



Revised Canberra Brickworks and Environs Planning and Development Strategy

Response from the Australian Institute of Landscape Architects (ACT Chapter)

Thank you for the opportunity for the Australian Institute of Landscape Architects, ACT Chapter (AILA ACT) to respond to the revised Canberra Brickworks and Environs Planning and Development Strategy, dated February 2015 (the 'Strategy').

Our comments are structured as per our previous submission, dated 14/07/2014, and relate to the areas that require a higher degree of resolution and revision to improve the Strategy's landscape outcomes to a level that befits this locally, nationally and internationally significant location.

Executive summary

AILA ACT is a committed advocate for positive landscape and broader community outcomes from the Territory Government's development proposals. We are supportive of the Strategy's vision to create a vibrant new community around a revitalized Canberra Brickworks Complex.

However, AILA ACT considers that the Strategy proposes a development that does not deliver the high quality public realm benefits as claimed in the Strategy's vision statement. AILA ACT suggests that the Strategy:

1. disregards the intent of the Territory Government and National Capital Authority's guidelines with regards to open spaces and the vegetated nature of hills, buffers and ridges;
2. extinguishes a healthy established vegetated landscape element that is an intrinsic component of Canberra's spatial quality and urban form
3. imposes upon the site, and on the broader landscape, an excessive number of multi-storey buildings, that at a significantly larger scale than the existing urban form; and,
4. diminishes the heritage value associated with Dunrossil Drive and the nationally significant symbolism of the vice regal activities associated with Government House.

AILA ACT is an active participant in the consultation process established by the LDA for the redevelopment of the site identified in the Strategy. Our support for and engagement with the process is on record, however we have undertaken a more detailed review of the revised Strategy and consider that the Strategy appears not to incorporate consultation outcomes in the critical areas



of existing vegetated open space and hills, buffers and ridges; existing planting arrangements; proposed building footprints, height and locations; and proposed road and pedestrian networks.

AILA ACT stands ready to contribute further to the LDA's development of the Strategy and recommends that this would be undertaken most efficiently by an early opportunity to engage face to face with the LDA's design and planning professionals in a series of design charrettes.

Response

This response is made to the following documents provided by the LDA:

- Canberra Brickworks and Environs Planning and Development Strategy, September 2013
- Canberra Brickworks and Environs Planning and Development Strategy, February 2015
- CB+E Traffic, Transport and Infrastructure Assessment, 17 February 2015 (SMEC report)
- Canberra Brickworks Landscape Revision 5, 19 February 2015;

Landscape buffer to surrounding visual catchments

The existing plantings and open spaces are extremely important as a visual catchment and act as the separator between South Canberra and Woden Valley. They are a critical element in the landscape and spatial layout of the New Town urban policy and the 'Y' Plan transport and the satellite town centre development framework adopted by the National Capital Development Commission (NCDC) in the 1960's. This framework reinforced the Griffin legacy whereby landscaped buffers act to contain each identifiable component of Canberra's development, and that as Canberrans travel between the valleys that house the suburbs and town centres, it is the hills, buffers and ridges that maintain and reinforce the integrity and character of the landscape as the prime form generator in the layout of Canberra's town centres and associated suburbs.

This landscape characteristic of vegetated hills, buffers and ridges is unique to Canberra and is reinforced by the ACT Territory Government's Territory Plan and the NCA's National Capital Plan, particularly the National Capital Open Space System (NCOSS) and the Capital Plan's designated areas, which include parts of this site. The areas of the site that are subject of the Territory Plan, outside of the Brickworks precinct, include urban open space and restricted access open space.

As noted in our previous submission, the site's southwestern, or Cotter Road, edge is sited along the ridge which connects Red Hill through Deakin and Yarralumla to the Government House grounds and beyond to Scrivener Dam. This ridge and the existing vegetation that covers it form an essential and the most visible part of the landscaped buffer between the South Canberra and the Woden Valley.



Australian Institute of Landscape Architects



Above: View northwards from Woden Valley along Yarra Glen to the site's southeastern edge, and in the photo on the right, westwards along Adelaide Avenue to the site's eastern corner. Both photos show the landscaped character of the existing inter-town buffer as a line of dark green trees along the Red Hill - Scrivener Dam ridgeline.



Above: Views along Yarra Glen towards the city, with Black Mountain and the landscaped buffer forming the mid and distant views. This changes as vehicles get closer to Adelaide Avenue where the buffer becomes more immediate. The buffer plantings act as the visual catchment separator and view shed backdrop. This buffer is critical to the intent of the Griffin legacy and the NCOSS – both forming the landscape experience of Canberra as a unique city.



Above: Views from Cotter Road towards Dunrossil Drive and Adelaide Avenue, the landscape buffer forms the visual catchment and provide backdrop to the pastoral setting of the Cotter horse paddocks and road networks.

Australian Institute of Landscape Architects

GPO Box 1646 CANBERRA ACT 2601

Phone: 02 6248 9970 Fax: 02 6249 7337

Email: admin@aila.org.au Website: www.aila.org.au

ABN: 84 008 531 851



Australian Institute of Landscape Architects

We note that the revised Strategy's significantly increased building heights, footprints and location poses a significant threat to this unique reading of the prominence of the landscape and does not conform to the stated intent of the National Capital Plans, vis:

Maintain and enhance the landscape character of Canberra and the Territory as the setting for the National Capital. Protect the undeveloped hill tops and open spaces which divide and give form to Canberra's urban areas. (NCA)

Canberra will continue to develop as a series of discrete urban areas within a landscape setting of hills, ridges and other open spaces. Planning policies will protect the landscape and environmental qualities of the hills and ridges surrounding urban areas, the Murrumbidgee and other river corridors, the mountains and forests west of the Murrumbidgee River, and productive rural landscapes. (ACTPLA)

With reference to the revised Strategy's *Character and Opportunities Plan*, we note that the areas shown shaded as the Adelaide Avenue and Cotter Road Buffers are the actual road ways and not adjacent verges which could act as buffers. The significance of this is indicated by a comparison between the September 2013 Strategy's *Open Space Plan*, which balances a minimal buffer along Cotter Road with buildings whose footprints and height are more appropriate for that location, and the arrangements of the revised Strategy. The revised Strategy proposes a continuous line of six storey buildings broken only by intersecting roads. Whilst the revised Strategy's *Dwelling Diversity: Cotter Road Edge* drawings indicate that there 'could be' stepped building massing and articulated facades, there is no requirement in the Strategy to mandate this arrangement.

These six storey buildings and the removal of existing vegetation as indicated in the SMEC report, will entirely extinguish the landscape component of this buffer and replace it with a line of multi-storey buildings. The buildings would be approximately 20m high and twenty six metres above the ground level of Adelaide Avenue, whilst the nominated screening tree, *Quercus ilex*, are slow growing and typically only achieves a height of 14 meters after fifty years, even assuming optimal growing conditions.

However, the growing conditions will be sub-optimal given the proposed earth works which will create hard-packed subsoil conditions that usually prevent trees from thriving and possibly not surviving at all. In addition, the trees and any other buffer plantings introduced to replace the existing healthy ones, will be subjected to extensive winter shade as they will be downhill and to the southern side of the six storey buildings. This arrangement prevents optimal sunlight penetration, provides no shade during summer and, in combination with the prevailing winter south westerly winds, is likely to result in stunted growth and diminished screening.

As such, the Cotter Road Character Sketch is misleading in that the buildings will be significantly higher than the trees. The lack of a vegetated visual catchment will be most obvious when approaching the site from Woden, Weston Creek and Central Canberra and significantly remove the ability to read the landscaped character of Canberra. We consider the loss of existing trees as a major constraint requiring a generational transition period from exiting to the proposed outcome.

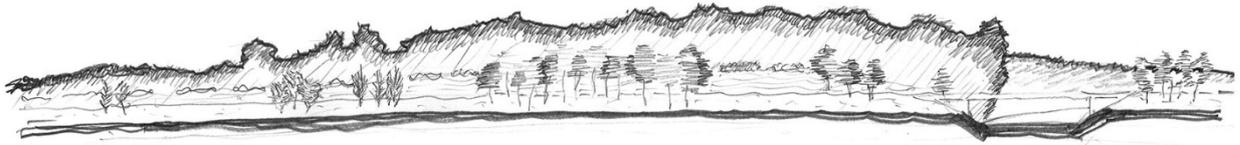


Australian Institute of Landscape Architects

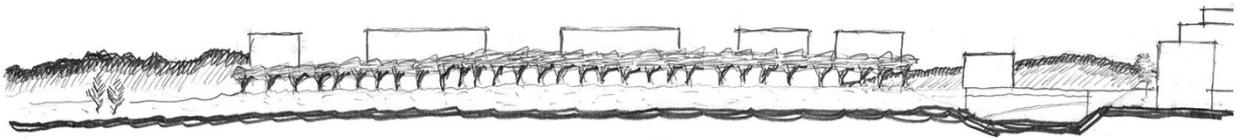
The following comparison of views of the site from the south indicate the extent to which the Strategy disregards the intent of the guidelines around vegetated open space and the hills, buffers and ridges of the NCOSS and more readily describe the existing and proposed conditions and the impact of the proposed buildings and tree removals on the landscape and ridgeline.

WEST

EAST



Above: North facing view of existing vegetated buffer along the Red Hill-Scrivener Dam ridgeline.



Above: Same view showing the replacement of a high tree line with massed buildings, inadequate screening and, on the right hand side, an inappropriately located and overly high group of buildings along Denison Street.

We note the reference to the 1918 Griffin Plan, with the remnants of the circular street layout at the Dudley and Novar street intersection being expressed in the plan. However, the extension of Dudley Street parallel with Adelaide Avenue reduces the primacy of this circular alignment. The Dudley Street realignment, and the three proposed buildings east of Abbott Street South are in a highly visible position and intrude into the viewshed from Yarra Glen and Adelaide Avenue. The buildings would also require the removal of the copse of trees that form the visual catchment when travelling southwest on Adelaide Avenue past Hopetoun Circuit. This zone should remain as an augmented landscape buffer.

Similarly, the revised Strategy's inclusion of five buildings of eight storeys and one of four storeys along Denison Street are significantly over-scaled and inappropriately sited. The four story and one of the eight storey buildings shown on the *Urban Blocks* plan will prevent the stated intention to restore parkland and interpretation of Cliathus Circle, as it's indicatively shown on the *Delivery* plan. In addition, they will create a canyon through which the existing bicycle path must traverse.



Australian Institute of Landscape Architects

Most importantly however, the built elements don't acknowledge the existing ridge's landform and covering vegetation as the most significant element of the view shed between South Canberra and Woden Valley. Clainthus Circle is the highest part of the site along the Red Hill- Scrivener Dam ridgeline near Yarra Glen, and as such, the Denison Street is elevated approximately 10 meters above Yarra Glen. To impose an additional 25 meter building height at this location will replace the vegetated nature of the current view shed between South Canberra and Woden Valley with a view of buildings from the three major approaches: Adelaide Avenue, Cotter Road and Yarra Glen. This is an extremely poor landscape outcome and undermines the Strategy's *Integration with Landscape* vision, and extinguishes the ability to read the Griffins' plan and the NCOSS.

Recommendations

- Increase the setback of development along Yarra Glen/Adelaide Avenue; retain existing vegetation and reinforce existing vegetated landscape buffers
- Delete Dudley Street east of Abbott Street South and the three buildings flanking Dudley St;
- Reduce the building height along Denison Street to match Deakin West's two storey character and retain the primacy of the landscape; we note that as the topography falls away towards Woden, the building heights could be increased to possibly four storeys in the lowest section of this landscape – thus retaining the integrity of the buffer
- Reduce height of buildings south of Park Avenue to four storeys maximum and ensure their footprints allow winter sunlight penetration into the Cotter Road buffer;
- Reinstate a more sympathetic building footprint arrangement similar to that shown in the 2013 Strategy's *Masterplan*, however with a retained (where possible) and increased buffer along Cotter Road; and,
- Mandate a 12 metre maximum height control within a buffer of 14 meter high trees to retain the suburban landscape that is a characteristic of much of Yarralumla.

Proposed landform, plantings and soil conditions

With reference to the Cotter Road buffer we suggest there is an opportunity to reflect the plantings characteristic of Canberra arterials with the planting of three rows to a width of 30-40 metres on each side of the roadway (80 metre curtilage), using *Ulmus spp*, *Quercus spp*, *Cedrus spp* and *Populus spp* - all plantings which reflect the existing character of both Yarralumla heritage and Yarra Glen plantings. This will reinforce the vice regal approach to the Dunrossil Drive entry and integrate the proposed buffer plantings with others in Canberra. Similarly, the existing group of trees at Dudley Street need to be retained to mark the bend in Yarra Glen which is viewed from both directions.

With reference to the SMEC report, we note that the proposal does not acknowledge the landform of the ridgeline which forms a significant element in the surrounding landscape of Central South



Canberra. In this report, the ridgeline has been levelled to provide broadly level building platforms and to facilitate a rectilinear street pattern. This may have economic considerations in providing for simplified civil engineering and building platforms, however, it can have a dramatic effect on the future functionality of the landscape particularly for street tree growth.

These engineered platforms need significant modification to provide for optimal tree growth. Current best practice excavation for tree root pits require that each street tree is given a significant volumetric capacity of suitable soil media to support the tree for long term growth. The volume required for a tree is a function of its height and spread. The volumes required are often not possible to be achieved within a street verge, and require calculations using the front setback. Where the development is at or close to natural ground, with minimal modification of existing conditions, there is existing topsoil and existing microflora in the soil media. Where an engineered platform of controlled fill has been provided, there is no site topsoil and minimal microflora in the soil media. In these situations, it is possible to provide for successful tree growth, however this requires significant excavation. The best practice solution for street tree planting in engineered fill is to excavate a trench parallel to the road, for 8m width x 1m depth. The excavated area is then connected to subsoil drainage. The trench is then filled with a modular plastic material (strata cell or similar), which allows for hard pavements to be placed over the material for drive crossings or similar. The end result is a significant linked area available for all trees within that side of the street.

In addition, the staged nature of the plantings over a period of 10 years will see the site's landscape significantly degraded, compared to its current condition, for the majority of that time. Furthermore, the slow rate of growth of some of the nominated species; the impact of the cut and fill on root growth; the increased overland flow due to soil being replaced with buildings, roads and other hardstand; and lastly, the decreased insolation levels, may prevent the proposed plantings from maturing for over 50 years.

We note the Cliathus Circle plantings are unlikely to be legible given that most of it is has been subjected to significant excavation, covered by roads and buildings and the Strategy's proposal to erect multi-storey buildings within its diameter.

Microclimate advantages seem to have been considered in terms of solar orientation, park and street tree plantings, but a more careful assessment of the microclimate implications of tree removal should be investigated. The impacts of the combined heat-island effect and wind exposure will impact on the successful thriving and degree of amenity afforded by the new plantings.

Recommendations

- Retain and augment existing buffer plantings using species common to Canberra's arterial roadways;
- All plantings in controlled fill are to be provided with 'strata cell' soil structural module system or similar, installed along all street tree plantings as described above;



- Undertake additional buffer and avenue plantings in Stage 1, and protect the canopies and root zones during subsequent stages, to accelerate the re-establishment of the landscaped quality of the Red Hill-Scrivener Dam ridge; and,
- Delete the proposed buildings from within the diameter of Clianthus Circle.

Dunrossil Drive axis

With reference to the September 2013 Strategy's *Open Space Plan*, we note that the revised Strategy has reduced the amount of open space and added two four-storey buildings at the intersection of the truncated Dunrossil Drive and the proposed Brickworks Road. This revision, and the proposal to access Government House from the site's primary access road, will impact the avenue which is included in the statement of significance of the Commonwealth heritage listing for Government House, vis:

Government House is approached along Dunrossil Drive which begins with a grove of oak trees and is lined with elms and robinias planted in 1918. The prominence of the elms is important as elm avenues are now quite rare, even on a world scale.

The Dunrossil Drive approach to Government House is one of the great pastoral character landscapes in southern Australia. The cross-sectional distance averages in excess of 80 metres, allowing for three rows of trees flanking the roadway. Recently the NCA has begun tree renewal to the precinct commencing with removal of blocks of *Pinus radiata* that flanked the formal avenue.

Despite this, the revised Strategy's *Masterplan* significantly reduces the ceremonial quality of the approach to Government House and alters an elm avenue that is considered internationally rare. The Strategy now proposes six storey buildings hard on the edge of the extended Dunrossil Axis, allowing for only one row of trees between the new road and the proposed building envelope. With reference to the September 2013 Strategy's *Street Hierarchy*, we note the revised Strategy's deletion of the proposed Reception Green and of Dunrossil Park, which was bounded on both sides by tree-lined roads. This arrangement created a total cross sectional public realm width that approximated the 80-meter cross sectional width of the existing Dunrossil Drive.

The revised Strategy's deletion of these parks and paired roads has decreased the public realm and introduced 12 four and six storey high building frontages into the vista along Dunrossil Drive when leaving Government House. This diminishes the existing quality of the landscape and of the heritage value and contrasts with the Strategy's stated intent of creating an avenue character on the Dunrossil Drive axis. We note here that the Minor Collector Section incorrectly shows two storey buildings along Park Avenue, which is inconsistent with the four and six storey buildings that are indicated in the *Urban Blocks* plan.

It would be preferable if the four and six storey built edge could be moved back to allow for at least three rows of plants each side of the Dunrossil Drive vista. This could possibly be accommodated through a reduction in the width of the proposed Westridge Reserve southwest of Denman Street. A triple-rowed avenue of trees along the new Dunrossil Axis will go some way to re-establishing the existing treed edge to the ridgeline.



Furthermore, the revision to the road along the eastern side of Quarry Park now proposes a connection to Bentham Street. This will further increase the 'rat runs' that are inherent in the Strategy's *Masterplan* as the site's road network will provide for the most direct route between the Cotter Road and Yarralumla which will:

- further decrease the ceremonial quality of the approach to Government House;
- limit the extent of planting and landscaping due to an increased requirement for clear fields of vision and reduced verge widths; and,
- decrease pedestrian and cyclist's safety along these roads.

As such, the proposed truncation of Dunrossil Drive, and the associated road network issues as noted above, does not deliver against the Strategy's *Celebration of Heritage* and *Streets for People* vision statements, nor does it deliver against *Site Opportunity #6* to 'provide a better interface to the arrival at Dunrossil Drive from Cotter Road' as it is proposed to add traffic lights to this intersection to manage the increased traffic volumes.

In the previous submission we highlighted the importance of the Dunrossil axis, the tree lined vista, the ceremonial arrival and departure experience and the width of the avenue curtilage. Given that the revised Strategy introduces a much denser and higher building mass into this symbolic space we note that the national importance of the arrival sequence, the vista and vegetated buffers are significantly diminished by the revised Strategy.

Recommendations

- Redesign the connection to Cotter Road so as to retain a dedicated access point to Dunrossil Drive and separate Dunrossil Drive from other access roads to the site;
- Reinstate the Reception Green on Brickworks Road on the Dunrossil Drive axis and delete the two four-storey buildings that have been added in the revised plan;
- Retain the Dunrossil Drive and Park Avenue curtilage at 80m to match the existing formal avenue's width, and allow for three rows of trees each side of Park Avenue. This could be achieved by decreasing the width of Westridge Park and moving the development blocks towards the north east;
- Undertake plantings along Park Avenue in Stage 1 to accelerate the re-establishment of the ceremonial quality of the Dunrossil Drive vista, prior to being overshadowed by any proposed buildings in Stage 2 and 3;
- Limit the buildings along Park Avenue and Cotter Road to four floors, with the upper two floors stepped back from the curtilage of the Dunrossil Drive axis;
- Relocate the larger buildings to the center of the development, ie reduce the massing along Cotter Road and increase the massing along Central Street; and,
- Review the name 'Central Street' as this does not reflect the nomenclature of street names in Canberra and specifically Yarralumla – perhaps to reflect the historic rail alignment.



Green infrastructure & WSUD

There seem to be unrealized opportunities within the design to use principles of ecological services to manage ground and surface water within both the hardscapes of the development and parklands through overflow into the Horse Paddocks and future wetlands associated with Yarralumla Creek. These need to be written into block development and open space development conditions to ensure that best practice urban storm water management can be achieved.

Additionally, there are aspirational statements around the inclusion of swales, retain/detain WSUD inclusions, however these are not mandated within the strategy and only appear as 'may be considered or included'

Recommendation

- Incorporate best practice WSUD and ecological services within streetscapes, internal spaces, and parks and areas adjacent to the proposed development

Building yield, heights and footprints

Typically the proposed massing arrangements of the new built form envisages lower density towards the existing Yarralumla housing and along the Denman Street Ridge, and higher density towards Cotter Road and Denison Street. This may assist to ameliorate the Yarralumla resident's concerns however the overall built volume (yield) within and adjacent to existing landscape buffers extinguish the reading of the landscape as detailed elsewhere in this response.

Recommendations

- Review the economic drivers that require such a high yield from the site, in particular if sale of the higher density sites is assumed to provide the funding for the Cotter Road extension to Denison Street; and,
- Reduce the yield to enable the retention of the primacy of the landscape along the site's existing buffers to Yarra Glen and Cotter Road.

Rectilinear grid form

As noted in our previous submission, we gave general support for an overall grid street planning layout, recognizing a mainly notional connection with some aspects of the 1918 Griffin Plan for the suburb. However, we note our concern over the extent of earthworks, and associated vegetation removal, to achieve this pattern.

It should be noted that the 1918 Griffin plan had a concentric radial road layout along this ridgeline which connected to the rectilinear grid where the landform allowed. This is typical of both Griffin's and the NCDC's road networks whereby topography was expressed through the orientation of roads allowing for a better reading of the landscape as the form giver for the city.



Recommendation

- Review the appropriateness of the proposed road layout if it requires such extensive cut and fill

Internal block activation

We note the proposal for commercial space in West Deakin and within the Brickworks, however the centre of the site is poorly serviced by commercial activity. In addition, non-vehicular access from the site to the south, west and east requires significant (i.e. over 500m) distances to be travelled along arterial roads.

Recommendations

- Provide for mixed use, i.e. shop-top, zonings in some of the new blocks to increase visitation and activation through the day; and,
- Provide off-road pedestrian/cycle routes, including bridges or tunnels across Yarra Glen and Cotter Road.

Conclusion

As stated in the Executive Summary, AILA ACT is willing to actively contribute to improving the Strategy's landscape and broader community outcomes, and as such, we request an early opportunity to engage face to face with the LDA's design and planning professionals in a series of design charrettes.

Amanda Evans, RLA

AILA ACT Chapter President

4 April 2015