations and town centres. The requirement should be that for car parks serving 5 or more dwellings, visitor car parking should be provided at the rate of 1 space per 5 dwellings (rounded up). Double garaging results in poor outcomes to streetscapes. No dwelling should result in garaging being more than 50% of the façade. The controls should ensure that garaging does not negatively impact on streetscape character or existing and future public amenity of public streets.
3.2O-2	**66** should be amended as follows: **"***Garages must not comprise more than 25% of the frontage of a lot or dwelling."* On-grade car parking must be confined to rear lanes or provide dwellings with no car parking if close to public transport that is well served and frequent. The Design Criteria must only apply to rear lane access. Inappropriate for existing public streets/roads not-applicable to the Terrace type.

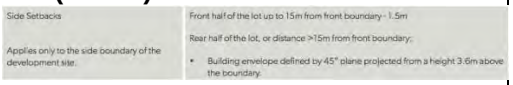
 Objective 3.2O-3 Design criteria 66. On-grade car parking is to be setback from the boundary to the primary or secondary road by: • If the setback of dwelling is >4.5m - 1m behind building line • If the setback of dwelling is <4.5m – 5.5m 67. The maximum aggregated garage door width that has a frontage to a primary road is: Lot width / Aggregate garage door width 7.5-12.5m / 3.2m wide >12.5m / 6.0m wide 68. Where the lot width is <7.5m the car space and / or garage is provided from a secondary road, parallel road or lane. 69. Shade trees are planted between every 4-5 parking spaces to reduce increased surface temperatures from large areas of paving. A shade tree has a minimum mature height of 8m and mature spread of 6m 70. Car spaces are to be separated by not less than 3m from windows or doors to habitable rooms of dwellings that are not associated with the parking space.	**67** The control limits the maximum aggregate garage door width to 6m for a lot width of >12.5m. It is unclear whether this control applies to the width of the site or the proposed allotments. The subdivision of a terrace house development to create individual lots does not appear to be a requirement. The controls need to be clear as to whether they apply to the site as a whole or the proposed lots only. **68** Reword. *"All at-grade car parking must be accessed from a public rear lane."* **69** Supported in principle. Unclear how this can be achieved and is dependent on lot width and the outcome dependent on occupants' future compliance. Experience suggests outcomes are poor. **70** Intent supported but is unworkable on small lots. Will result in poor daylight access and potential for poor streetscape address. **71** Delete as the Design Criteria implies types not intended to be complying development are included.
3.2P **Visual Privacy** 3.2P Visual Privacy  Objective 3.2P-1 Design criteria Adequate building separation distances are shared equitably between neighboring dwellings to achieve reasonable levels of external and internal visual privacy while retaining amenity for the dwelling 72. A privacy screen is required where the distance from the window of a habitable room to the boundary is : • less than 3m, and the habitable room has a FFL greater than 1m above existing ground level, or • less than 6m, and the habitable room has a FFL greater than 3m above ground level Note: This does not apply to bedroom windows that have an area less than 2m² 73. A privacy screen is not required on any window that has a sill height greater than 1.5m, or any window that has a frontage to a road or public open space. 74. A privacy screen is required where the distance of a terrace, balcony or verandah to the boundary is : • greater than 3m and the habitable room has a FFL less than 1m above existing ground level, or • greater than 6m and the habitable room has a FFL less than 2m above ground level Note: The privacy screen is only required to the edge of the terrace that faces the boundary. 75. A privacy screen is not required to a balcony or terrace that has an area less than 2m², or a balcony or terrace of any size that has a frontage to a road or public space. 76. Separation distances between windows and balconies of dwellings on the same site are double the distances above. Objective 3.2P-2 Design criteria Site and building design elements increase privacy without compromising access to light and air and balance outlook and views from habitable rooms and private open space 77. Where privacy screens are provided to windows, they must not cover part of the window required to meet the minimum daylight or solar access requirements, or restrict ventilation.	The Design Criteria set out for privacy and setbacks needs to be amended. The requirement for privacy screens indicates inadequate building separation controls and poor design resolution. **72** Privacy should be primarily achieved through sound design resolution. Five controls around the use of privacy screens indicates visual (and acoustic) privacy is not achieved via the proposed building separations at 2H. The building separation and setback controls should be amended and increased consistent with SEPP 65 ADG separations). **73** Delete. These conditions indicate inadequate setbacks from the boundary and should not be a condition that arises in this type of development. Amendment is required to increase building setbacks and separation to ensure privacy screens are not required. **74** Generally goes to inadequate setbacks and building separation controls. **75** Generally goes to inadequate setbacks and building separation controls. **76** The same amenity issues existing between dwellings within a site and on neighbouring sites. The separation controls must not result in poor amenity within a development and less than is achieved for high-density housing. **77** Privacy screens over windows achieve very poor amenity and indicate poor design resolution in internal planning layouts, combined with inadequate building separation. Add to Objective: …"siting of buildings, building separation and building layout." Proposed controls demonstrate building separation is inadequate. The controls should be amended to use SEPP 65 ADG visual privacy controls for building separation. Primary controls at 2H must be amended to address building separation to achieve adequate visual and acoustic privacy.
3.2Q **Acoustic Privacy** 3.2Q Acoustic Privacy  Objective 3.2Q-1 Design criteria Noise transfer is minimised through the siting of buildings and building layout 78. Noise sources not associated with the dwelling such as service areas, plant rooms, building services, mechanical equipment, should be located at least 3m away from bedrooms 79. All noise generating equipment such as air conditioning units, swimming pool filters, fixed vacuum systems and driveway entry shutters must be designed to protect the acoustic privacy of residents and neighbours. All such noise generating equipment must be acoustically screened. The noise level generated by any equipment must not exceed an LAeq (15min) of 5dB(A) above background noise at the property boundary.	3.2Q has no requirements for sound noise barrier planning principles to best resolve acoustic privacy. Performance requirements at Part 2 Design Guidance 2Q is separated to from the DC with not reference in the DC to that design guidance. None of the Design Criteria relate to the objective of siting and layout. **78** Supported. **79** Supported. Use SEPP 65 ADG acoustic privacy controls for building separation and dwelling layout.
3.2R **Noise and Pollution**	**3.2R** has no requirements for sound noise barrier planning principles to best resolve acoustic privacy and separate to statutory requirements. **80** Supported. **81** Supported. **82** Supported.

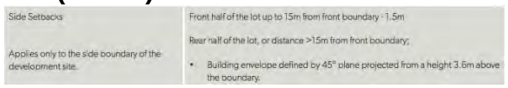
3.2R Noise and Pollution **Objective 3.2R-1** Ensure outside noise levels are controlled to acceptable levels in living and bedrooms of dwellings **Design criteria** 80. Any development within the 20 ANEF contour is to be constructed to comply with AS/NZS Acoustics – aircraft noise intrusion. 81. Dwellings that are within 100m of a road corridor with an annual daily traffic (AADT) volume of more than 1,000 vehicles (based on traffic volume data published on the website of the RMS) or 80m from a rail corridor are to have LA_{eq} measures are not exceeding: • in any bedroom: 35dB(A) between 10pm-7am • anywhere else in the building (other than a kitchen, garage, bathroom or hallway): 40dB(A) at any time This can be achieved by: • a full noise assessment prepared by a qualified acoustic engineer • complying with relevant noise control treatment for sleeping areas and other habitable rooms in Appendix C of Draft Guide to infrastructure development near rail corridors busy roads. 82. Dwellings within 25m of a rail corridor are required to have a vibration assessment carried out by a qualified structural engineer	
3.2S **Universal Design** 3.2S Universal Design **Objective 3.2S-1** Universal design features are included in dwelling design to promote flexible housing for all community members **Design criteria** 83. All dwellings are to include the Liveable Housing Design Guideline's silver level universal design features.	**83** Supported and should be amended to add requirement for adaptable housing to Platinum Level for two dwellings per 15. The increased number of Platinum Level housing to address long-term flexibility and financial equity for adaption of medium density housing.
3.2U **Architectural Form and Roof Design** 3.2U Architectural Form and Roof Design **Objective 3.2U-1** The architectural form is defined by a balanced composition of elements. It responds to internal layouts and desirable elements in the streetscape. It is a considered 3- dimensional form **Design criteria** 84. Provide in the design statement a description as to how the architectural form reduces the visual bulk and responds and provides a cohesive design response. Note: Refer to Part 2 for guidance. **Objective 3.2U-2** The roof treatments are integrated into the building design and positively respond to the street **Design criteria** 85. The roof design is integrated with the overall building form. 86. Skylights and ventilation systems are to be integrated into the roof design	**84** Supported but a PCA is not the appropriate person and cannot assess design quality of architectural form. **85** Supported, however PCA is not the appropriate person and cannot assess design quality of architectural form. **86** Supported, however PCA is not the appropriate person and cannot assess design quality of architectural form. Councils and design review panels must retain assessment role. Councils provide independent, specialist expertise in all the relevant disciplines. PCAs are not trained, qualified or experienced in assessing design quality of architectural form.
3.2V **Visual Appearance and Articulation** 3.2V Visual Appearance and Articulation **Objective 3.2V-1** To promote well designed buildings of high architectural quality that contribute to the local character **Design criteria** 87. Provide in the design statement a description as to how the aesthetics and articulation contribute to the character of the local area. Refer to Section 2 for guidance. 88. An articulation zone of 1.5m is provided forward of the building line. The articulation zones includes one or more of the following: • Veranda / Porch • Balcony • Pergola • Entry feature or portico • Awnings or other features over windows • Eaves and sun shading • Window box treatment • Recessed or projecting architectural elements • Bay windows	**87** Supported but a PCA is not the appropriate person to be assessing design quality of architecture. **88** Supported, however PCA is not the appropriate person and cannot assess design quality of architectural form.

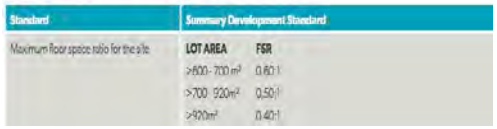
3.2W **Pools and Ancillary Development** 3.2W Pools and Ancillary Development  Note: Privacy and building separation and other design criteria apply to ancillary development	**89** Supported. **90** Supported. **91** Supported. **92** Required. **93** Supported. **94** Supported. **95** Supported for this housing type. **96** Should be conditional on lot size. Possible for a 6m x 6m room that could extend across full extent of a min width lot but must provide a 3m setback to the rear boundary that serves no purpose and adds no amenity to the lot. 0m side setback should apply to only one side boundary and room should not occupy more than 30% of the lot width. **97** Not supported. If windows are internal to a site, privacy can be controlled. If highlights provide outlook above roof lines of neighbouring site or over public domain, there are no privacy impacts. Opening size should provide pleasing proportions in the façade composition of all elevations.
Environment	
3.2X **Energy Efficiency** 3.2X Energy Efficiency  Note: A CDC or DA for a dwelling is required to have a BASIX Certificate that applies a minimum energy consumption target.	The proposed Design Criteria do not relate to the objective. They are superficial elements of 'passive environmental design' **98** Supported. **99** Supported.
3.2Y **Water Management and Conservation** 3.2Y Water Management and Conservation  Note: A CDC or DA for a dwelling is required to have a BASIX Certificate that applies a minimum water consumption target.	This section has been taken directly taken from the proposed SEPP wording and is not a guide. In addition it is contradictory and too broad. The Guide should provide more guidance on achieving suitable outcomes rather than restating the exact wording of the SEPP. Some DCPs do not permit runoff from a medium density development to be managed by means of a charged system or on site disposal, so this requirement cannot achieve compliance with the second dot point following which requires compliance with Council's DCP. On site disposal is particularly unsuited to this type of multi-dwelling development due to the large impervious areas permitted. The Guide has to clearly state that an inter-allotment drainage system must legally benefit the site and contain a suitable pipe. There is no definition. Some certifiers do not understand the importance of the terms of an easement. Section 68 of the Local Government Act 1993 does not apply to Councils within Sydney Water's area of operations, so this criterion requires compliance with Council's DCP (should read "management and disposal of stormwater"). However this is not sufficiently clear. This applies to all Councils in the greater Sydney area and should be the first dot point, not the second. **101** CDC pathway enables large development to be designed with no coordination with council requirements, nor demonstrated ability to link into the existing systems. **104** Delete: Implies very large development not intended as complying development.
3.2Z **Waste Management**	**105** Supported but should be exclusive of calculated private open space. **106** Supported. **107** Not supported. Problem with type and scale of development that is possible under the enabling definitions of '*primary/secondary/*parallel' in context of *streets/roads/lanes'*.

	A development of 40 dwellings for instance must have screen garbage areas integrated with the overall design or the streetscape character will be severely impacted. Development that will result in more than 6 dwellings (including the total if lodged under consecutive CDCs) must be properly designed, screened and be in a basement with basement car parking. Development If definitions remain, all waste storage and garbage disposal must comply with council requirements.
3.3 **Multi-Dwelling Housing and Master Planned Communities**	The inclusion of this housing type is not permitted under the Codes SEPP and must be deleted. Ku-ring-gai has a well-considered and sophisticated DCP for multi-dwelling housing which must be retained to achieve the intended urban and landscape character. See above comments at 3.1 for negative impacts of the proposed process. **Figure 3-10** demonstrates a failed housing typology that has infected much of western Sydney and operates in R2 zones under SEPP Seniors and People with a disability throughout Sydney and NSW. This housing type must not be permitted as it leads to very poor urban and landscape outcomes. This housing type is contrary to developing functional, sustainable cities, as it encourages large-scale, isolated higher density development that prevents coordination with pubic street networks and the services and amenity of local centres. It fails to establish future street and subdivision patterns that can be later further redeveloped for high density with the required functional street networks and public spaces. It results in impermeable large allotments with prioritised vehicle character. The figures used are unrealistic as it does not demonstrate the actual vehicle requirements under AS 2890. Principal Controls Comments - See Table 3.3 Multi-Dwelling Housing
3.3 A-Z	Multi-dwelling Housing and Master Planned Communities are developed in close consultation with councils, are assessed either by Council or other independent consent authority, and are not relevant to the MDDG or Codes SEPP. The section is fatally flawed. It contains poor typologies such as Figure 3-10 that are inconsistent with the Design Quality Principles and other National State and Local planning policies. The issues raised in the other sections apply to this section.
3.4 Manor Houses and Dual Occupancies	The pairing of Manor Houses and Dual Occupancy is poor. It is comparing types that are quite dissimilar unless the dual occupancy is attached, which is Side-by-Side housing at 3.1. The Manor House type could be well implemented in Ku-ring-gai's R2 zones on single allotments. However, the dual occupancy rear yard subdivision type is a poor subdivision type that leads to the further fragmentation of biodiversity corridors and general loss of landscape that characterises Ku-ring-gai. Dual occupancy rear subdivision must be tightly controlled and permitted only on specific sites identified for their suitability for inclusion in Schedule 1 of KLEP 2015. There would likely need to be amendments to the wording of KLEP so that further specifies permissibility of specific housing models under the house type classifications of medium or low density. See comments section 3.1 above regarding problems with the proposed DA and CDC pathways. **Figure 3-15** demonstrates the worst of streetscape character outcomes that can be achieved under the proposed development standards. The huge impact of the reality of accommodating vehicles is demonstrated, there is no viable deep soil landscape, the

	permitted dwelling size and housing type results in site coverage that negates private landscape, canopy trees are not possible within the site boundaries and largely unlikely to flourish in the patches of soil surrounded by hard stand. The roof is dark coloured contributing to raising land surface temperature. It should also be noted that this example is a corner site, bounded on 3 sides by a road network of streets and laneway, which is not found in the vast majority of NSW suburbs unless on large master planned subdivisions. The example represents the worst urban design outcome and fails many Commonwealth and State policies, such as Greening Cities Commonwealth Policy, National Climate Change Adaption Research Facility – *Pathways to climate adapted and healthy low income housing* **Figure 3-16** has no north point. It is schematic not based on a good exemplar of real development. Analysing the failures: • The bottom example illustrates the worst fundament design principles and fails the design quality principles. Yet if a Design Verification Statement is submitted, it would be certified by a PCA as compliant. • One or other of the levels advocate living areas with a southerly aspect • If the ground floor shows living areas with a northerly aspect, three-quarters of the entire northern side of the lot comprises hard stand and garaging. • The planning layouts fail to demonstrate fundamental planning principals for acoustic privacy by locating living areas of the first floor above the sleeping areas of the floor below (or vice versa). Principal Controls Comments - See Table 3.4 Manor Houses and Dual Occupancy
3.4A Building Envelope  *Development Application* The local building envelope controls are to be found in the LEP and DCP that applies to the land. This may include: • Maximum height of building • Front, rear and side setbacks The DCP may also provide direction on the character of the precinct and siting of the building. *Complying Development* The building envelope standards for complying development can be found in Medium Density Housing Code within ***State Environmental Planning Policy (Exempt and Complying Codes) 2008 (Codes SEPP)***. A summary is in the table below. **Standard** / **Summary Development Standard** Min site area / 600m² 15m wide Height of Building / 8.5m	The development standards of the MDH Codes SEPP through Complying Development stand in direct conflict with the following KLEP and KDCP Clauses: KLEP Land Use Table; KLEP cl 2.6 (2); cl 4.1 (3)(3A); KLEP cl 6.6; **HoB:** KLEP cl 4.3 (2) Ku-ring-gai's KLEP and KDCPs deliver outcomes consistent with Ku-ring-gai's urban and landscape character, and are consistent with broader strategic policies including state and national direction (protecting and enhancing natural and built heritage, landscape, biodiversity/riparian corridors, long term public health outcomes for healthy, pedestrian focused cities/town and suburbs. **Comments on Site requirements:** **Lot size:** Wording inconsistent with MDDG for minimum lot size requirements. The Explanation Of Intended Effect wording permits Manor Houses on any parent lot with a site area of >600m2 . MDDG wording and pathway at p 136 states KLEP land zoning and minimum lot size apply. This has significant and broad-reaching negative implications through NSW. **Definitions:** Inconsistent definition of ***'multi dwelling housing'*** *between EOIE* and *MDDG.* MDDG definition uses current SILEP definition with inherent circular reference to residential apartments. Therefore permissibility is unclear. Change MDDG definition to align with EOIE to exclude dwellings above or below. Manor House is a Class 2 building under the NCC (as is strata Terrace or Townhouse where shared basement parking). **CDC pathway:** Manor House type is inherently more complex to design and assess and should not be included under CDC. **HoB:** Allows for sufficient articulation of roof forms on flat sites. May be problematic on steep sites. 8.5m height is less than KLEP 2015 9.5-11.5m for R3 zone. See comments on Ceiling Heights 3.4K

	Amend MDDG definition of '*multi-dwelling housing'* to align with Codes SEPP definition. Propose rezoning strategic areas within the LGA to R3 and amend KLEP to accommodate specific medium density housing types to correspond with desired outcome. Minimum lot sizes for suitably located sites should be amended to best locate Manor House types. Manor House should only be assessed via DA pathway. Building type and issues are too complex for CDC.
1.4 (cont'd)  Primary Road Setback(Where an existing dwelling is within 40m - average of two closest dwellings. Where no dwellings are within 40m then: LOT AREA SETBACK 600 - 900 4.5m >900 - 1500 6.5m >1500+ 10m Secondary Road setback LOT AREA SETBACK 600 - 1500 3m >1500+ 5m	The development standards of the MDH Codes SEPP through Complying Development stand in direct conflict with the following KLEP and KDCP Clauses: KLEP cl 2.6 (2); cl 4.1 (3)(3A); KLEP cl 6.6 KDCP6A.3 Ku-ring-gai's KLEP and KDCPs deliver outcomes consistent with Ku-ring-gai's urban and landscape character, and are consistent with broader strategic policies including state and national direction (protecting and enhancing natural and built heritage, landscape, biodiversity/riparian corridors, long term public health outcomes for healthy, pedestrian focused cities/town and suburbs. Minimum lot size for multi-dwelling housing development generally 1200m2 under KLEP and the Primary Road Setback of 6.5m inconsistent with KDCP 6A.3 (10m).The secondary Road Setback of 3m min will be proposed as compliant development to avoid KMCs 6-8m. The proposed minimum lot size and setbacks will result in impacts on streetscape character and reliant on PCA to uphold existing urban character. There appears to be no mechanism to require urban character is taken into account other than via the checklist unlike *SEPP ARH* and *SEPP Seniors and People with a Disability.* Councils must retain existing setback controls for both DA and CDC pathways. The one-size-fits-all approach cannot work with the vast geographical, demographical, economic, subdivision variations across NSW. All Codes SEPP setbacks will materially impact Ku-ring-gai's and other established out ring suburb urban landscape character. This will be further exacerbated by permissibility of 3m excavation >1m from the boundary that would impact on viability of medium and larger trees.
3.4 (cont'd)  Side Setbacks Applies only to the side boundary of the development site. Front half of the lot up to 15m from front boundary - 1.5m Rear half of the lot, or distance >15m from front boundary: • Building envelope defined by 45° plane projected from a height 3.6m above the boundary.	The development standards of the MDH Codes SEPP through Complying Development stand in direct conflict with the following KLEP and KDCP Clauses: KDCP6A.3; Flow-on impacts to: KDCP Part 24 Water Management Part 18 Biodiversity ; Part 19R1 Greenweb Maps; Part 22 Landscape Design; Section C Part 24 Sustainability; Part 24 Water Management. Ku-ring-gai's KLEP and KDCPs deliver outcomes consistent with Ku-ring-gai's urban and landscape character, and are consistent with broader strategic policies including state and national direction (protecting and enhancing natural and built heritage, landscape, biodiversity/riparian corridors, long term public health outcomes for healthy, pedestrian focused cities/town and suburbs. Side setbacks will have a significant impact to Ku-ring-gai's landscape character in R3 zones. 1.2m is manifestly inadequate in Ku-

	ring-gai. Codes SEPP is inconsistent with KDCP 6A.3 for 3m minimum (is also dependant on orientation of living/habitable rooms. Height plane diagrams can lead to very poor built form particularly for minimum lot widths. Ku-ring-gai's existing setback controls achieve the desired landscape character and promote landscape in all side setback zones. This will be lost under Codes SEPP. No side setback controls take into account the internal layout, use and aspect of rooms and will lead to poor outcomes. Additionally in Class 2 buildings there are fire separation issues that are not addressed. Councils must advocate retaining existing setback controls for both DA and CDC pathways. Codes SEPP side setback controls must take into account BCA compliance for fire rating if proposed as complying development. Demonstrates levels of complexity that an unskilled designer and certifier will fail to address. Setbacks are inadequate in retaining Ku-ring-gai's landscape character. The policy fails to understand the fundamental structure and value of Sydney's suburban landscape character, and Ku-ring-gai's in particular, that has a block pattern of public street-deep soil landscape front yard-built form-deep soil landscape rear yard-boundary-deep soil rear yard landscape-built form-deep soil landscape front yard-street. Setbacks are inconsistent with National and State Policies for protecting landscape networks, adapting development to climate change, and Specific State Policies such as *Green Cover* and *Towards Our Greater Sydney 2056.* Impacts also relate to site coverage and landscape and likely flow-on impacts to Ku-ring-gai's DCP initiatives for sustainable development and preventing further fragmentation of landscape that supports biodiversity corridors.
3.4 (cont'd) 	The development standards of the MDH Codes SEPP through Complying Development stand in direct conflict with the following KLEP and KDCP Clauses: KDCP 6A.3 Flow-on impacts to: KDCP Part 24 Water Management; Part 18 Biodiversity ; Part 19R1 Greenweb Maps; Part 22 Landscape Design; Section C Part 24 Sustainability; Part 24 Water Management Ku-ring-gai's KLEP and KDCPs deliver outcomes consistent with Ku-ring-gai's urban and landscape character, and are consistent with broader strategic policies including state and national direction (protecting and enhancing natural and built heritage, landscape, biodiversity/riparian corridors, long term public health outcomes for healthy, pedestrian focused cities/town and suburbs. No side or rear setback controls take into account the internal layout, use and aspect of rooms and will lead to poor outcomes. Councils must retain existing setback controls for both DA and CDC pathways.
3.4B **Floor Space Ratio**	The development standards of the MDH Codes SEPP through Complying Development stand in direct conflict with the following KLEP and KDCP Clauses: FSR KLEP cl.4.4

<table>
<tr>
<td>3.4B Floor Space Ratio
Development Application: Refer to LEP or DCP that applies to the land.
Complying Development: Refer to Codes SEPP and summary table below:
 
<table>
<tr><th>Standard</th><th>Summary Development Standard</th></tr>
<tr><td>Maximum floor space ratio for the site</td><td>LOT AREA FSR
>600 - 700 m² 0.6:1
>700 - 920m² 0.5:1
>920m² 0.4:1</td></tr>
</table>
</td>
<td>Ku-ring-gai's KLEP and KDCPs deliver outcomes consistent with Ku-ring-gai's urban and landscape character, and are consistent with broader strategic policies including state and national direction (protecting and enhancing natural and built heritage, landscape, biodiversity/riparian corridors, long term public health outcomes for healthy, pedestrian focused cities/town and suburbs.

Codes SEPP FSR is less than KLEP 0.8:1 that generally applies to R3 zones. However, the type is quite different if we analyse like dwelling sizes (remembering above ground car parking is not included in the calculation under the Codes SEPP definition): The type is promoting smaller dwelling sizes, which is supported in principle as addressing current and increasingly important impacts arising from the continuous increase in Australian house size.

<table>
<tr><th>Lot size</th><th>FSR</th><th>No of dwellings & size</th></tr>
<tr><td>600-700m2</td><td>0.6:1</td><td>3 @ 120-140m2
4 @ 150m^2
6 @ 60-70m^2</td></tr>
<tr><td>700-920m2</td><td>0.5:1</td><td>3 @ 115-153m^2
4 @ 87.5-115m^2
6 @ 58-76m^2</td></tr>
<tr><td>>920m2</td><td>0.4:1</td><td>3 @ min 122m^2
4 @ min 92m^2
6 @ min 61m^2</td></tr>
</table>
Impacts, however, will be to site coverage and landscape. KDCP site coverage for multi dwelling housing permits a maximum of 40% site coverage. At-grade car parking as proposed will lead to significant loss of landscape.

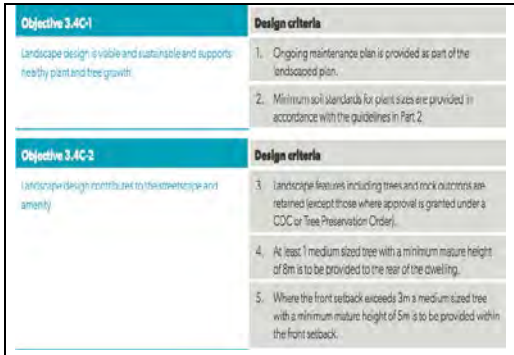
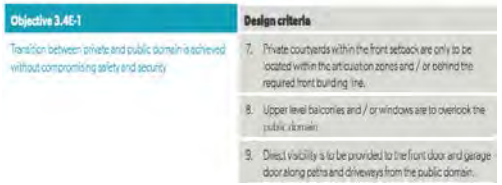
Proposed FSRs for the larger lots in LGAs such as Ku-ring-gai still enable oversized dwellings and results in excessive site coverage. The proposed FSRs have not been tested. They must be tested and set to reflect responsible dwelling sizes for this type of housing and responds to and is coordinated with all State and Commonwealth sustainability, energy efficiency, and landscape policies.</td>
</tr>
<tr>
<td>3.4C Landscaped Area
3.4C Landscaped Area
Development Application: Refer to LEP or DCP that applies to the land for minimum areas.
Complying Development: Refer to Codes SEPP and summary table below for minimum areas.
 
<table>
<tr><th>Standard</th><th>Summary Development Standard</th></tr>
<tr><td>Minimum Landscaped Area for the site</td><td>LOT AREA LANDSCAPED AREA AS PERCENTAGE OF LOT
>600 - 750 30%
> 750 - 900 35%
>900 - 1500 40%
>1500 45%
Minimum dimension of any landscaped area included in calculation - 1.5m</td></tr>
<tr><td>Proportion of area forward of building line that contains landscaped area</td><td>25% minimum</td></tr>
</table>
</td>
<td>The development standards of the MDH Codes SEPP through Complying Development stand in direct conflict with the following KLEP and KDCP Clauses: KDCP 6A.4 Building Separation; KDCP 6A.5 Site Coverage; KDCP 6A.6 Deep Soil Landscape, KDCP Part 24 Water Management; Part 18 Biodiversity; Part 19R1 Greenweb Maps; Part 22 Landscape Design; Section C Part 24 Sustainability; Part 24 Water Management

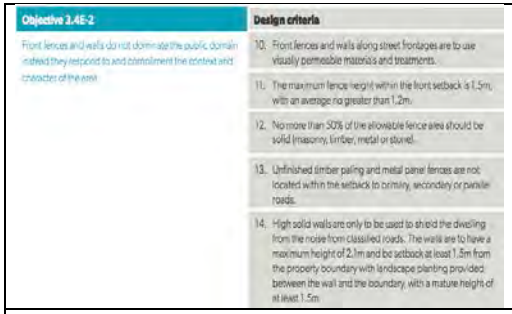
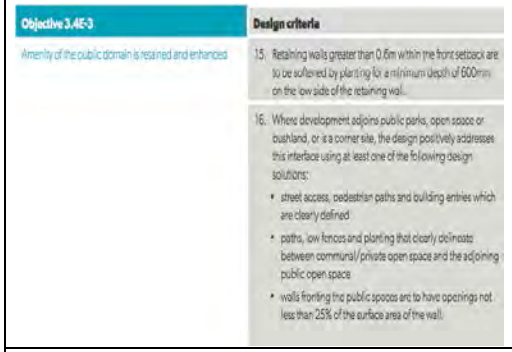
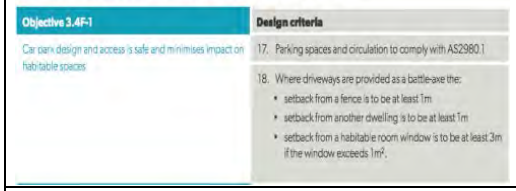
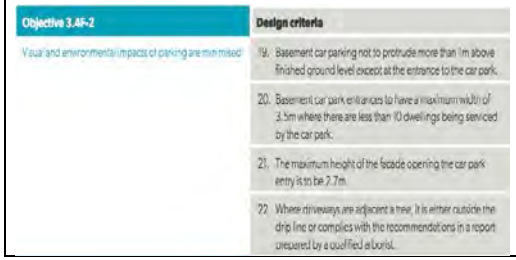
Ku-ring-gai's KLEP and KDCPs deliver outcomes consistent with Ku-ring-gai's urban and landscape character, and are consistent with broader strategic policies including state and national direction (protecting and enhancing natural and built heritage, landscape, biodiversity/riparian corridors, long term public health outcomes for healthy, pedestrian focused cities/town and suburbs.

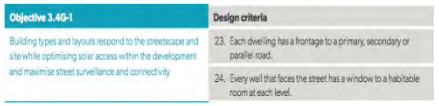
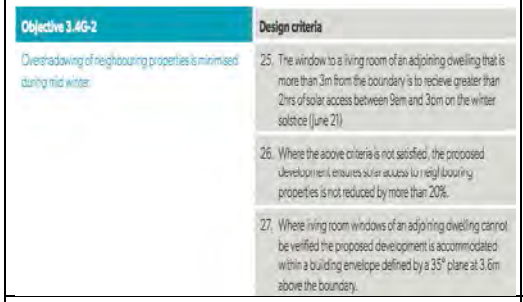
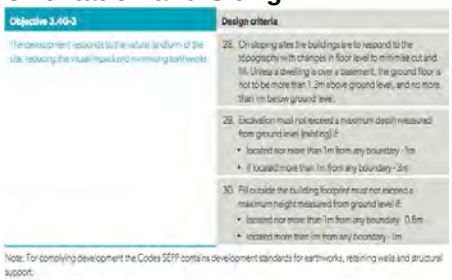
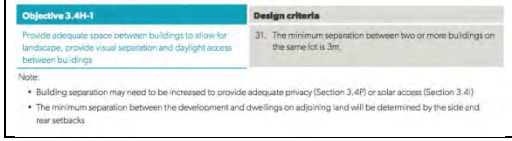
Multi-dwelling housing requires 40% of the landscape area to be deep soil. This component alone exceeds the total landscape area for the largest sites under proposed Codes Standards. This one Development Standard will have an unacceptable impact on Ku-ring-gai's landscape character if taken up across the LGA. KMC's requirement for deep soil is not reflected in the Codes SEPP definition, which is simplistic and fails to differentiate between landscape above structure and deep soil.</td>
</tr>
</table>

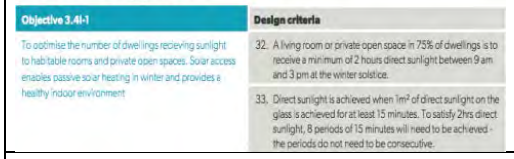
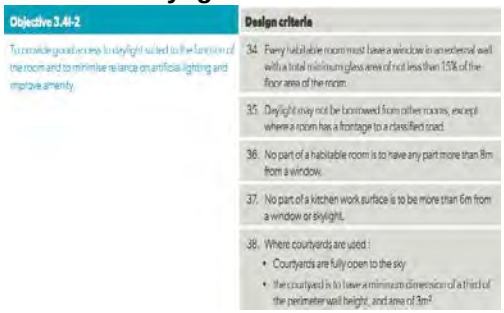
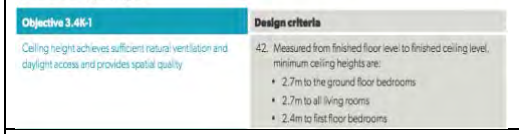
	Codes SEPP min dimension of 1.5m overrides KDCP definition of 2m (but appears to exclude *all* hard paving). It is unclear how stepping stones would be defined as a path and/or private open space terracing. KDCP is more onerous and with more exclusions than under the Codes SEPP. This will be attractive to applicants seeking to avoid KDCP higher requirements. Landscape control must reside in Council's control. The MDDG Part 2 is largely performance-based and enables alternative solutions to design criteria. A PCA cannot determine an application on merit so will either ignore Part 2 or approve a non-compliant development. FSR and landscape as proposed, is diametrically opposed to the Federal Government's 'Green Cities' policy (announced 01/2016 by Minister Greg Hunt)… *"cities with high levels of trees, foliage and green spaces — provide enormous benefits to their residents. Increasing urban canopy coverage decreases heat, which improves health and quality of life."* And the Greater Sydney Commission's *Towards our Greater Sydney 2056* at p6 core objectives for *A Sustainable Sydney:* *A city in its landscape* *An efficient city* *A resilient city* d at **p12** *…It is important to recognise that natural environmental areas are productive and have an impact on communities, the economy and regional tourism. Viewing Greater Sydney as a city in its landscape allows us to think about how the diversity of social, cultural and environmental conditions operate within this natural landscape* *…while also looking at how we can green our streets, neighbourhoods and suburbs with new tree canopies. This metropolitan priority aims to:* *improve the health of waterways* *protect, extend and enhance biodiversity, regional and local open space systems, as well as scenic and cultural heritage together with productive landscapes* *Increase access to open space, conserve the natural environment and enable healthy lifestyles and local food.* http://www.greghunt.com.au/Home/LatestNews/tabid/133/ID/3623/Long-term-planning-and-cities-for-the-next-century--Sydney-Business-Chamber.aspx http://www.uts.edu.au/research-and-teaching/our-research/institute-sustainable-futures/news/new-alliance-promote-greening http://gsc-public.s3-ap-southeast-2.amazonaws.com/s3fs-public/towardsour2056_21161117.pdf?5045ajdpvf0jcInAS2KVJ63jV3k2W3O1 The loss of every council's authority over landscape fails to consider the variety and specific character of each LGA throughout NSW and fails to provide a mechanism to achieve the variety that a city and NSW needs. Landscape is the single most important element that defines Ku-ring-gai's urban character. The MDDG Objectives and Design Criteria for landscape are manifestly inadequate for Ku-ring-gai. There is no requirement for any landscape to be deep soil. The required areas are inadequate and will not result in the trees being viable due to the high probability they will be removed, or replaced with smaller planting, or areas of paving extended post approval. Ku-ring-gai's urban character is predicated on the quality of its landscape, and has in place, detailed development objectives and controls for all setbacks, site coverage, total

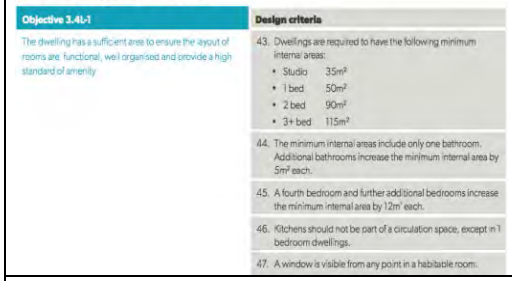
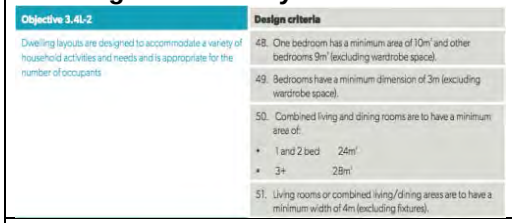
	landscape area, deep soil and tree removal that ensure all development, of every scale is within a dominant landscape setting characterised by canopy trees and deep soil planting. The loss of landscape controls, therefore, has a particularly devastating impact on Ku-ring-gai's strategic planning of urban character. Protection of canopy trees that may have value in either providing links between areas of biodiversity significance, or contributing to the background view between allotments or internal site character is very important. This has a function as a public asset, which is not recognised in the Codes SEPP or MDDG. Local experience of development currently lodged under *SEPP Seniors and People with a Disability* and *SEPP Affordable Rental Housing* has seen the gradual loss and/or degradation of established trees and vegetation within the Council area where these developments occur. Unlike these two SEPPs, the Codes SEPP has **no** development standard requiring development consider and respond appropriately to existing and desired urban character for landscape nor can it be verified. The types of development that have had the greatest impact in Ku-ring-gai are those advocated in the MDDG that prioritise at-grade car parking deep within the site. These have a devastating impact on the protection of existing and diminishing landscape. These outcomes are in direct conflict with the NSW Government's *A Plan for Growing Sydney* and its *Urban Green Cover Policies*, commonwealth policies for Greening Cities and Housing adapted to climate change. It is also worth noting, these are policies that are inconsistent with the United Nations, General Assembly *Draft outcome document of the United Nations Conference on Housing and Sustainable Urban Development (Habitat III) - New Urban Agenda*. Cumulative impacts resulting from the Landscaped Area development standard have the potential for loss of vegetation across NSW that will contribute to land surface temperature increases and the urban heat sink effect. The focus on streetscape landscape controls is important in achieving urban character, however, the policy fails to adequately value the rear yard landscape assets throughout NSW and in Ku-ring-gai specifically, and their importance climatically, their role protecting against further fragmentation of biodiversity significance and loss of green corridors, and their aesthetic contribution to urban character. Further to this, the local community demands its protection and the courts have recognised Ku-ring-gai's landscape character in its judgements.
3.4C (cont'd)	**1** The requirement for an ongoing maintenance plan is not feasible for two dwellings with little common area nor is it enforceable into the future. Landscape contractors provide at most a 6-12 month establishment plan. After that the maintenance of a development is a either private or communal responsibility. PCA's are not trained, qualified, or have the required expertise to assess landscape maintenance plans.
	2 The requirement for minimum soil standards is directed to planting on structures. This is unlikely to be relevant for two dwellings (dual occupancy). There should also be criteria for preservation of existing trees in accordance with AS4970-2009, minimum width of garden beds to side and rear boundaries for screen planting, minimum width of garden beds to driveway. PCA's are not trained, qualified, or have the required expertise to assess soil standards in relation to proposed vegetation requirements.
	3 CDC pathway negates Council's tree protections except where Biodiversity standards apply under the Act. However, role of PCAs relies on honesty of applicants in assessing tree worth as they are not trained, qualified or has the expertise to assess trees and landscape issues. Role of PCAs and Complying Development has serious impacts to protecting biodiversity, and landscape character. Councils must

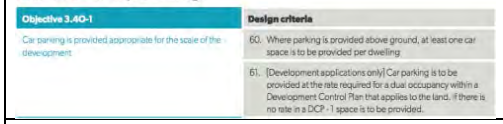
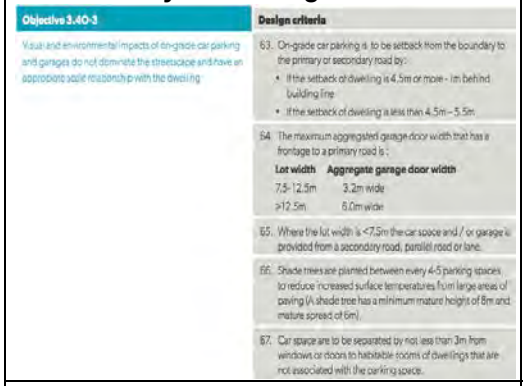
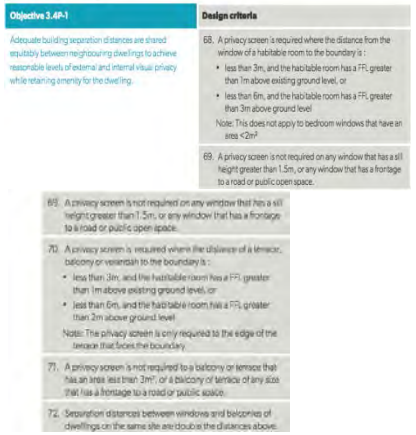
	retain assessment role. Councils provide independent, specialist expertise in all the relevant disciplines unlike a PCA. The reference to 'tree preservation order' should be substituted with Clause 5.9 consistent with the Principal LEP.
	4 Proposed min setbacks can support anticipated landscape for canopy trees. It is unclear how the setback would be applied if a garage to a rear lane is proposed. This could enable a lesser building separation test and likely loss of deep soil needed to achieve objective 3.4C-1. Role of PCAs and Complying Development has serious impacts to protecting biodiversity, and landscape character due to the added complexities of a Manor House. Councils must retain assessment role. Councils provide independent, specialist expertise in all the relevant disciplines unlike a PCA.
	5 Objective 3.1C-2 refers to contribution to streetscape and amenity; this is unachievable with one 5 metre high tree in the front setback. There is no further requirement for any other shrubs, groundcover or lawn and instead 75% of the front setback is permitted to be paved. A 5m tree may be appropriate for front setbacks of 3.5m however this is not in keeping with larger lots with existing front setbacks. There is no requirement for street tree planting.
Siting the Development	
3.4D **Local Character and Context** 3.4D Local Character and Context 	**6** PCAs will check a design statement is submitted but are not trained, qualified, nor have the expertise to assess urban design and architectural merit of a design. Urban character is not a principal development standard, and will be largely ignored. Councils must retain assessment role. Councils provide independent, specialist expertise in all the relevant disciplines unlike a PCA.
3.4E-1 **Public Domain Interface** 3.4E Public Domain Interface 	**7** Impact will be where minimum front setbacks are less than KDCP DCP. **8** It is unclear whether the control requires that balconies on the upper level are only permitted is they overlook the public domain only. Figure 3-16 shows upper level open space facing neighbouring dwellings. Control 56 allows balconies that would face the backyard of the subject site and also overlook the backyards of adjacent dwellings. A screen to the side of a first floor balcony would not prevent views of adjacent backyards. An upper limit on the area of first floor private open space and/or a requirement that they be orientated to the street only should be imposed. **9** The visual impact of driveways into a lot must be minimised. A Manor House is only suitable where there is rear lane access or a corner site. Driveway and garage size must not negatively impact either the primary public road or secondary public road amenity or streetscape character. Manor Houses with garages facing a secondary public street must be limited to a width of 7.2m (to accommodate 2 adaptable spaces). Large garages and hard stand in the front setback destroy streetscapes and unacceptably impact on public domain amenity through the loss of on-street car parking and street trees if accommodating multiple spaces with a combined width driveway crossover. Change all references to '*primary', 'secondary' and 'parallel' streets/roads/lanes* to *public* streets/road/lanes. Include definition of 'frontage' to mean the full extent of a lot and full extent of a building, and all dwellings within a building, on a lot or development site. Frontage is only achieved to a public street or road.
3.4E-2 **Public Domain Interface**	**10** Supported. **11** Front fences should be limited to 0.2m in height. **12** Supported. **13** Supported. **14** The control allows for the construction of 2.1m high fencing on frontages to classified roads. Tall fencing is unattractive, imposing and reduces safety through the loss of casual surveillance. The provision of high fencing is not required as reasonable internal noise levels can be achieved through construction techniques informed by a site specific acoustic assessment.

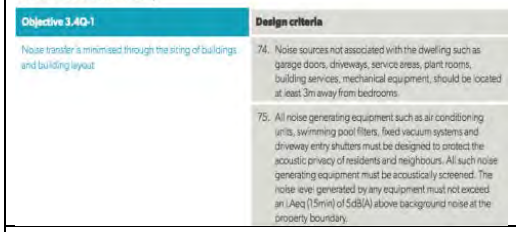
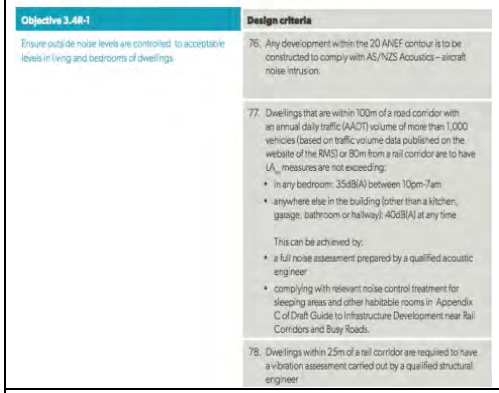
	
3.4E-3 **Public Domain Interface** 	**15** Generally supported. Elements of façade should be well coordinated with landscape treatment. **16** Supported. This Design Criteria should be applied to all medium density housing types. Compliance relies on PCA making merit assessment of public domain interface relationship and quality of the Site Analysis. They are not trained, qualified, or skilled to carry this out. Experience in Ku-ring-gai shows consistently that poor design outcomes and inappropriate development arises from inadequate site analysis and poor design response. This is the case for design also prepared by many registered architects. Without the requirements for development to be designed by a registered architect, and assessed and verified independently by a qualified urban designer or suitably experienced architect or landscape architect, it is unlikely this objective will be achieved. Public interest, protection and enhancement of the public domain can only be achieved via council as the consent authority.
3.4F-1 **Internal Streets- Vehicle and Pedestrian Access** 3.4F Internal Streets - Vehicle and Pedestrian Access 	Controls need to prevent the creation of *Internal Streets* unless fully formed <u>public</u> streets and dedicated to Council. Private driveways are NOT streets. The inclusion of '*internal streets'* that are private driveways has the effect of an enabling clause for types of development not intended to be via PCA pathway. If the definitions are not changed, all development that proposes an internal street/ road/lane must be determined by a DA to prevent poor urban outcomes for Manor House development. **17** Supported **18** This is inconsistent with EOIE p36 for development requirements at *(g) the lot must not be a battle-axe.*
3.4F-2 	**19**. Development only permitted with a total of 4 dwellings (EOIE, p 36 (e)) will not provide a basement. Manor Houses therefore must only be permitted on a corner site or a site with public rear lane access. **20** Applicable. Conflicts with EOIE p36 for development requirements at (e) *there must be no more than 4 dwellings on the lot at the completion of the development*. This should also be strengthened to prevent consecutive staged CDCs. **21** Supported but assumes a basement. **22** Relies on honesty of the arborist and PCA to adequately protect trees. This is a significant issue for many developments assessed by Ku-ring-gai even with an independent, accountable and verifiable DA pathway with council as the consent authority. **3.4F.** Internal 'Streets' are not streets, they are private driveways. They destroy landscape character, prioritise vehicles of over pedestrian and resident amenity which is in conflict with and devastate the internal site character by imposing expansive areas of

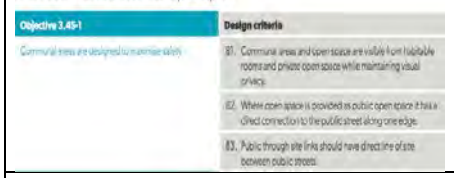
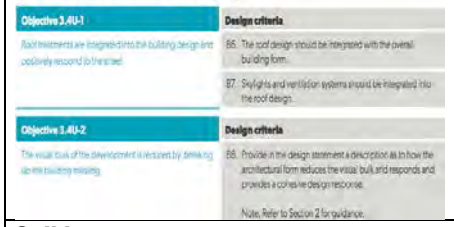
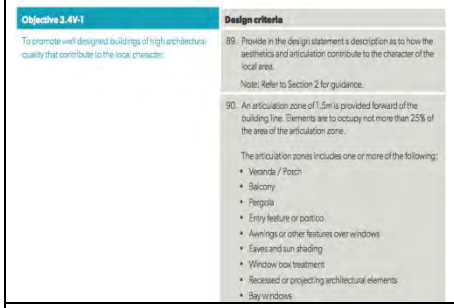
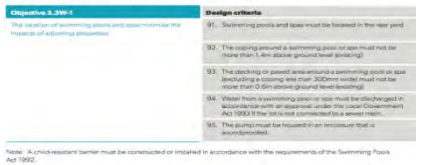
	hard-stand. An *internal street* must have specific controls about being public, appropriate reservation width, landscape, design, coordination with public domain and public access and be strategically well located as through-site connections to the public street network, no dead-ends. Councils must retain assessment role. Councils provide independent, specialist expertise in all the relevant disciplines unlike a PCA.
3.4G-1 **Orientation and Siting** 3.4G Orientation and Siting  Objective 3.4G-1 Building types and layouts respond to the streetscape and site while optimising solar access within the development and maximise street surveillance and connectivity Design criteria 23. Each dwelling has a frontage to a primary, secondary or parallel road. 24. Every wall that faces the street has a window to a habitable room at each level.	**23** Supported ONLY if all street references are to **public** streets. **24** Design Criteria needs to be reworded to suit the Manor House type. A window is insufficient. The main building entry will be located here also. 100% of the side of the building providing building entry or separate dwelling entries must have its 'frontage' to a public street. See previous comments for sites that are suitable. Councils must retain assessment role. Councils provide independent, specialist expertise in all the relevant disciplines unlike a PCA. Change all references to '*primary', 'secondary' and 'parallel' streets/roads/lanes* to *public* streets/road/lanes. Include definition of **'**frontage' to mean the full extent of a lot and full extent of a building, and all dwellings within a building, on a lot or development site. Frontage is only achieved to a public street or road.
3.4G-2  Objective 3.4G-2 Overshadowing of neighbouring properties is minimised during mid winter. Design criteria 25. The window to a living room of an adjoining dwelling that is more than 3m from the boundary is to recieve greater than 2hrs of solar access between 9am and 3pm on the winter solstice (June 21) 26. Where the above criteria is not satisfied, the proposed development ensures solar access to neighbouring properties is not reduced by more than 20%. 27. Where living room windows of an adjoining dwelling cannot be verified the proposed development is accommodated within a building envelope defined by a 35° plane at 3.6m above the boundary.	**25** The primary aspect of a living area should not be less than 6m from any boundary. Setbacks must enable compliance with BCA fire separation compliance without a fire-engineered solution. The control aims to protect solar access to living room windows which have a setback of more than 3m from a boundary. It would be rare for a DCP to require a side setback of 3m for a dwelling house and side setbacks of houses approved as complying development are usually 900mm. If this control is designed to preserve solar access to living rooms of adjacent dwellings in dwelling houses it is unlikely to be successful. **26** Reword. Does it mean if the adjoining dwelling does not currently receive 2hrs of solar access? **27** Supported. PCA has no training, expertise nor experience to assess validity of solar impacts.
3.4G-3 **Orientation and Siting**  Objective 3.4G-3 The development responds to the natural landform of the site, reducing the visual impact and minimising earthworks Design criteria 28. On sloping sites the buildings are to respond to the topography with changes in floor level to minimise cut and fill. Unless a dwelling is over a basement, the ground floor is not to be more than 1.2m above ground level, and no more than 1m below ground level. 29. Excavation must not exceed a maximum depth measured from ground level (existing) if: • located nor more than 1m from any boundary - 1m • if located more than 1m from any boundary - 3m 30. Fill outside the building footprint must not exceed a maximum height measured from ground level if: • located nor more than 1m from any boundary - 0.6m • located more than 1m from any boundary - 1m Note: For complying development the Codes SEPP contains development standards for earthworks, retaining walls and structural support.	**Objective 3.4G-3** – refers to minimizing earthworks, but it is followed by design criteria that allows excavation/filling up to 1m depth where 'not more than 1m from the boundary'. The control should be consistent with the current Codes SEPP requirement for a minimum 600mm setback. **28** Supported. Consistent with KMC's objectives. **29** Not supported. Excavation permitted within minimum 1 metre from the site boundary will impact on neighbour amenity. Excavation criteria should be consistent with current Code SEPP. Excavation criteria should be consistent with current Code SEPP. **30** Not supported. Filling permitted within minimum 1 metres from the site boundary will impact on neighbour amenity Filling criteria should be consistent with current Code SEPP.
3.4H **Building Separation** 3.4H Building Separation  Objective 3.4H-1 Provide adequate space between buildings to allow for landscape, provide visual separation and daylight access between buildings Design criteria 31. The minimum separation between two or more buildings on the same lot is 3m. Note: • Building separation may need to be increased to provide adequate privacy (Section 3.4P) or solar access (Section 3.4I) • The minimum separation between the development and dwellings on adjoining land will be determined by the side and rear setbacks	**31** Inadequate and not supported. There is no numerical or measurable separation to deal adequately with visual and acoustic privacy with this control or in Part 2.H. Building separation must use SEPP 65 separations dependant on internal layout, room use, and aspect of living areas. If not, privacy screens will be used as the first order solution and compliant with design criteria 3.2P. This advocates poor design outcomes and is inconsistent with the Design Quality Principles. Al Design Criteria **must** ensure amenity is never less than SEPP 65 for high density housing.

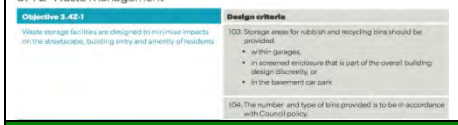
3.4I-1 **Solar and Daylight Access** 3.4I Solar and Daylight Access  Objective 3.4I-1 To optimise the number of dwellings recieving sunlight to habitable rooms and private open spaces. Solar access enables passive solar heating in winter and provides a healthy indoor environment Design criteria 32. A living room or private open space in 75% of dwellings is to receive a minimum of 2 hours direct sunlight between 9 am and 3 pm at the winter solstice. 33. Direct sunlight is achieved when 1m² of direct sunlight on the glass is achieved for at least 15 minutes. To satisfy 2hrs direct sunlight, 8 periods of 15 minutes will need to be achieved - the periods do not need to be consecutive.	**32** Supported. **33** Supported.
3.4I-2 **Solar and Daylight Access**  Objective 3.4I-2 To provide good access to daylight suited to the function of the room and to minimise reliance on artificial lighting and improve amenity Design criteria 34. Every habitable room must have a window in an external wall with a total minimum glass area of not less than 15% of the floor area of the room. 35. Daylight may not be borrowed from other rooms, except where a room has a frontage to a classified road. 36. No part of a habitable room is to have any part more than 8m from a window. 37. No part of a kitchen work surface is to be more than 6m from a window or skylight. 38. Where courtyards are used : • Courtyards are fully open to the sky • the courtyard is to have a minimum dimension of a third of the perimeter wall height, and area of 9m²	**34** Supported. **35 Delete**. …"*except where a room has a frontage to a classified road*." Noise barrier planning principles must be implemented to ensure **all** habitable rooms have a window in an external wall. A window can provide daylight but will need to be acoustically treated. Wording implies habitable rooms can provide no window, which is unacceptable. Proposed amenity significantly less than expected for high density development. Conflicts with DC 38. **36** Supported. **37** Supported. **38** The control includes a requirement that courtyards be 'fully open to the sky'. This would prevent the installation of a pergola or other means of shading device. This control should be changed to refer to courtyards that are used to demonstrate compliance with the direct sunlight requirement only. Inconsistent use of terms *'courtyard', 'skylight'* p39 at design guidance 11 and 15, '*courtyard housing'* p191, and this Design Criteria. Can enable a habitable room to have primary aspect into courtyard if dwelling is defined as a 'courtyard housing' as advocated at p191 Clarify use of the term '*courtyard*' and '*light well'*. In Manor House development, DC 38 enables a '*courtyard*' to be a central space around which all dwellings may face to address fire separation and protection alongside boundaries caused by the inadequate minimum setbacks. The use of the term '*light well'* is what DC 38 refers. A '*light well'* is not a '*courtyard*'. All Design Criteria **must** ensure amenity is never less than SEPP 65 for high density housing.
3.4J **Natural Ventilation** 3.4J Natural Ventilation  Objective 3.4J-1 All habitable rooms are naturally ventilated Design criteria 39. Natural ventilation is available to each habitable room. 40. Each dwelling is to be cross ventilated. 41. The area of unobstructed window openings should be equal to at least 5% of the floor area served.	**39** Supported. **40** Supported and amended to add**:** "*Maximum building depth must not exceed 16m measured glass line to glass line to achieve cross-ventilation."* **41** Supported. All Design Criteria **must** ensure amenity is never less than SEPP 65 for high density housing.
3.4K **Ceiling Height** 3.4K Ceiling Height  Objective 3.4K-1 Ceiling height achieves sufficient natural ventilation and daylight access and provides spatial quality Design criteria 42. Measured from finished floor level to finished ceiling level, minimum ceiling heights are: • 2.7m to the ground floor bedrooms • 2.7m to all living rooms • 2.4m to first floor bedrooms	**42** Poor control that achieves poor amenity. The Manor House type will have dwellings above and below. The control should be amended as follows "*Measured from finished floor level to finished ceiling level, minimum ceiling height is 2.7m for all levels of the development.* All Design Criteria **must** ensure amenity is never less than SEPP 65 for high density housing.
3.4L-1 **Dwelling Size and Layout**	**43** Supported However requires the skill of a registered architect to ensure efficient use of space that enables functional furniture layouts. A merit assessment is required by a suitably qualified professional to determine the spatial efficiency of internal dwelling layouts. A PCA cannot carry this out and therefore, it is highly likely dwellings will be poorly designed. **44** Supported. **45** Supported.

3.4L Dwelling Size and Layout  **Objective 3.4L-1** The dwelling has a sufficient area to ensure the layout of rooms are functional, well organised and provide a high standard of amenity **Design criteria** 43. Dwellings are required to have the following minimum internal areas: • Studio 35m² • 1 bed 50m² • 2 bed 90m² • 3+ bed 115m² 44. The minimum internal areas include only one bathroom. Additional bathrooms increase the minimum internal area by 5m² each. 45. A fourth bedroom and further additional bedrooms increase the minimum internal area by 12m² each. 46. Kitchens should not be part of a circulation space, except in 1 bedroom dwellings. 47. A window is visible from any point in a habitable room.	**46** Supported and amended to add *"and studios"* **47** Supported. **49** Supported. **50** Supported and amended to add "*Room proportions must be rectangular to enable functional and efficient furniture layouts and accommodate circulation."* Manor Houses must be designed by a registered architect and assessed by DA pathway. They are unsuitable as complying development.
3.4L-2 **Dwelling Size and Layout**  **Objective 3.4L-2** Dwelling layouts are designed to accommodate a variety of household activities and needs and is appropriate for the number of occupants **Design criteria** 48. One bedroom has a minimum area of 10m² and other bedrooms 9m² (excluding wardrobe space). 49. Bedrooms have a minimum dimension of 3m (excluding wardrobe space). 50. Combined living and dining rooms are to have a minimum area of: • 1 and 2 bed 24m² • 3+ 28m² 51. Living rooms or combined living/dining areas are to have a minimum width of 4m (excluding fixtures).	**51** Supported. Manor House type is intended for smaller dwellings so can withstand smaller sized development only where design is high quality and internal layouts are efficient. Manor Houses must be designed by a registered architect and assessed by DA pathway. They are unsuitable as complying development.
3.4M **Private Open Spaces** 3.4M Private Open Spaces **Objective 3.4M-1** Dwellings provide appropriately sized private open space and balconies to enhance residential amenity **Design criteria** 52. All dwellings are required to have a primary private open space of at least: • 1 bed - 8m² • 2-3+ bed - 12m² • Ground floor dwellings - 16m² 53. The minimum dimension of the included area is 2m, and excludes any storage space **Objective 3.4M-2** Primary private open space and balconies are appropriately located to enhance liveability for residents **Design criteria** 54. Primary open space and balconies is to be located adjacent to the living room, dining room or kitchen to extend the living space. 55. 50% of the primary private open space should be covered to provide shade and protection from rain. 56. Balconies and terraces above ground floor must orientate towards the street or rear and not to a side boundary	**52** Supported. **53** Supported. **54** Supported. **55** Supported. **56** Supported.
3.4N **Storage** 3.4N Storage **Objective 3.4N-1** Adequate, well designed storage is provided in each dwelling **Design criteria** 57. In addition to storage in kitchens, bathrooms and bedrooms, the following storage is provided: • 1 bed 6m³ • 2 bed 8m³ • 3+ bed 10m³ 58. At least 50% of the required storage is to be located within the dwelling. 59. Storage not located in dwellings is secure and clearly allocated to specific dwellings if in a common area.	**57** Supported. **58** Supported. **59** Supported.
3.4O-1	**60** Not Supported. Only where access is from a rear public lane way. The car parking requirement in control 60 is inadequate.

Car and Bicycle Parking 3.4O Car and Bicycle Parking  Objective 3.4O-1: Car parking is provided appropriate for the scale of the development Design criteria: 60. Where parking is provided above ground, at least one car space is to be provided per dwelling 61. [Development applications only] Car parking is to be provided at the rate required for a dual occupancy within a Development Control Plan that applies to the land. If there is no rate in a DCP - 1 space is to be provided.	Two and three bedroom dwellings are likely to require at least two car spaces per dwelling. All other car parking must be 1-space unless in a basement. **61** Supported. KMC requires all multi-dwelling housing to provide a basement.
3.4O-2 **Car and Bicycle Parking**  Objective 3.4O-2: Parking and facilities are provided for other modes of transport Design criteria: 62. Covered space is to be provided for the secure storage of at least 1 bicycle per dwelling.	62 Supported.
3.4O-3 **Car and Bicycle Parking**  Objective 3.4O-3: Visual and environmental impacts of on-grade car parking and garages do not dominate the streetscape and have an appropriate scale relationship with the dwelling Design criteria: 63. On-grade car parking is to be setback from the boundary to the primary or secondary road by: • If the setback of dwelling is 4.5m or more - 1m behind building line • If the setback of dwelling is less than 4.5m – 5.5m 64. The maximum aggregated garage door width that has a frontage to a primary road is : Lot width / Aggregate garage door width 7.5-12.5m / 3.2m wide >12.5m / 6.0m wide 65. Where the lot width is <7.5m the car space and / or garage is provided from a secondary road, parallel road or lane. 66. Shade trees are planted between every 4-5 parking spaces to reduce increased surface temperatures from large areas of paving (A shade tree has a minimum mature height of 8m and mature spread of 6m). 67. Car spaces are to be separated by not less than 3m from windows or doors to habitable rooms of dwellings that are not associated with the parking space.	63 On-grade car parking must be confined to rear lanes, or corner sites, or provide dwellings with no car parking if close to public transport that is well served and frequent. Amend Design Criteria control as it relates to building setback not dwelling setback. 64 Design Criteria is inconsistent with Manor House type, other DCs for car parking. Amend to add "*All at-grade car parking must be accessed from a public rear lane."* **65** Delete as the Design Criteria is inconsistent with Manor House type. **66** Required to be reworded. The Design Criteria is not consistent with the Manor House type but does apply to all other types. Outcome dependent on occupants' future compliance. Experience suggests outcomes are poor. **67** Required to be reworded. DC not consistent with the Manor House type.
3.4P **Visual Privacy** 3.4P Visual Privacy  Objective 3.4P-1: Adequate building separation distances are shared equitably between neighbouring dwellings to achieve reasonable levels of external and internal visual privacy while retaining amenity for the dwelling. Design criteria: 68. A privacy screen is required where the distance from the window of a habitable room to the boundary is : • less than 3m, and the habitable room has a FFL greater than 1m above existing ground level, or • less than 6m, and the habitable room has a FFL greater than 3m above ground level Note: This does not apply to bedroom windows that have an area <2m² 69. A privacy screen is not required on any window that has a sill height greater than 1.5m, or any window that has a frontage to a road or public open space. 70. A privacy screen is required where the distance of a terrace, balcony or verandah to the boundary is : • less than 3m, and the habitable room has a FFL greater than 1m above existing ground level, or • less than 6m, and the habitable room has a FFL greater than 2m above ground level Note: The privacy screen is only required to the edge of the terrace that faces the boundary 71. A privacy screen is not required to a balcony or terrace that has an area less than 2m², or a balcony or terrace of any size that has a frontage to a road or public space. 72. Separation distances between windows and balconies of dwellings on the same site are double the distances above.	Amendment is required for all privacy design criteria. They indicate inadequate building separation controls and will result in poor design resolution. **68** Privacy should be primarily achieved through sound design resolution. Five controls around the use of privacy screens indicates visual (and acoustic) privacy is not achieved via the proposed building separations at 2H. The setbacks and building separation should be amended and increased consistent with SEPP 65 ADG separations. **69 Delete.** These conditions indicate inadequate setbacks from the boundary and should not be a condition that arises in this type of development. The setbacks and building separation requires amendment is all habitable rooms require privacy screens. **70** Generally reflects inadequate setbacks and building separation controls. **71** Generally reflects inadequate setbacks and building separation controls. **72** The same amenity issues existing between dwellings within a site and on neighbouring sites. The separation controls must not result in poor amenity within a development and less than is achieved for high-density housing. **73** Privacy screens over windows achieve very poor amenity and indicate poor design resolution in internal planning layouts, combined with inadequate building separation. The objective should be amended to include "siting of buildings, building separation and building layout." Proposed controls demonstrate building separation is inadequate. The controls should be amended to use SEPP 65 ADG visual privacy controls for building separation. Primary controls at 2H must be amended to address building separation and setbacks to achieve adequate visual and acoustic privacy without the need to add privacy screens to habitable windows and balconies.

	
3.4Q **Acoustic Privacy** 3.4Q Acoustic Privacy 	**3.4Q** has no requirements for sound noise barrier planning principles to best resolve acoustic privacy. Performance requirements at Part 2 Design Guidance 2Q is separated to from the DC with not reference in the DC to that design guidance. None of the Design Criteria relate to the objective of siting and layout and cannot be assessed by a PCA. **74** Supported. **75** Supported. Use SEPP 65 ADG acoustic privacy controls for building separation and dwelling layout.
3.4R **Noise and Pollution** 3.4R Noise and Pollution 	**3.4R** has no requirements for sound noise barrier planning principles to best resolve acoustic privacy and separate to statutory requirements. **76.** Supported. **77.** Supported **78.** Supported.
Configuration	
3.4S-1 **Universal Design** 3.4S Universal Design 	**79.** All dwellings should achieve Silver Level Liveable Housing Design Guidelines. **80.** Supported and should be amended to add an increase in number of Platinum Level housing to address long-term flexibility and financial equity for adaption of medium density housing.
3.4S-2 **Universal Design**	**81.** Supported. However, the Design Criteria needs to differentiate between common space and communal open space. If a communal open space is proposed in the front street setback, it will be inconsistent with Ku-ring-gai's development controls. Amend heading to: ***3.4T*** *Communal areas and Open Space*

3.4S Communal areas and Open Space 	
3.4S-3 **Universal Design** 	**82.** Supported. This should be applied to all medium density housing types. **83** Supported. This should be applied to all medium density housing types. **84.** Supported. **85.** Supported.
3.4U **Architectural Form and Roof Design** 3.4U Architectural Form and Roof Design 	**86.** Supported but a PCA is not the appropriate person and cannot assess design quality of architectural form. **87.** Supported, however PCA is not the appropriate person and cannot assess design quality of architectural form. **88.** Supported, however PCA is not the appropriate person and cannot assess design quality of architectural form. Manor Houses must be designed by registered architects**.** Councils and design review panels must retain assessment role. Councils provide independent, specialist expertise in all the relevant disciplines. PCAs are not trained, qualified or experienced in assessing design quality of architectural form.
3.4V **Visual Appearance and Roof Design** 3.4V Visual Appearance and Articulation 	**89.** Supported but a PCA is not the appropriate person and cannot assess design quality of architectural form. **90.** Supported, however PCA is not the appropriate person and cannot assess design quality of architectural form.
3.4W **Pools and Ancillary Development** 3.3W Pools and Ancillary Development 	**91**. Supported. **92.** Supported. **93.** Supported. **94.** Required. **95.** Supported.
Environment	

3.4X **Energy Efficiency**  3.4X Energy Efficiency Objective 3.4X-1 — Development incorporates passive environmental design Design criteria 96. Provide an outdoor area for clothes drying that can accommodate at least 16 lineal metres of clothes line 97. Any clothes drying area should be screened from public and communal areas. Note: A CDC or DA for a dwelling is required to have a BASIX Certificate that applies a minimum energy consumption target.	The Design Criteria do not relate to the objective. They are superficial elements of 'passive environmental design' **96.** Supported. **97.** Supported.
3.4Y-1 **Water Management and Conservation**  3.4Y Water Management and Conservation Objective 3.4Y-1 — Potable water use is minimised Design criteria 98. Provide individual meters for hot and cold water consumption.	Section 3.4Y has been taken directly taken from the proposed SEPP wording and is not a guide. In addition it is contradictory and too broad. The Guide should provide more guidance on achieving suitable outcomes rather than restating the exact wording of the SEPP. Some DCPs do not permit runoff from a medium density development to be managed by means of a charged system or on site disposal, so this requirement cannot achieve compliance with the second dot point following which requires compliance with Council's DCP. On site disposal is particularly unsuited to this type of multi-dwelling development due to the large impervious areas permitted. The Guide has to clearly state that an inter-allotment drainage system must legally benefit the site and contain a suitable pipe. There is no definition. Some certifiers do not understand the importance of the terms of an easement. Section 68 of the Local Government Act 1993 does not apply to Councils within Sydney Water's area of operations, so this criterion requires compliance with Council's DCP (should read "management and disposal of stormwater"). However this is not sufficiently clear. This applies to all Councils in the greater Sydney area and should be the first dot point, not the second. **99.** CDC pathway enables development to be designed without proper coordination with council requirements, nor demonstrated ability to link into the existing systems.
3.4Z **Waste Management**  3.4 Z Waste Management Objective 3.4Z-1 — Waste storage facilities are designed to minimise impacts on the streetscape, building entry and amenity of residents Design criteria 103. Storage areas for rubbish and recycling bins should be provided • within garages, • in screened enclosure that is part of the overall building design discreetly, or • in the basement car park 104. The number and type of bins provided is to be in accordance with Council policy.	**103.** Supported but must be exclusive of calculated private open space. **104.** Supported. All waste storage and garbage disposal must comply with council requirements for storage and collection.
Part 4 Delivery	
4.1 Strategic Planning	The statements are supported but are inconsistent with the outcomes proposed and enabled under the Codes SEPP and if council adoption of the MDDG occurs for the Development Approval pathway. The CDC pathway and scope of Development Standards within the Codes SEPP overrides strategic planning by promoting ad-hoc development outside Council's strategic framework and potentially impacting 92.3% of total area zoned for residential housing purposes in Ku-ring-gai's case. All the examples lead to significant loss of deep soil landscape, all fail to value the site character and physical and qualitative benefits of the rear yard landscape, and result in further fragmentation of green corridors, are unrepresentative of actual built outcomes, none adequately accommodate vehicles (apart from the image shown bottom left and only for the component of terrace housing that addresses the public road and has rear lane car access). **Figure 4-1** is schematic and unrealistic. All of the images demonstrate flawed examples of development types.
4.1 (cont'd) Planning Proposals	This pathway provides an avenue to modify locally developed strategic plans and can further erode the coordination of larger developments with broader strategic objectives.
4.1 (cont'd) Salt and Pepper	*The existing subdivision pattern and lot sizes, including width and depth, will in part determine the block size*. (**p156**) This statement alone demonstrates the failure of the document and proposed policy. The fundamental structure of all towns and cities is predicated on the street layout **not** subdivision pattern. The street layout defines the block size. The block size determines the subdivision pattern. The block depth sets the lot depth. Lot width is the only variable in the block pattern.

	While corner sites provide opportunities to create rear lanes, wide/deep sites allow opportunities for new internal streets, and shallow sites are best for traditional terrace housing forms. (**p156**) Internal streets must be prohibited unless they form strategic through-site connections between public streets, and facilitate orderly redevelopment where strategic planning may change in the future. As a type, they isolate dwellings, lead to significant loss of deep soil landscaping to hard stand car parking and access, prevent through site linkages, has long term negative impacts on landscape and street networks, can force the use of cars for simple pedestrian movements within a suburb, and prioritise the impact of vehicles on our suburbs beyond the street to deep within a site. This type should only be permitted where all car parking is in a basement.
4.2 **Pre-Application Meetings**	Pre-DA meetings are supported as providing the most constructive and smoothest progress of a DA to approval. They are most effective when the DA then satisfies the local planning strategies and addresses the key identified strategic and site specific issues.
4.2 (cont'd) Complying Development	There is no process for complying development to undertake a pre-DA meeting. This further erodes the positive influence of strategic planning policies. It results in an ad hoc redevelopment process that could be on very large amalgamated sites that could have significant broader impacts on local communities. In our experience, proposed development that does not undertake a pre-DA meeting, results in poorer design outcomes, and lengthier assessment process resulting from multiple rounds of design amendments. The lack of consultation with Councils, lack of governance of PCAs, lack of independent checks-and-balances, and inherent financial conflict of interest of PCAs in the approvals process, by definition will result in the fragmentation of local strategic planning objectives. The fact that R2 and R3 zoned land in Ku-ring-gai represents 92.3% of land zoned for housing development demonstrates the extent of the possible erosion of well-developed and coordinated urban policies.
APPENDICES	
Appendix 1 **Pre-Application design proposal checklist**	The checklist is not a requisite of the CDC pathway. **Site Analysis** – clarify reference - Should be Appendix 4 and '*Medium Density Design Guide*". **Floor plans** – only require car parking layout for basements. This must include ALL on-site car parking to demonstrate landscape is capable of being achieved in the early design stage.
Appendix 2 **Application documentation checklist**	The water management design is listed under *Landscape plan*. This is unacceptable for either complying development or a development application. **Section 2Y-3 Design guidance** requires a separate design. A design by a suitably qualified and experienced engineer must be submitted with any application. It must be listed separately in the Appendix and include the following: • Be designed in accordance with Council's DCP. • Investigation and/ or design of any inter-allotment drainage system proposed for legal discharge of runoff from the development. • On site detention where required by Council's DCP to attenuate flows leaving the site and entering the public drainage system. • Retention and re-use of roof water to minimise both the use of potable water and the effects of development on downstream receiving waters by reducing the total volume of runoff leaving the site. • Water treatment measures where required by Council's DCP to achieve Council's water quality objectives. At **Page 193** the development shown does not provide any communal area for larger central communal open space which can be co-located with water sensitive urban design features. This should be amended to move the reference to documentation requirements of Schedule 1 of the *EP&A Regulation 2000* to be the first item in the 'Documentation' column.

	Site Plan, Landscape Plan, Floor Plans, Elevations, Sections must include requirement for dimensions. Certification by PCA is automatically voided if documents are not fully dimensioned because they cannot demonstrate compliance with Development Standards (building separations, setbacks, landscape, lot size, dwelling and room size, and all other measurable Design Criteria).
Appendix 3 **Design Verification Statement Template**	**Streetscape and Local Character** The panoramic photo requirement to show only 20m either side of the subject site fails to demonstrate *Part 3 Principal Controls* at 3.1A, 3.2A, 3.3A and 3.4A for *Primary Road Setback* for 40m has been satisfied. **Design Quality Principles** Provides inadequate description of the requirements of the verification needed to demonstrate each Design Quality Principle. Should be amended to add requirement for the statement to explain and demonstrate **how** the design achieves the Objectives and Design Criteria. Wording should be consistent with *the EP&A Regulation 2000* *Cl 50 (1AB) The statement by the qualified designer must:* *(a) verify that he or she designed, or directed the design, of the development, and* *(b) provide an explanation that verifies how the development:* *(i) addresses how the design quality principles are achieved, and* *(ii) demonstrates, in terms of the* [insert Medium Density Design Guide]*, how the objectives in Parts 2 and 3 of that guide have been achieved.*
Appendix 4 **Site Analysis Checklist**	Generally supported although more detail is required.
Appendix 5 **Recommended Principal Controls for Different Types**	Whilst it is noted that Clause 1.18 of the Codes SEPP will apply to the medium density development types, there is an ambiguous point in the "key considerations" for Manor Houses on page 195 of the MDDG which states that they are allowed on land zoned for low and medium density residential development. The notes on page 16 of the Explanation of Intended Effects qualify that a Manor House will be allowed as Complying Development on any land where multi-dwelling housing is permitted. Would there realistically be many instances where Councils allow multi-dwelling housing within the R2 zoning and, if not, should the reference to low density zonings in the "key considerations" be omitted? In addition, Manor Houses are noted on p195 as being of a scale similar to an oversized double storey single dwelling. Ku-ring-gai is unique in its abundance of heritage dwellings and conservation areas and medium density housing as Complying Development will seriously erode heritage conservation. A recent deemed refusal appeal for multi dwelling development located adjacent to a Heritage Item resulted in amendments to the design purely on heritage grounds. The building initially sat too far forward of the Heritage item and did not allow views to and from the item within the streetscape, setbacks to upper levels had to be increased and landscaping species and locations of trees were changed to provide for more appropriate screening species placed at more strategic locations on site. Complying Development would not provide this opportunity to achieve better outcomes. To go one step further, should medium density complying development be introduced, there is a strong case for limiting it only to those lots which are not bordered by any low density residential zones.
Two Dwellings Detached	**Design qualities** Rear lot subdivision is not supported. It generally achieves poor outcomes due to vehicle impacts within the small site area, and irrevocable loss of rear yard deep soil vegetation corridors. Battle-axe typology is generally poor and land is wasted accommodating driveways. They are only appropriate on very large, long sites where specific site conditions are conducive and appropriate landscape buffers can be provided. **Context and subdivision** Battle-axe type should not be supported. **Key considerations for development controls**

	Concentration of considerations regards streetscape, which is appropriate where both dwellings address the street. Battle-axe type fails consideration for the rear yard landscape, the rhythm of built-form to landscape as urban character, the value of our greenweb corridors and their environmental function across the suburbs. Type proposed with shared driveway for front and rear dwellings will not work due to AS2890 requirements for vehicle reversing swept paths requiring min 5.8m driveway width plus length of car 5.5m. It is a poor typology and should not be advocated. Figure p175. Should be deleted as it is a small lot rear yard subdivision is a poor typology. The schematic depiction is not representative of the impact of accommodating cars for AS2890 swept paths. Driveways need to accommodate reversing bays and loss of landscape far greater than indicated. The type fails to protect rear yard deep soil canopy planting. This landscape is the source of the green web that connects biodiversity corridors and which is a primary feature of the environmental health and landscape character in Ku-ring-gai and throughout Sydney's suburbs. Loss of this landscape resource contributes to Land Surface Temperature heat gains and results in measurable flow-on impacts to public health, sustainable energy use, water management, air quality, and urban character. **Example Plan:** There are a number of issues with the example plan as detailed below • there is no north point demonstrating appropriate orientation of the living areas, • the dwellings do not demonstrate cross-through ventilation at the ground floor without windows in opposing walls, • the wall extending from the corner lot dwelling to the side boundary of the neighbouring lot disconnects the landscape zones, • 'Rear' lot does not comply with the side setback development standard being built to boundary • does not satisfy Universal Design Silver level requirements. • Trees are schematic and demonstrate inadequacy of landscape control where none of the examples complies with the minimum landscape requirement at 2C for trees. (Note the setback provisions and landscape standards are inadequate for achieving Ku-ring-gai's landscape character.) The 5 points are incorrect as follows: *Tree planting in front setback* - This is the front of the corner lot only. *Garage Setback from building line* - Agree *Private open space* - Shown as paved area. POS covers all landscape in area title of dwelling *3m separation* [sic] *between buildings* - 'Rear' lot does not comply with the side setback development standard *Tree planting in rear setback* - This is side setback of this lot. Rear is the landscape zone opposite the front address of the dwelling. The examples demonstrate the inadequacy of the controls. **Table: Typical Principal Development Controls** Requires amendment as follows: • LEP and DCP controls must be retained for: o Strategic planning to control the location of medium density according to the specific LGA conditions of transport infrastructure, services, public open space resources, street and subdivision suitability o Permissibility o Min parent lot size for subdivision o FSR o Front and rear setbacks o Landscaped area o Desired Urban Character

	• Use specific, tested model exemplars of the type • Use the tested exemplar for all supporting diagrams to demonstrate consistency with all the specific controls • Specific recommended controls must relate directly to the specific exemplar (not propose wild ranges) this enables adjustment either up and down for differing parameters such as lot size • Controls for building separation and all side and rear setbacks ***must*** relate to habitable and non-habitable room functions and must not result in standards of amenity below that expected for high density development under SEPP 65 • Add requirements for the parent lot to meet specific conditions such as being a corner site, or with long axis addressing a street (for complying development) • CDC must limit the size of development to 2 dwellings; all other types must go through a DA process through Council. • Include control that sets a maximum dwelling size to address Australia's appetite for oversized housing. **Site Requirement for this type:** Parent lot must be a corner site or have its long axis addressing a public street. **Minimum Lot size:** Delete battle-axe. Not appropriate for small lot type.
Two Dwellings **Side-by-Side**	**Design qualities** **Context and subdivision** • *Minimum lot width high dependent on vehicle access.* This should be reconsidered in context of first dot point advocating best located on wide and shallow blocks and the min lot size controls so that vehicle cross-overs do not prevent or result in the loss of on-street car parking. **Key considerations for development controls** Should be amended to add "Public domain amenity of streets to be prioritised for pedestrians, retaining existing on-street parking, and street trees." This needs clarification *"Controls for setback, bulk, and scale, FSR, building height, landscape and private open space should be slightly more than a single dwelling house as there is a common boundary."* FSRs should be set to ensure site coverage is not excessive to achieve local desired landscape character and to ensure the maximum dwelling size is controlled in future development in our cities in response to climate change policies. The following comments are provided on the figures: • **Figures p177-178.** None of the images are consistent with each other. • **Figure p177 (left side).** No north point, schematic, landscape inadequate, tree planting not to scale, scaling of side setbacks wrong, absence of appropriate site coverage controls demonstrate impact of loss of deep soil. • **Figure p177 (right side).** Double garage does not comply with proposed standards, dominates front façade and streetscape. • **Figure p178 (top).** 3-d **i**nconsistent with "Example Plan" **Example Plan:** Better exemplar of type based on more realistic development. However, all side paths should be included as diagram is misleading to the extent of actual landscape achievable. Trees are schematic and demonstrate inadequacy of landscape controls for small lots unless parent lot is significantly large than permitted minim lot size. **Table: Typical Principal Development Controls** Requires amendment as follows: • LEP and DCP controls must be retained for: o Strategic planning to control the location of medium density according to the specific LGA conditions of transport infrastructure, services, public open space resources, street and subdivision suitability o Permissibility

	○ Min parent lot size for subdivision ○ FSR ○ Front and rear setbacks ○ Landscaped area ○ Desired Urban Character • Use specific, tested model exemplars of the type • Use the tested exemplar for all supporting diagrams to demonstrate consistency with all the specific controls • Specific recommended controls must relate directly to the specific exemplar (not propose wild ranges) this enables adjustment either up and down for differing parameters such as lot size • Controls for building separation and all side and rear setbacks ***must*** relate to habitable and non-habitable room functions and must not result in standards of amenity below that expected for high density development under SEPP 65 • Add requirements for the parent lot to meet specific conditions such as being a corner site, or with long axis addressing a street (for complying development) • CDC must limit the size of development to 2 dwellings, all other types must go through a DA process through Council • Include control that sets a maximum dwelling size to address Australia's appetite for oversized housing.
Terrace Houses **Car Parking to Primary Road**	**Design qualities** This type should not be permitted for the minimum lot size and permitted minimum lot widths. The type has detrimental impact on public amenity, along footpaths with excessive cross-overs, results in garaging dominating the streetscape, removes existing on-street car parking resulting in a loss of public amenity in favour of private amenity. Can only work where type is on very wide allotments resulting in subdivided lot with of min 12m or where close to railway stations where controls may permit a vehicle cross-over every 2nd or 3rd dwelling. This means only 30% of the development would be permitted at grade car parking. **Context and subdivision** The 2nd and 3rd dot points should be deleted. The type is highly ***un***desirable generally and on narrow lots or as a medium density exemplar in particular **Key considerations for development controls** Should be amended to add "Public domain amenity of streets to be prioritised for pedestrians, retaining existing on-street parking, and street trees." This required clarification - *Controls for setback, bulk, scale, FSR, building height, landscape and private open space should be slightly more than a single dwelling house as there is a common boundary.* FSRs should be set to ensure site coverage is not excessive to achieve local desired landscape character and to ensure the maximum dwelling size is controlled in future development in our cities in response to climate change policies. This should be deleted- **Min** *lot width where garages face the primary road should be 15m (7.5m each).* **Figure A-2** is a good example of a skilfully architect-designed development that is not representative of the type advocated by the schematic image and proposed development Standards. It is not representative of the bulk of this type of development across Sydney. Even Ku-ring-gai rarely sees this high-end design and construction quality. It is inconsistent with the *"Key considerations for developing controls".* It shows a double garage in a development of 12m+ lot width that is not representative of the type proposed by the development standards. **Example Plan:** The 'Example Plan' lot size is larger (200m2) than and inconsistent with the proposed Principal Development Standards (150m2) and not representative of proposed development. **Table: Typical Principal Development Controls**

	See comments previous sections above for general amendments to all recommended development standards. **Minimum Lot size:** Proposed 150m2 does not comply with min lot size of Codes SEPP for type. The example is Torrens title. The min lot size should represent Torrens title outcomes to avoid inconsistencies that will permit a lesser standard. Min lot sizes must be controlled by local planning instruments to achieve desired urban character, and be coordinated with local strategic planning policies. **Landscaped Area:** Minimum 40% deep soil area of minimum width should be included as design criteria for medium density development types.
Terrace Houses **Rear Lane Access**	**Design qualities** This type is the only terrace house model of at-grade car parking that achieves a positive streetscape character. It can ***only*** work where there is a block structure of primary roads and lanes. **Context and subdivision** Control for location and permissibility must be retained in local planning instruments and coordinated infrastructure, public amenity, suited to each LGA targeted needs addressing specific socio-economic, demographic, physical conditions and development objectives. **Key considerations for development controls** Should be amended to remove - ..."*Allow on land zoned for low and medium density residential development."* **Example Plan:** The 'Example Plan' lot size is larger (200m2) than and inconsistent with the proposed Principal Development Standards (130m2) and not representative of proposed development. **Table: Typical Principal Development Controls** See comments previous sections above for general amendments to all recommended development standards. **Minimum Lot size:** Proposed 130m2 does not comply with min lot size of Codes SEPP for type. The example is Torrens title. The min lot size should represent Torrens title outcomes to avoid inconsistencies that will permit a lesser standard. Min lot sizes must be controlled by local planning instruments to achieve desired urban character, and be coordinated with local strategic planning policies. **Landscaped Area:** Minimum 40% deep soil area of minimum width should be included as design criteria for medium density development types.
Terrace Houses **Basement Car Parking**	**Design qualities** Generally supported where the basement is confined to being below the building footprint and hard stand private open space areas ant the basement ramp can be well integrated with the development. The type has the potential to achieve high levels of amenity. **Context and subdivision** Control for location and permissibility must be retained in local planning instruments and coordinated infrastructure, public amenity, suited to each LGA targeted needs addressing specific socio-economic, demographic, physical conditions and development objectives. **Key considerations for development controls** Should be amended to remove … *"Allow on land zoned for low and medium density residential development."* **Example Plan:** Should be amended - Do not use dwelling types that require winder stairs. They are not permitted in NSW Housing Guidelines and do not achieve requirements for equitable, adaptable and flexible housing. They are inherently less safe for young children, adults carrying items between levels (such as children); they can prevent safe or even any movement of large pieces of furniture between levels.

	They are permitted under the BCA and play a valuable role on severely constrained sites where retrofitting into an existing dwelling or where single dwelling development is proposed. Winder-stair medium density typologies ***must not*** be advocated in the MDDG and must be prohibited in large development. **Table: Typical Principal Development Controls** See comments previous sections above for general amendments to all recommended development standards. **Minimum Lot size:** Proposed 100m2 does not comply with min lot size of Codes SEPP for type. The min lot size should represent Torrens title outcomes to avoid inconsistencies that will permit a lesser standard. Min lot sizes must be controlled by local planning instruments to achieve desired urban character, and be coordinated with local strategic planning policies. **Landscaped Area:** Minimum 40% deep soil area of minimum width should be included as design criteria for medium density development types.
Multi-Dwelling Housing Row Housing	**Delete this section in its entirety**. This typology has already resulted in substandard urban outcomes and must not be permitted.
Multi-Dwelling Housing Mews	**Delete this section in its entirety.** This typology has already resulted in substandard urban outcomes and must not be permitted.
Multi-Dwelling Housing Basement Car Parking	**Design Qualities** Can result in high amenity where FSR and landscape controls are matched to achieve the desired local urban character. FSR should not be greater than 0.7:1 for this housing type. Ku-ring-gai has an extensive, well-coordinated suite of development controls for this housing type that achieve high levels of amenity and the desired landscape character. **Context and subdivision** Control for location and permissibility must be retained in local planning instruments and coordinated infrastructure, public amenity, suited to each LGA targeted needs addressing specific socio-economic, demographic, physical conditions and development objectives. Should be amended to include "*Blocks will needs to be greater than **13m 24m** wide – but dependent on landscape context and landscape provided along the side boundary"* **Key considerations for development controls** The upswing in FSR of this type compared to the failed 'mews' type further reinforces why 'mews' is an inefficient and maladaptive housing type. Generally, the Key Considerations are consistent with Ku-ring-gai's DCP controls for side setback landscaping. **Example Plan** The exemplar is of a generally positive development. However, it is completely different type to the schematic on p189 (but consistent with the image at Figure A-4). It is an expensive construction and design type and not representative of the housing for which the MDDG is targeting. **Table: Typical Principal Development Controls** See comments previous sections above for general amendments to all recommended development standards. **Minimum Lot size:** clarify whether for Torrens title subdivided lot size or parent lot size prior to strata. The type is best on larger deeper lots where landscape and pedestrian amenity can be maximised. **FSR:** Generally 0.6.5 to 0.7:1 allows for yield needed to cover higher costs of basement construction while achieving a good landscape outcome. A poor landscape outcome is achieved with FSR of 1:1. **Landscaped area: 35**% as per the definition unsuitable for the Ku-ring-gai context. Minimum 40% deep soil area of minimum width should be included as a design criteria for medium density development types.
Multi-Dwelling Housing	**Design Qualities**

Courtyard Housing	The generic courtyard type can achieve high levels of amenity with they address a public street. They achieve very poor amenity where internal driveways are proposed because of the impacts of vehicles throughout the entire site. They have long term negative effect on the landscape in suburban areas and are generally unsympathetic to the desired urban character of most medium density suburban areas. There are very limited places this type is applicable in NSW where the build-to-boundary controls apply. Delete type and replace with this example with one more conducive to the broader NSW suburban context, or graphically emphasise the strategic linking of two existing streets that would be a requisite of the type**.** **Figure A-5** is located on a public lane and is not representative of the diagram Figure to the left p191. It is the work of highly skilled architects and is not representative of the development anticipated in the MDDG to be *"delivered by a range of builders with simple and often less expensive construction methods."* p7 *Explanation of Intended Effects*. **Context and subdivision** Requires highly skilled practitioners to successfully implement given the complex relationships that need to be balanced. Local development controls must be retained to control location and performance benchmarks for principal development standards. **Key considerations for developing controls** Reinforce requirement that privacy must not be achieved by privacy screens over openings. Privacy must be achieved through sound design and building separations highly dependent on surrounding context. Last dot point unfinished. **Example Plan** Example does not accommodate cars and is inconsistent with proposed principal development controls. There is no street on any boundary. None of the dwellings address a public space. Cross-through ventilation at ground level is limited by the lack of openings along the front façade, and their location needing air to turn corners. The first floor void is located so there is no cross through air movement between levels. **Table: Typical Principal Development Controls** See comments previous sections above for general amendments to all recommended development standards. **Landscaped Area:** 10-15% is unsuitable in Local Government Areas such as Ku-ring-gai. Minimum deep soil area of minimum width should be included as design criteria for medium density development types. **Setbacks:** First floor setback of 3m inadequate and must be dependent on internal functions of rooms.
Multi-Dwelling Housing **Large Lot Master Plan and Communities**	**Design Qualities** Require qualified multidisciplinary teams and should not be included in the MDDG. They are large scale development, complex and will not be carried out by small to medium sized developers and builders**.** **Figure p193** Should be deleted. This schematic representation is over simplified, and demonstrates the worst of these types of developments. All internal driveways are dead ends and unless located on a classified road where access can be limited, this type is contrary to sound city place-making principles. All internal driveways must link to surrounding street networks or enable provision for future connections. This requires careful strategic planning in consultation with councils and Government Departments to coordinate the desired street network and though site connection locations, and infrastructure requirements. The communal spaces and amenity in this example are absent. The land area required accommodating vehicles in this typology is inefficient. It requires vast areas of hard stand replacing existing or potential deep soil landscaping. The schematic quality of the diagram is crude and not representative of the built form reality. **Context and subdivision** The type used in the diagram p193 is regularly rolled out at the fringes of metropolitan Sydney and is a model that fails all sound

	urban planning principles particularly for housing adapted for climate change, lowering land surface temperature, and open space amenity. Better outcomes for *large growth areas and high demand for large quantities of housing* are readily achieved with other higher density housing types such as apartments. Apartments can be lower scale but readily achieve far higher amenity than proposed under the MDDG, are more efficient users of land, freeing up vital areas for public and communal spaces. **Key considerations for development controls** **"**Public and communal domain structure including prioritised pedestrian networks" should be prioritised. **Figure p193** is a poor representation of the key considerations. **Table: Typical Principal Development Controls** See comments previous sections above for general amendments to all recommended development standards. Typical development controls here are meaningless as they will greatly vary depending on the broader strategic objectives. The accompanying 3-d graphic is meaningless and demonstrates very poor master planning.
Manor House	This is potentially good typology that could have broad application where strategically located. The type can suit lower or higher cost housing depending on the applicable local development controls, which should prevail to establish suitable principal development controls specific to the LGA and locations within the LGA. Larger sites with dual street frontage are required so that vehicle parking does not compromise streetscape character, landscape character within the and around the site, or occupant amenity. **Figure p195** - Diagram has no north point. It is schematic not based on a good exemplar of real development. Analysing the failures: The bottom example illustrates the worst fundament design principles and fails the design quality principles. Yet if a Design Verification Statement is submitted, it would be certified by a PCA as compliant. One or other of the levels advocate living areas with a southerly aspect if the ground floor shows living areas with a northerly aspect, three-quarters of the entire northern side of the lot comprise hard stand and garaging. The planning layouts fail to demonstrate fundamental planning principals for acoustic privacy by locating living areas of the first floor above the sleeping areas of the floor below (or vice versa). **Context and subdivision** Generally agree. In Ku-ring-gai the current minimum lot width of 24m for medium density in R3 zones should prevail. If used in low density R2 zones, the minimum lot width should be increased to 24m to accommodate the larger building footprint. **Table: Typical Principal Development Controls** See comments previous sections above for general amendments to all recommended development standards. **FSR:** should not exceed 0.4:1 but should be tested with local development controls for medium density housing. On a site of 1000m2 it would permit a maximum of: 4 dwellings @ 100m2 3 dwellings @ 130m2 2 dwellings @ 250m2 **Landscaped area:** would need to be tested to achieve Ku-ring-gai's KDCP 6A.5 and 6A.6 for site coverage and deep soil landscape.
Glossary	Notes: **1. HOUSING TO RESPOND TO CLIMATE CHANGE** *Pathways to climate adapted and healthy low income housing, NCCARF, 2013,* https://www.nccarf.edu.au/sites/default/files/attached_files_publications/Barnett_2013_Climate_adapted_low_income_housing.pdf *3.4.3. Use of cooling devices in the home* (p23)

	A recent Australian study by Farbotko and Waitt (2011) concluded that residential air conditioning is a potentially maladaptive technology for reducing the risk of heat stress in low income households. They argue that while it has the potential to provide relief during hot weather, it comes with a double burden in the form of increased electricity usage and the risk that it won't be available when it is needed the most due to power outages, which are also associated with extreme heat. *3.5.2 Vegetation shade and shelter around home* (p24) *When planted around buildings, trees provide shade, protection from winds and modify the ambient conditions around individual buildings making conditions more comfortable for people (Akbari 2002). Direct shade on buildings affects energy use and thermal comfort by reducing solar heat gain through windows, walls, and roofs.* *Trees and shrubs planted around buildings reduce radiant heat gain and unwanted glare and will add moisture to the air through evapotranspiration. It has been shown that air is more humid and up to 5ºC cooler in the shade of trees in summer than in areas where there are no trees (Taha et al. 1988, Parker 1989, Fisher 2007, Souch and Souch 1993).* *The amount trees influence energy use and comfort levels depends on the general climate, the building type, and the size, type and position of the trees (Heisler 1986). Various studies estimate that properly sited trees can save between 10% and 50% of annual energy use in conventional houses, compared with the same houses in the open (Yu and Hien 2006, Akbari and Konopacki 2005, Simpson and McPherson 1996).* *4.1 Neighbourhood and Role of Place* [Land surface temperatures] *can have a major influence on the internal temperature of a building.* (p27) *4.4.1 Heat exposure and the built environment* *…Each city has large areas where land surfaces temperatures are higher than other parts of the city and these areas correspond mainly with areas of low vegetation cover. There are also more localised 'cool spots' associated with features such as parks and river courses. These findings are consistent with other studies that show the importance of vegetation and other built environment factors in determining land surface temperatures (Weng 2009, Bottyan and Unger 2003, Eliasson 1996, Dousset and Gourmelon 2003).* (p30) **2 STAIR SAFETY** http://www.housing.nsw.gov.au/__data/assets/pdf_file/0010/328537/DesignStandards2014Revision1.pdf http://www.yourhome.gov.au/housing/livable-and-adaptable-house http://www.liveablehomes.net.au/documents/CAD_Images/Jpeg/Fig24_Internal_Stairways.jpg http://www.liveablehomes.net.au/documents/CAD_Images/Jpeg/Fig24a_Internal_Stairways-Section.jpg http://ddadesign.com.au/welcome/Accessible-Stairs-ramps-and-lifts.pdf http://ddadesign.com.au http://hia.com.au/~/media/HIA%20Website/Files/Media%20Centre/Submissions/2010/Reducing%20the%20Risk%20of%20Slips%20Trips%20and%20Falls%20in%20Buildings%20BCA.ashx https://www.monash.edu/__data/assets/pdf_file/0011/218459/haz59.pdf Equitable adaption. Acorn Stairlifts (01.06.2016) quoted $4,000 to $4,500 to install a stairlift into a straight-run flight compared to $11,000 to $13,000 to install one into winder stair flights. Circulation clearances for adaption: There is also a grey area with the Australian Standard for circulation clearances for stairs, hallways and landings because they do not make any allowance for installing a stairlift. This requires an additional min 350mm to accommodate the folded chair when stored on a landing or on the stair if it's not to encroach into the otherwise compliant hallway or landing clearances. http://www.acornstairlifts.com.au/stairlifts/curved-stair-lifts http://www.huffingtonpost.com/jim-t-miller/how-to-choose-a-home-stair-lift_b_3521648.html