



The Manager  
LDA

Brickworks @act.gov.au

Dear Manager

### Introduction

The Inner South Canberra Community Council (ISCCC) appreciates the opportunity to make this submission in response to the Land Development Agency's (LDAs) Canberra Brickworks and Environs Planning and Development Strategy (the Strategy).

The ISCCC recognises and accepts the need for urban infill to meet Canberra's future population growth and that this area is identified in the ACT Government's 2011 ACT Planning Strategy. The ISCCC does not oppose infill on these sites. The ISCCC is, however, concerned about the impact the proposed large number of residents and visitors will have on the surrounding areas, particularly Yarralumla and Deakin commercial and community facilities and traffic routes, which are already subject to comments and complaints about the adequacy of their existing capacity.

This submission should be seen as complementary to the submissions provided to you by the Yarralumla Residents Association (YRA) and Deakin Residents Association (DRA), and does not intend to duplicate the detailed matters discussed therein. We raise a number of broad issues which we believe should be the subject of further investigation and response by the LDA. The ISCCC is very willing and looks forward to continuing its discussions with the LDA and the Government on the detailed parameters and characteristics of the proposed development.

### 2012 ACT Planning Strategy

The ISCCC is of the view that this proposal fails to meet the majority of the Strategies, and Key Actions identified in the Government's 2012 ACT Planning Strategy. An indication of the nature of these concerns is at Attachment 1. Given this failure, the ISCCC asks the LDA to issue a statement of 'compliance' as part of an explanation of the planning strategy which underpins the proposed development.

The ISCCC does not consider the material issued by the LDA in any way forms an appropriate strategy. Much of it provides barely relevant context and we note that the brickworks themselves will merely be 'made safe'. The ISCCC would prefer to see a proper planning strategy which addresses all the Government's strategic plans, including community facilities, transport and traffic, and environmental, sustainability and landscape issues.

The proposed development is the size of a town centre without any of the facilities normally provided for a town centre. All the commercial proposals described in the Strategy are in anticipation of the private sector taking up this opportunity which may take many years. Given the sub-optimum outcome at Kingston Foreshore, which is likely to have more commercial appeal than this project, the ISCCC would like this element of the strategy reviewed.

### Territory Plan

The ISCCC is concerned that the LDA strategy does not, or does not demonstrate, compliance with the Statement of Strategic Directions documented in the Territory Plan (TP). The TP Statement includes “the principles for sustainable development as well as the spatial planning and urban design principles that are intended to guide the more specific policy content of the Territory Plan”. The ISCCC asks the LDA to issue a statement of ‘compliance’ with the Principles as part of an explanation of the planning strategy which underpins the proposed development. An indication of some of the inconsistencies is at Attachment 2.

Further, the terms low, medium and high density are used in the documentation but are not defined in the Territory Plan. This renders the description meaningless at best, and open to manipulation at worst.

### Biodiversity and water catchment management

The ISCCC is concerned about many issues of biodiversity, water quality, water management, above and below ground water flows and associated matters which are outlined in Attachment 3.

### Other ACT Government Planning Strategies, Guidelines and Principles

The ISCCC notes there are many other ACTG planning strategies and principles that need to be applied to the proposed Yarralumla and Deakin development. These include but may not be limited to the: Garden City Principles, Transport for Canberra, Climate Change Action Plan 3. The ISCCC asks that all these be addressed for a development of this size. Given community concern, particularly in Yarralumla, that the proposed development is not in keeping with the desired characteristics of the suburb, the ISCCC recommends that the LDA holds further discussions with the YRA to better understand those concerns.

### Transport and Traffic

The ISCCC shares the significant community concern about routing inter town traffic through the new development and the lack of adequate and appropriate traffic and transport planning. In this regard the approach seems to have been to restrict thinking to the boundaries of the Yarralumla section of the development without recognition of the impacts of traffic flows from surrounding areas, existing traffic hot spot connections in adjoining Yarralumla and Deakin areas. The ISCCC supports the ACTG intention to reduce car dependency but is of the view that this needs to be done in a way that makes it safe and convenient for all residents, not just those who may be very mobile and are time rich.

The ISCCC asks the LDA to reassess transport and traffic matters in conjunction with other ACT Government Directorates, and taking into account previous consultant reviews, before any further decisions are made regarding traffic and transport.

#### National Capital

The ISCCC also has a number of concerns about National Capital aspects of the development which have been raised in other submissions and will, no doubt, be raised by the National Capital Authority. Issues include but are not limited to the National Capital Open Space System, ridges and buffers, vistas and views, and ceremonial routes.

We are disappointed that financial considerations appear to be driving the scale and shape of this development, to the detriment of the national capital values which have served Canberra so well for many decades.

There have been many expressions over the years of these values. In research conducted for this submission, we were made aware of a draft Urban Design Issues paper prepared by the Interim Territory Planning Authority in 1990. This extract well summarises some of the considerations which have not been sufficiently taken into account in the development of the Yarralumla/West Deakin proposal:

*Canberra is more accurately described as a 'City in Harmony with Nature, where the natural elements such as the hills and rivers are a very powerful part of the image of the city. The naturalistic garb of the hills, their proximity to the developed areas, and their almost constant presence on the horizon from anywhere in the city, are unique attributes.....Apart from some areas to the east, the hills form a backdrop in all ground-level views. Their presence is more dramatic in the older areas of Canberra, where Griffin carefully aligned major roads so that the hills formed termini to vistas. In most areas, their presence is more powerful because of the absence of vertical man-made elements in the foreground....'*

It appears from what is known of the proposal, that the views of the distant hills looking south/southwest from Yarralumla ridge would completely or substantially disappear. The land south and south east of the brickworks was designated by the 1992 ACT Territory Plan for restricted recreation access and an important visual landscape buffer zone terminating the northern boundary of Woden, when viewed from along Yarra Glen.

The July 2012 *Canberra Brickworks Environs Planning Strategy Questions and Answers* published by the LDA and the ACT Government addressed this concern, which it summarised as 'Disregard for the historical basis for a green barrier to the west of Yarralumla, which is part of original Westbourne Woods and Burley Griffin's planned buffer, between inner Canberra and satellite towns of Woden, Weston Creek and Belconnen.' It went on to say that 'All options retain a green buffer between Yarralumla and Woden, albeit in a modified form. Griffin's 1918 plans also proposed development in this area. Also at the time those plans were drafted the population of the ACT was not anticipated to have grown to the numbers it is now and will be in the future...'

The ISCCC believes that the buffer will be substantially and irreparably compromised by the construction of the development on the scale proposed and we could not support the 'modification' of the green buffers in the way proposed.

The ISCCC also notes that Adelaide Avenue is a "Main Avenue" and a processional route and that, subject to advice from the NCA, access to the Governor-General's residence may be severely compromised under the proposal.

### Lack of consultation

Because the approach of 'consultation' for the project has resembled more a real estate marketing tool (elements of the Strategy and the so-called 'Fly through' demonstrate this), the ISCCC asks the ACT Government to reconsider, restructure and recommence the process for developing this project and in doing so to take into account the submissions made by the YRA, the DRA and the many other residents of the Inner South and more broadly within Canberra. A somewhat less hasty and more inclusive process could deliver better outcomes, including a much higher level of acceptance. There have been a number of instances in the past where so-called consultation has merely been a notice of intent issued for comment but no opportunity for dialogue.

In addition to statements of compliance referred to above, inner south residents require regular, interactive dialogue to ensure that the required issues are addressed, not bursts of brief consultation once in three or four years

The ISCCC also has concerns about other issues such as the description of the development as 'Brickworks and environs' which is somewhat misleading. The Brickworks is merely to be made safe and is incidental to the project which is primarily for a major residential development of the size of the existing Yarralumla suburb and about four fifths of the combined Yarralumla and Deakin suburbs.

### Inner South Community Consultation

Given the substantial public concern about the proposed development, the ISCCC held a public meeting on 7 July 2014, attended by 200 residents of Yarralumla, Deakin and other parts of Canberra. The meeting passed a motion adopting the terms of the petition circulated by the YRA and DRA, which at the time of writing has attracted 1700 (and growing) signatures. The wording of the petition is as follows:

*We, the undersigned, call for the current plans for the development of the Canberra Brickworks and Environs to be withdrawn and reworked recognizing the problems inherent in doubling the size of the population, the reworked plans should:*

- *Develop a plan in harmony with the existing dwellings and layout of the suburb that reduces building heights; is less dense; provides more green space; conserves more existing trees (including the oak plantation); retains existing walking trails*
- *Address the significantly increased traffic flow within Yarralumla and its neighbouring suburbs of Deakin and Curtin; build a traffic overpass near the Mint;*

*provide adequate parking for residents and visitors within the development and increase parking at local shopping and medical and other facilities in Yarralumla and Deakin*

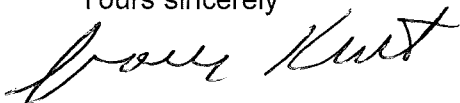
- *Provide detailed and fully costed plans relating to the immediate preservation of the Brickworks and for the next stage of the restoration and adaptive reuse of the site*
- *Provide extensive public reports and costings on plans for the safe removal of asbestos and other contaminated material from the site and implications for the health and safety of residents*
- *Explain and illustrate how existing infrastructure for electricity, water, sewerage and storm water will cope with a doubling of demand and provide detailed information on improved public transport options, community facilities and planned new amenities*

Other

The ISCCC acknowledges that a number of issues of concern raised by other groups and individuals may be more appropriately dealt with in other stages and processes of the planning and construction phases, and in other ACT strategic plans. However, there is a significant risk that early decisions will lock in poor results. The ISCCC would therefore expect the LDA to identify how, where and when these issues will be addressed.

The ISCCC would like to see a 'chronological plan of action' relevant to this proposed development. This would need to address all the stages (TPVs, DAs, EISs, budget and so on).

Yours sincerely



Gary Kent  
Chairperson  
Inner South Canberra Community Council

14 July 2014



**ISCCC Submission to LDA on the Yarralumla and Deakin proposed development  
Summary reference to ACT Planning Strategy strategies**

2012 ACT Planning Strategy Strategies	ISCCC Comment
<p><b>Strategy 1</b> Create a more compact, efficient city by focusing urban intensification in town centres, around group centres and along the major public transport routes, and balancing where greenfield expansion occurs.</p>	<p>The ISCCC would like the LDA to explain why the LDA proposal is being made now when:</p> <ul style="list-style-type: none"> <li>• it was not mentioned in the five year program under the ACT 2012 Planning Strategy</li> <li>• The ACT Planning Strategy states that only after the five year review of that Strategy completion and a consequent post five year review was it proposed to "Extend the program of master plans for centres and transit ways" ?</li> </ul>
<p><b>Strategy 2</b> - Improve everyone's mobility and choice of convenient travel by integrating the design and investment of the various networks and transport systems with the land uses they serve.</p>	<p>There is little evidence of integrated transport and land use planning in the LDA proposal which has only addressed this Strategy to the extent that it refers the proposed bus stop on Adelaide Avenue and this has in fact been separately mooted for some years, without success and may still not eventuate unless funded by the LDA. The benefit of such a bus stop seems very problematic in a practical sense due to the fact that people would have to walk a fair distance to it and then descend from the overpass to the median strip of Adelaide Avenue.</p>
<p><b>Strategy 3</b> Provide more cost effective and sustainable living options by improving the existing housing stock and establishing more choice in housing types in a variety of locations.</p>	<p>The LDA proposal does not refer to any differentiation in the housing to accommodate affordable, public, community, social or aged friendly There is also not much of a mix in the dwelling types. They are mostly apartment buildings, apart from a row of two storey dwellings behind Schomburgk Street, and on Kintore Crescent that may or may not be townhouses.</p>
<p><b>Strategy 4</b> Ensure everyone has convenient access to a range of facilities, services and opportunities for social interaction by reinforcing the role of group and local centres as community hubs</p>	<p>The LDA proposal merely refers to a network of foot and bicycle paths as if the whole community is sufficiently mobile and time rich to walk and cycle to all recreation, commercial and educational facilities and services. This proposal is additionally problematic due to the lack of provision of community facilities and services on the Yarralumla side of the development, and already over utilised parking at Yarralumla and Deakin shops.</p>

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Summary reference to ACT Planning Strategy strategies**

<b>2012 ACT Planning Strategy Strategies</b>	<b>ISCCC Comment</b>
<p><b>Strategy 5</b> Enhance Canberra's system of public spaces, providing vibrant, pleasant urban parks and places that everyone can enjoy by ensuring they are safe and accessible for the most vulnerable in our community.</p>	<p>The LDA has not addressed the current community usage patterns of urban open space recreation in this area. There will not be connectivity between the proposed parks in the development. This means that people wanting to walk from one to the other will have to transit busy residential streets which will also be rat runs due to these roads being the main access for traffic between Cotter Road and West Deakin. The safety of Quarry Park will be open to question due to the cliffs around it and the known contamination of the ground. In addition, there is no provision for parking in the Quarry Park, reducing its accessibility.</p>
<p><b>Strategy 6</b> Invest in design that will ensure urban change creates amenity, diversity and a more sustainable built form, and adds to Canberra's landscape setting.</p>	<p>The LDA needs to address how, under this Strategy it has been able to "encapsulate the key values of the community and articulate what is critical to the place-making and urban design". Indeed, the LDA has not listened to the community's views from 2010 and increased density from maximum 1100 in 2010 to 1600 in the 2013-14 proposal.</p>
<p><b>Strategy 7</b> Improve the city's efficiency, resilience to change and environmental sustainability by designing and incorporating innovative technologies and 'clean' initiatives into the physical infrastructure.</p>	<p>The LDA needs to explain how this Strategy is addressed in its proposal. The whole orientation of the development facing south-west, and the loss of the mature treed landscape, will increase vulnerability of the area of the summer heat and westerly winds (which is why Weston planted wind breaks along that ridge in the first place). The material provide for context of Strategy 7 includes that "<i>While the city's roads, stormwater, power and water supply systems have been well-designed and engineered, we must understand its condition</i>". the LDA's consultants have indicated that the existing infrastructure can cope, but other evidence from past consultants indicates that it will not. As noted earlier, connected wildlife corridors will be lost to make way for isolated parks. The golden sun moth habitat will be lost.</p>
<p><b>Strategy 8</b> Value the land and natural resources of the region by working collaboratively to manage urban growth, ensure connectivity and continuity in the natural systems and, where appropriate, conserve</p>	<p>The ISCCC recognises this Strategy needs to be read in the regional context, but would like the LDA to advise, what if any 'connectivity and continuity   the natural systems' is being affected and why.</p>



**ISCCC Submission to LDA on the Yarralumla and Deakin proposed development  
Summary reference to ACT Planning Strategy strategies**

agriculturally productive land.	
<b>2012 ACT Planning Strategy Strategies</b>	<b>ISCCC Comment</b>
<b>Strategy 9</b> Facilitate the development of a more prosperous region and a diverse economy by enhancing our travel and information networks and creating opportunities for a range of new enterprises.	The ISCCC would like the LDA to address this issue given that its proposal makes much of the potential use of the Brickworks, but only proposing to make it safe.



**Attachment 2**  
**Inconsistency of proposed Brickworks and environs development with key sustainable development principles in the ACT Territory Plan**

Principle	Comment
<p><b>General Principles:</b></p> <p>1.1 Planning processes and decisions will be focused on the combined achievement of economic vitality, community wellbeing, and environmental quality. Broad community involvement will be a key element in the pursuit of sustainable development, as will complementary regional strategies and agreements.</p>	<p>More than three years since the last community consultations, the ACT Government has come to the community with proposals for a massive development equivalent to the size of a whole suburb, and provided only six weeks for comment from the time of the first public information session. The dwelling density of the proposed development is about 50% higher than in 2010, despite community concerns about density proposed in 2010. The LDA did not make public the full planning strategy for the development until halfway through the consultation period.</p>
<p>1.2 Matters of broader National Capital, metropolitan and regional significance will be carefully considered when formulating Territory Plan policies and when making decisions about development proposals and sequencing.</p> <p><b>Environmental Sustainability:</b></p> <p>1.6 The pattern of development is to reflect land capability constraints resulting from topography, soils, geotechnical factors, drainage, natural hazards, micro- climate and the sensitivity of ecosystems. Particular attention will be given to the need to conserve soil, water and vegetation; maintain biological diversity; safeguard important ecosystems and ecological processes; and provide and protect wildlife corridors.</p>	<p>The proposal does not fully take into account the national significance of the site in terms of heritage and the processional route from Parliament House to Government House. It only provides for “making safe” rather than restoration and adaptive reuse of the national heritage icon, the Canberra Brickworks.</p> <p>The grid layout of the proposed development does not take into account the site’s topography which, according to the LDA’s SMEC consultants, will result in pooling of stormwater in the pads of buildings. There are inadequate arrangements for water sensitive design. Existing mature forest and most of the open green space, which provides habitat for the critically endangered golden sun moth and native temperate grasslands, will be cleared to make way for the development. Formal isolated parks will replace current green open space, with consequent loss of wildlife corridors.</p>
<p>1.7 Land and water resources will be planned in accordance with the principles of integrated catchment management and water sensitive urban design. Policies will seek to protect identified environmental values, whilst focusing on opportunities for multi-purpose use of resources. Special attention is to be given to protecting sources of the Territory’s water supply and to maintaining environmental flows in rivers and streams.</p>	<p>There are major issues about the consistency of the proposed development and the objectives of the Commonwealth funded Basin Priority Project aimed at improving water quality in the ACT’s water catchments, especially Yarralumla Creek and Lake Burley Griffin.</p>
<p>1.10 Integrated land use and transport planning will seek to maximise accessibility and transport efficiency, reduce energy consumption, support the preferred pattern of development, promote safety, safeguard environmental quality, and minimise greenhouse gas emissions.</p>	<p>There is no properly integrated transport and land use planning, with inadequate plans for public transport and for dealing with the congestion that the development will exacerbate at the junction of Cotter Road, Yarra Glen and Adelaide Avenue.</p>

**Inconsistency of proposed Brickworks and environs development with key sustainable development principles in the ACT Territory Plan**

<p>1.11 Policies for environmental planning and management will ensure amenity, minimise pollution, and protect public health and safety.</p>	<p>The proposed development will destroy highly valued community amenity through the clearing of the existing mature forest and open green space and replacement with much smaller and unconnected formal parks. There is still significant uncertainty about the threats to public health and safety posed by the asbestos and other contamination in the Brickworks and Quarry, and about the safety of the proposed remediation process.</p>
<p><b>Economic Sustainability:</b> 1.12 Planning policies will facilitate the widest possible range of commercial, retail, industrial, rural, tourism, and other forms of economic activity in order to promote new investment and a more diversified economy, to underpin employment growth, and to respond to changing economic opportunities</p>	<p>The proposal only provides \$1.5 million to “make safe” the Brickworks, reducing the likelihood of its adaptive reuse, which is now being left to the private sector. The proposed shops near the Brickworks, included in the 2010 proposal, have been removed in the 2014 proposal, with only a suggestion of a supermarket on the West Deakin side of the development (although there is provision on that side for 15,000 sq metres of commercial space)</p>
<p>1.13 The characteristics of the city that contribute to economic growth: Canberra’s role as the national capital and the seat of Federal Parliament; the ease of getting around the city; the safe and clean environment; and the vibrancy of centres as places of social, cultural and business exchange, will be enhanced.</p>	<p>The proposal does not enhance the national capital function as it does not enhance the processional route to Government House, and will create severe traffic congestion at the junction of Cotter Road, Yarra Glen and Adelaide Avenue.</p>
<p>1.14 An adequate and diverse supply of industrial land will be maintained to facilitate both conventional and new forms of industry.</p>	<p>15,000 square metres of commercial space will be provided on the West Deakin side of the development. It is not clear how the proposed high density residential development in the Brickworks will facilitate continued industrial use of that site.</p>
<p>1.15 Tourism will be fostered by permitting a variety of entertainment, leisure and accommodation facilities, including opportunities for ecotourism, in appropriate locations throughout the Territory.</p>	<p>The LDA’s information materials suggest the Brickworks and Quarry Park will become a “destination” but the plans indicate no provision has been made for parking, and it is unrealistic to expect all tourists would walk there from the proposed bus stop on Adelaide Avenue.</p>
<p>1.17 In planning future development and redevelopment, particular emphasis will be placed on cost-effective provision and management of existing and new infrastructure and services, taking into account whole-of-life and whole-of- system costs, including the ecological footprint of proposed developments and activities.</p>	<p>No provision seems to have been made for impact on existing stormwater, sewerage and electricity infrastructure, with the consultant’s report claiming such infrastructure is adequate. This is in a context where several areas in Yarralumla, including near the proposed development, don’t even have stormwater services.</p>
<p><b>Social Sustainability:</b> 1.18 Provision will be made for a comprehensive range of readily accessible community, cultural, sporting and recreational facilities, distributed according to the varying needs of different localities and</p>	<p>The proposed development includes no provision for additional community, cultural, sporting and recreational facilities - apart from isolated formal parks which are much smaller than the current green open space. The community will</p>

**Inconsistency of proposed Brickworks and environs development with key sustainable development principles in the ACT Territory Plan**

<p>population groups. In major centres and developing areas, sites will be safeguarded where necessary for particular community needs.</p>	<p>lose highly valued recreational amenity, namely, the walking trails that connect Denman Street to Dunrossil Drive along the old Uriarra Track.</p>
<p>1.19 A variety of open space types will be provided in each district or local area to meet the diverse recreational needs of residents and visitors, and to contribute to community health.</p>	<p>As noted above, the current large areas of green open space and walking trails will be replaced by isolated parks with no connectivity. A park on Kintore Crescent opposite Fraser Place zoned urban open space will be replaced with two storey dwellings.</p>
<p>1.23 The needs of people with disabilities will be recognised in all facets of urban planning, particularly including the design and operation of transport and access systems and the assessment of development proposals.</p>	<p>It's difficult to see how the proposed bus stop on Adelaide Avenue will be easy to access, as residents would have to walk onto the very busy Novar/Kent Street overpass and descend via a lift or ramp onto Adelaide Avenue. Most traffic heading to/from West Deakin will have to go through the new residential development, creating dangers for all residents, including those with disabilities. There appears to be no provision for parking in the Brickworks.</p>
<p>1.24 New suburban areas will be planned with a legible and permeable hierarchy of roads; conveniently located commercial and community facilities; a network of open spaces; an off-road system for pedestrians and cyclists; and provision for accessible public transport.</p>	<p>The proposed development is inconsistent with most of these criteria.</p>
<p>1.25 Heritage and cultural values will be safeguarded, including in particular those of the Territory's Aboriginal peoples and those derived from both its rural history and urban development as the National Capital. The distinctive qualities of residential areas and other places, as well as elements of community heritage, will also be recognised and their conservation promoted.</p>	<p>The plans only provide for "making safe" the Brickworks, not their conservation and adaptive reuse. While there are no registered indigenous heritage sites, we understand that a full investigation has not yet been undertaken.</p>
<p>1.26 Identified places of heritage significance will be protected in accordance with requirements for their conservation contained in the Heritage Register and any relevant heritage guidelines under the Heritage Act 2004. Special provisions are included in the Heritage Act for the recognition, registration and conservation of Aboriginal heritage.</p>	<p>While there is some provision for acknowledging the archaeological heritage of the Quarry, and of a segment of the railway remnants, the proposed plans only provide for "making safe" the Brickworks, not their conservation and adaptive reuse.</p>



**Submission regarding the Canberra Brickworks and Environs  
Planning and Development Strategy 2013.  
Dr Karen Williams**

**1. Introduction**

From the early days of the public consultation process the Brickworks Strategy (2010) acknowledged that:

*Landscape character and environmental systems are increasingly 'hot' issues in urban design. Multifunctional landscapes are being designed to contribute to environmental sustainability and amenity – to retain and distribute water, to contribute to air quality, and to ameliorate climate (5. Public Domain, p (ii));*

Environmental sustainability and amenity were reiterated as key principles of Canberra Brickworks and Environs Planning and Development Strategy - September 2013 ("Strategy 2013"):

*SUSTAINABILITY*

*Sustainability principles are fully incorporated into both the public domain and design of urban form.*

*PUBLIC DOMAIN*

*Improves linkages in the regional open space network and provides high-quality parks suitable for active and passive recreation (p 3)*

Strategy 2013 purports to be a strategic framework for land use consistent with the objectives and principles of the National Capital Plan and the Territory Plan, both of which advocate the use of integrated economic, social and environmental objectives to promote sustainable development.

However, the present submission addresses issues affecting ecological communities at the site and regional levels. These issues highlight an apparent disconnect of the environment from the urban landscape design model being presented in Strategy 2013.

In what follows, planning objectives derived from the National Capital Plan, the Territory Plan and the ACT Nature Conservation Strategy 2013-2023 ("NCS 2013-2023") will be defined. Outstanding issues will then be discussed under the headings of water, trees and wind, and landscape connectivity. While this involves the use of separate headings, it is obvious that these issues are interrelated.

What is lacking in Strategy 2013 is a broad ("all-of-landscape") strategic approach to the issues. The management and restoration of urban landscape and water catchment landscape should enhance the ecosystems connected with the brickworks development site in a way that provides environmental functions such as connectivity, habitat and amenity in parks, open space and streetscape while restoring the area's ability to provide both clean water and native habitat. Where possible, this submission will suggest how policy should be set to bring this about.

**2. Planning objectives**

Key matters of national significance listed in the National Capital Plan include:

*The development of a city which both respects environmental values and reflects national concerns with the sustainability of Australia's urban areas.*

That is also reflected in the Principles of Sustainable Development in the ACT Territory Plan's Statement of Strategic Directions, which state:

- Dr Karen Williams, 13.7.14 – Submission regarding the Canberra Brickworks and Environs Planning and Development Strategy 2013 – with grateful thanks for comments from various ISCCC members

*1.2 Matters of broader National Capital, metropolitan and regional significance will be carefully considered when formulating Territory Plan policies and when making decisions about development proposals and sequencing.*

*1.3 Economic, social and environmental objectives will be pursued in a balanced and integrated way, having regard to both short-term and long-term factors, such that present needs can be met without prejudicing the welfare of future generations, and without serious or irreversible loss of life-supporting natural resources or damage to the environment.*

*1.4 Wherever appropriate, the broader global and regional context and potential cumulative impacts of decisions will be taken into account. Where there are threats of serious or irreversible damage, lack of full scientific certainty should not be used as a reason for failing to prevent environmental degradation.*

*1.6 The pattern of development is to reflect land capability constraints resulting from topography, soils, geotechnical factors, drainage, natural hazards, microclimate and the sensitivity of ecosystems. Particular attention will be given to the need to conserve soil, water and vegetation; maintain biological diversity; safeguard important ecosystems and ecological processes; and provide and protect wildlife corridors.*

NCS 2013-2023 advocates 'assisting the ACT's biodiversity to adapt to a changing climate' and 'addressing the gaps in management of native vegetation remnants outside of reserves'. It explains that the changed biodiversity management context highlights the importance of implementing new conservation practices. Adopting a 'whole of landscape planning approach' is one suggestion; emphasising the restoration of ACT's focal landscapes – urban, rural and water catchments. Another suggestion put forward is placing a stronger focus on enhancing ecosystem resilience to better protect threatened species. NCS 2013-2023 maintains that 'a resilient, well-managed environment supports better health and wellbeing in our community.' Embracing the concept of the 'Bush Capital' it further suggests opportunities to extend and encourage the health and vitality of the ACT's biodiversity in urban areas, especially in ways that will help people cope with extremes of a changing climate.

### **3. Issues, with policy suggestions**

- **Water**

The Brickworks development adjoins one of the six priority catchments of the joint ACT/Commonwealth Government's Basin Priority Project ("BPP"). Strategy 2013 discusses water quality and flow management in terms of ecologically sustainable development and water sensitive urban design, as a closed system of rainwater harvesting and grey water recycling and black water treatment. Potential drainage of stormwater (and/or grey/black water overflows) into Lake Burley Griffin would pass through the grounds of the Royal Canberra Golf Club, leaching phosphates and high nitrogen fertilisers and poisons on their way to the lake. Such flows of ground water from the brickworks development via the golf course into Lake Burley Griffin would contribute to the existing blue-green algae problem. The severity of salinity issues would be determined by the depth of ground water, existing saline-affected areas and other evidence of salinity induced degradation.

There is, however, no strategy to manage the potential impact of groundwater flows beyond the boundaries of the Brickworks development site, for instance the installation of catchment intervention such as wetlands or ponds that would enable the storage, treatment and beneficial use of water on site, and improve water quality entering Lake Burley Griffin, Yarralumla Creek and, thus, the Molonglo River.

There is no evidence of allowance for extreme weather events, highlighted recently with the failure of stormwater management for the Googong Township development. These can be anticipated to be more frequent and more severe as a consequence of changes in climate. Nor is there discussion of the need for ongoing monitoring, analysis and management of natural groundwater seepage and drainage (or

- Dr Karen Williams, 13.7.14 – Submission regarding the Canberra Brickworks and Environs Planning and Development Strategy 2013 – with grateful thanks for comments from various ISCCC members



blockage) of stormwater. Instead, the focus is on extolling the virtues of improved opportunities for ACT residents to enjoy parks and open space as places of recreation and amenity. This is without consideration of effective and efficient ways of managing water to ensure these assets and values are maintained.

*Suggestions:*

Rainwater collection, along with stormwater harvesting and reuse, is now commonplace in new urban developments. Those and other alternative water supply, treatment and reuse systems have become essential tools in addressing water supply and wastewater disposal in many parts of Australia.

As the development of conventional surface and groundwater resources becomes increasingly expensive and difficult, along with the costs of wastewater treatment and discharge, these alternative approaches have become viable options for addressing our water-related challenges. They have been shown to provide reliable water services, save costs, reduce energy consumption and improve environmental performance.

However, to maintain water quality in ponds and lakes on and off the Brickworks development site and in the Yarralumla Creek and the Molonglo River, urban wastewater should be used locally for irrigation and not allowed to drain into the stream flow. Future development should be based on a catchment intervention strategy and on proven processes for dealing with the potential overflows of harvested and stored grey water during or following extreme weather events.

The implementation of a staged development process to alleviate too much impact on the environment in any single place at any one time may be necessary. It may be appropriate to require developers and contractors to provide soil and water management plans to demonstrate how the surrounding environment will handle disturbance of the site due to significant rain and wind events, impacts from construction works, etc.

For sustainable ongoing water management, the key issue is monitoring, planning, regulation (and enforcement of regulations) and having the right infrastructure in place. We suggest that Strategy 2013 be revised to incorporate those options from the outset, rather than commit to monitoring over time and addressing issues as they might arise (post planning and development window). The revised strategy should use transparent processes to monitor changes from what exists prior to and at the time of development to what occurs during and after development. The monitoring of the environment on-site and what goes on in the broader surrounding environment (particularly of impacts downstream) should have planning, monitoring, reporting and evaluation processes that make their results publically available.

Actual and potential impacts on Yarralumla Creek from the Brickworks development should align with the aims and objectives of the BPP project. The development of an ongoing monitoring program could potentially contribute a revised approach to catchment management to improve long term water quality in the ACT - via flows into and out of Yarralumla Creek and Molonglo River catchments - and what flows into the Murrumbidgee River System. An ongoing monitoring program would also assist in developing strategies to help the ACT community and associated flora and fauna ecosystems to better adapt to a changing climate.

In addition to a monitoring program (for the BPP project and ongoing) we suggest that the BPP project be considered in terms of an opportunity to use BPP investment as a way to support enhanced design and implantation of alternative water options in the Brickworks development.

Strategy 2013 should articulate a methodology that manages current and future developer and business contributions and continuing community engagement in the maintenance of any newly constructed water management infrastructure, either on the Brickworks site or developed to address water quality and flow management issues off-site. In that way the Brickworks development would be better integrated into the broader catchment management context of Lake Burley Griffin, the Yarralumla Creek and the Molonglo River.

- **Trees, windbreaks and ridgelines**

The Brickworks design incorporates replacement of significant numbers of mature trees along ridge lines with up to 8-storey buildings. Some of the trees were planted by Charles Weston as wind-breaks designed to protect the inner south Canberra suburbs from the prevailing strong westerly winds. Tall, spreading trees along ridge lines or in low lying woods, of course, offer corridors of connectivity and provide respite from extreme hot weather for understorey vegetation, animals and birds, as well as for people. The appearance of the ridge line, as approached from outside the Brickworks development site, will be significantly altered in the broader Canberra landscape setting. Until tree plantings are mature and reach full height and spread, the walls and balconies of buildings will replace the natural habitats of flora and fauna, and will provide the predominant aesthetic.

On average, 50% of block coverage in the Brickwork development proposal is allocated to permeable landscaped surfaces and less than 40% set aside as deep soil planting with 'significant' native tree planting. Projected new tree plantings would take at least 20 or 30 years to grow to their full leafy potential but experience with recent Canberra developments is that developers and property owners will place more priority on dwellings than on trees and there is no strategy for the long-term success of tree plantings.

The vigour and success of the plantings, therefore, are entirely contingent on dwelling size and design, space between and around buildings, future water restrictions, the extent and severity of prevailing periods of dry weather and the willingness of bodies corporate to maintain trees. We believe that there is certainly a case for augmenting potable water supplies through prevailing dry periods by the provision of fit-for-purpose water supplies from local water storages etc.

Up to eight storey buildings are contemplated on top of ridge lines but Strategy 2013 does not refer to layout and design strategies to avoid wind tunnel effects (as experienced in the nearby Woden town centre) on the brickworks environs and beyond. Nor are there strategies for ensuring the optimum placement of buildings and open space for the growth of mature trees while allowing for solar access to residences, or for views outwards and away from the site towards the ranges to the southwest.

It should also be noted that any reduction of tree cover at the Brickworks site will be significantly compounded by the removal of large numbers of mature trees from the adjacent Royal Canberra Golf Club as part of the club's fairway renovations. Some of those trees are, again, part of Charles Weston's Westbourne Woods.

Maintaining air quality, in the short term at least, will be a major issue during soil remediation and asbestos decontamination of the site, particularly for surrounding neighbourhoods subject to prevailing westerly winds.

### *Suggestions*

The Brickworks development should be revised to retain essential windbreaks while allowing for solar access to residences and for views outwards and away from the site towards the ranges to the

southwest. The height of buildings on ridgelines should be reduced. Policies to ensure the future viability of tree plantings should be developed.

- **Connectivity and landscape**

The Brickworks development has to be seen in a regional context of biodiversity protection and of connectivity. Native grassland in the ACT continues to be lost to or fragmented by urban development, or degraded by weed invasion. Rather than embracing the concept of the 'Bush Capital' and encouraging the ACT biodiversity in urban areas, Strategy 2013 neither attempts to enhance the resilience of the natural environment nor takes account of the dynamics of climate change either on the site or at a broader regional level. A critical case in point is the treatment of the grassland habitat associated with the Golden Sun Moth<sup>1</sup> and found within the boundaries of the Brickworks development site.

Only 5% (1000 ha) of lowland native grassland still exists in moderate to good condition in the ACT. Only a portion of this is dominated by wallaby grass species suitable to support Golden Sun Moth habitat. The destruction of the natural temperate grassland (itself a remnant of an endangered ecological community) and the associated Golden Sun Moth habitat located in the Brickworks development site would continue a history of environmental and landscape degradation (see Appendix 1) in the area, which was once part of extensive marshland. Figure 1 shows the extent to which natural temperate grassland has disappeared from the ACT since colonial settlement.

While the most important known sites of Golden Sun Moth habitat in the ACT are located within the Majura Field Firing Range, the Belconnen Naval Station, "Woden" property in the Jerrabomberra Valley and in the Mulanggary Grassland Reserve in Gungahlin<sup>2</sup>, the Brickworks development site is the only known Golden Sun Moth habitat in the south western area of the ACT.

*Suggestions:*

Protection of the remnant area of grassland as part of the Brickworks development strategy – specifically including monitoring and researching the moth habitat, to maintain and increase population numbers -are effective tools of conservation and management.

To enhance the biodiversity value of urban areas, the strategy of the Brickworks development should work for conservation and to strengthen connectivity corridors. Connectivity is a critical element in implementing all-of-landscape conservation strategies. Working with ecological communities at site and regional levels will help ACT biodiversity adapt to the changing environment so that core habitats and refugia can be linked and buffered across different land use zones.

The Brickworks development has the potential to maintain and extend lowland vegetation communities by contributing to a measureable increase in connectivity between areas of native and non-native vegetation in urban areas and river systems. The strategy employed by the Brickworks development can help address gaps in the management of remnant native vegetation outside of reserves and contribute to understanding and managing climate change refugia.

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<sup>1</sup> The Golden Sun Moth has been recommended by the Threatened Species Scientific Committee as eligible for inclusion in the critically endangered category of section 178 of the Environmental Protection and Biodiversity Conservation Act (<http://www.environment.gov.au/node/16501>).

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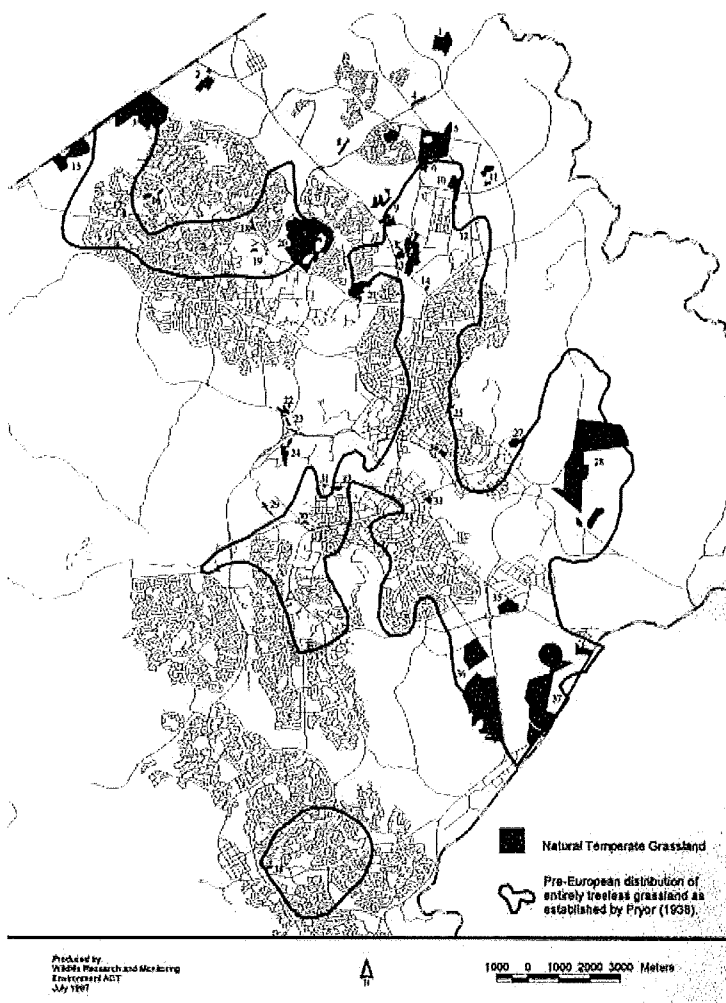
([http://www.environment.act.gov.au/cpr/conservation\\_and\\_ecological\\_communities/information\\_on\\_action\\_plans/factsheet\\_7](http://www.environment.act.gov.au/cpr/conservation_and_ecological_communities/information_on_action_plans/factsheet_7)).

➤ Dr Karen Williams, 13.7.14 – Submission regarding the Canberra Brickworks and Environs Planning and Development Strategy 2013 – with grateful thanks for comments from various ISCCC members

## Appendix 1

Natural temperate grassland means that Indigenous fire management practices would not have had a major role in the treeless character. Wet and dry grasslands dominated by wallaby grass species combined, extend across the broader Monaro region from the Goulburn region in the north, south to the Bombala region, and as far west as Adaminaby.

Lindsay Pryor in 1938 mapped the pre-European distribution of natural temperate grassland in the ACT as forming closely connected corridors, more or less stretching across the Gungahlin-Belconnen area to the Watson area, through inner north and south Canberra to Woden Valley and Symonston; as far west as Yarralumla-Deakin; with an isolated area in Isabella plains in the Tuggeranong Valley. The wet grasslands were located predominately in sites on the lower slopes and valley floors, which occur on a range of underlying rock layers, covered with poorly drained deep loamy soils.



**Figure 1: Pre-European and current (1997) distribution of natural temperate grassland in the Australian Capital Territory. (Source: *Threatened Species Action Plan No.1 Natural Temperate Grassland - An Endangered Ecological Community*) [http://www.environment.act.gov.au/\\_data/assets/pdf\\_file/0004/576535/actionplans1.pdf](http://www.environment.act.gov.au/_data/assets/pdf_file/0004/576535/actionplans1.pdf)**

Major change to the nature of the grassland environment in the Yarralumla area, which apparently contained areas of wet grasslands, occurred in the 1880s when Frederick Campbell bought 'Yarralumla' Station (present-day Government House) and 'fenced the boundary and subdivided the property, and ploughed many miles of drains in the marshy areas to eradicate the fluke menace' (Lyall Gillespie, *Canberra 1820-1913*, p 181).

- Dr Karen Williams, 13.7.14 – Submission regarding the Canberra Brickworks and Environs Planning and Development Strategy 2013 – with grateful thanks for comments from various ISCCC members